

COUNTY OF EL DORADO
FACILITIES DIVISION



**El Dorado County Placerville Jail
Expansion**
Initial Study/Mitigated Negative Declaration

December 2016



1501 SPORTS DRIVE, SUITE A • SACRAMENTO • CA • 95834
OFFICE 916.372.6100 • FAX 916.419.6108

TABLE OF CONTENTS

A. BACKGROUND 2

B. SOURCES..... 3

C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED..... 4

D. DETERMINATION 5

E. INTRODUCTION AND BACKGROUND..... 6

F. PROJECT DESCRIPTION 7

G. ENVIRONMENTAL CHECKLIST 14

 I. AESTHETICS.....15

 II. AGRICULTURE AND FOREST RESOURCES.....19

 III. AIR QUALITY.....20

 IV. BIOLOGICAL RESOURCES.....30

 V. CULTURAL RESOURCES.....35

 VI. GEOLOGY AND SOILS.....39

 VII. GREENHOUSE GAS EMISSIONS.....44

 VIII. HAZARDS AND HAZARDOUS MATERIALS.....47

 IX. HYDROLOGY AND WATER QUALITY.....50

 X. LAND USE AND PLANNING.....53

 XI. MINERAL RESOURCES.....54

 XII. NOISE.....55

 XIII. POPULATION AND HOUSING.....64

 XIV. PUBLIC SERVICES.....65

 XV. RECREATION.....66

 XVI. TRANSPORTATION AND CIRCULATION.....67

 XVII. UTILITIES AND SERVICE SYSTEMS.....71

 XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.....73

Appendices

Appendix A – Air Quality and GHG Modeling Results

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

December 2016

A. BACKGROUND

1. Project Title: County Jail Expansion
2. Lead Agency Name and Address: El Dorado County
Facilities Division
2850 Fairlane Court, Building C
Placerville, CA 95667
3. Contact Person and Phone Number: Charles Harrell
Building and Grounds Superintendent
(530) 621-5890
4. Project Location: El Dorado County Jail
300 Forni Road
Placerville, CA
Assessor's Parcel Number 325-300-321
5. Project Sponsor's Name and Address: El Dorado County
3000 Fairlane Ct., Ste. 1
Placerville, CA 95667
6. Existing General Plan Designation (City of Placerville): Public Facilities (PF)
7. Existing Zoning Designations (City of Placerville): PF
8. Project Description Summary:

The County Jail Expansion (proposed project) consists of an expansion to the existing El Dorado County Jail facility located at 300 Forni Road in the City of Placerville, CA. The proposed two-story structure would have a maximum floor area of 25,000 square feet (sf) and would be separate from, but attached to, the existing jail facility. The expansion would include space for medical and mental health facilities, inmate housing, administrative and staff support facilities, and inmate programs. The proposed mental health facility areas would include medical evaluation rooms and 14 medical beds. The proposed project would not increase the inmate capacity of the jail, but would instead allow for increased program space at the existing jail facility and more appropriate distribution of inmate housing throughout the jail. The proposed project would be consistent with the City General Plan land use designation and the zoning designation for the site.

B. SOURCES

It should be noted that all the technical reports and modeling results used for the purposes of this analysis are available upon request at the El Dorado County Facilities Division office. The following documents are referenced information sources utilized for the analysis within this Initial Study/Mitigated Negative Declaration (IS/MND):

1. California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
2. California Air Resources Board. *Ambient Air Quality Standards*. Available at: <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>. June 7, 2012.
3. California Air Resources Board. *Climate Change Scoping Plan*. December 2008.
4. California Air Resources Board. *Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document*. August 19, 2011.
5. California Air Resources Board. *First Update to the AB 32 Scoping Plan*. May 27, 2014.
6. California Department of Conservation. *El Dorado County Important Farmland 2014*. May 2016.
7. California Department of Conservation. *Mineral Lands Classification*. Available at: <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>. Accessed November 14, 2016.
8. California Department of Conservation. *Regulatory Maps Portal*. Available at: <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>. Accessed November 14, 2016.
9. California Department of Fish and Wildlife. *California Natural Diversity Database RareFind, Version 5*. Accessed November 9, 2016.
10. CAL FIRE. *El Dorado County Fire Hazard Severity Zone Map*. March 12, 2009.
11. Caltrans. *Transportation and Construction Vibration: Guidance Manual*. September 2013.
12. Caltrans. *California Scenic Highway Mapping System*. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/. Accessed November 2016.
13. City of Placerville. *General Plan*. Adopted January 23, 1990.
14. El Dorado County Air Pollution Control District. *Guide to Air Quality Assessment*. February 2002.
15. El Dorado County. *Asbestos Review Areas, Western Slope, County of El Dorado, State of California*. January 22, 2015. Available at: http://www.edcgov.us/uploadedFiles/Government/Air_Quality_Management/Asbestos%20Review%20Map%201-22-15.pdf. Accessed: November 2016.
16. El Dorado County. *Drainage Manual*. Adopted March 14, 1995.
17. El Dorado County. *Design and Improvement Standards Manual*. Adopted May 27, 1986.
18. El Dorado County. *Final Environmental Impact Report*. Adopted 2004.
19. El Dorado County. *General Plan*. Adopted July 19, 2004.
20. El Dorado County. *Integrated Natural Resources Management Plan – Phase I, Final Wildlife Movement and Corridors Report*. December 7, 2010.
21. ENVIRON International Corporation and the California Air Districts. *California Emissions Estimator Model User's Guide Version 2016.3.1*. September 2016.

22. j.c. brennan & associates, Inc. *El Dorado County Jail Expansion Environmental Noise Assessment*. November 15, 2016.
23. KD Anderson & Associates, Inc. *Trip Generation Analysis—El Dorado County Jail Expansion IS/MND, El Dorado County, CA*. November 4, 2016.
24. North Central Information Center. *Records Search Results for El Dorado County Placerville Jail Expansion*. December 7, 2016.
25. Sacramento Metropolitan Air Quality Management District. *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions)*. September 26, 2013.
26. U.S. Environmental Protection Agency. *National Ambient Air Quality Standards (NAAQS)*. Available at: <https://www.epa.gov/criteria-air-pollutants>. Accessed November 2016.

C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is “Potentially Significant Impact” as indicated by the checklist on the following pages.

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

D. DETERMINATION

On the basis of this initial study:

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

Signature

Charles Harrell

Printed Name

Date

El Dorado County

For

E. INTRODUCTION AND BACKGROUND

This IS/MND identifies and analyzes the potential environmental impacts of the proposed project. The information and analysis presented in this document are organized in accordance with the order of the California Environmental Quality Act (CEQA) checklist in Appendix G of the CEQA Guidelines. If the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures that shall be applied to the project are prescribed.

The mitigation measures prescribed for environmental effects described in this Initial Study will be implemented in conjunction with the project, as required by CEQA. The mitigation measures will be incorporated into the project through project conditions of approval. The County will adopt findings and a Mitigation Monitoring and Reporting Program for the project in conjunction with its approval of the project.

On July 19, 2004, the El Dorado County Board of Supervisors adopted a General Plan and General Plan Environmental Impact Report (EIR) for the County. While the proposed project site is located within the City of Placerville, the property on which the proposed project would be located is owned by El Dorado County, and the County is the lead agency with respect to the project. As such, the El Dorado County General Plan and County General Plan EIR are the applicable adopted planning documents for this IS/MND.

El Dorado County Placerville Jail

The El Dorado County Placerville Jail is located in Placerville, California, and was built in 1988. The facility is rated for 303 beds, including eight medical beds. The jail facility was not designed to house the current female population, and is currently overburdened. The County currently shuttles inmates between the Placerville facility and the El Dorado County Lake Tahoe Jail based on space availability.

A Jail Needs Assessment (JNA) was prepared in September of 2016 to assess the deficiencies and needs of the Placerville Jail facility. The JNA includes recommendations for on-site medical facilities, including, but not limited to, new medical offices, a separate dayroom for medical patients, additional laboratory space, and added medical beds. In addition, the JNA recommends the expansion of housing facilities to allow more appropriate segregation of inmates throughout the jail.

Senate Bill Number 844

Senate Bill Number 844 (SB 844) authorizes the Board of State and Community Corrections (BSCC) and certain participating counties to acquire, design, and construct adult local criminal justice facilities. Such facilities may include improved inmate and custodial housing, with an emphasis on expanding program, mental health, and treatment space as necessary to manage the adult offender population. In order to receive preference for funding under the SB 844 program, project applicants must demonstrate that the project would replace compacted, outdated, or unsafe housing capacity, add space for treatment and rehabilitation services, and result in only a minimal increase of inmate capacity. In addition, counties applying for financing authority under

the SB 844 program must include descriptions of efforts to address sexual abuse in facilities to be constructed or renovated pursuant to the bill. The County seeks to build an expansion to the El Dorado County Placerville Jail under the provisions of SB 844.

F. PROJECT DESCRIPTION

The following provides a description of the project site's current environmental setting, as well as the discretionary actions required for the proposed project and the proposed project components.

Project Location and Setting

The proposed project would be located directly adjacent to the El Dorado County Jail at 300 Forni Road in Placerville, California (see Figure 1 and Figure 2). The proposed project site is located on a portion of an approximately 20-acre parcel identified by the El Dorado County Assessor as Assessor's Parcel Number (APN) 325-300-321. Access to the site would be provided by Jail Street, which connects the existing jail facility to Forni Road.

The existing jail is situated at the top of a hill and is surrounded by associated parking lots to the north, east, and west. The westernmost parking area is not available for public use. The proposed project site is located adjacent to the northeast side of the existing jail facility on a gently sloped hill. The western portion of the site is enclosed by a chain-link, security fence, and covered with gravel. The remainder of the sloped site is covered with ruderal grasses. The area to the east of the proposed project site is undeveloped, with the exception of a gravel access road, and covered in ruderal grasses and scattered oak trees. South of the expansion site, off the jail property, is located a ravine with dense vegetation. A small paved parking lot is located north of the site.

Proposed Project Components

The proposed project includes construction of a two-story jail building that would connect to the northwest section of the existing jail facility (see Figure 3). The first floor of the proposed building would be two feet below the intake sally port level of the existing facility, while the second floor of the proposed building would be level with the administrative level of the existing facility. The proposed jail building and all associated improvements would be located entirely within the existing County-owned jail property. The conceptual layout of the proposed project identifies a total building square footage of 22,000 sf; however, this IS/MND assumes up to a maximum of 25,000 sf in order to provide a conservative analysis. The proposed expansion facility would include inmate housing areas with 54 beds, as well as administrative and staff support rooms, medical and mental health facilities, expanded inmate program areas, and ancillary mechanical, electrical, and janitorial rooms (see Figure 4). The proposed medical and mental health facilities would include medical and mental health units and 14 beds. Proposed allocation of program space is shown in Table 1. Although the proposed project would include new beds, the proposed project would not increase the inmate capacity of the jail, but would instead redistribute the existing inmate population.

Figure 1
Regional Project Location

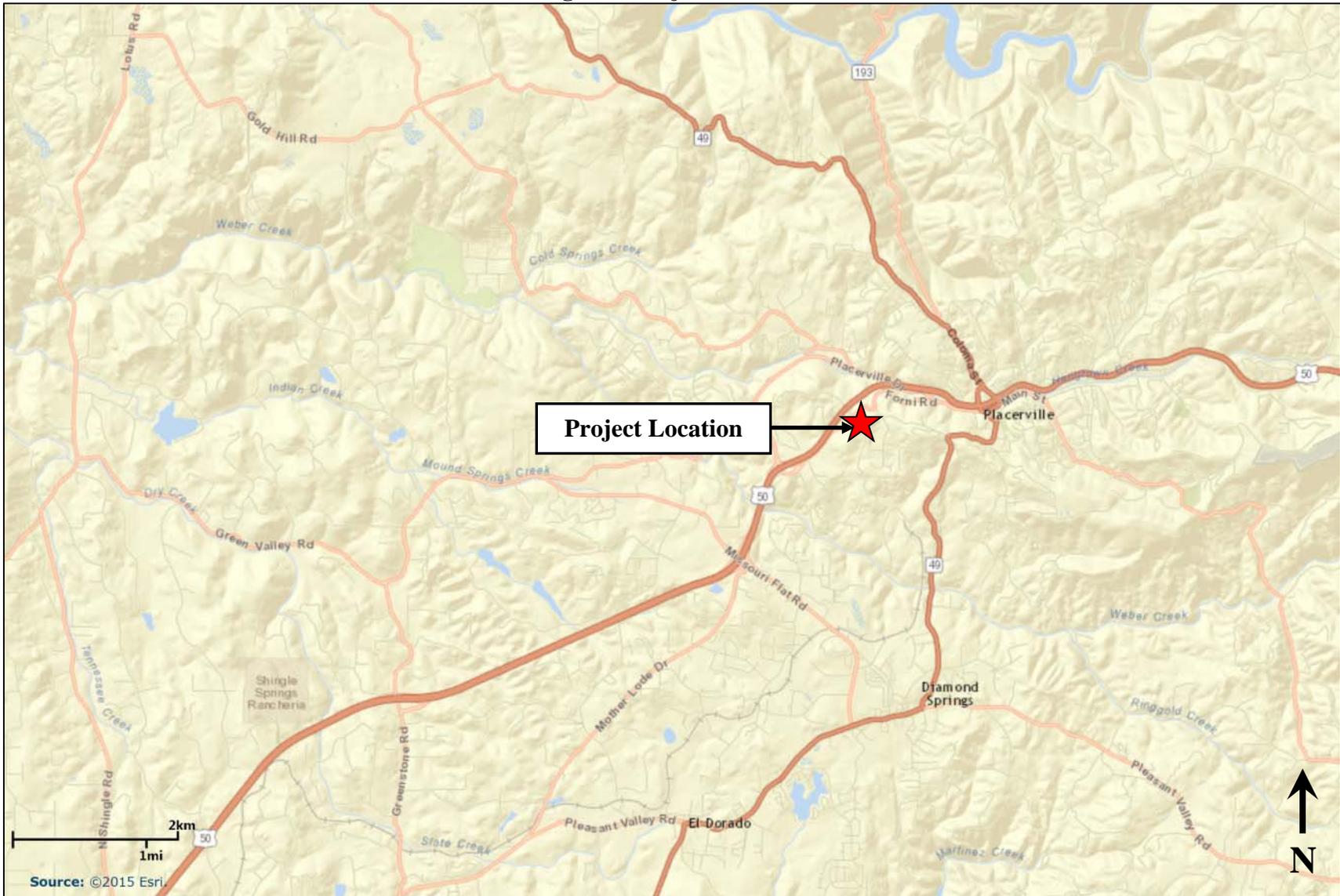


Figure 2
Project Vicinity Map

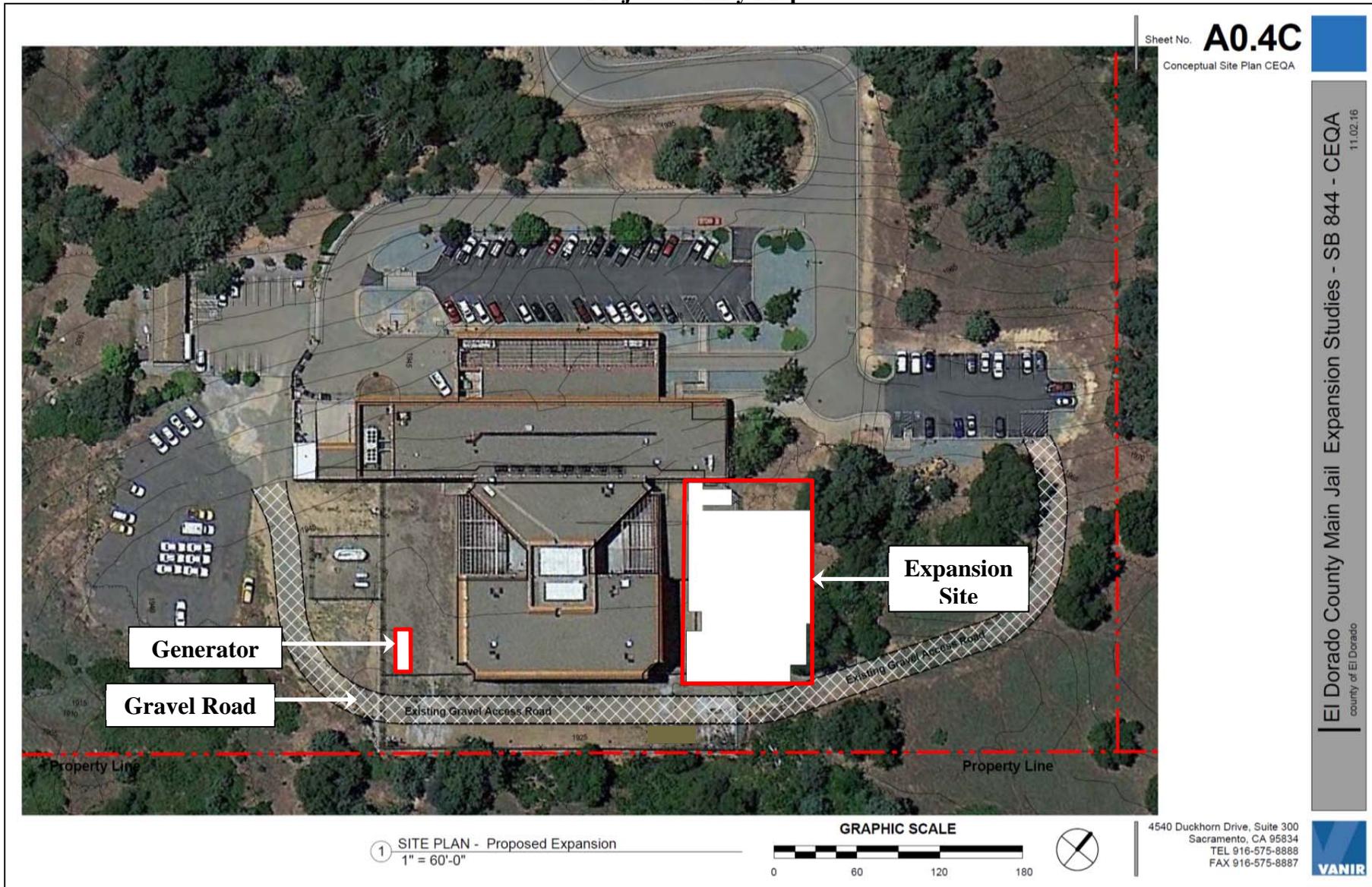


Figure 3
Site Layout

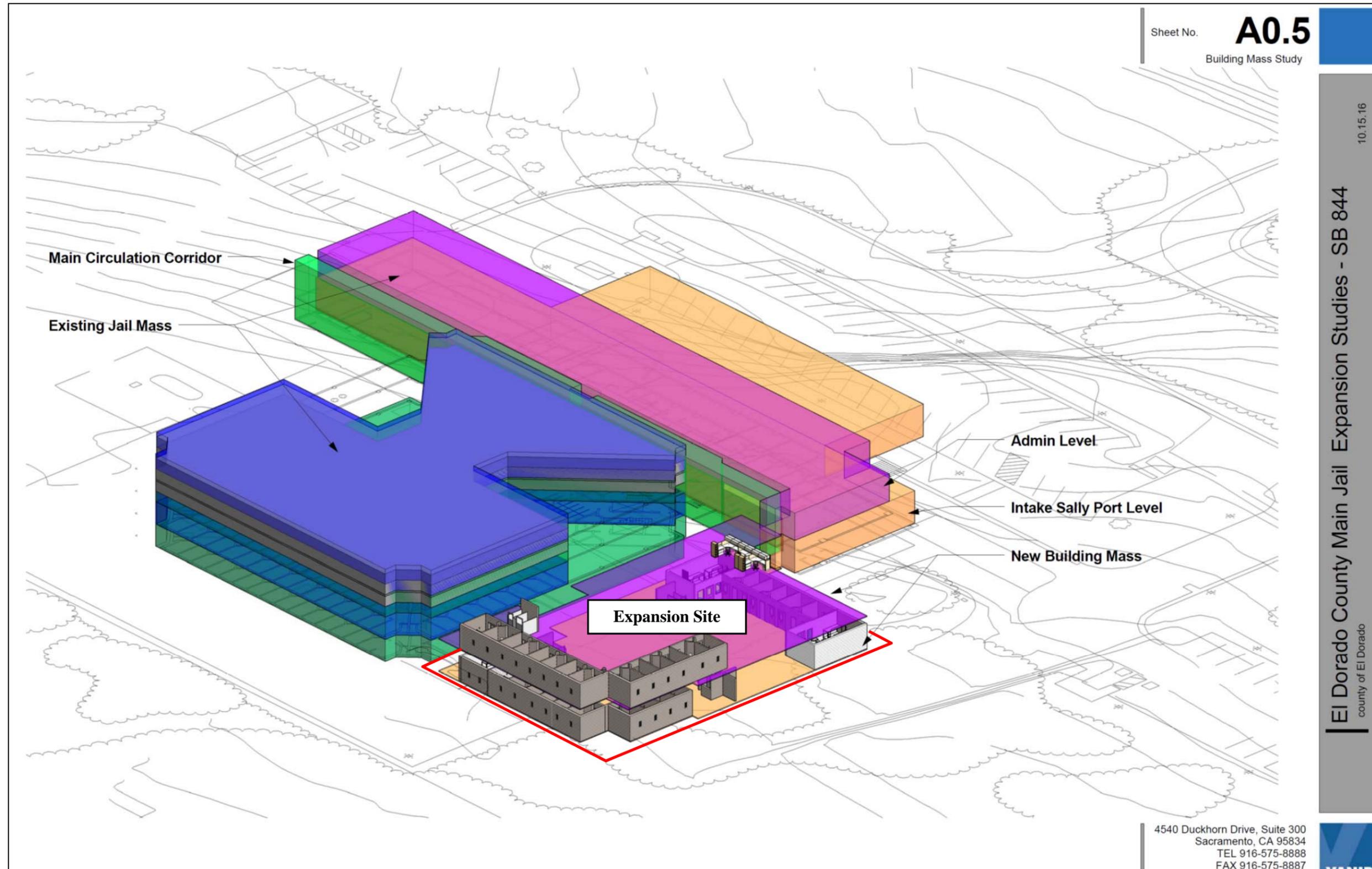


Figure 4
Expansion Floor Plan



| Program Type | Area (sf) | Floor | Percent of Total Area |
|---------------------------------|------------------|--------------|------------------------------|
| Admin and Staff Support | 1,240 | 2 | 5.7 |
| Program Space | 2,995 | 2 | 13.7 |
| Housing | 10,924 | 1 | 49.9 |
| Medical and Mental Health Units | 2,910 | 2 | 13.3 |
| Medical and Mental Health | 3,267 | 2 | 14.9 |
| Utility | 576 | 1 | 2.6 |
| | | | |
| TOTAL PROGRAM AREA | 21,911 | | 100 |

Note: A 349 sf layout variance was assumed for program areas. As discussed previously, a total area of 25,000 sf was assumed in this IS/MND to provide a conservative estimate.

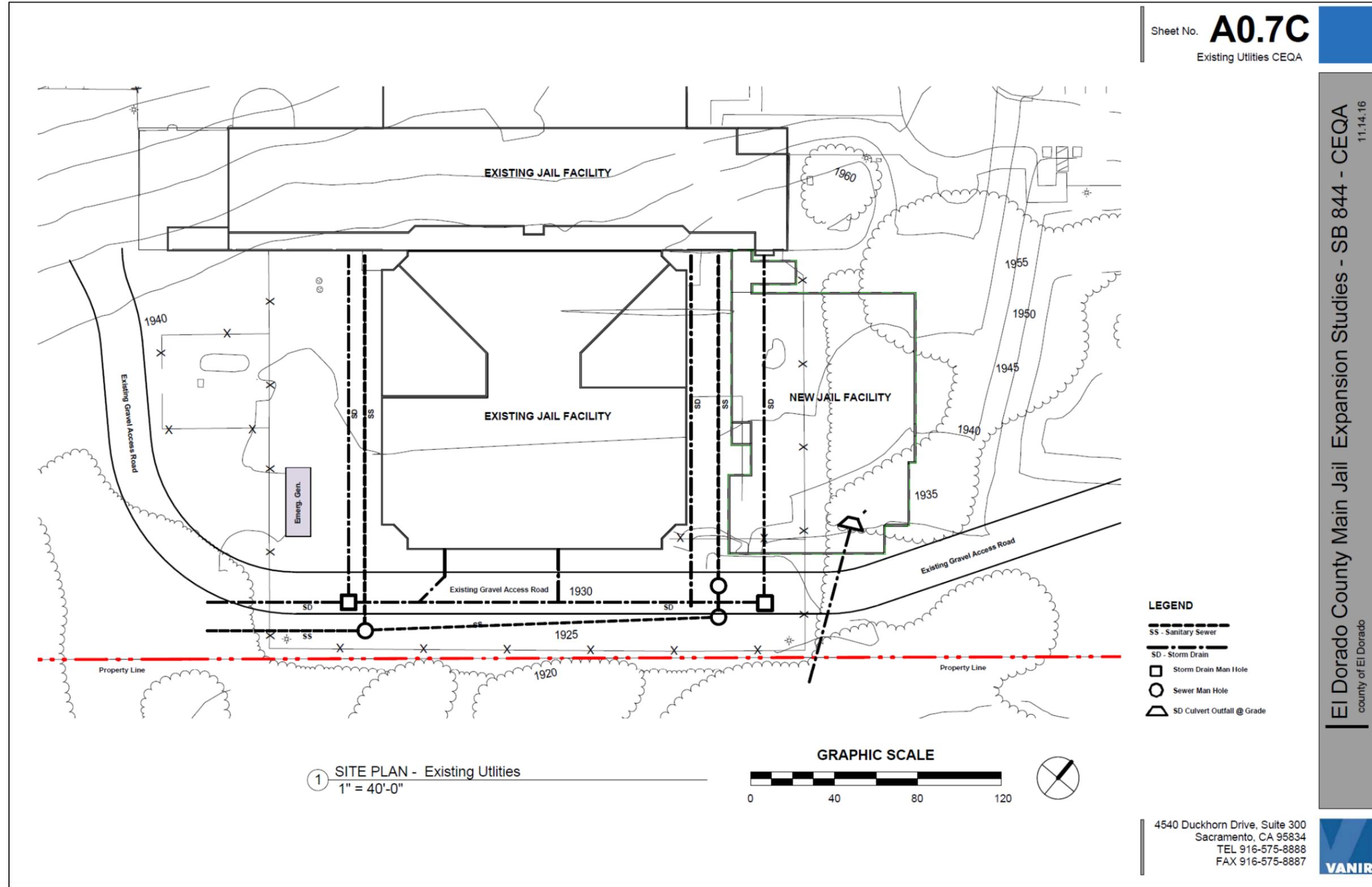
Whether the existing gravel access road would be paved as part of the proposed project improvements is currently unknown. For analysis purposes, this IS/MND assumes that the gravel access road would be paved as part of the proposed project. In addition, the proposed project would include installation of an emergency generator. The generator would be located southwest of the existing facility on a concrete slab (see Figure 2).

The stormwater runoff from the site’s new impervious surfaces – a relatively modest increase of 30,000 sf – would be directed to a new on-site stormwater management system. The new impervious areas would include the roof of the proposed expansion (approximately 15,000 sf) as well as the proposed paved road (approximately 15,000 sf), should the Fire Marshall require the existing gravel access road to be paved as part of the project. The system would include treatment of runoff from the new impervious areas. Treated runoff may be transported to an existing stormwater man-hole via new storm drain pipes (see Figure 5). The project would include a connection to the existing sewer line running along the northeast side of the existing jail facility. Water service would be provided through a new connection to an existing eight-inch water line in the parking lot to the north. Parking for the proposed project would be provided by the existing paved parking lots to the north and northwest of the site. The project would use the existing circulation systems associated with the existing jail facility, and would not modify access to the existing jail facility.

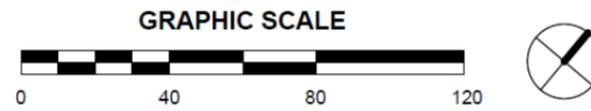
Discretionary Actions

The discretionary entitlements for the project include County Board of Supervisors adoption of the CEQA IS/MND and MMRP, and authorization of County staff to submit the application to the BSCC for the SB 844 grant funding.

Figure 5
Existing Utilities



① SITE PLAN - Existing Utilities
1" = 40'-0"



Sheet No. **A0.7C**
Existing Utilities CEQA

El Dorado County Main Jail Expansion Studies - SB 844 - CEQA
11.14.16
county of El Dorado

- LEGEND**
- SS - Sanitary Sewer
 - SD - Storm Drain
 - Storm Drain Man Hole
 - Sewer Man Hole
 - SD Culvert Outfall @ Grade

4540 Duckhorn Drive, Suite 300
Sacramento, CA 95834
TEL 916-575-8888
FAX 916-575-8887



G. ENVIRONMENTAL CHECKLIST

The following Checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are project-specific mitigation measures recommended, as appropriate, as part of the proposed project.

For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

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

Discussion

a,b. Examples of typical scenic vistas would include mountain ranges, ridgelines, or bodies of water as viewed from a highway, or other public space designated for the express purpose of viewing and sightseeing. CEQA case law has established that only public views, not private views, are protected under CEQA. For example, in *Association for Protection etc. Values v. City of Ukiah* (1991) 2 Cal.App.4th 720 [3 Cal. Rptr.2d 488] the court determined that “we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general. As recognized by the court in *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188 [129 Cal.Rptr. 739]: “[A]ll government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will adversely affect the environment of persons in general.” Therefore, it is appropriate to focus the aesthetic impact analysis on potential impacts to public views. The only public area affording views of the proposed project site and surrounding environs is Gold Nugget Way.

In general, a project’s impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista. The proposed project would be built directly adjacent to the existing El Dorado County Jail facility. Scenic vistas do not exist beyond the site, and, as such, scenic vistas would not be blocked by the proposed expansion.

The nearest State scenic highway is Highway 49 (HWY 49), which is located approximately 0.75 mile to the east of the proposed project site. Due to the topography of the area and the substantial distance between the proposed project and HWY 49, the project would not be visible from the roadway. Therefore, the proposed project would not have a substantial adverse effect on a scenic vista and would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic highway, and a *less-than-significant* impact would occur.

- c. The visual character of the proposed project area is predominantly defined by the existing jail facility, four associated parking lots, and the oak trees and grasses surrounding the facility. Sensitive viewers in the surrounding area would consist of drivers and bicyclists on the segment of Gold Nugget Way to the east of the site. However, views of the project site from the roadway would be almost entirely obscured by the intervening woodlands (see Figure 6). Furthermore, while the project would expand the footprint of the existing facility, the height of the new building would not exceed the height of the existing jail facility. The proposed expansion would be consistent with the visual character of the existing jail. Given that the proposed expansion would be congruous with the existing facility, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings, and a *less-than-significant* impact would occur.
- d. Existing sources of light at the proposed project site include light from exterior light fixtures on the existing jail facility and interior light spilling through windows on the facility. The facility does not produce a substantial amount of glare.

The proposed project would be required to comply with all applicable County General Plan policies, as well as Ordinance Code standards. El Dorado County General Plan Policy 2.8.1.1 includes strategies to limit excess nighttime light and glare from parking area lighting, signage, and buildings. In addition, Section 130.14.070 of the County Ordinance Code includes policies to ensure that the creation of light and glare is controlled to the extent that unnecessary and unwarranted illumination of an adjacent property would not occur. Compliance with the Ordinance Code would help to reduce long-range visibility of night lighting.

Overall, the proposed expansion would be consistent with the existing facility, and is unlikely to introduce new sources of substantial light or glare to the project site. However, without a site lighting plan, the impacts from lighting are difficult to anticipate. Therefore, without implementation of the mitigation measure listed below, the proposed project could have a *potentially significant* impact related to the creation of a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

- I-1. Prior to the issuance of a building permit, the Facilities Division shall submit a lighting plan to the El Dorado County Community Development Agency for review and approval. The County shall implement the approved lighting plan. The lighting plan shall comply with the El Dorado County Ordinance Code for lighting, including, but not limited to, the following:*

Figure 6
View of Site from Gold Nugget Way



- *Lighting plans shall contain, at a minimum, the location and height of all light fixtures, the manufacturer's name and style of light fixture, and specifications for each type of fixture.*
- *All outdoor lighting shall be hooded or screened as to direct the source of light downward and focus onto the property from which it originates and shall not negatively impact adjacent properties or directly reflect upon any adjacent residential property.*
- *Upward lighting shall be minimized to the greatest extent possible.*

| II. AGRICULTURE AND FOREST RESOURCES. <i>Would the project:</i> | Potentially Significant Impact | Less-Than- Significant with Mitigation Incorporated | Less-Than- Significant Impact | No Impact |
|--|--------------------------------------|---|-------------------------------------|--------------|
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ✘ |
| b. Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ✘ |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ✘ |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ✘ |
| e. Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ✘ |

Discussion

- a.e. According to the California Department of Conservation Farmland Mapping and Monitoring Program, the site is designated as Other Land and does not include land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, the site is not considered Farmland of Prime, Unique, or Statewide Importance. In addition, the proposed project would not involve changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use. Therefore, ***no impact*** regarding Farmland would result from implementation of the proposed project.
- b. The proposed project site is designated as PF by the Placerville General Plan and is zoned PF. Neither the land use designation nor the zoning designation permit agricultural uses. In addition, the project site is not under Williamson Act contract. Therefore, the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract, and ***no impact*** would occur.
- c,d. The project site is not considered forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). Therefore, the proposed project would have ***no impact*** with regard to the conversion of forest land or any potential conflict with existing zoning for forest land, timberland, or Timberland Production.

III. AIR QUALITY.

Would the project:

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

Discussion

a,b,c. The project site is located within the El Dorado County portion of the Mountain Counties Air Basin (MCAB), which is under the jurisdiction of the El Dorado County Air Quality Management District (EDCAQMD). Under State and federal law, the California Air Resources Board (CARB) is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to the State and national ambient air quality standards (AAQS). The El Dorado County portion of the MCAB is designated as nonattainment for the State and federal ozone, State particulate matter 10 microns in diameter (PM₁₀), and federal particulate matter 2.5 microns in diameter (PM_{2.5}) standards, and attainment or unclassified for all other AAQS. The U.S. Environmental Protection Agency (USEPA) requires states with areas designated as nonattainment for national AAQS to prepare State Implementation Plans (SIP) that demonstrate attainment and maintenance of the national AAQS. The SIP contains the strategies and control measures for states to use to attain the national AAQS. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, rules, and regulations of air basins as reported by the agencies with jurisdiction over them.

Due to the nonattainment designations, the EDCAQMD, along with the other air districts in the nonattainment areas, is required to develop plans to attain the federal and State standards for ozone and particulate matter. According to the EDCAQMD, the applicable attainment plan is the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (Ozone Attainment Plan), adopted September 26, 2013. The U.S. Environmental Protection Agency (USEPA) determined the motor vehicle emission budgets in the Plan to be adequate and made such findings effective August 25, 2014. On January 9, 2015, the USEPA approved the 2013 Ozone Attainment Plan.

The 2013 Ozone Attainment Plan demonstrates how existing and new control strategies would provide the necessary future emission reductions to meet the CAA requirements, including the NAAQS. It should be noted that in addition to strengthening the 8-hour ozone NAAQS, the USEPA also strengthened the secondary 8-hour ozone NAAQS, making the secondary standard identical to the primary standard. The MCAB remains classified as a nonattainment area with an attainment deadline of 2027. On October 26, 2015, the USEPA released a final implementation rule for the revised NAAQS for ozone to address the requirements for reasonable further progress, modeling and attainment demonstrations, and reasonably available control measures (RACM) and reasonably available control technology (RACT). With the publication of the new NAAQS ozone rules, areas in nonattainment must update their ozone attainment plans and submit new plans by 2020/2021.

According to the EDCAQMD, if a project can demonstrate consistency with the 2013 Ozone Attainment Plan, the project would not be considered to have a significant cumulative air quality impact with respect to ozone. Per the EDCAQMD's Guide to Air Quality Assessment, development projects within the MCAB portion of the County are considered consistent with the Attainment Plan if:

- The project does not require a change in existing land use designation, and project emissions of ROG and NO_x from the project are equal to or less than the emissions anticipated for the site if developed under the existing land use designation;
- The project does not exceed the EDCAQMD's thresholds of significance for ROG and NO_x;
- The lead agency requires the project to implement any applicable emission reduction measures contained in and/or derived from the 2013 Ozone Attainment Plan;
- The project complies with all applicable EDCAQMD rules and regulations.¹

The proposed project is an expansion of the existing El Dorado County Jail facility. The project site is currently planned and approved for PF uses by the Placerville General Plan and the zoning code. The proposed project would involve the continued use of the site for a governmental facility, which is an allowable use under the Placerville General Plan and zoning code designation. Therefore, the proposed project would not require a change in land use designation.

According to the CEQA Guidelines, an air quality impact may be considered significant if the proposed project's implementation would result in, or potentially result in, conditions, which violate any existing local, State or federal air quality regulations. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants designated as nonattainment in the area, the EDCAQMD has established significance thresholds associated with development projects for emissions of reactive organic gases (ROG) and nitrogen oxide (NO_x) emissions. If a project would

¹ El Dorado County Air Pollution Control District. *Guide to Air Quality Assessment*. February 2002.

result in mass emissions in excess of the thresholds of significance, the project could affect the EDCAQMD’s commitment to attainment of the federal AAQS for ozone and, thus, could result in a significant adverse impact on air quality in the region.

Thresholds for PM₁₀ or other pollutants, including CO, PM, SO₂, NO₂, sulfates, lead, and H₂S, have not yet been established by the EDCAQMD. However, a project could be considered to have a significant impact on air quality if it would cause or contribute significantly to a violation of the applicable AAQS. According to the EDCAQMD CEQA Guide, if construction-related ROG and NO_x mass emissions are determined to be less than significant, the assumption could be made that construction-related exhaust emissions of other air pollutants from the operation of equipment and worker commute vehicles would also be less than significant.² Similarly, according to EDCAQMD’s operational screening levels for CO and PM₁₀, if a project is anticipated to be below significance for ROG and NO_x, the project’s CO and PM₁₀ emissions are expected to be insignificant as well. The significance thresholds, expressed in pounds per day (lbs/day), are listed in Table 2. El Dorado County, as lead agency, utilizes the EDCAQMD’s recommended thresholds of significance for CEQA evaluation purposes. Thus, if the proposed project’s emissions exceed the pollutant thresholds presented in Table 2, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan.

| Pollutant | Construction/Operational Threshold (pounds/day) |
|------------------|--|
| ROG | 82 |
| NO _x | 82 |

Source: El Dorado County Air Pollution Control District. Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act. February 2002.

Implementation of the proposed project would contribute local emissions in the area during both the construction and operation of the proposed project. The proposed project’s short-term construction-related and long-term operational emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1 software – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including vehicle mix, trip length, average speed, etc. However, where project-specific data was available, such data was input into the model (e.g., land uses, construction phases and timing, inherent project design and site features, etc.). In particular, the proposed project was assumed to adhere to California’s

² El Dorado County Air Pollution Control District. *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act.* February 2002.

2016 Building Energy Efficiency Standards, and operational trip generation information was provided by a project specific Trip Generation Analysis performed by KD Anderson & Associates.³ Additionally, the proposed project was assumed to include paving of an existing gravel road on the project site.

Construction Emissions

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site. Construction exhaust emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes particulate matter (PM) emissions. As construction of the proposed project would generate air pollutant emissions intermittently within the site, and in the vicinity of the site, until all construction has been completed, construction is a potential concern because the proposed project is in a nonattainment area for ozone and PM.

The project is required to comply with all EDCAQMD rules and regulations for construction, including, but not limited to, the following, which would be noted on County-approved construction plans:

- Rule 202 related to visible emissions;
- Rule 215 related to architectural coatings;
- Rule 223 related to fugitive dust; and
- Rule 224 related to cutback asphalt paving material.

As shown in Table 2 above, the EDCAQMD threshold of significance for construction is 82 lbs/day for ROG and NOx. Table 3 below presents the estimated construction-related emissions of ROG and NOx, that would result from the proposed project. CalEEMod inherently accounts for applicable EDCAQMD rules, with the exception of Rule 215 related to architectural coatings; accordingly, the modeling was adjusted to reflect that the project would use only low volatile organic compound (VOC) paints per EDCAQMD rules and regulations. Construction of the proposed project was assumed to commence in Summer 2019. Adjusted values for construction phasing and durations were provided by Vanir, who is under contract with the County Facilities Department to provide preliminary engineering and grant acquisition services. According to Vanir, import and/or export of soil would not be required during project construction, as the on-site soils would be balanced.

³ KD Anderson & Associates, Inc. *Trip Generation Analysis—El Dorado County Jail Expansion IS/MND, El Dorado County, CA*. November 4, 2016.

| Table 3 | | |
|---|--|---|
| Maximum Unmitigated Construction-Related Emissions | | |
| Pollutant | Project Emissions (lbs/day) | EDCAQMD Significance Threshold (lbs/day) |
| ROG | 4.61 | 82.0 |
| NO _x | 18.87 | 82.0 |
| <i>Source: CalEEMod, November 2016 (see Appendix A).</i> | | |

As shown in Table 3, the project’s associated short-term construction-related emissions of ROG and NO_x would be below the thresholds of significance. According to the EDCAQMD, if ROG and NO_x mass emissions are determined not to be significant, then the assumption could be made that exhaust emissions of other air pollutants during construction would also not be significant.

The EDCAQMD screening approach for fugitive dust (PM₁₀) emissions is based on dust suppression measures that would prevent visible emissions beyond the boundaries of the project site. If such measures are incorporated into the design of the project, then further calculation to determine PM₁₀ emissions is not necessary. All construction activities that would result in the disturbance of soil occurring within El Dorado County are subject to EDCAQMD Rule 223-1 related to fugitive dust. Rule 223-1 includes requirements related to visible emissions, vehicle speed limits on unpaved roads, and cessation of certain construction activities during times of sustained, wind caused dust emissions. Compliance with the requirements of Rule 223-1 would ensure that measures sufficient to prevent visible emissions beyond the boundaries of the project site would be implemented. Accordingly, fugitive dust emissions are not anticipated to result in visible emissions beyond the boundaries of the project site and further calculation to determine PM₁₀ emissions is not necessary.

In addition, other air quality management districts in nearby regions (i.e., SMAQMD and Placer County Air Pollution Control District) generally consider typical construction projects involving grading that would disturb less than 15 acres per day not to generate emissions of PM that would violate AAQS, contribute substantially to air quality violations, or cause health risks. The proposed project is anticipated to disturb approximately 0.75-acre during the grading phase, which would be far less than the 15 acre screening threshold used by other air quality districts.

As such, the proposed project would comply with all applicable EDCAQMD rules and regulations related to construction, would be consistent with the type and scale of development anticipated for the site by applicable planning documents, and would result in construction-related emissions below EDCAQMD’s thresholds of significance. Accordingly, construction of the proposed project would not violate an air quality standard or contribute to an existing or projected air quality violation, and construction activities would result in a less-than-significant impact.

Operational Emissions

Operational emissions of ROG, NO_x, CO, and PM₁₀ would be generated by the proposed project from both mobile and stationary sources. Day-to-day employee trips would make up the majority of the mobile emissions. As discussed in the traffic section of this IS/MND, a total of eight new employees would be generated by the project, resulting in a minimal increase in new vehicle trips. Emissions would also occur from area sources such as natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, cleaning products, spray paint, etc.). Additionally, the proposed project includes the installation of an emergency diesel powered generator, that would create emissions during routine testing and while in-use during emergencies.

As stated above, the project is required to comply with all EDCAQMD rules and regulations, such as those listed previously for construction, as well as the following for operations:

- Rule 205 related to nuisance;
- Rule 207 related to particulate matter;
- Rule 502 related to general conformity; and
- Rule 523 related to new stationary source review.

In order to determine the maximum operational ROG and NO_x emissions that would result from operation of the proposed project, CalEEMod was used to estimate operational emissions. Where project specific information was available, such data was input into the model. Such information included project-specific daily trip generation provided by KD Anderson & Associates in the Trip Generation Analysis prepared for the proposed project, and the likely specifications and testing regimes for the proposed emergency generator. The results of the modeling are presented in Table 4 below.

| Table 4 | | |
|--|--|---|
| Maximum Unmitigated Operational Emissions | | |
| Pollutant | Project Emissions (lbs/day) | EDCAQMD Significance Threshold (lbs/day) |
| ROG | 4.09 | 82.0 |
| NO _x | 9.00 | 82.0 |

Source: CalEEMod, November 2016 (see Appendix A).

As Table 4 indicates, the project’s maximum unmitigated operational emissions would be below the applicable thresholds of significance. According to the EDCAQMD, if ROG and NO_x mass emissions are determined not to be significant, then the assumption could be made that exhaust emissions of other air pollutants during project operation would also not be significant.

Given the above, operation of the proposed project would not violate an air quality standard or contribute to an existing or projected air quality violation, and a less-than-significant impact would occur associated with project operations.

Cumulative Emissions

Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By nature, air pollution is largely a cumulative impact. A single project is not sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

Adopted EDCAQMD rules and regulations, as well as the thresholds of significance, have been developed consistent with the applicable air quality plan with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the MCAB is currently designated nonattainment for ozone and particulate matter. If a project's operational emissions exceed the EDCAQMD's emission thresholds, a project would be considered to conflict with or obstruct implementation of the EDCAQMD's air quality planning efforts, including emission reduction measures contained in and/or derived from the applicable air quality plan. Similarly, if a project does not comply with the adopted EDCAQMD's rules and regulations, a project would be considered to conflict with or obstruct implementation of the EDCAQMD's air quality planning efforts. As discussed above, the proposed project would not exceed any significance criteria set forth by the EDCAQMD, and project-level impacts would not be significant. In addition, the proposed project would be required to comply with all applicable EDCAQMD rules and regulations. Because the proposed project would result in operational emissions below the applicable thresholds of significance, the project would not be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the MCAB is designated as nonattainment.

Conclusion

As stated previously, the applicable regional air quality plans include the 2016 Ozone Attainment Plan. According to EDCAQMD, if a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project may be considered consistent with the applicable air quality plans. Because the proposed project would not result in construction related or operational emissions of air pollutants in excess of the EDCAQMD's thresholds of significance, the proposed project would not be considered to conflict with or obstruct the implementation of any regional air quality plans. Therefore, the proposed project would not contribute to the region's nonattainment status for ozone or PM or contribute substantially to the violation of an air quality standard, and a *less-than-significant* impact would result.

- d. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The proposed project would involve the expansion of the existing El Dorado County Jail facility. The nearest existing sensitive receptors would be the existing residences located approximately 520 feet to the east of the proposed project's primary area of disturbance. The outdoor prison yard, adjacent to the expansion site could also be considered sensitive, though inmates are only allowed in the yard for short periods of time. This yard is essentially a walled area with a partial roof to provide some open-air exposure.

The major pollutant concentrations of concern are localized Carbon Monoxide (CO) emissions and toxic air contaminant (TAC) emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed project would slightly increase traffic volumes on streets near the project site; therefore, the project would be expected to slightly increase local CO concentrations. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high.

The Trip Generation Analysis prepared for the proposed project estimated that the operation of the proposed expansion would generate a maximum of approximately 11 new vehicle trips each day. The addition of 11 new vehicle trips to the project area would not significantly impact local roadways or intersections. Therefore, the proposed project would not be anticipated to lead to a significant increase in CO concentrations in the project area.

TAC Emissions

Another category of environmental concern is TACs. The California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, gasoline stations, freeways and high traffic roads, distribution centers, and rail yards.

Because the proposed project is not a sensitive receptor, the project would not involve siting a new sensitive receptor within any recommended setback distance of existing sources of TACs. However, the project site is located approximately 520 feet away from

an existing residence, and the outdoor prison yard is in close proximity to the proposed area of disturbance; thus, activities related to construction and operation of the proposed project are analyzed to determine whether the proposed project would expose nearby sensitive receptors to TAC emissions.

The CARB identifies diesel particulate matter (DPM) from diesel-fueled engines as a TAC. The project does not involve long-term operation of any stationary diesel engine or other major on-site stationary source of TACs, with the exception of the new stationary diesel emergency generator, for which a permit to operate would be required from the EDCAQMD. Per the permit, the generator would be regulated and monitored to ensure any associated emissions are under specified limitations. In addition, the generator is intended to be used only for emergency situations in order to serve the El Dorado County Jail facility. Outside of emergency situations, the generator would only be used for maintenance and testing purposes. Such testing would not be likely to exceed bi-weekly 30-minute tests, and triennial four-hour tests, subject to EDCAQMD regulations. Because the generator would only be used for emergency situations and routine short testing intervals, the emergency generator would not be anticipated to expose nearby receptors to substantial pollutant concentrations.

Construction activities have the potential to generate DPM emissions related to the number and types of equipment typically associated with construction. Off-road heavy-duty diesel equipment used for site grading, paving, and other construction activities would result in the generation of DPM. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Operation of construction equipment would be regulated through the EDCAQMD's rules and regulations, and would likely occur intermittently throughout the course of a day. Thus, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM associated with construction of the proposed project for any extended period of time would be low. Because health risks associated with exposure to DPM or any TAC are correlated with high concentrations over a long period of exposure, the temporary, intermittent construction-related DPM emissions would not be expected to cause any health risks to nearby sensitive receptors.

Asbestos

Asbestos is the name for a group of naturally occurring silicate minerals and may be found in serpentine, other ultramafic, and volcanic rock. When rock containing naturally occurring asbestos (NOA) is broken or crushed, asbestos may become released and become airborne, causing a potential health hazard. The EDCAQMD regulates NOA through Rule 223-2, which requires activities to reduce asbestos dust created from earth moving activities. An asbestos dust mitigation plan must be prepared, submitted, approved and implemented when more than 20 cubic yards of earth will be moved at all sites identified as being in an Asbestos Review Area as shown on the *El Dorado County Naturally Occurring Asbestos Review Map* prepared by El Dorado County. According to the *El Dorado County Naturally Occurring Asbestos Review Map*, the project site is not

within an Asbestos Review Area.⁴ Thus, the site is not expected to contain NOA and impacts associated with potential exposure to such would not occur.

In conclusion, the proposed project would not expose any nearby sensitive receptors to substantial concentrations of any pollutants. Therefore, impacts related to exposing sensitive receptors to substantial pollutant concentrations would be *less than significant*.

- e. According to the CARB's Handbook, some of the most common sources of odor complaints received by local air districts are sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, auto body shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. Jails are not typically associated with the creation of objectionable odors. Thus, the project would not introduce any new sources of potential objectionable odors.

Diesel fumes from construction equipment could be found to be objectionable; however, as addressed above, operation of construction equipment would be regulated by EDCAQMD rules and regulations, would occur intermittently throughout the course of a day, and be temporary in nature. For the aforementioned reasons, the project would not result in any noticeable objectionable odors associated with construction.

EDCAQMD Rule 205, Nuisance, addresses the exposure of "nuisance or annoyance" air contaminant discharges, including odors, and provides enforcement of odor control. Rule 205 is complaint-based, where if public complaints are sufficient to cause the odor source to be considered a public nuisance, then the EDCAQMD is required to investigate the identified source, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications to correct the nuisance condition. Thus, although not anticipated, if odor or air quality complaints are made upon development of the proposed project, the EDCAQMD would be required (per EDCAQMD Rule 205) to ensure that such complaints are addressed and mitigated, as necessary.

Therefore, the proposed project would not create objectionable odors that would affect a substantial number of people, and a *less-than-significant* impact would occur.

⁴ El Dorado County. *Asbestos Review Areas, Western Slope, County of El Dorado, State of California*. January 22, 2015. Available at: http://www.edcgov.us/uploadedFiles/Government/Air_Quality_Management/Asbestos%20Review%20Map%2001-22-15.pdf. Accessed November 2016.

IV. BIOLOGICAL RESOURCES.

Would the project:

| | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a. The proposed project site is composed of a 0.34-acre portion of land adjacent to the northeast side of the existing facility, the area to the southwest of the existing jail facility where the emergency generator would be installed, and the existing gravel road. The western portion of the project site is within an enclosed security fence and is graveled. The remainder of the project site consists of ruderal grasses. The grasses are regularly mowed as part of existing facility maintenance procedures. The proposed project site does not contain any trees, shrubs, or aquatic or riparian habitat. Oak trees are located just outside of the eastern project site boundary and dense vegetation is located south of the expansion area, associated with the ravine.

A query of CNDDDB was performed in order to determine the potential plant and wildlife species that could occur within the proposed project site area. The Placerville Quad was

used as the search area. The CNDDDB query results indicate 12 special-status plant and wildlife species that could potentially occur in the project's extended area. However, only a small number of the species have habitat requirements that could potentially be represented on the project site. The majority of the species required aquatic or riparian habitat. Of the species with habitat requirements that could be provided by the project site, none had been recorded within the proposed project site or vicinity. Due to the disturbed nature of the site and the lack of suitable habitat, the special-status species recorded in the project vicinity per the CNDDDB would not be expected to occur on the project site, including all species specific to aquatic habitats.

Birds and their nests are protected under California Fish and Wildlife Code (Sections 3503, 3503.5, 3513), and the Migratory Bird Treaty Act (MBTA). The proposed project would not include removal of trees during construction, and, thus, would not result in direct impacts to nesting birds. However, the oak trees bordering the east side of the proposed project site could provide habitat for nesting raptors and migratory birds. Such birds could potentially be disturbed as a result of the project should they be nesting in the off-site trees during construction activities. Without implementation of the following mitigation measures, which require pre-construction raptor and nesting surveys and a construction buffer, development of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Therefore, the proposed project could result in a *potentially significant* impact.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

- IV-1(a). *Prior to initiation of ground disturbing activities, if construction is expected to occur during the raptor nesting season (February 1 to August 31), a pre-construction raptor survey shall be performed to determine if active raptor nests are present in the trees adjacent to the site. The survey shall be conducted by a qualified biologist not more than ten days prior to the onset of construction activities. If construction activities cease for longer than two weeks, a subsequent pre-construction survey shall be conducted. If active raptor nests are not found on or within 500 feet of the project site, further mitigation is not necessary. In addition, if construction activities are proposed to occur during the non-breeding season (September 1 to January 31), a survey is not required and further studies are not necessary. However, if active raptor nests are found on or within 500 feet of the site, the project applicant shall implement Mitigation Measure IV-1b. The pre-construction raptor survey(s) shall be submitted to the Community Development Agency.*
- IV-1(b). *During construction, ground disturbing activities shall not occur within 500 feet of the active raptor nest(s) until the young have fledged or until*

the biologist has determined that the nest is not active any longer. If construction activities cause the nesting bird(s) to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the exclusionary buffer shall be increased, as determined by the qualified biologist, such that activities are far enough from the nest to stop the agitated behavior. The exclusionary buffer shall remain in place until the young have fledged or as otherwise determined by a qualified biologist.

IV-1(c). Prior to initiation of ground disturbing activities, if any vegetation removal is expected to occur as a result of the project during the typical avian nesting season (February 1 to August 31), a pre-construction survey shall be performed to determine if active migratory bird nests are present in the trees adjacent to the site. The survey shall be conducted by a qualified biologist not more than ten days prior to the onset of vegetation removal. If construction activities cease for longer than two weeks, a subsequent pre-construction survey shall be conducted. The pre-construction survey shall be submitted to the Community Development Agency.

If active migratory bird nests are found on-site, disturbance or removal of the nest shall be avoided until the young have fledged and the nest is not active any longer.

It should be noted that extensive buffers, such as those recommended for nesting raptors, are not necessary for nesting avian species protected solely by the Migratory Bird Treaty Act. Depending on the bird species, site conditions, and the proposed construction activities near an active nest, a smaller buffer could be prescribed, as determined by the biologist, but in no case less than 25 feet. However, if construction activities cause the nesting bird(s) to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then an exclusionary buffer shall be increased, as determined by the qualified biologist, such that activities are far enough from the nest to stop the agitated behavior. The exclusionary buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist.

Alternatively, vegetation removal could be scheduled to avoid all potential impacts. Vegetation removal conducted between September 1 and January 31 will prevent impacts to nesting birds and unfledged young.

b,c. Riparian habitats are described as the land and vegetation that is situated along the bank of a stream or river. Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year. The proposed project site does not contain riparian habitat or federally-protected wetlands.

The proposed project would not have an adverse effect on a sensitive natural community or federally-protected wetland, and a *less-than-significant* impact would occur.

- d. In December 2009, El Dorado County approved a contract with Sierra Ecosystems Associates, Inc. to prepare the first phase of the El Dorado County Integrated Natural Resource Management Plan (INRMP). The INRMP is intended to preserve and enhance native habitats that support endangered and sensitive species. While the INRMP has not been finalized, the County has released a Wildlife Movement and Corridors Report as part of Phase I of the plan's implementation.⁵

The proposed project site is directly adjacent to the existing jail facility and would not obstruct any wildlife corridors identified in the INRMP. In addition, the broader area surrounding the project site is moderately developed by residential land use, which would preclude migratory species from utilizing the site and the surrounding area as a wildlife corridor. As discussed previously, the site does not contain aquatic habitat, and, thus, would not support resident or migratory fish species. As the proposed project site has been heavily disturbed and existing development occurs directly adjacent to the site, the site would not represent suitable nursery habitat for any wildlife species. Therefore, the proposed project would not interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites, and a *less-than-significant* impact would occur.

- e. Oak trees are not located within the project boundaries. Oak trees are located adjacent to the project's eastern boundary. The possibility exists that such off-site trees could be impacted during project construction activities. Without implementation of the appropriate tree protection measures, the proposed project could result in a *potentially significant* impact regarding local policies protecting biological resources.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

IV-2. *The following construction policies and guidelines for tree preservation and protection shall be followed during project implementation:*

- *The construction drawings shall identify the location of the tree trunk and dripline of all oak trees in the immediate vicinity of the site disturbance area.*
- *A protective fence shall be installed around all oak trees adjacent to the disturbance area. The protective fence shall be installed*

⁵ El Dorado County. *Integrated Natural Resources Management Plan – Phase I, Final Wildlife Movement and Corridors Report*. December 7, 2010.

prior to commencement of any construction activity and shall remain in place for the duration of construction.

- *Grading, excavation, deposition of fill, erosion, compaction, and other construction-related activities shall not be permitted within the dripline or at locations which may damage the root system of oak trees.*
- *Oil, gas, chemicals, vehicles, construction equipment, machinery, and other construction materials shall not be allowed within the dripline of oak trees.*
- *In the event that oak trees are inadvertently damaged such that removal is required, replacement trees shall be planted, as determined by the Community Development Agency.*

- f. The project site is not located within an area that is subject to an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the proposed project would have ***no impact*** related to a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

V. CULTURAL RESOURCES.

Would the project:

| | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|--|--------------------------------|--|-------------------------------------|--------------------------|
| a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Directly or indirectly destroy a unique paleontological resource on site or unique geologic features? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Disturb any human remains, including those interred outside of formal cemeteries. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion

- a. Historical resources are typically features that are associated with the lives of historically important persons and/or historically significant events, or that embody the distinctive characteristics of a type, period, region or method of construction. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics. The proposed project site does not contain any existing permanent structures or any other resources that could be considered historic resources. Therefore, the project would not cause a substantial adverse change in the significance of a historical resource, and a *less-than-significant* impact would occur.

- b-d. In this part of El Dorado County, archaeologists locate prehistoric-period habitation sites along streams or on ridges or knolls, especially those with southern exposure. This region is known as the ethnographic-period territory of the Nisenan, also called the Southern Maidu. The Nisenan maintained permanent settlements along major rivers in the Sacramento Valley and foothills; they also periodically traveled to higher elevations. The proposed project area is situated in the Sierra Nevada foothills about a half-mile south of Hangtown Creek. According to the records search conducted by the North Central Information Center of the California Historical Resources Information System (CHRIS), given the extent of known cultural resources and the environmental setting of the project area, there is low potential for locating prehistoric-period cultural resources in the vicinity of the proposed project area.⁶ It should be noted that a ravine is located south of

⁶ North Central Information Center. *Records Search Results for El Dorado County Placerville Jail Expansion*. December 7, 2016.

the project site; however, the ravine experiences only temporary water flow during storm events.

Overall, due to the possibility that ground-disturbing activities could uncover previously unknown buried archaeological or paleontological materials, the project could result in a ***potentially significant*** impact with respect to causing a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5 and/or disturbing human remains.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

V-1(a). *If any prehistoric artifacts or other indications of archaeological resources are found during grading and construction activities, all work within 100 feet of the find shall cease and the applicant shall retain a qualified archaeologist to evaluate the find(s). If the resource is determined to be eligible for inclusion in the California Register of Historical Resources and project impacts cannot be avoided, data recovery shall be undertaken. Pursuant to CEQA Guidelines Section 15126.4(b)(3)(C), a data recovery plan, which makes provisions for adequately recovering the scientifically consequential information from and about the resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code. If an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation. This language of this mitigation measure shall be included on any future grading plans and utility plans approved by the County for the Jail Expansion site.*

V-1(b). *If human remains of Native American origin are discovered during project construction, further disturbance shall not occur within 100 feet of the vicinity of the find(s) until the El Dorado County Coroner has made the necessary findings as to origin. (California Health and Safety Code Section 7050.5) Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the El Dorado County Coroner determines the remains to be Native American, the Native American Heritage Commission (NAHC) must be contacted within 24 hours. The NAHC must then identify the “most likely descendant(s)” (MLD). The landowner shall engage in consultations with the MLD. The MLD will make recommendations concerning the treatment of the remains within 48 hours, as provided in Public Resources Code 5097.98.*

- e. Tribal cultural resources are generally defined by Public Resources Code 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. In compliance with Assembly Bill (AB) 52 (Public Resources Code Section 21080.3.1), tribal consultation requirements, a project notification letter was distributed to the Wilton Rancheria, the United Auburn Community of the Auburn Rancheria, the Ione Band of Miwok Indians, the Nashville-El Dorado Miwok Indians, the Shingle Springs Band of Miwok Indians, T'si-Akim Maidu, and the Washoe Tribe of Nevada and California. The letters were distributed on November 14, 2016. The mandatory 30-day response period closed on December 13, 2016 and requests for consultation were received from two tribes.

A records search of the California Historic Resources Information System (CHRIS) was performed by the North Central Information Center (NCIC) for cultural resource site records and survey reports within a quarter-mile radius of the proposed project area.⁷ Per the results of the search, a low potential exists for locating prehistoric- or historic-period cultural resources in the vicinity of the proposed project area. The NCIC did not recommend further archival and/or field study by a cultural resources professional. In addition, a record search of the NAHC Sacred Lands File for the area of potential project effect (APE) yielded negative results.⁸

The proposed project site is directly adjacent to the existing jail facility and is largely disturbed as a result of initial jail construction. In addition, the project would disturb a relatively small area, consisting of approximately 0.75-acre. Nevertheless, the possibility exists that construction of the proposed project could result in a *potentially significant* impact to tribal cultural resources.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

- V-2. *The project proponent shall submit a copy of the project grading plan to tribes who have requested consultation on this project under Public Resources Code Section 21080.3.1. The grading plan shall set forth the plan and methodology for grading and other excavation activities, including a timeline, grading locations, and other pertinent details including but not limited to, the depth of excavation, types of equipment to be used, etc. At least 10 business days prior to project grading, the County shall contact the tribes, who have requested consultation, to notify the tribes of grading. Tribes shall be allowed access to the site for monitoring purposes during ground disturbing activities only, if they so desire.*

⁷ North Central Information Center. *Records Search Results for El Dorado County Placerville Jail Expansion*. December 7, 2016.

⁸ Native American Heritage Commission. *El Dorado County Placerville Jail Expansion, El Dorado County*. December 7, 2016.

Significance determinations shall be measured in terms of criteria for inclusion on the California Register of Historical Resources (Title 14 CCR, §4852[a]), and the definition of tribal cultural resources set forth in Public Resources Code Section 21074. The evaluation of the tribal cultural resource(s) shall include culturally appropriate temporary and permanent treatment, which may include avoidance of tribal cultural resources, in-place preservation, and/or re-burial on project property so the resource(s) are not subject to further disturbance in perpetuity. Any reburial shall occur at a location predetermined between the landowner and tribe.

The landowner shall relinquish ownership of all sacred items, burial goods, and all archaeological artifacts that are found on the project area to the tribe for proper treatment and disposition.

VI. GEOLOGY AND SOILS.

Would the project:

| | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ii. Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iii. Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iv. Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a. According to the California Geological Survey (CGS) Alquist-Priolo Earthquake Fault Zone Maps, the proposed project site is not located within the vicinity of an Alquist-Priolo Earthquake Fault Zone.⁹ According to the Placerville Municipal Code, active faults have not been identified in the City. The Melones Fault passes through the eastern portion of the City, trending in a north/south direction, but is not considered active. The County General Plan EIR concludes that the County is considered to have a relatively low potential for seismic activity.¹⁰

⁹ California Department of Conservation. *Regulatory Maps portal*. Available at: <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>. Accessed November 14, 2016.

¹⁰ El Dorado County. *2004 General Plan EIR* [pg. 5.9-5]. July 2004.

Fault Rupture

The nearest Alquist-Priolo Earthquake Fault Zone is approximately 50 miles east of the proposed project site, and the site is not near any known active faults. Therefore, the proposed project would not be at risk for fault rupture impacts.

Seismic Ground Shaking

According to the CGS, El Dorado County is located in an area of low earthquake hazard potential.¹¹ Consequently, the proposed project site would experience infrequent low levels of shaking. Most earthquakes in the area would only damage weaker masonry buildings. The proposed project would be designed to comply with all applicable state and local regulations, including the California Building Code (CBC), and would not be impacted by the levels of seismic ground shaking anticipated for the site.

Liquefaction

Liquefaction is a type of seismic-related ground failure in which the strength and stiffness of a soil is reduced by earthquake shaking or other rapid loading. Liquefaction is most likely to occur in water-saturated silts, sands, and gravels having low to medium density. When such soils are subjected to vibration, they tend to compact and decrease in volume. If groundwater is unable to drain from the soils during vibration, the tendency of the soils to decrease in volume results in an increase in pore-water pressure. Under such conditions, the soils may lose their shear strength and assume the properties of a heavy liquid. As noted above, the proposed project site is located in an area of low earthquake hazard potential and is not located in an Alquist-Priolo Earthquake Fault Zone. In addition, the County General Plan EIR has already determined that the County is not at risk from liquefaction hazards.¹² Therefore, the proposed project would be affected by liquefaction or seismic-related ground failure.

Landslides

CGS maintains a record of areas mapped for landslide hazards. The proposed project is not located in such an area.¹³ While the proposed project site is approximately 100 feet uphill from a ravine, the ravine is heavily vegetated, and not would be considered to be at risk for landslide occurrence. The project site is not located near any other steep slope or topographic feature (such as a road cut) that would be considered to be at risk of landslide occurrence.

¹¹ California Geological Survey. *Earthquake Shaking Potential for California*. 2008. Available at: http://www.conservation.ca.gov/cgs/information/publications/ms/Documents/MS48_revised.pdf. Accessed November 14, 2016.

¹² El Dorado County. *General Plan Environmental Impact Report* [pg. 5.9-6]. Adopted 2004.

¹³ California Geological Survey. *Information Warehouse: Landslides*. Available at: <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>. Accessed November 14, 2016.

Conclusion

Based on the above analysis, the proposed project would not expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure and/or liquefaction, or landslides. Therefore, a ***less-than-significant*** impact would result.

- b. The proposed project would require excavation and grading of the site prior to construction. During such early stages of construction, topsoil would be exposed. After grading and leveling and prior to overlaying the ground surface with structures, while topsoil would be exposed, the potential exists for wind erosion to occur, which could affect the project area and potentially inadvertently transport eroded soils to the ravine downhill from the project site. However, topsoil exposure would be temporary during site preparation and would cease once development of the proposed building expansion occurs. Development of the building would reduce the amount of exposed soil that may be lost or displaced due to wind. The proposed project would be designed to minimize the potential for future erosion. Nonetheless, due to the existing topography on the site and the potential exposure of topsoil on the proposed project site during construction activities, implementation of the proposed project could result in substantial erosion or the loss of topsoil. Therefore, a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a ***less-than-significant*** level.

VI-1. *Prior to the issuance of a grading permit, the project applicant shall prepare to the satisfaction of the Community Development Agency, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions should include, but are not limited to, the following:*

- *Hydro-seeding;*
- *Placement of erosion control measures within drainage ways and ahead of drop inlets;*
- *The temporary lining (during construction activities) of drop inlets with “filter fabric”;*
- *The placement of straw wattles along slope contours;*
- *Use of a designated equipment and vehicle “wash-out” location;*
- *Use of siltation fences;*
- *Use of on-site rock/gravel road at construction access points; and*
- *Use of sediment basins and dust palliatives.*

- c. As discussed above, the proposed project site is not located in an area at risk for landslides. The proposed project would be built on stable soils, and, similar to the existing jail facility, would be designed to accommodate the sloping terrain of the area without increasing risk of landslide occurrence.

Lateral spreading, subsidence, liquefaction, and collapse are all related to seismic activity. Lateral spreading occurs when soils move toward unsupported surfaces or slopes during earthquake shaking. Subsidence occurs when loose, sandy soils settle during earthquake shaking. Because the proposed project would not be at risk for strong seismic ground shaking, the project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. In addition, the proposed project would be designed in accordance with the CBC. As such, a *less-than-significant* impact would occur.

- d. Expansive soils increase in volume when they absorb water and have the potential to crack or otherwise compromise the integrity of building foundations. Such soils generally have a high shrink-swell potential. The United States Department of Agriculture Web Soil Survey identifies the on-site soils as belonging to the Boomer soil series.¹⁴ According to the County General Plan EIR, such soils have a low to moderate shrink-swell potential.¹⁵ Because the proposed project could potentially be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code, a *potentially significant* impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

VI-2. *Prior to approval of construction drawings and issuance of a building permit, the applicant shall retain a California Registered Geotechnical Engineer to prepare a design-level geotechnical report for the proposed project. The report shall address and make recommendations on the following:*

- *Structural foundations;*
- *Grading practices;*
- *Erosion/winterization;*
- *Special problems on the site (liquefaction potential, expansive/unstable soils, etc.); and*
- *Slope Stability.*

Based upon the above analysis, the report shall identify any engineering requirements needed to ensure that the proposed project is properly designed such that improvements would not be adversely affected by geologic hazards. All recommendations identified in the report shall be shown on the construction drawings prior to their approval by the El

¹⁴ United States Department of Agriculture. *Web Soil Survey*. Available at: <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed November 17, 2016.

¹⁵ El Dorado County. *General Plan Environmental Impact Report* [pg. 5.9-14]. Adopted 2004.

Dorado County Community Development Agency to ensure that all geotechnical recommendations specified in the report are properly incorporated and used in the project design.

- e. The proposed project would connect to the existing sewer system, and would not require the use of a septic tank or other alternative waste water disposal method. Therefore, ***no impact*** would occur related to having soils incapable of adequately supporting the use of septic tanks or alternate waste water disposal systems.

VII. GREENHOUSE GAS EMISSIONS.

Would the project:

| | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|--------------------------------|--|-------------------------------------|--------------------------|
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion

a,b. Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project’s GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO₂) and, to a lesser extent, other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO₂ equivalents (MTCO_{2e}/yr).

The EDCAQMD, has not formally adopted thresholds for evaluating GHG emissions, but has recommended the use of thresholds adopted by the SMAQMD. SMAQMD adopted the following CEQA thresholds of significance for GHG emissions on October 23, 2014:

- 1,100 MTCO_{2e} per year for construction and operational GHG emissions; and
- 10,000 direct MTCO_{2e} per year for stationary sources.

The thresholds of significance established by SMAQMD, and used by EDCAQMD, were developed to identify emissions levels for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards climate stabilization.

Buildout of the proposed project would contribute to increases of GHG emissions that are associated with global climate change during construction and operations. The proposed project’s short-term construction-related and long-term operational GHG emissions are presented below.

Short-Term Construction GHG Emissions

Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. However, the proposed project’s construction GHG emissions have been estimated and compared to the threshold of significance. The proposed project’s maximum annual construction-related GHG emissions are presented in Table 5. The construction modeling assumptions are described in the Air Quality section of this IS/MND.

| Table 5 | | |
|---|--|---|
| Maximum Unmitigated Project Construction GHG Emissions | | |
| | Annual GHG Emissions (MTCO₂e/yr) | Threshold of Significance (MTCO₂e/yr) |
| Maximum Annual Construction-related GHG Emissions | 202.91 | 1,100 |
| <i>Source: CalEEMod, November 2016 (see Appendix A).</i> | | |

As shown in the table, the proposed project’s maximum annual unmitigated construction-related GHG emissions would be below the applicable threshold of significance. Accordingly, the proposed project would not be expected to have a cumulatively considerable contribution to a significant cumulative GHG impact during construction.

Long-Term Operational GHG Emissions

The modeling assumptions for project operation are discussed in the Air Quality section of this IS/MND. The proposed project’s estimated operational GHG emissions are presented in Table 6 below.

| Table 6 | | |
|---|--|---|
| Unmitigated Project Operational GHG Emissions | | |
| Emission Source | Annual GHG Emissions (MTCO₂e/yr) | Threshold of Significance (MTCO₂e/yr) |
| Area | 0.00078 | - |
| Energy | 78.72 | - |
| Mobile | 7.65 | - |
| Stationary ¹ | 2.57 | - |
| Solid Waste | 11.69 | - |
| Water | 13.69 | - |
| TOTAL ANNUAL GHG EMISSIONS | 114.32 | 1,100 |
| ¹ Refers to the on-site emergency backup diesel generator. | | |
| <i>Source: CalEEMod, November 2016 (see Appendix A).</i> | | |

As shown in the table, the proposed project’s annual unmitigated operational GHG emissions would be below the applicable threshold of significance. Accordingly, the

proposed project would not be expected to have a cumulatively considerable contribution to a significant cumulative GHG impact during operation.

Conclusion

Because the proposed project would result in GHG emissions below the applicable thresholds of significance during both construction and operation, the proposed project would not be considered to conflict with applicable plans or policies related to the reduction of GHG emissions. Therefore, the proposed project's GHG emissions would not be considered to have a significant impact on the environment or conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs, and impacts would be *less than significant*.

VIII. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:

| | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h. Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion

- a. The proposed project would include construction of expanded medical facilities for inmates. Consequently, the project would generate medical waste during operation, and, thus, would be subject to the California Department of Public Health Medical Waste Management Program (MWMP). To protect the public and the environment from potentially infectious disease causing agents, the MWMP regulates the generation, handling, storage, treatment, and disposal of medical waste by providing oversight for the implementation of the Medical Waste Management Act (MWMA). The MWMP permits and inspects all medical waste off-site treatment facilities and medical waste transfer stations.

As required by law, medical waste would be contained separately from other waste at the point of origin. Red biohazard bags with the international biohazard symbol would be used for non-sharps waste, and rigid puncture- and leak-resistant containers would be used for sharps waste (needles, scalpels, etc.). Medical waste would be picked up from the jail and disposed of by licensed medical waste commercial vendors required to comply with various federal and State laws regarding hazardous materials transport. All chemicals would be stored inside facilities with appropriate containment and ventilation, as required, and such chemicals would be utilized in limited quantities by experienced personnel according to established standard operating procedures (SOPs). SOPs would be regularly updated and would be available to all necessary personnel.

County employees, contractors, and all other on-site personnel would be required to use, store, and transport hazardous materials in compliance with federal, State, and local regulations during project construction and operation. Significant risks to the public or workers are not expected with the assumption that these products are used, transported and disposed of properly in accordance with the handling instructions on their labels and in accordance with all applicable regulations. Therefore, the project would result in a *less-than-significant* impact related to the routine transport, use, or disposal of hazardous materials.

- b. The proposed project site is composed primarily of ruderal grasses and graveled areas that are regularly maintained. The western portion of the site is covered with gravel and is part of the existing fenced jail facility. The site does not contain wells, septic systems, chemicals, or any other potentially hazardous materials that could pose a risk to humans or the environment. The presence of undiscovered hazardous materials on the site is highly unlikely given the existing site usage. Therefore, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, and a *less-than-significant* impact would occur.
- c. The proposed project site is not located within 0.25-mile of an existing school. The nearest school, El Dorado High School, is located 0.75 mile away from the site. Therefore, the proposed project would have a *less-than-significant* impact related to the emission of hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school.
- d. According to the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, the proposed project site is not included on the list of hazardous materials sites. Therefore, the project would not create a significant hazard to the public or the environment, and *no impact* would occur.
- e,f. Placerville Airport, a public airstrip, is located three miles east of the proposed project site. The project would not be within the Airport Influence Area specified by the Placerville Airport Land Use Compatibility Plan (ALUCP), and, thus, would not be addressed by policies and goals of the ALUCP. Therefore, the proposed project would not result in a safety hazard for people residing or working in the project area, and a *less-than-significant* impact would occur.

- g. During operation, the proposed project would provide adequate access for emergency vehicles and would not interfere with potential evacuation or response routes used by emergency response teams. Emergency vehicle access to the site would be provided by the existing access road and parking lot directly north of the site. The parking lot includes a fire lane, and would provide easy access to the proposed project for emergency vehicles. The proposed project does not involve any substantial changes to the anticipated land uses for the site, and would not result in any modifications to roadways currently providing emergency vehicle access for the existing jail facility. Consequently, implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and a *less-than-significant* impact would occur.
- h. The California Department of Forestry and Fire (CAL FIRE) has mapped fire hazard severity zones throughout El Dorado County, including within the City of Placerville, which is located in a Local Responsibility Area (LRA). Mapped areas within LRAs are either classified as Very High Fire Hazard Severity Zones (VHFHSZs) or non-VHFHSZs, and depends on several factors including vegetation, topography, weather, crown fire potential, ember production, and likelihood of fire. The proposed project site, as well as the existing jail facility, is located in an area designated by CAL FIRE as a VHFHSZ.¹⁶

The existing jail facility receives fire protection services from the El Dorado County Fire District (EDCFD). In accordance with Public Resources Code Section 4291-4299, the County maintains the ruderal grasses surrounding the existing jail facility to provide proper defensible space around all on-site structures. The proposed project would be built directly adjacent to the existing jail, and would be protected by the existing defensible space as well as the existing gravel access road, which would act as a fire break. The project would be required to comply with all relevant Fire Safe Regulations adopted by the El Dorado County Building Inspection Division as well as all current Fire and Building Code regulations. Therefore, the proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, and a *less-than-significant* impact would occur.

¹⁶ CAL FIRE. *El Dorado County Fire Hazard Severity Zone Map*. March 12, 2009.

IX. HYDROLOGY AND WATER QUALITY.

Would the project:

| | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|--------------------------------|--|-------------------------------------|--------------------------|
| a. Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Otherwise substantially degrade water quality? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h. Place within a 100-year floodplain structures which would impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| j. Inundation by seiche, tsunami, or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion

- a,c-f. The unincorporated portion of El Dorado County's west slope is covered under a Phase II Small Municipal Separate Storm Sewer System (MS4) General National Pollutant Discharge Elimination System (NPDES) permit, which became effective on July 1, 2013. As of July 1, 2015, the state-mandated NPDES permit requires the County to address stormwater runoff from new development and redevelopment projects, both during

construction and after construction occurs. Projects subject to the requirements of the Phase II MS4 NPDES permit must submit the appropriate Post-Construction Storm Water Plan based on the project type. Regulated projects include projects that create or replace 5,000 sf or more of impervious surface. Including both the proposed paved road and the proposed expansion building, the proposed project would create a maximum of 30,000 sf of impervious area, and, thus, is subject to Phase II MS4 NPDES permit post-construction stormwater treatment requirements.

Regulated Projects are required to divide the project area into Drainage Management Areas (DMAs) and implement and direct water to appropriately-sized Site Design Measures (SDMs) and Baseline Hydromodification Measures to each DMA to the Maximum Extent Practicable (MEP). SDMs and Baseline Hydromodification Measures for Regulated Projects shall be based on volumetric and/or flow-based sizing criteria for the objective of achieving infiltration, evapotranspiration, and/or harvesting/reuse of the 85th percentile 24-hour storm runoff event. Regulated Projects must additionally include Source Control Best Management Practices (BMPs) where possible. SDMs and Baseline Hydromodification Measures include, but are not limited to:

- Rooftop and impervious area disconnection;
- Porous pavement;
- Rain barrels and cisterns;
- Vegetated swales;
- Bio-retention facilities;
- Green roofs; or
- Other equivalent measures, as proposed by the County.

Without implementation of the appropriate stormwater treatment elements, the proposed project could violate water quality standards and/or waste discharge requirements, substantially alter the existing drainage pattern of the site such that erosion or siltation on- or off-site would occur, substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality. Therefore, a *potentially significant* impact would occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

- IX-1. Prior to approval of construction drawings, the Facilities Division shall submit a Post Construction Storm Water Plan to the Community Development Agency. The Plan shall include a site plan showing DMAs, proposed impervious surface areas, Site Design Measures, Source Controls, and Stormwater Treatment and Baseline Hydromodification Measures that are planned to be implemented on the site. In addition, the Plan shall include calculations demonstrating 85th percentile 24-hour storm event capture and treatment for each DMA.*

- b. The proposed project would connect to the water supply system at the existing jail. The project would not add to the total number of inmates housed at the jail, but would instead move inmates from the existing overcrowded facility into the proposed expansion area. Consequently, water use at the existing jail facility would be reallocated to the expansion area, and the water use of the expanded jail would remain relatively constant. In addition, the project would be consistent with the General Plan land use designation for the site.

The proposed project would create a maximum of 30,000 sf of impervious area, approximately half of which would be due to paving of the existing gravel road, should the road be paved as part of the proposed project. Implementation of Mitigation Measure IX-1 above would ensure that runoff associated with the site would continue to be allowed to percolate through the soil, thereby, still allowing groundwater recharge to occur during storm events. Therefore, the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level, and a *less-than-significant* impact would occur.

- g-i. According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Program, the proposed project is not located within a defined 100-year flood zone.¹⁷ Therefore, the proposed project would not place housing or structures within a 100-year floodplain, as mapped on a Flood Insurance Rate Map, or expose people or structures to a significant risk of loss, injury or death involving flooding, and a *less-than-significant* impact would occur.
- j. Tsunamis are defined as sea waves created by undersea fault movement. A seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir, with destructive capacity that is not as great as that of a tsunami. Both tsunamis and seiches are associated with seismic events. The proposed project site is not located near an ocean or a large body of water and is not located in a seismically active area. Thus, the project would not be subject to inundation due to tsunamis or seiche. Furthermore, the project site is not located downhill from a steep slope, and, thus, mudflows are not expected to impact the proposed project. Therefore, impacts associated with inundation by seiche, tsunami, or mudflow would be considered *less than significant*.

¹⁷ FEMA. *Flood Insurance Rate Map, Map Number 06017C0752E*. Effective September 26, 2008.

| X. LAND USE AND PLANNING. <i>Would the project:</i> | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|--------------------------|
| a. Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ✘ |
| b. Conflict with any applicable land use plans, policies, or regulations of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | ✘ | <input type="checkbox"/> |
| c. Conflict with any applicable habitat conservation plan or natural communities conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ✘ |

Discussion

- a. The proposed project would expand the existing jail facility, which is not located within an established community. Therefore, the proposed project would not physically divide an established community, and ***no impact*** would occur.
- b. The proposed project site is located within the City of Placerville. The Placerville General Plan designates the property as PF and the site is zoned as PF. The proposed project would be consistent with both the land use designation and the zoning for the site. In terms of applicable policies, neither the County of El Dorado nor City of Placerville General Plan have policies specific to the jail property.

With respect to other policies adopted for the purpose of avoiding or mitigating an environmental effect, the El Dorado County General Plan is the applicable planning document (i.e., the project site is owned by El Dorado County and the County is the lead agency with respect to the project). The proposed project would not conflict with El Dorado County General Plan policies related to mitigating environmental effects, as demonstrated in Section IV of this IS/MND.

Therefore, the proposed project would not conflict with any applicable land use plans, policies, or regulations of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect, and a ***less-than-significant*** impact would occur.

- c. The project site is not located within an area that is subject to an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the proposed project would not conflict with any applicable habitat conservation plan or natural communities conservation plan, and ***no impact*** would occur.

XI. MINERAL RESOURCES.

Would the project:

| | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|--------------------------------|--|-------------------------------------|--------------------------|
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion

a,b. The County General Plan includes a Mineral Resource (MR) land use overlay for areas with economically significant mineral deposits. In addition, the California Department of Conservation provides Mineral Resource Zone maps of the County for various mineral resources such as gold, industrial limestone, and construction materials.¹⁸ The Mineral Resource Zone maps classify mapped areas based on the likelihood of mineral resource occurrence. MRZ-2a and -2b zones are areas underlain by mineral deposits where geologic data indicate that significant measured, indicated, or inferred resources are present.

While the Mineral Resource Zone maps for the area do indicate the likelihood of gold deposits to the north and south of the City, the proposed project site is not located in an area addressed by the General Plan MR overlay and is not located within an MRZ-2a or -2b zone as specified by a Mineral Resource Zone map. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the state and would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan, and a *less-than-significant* impact would occur.

¹⁸ California Department of Conservation. *Mineral Lands Classification Data Portal*. Available at: <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>. Accessed November 14, 2016.

XII. NOISE.

Would the project result in:

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

Discussion

a,c,d. An Environmental Noise Assessment (ENA) was prepared for the proposed project by j.c. brendan & associates, Inc., dated November 15, 2016. The following discussion is based on the ENA.

A decibel (dB) is a unit used for measuring sound levels. The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels (expressed as dBA). All noise levels reported in this section are in terms of A-weighted levels, but may be expressed as dBA, unless otherwise noted.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}). The L_{eq} is the foundation of the Day-night Average noise descriptor, L_{dn} , and shows very good correlation with community response to noise. The L_{dn} is based upon the average noise level over a 24-hour day, with a +10 dBA weighting applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours. The nighttime penalty is

based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, which tends to disguise short-term variations in the noise environment, the County utilizes hourly performance standards for non-transportation noise sources.

Per CEQA, a project’s noise impacts should be evaluated against locally adopted noise standards, as well as against existing ambient conditions without the project. A project’s noise impacts would be considered significant if the project would cause local noise standards to be exceeded or if the project would result in a substantial increase in ambient noise levels. The applicable local noise standards and the existing ambient noise environment are discussed in further detail below, followed by a discussion of the proposed project’s expected noise generation.

Existing Noise Environment and Adjacent Land Uses in Project Vicinity

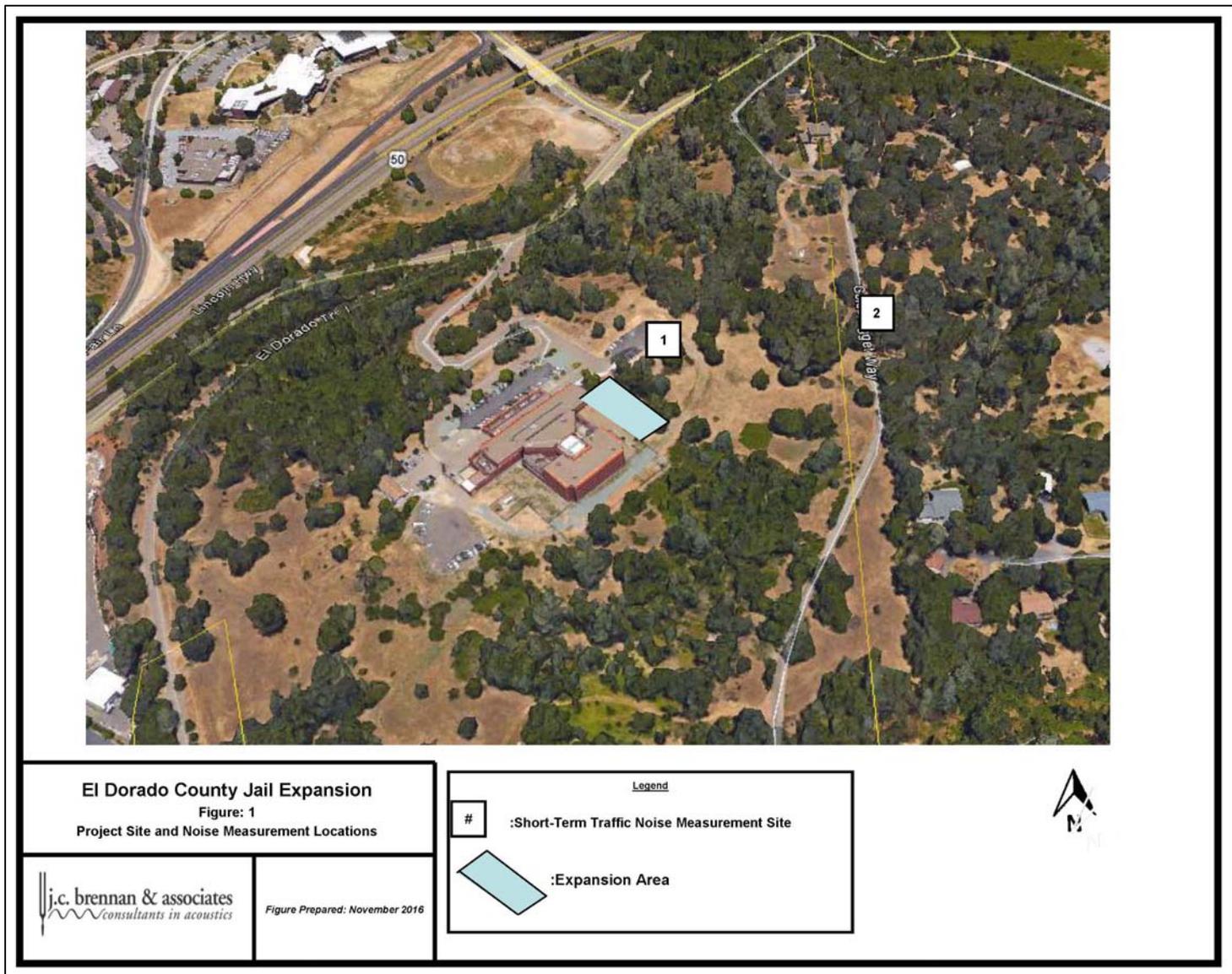
Noise-sensitive receptors in the vicinity of the proposed project site include sparse single-family homes east of the site across Gold Nugget Way. The daytime ambient noise environment at the project site is dominated primarily by local roadway traffic on Forni Road, parking lot activities, and distant traffic on HWY 50. The nearest residences to the east have considerable shielding of HWY 50 and the proposed project site. Local traffic on Gold Nugget Way and neighborhood activities such as power equipment are the primary noise sources at the residences. Gold Nugget Way is a narrow, single-lane road that extends one-half mile from Forni Road and provides access to various residences in the area.

The ENA included a noise measurement survey to quantify the existing ambient noise levels in the vicinity of the proposed project site. The survey consisted of continuous short-term noise measurements at the proposed project site and at the nearest residences east of the site. Figure 7 shows the specific location of the measurements. Equipment used for the noise measurement survey included a Larson Davis Laboratories (LDL) Model 824 precision integrating sound level meter. The meter was calibrated with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters. Results of the survey are shown in Table 7 below.

| Table 7 | | | |
|---|-------------------|------------------------------|-----------------------------|
| Summary of Measured Ambient Noise Levels | | | |
| Site | Date | Measured Noise Levels | |
| | | L_{eq} | L_{max} |
| 1 | November 14, 2016 | 51.9 dBA | 63.2 dBA |
| 2 | November 14, 2016 | 46.1 dBA | 62.7 dBA |

Source: j.c. brennan & associates, Inc., November 2016.

Figure 7
Noise Measurement Locations



The ambient noise levels at both sites are in accordance with the County General Plan daytime non-transportation noise level standards of 55 L_{eq} and 70 L_{max} for noise-sensitive land uses.

Significance Criteria

The following discussion of significance criteria is based off standards prescribed in the County General Plan Public Health, Safety, and Noise Element and the El Dorado County Code of Ordinances.

Construction

According to Policy 6.5.1.11, the standards outlined in the noise tables of the General Plan (Tables 6-3, 6-4, and 6-5) shall not apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7:00 AM and 7:00 PM, Monday through Friday, and 8:00 AM and 5:00 PM on weekends, and on federally recognized holidays. Notwithstanding such language included in the policy, the three tables are labeled as “construction noise” tables and include specific daytime and evening noise level standards. Therefore, this IS/MND evaluates the construction noise levels associated with development of the proposed project and compares them to the construction noise standards contained in General Plan Tables 6-3, 6-4, and 6-5. The standards used to evaluate construction noise in this IS/MND are shown in Table 8 below. The more restrictive L_{max} standards listed in Table 9 for non-transportation noise are also used.¹⁹

| Table 8 | | | |
|-------------------------------------|--------------------------------------|---------------------------------------|-------------------------------------|
| Construction Noise Standards | | | |
| Noise Level Descriptor | Daytime 7:00 AM – 7:00 PM | Evening 7:00 PM – 10:00 PM | Night 10:00 PM – 7:00 AM |
| Hourly L_{eq} , dB | 55 | 50 | 45 |
| L_{max} , dB | 70 | 60 | 55 |

Source: El Dorado County General Plan, 2004 (Amended December 2015).

Operation

According to Policy 6.5.1.7 of the Public Health, Safety, and Noise Element (Amended December 2015) of the County General Plan, noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards listed in Table 9. The non-transportation noise level criteria contained in the

¹⁹ The dB L_{eq} noise levels specified in Tables 6-3, 6-4, and 6-5 of the GP for “community regions”, in which the project site is located, are the same as the dB L_{eq} standards set forth for non-transportation noise in Table 9. However, the dB L_{max} noise levels specified in Tables 6-3, 6-4, and 6-5 for community regions are less restrictive than the L_{max} levels identified in Table 9. Therefore, for conservative purposes, the construction noise analysis uses the dB L_{eq} and L_{max} noise levels standards included in Table 9.

General Plan Public Health, Safety, and Noise Element are consistent with those contained in Title 130, Zoning, of the El Dorado County Code of Ordinances.

| Table 9 El Dorado County Noise Level Performance Standards for Noise Sensitive Land Uses Affected by Non-Transportation Sources | | | | | | |
|--|--------------------------------------|--------------|---------------------------------------|--------------|-------------------------------------|--------------|
| Noise Level Descriptor | Daytime 7:00 AM – 7:00 PM | | Evening 7:00 PM – 10:00 PM | | Night 10:00 PM – 7:00 AM | |
| | Community | Rural | Community | Rural | Community | Rural |
| Hourly L_{eq} , dB | 55 | 50 | 50 | 45 | 45 | 40 |
| L_{max} , dB | 70 | 60 | 60 | 55 | 55 | 50 |
| Notes: | | | | | | |
| 1. Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive tones. | | | | | | |
| 2. In Community areas, the exterior noise level standard shall be applied to the property line of the receiving property. In Rural areas, the exterior noise level shall be applied at a point 100 feet away from the residence. | | | | | | |
| <i>Source: El Dorado County General Plan, 2004 (Amended December 2015).</i> | | | | | | |

According to the County General Plan, in areas in which ambient noise levels are not in accordance with the standards shown in Table 9, increases in ambient noise levels shall be considered significant if the increase exceeds 3 dB. For areas in which ambient noise levels are in accordance with the General Plan standards, an increase of 5 dB would be considered significant.

Construction Noise Analysis

The ENA included an analysis of the construction noise that would be generated by the construction of the proposed expansion facility and paving the gravel access road. Construction of the proposed project would be expected to occur for a total of 16 months. The primary noise impacts would occur during site preparation, installation of utilities and excavation of the proposed expansion site. The primary noise sources would include a front-end loader, dump truck, and backhoe. It is estimated that the use of the on-site equipment would occur for a total of 44 days. Construction activities would generate maximum noise levels, as indicated in Table 10, ranging from 76 to 82 dB at a distance of 50 feet.

The primary construction area of the project site is located approximately 520 feet from the nearest residential building property line to the east. Based upon a distance of 520 feet and the maximum noise levels shown in Table 9, the maximum noise levels at the nearest residences are expected to range between 51 dBA and 56 dBA, while including some shielding due to topography. To determine the hourly L_{eq} noise levels at the nearest residences, the ENA used the Federal Highway Administration Roadway Noise Construction Model (RCNM) which assigns the average use of individual pieces of equipment and calculates the overall hourly L_{eq} of all noise sources. The ENA assumed that the loudest construction noise would occur during the grading, excavation and pouring of the foundation for the proposed expansion. Therefore, it was assumed that

construction equipment would include a backhoe, front-end loader, dump truck and concrete pump truck as the primary sources of noise.

| Type of Equipment | Maximum Level at 50 feet (dB) |
|--------------------------|--------------------------------------|
| Backhoe | 78 |
| Dump Truck | 76 |
| Front-end Loader | 79 |
| Concrete Pump Truck | 82 |
| Paver | 77 |

Source: j.c. brennan & associates, Inc., November 2016.

Based upon the results of the RCNM calculations, the hourly L_{eq} associated with the construction of the expansion facility would be approximately 54.7 dB at the nearest noise-sensitive receptor during simultaneous operation of all equipment. Therefore, the construction noise would comply the County daytime noise level standard of 55 dB L_{eq} and 70 dB L_{max} .

Project construction is also anticipated to include the paving of the existing gravel road. Paving would likely occur near the end of construction activities at the proposed expansion site and would take approximately three to four days. The gravel road is located approximately 450 feet from the nearest residences to the east. Paving equipment would likely include a front-end loader, dump truck and a paver. Using the RCNM, noise levels at the nearest residences would be 54.8 dB L_{eq} and 55 dB L_{max} during road paving activities.

Overall, construction of the proposed project would be in accordance with the daytime noise level standards for non-transportation noise sources specified by the County in Table 9. However, should construction not be limited to the appropriate daytime hours, the proposed project could cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, and a potentially significant impact could occur.

Operational Noise Analysis

As discussed in Section XVI of this IS/MND, the proposed project would generate a minimal amount of traffic (less than 11 trips per day). Consequently, the project would not generate a significant amount of transportation-related noise. The primary source of noise associated with the operation of the proposed project would be attributable to the proposed emergency generator, which would be located adjacent to the southwest side of the existing jail facility.

Noise levels associated with generators can vary significantly due to engine size, fuel type, type of muffler, and the use of an enclosure. Under normal circumstances, the proposed generator would be run for approximately 20 to 30 minutes on a weekly or bi-weekly period in order to satisfy maintenance requirements. Other than for maintenance,

the generator would only run during emergency power outages. Based on Title 130 of the El Dorado County Code of Ordinances, the use of the emergency generator during power outages would be considered exempt from the noise standards in Table 6. However, the generator may be subject to the noise levels standards while being exercised. Under Item D of Section 130.37.20, Exemptions, of the El Dorado County Code of Ordinances, whether maintenance of the emergency generator is exempt or not is unclear.

For purposes of this analysis, the non-transportation noise level standards of 55 L_{eq} and 70 L_{max} are assumed to apply to maintenance operation of the generator. The generator would include a muffler/silencer which would limit generator-related noise to 85 dB or less at a distance of 10 feet. Noise levels typically decrease by 6 dB per doubling of distance from the noise source. The nearest residence would be located approximately 600 feet away from the proposed location of the emergency generator. Consequently, the generator would be required to comply with a noise level of 85 dBA, at a distance of 10-meters in order to ensure that resultant noise levels at the nearest residences comply with the County's daytime 70 dBA maximum noise level standard and daytime 55 dBA hourly L_{eq} standard (assuming 30-minute maintenance runtimes). In addition, the maintenance operation would need to occur during the daytime period of 7:00 AM. to 7:00 PM.

Conclusion

Based on the above analysis, construction of the proposed project could conflict with noise level standards in the General Plan if construction activities are not limited to the appropriate daytime hours. In addition, maintenance of the proposed emergency generator could exceed non-transportation noise standards of the General Plan without implementation of the proper mitigation measures. Therefore, the proposed project could result in the exposure of persons to or generation of noise levels in excess of standards established in a local general plan or noise ordinance, and could result in a substantial temporary and/or permanent increase in ambient noise levels in the project vicinity above levels existing without the project. As such, a *potentially significant* impact would occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

- XII-1. The project contractor shall ensure that construction activities shall be limited to the hours of 7:00 AM to 7:00 PM, Monday through Friday, and 8:00 AM to 5:00 PM, Saturday and Sunday. In addition, construction shall not occur on federally recognized holidays. (unless extended by special permit). The construction activities hours shall be included on the grading plan submitted by the County Facilities Division for review and approval by the Community Development Agency prior to grading permit issuance.*
- XII-2. The project contractor shall ensure that all internal combustion engines associated with stationary and mobile construction equipment to be used on the project site shall have adequate mufflers equal to or better than*

those supplied with the equipment by the manufacturer. The muffler requirement shall be included on the grading plan submitted by the County Facilities Division for review and approval by the Community Development Agency prior to grading permit issuance.

XII-3. The project contractor shall ensure that the on-site construction staging areas shall be located as far as practical from existing residential areas. The aforementioned requirement shall be included on the grading plan submitted by the County Facilities Division for review and approval by the Community Development Agency prior to grading permit issuance.

XII-4(a). Maintenance-related (non-emergency) operation of the emergency generator shall be limited to the hours of 7:00 AM to 7:00 PM, Monday through Friday, and 8:00 AM to 5:00 PM, Saturday and Sunday. In addition, maintenance-related operation shall not occur on federally recognized holidays (unless extended by special permit).

XII-4(b). In conjunction with submittal of construction drawings to the Community Development Agency, the County Facilities Division shall provide generator specifications demonstrating that the generator that will be purchased and installed on-site will produce noise equal to or less than 85 dB at a distance of 10 feet. The final generator specifications shall be approved by the Community Development Agency prior to approval of construction drawings.

- b. Proposed construction activities have the potential to introduce sources of temporary ground vibration to the project site. Levels of vibration include imperceptible vibrations at low levels, low rumbling and minor vibration at moderate levels, and structural or architectural damage at high levels. For structural damage, the California Department of Transportation (Caltrans) uses a vibration limit of 0.5 inches/second, peak particle velocity (in/sec, PPV), for buildings structurally sound and designed to modern engineering standards and 0.2 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern.

The existing jail facility is the only structure in the vicinity of the proposed project site. Because the existing jail facility is of relatively recent construction, the 0.5 in/sec PPV threshold offers an appropriate value with regards to structural damage and is used as the threshold of significance for the analysis. Table 11 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet.

As shown in Table 11 below, the existing jail facility would not be exposed to construction-related vibration in excess of 0.5 in/sec. Due to the substantial distance between the proposed project site and the nearest noise-sensitive receptor, perceptible off-site vibration is not expected. Therefore, persons are not predicted to be exposed to excessive vibration or groundborne noise levels associated with the proposed project, and a *less-than-significant* impact would occur.

| Equipment | PPV at 25 ft (in/sec) |
|--|------------------------------|
| Vibratory Roller | 0.210 |
| Large Bulldozer | 0.089 |
| Caisson drilling | 0.089 |
| Loaded trucks | 0.076 |
| Jackhammer | 0.035 |
| Small bulldozer | 0.003 |
| <i>Source: Caltrans, Transportation and Construction Vibration: Guidance Manual, September 2013.</i> | |

e,f. The proposed project site is not located within the vicinity of a public airport or a private airstrip and is not covered by an airport land use plan. The nearest airstrip, Placerville Airport, is located three miles from the site. Placerville Airport is a relatively small county-owned public use airstrip and does not generate heavy air traffic. Air traffic-related noise, while intermittently audible within the City, does not appreciably affect the ambient noise environment at the project site. Therefore, the proposed project would not expose people housed or working in the project area to excessive noise levels, and ***no impact*** would occur.

XIII. POPULATION AND HOUSING.

Would the project:

| | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a. The proposed project would include an expansion of the existing jail facilities to include 68 new beds. 54 of the beds would be reallocated for general inmate housing use, and 14 would be used for mental health/medical purposes. In addition, project would add approximately eight new employees. The proposed expansion facilities would only serve the existing inmate population, and, per the selection criteria of SB 844, would not significantly increase the overall capacity of the jail. The number of employees added by the project would be insignificant relative to the total workforce at the existing facility, and their employment would not induce significant population growth in the area. Therefore, the proposed project would not induce substantial population growth to the area, either directly or indirectly, and a *less-than-significant* impact would occur.
- b,c. The proposed project site does not contain any existing housing and would not result in the displacement of any persons. In addition, the site is not designated or zoned for residential use. Therefore, the proposed project would not displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere, and *no impact* would occur.

XIV. PUBLIC SERVICES.

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

| | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|-----------------------------|--------------------------------|--|-------------------------------------|--------------------------|
| a. Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. Other Public Facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion

a-e. The EDCFD currently provides fire protection services to the jail facility. The nearest fire station is Fire Station 25, located at 3034 Sacramento Street in the City of Placerville. The station is located 1.6 miles away from the jail, and is staffed 24 hours a day, seven days a week. The proposed expansion would similarly receive fire protection services from EDCFD and no new fire department facilities would be required, the construction of which could cause significant environmental impacts, in order to adequately serve the project. The Fire District would review the project improvement plans to determine project compliance with the appropriate fire standards, including, but not limited to: location of fire hydrants, accessibility around buildings, fire sprinklers within buildings, building identification, and construction phasing. In addition, the proposed project would be required to pay a Fire District Mitigation fee.

The project site would be served by the El Dorado County Sheriff’s Department. The jail expansion is not anticipated to increase the demand upon the Sheriff’s Department given that the project would not increase the inmate capacity of the jail, but rather provide additional space for the existing adult population, particularly women and medical health inmates.

Schools, parks, and other public facilities are typically used by residents of nearby areas. The proposed project involves a jail facility and the inmate population does not have access to schools, parks, and other public facilities. Thus, demand for such facilities would not increase as a result of the project.

Overall, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives. Therefore, the proposed project would have a *less-than-significant* impact regarding the provision of public services and facilities.

XV. RECREATION.

Would the project:

| | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ✘ |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ✘ |

Discussion

- a,b. The proposed project is a jail facility, and as such, would not include any residential development or other land uses that might increase demand for public recreational facilities. As discussed previously, the proposed project would not increase the inmate capacity of the existing jail, and, thus, would not add new inmates to the facility. Therefore, the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities by family members who might visit inmates, such that substantial physical deterioration of the facility would occur or be accelerated, nor would the construction or expansion of recreational facilities be required which might have an adverse physical effect on the environment. As a result, ***no impact*** would occur.

XVI. TRANSPORTATION AND CIRCULATION.
Would the project:

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

Discussion

a,b. A Trip Generation Analysis was prepared for the proposed project by KD Anderson and Associates on November 4, 2016.²⁰ The following discussion is based on the Trip Generation Analysis. Trip generation is determined by identifying the type and size of land use being developed. Recognized sources of trip generation data may then be used to calculate the total number of trip ends resulting from the day to day operation of the proposed project.

²⁰ KD Anderson & Associates, Inc. *Trip Generation Analysis—El Dorado County Jail Expansion IS/MND, El Dorado County, CA.* November 4, 2016.

The Sheriff’s Department staff provided data for the employees at the existing jail facility including time and days of shifts for the work group. The jail operates with two 12-hour shifts. The AM shift change occurs in the 6:00 to 7:00 AM hour while the PM shift change occurs in the 6:00 to 7:00 PM hour. Eight additional employees are anticipated as a result of the proposed jail expansion. The new facility would include four shifts per week, with one shift working daytime hours on Tuesday to Thursday and every other Friday, a second shift working nighttime hours on Tuesday to Thursday and every other Friday, and the third and fourth shifts working Saturday through Monday and every other Friday. Each shift would have two employees.

Using the above information, the trip generation for the proposed project was calculated using two methods. The first method consisted of a review of rates published in the 9th edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual based on the projected expansion of the site. The second methodology was based on the usage statistics provided by the County Sheriff’s Department for the proposed project.

ITE Trip Generation Rates Method

For the ITE method, two independent variables were considered for Land Use 571, “Prison”: the number of additional beds and the number of additional employees. As noted previously, the Sheriff’s Department does not expect the added beds to increase the number of trips associated with the jail facility. However, the number of added beds was chosen as a variable to provide a conservative estimate. It should be noted that the ITE trip rates do not consider the anticipated timing for shift changes. Table 12 displays the projected AM and PM peak hour trip generation for the proposed project for each variable.

| Table 12 | | | |
|---|------------------|------|------------------------------------|
| ITE Trip Generation for Prison Land Use | | | |
| Units and Variable | Trip Rate | | Total AM/PM Peak Hour Trips |
| 68 Beds | AM | 0.10 | 7 |
| | PM | 0.05 | 4 |
| 8 Employees (Total) | AM | 0.52 | 4 |
| | PM | 0.68 | 5 |
| 2 Employees (By Shift) | AM | 0.52 | 1 |
| | PM | 0.68 | 1 |
| <i>Source: KD Anderson and Associates, Inc.</i> | | | |

Depending on the variable used and the number of employees on shift, the project could generate between one and seven trips during peak hours. None of the scenarios analyzed would result in the generation of more than 10 trips during the weekday AM or PM Peak periods.

Sheriff’s Department Statistics Method

For the methodology using information provided by the Sheriff’s Department, only the number of new employees that would be added by the proposed project was considered.

The Sheriff’s Department does not expect the project to result in additional trips related to deliveries, as any required deliveries could be combined with trips tied to the existing facility. While the inmate capacity of the jail would not increase as a result of the project, the proposed expansion could result in a transfer of inmates between the El Dorado County Lake Tahoe Jail and the proposed expansion facility. However, the project would provide for “video visitation”, which would allow for video conference between inmates at the proposed expanded facility in Placerville and their families in Lake Tahoe. Video visitation would eliminate any trips generated by families driving between Lake Tahoe and the expanded jail in Placerville. In addition, the County currently operates vehicles between the two jails based on space availability. The Sheriff’s Department anticipates fewer trips between the jails once the expansion is completed. Therefore, the only new trips that would be generated by the proposed project would likely be due solely to the eight added employees.

Table 13 below summarizes the number of trips that would be generated by the added employees based on shift changes instead of the ITE trip calculation rate used above.

| Table 13 | | | | |
|--|---------------------------|-----------------|---------------------------|-----------------|
| Sheriff’s Department Statistics Trip Generation | | | | |
| Shift | 6:00-7:00 AM Trips | | 6:00-7:00 PM Trips | |
| | Inbound | Outbound | Inbound | Outbound |
| 6:15 AM to 6:15 PM Shift | 2 | 2 | | |
| 6:15 PM to 6:15 AM Shift | | | 2 | 2 |
| Total Trips | 4 | | 4 | |
| <i>Source: KD Anderson and Associates, Inc.</i> | | | | |

As noted earlier, the jail operates in twelve hour shifts from 6:15 AM to 6:15 PM and 6:15 PM to 6:15 AM. The County uses a three-hour peak in identifying the peak hour of traffic. The AM peak is from 6:00 AM to 9:00 AM, and the PM peak is from 3:00 PM to 6:00 PM. Therefore, the worst-case scenario for the project assumes that the AM shift employee would arrive at the site within 15 minutes of their shift, between 6:00 and 6:15 AM. The PM peak hour ends 15 minutes prior to the shift change; therefore, a portion of the trips generated by the evening shift change may not fall within the PM peak hour.

Conclusion

The County’s Transportation Impact Study Guidelines identify that a full traffic study is required if a project has the potential to generate more than ten trips during the weekday AM or PM peak periods. As discussed above, under either of the above analysis methods, the proposed project would not result in the generation of more than 10 trips during AM or PM peak periods. Consequently, a full traffic study would not be required for the proposed project. Using the most conservative analysis provided by the Trip Generation Analysis, the proposed project would generate up to seven peak hour trips. The addition of seven peak hour trips would not have a measurable effect on the operation of existing circulation systems in the surrounding area. Therefore, the proposed project would not conflict with an applicable plan, ordinance or policy establishing measures of

effectiveness for the performance of the circulation system and would not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. Thus, a *less-than-significant* impact would occur.

- c. The proposed project site is not located within an area addressed by the Placerville ALUCP, and is three miles away from the Placerville Airport, the nearest airstrip. Because the height of the proposed structure would not exceed the height of the existing jail facility, the project would not have the potential to affect air traffic patterns. Therefore, because the proposed project would not result in a change in air traffic patterns, including either an increase in air traffic levels or a change in location that results in substantial safety risks, *no impact* would occur.
- d,e. The proposed project would not modify the circulation system of the existing jail facility, with the exception of the potential paving of the existing gravel road southeast of the facility. Thus, the proposed project would not introduce any new design hazards to the project area. During the construction phase of the project, all construction equipment and materials would be staged at a paved parking area on the west side of the existing jail facility. The parking area is not used for public parking, and use of the area as a staging area would not interfere with the existing circulation system. Consequently, the proposed project would not substantially increase hazards due to design features or incompatible uses and would not result in inadequate emergency access. Therefore, a *less-than-significant* impact would occur.
- f. El Dorado Transit currently provides public transit access to the jail.²¹ The proposed project would be an expansion to the existing jail facility. The project would include only eight new employees and would not increase the total number of inmates at the jail. Accordingly, the project would not overburden any public transit services in the area. The County General Plan does not contain specific policies requiring bicycle facilities or other alternative transportation options for new projects. Therefore, the proposed project would result in a *less-than-significant* impact related to adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities.

²¹ El Dorado Transit. *Route 20: Placerville*. Available at: <http://eldoradotransit.com/routes/placerville/#map-link>. Accessed November 18, 2016.

| XVII. UTILITIES AND SERVICE SYSTEMS. <i>Would the project:</i> | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|--------------------------------|--|-------------------------------------|--------------------------|
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g. Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion

a-e. The proposed project would create a maximum of 30,000 sf of impervious area. With the implementation of Mitigation Measure IX-1 above, the proposed project would include an appropriate stormwater management system meeting the requirements of the State Water Resources Control Board, as well as the EDC Drainage Manual Requirements, and would not require the construction of new or expanded wastewater treatment or storm drainage facilities. As noted previously, the proposed expansion would house inmates currently occupying the existing jail. The project would not increase the number of inmates at the jail, and, thus, would not be expected to increase overall water and wastewater demand associated with the jail. The eight employees that would be added by the proposed project would not reside at the jail, and would have a minimal effect on wastewater and water demand relative to the overall demand of the existing jail. Therefore, the proposed project would have a *less-than-significant* impact with regard to water and wastewater facilities and would have sufficient water supplies available to serve the project without new or expanded entitlements.

- f,g. The proposed project would generate solid waste associated with construction activities and project operations. Construction debris would be disposed of in accordance with applicable federal, State, and local regulations and standards. Per Chapter 8.43 of the El Dorado County Code of Ordinances, Construction and Demolition Debris Recycling Within the County, the project would be required to recycle at least 50 percent of the debris from construction so as to divert waste from landfills.

El Dorado Disposal provides solid waste collection, disposal, recycling, and yard waste services to the County, including the existing jail facility. Because the project would not increase the total number of inmates at the jail, and would add only eight employees, the project would not substantially increase the amount of solid waste generated at the project site, with the exception of medical waste. Disposal of medical waste from the proposed medical facilities would be handled according to all relevant federal, State, and local regulations, as discussed in Section VIII, question 'a', of this IS/MND. Therefore, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and would comply with federal, state, and local statutes and regulations related to solid waste. As such, a *less-than-significant* impact would occur.

| XVIII. MANDATORY FINDINGS OF SIGNIFICANCE. | Potentially Significant Impact | Less-Than-Significant with Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|--|--------------------------------|--|-------------------------------------|--------------------------|
| a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion

- a. As discussed throughout this IS/MND, the proposed project would disturb a relatively small area of land and would not include the removal of existing trees or shrubs. In addition, the proposed project site does not contain permanent structures that would be considered cultural or historic resources. As such, a low potential for sensitive biological resources and cultural resources exists on the project site. This IS/MND includes mitigation measures that would mitigate any potential impacts to biological and cultural resources. Therefore, the proposed project would have a *less-than-significant* impact related to degradation of the quality of the environment, reduction of habitat or plant and wildlife species, and elimination of important examples of California history or prehistory.
- b. Development of previously undeveloped land may be regarded as achieving short-term goals to the disadvantage of long-term environmental goals. However, the inevitable impacts resulting from population and economic growth are mitigated by long-range planning to establish policies, programs, and measures for the efficient and economical use of resources. Long-term environmental goals, both broad and specific, have been addressed previously in several environmental documents, the most comprehensive being the County General Plan EIR. As discussed throughout this IS/MND, the proposed

project would comply with all applicable goals and policies set forth in the General Plan. Therefore, the cumulative impact of the proposed project would be *less than significant*.

- c. The proposed project in conjunction with other development within the City of Placerville could incrementally contribute to cumulative impacts in the area. However, mitigation measures for all potentially significant project-level impacts identified for the proposed project in this IS/MND have been included that would reduce impacts to less-than-significant levels. As such, the project's incremental contribution towards cumulative impacts would not be considered significant. In addition, all future discretionary development projects in the area would be required to undergo the same environmental analysis and mitigate any potential impacts, as necessary. Therefore, the proposed project would not have any impacts that would be cumulatively considerable, and impacts would be *less than significant*

- d. During construction, the proposed project could potentially expose neighboring noise-sensitive receptors to excess noise levels. However, this IS/MND includes mitigation measures that would reduce any potential impacts to less-than-significant levels. Furthermore, the proposed project would be designed in accordance with all applicable building standards and codes to ensure adequate safety is provided for the future inmates and employees at the proposed project. Therefore, impacts related to environmental effects that could cause substantial adverse effects on human beings would be *less than significant*.

APPENDIX A

AIR QUALITY AND GHG MODELING RESULTS

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summary Report

El Dorado County Jail Expansion
El Dorado-Mountain County, Summary Report

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|-------|----------|-------------|--------------------|------------|
| Government Office Building | 25.00 | 1000sqft | 0.75 | 25,000.00 | 0 |
| Other Asphalt Surfaces | 16.00 | 1000sqft | 0.37 | 16,000.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|---------------------------------|--------------------------------|---------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.7 | Precipitation Freq (Days) | 70 |
| Climate Zone | 1 | | | Operational Year | 2020 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MW hr) | 404.79 | CH4 Intensity (lb/MW hr) | 0.029 | N2O Intensity (lb/MW hr) | 0.006 |

1.3 User Entered Comments

Only CalEEMod defaults were used.

Project Characteristics - CO2 intensity adjusted for PG&E progress towards RPS

Land Use - *

Construction Phase - Applicant Information

Vehicle Trips - K.D. Anderson Trip Generation Report

Area Mitigation - EDCAQMD regulation

Energy Mitigation -

Operational Off-Road Equipment - *

Stationary Sources - Emergency Generators and Fire Pumps - One 4 hour test required every 36 months; 30 minute monthly tests also required

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summary Report

2.0 Peak Daily Emissions

Peak Daily Construction Emissions

Peak Daily Construction Emissions

| Year | Phase | Unmitigated | | | | | | Mitigated | | | | | |
|--------|------------------------|-------------|-----------|-----------|---------------|----------|----------|-----------|-----------|-----------|---------------|----------|----------|
| | | ROG | NOX | CO | SO2 | PM10 | PM2.5 | ROG | NOX | CO | SO2 | PM10 | PM2.5 |
| lb/day | | | | | | | | | | | | | |
| 2019 | Grading | 1.4672 W | 16.0657 W | 6.9250 S | 0.0148 S | 5.4783 S | 3.1953 S | 1.4672 W | 16.0657 W | 6.9250 S | 0.0148 S | 5.4783 S | 3.1953 S |
| 2019 | Building Construction | 2.4008 W | 17.0216 W | 14.4082 W | 0.0253 S | 1.0955 W | 0.9397 W | 2.4008 W | 17.0216 W | 14.4082 W | 0.0253 S | 1.0955 W | 0.9397 W |
| 2020 | Building Construction | 2.1442 W | 15.7265 W | 14.0046 W | 0.0252 S | 0.9724 W | 0.8208 W | 2.1442 W | 15.7265 W | 14.0046 W | 0.0252 S | 0.9724 W | 0.8208 W |
| 2019 | Paving | 1.1749 W | 9.2230 W | 9.4202 S | 0.0147 S | 0.6301 S | 0.5106 S | 1.1749 W | 9.2230 W | 9.4202 S | 0.0147 S | 0.6301 S | 0.5106 S |
| 2019 | Architectural Coating | 2.2140 W | 1.8466 W | 1.9608 S | 3.2300e-003 S | 0.1536 S | 0.1355 S | 2.2140 W | 1.8466 W | 1.9608 S | 3.2300e-003 S | 0.1536 S | 0.1355 S |
| 2020 | Architectural Coating | 2.1885 W | 1.6939 W | 1.9388 S | 3.2200e-003 S | 0.1358 S | 0.1177 S | 2.1885 W | 1.6939 W | 1.9388 S | 3.2200e-003 S | 0.1358 S | 0.1177 S |
| | Peak Daily Total | 2.4008 W | 17.0216 W | 14.4082 W | 0.0253 S | 5.4783 S | 3.1953 S | 2.4008 W | 17.0216 W | 14.4082 W | 0.0253 S | 5.4783 S | 3.1953 S |
| | Air District Threshold | | | | | | | | | | | | |
| | Exceed Significance? | | | | | | | | | | | | |

Peak Daily Operational Emissions

Peak Daily Operational Emissions

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summary Report

| | | Unmitigated | | | | | | Mitigated | | | | | |
|----------|------------------------|-------------|---------------|---------------|---------------|---------------|---------------|-----------|---------------|---------------|---------------|---------------|---------------|
| | | ROG | NOX | CO | SO2 | PM10 | PM2.5 | ROG | NOX | CO | SO2 | PM10 | PM2.5 |
| | Operational Activity | lb/day | | | | | | | | | | | |
| On-Site | Stationary | 3.1504 S | 8.8065 S | 8.0340 S | 0.0151 S | 0.4635 S | 0.4635 S | 3.1504 S | 8.8065 S | 8.0340 S | 0.0151 S | 0.4635 S | 0.4635 S |
| On-Site | Area | 0.7028 S | 4.0000e-005 S | 4.2100e-003 S | 0.0000 S | 2.0000e-005 S | 2.0000e-005 S | 0.8826 S | 4.0000e-005 S | 4.2100e-003 S | 0.0000 S | 2.0000e-005 S | 2.0000e-005 S |
| On-Site | Energy | 0.0145 S | 0.1318 S | 0.1107 S | 7.9000e-004 S | 0.0100 S | 0.0100 S | 0.0145 S | 0.1318 S | 0.1107 S | 7.9000e-004 S | 0.0100 S | 0.0100 S |
| Off-Site | Mobile | 0.0435 S | 0.0630 W | 0.3258 W | 4.9000e-004 S | 0.0405 S | 0.0112 S | 0.0435 S | 0.0630 W | 0.3258 W | 4.9000e-004 S | 0.0405 S | 0.0112 S |
| | Peak Daily Total | 3.9113 S | 9.0014 W | 8.4747 W | 0.0164 S | 0.5140 S | 0.4848 S | 4.0910 S | 9.0014 W | 8.4747 W | 0.0164 S | 0.5140 S | 0.4848 S |
| | Air District Threshold | | | | | | | | | | | | |
| | Exceed Significance? | | | | | | | | | | | | |

3.0 Annual GHG Emissions

Annual GHG

Annual GHG

| | | Unmitigated | | | | Mitigated | | | |
|--------------|------------------------|-------------|--------|-------------|----------|-----------|--------|-------------|----------|
| | | CO2 | CH4 | N2O | CO2e | CO2 | CH4 | N2O | CO2e |
| GHG Activity | Year | MT/yr | | | | | | | |
| Construction | 2019 | 172.6084 | 0.0290 | 0.0000 | 173.3346 | 172.6082 | 0.0290 | 0.0000 | 173.3344 |
| Construction | 2020 | 202.1404 | 0.0309 | 0.0000 | 202.9128 | 202.1402 | 0.0309 | 0.0000 | 202.9126 |
| Operational | 2020 | 101.6176 | 0.4464 | 5.1710e-003 | 114.3197 | 101.6176 | 0.4464 | 5.1710e-003 | 114.3197 |
| | Total | | | | | | | | |
| | Significance Threshold | | | | | | | | |
| | Exceed Significance? | | | | | | | | |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

El Dorado County Jail Expansion
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|-------|----------|-------------|--------------------|------------|
| Government Office Building | 25.00 | 1000sqft | 0.75 | 25,000.00 | 0 |
| Other Asphalt Surfaces | 16.00 | 1000sqft | 0.37 | 16,000.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.7 | Precipitation Freq (Days) | 70 |
| Climate Zone | 1 | | | Operational Year | 2020 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MWhr) | 404.79 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity adjusted for PG&E progress towards RPS

Land Use - *

Construction Phase - Applicant Information

Vehicle Trips - K.D. Anderson Trip Generation Report

Area Mitigation - EDCAQMD regulation

Energy Mitigation -

Operational Off-Road Equipment - *

Stationary Sources - Emergency Generators and Fire Pumps - One 4 hour test required every 36 months; 30 minute monthly tests also required

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

| Table Name | Column Name | Default Value | New Value |
|---------------------------------|---|---------------|-------------|
| tblAreaMitigation | UseLowVOCPaintNonresidentialExteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintNonresidentialInteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblAreaMitigation | UseLowVOCPaintParkingValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintResidentialExteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintResidentialInteriorValue | 250 | 100 |
| tblConstructionPhase | NumDays | 10.00 | 306.00 |
| tblConstructionPhase | NumDays | 200.00 | 301.00 |
| tblConstructionPhase | NumDays | 4.00 | 10.00 |
| tblConstructionPhase | NumDays | 10.00 | 5.00 |
| tblConstructionPhase | PhaseEndDate | 10/26/2021 | 9/7/2020 |
| tblConstructionPhase | PhaseEndDate | 8/17/2020 | 8/24/2020 |
| tblConstructionPhase | PhaseEndDate | 8/24/2020 | 6/21/2019 |
| tblConstructionPhase | PhaseStartDate | 8/25/2020 | 7/6/2019 |
| tblConstructionPhase | PhaseStartDate | 6/15/2019 | 6/22/2019 |
| tblConstructionPhase | PhaseStartDate | 8/18/2020 | 6/15/2019 |
| tblGrading | AcresOfGrading | 3.75 | 1.50 |
| tblLandUse | LotAcreage | 0.57 | 0.75 |
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 404.79 |
| tblProjectCharacteristics | OperationalYear | 2018 | 2020 |
| tblStationaryGeneratorsPumpsEF | CH4_EF | 0.07 | 0.07 |
| tblStationaryGeneratorsPumpsEF | ROG_EF | 2.2480e-003 | 2.2477e-003 |
| tblStationaryGeneratorsPumpsUse | HorsePowerValue | 0.00 | 480.00 |
| tblStationaryGeneratorsPumpsUse | HoursPerDay | 0.00 | 4.00 |
| tblStationaryGeneratorsPumpsUse | HoursPerYear | 0.00 | 14.00 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

| | | | |
|---------------------------------|-------------------|-------|------|
| tblStationaryGeneratorsPumpsUse | NumberOfEquipment | 0.00 | 1.00 |
| tblVehicleTrips | ST_TR | 0.00 | 0.44 |
| tblVehicleTrips | SU_TR | 0.00 | 0.44 |
| tblVehicleTrips | WD_TR | 68.93 | 0.44 |

2.0 Emissions Summary

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|-------------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2019 | 4.6110 | 18.8315 | 16.3634 | 0.0285 | 4.7414 | 1.0540 | 5.4783 | 2.5173 | 1.0222 | 3.1953 | 0.0000 | 2,654.6348 | 2,654.6348 | 0.4442 | 0.0000 | 2,665.1802 |
| 2020 | 4.3294 | 17.3894 | 15.9424 | 0.0284 | 0.1950 | 0.9131 | 1.1080 | 0.0528 | 0.8856 | 0.9384 | 0.0000 | 2,632.0542 | 2,632.0542 | 0.4019 | 0.0000 | 2,642.1022 |
| Maximum | 4.6110 | 18.8315 | 16.3634 | 0.0285 | 4.7414 | 1.0540 | 5.4783 | 2.5173 | 1.0222 | 3.1953 | 0.0000 | 2,654.6348 | 2,654.6348 | 0.4442 | 0.0000 | 2,665.1802 |

Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|-------------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2019 | 4.6110 | 18.8315 | 16.3634 | 0.0285 | 4.7414 | 1.0540 | 5.4783 | 2.5173 | 1.0222 | 3.1953 | 0.0000 | 2,654.6348 | 2,654.6348 | 0.4442 | 0.0000 | 2,665.1802 |
| 2020 | 4.3294 | 17.3894 | 15.9424 | 0.0284 | 0.1950 | 0.9131 | 1.1080 | 0.0528 | 0.8856 | 0.9384 | 0.0000 | 2,632.0542 | 2,632.0542 | 0.4019 | 0.0000 | 2,642.1022 |
| Maximum | 4.6110 | 18.8315 | 16.3634 | 0.0285 | 4.7414 | 1.0540 | 5.4783 | 2.5173 | 1.0222 | 3.1953 | 0.0000 | 2,654.6348 | 2,654.6348 | 0.4442 | 0.0000 | 2,665.1802 |

| | ROG | NOx | CO | SO2 | 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 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

2.2 Overall Operational

Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|--------------------|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.7028 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |
| Energy | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |
| Mobile | 0.0435 | 0.0565 | 0.3024 | 4.9000e-004 | 0.0399 | 6.2000e-004 | 0.0405 | 0.0106 | 5.8000e-004 | 0.0112 | | 49.2704 | 49.2704 | 3.6000e-003 | | 49.3605 |
| Stationary | 3.1504 | 8.8065 | 8.0340 | 0.0151 | | 0.4635 | 0.4635 | | 0.4635 | 0.4635 | | 1,611.8671 | 1,611.8671 | 0.2260 | | 1,617.5167 |
| Total | 3.9113 | 8.9949 | 8.4513 | 0.0164 | 0.0399 | 0.4742 | 0.5140 | 0.0106 | 0.4741 | 0.4848 | | 1,819.3253 | 1,819.3253 | 0.2326 | 2.9000e-003 | 1,826.0057 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.8826 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |
| Energy | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |
| Mobile | 0.0435 | 0.0565 | 0.3024 | 4.9000e-004 | 0.0399 | 6.2000e-004 | 0.0405 | 0.0106 | 5.8000e-004 | 0.0112 | | 49.2704 | 49.2704 | 3.6000e-003 | | 49.3605 |
| Stationary | 3.1504 | 8.8065 | 8.0340 | 0.0151 | | 0.4635 | 0.4635 | | 0.4635 | 0.4635 | | 1,611.8671 | 1,611.8671 | 0.2260 | | 1,617.5167 |
| Total | 4.0910 | 8.9949 | 8.4513 | 0.0164 | 0.0399 | 0.4742 | 0.5140 | 0.0106 | 0.4741 | 0.4848 | | 1,819.3253 | 1,819.3253 | 0.2326 | 2.9000e-003 | 1,826.0057 |

| | ROG | NOx | CO | SO2 | 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 | -4.60 | 0.00 | 0.00 | 0.00 | 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 | 6/3/2019 | 6/14/2019 | 5 | 10 | |
| 2 | Building Construction | Building Construction | 6/22/2019 | 8/24/2020 | 5 | 301 | |
| 3 | Paving | Paving | 6/15/2019 | 6/21/2019 | 5 | 5 | |
| 4 | Architectural Coating | Architectural Coating | 7/6/2019 | 9/7/2020 | 5 | 306 | |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.37

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,500; Non-Residential Outdoor: 12,500; Striped Parking Area: 960 (Architectural Coating – sqft)

OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

Trips and VMT

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

| 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 | 3 | 8.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 13.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 15.00 | 7.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 3.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

3.2 Grading - 2019

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 | | | | | 4.6756 | 0.0000 | 4.6756 | 2.4999 | 0.0000 | 2.4999 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.4197 | 16.0357 | 6.6065 | 0.0141 | | 0.7365 | 0.7365 | | 0.6775 | 0.6775 | | 1,396.3909 | 1,396.3909 | 0.4418 | | 1,407.4359 |
| Total | 1.4197 | 16.0357 | 6.6065 | 0.0141 | 4.6756 | 0.7365 | 5.4121 | 2.4999 | 0.6775 | 3.1774 | | 1,396.3909 | 1,396.3909 | 0.4418 | | 1,407.4359 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

3.2 Grading - 2019

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0466 | 0.0243 | 0.3186 | 7.0000e-004 | 0.0657 | 5.1000e-004 | 0.0662 | 0.0174 | 4.7000e-004 | 0.0179 | | 69.4985 | 69.4985 | 2.4200e-003 | | 69.5590 |
| Total | 0.0466 | 0.0243 | 0.3186 | 7.0000e-004 | 0.0657 | 5.1000e-004 | 0.0662 | 0.0174 | 4.7000e-004 | 0.0179 | | 69.4985 | 69.4985 | 2.4200e-003 | | 69.5590 |

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 | | | | | 4.6756 | 0.0000 | 4.6756 | 2.4999 | 0.0000 | 2.4999 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.4197 | 16.0357 | 6.6065 | 0.0141 | | 0.7365 | 0.7365 | | 0.6775 | 0.6775 | 0.0000 | 1,396.3909 | 1,396.3909 | 0.4418 | | 1,407.4359 |
| Total | 1.4197 | 16.0357 | 6.6065 | 0.0141 | 4.6756 | 0.7365 | 5.4121 | 2.4999 | 0.6775 | 3.1774 | 0.0000 | 1,396.3909 | 1,396.3909 | 0.4418 | | 1,407.4359 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

3.2 Grading - 2019

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0466 | 0.0243 | 0.3186 | 7.0000e-004 | 0.0657 | 5.1000e-004 | 0.0662 | 0.0174 | 4.7000e-004 | 0.0179 | | 69.4985 | 69.4985 | 2.4200e-003 | | 69.5590 |
| Total | 0.0466 | 0.0243 | 0.3186 | 7.0000e-004 | 0.0657 | 5.1000e-004 | 0.0662 | 0.0174 | 4.7000e-004 | 0.0179 | | 69.4985 | 69.4985 | 2.4200e-003 | | 69.5590 |

3.3 Building Construction - 2019

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 | 2.2721 | 15.9802 | 13.4870 | 0.0220 | | 0.9158 | 0.9158 | | 0.8846 | 0.8846 | | 2,018.0224 | 2,018.0224 | 0.3879 | | 2,027.7210 |
| Total | 2.2721 | 15.9802 | 13.4870 | 0.0220 | | 0.9158 | 0.9158 | | 0.8846 | 0.8846 | | 2,018.0224 | 2,018.0224 | 0.3879 | | 2,027.7210 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

3.3 Building Construction - 2019

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 | 0.0379 | 0.9614 | 0.3183 | 1.9000e-003 | 0.0471 | 8.1900e-003 | 0.0553 | 0.0135 | 7.8400e-003 | 0.0214 | | 198.7928 | 198.7928 | 4.6500e-003 | | 198.9091 |
| Worker | 0.0874 | 0.0455 | 0.5973 | 1.3100e-003 | 0.1232 | 9.7000e-004 | 0.1242 | 0.0327 | 8.9000e-004 | 0.0336 | | 130.3097 | 130.3097 | 4.5400e-003 | | 130.4231 |
| Total | 0.1253 | 1.0068 | 0.9156 | 3.2100e-003 | 0.1703 | 9.1600e-003 | 0.1795 | 0.0462 | 8.7300e-003 | 0.0549 | | 329.1025 | 329.1025 | 9.1900e-003 | | 329.3322 |

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 | 2.2721 | 15.9802 | 13.4870 | 0.0220 | | 0.9158 | 0.9158 | | 0.8846 | 0.8846 | 0.0000 | 2,018.0224 | 2,018.0224 | 0.3879 | | 2,027.7210 |
| Total | 2.2721 | 15.9802 | 13.4870 | 0.0220 | | 0.9158 | 0.9158 | | 0.8846 | 0.8846 | 0.0000 | 2,018.0224 | 2,018.0224 | 0.3879 | | 2,027.7210 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

3.3 Building Construction - 2019

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 | 0.0379 | 0.9614 | 0.3183 | 1.9000e-003 | 0.0471 | 8.1900e-003 | 0.0553 | 0.0135 | 7.8400e-003 | 0.0214 | | 198.7928 | 198.7928 | 4.6500e-003 | | 198.9091 |
| Worker | 0.0874 | 0.0455 | 0.5973 | 1.3100e-003 | 0.1232 | 9.7000e-004 | 0.1242 | 0.0327 | 8.9000e-004 | 0.0336 | | 130.3097 | 130.3097 | 4.5400e-003 | | 130.4231 |
| Total | 0.1253 | 1.0068 | 0.9156 | 3.2100e-003 | 0.1703 | 9.1600e-003 | 0.1795 | 0.0462 | 8.7300e-003 | 0.0549 | | 329.1025 | 329.1025 | 9.1900e-003 | | 329.3322 |

3.3 Building Construction - 2020

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 | 2.0305 | 14.7882 | 13.1881 | 0.0220 | | 0.7960 | 0.7960 | | 0.7688 | 0.7688 | | 2,001.1595 | 2,001.1595 | 0.3715 | | 2,010.4467 |
| Total | 2.0305 | 14.7882 | 13.1881 | 0.0220 | | 0.7960 | 0.7960 | | 0.7688 | 0.7688 | | 2,001.1595 | 2,001.1595 | 0.3715 | | 2,010.4467 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

3.3 Building Construction - 2020

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 | 0.0294 | 0.8687 | 0.2786 | 1.9000e-003 | 0.0471 | 5.0400e-003 | 0.0521 | 0.0135 | 4.8200e-003 | 0.0184 | | 197.9134 | 197.9134 | 3.8600e-003 | | 198.0100 |
| Worker | 0.0813 | 0.0405 | 0.5369 | 1.2700e-003 | 0.1232 | 9.3000e-004 | 0.1242 | 0.0327 | 8.6000e-004 | 0.0336 | | 126.2778 | 126.2778 | 3.9800e-003 | | 126.3772 |
| Total | 0.1107 | 0.9093 | 0.8155 | 3.1700e-003 | 0.1703 | 5.9700e-003 | 0.1763 | 0.0462 | 5.6800e-003 | 0.0519 | | 324.1912 | 324.1912 | 7.8400e-003 | | 324.3872 |

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 | 2.0305 | 14.7882 | 13.1881 | 0.0220 | | 0.7960 | 0.7960 | | 0.7688 | 0.7688 | 0.0000 | 2,001.1595 | 2,001.1595 | 0.3715 | | 2,010.4467 |
| Total | 2.0305 | 14.7882 | 13.1881 | 0.0220 | | 0.7960 | 0.7960 | | 0.7688 | 0.7688 | 0.0000 | 2,001.1595 | 2,001.1595 | 0.3715 | | 2,010.4467 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

3.3 Building Construction - 2020

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 | 0.0294 | 0.8687 | 0.2786 | 1.9000e-003 | 0.0471 | 5.0400e-003 | 0.0521 | 0.0135 | 4.8200e-003 | 0.0184 | | 197.9134 | 197.9134 | 3.8600e-003 | | 198.0100 |
| Worker | 0.0813 | 0.0405 | 0.5369 | 1.2700e-003 | 0.1232 | 9.3000e-004 | 0.1242 | 0.0327 | 8.6000e-004 | 0.0336 | | 126.2778 | 126.2778 | 3.9800e-003 | | 126.3772 |
| Total | 0.1107 | 0.9093 | 0.8155 | 3.1700e-003 | 0.1703 | 5.9700e-003 | 0.1763 | 0.0462 | 5.6800e-003 | 0.0519 | | 324.1912 | 324.1912 | 7.8400e-003 | | 324.3872 |

3.4 Paving - 2019

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 | 0.9038 | 9.1743 | 8.9025 | 0.0135 | | 0.5225 | 0.5225 | | 0.4815 | 0.4815 | | 1,325.0953 | 1,325.0953 | 0.4112 | | 1,335.3751 |
| Paving | 0.1939 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.0977 | 9.1743 | 8.9025 | 0.0135 | | 0.5225 | 0.5225 | | 0.4815 | 0.4815 | | 1,325.0953 | 1,325.0953 | 0.4112 | | 1,335.3751 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

3.4 Paving - 2019

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0757 | 0.0394 | 0.5177 | 1.1400e-003 | 0.1068 | 8.4000e-004 | 0.1076 | 0.0283 | 7.7000e-004 | 0.0291 | | 112.9350 | 112.9350 | 3.9300e-003 | | 113.0334 |
| Total | 0.0757 | 0.0394 | 0.5177 | 1.1400e-003 | 0.1068 | 8.4000e-004 | 0.1076 | 0.0283 | 7.7000e-004 | 0.0291 | | 112.9350 | 112.9350 | 3.9300e-003 | | 113.0334 |

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 | 0.9038 | 9.1743 | 8.9025 | 0.0135 | | 0.5225 | 0.5225 | | 0.4815 | 0.4815 | 0.0000 | 1,325.0953 | 1,325.0953 | 0.4112 | | 1,335.3751 |
| Paving | 0.1939 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.0977 | 9.1743 | 8.9025 | 0.0135 | | 0.5225 | 0.5225 | | 0.4815 | 0.4815 | 0.0000 | 1,325.0953 | 1,325.0953 | 0.4112 | | 1,335.3751 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

3.4 Paving - 2019

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0757 | 0.0394 | 0.5177 | 1.1400e-003 | 0.1068 | 8.4000e-004 | 0.1076 | 0.0283 | 7.7000e-004 | 0.0291 | | 112.9350 | 112.9350 | 3.9300e-003 | | 113.0334 |
| Total | 0.0757 | 0.0394 | 0.5177 | 1.1400e-003 | 0.1068 | 8.4000e-004 | 0.1076 | 0.0283 | 7.7000e-004 | 0.0291 | | 112.9350 | 112.9350 | 3.9300e-003 | | 113.0334 |

3.5 Architectural Coating - 2019

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 | 1.9297 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2664 | 1.8354 | 1.8413 | 2.9700e-003 | | 0.1288 | 0.1288 | | 0.1288 | 0.1288 | | 281.4481 | 281.4481 | 0.0238 | | 282.0423 |
| Total | 2.1962 | 1.8354 | 1.8413 | 2.9700e-003 | | 0.1288 | 0.1288 | | 0.1288 | 0.1288 | | 281.4481 | 281.4481 | 0.0238 | | 282.0423 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

3.5 Architectural Coating - 2019

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0175 | 9.0900e-003 | 0.1195 | 2.6000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.8000e-004 | 6.7100e-003 | | 26.0619 | 26.0619 | 9.1000e-004 | | 26.0846 |
| Total | 0.0175 | 9.0900e-003 | 0.1195 | 2.6000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.8000e-004 | 6.7100e-003 | | 26.0619 | 26.0619 | 9.1000e-004 | | 26.0846 |

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 | 1.9297 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2664 | 1.8354 | 1.8413 | 2.9700e-003 | | 0.1288 | 0.1288 | | 0.1288 | 0.1288 | 0.0000 | 281.4481 | 281.4481 | 0.0238 | | 282.0423 |
| Total | 2.1962 | 1.8354 | 1.8413 | 2.9700e-003 | | 0.1288 | 0.1288 | | 0.1288 | 0.1288 | 0.0000 | 281.4481 | 281.4481 | 0.0238 | | 282.0423 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

3.5 Architectural Coating - 2019

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0175 | 9.0900e-003 | 0.1195 | 2.6000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.8000e-004 | 6.7100e-003 | | 26.0619 | 26.0619 | 9.1000e-004 | | 26.0846 |
| Total | 0.0175 | 9.0900e-003 | 0.1195 | 2.6000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.8000e-004 | 6.7100e-003 | | 26.0619 | 26.0619 | 9.1000e-004 | | 26.0846 |

3.5 Architectural Coating - 2020

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 | 1.9297 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2422 | 1.6838 | 1.8314 | 2.9700e-003 | | 0.1109 | 0.1109 | | 0.1109 | 0.1109 | | 281.4481 | 281.4481 | 0.0218 | | 281.9928 |
| Total | 2.1719 | 1.6838 | 1.8314 | 2.9700e-003 | | 0.1109 | 0.1109 | | 0.1109 | 0.1109 | | 281.4481 | 281.4481 | 0.0218 | | 281.9928 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

3.5 Architectural Coating - 2020

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0163 | 8.1000e-003 | 0.1074 | 2.5000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.7000e-004 | 6.7100e-003 | | 25.2556 | 25.2556 | 8.0000e-004 | | 25.2755 |
| Total | 0.0163 | 8.1000e-003 | 0.1074 | 2.5000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.7000e-004 | 6.7100e-003 | | 25.2556 | 25.2556 | 8.0000e-004 | | 25.2755 |

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 | 1.9297 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2422 | 1.6838 | 1.8314 | 2.9700e-003 | | 0.1109 | 0.1109 | | 0.1109 | 0.1109 | 0.0000 | 281.4481 | 281.4481 | 0.0218 | | 281.9928 |
| Total | 2.1719 | 1.6838 | 1.8314 | 2.9700e-003 | | 0.1109 | 0.1109 | | 0.1109 | 0.1109 | 0.0000 | 281.4481 | 281.4481 | 0.0218 | | 281.9928 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

3.5 Architectural Coating - 2020

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0163 | 8.1000e-003 | 0.1074 | 2.5000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.7000e-004 | 6.7100e-003 | | 25.2556 | 25.2556 | 8.0000e-004 | | 25.2755 |
| Total | 0.0163 | 8.1000e-003 | 0.1074 | 2.5000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.7000e-004 | 6.7100e-003 | | 25.2556 | 25.2556 | 8.0000e-004 | | 25.2755 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|---------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.0435 | 0.0565 | 0.3024 | 4.9000e-004 | 0.0399 | 6.2000e-004 | 0.0405 | 0.0106 | 5.8000e-004 | 0.0112 | | 49.2704 | 49.2704 | 3.6000e-003 | | 49.3605 |
| Unmitigated | 0.0435 | 0.0565 | 0.3024 | 4.9000e-004 | 0.0399 | 6.2000e-004 | 0.0405 | 0.0106 | 5.8000e-004 | 0.0112 | | 49.2704 | 49.2704 | 3.6000e-003 | | 49.3605 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|----------------------------|-------------------------|----------|--------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Government Office Building | 11.00 | 11.00 | 11.00 | 18,864 | 18,864 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Total | 11.00 | 11.00 | 11.00 | 18,864 | 18,864 |

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 | 9.50 | 7.30 | 7.30 | 33.00 | 62.00 | 5.00 | 50 | 34 | 16 |
| Other Asphalt Surfaces | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Government Office Building | 0.454995 | 0.048403 | 0.212486 | 0.164367 | 0.044757 | 0.007498 | 0.013219 | 0.003968 | 0.000916 | 0.000362 | 0.039855 | 0.000757 | 0.008417 |
| Other Asphalt Surfaces | 0.454995 | 0.048403 | 0.212486 | 0.164367 | 0.044757 | 0.007498 | 0.013219 | 0.003968 | 0.000916 | 0.000362 | 0.039855 | 0.000757 | 0.008417 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|------------------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|----------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |
| NaturalGas Unmitigated | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

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 | 1344.52 | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |

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 | | | | | |
| Government Office Building | 1.34452 | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |

6.0 Area Detail

6.1 Mitigation Measures Area

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|-------------|-------------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-------------|-------------|-------------|-----|-------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.8826 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |
| Unmitigated | 0.7028 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

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 | 0.1618 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.5407 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 4.0000e-004 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |
| Total | 0.7029 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |

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 | 0.0647 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.8175 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 4.0000e-004 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |
| Total | 0.8826 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |

7.0 Water Detail

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---------------------|--------|-----------|------------|-------------|-------------|-----------|
| Emergency Generator | 1 | 4 | 14 | 480 | 0.73 | Diesel |

Boilers

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

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

El Dorado County Jail Expansion - El Dorado-Mountain County County, Summer

10.1 Stationary Sources

Unmitigated/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 |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Equipment Type | lb/day | | | | | | | | | | lb/day | | | | | |
| Emergency Generator - Diesel (300 - 600 HP) | 3.1504 | 8.8065 | 8.0340 | 0.0151 | | 0.4635 | 0.4635 | | 0.4635 | 0.4635 | | 1,611.8671 | 1,611.8671 | 0.2260 | | 1,617.5167 |
| Total | 3.1504 | 8.8065 | 8.0340 | 0.0151 | | 0.4635 | 0.4635 | | 0.4635 | 0.4635 | | 1,611.8671 | 1,611.8671 | 0.2260 | | 1,617.5167 |

11.0 Vegetation

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

El Dorado County Jail Expansion
El Dorado-Mountain County County, Winter

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|-------|----------|-------------|--------------------|------------|
| Government Office Building | 25.00 | 1000sqft | 0.75 | 25,000.00 | 0 |
| Other Asphalt Surfaces | 16.00 | 1000sqft | 0.37 | 16,000.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|---------------------------------|--------------------------------|---------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.7 | Precipitation Freq (Days) | 70 |
| Climate Zone | 1 | | | Operational Year | 2020 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MW hr) | 404.79 | CH4 Intensity (lb/MW hr) | 0.029 | N2O Intensity (lb/MW hr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity adjusted for PG&E progress towards RPS

Land Use - *

Construction Phase - Applicant Information

Vehicle Trips - K.D. Anderson Trip Generation Report

Area Mitigation - EDCAQMD regulation

Energy Mitigation -

Operational Off-Road Equipment - *

Stationary Sources - Emergency Generators and Fire Pumps - One 4 hour test required every 36 months; 30 minute monthly tests also required

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

| Table Name | Column Name | Default Value | New Value |
|---------------------------------|---|---------------|-------------|
| tblAreaMitigation | UseLowVOCPaintNonresidentialExteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintNonresidentialInteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblAreaMitigation | UseLowVOCPaintParkingValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintResidentialExteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintResidentialInteriorValue | 250 | 100 |
| tblConstructionPhase | NumDays | 10.00 | 306.00 |
| tblConstructionPhase | NumDays | 200.00 | 301.00 |
| tblConstructionPhase | NumDays | 4.00 | 10.00 |
| tblConstructionPhase | NumDays | 10.00 | 5.00 |
| tblConstructionPhase | PhaseEndDate | 10/26/2021 | 9/7/2020 |
| tblConstructionPhase | PhaseEndDate | 8/17/2020 | 8/24/2020 |
| tblConstructionPhase | PhaseEndDate | 8/24/2020 | 6/21/2019 |
| tblConstructionPhase | PhaseStartDate | 8/25/2020 | 7/6/2019 |
| tblConstructionPhase | PhaseStartDate | 6/15/2019 | 6/22/2019 |
| tblConstructionPhase | PhaseStartDate | 8/18/2020 | 6/15/2019 |
| tblGrading | AcresOfGrading | 3.75 | 1.50 |
| tblLandUse | LotAcreage | 0.57 | 0.75 |
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 404.79 |
| tblProjectCharacteristics | OperationalYear | 2018 | 2020 |
| tblStationaryGeneratorsPumpsEF | CH4_EF | 0.07 | 0.07 |
| tblStationaryGeneratorsPumpsEF | ROG_EF | 2.2480e-003 | 2.2477e-003 |
| tblStationaryGeneratorsPumpsUse | HorsePowerValue | 0.00 | 480.00 |
| tblStationaryGeneratorsPumpsUse | HoursPerDay | 0.00 | 4.00 |
| tblStationaryGeneratorsPumpsUse | HoursPerYear | 0.00 | 14.00 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

| | | | |
|---------------------------------|-------------------|-------|------|
| tblStationaryGeneratorsPumpsUse | NumberOfEquipment | 0.00 | 1.00 |
| tblVehicleTrips | ST_TR | 0.00 | 0.44 |
| tblVehicleTrips | SU_TR | 0.00 | 0.44 |
| tblVehicleTrips | WD_TR | 68.93 | 0.44 |

2.0 Emissions Summary

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|-------------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2019 | 4.6148 | 18.8682 | 16.3619 | 0.0283 | 4.7414 | 1.0541 | 5.4783 | 2.5173 | 1.0224 | 3.1953 | 0.0000 | 2,636.1789 | 2,636.1789 | 0.4441 | 0.0000 | 2,646.7253 |
| 2020 | 4.3327 | 17.4203 | 15.9364 | 0.0283 | 0.1950 | 0.9132 | 1.1081 | 0.0528 | 0.8857 | 0.9385 | 0.0000 | 2,613.9664 | 2,613.9664 | 0.4019 | 0.0000 | 2,624.0142 |
| Maximum | 4.6148 | 18.8682 | 16.3619 | 0.0283 | 4.7414 | 1.0541 | 5.4783 | 2.5173 | 1.0224 | 3.1953 | 0.0000 | 2,636.1789 | 2,636.1789 | 0.4441 | 0.0000 | 2,646.7253 |

Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|-------------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2019 | 4.6148 | 18.8682 | 16.3619 | 0.0283 | 4.7414 | 1.0541 | 5.4783 | 2.5173 | 1.0224 | 3.1953 | 0.0000 | 2,636.1789 | 2,636.1789 | 0.4441 | 0.0000 | 2,646.7253 |
| 2020 | 4.3327 | 17.4203 | 15.9364 | 0.0283 | 0.1950 | 0.9132 | 1.1081 | 0.0528 | 0.8857 | 0.9385 | 0.0000 | 2,613.9664 | 2,613.9664 | 0.4019 | 0.0000 | 2,624.0142 |
| Maximum | 4.6148 | 18.8682 | 16.3619 | 0.0283 | 4.7414 | 1.0541 | 5.4783 | 2.5173 | 1.0224 | 3.1953 | 0.0000 | 2,636.1789 | 2,636.1789 | 0.4441 | 0.0000 | 2,646.7253 |

| | ROG | NOx | CO | SO2 | 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 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

2.2 Overall Operational

Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|--------------------|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.7028 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |
| Energy | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |
| Mobile | 0.0360 | 0.0630 | 0.3258 | 4.6000e-004 | 0.0399 | 6.2000e-004 | 0.0405 | 0.0106 | 5.8000e-004 | 0.0112 | | 45.4987 | 45.4987 | 3.8600e-003 | | 45.5952 |
| Stationary | 3.1504 | 8.8065 | 8.0340 | 0.0151 | | 0.4635 | 0.4635 | | 0.4635 | 0.4635 | | 1,611.8671 | 1,611.8671 | 0.2260 | | 1,617.5167 |
| Total | 3.9038 | 9.0014 | 8.4747 | 0.0164 | 0.0399 | 0.4742 | 0.5140 | 0.0106 | 0.4741 | 0.4848 | | 1,815.5536 | 1,815.5536 | 0.2329 | 2.9000e-003 | 1,822.2404 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

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 | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 0.8826 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |
| Energy | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |
| Mobile | 0.0360 | 0.0630 | 0.3258 | 4.6000e-004 | 0.0399 | 6.2000e-004 | 0.0405 | 0.0106 | 5.8000e-004 | 0.0112 | | 45.4987 | 45.4987 | 3.8600e-003 | | 45.5952 |
| Stationary | 3.1504 | 8.8065 | 8.0340 | 0.0151 | | 0.4635 | 0.4635 | | 0.4635 | 0.4635 | | 1,611.8671 | 1,611.8671 | 0.2260 | | 1,617.5167 |
| Total | 4.0835 | 9.0014 | 8.4747 | 0.0164 | 0.0399 | 0.4742 | 0.5140 | 0.0106 | 0.4741 | 0.4848 | | 1,815.5536 | 1,815.5536 | 0.2329 | 2.9000e-003 | 1,822.2404 |

| | ROG | NOx | CO | SO2 | 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 | -4.60 | 0.00 | 0.00 | 0.00 | 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 | 6/3/2019 | 6/14/2019 | 5 | 10 | |
| 2 | Building Construction | Building Construction | 6/22/2019 | 8/24/2020 | 5 | 301 | |
| 3 | Paving | Paving | 6/15/2019 | 6/21/2019 | 5 | 5 | |
| 4 | Architectural Coating | Architectural Coating | 7/6/2019 | 9/7/2020 | 5 | 306 | |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.37

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,500; Non-Residential Outdoor: 12,500; Striped Parking Area: 960 (Architectural Coating – sqft)

OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

Trips and VMT

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

| 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 | 3 | 8.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 13.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 15.00 | 7.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 3.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

3.2 Grading - 2019

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 | | | | | 4.6756 | 0.0000 | 4.6756 | 2.4999 | 0.0000 | 2.4999 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.4197 | 16.0357 | 6.6065 | 0.0141 | | 0.7365 | 0.7365 | | 0.6775 | 0.6775 | | 1,396.3909 | 1,396.3909 | 0.4418 | | 1,407.4359 |
| Total | 1.4197 | 16.0357 | 6.6065 | 0.0141 | 4.6756 | 0.7365 | 5.4121 | 2.4999 | 0.6775 | 3.1774 | | 1,396.3909 | 1,396.3909 | 0.4418 | | 1,407.4359 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

3.2 Grading - 2019

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0475 | 0.0300 | 0.2998 | 6.3000e-004 | 0.0657 | 5.1000e-004 | 0.0662 | 0.0174 | 4.7000e-004 | 0.0179 | | 62.8157 | 62.8157 | 2.2700e-003 | | 62.8725 |
| Total | 0.0475 | 0.0300 | 0.2998 | 6.3000e-004 | 0.0657 | 5.1000e-004 | 0.0662 | 0.0174 | 4.7000e-004 | 0.0179 | | 62.8157 | 62.8157 | 2.2700e-003 | | 62.8725 |

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 | | | | | 4.6756 | 0.0000 | 4.6756 | 2.4999 | 0.0000 | 2.4999 | | | 0.0000 | | | 0.0000 |
| Off-Road | 1.4197 | 16.0357 | 6.6065 | 0.0141 | | 0.7365 | 0.7365 | | 0.6775 | 0.6775 | 0.0000 | 1,396.3909 | 1,396.3909 | 0.4418 | | 1,407.4359 |
| Total | 1.4197 | 16.0357 | 6.6065 | 0.0141 | 4.6756 | 0.7365 | 5.4121 | 2.4999 | 0.6775 | 3.1774 | 0.0000 | 1,396.3909 | 1,396.3909 | 0.4418 | | 1,407.4359 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

3.2 Grading - 2019

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0475 | 0.0300 | 0.2998 | 6.3000e-004 | 0.0657 | 5.1000e-004 | 0.0662 | 0.0174 | 4.7000e-004 | 0.0179 | | 62.8157 | 62.8157 | 2.2700e-003 | | 62.8725 |
| Total | 0.0475 | 0.0300 | 0.2998 | 6.3000e-004 | 0.0657 | 5.1000e-004 | 0.0662 | 0.0174 | 4.7000e-004 | 0.0179 | | 62.8157 | 62.8157 | 2.2700e-003 | | 62.8725 |

3.3 Building Construction - 2019

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 | 2.2721 | 15.9802 | 13.4870 | 0.0220 | | 0.9158 | 0.9158 | | 0.8846 | 0.8846 | | 2,018.0224 | 2,018.0224 | 0.3879 | | 2,027.7210 |
| Total | 2.2721 | 15.9802 | 13.4870 | 0.0220 | | 0.9158 | 0.9158 | | 0.8846 | 0.8846 | | 2,018.0224 | 2,018.0224 | 0.3879 | | 2,027.7210 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

3.3 Building Construction - 2019

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 | 0.0396 | 0.9852 | 0.3591 | 1.8700e-003 | 0.0471 | 8.3500e-003 | 0.0554 | 0.0135 | 7.9900e-003 | 0.0215 | | 195.3730 | 195.3730 | 5.0300e-003 | | 195.4988 |
| Worker | 0.0890 | 0.0562 | 0.5620 | 1.1800e-003 | 0.1232 | 9.7000e-004 | 0.1242 | 0.0327 | 8.9000e-004 | 0.0336 | | 117.7795 | 117.7795 | 4.2600e-003 | | 117.8860 |
| Total | 0.1287 | 1.0414 | 0.9211 | 3.0500e-003 | 0.1703 | 9.3200e-003 | 0.1796 | 0.0462 | 8.8800e-003 | 0.0551 | | 313.1525 | 313.1525 | 9.2900e-003 | | 313.3847 |

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 | 2.2721 | 15.9802 | 13.4870 | 0.0220 | | 0.9158 | 0.9158 | | 0.8846 | 0.8846 | 0.0000 | 2,018.0224 | 2,018.0224 | 0.3879 | | 2,027.7210 |
| Total | 2.2721 | 15.9802 | 13.4870 | 0.0220 | | 0.9158 | 0.9158 | | 0.8846 | 0.8846 | 0.0000 | 2,018.0224 | 2,018.0224 | 0.3879 | | 2,027.7210 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

3.3 Building Construction - 2019

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 | 0.0396 | 0.9852 | 0.3591 | 1.8700e-003 | 0.0471 | 8.3500e-003 | 0.0554 | 0.0135 | 7.9900e-003 | 0.0215 | | 195.3730 | 195.3730 | 5.0300e-003 | | 195.4988 |
| Worker | 0.0890 | 0.0562 | 0.5620 | 1.1800e-003 | 0.1232 | 9.7000e-004 | 0.1242 | 0.0327 | 8.9000e-004 | 0.0336 | | 117.7795 | 117.7795 | 4.2600e-003 | | 117.8860 |
| Total | 0.1287 | 1.0414 | 0.9211 | 3.0500e-003 | 0.1703 | 9.3200e-003 | 0.1796 | 0.0462 | 8.8800e-003 | 0.0551 | | 313.1525 | 313.1525 | 9.2900e-003 | | 313.3847 |

3.3 Building Construction - 2020

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 | 2.0305 | 14.7882 | 13.1881 | 0.0220 | | 0.7960 | 0.7960 | | 0.7688 | 0.7688 | | 2,001.1595 | 2,001.1595 | 0.3715 | | 2,010.4467 |
| Total | 2.0305 | 14.7882 | 13.1881 | 0.0220 | | 0.7960 | 0.7960 | | 0.7688 | 0.7688 | | 2,001.1595 | 2,001.1595 | 0.3715 | | 2,010.4467 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

3.3 Building Construction - 2020

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 | 0.0309 | 0.8882 | 0.3147 | 1.8600e-003 | 0.0471 | 5.1400e-003 | 0.0522 | 0.0135 | 4.9200e-003 | 0.0185 | | 194.4092 | 194.4092 | 4.1900e-003 | | 194.5140 |
| Worker | 0.0828 | 0.0501 | 0.5018 | 1.1500e-003 | 0.1232 | 9.3000e-004 | 0.1242 | 0.0327 | 8.6000e-004 | 0.0336 | | 114.1247 | 114.1247 | 3.7000e-003 | | 114.2173 |
| Total | 0.1137 | 0.9382 | 0.8165 | 3.0100e-003 | 0.1703 | 6.0700e-003 | 0.1764 | 0.0462 | 5.7800e-003 | 0.0520 | | 308.5339 | 308.5339 | 7.8900e-003 | | 308.7312 |

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 | 2.0305 | 14.7882 | 13.1881 | 0.0220 | | 0.7960 | 0.7960 | | 0.7688 | 0.7688 | 0.0000 | 2,001.1595 | 2,001.1595 | 0.3715 | | 2,010.4467 |
| Total | 2.0305 | 14.7882 | 13.1881 | 0.0220 | | 0.7960 | 0.7960 | | 0.7688 | 0.7688 | 0.0000 | 2,001.1595 | 2,001.1595 | 0.3715 | | 2,010.4467 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

3.3 Building Construction - 2020

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 | 0.0309 | 0.8882 | 0.3147 | 1.8600e-003 | 0.0471 | 5.1400e-003 | 0.0522 | 0.0135 | 4.9200e-003 | 0.0185 | | 194.4092 | 194.4092 | 4.1900e-003 | | 194.5140 |
| Worker | 0.0828 | 0.0501 | 0.5018 | 1.1500e-003 | 0.1232 | 9.3000e-004 | 0.1242 | 0.0327 | 8.6000e-004 | 0.0336 | | 114.1247 | 114.1247 | 3.7000e-003 | | 114.2173 |
| Total | 0.1137 | 0.9382 | 0.8165 | 3.0100e-003 | 0.1703 | 6.0700e-003 | 0.1764 | 0.0462 | 5.7800e-003 | 0.0520 | | 308.5339 | 308.5339 | 7.8900e-003 | | 308.7312 |

3.4 Paving - 2019

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 | 0.9038 | 9.1743 | 8.9025 | 0.0135 | | 0.5225 | 0.5225 | | 0.4815 | 0.4815 | | 1,325.0953 | 1,325.0953 | 0.4112 | | 1,335.3751 |
| Paving | 0.1939 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.0977 | 9.1743 | 8.9025 | 0.0135 | | 0.5225 | 0.5225 | | 0.4815 | 0.4815 | | 1,325.0953 | 1,325.0953 | 0.4112 | | 1,335.3751 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

3.4 Paving - 2019

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0772 | 0.0487 | 0.4871 | 1.0300e-003 | 0.1068 | 8.4000e-004 | 0.1076 | 0.0283 | 7.7000e-004 | 0.0291 | | 102.0756 | 102.0756 | 3.6900e-003 | | 102.1678 |
| Total | 0.0772 | 0.0487 | 0.4871 | 1.0300e-003 | 0.1068 | 8.4000e-004 | 0.1076 | 0.0283 | 7.7000e-004 | 0.0291 | | 102.0756 | 102.0756 | 3.6900e-003 | | 102.1678 |

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 | 0.9038 | 9.1743 | 8.9025 | 0.0135 | | 0.5225 | 0.5225 | | 0.4815 | 0.4815 | 0.0000 | 1,325.0953 | 1,325.0953 | 0.4112 | | 1,335.3751 |
| Paving | 0.1939 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.0977 | 9.1743 | 8.9025 | 0.0135 | | 0.5225 | 0.5225 | | 0.4815 | 0.4815 | 0.0000 | 1,325.0953 | 1,325.0953 | 0.4112 | | 1,335.3751 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

3.4 Paving - 2019

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0772 | 0.0487 | 0.4871 | 1.0300e-003 | 0.1068 | 8.4000e-004 | 0.1076 | 0.0283 | 7.7000e-004 | 0.0291 | | 102.0756 | 102.0756 | 3.6900e-003 | | 102.1678 |
| Total | 0.0772 | 0.0487 | 0.4871 | 1.0300e-003 | 0.1068 | 8.4000e-004 | 0.1076 | 0.0283 | 7.7000e-004 | 0.0291 | | 102.0756 | 102.0756 | 3.6900e-003 | | 102.1678 |

3.5 Architectural Coating - 2019

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 | 1.9297 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2664 | 1.8354 | 1.8413 | 2.9700e-003 | | 0.1288 | 0.1288 | | 0.1288 | 0.1288 | | 281.4481 | 281.4481 | 0.0238 | | 282.0423 |
| Total | 2.1962 | 1.8354 | 1.8413 | 2.9700e-003 | | 0.1288 | 0.1288 | | 0.1288 | 0.1288 | | 281.4481 | 281.4481 | 0.0238 | | 282.0423 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

3.5 Architectural Coating - 2019

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0178 | 0.0113 | 0.1124 | 2.4000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.8000e-004 | 6.7100e-003 | | 23.5559 | 23.5559 | 8.5000e-004 | | 23.5772 |
| Total | 0.0178 | 0.0113 | 0.1124 | 2.4000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.8000e-004 | 6.7100e-003 | | 23.5559 | 23.5559 | 8.5000e-004 | | 23.5772 |

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 | 1.9297 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2664 | 1.8354 | 1.8413 | 2.9700e-003 | | 0.1288 | 0.1288 | | 0.1288 | 0.1288 | 0.0000 | 281.4481 | 281.4481 | 0.0238 | | 282.0423 |
| Total | 2.1962 | 1.8354 | 1.8413 | 2.9700e-003 | | 0.1288 | 0.1288 | | 0.1288 | 0.1288 | 0.0000 | 281.4481 | 281.4481 | 0.0238 | | 282.0423 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

3.5 Architectural Coating - 2019

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0178 | 0.0113 | 0.1124 | 2.4000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.8000e-004 | 6.7100e-003 | | 23.5559 | 23.5559 | 8.5000e-004 | | 23.5772 |
| Total | 0.0178 | 0.0113 | 0.1124 | 2.4000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.8000e-004 | 6.7100e-003 | | 23.5559 | 23.5559 | 8.5000e-004 | | 23.5772 |

3.5 Architectural Coating - 2020

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 | 1.9297 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2422 | 1.6838 | 1.8314 | 2.9700e-003 | | 0.1109 | 0.1109 | | 0.1109 | 0.1109 | | 281.4481 | 281.4481 | 0.0218 | | 281.9928 |
| Total | 2.1719 | 1.6838 | 1.8314 | 2.9700e-003 | | 0.1109 | 0.1109 | | 0.1109 | 0.1109 | | 281.4481 | 281.4481 | 0.0218 | | 281.9928 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

3.5 Architectural Coating - 2020

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0166 | 0.0100 | 0.1004 | 2.3000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.7000e-004 | 6.7100e-003 | | 22.8250 | 22.8250 | 7.4000e-004 | | 22.8435 |
| Total | 0.0166 | 0.0100 | 0.1004 | 2.3000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.7000e-004 | 6.7100e-003 | | 22.8250 | 22.8250 | 7.4000e-004 | | 22.8435 |

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 | 1.9297 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2422 | 1.6838 | 1.8314 | 2.9700e-003 | | 0.1109 | 0.1109 | | 0.1109 | 0.1109 | 0.0000 | 281.4481 | 281.4481 | 0.0218 | | 281.9928 |
| Total | 2.1719 | 1.6838 | 1.8314 | 2.9700e-003 | | 0.1109 | 0.1109 | | 0.1109 | 0.1109 | 0.0000 | 281.4481 | 281.4481 | 0.0218 | | 281.9928 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

3.5 Architectural Coating - 2020

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0166 | 0.0100 | 0.1004 | 2.3000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.7000e-004 | 6.7100e-003 | | 22.8250 | 22.8250 | 7.4000e-004 | | 22.8435 |
| Total | 0.0166 | 0.0100 | 0.1004 | 2.3000e-004 | 0.0246 | 1.9000e-004 | 0.0248 | 6.5400e-003 | 1.7000e-004 | 6.7100e-003 | | 22.8250 | 22.8250 | 7.4000e-004 | | 22.8435 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|---------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.0360 | 0.0630 | 0.3258 | 4.6000e-004 | 0.0399 | 6.2000e-004 | 0.0405 | 0.0106 | 5.8000e-004 | 0.0112 | | 45.4987 | 45.4987 | 3.8600e-003 | | 45.5952 |
| Unmitigated | 0.0360 | 0.0630 | 0.3258 | 4.6000e-004 | 0.0399 | 6.2000e-004 | 0.0405 | 0.0106 | 5.8000e-004 | 0.0112 | | 45.4987 | 45.4987 | 3.8600e-003 | | 45.5952 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|----------------------------|-------------------------|----------|--------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Government Office Building | 11.00 | 11.00 | 11.00 | 18,864 | 18,864 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Total | 11.00 | 11.00 | 11.00 | 18,864 | 18,864 |

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 | 9.50 | 7.30 | 7.30 | 33.00 | 62.00 | 5.00 | 50 | 34 | 16 |
| Other Asphalt Surfaces | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Government Office Building | 0.454995 | 0.048403 | 0.212486 | 0.164367 | 0.044757 | 0.007498 | 0.013219 | 0.003968 | 0.000916 | 0.000362 | 0.039855 | 0.000757 | 0.008417 |
| Other Asphalt Surfaces | 0.454995 | 0.048403 | 0.212486 | 0.164367 | 0.044757 | 0.007498 | 0.013219 | 0.003968 | 0.000916 | 0.000362 | 0.039855 | 0.000757 | 0.008417 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|------------------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|----------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |
| NaturalGas Unmitigated | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

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 | 1344.52 | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |

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 | | | | | |
| Government Office Building | 1.34452 | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 0.0145 | 0.1318 | 0.1107 | 7.9000e-004 | | 0.0100 | 0.0100 | | 0.0100 | 0.0100 | | 158.1789 | 158.1789 | 3.0300e-003 | 2.9000e-003 | 159.1189 |

6.0 Area Detail

6.1 Mitigation Measures Area

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|-------------|-------------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-------------|-------------|-------------|-----|-------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.8826 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |
| Unmitigated | 0.7028 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

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 | 0.1618 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.5407 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 4.0000e-004 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |
| Total | 0.7029 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |

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 | 0.0647 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 0.8175 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 4.0000e-004 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |
| Total | 0.8826 | 4.0000e-005 | 4.2100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | | 8.9700e-003 | 8.9700e-003 | 2.0000e-005 | | 9.5700e-003 |

7.0 Water Detail

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---------------------|--------|-----------|------------|-------------|-------------|-----------|
| Emergency Generator | 1 | 4 | 14 | 480 | 0.73 | Diesel |

Boilers

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

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

El Dorado County Jail Expansion - El Dorado-Mountain County County, Winter

10.1 Stationary Sources

Unmitigated/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 |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Equipment Type | lb/day | | | | | | | | | | lb/day | | | | | |
| Emergency Generator - Diesel (300 - 600 HP) | 3.1504 | 8.8065 | 8.0340 | 0.0151 | | 0.4635 | 0.4635 | | 0.4635 | 0.4635 | | 1,611.8671 | 1,611.8671 | 0.2260 | | 1,617.5167 |
| Total | 3.1504 | 8.8065 | 8.0340 | 0.0151 | | 0.4635 | 0.4635 | | 0.4635 | 0.4635 | | 1,611.8671 | 1,611.8671 | 0.2260 | | 1,617.5167 |

11.0 Vegetation

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

El Dorado County Jail Expansion
El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|-------|----------|-------------|--------------------|------------|
| Government Office Building | 25.00 | 1000sqft | 0.75 | 25,000.00 | 0 |
| Other Asphalt Surfaces | 16.00 | 1000sqft | 0.37 | 16,000.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|---------------------------------|--------------------------------|---------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.7 | Precipitation Freq (Days) | 70 |
| Climate Zone | 1 | | | Operational Year | 2020 |
| Utility Company | Pacific Gas & Electric Company | | | | |
| CO2 Intensity (lb/MW hr) | 404.79 | CH4 Intensity (lb/MW hr) | 0.029 | N2O Intensity (lb/MW hr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity adjusted for PG&E progress towards RPS

Land Use - *

Construction Phase - Applicant Information

Vehicle Trips - K.D. Anderson Trip Generation Report

Area Mitigation - EDCAQMD regulation

Energy Mitigation -

Operational Off-Road Equipment - *

Stationary Sources - Emergency Generators and Fire Pumps - One 4 hour test required every 36 months; 30 minute monthly tests also required

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

| Table Name | Column Name | Default Value | New Value |
|---------------------------------|---|---------------|-------------|
| tblAreaMitigation | UseLowVOCPaintNonresidentialExteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintNonresidentialInteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintParkingCheck | False | True |
| tblAreaMitigation | UseLowVOCPaintParkingValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintResidentialExteriorValue | 250 | 100 |
| tblAreaMitigation | UseLowVOCPaintResidentialInteriorValue | 250 | 100 |
| tblConstructionPhase | NumDays | 10.00 | 306.00 |
| tblConstructionPhase | NumDays | 200.00 | 301.00 |
| tblConstructionPhase | NumDays | 4.00 | 10.00 |
| tblConstructionPhase | NumDays | 10.00 | 5.00 |
| tblConstructionPhase | PhaseEndDate | 10/26/2021 | 9/7/2020 |
| tblConstructionPhase | PhaseEndDate | 8/17/2020 | 8/24/2020 |
| tblConstructionPhase | PhaseEndDate | 8/24/2020 | 6/21/2019 |
| tblConstructionPhase | PhaseStartDate | 8/25/2020 | 7/6/2019 |
| tblConstructionPhase | PhaseStartDate | 6/15/2019 | 6/22/2019 |
| tblConstructionPhase | PhaseStartDate | 8/18/2020 | 6/15/2019 |
| tblGrading | AcresOfGrading | 3.75 | 1.50 |
| tblLandUse | LotAcreage | 0.57 | 0.75 |
| tblProjectCharacteristics | CO2IntensityFactor | 641.35 | 404.79 |
| tblProjectCharacteristics | OperationalYear | 2018 | 2020 |
| tblStationaryGeneratorsPumpsEF | CH4_EF | 0.07 | 0.07 |
| tblStationaryGeneratorsPumpsEF | ROG_EF | 2.2480e-003 | 2.2477e-003 |
| tblStationaryGeneratorsPumpsUse | HorsePowerValue | 0.00 | 480.00 |
| tblStationaryGeneratorsPumpsUse | HoursPerDay | 0.00 | 4.00 |
| tblStationaryGeneratorsPumpsUse | HoursPerYear | 0.00 | 14.00 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

| | | | |
|---------------------------------|-------------------|-------|------|
| tblStationaryGeneratorsPumpsUse | NumberOfEquipment | 0.00 | 1.00 |
| tblVehicleTrips | ST_TR | 0.00 | 0.44 |
| tblVehicleTrips | SU_TR | 0.00 | 0.44 |
| tblVehicleTrips | WD_TR | 68.93 | 0.44 |

2.0 Emissions Summary

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

2.1 Overall Construction

Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2019 | 0.3145 | 1.3863 | 1.1669 | 2.0400e-003 | 0.0367 | 0.0766 | 0.1132 | 0.0161 | 0.0740 | 0.0901 | 0.0000 | 172.6084 | 172.6084 | 0.0291 | 0.0000 | 173.3346 |
| 2020 | 0.3761 | 1.4801 | 1.3542 | 2.4100e-003 | 0.0159 | 0.0777 | 0.0937 | 4.3300e-003 | 0.0754 | 0.0797 | 0.0000 | 202.1404 | 202.1404 | 0.0309 | 0.0000 | 202.9129 |
| Maximum | 0.3761 | 1.4801 | 1.3542 | 2.4100e-003 | 0.0367 | 0.0777 | 0.1132 | 0.0161 | 0.0754 | 0.0901 | 0.0000 | 202.1404 | 202.1404 | 0.0309 | 0.0000 | 202.9129 |

Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2019 | 0.3145 | 1.3863 | 1.1669 | 2.0400e-003 | 0.0367 | 0.0766 | 0.1132 | 0.0161 | 0.0740 | 0.0901 | 0.0000 | 172.6082 | 172.6082 | 0.0291 | 0.0000 | 173.3344 |
| 2020 | 0.3761 | 1.4801 | 1.3542 | 2.4100e-003 | 0.0159 | 0.0777 | 0.0937 | 4.3300e-003 | 0.0754 | 0.0797 | 0.0000 | 202.1402 | 202.1402 | 0.0309 | 0.0000 | 202.9127 |
| Maximum | 0.3761 | 1.4801 | 1.3542 | 2.4100e-003 | 0.0367 | 0.0777 | 0.1132 | 0.0161 | 0.0754 | 0.0901 | 0.0000 | 202.1402 | 202.1402 | 0.0309 | 0.0000 | 202.9127 |

| | ROG | NOx | CO | SO2 | 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 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|-----------|--|--|
| 1 | 6-3-2019 | 9-2-2019 | 0.6920 | 0.6920 |
| 2 | 9-3-2019 | 12-2-2019 | 0.7628 | 0.7628 |
| 3 | 12-3-2019 | 3-2-2020 | 0.7249 | 0.7249 |
| 4 | 3-3-2020 | 6-2-2020 | 0.7140 | 0.7140 |
| 5 | 6-3-2020 | 9-2-2020 | 0.6563 | 0.6563 |
| 6 | 9-3-2020 | 9-30-2020 | 0.0069 | 0.0069 |
| | | Highest | 0.7628 | 0.7628 |

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 | 0.1282 | 0.0000 | 3.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 7.3000e-004 | 7.3000e-004 | 0.0000 | 0.0000 | 7.8000e-004 |
| Energy | 2.6500e-003 | 0.0241 | 0.0202 | 1.4000e-004 | | 1.8300e-003 | 1.8300e-003 | | 1.8300e-003 | 1.8300e-003 | 0.0000 | 78.2416 | 78.2416 | 4.2300e-003 | 1.2500e-003 | 78.7204 |
| Mobile | 6.6300e-003 | 0.0111 | 0.0559 | 8.0000e-005 | 6.9600e-003 | 1.1000e-004 | 7.0700e-003 | 1.8600e-003 | 1.1000e-004 | 1.9700e-003 | 0.0000 | 7.6307 | 7.6307 | 6.1000e-004 | 0.0000 | 7.6461 |
| Stationary | 5.5100e-003 | 0.0154 | 0.0141 | 3.0000e-005 | | 8.1000e-004 | 8.1000e-004 | | 8.1000e-004 | 8.1000e-004 | 0.0000 | 2.5590 | 2.5590 | 3.6000e-004 | 0.0000 | 2.5679 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 4.7195 | 0.0000 | 4.7195 | 0.2789 | 0.0000 | 11.6925 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.5756 | 6.8904 | 8.4661 | 0.1623 | 3.9200e-003 | 13.6934 |
| Total | 0.1430 | 0.0506 | 0.0905 | 2.5000e-004 | 6.9600e-003 | 2.7500e-003 | 9.7100e-003 | 1.8600e-003 | 2.7500e-003 | 4.6100e-003 | 6.2952 | 95.3225 | 101.6177 | 0.4465 | 5.1700e-003 | 114.3210 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

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 | 0.1032 | 0.0000 | 3.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 7.3000e-004 | 7.3000e-004 | 0.0000 | 0.0000 | 7.8000e-004 |
| Energy | 2.6500e-003 | 0.0241 | 0.0202 | 1.4000e-004 | | 1.8300e-003 | 1.8300e-003 | | 1.8300e-003 | 1.8300e-003 | 0.0000 | 78.2416 | 78.2416 | 4.2300e-003 | 1.2500e-003 | 78.7204 |
| Mobile | 6.6300e-003 | 0.0111 | 0.0559 | 8.0000e-005 | 6.9600e-003 | 1.1000e-004 | 7.0700e-003 | 1.8600e-003 | 1.1000e-004 | 1.9700e-003 | 0.0000 | 7.6307 | 7.6307 | 6.1000e-004 | 0.0000 | 7.6461 |
| Stationary | 5.5100e-003 | 0.0154 | 0.0141 | 3.0000e-005 | | 8.1000e-004 | 8.1000e-004 | | 8.1000e-004 | 8.1000e-004 | 0.0000 | 2.5590 | 2.5590 | 3.6000e-004 | 0.0000 | 2.5679 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 4.7195 | 0.0000 | 4.7195 | 0.2789 | 0.0000 | 11.6925 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 1.5756 | 6.8904 | 8.4661 | 0.1623 | 3.9200e-003 | 13.6934 |
| Total | 0.1180 | 0.0506 | 0.0905 | 2.5000e-004 | 6.9600e-003 | 2.7500e-003 | 9.7100e-003 | 1.8600e-003 | 2.7500e-003 | 4.6100e-003 | 6.2952 | 95.3225 | 101.6177 | 0.4465 | 5.1700e-003 | 114.3210 |

| | ROG | NOx | CO | SO2 | 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 | 17.49 | 0.00 | 0.00 | 0.00 | 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

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1 | Grading | Grading | 6/3/2019 | 6/14/2019 | 5 | 10 | |
| 2 | Building Construction | Building Construction | 6/22/2019 | 8/24/2020 | 5 | 301 | |
| 3 | Paving | Paving | 6/15/2019 | 6/21/2019 | 5 | 5 | |
| 4 | Architectural Coating | Architectural Coating | 7/6/2019 | 9/7/2020 | 5 | 306 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.37

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,500; Non-Residential Outdoor: 12,500; Striped Parking Area: 960 (Architectural Coating – sqft)

OffRoad Equipment

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Grading | Graders | 1 | 6.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 6.00 | 247 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Paving | Cement and Mortar Mixers | 1 | 6.00 | 9 | 0.56 |
| Paving | Pavers | 1 | 6.00 | 130 | 0.42 |
| Paving | Paving Equipment | 1 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 6.00 | 231 | 0.29 |
| Building Construction | Forklifts | 1 | 6.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97 | 0.37 |
| Building Construction | Welders | 3 | 8.00 | 46 | 0.45 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

Trips and VMT

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Grading | 3 | 8.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 5 | 13.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 7 | 15.00 | 7.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 3.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

3.2 Grading - 2019

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 | | | | | 0.0234 | 0.0000 | 0.0234 | 0.0125 | 0.0000 | 0.0125 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.1000e-003 | 0.0802 | 0.0330 | 7.0000e-005 | | 3.6800e-003 | 3.6800e-003 | | 3.3900e-003 | 3.3900e-003 | 0.0000 | 6.3339 | 6.3339 | 2.0000e-003 | 0.0000 | 6.3840 |
| Total | 7.1000e-003 | 0.0802 | 0.0330 | 7.0000e-005 | 0.0234 | 3.6800e-003 | 0.0271 | 0.0125 | 3.3900e-003 | 0.0159 | 0.0000 | 6.3339 | 6.3339 | 2.0000e-003 | 0.0000 | 6.3840 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.1000e-004 | 1.4000e-004 | 1.4700e-003 | 0.0000 | 3.1000e-004 | 0.0000 | 3.2000e-004 | 8.0000e-005 | 0.0000 | 9.0000e-005 | 0.0000 | 0.2910 | 0.2910 | 1.0000e-005 | 0.0000 | 0.2912 |
| Total | 2.1000e-004 | 1.4000e-004 | 1.4700e-003 | 0.0000 | 3.1000e-004 | 0.0000 | 3.2000e-004 | 8.0000e-005 | 0.0000 | 9.0000e-005 | 0.0000 | 0.2910 | 0.2910 | 1.0000e-005 | 0.0000 | 0.2912 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

3.2 Grading - 2019

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 | | | | | 0.0234 | 0.0000 | 0.0234 | 0.0125 | 0.0000 | 0.0125 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.1000e-003 | 0.0802 | 0.0330 | 7.0000e-005 | | 3.6800e-003 | 3.6800e-003 | | 3.3900e-003 | 3.3900e-003 | 0.0000 | 6.3339 | 6.3339 | 2.0000e-003 | 0.0000 | 6.3840 |
| Total | 7.1000e-003 | 0.0802 | 0.0330 | 7.0000e-005 | 0.0234 | 3.6800e-003 | 0.0271 | 0.0125 | 3.3900e-003 | 0.0159 | 0.0000 | 6.3339 | 6.3339 | 2.0000e-003 | 0.0000 | 6.3840 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.1000e-004 | 1.4000e-004 | 1.4700e-003 | 0.0000 | 3.1000e-004 | 0.0000 | 3.2000e-004 | 8.0000e-005 | 0.0000 | 9.0000e-005 | 0.0000 | 0.2910 | 0.2910 | 1.0000e-005 | 0.0000 | 0.2912 |
| Total | 2.1000e-004 | 1.4000e-004 | 1.4700e-003 | 0.0000 | 3.1000e-004 | 0.0000 | 3.2000e-004 | 8.0000e-005 | 0.0000 | 9.0000e-005 | 0.0000 | 0.2910 | 0.2910 | 1.0000e-005 | 0.0000 | 0.2912 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

3.3 Building Construction - 2019

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 | 0.1556 | 1.0946 | 0.9239 | 1.5100e-003 | | 0.0627 | 0.0627 | | 0.0606 | 0.0606 | 0.0000 | 125.4043 | 125.4043 | 0.0241 | 0.0000 | 126.0070 |
| Total | 0.1556 | 1.0946 | 0.9239 | 1.5100e-003 | | 0.0627 | 0.0627 | | 0.0606 | 0.0606 | 0.0000 | 125.4043 | 125.4043 | 0.0241 | 0.0000 | 126.0070 |

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 | 2.6400e-003 | 0.0675 | 0.0233 | 1.3000e-004 | 3.1100e-003 | 5.7000e-004 | 3.6800e-003 | 9.0000e-004 | 5.4000e-004 | 1.4400e-003 | 0.0000 | 12.2641 | 12.2641 | 3.0000e-004 | 0.0000 | 12.2716 |
| Worker | 5.5000e-003 | 3.5600e-003 | 0.0379 | 8.0000e-005 | 8.0900e-003 | 7.0000e-005 | 8.1600e-003 | 2.1500e-003 | 6.0000e-005 | 2.2100e-003 | 0.0000 | 7.4745 | 7.4745 | 2.6000e-004 | 0.0000 | 7.4811 |
| Total | 8.1400e-003 | 0.0710 | 0.0612 | 2.1000e-004 | 0.0112 | 6.4000e-004 | 0.0118 | 3.0500e-003 | 6.0000e-004 | 3.6500e-003 | 0.0000 | 19.7386 | 19.7386 | 5.6000e-004 | 0.0000 | 19.7528 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

3.3 Building Construction - 2019

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 | 0.1556 | 1.0946 | 0.9239 | 1.5100e-003 | | 0.0627 | 0.0627 | | 0.0606 | 0.0606 | 0.0000 | 125.4041 | 125.4041 | 0.0241 | 0.0000 | 126.0068 |
| Total | 0.1556 | 1.0946 | 0.9239 | 1.5100e-003 | | 0.0627 | 0.0627 | | 0.0606 | 0.0606 | 0.0000 | 125.4041 | 125.4041 | 0.0241 | 0.0000 | 126.0068 |

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 | 2.6400e-003 | 0.0675 | 0.0233 | 1.3000e-004 | 3.1100e-003 | 5.7000e-004 | 3.6800e-003 | 9.0000e-004 | 5.4000e-004 | 1.4400e-003 | 0.0000 | 12.2641 | 12.2641 | 3.0000e-004 | 0.0000 | 12.2716 |
| Worker | 5.5000e-003 | 3.5600e-003 | 0.0379 | 8.0000e-005 | 8.0900e-003 | 7.0000e-005 | 8.1600e-003 | 2.1500e-003 | 6.0000e-005 | 2.2100e-003 | 0.0000 | 7.4745 | 7.4745 | 2.6000e-004 | 0.0000 | 7.4811 |
| Total | 8.1400e-003 | 0.0710 | 0.0612 | 2.1000e-004 | 0.0112 | 6.4000e-004 | 0.0118 | 3.0500e-003 | 6.0000e-004 | 3.6500e-003 | 0.0000 | 19.7386 | 19.7386 | 5.6000e-004 | 0.0000 | 19.7528 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

3.3 Building Construction - 2020

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 | 0.1716 | 1.2496 | 1.1144 | 1.8600e-003 | | 0.0673 | 0.0673 | | 0.0650 | 0.0650 | 0.0000 | 153.4031 | 153.4031 | 0.0285 | 0.0000 | 154.1150 |
| Total | 0.1716 | 1.2496 | 1.1144 | 1.8600e-003 | | 0.0673 | 0.0673 | | 0.0650 | 0.0650 | 0.0000 | 153.4031 | 153.4031 | 0.0285 | 0.0000 | 154.1150 |

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 | 2.5300e-003 | 0.0751 | 0.0252 | 1.6000e-004 | 3.8400e-003 | 4.3000e-004 | 4.2700e-003 | 1.1100e-003 | 4.1000e-004 | 1.5200e-003 | 0.0000 | 15.0586 | 15.0586 | 3.1000e-004 | 0.0000 | 15.0663 |
| Worker | 6.3100e-003 | 3.9100e-003 | 0.0418 | 1.0000e-004 | 9.9800e-003 | 8.0000e-005 | 0.0101 | 2.6600e-003 | 7.0000e-005 | 2.7300e-003 | 0.0000 | 8.9345 | 8.9345 | 2.9000e-004 | 0.0000 | 8.9416 |
| Total | 8.8400e-003 | 0.0790 | 0.0670 | 2.6000e-004 | 0.0138 | 5.1000e-004 | 0.0143 | 3.7700e-003 | 4.8000e-004 | 4.2500e-003 | 0.0000 | 23.9930 | 23.9930 | 6.0000e-004 | 0.0000 | 24.0079 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

3.3 Building Construction - 2020

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 | 0.1716 | 1.2496 | 1.1144 | 1.8600e-003 | | 0.0673 | 0.0673 | | 0.0650 | 0.0650 | 0.0000 | 153.4029 | 153.4029 | 0.0285 | 0.0000 | 154.1149 |
| Total | 0.1716 | 1.2496 | 1.1144 | 1.8600e-003 | | 0.0673 | 0.0673 | | 0.0650 | 0.0650 | 0.0000 | 153.4029 | 153.4029 | 0.0285 | 0.0000 | 154.1149 |

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 | 2.5300e-003 | 0.0751 | 0.0252 | 1.6000e-004 | 3.8400e-003 | 4.3000e-004 | 4.2700e-003 | 1.1100e-003 | 4.1000e-004 | 1.5200e-003 | 0.0000 | 15.0586 | 15.0586 | 3.1000e-004 | 0.0000 | 15.0663 |
| Worker | 6.3100e-003 | 3.9100e-003 | 0.0418 | 1.0000e-004 | 9.9800e-003 | 8.0000e-005 | 0.0101 | 2.6600e-003 | 7.0000e-005 | 2.7300e-003 | 0.0000 | 8.9345 | 8.9345 | 2.9000e-004 | 0.0000 | 8.9416 |
| Total | 8.8400e-003 | 0.0790 | 0.0670 | 2.6000e-004 | 0.0138 | 5.1000e-004 | 0.0143 | 3.7700e-003 | 4.8000e-004 | 4.2500e-003 | 0.0000 | 23.9930 | 23.9930 | 6.0000e-004 | 0.0000 | 24.0079 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

3.4 Paving - 2019

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 | 2.2600e-003 | 0.0229 | 0.0223 | 3.0000e-005 | | 1.3100e-003 | 1.3100e-003 | | 1.2000e-003 | 1.2000e-003 | 0.0000 | 3.0053 | 3.0053 | 9.3000e-004 | 0.0000 | 3.0286 |
| Paving | 4.8000e-004 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 2.7400e-003 | 0.0229 | 0.0223 | 3.0000e-005 | | 1.3100e-003 | 1.3100e-003 | | 1.2000e-003 | 1.2000e-003 | 0.0000 | 3.0053 | 3.0053 | 9.3000e-004 | 0.0000 | 3.0286 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.7000e-004 | 1.1000e-004 | 1.2000e-003 | 0.0000 | 2.6000e-004 | 0.0000 | 2.6000e-004 | 7.0000e-005 | 0.0000 | 7.0000e-005 | 0.0000 | 0.2364 | 0.2364 | 1.0000e-005 | 0.0000 | 0.2366 |
| Total | 1.7000e-004 | 1.1000e-004 | 1.2000e-003 | 0.0000 | 2.6000e-004 | 0.0000 | 2.6000e-004 | 7.0000e-005 | 0.0000 | 7.0000e-005 | 0.0000 | 0.2364 | 0.2364 | 1.0000e-005 | 0.0000 | 0.2366 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

3.4 Paving - 2019

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 | 2.2600e-003 | 0.0229 | 0.0223 | 3.0000e-005 | | 1.3100e-003 | 1.3100e-003 | | 1.2000e-003 | 1.2000e-003 | 0.0000 | 3.0053 | 3.0053 | 9.3000e-004 | 0.0000 | 3.0286 |
| Paving | 4.8000e-004 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 2.7400e-003 | 0.0229 | 0.0223 | 3.0000e-005 | | 1.3100e-003 | 1.3100e-003 | | 1.2000e-003 | 1.2000e-003 | 0.0000 | 3.0053 | 3.0053 | 9.3000e-004 | 0.0000 | 3.0286 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.7000e-004 | 1.1000e-004 | 1.2000e-003 | 0.0000 | 2.6000e-004 | 0.0000 | 2.6000e-004 | 7.0000e-005 | 0.0000 | 7.0000e-005 | 0.0000 | 0.2364 | 0.2364 | 1.0000e-005 | 0.0000 | 0.2366 |
| Total | 1.7000e-004 | 1.1000e-004 | 1.2000e-003 | 0.0000 | 2.6000e-004 | 0.0000 | 2.6000e-004 | 7.0000e-005 | 0.0000 | 7.0000e-005 | 0.0000 | 0.2364 | 0.2364 | 1.0000e-005 | 0.0000 | 0.2366 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

3.5 Architectural Coating - 2019

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.1225 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0169 | 0.1166 | 0.1169 | 1.9000e-004 | | 8.1800e-003 | 8.1800e-003 | | 8.1800e-003 | 8.1800e-003 | 0.0000 | 16.2132 | 16.2132 | 1.3700e-003 | 0.0000 | 16.2474 |
| Total | 0.1395 | 0.1166 | 0.1169 | 1.9000e-004 | | 8.1800e-003 | 8.1800e-003 | | 8.1800e-003 | 8.1800e-003 | 0.0000 | 16.2132 | 16.2132 | 1.3700e-003 | 0.0000 | 16.2474 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0200e-003 | 6.6000e-004 | 7.0200e-003 | 2.0000e-005 | 1.5000e-003 | 1.0000e-005 | 1.5100e-003 | 4.0000e-004 | 1.0000e-005 | 4.1000e-004 | 0.0000 | 1.3858 | 1.3858 | 5.0000e-005 | 0.0000 | 1.3870 |
| Total | 1.0200e-003 | 6.6000e-004 | 7.0200e-003 | 2.0000e-005 | 1.5000e-003 | 1.0000e-005 | 1.5100e-003 | 4.0000e-004 | 1.0000e-005 | 4.1000e-004 | 0.0000 | 1.3858 | 1.3858 | 5.0000e-005 | 0.0000 | 1.3870 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

3.5 Architectural Coating - 2019

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.1225 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0169 | 0.1166 | 0.1169 | 1.9000e-004 | | 8.1800e-003 | 8.1800e-003 | | 8.1800e-003 | 8.1800e-003 | 0.0000 | 16.2131 | 16.2131 | 1.3700e-003 | 0.0000 | 16.2474 |
| Total | 0.1395 | 0.1166 | 0.1169 | 1.9000e-004 | | 8.1800e-003 | 8.1800e-003 | | 8.1800e-003 | 8.1800e-003 | 0.0000 | 16.2131 | 16.2131 | 1.3700e-003 | 0.0000 | 16.2474 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0200e-003 | 6.6000e-004 | 7.0200e-003 | 2.0000e-005 | 1.5000e-003 | 1.0000e-005 | 1.5100e-003 | 4.0000e-004 | 1.0000e-005 | 4.1000e-004 | 0.0000 | 1.3858 | 1.3858 | 5.0000e-005 | 0.0000 | 1.3870 |
| Total | 1.0200e-003 | 6.6000e-004 | 7.0200e-003 | 2.0000e-005 | 1.5000e-003 | 1.0000e-005 | 1.5100e-003 | 4.0000e-004 | 1.0000e-005 | 4.1000e-004 | 0.0000 | 1.3858 | 1.3858 | 5.0000e-005 | 0.0000 | 1.3870 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

3.5 Architectural Coating - 2020

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.1727 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0217 | 0.1507 | 0.1639 | 2.7000e-004 | | 9.9300e-003 | 9.9300e-003 | | 9.9300e-003 | 9.9300e-003 | 0.0000 | 22.8516 | 22.8516 | 1.7700e-003 | 0.0000 | 22.8959 |
| Total | 0.1944 | 0.1507 | 0.1639 | 2.7000e-004 | | 9.9300e-003 | 9.9300e-003 | | 9.9300e-003 | 9.9300e-003 | 0.0000 | 22.8516 | 22.8516 | 1.7700e-003 | 0.0000 | 22.8959 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.3400e-003 | 8.3000e-004 | 8.8600e-003 | 2.0000e-005 | 2.1100e-003 | 2.0000e-005 | 2.1300e-003 | 5.6000e-004 | 2.0000e-005 | 5.8000e-004 | 0.0000 | 1.8926 | 1.8926 | 6.0000e-005 | 0.0000 | 1.8941 |
| Total | 1.3400e-003 | 8.3000e-004 | 8.8600e-003 | 2.0000e-005 | 2.1100e-003 | 2.0000e-005 | 2.1300e-003 | 5.6000e-004 | 2.0000e-005 | 5.8000e-004 | 0.0000 | 1.8926 | 1.8926 | 6.0000e-005 | 0.0000 | 1.8941 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

3.5 Architectural Coating - 2020

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.1727 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0217 | 0.1507 | 0.1639 | 2.7000e-004 | | 9.9300e-003 | 9.9300e-003 | | 9.9300e-003 | 9.9300e-003 | 0.0000 | 22.8516 | 22.8516 | 1.7700e-003 | 0.0000 | 22.8958 |
| Total | 0.1944 | 0.1507 | 0.1639 | 2.7000e-004 | | 9.9300e-003 | 9.9300e-003 | | 9.9300e-003 | 9.9300e-003 | 0.0000 | 22.8516 | 22.8516 | 1.7700e-003 | 0.0000 | 22.8958 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.3400e-003 | 8.3000e-004 | 8.8600e-003 | 2.0000e-005 | 2.1100e-003 | 2.0000e-005 | 2.1300e-003 | 5.6000e-004 | 2.0000e-005 | 5.8000e-004 | 0.0000 | 1.8926 | 1.8926 | 6.0000e-005 | 0.0000 | 1.8941 |
| Total | 1.3400e-003 | 8.3000e-004 | 8.8600e-003 | 2.0000e-005 | 2.1100e-003 | 2.0000e-005 | 2.1300e-003 | 5.6000e-004 | 2.0000e-005 | 5.8000e-004 | 0.0000 | 1.8926 | 1.8926 | 6.0000e-005 | 0.0000 | 1.8941 |

4.0 Operational Detail - Mobile

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 6.6300e-003 | 0.0111 | 0.0559 | 8.0000e-005 | 6.9600e-003 | 1.1000e-004 | 7.0700e-003 | 1.8600e-003 | 1.1000e-004 | 1.9700e-003 | 0.0000 | 7.6307 | 7.6307 | 6.1000e-004 | 0.0000 | 7.6461 |
| Unmitigated | 6.6300e-003 | 0.0111 | 0.0559 | 8.0000e-005 | 6.9600e-003 | 1.1000e-004 | 7.0700e-003 | 1.8600e-003 | 1.1000e-004 | 1.9700e-003 | 0.0000 | 7.6307 | 7.6307 | 6.1000e-004 | 0.0000 | 7.6461 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|----------------------------|-------------------------|--------------|--------------|---------------|---------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Government Office Building | 11.00 | 11.00 | 11.00 | 18,864 | 18,864 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Total | 11.00 | 11.00 | 11.00 | 18,864 | 18,864 |

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 | 9.50 | 7.30 | 7.30 | 33.00 | 62.00 | 5.00 | 50 | 34 | 16 |
| Other Asphalt Surfaces | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

4.4 Fleet Mix

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Government Office Building | 0.454995 | 0.048403 | 0.212486 | 0.164367 | 0.044757 | 0.007498 | 0.013219 | 0.003968 | 0.000916 | 0.000362 | 0.039855 | 0.000757 | 0.008417 |
| Other Asphalt Surfaces | 0.454995 | 0.048403 | 0.212486 | 0.164367 | 0.044757 | 0.007498 | 0.013219 | 0.003968 | 0.000916 | 0.000362 | 0.039855 | 0.000757 | 0.008417 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|---------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 52.0533 | 52.0533 | 3.7300e-003 | 7.7000e-004 | 52.3765 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 52.0533 | 52.0533 | 3.7300e-003 | 7.7000e-004 | 52.3765 |
| NaturalGas Mitigated | 2.6500e-003 | 0.0241 | 0.0202 | 1.4000e-004 | | 1.8300e-003 | 1.8300e-003 | | 1.8300e-003 | 1.8300e-003 | 0.0000 | 26.1883 | 26.1883 | 5.0000e-004 | 4.8000e-004 | 26.3439 |
| NaturalGas Unmitigated | 2.6500e-003 | 0.0241 | 0.0202 | 1.4000e-004 | | 1.8300e-003 | 1.8300e-003 | | 1.8300e-003 | 1.8300e-003 | 0.0000 | 26.1883 | 26.1883 | 5.0000e-004 | 4.8000e-004 | 26.3439 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

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 | 490750 | 2.6500e-003 | 0.0241 | 0.0202 | 1.4000e-004 | | 1.8300e-003 | 1.8300e-003 | | 1.8300e-003 | 1.8300e-003 | 0.0000 | 26.1883 | 26.1883 | 5.0000e-004 | 4.8000e-004 | 26.3439 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 2.6500e-003 | 0.0241 | 0.0202 | 1.4000e-004 | | 1.8300e-003 | 1.8300e-003 | | 1.8300e-003 | 1.8300e-003 | 0.0000 | 26.1883 | 26.1883 | 5.0000e-004 | 4.8000e-004 | 26.3439 |

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 | 490750 | 2.6500e-003 | 0.0241 | 0.0202 | 1.4000e-004 | | 1.8300e-003 | 1.8300e-003 | | 1.8300e-003 | 1.8300e-003 | 0.0000 | 26.1883 | 26.1883 | 5.0000e-004 | 4.8000e-004 | 26.3439 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 2.6500e-003 | 0.0241 | 0.0202 | 1.4000e-004 | | 1.8300e-003 | 1.8300e-003 | | 1.8300e-003 | 1.8300e-003 | 0.0000 | 26.1883 | 26.1883 | 5.0000e-004 | 4.8000e-004 | 26.3439 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|----------------------------|-----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kWh/yr | MT/yr | | | |
| Government Office Building | 283500 | 52.0533 | 3.7300e-003 | 7.7000e-004 | 52.3765 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 52.0533 | 3.7300e-003 | 7.7000e-004 | 52.3765 |

Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|----------------------------|-----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kWh/yr | MT/yr | | | |
| Government Office Building | 283500 | 52.0533 | 3.7300e-003 | 7.7000e-004 | 52.3765 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 52.0533 | 3.7300e-003 | 7.7000e-004 | 52.3765 |

6.0 Area Detail

6.1 Mitigation Measures Area

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive 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 | 0.1032 | 0.0000 | 3.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 7.3000e-004 | 7.3000e-004 | 0.0000 | 0.0000 | 7.8000e-004 |
| Unmitigated | 0.1282 | 0.0000 | 3.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 7.3000e-004 | 7.3000e-004 | 0.0000 | 0.0000 | 7.8000e-004 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

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 | 0.0295 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0987 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 4.0000e-005 | 0.0000 | 3.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 7.3000e-004 | 7.3000e-004 | 0.0000 | 0.0000 | 7.8000e-004 |
| Total | 0.1282 | 0.0000 | 3.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 7.3000e-004 | 7.3000e-004 | 0.0000 | 0.0000 | 7.8000e-004 |

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 | 0.0118 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0914 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 4.0000e-005 | 0.0000 | 3.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 7.3000e-004 | 7.3000e-004 | 0.0000 | 0.0000 | 7.8000e-004 |
| Total | 0.1032 | 0.0000 | 3.8000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 7.3000e-004 | 7.3000e-004 | 0.0000 | 0.0000 | 7.8000e-004 |

7.0 Water Detail

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

7.1 Mitigation Measures Water

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|-------------|---------|
| Category | MT/yr | | | |
| Mitigated | 8.4661 | 0.1623 | 3.9200e-003 | 13.6934 |
| Unmitigated | 8.4661 | 0.1623 | 3.9200e-003 | 13.6934 |

7.2 Water by Land Use

Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|----------------------------|--------------------|---------------|---------------|--------------------|----------------|
| Land Use | Mgal | MT/yr | | | |
| Government Office Building | 4.96649 / 3.04398 | 8.4661 | 0.1623 | 3.9200e-003 | 13.6934 |
| Other Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 8.4661 | 0.1623 | 3.9200e-003 | 13.6934 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

7.2 Water by Land Use

Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|----------------------------|--------------------|---------------|---------------|--------------------|----------------|
| Land Use | Mgal | MT/yr | | | |
| Government Office Building | 4.96649 / 3.04398 | 8.4661 | 0.1623 | 3.9200e-003 | 13.6934 |
| Other Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 8.4661 | 0.1623 | 3.9200e-003 | 13.6934 |

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|--------|---------|
| | MT/yr | | | |
| Mitigated | 4.7195 | 0.2789 | 0.0000 | 11.6925 |
| Unmitigated | 4.7195 | 0.2789 | 0.0000 | 11.6925 |

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

8.2 Waste by Land Use

Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|----------------------------|----------------|---------------|---------------|---------------|----------------|
| Land Use | tons | MT/yr | | | |
| Government Office Building | 23.25 | 4.7195 | 0.2789 | 0.0000 | 11.6925 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 4.7195 | 0.2789 | 0.0000 | 11.6925 |

Mitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|----------------------------|----------------|---------------|---------------|---------------|----------------|
| Land Use | tons | MT/yr | | | |
| Government Office Building | 23.25 | 4.7195 | 0.2789 | 0.0000 | 11.6925 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 4.7195 | 0.2789 | 0.0000 | 11.6925 |

9.0 Operational Offroad

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

El Dorado County Jail Expansion - El Dorado-Mountain County County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---------------------|--------|-----------|------------|-------------|-------------|-----------|
| Emergency Generator | 1 | 4 | 14 | 480 | 0.73 | Diesel |

Boilers

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

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

10.1 Stationary Sources

Unmitigated/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 |
|---|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Equipment Type | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Emergency Generator - Diesel (300 - 600 HP) | 5.5100e-003 | 0.0154 | 0.0141 | 3.0000e-005 | | 8.1000e-004 | 8.1000e-004 | | 8.1000e-004 | 8.1000e-004 | 0.0000 | 2.5590 | 2.5590 | 3.6000e-004 | 0.0000 | 2.5679 |
| Total | 5.5100e-003 | 0.0154 | 0.0141 | 3.0000e-005 | | 8.1000e-004 | 8.1000e-004 | | 8.1000e-004 | 8.1000e-004 | 0.0000 | 2.5590 | 2.5590 | 3.6000e-004 | 0.0000 | 2.5679 |

11.0 Vegetation

El Dorado County Jail Expansion
El Dorado-Mountain County County, Mitigation Report

Construction Mitigation Summary

| Phase | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|------|------|------|------|--------------|---------------|----------|-----------|-----------|------|------|------|
| Percent Reduction | | | | | | | | | | | | |
| Architectural Coating | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Building Construction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grading | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

OFFROAD Equipment Mitigation

| Equipment Type | Fuel Type | Tier | Number Mitigated | Total Number of Equipment | DPF | Oxidation Catalyst |
|---------------------------|-----------|-----------|------------------|---------------------------|-----------|--------------------|
| Air Compressors | Diesel | No Change | 0 | 1 | No Change | 0.00 |
| Cement and Mortar Mixers | Diesel | No Change | 0 | 1 | No Change | 0.00 |
| Cranes | Diesel | No Change | 0 | 1 | No Change | 0.00 |
| Forklifts | Diesel | No Change | 0 | 1 | No Change | 0.00 |
| Generator Sets | Diesel | No Change | 0 | 1 | No Change | 0.00 |
| Graders | Diesel | No Change | 0 | 1 | No Change | 0.00 |
| Pavers | Diesel | No Change | 0 | 1 | No Change | 0.00 |
| Paving Equipment | Diesel | No Change | 0 | 1 | No Change | 0.00 |
| Rollers | Diesel | No Change | 0 | 1 | No Change | 0.00 |
| Rubber Tired Dozers | Diesel | No Change | 0 | 1 | No Change | 0.00 |
| Tractors/Loaders/Backhoes | Diesel | No Change | 0 | 3 | No Change | 0.00 |
| Welders | Diesel | No Change | 0 | 3 | No Change | 0.00 |

| Equipment Type | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|---------------------|--------------|--------------|--------------|--------------|---------------|-------------------|--------------|--------------|--------------|--------------|--------------|
| | Unmitigated tons/yr | | | | | | Unmitigated mt/yr | | | | | |
| Air Compressors | 3.85900E-002 | 2.67250E-001 | 2.80840E-001 | 4.50000E-004 | 1.81100E-002 | 1.81100E-002 | 0.00000E+000 | 3.90648E+001 | 3.90648E+001 | 3.14000E-003 | 0.00000E+000 | 3.91433E+001 |
| Cement and Mortar Mixers | 1.10000E-004 | 6.90000E-004 | 5.80000E-004 | 0.00000E+000 | 3.00000E-005 | 3.00000E-005 | 0.00000E+000 | 8.59300E-002 | 8.59300E-002 | 1.00000E-005 | 0.00000E+000 | 8.61500E-002 |
| Cranes | 5.46300E-002 | 6.50300E-001 | 2.51870E-001 | 6.60000E-004 | 2.71700E-002 | 2.49900E-002 | 0.00000E+000 | 5.87486E+001 | 5.87486E+001 | 1.88100E-002 | 0.00000E+000 | 5.92189E+001 |
| Forklifts | 1.73400E-002 | 1.55610E-001 | 1.36150E-001 | 1.80000E-004 | 1.18100E-002 | 1.08700E-002 | 0.00000E+000 | 1.55632E+001 | 1.55632E+001 | 4.98000E-003 | 0.00000E+000 | 1.56878E+001 |
| Generator Sets | 6.41300E-002 | 5.52730E-001 | 5.68150E-001 | 1.01000E-003 | 3.20500E-002 | 3.20500E-002 | 0.00000E+000 | 8.64767E+001 | 8.64767E+001 | 5.14000E-003 | 0.00000E+000 | 8.66053E+001 |
| Graders | 1.83000E-003 | 2.46700E-002 | 6.89000E-003 | 2.00000E-005 | 7.90000E-004 | 7.30000E-004 | 0.00000E+000 | 2.23721E+000 | 2.23721E+000 | 7.10000E-004 | 0.00000E+000 | 2.25491E+000 |
| Pavers | 5.40000E-004 | 5.86000E-003 | 5.44000E-003 | 1.00000E-005 | 2.90000E-004 | 2.60000E-004 | 0.00000E+000 | 7.91800E-001 | 7.91800E-001 | 2.50000E-004 | 0.00000E+000 | 7.98060E-001 |
| Paving Equipment | 5.30000E-004 | 5.64000E-003 | 6.31000E-003 | 1.00000E-005 | 2.80000E-004 | 2.60000E-004 | 0.00000E+000 | 9.14710E-001 | 9.14710E-001 | 2.90000E-004 | 0.00000E+000 | 9.21950E-001 |
| Rollers | 5.00000E-004 | 4.90000E-003 | 4.17000E-003 | 1.00000E-005 | 3.20000E-004 | 3.00000E-004 | 0.00000E+000 | 5.15330E-001 | 5.15330E-001 | 1.60000E-004 | 0.00000E+000 | 5.19410E-001 |
| Rubber Tired Dozers | 4.25000E-003 | 4.52800E-002 | 1.60700E-002 | 3.00000E-005 | 2.21000E-003 | 2.03000E-003 | 0.00000E+000 | 2.87610E+000 | 2.87610E+000 | 9.10000E-004 | 0.00000E+000 | 2.89885E+000 |
| Tractors/Loaders/Backhoes | 2.68400E-002 | 2.69570E-001 | 2.78610E-001 | 3.80000E-004 | 1.75300E-002 | 1.61200E-002 | 0.00000E+000 | 3.35436E+001 | 3.35436E+001 | 1.07300E-002 | 0.00000E+000 | 3.38120E+001 |
| Welders | 1.65870E-001 | 7.32120E-001 | 8.19310E-001 | 1.17000E-003 | 4.25100E-002 | 4.25100E-002 | 0.00000E+000 | 8.63933E+001 | 8.63933E+001 | 1.35200E-002 | 0.00000E+000 | 8.67312E+001 |

| Equipment Type | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------------------|-------------------|--------------|--------------|--------------|--------------|---------------|-----------------|--------------|--------------|--------------|--------------|--------------|
| | Mitigated tons/yr | | | | | | Mitigated mt/yr | | | | | |
| Air Compressors | 3.85900E-002 | 2.67250E-001 | 2.80840E-001 | 4.50000E-004 | 1.81100E-002 | 1.81100E-002 | 0.00000E+000 | 3.90647E+001 | 3.90647E+001 | 3.14000E-003 | 0.00000E+000 | 3.91432E+001 |
| Cement and Mortar Mixers | 1.10000E-004 | 6.90000E-004 | 5.80000E-004 | 0.00000E+000 | 3.00000E-005 | 3.00000E-005 | 0.00000E+000 | 8.59300E-002 | 8.59300E-002 | 1.00000E-005 | 0.00000E+000 | 8.61500E-002 |
| Cranes | 5.46300E-002 | 6.50300E-001 | 2.51870E-001 | 6.60000E-004 | 2.71700E-002 | 2.49900E-002 | 0.00000E+000 | 5.87485E+001 | 5.87485E+001 | 1.88100E-002 | 0.00000E+000 | 5.92189E+001 |
| Forklifts | 1.73400E-002 | 1.55610E-001 | 1.36150E-001 | 1.80000E-004 | 1.18100E-002 | 1.08700E-002 | 0.00000E+000 | 1.55632E+001 | 1.55632E+001 | 4.98000E-003 | 0.00000E+000 | 1.56878E+001 |
| Generator Sets | 6.41300E-002 | 5.52730E-001 | 5.68150E-001 | 1.01000E-003 | 3.20500E-002 | 3.20500E-002 | 0.00000E+000 | 8.64766E+001 | 8.64766E+001 | 5.14000E-003 | 0.00000E+000 | 8.66052E+001 |
| Graders | 1.83000E-003 | 2.46700E-002 | 6.89000E-003 | 2.00000E-005 | 7.90000E-004 | 7.30000E-004 | 0.00000E+000 | 2.23721E+000 | 2.23721E+000 | 7.10000E-004 | 0.00000E+000 | 2.25490E+000 |
| Pavers | 5.40000E-004 | 5.86000E-003 | 5.44000E-003 | 1.00000E-005 | 2.90000E-004 | 2.60000E-004 | 0.00000E+000 | 7.91800E-001 | 7.91800E-001 | 2.50000E-004 | 0.00000E+000 | 7.98060E-001 |
| Paving Equipment | 5.30000E-004 | 5.64000E-003 | 6.31000E-003 | 1.00000E-005 | 2.80000E-004 | 2.60000E-004 | 0.00000E+000 | 9.14710E-001 | 9.14710E-001 | 2.90000E-004 | 0.00000E+000 | 9.21950E-001 |
| Rollers | 5.00000E-004 | 4.90000E-003 | 4.17000E-003 | 1.00000E-005 | 3.20000E-004 | 3.00000E-004 | 0.00000E+000 | 5.15330E-001 | 5.15330E-001 | 1.60000E-004 | 0.00000E+000 | 5.19410E-001 |
| Rubber Tired Dozers | 4.25000E-003 | 4.52800E-002 | 1.60700E-002 | 3.00000E-005 | 2.21000E-003 | 2.03000E-003 | 0.00000E+000 | 2.87610E+000 | 2.87610E+000 | 9.10000E-004 | 0.00000E+000 | 2.89885E+000 |
| Tractors/Loaders/Balckhoes | 2.68400E-002 | 2.69560E-001 | 2.78610E-001 | 3.80000E-004 | 1.75300E-002 | 1.61200E-002 | 0.00000E+000 | 3.35436E+001 | 3.35436E+001 | 1.07300E-002 | 0.00000E+000 | 3.38120E+001 |
| Welders | 1.65870E-001 | 7.32120E-001 | 8.19310E-001 | 1.17000E-003 | 4.25100E-002 | 4.25100E-002 | 0.00000E+000 | 8.63932E+001 | 8.63932E+001 | 1.35200E-002 | 0.00000E+000 | 8.67311E+001 |

| Equipment Type | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Percent Reduction | | | | | | | | | | | | |
| Air Compressors | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 1.02394E-006 | 1.02394E-006 | 0.00000E+000 | 0.00000E+000 | 1.27736E-006 |
| Cement and Mortar Mixers | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 |
| Cranes | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 1.19152E-006 | 1.19152E-006 | 0.00000E+000 | 0.00000E+000 | 1.18205E-006 |
| Forklifts | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 6.42540E-007 | 6.42540E-007 | 0.00000E+000 | 0.00000E+000 | 1.27487E-006 |
| Generator Sets | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 1.15638E-006 | 1.15638E-006 | 0.00000E+000 | 0.00000E+000 | 1.27013E-006 |
| Graders | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 4.43477E-006 |
| Pavers | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 |
| Paving Equipment | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 |
| Rollers | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 |
| Rubber Tired Dozers | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 |
| Tractors/Loaders/Balckhoes | 0.00000E+000 | 3.70961E-005 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 1.19248E-006 | 1.19248E-006 | 0.00000E+000 | 0.00000E+000 | 1.18301E-006 |
| Welders | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 0.00000E+000 | 1.15750E-006 | 1.15750E-006 | 0.00000E+000 | 0.00000E+000 | 1.15299E-006 |

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

| | | | | | | |
|----|--|--------------------|--|---------------------|---------------------|--|
| No | Soil Stabilizer for unpaved Roads | PM10 Reduction | | PM2.5 Reduction | | |
| No | Replace Ground Cover of Area Disturbed | PM10 Reduction | | PM2.5 Reduction | | |
| No | Water Exposed Area | PM10 Reduction | | PM2.5 Reduction | Frequency (per day) | |
| No | Unpaved Road Mitigation | Moisture Content % | | Vehicle Speed (mph) | | |

| | | | | | | | |
|----|------------------|----------------|------|--|--|--|--|
| No | Clean Paved Road | % PM Reduction | 0.00 | | | | |
|----|------------------|----------------|------|--|--|--|--|

| Phase | Source | Unmitigated | | Mitigated | | Percent Reduction | |
|-----------------------|---------------|-------------|-------|-----------|-------|-------------------|-------|
| | | PM10 | PM2.5 | PM10 | PM2.5 | PM10 | PM2.5 |
| Architectural Coating | Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Architectural Coating | Roads | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Building Construction | Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Building Construction | Roads | 0.03 | 0.01 | 0.03 | 0.01 | 0.00 | 0.00 |
| Grading | Fugitive Dust | 0.02 | 0.01 | 0.02 | 0.01 | 0.00 | 0.00 |
| Grading | Roads | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | Roads | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Operational Percent Reduction Summary

| Category | ROG | NOx | CO | SO2 | Exhaust PM10 | Exhaust PM2.5 | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|-------|------|------|------|--------------|---------------|----------|-----------|-----------|------|------|------|
| Percent Reduction | | | | | | | | | | | | |
| Architectural Coating | 59.99 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Consumer Products | 7.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Electricity | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Natural Gas | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Water Indoor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Water Outdoor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Operational Mobile Mitigation

Project Setting:

| Mitigation | Category | Measure | % Reduction | Input Value 1 | Input Value 2 | Input Value |
|------------|----------|-------------------------------------|-------------|---------------|---------------|-------------|
| No | Land Use | Increase Density | 0.00 | | | |
| No | Land Use | Increase Diversity | 0.09 | 0.30 | | |
| No | Land Use | Improve Walkability Design | 0.00 | | | |
| No | Land Use | Improve Destination Accessibility | 0.00 | | | |
| No | Land Use | Increase Transit Accessibility | 0.25 | | | |
| No | Land Use | Integrate Below Market Rate Housing | 0.00 | | | |
| | Land Use | Land Use SubTotal | 0.00 | | | |

| | | | | | |
|----|---------------------------|--|------|--|------|
| No | Neighborhood Enhancements | Improve Pedestrian Network | | | |
| No | Neighborhood Enhancements | Provide Traffic Calming Measures | | | |
| No | Neighborhood Enhancements | Implement NEV Network | 0.00 | | |
| | Neighborhood Enhancements | Neighborhood Enhancements Subtotal | 0.00 | | |
| No | Parking Policy Pricing | Limit Parking Supply | 0.00 | | |
| No | Parking Policy Pricing | Unbundle Parking Costs | 0.00 | | |
| No | Parking Policy Pricing | On-street Market Pricing | 0.00 | | |
| | Parking Policy Pricing | Parking Policy Pricing Subtotal | 0.00 | | |
| No | Transit Improvements | Provide BRT System | 0.00 | | |
| No | Transit Improvements | Expand Transit Network | 0.00 | | |
| No | Transit Improvements | Increase Transit Frequency | 0.00 | | |
| | Transit Improvements | Transit Improvements Subtotal | 0.00 | | |
| | | Land Use and Site Enhancement Subtotal | 0.00 | | |
| No | Commute | Implement Trip Reduction Program | | | |
| No | Commute | Transit Subsidy | | | |
| No | Commute | Implement Employee Parking "Cash Out" | | | |
| No | Commute | Workplace Parking Charge | | | |
| No | Commute | Encourage Telecommuting and Alternative Work Schedules | 0.00 | | |
| No | Commute | Market Commute Trip Reduction Option | 0.00 | | |
| No | Commute | Employee Vanpool/Shuttle | 0.00 | | 2.00 |
| No | Commute | Provide Ride Sharing Program | | | |
| | Commute | Commute Subtotal | 0.00 | | |

| | | | | | |
|----|-------------|------------------------------|------|--|--|
| No | School Trip | Implement School Bus Program | 0.00 | | |
| | | Total VMT Reduction | 0.00 | | |

Area Mitigation

| Measure Implemented | Mitigation Measure | Input Value |
|---------------------|--|-------------|
| No | Only Natural Gas Hearth | |
| Yes | No Hearth | |
| Yes | Use Low VOC Cleaning Supplies | |
| Yes | Use Low VOC Paint (Residential Interior) | 100.00 |
| Yes | Use Low VOC Paint (Residential Exterior) | 100.00 |
| Yes | Use Low VOC Paint (Non-residential Interior) | 100.00 |
| Yes | Use Low VOC Paint (Non-residential Exterior) | 100.00 |
| Yes | Use Low VOC Paint (Parking) | 100.00 |
| No | % Electric Lawnmower | 0.00 |
| No | % Electric Leafblower | 0.00 |
| No | % Electric Chainsaw | 0.00 |

Energy Mitigation Measures

| Measure Implemented | Mitigation Measure | Input Value 1 | Input Value 2 |
|---------------------|----------------------------------|---------------|---------------|
| No | Exceed Title 24 | | |
| No | Install High Efficiency Lighting | | |
| No | On-site Renewable | | |

| Appliance Type | Land Use Subtype | % Improvement |
|----------------|------------------|---------------|
| ClothWasher | | 30.00 |
| DishWasher | | 15.00 |
| Fan | | 50.00 |
| Refrigerator | | 15.00 |

Water Mitigation Measures

| Measure Implemented | Mitigation Measure | Input Value 1 | Input Value 2 |
|---------------------|--|---------------|---------------|
| No | Apply Water Conservation on Strategy | | |
| No | Use Reclaimed Water | | |
| No | Use Grey Water | | |
| No | Install low-flow bathroom faucet | 32.00 | |
| No | Install low-flow Kitchen faucet | 18.00 | |
| No | Install low-flow Toilet | 20.00 | |
| No | Install low-flow Shower | 20.00 | |
| No | Turf Reduction | | |
| No | Use Water Efficient Irrigation Systems | 6.10 | |
| No | Water Efficient Landscape | | |

Solid Waste Mitigation

| Mitigation Measures | Input Value |
|---------------------|-------------|
|---------------------|-------------|

| | |
|--|--|
| Institute Recycling and Composting Services Percent Reduction in Waste Disposed | |
|--|--|