APPENDIX A

Initial Study, Notice of Preparation, and Comments

EL DORADO COUNTY PLANNING SERVICES
2850 FAIR LANE COURT
PLACERVILLE, CA 95667

INITIAL STUDY
ENVIRONMENTAL CHECKLIST

Project Title: Vineyards at El Dorado Hills/Z16-0002/PD16-0001/TM16-1528

Lead Agency Name and Address: El Dorado County, 2850 Fair Lane Court, Placerville, CA 95667

Contact Person: Rommel Pabalinas, Senior Planner | **Phone Number:** (530) 621-5363

Applicant's Name and Address: Omni Financial, 1260 41st Ave., Ste. O, Capitola, CA 95010

Project Engineer's Name and Address: Olga V. Sciorelli, P.E. QSD, QSP, 1375 Exposition Blvd., Ste. 102, Sacramento, CA 95815

Project Location: North of Malcolm Dixon Road, east of Salmon Falls Road, and west of Arroyo Vista Way in El Dorado Hills, CA

Assessor's Parcel Number: 126-100-24 **Acres:** 114.03 acres

Sections: Sec.14 **T:** 10N **R:** 8E

General Plan Designation: Low Density Residential (LDR)

Zoning: Estate Residential – Five Acre (RE-5)

Description of Project: Development of 42 single family residential units, five open space lots, one roadway lot, and utility and transportation improvements on approximately 114 acres. Actions to be taken by the County in approving the project include, but are not limited to:

- Rezone (Z16-0002) of subject property adding a Planned Development (-PD) overlay zone to the underlying zoning of RE-5 resulting in a new zoning of Estate Residential, 5-acre-Planned Development (RE-5-PD);
- Tentative Subdivision Map (TM16-1528) of 114.03-acre property creating a total of 42 residential lots, with lots ranging from a minimum of 43,560 square feet to a maximum of 46,562 square feet, 1 roadway lot, and 5 open space lots; and
- Planned Development Permit (PD16-0001) establishing an official development plan for the Vineyards at El Dorado Hills project.

Surrounding Land Uses and Setting:

	Zoning	General Plan	Land Use/Improvements
Site	RE-5	LDR	Oak woodlands and annual grassland
North	RE-5/PD, RE-10	LDR	Oak woodlands, rural residential uses
South	RE-5, PA-20, R1A	MDR, HDR	Malcolm Dixon Rd., low density residential uses, Green Valley Rd.
East	RE-5	LDR	Arroyo Vista Wy., oak woodlands, rural residential uses
West	RE-5, RE-5/PD, RE-10	LDR, MDR	Oak woodlands, Salmon Falls Rd., rural residential uses

Briefly describe the environmental setting: The project site is located in a rural residential area and is characterized by gentle to moderate slopes, with scattered individual oak trees with majority of the oak woodlands concentrated in the northwest corner of the project site.

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):
1. El Dorado Irrigation District
2. El Dorado Hills Fire District

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

X	Aesthetics		Agriculture and Forestry Resources	X	Air Quality
X	Biological Resources	X	Cultural Resources	X	Geology / Soils
X	Greenhouse Gas Emissions	X	Hazards & Hazardous Materials	X	Hydrology / Water Quality
	Land Use / Planning		Mineral Resources	X	Noise
	Population / Housing	X	Public Services		Recreation
X	Transportation/Traffic	X	Tribal Cultural Resources	X	Utilities / Service Systems

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☒ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by Mitigation Measures based on the earlier analysis as described in attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION, pursuant to applicable standards; and b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or Mitigation Measures that are imposed upon the proposed project, nothing further is required.

Signature: _____ Date: 10/3/17

Printed Name: Rommel Pabalinas, Senior Planner For: El Dorado County

Introduction

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts resulting from the proposed project. The project would allow development of 42 single family residential units, five open space lots, one roadway lot, and utility and transportation improvements on approximately 114 acres.

Project Description

See the attached Notice of Preparation for a detailed description of the project.

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. If the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is a fair argument that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of Mitigation Measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the Mitigation Measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

   a. Earlier Analysis Used. Identify and state where they are available for review.
   b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   a. the significance criteria or threshold, if any, used to evaluate each question; and
   b. the mitigation measure identified, if any, to reduce the impact to less than significant.

ENVIRONMENTAL IMPACTS

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

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal regulations are applicable to aesthetics in relation to the proposed project.

State Laws, Regulations, and Policies

California Scenic Highway Program

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (Caltrans, 2015). The state highway system includes designated scenic highways and those that are eligible for designation as scenic highways. There are no officially designated state scenic corridors in the vicinity of the project site.

Local Laws, Regulations, and Policies

The County has several standards and ordinances that address issues relating to visual resources. Many of these can be found in the County Zoning Ordinance (Title 130 of the County Code). The Zoning Ordinance consists of descriptions of the zoning districts, including identification of uses allowed by right or requiring a special-use permit and specific development standards that apply in particular districts based on parcel size and land use density. These development standards often involve limits on the allowable size of structures, required setbacks, and design guidelines. Included are requirements for setbacks and allowable exceptions, the location of public utility distribution and transmission lines, architectural supervision of structures facing a state highway, height limitations on structures and fences, outdoor lighting, and wireless communication facilities.

Visual resources are classified as 1) scenic resources or 2) scenic views. Scenic resources include specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements. Scenic views are elements of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually middle ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor.

A list of the county's scenic views and resources is presented in Table 5.3-1 of the El Dorado County General Plan EIR (p. 5.3-3). This list includes areas along highways where viewers can see large water bodies (e.g., Lake Tahoe and Folsom Reservoir), river canyons, rolling hills, forests, or historic structures or districts that are reminiscent of El Dorado County's heritage. The project site is not included on this list of important public scenic viewpoints.

Several highways in El Dorado County have been designated by the California Department of Transportation (Caltrans) as scenic highways or are eligible for such designation. These include U.S. 50 from the eastern limits of the Government Center interchange (Placerville Drive/Forni Road) in Placerville to South Lake Tahoe, all of SR 89 within the county, and those portions of SR 88 along the southern border of the county.

Rivers in El Dorado County include the American, Cosumnes, Rubicon, and Upper Truckee rivers. A large portion of El Dorado County is under the jurisdiction of the U.S. Forest Service (USFS), which under the Wild and Scenic Rivers Act may designate rivers or river sections to be Wild and Scenic Rivers. To date, no river sections in El Dorado County have been nominated for or granted Wild and Scenic River status.

Discussion:
A substantial adverse effect to Visual Resources would result in the introduction of physical features that are not characteristic of the surrounding development, substantially change the natural landscape, or obstruct an identified public scenic vista.

a, c, d. Scenic Vista or Resource, Visual Character, Light and Glare:
The project site is located in a rural residential area with existing rural and single-family residential uses located to the west, south, and east. Most of the site is characterized by gentle to moderate slopes, with scattered individual oak trees with majority of the oak woodlands concentrated in the northwest corner of the project. Three existing structures are located in the southern portion of the project site near Malcolm Dixon Road. The surrounding land uses include oak woodlands and rural residential uses to the north, Malcolm Dixon Road, low density residential uses, and Green Valley Road to the south, Arroyo Vista Way, oak woodlands, and rural residential uses to the east, and oak woodlands, Salmon Falls Road, and rural residential uses to the west.

The potential impacts related to scenic vistas or resources, the visual character of the site, and light and glare caused by the proposed project will require a more detailed analysis in the environmental impact report (EIR). The lead agency will examine these three environmental issues listed in the checklist above in the EIR and will decide whether the proposed project will have a **potentially significant** impact on aesthetics.

The EIR will provide provide a discussion of view sheds, proximity to scenic roadways and scenic vistas, existing lighting standards, thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts on aesthetics. This section of the EIR will identify applicable General Plan policies that protect the visual values located along public roadways and surrounding land uses, and will also address the potential for the project to substantially impair the visual character of the project vicinity. The analysis will address any proposed design and landscaping plans developed by the applicant and provide a narrative description of the anticipated changes to the visual characteristics of the project site as a result of project implementation and the conversion of the existing on-site land uses. The analysis will also address potential impacts associated with light spillage onto adjacent properties during nighttime activities.

b. Scenic Resources.
As noted above, designated or eligible scenic highways in El Dorado County include U.S. 50 from the eastern limits of the Government Center interchange (Placerville Drive/Forni Road) in Placerville to South Lake Tahoe, all of SR 89 within the county, and those portions of SR 88 along the southern border of the county. The project site is not visible from U.S. 50, SR 89, and SR 88 and, because of this, the impact to scenic resources within a state scenic highway would be **less than significant**.

FINDING: At this point, a definitive impact conclusion for environmental topics a, c, and d will not be made; rather, these topics are considered **potentially significant** until a detailed analysis is prepared in the EIR. Impacts to scenic resources within a state scenic highway (b) were determined to be **less than significant**.

II. AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by California Department of forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Locally Important Farmland (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			**X**	
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?			**X**	
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?			**X**	
d. Result in the loss of forest land or conversion of forest land to non-forest use?			**X**	
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal regulations are applicable to agricultural and forestry resources in relation to the proposed project.

State Laws, Regulations, and Policies

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP), administered by the California Department of Conservation (CDC), produces maps and statistical data for use in analyzing impacts on California's agricultural resources. FMMP rates and classifies agricultural land according to soil quality, irrigation status, and other criteria. Important Farmland categories are as follows (CDC 2013a):

> ***Prime Farmland:*** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

Farmland of Statewide Importance: Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

Unique Farmland: Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands are usually irrigated but might include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some time during the 4 years before the FMMP's mapping date.

Farmland of Local Importance: Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (CDC 2013b). In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate.

Z'berg-Nejedly Forest Practice Act

Logging on private and corporate land in California is regulated by the 1973 Z'berg-Nejedly Forest Practice Act. This Act established the Forest Practice Rules (FPRs) and a politically-appointed Board of Forestry to oversee their implementation. The California Department of Forestry (CALFIRE) works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs.

Discussion:

A substantial adverse effect to Agricultural Resources would occur if:

- There is a conversion of choice agricultural land to nonagricultural use, or impairment of the agricultural productivity of agricultural land;
- The amount of agricultural land in the County is substantially reduced; or
- Agricultural uses are subjected to impacts from adjacent incompatible land uses.

a. Farmland Mapping and Monitoring Program:

The project site is currently zoned RE-5. The proposed project site is currently designated as Grazing Land and Other Land, as depicted by the State of California Department of Conservation California Important Farmland Finder (July 2017). Development of the project site for urban uses was analyzed in the El Dorado County General Plan EIR. Development of the proposed project would not convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Locally Important Farmland (Farmland). Therefore, this a **less than significant** impact.

b. Agricultural Zoning or Williamson Act Contract:

The project site is not under a Williamson Act contract. The site is categorized as Non-Enrolled Land, meaning the land is not enrolled in a Williamson Act contract. There are no adjacent lands under a Williamson Act contract or lands zoned for agricultural use that would be affected by development of the proposed project.

The project site is currently zoned RE-5. The proposed residential uses are consistent with the existing zoning designation, and the project would not require a zoning amendment. The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. Therefore, implementation of the proposed project would have a **less than significant** impact relative to this topic and no mitigation is required.

c-d. Zoning for Forest Land, Loss or Conversion of Forest Land:

The proposed project site is zoned RE-5. The project would require a rezone (Z16-0002) of the subject property in order to add a Planned Development (-PD) overlay zone to the underlying zoning of RE-5 resulting in a new zoning of Estate Residential, 5-acre-Planned Development (RE-5-PD). The project site is not zoned for Timberland Production. Therefore, the project does not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

The project would maintain approximately 65.58 acres of open space, which may include park areas, trails, and vineyards. The development of the project site for urban uses was analyzed in the County's General Plan EIR. Therefore, implementation of the proposed project would have a **less than significant** impact relative to this topic.

e. Conversion of Farmland or Forest Land:

As previously stated, the project site is currently designated as Grazing Land and Other Land by the FMMP. The project site is zoned for residential uses and is not zoned or designated for agricultural, forest, or timber uses. Land to the north, east, and west is designated as Grazing Land and Other Land, and land directly south of the project site is designated Urban and Built-Up Land. Development of the project is consistent with the County's General Plan, and conversion of the site to urban uses was analyzed in the County's General Plan EIR. Therefore, the project would not result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, implementation of the proposed project would have a **less than significant** impact.

FINDING: For this Agriculture and Forest Resource category, the thresholds of significance have not been exceeded and **less than significant** impacts would be anticipated to result from the project.

III. **AIR QUALITY.** *Would the project:*				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	**X**			
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	**X**			
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)?	**X**			
d. Expose sensitive receptors to substantial pollutant concentrations?	**X**			
e. Create objectionable odors affecting a substantial number of people?	**X**			

Regulatory Setting:

Federal Laws, Regulations, and Policies

The Clean Air Act is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for seven criteria pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM10), particulate matter of aerodynamic radius of 2.5 micrometers or less (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO2), sulfur dioxide (SO2), ground-level ozone, and lead. Of these criteria pollutants, particulate matter and ground-level ozone pose the greatest threats to human health.

State Laws, Regulations, and Policies

The California Air Resources Board (CARB) sets standards for criteria pollutants in California that are more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride. The proposed project is located within the Mountain Counties Air Basin, which is comprised of seven air districts: the Northern Sierra Air Quality Management District (AQMD), Placer County Air Pollution Control District (APCD), Amador County APCD, Calaveras County APCD, the Tuolumne County APCD, the Mariposa County APCD, and a portion of the El Dorado County AQMD, which consists of the western portion of El Dorado County. The El Dorado County Air Quality Management District manages air quality for attainment and permitting purposes within El Dorado County.

USEPA and CARB regulate various stationary sources, area sources, and mobile sources. USEPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), known as hazardous air pollutants (HAPs) at the federal level. In addition, USEPA has regulations involving emission criteria for off-road sources such as emergency generators, construction equipment, and vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications.

Air quality in the project area is regulated by the El Dorado County Air Quality Management District, CARB, and local air districts are responsible for overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air

quality-related sections of environmental documents required to comply with CEQA. The AQMD regulates air quality through the federal and state Clean Air Acts, district rules, and its permit authority.

USEPA and CARB designate regions as "attainment" (within standards) or "nonattainment" (exceeds standards) based on the ambient air quality. The County is in nonattainment status for both federal and state ozone standards and for the state PM10 standard, and is in attainment or unclassified status for other pollutants (California Air Resources Board 2017). County thresholds are included in the chart below.

Criteria Pollutant	**El Dorado County Threshold**	
Reactive Organic Gasses (ROG)	82 lbs/day	
Nitrogen Oxides (NOx)	82 lbs/day	
Carbon Monoxide (CO)	8-hour average: 9 parts per million (ppm)	1-hour average: 20 ppm
Particulate Matter (PM10):	Annual arithmetic mean: 20 µg/m3	24-hour average: 50 µg/m3
Particulate Matter (PM2.5):	Annual arithmetic mean: 12 µg/m3	24-hour average: 35 µg/m3
Ozone	8-hour average: 0.07 ppm	1-hour average: .09

For fugitive dust (PM10), if dust suppression measures will prevent visible emissions beyond the boundaries of the project, further calculations to determine PM emissions are not necessary. For the other criteria pollutants, including CO, PM10, SO2, NO2, sulfates, lead, and H2S, a project is considered to have a significant impact on air quality if it will cause or contribute significantly to a violation of the applicable national or state ambient air quality standard(s) shown in the table above.

Naturally occurring asbestos (NOA) is found in certain areas of El Dorado County and can pose a health risk if released into the air. The AQMD has adopted an El Dorado County Naturally Occurring Asbestos Review Area Map that identifies those areas more likely to contain NOA (El Dorado County 2005).

Discussion:
The El Dorado County Air Quality Management District (AQMD) has developed a Guide to Air Quality Assessment (2002) to evaluate project specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. A substantial adverse effect on air quality would occur if:

- Emissions of ROG and No_x will result in construction or operation emissions greater than 82lbs/day;
- Emissions of PM_{10}, CO, SO_2, and NO_x, as a result of construction or operation emissions, will result in ambient pollutant concentrations in excess of the applicable National or State Ambient Air Quality Standard (AAQS). Special standards for ozone, CO, and visibility apply in the Lake Tahoe Air Basin portion of the County; or
- Emissions of toxic air contaminants cause cancer risk greater than 1 in 1 million (10 in 1 million if best available control technology for toxics is used) or a non-cancer Hazard Index greater than 1. In addition, the project must demonstrate compliance with all applicable District, State and Federal regulations governing toxic and hazardous emissions.

a-e. Air Quality Plan, Air Quality Standards or Projected Air Quality Violations, Cumulatively Considerable Impacts, Sensitive Receptors, Objectionable Odors:

It has been determined that the potential impacts on air quality caused by the proposed project will require a detailed analysis in the EIR. As such, the lead agency will examine each of the five environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact on air quality. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will include an air quality analysis that presents the methodology, thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts on air quality.

FINDING: At this point, a definitive impact conclusion for each of these air quality topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

IV. BIOLOGICAL RESOURCES. *Would the project:*				
	Potentially Significant Impact	Less than Significant with Mitigation	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?	**X**			
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	**X**			
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?	**X**			
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	**X**			
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	**X**			
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				**X**

Regulatory Setting:

Federal Laws, Regulations, and Policies

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Code [USC] Section 1531 *et seq*.; 50 Code of Federal Regulations [CFR] Parts 17 and 222) provides for conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, USFWS manages terrestrial and freshwater species, whereas NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the "take" of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 *et seq*.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 10(a)(1)(B) of the ESA provides a process by which nonfederal entities may obtain an incidental

take permit from USFWS or NMFS for otherwise lawful activities that incidentally may result in “take” of endangered or threatened species, subject to specific conditions. A habitat conservation plan (HCP) must accompany an application for an incidental take permit.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) protects migratory birds. Most actions that result in take, or the permanent or temporary possession of, a migratory bird constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. USFWS is responsible for overseeing compliance with the MBTA.

Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), first enacted in 1940, prohibits "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The definition for "Disturb" includes injury to an eagle, a decrease in its productivity, or nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present.

Clean Water Act

Clean Water Act (CWA) section 404 regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to the aforementioned waters (33 CFR Section 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial waterbodies such as swimming pools, vernal pools, and water-filled depressions (33 CFR Part 328). Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of U.S. Army Corps of Engineers (USACE) under the provisions of CWA Section 404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by USACE through permit requirements. No USACE permit is effective in the absence of state water quality certification pursuant to Section 401 of CWA.

Section 401 of the CWA requires an evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the U.S. In California, the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in compliance with the CWA and its water quality control plan (also known as a Basin Plan). Applicants for a federal license or permit to conduct activities that may result in the discharge to waters of the U.S. (including wetlands or vernal pools) must also obtain a Section 401 water quality certification to ensure that any such discharge will comply with the applicable provisions of the CWA.

State Laws, Regulations, and Policies

California Fish and Game Code

The California Fish and Game Code includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977 (NPPA) and the California Endangered Species Act (CESA). The NPPA (California Fish and Game Code Section 1900-1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized in limited circumstances.

CESA (California Fish and Game Code Section 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of the California Fish and Game Code prohibits the take of any species that is state listed as endangered or

threatened, or designated as a candidate for such listing. California Department of Fish and Wildlife (CDFW) may issue an incidental take permit authorizing the take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

California Fish and Game Code Section 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, Section 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

Streambed Alteration Agreement

Sections 1601 to 1606 of the California Fish and Game Code require that a Streambed Alteration Application be submitted to CDFW for any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake. As a general rule, this requirement applies to any work undertaken within the 100-year floodplain of a stream or river containing fish or wildlife resources.

California Native Plant Protection Act

The California Native Plant Protection Act (California Fish and Game Code Section 1900–1913) prohibits the taking, possessing, or sale of any plants with a state designation of rare, threatened, or endangered (as defined by CDFW). The California Native Plant Society (CNPS) maintains a list of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (CNPS 2001). Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

Forest Practice Act

Logging on private and corporate land in California is regulated by the Z'Berg-Nejedly Forest Practices Act (FPA), which took effect January 1, 1974. The act established the Forest Practice Rules (FPRs) and a politically-appointed Board of Forestry to oversee their implementation. The California Department of Forestry (CALFIRE) works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs. A Timber Harvest Plan (THP) must be prepared by a Registered Professional Forester (RPF) for timber harvest on virtually all non-federal land. The FPA also established the requirement that all non-federal forests cut in the State be regenerated with at least three hundred stems per acre on high site lands, and one hundred fifty trees per acre on low site lands.

Local Laws, Regulations, and Policies

The County General Plan also include policies that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address potential impacts on special-status plant species or create opportunities for habitat improvement. The El Dorado County General Plan designates the Important Biological Corridor (IBC) (Exhibits 5.12-14, 5.12-5 and 5.12-7, El Dorado County, 2003). Lands located within the overlay district are subject to the following provisions, given that they do not interfere with agricultural practices:

- Increased minimum parcel size;
- Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands;
- Lower thresholds for grading permits;
- Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss;
- Increased riparian corridor and wetland setbacks;
- Greater protection for rare plants (e.g., no disturbance at all or disturbance only as recommended by U.S. Fish and Wildlife Service/California Department of Fish and Wildlife);
- Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities;
- Building permits discretionary or some other type of “site review” to ensure that canopy is retained;
- More stringent standards for lot coverage, floor area ratio (FAR), and building height; and

- No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement).

Discussion:
A substantial adverse effect on Biological Resources would occur if the implementation of the project would:

- Substantially reduce or diminish habitat for native fish, wildlife or plants;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a native plant or animal community;
- Reduce the number or restrict the range of a rare or endangered plant or animal;
- Substantially affect a rare or endangered species of animal or plant or the habitat of the species; or
- Interfere substantially with the movement of any resident or migratory fish or wildlife species.

a-e. Special Status Species, Riparian Habitat or Other Sensitive Natural Communities, Wetlands, Migration Corridors, Local Policies:

Based on the documented special status species, riparian habitat and wetlands, migration corridors, local policies, and adopted plans, it has been determined that the potential impacts on biological resources caused by the proposed project will require a detailed analysis. As such, the lead agency will examine each of the environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact on biological resources. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will provide a summary of local biological resources, including descriptions and mapping of plant communities, the associated plant and wildlife species, and sensitive biological resources known to occur, or with the potential to occur in the project vicinity. The analysis will conclude with a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented in order to reduce impacts on biological resources and to ensure compliance with the federal and state regulations.

f. Habitat Conservation Plan:

The project site is not within the boundaries of an adopted Natural Community Conservation Plan or any other conservation plan. As such, the proposed project would not conflict with an adopted conservation plan. There would be **no impact**.

FINDING: At this point, a definitive impact conclusion for biological resources topics a-e will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR. The project would have **no impact** related to habitat conservation plans.

V. CULTURAL RESOURCES. *Would the project:*				
	Potentially Significant Impact	Less than Significant with Mitigation	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?	**X**			
b. Cause a substantial adverse change in the significance of archaeological resource pursuant to Section 15064.5?	**X**			
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**X**			
d. Disturb any human remains, including those interred outside of formal cemeteries?	**X**			

Regulatory Setting:

Federal Laws, Regulations, and Policies

The National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. The criteria for listing in the NRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of history (events);
B. Are associated with the lives of persons significant in our past (persons);
C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (architecture); or
D. Have yielded or may likely yield information important in prehistory or history (information potential).

State Laws, Regulations, and Policies

California Register of Historical Resources

Public Resources Code Section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

1. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Are associated with the lives of persons important in our past;
3. Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
4. Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

The California Register of Historic Places

The California Register of Historic Places (CRHP) program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under the California Environmental Quality Act. The criteria for listing in the CRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
B. Are associated with the lives of persons important to local, California or national history.
C. Embody the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
D. Have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The State Office of Historic Preservation sponsors the California Historical Resources Information System (CHRIS), a statewide system for managing information on the full range of historical resources identified in California. CHRIS provides an integrated database of site-specific archaeological and historical resources information. The State Office of Historic Preservation also maintains the California Register of Historical Resources (CRHR), which identifies the State's architectural, historical, archeological and cultural resources. The CRHR includes properties listed in or formally determined eligible for the National Register and lists selected California Registered Historical Landmarks.

Public Resources Code (Section 5024.1[B]) states that any agency proposing a project that could potentially impact a resource listed on the CRHR must first notify the State Historic Preservation Officer, and must work with the officer to ensure that the project incorporates "prudent and feasible measures that will eliminate or mitigate the adverse effects."

California Health and Safety Code Section 7050.5 requires that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Section 5097.98 of the California Public Resources Code stipulates that whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The decedents may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the Native American Heritage Commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

CEQA and CEQA Guidelines

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.
- Although not specifically inclusive of paleontological resources, these criteria may also help to define "a unique paleontological resource or site."

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided under CEQA Section 21083.2.

Section 15064.5 of the CEQA Guidelines notes that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are expected to identify potentially feasible measures to mitigate significant adverse changes in the significance of a historic resource before they approve such projects. Historic resources are those that are:

- listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code Section 5024.1[k]);
- included in a local register of historic resources (Public Resources Code Section 5020.1) or identified as significant in an historic resource survey meeting the requirements of Public Resources Code Section 5024.1(g); or
- determined by a lead agency to be historically significant.

CEQA Guidelines Section 15064.5 also prescribes the processes and procedures found under Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

The lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with CEQA and other applicable statutes. Paleontological and historical resource management is also addressed in Public Resources Code Section 5097.5, "Archaeological, Paleontological, and Historical Sites." This statute defines as a misdemeanor any unauthorized disturbance or removal of a fossil site or remains on public land and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources. This statute would apply to any construction or other related project impacts that would occur on state-owned or state-managed lands. The County General Plan contains policies describing specific, enforceable measures to protect cultural resources and the treatment of resources when found.

Discussion:
In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a historical or cultural resource significant or important. A substantial adverse effect on Cultural Resources would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a prehistoric or historic archaeological site or property that is historically or culturally significant to a community or ethnic or social group; or a paleontological site except as a part of a scientific study;
- Affect a landmark of cultural/historical importance;
- Conflict with established recreational, educational, religious or scientific uses of the area; or
- Conflict with adopted environmental plans and goals of the community where it is located.

a-d. Historical Resources, Archaeological Resources, Paleontological Resources, Human Remains:
Based on known historical and archaeological resources in the region, and the potential for undocumented underground cultural resources in the region, it has been determined that the potential impacts on cultural resources caused by the proposed project will require a detailed analysis in the EIR. As such, the lead agency will examine each of the four environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact on cultural resources. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will include an overview of the prehistory and history of the area, the potential for surface and subsurface cultural resources to be found in the area, the types of cultural resources that may be expected to be found, a review of existing regulations and policies that protect cultural resources, an impact analysis, and mitigation that should be implemented in order to reduce potential impacts to cultural resources. In addition, the CEQA process will include a request to the Native American Heritage Commission for a list of local Native American groups that should be contacted relative to this project.

FINDING: At this point, a definitive impact conclusion for each of these cultural resources topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

VI. GEOLOGY AND SOILS. *Would the project:*				
	Potentially Significant Impact	Less than Significant with Mitigation	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:	X			
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	X			
ii) Strong seismic ground shaking?	X			
iii) Seismic-related ground failure, including liquefaction?	X			
iv) Landslides?	X			
b. Result in substantial soil erosion or the loss of topsoil?	X			
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	X			
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?	X			
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	X			

Regulatory Setting:

Federal Laws, Regulations, and Policies

National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake risk-reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP: USGS, National Science Foundation (NSF), Federal Emergency Management Agency (FEMA), and National Institute of Standards and Technology (NIST). Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2009) are to:

1. Develop effective measures to reduce earthquake hazards;
2. Promote the adoption of earthquake hazard reduction activities by federal, state, and local governments; national building standards and model building code organizations; engineers; architects; building owners; and others who play a role in planning and constructing buildings, bridges, structures, and critical infrastructure or “lifelines”;

3. Improve the basic understanding of earthquakes and their effects on people and infrastructure through interdisciplinary research involving engineering; natural sciences; and social, economic, and decision sciences; and
4. Develop and maintain the USGS seismic monitoring system (Advanced National Seismic System); the NSF-funded project aimed at improving materials, designs, and construction techniques (George E. Brown Jr. Network for Earthquake Engineering Simulation); and the global earthquake monitoring network (Global Seismic Network).

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

State Laws, Regulations, and Policies

Alquist–Priolo Earthquake Fault Zoning Act

The Alquist–Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 *et seq*.) was passed to reduce the risk to life and property from surface faulting in California. The Alquist–Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones. Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are "sufficiently active" and "well defined." Before a project can be permitted, cities and counties are required to have a geologic investigation conducted to demonstrate that the proposed buildings would not be constructed across active faults.

Historical seismic activity and fault and seismic hazards mapping in the project vicinity indicate that the area has relatively low potential for seismic activity (El Dorado County 2003). No active faults have been mapped in the project area, and none of the known faults have been designated as an Alquist-Priolo Earthquake Fault Zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 2690–2699.6) establishes statewide minimum public safety standards for mitigation of earthquake hazards. While the Alquist–Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist–Priolo Act. The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other seismic hazards, and cities and counties are required to regulate development within mapped seismic hazard zones. In addition, the act addresses not only seismically induced hazards but also expansive soils, settlement, and slope stability.

Mapping and other information generated pursuant to the SHMA is to be made available to local governments for planning and development purposes. The State requires: (1) local governments to incorporate site-specific geotechnical hazard investigations and associated hazard mitigation, as part of the local construction permit approval process; and (2) the agent for a property seller or the seller if acting without an agent, must disclose to any prospective buyer if the property is located within a Seismic Hazard Zone. Under the Seismic Hazards Mapping Act, cities and counties may withhold the development permits for a site within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

California Building Standards Code

Title 24 CCR, also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building

Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California.

Discussion:
A substantial adverse effect on Geologic Resources would occur if the implementation of the project would:

- Allow substantial development of structures or features in areas susceptible to seismically induced hazards such as groundshaking, liquefaction, seiche, and/or slope failure where the risk to people and property resulting from earthquakes could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards;
- Allow substantial development in areas subject to landslides, slope failure, erosion, subsidence, settlement, and/or expansive soils where the risk to people and property resulting from such geologic hazards could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards; or
- Allow substantial grading and construction activities in areas of known soil instability, steep slopes, or shallow depth to bedrock where such activities could result in accelerated erosion and sedimentation or exposure of people, property, and/or wildlife to hazardous conditions (e.g., blasting) that could not be mitigated through engineering and construction measures in accordance with regulations, codes, and professional standards.

a-e. Earthquake Faults, Ground Shaking, Liquefaction, Landslides, Soil Erosion, Unstable Soils, Expansive Soils, Septic Tanks:

It has been determined that the potential impacts from geology and soils will require a detailed analysis in the EIR. As such, the lead agency will examine each of the environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact from geology and soils. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will include a review of existing geotechnical reports, published documents, aerial photos, geologic maps and other geological and geotechnical literature pertaining to the site and surrounding area to aid in evaluating geologic resources and geologic hazards that may be present. The EIR will include a description of the applicable regulatory setting, a description of the existing geologic and soils conditions on and around the project site, an evaluation of geologic hazards, a description of the nature and general engineering characteristics of the subsurface conditions within the project site, and the provision of findings and potential mitigation strategies to address any geotechnical concerns or potential hazards. This section will provide an analysis including thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts associated with geology and soils.

FINDING: At this point, a definitive impact conclusion for each of these geology and soils topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

VII. GREENHOUSE GAS EMISSIONS. *Would the project:*				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	X			
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	X			

Background/Science

Cumulative greenhouse gases (GHG) emissions are believed to contribute to an increased greenhouse effect and global climate change, which may result in sea level rise, changes in precipitation, habitat, temperature, wildfires, air pollution levels, and changes in the frequency and intensity of weather-related events. While criteria pollutants and toxic air contaminants are pollutants of regional and local concern (see Section III. Air Quality above); GHG are global pollutants. The primary land-use related GHG are carbon dioxide (CO_2), methane (CH_4) and nitrous oxides (N_2O). The individual pollutant's ability to retain infrared radiation represents its "global warming potential" and is expressed in terms of CO_2 equivalents; therefore, CO_2 is the benchmark having a global warming potential of 1. Methane has a global warming potential of 21 and thus has a 21 times greater global warming effect per metric ton of CH_4 than CO_2. Nitrous Oxide has a global warming potential of 310. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., $MTCO_2e/yr$). The three other main GHG are Hydroflourocarbons, Perflourocarbons, and Sulfur Hexaflouride. While these compounds have significantly higher global warming potentials (ranging in the thousands), all three typically are not a concern in land-use development projects and are usually only used in specific industrial processes.

GHG Sources

The primary man-made source of CO_2 is the burning of fossil fuels; the two largest sources being coal burning to produce electricity and petroleum burning in combustion engines. The primary sources of man-made CH_4 are natural gas systems losses (during production, processing, storage, transmission and distribution), enteric fermentation (digestion from livestock) and landfill off-gassing. The primary source of man-made N_2O is agricultural soil management (fertilizers), with fossil fuel combustion a very distant second. In El Dorado County, the primary source of GHG is fossil fuel combustion mainly in the transportation sector (estimated at 70% of countywide GHG emissions). A distant second are residential sources (approximately 20%), and commercial/industrial sources are third (approximately 7%). The remaining sources are waste/landfill (approximately 3%) and agricultural (<1%).

Regulatory Setting:

Federal Laws, Regulations, and Policies

At the federal level, USEPA has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting requirements for large stationary emitters of GHGs. On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012-2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses.

State Laws, Regulations, and Policies

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the *California Climate Solutions Act of 2006* (Stats. 2006, ch. 488) (Health & Safety Code, Section 38500 et seq.). AB 32 requires a statewide GHG emissions reduction to 1990 levels by the year 2020. AB 32 requires the California Air Resources Board (CARB) to implement and enforce the statewide cap. When AB 32 was signed, California's annual GHG emissions were estimated at 600 million metric tons of CO_2 equivalent ($MMTCO_2e$) while 1990 levels were estimated at 427 $MMTCO_2e$. Setting 427 $MMTCO_2e$ as the emissions target for 2020, current (2006) GHG emissions levels must be reduced by 29%. CARB adopted the AB 32 Scoping Plan in December 2008 establishing various actions the state would implement to achieve this reduction (CARB, 2008). The Scoping Plan recommends a community-wide GHG reduction goal for local governments of 15%.

In June 2008, the California Governor's Office of Planning and Research's (OPR) issued a Technical Advisory (OPR, 2008) providing interim guidance regarding a proposed project's GHG emissions and contribution to global climate change. In the absence of adopted local or statewide thresholds, OPR recommends the following approach for analyzing GHG emissions: Identify and quantify the project's GHG emissions, assess the significance of the impact on climate change; and if the impact is found to be significant, identify alternatives and/or Mitigation Measures that would reduce the impact to less than significant levels (CEC, 2006).

Discussion:

a-b. Greenhouse Gas Emissions, Policy Conflicts:

Implementation of the proposed project could generate GHGs from a variety of sources, including but not limited to vehicle trips, vehicle idling, electricity consumption, water use, and solid waste generation. It has been determined that the potential impacts from GHGs by the proposed project will require a detailed analysis in the EIR. As such, the lead agency will examine each of the environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact from GHG emissions. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will include a GHG emissions analysis pursuant to the requirements of Executive Order S-3-05 and The Global Warming Solutions Act of 2006 (AB 32). The analysis will follow the California Air Pollution Control Officers Association (CAPCOA) white paper methodology and recommendations presented in Climate Change & CEQA, which was prepared in coordination with the California Air Resources Board and the Governor's Office of Planning and Research as a common platform for public agencies to ensure that GHG emissions are appropriately considered and addressed under CEQA. This analysis will consider a regional approach toward determining whether GHG emissions are significant, and will present mitigation measures to reduce impacts. The discussion and analysis will include quantification of GHGs generated by the project as well as a qualitative discussion of the project's consistency with any applicable state and local plans to reduce the impacts of climate change.

The EIR will provide an analysis including the methodology, thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts associated with GHG emissions.

FINDING: At this point, a definitive impact conclusion for each of these GHG emissions topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

VIII. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	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?	X			
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	X			
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	X			
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	X			
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	X			
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?	X			
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	X			
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	X			

Regulatory Setting:

Hazardous materials and hazardous wastes are subject to extensive federal, state, and local regulations to protect public health and the environment. These regulations provide definitions of hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, and disposal of hazardous wastes; and require health and safety provisions for workers and the public. The major federal, state, and regional agencies enforcing these regulations are USEPA and the Occupational Safety and Health Administration (OSHA); California Department of Toxic Substances Control (DTSC); California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA); California Governor's Office of Emergency Services (Cal OES); and EDCAPCD.

Federal Laws, Regulations, and Policies

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 *et seq.*) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC Section 6901 *et seq.*), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the "cradle-to-grave" regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in addition to California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Energy Policy Act of 2005

Title XV, Subtitle B of the Energy Policy Act of 2005 (the Underground Storage Tank Compliance Act of 2005) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original legislation that created the Underground Storage Tank (UST) Program. As defined by law, a UST is "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground." In cooperation with USEPA, SWRCB oversees the UST Program. The intent is to protect public health and safety and the environment from releases of petroleum and other hazardous substances from tanks. The four primary program elements include leak prevention (implemented by Certified Unified Program Agencies [CUPAs], described in more detail below), cleanup of leaking tanks, enforcement of UST requirements, and tank integrity testing.

Spill Prevention, Control, and Countermeasure Rule

USEPA's Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 CFR, Part 112) apply to facilities with a single above-ground storage tank (AST) with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

Occupational Safety and Health Administration

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

Federal Communications Commission Requirements

There is no federally mandated radio frequency (RF) exposure standard; however, pursuant to the Telecommunications Act of 1996 (47 USC Section 224), the Federal Communications Commission (FCC) established guidelines for dealing with RF exposure, as presented below. The exposure limits are specified in 47 CFR Section

1.1310 in terms of frequency, field strength, power density, and averaging time. Facilities and transmitters licensed and authorized by FCC must either comply with these limits or an applicant must file an environmental assessment (EA) with FCC to evaluate whether the proposed facilities could result in a significant environmental effect.

FCC has established two sets of RF radiation exposure limits—Occupational/Controlled and General Population/Uncontrolled. The less-restrictive Occupational/Controlled limit applies only when a person (worker) is exposed as a consequence of his or her employment and is "fully aware of the potential exposure and can exercise control over his or her exposure," otherwise the General Population limit applies (47 CFR Section 1.1310).

The FCC exposure limits generally apply to all FCC-licensed facilities (47 CFR Section 1.1307[b][1]). Unless exemptions apply, as a condition of obtaining a license to transmit, applicants must certify that they comply with FCC environmental rules, including those that are designed to prevent exposing persons to radiation above FCC RF limits (47 CFR Section1.1307[b]). Licensees at co-located sites (e.g., towers supporting multiple antennas, including antennas under separate ownerships) must take the necessary actions to bring the accessible areas that exceed the FCC exposure limits into compliance. This is a shared responsibility of all licensees whose transmission power density levels account for 5.0 or more percent of the applicable FCC exposure limits (47CFR 1.1307[b][3]).

Code of Federal Regulations (14 CFR) Part 77

14 CFR Part 77.9 is designed to promote air safety and the efficient use of navigable airspace. Implementation of the code is administered by the Federal Aviation Administration (FAA). If an organization plans to sponsor any construction or alterations that might affect navigable airspace, a Notice of Proposed Construction or Alteration (FAA Form 7460-1) must be filed. The code provides specific guidance regarding FAA notification requirements.

State Laws, Regulations, and Policies

Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the state's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public of exposure to such chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment. In accordance with Proposition 65, the California Governor's Office publishes, at least annually, a list of such chemicals. OEHHA, an agency under the California Environmental Protection Agency (CalEPA), is the lead agency for implementation of the Proposition 65 program. Proposition 65 is enforced through the California Attorney General's Office; however, district and city attorneys and any individual acting in the public interest may also file a lawsuit against a business alleged to be in violation of Proposition 65 regulations.

The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other state agencies set the standards for their programs, while local governments (CUPAs) implement the standards. For each county, the CUPA regulates/oversees the following:

- Hazardous materials business plans;
- California accidental release prevention plans or federal risk management plans;
- The operation of USTs and ASTs;
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;
- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

Hazardous Materials Business Plans

Hazardous materials business plans are required for businesses that handle hazardous materials in quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet (cf) of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A) (Cal OES, 2015). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees (Cal OES, 2015). In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups) (Cal OES, 2015).

California Occupational Safety and Health Administration

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans. Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers must also make material safety data sheets available to employees and document employee information and training programs. In addition, Cal/OSHA has established maximum permissible RF radiation exposure limits for workers (Title 8 CCR Section 5085[b]), and requires warning signs where RF radiation might exceed the specified limits (Title 8 CCR Section 5085 [c]).

California Accidental Release Prevention

The purpose of the California Accidental Release Prevention (CalARP) program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance are required to develop a risk management plan (RMP). This RMP must provide a detailed analysis of potential risk factors and associated mitigation measures that can be implemented to reduce accident potential. CUPAs implement the CalARP program through review of RMPs, facility inspections, and public access to information that is not confidential or a trade secret.

California Department of Forestry and Fire Protection Wildland Fire Management

The Office of the State Fire Marshal and the California Department of Forestry and Fire Protection (CAL FIRE) administer state policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire suppression equipment (Public Resources Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline fueled internal combustion engines must not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Highway Patrol

CHP, along with Caltrans, enforce and monitor hazardous materials and waste transportation laws and regulations in California. These agencies determine container types used and license hazardous waste haulers for hazardous

waste transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP.

Local Laws, Regulations, and Policies

A map of the fuel loading in the County (General Plan Figure HS-1) shows the fire hazard severity classifications of the SRAs in El Dorado County, as established by CDF. The classification system provides three classes of fire hazards: Moderate, High, and Very High. Fire Hazard Ordinance (Chapter 8.08) requires defensible space as described by the State Public Resources Code, including the incorporation and maintenance of a 30-foot fire break or vegetation fuel clearance around structures in fire hazard zones. The County's requirements on emergency access, signing and numbering, and emergency water are more stringent than those required by state law (Patton 2002). The Fire Hazard Ordinance also establishes limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments.

Discussion:

A substantial adverse effect due to Hazards or Hazardous Materials would occur if implementation of the project would:

- Expose people and property to hazards associated with the use, storage, transport, and disposal of hazardous materials where the risk of such exposure could not be reduced through implementation of Federal, State, and local laws and regulations;
- Expose people and property to risks associated with wildland fires where such risks could not be reduced through implementation of proper fuel management techniques, buffers and landscape setbacks, structural design features, and emergency access; or
- Expose people to safety hazards as a result of former on-site mining operations.

a-h. Hazardous Materials, Release of Hazardous Materials, Hazardous Materials Near Schools, Hazardous Materials Sites, Safety Hazards Near Airports, Private Airstrips, Emergency Response Plan, Wildland Fires:

It has been determined that the potential impacts from hazards and/or hazardous materials by the proposed project will require a detailed analysis in the EIR. As such, the lead agency will examine each of the eight environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact from hazards and/or hazardous materials. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will include a review of existing environmental site assessments and any other relevant studies for the project site to obtain a historical record of environmental conditions. The analysis will also include a review of recent records and aerial photographs. A site reconnaissance will be performed to observe the site and potential areas of interest. Property owners/managers will be interviewed to gather information on the current and historical use of the properties, and the potential for project implementation to introduce hazardous materials to and from the area during construction and operation. If environmental conditions are identified, mitigation measures, as applicable, will be identified to address the environmental conditions.

This section will provide an analysis including the methodology, thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts associated with hazards and hazardous materials.

FINDING: At this point, a definitive impact conclusion for each of these hazards and hazardous materials topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

IX. HYDROLOGY AND WATER QUALITY. Would the project:				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	**X**			
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	**X**			
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or -off-site?	**X**			
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?	**X**			
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?	**X**			
f. Otherwise substantially degrade water quality?	**X**			
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			**X**	
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			**X**	
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?			**X**	
j. Inundation by seiche, tsunami, or mudflow?			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

Clean Water Act

The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The key sections pertaining to water quality regulation for the Proposed Project are CWA Section 303 and Section 402.

Section 303(d) — Listing of Impaired Water Bodies
Under CWA Section 303(d), states are required to identify "impaired water bodies" (those not meeting established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for the development of control plans to improve water quality. USEPA then approves the State's recommended list of impaired waters or adds and/or removes waterbodies.

Section 402—NPDES Permits for Stormwater Discharge
CWA Section 402 regulates construction-related stormwater discharges to surface waters through the NPDES, which is officially administered by USEPA. In California, USEPA has delegated its authority to the State Water Resources Control Board (SWRCB), which, in turn, delegates implementation responsibility to the nine RWQCBs, as discussed below in reference to the Porter-Cologne Water Quality Control Act.

The NPDES program provides for both general (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits. General Permit for Construction Activities: Most construction projects that disturb 1.0 or more acre of land are required to obtain coverage under SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The general permit requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). SWPPP must include a site map and a description of the proposed construction activities, demonstrate compliance with relevant local ordinances and regulations, and present a list of Best Management Practices (BMPs) that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor construction activities and report compliance to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

<u>Municipal Stormwater Permitting Program</u>
SWRCB regulates stormwater discharges from municipal separate storm sewer systems (MS4s) through its Municipal Storm Water Permitting Program (SWRCB, 2013). Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are issued for medium (population between 100,000 and 250,000 people) and large (population of 250,000 or more people) municipalities, and are often issued to a group of co-permittees within a metropolitan area. Phase I permits have been issued since 1990. Beginning in 2003, SWRCB began issuing Phase II MS4 permits for smaller municipalities (population less than 100,000).

El Dorado County is covered under two SWRCB Regional Boards. The West Slope Phase II Municipal Separate Storm Sewer Systems (MS4) NPDES Permit is administered by the Central Valley Regional Water Quality Control Board (RWQCB) (Region Five). The Lake Tahoe Phase I MS4 NPDES Permit is administered by the Lahontan RWQCB (Region Six). The current West Slope MS4 NPDES Permit was adopted by the SWRCB on February 5, 2013. The Permit became effective on July 1, 2013 for a term of five years and focuses on the enhancement of surface water quality within high priority urbanized areas. The current Lake Tahoe MS4 NPDES Permit was adopted and took effect on December 6, 2011 for a term of five years. The Permit incorporated the Lake Tahoe Total Maximum Daily Load (TMDL) and the Lake Clarity Crediting Program (LCCP) to account for the reduction of fine sediment particles and nutrients discharged to Lake Tahoe. The proposed project qualifies as a "Regulated/Hydromodification Project" as defined in the current Small MS4 Permit for the West Slope and therefore will be required to comply with the standards provided in the Order and in the County's West Slope Development and Redevelopment Standards and Post Construction Storm Water Plan Requirements.

On May 19, 2015, the El Dorado County Board of Supervisors formally adopted revisions to the Storm Water Quality Ordinance (Ordinance 4992). Previously applicable only to the Lake Tahoe Basin, the ordinance establishes legal authority for the entire unincorporated portion of the County. The purpose of the ordinance is to 1) protect health, safety, and general welfare, 2) enhance and protect the quality of Waters of the State by reducing pollutants in storm water discharges to the maximum extent practicable and controlling non-storm water

discharges to the storm drain system, and 3) cause the use of Best Management Practices to reduce the adverse effects of polluted runoff discharges on Waters of the State.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities complying with FEMA regulations that limit development in floodplains. The NFIP regulations permit development within special flood hazard zones provided that residential structures are raised above the base flood elevation of a 100-year flood event. Non-residential structures are required either to provide flood proofing construction techniques for that portion of structures below the 100-year flood elevation or to elevate above the 100-year flood elevation. The regulations also apply to substantial improvements of existing structures.

State Laws, Regulations, and Policies

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (known as the Porter–Cologne Act), passed in 1969, dovetails with the CWA (see discussion of the CWA above). It established the SWRCB and divided the state into nine regions, each overseen by an RWQCB. SWRCB is the primary State agency responsible for protecting the quality of the state's surface water and groundwater supplies; however, much of the SWRCB's daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 401, 402, and 303[d]. In general, SWRCB manages water rights and regulates statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter–Cologne Act requires RWQCBs to develop water quality control plans (also known as basin plans) that designate beneficial uses of California's major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met. Under the Porter–Cologne Act, basin plans must be updated every 3 years.

Discussion:

A substantial adverse effect on Hydrology and Water Quality would occur if the implementation of the project would:

- Expose residents to flood hazards by being located within the 100-year floodplain as defined by the Federal Emergency Management Agency;
- Cause substantial change in the rate and amount of surface runoff leaving the project site ultimately causing a substantial change in the amount of water in a stream, river or other waterway;
- Substantially interfere with groundwater recharge;
- Cause degradation of water quality (temperature, dissolved oxygen, turbidity and/or other typical stormwater pollutants) in the project area; or
- Cause degradation of groundwater quality in the vicinity of the project site.

a-f. Water Quality Standards Groundwater Supplies, Drainage Patterns:

It has been determined that the potential impacts on hydrology and water quality caused by the proposed project will require a detailed analysis in the EIR. As such, the lead agency will examine each of the six potentially significant environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact on hydrology and water quality. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather, topics a-f are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will summarize onsite hydrology and hydraulic calculations under existing and proposed conditions. The EIR will evaluate the potential construction and operational impacts of the proposed project on water quality. This section will describe the surface drainage patterns of the project site and adjoining areas, and identify surface water quality in the project site based on existing and available data. This section will provide an analysis including the methodology, thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts associated with hydrology and water quality.

g-j. Flood Hazard Areas, Dam Inundation, Seiche, Tsunami, or Mudflow:

The project site is located in FEMA Flood Zone X (unshaded) (FIRMs 06017C0704E and 06017C0725E). Areas in Zone X (unshaded) are outside of the 100-year and 500-year floodplain. Zone X (unshaded) indicates areas of minimal flood hazard. No dams which would result in potential hazards related to dam failures are located in the project area. The risk of exposure to seiche, tsunami, or mudflows would be remote. Therefore, impacts related to flooding would be **less than significant**.

FINDING: At this point, a definitive impact conclusion for hydrology and water quality topics a-f will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR. Flood hazard impacts are considered **less than significant**.

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

Regulatory Setting:

California State law requires that each City and County adopt a general plan "for the physical development of the City and any land outside its boundaries which bears relation to its planning." Typically, a general plan is designed to address the issues facing the City or County for the next 15-20 years. The general plan expresses the community's development goals and incorporates public policies relative to the distribution of future public and private land uses. The El Dorado County General Plan was adopted in 2004. The 2013-2021 Housing Element was adopted in 2013.

Discussion:

A substantial adverse effect on Land Use would occur if the implementation of the project would:

- Result in the conversion of Prime Farmland as defined by the State Department of Conservation;
- Result in conversion of land that either contains choice soils or which the County Agricultural Commission has identified as suitable for sustained grazing, provided that such lands were not assigned urban or other nonagricultural use in the Land Use Map;
- Result in conversion of undeveloped open space to more intensive land uses;
- Result in a use substantially incompatible with the existing surrounding land uses; or
- Conflict with adopted environmental plans, policies, and goals of the community.

a. Established Community:

The project site is not located within an existing Community Region area of the county, but rather is located in an area with rural residential and open space uses as previously described. The project site is mostly undeveloped, with six existing structures are located in the southern portion of the project site near Malcolm Dixon Road. The surrounding land uses include oak woodlands and rural residential uses to the north, Malcolm Dixon Road, low density residential uses, and Green Valley Road to the south, Arroyo Vista Way, oak woodlands, and rural residential uses to the east, and oak woodlands, Salmon Falls Road, and rural residential uses to the west. Implementation of the proposed project would not result in the division of an established community. As such, the proposed project would not divide an established community or conflict with any land use plans, policies, or regulations. There would be a **less than significant** impact.

b. Land Use Consistency:

The proposed project is consistent with adopted planning documents and land use regulations adopted to address potential environmental effects. The General Plan designates the site LDR and the site is zoned RE-5.

The LDR designation establishes areas for single-family residential development in a rural setting, as described under General Plan Policy 2.2.1.2. In Rural Regions, this designation shall provide a transition from Community Regions and Rural Centers into the agricultural, timber, and more rural areas of the County and shall be applied to those areas where infrastructure such as arterial roadways, public water, and public sewer are generally not available. The maximum allowed density in the LDR designation is one unit per five acres. The RE-5 zone is intended to preserve the rural character of an area by providing for and regulating the development of low density and rural residential development at one dwelling unit per five acres. The proposed low density development would include open space areas throughout the site. The proposed project may include small-scale vineyard that will be planted within the open space lots. As such, the project has been designed to preserve the rural character of the area.

General Plan Policy 2.2.4.1 allows residential Planned Developments which provide a minimum of 30% commonly owned publicly dedicated open space to receive a density bonus of one and half dwelling units, in addition to the number of base units allowed, for each unit of developable land set aside as open space. Section 130.28.060 of the County Code has similar provisions, providing for density bonuses where a new minimum of 30 percent of the land area within a residential development project is set aside for commonly owned or publicly dedicated open space, as defined in Article 8 of the Code. The proposed project includes 65.58 acres of open space uses, 65.1 acres of which would count towards the minimum open space requirement. These open space areas would make up 57.1 percent of the project site.

The base units allowed and density bonus units are calculated as follows:

1. 65.1 acres (65.58 acres commonly held open space minus 0.5 acre body of water) x 2.5 units per five acres (one unit per five acres base density allowed plus 1.5 units per five acres density bonus) = 32.55 units
2. Remaining 48.45 acres of developable land x one unit per five acres = 9.69 units

Total Units Allowed with Density Bonus = 42.24 units

The project proposes development of 42 new homes, which is consistent with both the General Plan and the County's Zoning Code density bonus provisions.

General Plan Policy 2.2.5.21 addresses compatibility with surrounding uses. The proposed site design allows for the open space around the perimeter of the project site, preserving a natural buffer between existing residential areas. Development density would be visually and physically compatible with the overall densities of existing and approved development in the vicinity of the project site.

As such, the proposed project would not conflict with any land use plans, policies, or regulations. There would be a **less than significant** impact.

It is noted that compliance with General Plan, zoning, and other applicable adopted planning requirements related to aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, public services, traffic/circulation, and utilities will be addressed in the Draft EIR, as identified throughout this Initial Study.

c. Habitat Conservation Plan:

The project site is not within the boundaries of an adopted Natural Community Conservation Plan or any other conservation plan. As such, the proposed project would not conflict with an adopted conservation plan. There would be **no impact**.

FINDING: The proposed project would not divide an established community or conflict with any land use policies or jurisdictions. There would be a **less than significant** impact. The project would also have **no impact** related to habitat conservation plans.

XI. **MINERAL RESOURCES.** *Would the project:*				
	Potentially Significant Impact	Less than Significant with Mitigation	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?				**X**
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to mineral resources and the proposed project.

State Laws, Regulations, and Policies

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board identify, map, and classify aggregate resources throughout California that contain regionally significant mineral resources. Designations of land areas are assigned by CDC and California Geological Survey following analysis of geologic reports and maps, field investigations, and using information about the locations of active sand and gravel mining operations. Local jurisdictions are required to enact planning procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans.

The California Mineral Land Classification System represents the relationship between knowledge of mineral deposits and their economic characteristics (grade and size). The nomenclature used with the California Mineral Land Classification System is important in communicating mineral potential information in activities such as mineral land classification, and usage of these terms are incorporated into the criteria developed for assigning mineral resource zones. Lands classified MRZ-2 are areas that contain identified mineral resources. Areas classified as MRZ-2a or MRZ-2b (referred to hereafter as MRZ-2) are considered important mineral resource areas.

Local Laws, Regulations, and Policies

El Dorado County in general is considered a mining region capable of producing a wide variety of mineral resources. Metallic mineral deposits, including gold, are considered the most significant extractive mineral resources. Exhibit 5.9-6 shows the MRZ-2 areas within the county based on designated Mineral Resource (-MR) overlay areas. The -MR overlay areas are based on mineral resource mapping published in the mineral land classification reports referenced above. The majority of the county's important mineral resource deposits are concentrated in the western third of the county.

According to General Plan Policy 2.2.2.7, before authorizing any land uses within the -MR overlay zone that will threaten the potential to extract minerals in the affected area, the County shall prepare a statement specifying its reasons for considering approval of the proposed land use and shall provide for public and agency notice of such a statement consistent with the requirements of Public Resources Code section 2762. Furthermore, before finally approving any such proposed land use, the County shall balance the mineral values of the threatened mineral resource area against the economic, social, or other values associated with the proposed alternative land uses.

Where the affected minerals are of regional significance, the County shall consider the importance of these minerals to their market region as a whole and not just their importance to the County.

Where the affected minerals are of Statewide significance, the County shall consider the importance of these minerals to the State and Nation as a whole. The County may approve the alternative land use if it determines that the benefits of such uses outweigh the potential or certain loss of the affected mineral resources in the affected regional, Statewide, or national market.

Discussion:
A substantial adverse effect on Mineral Resources would occur if the implementation of the project would:

- Result in obstruction of access to, and extraction of mineral resources classified MRZ-2x, or result in land use compatibility conflicts with mineral extraction operations.

a-b. Mineral Resources:
The project site is not located in an area identified as having known important mineral resources. Figure CO-1, Important Mineral Resource Areas, of the El Dorado County General Plan shows areas in El Dorado County that are considered MRZ-2a and -2b (CA Department of Conservation 2003). The project site does not fall within any of these areas and, thus, is not in a location identified as having important mineral resources. The project would have **no impact** to mineral resources.

FINDING: The proposed project would not result in the loss of availability of a known mineral resource in the area, nor would the project result in the loss of a locally-important mineral resource recovery site. There would be **no impact** to mineral resources from this development.

XII. NOISE. *Would the project result in:*	Potentially Significant Impact	Less than Significant with Mitigation	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?	**X**			
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	**X**			
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	**X**			
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	**X**			
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise level?			**X**	
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?			**X**	

Regulatory Setting:

No federal or state laws, regulations, or policies for construction-related noise and vibration that apply to the Proposed Project. However, the Federal Transit Administration (FTA) Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA Leq and 100 dBA Leq should be used for residential and commercial/industrial areas, respectively (FTA 2006).

For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.12 inches per second (in/sec) PPV for buildings susceptible to vibration damage (FTA 2006).

Discussion:

A substantial adverse effect due to Noise would occur if the implementation of the project would:

- Result in short-term construction noise that creates noise exposures to surrounding noise sensitive land uses in excess of 60dBA CNEL;
- Result in long-term operational noise that creates noise exposures in excess of 60 dBA CNEL at the adjoining property line of a noise sensitive land use and the background noise level is increased by 3dBA, or more;
- Results in noise levels inconsistent with the performance standards contained in Table 6-1 and Table 6-2 in the El Dorado County General Plan; or
- Results in noise levels inconsistent with the noise level standards for noise-sensitive land uses affected by transportation noise sources contained in Section 130.37.060 of the El Dorado County Municipal Code.

TABLE 6-2
NOISE LEVEL PERFORMANCE PROTECTION STANDARDS
FOR NOISE SENSITIVE LAND USES
AFFECTED BY NON-TRANSPORTATION* SOURCES

Noise Level Descriptor	Daytime 7 a.m. - 7 p.m.		Evening 7 p.m. - 10 p.m.		Night 10 p.m. - 7 a.m.	
	Community	Rural	Community	Rural	Community	Rural
Hourly L_{eq}, dB	55	50	50	45	45	40
Maximum level, dB	70	60	60	55	55	**50**

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 noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.

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 standard shall be applied at a point 100' away from the residence. The above standards shall be measured only on property containing a noise sensitive land use as defined in Objective 6.5.1. This measurement standard may be amended to provide for measurement at the boundary of a recorded noise easement between all effected property owners and approved by the County.

*Note: For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Control of noise from facilities of regulated public facilities is preempted by California Public Utilities Commission (CPUC) regulations. All other noise sources are subject to local regulations. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, schools, hospitals, commercial land uses, other outdoor land use, etc.

TABLE 130.37.060.2
NOISE LEVEL STANDARDS FOR NOISE-SENSITIVE LAND USES AFFECTED BY TRANSPORTATION NOISE SOURCES

Sensitive Receptor	Outdoor Activity Areas	Interior Spaces	
	L_{dn}/CNEL, dB	L_{dn}/CNEL, dB	L_{eq}, dB[1]
Residential	60	45	--
Transient Lodging	60	45	--
Hospitals, Nursing Homes	60	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls, Schools	60	--	40
Office Buildings	--	--	45
Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

[1] As determined for a typical worst-case hour during period of use.

a-d. Noise Exposure, Groundborne Vibration, Permanent Noise Increases, Temporary or Periodic Noise Increases:

Based on existing and projected noise levels along roadways, and the potential for noise generated during project construction and operational activities, it has been determined that the potential impacts from noise caused by the proposed project will require analysis in the EIR. As such, the lead agency will examine each of the six potentially significant environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact from noise. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The noise analysis will provide an estimate of existing traffic noise levels adjacent to the project-area roadways through application of accepted traffic noise prediction methodologies. Any significant noise sources other than local traffic within the project site will be identified and quantified through noise level measurements. The noise analysis will identify all significant noise impacts due to and upon development of the proposed project. An assessment of construction noise impacts and potential mitigation measures will also be provided. The analysis will present appropriate and practical recommendations for noise control aimed at reducing any noise impacts. The EIR will include thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts associated with noise.

e-f. Aircraft Noise:

The project site is located more than two miles from the closest airport, the Cameron Airpark Airport, and there are no private airstrips within the vicinity of the project. The project is located outside of the airport noise zones for Cameron Park Airport. Noise exposure associated with airports and airstrips would be **less than significant**.

FINDING: At this point, a definitive impact conclusion for each of noise topics a through d will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR. The proposed project would not result in any significant impacts associated airport noise; this is a **less than significant** impact.

XIII. POPULATION AND HOUSING. *Would the project:*				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (i.e., by proposing new homes and businesses) or indirectly (i.e., through extension of roads or other infrastructure)?			**X**	
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			**X**	
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			**X**	

Regulatory Setting:
No federal or state laws, regulations, or policies apply to population and housing and the proposed project.

Discussion:
A substantial adverse effect on Population and Housing would occur if the implementation of the project would:

- Create substantial growth or concentration in population;
- Create a more substantial imbalance in the County's current jobs to housing ratio; or
- Conflict with adopted goals and policies set forth in applicable planning documents.

a. Population Growth:
Section 15126.2(d) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

> *The way in which a proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth…It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.*

Based on the CEQA Guidelines, growth inducement is any growth that exceeds planned growth of an area and results in new development that would not have taken place without implementation of the project. A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand (*Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342). Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. A project providing an increased water supply or wastewater treatment/collection in an area where this service historically limited growth could be considered growth-inducing. The State CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in

significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

Components of Growth:
The timing, magnitude, and location of land development and population growth in a region are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Since the general plan of a community defines the location, type, and intensity of growth, it is the primary means of regulating development and growth in California.

Direct Population Growth:
The proposed project includes development of housing that would result in direct population growth. The proposed project includes the addition of 42 residential units. Using the most recent U.S. Census (2011-2015) and Department of Finance (2016) estimates for the average number of persons residing in a dwelling unit in El Dorado Hills of 3.03, the addition of 42 housing units would increase the population in the area by an estimated 127 persons.

The proposed project would result in an increase in units from what was analyzed for the project site in the County's General Plan EIR. According to the County General Plan Land Use Element, the LDR land use designation allows for a maximum of one dwelling unit per five acres. Applying this maximum density of one unit per five acres to the 114.03-acre project site, the site could support up to 22.8 units under the current land use designation. The proposed project would introduce 42 residential units, which is an approximately 20 unit increase from what is currently allowed under the LDR designation.

It is noted that the County General Plan provides for a density bonus for projects that meet certain criteria. According to Section 130.28.060 of the County Code, density bonuses may be earned where a new minimum of 30 percent of the land area within a residential development project is set aside for commonly owned or publicly dedicated open space, as defined in Article 8 of the Code. The proposed project includes 65.58 acres of open space uses, 65.1 acres of which would count towards the minimum open space requirement. These open space areas would make up 57.1 percent of the project site. As such, with the proposed density bonus, the population growth for the site is consistent with the level of development allowed by the General Plan.

According to the California Department of Finance, El Dorado County's population is anticipated to increase by over 20,000 between the years 2010 and 2020, and by over 67,000 between 2010 and 2035 (California Department of Finance 2013a; El Dorado County 2013). The addition of 127 residents would not constitute substantial population growth. Additionally, development of the project site with up to 42 housing units could meet up to 1.06% of the county's regional housing need allocation (3,948 units).

Indirect Population Growth:
Projects that include residential uses have the potential to result in indirect population growth through the extension of infrastructure into areas that were not previously served. Implementation of the proposed project would provide residential growth in the area. Construction of proposed infrastructure would not have the potential to induce growth beyond what is proposed because the infrastructure is not oversized to accommodate

additional projects or growth. Additionally, extension of infrastructure to the project site and surrounding areas was assumed in the County General Plan and General Plan EIR.

Conclusion:
The proposed project would not result in direct or indirect population growth beyond the County's planned capacity. Therefore, the proposed project is not anticipated to exceed the planned growth (directly or indirectly) in the area beyond what is anticipated in the El Dorado County General Plan. While the proposed project will result in growth, it is not anticipated to significantly induce growth. The increase in population and housing was addressed in the County General Plan EIR. Impacts would be **less than significant**.

b. Housing Displacement:

Six existing structures are located in the southern portion of the project site near Malcolm Dixon Road. These structures include a schoolhouse, barn, pumphouse, and associated outbuildings located in the southwest area of the site, and a residence and outbuildings in the southeast area of the site. The one existing habitable residential structure located in the southeast area of the site would remain as part of the project. The schoolhouse building would be preserved within one of the proposed open space lots. The project may include restoration of existing structures. Development of the project would add 42 residential units to the project site. Therefore, the project would not displace substantial numbers of housing. The project will have a **less than significant** impact related to this topic.

c. Replacement Housing:

There are no people currently living on the project site. Development of this project would not displace any existing people, and would instead add 42 single family residences to the site. Therefore, the project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. The project will have a **less than significant** impact related to this topic

FINDING: For this Population and Housing category, the thresholds of significance have not been exceeded and **less than significant** impacts would be anticipated to result from the project.

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	Less Than Significant Impact	No Impact
a. Fire protection?	**X**			
b. Police protection?	**X**			
c. Schools?	**X**			
d. Parks?			**X**	
e. Other government services?	**X**			

Regulatory Setting:

Federal Laws, Regulations, and Policies

California Fire Code

The California Fire Code (Title 24 CCR, Part 9) establishes minimum requirements to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33 of CCR contains requirements for fire safety during construction and demolition.

Discussion:

A substantial adverse effect on Public Services would occur if the implementation of the project would:

- Substantially increase or expand the demand for fire protection and emergency medical services without increasing staffing and equipment to meet the Department's/District's goal of 1.5 firefighters per 1,000 residents and 2 firefighters per 1,000 residents, respectively;
- Substantially increase or expand the demand for public law enforcement protection without increasing staffing and equipment to maintain the Sheriff's Department goal of one sworn officer per 1,000 residents;
- Substantially increase the public school student population exceeding current school capacity without also including provisions to adequately accommodate the increased demand in services;
- Place a demand for library services in excess of available resources;
- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Be inconsistent with County adopted goals, objectives or policies.

a-c, e. Fire Protection, Police Protection, Schools, Other Government Services:

Implementation of the proposed project would result in increased demand for police, fire protection, schools, and other public facilities in the area. It has been determined that the potential impacts from increased demands on public services caused by the proposed project will require a detailed analysis in the EIR. As such, the lead agency will examine each of these four environmental issues listed in the checklist above in the EIR and will determine

whether the proposed project has the potential to have a significant impact on public services. At this point a definitive impact conclusion for each of these four environmental topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

During the preparation of the EIR, the public service providers will be consulted in order to determine existing service levels in the project areas. This would include documentation regarding existing staff levels, equipment and facilities, current service capacity, existing service boundaries, and planned service expansions. Master plans from such public service providers and County policies, programs, and standards associated with the provision of public services will be presented in the EIR. The project site is not yet within the EDH Fire service area; LAFCO conditionally approved the annexation, but the final LAFCO conditions have not yet been satisfied. In the event that all conditions are not completed by the August 27, 2018 deadline, the project may be required to reapply to LAFCO for annexation into EDH Fire.

The EIR will provide an analysis including the thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented reduce impacts associated with public services.

d. Parks:

Development of the project site would increase demand for park facilities. The project would include approximately 65.58 acres of open space area. Two existing parks are located in close proximity to the project site. Murray Homestead Park is located approximately 0.5 miles south of the project site, and Overlook Park is located approximately 0.6 miles west of the project site; both of these parks are El Dorado Hills Community Services District (CSD) facilities. While the project site is not within the El Dorado Hills CSD service area and would not result in a direct increase in the revenue of the CSD apart from rental or other applicable fees, project residents may use El Dorado Hills CSD and other regional parks and recreation facilities. The project will provide an on-site trail and on-site open space as previously described.

The County's General Plan identifies a park standard based on a goal of five acres of developed parkland per 1,000 residents within the county limits. The proposed project includes development of 42 residential units. Using the most recent U.S. Census (2011-2015) and Department of Finance (2016) estimates for the average number of persons residing in a dwelling unit in El Dorado Hills of 3.03, the addition of 42 housing units would increase the population in the area by an estimated 127 persons. Therefore, the proposed project would be required to provide approximately 0.635 acres in order to meet the County's park standard.

The proposed project would dedicate 65.85 acres for open space uses. The dedication of land, the payment of fees in lieu thereof, or a combination of both for park and recreational purposes is required by the Chapter Sec. 120.12.090 of the El Dorado County Subdivision Ordinance as a condition of approval of the final subdivision map when the condition has been imposed on the tentative map of the subdivision. The proposed project would be required to either meet or exceed the required parkland dedication, pay the in-lieu fee, or provide a combination of both. Additionally, due to the amount of onsite recreational amenities, and the number of persons generated by the project, the proposed project would not require new or expanded park facilities, development of parks and recreation facilities, or the rehabilitation of parks and recreation facilities that would result in a significant impact on the environment. As such, with the addition of the proposed trails and open space and payment of applicable County fees, the proposed project will result in a **less than significant** impact.

FINDING: At this point, a definitive impact conclusion for public services topics a-c and e will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR. The project would have a **less than significant** impact related to parks.

XV. RECREATION.				
	Potentially Significant Impact	Less than Significant with Mitigation	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?			X	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Regulatory Setting:

Federal Laws, Regulations, and Policies

There are no applicable federal laws, regulations, or policies.

State Laws, Regulations, and Policies

The Quimby Act

The 1975 Quimby Act (California Government Code Section 66477) requires residential subdivision developers to help mitigate the impacts of property improvements by requiring them to set aside land, donate conservation easements, or pay fees for park improvements. The Quimby Act gave authority for passage of land dedication ordinances to cities and counties for parkland dedication or in-lieu fees paid to the local jurisdiction. Quimby exactions must be roughly proportional and closely tied (nexus) to a project's impacts as identified through traffic studies required by CEQA. The exactions only apply to the acquisition of new parkland; they do not apply to the physical development of new park facilities or associated operations and maintenance costs.

The County implements the Quimby Act through §16.12.090 of the County Code. The County Code sets standards for the acquisition of land for parks and recreational purposes, or payments of fees in lieu thereof, on any land subdivision. Other projects, such as ministerial residential or commercial development, could contribute to the demand for park and recreation facilities without providing land or funding for such facilities.

Local Laws, Regulations, and Policies

The 2004 El Dorado County General Plan Parks and Recreation Element establishes goals and policies that address needs for the provision and maintenance of parks and recreation facilities in the county, with a focus on providing recreational opportunities and facilities on a regional scale, securing adequate funding sources, and increasing tourism and recreation-based businesses. The Recreation Element describes the need for 1.5 acres of regional parkland, 1.5 acres of community parkland, and 2 acres of neighborhood parkland per 1,000 residents. Another 95 acres of park land are needed to meet the General Plan guidelines.

Discussion:

A substantial adverse effect on Recreational Resources would occur if the implementation of the project would:

- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Substantially increase the use of neighborhood or regional parks in the area such that substantial physical deterioration of the facility would occur.

a, b. Parks and Recreational Facilities:

The proposed project will directly increase the number of persons in the area as a result of increased residential uses. There are no existing parks or recreational facilities on the project site. The proposed project does, however, include dedication of open space within the project site, which more than offset any new demand for parks or recreational facilities that could result from the residential uses. The project would include approximately 65.58 acres of open space, which may include park areas, trails, and vineyards.

Two existing parks are located in close proximity to the project site. Murray Homestead Park is located approximately 0.5 miles south of the project site, and Overlook Park is located approximately 0.6 miles west of the project site; both of these parks are El Dorado Hills Community Services District (CSD) facilities. While the project site is not within the El Dorado Hills CSD service area and would not result in a direct increase in the revenue of the CSD apart from rental or other applicable fees, project residents may use El Dorado Hills CSD and other regional parks and recreation facilities. The project will include on-site open space amenities and the project will have one-acre minimum lot sizes that will allow for recreation opportunities associated with the individual lots and residences. It is not anticipated that the project would result in a significant increase in the use of El Dorado Hills CSD facilities that would result in substantial physical deterioration or considerably contribute to substantial physical deterioration of El Dorado Hills CSD facilities.

The proposed project would directly increase the number of persons in the area. According the most recent U.S. Census and Department of Finance estimates, the average number of persons residing in a dwelling unit in El Dorado Hills is 3.03. For the purposes of extractive and collecting fees to mitigate for increase park demands (Quimby Act), the California Government Code Section 66477 states: *The amount of land dedicated or fees paid shall be based upon the residential density, which shall be determined on the basis of the approved or conditionally approved tentative map or parcel map and the average number of persons per household. There shall be a rebuttable presumption that the average number of persons per household by units in a structure is the same as that disclosed by the most recent available federal census or a census taken pursuant to Chapter 17 (commencing with Section 40200) of Part 2 of Division 3 of Title 4.*

The County's General Plan identifies a park standard based on a goal of five acres of developed parkland per 1,000 residents within the county limits. The proposed project includes development of 42 residential units. Using the most recent U.S. Census (2011-2015) and Department of Finance (2016) estimates for the average number of persons residing in a dwelling unit in El Dorado Hills of 3.03, the addition of 42 housing units would increase the population in the area by an estimated 127 persons. Therefore, proposed project would be required to provide 0.635 acres in order to meet the County's park standard.

The proposed project would dedicate 65.85 acres for open space uses. The dedication of land, the payment of fees in lieu thereof, or a combination of both for park and recreational purposes is required by the Chapter 120.12 of the County Municipal Code as a condition of approval for any parcel map which creates parcels less than 20 acres in size. The proposed project would be required to either meet or exceed the required parkland dedication, pay the in-lieu fee, or provide a combination of both. Additionally, due to the amount of onsite recreational amenities, and the number of persons generated by the project, the proposed project would not require new or expanded park or recreation facilities, development of parks and recreation facilities, or the rehabilitation of parks and recreation facilities that would result in a significant impact on the environment. As such, the proposed project will result in a **less than significant** impact.

FINDING: No significant impacts to open space or park facilities would result as part of the project. For this Recreation category, impacts would be **less than significant**.

XVI. TRANSPORTATION/TRAFFIC. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	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?	X			
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?	X			
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?				X
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e. Result in inadequate emergency access?	X			
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?	X			

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to transportation/traffic and the Proposed Project.

State Laws, Regulations, and Policies

Caltrans manages the state highway system and ramp interchange intersections. This state agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance.

Local Laws, Regulations, and Policies

According to the transportation element of the County General Plan, Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions. Level of Service is defined in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council). There are some roadway segments that are excepted from these standards and are allowed to operate at LOS F. Policy TC-Xa of the El Dorado County General Plan Transportation and Circulation Element mentions ways to coordinate planning and implementation of roadway improvements with new development to maintain adequate levels of service on County roads. According to Policy TC-Xe, "worsen" is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

A. A two percent increase in traffic during a.m., p.m. peak hour, or daily

B. The addition of 100 or more daily trips, or
C. The addition of 10 or more trips during the a.m. or p.m. peak hour.

Discussion:
The Transportation and Circulation Policies contained in the County General Plan establish a framework for review of thresholds of significance and identification of potential impacts of new development on the County's road system. These policies are enforced by the application of the Transportation Impact Study (TIS) Guidelines, the County Design and Improvements Standards Manual, and the County Encroachment Ordinance, with review of individual development projects by the Transportation and Long Range Planning Divisions of the Community Development Agency. A substantial adverse effect to traffic would occur if the implementation of the project would:

- Result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system;
- Generate traffic volumes which cause violations of adopted level of service standards (project and cumulative); or
- Result in or worsen Level of Service (LOS) F traffic congestion during weekday, peak-hour periods on any highway, road, interchange or intersection in the unincorporated areas of the county as a result of a residential development project of 5 or more units.

a, b, e, f.Traffic Increases, Levels of Service Standards, Emergency Access, Alternative Transportation:
The proposed project includes the development of uses that will increase traffic on existing and planned roadways. The circulation design includes roadway improvements intended to accommodate traffic patterns in the area. Based on existing and projected traffic volume levels along roadways, it has been determined that the potential traffic impacts caused by the proposed project will require a detailed analysis in the EIR. As such, the EIR will examine each of the six environmental issues listed in the checklist above in the EIR and will determine whether the proposed project has the potential to have a significant impact from traffic. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is conducted in the EIR.

The EIR will describe existing and future traffic conditions and will identify the trips that will be generated by the project and the projected distribution of those trips on the roadway system. The EIR will analyze traffic impacts associated with the project under existing and cumulative conditions. Potential impacts associated with site access and on-site circulation will also be addressed in the EIR.

Impacts to the bicycle, pedestrian, and transit facilities and services will be also evaluated. Significant impacts will be identified in accordance with the established criteria. Mitigation measures will be identified to lessen the significance of impacts where feasible. The EIR will provide an analysis including the thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented reduce impacts associated with transportation/traffic.

c. Air Traffic
The proposed project does not include airport or airstrip facilities and is not located adjacent to an airport or airstrip. The closest airstrip is the John Wayne Airport approximately 18.5 miles northwest of the project site. According to the Orange County ALUC Land Use Plan for John Wayne Airport, the project site is not located within any of the safety zones. The proposed project would not 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. Implementation of proposed project would have **no impact** relative to this topic.

d. Design Hazards

The project site is currently accessed via a private road off of Malcolm Dixon Road. This existing access would be improved as part of the proposed project. A secondary project access would be constructed along Malcolm Dixon Road, west of the existing access. Internal roadways would also be constructed, including local and cul-de-sac streets.

The proposed roadways would be designed by licensed Civil Engineers, and design of the roadways would be guided by the County's Design and Improvement Standards Manual (DISM) and the American Association of State Highway Transportation Officials (AASHTO) "Policy on Geometric Design of Highways and Streets". Compliance with the aforementioned manual and policies are required under law by the County's Ordinance Code and General Plan. By following the County DISM and AASHTO "Policy on Geometric Design of Highways and Streets", and obtaining the County Engineer's approval of the final construction plans, the proposed roadways would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Therefore, this impact would be **less than significant**.

FINDING: At this point, a definitive impact conclusion for transportation/traffic topics a, b, e, and f will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR. The project would have **no impact** related to air traffic and a **less than significant** impact related to design hazards.

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

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to Tribal Cultural Resources (TCRs) and the Proposed Project.

State Laws, Regulations, and Policies

Assembly Bill (AB) 52 – Native Americans: California Environmental Quality Act

AB 52, which became effective on July 1, 2015, requires that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in Public Resources Code section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Section 21074(a) of the Public Resources Code, TCRs are:

1. Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:
    a. Included or determined to be eligible for inclusion in the California Register of Historical Resources; or
    b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074 as follows:

a. A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and
b. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

Discussion:
In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a TCR significant or important. To be considered a TCR, a resource must be either: (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or: (2) a resource that the lead agency chooses, in its discretion, to treat as a TCR and meets the criteria for listing in the state register of historic resources pursuant to the criteria set forth in Public Resources Code Section 5024.1(c). A substantial adverse change to a TCR would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a TCR such that the significance of the resource would be materially impaired

a. Tribal Cultural Resources:
It has been determined that the potential impacts to tribal cultural resources caused by the proposed project will require analysis in the EIR. As such, the lead agency will examine the environmental issues listed in the checklist above in the EIR, and will decide whether the proposed project has the potential to have a significant impact on tribal cultural resources. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

FINDING: At this point, a definitive impact conclusion for each of these tribal cultural resources topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

XVIII. UTILITIES AND SERVICE SYSTEMS. *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	X			
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?	X			
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X			
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	X			
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?				X
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	X			
g. Comply with federal, state, and local statutes and regulations related to solid waste?	X			

Regulatory Setting:

Federal Laws, Regulations, and Policies

Energy Policy Act of 2005

The Energy Policy Act of 2005, intended to reduce reliance on fossil fuels, provides loan guarantees or tax credits for entities that develop or use fuel-efficient and/or energy efficient technologies (USEPA, 2014). The act also increases the amount of biofuel that must be mixed with gasoline sold in the United States (USEPA, 2014).

State Laws, Regulations, and Policies

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code, Division 30) requires all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000 (Public Resources Code Section 41780). The state, acting through the California Integrated Waste Management Board (CIWMB), determines compliance with this mandate. Per-capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Public Resources Code Sections 42900-42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years (CEC 2015a). The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2015a). The 2014 Draft Integrated Energy Policy Report Update includes policy recommendations, such as increasing investments in electric vehicle charging infrastructure at workplaces, multi-unit dwellings, and public sites (CEC 2015b).

Title 24–Building Energy Efficiency Standards

Title 24 Building Energy Efficiency Standards of the California Building Code are intended to ensure that building construction, system design, and installation achieve energy efficiency and preserve outdoor and indoor environmental quality (CEC 2012). The standards are updated on an approximately 3-year cycle. The 2013 standards went into effect on July 1, 2014.

Urban Water Management Planning Act

California Water Code Sections 10610 *et seq.* requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet per year (AFY), prepare an urban water management plan (UWMP).

Other Standards and Guidelines

Leadership in Energy & Environmental Design

Leadership in Energy & Environmental Design (LEED) is a green building certification program, operated by the U.S. Green Building Council (USGBC) that recognizes energy efficient and/or environmentally friendly (green) components of building design (USGBC, 2015). To receive LEED certification, a building project must satisfy prerequisites and earn points related to different aspects of green building and environmental design (USGBC, 2015). The four levels of LEED certification are related to the number of points a project earns: (1) certified (40–49 points), (2) silver (50–59 points), (3) gold (60–79 points), and (4) platinum (80+ points) (USGBC, 2015). Points or credits may be obtained for various criteria, such as indoor and outdoor water use reduction, and construction and demolition (C&D) waste management planning. Indoor water use reduction entails reducing consumption of building fixtures and fittings by at least 20% from the calculated baseline and requires all newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling to be WaterSense labeled (USGBC, 2014). Outdoor water use reduction may be achieved by showing that the landscape does not require a permanent irrigation system beyond a maximum 2.0-year establishment period, or by reducing the project's landscape water requirement by at least 30% from the calculated baseline for the site's peak watering month (USGBC, 2014). C&D waste management points may be obtained by diverting at least 50% of C&D material and three material streams, or generating less than 2.5 pounds of construction waste per square foot of the building's floor area (USGBC, 2014).

Discussion:

A substantial adverse effect on Utilities and Service Systems would occur if the implementation of the project would:

- Breach published national, state, or local standards relating to solid waste or litter control;
- Substantially increase the demand for potable water in excess of available supplies or distribution capacity without also including provisions to adequately accommodate the increased demand, or is unable to provide an adequate on-site water supply, including treatment, storage and distribution;
- Substantially increase the demand for the public collection, treatment, and disposal of wastewater without also including provisions to adequately accommodate the increased demand, or is unable to provide for adequate on-site wastewater system; or
- Result in demand for expansion of power or telecommunications service facilities without also including provisions to adequately accommodate the increased or expanded demand.

a-d, f-g. Wastewater Requirements Construction of New Facilities, New Stormwater Facilities, Sufficient Water Supply, Solid Waste Disposal and Requirements:

Implementation of the proposed project would result in increased demands for utilities to serve the project. As such, the lead agency will examine each of the seven environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact to utilities and service systems. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will analyze water, and storm drainage infrastructure, as well as other utilities (i.e. solid waste, gas, electric, etc.), that are needed to serve the proposed project. The EIR will analyze the impacts associated with required on- or off-site construction of the conveyance system that is part of the proposed project, including temporary impacts associated with the construction phase.

The EIR will analyze the impacts associated with construction of the water system, including temporary impacts associated with the construction phase. The EIR will also identify permit requirements and mitigation needed to minimize and/or avoid impacts, and will present the proposed infrastructure as provided by the project site engineering reports.

The EIR will also address solid waste collection and disposal services for the proposed project. This will include an assessment of the existing capacity and project demands. The assessment will identify whether there is sufficient capacity to meet the project demands.

The EIR will provide thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts associated with utilities and service systems.

e. Adequate Wastewater Capacity

The proposed project would be served by individual septic systems for each residence and would not be served by a wastewater treatment provider. As such, the project would not increase demand on the County wastewater system. Therefore, the proposed project would not **no impact** on the County wastewater capacity.

FINDING: At this point, a definitive impact conclusion for utilities topics a-d and f-g will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR. The project would have **no impact** related to wastewater capacity.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE. *Does the project:*				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. 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?	**X**			
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	**X**			
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	**X**			

Discussion:

It has been determined that the potential for the proposed project 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; eliminate important examples of the major periods of California history or prehistory; create cumulatively considerable impacts; or adversely affect human beings will require more detailed analysis in an EIR. As such, the EIR will examine each of these environmental issues in the EIR and will decide whether the proposed project has the potential to have a significant impact on these environmental issues. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

FINDINGS: At this point, a definitive impact conclusion for each of these mandatory findings of significance topics will not be made; rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

SUPPORTING INFORMATION SOURCE LIST

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COMMUNITY DEVELOPMENT SERVICES
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TO: Interested Parties

FROM: Rommel (Mel) Pabalinas, Senior Planner, County of El Dorado

DATE: October 11, 2017

RE: Notice of Preparation of a Draft Environmental Impact Report and Notice of Public Scoping Meeting for the Vineyards at El Dorado Hills

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The County of El Dorado (County) will be the lead agency under the California Environmental Quality Act (CEQA) for preparation of an Environmental Impact Report (EIR) for the proposed Vineyards at El Dorado Hills (Project) in El Dorado County. This Notice of Preparation (NOP) and notice of public scoping meeting has been issued to solicit comments from responsible and trustee agencies and other interested parties regarding the scope and content of the environmental information and analyses that should be included in the Draft EIR. The location, project description, project entitlement requests, and potential environmental effects of the proposed project are summarized below.

Comments and suggestions are requested during the 30-day public comment period for the NOP regarding the environmental issues that will be analyzed in the EIR. Agencies and interested parties may provide the County with written comments on topics to be addressed in the EIR for the project. Because of time limits mandated by State law, comments should be provided no later than 5:00 PM on November 13, 2017. Keep in mind that there will be another opportunity to submit detailed comments when the Draft EIR is released for public review. Please mail, email, or fax your comments to:

Rommel (Mel) Pabalinas, Senior Planner
El Dorado County Development Services Department, Planning Division
2850 Fair Lane Court, Building C
Placerville, CA 95667
Email: rommel.pabalinas@edcgov.us
Fax: (530) 642-0508

The County will hold a public scoping meeting to provide additional information about the Project and to receive verbal and written comments.

Date: Thursday, October 26, 2017

Time: 6:00 PM to 8:00 PM

Where: El Dorado Hills Fire Department Station No. 85
1050 Wilson Boulevard
El Dorado Hills, CA 95762

The scoping meeting format will be an open house; interested parties may arrive at any time during the 2-hour window to receive information on the Project or provide comments.

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) AND NOTICE OF PUBLIC SCOPING MEETING FOR THE VINEYARDS AT EL DORADO HILLS

Project Information

Location:

The proposed Vineyards at El Dorado Hills (project) is located east of El Dorado Hills, California, an unincorporated area of El Dorado County (County) that is approximately 23 miles east of Sacramento and 20 miles west of Placerville (see Figure 1). The project site is located in a rural area with existing rural and single-family residential uses located in the vicinity. Malcolm Dixon Road is located along the southern project boundary (see Figure 2). The project site is identified by Assessor's Parcel Number (APN) 126-100-24. Most of the site is characterized by gentle to moderate slopes (see Figure 3), with scattered individual oak trees with majority of the oak woodlands concentrated in the northwest corner of the project (see Figure 4). Six existing structures are located in the southern portion of the project site near Malcolm Dixon Road. These structures include a schoolhouse, barn, pumphouse, and associated outbuildings located in the southwest area of the site, and a residence and outbuildings in the southeast area of the site. The surrounding land uses include oak woodlands and rural residential uses to the north, Malcolm Dixon Road, low density residential uses, and Green Valley Road to the south, Arroyo Vista Way, oak woodlands, and rural residential uses to the east, and oak woodlands, Salmon Falls Road, and rural residential uses to the west.

Project Description:

The project site is approximately 114.03 acres (4,967,147 square feet) of largely undeveloped nonnative grassland and oak woodland and ranges in elevation from approximately 687 to 879 feet above sea level sloping gently east to west. The County General Plan designates the project site as Low Density Residential (LDR) (see Figure 5). The County's zoning code designates the project site as Estate Residential – 5-acre (RE-5) (see Figure 5).

Project Characteristics

1. Site Design

The proposed project includes development of 42 single-family residential lots on a total of 42.23 acres (see Figures 6 and 7). The remaining approximately 71.8 acres would include one 6.22-acre roadway lot and five open space lots totaling 65.58 acres.

The 42 residential lots are a minimum of one acre in size, ranging from 43,560 square feet to a 46,562 square feet.

The project is requesting a density bonus, as provided by General Plan Policy 2.2.4.1 and Zoning Ordinance Section 130.28.060. General Plan Policy 2.2.4.1 provides for a density bonus of 1.5 dwelling units, in addition to the number of base units allowed, for each unit of developable land set aside as open space. Section 130.28.060 of the County Code has similar provisions, providing for density bonuses where a new minimum of 30 percent of the land area within a residential development project is set aside for commonly owned or publicly dedicated open space, as defined in Article 8 of the Code. The proposed project includes 65.58 acres of open space uses, 65.1 acres of which would count towards the minimum open space requirement. These open space areas would make up 57.1 percent of the project site. The density bonus calculation for the project is as follows:

Base Units Permitted Under the General Plan

114.03 acres developable land x 0.2 dwelling units per acre (Low Density Residential) = 22.8 base units

Density Bonus Unit

65.1 acres developable open space x 0.2 dwelling units per acre (Low Density Residential) x 1.5 density bonus = 19.53 density bonus units

Total Allowed Units = 42.33 units (22.8 base units + 19.53 density bonus units)

The five open space lots, totaling 65.58 acres, have been designed to include the existing schoolhouse and to preserve portions of oak woodlands and the majority of the identified wetlands and other waters on the project site.

The proposed project may include a small-scale vineyard that will be planted within the open space lots and managed by the Home Owners' Association (HOA) or its designee. No production or distribution facilities are proposed on the project site. The project may include restoration of existing structures, including the schoolhouse, or construction of new structures to facilitate vineyard operations and events.

2. Access, Circulation, and Parking

Malcolm Dixon Road, a two-lane roadway, is located along the southern project boundary. The project site is currently accessed via a private road off of Malcolm Dixon Road. This existing access would be improved as part of the proposed project. A secondary project access would be constructed along Malcolm Dixon Road, west of the existing access. Internal roadways would also be constructed, including local and cul-de-sac streets. The proposed circulation system, including access points, is shown on Figure 6.

A variety of pedestrian circulation amenities would be included in the project, including pedestrian paths along most streets and a series of multi-use trails within the project site. A multi-use trail through the project may connect from Malcolm Dixon Road to the future developments to the north and through the development.

3. Improvements and Infrastructure

Water Service

Water service would be provided by El Dorado Irrigation District (EID). The project site is not within the EID service boundary and will require annexation before service can be obtained. EID has facilities located near the northern project boundary, including an 18-inch water line and the Salmon Falls Tank. An eight-inch water line is located south of the property in Alta Vista Court. Additionally, a 12-inch water line is located in Green Valley Road. The project would provide on-site water infrastructure improvements including a booster station.

Sewer Service

Each of the residential lots would be served by an on-site septic system.

Stormwater Drainage

The project site is located within the New York Creek watershed. Runoff from the southeast corner of the project site flows into the uppermost reaches of Dutch Ravine, which is confluent with New York Creek approximately 0.85 miles to the west. The majority of the site currently drains from east to west into lesser, unnamed tributaries that join the main New York Creek channel less than 0.4 miles west of the site. There are few existing drainage structures affected by site runoff.

Proposed site grading will maintain existing drainage patterns to the maximum extent practicable. The majority of the lots would drain to the rear. The project includes an on-site detention basin located in Lot C, north of Lots 21 and 22 and southwest of Lot 34. The proposed storm drainage system would be designed to ensure that post-construction runoff volumes do not exceed pre-development conditions. In addition to mitigating post-development runoff, the project will be required to capture and treat the 85th percentile 24-hour storm event per current Phase II municipal separate storm sewer systems (MS4) Permit and El Dorado County West Slope Development and Redevelopment Standards and Post Construction Storm Water Plan Requirements.

Other Utilities

Electrical, gas, phone, cable and related internet services would be extended to all portions of the project site from existing facilities located along Malcolm Dixon Road, or other utility systems in the project area.

4. Public Services

Law enforcement services would be provided by the El Dorado County Sheriff's Department. Fire protection and emergency medical services would be provided by the El Dorado Hills Fire Department (EDH Fire). The project site is not within the El Dorado County Water District (EDH Fire) service boundary and will require annexation before structural fire protection and emergency medical services can be obtained. The project site is located within the Rescue Union School District and the El Dorado Union High School District. Solid waste services would be provided by El Dorado Disposal.

5. Phasing

A tentative subdivision map for the project has been submitted as part of the project application. The tentative subdivision map includes a circulation and phasing plan for the project. The project would be developed in four phases. Phase I would include development of lots 9 through 16, and lots 41 and 42; Phase II would include development of lots 1 through 8; Phase III would include development of lots 17 through 27; Phase IV would include development of lots 28 through 40.

Project Background

In October 2009, El Dorado County certified a Mitigated Negative Declaration and approved a Tentative Subdivision Map, known as Diamante Estates, for the project site. The Diamante Estates project included 19 single family lots, ranging in size from 5.0 to 9.9 acres, and one 2.2-acre open space lot. As part of the Diamante Estates approval, the project site was rezoned from Exclusive Agriculture (AE) to Estate Residential 5-acre. The Diamante Estates project included public water service from EID and individual septic systems. The Diamante Estates project required El Dorado County Local Agency Formation Commission (LAFCO) approval of annexation of the project site into both the EID and EDH Fire boundaries.

In August 2014, LAFCO conditionally approved the Diamante Estates Reorganization into the EID and EDH Fire boundaries. Outstanding LAFCO conditions include US Bureau of Reclamation (USBR) authorization for inclusion into EID's service area and payment of State Board of Equalization fees. In January 2016, EID approved the annexation of the project site into its service area and sent the inclusion application to USBR. In 2015, LAFCO approved a one-year extension for the reorganization request and, in June 2016, LAFCO approved a two-year extension for the project site's reorganization into the EID and EDH Fire boundaries which extended the deadline to August 27, 2018. In the event that all LAFCO conditions are not completed by this deadline, the project proponent may be required to reapply to LAFCO for annexation into EID and EDH Fire.

Proposed Entitlement Requests

This NOP and Initial Study evaluate the potential environmental impacts associated with the approval of the Vineyards at El Dorado Hills project. Approvals from the County and other jurisdictional agencies and service providers are necessary.

Actions to be taken by the County in approving the project include, but are not limited to:

- Rezone (Z16-0002) of subject property adding a Planned Development (-PD) overlay zone to the underlying zoning of Estate Residential, 5-acre minimum (RE-5) resulting in a new zoning of Estate Residential, 5-acre-Planned Development (RE-5-PD)
- Tentative Subdivision Map (TM16-1528) of 114.03-acre property creating a total of 42 residential lots, with lots ranging from a minimum of 43,560 square feet to a maximum of 46,562 square feet, 1 roadway lot, and 5 open space lots; and
- Planned Development Permit (PD16-0001) establishing an official development plan for the Vineyards at El Dorado Hills project. The proposed development is consistent with the existing land use and zoning designations for the project site.

Permits that the project has obtained or will be required to obtain include, but are not limited to:

- Central Valley Regional Water Quality Control Board (CVRWQCB) - Storm Water Pollution Prevention Plan (SWPPP) approval prior to construction activities pursuant to the Clean Water Act;
- El Dorado Irrigation District – Facility Plan Report;
- El Dorado Hills Fire District – Plan review and approval; and
- El Dorado County Air Quality Management District (AQMD) - Approval of construction-related air quality permits.

Additional project information, including the Initial Study, can be accessed via the following web link:

http://edcapps.edcgov.us/Planning/ProjectInquiryDisplay.asp?ProjectID=20719

Environmental Effects and Project Alternatives

Probable Environmental Effects:

Based on a preliminary environmental analysis of the project, the County has determined that the range of issues identified in the CEQA Guidelines, listed below, shall be addressed in the EIR.

- Aesthetics
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise and Vibration
- Public Services and Utilities
- Traffic and Circulation
- Tribal Cultural Resources

In addition to the above areas, the Draft EIR will also evaluate the potential cumulative and growth inducing effects of the project, as required by CEQA. Reasonably foreseeable future projects in the project vicinity will be considered in this analysis.

Comments and suggestions are requested during the 30-day public comment period for the NOP regarding the environmental issues that will be analyzed in the EIR.

Potential Alternatives to be addressed in the EIR:

In accordance with Section 15126.6 of the State CEQA Guidelines, an EIR must “describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project, but would avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparative merits of the alternatives.” As required by CEQA, the EIR will evaluate a No Project Alternative. Aside from the No Project Alternative, the County has not yet determined what additional alternatives to the project will be evaluated in the EIR. These will be identified during the environmental review process. Once selected, the alternatives will be analyzed at a qualitative level of detail in the Draft EIR for

comparison against the impacts identified for the proposed project, consistent with the requirements of CEQA.

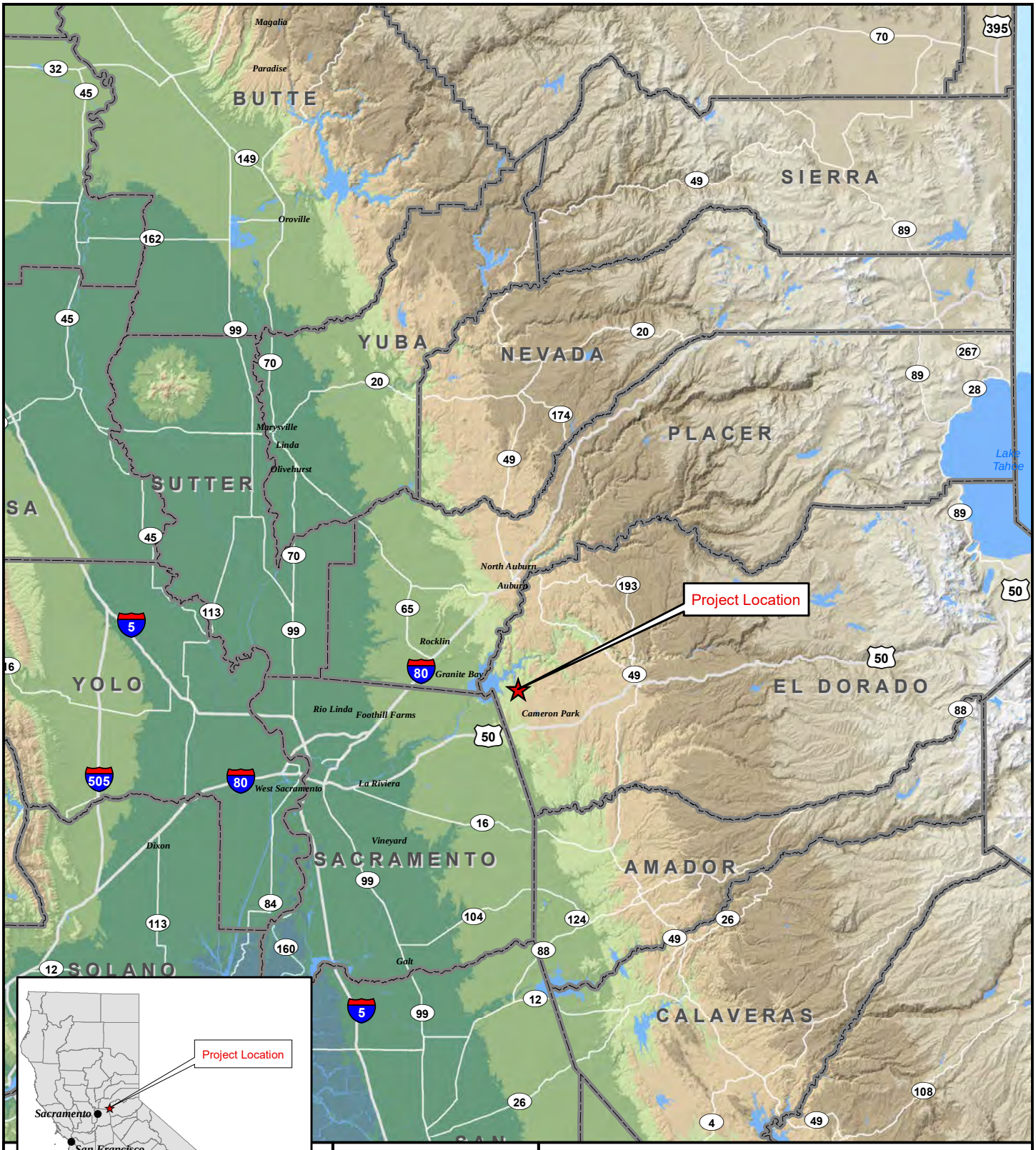
Public Scoping Meeting

The County will hold a public scoping meeting to provide additional information about the project and to receive verbal and written input. The public scoping meeting will be held on October 26, 2017 from 6:00 to 8:00 PM at the El Dorado Hills Fire Department Station No.85, located at 1050 Wilson Boulevard, El Dorado Hills, CA 95762. The scoping meeting format will be an open house; interested parties may arrive at any time during the 2-hour window to receive information on the project or provide input.

Requests for Additional Information

If you have any questions, please contact Rommel (Mel) Pabalinas at the County of El Dorado, Community Development Agency, Development Services Division - Planning, 2850 Fair Lane Court, Building C, Placerville, CA 95667, by telephone at (530) 621-5363, or by email to rommel.pabalinas@edcgov.us.

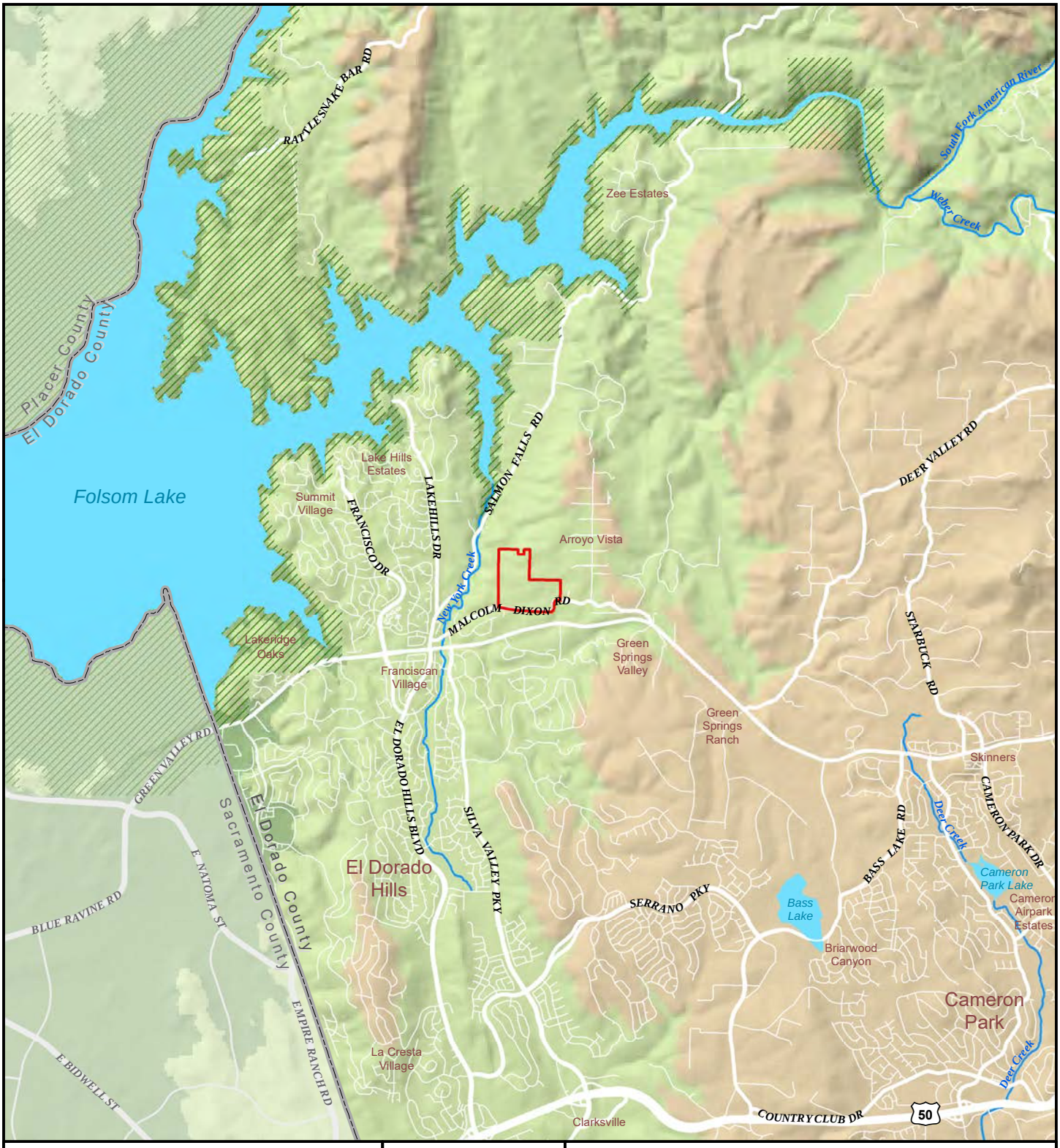
Attachments:
Figure 1 - Regional Location Map
Figure 2 - Vicinity Map
Figure 3 - USGS Topographic Map
Figure 4 - Aerial View of Project Site
Figure 5 - General Plan and Zoning Designations
Figure 6 - Site Plan
Figure 7 – Contextual Site Plan



VINEYARDS AT EL DORADO HILLS
ELDORADO COUNTY, CALIFORNIA

Figure 1: Regional Location Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm



Legend

- Project Boundary
- County Boundary
- Lake
- Folsom State Recreation Area

N

0 ½ 1

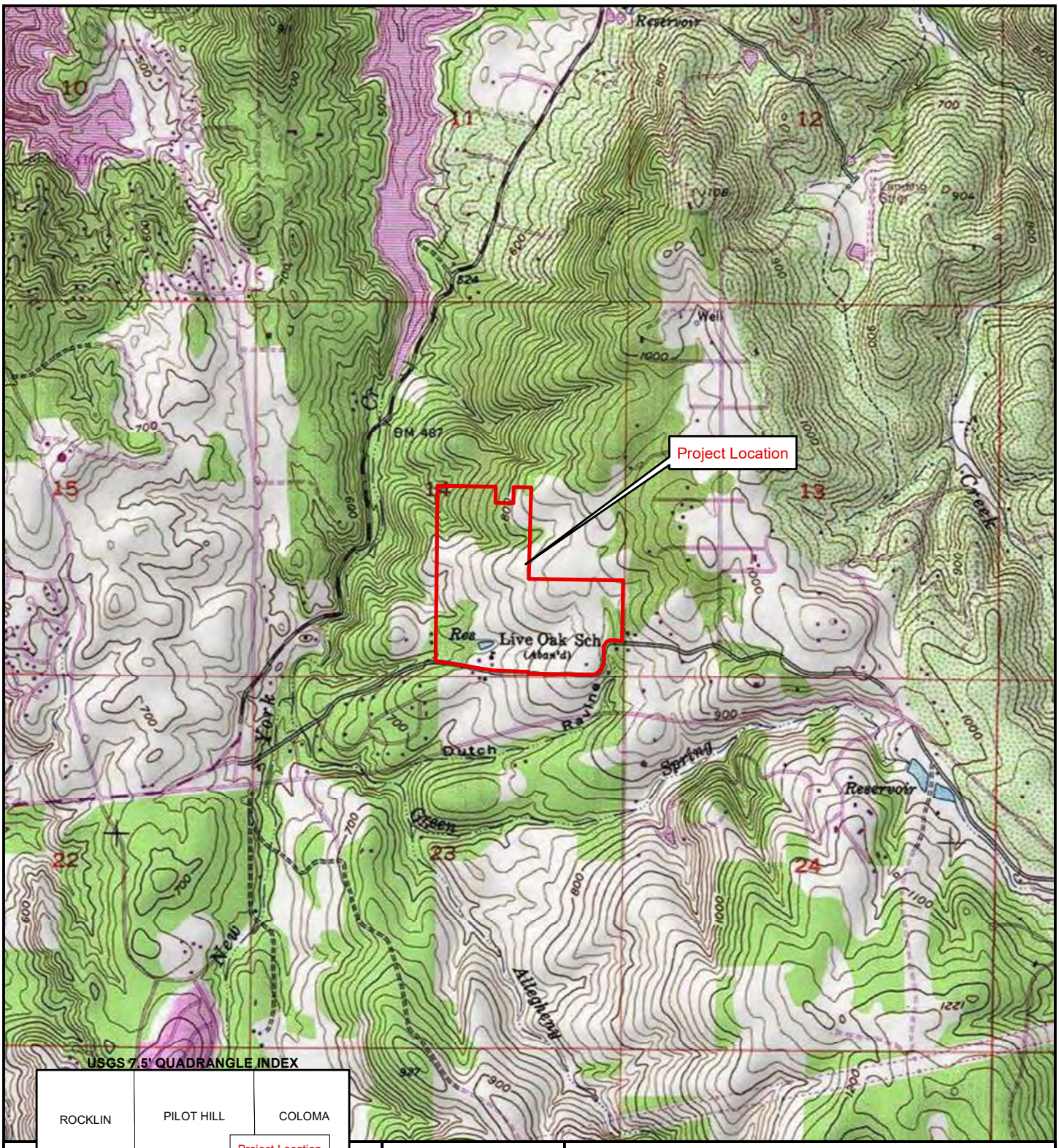
Miles

Data sources: El Dorado County GIS; California Spatial Information Library.
Map date: July 17, 2017.

VINEYARD AT ELDORADO HILLS
EL DORADO COUNTY, CALIFORNIA

Figure 2: Vicinity Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm



USGS 7.5' QUADRANGLE INDEX

ROCKLIN	PILOT HILL	COLOMA
FOLSOM	CLARKSVILLE (Project Location)	SHINGLE SPRINGS
BUFFALO CREEK	FOLSOM SE	LATROBE

Data sources: El Dorado County GIS; ArcGIS Online USGS Topographic Map Service. Map date: July 17, 2017.

N

0 500 1,000

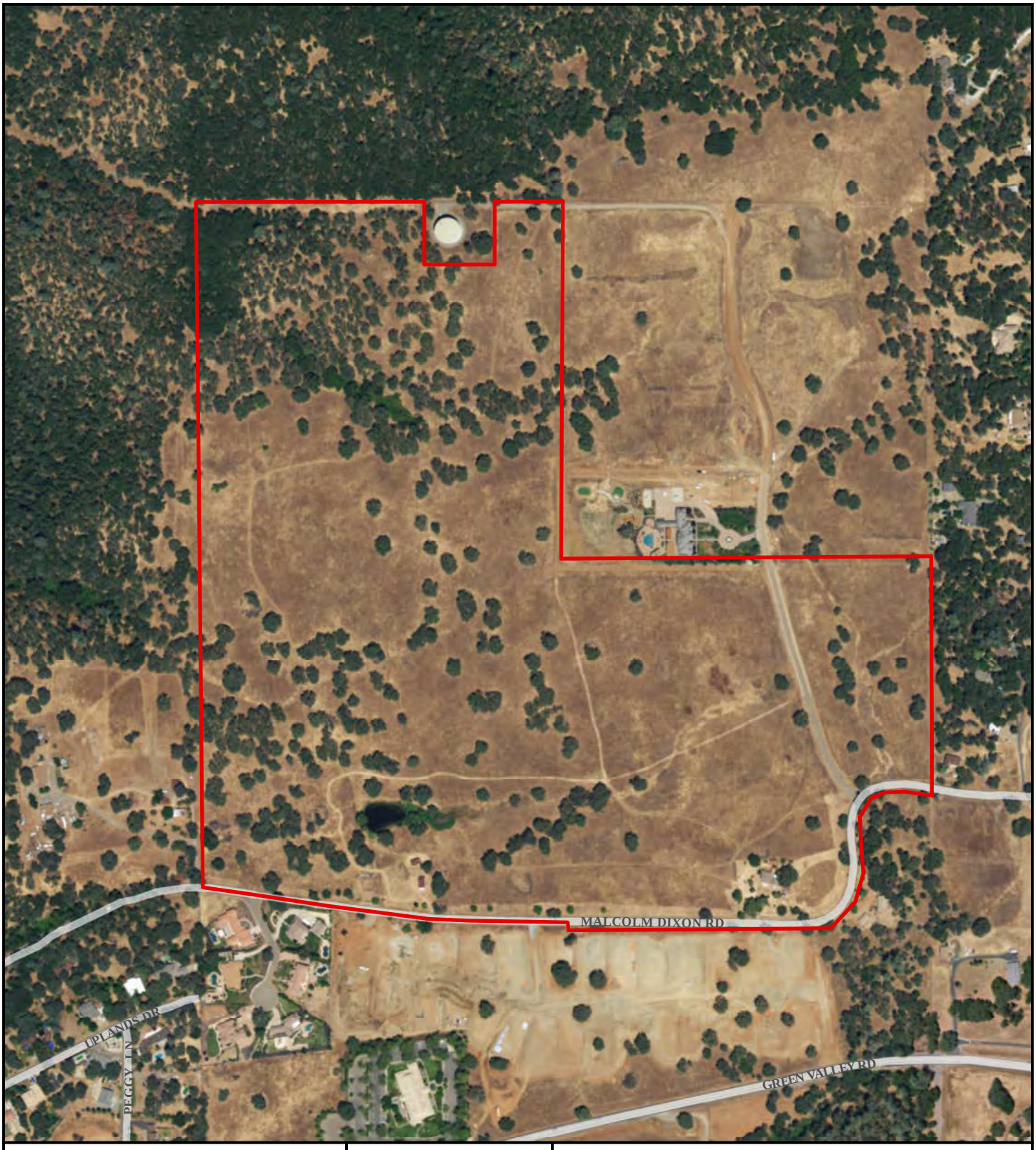
Feet

VINEYARD AT ELDORADO HILLS
EL DORADO COUNTY, CALIFORNIA

Figure 3: USGS Topographic Map

Clarksville Quadrangle

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm



Legend

Project Boundary

N

0 150 300

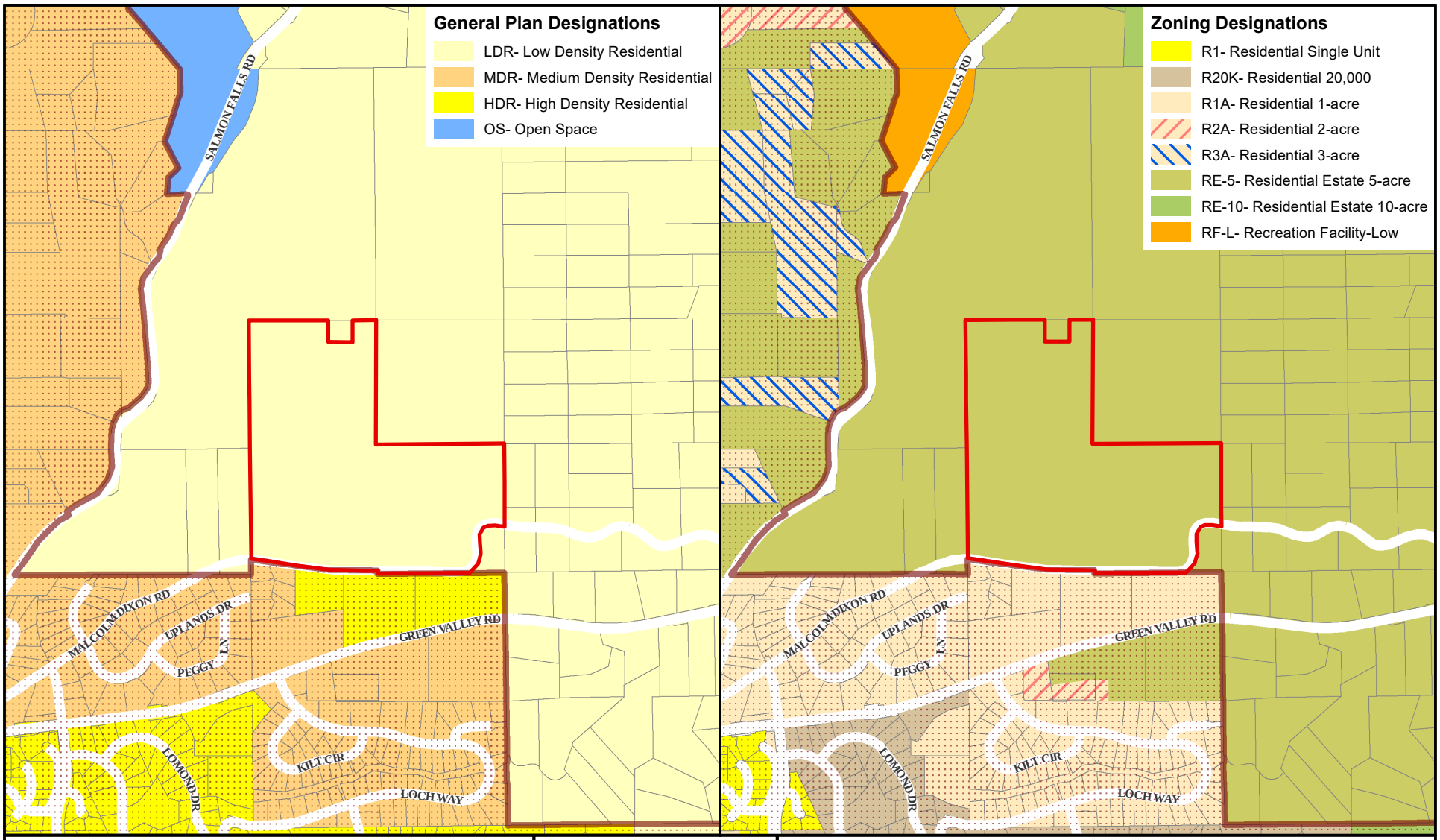
Feet

Sources: El Dorado County; ArcGIS Online World Imagery Map Service. Map date: July 17, 2017.

VINEYARDS AT EL DORADO HILLS
EL DORADO COUNTY, CALIFORNIA

Figure 4. Aerial View of Project Site

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm



VINEYARDS AT EL DORADO HILLS
EL DORADO COUNTY, CALIFORNIA

Figure 5. General Plan and Zoning Designations

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

LEGEND:

- BOUNDARY
- LOT LINE
- WETLANDS SETBACK
- RIGHT OF WAY LINE
- (P) EASEMENT
- (P) AC SETBACK
- (E) EASEMENT
- (E) EDGE OF PAVEMENT
- SEASONAL WETLANDS
- POND
- (P) OPEN BOTTOM CROSSING
- FIRE HYDRANT
- TREES

0 50' 100' 200'

Source: CTA Engineering & Surveying, March, 2016.
Map date: July 18, 2017.

VINEYARDS AT EL DORADO HILLS
EL DORADO COUNTY, CALIFORNIA

Figure 6. Site Plan

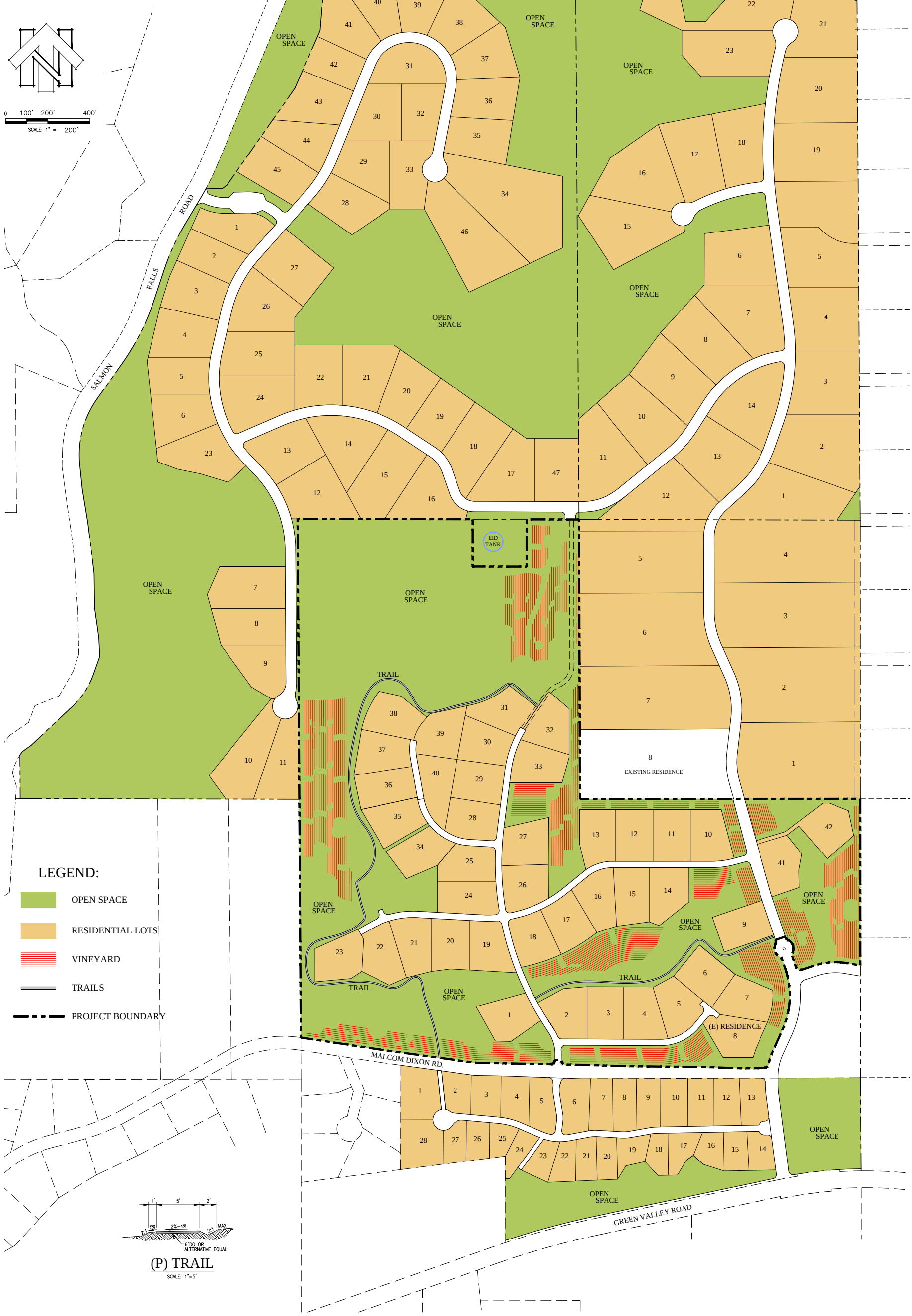
De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

VINEYARDS AT EL DORADO HILLS

MALCOM DIXON AREA

EL DORADO HILLS, CALIFORNIA

SEPTEMBER, 2017



VINEYARDS AT EL DORADO HILLS
EL DORADO COUNTY, CA

Figure 7: Contextual Site Plan

---------- Forwarded message ----------
From: **bill Moore** <papa44@sbcglobal.net>
Date: Sun, Oct 15, 2017 at 8:53 AM
Subject: developments
To: rommel.pabalinas@edcgov.us

Mr. Pabalinas

The words you are about to read are from our (my wife and i) hearts. We have lived in EDC for 30 years last month. We have seen many changes in our community. Mostly good but not all growth is a good change. My words dont come from some political view point. They come from a tax paying citizen of a small community. I worked and retired locally. I was a coach at ORHS for 10 years. I am embedded in this community. We are not people who have used this place as a stepping stone. We live here and raised our 3 children here and one of them still lives in EDH. The other two close by.

Reading through the infomation we were sent there are two main issues that have to stare everybody in the face. They are both the elephant in the room. First one is water (H2O) that finite chemical that gives us life and sustains life. I dont care what EID says about this. They cannot guarantee us all that there will be enough water to see us all through. If they could then please have then explain away 5 years of draught. One year of good rain and snow isn't enough to wash away 5 years without. EID is betting on the odds. I'm not a gambler, especially with life. EID has asked (threatened us all) to cut back or else. We did and our rates still went up. Water is a shuffle board, a game to some. Not us. Can EID guarantee water? No more than i can. I think you get my point on water or at least i hope you do.

The next issue for us is obvious. Its traffic, roads, time spent on the highways. Will Malcolm/dixon, GV RD, EDH blvd., Salmon Falls Rd., Hway 50 be widened to accomodate the influx of new residence on all those roads. We dont see any widening being done. I surely hope that we dont hear, "we will address that after the development is approved". Remember Nancy Pelosi's words? Have you been on all those roads mentioned in the a.m. and p.m. during rush hours to witness for yourself what i am talking about? Just imagine driving in that on a daily basis with added development. Not to mention the 10,000 homes Folsom is developing all funneling to Hwy. 50. Rush hour and impact bring road rage. I experenced it on thursday going to pick up a granddaughter for a day. A young kid was obviously late for work or he simply drives like this everyday. He was so close to me i could not see the front of his car. I did the tactical manuvers to

make him go around me or back off. Well he did. He passed me so close i could almost reach out and touch his car. Then he cut back in front of me so close again and slammed on his brakes. This is what we get with impact of people.

About 20 years ago there was suppose to be new HS built next to the Pleasant Grove Middle School. It wasn't built. Oak Ridge is way over crowded. I dont hear of or see any new schools being built to plan ahead for impact that is coming unless we stop it. People/kids need recreation. We need to unwind. More impact/development doesn't allow for that.

Please dont approve this development until all infrastructure has been completed and paid for by the developers. Dont pass this responsibility on Mr. Pabalinas to your successor. Do what we are asking of you. And do it now. Be a forward thinker not a go along to get along type.

Very Sincerely,

Bill and Fred Moore

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Rommel (Mel) Pabalinas, Senior Planner
El Dorado County Community Development Services
Planning and Building Department
Planning Division
2850 Fairlane Court
Placerville, CA 95667
Main Line 530-621-5355
Direct line 530-621-5363
Fax 530-642-0508

---------- Forwarded message ----------
From: **dlg** <dflsg@pacbell.net>
Date: Sun, Nov 12, 2017 at 11:15 PM
Subject: NOP comments for Vineyards at EDH
To: "rommel.pabalinas@edcgov.us" <rommel.pabalinas@edcgov.us>

Dear Mr. Pabalinas,

I have a few concerns with this proposed development.

1. Another development asking for a higher density zoning change from the County **voter approved** General Plan of 5 acre (RE-5). We are not for approving this change from the GP.

2. With another potential 76 lots north of the Vineyards plus the Vineyards that brings another 118 residence's dumping their daily commutes and trips onto an already over taxed roadway and over county db permitted noise levels associated with Green Valley Rd. Fix the existing traffic and noise issues first before approving any additional development.

3. If the developer of the Vineyard and properties to the north can pipe in EID water, PG&E Gas and electric, phone and cable then they can pipe in EID sewer and stop putting in 118+ septic systems that will ultimately at some point in our children's life time fail and pollute the waterways that flow to Folsom Lake. EID and it's rate payers have paid a small fortune to upgrade and expand the Latrobe Road plant and it needs to be utilized by ALL development properties especially if they are proposing to utilize EID water, shouldn't be able to access one without the other. No sewer no water.

4. Vagueness of 'May" include a working vineyard. No production or distribution facilities are "proposed". Project "May" include construction of new structures to facilitate operations and events. These items will bring heavy impacts to traffic, noise, water, wastewater, runoff, greenhouse gas emissions and other issues that need to be address now not afterwards. Better yet, it should be stated that NO working vineyard, production, operation or event facilities will be allowed on property zoned E5 or any other residential zoning designation.

Regards,
Dale and Linda Gretzinger

---------- Forwarded message ----------
From: **Natalie Porter** <natalie.porter@edcgov.us>
Date: Fri, Oct 13, 2017 at 9:56 AM
Subject: Re: Draft NOP/IS - Vineyards at El Dorado Hills
To: Rommel Pabalinas <rommel.pabalinas@edcgov.us>

Hi Mel -

I finally looked at the IS for Vineyards - just one thing in the Transportation section. They say the nearest airport is the John Wayne Airport (that's in Orange County) - this was obviously a cut and paste and you just need to check that they updated it to reflect the Cameron Park Airport as being nearest to the project.

---------- Forwarded message ----------
From: **Jane Flint** <janeaflint@gmail.com>
Date: Tue, Nov 7, 2017 at 2:19 PM
Subject: Environmental Impact Report for Vinyards at El Dorado Hills
To: rommel.pabalinas@edcgov.us

Please advise what types of noise and vibration, air quality and hazardous materials barriers are being considered along Green Valley Road to protect those homeowners whose homes back up to Green Valley Road.

Thank You,
JaneFlint
1788 Calaveras Drive
El Dorado Hills Ca 95762

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Rommel (Mel) Pabalinas, Senior Planner
El Dorado County Community Development Services
Planning and Building Department
Planning Division
2850 Fairlane Court
Placerville, CA 95667
Main Line 530-621-5355
Direct line 530-621-5363
Fax 530-642-0508

---------- Forwarded message ----------
From: "Jeff Brock" <jeffbrock99@hotmail.com>
Date: Oct 15, 2017 6:58 PM
Subject: EIR for Vineyards at El Dorado Hills
To: "rommel.pabalinas@edcgov.us" <rommel.pabalinas@edcgov.us>, "donna brock" <donnambrock@live.com>
Cc:

Hi Mel - thanks for sending us the overview of the EIR. Our chief concerns we would like to have addressed in your analysis:

- We live in Winterhaven (Danbury Circle). It appears this development will destroy our view. Are aesthetics and adjacent property values factored in?

- Wildlife: are you considering contiguous greenbelts so wildlife can migrate through he new development between green spaces and nature?

- Fire control

- Air pollution from infrastructure overload

- Are trees being preserved - both to block erosion and for aesthetics?

- Water run off

Thanks!

Jeff & Donna

---------- Forwarded message ----------
From: **John Chueh** <johnchueh@yahoo.com>
Date: Thu, Oct 26, 2017 at 2:35 PM
Subject: Vineyard at El Dorado Hills
To: Rommel.pabalinas@edcgov.us

Hello,

I am writing to voice my concerns on the Vineyard at El Dorado Hills project.. My concerns are as follows:
1. The additional traffic flow onto Salmon Falls Boulevard and Green Valley Boulevard will cause more traffic backups during rush hours. The distances between Malcolm Dixon and Village Center Drive is very short, and when you have cars stopping for on coming traffic while trying to making a left turn onto Village Center Drive could cause traffic backup pass Malcom Dixon and the intersection of Green Valley and Salmon Falls Boulevard . By the same token, cars from Malcolm Dixon would have difficulty merging into Salmon Falls during rush hours because of high traffic volume on Salmons Falls.

2. The traffic on Bancroft Drive would increase in the morning and afternoon hours when parents are taking their kids to and from Marina Middle School and Lake Forest Elementary School. Bancroft Drive is a residential street and has already had traffic problems like speeding and noise. Additional traffic on this street would create safety concerns for all residents, especially for the children and senior citizens.

3. There are also concerns on the noise and dust produced during construction of the project.

Please address these issues in your approval process.

Regards,

John Chueh, retired P.E.
4098 Bancroft Drive
El Dorado Hills, Ca 95762
(916)220-2768

Sent from my iPhone

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Rommel (Mel) Pabalinas, Senior Planner
El Dorado County Community Development Services
Planning and Building Department
Planning Division
2850 Fairlane Court
Placerville, CA 95667
Main Line 530-621-5355
Direct line 530-621-5363
Fax 530-642-0508

---------- Forwarded message ----------
From: "Katherine Nelson" <cameracrazykat@gmail.com>
Date: Nov 11, 2017 9:47 AM
Subject: The Vineyards
To: <rommel.pabalinas@edcgov.us>
Cc:

This email is to express my opinion regarding the density bonus on the site for the Vineyards development in El Dorado Hills.

I understand the reasoning in the general plan policy of a density "bonus" but my thoughts are: where/when does it stop? If open space is set aside for a development in 2017 - how long is that space "protected"? Five years? Ten years? Or until someone losses site of the original plan and applies to build on that "open space". It's been my experience that open space is set aside only to have pressure brought about on the decision makers to change that zoning at a later date.
The unique beauty of El Dorado Hills is the amount of open space - space without high density - it's why we bought here.

There would be a roadway connecting to Salmon Falls Road. The intersection of Lakehills and Salmon Falls Road is already marginal. Adding double the homes on the Vineyard development will add double the traffic barreling down that road.

Lastly, is the infrastructure really keeping up? And I don't just mean roads and emergency services which I know you are looking at - I mean in all of El Dorado Hills. It used to be that we could get a medical appointment in a reasonable amount of time. All the new construction south of Hwy 50 has changed that! Calling to get a physical this year was a three month wait! Calling to book an appointment last Aug with a specialist meant traveling to Carmichael in Nov. Otherwise the soonest appointment in Folsom was January.

Of course builders want high density and they will always fight for the zoning they need. And of course, growth is inevitable. But I implore you to fight back where you can. Keep El Dorado Hills the beautiful town it has always been. Let the deer continue to walk through our neighborhoods.

Thank You,
Katherine & Larry Nelson

---------- Forwarded message ----------
From: <leesafons@surewest.net>
Date: Mon, Nov 13, 2017 at 12:58 PM
Subject: Environmental Impact Report - The Vineyards
To: rommel.pabalinas@edcgov.us

Mr. Pabalinas,

Thank you for being the County of El Dorado point of contact on the Yineyards subdivision Environmental Impact Report. As a neighbor whose yard is adjacent to Salmon Falls I am greatly concerned. The home that I purchased in Green Valley Hills five years ago was a wreck. I bought for the view, I bought for the sake of the yard.

If you drive east of Highway 50 from El Dorado Hills to Folsom you have a glimpse of what is to come if the subdivision is approved. Earth movers and orange plastic fencing for years. Followed by urban blight, additional noise, and traffic.

Should the proposed subdivision be approved I will probably move. What I see and will hear in the future on the other side of my 5 foot high county fence is cement trucks and construction crews starting early in the morning when I watch the sunrise.

If it is in your power, please block this development.

What I enjoy now are the bike riders, walkers, runners, and yes even motorcyclists taking scenic Salmon Falls to Auburn. This will change if the area is developed. We will lose what makes El Dorado Hills unique.

With homes follows commercial development and even the possibility of widening the road. Please keep El Dorado Hills the gateway to the Sierras.

Many thanks,

Leesa Fons

4087 Bancroft Drive
El Dorado Hills, CA 95762
916-932-4069

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Rommel (Mel) Pabalinas, Senior Planner
El Dorado County Community Development Services
Planning and Building Department
Planning Division
2850 Fairlane Court
Placerville, CA 95667
Main Line 530-621-5355
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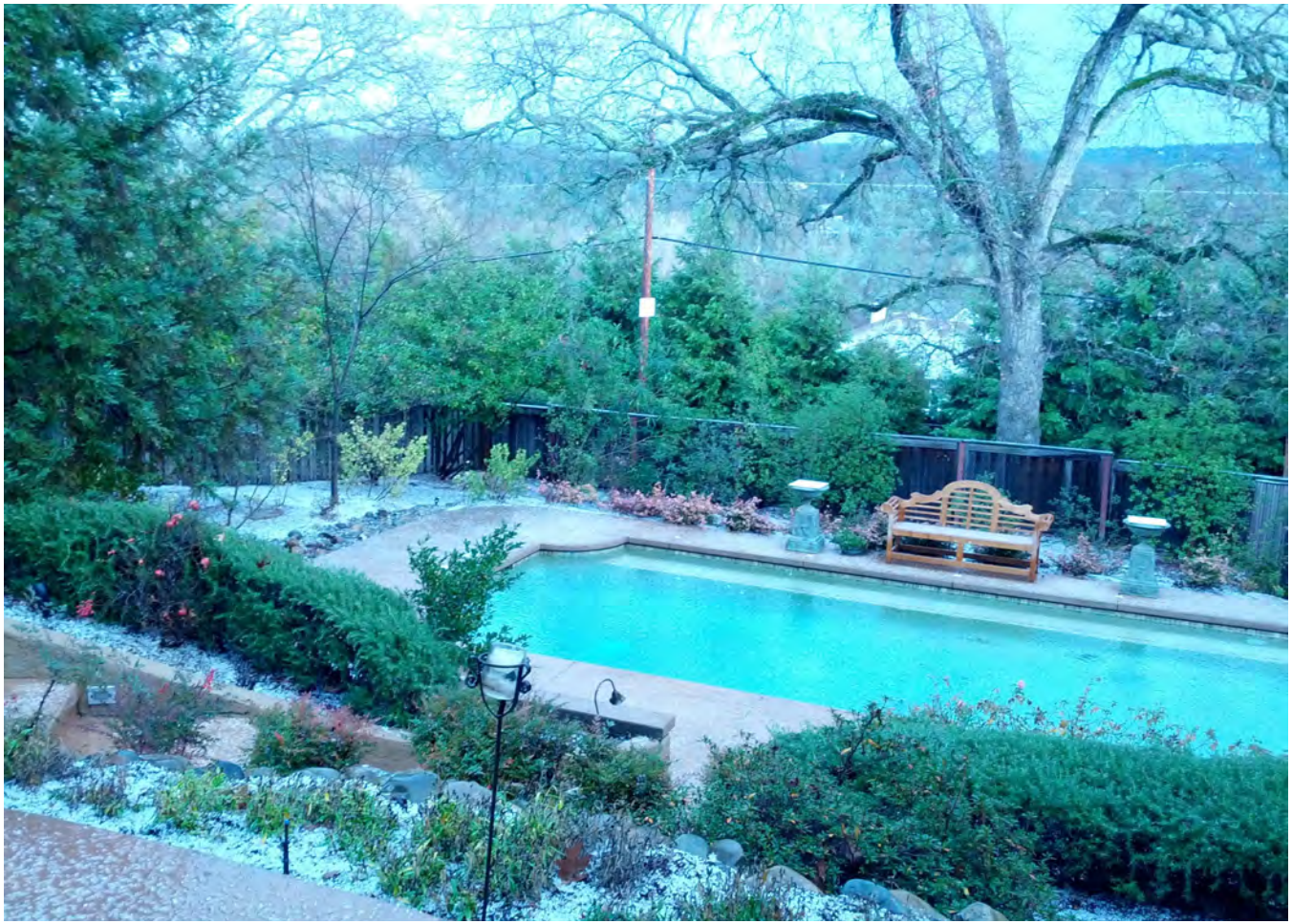

---------- Forwarded message ----------
From: **Lynn Watkinson** <lynardw@sbcglobal.net>
Date: Mon, Oct 30, 2017 at 10:21 AM
Subject: Vineyards at El Dorado Hills
To: Rommel.pabalinas@edcgov.us

My name is Lynn Watkinson, and I was planning on going to the meeting at the fire department Thursday Oct 26th. Unfortunately I had to take my mother in law to emergency that afternoon and never got out of there till after 8 p.m. I oppose this development going in our RURAL community. We all moved up here to like in the country, no housing developments, 5 acre parcels minimum. We already have an eye sore across from the red school house with a hideous fence going down Malcolom Dixon rd. This IS NOT what we want to look at everyday, but were stuck with it cause of that development. Now there is someone else that wants to build and another hideous fence will be put up for us to look at everyday and feel like we are driving through a tunnel. No, that can't happen. And Malcolom Dixon cant handle more traffic either. That is a huge safety issue. AND THE RED SCHOOL HOUSE CANNOT BE MOVED OR RELOCATED. That is history . Moving that would be like moving a cemetery from its original spot. Just like Pleasant Grove middle school. When building that school they had to preserve the pioneer cemetery that is next to it by putting a iron fence around it and leaving it where it is. Same should be for the red school house Live Oak School. I am attaching an article that was in the Folsom telegraph in May. THIS DEVELOPMENT CAN NOT GO FORWARD, IT WILL RUIN OUR COMMUNITY AND THE REASON WE LIVE UP HERE.
Thank you
Lynn Watkinson
Arroyo Vista Way

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Rommel (Mel) Pabalinas, Senior Planner
El Dorado County Community Development Services
Planning and Building Department
Planning Division

2850 Fairlane Court
Placerville, CA 95667
Main Line 530-621-5355
Direct line 530-621-5363
Fax 530-642-0508

COMMENT

Vintage Folsom

COURTESY OF THE FOLSOM HISTORY MUSEUM

Live Oak School in the '30s

Live Oak School was organized on April 6, 1883. It lapsed and merged with Tennessee District to become a component of the Rescue Union School District on July 1, 1950.

The school was located on what was originally Green Valley Road. Then Green Valley Road route was changed so the part that passed Live Oak School was renamed Malcom Dixon Road. When the school was in operation, it held all eight grades and had an outhouse with drinking water taken from a well on the Darrington property across the road. There was a dipper from which all the kids drank.

The following story is by James E. Davies and was written in 1996:

"Fifty-some years ago, I attended Live Oak Grammar School. The old schoolhouse still stands, three or four miles east of Folsom. Back in the 1940s there were only two houses within a mile of the school and only eight houses between the school and Folsom.

I started at Live Oak Grammar School in 1939 and graduated eight years later at the top of my class (I was the only student). One teacher taught all eight grades and there was an average of 12 students each year.

The schoolhouse had no electricity, no running water and no telephone. The teacher or the older kids hauled drinking water from across the road. A wood stove kept us warm in winter. The teacher was very strict in class, but gave us a lot of freedom during recess. If we broke the rules, she clobbered us. If that didn't work, she told our parents. We didn't have any trouble telling right from wrong.

We were always up to some sort of mischief, but one time stands out in my mind. I remember one particular incident involving boys in the school throwing toilet paper over a tree about a mile from school. This was during WWII and Japan was sending paper balloons with explosives over California. The Air Force soon spotted the toilet paper masterpiece and thought it was a Japanese balloon. It wasn't long before all hell broke loose and when the authorities arrived it didn't take them long to find the real culprits."

---------- Forwarded message ----------
From: **ml Ml** <mlreise@hotmail.com>
Date: Fri, Oct 27, 2017 at 11:20 AM
Subject: Malcolm Dixon Rd/Vineyards project
To: "Rommel.pabalinas@edcgov.us" <Rommel.pabalinas@edcgov.us>

Hi. I am a 30 year resident on Malcolm Dixon Rd. I am opposed to changing the 5 acre density plan that now exists. Malcolm Dixon is a small rural road with 2 creeks and 2 bridges that are narrow. It is unsafe for 2 cars to pass each other on some places on the road.

This new Vineyards project will allow access to at least another 120+ cars on our small rural road by the time it's finished. The access to and from Green Valley is not open to traffic yet, so this will not be available for all the construction vehicles that will be building this project. There is already a very ugly fence across the street from the proposed project that totally changed the landscape of Malcolm Dixon Rd. We have no fences. That's why most of us bought property up here.

You need to come drive this road and look at it from a homeowners perspective. It is one of the last rural roads around. It is a favorite bicycle route for those who can't ride Green Valley due to the traffic. Please leave it intact and safe.

Thank you for your time.
MaryLynn Reise
1164 Malcolm Dixon Rd
916-849-2264

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Rommel (Mel) Pabalinas, Senior Planner
El Dorado County Community Development Services

Planning and Building Department
Planning Division
2850 Fairlane Court
Placerville, CA 95667
Main Line 530-621-5355
Direct line 530-621-5363
Fax 530-642-0508

---------- Forwarded message ----------
From: "Michelle Goins" <michelle.goins@polarity.net>
Date: Oct 16, 2017 8:08 AM
Subject: Vineyards at El Dorado Hills
To: <rommel.pabalinas@edcgov.us>
Cc:

Good morning Mr. Pabalinas,

Thank you for the opportunity to respond to the Notice of Preparation for the Vineyards at El Dorado Hills via email as I am unable to attend the public meeting on October 26, 2017.

After reading through the document and reviewing the maps, the only glaring concern I have is in regards to new/improved road infrastructure outside of the planned area. Growth is good and positive for our community and I fully support it; however, as you know, Green Valley is already impacted with the additional traffic in El Dorado Hills and I believe developers and the county have an obligation back to the community (many of us have lived here 20+ hears) to make sure that as homes are added, that the appropriate funds (tax $$ as well as developers $$) are set aside to improve the roads -- movement of traffic, etc.

Please respond to me and the community with your plans regarding this issue especially as it impacts the road systems beyond the project; specifically Green Valley Road, El Dorado Hills Blvd, and Silva Valley Pkwy.

When will Green Valley expand to a 4-way road East of Francisco? When will Silva Valley Pkwy expand to a 4-way road? In addition, are there future plans to make Malcom Dixon a 4-way road? The expansion of these road systems will not only improve the flow of traffic, but will also have a positive impact on decreasing potential accidents due to congestion and flow issues.

Traffic circulation outside of this planned development is a very important piece to the positive growth and improvement of our community.

Thank you for your time and consideration.

Sincerely,

Michelle Goins
Controller
Polarity, Inc.
PH:916-635.3050 x222
FX:916-635-7866
www.polarity.net

---------- Forwarded message ----------
From: "Scott Sahaida" <srsahaid@gmail.com>
Date: Oct 20, 2017 2:32 PM
Subject: Vineyards EIR input
To: <rommel.pabalinas@edcgov.us>
Cc:

Hi Rommel,

I wanted to provide my inputs to the proposed rezoning of the property off of Malcom Dixon road. My wife and I are totally against rezoning . Please keep the current RE-5 as called out in the general plan. The county already destroyed the rural character of Malcom Dixon road by approving the overlook across the street which has an ugly fence that makes it look like a back alley. Green valley road is already overloaded from county line to Cameron park and Malcom Dixon is not designed for additional traffic,,, what's the point of having a general plan if the county grants every rezoning request..the developer knew the property was RE-5 so too bad...please do not approve this rezoning request. The county can't even maintain the roads we have in EDH- don't add more cars and neighborhood roads north of the freeway...

Thanks for hearing our inputs,
Scott and Fimy Sahaida
El Dorado hills residents since 1999

---------- Forwarded message ----------
From: **steve jobson** <sjobson@sundancelumber.com>
Date: Tue, Oct 17, 2017 at 11:29 AM
Subject: EIR The Vineyards Project APN 126-100-24
To: rommel.pabalinas@edcgov.us
Cc: bosone@edcgov.us

Rommel Pabalinas, Senior Planner County of El Dorado

Dear Mel,

I received your notice dated October 11, 2017 regarding the project mentioned in the subject line. Not that this email to you will do any good, but I am very opposed to this project. Reason you as a planning agency and responsible government entity continue to be persuaded by developers to increase density. The planning department and the Supervisors have neglected responsible growth and mandated laws that prevent overly impacted areas of our county. The road system is the same system that has been in place since I was growing up here in the sixties. Green Valley Road and that travel between El Dorado Hills and Placerville is a death trap. And yet you are going to push this project through and only receive my type of response as a formality. Your EIR and information regarding these projects

is a requirement that falls on deaf ears. In just the last few weeks there has been several fatalities in the area you are planning to increase traffic. Let's put it this way Mel, at what point do you assume responsibility for hazardous conditions created by negligent planning? The next death on these roads that happens as a result of overcrowded conditions and drivers that pass on solid double yellow lines because they are inpatient are you going to consider some responsibility for that? What about fire Mel? You got the road systems and everything else in place to take care of another Oakland Hills? I live off Lake Hills and Mel that is a fire nightmare just waiting to happen. So you want to put more people in an area difficult to evacuate? I noticed that there are several existing buildings on site Mel. The fact is those could be historic buildings. You got permission from the historical preservation people on mowing those over like you guys have done in the past at other locations throughout the county? Should I contact a few of them and see if they are aware of the project? One thing I can tell your for sure Mel, is this email letter to you and any others that you receive opposing this won't mean a darn thing. I have seen this stuff waved through and approved almost every time. So in summary Mel, I guess you could say I oppose this project. Please pass it on to the developers of this project that I am really happy they have you guys in their back pockets and have the opportunity of hitting another profit home run at our risk and detriment

Steve Jobson

1632 Loma Verde Dr.

El Dorado Hills, CA 95762

Cc: Hidahl, Supervisor

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Rommel (Mel) Pabalinas, Senior Planner
El Dorado County Community Development Services
Planning and Building Department
Planning Division
2850 Fairlane Court
Placerville, CA 95667
Main Line 530-621-5355
Direct line 530-621-5363
Fax 530-642-0508

please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

VINEYARDS AT EL DORADO HILLS PROJECT

SCOPING MEETING

THURSDAY OCTOBER 26, 2017 - 6:00 PM

1. ***Registration Period:*** Attendees will sign in and give his/her name, association, address, and email. This information will be put on a mailing list for future mailings.

2. ***Format:*** The County of El Dorado staff and consultants will be available to provide an overview of the project, the Initial Study findings, the purpose of the meeting, and opportunities for community input/participation during the environmental review process.

3. ***Questions/Comments:*** The County of El Dorado staff and consultants will accept questions and comments concerning the project and scope of the EIR. The intent is to record comments/concerns so they can be addressed within the Draft EIR.

Please write any comment or concern regarding this project in the space provided below.

- Provide comparison to originally proposed 5 acre lots to give the community an idea of the benefits of the project currently vs. past
- Add sidewalks to Malcom Dixon for public access to proposed trails
- Add bike lanes for bike traffic
- Habitat corridor an option with the surrounding development?
- How will the density be mitigated with traffic and single lane bridges
- Why are they proposing septic? They should be on sewer like the Overlook
- With gated community, how will public access trails? Can the developer add a parking lot for the public
- Mitigation for the vineyards for noise, impacts to oaks, harvest noise & trucks, pesticides, ect.
- Traffic review on Green Valley for all existing & proposed development.
- Road connecting to project to the north should be paved to increase circulation throughout area.
- Renovate school house for use by HOA as meeting space.

DE NOVO PLANNING GROUP
1020 Suncast Lane, Suite 106 | EL DORADO HILLS, CA 95762
bthompson@denovoplanning.com | TEL 916 812 7927

VINEYARDS AT EL DORADO HILLS PROJECT

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Please write any comment or concern regarding this project in the space provided below.

heidi.broadbent@gmail.com

requested copy of sign in sheet

VINEYARDS AT EL DORADO HILLS PROJECT

SCOPING MEETING

THURSDAY OCTOBER 26, 2017 - 6:00 PM

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Please write any comment or concern regarding this project in the space provided below.

1) Did the percolation test pass? >> How could it on such small lots >>

2) Require sewer hookup - to public sewer - Otherwise it will contaminate the downhill wells!! Those people will be out of water!!

That is not fair - I have been here for 57 years - to get forced out by a developer -

3) We are already short on water!! How can you make such small lots??

4) Traffic - how many people will die with the increased traffic!?

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Please write any comment or concern regarding this project in the space provided below.

As a resident of EDH, my greatest concern is the impact development has on my community. On a personal note, I'm tired of developers requesting approval of low density housing developments, then once approved, asking for zoning changes for high density housing.

Please listen to the people of EDH. We don't want the impact on our roads, schools, traffic, crime, emergency services - EDH was never intended for a large population. our infrastructure will not and can not accommodate it -

Paula Autry
1695 Knight Lane
EDH

VINEYARDS AT EL DORADO HILLS PROJECT

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Please write any comment or concern regarding this project in the space provided below.

- Notification of Draft EIR: please consider using "Nextdoor" web sites. many residences in EDH are part of these and you could reach more of the people.
- Concerned about traffic impacts, Police/sheriff service impacts, Fire department impacts and School impacts. (EDH high school is highly impacted / crowded)
- The change in the density requirements
- Access to the open spaces of the project by the public outside the neighborhood.
- Better public notice.

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VINEYARDS AT EL DORADO HILLS PROJECT

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Please write any comment or concern regarding this project in the space provided below.

I want an impact report sent to me —
Lee MacKie 1681 Arroyo Vista Way, EDH. 95762

Why is the approved and voted on General Plan allowed to be altered significantly on a case by case basis? Why have a GP if it is not followed or can be easily changed.

Jim Shoemaker 2061 Arroyo Vista Way, EDH 95762

APPENDIX B

Air Quality, Greenhouse Gas, and Energy Modeling Outputs

Vineyards at EDH

El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	6.22	Acre	6.22	270,943.20	0
Single Family Housing	41.00	Dwelling Unit	42.23	73,800.00	110

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)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Year 2020 CO2 Intensity Factor provided by CPUC GHG Calculator: https://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf

Land Use - As provided by project applicant. CalEEMod does not provide a land use for agriculture (for the vineyards portion of the project). However, data to reflect vineyards is provided throughout this model. Pop = 2.68 x 41 units = 110

Construction Phase - Construction days estimated based on project size.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - One addition dozer and two additional tractors were added to the CalEEMod default off-road construction equipment (under the site preparation phase) to reflect the construction of the vineyards

Vineyards at EDH - On-site Agriculture Operations Only

El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	0.00	Acre	0.00	0.44	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)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project Characteristics - Year 2020 CO2 Intensity Factor provided by CPUC GHG Calculator: https://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf

Land Use - Note: this model only models off-road agricultural emissions (modelled within the construction emissions category within this model) and water-related emissions. For purposes of CHG modelling of vineyards operation

Construction Phase - Construction vehicles are used as a proxy for on-site off-road agricultural vehicles, based on information provided by the project applicant

Off-road Equipment -

Off-road Equipment - 5 compact tractors (as provided by project applicant)

Trips and VMT - On-road vehicles generated by the operation of the vineyards is already included within the “Mobile” sector of the primary CalEEMod run.

Demolition -

Grading - No construction modelled.

Architectural Coating -

Vehicle Trips -

Woodstoves -

Area Coating - No architectural coatings within this model run.

Energy Use -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Water Mitigation -

Water And Wastewater - As provided by project applicant: 16 weeks of watering (June through September); each vine requires 7 gallons of water/week; 1,100 vines per acre; and 25 acres of vineyards. This is equivalent to 3,080,000 gallons of water/year.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	0
tblAreaCoating	Area_EF_Nonresidential_Interior	250	0
tblAreaCoating	Area_EF_Parking	250	0
tblAreaCoating	Area_EF_Residential_Exterior	250	0
tblAreaCoating	Area_EF_Residential_Interior	250	0
tblConstructionPhase	NumDays	0.00	3.00
tblConstructionPhase	PhaseEndDate	2/28/2018	3/5/2018
tblLandUse	LotAcreage	0.00	1.0000e-005
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblWater	OutdoorWaterUseRate	0.00	3,080,000.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

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

Year	tons/yr										MT/yr					
2018	2.7800e-003	0.0304	0.0204	3.0000e-005	8.0000e-004	1.7400e-003	2.5400e-003	9.0000e-005	1.6100e-003	1.6900e-003	0.0000	3.0397	3.0397	9.5000e-004	0.0000	3.0634
Maximum	**2.7800e-003**	**0.0304**	**0.0204**	**3.0000e-005**	**8.0000e-004**	**1.7400e-003**	**2.5400e-003**	**9.0000e-005**	**1.6100e-003**	**1.6900e-003**	**0.0000**	**3.0397**	**3.0397**	**9.5000e-004**	**0.0000**	**3.0634**

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					
2018	2.7800e-003	0.0304	0.0204	3.0000e-005	8.0000e-004	1.7400e-003	2.5400e-003	9.0000e-005	1.6100e-003	1.6900e-003	0.0000	3.0397	3.0397	9.5000e-004	0.0000	3.0634
Maximum	**2.7800e-003**	**0.0304**	**0.0204**	**3.0000e-005**	**8.0000e-004**	**1.7400e-003**	**2.5400e-003**	**9.0000e-005**	**1.6100e-003**	**1.6900e-003**	**0.0000**	**3.0397**	**3.0397**	**9.5000e-004**	**0.0000**	**3.0634**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2018	5-31-2018	0.0395	0.0395
		Highest	0.0395	0.0395

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	1.4180	1.4180	1.4000e-004	3.0000e-005	1.4303
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.4180**	**1.4180**	**1.4000e-004**	**3.0000e-005**	**1.4303**

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	1.4180	1.4180	1.4000e-004	3.0000e-005	1.4303
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.4180**	**1.4180**	**1.4000e-004**	**3.0000e-005**	**1.4303**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2018	3/5/2018	5	3	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 1E-05

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	5	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2018

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					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7800e-003	0.0304	0.0204	3.0000e-005		1.7400e-003	1.7400e-003		1.6100e-003	1.6100e-003	0.0000	3.0397	3.0397	9.5000e-004	0.0000	3.0634
Total	**2.7800e-003**	**0.0304**	**0.0204**	**3.0000e-005**	**8.0000e-004**	**1.7400e-003**	**2.5400e-003**	**9.0000e-005**	**1.6100e-003**	**1.7000e-003**	**0.0000**	**3.0397**	**3.0397**	**9.5000e-004**	**0.0000**	**3.0634**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7800e-003	0.0304	0.0204	3.0000e-005		1.7400e-003	1.7400e-003		1.6100e-003	1.6100e-003	0.0000	3.0397	3.0397	9.5000e-004	0.0000	3.0634
Total	**2.7800e-003**	**0.0304**	**0.0204**	**3.0000e-005**	**8.0000e-004**	**1.7400e-003**	**2.5400e-003**	**9.0000e-005**	**1.6100e-003**	**1.7000e-003**	**0.0000**	**3.0397**	**3.0397**	**9.5000e-004**	**0.0000**	**3.0634**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Implement School Bus Program

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	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
Parking Lot	0.512962	0.041542	0.225677	0.140684	0.035619	0.007151	0.016044	0.009270	0.001580	0.001207	0.005638	0.000826	0.001801

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	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e

Land Use	kWh/yr	MT/yr			
Parking Lot	0.154	2.0000e-005	0.0000	0.0000	2.0000e-005
Total		**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	0.154	2.0000e-005	0.0000	0.0000	2.0000e-005
Total		**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

6.0 Area Detail

6.1 Mitigation Measures Area

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

Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	ROG	NOx	CO	SO2	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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.4180	1.4000e-004	3.0000e-005	1.4303
Unmitigated	1.4180	1.4000e-004	3.0000e-005	1.4303

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 3.08	1.4180	1.4000e-004	3.0000e-005	1.4303
Total		**1.4180**	**1.4000e-004**	**3.0000e-005**	**1.4303**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 3.08	1.4180	1.4000e-004	3.0000e-005	1.4303
Total		**1.4180**	**1.4000e-004**	**3.0000e-005**	**1.4303**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

Vineyards at EDH - El Dorado-Mountain County County, Summer

Vineyards at EDH

El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	6.22	Acre	6.22	270,943.20	0
Single Family Housing	41.00	Dwelling Unit	42.23	73,800.00	110

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)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Year 2020 CO2 Intensity Factor provided by CPUC GHG Calculator: https://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf

Land Use - As provided by project applicant. CalEEMod does not provide a land use for agriculture (for the vineyards portion of the project). However, data to reflect vineyards is provided throughout this model. Pop = 2.68 x 41 units = 110

Construction Phase - Construction days estimated based on project size.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - One addition dozer and two additional tractors were added to the CalEEMod default off-road construction equipment (under the site preparation phase) to reflect the construction of the vineyards

Trips and VMT - 12 additional worker trips per day was added to the site preparation phase (above and beyond the CalEEMod defaults) to reflect the worker trips needed to establish the vineyard, based on data provided by the applicant.

Demolition - Approximately 12,000 square feet of buildings is assumed to be removed (6 buildings x approx. 2,000 square feet each).

Grading - Assumed entire project site (114.03) is graded, as a conservative estimate.

Architectural Coating - Per EDCAQMD Rule 215 - 150 g/L architectural coatings maximum for interior and exterior coatings.

Vehicle Trips - Single Family Housing trip rates provided by Kimley Horn. 474 daily trips/42 du = 11.28571 trips per du/day.

Woodstoves -

Area Coating - Per EDCAQMD Rule 215 - 150 g/L architectural coatings maximum for interior and exterior coatings.

Energy Use -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstructionPhase	NumDays	50.00	21.00
tblConstructionPhase	NumDays	740.00	340.00
tblConstructionPhase	PhaseEndDate	5/9/2018	10/1/2018
tblConstructionPhase	PhaseEndDate	6/20/2018	11/12/2018
tblConstructionPhase	PhaseEndDate	10/3/2018	2/25/2019
tblConstructionPhase	PhaseEndDate	8/4/2021	6/15/2020
tblConstructionPhase	PhaseEndDate	10/20/2021	8/31/2020
tblConstructionPhase	PhaseEndDate	1/5/2022	11/17/2020
tblConstructionPhase	PhaseStartDate	3/1/2018	9/1/2018

tblConstructionPhase	PhaseStartDate	5/10/2018	10/2/2018
tblConstructionPhase	PhaseStartDate	6/21/2018	11/13/2018
tblConstructionPhase	PhaseStartDate	10/4/2018	2/26/2019
tblConstructionPhase	PhaseStartDate	8/5/2021	6/16/2020
tblConstructionPhase	PhaseStartDate	10/21/2021	9/2/2020
tblGrading	AcresOfGrading	187.50	114.03
tblLandUse	LotAcreage	13.31	42.23
tblLandUse	Population	117.00	110.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	6.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	WorkerTripNumber	25.00	18.00
tblVehicleTrips	ST_TR	9.91	11.29
tblVehicleTrips	SU_TR	8.62	11.29
tblVehicleTrips	WD_TR	9.52	11.29

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	6.3755	66.0802	35.9874	0.0639	24.2362	3.5613	27.7975	13.2801	3.2764	16.5565	0.0000	6,425.1753	6,425.1753	1.9509	0.0000	6,473.9478
2019	4.8554	54.5808	34.1732	0.0638	7.7988	2.3839	10.1827	3.5279	2.1932	5.7211	0.0000	6,313.7657	6,313.7657	1.9487	0.0000	6,362.4829
2020	28.9965	25.6156	23.4162	0.0511	1.3894	1.1604	2.5498	0.3758	1.0915	1.4674	0.0000	5,024.4455	5,024.4455	0.7180	0.0000	5,041.5485
Maximum	**28.9965**	**66.0802**	**35.9874**	**0.0639**	**24.2362**	**3.5613**	**27.7975**	**13.2801**	**3.2764**	**16.5565**	**0.0000**	**6,425.1753**	**6,425.1753**	**1.9509**	**0.0000**	**6,473.9478**

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					
2018	6.3755	66.0802	35.9874	0.0639	24.2362	3.5613	27.7975	13.2801	3.2764	16.5565	0.0000	6,425.1753	6,425.1753	1.9509	0.0000	6,473.9478
2019	4.8554	54.5808	34.1732	0.0638	7.7988	2.3839	10.1827	3.5279	2.1932	5.7211	0.0000	6,313.7657	6,313.7657	1.9487	0.0000	6,362.4829
2020	28.9965	25.6156	23.4162	0.0511	1.3894	1.1604	2.5498	0.3758	1.0915	1.4674	0.0000	5,024.4455	5,024.4455	0.7180	0.0000	5,041.5485
Maximum	**28.9965**	**66.0802**	**35.9874**	**0.0639**	**24.2362**	**3.5613**	**27.7975**	**13.2801**	**3.2764**	**16.5565**	**0.0000**	**6,425.1753**	**6,425.1753**	**1.9509**	**0.0000**	**6,473.9478**

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

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	64.9561	1.2646	80.8478	0.1405		10.8784	10.8784		10.8784	10.8784	1,138.6410	483.6214	1,622.2624	1.0567	0.0896	1,675.3701
Energy	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Mobile	1.1771	3.4992	12.6778	0.0343	2.8087	0.0395	2.8482	0.7509	0.0371	0.7880		3,433.0954	3,433.0954	0.1201		3,436.0976
Total	**66.1479**	**4.8892**	**93.5790**	**0.1756**	**2.8087**	**10.9280**	**13.7367**	**0.7509**	**10.9256**	**11.6765**	**1,138.6410**	**4,076.8381**	**5,215.4791**	**1.1799**	**0.0925**	**5,272.5405**

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	2.2815	0.6514	3.6549	4.0900e-003		0.0682	0.0682		0.0682	0.0682	0.0000	787.5038	787.5038	0.0209	0.0143	792.2959
Energy	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Mobile	1.1771	3.4992	12.6778	0.0343	2.8087	0.0395	2.8482	0.7509	0.0371	0.7880		3,433.0954	3,433.0954	0.1201		3,436.0976
Total	**3.4733**	**4.2759**	**16.3861**	**0.0391**	**2.8087**	**0.1178**	**2.9265**	**0.7509**	**0.1154**	**0.8663**	**0.0000**	**4,380.7205**	**4,380.7205**	**0.1441**	**0.0173**	**4,389.4663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**94.75**	**12.54**	**82.49**	**77.70**	**0.00**	**98.92**	**78.70**	**0.00**	**98.94**	**92.58**	**100.00**	**-7.45**	**16.01**	**87.79**	**81.33**	**16.75**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2018	10/1/2018	5	21	
2	Site Preparation	Site Preparation	10/2/2018	11/12/2018	5	30	
3	Grading	Grading	11/13/2018	2/25/2019	5	75	
4	Building Construction	Building Construction	2/26/2019	6/15/2020	5	340	
5	Paving	Paving	6/16/2020	8/31/2020	5	55	
6	Architectural Coating	Architectural Coating	9/2/2020	11/17/2020	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 114.03

Acres of Paving: 6.22

Residential Indoor: 149,445; Residential Outdoor: 49,815; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	4	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	6	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	55.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	10	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	129.00	49.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

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					0.5713	0.0000	0.5713	0.0865	0.0000	0.0865			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.5713**	**1.9386**	**2.5098**	**0.0865**	**1.8048**	**1.8913**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0320	1.0152	0.3000	2.1900e-003	0.0452	7.7000e-003	0.0529	0.0123	7.3700e-003	0.0197		229.1290	229.1290	3.7200e-003		229.2221
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	0.0954	0.0517	0.6735	1.3600e-003	0.1232	1.0100e-003	0.1242	0.0327	9.3000e-004	0.0336		135.5602	135.5602	5.1900e-003		135.6900

Total	**0.1274**	**1.0669**	**0.9735**	**3.5500e-003**	**0.1684**	**8.7100e-003**	**0.1771**	**0.0450**	**8.3000e-003**	**0.0533**		**364.6892**	**364.6892**	**8.9100e-003**		**364.9121**

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					0.5713	0.0000	0.5713	0.0865	0.0000	0.0865			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.5713**	**1.9386**	**2.5098**	**0.0865**	**1.8048**	**1.8913**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0320	1.0152	0.3000	2.1900e-003	0.0452	7.7000e-003	0.0529	0.0123	7.3700e-003	0.0197		229.1290	229.1290	3.7200e-003		229.2221
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	0.0954	0.0517	0.6735	1.3600e-003	0.1232	1.0100e-003	0.1242	0.0327	9.3000e-004	0.0336		135.5602	135.5602	5.1900e-003		135.6900
Total	**0.1274**	**1.0669**	**0.9735**	**3.5500e-003**	**0.1684**	**8.7100e-003**	**0.1771**	**0.0450**	**8.3000e-003**	**0.0533**		**364.6892**	**364.6892**	**8.9100e-003**		**364.9121**

3.3 Site Preparation - 2018

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					24.0883	0.0000	24.0883	13.2409	0.0000	13.2409			0.0000			0.0000
Off-Road	6.2610	66.0182	31.5262	0.0528		3.5601	3.5601		3.2753	3.2753		5,317.3491	5,317.3491	1.6554		5,358.7332
Total	**6.2610**	**66.0182**	**31.5262**	**0.0528**	**24.0883**	**3.5601**	**27.6484**	**13.2409**	**3.2753**	**16.5162**		**5,317.3491**	**5,317.3491**	**1.6554**		**5,358.7332**

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	0.1145	0.0620	0.8082	1.6400e-003	0.1479	1.2200e-003	0.1491	0.0392	1.1200e-003	0.0403		162.6722	162.6722	6.2300e-003		162.8280
Total	**0.1145**	**0.0620**	**0.8082**	**1.6400e-003**	**0.1479**	**1.2200e-003**	**0.1491**	**0.0392**	**1.1200e-003**	**0.0403**		**162.6722**	**162.6722**	**6.2300e-003**		**162.8280**

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					24.0883	0.0000	24.0883	13.2409	0.0000	13.2409			0.0000			0.0000
Off-Road	6.2610	66.0182	31.5262	0.0528		3.5601	3.5601		3.2753	3.2753	0.0000	5,317.3491	5,317.3491	1.6554		5,358.7332
Total	**6.2610**	**66.0182**	**31.5262**	**0.0528**	**24.0883**	**3.5601**	**27.6484**	**13.2409**	**3.2753**	**16.5162**	**0.0000**	**5,317.3491**	**5,317.3491**	**1.6554**		**5,358.7332**

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	0.1145	0.0620	0.8082	1.6400e-003	0.1479	1.2200e-003	0.1491	0.0392	1.1200e-003	0.0403		162.6722	162.6722	6.2300e-003		162.8280
Total	**0.1145**	**0.0620**	**0.8082**	**1.6400e-003**	**0.1479**	**1.2200e-003**	**0.1491**	**0.0392**	**1.1200e-003**	**0.0403**		**162.6722**	**162.6722**	**6.2300e-003**		**162.8280**

3.4 Grading - 2018

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					7.6345	0.0000	7.6345	3.4843	0.0000	3.4843			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230		6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**7.6345**	**2.6337**	**10.2682**	**3.4843**	**2.4230**	**5.9074**		**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

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	0.1272	0.0689	0.8980	1.8200e-003	0.1643	1.3500e-003	0.1657	0.0436	1.2500e-003	0.0448		180.7469	180.7469	6.9200e-003		180.9200
Total	**0.1272**	**0.0689**	**0.8980**	**1.8200e-003**	**0.1643**	**1.3500e-003**	**0.1657**	**0.0436**	**1.2500e-003**	**0.0448**		**180.7469**	**180.7469**	**6.9200e-003**		**180.9200**

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					7.6345	0.0000	7.6345	3.4843	0.0000	3.4843			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**7.6345**	**2.6337**	**10.2682**	**3.4843**	**2.4230**	**5.9074**	**0.0000**	**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

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	0.1272	0.0689	0.8980	1.8200e-003	0.1643	1.3500e-003	0.1657	0.0436	1.2500e-003	0.0448		180.7469	180.7469	6.9200e-003		180.9200
Total	**0.1272**	**0.0689**	**0.8980**	**1.8200e-003**	**0.1643**	**1.3500e-003**	**0.1657**	**0.0436**	**1.2500e-003**	**0.0448**		**180.7469**	**180.7469**	**6.9200e-003**		**180.9200**

3.4 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					7.6345	0.0000	7.6345	3.4843	0.0000	3.4843			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**7.6345**	**2.3827**	**10.0171**	**3.4843**	**2.1920**	**5.6764**		**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

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	0.1165	0.0606	0.7964	1.7500e-003	0.1643	1.2900e-003	0.1656	0.0436	1.1900e-003	0.0448		173.7462	173.7462	6.0500e-003		173.8975

Total	**0.1165**	**0.0606**	**0.7964**	**1.7500e-003**	**0.1643**	**1.2900e-003**	**0.1656**	**0.0436**	**1.1900e-003**	**0.0448**		**173.7462**	**173.7462**	**6.0500e-003**		**173.8975**

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					7.6345	0.0000	7.6345	3.4843	0.0000	3.4843			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**7.6345**	**2.3827**	**10.0171**	**3.4843**	**2.1920**	**5.6764**	**0.0000**	**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

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	0.1165	0.0606	0.7964	1.7500e-003	0.1643	1.2900e-003	0.1656	0.0436	1.1900e-003	0.0448		173.7462	173.7462	6.0500e-003		173.8975
Total	**0.1165**	**0.0606**	**0.7964**	**1.7500e-003**	**0.1643**	**1.2900e-003**	**0.1656**	**0.0436**	**1.1900e-003**	**0.0448**		**173.7462**	**173.7462**	**6.0500e-003**		**173.8975**

3.5 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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.2652	6.7294	2.2278	0.0133	0.3296	0.0574	0.3870	0.0948	0.0549	0.1496		1,391.5496	1,391.5496	0.0326		1,392.3634
Worker	0.7516	0.3910	5.1367	0.0113	1.0597	8.3000e-003	1.0680	0.2811	7.6500e-003	0.2887		1,120.6631	1,120.6631	0.0390		1,121.6388
Total	**1.0168**	**7.1205**	**7.3645**	**0.0246**	**1.3893**	**0.0657**	**1.4550**	**0.3758**	**0.0625**	**0.4384**		**2,512.2127**	**2,512.2127**	**0.0716**		**2,514.0022**

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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.2652	6.7294	2.2278	0.0133	0.3296	0.0574	0.3870	0.0948	0.0549	0.1496		1,391.5496	1,391.5496	0.0326		1,392.3634
Worker	0.7516	0.3910	5.1367	0.0113	1.0597	8.3000e-003	1.0680	0.2811	7.6500e-003	0.2887		1,120.6631	1,120.6631	0.0390		1,121.6388
Total	**1.0168**	**7.1205**	**7.3645**	**0.0246**	**1.3893**	**0.0657**	**1.4550**	**0.3758**	**0.0625**	**0.4384**		**2,512.2127**	**2,512.2127**	**0.0716**		**2,514.0022**

3.5 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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.2058	6.0812	1.9503	0.0133	0.3297	0.0353	0.3650	0.0948	0.0338	0.1285		1,385.3934	1,385.3934	0.0271		1,386.0698
Worker	0.6993	0.3484	4.6174	0.0109	1.0597	8.0400e-003	1.0677	0.2811	7.4100e-003	0.2885		1,085.9891	1,085.9891	0.0342		1,086.8442
Total	**0.9051**	**6.4295**	**6.5677**	**0.0242**	**1.3894**	**0.0434**	**1.4327**	**0.3758**	**0.0412**	**0.4170**		**2,471.3825**	**2,471.3825**	**0.0613**		**2,472.9140**

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.2058	6.0812	1.9503	0.0133	0.3297	0.0353	0.3650	0.0948	0.0338	0.1285		1,385.3934	1,385.3934	0.0271		1,386.0698
Worker	0.6993	0.3484	4.6174	0.0109	1.0597	8.0400e-003	1.0677	0.2811	7.4100e-003	0.2885		1,085.9891	1,085.9891	0.0342		1,086.8442
Total	**0.9051**	**6.4295**	**6.5677**	**0.0242**	**1.3894**	**0.0434**	**1.4327**	**0.3758**	**0.0412**	**0.4170**		**2,471.3825**	**2,471.3825**	**0.0613**		**2,472.9140**

3.6 Paving - 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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.2963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6529**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

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	0.0813	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	**0.0813**	**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**

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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.2963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6529**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

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	0.0813	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	**0.0813**	**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**

3.7 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	28.6133					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	**28.8555**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

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	0.1409	0.0702	0.9306	2.2000e-003	0.2136	1.6200e-003	0.2152	0.0567	1.4900e-003	0.0582		218.8815	218.8815	6.8900e-003		219.0539
Total	**0.1409**	**0.0702**	**0.9306**	**2.2000e-003**	**0.2136**	**1.6200e-003**	**0.2152**	**0.0567**	**1.4900e-003**	**0.0582**		**218.8815**	**218.8815**	**6.8900e-003**		**219.0539**

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	28.6133					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	**28.8555**	**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**

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	0.1409	0.0702	0.9306	2.2000e-003	0.2136	1.6200e-003	0.2152	0.0567	1.4900e-003	0.0582		218.8815	218.8815	6.8900e-003		219.0539
Total	**0.1409**	**0.0702**	**0.9306**	**2.2000e-003**	**0.2136**	**1.6200e-003**	**0.2152**	**0.0567**	**1.4900e-003**	**0.0582**		**218.8815**	**218.8815**	**6.8900e-003**		**219.0539**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1771	3.4992	12.6778	0.0343	2.8087	0.0395	2.8482	0.7509	0.0371	0.7880		3,433.0954	3,433.0954	0.1201		3,436.0976

Unmitigated	1.1771	3.4992	12.6778	0.0343	2.8087	0.0395	2.8482	0.7509	0.0371	0.7880		3,433.0954	3,433.0954	0.1201		3,436.0976

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	462.71	462.71	462.71	1,325,464	1,325,464
Total	462.71	462.71	462.71	1,325,464	1,325,464

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.512962	0.041542	0.225677	0.140684	0.035619	0.007151	0.016044	0.009270	0.001580	0.001207	0.005638	0.000826	0.001801
Single Family Housing	0.512962	0.041542	0.225677	0.140684	0.035619	0.007151	0.016044	0.009270	0.001580	0.001207	0.005638	0.000826	0.001801

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	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
NaturalGas Unmitigated	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1361.03	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Total		**0.0147**	**0.1254**	**0.0534**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**160.1214**	**160.1214**	**3.0700e-003**	**2.9400e-003**	**161.0729**

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.36103	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Total		**0.0147**	**0.1254**	**0.0534**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**160.1214**	**160.1214**	**3.0700e-003**	**2.9400e-003**	**161.0729**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	2.2815	0.6514	3.6549	4.0900e-003		0.0682	0.0682		0.0682	0.0682	0.0000	787.5038	787.5038	0.0209	0.0143	792.2959
Unmitigated	64.9561	1.2646	80.8478	0.1405		10.8784	10.8784		10.8784	10.8784	1,138.6410	483.6214	1,622.2624	1.0567	0.0896	1,675.3701

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	0.4312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	62.7462	1.2254	77.4534	0.1403		10.8597	10.8597		10.8597	10.8597	1,138.6410	477.5294	1,616.1704	1.0508	0.0896	1,669.1295
Landscaping	0.1034	0.0393	3.3944	1.8000e-004		0.0187	0.0187		0.0187	0.0187		6.0920	6.0920	5.9400e-003		6.2406
Total	**64.9560**	**1.2646**	**80.8478**	**0.1405**		**10.8784**	**10.8784**		**10.8784**	**10.8784**	**1,138.6410**	**483.6214**	**1,622.2624**	**1.0567**	**0.0896**	**1,675.3700**

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	0.4312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0716	0.6121	0.2605	3.9100e-003		0.0495	0.0495		0.0495	0.0495	0.0000	781.4118	781.4118	0.0150	0.0143	786.0553
Landscaping	0.1034	0.0393	3.3944	1.8000e-004		0.0187	0.0187		0.0187	0.0187		6.0920	6.0920	5.9400e-003		6.2406
Total	**2.2815**	**0.6514**	**3.6549**	**4.0900e-003**		**0.0682**	**0.0682**		**0.0682**	**0.0682**	**0.0000**	**787.5038**	**787.5038**	**0.0209**	**0.0143**	**792.2959**

7.0 Water Detail

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Vineyards at EDH - El Dorado-Mountain County County, Summer

Vineyards at EDH

El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	6.22	Acre	6.22	270,943.20	0
Single Family Housing	41.00	Dwelling Unit	42.23	73,800.00	110

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)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Year 2020 CO2 Intensity Factor provided by CPUC GHG Calculator: https://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf

Land Use - As provided by project applicant. CalEEMod does not provide a land use for agriculture (for the vineyards portion of the project). However, data to reflect vineyards is provided throughout this model. Pop = 2.68 x 41 units = 110

Construction Phase - Construction days estimated based on project size.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - One addition dozer and two additional tractors were added to the CalEEMod default off-road construction equipment (under the site preparation phase) to reflect the construction of the vineyards

Trips and VMT - 12 additional worker trips per day was added to the site preparation phase (above and beyond the CalEEMod defaults) to reflect the worker trips needed to establish the vineyard, based on data provided by the applicant.

Demolition - Approximately 12,000 square feet of buildings is assumed to be removed (6 buildings x approx. 2,000 square feet each).

Grading - Assumed entire project site (114.03) is graded, as a conservative estimate.

Architectural Coating - Per EDCAQMD Rule 215 - 150 g/L architectural coatings maximum for interior and exterior coatings.

Vehicle Trips - Single Family Housing trip rates provided by Kimley Horn. 474 daily trips/42 du = 11.28571 trips per du/day.

Woodstoves -

Area Coating - Per EDCAQMD Rule 215 - 150 g/L architectural coatings maximum for interior and exterior coatings.

Energy Use -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstructionPhase	NumDays	50.00	21.00
tblConstructionPhase	NumDays	740.00	340.00
tblConstructionPhase	PhaseEndDate	5/9/2018	10/1/2018
tblConstructionPhase	PhaseEndDate	6/20/2018	11/12/2018
tblConstructionPhase	PhaseEndDate	10/3/2018	2/25/2019
tblConstructionPhase	PhaseEndDate	8/4/2021	6/15/2020
tblConstructionPhase	PhaseEndDate	10/20/2021	8/31/2020
tblConstructionPhase	PhaseEndDate	1/5/2022	11/17/2020
tblConstructionPhase	PhaseStartDate	3/1/2018	9/1/2018

tblConstructionPhase	PhaseStartDate	5/10/2018	10/2/2018
tblConstructionPhase	PhaseStartDate	6/21/2018	11/13/2018
tblConstructionPhase	PhaseStartDate	10/4/2018	2/26/2019
tblConstructionPhase	PhaseStartDate	8/5/2021	6/16/2020
tblConstructionPhase	PhaseStartDate	10/21/2021	9/2/2020
tblGrading	AcresOfGrading	187.50	114.03
tblLandUse	LotAcreage	13.31	42.23
tblLandUse	Population	117.00	110.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	6.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	WorkerTripNumber	25.00	18.00
tblVehicleTrips	ST_TR	9.91	11.29
tblVehicleTrips	SU_TR	8.62	11.29
tblVehicleTrips	WD_TR	9.52	11.29

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	6.3755	66.0802	35.9874	0.0639	24.2362	3.5613	27.7975	13.2801	3.2764	16.5565	0.0000	6,425.1753	6,425.1753	1.9509	0.0000	6,473.9478
2019	4.8554	54.5808	34.1732	0.0638	7.7988	2.3839	10.1827	3.5279	2.1932	5.7211	0.0000	6,313.7657	6,313.7657	1.9487	0.0000	6,362.4829
2020	28.9965	25.6156	23.4162	0.0511	1.3894	1.1604	2.5498	0.3758	1.0915	1.4674	0.0000	5,024.4455	5,024.4455	0.7180	0.0000	5,041.5485
Maximum	**28.9965**	**66.0802**	**35.9874**	**0.0639**	**24.2362**	**3.5613**	**27.7975**	**13.2801**	**3.2764**	**16.5565**	**0.0000**	**6,425.1753**	**6,425.1753**	**1.9509**	**0.0000**	**6,473.9478**

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					
2018	6.3755	66.0802	35.9874	0.0639	24.2362	3.5613	27.7975	13.2801	3.2764	16.5565	0.0000	6,425.1753	6,425.1753	1.9509	0.0000	6,473.9478
2019	4.8554	54.5808	34.1732	0.0638	7.7988	2.3839	10.1827	3.5279	2.1932	5.7211	0.0000	6,313.7657	6,313.7657	1.9487	0.0000	6,362.4829
2020	28.9965	25.6156	23.4162	0.0511	1.3894	1.1604	2.5498	0.3758	1.0915	1.4674	0.0000	5,024.4455	5,024.4455	0.7180	0.0000	5,041.5485
Maximum	**28.9965**	**66.0802**	**35.9874**	**0.0639**	**24.2362**	**3.5613**	**27.7975**	**13.2801**	**3.2764**	**16.5565**	**0.0000**	**6,425.1753**	**6,425.1753**	**1.9509**	**0.0000**	**6,473.9478**

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

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	64.9561	1.2646	80.8478	0.1405		10.8784	10.8784		10.8784	10.8784	1,138.6410	483.6214	1,622.2624	1.0567	0.0896	1,675.3701
Energy	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Mobile	1.1771	3.4992	12.6778	0.0343	2.8087	0.0395	2.8482	0.7509	0.0371	0.7880		3,433.0954	3,433.0954	0.1201		3,436.0976
Total	**66.1479**	**4.8892**	**93.5790**	**0.1756**	**2.8087**	**10.9280**	**13.7367**	**0.7509**	**10.9256**	**11.6765**	**1,138.6410**	**4,076.8381**	**5,215.4791**	**1.1799**	**0.0925**	**5,272.5405**

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	2.2815	0.6514	3.6549	4.0900e-003		0.0682	0.0682		0.0682	0.0682	0.0000	787.5038	787.5038	0.0209	0.0143	792.2959
Energy	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Mobile	1.1771	3.4992	12.6778	0.0343	2.8087	0.0395	2.8482	0.7509	0.0371	0.7880		3,433.0954	3,433.0954	0.1201		3,436.0976
Total	**3.4733**	**4.2759**	**16.3861**	**0.0391**	**2.8087**	**0.1178**	**2.9265**	**0.7509**	**0.1154**	**0.8663**	**0.0000**	**4,380.7205**	**4,380.7205**	**0.1441**	**0.0173**	**4,389.4663**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**94.75**	**12.54**	**82.49**	**77.70**	**0.00**	**98.92**	**78.70**	**0.00**	**98.94**	**92.58**	**100.00**	**-7.45**	**16.01**	**87.79**	**81.33**	**16.75**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2018	10/1/2018	5	21	
2	Site Preparation	Site Preparation	10/2/2018	11/12/2018	5	30	
3	Grading	Grading	11/13/2018	2/25/2019	5	75	
4	Building Construction	Building Construction	2/26/2019	6/15/2020	5	340	
5	Paving	Paving	6/16/2020	8/31/2020	5	55	
6	Architectural Coating	Architectural Coating	9/2/2020	11/17/2020	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 114.03

Acres of Paving: 6.22

Residential Indoor: 149,445; Residential Outdoor: 49,815; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	4	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	6	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	55.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	10	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	129.00	49.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

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					0.5713	0.0000	0.5713	0.0865	0.0000	0.0865			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.5713**	**1.9386**	**2.5098**	**0.0865**	**1.8048**	**1.8913**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0320	1.0152	0.3000	2.1900e-003	0.0452	7.7000e-003	0.0529	0.0123	7.3700e-003	0.0197		229.1290	229.1290	3.7200e-003		229.2221
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	0.0954	0.0517	0.6735	1.3600e-003	0.1232	1.0100e-003	0.1242	0.0327	9.3000e-004	0.0336		135.5602	135.5602	5.1900e-003		135.6900

Total	**0.1274**	**1.0669**	**0.9735**	**3.5500e-003**	**0.1684**	**8.7100e-003**	**0.1771**	**0.0450**	**8.3000e-003**	**0.0533**		**364.6892**	**364.6892**	**8.9100e-003**		**364.9121**

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					0.5713	0.0000	0.5713	0.0865	0.0000	0.0865			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.5713**	**1.9386**	**2.5098**	**0.0865**	**1.8048**	**1.8913**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0320	1.0152	0.3000	2.1900e-003	0.0452	7.7000e-003	0.0529	0.0123	7.3700e-003	0.0197		229.1290	229.1290	3.7200e-003		229.2221
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	0.0954	0.0517	0.6735	1.3600e-003	0.1232	1.0100e-003	0.1242	0.0327	9.3000e-004	0.0336		135.5602	135.5602	5.1900e-003		135.6900
Total	**0.1274**	**1.0669**	**0.9735**	**3.5500e-003**	**0.1684**	**8.7100e-003**	**0.1771**	**0.0450**	**8.3000e-003**	**0.0533**		**364.6892**	**364.6892**	**8.9100e-003**		**364.9121**

3.3 Site Preparation - 2018

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					24.0883	0.0000	24.0883	13.2409	0.0000	13.2409			0.0000			0.0000
Off-Road	6.2610	66.0182	31.5262	0.0528		3.5601	3.5601		3.2753	3.2753		5,317.3491	5,317.3491	1.6554		5,358.7332
Total	**6.2610**	**66.0182**	**31.5262**	**0.0528**	**24.0883**	**3.5601**	**27.6484**	**13.2409**	**3.2753**	**16.5162**		**5,317.3491**	**5,317.3491**	**1.6554**		**5,358.7332**

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	0.1145	0.0620	0.8082	1.6400e-003	0.1479	1.2200e-003	0.1491	0.0392	1.1200e-003	0.0403		162.6722	162.6722	6.2300e-003		162.8280
Total	**0.1145**	**0.0620**	**0.8082**	**1.6400e-003**	**0.1479**	**1.2200e-003**	**0.1491**	**0.0392**	**1.1200e-003**	**0.0403**		**162.6722**	**162.6722**	**6.2300e-003**		**162.8280**

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					24.0883	0.0000	24.0883	13.2409	0.0000	13.2409			0.0000			0.0000
Off-Road	6.2610	66.0182	31.5262	0.0528		3.5601	3.5601		3.2753	3.2753	0.0000	5,317.3491	5,317.3491	1.6554		5,358.7332
Total	**6.2610**	**66.0182**	**31.5262**	**0.0528**	**24.0883**	**3.5601**	**27.6484**	**13.2409**	**3.2753**	**16.5162**	**0.0000**	**5,317.3491**	**5,317.3491**	**1.6554**		**5,358.7332**

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	0.1145	0.0620	0.8082	1.6400e-003	0.1479	1.2200e-003	0.1491	0.0392	1.1200e-003	0.0403		162.6722	162.6722	6.2300e-003		162.8280
Total	**0.1145**	**0.0620**	**0.8082**	**1.6400e-003**	**0.1479**	**1.2200e-003**	**0.1491**	**0.0392**	**1.1200e-003**	**0.0403**		**162.6722**	**162.6722**	**6.2300e-003**		**162.8280**

3.4 Grading - 2018

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					7.6345	0.0000	7.6345	3.4843	0.0000	3.4843			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230		6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**7.6345**	**2.6337**	**10.2682**	**3.4843**	**2.4230**	**5.9074**		**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

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	0.1272	0.0689	0.8980	1.8200e-003	0.1643	1.3500e-003	0.1657	0.0436	1.2500e-003	0.0448		180.7469	180.7469	6.9200e-003		180.9200
Total	**0.1272**	**0.0689**	**0.8980**	**1.8200e-003**	**0.1643**	**1.3500e-003**	**0.1657**	**0.0436**	**1.2500e-003**	**0.0448**		**180.7469**	**180.7469**	**6.9200e-003**		**180.9200**

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					7.6345	0.0000	7.6345	3.4843	0.0000	3.4843			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**7.6345**	**2.6337**	**10.2682**	**3.4843**	**2.4230**	**5.9074**	**0.0000**	**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

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	0.1272	0.0689	0.8980	1.8200e-003	0.1643	1.3500e-003	0.1657	0.0436	1.2500e-003	0.0448		180.7469	180.7469	6.9200e-003		180.9200
Total	**0.1272**	**0.0689**	**0.8980**	**1.8200e-003**	**0.1643**	**1.3500e-003**	**0.1657**	**0.0436**	**1.2500e-003**	**0.0448**		**180.7469**	**180.7469**	**6.9200e-003**		**180.9200**

3.4 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					7.6345	0.0000	7.6345	3.4843	0.0000	3.4843			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**7.6345**	**2.3827**	**10.0171**	**3.4843**	**2.1920**	**5.6764**		**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

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	0.1165	0.0606	0.7964	1.7500e-003	0.1643	1.2900e-003	0.1656	0.0436	1.1900e-003	0.0448		173.7462	173.7462	6.0500e-003		173.8975

Total	**0.1165**	**0.0606**	**0.7964**	**1.7500e-003**	**0.1643**	**1.2900e-003**	**0.1656**	**0.0436**	**1.1900e-003**	**0.0448**		**173.7462**	**173.7462**	**6.0500e-003**		**173.8975**

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					7.6345	0.0000	7.6345	3.4843	0.0000	3.4843			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**7.6345**	**2.3827**	**10.0171**	**3.4843**	**2.1920**	**5.6764**	**0.0000**	**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

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	0.1165	0.0606	0.7964	1.7500e-003	0.1643	1.2900e-003	0.1656	0.0436	1.1900e-003	0.0448		173.7462	173.7462	6.0500e-003		173.8975
Total	**0.1165**	**0.0606**	**0.7964**	**1.7500e-003**	**0.1643**	**1.2900e-003**	**0.1656**	**0.0436**	**1.1900e-003**	**0.0448**		**173.7462**	**173.7462**	**6.0500e-003**		**173.8975**

3.5 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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.2652	6.7294	2.2278	0.0133	0.3296	0.0574	0.3870	0.0948	0.0549	0.1496		1,391.5496	1,391.5496	0.0326		1,392.3634
Worker	0.7516	0.3910	5.1367	0.0113	1.0597	8.3000e-003	1.0680	0.2811	7.6500e-003	0.2887		1,120.6631	1,120.6631	0.0390		1,121.6388
Total	**1.0168**	**7.1205**	**7.3645**	**0.0246**	**1.3893**	**0.0657**	**1.4550**	**0.3758**	**0.0625**	**0.4384**		**2,512.2127**	**2,512.2127**	**0.0716**		**2,514.0022**

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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.2652	6.7294	2.2278	0.0133	0.3296	0.0574	0.3870	0.0948	0.0549	0.1496		1,391.5496	1,391.5496	0.0326		1,392.3634
Worker	0.7516	0.3910	5.1367	0.0113	1.0597	8.3000e-003	1.0680	0.2811	7.6500e-003	0.2887		1,120.6631	1,120.6631	0.0390		1,121.6388
Total	**1.0168**	**7.1205**	**7.3645**	**0.0246**	**1.3893**	**0.0657**	**1.4550**	**0.3758**	**0.0625**	**0.4384**		**2,512.2127**	**2,512.2127**	**0.0716**		**2,514.0022**

3.5 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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.2058	6.0812	1.9503	0.0133	0.3297	0.0353	0.3650	0.0948	0.0338	0.1285		1,385.3934	1,385.3934	0.0271		1,386.0698
Worker	0.6993	0.3484	4.6174	0.0109	1.0597	8.0400e-003	1.0677	0.2811	7.4100e-003	0.2885		1,085.9891	1,085.9891	0.0342		1,086.8442
Total	**0.9051**	**6.4295**	**6.5677**	**0.0242**	**1.3894**	**0.0434**	**1.4327**	**0.3758**	**0.0412**	**0.4170**		**2,471.3825**	**2,471.3825**	**0.0613**		**2,472.9140**

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.2058	6.0812	1.9503	0.0133	0.3297	0.0353	0.3650	0.0948	0.0338	0.1285		1,385.3934	1,385.3934	0.0271		1,386.0698
Worker	0.6993	0.3484	4.6174	0.0109	1.0597	8.0400e-003	1.0677	0.2811	7.4100e-003	0.2885		1,085.9891	1,085.9891	0.0342		1,086.8442
Total	**0.9051**	**6.4295**	**6.5677**	**0.0242**	**1.3894**	**0.0434**	**1.4327**	**0.3758**	**0.0412**	**0.4170**		**2,471.3825**	**2,471.3825**	**0.0613**		**2,472.9140**

3.6 Paving - 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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.2963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6529**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

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	0.0813	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	**0.0813**	**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**

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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.2963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6529**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

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	0.0813	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	**0.0813**	**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**

3.7 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	28.6133					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	**28.8555**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

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	0.1409	0.0702	0.9306	2.2000e-003	0.2136	1.6200e-003	0.2152	0.0567	1.4900e-003	0.0582		218.8815	218.8815	6.8900e-003		219.0539
Total	**0.1409**	**0.0702**	**0.9306**	**2.2000e-003**	**0.2136**	**1.6200e-003**	**0.2152**	**0.0567**	**1.4900e-003**	**0.0582**		**218.8815**	**218.8815**	**6.8900e-003**		**219.0539**

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	28.6133					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	**28.8555**	**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**

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	0.1409	0.0702	0.9306	2.2000e-003	0.2136	1.6200e-003	0.2152	0.0567	1.4900e-003	0.0582		218.8815	218.8815	6.8900e-003		219.0539
Total	**0.1409**	**0.0702**	**0.9306**	**2.2000e-003**	**0.2136**	**1.6200e-003**	**0.2152**	**0.0567**	**1.4900e-003**	**0.0582**		**218.8815**	**218.8815**	**6.8900e-003**		**219.0539**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1771	3.4992	12.6778	0.0343	2.8087	0.0395	2.8482	0.7509	0.0371	0.7880		3,433.0954	3,433.0954	0.1201		3,436.0976

Unmitigated	1.1771	3.4992	12.6778	0.0343	2.8087	0.0395	2.8482	0.7509	0.0371	0.7880		3,433.0954	3,433.0954	0.1201		3,436.0976

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	462.71	462.71	462.71	1,325,464	1,325,464
Total	462.71	462.71	462.71	1,325,464	1,325,464

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.512962	0.041542	0.225677	0.140684	0.035619	0.007151	0.016044	0.009270	0.001580	0.001207	0.005638	0.000826	0.001801
Single Family Housing	0.512962	0.041542	0.225677	0.140684	0.035619	0.007151	0.016044	0.009270	0.001580	0.001207	0.005638	0.000826	0.001801

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	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
NaturalGas Unmitigated	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1361.03	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Total		**0.0147**	**0.1254**	**0.0534**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**160.1214**	**160.1214**	**3.0700e-003**	**2.9400e-003**	**161.0729**

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.36103	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Total		**0.0147**	**0.1254**	**0.0534**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**160.1214**	**160.1214**	**3.0700e-003**	**2.9400e-003**	**161.0729**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	2.2815	0.6514	3.6549	4.0900e-003		0.0682	0.0682		0.0682	0.0682	0.0000	787.5038	787.5038	0.0209	0.0143	792.2959
Unmitigated	64.9561	1.2646	80.8478	0.1405		10.8784	10.8784		10.8784	10.8784	1,138.6410	483.6214	1,622.2624	1.0567	0.0896	1,675.3701

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	0.4312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	62.7462	1.2254	77.4534	0.1403		10.8597	10.8597		10.8597	10.8597	1,138.6410	477.5294	1,616.1704	1.0508	0.0896	1,669.1295
Landscaping	0.1034	0.0393	3.3944	1.8000e-004		0.0187	0.0187		0.0187	0.0187		6.0920	6.0920	5.9400e-003		6.2406
Total	**64.9560**	**1.2646**	**80.8478**	**0.1405**		**10.8784**	**10.8784**		**10.8784**	**10.8784**	**1,138.6410**	**483.6214**	**1,622.2624**	**1.0567**	**0.0896**	**1,675.3700**

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	0.4312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0716	0.6121	0.2605	3.9100e-003		0.0495	0.0495		0.0495	0.0495	0.0000	781.4118	781.4118	0.0150	0.0143	786.0553
Landscaping	0.1034	0.0393	3.3944	1.8000e-004		0.0187	0.0187		0.0187	0.0187		6.0920	6.0920	5.9400e-003		6.2406
Total	**2.2815**	**0.6514**	**3.6549**	**4.0900e-003**		**0.0682**	**0.0682**		**0.0682**	**0.0682**	**0.0000**	**787.5038**	**787.5038**	**0.0209**	**0.0143**	**792.2959**

7.0 Water Detail

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Trips and VMT - 12 additional worker trips per day was added to the site preparation phase (above and beyond the CalEEMod defaults) to reflect the worker trips needed to establish the vineyard, based on data provided by the applicant.

Demolition - Approximately 12,000 square feet of buildings is assumed to be removed (6 buildings x approx. 2,000 square feet each).

Grading - Assumed entire project site (114.03) is graded, as a conservative estimate.

Architectural Coating - Per EDCAQMD Rule 215 - 150 g/L architectural coatings maximum for interior and exterior coatings.

Vehicle Trips - Single Family Housing trip rates provided by Kimley Horn. 474 daily trips/42 du = 11.28571 trips per du/day.

Woodstoves -

Area Coating - Per EDCAQMD Rule 215 - 150 g/L architectural coatings maximum for interior and exterior coatings.

Energy Use -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstructionPhase	NumDays	50.00	21.00
tblConstructionPhase	NumDays	740.00	340.00
tblConstructionPhase	PhaseEndDate	5/9/2018	10/1/2018
tblConstructionPhase	PhaseEndDate	6/20/2018	11/12/2018
tblConstructionPhase	PhaseEndDate	10/3/2018	2/25/2019
tblConstructionPhase	PhaseEndDate	8/4/2021	6/15/2020
tblConstructionPhase	PhaseEndDate	10/20/2021	8/31/2020
tblConstructionPhase	PhaseEndDate	1/5/2022	11/17/2020
tblConstructionPhase	PhaseStartDate	3/1/2018	9/1/2018

tblConstructionPhase	PhaseStartDate	5/10/2018	10/2/2018
tblConstructionPhase	PhaseStartDate	6/21/2018	11/13/2018
tblConstructionPhase	PhaseStartDate	10/4/2018	2/26/2019
tblConstructionPhase	PhaseStartDate	8/5/2021	6/16/2020
tblConstructionPhase	PhaseStartDate	10/21/2021	9/2/2020
tblGrading	AcresOfGrading	187.50	114.03
tblLandUse	LotAcreage	13.31	42.23
tblLandUse	Population	117.00	110.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	6.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	WorkerTripNumber	25.00	18.00
tblVehicleTrips	ST_TR	9.91	11.29
tblVehicleTrips	SU_TR	8.62	11.29
tblVehicleTrips	WD_TR	9.52	11.29

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.2269	2.4484	1.3568	2.3700e-003	0.5398	0.1200	0.6597	0.2657	0.1106	0.3763	0.0000	216.4295	216.4295	0.0638	0.0000	218.0249
2019	0.4640	4.2324	3.3674	6.8600e-003	0.3314	0.1975	0.5290	0.1136	0.1848	0.2984	0.0000	616.2822	616.2822	0.1057	0.0000	618.9250
2020	1.0214	1.9719	1.8704	3.7800e-003	0.0882	0.0929	0.1811	0.0239	0.0871	0.1110	0.0000	336.1818	336.1818	0.0555	0.0000	337.5689
Maximum	**1.0214**	**4.2324**	**3.3674**	**6.8600e-003**	**0.5398**	**0.1975**	**0.6597**	**0.2657**	**0.1848**	**0.3763**	**0.0000**	**616.2822**	**616.2822**	**0.1057**	**0.0000**	**618.9250**

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					
2018	0.2269	2.4484	1.3568	2.3700e-003	0.5398	0.1200	0.6597	0.2657	0.1106	0.3763	0.0000	216.4293	216.4293	0.0638	0.0000	218.0247
2019	0.4640	4.2324	3.3674	6.8600e-003	0.3314	0.1975	0.5290	0.1136	0.1848	0.2984	0.0000	616.2818	616.2818	0.1057	0.0000	618.9246
2020	1.0214	1.9719	1.8704	3.7800e-003	0.0882	0.0929	0.1811	0.0239	0.0871	0.1110	0.0000	336.1816	336.1816	0.0555	0.0000	337.5686
Maximum	**1.0214**	**4.2324**	**3.3674**	**6.8600e-003**	**0.5398**	**0.1975**	**0.6597**	**0.2657**	**0.1848**	**0.3763**	**0.0000**	**616.2818**	**616.2818**	**0.1057**	**0.0000**	**618.9246**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
3	9-1-2018	11-30-2018	1.9825	1.9825
4	12-1-2018	2-28-2019	1.9409	1.9409
5	3-1-2019	5-31-2019	1.0407	1.0407
6	6-1-2019	8-31-2019	1.0375	1.0375
7	9-1-2019	11-30-2019	1.0325	1.0325
8	12-1-2019	2-29-2020	0.9717	0.9717
9	3-1-2020	5-31-2020	0.9437	0.9437
10	6-1-2020	8-31-2020	0.5890	0.5890
11	9-1-2020	9-30-2020	0.3185	0.3185
		Highest	1.9825	1.9825

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	2.9663	0.0538	3.4811	5.7700e-003		0.4469	0.4469		0.4469	0.4469	42.3513	18.2589	60.6102	0.0396	3.3300e-003	62.5921
Energy	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	85.7821	85.7821	6.4400e-003	1.7100e-003	86.4533
Mobile	0.1802	0.6777	2.2037	5.8300e-003	0.4902	7.1900e-003	0.4974	0.1315	6.7600e-003	0.1383	0.0000	530.5039	530.5039	0.0193	0.0000	530.9868
Waste						0.0000	0.0000		0.0000	0.0000	5.5823	0.0000	5.5823	0.3299	0.0000	13.8298
Water						0.0000	0.0000		0.0000	0.0000	0.8475	2.6767	3.5242	0.0873	2.1100e-003	6.3360
Total	**3.1492**	**0.7544**	**5.6946**	**0.0118**	**0.4902**	**0.4560**	**0.9462**	**0.1315**	**0.4555**	**0.5871**	**48.7810**	**637.2216**	**686.0026**	**0.4825**	**7.1500e-003**	**700.1980**

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	0.3967	0.0286	0.3162	1.8000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	29.5617	29.5617	1.0400e-003	5.3000e-004	29.7465
Energy	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	85.7821	85.7821	6.4400e-003	1.7100e-003	86.4533
Mobile	0.1802	0.6777	2.2037	5.8300e-003	0.4902	7.1900e-003	0.4974	0.1315	6.7600e-003	0.1383	0.0000	530.5039	530.5039	0.0193	0.0000	530.9868
Waste						0.0000	0.0000		0.0000	0.0000	5.5823	0.0000	5.5823	0.3299	0.0000	13.8298
Water						0.0000	0.0000		0.0000	0.0000	0.8475	2.6767	3.5242	0.0873	2.1100e-003	6.3360
Total	**0.5796**	**0.7293**	**2.5296**	**6.1600e-003**	**0.4902**	**0.0128**	**0.5029**	**0.1315**	**0.0123**	**0.1438**	**6.4297**	**648.5244**	**654.9541**	**0.4440**	**4.3500e-003**	**667.3524**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	81.60	3.33	55.58	47.57	0.00	97.20	46.84	0.00	97.30	75.50	86.82	-1.77	4.53	7.98	39.16	4.69

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2018	10/1/2018	5	21	
2	Site Preparation	Site Preparation	10/2/2018	11/12/2018	5	30	
3	Grading	Grading	11/13/2018	2/25/2019	5	75	
4	Building Construction	Building Construction	2/26/2019	6/15/2020	5	340	
5	Paving	Paving	6/16/2020	8/31/2020	5	55	
6	Architectural Coating	Architectural Coating	9/2/2020	11/17/2020	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 114.03

Acres of Paving: 6.22

Residential Indoor: 149,445; Residential Outdoor: 49,815; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	4	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	6	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40

Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	55.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	10	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	129.00	49.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

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					6.0000e-003	0.0000	6.0000e-003	9.1000e-004	0.0000	9.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0391	0.4024	0.2342	4.1000e-004		0.0204	0.0204		0.0190	0.0190	0.0000	36.8803	36.8803	0.0102	0.0000	37.1343
Total	**0.0391**	**0.4024**	**0.2342**	**4.1000e-004**	**6.0000e-003**	**0.0204**	**0.0264**	**9.1000e-004**	**0.0190**	**0.0199**	**0.0000**	**36.8803**	**36.8803**	**0.0102**	**0.0000**	**37.1343**

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	3.4000e-004	0.0110	3.2200e-003	2.0000e-005	4.6000e-004	8.0000e-005	5.4000e-004	1.3000e-004	8.0000e-005	2.0000e-004	0.0000	2.1729	2.1729	4.0000e-005	0.0000	2.1738
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	9.2000e-004	6.2000e-004	6.5700e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2500e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1920	1.1920	5.0000e-005	0.0000	1.1931
Total	**1.2600e-003**	**0.0116**	**9.7900e-003**	**3.0000e-005**	**1.7000e-003**	**9.0000e-005**	**1.7900e-003**	**4.6000e-004**	**9.0000e-005**	**5.4000e-004**	**0.0000**	**3.3649**	**3.3649**	**9.0000e-005**	**0.0000**	**3.3670**

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					6.0000e-003	0.0000	6.0000e-003	9.1000e-004	0.0000	9.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0391	0.4024	0.2342	4.1000e-004		0.0204	0.0204		0.0190	0.0190	0.0000	36.8802	36.8802	0.0102	0.0000	37.1343

Total	**0.0391**	**0.4024**	**0.2342**	**4.1000e-004**	**6.0000e-003**	**0.0204**	**0.0264**	**9.1000e-004**	**0.0190**	**0.0199**	**0.0000**	**36.8802**	**36.8802**	**0.0102**	**0.0000**	**37.1343**

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	3.4000e-004	0.0110	3.2200e-003	2.0000e-005	4.6000e-004	8.0000e-005	5.4000e-004	1.3000e-004	8.0000e-005	2.0000e-004	0.0000	2.1729	2.1729	4.0000e-005	0.0000	2.1738
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	9.2000e-004	6.2000e-004	6.5700e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2500e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1920	1.1920	5.0000e-005	0.0000	1.1931
Total	**1.2600e-003**	**0.0116**	**9.7900e-003**	**3.0000e-005**	**1.7000e-003**	**9.0000e-005**	**1.7900e-003**	**4.6000e-004**	**9.0000e-005**	**5.4000e-004**	**0.0000**	**3.3649**	**3.3649**	**9.0000e-005**	**0.0000**	**3.3670**

3.3 Site Preparation - 2018

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					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0939	0.9903	0.4729	7.9000e-004		0.0534	0.0534		0.0491	0.0491	0.0000	72.3573	72.3573	0.0225	0.0000	72.9204
Total	**0.0939**	**0.9903**	**0.4729**	**7.9000e-004**	**0.3613**	**0.0534**	**0.4147**	**0.1986**	**0.0491**	**0.2477**	**0.0000**	**72.3573**	**72.3573**	**0.0225**	**0.0000**	**72.9204**

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	1.5800e-003	1.0600e-003	0.0113	2.0000e-005	2.1300e-003	2.0000e-005	2.1400e-003	5.7000e-004	2.0000e-005	5.8000e-004	0.0000	2.0434	2.0434	8.0000e-005	0.0000	2.0454
Total	**1.5800e-003**	**1.0600e-003**	**0.0113**	**2.0000e-005**	**2.1300e-003**	**2.0000e-005**	**2.1400e-003**	**5.7000e-004**	**2.0000e-005**	**5.8000e-004**	**0.0000**	**2.0434**	**2.0434**	**8.0000e-005**	**0.0000**	**2.0454**

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					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0939	0.9903	0.4729	7.9000e-004		0.0534	0.0534		0.0491	0.0491	0.0000	72.3572	72.3572	0.0225	0.0000	72.9203
Total	**0.0939**	**0.9903**	**0.4729**	**7.9000e-004**	**0.3613**	**0.0534**	**0.4147**	**0.1986**	**0.0491**	**0.2477**	**0.0000**	**72.3572**	**72.3572**	**0.0225**	**0.0000**	**72.9203**

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	1.5800e-003	1.0600e-003	0.0113	2.0000e-005	2.1300e-003	2.0000e-005	2.1400e-003	5.7000e-004	2.0000e-005	5.8000e-004	0.0000	2.0434	2.0434	8.0000e-005	0.0000	2.0454
Total	**1.5800e-003**	**1.0600e-003**	**0.0113**	**2.0000e-005**	**2.1300e-003**	**2.0000e-005**	**2.1400e-003**	**5.7000e-004**	**2.0000e-005**	**5.8000e-004**	**0.0000**	**2.0434**	**2.0434**	**8.0000e-005**	**0.0000**	**2.0454**

3.4 Grading - 2018

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					0.1659	0.0000	0.1659	0.0645	0.0000	0.0645	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0891	1.0416	0.6141	1.0900e-003		0.0461	0.0461		0.0424	0.0424	0.0000	99.1349	99.1349	0.0309	0.0000	99.9064
Total	**0.0891**	**1.0416**	**0.6141**	**1.0900e-003**	**0.1659**	**0.0461**	**0.2119**	**0.0645**	**0.0424**	**0.1069**	**0.0000**	**99.1349**	**99.1349**	**0.0309**	**0.0000**	**99.9064**

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	2.0500e-003	1.3800e-003	0.0146	3.0000e-005	2.7600e-003	2.0000e-005	2.7800e-003	7.3000e-004	2.0000e-005	7.6000e-004	0.0000	2.6488	2.6488	1.0000e-004	0.0000	2.6514
Total	**2.0500e-003**	**1.3800e-003**	**0.0146**	**3.0000e-005**	**2.7600e-003**	**2.0000e-005**	**2.7800e-003**	**7.3000e-004**	**2.0000e-005**	**7.6000e-004**	**0.0000**	**2.6488**	**2.6488**	**1.0000e-004**	**0.0000**	**2.6514**

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					0.1659	0.0000	0.1659	0.0645	0.0000	0.0645	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0891	1.0416	0.6141	1.0900e-003		0.0461	0.0461		0.0424	0.0424	0.0000	99.1348	99.1348	0.0309	0.0000	99.9063
Total	**0.0891**	**1.0416**	**0.6141**	**1.0900e-003**	**0.1659**	**0.0461**	**0.2119**	**0.0645**	**0.0424**	**0.1069**	**0.0000**	**99.1348**	**99.1348**	**0.0309**	**0.0000**	**99.9063**

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	2.0500e-003	1.3800e-003	0.0146	3.0000e-005	2.7600e-003	2.0000e-005	2.7800e-003	7.3000e-004	2.0000e-005	7.6000e-004	0.0000	2.6488	2.6488	1.0000e-004	0.0000	2.6514
Total	**2.0500e-003**	**1.3800e-003**	**0.0146**	**3.0000e-005**	**2.7600e-003**	**2.0000e-005**	**2.7800e-003**	**7.3000e-004**	**2.0000e-005**	**7.6000e-004**	**0.0000**	**2.6488**	**2.6488**	**1.0000e-004**	**0.0000**	**2.6514**

3.4 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					0.1809	0.0000	0.1809	0.0727	0.0000	0.0727	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0948	1.0904	0.6675	1.2400e-003		0.0477	0.0477		0.0438	0.0438	0.0000	111.4026	111.4026	0.0353	0.0000	112.2838
Total	**0.0948**	**1.0904**	**0.6675**	**1.2400e-003**	**0.1809**	**0.0477**	**0.2286**	**0.0727**	**0.0438**	**0.1166**	**0.0000**	**111.4026**	**111.4026**	**0.0353**	**0.0000**	**112.2838**

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	2.1400e-003	1.3900e-003	0.0148	3.0000e-005	3.1500e-003	3.0000e-005	3.1700e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.9098	2.9098	1.0000e-004	0.0000	2.9124
Total	**2.1400e-003**	**1.3900e-003**	**0.0148**	**3.0000e-005**	**3.1500e-003**	**3.0000e-005**	**3.1700e-003**	**8.4000e-004**	**2.0000e-005**	**8.6000e-004**	**0.0000**	**2.9098**	**2.9098**	**1.0000e-004**	**0.0000**	**2.9124**

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					0.1809	0.0000	0.1809	0.0727	0.0000	0.0727	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0948	1.0904	0.6675	1.2400e-003		0.0477	0.0477		0.0438	0.0438	0.0000	111.4025	111.4025	0.0353	0.0000	112.2837
Total	**0.0948**	**1.0904**	**0.6675**	**1.2400e-003**	**0.1809**	**0.0477**	**0.2286**	**0.0727**	**0.0438**	**0.1166**	**0.0000**	**111.4025**	**111.4025**	**0.0353**	**0.0000**	**112.2837**

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	2.1400e-003	1.3900e-003	0.0148	3.0000e-005	3.1500e-003	3.0000e-005	3.1700e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.9098	2.9098	1.0000e-004	0.0000	2.9124
Total	**2.1400e-003**	**1.3900e-003**	**0.0148**	**3.0000e-005**	**3.1500e-003**	**3.0000e-005**	**3.1700e-003**	**8.4000e-004**	**2.0000e-005**	**8.6000e-004**	**0.0000**	**2.9098**	**2.9098**	**1.0000e-004**	**0.0000**	**2.9124**

3.5 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	0.2609	2.3292	1.8966	2.9700e-003		0.1425	0.1425		0.1340	0.1340	0.0000	259.7901	259.7901	0.0633	0.0000	261.3723
Total	**0.2609**	**2.3292**	**1.8966**	**2.9700e-003**		**0.1425**	**0.1425**		**0.1340**	**0.1340**	**0.0000**	**259.7901**	**259.7901**	**0.0633**	**0.0000**	**261.3723**

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	0.0298	0.7620	0.2629	1.4600e-003	0.0352	6.3900e-003	0.0416	0.0102	6.1100e-003	0.0163	0.0000	138.4858	138.4858	3.4000e-003	0.0000	138.5708
Worker	0.0764	0.0494	0.5256	1.1500e-003	0.1122	9.2000e-004	0.1131	0.0299	8.5000e-004	0.0307	0.0000	103.6939	103.6939	3.6700e-003	0.0000	103.7857
Total	**0.1062**	**0.8114**	**0.7885**	**2.6100e-003**	**0.1474**	**7.3100e-003**	**0.1547**	**0.0400**	**6.9600e-003**	**0.0470**	**0.0000**	**242.1797**	**242.1797**	**7.0700e-003**	**0.0000**	**242.3565**

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	0.2609	2.3292	1.8966	2.9700e-003		0.1425	0.1425		0.1340	0.1340	0.0000	259.7898	259.7898	0.0633	0.0000	261.3720
Total	**0.2609**	**2.3292**	**1.8966**	**2.9700e-003**		**0.1425**	**0.1425**		**0.1340**	**0.1340**	**0.0000**	**259.7898**	**259.7898**	**0.0633**	**0.0000**	**261.3720**

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	0.0298	0.7620	0.2629	1.4600e-003	0.0352	6.3900e-003	0.0416	0.0102	6.1100e-003	0.0163	0.0000	138.4858	138.4858	3.4000e-003	0.0000	138.5708
Worker	0.0764	0.0494	0.5256	1.1500e-003	0.1122	9.2000e-004	0.1131	0.0299	8.5000e-004	0.0307	0.0000	103.6939	103.6939	3.6700e-003	0.0000	103.7857
Total	**0.1062**	**0.8114**	**0.7885**	**2.6100e-003**	**0.1474**	**7.3100e-003**	**0.1547**	**0.0400**	**6.9600e-003**	**0.0470**	**0.0000**	**242.1797**	**242.1797**	**7.0700e-003**	**0.0000**	**242.3565**

3.5 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	0.1261	1.1416	1.0025	1.6000e-003		0.0665	0.0665		0.0625	0.0625	0.0000	137.8079	137.8079	0.0336	0.0000	138.6485
Total	**0.1261**	**1.1416**	**1.0025**	**1.6000e-003**		**0.0665**	**0.0665**		**0.0625**	**0.0625**	**0.0000**	**137.8079**	**137.8079**	**0.0336**	**0.0000**	**138.6485**

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	0.0125	0.3701	0.1241	7.8000e-004	0.0189	2.1200e-003	0.0211	5.4700e-003	2.0300e-003	7.5000e-003	0.0000	74.2236	74.2236	1.5200e-003	0.0000	74.2617
Worker	0.0382	0.0237	0.2533	6.0000e-004	0.0604	4.8000e-004	0.0609	0.0161	4.4000e-004	0.0165	0.0000	54.1036	54.1036	1.7300e-003	0.0000	54.1468
Total	**0.0507**	**0.3938**	**0.3774**	**1.3800e-003**	**0.0794**	**2.6000e-003**	**0.0820**	**0.0216**	**2.4700e-003**	**0.0240**	**0.0000**	**128.3272**	**128.3272**	**3.2500e-003**	**0.0000**	**128.4085**

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	0.1261	1.1416	1.0025	1.6000e-003		0.0665	0.0665		0.0625	0.0625	0.0000	137.8078	137.8078	0.0336	0.0000	138.6483
Total	**0.1261**	**1.1416**	**1.0025**	**1.6000e-003**		**0.0665**	**0.0665**		**0.0625**	**0.0625**	**0.0000**	**137.8078**	**137.8078**	**0.0336**	**0.0000**	**138.6483**

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	0.0125	0.3701	0.1241	7.8000e-004	0.0189	2.1200e-003	0.0211	5.4700e-003	2.0300e-003	7.5000e-003	0.0000	74.2236	74.2236	1.5200e-003	0.0000	74.2617
Worker	0.0382	0.0237	0.2533	6.0000e-004	0.0604	4.8000e-004	0.0609	0.0161	4.4000e-004	0.0165	0.0000	54.1036	54.1036	1.7300e-003	0.0000	54.1468
Total	**0.0507**	**0.3938**	**0.3774**	**1.3800e-003**	**0.0794**	**2.6000e-003**	**0.0820**	**0.0216**	**2.4700e-003**	**0.0240**	**0.0000**	**128.3272**	**128.3272**	**3.2500e-003**	**0.0000**	**128.4085**

3.6 Paving - 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	0.0373	0.3868	0.4029	6.3000e-004		0.0207	0.0207		0.0191	0.0191	0.0000	55.0776	55.0776	0.0178	0.0000	55.5229
Paving	8.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0455**	**0.3868**	**0.4029**	**6.3000e-004**		**0.0207**	**0.0207**		**0.0191**	**0.0191**	**0.0000**	**55.0776**	**55.0776**	**0.0178**	**0.0000**	**55.5229**

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	2.0500e-003	1.2700e-003	0.0136	3.0000e-005	3.2500e-003	3.0000e-005	3.2700e-003	8.6000e-004	2.0000e-005	8.9000e-004	0.0000	2.9077	2.9077	9.0000e-005	0.0000	2.9100
Total	**2.0500e-003**	**1.2700e-003**	**0.0136**	**3.0000e-005**	**3.2500e-003**	**3.0000e-005**	**3.2700e-003**	**8.6000e-004**	**2.0000e-005**	**8.9000e-004**	**0.0000**	**2.9077**	**2.9077**	**9.0000e-005**	**0.0000**	**2.9100**

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	0.0373	0.3868	0.4029	6.3000e-004		0.0207	0.0207		0.0191	0.0191	0.0000	55.0775	55.0775	0.0178	0.0000	55.5229

Paving	8.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0455**	**0.3868**	**0.4029**	**6.3000e-004**		**0.0207**	**0.0207**		**0.0191**	**0.0191**	**0.0000**	**55.0775**	**55.0775**	**0.0178**	**0.0000**	**55.5229**

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	2.0500e-003	1.2700e-003	0.0136	3.0000e-005	3.2500e-003	3.0000e-005	3.2700e-003	8.6000e-004	2.0000e-005	8.9000e-004	0.0000	2.9077	2.9077	9.0000e-005	0.0000	2.9100
Total	**2.0500e-003**	**1.2700e-003**	**0.0136**	**3.0000e-005**	**3.2500e-003**	**3.0000e-005**	**3.2700e-003**	**8.6000e-004**	**2.0000e-005**	**8.9000e-004**	**0.0000**	**2.9077**	**2.9077**	**9.0000e-005**	**0.0000**	**2.9100**

3.7 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	0.7869					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6600e-003	0.0463	0.0504	8.0000e-005		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	7.0215	7.0215	5.4000e-004	0.0000	7.0350
Total	**0.7935**	**0.0463**	**0.0504**	**8.0000e-005**		**3.0500e-003**	**3.0500e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**7.0215**	**7.0215**	**5.4000e-004**	**0.0000**	**7.0350**

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	3.5600e-003	2.2000e-003	0.0236	6.0000e-005	5.6300e-003	4.0000e-005	5.6700e-003	1.5000e-003	4.0000e-005	1.5400e-003	0.0000	5.0399	5.0399	1.6000e-004	0.0000	5.0440
Total	**3.5600e-003**	**2.2000e-003**	**0.0236**	**6.0000e-005**	**5.6300e-003**	**4.0000e-005**	**5.6700e-003**	**1.5000e-003**	**4.0000e-005**	**1.5400e-003**	**0.0000**	**5.0399**	**5.0399**	**1.6000e-004**	**0.0000**	**5.0440**

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	0.7869					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6600e-003	0.0463	0.0504	8.0000e-005		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	7.0214	7.0214	5.4000e-004	0.0000	7.0350
Total	**0.7935**	**0.0463**	**0.0504**	**8.0000e-005**		**3.0500e-003**	**3.0500e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**7.0214**	**7.0214**	**5.4000e-004**	**0.0000**	**7.0350**

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	3.5600e-003	2.2000e-003	0.0236	6.0000e-005	5.6300e-003	4.0000e-005	5.6700e-003	1.5000e-003	4.0000e-005	1.5400e-003	0.0000	5.0399	5.0399	1.6000e-004	0.0000	5.0440
Total	**3.5600e-003**	**2.2000e-003**	**0.0236**	**6.0000e-005**	**5.6300e-003**	**4.0000e-005**	**5.6700e-003**	**1.5000e-003**	**4.0000e-005**	**1.5400e-003**	**0.0000**	**5.0399**	**5.0399**	**1.6000e-004**	**0.0000**	**5.0440**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1802	0.6777	2.2037	5.8300e-003	0.4902	7.1900e-003	0.4974	0.1315	6.7600e-003	0.1383	0.0000	530.5039	530.5039	0.0193	0.0000	530.9868
Unmitigated	0.1802	0.6777	2.2037	5.8300e-003	0.4902	7.1900e-003	0.4974	0.1315	6.7600e-003	0.1383	0.0000	530.5039	530.5039	0.0193	0.0000	530.9868

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	462.71	462.71	462.71	1,325,464	1,325,464
Total	462.71	462.71	462.71	1,325,464	1,325,464

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.512962	0.041542	0.225677	0.140684	0.035619	0.007151	0.016044	0.009270	0.001580	0.001207	0.005638	0.000826	0.001801
Single Family Housing	0.512962	0.041542	0.225677	0.140684	0.035619	0.007151	0.016044	0.009270	0.001580	0.001207	0.005638	0.000826	0.001801

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	59.2722	59.2722	5.9300e-003	1.2300e-003	59.7859
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	59.2722	59.2722	5.9300e-003	1.2300e-003	59.7859
NaturalGas Mitigated	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	26.5099	26.5099	5.1000e-004	4.9000e-004	26.6674
NaturalGas Unmitigated	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	26.5099	26.5099	5.1000e-004	4.9000e-004	26.6674

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	496777	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	26.5099	26.5099	5.1000e-004	4.9000e-004	26.6674
Total		**2.6800e-003**	**0.0229**	**9.7400e-003**	**1.5000e-004**		**1.8500e-003**	**1.8500e-003**		**1.8500e-003**	**1.8500e-003**	**0.0000**	**26.5099**	**26.5099**	**5.1000e-004**	**4.9000e-004**	**26.6674**

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	496777	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	26.5099	26.5099	5.1000e-004	4.9000e-004	26.6674
Total		**2.6800e-003**	**0.0229**	**9.7400e-003**	**1.5000e-004**		**1.8500e-003**	**1.8500e-003**		**1.8500e-003**	**1.8500e-003**	**0.0000**	**26.5099**	**26.5099**	**5.1000e-004**	**4.9000e-004**	**26.6674**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	94830.1	12.4741	1.2500e-003	2.6000e-004	12.5822
Single Family Housing	355766	46.7981	4.6800e-003	9.7000e-004	47.2036

Total		**59.2722**	**5.9300e-003**	**1.2300e-003**	**59.7859**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	94830.1	12.4741	1.2500e-003	2.6000e-004	12.5822
Single Family Housing	355766	46.7981	4.6800e-003	9.7000e-004	47.2036
Total		**59.2722**	**5.9300e-003**	**1.2300e-003**	**59.7859**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	0.3967	0.0286	0.3162	1.8000e-004		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.0000	29.5617	29.5617	1.0400e-003	5.3000e-004	29.7465
Unmitigated	2.9663	0.0538	3.4811	5.7700e-003		0.4469	0.4469		0.4469	0.4469	42.3513	18.2589	60.6102	0.0396	3.3300e-003	62.5921

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	0.0787					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.5726	0.0502	3.1756	5.7500e-003		0.4453	0.4453		0.4453	0.4453	42.3513	17.7615	60.1128	0.0391	3.3300e-003	62.0826
Landscaping	9.3100e-003	3.5300e-003	0.3055	2.0000e-005		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	0.4974	0.4974	4.9000e-004	0.0000	0.5095
Total	**2.9663**	**0.0538**	**3.4811**	**5.7700e-003**		**0.4469**	**0.4469**		**0.4469**	**0.4469**	**42.3513**	**18.2589**	**60.6102**	**0.0396**	**3.3300e-003**	**62.5921**

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	0.0787					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.9400e-003	0.0251	0.0107	1.6000e-004		2.0300e-003	2.0300e-003		2.0300e-003	2.0300e-003	0.0000	29.0643	29.0643	5.6000e-004	5.3000e-004	29.2370
Landscaping	9.3100e-003	3.5300e-003	0.3055	2.0000e-005		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	0.4974	0.4974	4.9000e-004	0.0000	0.5095
Total	**0.3967**	**0.0286**	**0.3162**	**1.8000e-004**		**3.7100e-003**	**3.7100e-003**		**3.7100e-003**	**3.7100e-003**	**0.0000**	**29.5617**	**29.5617**	**1.0500e-003**	**5.3000e-004**	**29.7465**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.5242	0.0873	2.1100e-003	6.3360
Unmitigated	3.5242	0.0873	2.1100e-003	6.3360

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.67132 / 1.68409	3.5242	0.0873	2.1100e-003	6.3360
Total		**3.5242**	**0.0873**	**2.1100e-003**	**6.3360**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.67132 / 1.68409	3.5242	0.0873	2.1100e-003	6.3360
Total		**3.5242**	**0.0873**	**2.1100e-003**	**6.3360**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5.5823	0.3299	0.0000	13.8298
Unmitigated	5.5823	0.3299	0.0000	13.8298

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000

Single Family Housing	27.5	5.5823	0.3299	0.0000	13.8298
Total		**5.5823**	**0.3299**	**0.0000**	**13.8298**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	27.5	5.5823	0.3299	0.0000	13.8298
Total		**5.5823**	**0.3299**	**0.0000**	**13.8298**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Vineyards at EDH - Future Year 2030 - El Dorado-Mountain County County, Annual

Vineyards at EDH - Future Year 2030

El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	6.22	Acre	6.22	270,943.20	0
Single Family Housing	41.00	Dwelling Unit	42.23	73,800.00	110

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	217.5	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Year 2030 CO2 Intensity Factor provided by extrapolating Year 2020 factor from the CPUC GHG Calculator (from 33% to 50% renewable): https://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf

Land Use - As provided by project applicant. CalEEMod does not provide a land use for agriculture (for the vineyards portion of the project). However, data to reflect vineyards is provided throughout this model. Pop = 2.68 x # of units

Construction Phase - No construction modelled for this model run (year 2030).

Off-road Equipment -

Off-road Equipment - No construction modelled.

Trips and VMT -

Demolition -

Grading - No construction modelled.

Architectural Coating -

Vehicle Trips - Single Family Housing trip rates provided by Kimley Horn. 474 daily trips/42 du = 11.28571 trips per du/day.

Woodstoves -

Area Coating - Per EDCAQMD Rule 215 - 150 g/L architectural coatings maximum for interior and exterior coatings.

Energy Use -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblLandUse	LotAcreage	13.31	42.23
tblLandUse	Population	117.00	110.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	217.5
tblVehicleTrips	ST_TR	9.91	11.29
tblVehicleTrips	SU_TR	8.62	11.29
tblVehicleTrips	WD_TR	9.52	11.29

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

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

2018	0.0700	0.7240	0.3484	5.9000e-004	0.2731	0.0387	0.3118	0.1495	0.0356	0.1851	0.0000	54.1832	54.1832	0.0163	0.0000	54.5910
Maximum	**0.0700**	**0.7240**	**0.3484**	**5.9000e-004**	**0.2731**	**0.0387**	**0.3118**	**0.1495**	**0.0356**	**0.1851**	**0.0000**	**54.1832**	**54.1832**	**0.0163**	**0.0000**	**54.5910**

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					
2018	0.0700	0.7240	0.3484	5.9000e-004	0.2731	0.0387	0.3118	0.1495	0.0356	0.1851	0.0000	54.1832	54.1832	0.0163	0.0000	54.5910
Maximum	**0.0700**	**0.7240**	**0.3484**	**5.9000e-004**	**0.2731**	**0.0387**	**0.3118**	**0.1495**	**0.0356**	**0.1851**	**0.0000**	**54.1832**	**54.1832**	**0.0163**	**0.0000**	**54.5910**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2018	5-31-2018	0.7943	0.7943
		Highest	0.7943	0.7943

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	2.9661	0.0537	3.4793	5.7700e-003		0.4469	0.4469		0.4469	0.4469	42.3513	18.2589	60.6102	0.0396	3.3300e-003	62.5918
Energy	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	70.9641	70.9641	6.4400e-003	1.7100e-003	71.6352
Mobile	0.0944	0.2995	1.1088	4.2000e-003	0.4886	3.1400e-003	0.4917	0.1308	2.9200e-003	0.1338	0.0000	383.0477	383.0477	8.9900e-003	0.0000	383.2725
Waste						0.0000	0.0000		0.0000	0.0000	5.5823	0.0000	5.5823	0.3299	0.0000	13.8298
Water						0.0000	0.0000		0.0000	0.0000	0.8475	2.0075	2.8550	0.0873	2.1100e-003	5.6668
Total	**3.0632**	**0.3761**	**4.5978**	**0.0101**	**0.4886**	**0.4519**	**0.9405**	**0.1308**	**0.4517**	**0.5825**	**48.7810**	**474.2782**	**523.0592**	**0.4722**	**7.1500e-003**	**536.9961**

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	0.3965	0.0286	0.3144	1.8000e-004		3.7200e-003	3.7200e-003		3.7200e-003	3.7200e-003	0.0000	29.5617	29.5617	1.0300e-003	5.3000e-004	29.7462
Energy	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	70.9641	70.9641	6.4400e-003	1.7100e-003	71.6352
Mobile	0.0944	0.2995	1.1088	4.2000e-003	0.4886	3.1400e-003	0.4917	0.1308	2.9200e-003	0.1338	0.0000	383.0477	383.0477	8.9900e-003	0.0000	383.2725
Waste						0.0000	0.0000		0.0000	0.0000	5.5823	0.0000	5.5823	0.3299	0.0000	13.8298
Water						0.0000	0.0000		0.0000	0.0000	0.8475	2.0075	2.8550	0.0873	2.1100e-003	5.6668
Total	**0.4935**	**0.3510**	**1.4329**	**4.5300e-003**	**0.4886**	**8.7100e-003**	**0.4973**	**0.1308**	**8.4900e-003**	**0.1393**	**6.4297**	**485.5809**	**492.0107**	**0.4337**	**4.3500e-003**	**504.1506**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**83.89**	**6.68**	**68.84**	**55.24**	**0.00**	**98.07**	**47.13**	**0.00**	**98.12**	**76.08**	**86.82**	**-2.38**	**5.94**	**8.16**	**39.16**	**6.12**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2018	4/11/2018	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2018

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					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0684	0.7230	0.3371	5.7000e-004		0.0387	0.0387		0.0356	0.0356	0.0000	52.1399	52.1399	0.0162	0.0000	52.5457
Total	**0.0684**	**0.7230**	**0.3371**	**5.7000e-004**	**0.2710**	**0.0387**	**0.3096**	**0.1490**	**0.0356**	**0.1845**	**0.0000**	**52.1399**	**52.1399**	**0.0162**	**0.0000**	**52.5457**

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	1.5800e-003	1.0600e-003	0.0113	2.0000e-005	2.1300e-003	2.0000e-005	2.1400e-003	5.7000e-004	2.0000e-005	5.8000e-004	0.0000	2.0434	2.0434	8.0000e-005	0.0000	2.0454
Total	**1.5800e-003**	**1.0600e-003**	**0.0113**	**2.0000e-005**	**2.1300e-003**	**2.0000e-005**	**2.1400e-003**	**5.7000e-004**	**2.0000e-005**	**5.8000e-004**	**0.0000**	**2.0434**	**2.0434**	**8.0000e-005**	**0.0000**	**2.0454**

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					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0684	0.7230	0.3371	5.7000e-004		0.0387	0.0387		0.0356	0.0356	0.0000	52.1398	52.1398	0.0162	0.0000	52.5456
Total	**0.0684**	**0.7230**	**0.3371**	**5.7000e-004**	**0.2710**	**0.0387**	**0.3096**	**0.1490**	**0.0356**	**0.1845**	**0.0000**	**52.1398**	**52.1398**	**0.0162**	**0.0000**	**52.5456**

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	1.5800e-003	1.0600e-003	0.0113	2.0000e-005	2.1300e-003	2.0000e-005	2.1400e-003	5.7000e-004	2.0000e-005	5.8000e-004	0.0000	2.0434	2.0434	8.0000e-005	0.0000	2.0454
Total	**1.5800e-003**	**1.0600e-003**	**0.0113**	**2.0000e-005**	**2.1300e-003**	**2.0000e-005**	**2.1400e-003**	**5.7000e-004**	**2.0000e-005**	**5.8000e-004**	**0.0000**	**2.0434**	**2.0434**	**8.0000e-005**	**0.0000**	**2.0454**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0944	0.2995	1.1088	4.2000e-003	0.4886	3.1400e-003	0.4917	0.1308	2.9200e-003	0.1338	0.0000	383.0477	383.0477	8.9900e-003	0.0000	383.2725
Unmitigated	0.0944	0.2995	1.1088	4.2000e-003	0.4886	3.1400e-003	0.4917	0.1308	2.9200e-003	0.1338	0.0000	383.0477	383.0477	8.9900e-003	0.0000	383.2725

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

Parking Lot	0.00	0.00	0.00		
Single Family Housing	462.71	462.71	462.71	1,325,464	1,325,464
Total	462.71	462.71	462.71	1,325,464	1,325,464

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746
Single Family Housing	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746

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	44.4542	44.4542	5.9300e-003	1.2300e-003	44.9678
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	44.4542	44.4542	5.9300e-003	1.2300e-003	44.9678
NaturalGas Mitigated	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	26.5099	26.5099	5.1000e-004	4.9000e-004	26.6674
NaturalGas Unmitigated	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	26.5099	26.5099	5.1000e-004	4.9000e-004	26.6674

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	496777	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	26.5099	26.5099	5.1000e-004	4.9000e-004	26.6674
Total		**2.6800e-003**	**0.0229**	**9.7400e-003**	**1.5000e-004**		**1.8500e-003**	**1.8500e-003**		**1.8500e-003**	**1.8500e-003**	**0.0000**	**26.5099**	**26.5099**	**5.1000e-004**	**4.9000e-004**	**26.6674**

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	496777	2.6800e-003	0.0229	9.7400e-003	1.5000e-004		1.8500e-003	1.8500e-003		1.8500e-003	1.8500e-003	0.0000	26.5099	26.5099	5.1000e-004	4.9000e-004	26.6674
Total		**2.6800e-003**	**0.0229**	**9.7400e-003**	**1.5000e-004**		**1.8500e-003**	**1.8500e-003**		**1.8500e-003**	**1.8500e-003**	**0.0000**	**26.5099**	**26.5099**	**5.1000e-004**	**4.9000e-004**	**26.6674**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e

Land Use	kWh/yr	MT/yr			
Parking Lot	94830.1	9.3556	1.2500e-003	2.6000e-004	9.4637
Single Family Housing	355766	35.0986	4.6800e-003	9.7000e-004	35.5041
Total		**44.4542**	**5.9300e-003**	**1.2300e-003**	**44.9678**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	94830.1	9.3556	1.2500e-003	2.6000e-004	9.4637
Single Family Housing	355766	35.0986	4.6800e-003	9.7000e-004	35.5041
Total		**44.4542**	**5.9300e-003**	**1.2300e-003**	**44.9678**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	0.3965	0.0286	0.3144	1.8000e-004		3.7200e-003	3.7200e-003		3.7200e-003	3.7200e-003	0.0000	29.5617	29.5617	1.0300e-003	5.3000e-004	29.7462
Unmitigated	2.9661	0.0537	3.4793	5.7700e-003		0.4469	0.4469		0.4469	0.4469	42.3513	18.2589	60.6102	0.0396	3.3300e-003	62.5918

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	0.0787					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.5726	0.0502	3.1756	5.7500e-003		0.4453	0.4453		0.4453	0.4453	42.3513	17.7615	60.1128	0.0391	3.3300e-003	62.0826
Landscaping	9.0900e-003	3.5000e-003	0.3037	2.0000e-005		1.6900e-003	1.6900e-003		1.6900e-003	1.6900e-003	0.0000	0.4974	0.4974	4.7000e-004	0.0000	0.5092
Total	**2.9661**	**0.0537**	**3.4793**	**5.7700e-003**		**0.4469**	**0.4469**		**0.4469**	**0.4469**	**42.3513**	**18.2589**	**60.6102**	**0.0396**	**3.3300e-003**	**62.5918**

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	0.0787					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3057					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.9400e-003	0.0251	0.0107	1.6000e-004		2.0300e-003	2.0300e-003		2.0300e-003	2.0300e-003	0.0000	29.0643	29.0643	5.6000e-004	5.3000e-004	29.2370

Landscaping	9.0900e-003	3.5000e-003	0.3037	2.0000e-005		1.6900e-003	1.6900e-003		1.6900e-003	1.6900e-003	0.0000	0.4974	0.4974	4.7000e-004	0.0000	0.5092
Total	**0.3965**	**0.0286**	**0.3144**	**1.8000e-004**		**3.7200e-003**	**3.7200e-003**		**3.7200e-003**	**3.7200e-003**	**0.0000**	**29.5617**	**29.5617**	**1.0300e-003**	**5.3000e-004**	**29.7462**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.8550	0.0873	2.1100e-003	5.6668
Unmitigated	2.8550	0.0873	2.1100e-003	5.6668

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.67132 / 1.68409	2.8550	0.0873	2.1100e-003	5.6668
Total		**2.8550**	**0.0873**	**2.1100e-003**	**5.6668**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.67132 / 1.68409	2.8550	0.0873	2.1100e-003	5.6668
Total		**2.8550**	**0.0873**	**2.1100e-003**	**5.6668**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5.5823	0.3299	0.0000	13.8298
Unmitigated	5.5823	0.3299	0.0000	13.8298

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	27.5	5.5823	0.3299	0.0000	13.8298
Total		**5.5823**	**0.3299**	**0.0000**	**13.8298**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	27.5	5.5823	0.3299	0.0000	13.8298
Total		**5.5823**	**0.3299**	**0.0000**	**13.8298**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Vineyards at EDH - Future Year 2030

El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	6.22	Acre	6.22	270,943.20	0
Single Family Housing	41.00	Dwelling Unit	42.23	73,800.00	110

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	217.5	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Year 2030 CO2 Intensity Factor provided by extrapolating Year 2020 factor from the CPUC GHG Calculator (from 33% to 50% renewable): https://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf

Land Use - As provided by project applicant. CalEEMod does not provide a land use for agriculture (for the vineyards portion of the project). However, data to reflect vineyards is provided throughout this model. Pop = 2.68 x # of units

Construction Phase - No construction modelled for this model run (year 2030).

Off-road Equipment -

Off-road Equipment - No construction modelled.

Trips and VMT -

Demolition -

Grading - No construction modelled.

Architectural Coating -

Vehicle Trips - Single Family Housing trip rates provided by Kimley Horn. 474 daily trips/42 du = 11.28571 trips per du/day.

Woodstoves -

Area Coating - Per EDCAQMD Rule 215 - 150 g/L architectural coatings maximum for interior and exterior coatings.

Energy Use -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblLandUse	LotAcreage	13.31	42.23
tblLandUse	Population	117.00	110.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	217.5
tblVehicleTrips	ST_TR	9.91	11.29
tblVehicleTrips	SU_TR	8.62	11.29
tblVehicleTrips	WD_TR	9.52	11.29

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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

2018	4.6772	48.2608	23.2845	0.0397	18.2141	2.5781	20.7923	9.9699	2.3719	12.3418	0.0000	3,994.2961	3,994.2961	1.1991	0.0000	4,024.2728
Maximum	**4.6772**	**48.2608**	**23.2845**	**0.0397**	**18.2141**	**2.5781**	**20.7923**	**9.9699**	**2.3719**	**12.3418**	**0.0000**	**3,994.2961**	**3,994.2961**	**1.1991**	**0.0000**	**4,024.2728**

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					
2018	4.6772	48.2608	23.2845	0.0397	18.2141	2.5781	20.7923	9.9699	2.3719	12.3418	0.0000	3,994.2961	3,994.2961	1.1991	0.0000	4,024.2728
Maximum	**4.6772**	**48.2608**	**23.2845**	**0.0397**	**18.2141**	**2.5781**	**20.7923**	**9.9699**	**2.3719**	**12.3418**	**0.0000**	**3,994.2961**	**3,994.2961**	**1.1991**	**0.0000**	**4,024.2728**

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

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	64.9536	1.2643	80.8276	0.1405		10.8785	10.8785		10.8785	10.8785	1,138.6410	483.6214	1,622.2624	1.0566	0.0896	1,675.3666
Energy	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729

Mobile	0.6414	1.5620	6.5001	0.0247	2.7999	0.0172	2.8171	0.7472	0.0160	0.7632		2,476.6685	2,476.6685	0.0556		2,478.0583
Total	**65.6097**	**2.9517**	**87.3811**	**0.1660**	**2.7999**	**10.9058**	**13.7057**	**0.7472**	**10.9046**	**11.6518**	**1,138.6410**	**3,120.4113**	**4,259.0523**	**1.1152**	**0.0925**	**4,314.4978**

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	2.2790	0.6510	3.6347	4.0900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	787.5038	787.5038	0.0208	0.0143	792.2925
Energy	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Mobile	0.6414	1.5620	6.5001	0.0247	2.7999	0.0172	2.8171	0.7472	0.0160	0.7632		2,476.6685	2,476.6685	0.0556		2,478.0583
Total	**2.9351**	**2.3384**	**10.1882**	**0.0295**	**2.7999**	**0.0956**	**2.8955**	**0.7472**	**0.0944**	**0.8416**	**0.0000**	**3,424.2936**	**3,424.2936**	**0.0794**	**0.0173**	**3,431.4236**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**95.53**	**20.78**	**88.34**	**82.20**	**0.00**	**99.12**	**78.87**	**0.00**	**99.13**	**92.78**	**100.00**	**-9.74**	**19.60**	**92.88**	**81.33**	**20.47**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2018	4/11/2018	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0663**	**2.5769**	**20.6432**	**9.9307**	**2.3708**	**12.3014**		**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

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	0.1145	0.0620	0.8082	1.6400e-003	0.1479	1.2200e-003	0.1491	0.0392	1.1200e-003	0.0403		162.6722	162.6722	6.2300e-003		162.8280
Total	**0.1145**	**0.0620**	**0.8082**	**1.6400e-003**	**0.1479**	**1.2200e-003**	**0.1491**	**0.0392**	**1.1200e-003**	**0.0403**		**162.6722**	**162.6722**	**6.2300e-003**		**162.8280**

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0663**	**2.5769**	**20.6432**	**9.9307**	**2.3708**	**12.3014**	**0.0000**	**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

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	0.1145	0.0620	0.8082	1.6400e-003	0.1479	1.2200e-003	0.1491	0.0392	1.1200e-003	0.0403		162.6722	162.6722	6.2300e-003		162.8280
Total	**0.1145**	**0.0620**	**0.8082**	**1.6400e-003**	**0.1479**	**1.2200e-003**	**0.1491**	**0.0392**	**1.1200e-003**	**0.0403**		**162.6722**	**162.6722**	**6.2300e-003**		**162.8280**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6414	1.5620	6.5001	0.0247	2.7999	0.0172	2.8171	0.7472	0.0160	0.7632		2,476.6685	2,476.6685	0.0556		2,478.0583
Unmitigated	0.6414	1.5620	6.5001	0.0247	2.7999	0.0172	2.8171	0.7472	0.0160	0.7632		2,476.6685	2,476.6685	0.0556		2,478.0583

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	462.71	462.71	462.71	1,325,464	1,325,464
Total	462.71	462.71	462.71	1,325,464	1,325,464

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746
Single Family Housing	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746

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	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
NaturalGas Unmitigated	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729

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					

Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1361.03	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Total		**0.0147**	**0.1254**	**0.0534**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**160.1214**	**160.1214**	**3.0700e-003**	**2.9400e-003**	**161.0729**

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.36103	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Total		**0.0147**	**0.1254**	**0.0534**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**160.1214**	**160.1214**	**3.0700e-003**	**2.9400e-003**	**161.0729**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	2.2790	0.6510	3.6347	4.0900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	787.5038	787.5038	0.0208	0.0143	792.2925

Unmitigated	64.9536	1.2643	80.8276	0.1405		10.8785	10.8785		10.8785	10.8785	1,138.6410	483.6214	1,622.2624	1.0566	0.0896	1,675.3666

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	0.4312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	62.7462	1.2254	77.4534	0.1403		10.8597	10.8597		10.8597	10.8597	1,138.6410	477.5294	1,616.1704	1.0508	0.0896	1,669.1295
Landscaping	0.1010	0.0389	3.3742	1.8000e-004		0.0188	0.0188		0.0188	0.0188		6.0920	6.0920	5.8100e-003		6.2372
Total	**64.9536**	**1.2643**	**80.8276**	**0.1405**		**10.8785**	**10.8785**		**10.8785**	**10.8785**	**1,138.6410**	**483.6214**	**1,622.2624**	**1.0566**	**0.0896**	**1,675.3666**

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	0.4312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0716	0.6121	0.2605	3.9100e-003		0.0495	0.0495		0.0495	0.0495	0.0000	781.4118	781.4118	0.0150	0.0143	786.0553
Landscaping	0.1010	0.0389	3.3742	1.8000e-004		0.0188	0.0188		0.0188	0.0188		6.0920	6.0920	5.8100e-003		6.2372

Total	2.2791	0.6510	3.6347	4.0900e-003		0.0683	0.0683		0.0683	0.0683	0.0000	787.5038	787.5038	0.0208	0.0143	792.2925

7.0 Water Detail

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Vineyards at EDH - El Dorado-Mountain County County, Winter

Vineyards at EDH

El Dorado-Mountain County County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	6.22	Acre	6.22	270,943.20	0
Single Family Housing	41.00	Dwelling Unit	42.23	73,800.00	110

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)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Year 2020 CO2 Intensity Factor provided by CPUC GHG Calculator: https://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf

Land Use - As provided by project applicant. CalEEMod does not provide a land use for agriculture (for the vineyards portion of the project). However, data to reflect vineyards is provided throughout this model. Pop = 2.68 x 41 units = 110

Construction Phase - Construction days estimated based on project size.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - One addition dozer and two additional tractors were added to the CalEEMod default off-road construction equipment (under the site preparation phase) to reflect the construction of the vineyards.

Trips and VMT - 12 additional worker trips per day was added to the site preparation phase (above and beyond the CalEEMod defaults) to reflect the worker trips needed to establish the vineyard, based on data provided by the applicant.

Demolition - Approximately 12,000 square feet of buildings is assumed to be removed (6 buildings x approx. 2,000 square feet each).

Grading - Assumed entire project site (114.03) is graded, as a conservative estimate.

Architectural Coating - Per EDCAQMD Rule 215 - 150 g/L architectural coatings maximum for interior and exterior coatings.

Vehicle Trips - Single Family Housing trip rates provided by Kimley Horn. 474 daily trips/42 du = 11.28571 trips per du/day.

Woodstoves -

Area Coating - Per EDCAQMD Rule 215 - 150 g/L architectural coatings maximum for interior and exterior coatings.

Energy Use -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstructionPhase	NumDays	50.00	21.00
tblConstructionPhase	NumDays	740.00	340.00
tblConstructionPhase	PhaseEndDate	5/9/2018	10/1/2018
tblConstructionPhase	PhaseEndDate	6/20/2018	11/12/2018
tblConstructionPhase	PhaseEndDate	10/3/2018	2/25/2019
tblConstructionPhase	PhaseEndDate	8/4/2021	6/15/2020
tblConstructionPhase	PhaseEndDate	10/20/2021	8/31/2020
tblConstructionPhase	PhaseEndDate	1/5/2022	11/17/2020
tblConstructionPhase	PhaseStartDate	3/1/2018	9/1/2018

tblConstructionPhase	PhaseStartDate	5/10/2018	10/2/2018
tblConstructionPhase	PhaseStartDate	6/21/2018	11/13/2018
tblConstructionPhase	PhaseStartDate	10/4/2018	2/26/2019
tblConstructionPhase	PhaseStartDate	8/5/2021	6/16/2020
tblConstructionPhase	PhaseStartDate	10/21/2021	9/2/2020
tblGrading	AcresOfGrading	187.50	114.03
tblLandUse	LotAcreage	13.31	42.23
tblLandUse	Population	117.00	110.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	6.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	WorkerTripNumber	25.00	18.00
tblVehicleTrips	ST_TR	9.91	11.29
tblVehicleTrips	SU_TR	8.62	11.29
tblVehicleTrips	WD_TR	9.52	11.29

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	6.3777	66.0949	35.9400	0.0637	24.2362	3.5613	27.7975	13.2801	3.2764	16.5565	0.0000	6,407.8118	6,407.8118	1.9505	0.0000	6,456.5745
2019	4.8576	54.5952	34.1262	0.0636	7.7988	2.3839	10.1827	3.5279	2.1932	5.7211	0.0000	6,297.0588	6,297.0588	1.9483	0.0000	6,345.7667
2020	28.9991	25.8338	23.3672	0.0498	1.3894	1.1611	2.5505	0.3758	1.0922	1.4680	0.0000	4,895.3999	4,895.3999	0.7177	0.0000	4,912.5008
Maximum	**28.9991**	**66.0949**	**35.9400**	**0.0637**	**24.2362**	**3.5613**	**27.7975**	**13.2801**	**3.2764**	**16.5565**	**0.0000**	**6,407.8118**	**6,407.8118**	**1.9505**	**0.0000**	**6,456.5745**

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					
2018	6.3777	66.0949	35.9400	0.0637	24.2362	3.5613	27.7975	13.2801	3.2764	16.5565	0.0000	6,407.8118	6,407.8118	1.9505	0.0000	6,456.5744
2019	4.8576	54.5952	34.1262	0.0636	7.7988	2.3839	10.1827	3.5279	2.1932	5.7211	0.0000	6,297.0588	6,297.0588	1.9483	0.0000	6,345.7667
2020	28.9991	25.8338	23.3672	0.0498	1.3894	1.1611	2.5505	0.3758	1.0922	1.4680	0.0000	4,895.3999	4,895.3999	0.7177	0.0000	4,912.5008
Maximum	**28.9991**	**66.0949**	**35.9400**	**0.0637**	**24.2362**	**3.5613**	**27.7975**	**13.2801**	**3.2764**	**16.5565**	**0.0000**	**6,407.8118**	**6,407.8118**	**1.9505**	**0.0000**	**6,456.5744**

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

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	64.9561	1.2646	80.8478	0.1405		10.8784	10.8784		10.8784	10.8784	1,138.6410	483.6214	1,622.2624	1.0567	0.0896	1,675.3701
Energy	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Mobile	0.9737	3.8298	12.4645	0.0315	2.8087	0.0396	2.8484	0.7509	0.0373	0.7882		3,160.7844	3,160.7844	0.1182		3,163.7388
Total	**65.9444**	**5.2198**	**93.3657**	**0.1728**	**2.8087**	**10.9281**	**13.7369**	**0.7509**	**10.9258**	**11.6767**	**1,138.6410**	**3,804.5272**	**4,943.1681**	**1.1780**	**0.0925**	**5,000.1817**

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	2.2815	0.6514	3.6549	4.0900e-003		0.0682	0.0682		0.0682	0.0682	0.0000	787.5038	787.5038	0.0209	0.0143	792.2959
Energy	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Mobile	0.9737	3.8298	12.4645	0.0315	2.8087	0.0396	2.8484	0.7509	0.0373	0.7882		3,160.7844	3,160.7844	0.1182		3,163.7388
Total	**3.2699**	**4.6066**	**16.1728**	**0.0364**	**2.8087**	**0.1179**	**2.9266**	**0.7509**	**0.1156**	**0.8665**	**0.0000**	**4,108.4095**	**4,108.4095**	**0.1422**	**0.0173**	**4,117.1075**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**95.04**	**11.75**	**82.68**	**78.93**	**0.00**	**98.92**	**78.69**	**0.00**	**98.94**	**92.58**	**100.00**	**-7.99**	**16.89**	**87.93**	**81.33**	**17.66**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2018	10/1/2018	5	21	
2	Site Preparation	Site Preparation	10/2/2018	11/12/2018	5	30	
3	Grading	Grading	11/13/2018	2/25/2019	5	75	
4	Building Construction	Building Construction	2/26/2019	6/15/2020	5	340	
5	Paving	Paving	6/16/2020	8/31/2020	5	55	
6	Architectural Coating	Architectural Coating	9/2/2020	11/17/2020	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 114.03

Acres of Paving: 6.22

Residential Indoor: 149,445; Residential Outdoor: 49,815; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	4	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	6	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	55.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	10	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	129.00	49.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

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					0.5713	0.0000	0.5713	0.0865	0.0000	0.0865			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.5713**	**1.9386**	**2.5098**	**0.0865**	**1.8048**	**1.8913**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0327	1.0518	0.3141	2.1700e-003	0.0452	7.8200e-003	0.0530	0.0123	7.4800e-003	0.0198		226.7203	226.7203	3.9100e-003		226.8182
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	0.0972	0.0639	0.6379	1.2300e-003	0.1232	1.0100e-003	0.1242	0.0327	9.3000e-004	0.0336		122.5375	122.5375	4.9000e-003		122.6600

Total	**0.1299**	**1.1158**	**0.9521**	**3.4000e-003**	**0.1684**	**8.8300e-003**	**0.1772**	**0.0450**	**8.4100e-003**	**0.0534**		**349.2579**	**349.2579**	**8.8100e-003**		**349.4782**

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					0.5713	0.0000	0.5713	0.0865	0.0000	0.0865			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.5713**	**1.9386**	**2.5098**	**0.0865**	**1.8048**	**1.8913**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

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	0.0327	1.0518	0.3141	2.1700e-003	0.0452	7.8200e-003	0.0530	0.0123	7.4800e-003	0.0198		226.7203	226.7203	3.9100e-003		226.8182
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	0.0972	0.0639	0.6379	1.2300e-003	0.1232	1.0100e-003	0.1242	0.0327	9.3000e-004	0.0336		122.5375	122.5375	4.9000e-003		122.6600
Total	**0.1299**	**1.1158**	**0.9521**	**3.4000e-003**	**0.1684**	**8.8300e-003**	**0.1772**	**0.0450**	**8.4100e-003**	**0.0534**		**349.2579**	**349.2579**	**8.8100e-003**		**349.4782**

3.3 Site Preparation - 2018

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					24.0883	0.0000	24.0883	13.2409	0.0000	13.2409			0.0000			0.0000
Off-Road	6.2610	66.0182	31.5262	0.0528		3.5601	3.5601		3.2753	3.2753		5,317.3491	5,317.3491	1.6554		5,358.7332
Total	**6.2610**	**66.0182**	**31.5262**	**0.0528**	**24.0883**	**3.5601**	**27.6484**	**13.2409**	**3.2753**	**16.5162**		**5,317.3491**	**5,317.3491**	**1.6554**		**5,358.7332**

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	0.1166	0.0767	0.7655	1.4800e-003	0.1479	1.2200e-003	0.1491	0.0392	1.1200e-003	0.0403		147.0451	147.0451	5.8800e-003		147.1920
Total	**0.1166**	**0.0767**	**0.7655**	**1.4800e-003**	**0.1479**	**1.2200e-003**	**0.1491**	**0.0392**	**1.1200e-003**	**0.0403**		**147.0451**	**147.0451**	**5.8800e-003**		**147.1920**

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					24.0883	0.0000	24.0883	13.2409	0.0000	13.2409			0.0000			0.0000
Off-Road	6.2610	66.0182	31.5262	0.0528		3.5601	3.5601		3.2753	3.2753	0.0000	5,317.3491	5,317.3491	1.6554		5,358.7332
Total	**6.2610**	**66.0182**	**31.5262**	**0.0528**	**24.0883**	**3.5601**	**27.6484**	**13.2409**	**3.2753**	**16.5162**	**0.0000**	**5,317.3491**	**5,317.3491**	**1.6554**		**5,358.7332**

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	0.1166	0.0767	0.7655	1.4800e-003	0.1479	1.2200e-003	0.1491	0.0392	1.1200e-003	0.0403		147.0451	147.0451	5.8800e-003		147.1920
Total	**0.1166**	**0.0767**	**0.7655**	**1.4800e-003**	**0.1479**	**1.2200e-003**	**0.1491**	**0.0392**	**1.1200e-003**	**0.0403**		**147.0451**	**147.0451**	**5.8800e-003**		**147.1920**

3.4 Grading - 2018

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					7.6345	0.0000	7.6345	3.4843	0.0000	3.4843			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230		6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**7.6345**	**2.6337**	**10.2682**	**3.4843**	**2.4230**	**5.9074**		**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

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	0.1296	0.0853	0.8506	1.6400e-003	0.1643	1.3500e-003	0.1657	0.0436	1.2500e-003	0.0448		163.3834	163.3834	6.5300e-003		163.5467
Total	**0.1296**	**0.0853**	**0.8506**	**1.6400e-003**	**0.1643**	**1.3500e-003**	**0.1657**	**0.0436**	**1.2500e-003**	**0.0448**		**163.3834**	**163.3834**	**6.5300e-003**		**163.5467**

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					7.6345	0.0000	7.6345	3.4843	0.0000	3.4843			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**7.6345**	**2.6337**	**10.2682**	**3.4843**	**2.4230**	**5.9074**	**0.0000**	**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

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	0.1296	0.0853	0.8506	1.6400e-003	0.1643	1.3500e-003	0.1657	0.0436	1.2500e-003	0.0448		163.3834	163.3834	6.5300e-003		163.5467
Total	**0.1296**	**0.0853**	**0.8506**	**1.6400e-003**	**0.1643**	**1.3500e-003**	**0.1657**	**0.0436**	**1.2500e-003**	**0.0448**		**163.3834**	**163.3834**	**6.5300e-003**		**163.5467**

3.4 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					7.6345	0.0000	7.6345	3.4843	0.0000	3.4843			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**7.6345**	**2.3827**	**10.0171**	**3.4843**	**2.1920**	**5.6764**		**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

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	0.1187	0.0750	0.7494	1.5800e-003	0.1643	1.2900e-003	0.1656	0.0436	1.1900e-003	0.0448		157.0393	157.0393	5.6800e-003		157.1813

Total	**0.1187**	**0.0750**	**0.7494**	**1.5800e-003**	**0.1643**	**1.2900e-003**	**0.1656**	**0.0436**	**1.1900e-003**	**0.0448**		**157.0393**	**157.0393**	**5.6800e-003**		**157.1813**

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					7.6345	0.0000	7.6345	3.4843	0.0000	3.4843			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**7.6345**	**2.3827**	**10.0171**	**3.4843**	**2.1920**	**5.6764**	**0.0000**	**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

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	0.1187	0.0750	0.7494	1.5800e-003	0.1643	1.2900e-003	0.1656	0.0436	1.1900e-003	0.0448		157.0393	157.0393	5.6800e-003		157.1813
Total	**0.1187**	**0.0750**	**0.7494**	**1.5800e-003**	**0.1643**	**1.2900e-003**	**0.1656**	**0.0436**	**1.1900e-003**	**0.0448**		**157.0393**	**157.0393**	**5.6800e-003**		**157.1813**

3.5 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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.2774	6.8962	2.5136	0.0131	0.3296	0.0584	0.3881	0.0948	0.0559	0.1507		1,367.6112	1,367.6112	0.0352		1,368.4915
Worker	0.7658	0.4835	4.8335	0.0102	1.0597	8.3000e-003	1.0680	0.2811	7.6500e-003	0.2887		1,012.9038	1,012.9038	0.0366		1,013.8192
Total	**1.0432**	**7.3798**	**7.3471**	**0.0233**	**1.3893**	**0.0667**	**1.4561**	**0.3758**	**0.0636**	**0.4394**		**2,380.5149**	**2,380.5149**	**0.0718**		**2,382.3107**

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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.2774	6.8962	2.5136	0.0131	0.3296	0.0584	0.3881	0.0948	0.0559	0.1507		1,367.6112	1,367.6112	0.0352		1,368.4915
Worker	0.7658	0.4835	4.8335	0.0102	1.0597	8.3000e-003	1.0680	0.2811	7.6500e-003	0.2887		1,012.9038	1,012.9038	0.0366		1,013.8192
Total	**1.0432**	**7.3798**	**7.3471**	**0.0233**	**1.3893**	**0.0667**	**1.4561**	**0.3758**	**0.0636**	**0.4394**		**2,380.5149**	**2,380.5149**	**0.0718**		**2,382.3107**

3.5 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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.2162	6.2173	2.2032	0.0130	0.3297	0.0360	0.3657	0.0948	0.0344	0.1292		1,360.8642	1,360.8642	0.0294		1,361.5979
Worker	0.7123	0.4304	4.3155	9.8700e-003	1.0597	8.0400e-003	1.0677	0.2811	7.4100e-003	0.2885		981.4727	981.4727	0.0318		982.2684
Total	**0.9285**	**6.6477**	**6.5187**	**0.0229**	**1.3894**	**0.0440**	**1.4334**	**0.3758**	**0.0419**	**0.4177**		**2,342.3369**	**2,342.3369**	**0.0612**		**2,343.8663**

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.2162	6.2173	2.2032	0.0130	0.3297	0.0360	0.3657	0.0948	0.0344	0.1292		1,360.8642	1,360.8642	0.0294		1,361.5979
Worker	0.7123	0.4304	4.3155	9.8700e-003	1.0597	8.0400e-003	1.0677	0.2811	7.4100e-003	0.2885		981.4727	981.4727	0.0318		982.2684
Total	**0.9285**	**6.6477**	**6.5187**	**0.0229**	**1.3894**	**0.0440**	**1.4334**	**0.3758**	**0.0419**	**0.4177**		**2,342.3369**	**2,342.3369**	**0.0612**		**2,343.8663**

3.6 Paving - 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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.2963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6529**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

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	0.0828	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	**0.0828**	**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**

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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.2963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6529**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

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	0.0828	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	**0.0828**	**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**

3.7 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	28.6133					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	**28.8555**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

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	0.1436	0.0868	0.8698	1.9900e-003	0.2136	1.6200e-003	0.2152	0.0567	1.4900e-003	0.0582		197.8162	197.8162	6.4100e-003		197.9766
Total	**0.1436**	**0.0868**	**0.8698**	**1.9900e-003**	**0.2136**	**1.6200e-003**	**0.2152**	**0.0567**	**1.4900e-003**	**0.0582**		**197.8162**	**197.8162**	**6.4100e-003**		**197.9766**

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	28.6133					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	**28.8555**	**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**

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	0.1436	0.0868	0.8698	1.9900e-003	0.2136	1.6200e-003	0.2152	0.0567	1.4900e-003	0.0582		197.8162	197.8162	6.4100e-003		197.9766
Total	**0.1436**	**0.0868**	**0.8698**	**1.9900e-003**	**0.2136**	**1.6200e-003**	**0.2152**	**0.0567**	**1.4900e-003**	**0.0582**		**197.8162**	**197.8162**	**6.4100e-003**		**197.9766**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9737	3.8298	12.4645	0.0315	2.8087	0.0396	2.8484	0.7509	0.0373	0.7882		3,160.7844	3,160.7844	0.1182		3,163.7388

Unmitigated	0.9737	3.8298	12.4645	0.0315	2.8087	0.0396	2.8484	0.7509	0.0373	0.7882		3,160.7844	3,160.7844	0.1182		3,163.7388

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	462.71	462.71	462.71	1,325,464	1,325,464
Total	462.71	462.71	462.71	1,325,464	1,325,464

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.512962	0.041542	0.225677	0.140684	0.035619	0.007151	0.016044	0.009270	0.001580	0.001207	0.005638	0.000826	0.001801
Single Family Housing	0.512962	0.041542	0.225677	0.140684	0.035619	0.007151	0.016044	0.009270	0.001580	0.001207	0.005638	0.000826	0.001801

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	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
NaturalGas Unmitigated	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1361.03	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Total		**0.0147**	**0.1254**	**0.0534**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**160.1214**	**160.1214**	**3.0700e-003**	**2.9400e-003**	**161.0729**

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					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.36103	0.0147	0.1254	0.0534	8.0000e-004		0.0101	0.0101		0.0101	0.0101		160.1214	160.1214	3.0700e-003	2.9400e-003	161.0729
Total		**0.0147**	**0.1254**	**0.0534**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**		**160.1214**	**160.1214**	**3.0700e-003**	**2.9400e-003**	**161.0729**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	2.2815	0.6514	3.6549	4.0900e-003		0.0682	0.0682		0.0682	0.0682	0.0000	787.5038	787.5038	0.0209	0.0143	792.2959
Unmitigated	64.9561	1.2646	80.8478	0.1405		10.8784	10.8784		10.8784	10.8784	1,138.6410	483.6214	1,622.2624	1.0567	0.0896	1,675.3701

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	0.4312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	62.7462	1.2254	77.4534	0.1403		10.8597	10.8597		10.8597	10.8597	1,138.6410	477.5294	1,616.1704	1.0508	0.0896	1,669.1295
Landscaping	0.1034	0.0393	3.3944	1.8000e-004		0.0187	0.0187		0.0187	0.0187		6.0920	6.0920	5.9400e-003		6.2406
Total	**64.9560**	**1.2646**	**80.8478**	**0.1405**		**10.8784**	**10.8784**		**10.8784**	**10.8784**	**1,138.6410**	**483.6214**	**1,622.2624**	**1.0567**	**0.0896**	**1,675.3700**

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	0.4312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0716	0.6121	0.2605	3.9100e-003		0.0495	0.0495		0.0495	0.0495	0.0000	781.4118	781.4118	0.0150	0.0143	786.0553
Landscaping	0.1034	0.0393	3.3944	1.8000e-004		0.0187	0.0187		0.0187	0.0187		6.0920	6.0920	5.9400e-003		6.2406
Total	**2.2815**	**0.6514**	**3.6549**	**4.0900e-003**		**0.0682**	**0.0682**		**0.0682**	**0.0682**	**0.0000**	**787.5038**	**787.5038**	**0.0209**	**0.0143**	**792.2959**

7.0 Water Detail

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

On-site Vineyards Outdoor Water Usage Calculations

Estimated Outdoor Water Usage:	3,080,000	gallons/ year	Source: Project applicant
Electricity Intensity Factor to Supply:	2,117	kWh/Mgal	Source: CEC, 2006; CalEEMod v.2016.3.2
Electricity Intensity Factor to Treat:	111	kWh/Mgal	Source: CEC, 2006; CalEEMod v.2016.3.2
Electricity Intensity Factor to Distribute:	1,272	kWh/Mgal	Source: CEC, 2006; CalEEMod v.2016.3.2
Electricity Intensity Factor for Wastewater Treatment:	1,911	kWh/Mgal	Source: CEC, 2006; CalEEMod v.2016.3.2
Sum of Electricity Intensity Factors:	5,411	kWh/Mgal	
On-site Vineyards Water Usage Electricity:	**16,665.88**	**kWh/year**	

CO2 Emissions:

Year 2020 CO2/kWh factor:	290	lbs CO2/MWh	Source: PG&E, 2015
Year 2020 CO2 emissions (lbs CO2):	4,833	lbs CO2	
Year 2020 CO2 emissions (MT CO2):	**2.19**	**MT CO2**	
Year 2030 CO2/kWh factor:	217.5	lbs CO2/MWh	
Year 2030 CO2 emissions (lbs CO2):	3,625	lbs CO2	
Year 2030 CO2 emissions (MT CO2):	**1.64**	**MT CO2**	

Off-road Mobile (Construction) Energy Usage

Note: For the sake of simplicity, and as a conservative estimation, it was assumed that all off-road vehicles use diesel fuel as an energy source. Demolition, site preparation and grading off-road mobile vehicle on-site gallons of fuel are calculated below.

Given Factor:	**209.96**	**metric tons**	**CO2 (provided in CalEEMod Output File)**	
Conversion Factor:	2204.62	pounds	per metric ton	
Intermediate Result:	**462,884**	**pounds**	**CO2**	
Conversion Factor:	22.38	pounds	CO2 per 1 gallon of diesel fuel	(Source: U.S. EIA, 2016).
Final Result:	**20,682.91**	**gallons**	**diesel fuel**	Website: http://www.eia.gov/tools/faqs/faq.cfm?id=307&t=11)

On-road Mobile (Operational) Energy Usage

Note: For the sake of simplicity, it was assumed that passenger vehicles, light duty trucks, motorcycles, and mobile homes use gasoline, and all medium-duty trucks, heavy-duty trucks, and buses use diesel fuel.

Unmitigated:

Step 1: **Total Net Daily Trips (approximate)**

470

Res H-W	*Res H-S*	*Res H-O*
Trip Length (miles) (provided by CalEEMod)		
10.8	7.3	7.5
Trip % (conservatively estimated)		
42.60%	21.00%	36.40%

Average Trip Length (weighted average)

8.8638

Therefore:

Average Daily VMT:

4,170

Step 2: Given:

Fleet Mix (provided by CalEEMod v2016.3.1)

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
51.3%	4.2%	22.6%	14.1%	3.6%	0.7%	1.6%	0.9%	0.2%	0.1%	0.6%	0.1%	0.2%

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LDA	LDT1	LDT2	MDV	MCY	MH	OBUS
29.33509657	23.679122	21.095877	15.61685106	34.65983025	6.48854607	6.4587038

Diesel MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LHD1	LHD2	MHD	HHD	UBUS	SBUS
17.03681767	15.354256	8.2174313	5.471643017	4.432964734	7.211905445

Therefore:

Weighted Average MPG Factors

Gasoline: **25.0** Diesel: **13.0**

Step 3: **Therefore:**

155 **daily gallons of gasoline** **23** **daily gallons of diesel**

or

56,610	**annual gallons of gasoline**	**8,403**	**annual gallons of diesel**

On-road Mobile (Construction) Energy Usage - Demolition

Step 1: **Total Daily Worker Trips (provided by CalEEMod)**

15

Worker Trip Length (miles) (provided by CalEEMod)

10.8

Therefore:

Average Worker Daily VMT:

162

Step 2: Given:

Assumed Fleet Mix for Workers (provided by CalEEMod v2016.3.1)

LDA	LDT1	LDT2
0.3333333	0.333333	0.333333

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LDA	LDT1	LDT2
27.176997	22.89247	20.66278

Therefore:

Weighted Average Worker MPG Factor

23.6

Step 3: **Therefore:**

6.9 **Worker daily gallons of gasoline**

Step 4: 21 **# of Days (see CalEEMod)**

Therefore:

Result: **144** **Total gallons of gasoline**

On-road Mobile (Construction) Energy Usage - Site Preparation

Step 1: **Total Daily Worker Trips (provided by CalEEMod)**

37

Worker Trip Length (miles) (provided by CalEEMod)

10.8

Therefore:

Average Worker Daily VMT:

400

Step 2: Given:

Assumed Fleet Mix for Workers (provided by CalEEMod v2016.3.1)

LDA	LDT1	LDT2
0.3333333	0.3333333	0.3333333

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LDA	LDT1	LDT2
27.176997	22.892471	20.662779

Therefore:

Weighted Average Worker MPG Factor

23.6

Step 3: **Therefore:**

16.9 **Worker daily gallons of gasoline**

Step 4: 30 **# of Days (see CalEEMod)**

Therefore:

Result: **508** **Total gallons of gasoline**

On-road Mobile (Construction) Energy Usage - Grading

Step 1: **Total Daily Worker Trips (provided by CalEEMod)**

20

Worker Trip Length (miles) (provided by CalEEMod)

10.8

Therefore:

Average Worker Daily VMT:

216

Step 2: Given:

Assumed Fleet Mix for Workers (provided by CalEEMod v2016.3.1)

LDA	LDT1	LDT2
0.3333333	0.3333333	0.3333333

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LDA	LDT1	LDT2
27.176997	22.892471	20.662779

Therefore:

Weighted Average Worker MPG Factor

23.6

Step 3: **Therefore:**

9.2 **Worker daily gallons of gasoline**

Step 4: 75 **# of Days (see CalEEMod)**

Therefore:

Result: **687** **Total gallons of gasoline**

On-road Mobile (Construction) Energy Usage - Building Construction

Step 1:

Total Daily Worker Trips (provided by CalEEMod)	Total Daily Vendor Trips (provided by CalEEMod)	Total Daily Hauler Trips (provided by CalEEMod)
129	49	0

Worker Trip Length (miles) (provided by CalEEMod)	Vendor Trip Length (miles) (provided by CalEEMod)	Hauling Trip Length (miles) (provided by CalEEMod)
10.8	7.3	0

Therefore:

Average Worker Daily VMT:	Average Vendor Daily VMT:	Average Hauling Daily VMT:
1,393.20	358	-

Step 2:

Given:

Assumed Fleet Mix for Workers (provided by CalEEMod v2016.3.1)

LDA	LDT1	LDT2
0.33333333	0.333333	0.333333

Assumed Fleet Mix for Vendors (provided by CalEEMod v2016.3.1)

MHD	HHD
0.5	0.5

And:

MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

Gasoline:			Diesel:	
LDA	LDT1	LDT2	MHD	HHD
27.1769965	22.89247	20.66278	8.140403493	5.408756

Therefore:

Weighted Average Worker (Gasoline) MPG Factor	Weighted Average Vendor (Diesel) MPG Factor	Weighted Average Hauling MPG Factor
23.6	6.8	0.0

Step 3:

Therefore:		Therefore:		Therefore:	
59	Worker daily gallons of gasoline	53	Vendor daily gallons of diesel	0.0	

Step 4:

340 # of Days (see CalEEMod)

Therefore:		Therefore:	
20,091	Total gallons of gasoline	17,952	Total gallons of diesel

On-road Mobile (Construction) Energy Usage - Paving

Step 1: **Total Daily Worker Trips (provided by CalEEMod)**

15

Worker Trip Length (miles) (provided by CalEEMod)

10.8

Therefore:

Average Worker Daily VMT:

162

Step 2: Given:

Assumed Fleet Mix for Workers (provided by CalEEMod v2016.3.1)

LDA	LDT1	LDT2
0.3333333	0.3333333	0.3333333

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LDA	LDT1	LDT2
27.176997	22.892471	20.662779

Therefore:

Weighted Average Worker MPG Factor

23.6

Step 3: **Therefore:**

6.9 **Worker daily gallons of gasoline**

Step 4: 55 **# of Days (see CalEEMod)**

Therefore:

Result: **378** **Total gallons of gasoline**

On-road Mobile (Construction) Energy Usage - Architectural Coating

Step 1: **Total Daily Worker Trips (provided by CalEEMod)**

26

Worker Trip Length (miles) (provided by CalEEMod)

10.8

Therefore:

Average Worker Daily VMT:

281

Step 2: Given:

Assumed Fleet Mix for Workers (provided by CalEEMod v2016.3.1)

LDA	LDT1	LDT2
0.3333333	0.3333333	0.3333333

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LDA	LDT1	LDT2
27.176997	22.892471	20.662779

Therefore:

Weighted Average Worker MPG Factor

23.6

Step 3: **Therefore:**

11.9 **Worker daily gallons of gasoline**

Step 4: 55 **# of Days (see CalEEMod)**

Therefore:

Result: **655** **Total gallons of gasoline**

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: County
Region: El Dorado
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	Fuel	VMT	Fuel_Consumption	MPG (derived)	
El Dorado	2020	All Other Buses	DSL	2827.361	0.349703664		
El Dorado	2020	LDA	GAS	2234289	76.16436578	**29.33509657**	
El Dorado	2020	LDA	DSL	26822.97	0.717033326		
El Dorado	2020	LDA	ELEC	66080.66	0		
El Dorado	2020	LDT1	GAS	188095.4	7.943511835	**23.67912233**	
El Dorado	2020	LDT1	DSL	324.2172	0.012465344		
El Dorado	2020	LDT1	ELEC	48.90481	0		
El Dorado	2020	LDT2	GAS	1022049	48.44779314	**21.09587713**	
El Dorado	2020	LDT2	DSL	1797.601	0.062384944		
El Dorado	2020	LHD1	GAS	65210.8	6.875596988		
El Dorado	2020	LHD1	DSL	96383.19	5.657346759	**17.03681767**	
El Dorado	2020	LHD2	GAS	6269.238	0.717132016		
El Dorado	2020	LHD2	DSL	26171.73	1.704525848	**15.35425569**	
El Dorado	2020	MCY	GAS	25577.99	0.737972252	**34.65983025**	
El Dorado	2020	MDV	GAS	627025.2	40.15055413	**15.61685106**	
El Dorado	2020	MDV	DSL	11226.04	0.508891871		
El Dorado	2020	MH	GAS	5998.462	0.924469406	**6.48854607**	
El Dorado	2020	MH	DSL	2170.293	0.229928898		
El Dorado	2020	Motor Coach	DSL	1628.773	0.292020301		
El Dorado	2020	OBUS	GAS	2710.516	0.419668779	**6.458703818**	
El Dorado	2020	PTO	DSL	2770.178	0.60673461	**4.565716901**	
El Dorado	2020	SBUS	GAS	479.8704	0.042505824		
El Dorado	2020	SBUS	DSL	3267.714	0.453099909	**7.211905445**	
El Dorado	2020	T6 Ag	DSL	812.5587	0.104016678	**7.811811611**	**8.217431**
El Dorado	2020	T6 CAIRP heavy	DSL	227.3743	0.027000315	**8.42117305**	
El Dorado	2020	T6 CAIRP small	DSL	697.9831	0.083286595	**8.380496872**	
El Dorado	2020	T6 instate construction heavy	DSL	933.7249	0.114032467	**8.188237684**	
El Dorado	2020	T6 instate construction small	DSL	7444.792	0.900461544	**8.267750754**	
El Dorado	2020	T6 instate heavy	DSL	15090.53	1.844057148	**8.183330098**	
El Dorado	2020	T6 instate small	DSL	35148.93	4.280481616	**8.211442632**	
El Dorado	2020	T6 OOS heavy	DSL	130.2769	0.015487487	**8.411754508**	
El Dorado	2020	T6 OOS small	DSL	399.9181	0.047720089	**8.380496872**	
El Dorado	2020	T6 Public	DSL	6227.856	0.764210635	**8.149396843**	
El Dorado	2020	T6 utility	DSL	160.7883	0.020134147	**7.985853395**	
El Dorado	2020	T6TS	GAS	5513.329	0.883456568		
El Dorado	2020	T7 Ag	DSL	14.36496	0.002705378	**5.309779287**	**5.471643**
El Dorado	2020	T7 CAIRP	DSL	5165.017	0.878761885	**5.877606452**	
El Dorado	2020	T7 CAIRP construction	DSL	662.3774	0.112738473	**5.875344407**	
El Dorado	2020	T7 NNOOS	DSL	6404.627	1.019087973	**6.284665392**	
El Dorado	2020	T7 NOOS	DSL	2040.18	0.354419808	**5.756393851**	
El Dorado	2020	T7 POAK	DSL	43.99389	0.007637306	**5.760394068**	
El Dorado	2020	T7 Public	DSL	4933.065	0.970249527	**5.084325985**	
El Dorado	2020	T7 Single	DSL	13951.17	2.456285978	**5.679783453**	
El Dorado	2020	T7 single construction	DSL	1713.483	0.285690865	**5.997682401**	
El Dorado	2020	T7 SWCV	DSL	1502.993	0.680214871	**2.20958495**	
El Dorado	2020	T7 tractor	DSL	330.0366	0.056118521	**5.881063829**	
El Dorado	2020	T7 tractor construction	DSL	1277.528	0.2149602	**5.943092129**	
El Dorado	2020	T7 utility	DSL	30.57253	0.005920921	**5.163474478**	
El Dorado	2020	T7IS	GAS	1217.408	0.274734589		
El Dorado	2020	UBUS	GAS	2233.237	0.454970787		
El Dorado	2020	UBUS	DSL	3244.8	0.731970591	**4.432964734**	