

**CARSON CREEK SPECIFIC PLAN**  
**SPECIAL USE PERMIT S14-0010 - WESTMONT LIVING ASSISTED-LIVING-MEMORY CARE**  
**FACILITY**  
**EL DORADO COUNTY**  
**ENVIRONMENTAL IMPACT REPORT ADDENDUM**  
**State Clearinghouse Number: 94072021**

**Introduction**

On March 4, 1997, the El Dorado County Board of Supervisors adopted the Carson Creek Specific Plan (CCSP), certified the accompanying Final Program Environmental Impact Report (Final EIR), and made the corresponding Findings. Litigation ensued, resulting in a subsequent document (called an Addendum, but as explained in that document, in part met the criteria for a subsequent EIR rather than a CEQA-defined Addendum). That Addendum was certified on September 28, 1999. It is considered part of the Final EIR for the project.

The California Environmental Quality Act (CEQA) Guidelines § 15164 permits use of an Addendum to a Program EIR when a proposed project requires a new discretionary approval and is within the scope of the Program EIR. The new project must not have one or more significant effects, its environmental impacts cannot be more severe than those previously evaluated, and its impacts must be either mitigated through the Program EIR or among those previously declared to be significant and unavoidable. Section 15164(c) permits the Lead Agency (e.g. El Dorado County) to include an Addendum in the final EIR or negative declaration, but does not require the Addendum to be circulated for public review (See California Natural Resources Agency, Title 14, California Code of Regulations, Chapter 3, Guidelines for the Implementation of the California Environmental Quality Act, Article 11, Types of EIRs, Sections 15160 – 15170, available at <http://resources.ca.gov/ceqa/guidelines/art11.html> (accessed April 22, 2016). CEQA does not specify a particular format for an Addendum.

The CCSP encompasses approximately 710 acres in western El Dorado County, 0.5 mile south of Highway 50, 0.3 mile west of Latrobe Rd. and adjacent to the Sacramento County line. The proposed Westmont Assisted Living and Memory Care project would allow a 134-unit residential care facility for the elderly on an approximately four-acre site on Golden Foothill Parkway within the CCSP. The subject property is located in the CCSP Phase 2 and Village 9 of the Carson Creek Specific Plan (CCSP), in the El Dorado Hills area of El Dorado County, approximately 1.8 miles south of Highway 50, and 0.3 mile west of Latrobe Road. It is designated for a fire station with underlying residential uses if the fire station is not developed on the site. The Golden Foothill fire station was recently constructed nearby on Golden Foothill Parkway, releasing the property for residential development.

The proposed project, although residential in character, is required by the CCSP to obtain a special development permit to proceed – a new discretionary entitlement. The accompanying Initial Study has been prepared by El Dorado County to determine whether the environmental impacts of this project are similar in nature and scale to those previously evaluated by the Final Program EIR. As explained below, with related Findings, the proposed project's impacts are less than significant, with incorporation of mitigation measures set forth in the CCSP Final Program EIR.

**APPROVED**  
**EL DORADO COUNTY**  
**PLANNING COMMISSION**

DATE July 28, 2016  
BY Roger Trout/Curt  
EXECUTIVE SECRETARY



EL DORADO COUNTY PLANNING SERVICES  
 2850 FAIRLANE COURT  
 PLACERVILLE, CA 95667

INITIAL STUDY  
 ENVIRONMENTAL CHECKLIST

<b>Project Title:</b> S14-0010/Westmont Living Assisted-Living-Memory Care Facility			
<b>Lead Agency Name and Address:</b> El Dorado County, 2850 Fairlane Court, Placerville, CA 95667			
<b>Contact Person:</b> Rommel Pabalinas, Senior Planner		<b>Phone Number:</b> (530) 621-5355	
<b>Applicant's Name and Address:</b> Westmont Development, LP, 7660 Fay Ave., Ste. N, La Jolla, CA 92037			
<b>Project Agent's Name and Address:</b> Michael O'Rourke, CEO, 7660 Fay Ave., Ste. N, La Jolla, CA 92037			
<b>Project Engineer's Name and Address:</b> CTA Engineering and Surveying, 3233 Monier Cir., Rancho Cordova, CA 95742			
<b>Project Location:</b> South side of Golden Foothill Parkway, at the intersection of the proposed Carson Crossing Drive, in the El Dorado Hills area; Lot 7, Carson Creek Specific Plan			
<b>Assessor's Parcel Number:</b> 117-580-17		<b>Acres:</b> 4.072 acres	
<b>Sections:</b> Sec. __ T: __ R: __			
<b>General Plan Designation:</b> Adopted Plan, Carson Creek Specific Plan			
<b>Zoning:</b> Carson Creek Specific Plan, Multifamily Residential			
<b>Description of Project:</b> 134-unit Assisted-Living and Memory Care facility			
<b>Surrounding Land Uses and Setting:</b>			
	<b>Zoning</b>	<b>General Plan</b>	<b>Land Use/Improvements</b>
<b>Site</b>	Multifamily (MF)	Adopted Plan (AP) Carson Creek Specific Plan (CC-SP)	Undeveloped
<b>North</b>	Research and Development (R&D)	Research and Development (R&D)	Research and Development/ Undeveloped
<b>South</b>	Carson Creek Specific Plan (CC-SP)	Adopted Plan (AP) Carson Creek Specific Plan (CCSP)	Residential/Undeveloped
<b>East</b>	Research and Development (R&D)	Research and Development (R&D)	Research and Development/ Office and Warehouse
<b>West</b>	Carson Creek Specific Plan (CC-SP)	Adopted Plan (AP) Carson Creek Specific Plan (CC-SP)	Residential/Undeveloped
Environmental Setting: The project site lies on flat to gently sloping terrain on the south side of Golden Foothill Parkway and west of Carson Crossing Drive, between a low-rise business park and age-restricted single-family residential development.			
Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):			
1. Air Quality Management District			
2. Community Development Agency- Long Range Planning Division-Storm Drainage			
3. Community Development Agency- Transportation Division			

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

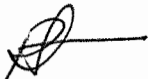
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

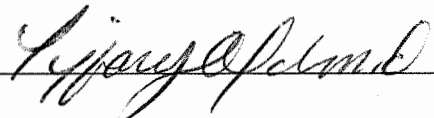
	Aesthetics		Agriculture and Forestry Resources		Air Quality
	Biological Resources		Cultural Resources		Geology / Soils
	Greenhouse Gas Emissions		Hazards & Hazardous Materials		Hydrology / Water Quality
	Land Use / Planning		Mineral Resources		Noise
	Population / Housing		Public Services		Recreation
	Transportation/Traffic		Tribal Cultural Resources		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: 4/29/14  
Printed Name: Rommel Pabalinas, Project Planner For: El Dorado County

Signature:  Date: 06/29/16  
Printed Name: Tiffany Schmid, Principal Planner For: El Dorado County

## **PROJECT DESCRIPTION**

### **Introduction**

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate whether any potential environmental impacts resulting from the proposed project would exceed those described in the Carson Creek Final Program Environmental Impact Report and Addenda, SCH No. 94072021 (January 1997) (hereafter “CCSP Program FEIR”), and to substantiate the use of an additional Addendum to the Program EIR. The “Draft” EIR, which was incorporated into the Program EIR, exists as a stand-alone document, and is referenced in this document as “CCSP Draft EIR.”

CEQA Guidelines § 15164 permits use of an Addendum to a Program EIR when a proposed project requires a new discretionary approval and is within the scope of the Program EIR. The new project must not have one or more significant effects, its environmental impacts can not be more severe than those previously evaluated, and its impacts must be either mitigated through the Program EIR or among those previously declared to be significant and unavoidable. Section 15164(c) permits the Lead Agency (e.g. El Dorado County) to include an Addendum in the final EIR or negative declaration, but does not require the Addendum to be circulated for public review (See California Natural Resources Agency, Title 14, California Code of Regulations, Chapter 3, Guidelines for the Implementation of the California Environmental Quality Act, Article 11, Types of EIRs, Section s 15160 – 15170, available at <http://resources.ca.gov/ceqa/guidelines/art11.html> (accessed April 22, 2016).

The subject property is located within Phase 2 and Village 9 of the Carson Creek Specific Plan (CCSP), in the El Dorado Hills area of El Dorado County, approximately 1.8 miles south of Highway 50, and 0.3 mile west of Latrobe Road.

The Program EIR was certified and the CCSP was approved by the Board of Supervisors on March 4, 1997. A lawsuit was then filed on the Specific Plan, which resulted in a settlement agreement and an Addendum to evaluate water supply for the project. Subsequent Specific Plan amendments were approved on September 28, 1999.

Phase 2 of the CCSP was approved under tentative map application TM04-1391 on February 14, 2008. A large lot final map, J-130, was recorded August 26, 2014. Large-lot final maps are for financing purposes only and do not allow issuance of building permits until such time as subsequent phased maps are recorded. The project was on hold until final map TM 04-1391-F-3 for Carson Creek Phase 2 Unit 1, Exhibit S, was approved by the BOS on September 17, 2015.

The proposed project would allow a 134-unit residential care facility for the elderly on an approximately four-acre site on Golden Foothill Parkway, within the Carson Creek Specific Plan in the El Dorado Hills area.

### **Project Location and Surrounding Land Uses**

The project site lies on flat to gently sloping terrain on the south side of Golden Foothill Parkway and west of the future Carson Crossing Drive. It is not within an important biological corridor or agricultural district. To the east is a portion of the El Dorado Hills Business Park, with one to two-story office and industrial structures. A recently-constructed, age-restricted single-family residential development lies southwest of the site, west of Carson Creek. Parcels north of the project site are in various stages of rough grading and development. The undeveloped 18+ acre property – Unit 2 of the CCSP - lies immediately to the south, between the subject property and the westward curve of Carson Crossing Drive.

Carson Creek flows north to south approximately 235 – 265 feet from the western property line; the creek is protected by a platted buffer area that extends approximately 120 feet on both sides of the creek’s centerline. There are no trees on the site, and vegetation is limited mainly to annual grasses and weedy plants. The site has been disturbed by disking, grading and stockpiling of construction materials, as it is surrounded by various development projects of the Carson Creek Specific Plan and El Dorado Hills Business Park.

## **Project Characteristics**

The proposed residential care facility comprises a single 120,213-square foot, two-story structure designed in a California-Spanish-Colonial architectural motif, with three internal courtyards, including a “memory garden.” The initial phase of the project would provide 35 memory-care units and 65 assisted-living units, including 17 studios, 39 one-bedroom and nine two-bedroom units in 91,446 square feet. The second phase would add 34 assisted-living units, including eight studios, 20 one-bedroom and six 2-bedroom units in 28,767 square feet. The care facility would provide 24-hour per day supervision, with 29 employees on-site during the day. Amenities would include meals, entertainment, activities, exercise programs, a movie theater, on-site beauty shop, a gift shop and transportation to local activities and shopping. The facility would have direct access to nearby walking paths in the CCSP area.

The project’s California-Spanish-Colonial architecture uses flat, stucco-faced building planes with a combination of hip, gable and mansard tile roofing. Functional and decorative wrought-iron balconies ornament the upper story windows; other wrought-iron grillwork accents gable vents and roof fascia. The building’s main façade on Golden Foothill Parkway is anchored by a central decorative tower and chimney feature.

Proposed landscaping includes various water-efficient evergreen and deciduous trees, shrubs and groundcover, with both drip and standard rotor-sprinkler irrigation systems. No turf is proposed.

### **1. Infrastructure/Circulation**

Primary access to the project is proposed to be from Golden Foothill Parkway with a secondary right-in, right-out access driveway Carson Crossing Drive. Carson Crossing Drive will create a new intersection on Golden Foothill Parkway and will traverse the Carson Creek Specific Plan to the northwest, eventually connecting to White Rock Road within the City of Folsom. Carson Crossing Drive is proposed to be constructed as a part of the larger CCSP project. In addition to the Golden Foothill Parkway and Carson Crossing Drive intersection, the CCSP Unit 3 project proposes a gated access off Golden Foothill Parkway approximately 600 feet west of Carson Crossing Drive.

Sixty-nine parking spaces – one space for every two units - including three ADA-compliant spaces, are shown arrayed on the north, west and south sides of the building, connected by a perimeter driveway.

The project would be served by public water and sewer via water and sewer lines located in the adjacent roadways. The project is within the Eldorado Irrigation District’s service area, and water and sewer infrastructure are currently being installed as the surrounding subdivision is developed.

### **2. Construction Considerations**

The project would incorporate parking lot and landscape lighting. All exterior lighting must conform to the County Zoning Ordinance Section 130.14.170, and be fully shielded pursuant to the Illumination Engineering Society of North America’s (IESNA) full cut-off designation.

No signs are proposed for the residential care facility.

## **Project Schedule and Approvals**

Because this Initial Study is being prepared to substantiate a second Addendum to the Final CCSP Program EIR, it is not required to be circulated but will be available for review prior to the public hearing on the project.

The applicant is seeking a Special Use Permit to allow a 134-unit residential care facility in the CCSP Multi-Family residential district.

## **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:
  - Earlier Analysis Used. Identify and state where they are available for review.
  - 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.
  - 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:
  - The significance criteria or threshold, if any, used to evaluate each question; and
  - The mitigation measure identified, if any, to reduce the impact to less than significant.

**ENVIRONMENTAL IMPACTS**

<b>I. AESTHETICS.</b> 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**

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.

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. None of these are near the project site.

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 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. **Scenic Vista or Resource:** The project site lies on flat to gently sloping terrain on the south side of Golden Foothill Parkway and west of the future Carson Crossing Drive, in an area of active residential and R&D development. This development has dramatically changed the agricultural character of the landscape. Accordingly, the existing aesthetic baseline for scenic vistas includes the current built environment.

The CCSP Program EIR evaluated views toward the project site from two positions along Latrobe Road, at Golden Foothill Parkway (north) and Investment Boulevard (Photo Locations No. 4, 6; Impacts No. 4.3-4.3-4, 4.3-6), and concluded that impacts to these view locations were less than significant, because new development would occur behind the business park, and ultimately be indistinguishable from it. These view locations encompass the views from Latrobe Road and Golden Foothill Parkway (south). Business park development has progressed, including growth of landscape trees. As for the CCSP generally, the proposed project would likely be hidden from view from Latrobe Road, since the proposed building heights are not greater than the existing structures. Impacts to views would not change. Moreover, no scenic vistas have been officially designated for the project site or vicinity in the General Plan (El Dorado County, 2003). Accordingly, no impacts to scenic vistas or associated resources are anticipated.

- b. **Scenic Resources Within Viewshed of State Scenic Highway:**

- The project is not near any officially designated State Scenic Highway or county-designated scenic highway, or any roadway that is part of a corridor protection program (Caltrans, 2013).
- There are no mature, native trees or historic buildings on or near the project site.
- Given these facts, no impacts to scenic resources within the viewshed of a scenic highway are anticipated.

- c. **Visual Character of the Site and Surroundings:** With expansion of the business park and implementation of the CCSP, the visual character of the site and environs is changing from an open, agricultural landscape to a "built" environment, with low-rise, industrial, R&D buildings on the east and residential uses to the west. When the CCSP was adopted and the FEIR certified, these changes were considered to be significant (Impacts No. 4.3-2, 4.3-3, 4.3-5). Of these impacts, No. 4.3-5 (views of Carson Creek from Golden Foothill Parkway at the creek crossing) is the most relevant to the proposed project, since it corresponds to a view of the creek southward from a position on Golden Foothill Parkway (south), just west of the subject property. At the time, no development had occurred except for the business park to the east, and views of the creek and distant rolling hills were largely uninterrupted. To soften the visual boundaries between new construction and the creek, Mitigation Measure 4.3-5 required that the project incorporate native plant species in the greenbelt along the creek, and that the project use natural building materials (wood, stone and brick) for hardscape features, such as fencing, trail materials, etc. In particular, Mitigation Measure 4.3-5(e) required that the CCSP "retain unobstructed views of Carson Creek from locations



along Golden Hills Parkway.” Even with these mitigation measures, however, impacts to the visual character of this portion of the CCSP remained significant and unavoidable.

Presently, views south from Golden Foothill Parkway are somewhat more constricted along Carson Creek, despite the buffer area on each side of the creek, as development has proceeded to the southwest. Views are maintained from the bridge over the creek, and from locations to either side, consistent with Mitigation Measure 4.3-5(e). The proposed project would not interfere with these views, since the western property line is separated from the creek buffer perimeter by approximately 115 to 145 feet. Accordingly, impacts to these views would not markedly change from those evaluated by the Program EIR.

The site would be visible from the trail/pathway system along Carson Creek, as well as from Golden Foothill Parkway. However, the existing 240-foot buffer along Carson Creek would preserve local views of the creek, and the two-story project would not interfere substantially with those views, since it would essentially preserve a linear view corridor, as the building would be set back from the street by approximately 72 feet, and from the western property line by 55 feet. The project is using materials of “natural” colors – tan stucco, terra-cotta roof tile, dark bronze wrought-iron, etc. (see Sheet A 3.2, Planning Submittal), and is of similar height and bulk to the business park structures to the east. Thus, the project is reasonably consistent with Mitigation Measure 4.3-5, and would not create new visual impacts beyond those considered in the Program EIR.

The site’s present condition is visually degraded, as it has been subject to rough grading and stockpiling of rock and other construction materials. When completed, a two-story, California-Spanish Colonial structure would be in place, with associated landscaping and site amenities. The architecture is also subject to the Carson Creek Specific Plan development standards, which are expressly designed to encourage visually-pleasing building design and to minimize visual impacts. Accordingly, no additional site degradation is anticipated, and associated impacts are not anticipated to exceed those evaluated in the Program EIR. Impacts, if any, would be less than significant.

- d. **Light and Glare:** The project would contribute to nighttime ambient light in the local area from parking lot and landscape lighting. The applicant has not submitted a lighting plan; however, all exterior lighting must conform to the County Zoning Ordinance Section 130.14.170, and be fully shielded pursuant to the Illumination Engineering Society of North America’s (IESNA) full cut-off designation. Accordingly, impacts from light and glare are anticipated to be less than significant.

**FINDING:** The CCSP Program FEIR mitigation measures apply to this project, and anticipated visual impacts would not exceed those evaluated in that EIR. Accordingly, as conditioned and with adherence to El Dorado County Code of Ordinances (County Code), for this Aesthetics category, impacts would be less than significant.

<b>II. AGRICULTURE AND FOREST RESOURCES.</b> 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 (CDC 2008). 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.

**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 not zoned for agricultural use, is not located within an Agricultural District, and does not contain prime soils.
- b. **Agricultural Uses:** The Program EIR for the CCSP evaluated the change in use from agriculture (grazing land) to residential uses and found impacts to be less than significant (Land Use, Section 4.2). Moreover, the Program EIR noted that a Williamson Act contract applicable to the project site was not renewed, and was set to expire nine years after February 28, 1991 (i.e. February 28, 1999). The proposed project is separated from existing grazing uses by surrounding development, and would not interfere with continuation of grazing on agricultural properties to the south of the CCSP area. Given these facts, the project would not affect existing or future agricultural uses, and no associated impacts are anticipated.
- c-d. **Loss of Forest Land or Conversion of Forest Land:** The project site is not designated as Timberland Preserve Zone (TPZ) or other forestland according to the General Plan and Zoning Ordinance. There are no trees on the project site, thus no tree removal would occur. Given these facts, the project would not affect forest land, and no associated impacts are anticipated.
- e. **Conversion of Prime Farmland or Forest Land:** As noted above, the project site is not zoned for agricultural use nor is it located within an Agricultural District. The project would not change the site's land use from agriculture or convert farmland to another land use. Given these facts, the project would not affect prime farmland or forest land. No associated impacts are anticipated.

**FINDING:** For this Agriculture category, the thresholds of significance have not been exceeded and no impacts would be anticipated to result from the project.

<b>III. AIR QUALITY. <i>Would the project:</i></b>				
	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 six 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), 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 the west slope portion of 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. California Air Resources Board 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. National and state ambient air quality standards (AAQS) have been adopted by the Environmental Protection Agency and State of California, respectively, for each criteria pollutant: ozone, particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide.

The Environmental Protection Agency and State also 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, 2013). County thresholds are included in the chart below.

Criteria Pollutant	El Dorado County Threshold	
Reactive Organic Gases (ROG)	82 lbs/day	
Nitrogen Oxides (NOx)	82 lbs/day	
Carbon Monoxide (CO)	8-hour average: 6 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: 0.070 ppm	1-hour average: .09 ppm

Criteria Pollutant – Mass Emissions, Stationary Sources (PM <sub>10</sub> used for construction emissions)	El Dorado AQMD Threshold (Rule 523.3)
ROG	10 lbs/day
NOx	10 lbs/day
Particulate Matter (PM10):	80 lbs/day

The guide includes a table (Table 5.2) listing project types with potentially significant emissions. ROG and NOx Emissions may be assumed to not be significant if:

- The project encompasses 12 acres or less of ground that is being worked at one time during construction;
- At least one of the recommended mitigation measures related to such pollutants is incorporated into the construction of the project;
- The project proponent commits to pay mitigation fees in accordance with the provisions of an established mitigation fee program in the district (or such program in another air pollution control district that is acceptable to District); or
- Daily average fuel use is less than 337 gallons per day for equipment from 1995 or earlier, or 402 gallons per day for equipment from 1996 or later.

If the project meets one of the conditions above, AQMD assumed that exhaust emissions of other air pollutants from the operation of equipment and vehicles are also not significant.

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).

Naturally-occurring asbestos (NOA) is also a concern in El Dorado County because it is known to be present in certain soils 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 NOx will result in construction or operation emissions greater than 82lbs/day (Table 3.2);

- Emissions of PM<sub>10</sub>, CO, SO<sub>2</sub> and NO<sub>x</sub>, 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 would 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 U.S. EPA regulations governing toxic and hazardous emissions.

a. **Air Quality Plan:** El Dorado County has adopted the Rules and Regulations of the El Dorado County Air Quality Management District (2000) establishing rules and standards for the reduction of stationary source air pollutants (ROG/VOC, NO<sub>x</sub>, and O<sub>3</sub>). The EDC/State Clean Air Act Plan has set a schedule for implementing and funding transportation contract measures to limit mobile source emissions. The CCSP Program EIR evaluated the project for compliance with statewide and regional plans, and determined that it would not conflict with or obstruct implementation of either plan, and that the project was consistent with the then-applicable El Dorado County General Plan (Impact No. 4.6-7). Rather, all phases of the project would be required to comply with applicable plan components, including new Rules as adopted. The proposed project does not change these conclusions, as it would also be required to conform to plans and local Rules.

b-c. **Air Quality Standards and Cumulative Impacts:** The California Emissions Estimator Model (CalEEMod, v. 2013.2.2) was used to evaluate construction and operational impacts of the proposed project (see Appendix A for complete model results). Table AQ - 1 below shows the model results for unmitigated winter, summer, and annual construction and operational emissions.

1. **Construction Emissions:** Based on a schedule extending from approximately April 1, 2017 through April 30, 2018,<sup>1</sup> project construction would generate approximately 111 lbs of ROG per day during the 2018 portion of construction, exceeding the 82 lb./day ROG threshold. Mitigation measures, such as incorporating low-emission construction equipment (e.g. Tier IV engines or better), would reduce ROG levels, but not to less than 82 lbs/day.<sup>2</sup> The project would not exceed NO<sub>x</sub> emissions thresholds.

Project construction would not exceed the 80 lbs/day PM<sub>10</sub> threshold; additionally, because the project area is less than 12 acres, this impact is assumed to be less than significant. Moreover, project grading and construction would require an El Dorado AQMD Fugitive Dust Mitigation Plan (FDMP) for grading and construction activities (see [http://edcgov.us/uploadedFiles/Government/Air\\_Quality\\_Management/FDP%20Application%20Form%20FY%2015-16\(1\).pdf](http://edcgov.us/uploadedFiles/Government/Air_Quality_Management/FDP%20Application%20Form%20FY%2015-16(1).pdf) (accessed April 14, 2016)). Such a plan would address grading measures and operation of equipment to minimize and reduce the level of defined particulate matter exposure and/or emissions to less than significant levels.

The Carson Creek FEIR assessed construction impacts for CCSP infrastructure and land uses similarly (Impact No. 4.6-2), and found that construction would cause a significant and unavoidable short-term impact. To reduce construction impacts to the extent possible, the FEIR required several mitigation measures, which would also apply to this project (Mitigation Measures 4.61, 4.62, 4.63). These measures include the previously-mentioned dust-control measures, using low-emission mobile and stationary construction equipment, complying with AQMD rules, etc. Given that these mitigation measures would be required for the proposed project, and that the project would not increase emissions above the FEIR-determined “significant and unavoidable” level, the analysis and findings for the CCSP are still valid for this project. Short-term impacts would remain significant and unavoidable.

2. **Operational Emissions:** Following construction, the project would operate under applicable thresholds. Impacts are anticipated to be less than significant.

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<sup>1</sup> See Appendix A (CalEEMod Results) for construction equipment details, emissions associated with specific construction phases, etc.

<sup>2</sup> Id.; see “Mitigated Construction” tables for model results.

3. **Naturally Occurring Asbestos:** The project site is outside of mapped NOAs according to the most recent edition of the El Dorado County Asbestos Review Map, available at [http://edcgov.us/Government/AirQualityManagement/Asbestos\\_Maps.aspx](http://edcgov.us/Government/AirQualityManagement/Asbestos_Maps.aspx) (accessed April 14, 2016).
- d. **Sensitive Receptors:** The CEQA Guidelines (14 CCR 15000) identify sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others that are especially sensitive to the effects of air pollutants. Hospitals, schools, and convalescent hospitals are examples of sensitive receptors. The proposed project would create a “sensitive receptor” that would not be occupied until construction was complete. As noted above, once the facility is in operation, no substantial pollutants would be emitted following construction. Other than construction emissions, as noted above, impacts are anticipated to be less than significant.
- e. **Objectionable Odors:** Table 3-1 of the Guide to Air Quality Assessment (AQMD, 2002) does not include assisted-living facilities in its objectionable odor-causing list. The proposed project would not generate or produce such odors as it would create an assisted-living facility. Odors, if any, would come from the facility’s kitchen, and would be largely confined to the site. No impacts associated with odors are anticipated.

**FINDING:** The proposed project would not affect the implementation of regional air quality regulations or management plans. The CCSP Program FEIR mitigation measures apply to this project, and anticipated impacts to local and regional air quality would not exceed those evaluated in that EIR. Accordingly, as conditioned and with adherence to El Dorado County Code of Ordinances (County Code) and El Dorado AQMD Rules, short-term impacts would remain significant and unavoidable, but long-term impacts would be less than significant.

**Table AQ - 1  
 Unmitigated Construction and Operational Emissions**

<b>Winter Emissions Construction</b>						
	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10</b>	<b>PM2.5</b>
<b>Year</b>	<b>lbs/day</b>					
2017	8.67	94.40	68.55	0.08	29.02	17.47
2018	110.52	22.68	26.49	0.04	2.45	1.57
<b>Total</b>	<b>119.17</b>	<b>117.08</b>	<b>95.04</b>	<b>0.12</b>	<b>31.47</b>	<b>19.05</b>
<b>Winter Emissions Operational</b>						
	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10</b>	<b>PM2.5</b>
<b>Category</b>	<b>lbs/day</b>					
Area	3.94	0.13	11.13	5.8x10 <sup>-004</sup>	0.06	0.06
Energy	0.17	0.15	0.06	9.4x10 <sup>-004</sup>	0.01	0.01
Mobile	1.32	2.92	13.30	0.03	2.26	0.63
<b>Total</b>	<b>5.28</b>	<b>3.20</b>	<b>24.50</b>	<b>0.031</b>	<b>2.33</b>	<b>0.70</b>
<b>Summer Emissions Construction</b>						
	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10</b>	<b>PM2.5</b>
<b>Year</b>	<b>lbs/day</b>					
2017	8.65	94.26	68.05	0.08	29.02	17.47
2018	110.53	22.50	25.70	0.04	2.45	1.57
<b>Total</b>	<b>119.18</b>	<b>116.76</b>	<b>93.75</b>	<b>0.12</b>	<b>31.47</b>	<b>19.05</b>
<b>Summer Emissions Operational</b>						
	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10</b>	<b>PM2.5</b>
<b>Category</b>	<b>lbs/day</b>					
Area	3.95	0.13	11.13	5.8x10 <sup>-004</sup>	0.06	0.06
Energy	0.02	0.15	0.06	9.4x10 <sup>-004</sup>	0.01	0.01
Mobile	1.41	2.57	13.20	0.03	2.26	0.63
<b>Total</b>	<b>5.37</b>	<b>2.85</b>	<b>24.40</b>	<b>0.03</b>	<b>2.34</b>	<b>0.70</b>
<b>Annual Emissions Construction</b>						
	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10</b>	<b>PM2.5</b>
<b>Year</b>	<b>lbs/day*</b>					
2017	1.97	12.22	15.90	0.02	2.65	1.45
2018	14.69	7.61	11.33	0.02	1.24	0.53
<b>Total</b>	<b>16.66</b>	<b>19.83</b>	<b>27.22</b>	<b>0.04</b>	<b>3.89</b>	<b>1.98</b>
* Notes: Values converted from tons/year in CalEEMod results for comparison to AQMD thresholds. Construction days in 2017 ≈ 259 Construction days in 2018 ≈ 102 Total Construction days ≈ 361						
<b>Annual Emissions Operational</b>						
	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10</b>	<b>PM2.5</b>
<b>Category</b>	<b>lbs/day*</b>					
Area	3.62	0.01	1.21	0.00	0.01	0.01
Energy	0.02	0.16	0.05	0.00	0.01	0.01
Mobile	1.21	2.74	12.11	0.03	2.08	0.60
<b>Total</b>	<b>4.84</b>	<b>2.92</b>	<b>13.37</b>	<b>0.03</b>	<b>2.10</b>	<b>0.62</b>
* Notes: Values converted from tons/year in CalEEMod results for comparison to AQMD thresholds. Operational Year = 365 days						



<b>IV. BIOLOGICAL RESOURCES.</b> <i>Would the project:</i>				
	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 water bodies 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. **Special Status Species:** There are no special status species or habitat for those species on the project site. The Program FEIR evaluated the larger CCSP property for the presence of special-status species, and found only marginal habitat, as the land had been heavily grazed for years. Despite the presence of vernal pools and the Carson Creek riparian corridor, grazing pressure had heavily impacted habitat value. No special-status species were found during focused surveys, or expected to be found on the Carson Creek portion of the CCSP (Impacts No. 4.8-3, 4.8-4; Draft EIR p. 4.8-11). With the proposed mitigation measures contained within the CCSP, impacts to special-status species were considered less than significant (CCSP Draft EIR p. 4.8-11).

The project site itself has been rough-graded and supports only non-native annual grasses and forbs. It contains no vernal pools. It is separated by several hundred feet from the Carson Creek corridor. Measures adopted in the Program EIR, as well as current stormwater regulations, would protect the creek from any drainage from the subject property (additional discussion below and in the Hydrologic Resources section in this document). Accordingly, impacts to special-status do not exceed those evaluated in the Program EIR and are anticipated to be less than significant.

b-c. **Riparian Habitat and Wetlands:** There is no riparian or wetland habitat on the project site. The Program FEIR/CCSP Draft EIR evaluated the overall CCSP area for riparian habitat and wetlands, and identified 27.43 acres of wetland terrain on the Carson Creek Ranch portion of the CCSP, but none directly on the project site itself. A Wetland Preservation and Compensation Plan was devised to compensate for the loss of approximately 9.14 acres. The current CCSP requires protection of wetlands, including measures to avoid indirect wetland loss by controlling stormwater runoff from paved surfaces (citing compliance with General Plan Policies 5.4.1.1, 5.4.1.2, CCSP p. 2-21). The CCSP Draft EIR Mitigation Measure 4.10-1, Increased Surface Runoff, includes a commitment to at least 14 best management practices (BMPs) to ensure that contaminated water does not reach natural drainages. Given the existing mitigation measures, and the fact that the site contains no riparian habitat or wetlands, impacts are not expected to exceed those evaluated in the Program EIR, and to be less than significant.

d. **Migration Corridors:** The project site is not within a designated Important Biological Corridor (IBC), nor would the project block wildlife movement along Carson Creek. The Program EIR determined that the CCSP would not interfere with migration corridors since wildlife movement was already limited in the area by surrounding residential, commercial and industrial development (CCSP Draft EIR Impact No. 4.8-5, p. 4.8-12). Moreover, the CCSP is not within an identified deer herd migration corridor (id.). Accordingly, as concluded for the CCSP, the proposed project is not anticipated to affect wildlife movement.

e. **Local Policies:** Local protection of biological resources includes the IBC overlay, oak woodland preservation, rare plants and special-status species, and wetland preservation with the goal to preserve and protect sensitive natural resources within the County. As noted in parts (b-c) and (d) above, none of these designations apply to the subject property. No impacts associated with non-compliance with local policies are anticipated.

f. **Adopted Plans:** This project would not conflict with the provisions of an adopted Natural Community Conservation Plan (NCP), or other approved local, regional, or state habitat conservation plan. Rather, the project would be required to comply with the CCSP, which contains measures for habitat protection. No other habitat

conservation plans exist that apply to the subject property. Accordingly, no impacts associated with non-compliance with adopted plans are anticipated.

**FINDING:** No impacts to protected species, habitat, wetlands, or oak trees were identified for this project. The CCSP Program FEIR mitigation measures apply to all development within the CCSP area, and anticipated impacts to biological resources would not exceed those evaluated in that EIR. Accordingly, as conditioned and with adherence to El Dorado County Code of Ordinances (County Code) and CCSP regulations, impacts would be less than significant.

<b>V. CULTURAL RESOURCES. <i>Would the project:</i></b>				
	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:

1. Are associated with events that have made a significant contribution to the broad patterns of history (events);
2. Are associated with the lives of persons significant in our past (persons);
3. 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
4. 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:

1. 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.
2. Are associated with the lives of persons important to local, California or national history.
3. 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.
4. 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**

CEQA Section 21083.2 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.

CEQA Guidelines Section 15064.5 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.

The CCSP Program FEIR/CCSP Draft EIR incorporated a cultural resources survey (Lindstrom, PhD, 1995) (see CCSP Draft EIR, p. 4.11-1; non-confidential portions of this report are available at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667). This survey included a literature search of historical and prehistorical themes near the project area and other regional archaeological reports that are on file at the North Central Information Center at California State University, Sacramento, at the El Dorado County Historical Museum and the El Dorado County Planning Department. The Native American Heritage Commission and the El Dorado Indian Council were contacted regarding potential Native American concerns. Dr. Lindstrom also conducted a field survey of the site, focusing on those areas considered highly sensitive for cultural and archaeological resources. The CCSP Draft EIR, as well as the original resources survey report, describe the area's archeological and cultural significance. The survey revealed various historical artifacts, including stone walls, building foundations, wells, apparent privy pits, placer mining evidence along Carson Creek, and ditch segments. No Native American cultural properties were identified on the CCSP property, although the survey found a single projectile point and referenced nearby sites containing resources such as petroglyphs, mortar bowls, and tool-manufacturing debris. Generally, impacts to *known* resources were considered less than significant (CCSP Draft EIR, p. 4.11-10). Impacts to *unknown* and undiscovered resources were considered potentially significant, however, but the study and EIR concluded that mitigation measures, such as locating and recording significant cultural resources and stopping work if artifacts and/or human remains were found during grading or construction, then contacting a licensed archaeologist for a significance determination (Mitigation Measures 4.11-1 through 4.11-4).

- a-c. **Historic, Archeological and Paleontological Resources:** The project site contains no visible cultural resources, and as described above, has been disturbed by rough grading and surrounding CCSP development. It is not located near the areas Dr. Lindstrom identified as "sensitive" in the southeastern portion of the CCSP property, designated for business park development (Impact 4.11-1). However, there is potential for undiscovered cultural resources to be exposed during final site grading and excavation for foundations. The CCSP Program FEIR Mitigation Measures 4.11-1 – 4.11-4 would require recording of significant resources and, if resources are found, evaluation and monitoring by a licensed archaeologist, including recovery of the resource, if appropriate. With this mitigation measure already in place, as well as with standard conditions derived from General Plan policies, impacts from the proposed project are anticipated to be less than significant.
- d. **Human Remains.** The cultural resources study performed for the CCSP did not discover evidence of past or present burial sites or of human remains. There is a potential for human remains to be discovered, however, during fine grading and project construction. As for other cultural resources above, Mitigation Measures 4.11-1 through 4.11-4 would ensure that remains were properly identified and conserved, including **such** procedures as notifying the most likely Native American descendant, if applicable. Note that Mitigation Measure 4.11-1(b) states that "the archaeologist *shall determine proper methods* (emphasis added) of handling the resource(s) for transport and placement in an appropriate repository" (Draft CCSP, p. 4.11-11). "Proper methods" would include those currently in place for dealing with cultural resources. Accordingly, with this mitigation measure in place, impacts to human remains are anticipated to be less than significant.

**FINDING:** No significant cultural resources have been identified on the project site; accordingly, impacts to cultural resources would not exceed those identified in the CCSP Program FEIR. CCSP Program FEIR mitigation measures apply to this project, as well as multiple General Plan policies for cultural resource protection. Standard conditions of approval would also apply, requiring that work stop in the event of accidental discovery during construction. Therefore, as conditioned and



with adherence to the El Dorado County Code and CCSP regulations, impacts to cultural resources would be less than significant.

<b>VI. GEOLOGY AND SOILS. <i>Would the project:</i></b>				
	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:				
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 wastewater disposal systems where sewers are not available for the disposal of wastewater?				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 associated with Geologic Resources would occur if the project would:

- Allow substantial development of structures or features in areas susceptible to seismically induced hazards such as ground-shaking, 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.

The CCSP Program FEIR incorporated an “earth resources analysis” prepared by Youngdahl & Associates that evaluated the entire CCSP site’s existing geological and soil conditions with respect to CCSP buildout (CCSP Draft EIR, pp. 4.9-1 – 4.9-16). The study included a comprehensive literature search, mapping analysis and stereoscopic aerial photographs. Field reconnaissance was performed, and distances to known active and potentially active faults mapped. Impacts associated with geology and soils conditions were found to be less than significant with incorporation of mitigation measures.

a. **Seismic Hazards:**

i) According to the California Department of Conservation Division of Mines and Geology, there are no Alquist-Priolo fault zones within El Dorado County (DOC, 2007). The nearest such faults are located in Alpine and Butte Counties. However, the CCSP area is approximately 4000 feet away from the west branch of the Bear Mountains Fault Zone, and is within the Mormon Island Fault Zone (Impact No. 4.9-4). The CCSP Draft EIR considered the possibility of ground rupture on the CCSP site to be unlikely, but possible, given the age of both fault zones and their lack of significant activity for 65,000 to 75,000 years. Mitigation Measure 4.9-4 requires that all structures comply with the (current) Uniform Building Code (UBC) and adhere to the design standards for UBC Zone 3, at a minimum. The mitigation measure also required geologic mapping and trench logging prior to the approval of subdivision tract maps to determine the age and locations of specific displacements associated with the Mormon Island Fault Zone. With this Mitigation Measure, impacts related to ground rupture were considered less than significant. Geologic conditions in the project area have not changed since the Program FEIR and addenda were adopted; accordingly, applying Mitigation Measure 4.9-4 would reduce ground rupture impacts to less than significant levels.

ii) The CCSP Draft EIR noted that both fault systems described in (i) above had a low to moderate capacity for severe ground shaking on the CCSP property (Impact 4.9-5). Site-specific ground acceleration analysis indicated the ground-shaking potential to be as high as 0.7 g (CCSP Draft EIR, p. 4.9-11). This impact was considered to be potentially significant. However, Mitigation Measure 4.9-5 would reduce impacts to people and structures by requiring compliance with UBC design factors for UBC Zone 3, and to incorporate structural requirements resulting from site-specific geotechnical analyses prior to approval of final building plans. With this Mitigation Measure, impacts related to ground shaking were considered less than significant. Geologic conditions in the project area have not changed since the Program FEIR and addenda were adopted; accordingly, applying Mitigation Measure 4.9-5 would reduce ground-shaking impacts to less than significant levels.

iii) The CCSP Draft EIR noted that there was relatively little potential seismic-related ground failure (Impact 4.9-3), including differential compaction and liquefaction, because except for the CCSP property’s drainage areas, the property is underlain by bedrock (CCSP Draft EIR, p. 4.9-10). Impacts related to ground failure at building sites, such as the subject property, were found to be less than significant. Geologic conditions in the project area have not changed since the Program FEIR and addenda were adopted; accordingly, impacts to the proposed project would be less than significant.

iv) The CCSP Draft EIR stated that no potential for landslides existed on the CCSP property, since the topography was (and remains) gentle to moderate (Impact No. 4.9-2). Topographic conditions have not changed since the Program FEIR and addenda were adopted; accordingly, there would be no impacts related to landslides.

- b. **Soil Erosion:** The project site is relatively flat and would not require cut and fill, although some grading and soil import is required to complete the building pads and parking areas. Substantial soil erosion would not be expected. However, the CCSP Draft EIR indicated that construction activities involving ground disturbance, including cut-and-fill slopes, could still result in potentially significant impacts (Impact No. 4.9-7). Program FEIR Mitigation

Measure 4.9-7 sets forth an array of actions to avoid erosion and to maintain stability of cuts or trenches, moreover, all grading activities onsite would be required to comply with the El Dorado County Grading, Erosion and Sediment Control Ordinance, and to implement pre- and post-construction Best Management Practices (BMPs). BMPs must be consistent with the County's California Stormwater Pollution Prevention Plan (SWPPP) issued by the State Water Resources Control Board to eliminate run-off and erosion and sediment controls. Any grading activities exceeding 250 cubic yards of graded material or grading completed for supporting a structure must meet the provisions contained in the County of El Dorado Grading, Erosion, and Sediment Control Ordinance. With Mitigation Measure 4.9-7, plus existing regulations, remaining impacts related to soil erosion and topsoil loss are anticipated to be less than significant.

- c. **Other Geologic Hazards:** The CCSP Draft EIR indicates that the site is generally stable, consisting of thin surface soils underlain by weathered bedrock (Impacts No. 4.9-8). Any soils prone to liquefaction or collapse existing on the CCSP site overall lie within the Carson Creek alluvial areas that the CCSP designates for open space uses (CCSP Draft EIR, p. 4.9-12). The project site itself is elevated above the creek and separated from the open-space boundary by approximately 150 feet. Geologic conditions in the CCSP project area have not changed since the Program FEIR and addenda were adopted, and the proposed project is not located within areas suspected to be prone to liquefaction; accordingly, impacts related to other geologic hazards would be less than significant.
- d. **Expansive Soils:** Expansive soils are those that greatly increase in volume when they absorb water and shrink when they dry out. When buildings are placed on expansive soils, foundations may rise each wet season and fall each dry season. This movement may result in cracking foundations, distortion of structures, and warping of doors and windows. As described in (c) above, the CCSP Draft EIR indicated that the soils in the CCSP area are generally stable, and except for soils within the creek alluvium, are not generally expansive. Geologic conditions in the CCSP project area have not changed since the Program FEIR and addenda were adopted, and the proposed project is not located within an area with potentially expansive soils; accordingly, impacts related to such soils would be less than significant.
- e. **Septic Capability:** The proposed project would not rely on septic systems for wastewater disposal. No related impacts are anticipated.

**FINDING:** The CCSP Draft EIR's review of the soils and geologic conditions on the project site determined that, with incorporation of mitigation measures, impacts related to Geology and Soils would be less than significant (CCSP Draft EIR, p. 4.9-15). As noted above, geologic conditions on the project site have not changed since the adoption of the Program FEIR and addenda. Moreover, all grading activities would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance, which sets forth requirements that address soil erosion, landslides and other geologic impacts. Future building construction would be required to comply with the UBC, which would reduce exposure to seismic-related impacts. With these requirements, impacts associated with geology and soils would be less than significant.

<b>VII. GREENHOUSE GAS EMISSIONS. <i>Would the project:</i></b>				
	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<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxides (N<sub>2</sub>O or NO<sub>x</sub>). An individual pollutant’s ability to retain infrared radiation represents its “global warming potential” and is expressed in terms of CO<sub>2</sub> equivalents, measured in metric tons (MT), and expressed as CO<sub>2</sub>e. CO<sub>2</sub> is the benchmark GHG with 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<sub>4</sub> than CO<sub>2</sub>. Nitrous Oxide has a global warming potential of 310. The three other main GHG are Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride. While these compounds have significantly higher global warming potentials, ranging in the thousands, all three typically are not emitted by land-use development projects and are usually only associated with specific industrial processes.

**GHG Sources**

The primary man-made source of CO<sub>2</sub> is the burning of fossil fuels; the two largest sources are coal burning for electricity and petroleum burning in combustion engines. The primary sources of man-made CH<sub>4</sub> 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<sub>2</sub>O 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 from the transportation sector (estimated at 70% of countywide GHG emissions). Residential sources are a distant second (approximately 20%), and commercial/industrial sources are third (approximately 7%). The remaining sources are waste/landfill gases (approximately 3%) and agricultural land uses (<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

### California Climate Solutions Act of 2006

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<sub>2</sub> equivalent (MMTCO<sub>2e</sub>) while 1990 levels were estimated at 427 MMTCO<sub>2e</sub>. Setting 427 MMTCO<sub>2e</sub> 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).

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).

The CARB Scoping Plan, most recently updated in 2014,<sup>3</sup> explains that reducing GHG emissions to 1990 levels means cutting approximately 30 percent from business-as-usual emissions levels projected for 2020, or about 15 percent from today's levels. "Business as usual" generally describes a GHG emissions scenario that reflects the levels that would result if land development proceeded without implementing GHG-reduction measures. The Scoping Plan sets forth an array of strategies for reducing GHG emissions, categorized by economic sector. These strategies include policies and programs to be adopted by local agencies; however, they do not set numeric "bright-line" GHG thresholds.

A late-2015 California Supreme Court decision, *Center for Biological Diversity, et al. v. California Department of Fish and Wildlife*, (2015) 62 Cal 4th 204, reh'g. den. Feb. 17, 2016), addressed the Newhall Ranch (Los Angeles County) project's use of the "business-as-usual" method of determining greenhouse gas impact significance, where that EIR had used the Scoping Plan's 29% reduction goal as a project-level threshold. The Court criticized the document for failing to explain how a quantitative statewide goal, based on one set of underlying land-use assumptions, could be directly applied to an individual project, at a particular location, where underlying land use assumptions might be different. Stating that "[t]he analytical gap left by the EIR's failure to establish, through substantial evidence and reasoned explanation, a quantitative equivalence between the Scoping Plan's statewide comparison, and the EIR's own project-level comparison deprived the EIR of its 'sufficiency as an informative document,'" the Court opined that if an EIR uses the Scoping Plan's statewide measure of emissions reduction, it must fully substantiate its rationale for doing so. Specifically, the Court held that this method not be used to set a hypothetical environmental baseline, and then to compare a proposed project's emissions to that baseline. Further, the Court stated that agencies may determine whether a project is consistent with AB 32's goals by evaluating whether a project complies with relevant regulations or regulatory programs, including local Climate Action Plans, which are designed to reduce GHG emissions. Agencies may also set numeric thresholds similar to those established for other air pollutants.

While AQMD and El Dorado County have no adopted GHG thresholds of significance, AQMD recommends using Sacramento Metropolitan AQMD's (SMAQMD) GHG thresholds, which were developed in conjunction with El Dorado County, Placer County, Yolo-Solano, and Feather River Air Districts. Because data from projects in El Dorado County, along with the other counties in the Sacramento region, were used to develop these thresholds, it is AQMD's opinion that these regional GHG thresholds represent "substantial evidence" for CEQA purposes and are appropriate for use as CEQA thresholds of significance. The supporting documents on the thresholds can be found on SMAQMD's website here (Chapter 6): <http://airquality.org/ceqa/ceqaguideupdate.shtml>).

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<sup>3</sup> California Environmental Protection Agency, Air Resources Board, *First Update to the AB 32 Scoping Plan*, May 27, 2014, available at <http://www.arb.ca.gov/cc/scopingplan/document/updatescopingplan2013.htm> (accessed March 22, 2016).

The El Dorado Air Quality Management District currently uses a numeric standard, **1,100 MTCO<sub>2</sub>e/yr** for non-industrial projects.

**Discussion**

**Analysis Methodology:** The El Dorado County Air Quality Management District (EDCAQMD) directs applicants to use the California Emissions Estimator Model (CalEEMod) for quantification of project-related GHG and criteria pollutant emissions. CalEEMod is a statewide model providing a uniform GHG analysis platform for government agencies, land use planners, and environmental professionals. It quantifies direct emissions from construction and operation (including vehicle use), and indirect emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The software incorporates the most recent vehicle emission factors from the Emission Factors (EMFAC) model provided by CARB, and average trip generation factors published by the Institute of Transportation Engineers (ITE). The model uses and quantifies mitigation measures reduction benefits found in the California Air Pollution Control Officers Association’s (CAPCOA) document *Quantifying Greenhouse Gas Mitigation Measure (2010)*, and is accepted by CARB.

**Impact Significance Criteria**

CEQA does not provide clear direction on addressing climate change. It requires lead agencies identify project GHG emissions impacts and their “significance,” but is not clear what constitutes a “significant” impact. As stated above, GHG impacts are inherently cumulative, and since no single project could cause global climate change, the CEQA test is if impacts are “cumulatively considerable.” Not all projects emitting GHGs contribute significantly to climate change. CEQA authorizes reliance on previously approved plans (i.e., a Climate Action Plan (CAP), etc.) and mitigation programs adequately analyzing and mitigating GHG emissions to a less than significant level. “Tiering” from such a programmatic-level document is the preferred method to address GHG emissions. El Dorado County does not have an adopted CAP or similar program-level document; therefore, the project’s GHG emissions must be addressed at the project-level.

As noted above, the District recommends using the SMAQMD GHG emissions thresholds for land use development projects, 1,100 MTCO<sub>2</sub>e/yr.

**Project Emissions Analysis**

The project site consists of approximately four acres of rough-graded annual grassland. Development of the site with the proposed assisted-living facility would generate emissions related to construction, building energy use, motor vehicles and landscape equipment engines.

The proposed project’s short-term construction-related GHG emissions and long-term operational project GHG emissions were estimated using CalEEMod v. 2013.2.2. The assumed project operational year used in the model is 2018.

**Short-Term (Construction) GHG Emissions**

Estimated increases in GHG emissions associated with construction of the proposed project are summarized below (see Appendix A for CalEEMod output). Table GHG - 1 below summarizes short-term CO<sub>2</sub> emissions.

**Table GHG - 1**

<b>Unmitigated Construction GHG Emissions</b>	
<b>Year</b>	<b>CO<sub>2</sub> emissions (MTCO<sub>2</sub>e/yr)</b>
2017	211.87
2018	80.14
<b>Total Construction GHG Emissions</b>	<b>292.01</b>

*Source: CalEEMod Version 2013.2.2, Appendix A*

The CalEEMod results indicate that short-term unmitigated emissions of GHG associated with construction of the proposed project would be 273.41 MTCO<sub>2</sub>e 189.91 in 2017, and 83.49 MTCO<sub>2</sub>e in 2018. CO<sub>2</sub>e emissions are greater in the first year of construction because of more intense use of earth-moving equipment and other off-road equipment engines. This level of

emissions does not exceed the El Dorado County AQMD threshold of 1,100 MTCO<sub>2</sub>e/year; accordingly, short-term GHG impacts would be less than significant.

**Long-Term (Operational) GHG Emissions**

The long-term operational GHG emissions estimate incorporates potential area individual source (e.g. fireplaces) and vehicle emissions, utility, water usage, wastewater and solid waste generation emissions. Table GHG - 2 below shows estimated project GHG emissions (see Appendix A for CalEEMod output).

**Table GHG - 2**

<b>Unmitigated Operational GHG Emissions</b>	
<b>Year</b>	<b>Annual CO<sub>2</sub> emissions (MTCO<sub>2</sub>e)</b>
Annual Operational GHG Emissions	635.20

*Source: CalEEMod Version 2013.2.2*

The proposed project's unmitigated GHG emissions are estimated at 635.20 MTCO<sub>2</sub>e/yr, which is below the 1,100 MTCO<sub>2</sub>e/yr threshold. Therefore, project GHG impacts would be less than significant.

**FINDING:** The CCSP Program FEIR did not evaluate GHG emissions, because these emissions were not a separate issue at the time the Program EIR was prepared and adopted. However, as estimated by the most recent version of the CalEEMod, the proposed assisted-living/memory care facility's greenhouse gas emissions would not exceed short or long-term El Dorado County AQMD thresholds. Accordingly, greenhouse gas impacts would be less than significant.



<b>VIII. HAZARDS AND HAZARDOUS MATERIALS.</b> <i>Would the project:</i>				
	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 EDCAQMD.

**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.

#### 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:** The CCSP Program FEIR incorporated a "Risk of Upset" analysis prepared by Youngdahl & Associates that evaluated the entire CCSP site's potential for hazardous substances (toxic waste, gasoline, etc.) to exist on the project site, and to assess the effect on the proposed CCSP (CCSP Draft EIR, pp. 4.22-1 – 4.22-8). The study included interviews with individuals familiar with the historic uses of the property and with agency personnel, comprehensive records search, review of historic aerial photographs, and site reconnaissance. Additionally, the study incorporated the 1990 and 1991 "Phase I" Environmental Site Assessments (ESAs) performed by Wheeldon & Associates.

The Risk of Upset analysis identified several impact areas that have either been resolved and/or were not located on near the proposed project site. These include a work shed and barn, other structures, wells, septic tanks, leach fields, placer mining operations (limited), underground storage tanks, the adjacent inactive Southern Pacific Railroad Grade, and General Plan

consistency (Impacts 4.22-1, 4.22-2, 4.22-3, 4.22-4, 4.22-6, 4.22-7, 4.22-8, 4.22-9, CCSP Draft EIR, pp. 4.22-7). All of these were found to be less than significant with incorporation of mitigation measures (CCSP Draft EIR, p. 4.22-8).

Impact No. 4.22-5, "Contiguous Industries," described potential onsite contamination from stormwater runoff from adjacent industrial uses. This impact was found to be less than significant because no industrial uses existed (or exist now) nearby that require an individual National Pollution Discharge Elimination System (NPDES) permit, and any discharges into Carson Creek were expected to be less than significant (CCSP Draft EIR, p. 4.22-5).

A substantial adverse effect related 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-b. **Hazardous Materials:** The proposed assisted-living facility would not involve routine transportation, use, and/or disposal of hazardous materials, such as construction materials, paints, fuels, landscaping materials, and household cleaning supplies. Although hazardous materials would be used during both construction and operation of the facility (diesel fuel, solvents, paints, cleaning supplies, landscaping chemicals, etc.), existing regulations as described above control their use and disposal. Associated impacts would be less than significant.
- c. **Hazardous Materials near Schools:** The proposed project is located within one-quarter mile of Marble Valley Academy, a private K-8 school located at 5005 Hillside Circle, southeast of the project site. However, less-than-significant impacts associated with hazardous emissions or waste would be anticipated, because the proposed assisted-living facility would not use or store large amounts of hazardous materials. As described in (a-b) above, compliance with existing regulations would preclude schoolchildren's exposure to any hazardous materials used on the project site.
- d. **Hazardous Sites:** The project site is not included on a list of or near any hazardous materials sites or uncontrolled leaking underground storage tanks. The current California Department of Toxic Substance Control Envirostor database (available at <http://www.envirostor.dtsc.ca.gov/>, accessed April 20, 2016) and the California State Water Resources Control Board Geotracker database (available at <http://geotracker.waterboards.ca.gov/>, accessed April 20, 2016) show no sites on or near the subject property. No impacts associated with hazardous sites would be anticipated.
- e-f. **Aircraft Hazards, Private Airstrips:** The proposed project is not located within an Airport Safety District combining zone, nor is it near a public airport or private airstrip. No related impacts are anticipated.
- g. **Emergency Plan:** The CCSP Draft EIR evaluated whether fire and emergency services were adequate to serve the CCSP area (Impact No. 4.13-1, pp. 4.13-3 – 4.13-5). No significant impacts to emergency services or plans were found, and no mitigation measures required. The proposed project is within the El Dorado Hills Fire Department's jurisdiction, and was reviewed by the Fire Protection District and Transportation Division for access and circulation. With minor adjustments to the proposed site plan for turning radii and application of standard conditions for fire flow, etc., the project would adequately support emergency access and fire protection services. Moreover, the newly-constructed Golden Foothill Fire Station, at 4680 Golden Foothill Parkway, is less than one-quarter mile from the project site. Accordingly, no impacts to emergency response plan or emergency evacuation plans are anticipated.
- h. **Wildfire Hazards:** The project site, and the entire CCSP area are not in a wildland fire zone, nor would wildland fires be expected to encroach into the CCSP (see CalFire, Very High Fire Hazard Severity Zones in LRA, March 12, 2009, available at [http://frap.fire.ca.gov/webdata/maps/el\\_dorado/fhszl\\_map.9.pdf](http://frap.fire.ca.gov/webdata/maps/el_dorado/fhszl_map.9.pdf) (accessed April 21, 2016)).

Wildland vegetation, primarily grassland, has been removed or is being removed from the entire CCSP area to facilitate development. Accordingly, no significant risk of loss, injury or death from wildland fires would be expected, and no impact would result.

**FINDING:** The CCSP Program FEIR evaluated the CCSP's potential to expose the area to hazards relating to the use, storage, transport, or disposal of hazardous materials, and determined that impacts would be less than significant with the incorporation of mitigation measures. No impacts requiring mitigation measures affect the project site because those impacts occurred at other locations within the CCSP, and have been resolved. Impact No. 4.22-5, Contiguous Industries, was deemed to be less than significant for the overall CCSP. As discussed above, the project itself would not expose people or structures to substantial exposure to hazardous materials or conditions. Accordingly, impacts related to Hazards and Hazardous Materials would be less than significant.

<b>IX. HYDROLOGY AND WATER QUALITY. Would the project:</b>				
	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 water bodies.

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.

#### Municipal Stormwater Permitting Program

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, for the West Slope and the Lake Tahoe area, respectively. 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 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.

Pursuant to the MS4 permit, permittee agencies must enact standards for reducing runoff and pollutants associated with runoff from "Regulated Projects."<sup>4</sup> Regulated projects include private development projects that create and/or replace 5,000 or more square feet of impervious surfaces. Permittees must require such projects to implement "best management practices" (BMPs) for site design, source control, runoff reduction, storm water treatment and baseline hydromodification management. Accordingly, on May 19, 2015 the El Dorado County Board of Supervisors formally adopted revisions to the Storm Water Quality Ordinance (Ordinance 4992) that developed stormwater regulations for development projects on the West Slope. Previously applicable only to the Lake Tahoe Basin, the ordinance applies to 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 BMPs 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

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<sup>4</sup> California State Water Resources Control Board (SWRCB) Water Quality Order No. 2013-0001-DWQ (Order), Section E.12.c, available at [http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/index.shtml](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/index.shtml) (accessed April 22, 2016).



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 water body (i.e., the reasons that the water body 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.

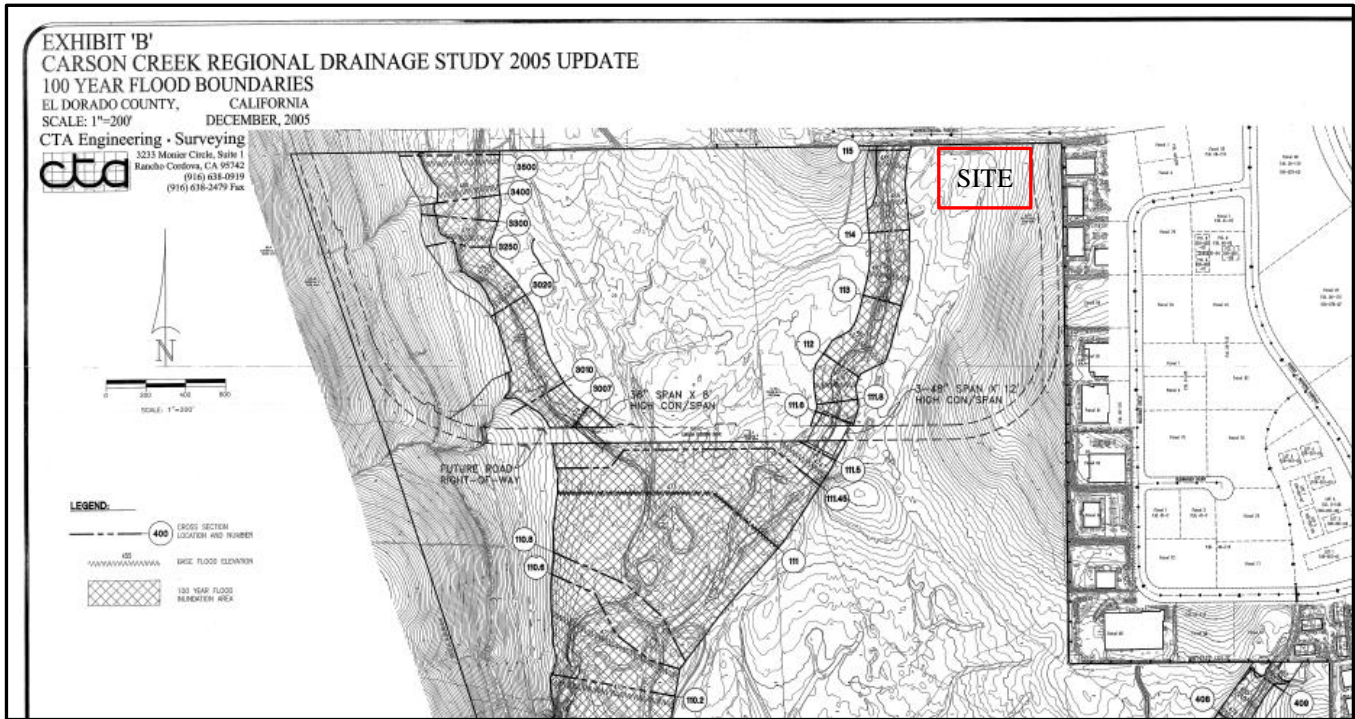
**Discussion:** The CCSP Program FEIR incorporated a hydrology report prepared by Gene E. Thorne & Associates, Inc., the Carson Creek Regional Drainage Study, prepared by Shari Bottorff, consulting hydrologist, and findings from a site reconnaissance to assess the site’s surface water conditions and potential impacts resulting from the CCSP (CCSP Draft EIR, pp. 4.1 – 4.16). CTA Engineers/Surveyors updated the Carson Creek drainage study in 2005, in response to continuing development in the vicinity of Carson Creek (See Carson Creek Regional Drainage Study, 2005 Update, available at [https://www.edcgov.us/Government/DOT/CEQA/SilvaValleyinterchange/CTA\\_202005\\_20Update.aspx](https://www.edcgov.us/Government/DOT/CEQA/SilvaValleyinterchange/CTA_202005_20Update.aspx) (accessed April 21, 2016). Figure Hyd - 1 below shows an excerpt from the Update, with the proposed project site identified.

Seven mitigation measures were applied to the CCSP, including (1) designing and implementing a comprehensive drainage plan to accommodate increased surface runoff (MM 4.10-1), (2) precluding development in 100-year flood zones as mapped in the Carson Creek drainage study (MM 4.10-2, 3), (3) obtaining a General Construction Activity Stormwater Permit and complying with its requirements, (4) preparing an erosion control program (MM 4.10-4), (5) designing and constructing onsite detention basins during construction (6) designing and committing to a surface water pollution control plan (MM 4.10-6) and (7) maintaining consistency with General Plan policies for protecting hydrologic resources and water quality. With these mitigation measures, related impacts were determined to be less than significant.

The proposed project would generate stormwater runoff primarily from its surface parking lot, which would receive incident rainfall as well as drainage from the building’s roof. Drainage would be directed westward along both north and south parking aisles, then drain to “A” Street on the property’s western boundary (Sheet 1, Planning Submittal, Proposed Grading). Stormwater would be captured in gutters and catch basins, and drain southward. The CCSP Program FEIR Mitigation Measure 4.10-6 requires onsite detention basins during construction (as appropriate to particular projects and sites within the CCSP0, and that applicants develop and implement surface water pollution control plans prior to issuance of grading permits.

As noted in the Project Description, above, the project would use public water for potable water supplies, and may use reclaimed water from the El Dorado Irrigation District plant on Latrobe Road for irrigation.

**Figure Hyd - 1**  
**Carson Creek Regional Drainage Study, 2005 Update, Exhibit B**  
(excerpt; scale approximate)



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. **Water Quality Standards:** The Program FEIR recognized that CCSP development had the potential to generate surface runoff contaminated by sediment, automotive fluids, landscape maintenance chemicals, and other soluble urban pollutants, during both project construction and operation (Impact Nos. 4.10-5, 4.10-6). The Program EIR noted that the CCSP's design included such features as detention basins and maintaining a buffer area on both sides of Carson Creek, but considered impacts significant nonetheless. However, Mitigation Measures 4.10-5 and 4.10-6 required that development projects implement short and long-term measures to minimize pollutant levels in stormwater runoff. Short-term measures included erosion control programs with BMPs including sediment basins and traps, silt fences, hay bale dikes, gravel construction entrances, maintenance programs, and hydroseeding. Long-term measures included on-site detention basins during construction, developing and implementing a surface water pollution control plan, installing oil and grease traps in parking lots, and developing a financial mechanism to fund long-term program costs. With these mitigation measures incorporated, impacts to water quality were determined to be less than significant (CCSP Draft EIR, p. 4.10-16).

While the Mitigation Measures apply to all new development in the CCSP, they overlap with current storm water pollution prevention requirements that arise from the California State Water Resources Control Board (SWRCB) Water Quality Order No. 2013-0001-DWQ (Order) cited above. The project proposes to render more than 5,000 square feet impervious to surface runoff, and therefore is a "Regulated Project." Accordingly, it would be required to comply with the Order, including all applicable BMPs. The applicant would be required to submit a drainage study with the grading permit application, which would address storm water runoff increase, impacts to downstream facilities and properties, and identification of appropriate storm water quality management practices to the satisfaction of the Building Services Section of the Development Services Division.

Because the project would disturb more than one acre of land, it must also comply with the NPDES program, pursuant to SWRCB Construction General Permit Order No. 2009-0009-DWQ (CGP), including all subsequent amendments or revised orders. As discussed in the Regulatory Setting above, the applicant must prepare a SWPPP containing appropriate BMPs to reduce erosion and protect against sediment and pollutant discharge into Carson Creek.

Accordingly, with the CCSP Mitigation Measures in place, combined with the existing regulatory scheme, impacts from the proposed project are not anticipated to exceed those evaluated in the CCSP, and would be less than significant.

- b. **Groundwater Supplies:** The geology of the Western Slope portion of El Dorado County is principally hard, crystalline, igneous, or metamorphic rock overlain with a thin mantle of sediment or soil. Groundwater in this region is found in fractures, joints, cracks, and fault zones within the bedrock mass. These discrete fracture areas are typically vertical in orientation rather than horizontal as in sedimentary or alluvial aquifers. Recharge is predominantly through rainfall infiltrating into the fractures. Movement of this groundwater is very limited due to the lack of porosity in the bedrock.

The CCSP Draft EIR assessed the CCSP's impacts on groundwater recharge. Carson Creek and its tributaries and ponds were considered the primary areas for recharge on the CCSP property (CCSP Draft EIR, p. 4.10-6). Because the existing creek channels would be retained, impacts to groundwater recharge were considered less than significant (Impact No. 4.10-4). The proposed project would not interfere with the recharge area along Carson Creek, and would not depend on local groundwater for water supply. Accordingly, impacts to groundwater would not be different from those evaluated in the Draft CCSP EIR, and would be less than significant.

- c-f. **Drainage Patterns:** The CCSP Draft EIR assessed the CCSP's impacts on drainage patterns throughout the property, incorporating a drainage concept plan and anticipating that a final drainage study would be prepared prior to grading plan approval (Impacts 4.10-1, 4.10-2, CCSP Draft EIR pp. 4.10-8 – 4.10-11). The CCSP was designed to preserve Carson Creek as a natural channel, to create detention basins and to retain existing surface natural drainages (id.). The detention basins were designed to accommodate project-generated runoff (id., p. 4.10-10). Nonetheless, the CCSP Draft EIR found that because the impervious area would be increased from approximately 1% to 75% of the property, that impervious surfaces would markedly alter runoff patterns and increase discharge volumes and rates (id.). Mitigation Measure 4.10-1 addressed impacts to surface runoff volumes by requiring final drainage plans and commitments to both funding and improvements to reduce impacts to less than significant levels. BMPs were required for all construction phases. Mitigation Measure 4.10-2 addressed impacts related to the 100-year flood event by excluding development from the 100-year flood zone unless flood protection improvements were installed. With these mitigation measures in place, the Draft CCSP determined that impacts were less than significant.

The proposed project would affect approximately four acres of the CCSP. Current County regulations require that the applicant submit a Drainage Report and accompanying plans, and to commit to installing applicable BMPs to reduce runoff from the site during and after construction. As in (a) above, these plans and BMPs would preclude significant impacts related to storm water runoff and flooding, and to water quality degradation. Accordingly, because existing regulations as well as CCSP requirements and mitigation measures apply to the project, and the project's individual impacts are not expected to exceed those anticipated by the Draft CCSP EIR, impacts related to storm water runoff volume and water quality would be less than significant.

g-j. **Flood-related Hazards:** The CCSP Draft EIR assessed flood hazards for the CCSP (Impacts No. 4.10-2 (110-year flood event) and No. 4.10-3 (flooding due to failure of a levee or dam)). Impacts related to flooding from Carson Creek were considered to be significant but mitigable by precise drainage design and installation of 100-year flood protection improvements (Mitigation Measure 4.10-2). This mitigation measure was also determined to reduce impacts related to flooding from detention basin containment failure to less than significant levels.

The project site is not within a FEMA flood hazard area, nor is it within the 100-year flood boundary shown on the Carson Creek Regional Drainage Study, 2005 Update (Figure Hyd - 1; see also FEMA Flood Map Service Center: Search By Address, available at <https://msc.fema.gov/portal/search?AddressQuery=4680%20Golden%20Foothill%20Parkway%2C%20el%20dorado%20hills%2C%20ca%2095762#searchresultsanchor> (accessed April 22, 2016)). The project site is not downstream of a dam. There is no risk of exposure to seiche or tsunami, because no static water bodies or oceans are near the project site. Mudflows would be unlikely, since the terrain around the project site is relatively level. Accordingly, impacts related to flooding, seiche, tsunami or mudflow would be less than significant.

**FINDING:** The CCSP Program FEIR evaluated the CCSP’s effects on local hydrology and the potential for significant impacts related to water quality, groundwater supply and recharge, flooding, seiche, tsunami and mudflow. Impacts were reduced to less than significant levels through Mitigation Measures 4.10-1 – 4.10-7. These mitigation measures apply to the proposed project. With these mitigations, combined with adherence to existing regulations, the proposed project’s impacts are anticipated to be less than significant.

<b>X. LAND USE PLANNING.</b> <i>Would the project:</i>				
	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:**

**Local Laws, Regulations, and Policies**

El Dorado County General Plan

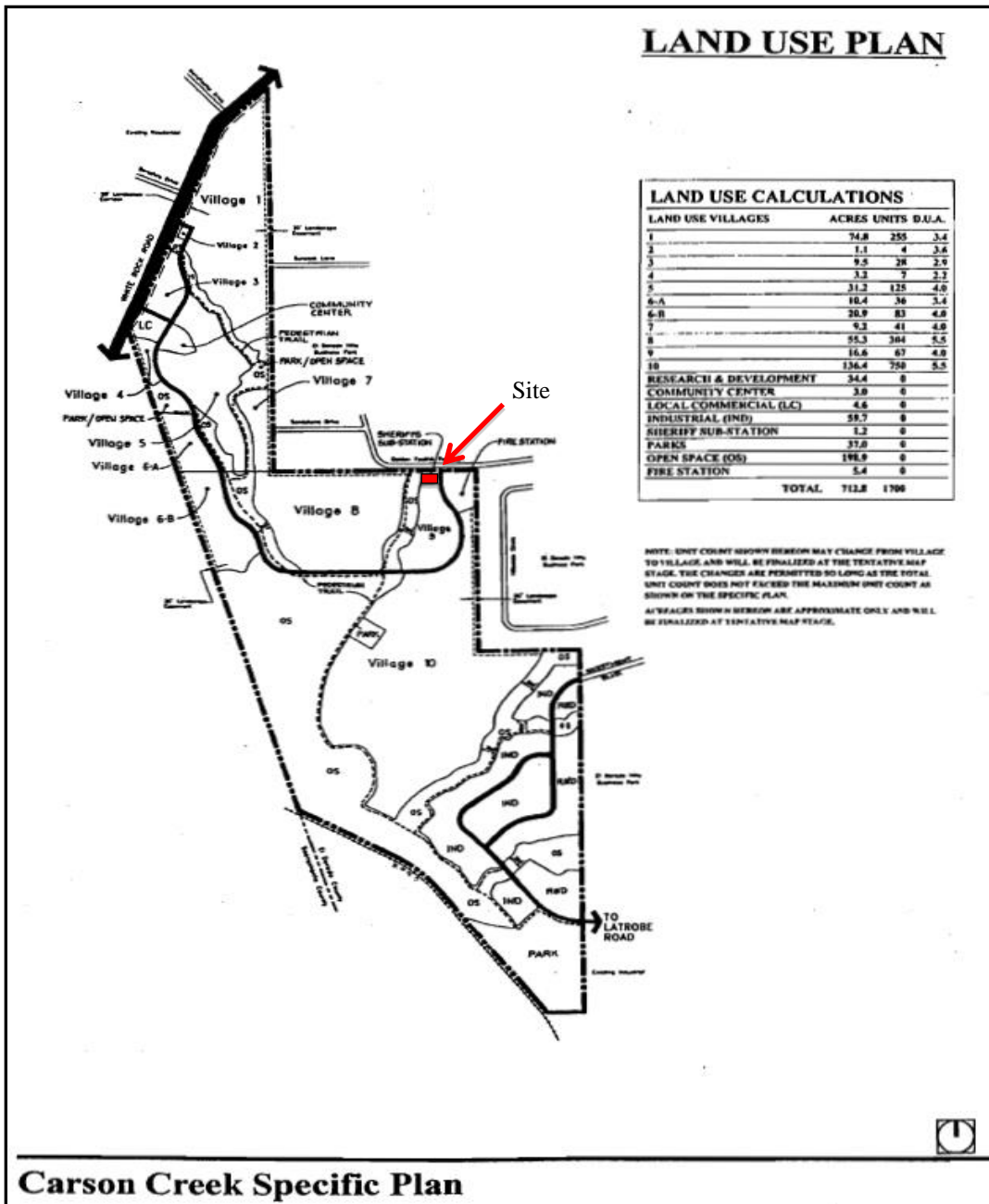
California State law requires that each City and County adopt a general plan "for the physical development of the City and any land outside its boundaries which bears relation to its planning." Typically, a general plan is designed to address the issues facing the City or County for the next 15-20 years. 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.

Carson Creek Specific Plan (CCSP)

Specific Plans follow General Plans in hierarchy. They contain more detail and typically apply to a smaller community area, such as a planned community or a mixed-use town center. They may set forth particular land use regulations and

development standards to accomplish localized planning goals (Govt. Code § 65450), and must be consistent with the General Plan. The Carson Creek Specific Plan was adopted by the County Board of Supervisors on March 4, 1997, with amendments adopted in 1999 and 2015. The CCSP encompasses 710 acres west of Latrobe Road and south of White Rock Road, adjacent to the El Dorado Business Park. Land use designations in the CCSP include residential, local convenience commercial, research and development, industrial, parks and open space. Figure LU - 1 below shows the CCSP land use distribution.

Figure LU - 1  
 Carson Creek Specific Plan, Land Use Plan



CCSP overlay designations “SS” and “FS” set locations for a sheriff’s substation and fire station, respectively. Each reverts to the underlying residential designation if these uses are constructed elsewhere (CCSP p. 3-6). Community care, senior-related facilities (congregate care, assisted-living, skilled nursing, etc.) are allowed in single-family residential designations subject to special use permits if approved by the County Planning Commission.

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

- Result in conversion of undeveloped open space to more intensive land uses;
- Physically divide an established community;
- 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. **Conversion of open space:** The CCSP Program FEIR determined that the CCSP would cause less-than-significant impacts with respect to converting open grazing land to residential, commercial and light-industrial uses (Impact No. 4.2-1, CCSP Draft EIR, pp. 4.2-13 - 4.2-14) because from a land-use perspective, grazing is considered temporary and portable, thus displacing grazing for other uses does not result in a fundamental land-use conflict. The proposed project would convert undeveloped, rough-graded land to a developed condition but the surrounding land is either developed or presently being developed for business park and residential uses. Converting the project site, which no longer functions as a natural landscape, would be consistent with the CCSP Program FEIR determination. No impacts would result.
- b. **Established Community:** The proposed project would not divide an established community; rather, it would “fill in” an existing gap between two developed areas but would not create a barrier between them. The proposed use, an assisted-living and congregate care facility, is transitional in nature from the age-restricted single-family development on the south and west to the business park uses on the east. No related impacts would result.
- c, d. **Land Use Consistency, Conflicts with Adopted Plans, Policies or Goals:** The CCSP Program FEIR evaluated the CCSP for consistency with the General Plan, and determined that except for consistency with service district capabilities, impacts were less than significant. Mitigation Measures 4.14-1 and 4.14-2 (assessment district for law enforcement services), 4.16-1 (in-lieu fees for parkland acquisition and development), 4.18-1 (water supplies), 5-1 (public services mitigation fee) and 5-3 (establishing a landscaping and lighting district) were considered to reduce remaining impacts to less than significant. These mitigation measures continue to be in effect for the overall CCSP area.

The County General Plan designates the project site as Adopted Plan. This land use category recognizes areas for which specific land use plans have been prepared and adopted. These plans (e.g., specific plans or community plans) are incorporated into the General Plan by reference, and their respective land use maps are likewise incorporated into the General Plan land use diagram.

The CCSP designates the project site as residential but reserved for a fire station. The Golden Foothill fire station has recently been constructed approximately 0.25 mile away on Golden Foothills Parkway, so the project site is not required for a fire station. As noted above, the underlying residential designation would apply in the event that the intended use was not developed.

CCSP Policy 2.2.5.9 recognizes the need for extended family support service uses in residential areas of the CCSP. The CCSP allows community-care facilities, assisted-living and congregate care pursuant to a special use permit from the Planning Commission. The proposed project is a self-contained assisted-living and congregate care facility, consistent with Policy 2.2.5.9. Accordingly, no land use inconsistencies or conflicts are anticipated, and no related impacts would result.

**FINDING:** The CCSP Program FEIR evaluated the CCSP’s potential for conflict with the General Plan, and determined that with incorporation of mitigation measures, impacts with respect to service district capabilities would be less than significant.

These mitigation measures remain in effect. The proposed assisted-living facility is consistent with CCSP goals and policies, and with uses allowed in residential zones of the CCSP, subject to a special use permit. Accordingly, no impacts associated with land use goals or standards would result.

<b>XI. MINERAL RESOURCES. <i>Would the project:</i></b>				
	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. County General Plan 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:** The CCSP Program FEIR evaluated the CCSP for impacts to mineral resources (Impact No. 4.9-10, CCSP Draft EIR p. 4.9-13) and determined that impacts were less than significant. Some evidence of dredging in Carson Creek existed, but there was no evidence of recent activity or large-scale mineral production. The CCSP area is not in a designated Mineral Resource overlay zone.

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. **Effects on Mineral Resources:** As noted in the CCSP Program FEIR, the overall CCSP area was within the MRZ-4 mineral resource zone district, which includes areas where the available data do not preclude the presence or absence of mineral deposits. No production mining has occurred within the CCSP or on the subject property. The CCSP area is not presently designated as an important mineral resource area (County General Plan Figure CO-1 (source: California Dept. of Conservation, 2003)). The project site itself is not a designated mineral resource recovery site, but is designated on the CCSP for either residential or fire station uses. Accordingly, no impacts associated with mineral resource availability would be anticipated.

**FINDING:** The CCSP Program FEIR evaluated the CCSP area for mineral resource potential, and determined that no such resources were present on the property. The project site is in a CCSP area designated for residential development, not for mineral resource recovery. No impacts to mineral resources are expected.



<b>XII. NOISE.</b> 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 ground borne vibration or ground borne 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 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).

**Local Laws, Regulations, and Policies**

El Dorado County General Plan Public Health, Safety and Noise Element (December 2015)

This General Plan Element identifies major noise sources affecting the County, maps noise contours for major noise producers, including highways, and sets forth policies and programs that address existing and foreseeable noise problems, and minimize residents’ exposure to excessive noise.

Objective 6.5.1, Protection of Noise-Sensitive Development

Protect existing noise-sensitive developments (e.g., hospitals, schools, churches and residential) from new uses that would generate noise levels incompatible with those uses and, conversely, discourage noise-sensitive uses from locating near sources of high noise levels.

**Policies 6.5.1.1 - 6.5.1.15** set forth various performance standards for implementing Objective 6.5.1. Specific policies affecting the proposed assisted-living facility include:

**Policy 6.5.1.1** Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 6-1 or the performance standards of Table 6-2, an acoustical

analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

**Policy 6.5.1.6** New noise-sensitive uses shall not be allowed where the noise level, due to non-transportation noise sources, will exceed the noise level standards of Table 6-2 unless effective noise mitigation measures have been incorporated into the development design to achieve those standards.

**Policy 6.5.1.11** The standards outlined in Tables 6-3, 6-4, and 6-5 shall not apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7 a.m. and 7 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends, and on federally-recognized holidays. (*emphasis added*) Further, the standards outlined in Tables 6-3, 6-4, and 6-5 shall not apply to public projects to alleviate traffic congestion and safety hazards.

Table NOI - 1 and Table NOI - 2 (General Plan Tables 6-2 and 6-3) below set forth threshold noise levels for protecting noise-sensitive receptors and project-created noise, respectively. General Plan Table 6-1 applies only to transportation noise sources, and is omitted here.

**Discussion:** The CCSP Program FEIR evaluated the sound environment, including existing transportation noise, for the entire CCSP area and identified significant short-term noise impacts from construction as well as significant long-term impacts from increased traffic noise, railroad noise (if the existing inactive Southern Pacific track was used for light-rail transit) and stationary source noise from business park uses (Impacts 4.7.1 – 4.7.4, CCSP Draft EIR pp. 4.10 – 4.15). Mitigation Measures 4.7-1 through 4.7-4 were determined to reduce noise impacts to less than significant levels. Of these, Mitigation Measures 4.7-1 and 4.7-2 would apply to the proposed project.

Mitigation Measure 4.7-1, Short-term Construction Noise, requires construction activities to conform to County noise regulations or be limited to between 7:00 a.m. and 7:00 p.m. on weekdays, between 8:00 a.m. and 6:00 p.m. on Saturdays. Construction would be prohibited on Sundays and holidays.

Mitigation Measure 4.7-2, Increased Traffic Noise, requires the County to prepare an acoustical analysis where a project could result in exposure of noise-sensitive land uses to existing or future traffic noise levels in excess of County noise standards. In the event that the acoustical study demonstrates that excessive noise levels could occur, then various noise attenuation measures would be required, including but not limited to setbacks, sound barrier walls and noise berms.

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; or
- Result in noise levels inconsistent with the performance standards contained in Tables 6-1, 6-2 or 6-3 in the El Dorado County General Plan.

**Table NOI - 1**  
**Noise Level Performance Protection Standards For Noise Sensitive Land Uses**  
**Affected By Non-Transportation\* Sources**  
**(General Plan Table 6-2)**

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

**Notes:**  
 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 affected 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 uses, etc.

**Table NOI - 2**  
**Maximum Allowable Noise Exposure for Nontransportation Noise Sources**  
**In Community Regions and Adopted Plan Areas – Construction Noise**  
**(General Plan Table 6-3)**

Land Use Designation	Time Period	Noise Level (dB)	
		$L_{eq}$	$L_{max}$
Higher-Density Residential (MFR, HDR, MDR)	7 am – 7 pm	55	75
	7 pm – 10 pm	50	65
	10 pm – 7 am	45	60
Commercial and Public Facilities (C, R&D, PF)	7 am – 7 pm	70	90
	7 pm – 7 am	65	75
Industrial (I)	Any Time	80	90

**Notes:**  
<sup>1</sup> Adopted Plan areas should refer to those land use designations that most closely correspond to the similar General Plan land use designations for similar development.

a., d **Noise Exposures in excess of standards:**

**Short-term Construction Noise:** The CCSP FEIR evaluated construction noise impacts to existing single-family homes approximately 100 feet from the northern portion of the CCSP area, estimating construction sound levels at property lines to be 82 dBA (CCSP FEIR p. 4.7-11). Mitigation Measure 4.7-1 reduced construction impacts to less than significant levels by limiting construction to between 7:00 a.m. and 7:00 p.m. on weekdays, between 8:00 a.m. and 6:00 p.m. on Saturdays. Construction would be prohibited on Sundays and holidays. Alternatively, construction projects would be permitted to conform to existing County noise regulations.

The proposed project would expose residents in the new single-family residential community west of Carson Creek to short-term construction noise. The nearest lot is approximately 500 feet west of the site's western boundary, and all lots are separated from the site by Carson Creek. Sound attenuates by approximately 6 dBA with each doubling of distance from source to receptor (Bollard, p. 4.7-11). Depending on the construction phase and equipment used, anticipated sound levels during construction would range from 79 to 91 dBA at 50 feet from the source; at 100 feet away, sound levels would be reduced to 73 to 85 dBA (id). At 200 feet, sound levels would be reduced to 67 to 79 dBA, and at 400 feet, 61 to 73 dBA. At 800 feet from the source, sound levels would be approximately 55 to 67 dBA. Sound levels at 500 feet would thus likely exceed the maximum level for noise-sensitive uses, such as residents of single-family homes (Table NOI - 1). However, these levels are lower than those that the FEIR considered to be mitigable. Additionally, General Plan Policy 6.5.1.11 above specifically exempts construction noise for development projects when construction is limited to daytime hours. Mitigation Measure 4.7-1 limits construction hours further, prohibiting construction on Sundays and holidays. Accordingly, with this mitigation in place, remaining construction noise impacts would be less than significant, and no additional mitigation would be required.

**Long-term Noise:** The project itself, an assisted-living facility, would not be expected to generate excessive noise, as all community outdoor facilities are within enclosed atria within the building, which would confine recreational noise. However, the acoustical study prepared for the project (Bollard Acoustical Consultants, Inc., October 30, 2014) notes that future residents in second-story units could be exposed to traffic noise from Carson Crossing. To reduce these noise impacts to less than significant levels, the study recommends that all windows with a view of Carson Crossing be upgraded to a minimum Sound Transmission Class (STC) rating of 30, and that the facility provide air conditioning to allow occupants to close windows as desired for additional acoustical isolation. These improvements would be considered noise attenuation measures within the scope of Mitigation Measure 4.7-2, not additional mitigation. Therefore, impacts due to long-term noise exposure would be less than significant.

b. **Ground-borne Vibration or Noise:** The CCSP Program FEIR did not consider ground borne vibration to be a significant impact, did not address the issue in detail, and thus did not set forth mitigation measures. Construction of the proposed assisted-living facility would not be expected to generate substantial ground borne vibration or noise levels, because activities that cause vibration, such as pile-driving, blasting or other activities, would not be required. Operation of the project would not cause vibration, as it is a residential facility for the elderly (contrasted to, e.g., a hard-rock quarry). No short or long-term impacts related to vibration are anticipated.

c. **Permanent Noise Increases:** The CCSP Program FEIR determined that CCSP buildout would not cause long-term, permanent noise increases, since County noise regulations and FEIR mitigation measures would reduce impacts by future noise sources or on noise-sensitive uses to less than significant levels. As the proposed project is consistent with the CCSP land uses intended for the project site, and its acoustical study indicated that long-term noise impacts are mitigable, impacts related to permanent noise increases are anticipated to be less than significant.

e-f. **Aircraft Noise:** The project is not near an airport or airstrip. No related impacts are anticipated.

**FINDING:** The CCSP Program FEIR evaluated the CCSP for short and long-term noise impacts, and found that with incorporation of mitigation measures, adherence to the County General Plan polices for noise control, and County Code, no significant direct or indirect noise impacts were expected. The proposed project is consistent with the land uses indicated for the project site, as evaluated in the Land Use section above. The project's acoustical study indicated that sound levels experienced by future residents could be mitigated by sound attenuation measures included in the CCSP Program FEIR.

Accordingly, noise impacts generated by the proposed project would not be substantially different from those examined by the CCSP Program FEIR, and would be less than significant.

<b>XIII. POPULATION AND HOUSING. <i>Would the project:</i></b>				
	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.

**Local Laws, Regulations, and Policies**

El Dorado County General Plan Housing Element

The Housing Element encourages providing targeted assistive housing for seniors, particularly those of low and moderate-income. While Housing Element policies focus on senior housing affordability, they do not preclude market-rate assisted-living residential facilities. Policy HO-4.1 specifically addresses congregate-care facilities.

**Policy HO-4.1** requires the County to encourage development of affordable housing for seniors, including congregate care facilities.

Carson Creek Specific Plan

**Policy 2.2.5.9** recognizes the need for extended family support service uses to be allowed in residential areas of the CCSP. Community care facilities are allowed subject to a special use permit from the Planning Commission.

**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:** The CCSP Program FEIR evaluated the CCSP’s contribution to El Dorado County’s population growth, and estimated that project buildout would add approximately 7,565 individuals, based on the proposed 2,701 housing units with 2.8 persons per household (CCSP Draft EIR, p. 4.4-6). At the time, this was considered consistent with County population projections, thus impacts to population growth were less than significant. The *adopted* CCSP has 1001 fewer units than originally planned – 1,700 instead of 2701, distributed among 10 residential “villages” (CCSP p. 3-3). 1,700 units would represent approximately 4,760 individuals, also

consistent with the County projections in effect when the CCSP was adopted. Most of these units would be “age-restricted,” occupied by adults 55 years of age or older. The CCSP Draft EIR used data from the 1990 census and the 1994 Housing Element, which estimated that County population would grow to 218,730 by 2010. The El Dorado County 2013-2021 Housing Element now estimates that by 2020, population will grow to 203,095 persons from 180,921 persons in 2010 (Housing Element, p. 4-8).

The project site is located in CCSP Village No. 9, and is designated for residential uses. The CCSP indicates that Village 9 would have 67 single-family units (187.6 individuals) on 16.6 acres (11.3 persons/acre), but also states that residential densities are variable, and would be fixed only upon issuance of tentative maps. It does not address population densities in assisted-living or congregate-care settings.

The proposed project would have 134 assisted-living units, including 25 studios, 59 one-bedroom units, 15 two-bedroom units, and 35 memory-care studios. Table POP - 1 below estimates that there would be 149 residents, assuming one person per studio and one-bedroom unit, and two persons per two-bedroom unit. 149 persons would represent 0.07% of El Dorado County’s projected 2020 population.

**Table POP - 1**  
**Estimated Project Population**

Unit Type	No. of Units	Residents Per Unit	Population
Memory Care Studio	35	1	35
Studio	25	1	25
One-Bedroom	59	1	59
Two-Bedroom	15	2	30
<b>Total Estimated Population</b>			<b>149</b>

The estimated population for the proposed project represents approximately 51 persons/acre, greater than the projected density for Village 9, but within its numeric projection for the overall land area. The remainder of Village 9 has not yet been developed, nor have plans been submitted. Additionally, the CCSP does not have an upper population limit, but instead has a housing unit limit of 1700. Assisted-living facilities are typically not considered “housing units” per se, even if they have apartment-like features. The number of units available for Village 9 would not necessarily be affected by the proposed project. Moreover, the CCSP Policy 2.2.5.9 anticipated such a project in residential areas. Since CCSP residential densities are flexible, and the estimated number of residents in the proposed project is less than the total projected for 67 units, it is reasonable to conclude that 149 persons do not represent a significant increase in either the CCSP or Countywide population. Accordingly, impacts associated with population increase or concentration would be less than significant.

- b., c. **Housing Displacement:** The proposed assisted-living facility would not displace existing housing or people, as it would be constructed on a currently-vacant site. Rather, the project would provide housing in a congregate setting, consistent with CCSP Policy 2.2.5.9. No impacts associated with housing or resident displacement would be expected.

**FINDING:** The CCSP Program FEIR evaluated the CCSP for impacts associated with population, and after comparing the project’s anticipated residential population to then-current County projections and the County General Plan, determined that impacts were less than significant. The proposed project would introduce approximately 149 persons, some who might relocate from elsewhere in the County. This population is consistent with the proposed uses and densities in the CCSP, given Policy 2.2.5.9, which encourages development of community-care facilities. Moreover, given the County’s current population projections, the project would represent a small percentage – 0.07% – of the County’s projected 2020 population. Finally, the project would not displace existing housing or residents. Accordingly, impacts associated with population from the proposed project would not be materially different from those considered by the CCSP Program FEIR and would be less than significant.

<b>XIV. PUBLIC SERVICES.</b> 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**

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

**State Laws, Regulations, and Policies**

Various state laws, regulations, and policies affect the administration of public schools in the State of California. School districts, for example, can levy and collect school facility fees from developers to generate revenue to accommodate the students associated with regional growth (Government Code §65995). State legislation authorizing and limiting school facilities fees specify that the fees constitute "full mitigation" of impacts. In addition to the imposition of impact fees, the State Department of Education provides Average Daily Attendance (ADA) funding to schools based on their attendance statistics.

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.

**Local Laws, Regulations, and Policies**

The provision of public services in the County are largely regulated at the local level with the County having the responsibility for the provision of fire and police protection, providing parks and open spaces for residences, and providing other typical municipal services. Schools that serve residents in the area are governed at the school district level and include two school districts: Latrobe School District for elementary and middle schools and the El Dorado Union High School district for high schools. An additional school district that could serve the student population in the County includes Buckeye Union School District. Each district establishes enrollment policies and procedures for their students and families. Each district is also responsible for planning for student enrollment increases.

**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. **Fire Protection:** 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. As such these minimum requirements were analyzed and discussed in the CCSP Program EIR and that project's impacts on fire suppression services currently provided by the El Dorado Hills Fire Department. The Department's service district for fire protection and emergency medical services encompasses approximately 30,000 acres (47 square miles) and serves an estimated population of 14,000. The Department engages in mutual and automatic aid agreements with surrounding and adjacent fire departments.

At the time of its adoption, the buildout of the CCSP was predicted to result in a population increase of up to approximately 7,565 people in the area, generating an increased demand for fire and emergency medical services. Based on the then Department's goal of 1.5 firefighters per 1,000 populations, buildout of the Specific Plan would generate the need for up to 11 additional firefighters. Estimated emergency response times to the proposed project site was predicted to be less than 5 minutes. The CCSP also identified a planned fire station in the El Dorado Hills Business Park that would serve the Specific Plan area. The "Golden Foothill Station" was subsequently constructed in the El Dorado Business Park at 4680 Golden Foothill Parkway. Both existing service capabilities, planned expansions to those capabilities, and the provision of the newer fire station in the El Dorado Hills Business Park, as foreseen in the CCSP Program EIR, results in either no impact or less than significant impacts on fire and emergency medical facilities posed by the assisted-living facility.

b. **Police Protection:** Law enforcement services are provided to the CCSP area by the El Dorado County Sheriff-Coroner's Department (Sheriff's Department). The Sheriff's headquarters are located in the City of Placerville at 300 Fairlane, approximately 18 miles east of the Planning Area. Other Sheriff's Department facilities include a station in South Lake Tahoe and a substation in Georgetown (Roth 1994). The nearest substation is at 4354 Town Center Drive, El Dorado Hills, approximately two miles from the project site.

When the CCSP was adopted, it was predicted that demand for law enforcement services in El Dorado County would increase with buildout of the Specific Plan. Development consistent with the Specific Plan was predicted to generate up to approximately 7,565 new residents, resulting in an increased demand on Sheriff's Department services. As sufficient funding sources were not identified to support expanded law enforcement capabilities to serve the CCSP area, the CCSP Program EIR incorporated a mitigation measure (Mitigation Measure 4.14-1) requiring: (a) that building permit applicants obtain service letters from the El Dorado County Sheriff's Department and, (b) an assessment district be formed to fund adequate law enforcement staffing and equipment to serve the area. Implementation of these measures results in a less-than-significant impact on police protection facilities in regards to the assisted-living facility, because it will be required to contribute to the assessment district, as well as to obtain the referenced service letter.

c. **Schools:** Buildout of the CCSP was projected to generate an estimated 378 middle school (grades 7-8) students, based on a generation factor of 0.14 middle school students per household. A total of 567 high school students was anticipated to be generated, based on a generation factor of 0.21 high school students per household unit. Provisions within the CCSP include the set-aside of a 20-acre middle school site in the southern portion of the project area. In addition, the CCSP envisioned busing students between schools and school districts as enrollment capacities changed. The CCSP Program EIR also included mitigation measure to address the plan area's impacts on schools



(Mitigation Measure 4.12-1) that included such measures as (a) payment of school district developer fees, creating a Mello-Roos district or similar financing entity to fund the construction of new schools, and providing temporary classrooms as needed. These combined measures resulted in less than significant impacts to school enrollment within the specific plan area. The proposed assisted-living facility is not intended for families with children, and consequently would not generate demands on school facilities. Accordingly, the proposed project would not generate impacts on schools.

- d. **Parks.** Buildout of the CCSP was predicted to result in the need for additional parkland in the El Dorado Hills Community Services District. Based on EDHCSD's requirement of 5 acres of developed or active parkland for every 1,000 individuals, development consistent with the Specific Plan was predicted to result in a demand for up to 38 acres of active parkland. Actual parkland dedication and/or in-lieu fee requirements would be based on the final densities proposed in each phase of development. The specific plan itself designated three park sites (31.2 acres) within the specific plan area along with 142.8 acres of "enhanced open space" areas. These designated park areas and open space areas, coupled with the required payment of in-lieu fees to purchase additional park areas and fund facilities, were included in the original mitigation measures in the CCSP Program EIR. As such, they are sufficient to address the needs of the specific plan area, including those of the proposed assisted-living facility which is not anticipated to place significant demand on local park spaces or facilities.
- e. **Government Services.** Provisions within the CCSP and mitigation measures in the CCSP Program EIR addressed the needs of future residents and users of the CCSP area, including additional governmental services (e.g., library services) and, therefore, adequately addressed the impacts of the assisted-living facility and its potential impacts on these general governmental services.

**FINDING:** The CCSP Program FEIR evaluated the CCSP for impacts associated with public services, and determined that implementing the mitigation measures cited above would reduce the CCSP's impacts to less than significant. The proposed project would not change this conclusion, because any increased demand for public services would be addressed through the payment of established impact fees, implementation of CCSP Program EIR mitigation measures and planned public service capabilities improvements. Accordingly, impacts to public services from the proposed project would not be materially different from those considered by the CCSP Program FEIR and would be less than significant.

<b>XV. RECREATION.</b>				
	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:**

**State Laws, Regulations, and Policies**

The California Parklands Act

The California Parklands Act of 1980 (Public Resources Code Section 5096.141-5096.143) recognizes the public interest for the state to acquire, develop, and restore areas for recreation and to aid local governments to do the same. The California Parklands Act also identifies the necessity of local agencies to exercise vigilance to see that the parks, recreation areas, and recreational facilities they now have are not lost to other uses.

The California state legislature approved the California Recreational Trail Act of 1974 (Public Resources Code Section 2070-5077.8) requiring that the Department of Parks and Recreation prepare a comprehensive plan for California trails. The California Recreational Trails Plan is produced for all California agencies and recreation providers that manage trails. The Plan includes information on the benefits of trails, how to acquire funding, effective stewardship, and how to encourage cooperation among different trail users.

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 parkland 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 services:** As explained in Section XIV(d) above, the CCSP Final Program EIR evaluated the CCSP's potential impacts on parks and recreational services, and determined that with ordinary park impact fees and the CCSP's included park and open space facilities, the CCSP's impacts were less than significant. The proposed project would not encroach on any CCSP planned open space or parkland. The facility would have two atrium-style outdoor spaces, one with an enclosed memory garden, and the other with a pool. A private fitness center and activity room would also be provided. With these self-contained services, the proposed project's impact on park and recreational services is anticipated to be less than significant.

**FINDING:** The CCSP Program FEIR evaluated the CCSP for impacts associated with parks and recreation, and determined that implementing the mitigation measures cited in Section XIV above would reduce the CCSP's impacts to less than significant. As explained above, the proposed project's impacts to open space or park facilities would not exceed those anticipated by the CCSP Program EIR, and would be less than significant.

<b>XVI. TRANSPORTATION/TRAFFIC.</b> <i>Would the project:</i>				
	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 exempted from these standards and are allowed to operate at LOS F. 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. **Traffic Increases:** Project buildout of the CCSP was projected to result in daily traffic increases on White Rock Road, increased traffic volumes on El Dorado Hills Boulevard, increased peak hour traffic volumes along U.S. Highway 50 at the El Dorado Hills/Latrobe Road Interchange, as well as for other roadways and intersections in the general project vicinity. In addition, buildout of the CCSP was expected to result in increased demand for public transit services, as well as for bicycle and pedestrian facilities. Various mitigations in the CCSP Program EIR addressed these potential impacts, including the distribution of fair share costs for road widening and intersection improvements, construction of bus turnout areas and shelters, and construction of a Class II bike lane. With these mitigations measures, the CCSP Final Program EIR determined that impacts would be less than significant.

**Traffic Memorandum (On-Site Transportation Review):** To determine whether the proposed project would generate traffic impacts greater than those evaluated for the CCSP, a new Traffic Memorandum was prepared by T. Kear Transportation Planning & Management, Inc. (Appendix B). The purpose of the memorandum was to analyze the specific traffic impacts associated with the proposed facility (i.e. On-Site Transportation Review), including increases in traffic and its effects on level of service standards, as well as for design standards affecting the project's proposed driveway location. A specific focus of this review was to determine the potential for vehicle queuing to block turning movements at the project's proposed driveway or the future intersection of Golden Foothill Parkway and Carson Crossing Drive, located adjacent to the proposed project.

Specifically, the Traffic Memorandum addressed the following factors:

1. Existence of any current traffic problems in the local area such as a high-accident location, non-standard intersection or roadway, or an intersection in need of a traffic signal.
2. Proximity of proposed site driveway(s) to other driveways or intersections.
3. Adequacy of vehicle parking relative to both the anticipated demand and zoning code requirements.
4. Adequacy of the project site design to fully satisfy truck-loading demand on-site, when the anticipated number of deliveries and service calls may exceed 10 per day.
5. Adequacy of the project site design to provide at least a 25' minimum required throat depth (MRTD) at project driveways. Include calculation of the MRTD.
6. Adequacy of the project site design to convey all vehicle types.
7. Adequacy of sight distance on-site.
8. Queuing analysis of drive-through facilities.

**Project Trip Generation:** Table TR - 1 below shows the project trip generation results for the 134-unit assisted-living facility and are derived from the Traffic Memorandum.

**Table TR - 1**  
**Project Trip Generation for 134 Units**

Description	ITE Land Use Code	Units	Daily	AM Peak Hour Generation				PM Peak Hour Generation					
			Total Trips	Total Trips	In		Out		Total Trips	In		Out	
					%	Trips	% Trips	Trips		% Trips	Trips		
Continuing Care Units	255	134	322	19	65%	12	35%	7	21	39%	8	61%	13

Daily rate: 2.4, AM peak-hour rate: 0.14, PM peak-hour rate 0.16

Source: Trip Generation 9th Ed., 2012, ITE, land use 255 (Continuing Care Facility)

Project trip distribution was based on results of select zone analysis from the TDM, trip distribution assumptions from previous traffic impact studies in the vicinity (including previous studies for this group of projects), discussion with the project team, input from County staff, and local area knowledge. Project trips, derived from the trip generation and distribution above, were assigned to study intersection(s) to estimate near-term (2025) traffic levels with the proposed project.

- b. **Levels of Service Standards:** Level-of-service for SSSC (Side Street Stop Controlled) intersections is defined by the amount of control delay on either the worst (the most delay) approach on single lane approaches, or the worst lane for multi-lane approaches. Level-of-service is graded on an A (best) through F (worst) scale. Results are reported below. The traffic-modeling program *Synchro* (v. 9) was used to perform level-of-service calculations. Table TR - 2 below indicates near-term 2025 delay, level-of-service and worst-approach scenarios for the project.

**Table TR - 2**  
**Anticipated near-term 2025 delay, levels-of-service and worst-approach (SSSC analysis)**

Location	2025 AM Peak-Hour, RIRO Driveway	2025 PM Peak-hour, RIRO Driveway	2025 AM Peak-Hour, Full-access Driveway	2025 PM Peak-Hour, Full-access Driveway
Golden Foothill Parkway/ Carson Crossing Drive	22.5 seconds, C, NB left turn	26.4 seconds, D, NB left turn	22.3 seconds, C, NB left turn	25.9 seconds, D, NB left turn
Project Driveway	Driveway was not analyzed for RIRO scenario	Driveway was not analyzed for RIRO scenario	9.8 seconds, A, NB left turn	9.6 seconds, A, NB left turn

The Traffic Memorandum analyzed both the trip generation and trip distribution of the proposed project as well as the expected peak-hour delays at the project driveway locations. In addition, the project was compared against the eight required elements (listed above) of the On-site Transportation Review (which included an analysis of trip generation and peak-hour delays at project driveways). The study found no significant impacts when compared against the eight criteria with implementation of the following recommendations:

- With modification of the roadway striping plans for Golden Foothill Parkway fronting the proposed project, approval of a conditional use permit for the existing site plan will not result in traffic operations issues under existing (2015) or near-term (2025) conditions. Anticipated 95% queue lengths are one vehicle long or shorter.
- The eastbound approach to the Golden Foothill Parkway/Carson Crossing Drive intersection should be striped as a single shared lane, which differs from the proposed striping in the October 2014 plan set for the intersection. The westbound approach should be striped as a through lane plus a left turn pocket (consistent with the October 2014 plan set for the intersection). The northbound approach should be striped as a shared through-left lane plus a right turn pocket (consistent with the October 2014 plan set for the intersection).

- Under cumulative (2035) conditions the Golden Foothill Parkway/Carson Crossing Drive intersection is anticipated to require signalization. El Dorado County should condition the proposed project to allow for a future raised median on Golden Foothill Parkway that would restrict driveway-turning movements to right-in/right-out.
- The on-site parking lot aisle design is unlikely to accommodate the swept path for the turning movements of a California legal truck (CA Legal-65). Full size commercial vehicles may need to park on Golden Foothill Parkway or Carson Crossing Drive to service the proposed project. This limitation is common and is not anticipated to be a problem.

The above findings and recommendations of the On-Site Transportation Review are consistent with traffic mitigations in the CCSP Program EIR, and will be included in the Conditions of Approval for the project. Accordingly, the proposed project would not generate impacts that exceed those evaluated in the CCSP Final Program EIR, and traffic impacts would remain less than significant.

- c. **Air Traffic:** The proposed project is not located near any major airports nor will its operation interfere with airport operations. There would be no impact.
- d. **Design Hazards:** According to the One-Site Transportation Review Memorandum for the project, the proposed driveway design was determined to be consistent with El Dorado County requirements. The El Dorado County Zoning Ordinance requires that parking area ingress and egress driveways be located a minimum of one hundred fifty feet from the intersection of two major arterials, one hundred feet from the intersection of a major arterial and collector street, and seventy feet from the intersection of two collector streets or a collector and local street. Measurements are taken from the centerline of the nearest travel lane of the intersecting streets and the centerline of the driveway. The centerline of the proposed Golden Foothill Parkway driveway is located more than 200 feet from the centerline of Carson Crossing Drive, and the Carson Crossing driveway is more than 300 feet from the centerline of Golden Foothill Parkway. Accordingly, the proposed project's access design is consistent with County requirements, and exhibits no design hazards. No impacts are anticipated.
- e. **Emergency Access:** The CCSP Final Program EIR determined that implementing development design plans would generate less-than-significant impacts (Impact No. 4.13-3). Emergency access will be unaffected by the proposed project, since it provides adequate on-site access, will not obstruct either Carson Crossing or Golden Foothill Parkway. Movements of construction vehicles could potentially interfere with emergency vehicles; however, this degree of impact was considered by the CCSP Final Program EIR and determined to be less than significant with ordinary construction controls. Accordingly, because the proposed project would be required to comply with County development standards, impacts associated with emergency access would not exceed those evaluated in the CCSP Final Program EIR, and would be less than significant.
- f. **Alternative Transportation:** Alternative transportation will be provided for residents of the assisted care facility (multiple-passenger vans). The project itself would enable mobile residents to use CCSP walkways and trails. The project itself is not anticipated to create a need for either new or expanded alternative transportation facilities. No impacts to alternative transportation systems are anticipated.

<b>XVII. TRIBAL CULTURAL RESOURCES.</b> <i>Would the project:</i>				
	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 Tribal Cultural Resource as defined in Section 21074?			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

AB 52, which was approved in September 2014 and 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 CEQA 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).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TRCs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

**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.** A cultural resources assessment was prepared for the CCSP Program EIR that included a literature search of historical and pre-historical resources in the project areas. This assessment also included an analysis of the potential for Native American (NA) resources in the CCSP area. Based on the records search, several archaeological surveys have been conducted adjacent to the project site. The southeast portion of the project site was surveyed in 1976 and no resources were found. No previously recorded prehistoric sites were known to be located within or adjacent to the project. However, one isolated projectile point was found in the 1995 sample survey. In total, six historic sites were recorded during the sample survey within the CCSP area. However, no Native American cultural properties were identified within the proposed project area.

The CCSP Program EIR noted that the identified historic sites were of varying value and significance, with mitigation provided specifically for those sites that were deemed significant. As a general rule, however, the CCSP area's potential for experiencing project-related impacts was addressed through implementation of Mitigation Measure 4.11-1 and 4.11-3 which require (a) any discovered significant cultural resources, including Native American resource, to be recorded at the North Central Information Center at California State University at Sacramento; and (b) that a licensed archeologist be made available at the project site during excavation/construction activities to direct resource recovery activities.

**FINDING:** No significant TCRs are known to exist on the project site, and CCSP mitigation measures would ensure appropriate treatment of any resources that were discovered during excavation or grading. Accordingly, the proposed project would not be expected to cause a substantial adverse change to a TCR. Related impacts would be less than significant.



<b>XVIII. UTILITIES AND SERVICE SYSTEMS. <i>Would the project:</i></b>				
	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. **Wastewater Requirements:** The El Dorado Irrigation District (EID) collects and treats wastewater in the project area. Existing EID wastewater facilities in the vicinity of the project site include: an 8-inch sewer force main in White Rock Road, sewage lift station approximately 500 feet south of Berkshire Drive at White Rock Road, a 10-inch gravity sewer main with a stubout to the project site at Suncastr Lane, and two sewage lift stations, gravity sewers and force mains along portions of the eastern boundary of the project site in the existing El Dorado Hills Business Park. In addition, a 10-inch reclaimed wastewater line is located in Latrobe Road to the east of the project site, which has been more recently extended to Carson Crossing Drive. Wastewater generated in the project area is treated at the El Dorado Hills Wastewater Treatment Plant (EDHWTP). At the time of preparation of the CCSP Program EIR, the EDHWTP treated wastewater from approximately 3,620 sewer connections in the El Dorado Hills area.

The CCSP proposed the extension of existing wastewater infrastructure to serve the project area and the EID did not foresee any infrastructure limitations on extending services to the specific plan area. Consequently, CCSP-related impacts were deemed less than significant. The construction of the proposed assisted care facility is consistent with residential uses planned for the project site, and would not exceed the infrastructure demands that the CCSP Final Program EIR anticipated. Accordingly, wastewater facilities and existing services would be adequate to serve the facility, and impacts would be less than significant.

- b. **Construction of New Facilities:** See discussion under parts (a.) and (d.).

- c. **New Stormwater Facilities:** The proposed project would generate stormwater runoff primarily from its surface parking lot, which would receive incident rainfall as well as drainage from the building's roof. Drainage would be directed westward along both north and south parking aisles, then drain to "A" Street on the property's western boundary (Sheet 1, Planning Submittal, Proposed Grading). Stormwater would be captured in gutters and catch basins, and drain southward. The CCSP Final Program EIR Mitigation Measure 4.10-6 requires onsite detention basins during construction as appropriate to particular projects and sites within the CCSP, and that applicants develop and implement surface water pollution control plans prior to issuance of grading permits.

Additionally, the CCSP Final Program EIR acknowledged that development within the CCSP area would increase runoff quantities and peak discharges from the project site, resulting in increased water levels in Carson Creek, especially during 100-year storm events. Consequently, the specific plan proposed to provide 100-year flood protection by raising proposed development areas above the 100-year floodplain. The CCSP Final Program EIR also acknowledged that short-term construction impacts to water quality would also occur. The CCSP Program EIR included mitigation measure to address these concerns (Mitigation Measures 4.10-1, 4.10-2, 4.10-3, 4.10-5, 4.10-6, and 4.10-7 that address short and long-term water quality impacts, 100-year flood events, and flooding associated with the failure of dams or levees. In addition, the CCSP proposed drainage facilities including drainage detention basins, to address stormwater flows within the project area. These previous mitigation measures were considered sufficient to reduce remaining wastewater and water quality impacts to less than significant. These mitigation measures continue to be in effect for the overall CCSP area including for the location of the proposed project, thus reducing impacts to levels that are less than significant.

- d. **Sufficient Water Supply:** El Dorado Irrigation District (EID) is the primary purveyor and supplier of domestic, agricultural, and industrial water to residents and businesses in western El Dorado County. In addition, existing water supply infrastructure surrounds the specific plan area, consisting of several 12-inch water mains and one 8-inch water main.

At the time of its preparation, the CCSP Program EIR concluded that there were insufficient water rights available to serve the CCSP area. In addition, the EIR noted the need to extend water infrastructure to the project site but that because the specific plan provided for this infrastructure, this would be a less than significant impact. Because of the water rights/supply issue, the CCSP Program EIR proposed mitigation to address this shortfall (Mitigation Measure 4.18-1), including such measures as (1) preparing a Facility Plan Report for the project to address the expansion of water sewer facilities; (2) installing low-volume and low-flow fixtures to reduce water consumption; and (3) installing water efficient irrigation systems.

An Addendum to the Final Program EIR was prepared in January 1997, responding in part to litigation over water supply. That report described water supplies available to the CCSP from EID, including supplies from Folsom Lake. The report also cites several General Plan policies that preclude development if water supply is not available from water purveyors (1997 Addendum, pp. 5-12). Taken together, impacts related to water supply remained less than significant with incorporation of mitigation measures.

The annual average consumption for an assisted-living facility is approximately thirty-seven thousand gallons per bed or thirty-three thousand gallons per apartment. For the entire project (134 apartment units) the estimated annual water demand would be 4,422,000 gallons annually.<sup>5</sup> This represents an incremental increase over the amount of water usage that would be experienced were the property to revert to a residential land use (absent the CCSP's plan to develop the site with a fire station). In addition, the CCSP Final Program EIR Mitigation Measure 4.18 was considered adequate to reduce remaining water supply impacts to less-than-significant levels. This mitigation measure continues to be in effect for the overall CCSP area, including the proposed project.

The CCSP Draft EIR also assessed the CCSP's impacts on groundwater recharge. Carson Creek and its tributaries and ponds were considered the primary areas for recharge on the CCSP property (CCSP Draft EIR, p. 4.10-6). Because the existing creek channels would be retained, impacts to groundwater recharge were considered less than significant (Impact No. 4.10-4). The proposed project would not interfere with the recharge area along Carson Creek, and would not depend on local groundwater for water supply. Accordingly, impacts to groundwater would not be different from those evaluated in the Draft CCSP EIR, and would be less than significant.

- e. **Adequate Wastewater Capacity:** Buildout of the CCSP area would generate wastewater that would be treated at the El Dorado Hills Wastewater Treatment Plant (EDHWTP) on Latrobe Road. At the time of CCSP adoption, the EDHWTP indicated that it had sufficient capacity to handle wastewater generations throughout the entire CCSP area, including fire station or residential development at the proposed project's site. As explained in the Land Use section above, the proposed assisted-living facility is residential in nature, and is an allowed use in residential areas of the CCSP, subject to a special development permit. Accordingly, the proposed project's wastewater treatment demands would not exceed those anticipated by the Final Program EIR, and associated impacts would be less than significant.
  
- f-g. **Solid Waste Disposal and Requirements:** El Dorado Disposal distributes municipal solid waste to Forward Landfill in Stockton and Kiefer Landfill in Sacramento. Pursuant to El Dorado County Environmental Management Solid Waste Division staff, both facilities have sufficient capacity to serve the County. Recyclable materials are distributed to a facility in Benicia and green wastes are sent to a processing facility in Sacramento. County Ordinance No. 4319 requires that new development provide areas for adequate, accessible, and convenient storing, collecting and loading of solid waste and recyclables. This project does not propose to add any activities that would generate excessive amounts of solid waste, and any future additional housing units would generate minimal amounts of solid waste for disposal. Project impacts would be less than significant.

**FINDING:** No significant utility and service system impacts would be expected with the project, either directly or indirectly. For this Utilities and Service Systems category, the thresholds of significance would not be exceeded, the service needs of the facility would be minimal, and any potentially significant impacts have been previously addressed by mitigation measures included in the CCSP Program EIR.

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<sup>5</sup> Benchmarking Task Force Collaboration for Industrial, Commercial & Institutional (ICI) Water Conservation, July 2007

<b>XIX. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:</b>				
	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:**

- a. No substantial evidence contained in the project record has been found that would indicate that this project would have the potential to significantly degrade the quality of the environment. As conditioned or mitigated, and with adherence to County permit requirements, this project would not have the potential to 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 California history, pre-history, or tribal cultural resources. There are no special status species or habitat for those species on the project site. The project site itself has been rough-graded and supports only non-native annual grasses and forbs. It contains no vernal pools. There is no riparian or wetland habitat on the project site nor are there wildlife migration corridors on or near the project site. Any impacts from the project would be less than significant due to the design of the project and required standards that would be implemented prior to construction of the assisted-living facility or with the building permit processes and/or any required project specific improvements on the property.
- b. Cumulative impacts are defined in Section 15355 of the California Environmental Quality Act (CEQA) Guidelines as two or more individual effects, which when considered together, would be considerable or which would compound or increase other environmental impacts.

The project would not involve development or changes in land use that would result in an excessive increase in population growth. Impacts due to increased demand for public services associated with the project have been previously addressed through mitigation in the CCSP Program EIR or would be offset by the payment of fees as required by service providers to extend the necessary infrastructure services. The project would not be anticipated to contribute substantially to increased traffic in the area, contribute to highway or driveway design hazards, and the project would not require an increase in the wastewater treatment capacity of the County. Due to the small size of the proposed project, types of activities proposed, and site-specific environmental conditions, which have been disclosed in the Project Description and analyzed in Items I through XVI, there

would be no significant impacts anticipated related to agriculture resources, air quality, biological resources, cultural resources, geology/soils, hazards/hazardous materials, hydrology/water quality, land use/planning, mineral resources, noise, population/housing, public services, recreation, traffic/transportation, or utilities/service systems that would combine with similar effects such that the project's contribution would be cumulatively considerable. For these issue areas, either no impacts, or less than significant impacts would be anticipated.

As outlined and discussed in this document, as conditioned and with compliance with County Codes, this project would be anticipated to have a less than significant project-related environmental effect which would cause substantial adverse effects on human beings, either directly or indirectly. Based on the analysis in this study, it has been determined that the project would have less than significant cumulative impacts.

- c. Based on the discussion contained in this document, no potentially significant impacts to human beings are anticipated to occur with respect to potential project impacts. The project would not include any physical changes to the site that would generate environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Any future development or physical changes would require review and permitting through the County. Adherence to these standard conditions would be expected to reduce potential impacts to a less than significant level.

**FINDINGS:** The proposed project will not result in significant environmental impacts. Project impacts will not exceed those identified in the CCSP Final Program EIR, applicable environmental standards, nor would significantly contribute to cumulative environmental impacts.

## **INITIAL STUDY ATTACHMENTS**

Appendix A: CalEEMod Output  
Appendix B: On-site Transportation Review (T. Kear, cited below)

## **SUPPORTING INFORMATION SOURCE LIST**

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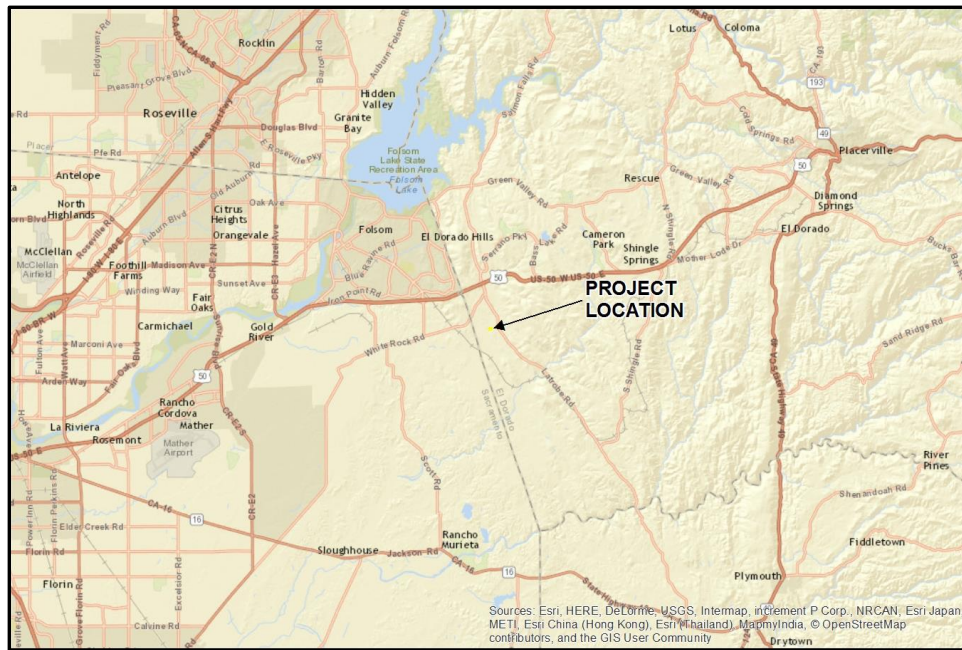
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**Figure PD - 2**  
**Regional Location**

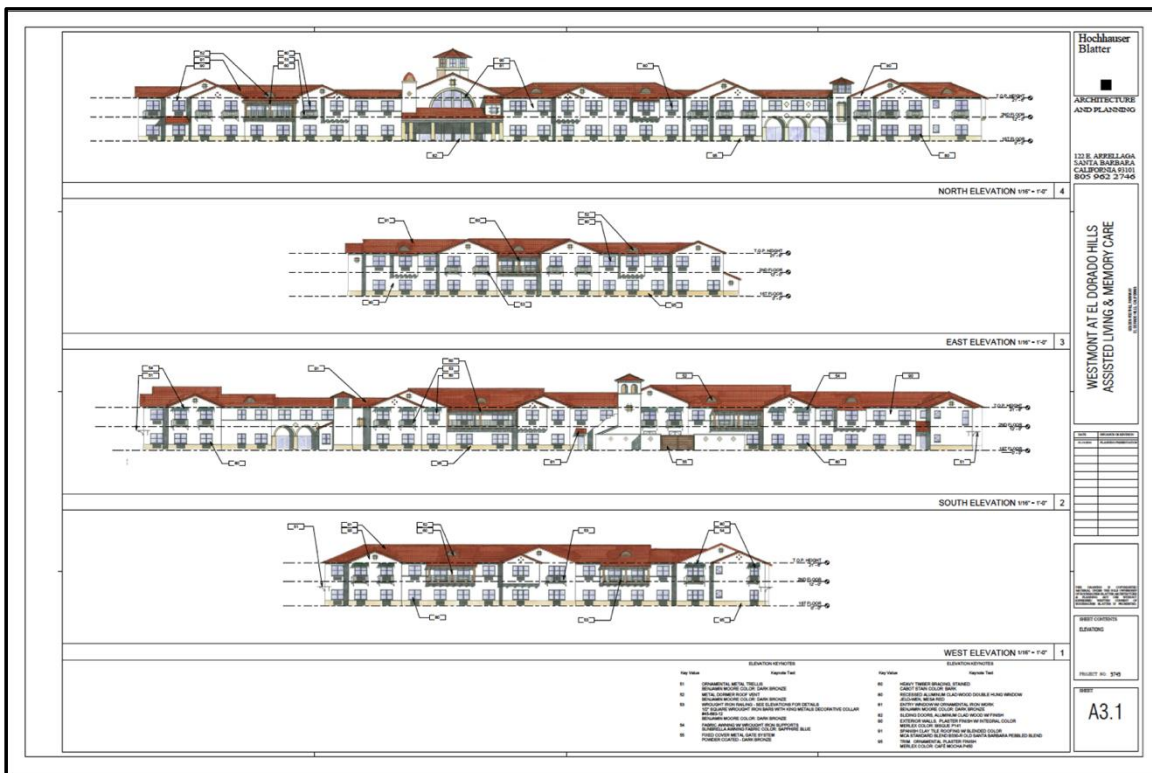
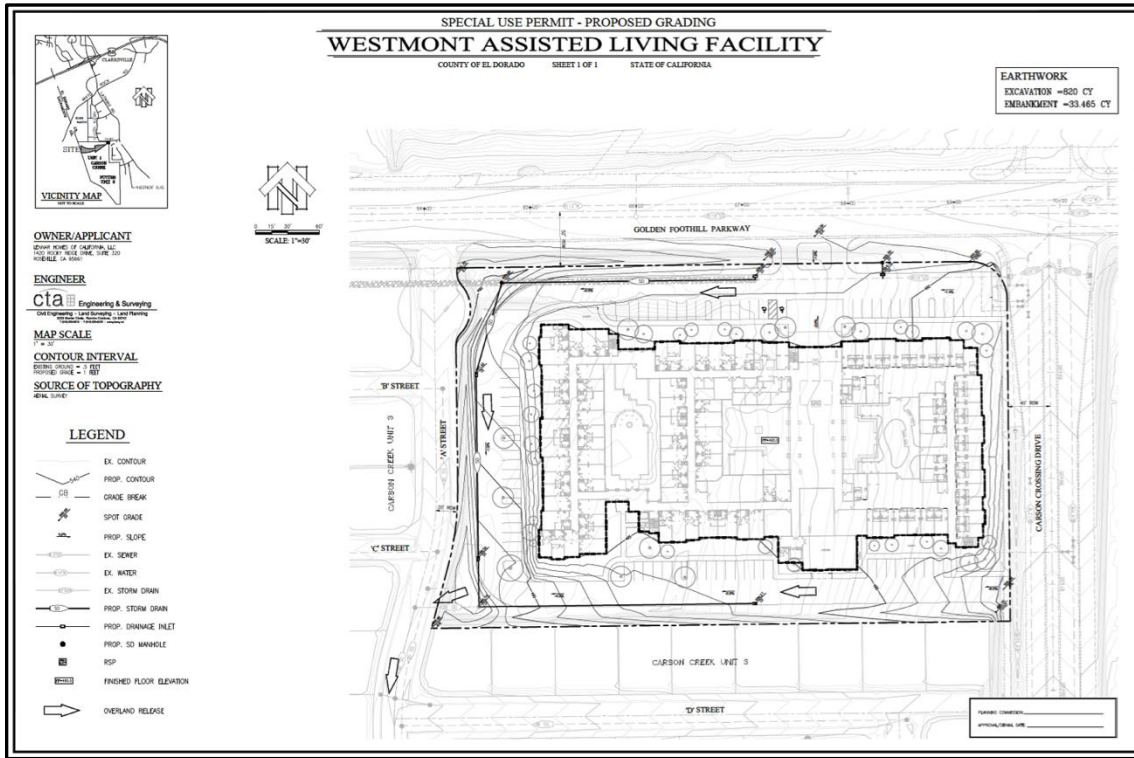


**Figure PD - 2**  
**Project Location – Aerial View**





**Figure PD - 5**  
**Grading Plan and Elevations**



**Figure PD - 6**  
**Landscape Plan and Renderings**



**Westmont Assisted Living 2**  
**El Dorado-Mountain County County, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Congregate Care (Assisted Living)	134.00	Dwelling Unit	4.07	120,213.00	149

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	70
<b>Climate Zone</b>	1			<b>Operational Year</b>	2018
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

**Appendix A**

## Project Characteristics -

Land Use - Acreage provided by applicant. Population est. by no. of unit types

Construction Phase - Const duration 3/1/17 - 4/30/18

Bldng construction - HVAC = 1 crane, 1 week.

Construction days overlap. Total no. of days ~ 361: 259 in 2017, 102 in 2018

No work 11/23/17, 11/24/17, 12/26/17, 1/1/17

## Off-road Equipment -

Off-road Equipment - Values provided by applicant.  
Structure is wood-framed.

Off-road Equipment - Generator set used for 1st week of construction.

Off-road Equipment - Cranes used for 1 week to install roof-mount HVAC.

Off-road Equipment - Values provided by applicant

Off-road Equipment - Values provided by applicant

Off-road Equipment - Crane used for 1 week in construction phase. Gen set used 1 week in construction.

Grading - Values provided by applicant

Woodstoves - No fireplaces or wood stoves.

Landscape Equipment - No turf = no lawnmowing. Equipt likely limited to blowers.

## Energy Use -

Land Use Change - Annual "grassland" occupies only part of site.

## Sequestration -

Construction Off-road Equipment Mitigation - All exposed ground will be covered at end of construction by pavement, buildings, or 43,000 ft<sup>2</sup> +/- of landscaping. If necessary to mitigate all equipt will use Tier 4 engines.

Mobile Land Use Mitigation - Project is within 2 miles of transit center & retail (CVS, Target, Nugget, theater, services)

Mobile Commute Mitigation - Van for residents will substitute for individual vehicles. Mode share is estimated.

Area Mitigation - No lawnmowers would be used.  
Attempt for 50% electric leafblowers. No chainsaws.

Energy Mitigation - Amounts estimated.

Water Mitigation - No turf specified in landscape.

## Waste Mitigation -

Trips and VMT - Assume 20-yd capacity trucks.

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	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	100
tblCommuteMitigation	EmployeeVanpoolPercentModeShare	2	10
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstructionPhase	NumDays	230.00	333.00
tblConstructionPhase	NumDays	230.00	7.00
tblConstructionPhase	NumDays	230.00	7.00
tblConstructionPhase	NumDays	8.00	21.00
tblConstructionPhase	NumDays	18.00	14.00
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	PhaseEndDate	4/23/2018	4/17/2018
tblConstructionPhase	PhaseEndDate	5/2/2018	4/8/2017
tblConstructionPhase	PhaseEndDate	4/17/2017	10/9/2017
tblConstructionPhase	PhaseEndDate	4/1/2017	3/31/2017



tblConstructionPhase	PhaseEndDate	10/25/2017	4/6/2018
tblConstructionPhase	PhaseStartDate	4/7/2018	4/2/2018
tblConstructionPhase	PhaseStartDate	4/25/2018	4/1/2017
tblConstructionPhase	PhaseStartDate	4/9/2017	10/2/2017
tblConstructionPhase	PhaseStartDate	3/9/2017	3/8/2017
tblConstructionPhase	PhaseStartDate	10/10/2017	3/22/2018
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	NumberGas	73.70	0.00
tblFireplaces	NumberNoFireplace	13.40	134.00
tblFireplaces	NumberWood	46.90	0.00
tblGrading	AcresOfGrading	10.50	4.00
tblGrading	AcresOfGrading	10.50	0.00
tblGrading	MaterialExported	0.00	1,000.00
tblLandscapeEquipment	NumberSummerDays	180	40
tblLandUse	LandUseSquareFeet	134,000.00	120,213.00
tblLandUse	LotAcreage	8.38	4.07
tblLandUse	Population	383.00	149.00
tblOffRoadEquipment	HorsePower	174.00	255.00
tblOffRoadEquipment	LoadFactor	0.41	0.40
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Graders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00



tblTripsAndVMT	VendorTripLength	7.30	6.50
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	8.00
tblWaterMitigation	UseWaterEfficientIrrigationSystemPercentageReduction	6.1	30
tblWoodstoves	NumberCatalytic	6.70	0.00
tblWoodstoves	NumberNoncatalytic	6.70	0.00

## 2.0 Emissions Summary

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6644	2.5800e-003	0.2227	1.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	0.3612	0.3612	3.6000e-004	0.0000	0.3687
Energy	3.1500e-003	0.0269	0.0114	1.7000e-004		2.1700e-003	2.1700e-003		2.1700e-003	2.1700e-003	0.0000	168.4174	168.4174	6.8000e-003	1.8600e-003	169.1354
Mobile	0.2193	0.4895	2.2089	5.1700e-003	0.3706	6.2100e-003	0.3768	0.0992	5.7200e-003	0.1050	0.0000	379.4801	379.4801	0.0162	0.0000	379.8201
Waste						0.0000	0.0000		0.0000	0.0000	24.8197	0.0000	24.8197	1.4668	0.0000	55.6226
Water						0.0000	0.0000		0.0000	0.0000	2.7698	19.3473	22.1171	0.2854	6.9000e-003	30.2483
<b>Total</b>	<b>0.8869</b>	<b>0.5189</b>	<b>2.4430</b>	<b>5.3500e-003</b>	<b>0.3706</b>	<b>9.6000e-003</b>	<b>0.3802</b>	<b>0.0992</b>	<b>9.1100e-003</b>	<b>0.1084</b>	<b>27.5895</b>	<b>567.6060</b>	<b>595.1955</b>	<b>1.7755</b>	<b>8.7600e-003</b>	<b>635.1950</b>

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5134	2.0400e-003	0.1694	1.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	0.2539	0.2539	1.9000e-004	0.0000	0.2580
Energy	2.6600e-003	0.0227	9.6700e-003	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	122.8507	122.8507	4.8700e-003	1.3900e-003	123.3825
Mobile	0.2130	0.4533	2.0681	4.7600e-003	0.3398	5.7300e-003	0.3455	0.0910	5.2800e-003	0.0963	0.0000	348.7406	348.7406	0.0150	0.0000	349.0554
Waste						0.0000	0.0000		0.0000	0.0000	18.6148	0.0000	18.6148	1.1001	0.0000	41.7169
Water						0.0000	0.0000		0.0000	0.0000	2.2159	13.3673	15.5832	0.2282	5.4900e-003	22.0764
<b>Total</b>	<b>0.7291</b>	<b>0.4780</b>	<b>2.2472</b>	<b>4.9200e-003</b>	<b>0.3398</b>	<b>8.4700e-003</b>	<b>0.3483</b>	<b>0.0910</b>	<b>8.0200e-003</b>	<b>0.0990</b>	<b>20.8306</b>	<b>485.2126</b>	<b>506.0432</b>	<b>1.3483</b>	<b>6.8800e-003</b>	<b>536.4892</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>17.79</b>	<b>7.88</b>	<b>8.02</b>	<b>8.04</b>	<b>8.31</b>	<b>11.77</b>	<b>8.40</b>	<b>8.31</b>	<b>11.96</b>	<b>8.62</b>	<b>24.50</b>	<b>14.52</b>	<b>14.98</b>	<b>24.06</b>	<b>21.46</b>	<b>15.54</b>

### 2.3 Vegetation

#### Vegetation

	CO2e
Category	MT
New Trees	63.0120
Vegetation Land Change	-8.6200
<b>Total</b>	<b>54.3920</b>

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2017	3/8/2017	6	7	Rough grading
2	Grading	Grading	3/8/2017	3/31/2017	6	21	Finish grading
3	Building Construction	Building Construction	4/1/2017	4/24/2018	6	333	Framing, finish construction
4	Building Construction - generator powered	Building Construction	4/1/2017	4/8/2017	6	7	1st week before power hookup
5	Building Construction - HVAC	Building Construction	10/2/2017	10/9/2017	6	7	Install HVAC w/crane
6	Paving	Paving	3/22/2018	4/6/2018	6	14	
7	Architectural Coating	Architectural Coating	4/2/2018	4/17/2018	6	14	

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

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

**Acres of Paving: 0**

**Residential Indoor: 243,431; Residential Outdoor: 81,144; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	0	8.00	162	0.38
Site Preparation	Graders	1	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	0	7.00	226	0.29
Building Construction	Forklifts	1	7.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Building Construction - generator powered	Cranes	0	7.00	226	0.29
Building Construction - generator powered	Forklifts	0	8.00	89	0.20
Building Construction - generator powered	Generator Sets	1	8.00	84	0.74
Building Construction - generator powered	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction - generator powered	Welders	0	8.00	46	0.45
Building Construction - HVAC	Cranes	1	8.00	226	0.29
Building Construction - HVAC	Forklifts	0	8.00	89	0.20
Building Construction - HVAC	Generator Sets	0	8.00	84	0.74
Building Construction - HVAC	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction - HVAC	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42



Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Site Preparation	Scrapers	1	8.00	361	0.48
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

**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	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	100.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	96.00	14.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - generator powered	1	96.00	14.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - HVAC	1	96.00	14.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Use Cleaner Engines for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

### 3.2 Site Preparation - 2017

#### 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					0.0632	0.0000	0.0632	0.0348	0.0000	0.0348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0201	0.2274	0.1582	1.9000e-004		0.0103	0.0103		9.4800e-003	9.4800e-003	0.0000	17.2373	17.2373	5.2800e-003	0.0000	17.3482
<b>Total</b>	<b>0.0201</b>	<b>0.2274</b>	<b>0.1582</b>	<b>1.9000e-004</b>	<b>0.0632</b>	<b>0.0103</b>	<b>0.0735</b>	<b>0.0348</b>	<b>9.4800e-003</b>	<b>0.0442</b>	<b>0.0000</b>	<b>17.2373</b>	<b>17.2373</b>	<b>5.2800e-003</b>	<b>0.0000</b>	<b>17.3482</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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	9.0000e-005	1.1000e-004	1.1300e-003	0.0000	2.0000e-004	0.0000	2.1000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.1783	0.1783	1.0000e-005	0.0000	0.1785
<b>Total</b>	<b>9.0000e-005</b>	<b>1.1000e-004</b>	<b>1.1300e-003</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.1783</b>	<b>0.1783</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1785</b>

**3.2 Site Preparation - 2017**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.1100	0.1332	1.9000e-004		5.0200e-003	5.0200e-003		4.6300e-003	4.6300e-003	0.0000	17.2373	17.2373	5.2800e-003	0.0000	17.3482
<b>Total</b>	<b>0.0108</b>	<b>0.1100</b>	<b>0.1332</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>5.0200e-003</b>	<b>5.0200e-003</b>	<b>0.0000</b>	<b>4.6300e-003</b>	<b>4.6300e-003</b>	<b>0.0000</b>	<b>17.2373</b>	<b>17.2373</b>	<b>5.2800e-003</b>	<b>0.0000</b>	<b>17.3482</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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	9.0000e-005	1.1000e-004	1.1300e-003	0.0000	2.0000e-004	0.0000	2.1000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.1783	0.1783	1.0000e-005	0.0000	0.1785
<b>Total</b>	<b>9.0000e-005</b>	<b>1.1000e-004</b>	<b>1.1300e-003</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.1783</b>	<b>0.1783</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1785</b>

### 3.3 Grading - 2017

#### 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					0.0654	0.0000	0.0654	0.0350	0.0000	0.0350	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0283	0.2957	0.1992	2.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	20.0470	20.0470	6.1400e-003	0.0000	20.1760
<b>Total</b>	<b>0.0283</b>	<b>0.2957</b>	<b>0.1992</b>	<b>2.2000e-004</b>	<b>0.0654</b>	<b>0.0163</b>	<b>0.0818</b>	<b>0.0350</b>	<b>0.0150</b>	<b>0.0500</b>	<b>0.0000</b>	<b>20.0470</b>	<b>20.0470</b>	<b>6.1400e-003</b>	<b>0.0000</b>	<b>20.1760</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4800e-003	0.0123	0.0357	3.0000e-005	8.0000e-004	1.2000e-004	9.1000e-004	2.2000e-004	1.1000e-004	3.2000e-004	0.0000	2.5264	2.5264	2.0000e-005	0.0000	2.5268
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	3.5000e-004	4.1000e-004	4.2200e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6687	0.6687	3.0000e-005	0.0000	0.6694
<b>Total</b>	<b>1.8300e-003</b>	<b>0.0128</b>	<b>0.0400</b>	<b>4.0000e-005</b>	<b>1.5700e-003</b>	<b>1.3000e-004</b>	<b>1.6800e-003</b>	<b>4.2000e-004</b>	<b>1.2000e-004</b>	<b>5.3000e-004</b>	<b>0.0000</b>	<b>3.1951</b>	<b>3.1951</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>3.1962</b>

### 3.3 Grading - 2017

#### 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.1116	0.1806	2.2000e-004		5.0600e-003	5.0600e-003		4.6800e-003	4.6800e-003	0.0000	20.0470	20.0470	6.1400e-003	0.0000	20.1760
<b>Total</b>	<b>0.0112</b>	<b>0.1116</b>	<b>0.1806</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>5.0600e-003</b>	<b>5.0600e-003</b>	<b>0.0000</b>	<b>4.6800e-003</b>	<b>4.6800e-003</b>	<b>0.0000</b>	<b>20.0470</b>	<b>20.0470</b>	<b>6.1400e-003</b>	<b>0.0000</b>	<b>20.1760</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4800e-003	0.0123	0.0357	3.0000e-005	8.0000e-004	1.2000e-004	9.1000e-004	2.2000e-004	1.1000e-004	3.2000e-004	0.0000	2.5264	2.5264	2.0000e-005	0.0000	2.5268
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	3.5000e-004	4.1000e-004	4.2200e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6687	0.6687	3.0000e-005	0.0000	0.6694
<b>Total</b>	<b>1.8300e-003</b>	<b>0.0128</b>	<b>0.0400</b>	<b>4.0000e-005</b>	<b>1.5700e-003</b>	<b>1.3000e-004</b>	<b>1.6800e-003</b>	<b>4.2000e-004</b>	<b>1.2000e-004</b>	<b>5.3000e-004</b>	<b>0.0000</b>	<b>3.1951</b>	<b>3.1951</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>3.1962</b>

### 3.4 Building Construction - 2017

#### 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	0.1085	0.6606	0.5641	7.3000e-004		0.0507	0.0507		0.0478	0.0478	0.0000	62.1337	62.1337	0.0171	0.0000	62.4917
<b>Total</b>	<b>0.1085</b>	<b>0.6606</b>	<b>0.5641</b>	<b>7.3000e-004</b>		<b>0.0507</b>	<b>0.0507</b>		<b>0.0478</b>	<b>0.0478</b>	<b>0.0000</b>	<b>62.1337</b>	<b>62.1337</b>	<b>0.0171</b>	<b>0.0000</b>	<b>62.4917</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0216	0.1339	0.3682	3.0000e-004	9.1600e-003	1.7800e-003	0.0109	2.6100e-003	1.6400e-003	4.2500e-003	0.0000	26.8511	26.8511	2.1000e-004	0.0000	26.8556
Worker	0.0373	0.0440	0.4533	1.0000e-003	0.0822	6.6000e-004	0.0829	0.0219	6.1000e-004	0.0225	0.0000	71.8380	71.8380	3.7300e-003	0.0000	71.9163
<b>Total</b>	<b>0.0590</b>	<b>0.1779</b>	<b>0.8216</b>	<b>1.3000e-003</b>	<b>0.0914</b>	<b>2.4400e-003</b>	<b>0.0938</b>	<b>0.0245</b>	<b>2.2500e-003</b>	<b>0.0267</b>	<b>0.0000</b>	<b>98.6892</b>	<b>98.6892</b>	<b>3.9400e-003</b>	<b>0.0000</b>	<b>98.7719</b>

### 3.4 Building Construction - 2017

#### 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	0.0104	0.1409	0.5017	7.3000e-004		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	62.1336	62.1336	0.0171	0.0000	62.4916
<b>Total</b>	<b>0.0104</b>	<b>0.1409</b>	<b>0.5017</b>	<b>7.3000e-004</b>		<b>1.0500e-003</b>	<b>1.0500e-003</b>		<b>1.0500e-003</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>62.1336</b>	<b>62.1336</b>	<b>0.0171</b>	<b>0.0000</b>	<b>62.4916</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0216	0.1339	0.3682	3.0000e-004	9.1600e-003	1.7800e-003	0.0109	2.6100e-003	1.6400e-003	4.2500e-003	0.0000	26.8511	26.8511	2.1000e-004	0.0000	26.8556
Worker	0.0373	0.0440	0.4533	1.0000e-003	0.0822	6.6000e-004	0.0829	0.0219	6.1000e-004	0.0225	0.0000	71.8380	71.8380	3.7300e-003	0.0000	71.9163
<b>Total</b>	<b>0.0590</b>	<b>0.1779</b>	<b>0.8216</b>	<b>1.3000e-003</b>	<b>0.0914</b>	<b>2.4400e-003</b>	<b>0.0938</b>	<b>0.0245</b>	<b>2.2500e-003</b>	<b>0.0267</b>	<b>0.0000</b>	<b>98.6892</b>	<b>98.6892</b>	<b>3.9400e-003</b>	<b>0.0000</b>	<b>98.7719</b>

### 3.4 Building Construction - 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					
Off-Road	0.0391	0.2466	0.2289	3.0000e-004		0.0178	0.0178		0.0168	0.0168	0.0000	25.6321	25.6321	6.8800e-003	0.0000	25.7765
<b>Total</b>	<b>0.0391</b>	<b>0.2466</b>	<b>0.2289</b>	<b>3.0000e-004</b>		<b>0.0178</b>	<b>0.0178</b>		<b>0.0168</b>	<b>0.0168</b>	<b>0.0000</b>	<b>25.6321</b>	<b>25.6321</b>	<b>6.8800e-003</b>	<b>0.0000</b>	<b>25.7765</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.9100e-003	0.0521	0.1426	1.3000e-004	3.8200e-003	6.3000e-004	4.4500e-003	1.0900e-003	5.8000e-004	1.6700e-003	0.0000	11.0758	11.0758	8.0000e-005	0.0000	11.0776
Worker	0.0136	0.0164	0.1669	4.2000e-004	0.0343	2.7000e-004	0.0346	9.1300e-003	2.5000e-004	9.3700e-003	0.0000	28.8225	28.8225	1.4200e-003	0.0000	28.8523
<b>Total</b>	<b>0.0215</b>	<b>0.0684</b>	<b>0.3095</b>	<b>5.5000e-004</b>	<b>0.0381</b>	<b>9.0000e-004</b>	<b>0.0390</b>	<b>0.0102</b>	<b>8.3000e-004</b>	<b>0.0110</b>	<b>0.0000</b>	<b>39.8984</b>	<b>39.8984</b>	<b>1.5000e-003</b>	<b>0.0000</b>	<b>39.9299</b>



### 3.4 Building Construction - 2018

#### 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	4.3500e-003	0.0587	0.2092	3.0000e-004		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	25.6321	25.6321	6.8800e-003	0.0000	25.7765
<b>Total</b>	<b>4.3500e-003</b>	<b>0.0587</b>	<b>0.2092</b>	<b>3.0000e-004</b>		<b>4.4000e-004</b>	<b>4.4000e-004</b>		<b>4.4000e-004</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>25.6321</b>	<b>25.6321</b>	<b>6.8800e-003</b>	<b>0.0000</b>	<b>25.7765</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.9100e-003	0.0521	0.1426	1.3000e-004	3.8200e-003	6.3000e-004	4.4500e-003	1.0900e-003	5.8000e-004	1.6700e-003	0.0000	11.0758	11.0758	8.0000e-005	0.0000	11.0776
Worker	0.0136	0.0164	0.1669	4.2000e-004	0.0343	2.7000e-004	0.0346	9.1300e-003	2.5000e-004	9.3700e-003	0.0000	28.8225	28.8225	1.4200e-003	0.0000	28.8523
<b>Total</b>	<b>0.0215</b>	<b>0.0684</b>	<b>0.3095</b>	<b>5.5000e-004</b>	<b>0.0381</b>	<b>9.0000e-004</b>	<b>0.0390</b>	<b>0.0102</b>	<b>8.3000e-004</b>	<b>0.0110</b>	<b>0.0000</b>	<b>39.8984</b>	<b>39.8984</b>	<b>1.5000e-003</b>	<b>0.0000</b>	<b>39.9299</b>

### 3.5 Building Construction - generator powered - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.0000e-003	0.0156	0.0132	2.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	1.9782	1.9782	1.6000e-004	0.0000	1.9816
<b>Total</b>	<b>2.0000e-003</b>	<b>0.0156</b>	<b>0.0132</b>	<b>2.0000e-005</b>		<b>1.0500e-003</b>	<b>1.0500e-003</b>		<b>1.0500e-003</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>1.9782</b>	<b>1.9782</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>1.9816</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4000e-004	3.9900e-003	0.0110	1.0000e-005	2.7000e-004	5.0000e-005	3.3000e-004	8.0000e-005	5.0000e-005	1.3000e-004	0.0000	0.7998	0.7998	1.0000e-005	0.0000	0.8000
Worker	1.1100e-003	1.3100e-003	0.0135	3.0000e-005	2.4500e-003	2.0000e-005	2.4700e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.1399	2.1399	1.1000e-004	0.0000	2.1422
<b>Total</b>	<b>1.7500e-003</b>	<b>5.3000e-003</b>	<b>0.0245</b>	<b>4.0000e-005</b>	<b>2.7200e-003</b>	<b>7.0000e-005</b>	<b>2.8000e-003</b>	<b>7.3000e-004</b>	<b>7.0000e-005</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>2.9397</b>	<b>2.9397</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>2.9422</b>

### 3.5 Building Construction - generator powered - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3000e-004	1.0000e-003	0.0142	2.0000e-005		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	1.9782	1.9782	1.6000e-004	0.0000	1.9816
<b>Total</b>	<b>2.3000e-004</b>	<b>1.0000e-003</b>	<b>0.0142</b>	<b>2.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.9782</b>	<b>1.9782</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>1.9816</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4000e-004	3.9900e-003	0.0110	1.0000e-005	2.7000e-004	5.0000e-005	3.3000e-004	8.0000e-005	5.0000e-005	1.3000e-004	0.0000	0.7998	0.7998	1.0000e-005	0.0000	0.8000
Worker	1.1100e-003	1.3100e-003	0.0135	3.0000e-005	2.4500e-003	2.0000e-005	2.4700e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.1399	2.1399	1.1000e-004	0.0000	2.1422
<b>Total</b>	<b>1.7500e-003</b>	<b>5.3000e-003</b>	<b>0.0245</b>	<b>4.0000e-005</b>	<b>2.7200e-003</b>	<b>7.0000e-005</b>	<b>2.8000e-003</b>	<b>7.3000e-004</b>	<b>7.0000e-005</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>2.9397</b>	<b>2.9397</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>2.9422</b>

### 3.6 Building Construction - HVAC - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.2700e-003	0.0269	9.6500e-003	2.0000e-005		1.2000e-003	1.2000e-003		1.1000e-003	1.1000e-003	0.0000	1.8328	1.8328	5.6000e-004	0.0000	1.8446
<b>Total</b>	<b>2.2700e-003</b>	<b>0.0269</b>	<b>9.6500e-003</b>	<b>2.0000e-005</b>		<b>1.2000e-003</b>	<b>1.2000e-003</b>		<b>1.1000e-003</b>	<b>1.1000e-003</b>	<b>0.0000</b>	<b>1.8328</b>	<b>1.8328</b>	<b>5.6000e-004</b>	<b>0.0000</b>	<b>1.8446</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4000e-004	3.9900e-003	0.0110	1.0000e-005	2.7000e-004	5.0000e-005	3.3000e-004	8.0000e-005	5.0000e-005	1.3000e-004	0.0000	0.7998	0.7998	1.0000e-005	0.0000	0.8000
Worker	1.1100e-003	1.3100e-003	0.0135	3.0000e-005	2.4500e-003	2.0000e-005	2.4700e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.1399	2.1399	1.1000e-004	0.0000	2.1422
<b>Total</b>	<b>1.7500e-003</b>	<b>5.3000e-003</b>	<b>0.0245</b>	<b>4.0000e-005</b>	<b>2.7200e-003</b>	<b>7.0000e-005</b>	<b>2.8000e-003</b>	<b>7.3000e-004</b>	<b>7.0000e-005</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>2.9397</b>	<b>2.9397</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>2.9422</b>

### 3.6 Building Construction - HVAC - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.4000e-004	1.0500e-003	8.9000e-003	2.0000e-005		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	1.8328	1.8328	5.6000e-004	0.0000	1.8446
<b>Total</b>	<b>2.4000e-004</b>	<b>1.0500e-003</b>	<b>8.9000e-003</b>	<b>2.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.8328</b>	<b>1.8328</b>	<b>5.6000e-004</b>	<b>0.0000</b>	<b>1.8446</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4000e-004	3.9900e-003	0.0110	1.0000e-005	2.7000e-004	5.0000e-005	3.3000e-004	8.0000e-005	5.0000e-005	1.3000e-004	0.0000	0.7998	0.7998	1.0000e-005	0.0000	0.8000
Worker	1.1100e-003	1.3100e-003	0.0135	3.0000e-005	2.4500e-003	2.0000e-005	2.4700e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.1399	2.1399	1.1000e-004	0.0000	2.1422
<b>Total</b>	<b>1.7500e-003</b>	<b>5.3000e-003</b>	<b>0.0245</b>	<b>4.0000e-005</b>	<b>2.7200e-003</b>	<b>7.0000e-005</b>	<b>2.8000e-003</b>	<b>7.3000e-004</b>	<b>7.0000e-005</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>2.9397</b>	<b>2.9397</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>2.9422</b>

### 3.7 Paving - 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					
Off-Road	9.7200e-003	0.0985	0.0828	1.2000e-004		5.8900e-003	5.8900e-003		5.4300e-003	5.4300e-003	0.0000	11.1120	11.1120	3.3900e-003	0.0000	11.1832
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>9.7200e-003</b>	<b>0.0985</b>	<b>0.0828</b>	<b>1.2000e-004</b>		<b>5.8900e-003</b>	<b>5.8900e-003</b>		<b>5.4300e-003</b>	<b>5.4300e-003</b>	<b>0.0000</b>	<b>11.1120</b>	<b>11.1120</b>	<b>3.3900e-003</b>	<b>0.0000</b>	<b>11.1832</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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	3.0000e-004	3.6000e-004	3.7200e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6434	0.6434	3.0000e-005	0.0000	0.6440
<b>Total</b>	<b>3.0000e-004</b>	<b>3.6000e-004</b>	<b>3.7200e-003</b>	<b>1.0000e-005</b>	<b>7.7000e-004</b>	<b>1.0000e-005</b>	<b>7.7000e-004</b>	<b>2.0000e-004</b>	<b>1.0000e-005</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.6434</b>	<b>0.6434</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.6440</b>

### 3.7 Paving - 2018

#### 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	1.4500e-003	6.2900e-003	0.0895	1.2000e-004		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	11.1119	11.1119	3.3900e-003	0.0000	11.1832
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.4500e-003</b>	<b>6.2900e-003</b>	<b>0.0895</b>	<b>1.2000e-004</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>11.1119</b>	<b>11.1119</b>	<b>3.3900e-003</b>	<b>0.0000</b>	<b>11.1832</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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	3.0000e-004	3.6000e-004	3.7200e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6434	0.6434	3.0000e-005	0.0000	0.6440
<b>Total</b>	<b>3.0000e-004</b>	<b>3.6000e-004</b>	<b>3.7200e-003</b>	<b>1.0000e-005</b>	<b>7.7000e-004</b>	<b>1.0000e-005</b>	<b>7.7000e-004</b>	<b>2.0000e-004</b>	<b>1.0000e-005</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.6434</b>	<b>0.6434</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.6440</b>

### 3.8 Architectural Coating - 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					
Archit. Coating	0.7522					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0900e-003	0.0140	0.0130	2.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	1.7873	1.7873	1.7000e-004	0.0000	1.7909
<b>Total</b>	<b>0.7543</b>	<b>0.0140</b>	<b>0.0130</b>	<b>2.0000e-005</b>		<b>1.0500e-003</b>	<b>1.0500e-003</b>		<b>1.0500e-003</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>1.7873</b>	<b>1.7873</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>1.7909</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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	3.8000e-004	4.6000e-004	4.7200e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8149	0.8149	4.0000e-005	0.0000	0.8158
<b>Total</b>	<b>3.8000e-004</b>	<b>4.6000e-004</b>	<b>4.7200e-003</b>	<b>1.0000e-005</b>	<b>9.7000e-004</b>	<b>1.0000e-005</b>	<b>9.8000e-004</b>	<b>2.6000e-004</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.8149</b>	<b>0.8149</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.8158</b>



### 3.8 Architectural Coating - 2018

#### 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	0.7522					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1000e-004	9.0000e-004	0.0128	2.0000e-005		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	1.7873	1.7873	1.7000e-004	0.0000	1.7909
<b>Total</b>	<b>0.7524</b>	<b>9.0000e-004</b>	<b>0.0128</b>	<b>2.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.7873</b>	<b>1.7873</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>1.7909</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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	3.8000e-004	4.6000e-004	4.7200e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.8000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8149	0.8149	4.0000e-005	0.0000	0.8158
<b>Total</b>	<b>3.8000e-004</b>	<b>4.6000e-004</b>	<b>4.7200e-003</b>	<b>1.0000e-005</b>	<b>9.7000e-004</b>	<b>1.0000e-005</b>	<b>9.8000e-004</b>	<b>2.6000e-004</b>	<b>1.0000e-005</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.8149</b>	<b>0.8149</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.8158</b>

### 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

- Increase Density
- Increase Transit Accessibility
- Improve Pedestrian Network
- Employee Vanpool/Shuttle

	ROG	NOx	CO	SO2	Fugitive 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	0.2130	0.4533	2.0681	4.7600e-003	0.3398	5.7300e-003	0.3455	0.0910	5.2800e-003	0.0963	0.0000	348.7406	348.7406	0.0150	0.0000	349.0554
Unmitigated	0.2193	0.4895	2.2089	5.1700e-003	0.3706	6.2100e-003	0.3768	0.0992	5.7200e-003	0.1050	0.0000	379.4801	379.4801	0.0162	0.0000	379.8201

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	367.16	294.80	326.96	1,005,684	922,061
Total	367.16	294.80	326.96	1,005,684	922,061

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted Living)	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.456845	0.078463	0.189736	0.161142	0.074925	0.010638	0.010772	0.000982	0.001366	0.000775	0.008718	0.000744	0.004895

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable 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					
NaturalGas Mitigated	2.6600e-003	0.0227	9.6700e-003	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.3275	26.3275	5.0000e-004	4.8000e-004	26.4877
NaturalGas Unmitigated	3.1500e-003	0.0269	0.0114	1.7000e-004		2.1700e-003	2.1700e-003		2.1700e-003	2.1700e-003	0.0000	31.1418	31.1418	6.0000e-004	5.7000e-004	31.3313
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	96.5232	96.5232	4.3600e-003	9.0000e-004	96.8948
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	137.2756	137.2756	6.2100e-003	1.2800e-003	137.8041

### 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					
Congregate Care (Assisted Living)	583575	3.1500e-003	0.0269	0.0114	1.7000e-004		2.1700e-003	2.1700e-003		2.1700e-003	2.1700e-003	0.0000	31.1418	31.1418	6.0000e-004	5.7000e-004	31.3313
<b>Total</b>		<b>3.1500e-003</b>	<b>0.0269</b>	<b>0.0114</b>	<b>1.7000e-004</b>		<b>2.1700e-003</b>	<b>2.1700e-003</b>		<b>2.1700e-003</b>	<b>2.1700e-003</b>	<b>0.0000</b>	<b>31.1418</b>	<b>31.1418</b>	<b>6.0000e-004</b>	<b>5.7000e-004</b>	<b>31.3313</b>

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Congregate Care (Assisted Living)	493359	2.6600e-003	0.0227	9.6700e-003	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003	0.0000	26.3275	26.3275	5.0000e-004	4.8000e-004	26.4877
<b>Total</b>		<b>2.6600e-003</b>	<b>0.0227</b>	<b>9.6700e-003</b>	<b>1.5000e-004</b>		<b>1.8400e-003</b>	<b>1.8400e-003</b>		<b>1.8400e-003</b>	<b>1.8400e-003</b>	<b>0.0000</b>	<b>26.3275</b>	<b>26.3275</b>	<b>5.0000e-004</b>	<b>4.8000e-004</b>	<b>26.4877</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	471881	137.2756	6.2100e-003	1.2800e-003	137.8041
<b>Total</b>		<b>137.2756</b>	<b>6.2100e-003</b>	<b>1.2800e-003</b>	<b>137.8041</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	331796	96.5232	4.3600e-003	9.0000e-004	96.8948
<b>Total</b>		<b>96.5232</b>	<b>4.3600e-003</b>	<b>9.0000e-004</b>	<b>96.8948</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies
- Use Electric Lawnmower
- Use Electric Leafblower

	ROG	NOx	CO	SO2	Fugitive 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	0.5134	2.0400e-003	0.1694	1.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	0.2539	0.2539	1.9000e-004	0.0000	0.2580
Unmitigated	0.6644	2.5800e-003	0.2227	1.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	0.3612	0.3612	3.6000e-004	0.0000	0.3687

## 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	0.1881					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4695					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.8600e-003	2.5800e-003	0.2227	1.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	0.3612	0.3612	3.6000e-004	0.0000	0.3687
<b>Total</b>	<b>0.6644</b>	<b>2.5800e-003</b>	<b>0.2227</b>	<b>1.0000e-005</b>		<b>1.2200e-003</b>	<b>1.2200e-003</b>		<b>1.2200e-003</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>0.3612</b>	<b>0.3612</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>0.3687</b>

## 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Consumer Products	0.4344					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.7700e-003	2.0400e-003	0.1694	1.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	0.2539	0.2539	1.9000e-004	0.0000	0.2580
Architectural Coating	0.0752					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.5134</b>	<b>2.0400e-003</b>	<b>0.1694</b>	<b>1.0000e-005</b>		<b>9.0000e-004</b>	<b>9.0000e-004</b>		<b>9.0000e-004</b>	<b>9.0000e-004</b>	<b>0.0000</b>	<b>0.2539</b>	<b>0.2539</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.2580</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Turf Reduction

Use Water Efficient Irrigation System

Use Water Efficient Landscaping



	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	22.1171	0.2854	6.9000e-003	30.2483
Mitigated	15.5832	0.2282	5.4900e-003	22.0764

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	8.73064 / 5.5041	22.1171	0.2854	6.9000e-003	30.2483
<b>Total</b>		<b>22.1171</b>	<b>0.2854</b>	<b>6.9000e-003</b>	<b>30.2483</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	6.98451 / 2.33044	15.5832	0.2282	5.4900e-003	22.0764
<b>Total</b>		<b>15.5832</b>	<b>0.2282</b>	<b>5.4900e-003</b>	<b>22.0764</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.6148	1.1001	0.0000	41.7169
Unmitigated	24.8197	1.4668	0.0000	55.6226

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	122.27	24.8197	1.4668	0.0000	55.6226
<b>Total</b>		<b>24.8197</b>	<b>1.4668</b>	<b>0.0000</b>	<b>55.6226</b>

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	91.7025	18.6148	1.1001	0.0000	41.7169
<b>Total</b>		<b>18.6148</b>	<b>1.1001</b>	<b>0.0000</b>	<b>41.7169</b>

## 9.0 Operational Offroad

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

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	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	54.3920	0.0000	0.0000	54.3920

## 10.1 Vegetation Land Change

### Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	2 / 0	-8.6200	0.0000	0.0000	-8.6200
<b>Total</b>		<b>-8.6200</b>	<b>0.0000</b>	<b>0.0000</b>	<b>-8.6200</b>

**10.2 Net New Trees**

**Species Class**

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	89	63.0120	0.0000	0.0000	63.0120
<b>Total</b>		<b>63.0120</b>	<b>0.0000</b>	<b>0.0000</b>	<b>63.0120</b>

**Westmont Assisted Living 2**  
**El Dorado-Mountain County County, Summer**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Congregate Care (Assisted Living)	134.00	Dwelling Unit	4.07	120,213.00	149

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	70
<b>Climate Zone</b>	1			<b>Operational Year</b>	2018
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

## Project Characteristics -

Land Use - Acreage provided by applicant. Population est. by no. of unit types

Construction Phase - Const duration 3/1/17 - 4/30/18

Bldng construction - HVAC = 1 crane, 1 week.

Construction days overlap. Total no. of days ~ 361: 259 in 2017, 102 in 2018

No work 11/23/17, 11/24/17, 12/26/17, 1/1/17

## Off-road Equipment -

Off-road Equipment - Values provided by applicant.  
Structure is wood-framed.

Off-road Equipment - Generator set used for 1st week of construction.

Off-road Equipment - Cranes used for 1 week to install roof-mount HVAC.

Off-road Equipment - Values provided by applicant

Off-road Equipment - Values provided by applicant

Off-road Equipment - Crane used for 1 week in construction phase. Gen set used 1 week in construction.

Grading - Values provided by applicant

Woodstoves - No fireplaces or wood stoves.

Landscape Equipment - No turf = no lawnmowing. Equipt likely limited to blowers.

## Energy Use -

Land Use Change - Annual "grassland" occupies only part of site.

## Sequestration -

Construction Off-road Equipment Mitigation - All exposed ground will be covered at end of construction by pavement, buildings, or 43,000 ft<sup>2</sup> +/- of landscaping. If necessary to mitigate all equipt will use Tier 4 engines.

Mobile Land Use Mitigation - Project is within 2 miles of transit center & retail (CVS, Target, Nugget, theater, services)

Mobile Commute Mitigation - Van for residents will substitute for individual vehicles. Mode share is estimated.

Area Mitigation - No lawnmowers would be used.

Attempt for 50% electric leafblowers. No chainsaws.

Energy Mitigation - Amounts estimated.

Water Mitigation - No turf specified in landscape.

## Waste Mitigation -

Trips and VMT - Assume 20-yd capacity trucks.

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	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	100
tblCommuteMitigation	EmployeeVanpoolPercentModeShare	2	10
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final



tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	18.00	14.00
tblConstructionPhase	NumDays	230.00	333.00
tblConstructionPhase	NumDays	230.00	7.00
tblConstructionPhase	NumDays	230.00	7.00
tblConstructionPhase	NumDays	8.00	21.00
tblConstructionPhase	NumDays	18.00	14.00
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	PhaseEndDate	4/23/2018	4/17/2018
tblConstructionPhase	PhaseEndDate	5/2/2018	4/8/2017
tblConstructionPhase	PhaseEndDate	4/17/2017	10/9/2017
tblConstructionPhase	PhaseEndDate	4/1/2017	3/31/2017

tblConstructionPhase	PhaseEndDate	10/25/2017	4/6/2018
tblConstructionPhase	PhaseStartDate	4/7/2018	4/2/2018
tblConstructionPhase	PhaseStartDate	4/25/2018	4/1/2017
tblConstructionPhase	PhaseStartDate	4/9/2017	10/2/2017
tblConstructionPhase	PhaseStartDate	3/9/2017	3/8/2017
tblConstructionPhase	PhaseStartDate	10/10/2017	3/22/2018
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	NumberGas	73.70	0.00
tblFireplaces	NumberNoFireplace	13.40	134.00
tblFireplaces	NumberWood	46.90	0.00
tblGrading	AcresOfGrading	10.50	4.00
tblGrading	AcresOfGrading	10.50	0.00
tblGrading	MaterialExported	0.00	1,000.00
tblLandscapeEquipment	NumberSummerDays	180	40
tblLandUse	LandUseSquareFeet	134,000.00	120,213.00
tblLandUse	LotAcreage	8.38	4.07
tblLandUse	Population	383.00	149.00
tblOffRoadEquipment	HorsePower	174.00	255.00
tblOffRoadEquipment	LoadFactor	0.41	0.40
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Graders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00



tblTripsAndVMT	VendorTripLength	7.30	6.50
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	8.00
tblWaterMitigation	UseWaterEfficientIrrigationSystemPercentageReduction	6.1	30
tblWoodstoves	NumberCatalytic	6.70	0.00
tblWoodstoves	NumberNoncatalytic	6.70	0.00

## 2.0 Emissions Summary

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.9462	0.1292	11.1334	5.8000e-004		0.0608	0.0608		0.0608	0.0608	0.0000	19.9060	19.9060	0.0197	0.0000	20.3203
Energy	0.0172	0.1473	0.0627	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.0984	188.0984	3.6100e-003	3.4500e-003	189.2432
Mobile	1.4107	2.5764	13.2022	0.0321	2.2211	0.0357	2.2568	0.5927	0.0329	0.6256		2,588.2518	2,588.2518	0.1027		2,590.4079
<b>Total</b>	<b>5.3741</b>	<b>2.8529</b>	<b>24.3982</b>	<b>0.0336</b>	<b>2.2211</b>	<b>0.1084</b>	<b>2.3295</b>	<b>0.5927</b>	<b>0.1055</b>	<b>0.6983</b>	<b>0.0000</b>	<b>2,796.2562</b>	<b>2,796.2562</b>	<b>0.1260</b>	<b>3.4500e-003</b>	<b>2,799.9713</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.9807	0.1018	8.4721	3.8000e-004		0.0451	0.0451		0.0451	0.0451	0.0000	13.9960	13.9960	0.0107	0.0000	14.2211
Energy	0.0146	0.1246	0.0530	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.0197	159.0197	3.0500e-003	2.9200e-003	159.9874
Mobile	1.3732	2.3861	12.2675	0.0295	2.0364	0.0330	2.0694	0.5435	0.0304	0.5738		2,378.2345	2,378.2345	0.0950		2,380.2305
<b>Total</b>	<b>4.3685</b>	<b>2.6124</b>	<b>20.7926</b>	<b>0.0307</b>	<b>2.0364</b>	<b>0.0882</b>	<b>2.1246</b>	<b>0.5435</b>	<b>0.0856</b>	<b>0.6290</b>	<b>0.0000</b>	<b>2,551.2502</b>	<b>2,551.2502</b>	<b>0.1088</b>	<b>2.9200e-003</b>	<b>2,554.4390</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	18.71	8.43	14.78	8.77	8.31	18.64	8.80	8.32	18.94	9.92	0.00	8.76	8.76	13.65	15.36	8.77

### 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	3/1/2017	3/8/2017	6	7	Rough grading
2	Grading	Grading	3/8/2017	3/31/2017	6	21	Finish grading
3	Building Construction	Building Construction	4/1/2017	4/24/2018	6	333	Framing, finish construction
4	Building Construction - generator powered	Building Construction	4/1/2017	4/8/2017	6	7	1st week before power hookup
5	Building Construction - HVAC	Building Construction	10/2/2017	10/9/2017	6	7	Install HVAC w/crane
6	Paving	Paving	3/22/2018	4/6/2018	6	14	
7	Architectural Coating	Architectural Coating	4/2/2018	4/17/2018	6	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 243,431; Residential Outdoor: 81,144; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	0	8.00	162	0.38
Site Preparation	Graders	1	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41

Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	0	7.00	226	0.29
Building Construction	Forklifts	1	7.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Building Construction - generator powered	Cranes	0	7.00	226	0.29
Building Construction - generator powered	Forklifts	0	8.00	89	0.20
Building Construction - generator powered	Generator Sets	1	8.00	84	0.74
Building Construction - generator powered	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction - generator powered	Welders	0	8.00	46	0.45
Building Construction - HVAC	Cranes	1	8.00	226	0.29
Building Construction - HVAC	Forklifts	0	8.00	89	0.20
Building Construction - HVAC	Generator Sets	0	8.00	84	0.74
Building Construction - HVAC	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction - HVAC	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Site Preparation	Scrapers	1	8.00	361	0.48
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

**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	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	100.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	96.00	14.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction generator powered	1	96.00	14.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction HVAC	1	96.00	14.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 3.2 Site Preparation - 2017

#### 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	5.7485	64.9588	45.1863	0.0531		2.9443	2.9443		2.7088	2.7088		5,428.8275	5,428.8275	1.6634		5,463.7586
<b>Total</b>	<b>5.7485</b>	<b>64.9588</b>	<b>45.1863</b>	<b>0.0531</b>	<b>18.0663</b>	<b>2.9443</b>	<b>21.0106</b>	<b>9.9307</b>	<b>2.7088</b>	<b>12.6395</b>		<b>5,428.8275</b>	<b>5,428.8275</b>	<b>1.6634</b>		<b>5,463.7586</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0309	0.0272	0.3512	7.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166		61.5150	61.5150	2.9100e-003		61.5761
<b>Total</b>	<b>0.0309</b>	<b>0.0272</b>	<b>0.3512</b>	<b>7.8000e-004</b>	<b>0.0609</b>	<b>4.7000e-004</b>	<b>0.0613</b>	<b>0.0161</b>	<b>4.3000e-004</b>	<b>0.0166</b>		<b>61.5150</b>	<b>61.5150</b>	<b>2.9100e-003</b>		<b>61.5761</b>

### 3.2 Site Preparation - 2017

#### 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.0838	31.4406	38.0651	0.0531		1.4330	1.4330		1.3227	1.3227	0.0000	5,428.8275	5,428.8275	1.6634		5,463.7586
<b>Total</b>	<b>3.0838</b>	<b>31.4406</b>	<b>38.0651</b>	<b>0.0531</b>	<b>0.0000</b>	<b>1.4330</b>	<b>1.4330</b>	<b>0.0000</b>	<b>1.3227</b>	<b>1.3227</b>	<b>0.0000</b>	<b>5,428.8275</b>	<b>5,428.8275</b>	<b>1.6634</b>		<b>5,463.7586</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0309	0.0272	0.3512	7.8000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166		61.5150	61.5150	2.9100e-003		61.5761
<b>Total</b>	<b>0.0309</b>	<b>0.0272</b>	<b>0.3512</b>	<b>7.8000e-004</b>	<b>0.0609</b>	<b>4.7000e-004</b>	<b>0.0613</b>	<b>0.0161</b>	<b>4.3000e-004</b>	<b>0.0166</b>		<b>61.5150</b>	<b>61.5150</b>	<b>2.9100e-003</b>		<b>61.5761</b>

### 3.3 Grading - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2311	0.0000	6.2311	3.3331	0.0000	3.3331			0.0000			0.0000
Off-Road	2.6973	28.1608	18.9679	0.0206		1.5550	1.5550		1.4306	1.4306		2,104.5737	2,104.5737	0.6448		2,118.1153
<b>Total</b>	<b>2.6973</b>	<b>28.1608</b>	<b>18.9679</b>	<b>0.0206</b>	<b>6.2311</b>	<b>1.5550</b>	<b>7.7861</b>	<b>3.3331</b>	<b>1.4306</b>	<b>4.7637</b>		<b>2,104.5737</b>	<b>2,104.5737</b>	<b>0.6448</b>		<b>2,118.1153</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1325	1.0766	3.1094	2.7400e-003	0.0790	0.0110	0.0899	0.0214	0.0101	0.0315		265.5770	265.5770	1.6100e-003		265.6108
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	0.0386	0.0340	0.4390	9.7000e-004	0.0761	5.9000e-004	0.0767	0.0202	5.4000e-004	0.0207		76.8937	76.8937	3.6400e-003		76.9702
<b>Total</b>	<b>0.1711</b>	<b>1.1106</b>	<b>3.5484</b>	<b>3.7100e-003</b>	<b>0.1550</b>	<b>0.0116</b>	<b>0.1666</b>	<b>0.0416</b>	<b>0.0106</b>	<b>0.0522</b>		<b>342.4707</b>	<b>342.4707</b>	<b>5.2500e-003</b>		<b>342.5810</b>

### 3.3 Grading - 2017

#### 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.0617	10.6266	17.1989	0.0206		0.4822	0.4822		0.4454	0.4454	0.0000	2,104.5737	2,104.5737	0.6448		2,118.1153
<b>Total</b>	<b>1.0617</b>	<b>10.6266</b>	<b>17.1989</b>	<b>0.0206</b>	<b>0.0000</b>	<b>0.4822</b>	<b>0.4822</b>	<b>0.0000</b>	<b>0.4454</b>	<b>0.4454</b>	<b>0.0000</b>	<b>2,104.5737</b>	<b>2,104.5737</b>	<b>0.6448</b>		<b>2,118.1153</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1325	1.0766	3.1094	2.7400e-003	0.0790	0.0110	0.0899	0.0214	0.0101	0.0315		265.5770	265.5770	1.6100e-003		265.6108
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	0.0386	0.0340	0.4390	9.7000e-004	0.0761	5.9000e-004	0.0767	0.0202	5.4000e-004	0.0207		76.8937	76.8937	3.6400e-003		76.9702
<b>Total</b>	<b>0.1711</b>	<b>1.1106</b>	<b>3.5484</b>	<b>3.7100e-003</b>	<b>0.1550</b>	<b>0.0116</b>	<b>0.1666</b>	<b>0.0416</b>	<b>0.0106</b>	<b>0.0522</b>		<b>342.4707</b>	<b>342.4707</b>	<b>5.2500e-003</b>		<b>342.5810</b>

### 3.4 Building Construction - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9231	5.6217	4.8010	6.2200e-003		0.4313	0.4313		0.4070	0.4070		582.8994	582.8994	0.1599		586.2580
<b>Total</b>	<b>0.9231</b>	<b>5.6217</b>	<b>4.8010</b>	<b>6.2200e-003</b>		<b>0.4313</b>	<b>0.4313</b>		<b>0.4070</b>	<b>0.4070</b>		<b>582.8994</b>	<b>582.8994</b>	<b>0.1599</b>		<b>586.2580</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1629	1.0697	2.4891	2.6000e-003	0.0808	0.0150	0.0958	0.0230	0.0138	0.0368		252.9534	252.9534	1.9800e-003		252.9950
Worker	0.3705	0.3264	4.2143	9.3400e-003	0.7303	5.6400e-003	0.7359	0.1937	5.1800e-003	0.1989		738.1795	738.1795	0.0350		738.9135
<b>Total</b>	<b>0.5334</b>	<b>1.3961</b>	<b>6.7034</b>	<b>0.0119</b>	<b>0.8111</b>	<b>0.0207</b>	<b>0.8318</b>	<b>0.2167</b>	<b>0.0190</b>	<b>0.2357</b>		<b>991.1329</b>	<b>991.1329</b>	<b>0.0369</b>		<b>991.9085</b>

### 3.4 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0888	1.1988	4.2698	6.2200e-003		8.9200e-003	8.9200e-003		8.9200e-003	8.9200e-003	0.0000	582.8994	582.8994	0.1599		586.2580
<b>Total</b>	<b>0.0888</b>	<b>1.1988</b>	<b>4.2698</b>	<b>6.2200e-003</b>		<b>8.9200e-003</b>	<b>8.9200e-003</b>		<b>8.9200e-003</b>	<b>8.9200e-003</b>	<b>0.0000</b>	<b>582.8994</b>	<b>582.8994</b>	<b>0.1599</b>		<b>586.2580</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1629	1.0697	2.4891	2.6000e-003	0.0808	0.0150	0.0958	0.0230	0.0138	0.0368		252.9534	252.9534	1.9800e-003		252.9950
Worker	0.3705	0.3264	4.2143	9.3400e-003	0.7303	5.6400e-003	0.7359	0.1937	5.1800e-003	0.1989		738.1795	738.1795	0.0350		738.9135
<b>Total</b>	<b>0.5334</b>	<b>1.3961</b>	<b>6.7034</b>	<b>0.0119</b>	<b>0.8111</b>	<b>0.0207</b>	<b>0.8318</b>	<b>0.2167</b>	<b>0.0190</b>	<b>0.2357</b>		<b>991.1329</b>	<b>991.1329</b>	<b>0.0369</b>		<b>991.9085</b>

### 3.4 Building Construction - 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					
Off-Road	0.7972	5.0319	4.6714	6.2200e-003		0.3632	0.3632		0.3432	0.3432		576.6238	576.6238	0.1547		579.8728
<b>Total</b>	<b>0.7972</b>	<b>5.0319</b>	<b>4.6714</b>	<b>6.2200e-003</b>		<b>0.3632</b>	<b>0.3632</b>		<b>0.3432</b>	<b>0.3432</b>		<b>576.6238</b>	<b>576.6238</b>	<b>0.1547</b>		<b>579.8728</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1435	0.9979	2.2771	2.6000e-003	0.0809	0.0128	0.0937	0.0230	0.0118	0.0348		250.2019	250.2019	1.8500e-003		250.2408
Worker	0.3264	0.2910	3.7443	9.3300e-003	0.7303	5.4600e-003	0.7357	0.1937	5.0400e-003	0.1988		710.3040	710.3040	0.0319		710.9738
<b>Total</b>	<b>0.4699</b>	<b>1.2889</b>	<b>6.0213</b>	<b>0.0119</b>	<b>0.8112</b>	<b>0.0183</b>	<b>0.8295</b>	<b>0.2167</b>	<b>0.0168</b>	<b>0.2336</b>		<b>960.5059</b>	<b>960.5059</b>	<b>0.0337</b>		<b>961.2145</b>



### 3.4 Building Construction - 2018

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0888	1.1988	4.2698	6.2200e-003		8.9200e-003	8.9200e-003		8.9200e-003	8.9200e-003	0.0000	576.6238	576.6238	0.1547		579.8728
<b>Total</b>	<b>0.0888</b>	<b>1.1988</b>	<b>4.2698</b>	<b>6.2200e-003</b>		<b>8.9200e-003</b>	<b>8.9200e-003</b>		<b>8.9200e-003</b>	<b>8.9200e-003</b>	<b>0.0000</b>	<b>576.6238</b>	<b>576.6238</b>	<b>0.1547</b>		<b>579.8728</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1435	0.9979	2.2771	2.6000e-003	0.0809	0.0128	0.0937	0.0230	0.0118	0.0348		250.2019	250.2019	1.8500e-003		250.2408
Worker	0.3264	0.2910	3.7443	9.3300e-003	0.7303	5.4600e-003	0.7357	0.1937	5.0400e-003	0.1988		710.3040	710.3040	0.0319		710.9738
<b>Total</b>	<b>0.4699</b>	<b>1.2889</b>	<b>6.0213</b>	<b>0.0119</b>	<b>0.8112</b>	<b>0.0183</b>	<b>0.8295</b>	<b>0.2167</b>	<b>0.0168</b>	<b>0.2336</b>		<b>960.5059</b>	<b>960.5059</b>	<b>0.0337</b>		<b>961.2145</b>

### 3.5 Building Construction - generator powered - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5701	4.4642	3.7735	6.5800e-003		0.3004	0.3004		0.3004	0.3004		623.0346	623.0346	0.0504		624.0936
<b>Total</b>	<b>0.5701</b>	<b>4.4642</b>	<b>3.7735</b>	<b>6.5800e-003</b>		<b>0.3004</b>	<b>0.3004</b>		<b>0.3004</b>	<b>0.3004</b>		<b>623.0346</b>	<b>623.0346</b>	<b>0.0504</b>		<b>624.0936</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1629	1.0697	2.4891	2.6000e-003	0.0808	0.0150	0.0958	0.0230	0.0138	0.0368		252.9534	252.9534	1.9800e-003		252.9950
Worker	0.3705	0.3264	4.2143	9.3400e-003	0.7303	5.6400e-003	0.7359	0.1937	5.1800e-003	0.1989		738.1795	738.1795	0.0350		738.9135
<b>Total</b>	<b>0.5334</b>	<b>1.3961</b>	<b>6.7034</b>	<b>0.0119</b>	<b>0.8111</b>	<b>0.0207</b>	<b>0.8318</b>	<b>0.2167</b>	<b>0.0190</b>	<b>0.2357</b>		<b>991.1329</b>	<b>991.1329</b>	<b>0.0369</b>		<b>991.9085</b>

### 3.5 Building Construction - generator powered - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0658	0.2850	4.0564	6.5800e-003		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	623.0346	623.0346	0.0504		624.0936
<b>Total</b>	<b>0.0658</b>	<b>0.2850</b>	<b>4.0564</b>	<b>6.5800e-003</b>		<b>8.7700e-003</b>	<b>8.7700e-003</b>		<b>8.7700e-003</b>	<b>8.7700e-003</b>	<b>0.0000</b>	<b>623.0346</b>	<b>623.0346</b>	<b>0.0504</b>		<b>624.0936</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1629	1.0697	2.4891	2.6000e-003	0.0808	0.0150	0.0958	0.0230	0.0138	0.0368		252.9534	252.9534	1.9800e-003		252.9950
Worker	0.3705	0.3264	4.2143	9.3400e-003	0.7303	5.6400e-003	0.7359	0.1937	5.1800e-003	0.1989		738.1795	738.1795	0.0350		738.9135
<b>Total</b>	<b>0.5334</b>	<b>1.3961</b>	<b>6.7034</b>	<b>0.0119</b>	<b>0.8111</b>	<b>0.0207</b>	<b>0.8318</b>	<b>0.2167</b>	<b>0.0190</b>	<b>0.2357</b>		<b>991.1329</b>	<b>991.1329</b>	<b>0.0369</b>		<b>991.9085</b>

### 3.6 Building Construction - HVAC - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6480	7.6930	2.7563	5.6400e-003		0.3430	0.3430		0.3155	0.3155		577.2380	577.2380	0.1769		580.9522
<b>Total</b>	<b>0.6480</b>	<b>7.6930</b>	<b>2.7563</b>	<b>5.6400e-003</b>		<b>0.3430</b>	<b>0.3430</b>		<b>0.3155</b>	<b>0.3155</b>		<b>577.2380</b>	<b>577.2380</b>	<b>0.1769</b>		<b>580.9522</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1629	1.0697	2.4891	2.6000e-003	0.0808	0.0150	0.0958	0.0230	0.0138	0.0368		252.9534	252.9534	1.9800e-003		252.9950
Worker	0.3705	0.3264	4.2143	9.3400e-003	0.7303	5.6400e-003	0.7359	0.1937	5.1800e-003	0.1989		738.1795	738.1795	0.0350		738.9135
<b>Total</b>	<b>0.5334</b>	<b>1.3961</b>	<b>6.7034</b>	<b>0.0119</b>	<b>0.8111</b>	<b>0.0207</b>	<b>0.8318</b>	<b>0.2167</b>	<b>0.0190</b>	<b>0.2357</b>		<b>991.1329</b>	<b>991.1329</b>	<b>0.0369</b>		<b>991.9085</b>

### 3.6 Building Construction - HVAC - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0694	0.3005	2.5430	5.6400e-003		9.2500e-003	9.2500e-003		9.2500e-003	9.2500e-003	0.0000	577.2380	577.2380	0.1769		580.9522
<b>Total</b>	<b>0.0694</b>	<b>0.3005</b>	<b>2.5430</b>	<b>5.6400e-003</b>		<b>9.2500e-003</b>	<b>9.2500e-003</b>		<b>9.2500e-003</b>	<b>9.2500e-003</b>	<b>0.0000</b>	<b>577.2380</b>	<b>577.2380</b>	<b>0.1769</b>		<b>580.9522</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1629	1.0697	2.4891	2.6000e-003	0.0808	0.0150	0.0958	0.0230	0.0138	0.0368		252.9534	252.9534	1.9800e-003		252.9950
Worker	0.3705	0.3264	4.2143	9.3400e-003	0.7303	5.6400e-003	0.7359	0.1937	5.1800e-003	0.1989		738.1795	738.1795	0.0350		738.9135
<b>Total</b>	<b>0.5334</b>	<b>1.3961</b>	<b>6.7034</b>	<b>0.0119</b>	<b>0.8111</b>	<b>0.0207</b>	<b>0.8318</b>	<b>0.2167</b>	<b>0.0190</b>	<b>0.2357</b>		<b>991.1329</b>	<b>991.1329</b>	<b>0.0369</b>		<b>991.9085</b>

### 3.7 Paving - 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					
Off-Road	1.3885	14.0727	11.8278	0.0176		0.8417	0.8417		0.7755	0.7755		1,749.8334	1,749.8334	0.5343		1,761.0529
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3885</b>	<b>14.0727</b>	<b>11.8278</b>	<b>0.0176</b>		<b>0.8417</b>	<b>0.8417</b>		<b>0.7755</b>	<b>0.7755</b>		<b>1,749.8334</b>	<b>1,749.8334</b>	<b>0.5343</b>		<b>1,761.0529</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0510	0.0455	0.5850	1.4600e-003	0.1141	8.5000e-004	0.1150	0.0303	7.9000e-004	0.0311		110.9850	110.9850	4.9800e-003		111.0897
<b>Total</b>	<b>0.0510</b>	<b>0.0455</b>	<b>0.5850</b>	<b>1.4600e-003</b>	<b>0.1141</b>	<b>8.5000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>7.9000e-004</b>	<b>0.0311</b>		<b>110.9850</b>	<b>110.9850</b>	<b>4.9800e-003</b>		<b>111.0897</b>

### 3.7 Paving - 2018

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2074	0.8987	12.7897	0.0176		0.0277	0.0277		0.0277	0.0277	0.0000	1,749.8334	1,749.8334	0.5343		1,761.0529
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2074</b>	<b>0.8987</b>	<b>12.7897</b>	<b>0.0176</b>		<b>0.0277</b>	<b>0.0277</b>		<b>0.0277</b>	<b>0.0277</b>	<b>0.0000</b>	<b>1,749.8334</b>	<b>1,749.8334</b>	<b>0.5343</b>		<b>1,761.0529</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0510	0.0455	0.5850	1.4600e-003	0.1141	8.5000e-004	0.1150	0.0303	7.9000e-004	0.0311		110.9850	110.9850	4.9800e-003		111.0897
<b>Total</b>	<b>0.0510</b>	<b>0.0455</b>	<b>0.5850</b>	<b>1.4600e-003</b>	<b>0.1141</b>	<b>8.5000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>7.9000e-004</b>	<b>0.0311</b>		<b>110.9850</b>	<b>110.9850</b>	<b>4.9800e-003</b>		<b>111.0897</b>

**3.8 Architectural Coating - 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					
Archit. Coating	107.4575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
<b>Total</b>	<b>107.7561</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>		<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.0102</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0646	0.0576	0.7411	1.8500e-003	0.1445	1.0800e-003	0.1456	0.0383	1.0000e-003	0.0393		140.5810	140.5810	6.3100e-003		140.7136
<b>Total</b>	<b>0.0646</b>	<b>0.0576</b>	<b>0.7411</b>	<b>1.8500e-003</b>	<b>0.1445</b>	<b>1.0800e-003</b>	<b>0.1456</b>	<b>0.0383</b>	<b>1.0000e-003</b>	<b>0.0393</b>		<b>140.5810</b>	<b>140.5810</b>	<b>6.3100e-003</b>		<b>140.7136</b>



### 3.8 Architectural Coating - 2018

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4485	281.4485	0.0267		282.0102
Archit. Coating	107.4575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>107.4872</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.0102</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0646	0.0576	0.7411	1.8500e-003	0.1445	1.0800e-003	0.1456	0.0383	1.0000e-003	0.0393		140.5810	140.5810	6.3100e-003		140.7136
<b>Total</b>	<b>0.0646</b>	<b>0.0576</b>	<b>0.7411</b>	<b>1.8500e-003</b>	<b>0.1445</b>	<b>1.0800e-003</b>	<b>0.1456</b>	<b>0.0383</b>	<b>1.0000e-003</b>	<b>0.0393</b>		<b>140.5810</b>	<b>140.5810</b>	<b>6.3100e-003</b>		<b>140.7136</b>

### 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

- Increase Density
- Increase Transit Accessibility
- Improve Pedestrian Network
- Employee Vanpool/Shuttle

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.3732	2.3861	12.2675	0.0295	2.0364	0.0330	2.0694	0.5435	0.0304	0.5738		2,378.2345	2,378.2345	0.0950		2,380.2305
Unmitigated	1.4107	2.5764	13.2022	0.0321	2.2211	0.0357	2.2568	0.5927	0.0329	0.6256		2,588.2518	2,588.2518	0.1027		2,590.4079

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	367.16	294.80	326.96	1,005,684	922,061
Total	367.16	294.80	326.96	1,005,684	922,061

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted Living)	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.456845	0.078463	0.189736	0.161142	0.074925	0.010638	0.010772	0.000982	0.001366	0.000775	0.008718	0.000744	0.004895

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable 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	0.0146	0.1246	0.0530	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.0197	159.0197	3.0500e-003	2.9200e-003	159.9874
NaturalGas Unmitigated	0.0172	0.1473	0.0627	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.0984	188.0984	3.6100e-003	3.4500e-003	189.2432

### 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					
Congregate Care (Assisted Living)	1598.84	0.0172	0.1473	0.0627	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.0984	188.0984	3.6100e-003	3.4500e-003	189.2432
<b>Total</b>		<b>0.0172</b>	<b>0.1473</b>	<b>0.0627</b>	<b>9.4000e-004</b>		<b>0.0119</b>	<b>0.0119</b>		<b>0.0119</b>	<b>0.0119</b>		<b>188.0984</b>	<b>188.0984</b>	<b>3.6100e-003</b>	<b>3.4500e-003</b>	<b>189.2432</b>

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	1.35167	0.0146	0.1246	0.0530	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.0197	159.0197	3.0500e-003	2.9200e-003	159.9874
<b>Total</b>		<b>0.0146</b>	<b>0.1246</b>	<b>0.0530</b>	<b>8.0000e-004</b>		<b>0.0101</b>	<b>0.0101</b>		<b>0.0101</b>	<b>0.0101</b>		<b>159.0197</b>	<b>159.0197</b>	<b>3.0500e-003</b>	<b>2.9200e-003</b>	<b>159.9874</b>

### 6.0 Area Detail

#### 6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.9807	0.1018	8.4721	3.8000e-004		0.0451	0.0451		0.0451	0.0451	0.0000	13.9960	13.9960	0.0107	0.0000	14.2211
Unmitigated	3.9462	0.1292	11.1334	5.8000e-004		0.0608	0.0608		0.0608	0.0608	0.0000	19.9060	19.9060	0.0197	0.0000	20.3203

## 6.2 Area by SubCategory

### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0304					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5726					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3432	0.1292	11.1334	5.8000e-004		0.0608	0.0608		0.0608	0.0608		19.9060	19.9060	0.0197		20.3203
<b>Total</b>	<b>3.9462</b>	<b>0.1292</b>	<b>11.1334</b>	<b>5.8000e-004</b>		<b>0.0608</b>	<b>0.0608</b>		<b>0.0608</b>	<b>0.0608</b>	<b>0.0000</b>	<b>19.9060</b>	<b>19.9060</b>	<b>0.0197</b>	<b>0.0000</b>	<b>20.3203</b>

## 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4122					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3802					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1883	0.1018	8.4721	3.8000e-004		0.0451	0.0451		0.0451	0.0451		13.9960	13.9960	0.0107		14.2211
<b>Total</b>	<b>2.9807</b>	<b>0.1018</b>	<b>8.4721</b>	<b>3.8000e-004</b>		<b>0.0451</b>	<b>0.0451</b>		<b>0.0451</b>	<b>0.0451</b>	<b>0.0000</b>	<b>13.9960</b>	<b>13.9960</b>	<b>0.0107</b>	<b>0.0000</b>	<b>14.2211</b>

## 7.0 Water Detail

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### 7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Turf Reduction

Use Water Efficient Irrigation System

Use Water Efficient Landscaping

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

### 9.0 Operational Offroad

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

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**Westmont Assisted Living 2**  
**El Dorado-Mountain County County, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Congregate Care (Assisted Living)	134.00	Dwelling Unit	4.07	120,213.00	149

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	70
<b>Climate Zone</b>	1			<b>Operational Year</b>	2018
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

## Project Characteristics -

Land Use - Acreage provided by applicant. Population est. by no. of unit types

Construction Phase - Const duration 3/1/17 - 4/30/18

Bldng construction - HVAC = 1 crane, 1 week.

Construction days overlap. Total no. of days ~ 361: 259 in 2017, 102 in 2018

No work 11/23/17, 11/24/17, 12/26/17, 1/1/17

## Off-road Equipment -

Off-road Equipment - Values provided by applicant.  
Structure is wood-framed.

Off-road Equipment - Generator set used for 1st week of construction.

Off-road Equipment - Cranes used for 1 week to install roof-mount HVAC.

Off-road Equipment - Values provided by applicant

Off-road Equipment - Values provided by applicant

Off-road Equipment - Crane used for 1 week in construction phase. Gen set used 1 week in construction.

Grading - Values provided by applicant

Woodstoves - No fireplaces or wood stoves.

Landscape Equipment - No turf = no lawnmowing. Equipt likely limited to blowers.

## Energy Use -

Land Use Change - Annual "grassland" occupies only part of site.

## Sequestration -

Construction Off-road Equipment Mitigation - All exposed ground will be covered at end of construction by pavement, buildings, or 43,000 ft<sup>2</sup> +/- of landscaping. If necessary to mitigate all equipt will use Tier 4 engines.

Mobile Land Use Mitigation - Project is within 2 miles of transit center & retail (CVS, Target, Nugget, theater, services)

Mobile Commute Mitigation - Van for residents will substitute for individual vehicles. Mode share is estimated.

Area Mitigation - No lawnmowers would be used.

Attempt for 50% electric leafblowers. No chainsaws.

Energy Mitigation - Amounts estimated.

Water Mitigation - No turf specified in landscape.

## Waste Mitigation -

Trips and VMT - Assume 20-yd capacity trucks.

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	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	100
tblCommuteMitigation	EmployeeVanpoolPercentModeShare	2	10
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	18.00	14.00
tblConstructionPhase	NumDays	230.00	333.00
tblConstructionPhase	NumDays	230.00	7.00
tblConstructionPhase	NumDays	230.00	7.00
tblConstructionPhase	NumDays	8.00	21.00
tblConstructionPhase	NumDays	18.00	14.00
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	PhaseEndDate	4/23/2018	4/17/2018
tblConstructionPhase	PhaseEndDate	5/2/2018	4/8/2017
tblConstructionPhase	PhaseEndDate	4/17/2017	10/9/2017
tblConstructionPhase	PhaseEndDate	4/1/2017	3/31/2017

tblConstructionPhase	PhaseEndDate	10/25/2017	4/6/2018
tblConstructionPhase	PhaseStartDate	4/7/2018	4/2/2018
tblConstructionPhase	PhaseStartDate	4/25/2018	4/1/2017
tblConstructionPhase	PhaseStartDate	4/9/2017	10/2/2017
tblConstructionPhase	PhaseStartDate	3/9/2017	3/8/2017
tblConstructionPhase	PhaseStartDate	10/10/2017	3/22/2018
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	NumberGas	73.70	0.00
tblFireplaces	NumberNoFireplace	13.40	134.00
tblFireplaces	NumberWood	46.90	0.00
tblGrading	AcresOfGrading	10.50	4.00
tblGrading	AcresOfGrading	10.50	0.00
tblGrading	MaterialExported	0.00	1,000.00
tblLandscapeEquipment	NumberSummerDays	180	40
tblLandUse	LandUseSquareFeet	134,000.00	120,213.00
tblLandUse	LotAcreage	8.38	4.07
tblLandUse	Population	383.00	149.00
tblOffRoadEquipment	HorsePower	174.00	255.00
tblOffRoadEquipment	LoadFactor	0.41	0.40
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Graders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00



tblTripsAndVMT	VendorTripLength	7.30	6.50
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripLength	10.80	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	8.00
tblWaterMitigation	UseWaterEfficientIrrigationSystemPercentageReduction	6.1	30
tblWoodstoves	NumberCatalytic	6.70	0.00
tblWoodstoves	NumberNoncatalytic	6.70	0.00

## 2.0 Emissions Summary

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.9462	0.1292	11.1334	5.8000e-004		0.0608	0.0608		0.0608	0.0608	0.0000	19.9060	19.9060	0.0197	0.0000	20.3203
Energy	0.0172	0.1473	0.0627	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.0984	188.0984	3.6100e-003	3.4500e-003	189.2432
Mobile	1.3164	2.9230	13.3000	0.0292	2.2211	0.0358	2.2569	0.5927	0.0330	0.6257		2,361.3585	2,361.3585	0.1027		2,363.5149
<b>Total</b>	<b>5.2798</b>	<b>3.1995</b>	<b>24.4960</b>	<b>0.0307</b>	<b>2.2211</b>	<b>0.1084</b>	<b>2.3296</b>	<b>0.5927</b>	<b>0.1056</b>	<b>0.6984</b>	<b>0.0000</b>	<b>2,569.3629</b>	<b>2,569.3629</b>	<b>0.1260</b>	<b>3.4500e-003</b>	<b>2,573.0784</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.9807	0.1018	8.4721	3.8000e-004		0.0451	0.0451		0.0451	0.0451	0.0000	13.9960	13.9960	0.0107	0.0000	14.2211
Energy	0.0146	0.1246	0.0530	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.0197	159.0197	3.0500e-003	2.9200e-003	159.9874
Mobile	1.2801	2.7070	12.5025	0.0268	2.0364	0.0330	2.0695	0.5435	0.0304	0.5739		2,170.1311	2,170.1311	0.0951		2,172.1274
<b>Total</b>	<b>4.2754</b>	<b>2.9334</b>	<b>21.0276</b>	<b>0.0280</b>	<b>2.0364</b>	<b>0.0882</b>	<b>2.1247</b>	<b>0.5435</b>	<b>0.0856</b>	<b>0.6291</b>	<b>0.0000</b>	<b>2,343.1468</b>	<b>2,343.1468</b>	<b>0.1088</b>	<b>2.9200e-003</b>	<b>2,346.3359</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	19.02	8.32	14.16	8.79	8.31	18.62	8.80	8.32	18.93	9.92	0.00	8.80	8.80	13.65	15.36	8.81

### 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	3/1/2017	3/8/2017	6	7	Rough grading
2	Grading	Grading	3/8/2017	3/31/2017	6	21	Finish grading
3	Building Construction	Building Construction	4/1/2017	4/24/2018	6	333	Framing, finish construction
4	Building Construction - generator powered	Building Construction	4/1/2017	4/8/2017	6	7	1st week before power hookup
5	Building Construction - HVAC	Building Construction	10/2/2017	10/9/2017	6	7	Install HVAC w/crane
6	Paving	Paving	3/22/2018	4/6/2018	6	14	
7	Architectural Coating	Architectural Coating	4/2/2018	4/17/2018	6	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 243,431; Residential Outdoor: 81,144; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	0	8.00	162	0.38
Site Preparation	Graders	1	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41

Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	0	7.00	226	0.29
Building Construction	Forklifts	1	7.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Building Construction - generator powered	Cranes	0	7.00	226	0.29
Building Construction - generator powered	Forklifts	0	8.00	89	0.20
Building Construction - generator powered	Generator Sets	1	8.00	84	0.74
Building Construction - generator powered	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction - generator powered	Welders	0	8.00	46	0.45
Building Construction - HVAC	Cranes	1	8.00	226	0.29
Building Construction - HVAC	Forklifts	0	8.00	89	0.20
Building Construction - HVAC	Generator Sets	0	8.00	84	0.74
Building Construction - HVAC	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction - HVAC	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Site Preparation	Scrapers	1	8.00	361	0.48
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

**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	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	100.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	96.00	14.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction generator powered	1	96.00	14.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction HVAC	1	96.00	14.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 3.2 Site Preparation - 2017

#### 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	5.7485	64.9588	45.1863	0.0531		2.9443	2.9443		2.7088	2.7088		5,428.8275	5,428.8275	1.6634		5,463.7586
<b>Total</b>	<b>5.7485</b>	<b>64.9588</b>	<b>45.1863</b>	<b>0.0531</b>	<b>18.0663</b>	<b>2.9443</b>	<b>21.0106</b>	<b>9.9307</b>	<b>2.7088</b>	<b>12.6395</b>		<b>5,428.8275</b>	<b>5,428.8275</b>	<b>1.6634</b>		<b>5,463.7586</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0279	0.0337	0.3298	6.9000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166		54.8444	54.8444	2.9100e-003		54.9056
<b>Total</b>	<b>0.0279</b>	<b>0.0337</b>	<b>0.3298</b>	<b>6.9000e-004</b>	<b>0.0609</b>	<b>4.7000e-004</b>	<b>0.0613</b>	<b>0.0161</b>	<b>4.3000e-004</b>	<b>0.0166</b>		<b>54.8444</b>	<b>54.8444</b>	<b>2.9100e-003</b>		<b>54.9056</b>

**3.2 Site Preparation - 2017**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000				0.0000
Off-Road	3.0838	31.4406	38.0651	0.0531		1.4330	1.4330		1.3227	1.3227	0.0000	5,428.8275	5,428.8275	1.6634			5,463.7586
<b>Total</b>	<b>3.0838</b>	<b>31.4406</b>	<b>38.0651</b>	<b>0.0531</b>	<b>0.0000</b>	<b>1.4330</b>	<b>1.4330</b>	<b>0.0000</b>	<b>1.3227</b>	<b>1.3227</b>	<b>0.0000</b>	<b>5,428.8275</b>	<b>5,428.8275</b>	<b>1.6634</b>			<b>5,463.7586</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	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	0.0279	0.0337	0.3298	6.9000e-004	0.0609	4.7000e-004	0.0613	0.0161	4.3000e-004	0.0166		54.8444	54.8444	2.9100e-003			54.9056
<b>Total</b>	<b>0.0279</b>	<b>0.0337</b>	<b>0.3298</b>	<b>6.9000e-004</b>	<b>0.0609</b>	<b>4.7000e-004</b>	<b>0.0613</b>	<b>0.0161</b>	<b>4.3000e-004</b>	<b>0.0166</b>		<b>54.8444</b>	<b>54.8444</b>	<b>2.9100e-003</b>			<b>54.9056</b>

### 3.3 Grading - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2311	0.0000	6.2311	3.3331	0.0000	3.3331			0.0000			0.0000
Off-Road	2.6973	28.1608	18.9679	0.0206		1.5550	1.5550		1.4306	1.4306		2,104.5737	2,104.5737	0.6448		2,118.1153
<b>Total</b>	<b>2.6973</b>	<b>28.1608</b>	<b>18.9679</b>	<b>0.0206</b>	<b>6.2311</b>	<b>1.5550</b>	<b>7.7861</b>	<b>3.3331</b>	<b>1.4306</b>	<b>4.7637</b>		<b>2,104.5737</b>	<b>2,104.5737</b>	<b>0.6448</b>		<b>2,118.1153</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1499	1.2059	3.6552	2.7400e-003	0.0790	0.0110	0.0900	0.0214	0.0102	0.0315		264.7493	264.7493	1.6500e-003		264.7839
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	0.0348	0.0422	0.4123	8.7000e-004	0.0761	5.9000e-004	0.0767	0.0202	5.4000e-004	0.0207		68.5555	68.5555	3.6400e-003		68.6320
<b>Total</b>	<b>0.1847</b>	<b>1.2481</b>	<b>4.0674</b>	<b>3.6100e-003</b>	<b>0.1550</b>	<b>0.0116</b>	<b>0.1666</b>	<b>0.0416</b>	<b>0.0107</b>	<b>0.0523</b>		<b>333.3048</b>	<b>333.3048</b>	<b>5.2900e-003</b>		<b>333.4159</b>

**3.3 Grading - 2017****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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.0617	10.6266	17.1989	0.0206		0.4822	0.4822		0.4454	0.4454	0.0000	2,104.5737	2,104.5737	0.6448		2,118.1153
<b>Total</b>	<b>1.0617</b>	<b>10.6266</b>	<b>17.1989</b>	<b>0.0206</b>	<b>0.0000</b>	<b>0.4822</b>	<b>0.4822</b>	<b>0.0000</b>	<b>0.4454</b>	<b>0.4454</b>	<b>0.0000</b>	<b>2,104.5737</b>	<b>2,104.5737</b>	<b>0.6448</b>		<b>2,118.1153</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1499	1.2059	3.6552	2.7400e-003	0.0790	0.0110	0.0900	0.0214	0.0102	0.0315		264.7493	264.7493	1.6500e-003		264.7839
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	0.0348	0.0422	0.4123	8.7000e-004	0.0761	5.9000e-004	0.0767	0.0202	5.4000e-004	0.0207		68.5555	68.5555	3.6400e-003		68.6320
<b>Total</b>	<b>0.1847</b>	<b>1.2481</b>	<b>4.0674</b>	<b>3.6100e-003</b>	<b>0.1550</b>	<b>0.0116</b>	<b>0.1666</b>	<b>0.0416</b>	<b>0.0107</b>	<b>0.0523</b>		<b>333.3048</b>	<b>333.3048</b>	<b>5.2900e-003</b>		<b>333.4159</b>



**3.4 Building Construction - 2017****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9231	5.6217	4.8010	6.2200e-003		0.4313	0.4313		0.4070	0.4070		582.8994	582.8994	0.1599		586.2580
<b>Total</b>	<b>0.9231</b>	<b>5.6217</b>	<b>4.8010</b>	<b>6.2200e-003</b>		<b>0.4313</b>	<b>0.4313</b>		<b>0.4070</b>	<b>0.4070</b>		<b>582.8994</b>	<b>582.8994</b>	<b>0.1599</b>		<b>586.2580</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2060	1.1557	3.6652	2.5900e-003	0.0808	0.0153	0.0962	0.0230	0.0141	0.0371		250.4465	250.4465	2.0600e-003		250.4897
Worker	0.3344	0.4047	3.9576	8.3200e-003	0.7303	5.6400e-003	0.7359	0.1937	5.1800e-003	0.1989		658.1329	658.1329	0.0350		658.8670
<b>Total</b>	<b>0.5404</b>	<b>1.5604</b>	<b>7.6228</b>	<b>0.0109</b>	<b>0.8111</b>	<b>0.0210</b>	<b>0.8321</b>	<b>0.2167</b>	<b>0.0193</b>	<b>0.2360</b>		<b>908.5795</b>	<b>908.5795</b>	<b>0.0370</b>		<b>909.3567</b>

### 3.4 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0888	1.1988	4.2698	6.2200e-003		8.9200e-003	8.9200e-003		8.9200e-003	8.9200e-003	0.0000	582.8994	582.8994	0.1599		586.2580
<b>Total</b>	<b>0.0888</b>	<b>1.1988</b>	<b>4.2698</b>	<b>6.2200e-003</b>		<b>8.9200e-003</b>	<b>8.9200e-003</b>		<b>8.9200e-003</b>	<b>8.9200e-003</b>	<b>0.0000</b>	<b>582.8994</b>	<b>582.8994</b>	<b>0.1599</b>		<b>586.2580</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2060	1.1557	3.6652	2.5900e-003	0.0808	0.0153	0.0962	0.0230	0.0141	0.0371		250.4465	250.4465	2.0600e-003		250.4897
Worker	0.3344	0.4047	3.9576	8.3200e-003	0.7303	5.6400e-003	0.7359	0.1937	5.1800e-003	0.1989		658.1329	658.1329	0.0350		658.8670
<b>Total</b>	<b>0.5404</b>	<b>1.5604</b>	<b>7.6228</b>	<b>0.0109</b>	<b>0.8111</b>	<b>0.0210</b>	<b>0.8321</b>	<b>0.2167</b>	<b>0.0193</b>	<b>0.2360</b>		<b>908.5795</b>	<b>908.5795</b>	<b>0.0370</b>		<b>909.3567</b>

### 3.4 Building Construction - 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					
Off-Road	0.7972	5.0319	4.6714	6.2200e-003		0.3632	0.3632		0.3432	0.3432		576.6238	576.6238	0.1547		579.8728
<b>Total</b>	<b>0.7972</b>	<b>5.0319</b>	<b>4.6714</b>	<b>6.2200e-003</b>		<b>0.3632</b>	<b>0.3632</b>		<b>0.3432</b>	<b>0.3432</b>		<b>576.6238</b>	<b>576.6238</b>	<b>0.1547</b>		<b>579.8728</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1797	1.0774	3.4235	2.6000e-003	0.0809	0.0130	0.0939	0.0230	0.0120	0.0350		247.7295	247.7295	1.9200e-003		247.7699
Worker	0.2907	0.3606	3.4777	8.3100e-003	0.7303	5.4600e-003	0.7357	0.1937	5.0400e-003	0.1988		633.1631	633.1631	0.0319		633.8329
<b>Total</b>	<b>0.4704</b>	<b>1.4380</b>	<b>6.9011</b>	<b>0.0109</b>	<b>0.8112</b>	<b>0.0185</b>	<b>0.8297</b>	<b>0.2167</b>	<b>0.0170</b>	<b>0.2337</b>		<b>880.8926</b>	<b>880.8926</b>	<b>0.0338</b>		<b>881.6027</b>

### 3.4 Building Construction - 2018

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0888	1.1988	4.2698	6.2200e-003		8.9200e-003	8.9200e-003		8.9200e-003	8.9200e-003	0.0000	576.6238	576.6238	0.1547		579.8728
<b>Total</b>	<b>0.0888</b>	<b>1.1988</b>	<b>4.2698</b>	<b>6.2200e-003</b>		<b>8.9200e-003</b>	<b>8.9200e-003</b>		<b>8.9200e-003</b>	<b>8.9200e-003</b>	<b>0.0000</b>	<b>576.6238</b>	<b>576.6238</b>	<b>0.1547</b>		<b>579.8728</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1797	1.0774	3.4235	2.6000e-003	0.0809	0.0130	0.0939	0.0230	0.0120	0.0350		247.7295	247.7295	1.9200e-003		247.7699
Worker	0.2907	0.3606	3.4777	8.3100e-003	0.7303	5.4600e-003	0.7357	0.1937	5.0400e-003	0.1988		633.1631	633.1631	0.0319		633.8329
<b>Total</b>	<b>0.4704</b>	<b>1.4380</b>	<b>6.9011</b>	<b>0.0109</b>	<b>0.8112</b>	<b>0.0185</b>	<b>0.8297</b>	<b>0.2167</b>	<b>0.0170</b>	<b>0.2337</b>		<b>880.8926</b>	<b>880.8926</b>	<b>0.0338</b>		<b>881.6027</b>

### 3.5 Building Construction - generator powered - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5701	4.4642	3.7735	6.5800e-003		0.3004	0.3004		0.3004	0.3004		623.0346	623.0346	0.0504		624.0936
<b>Total</b>	<b>0.5701</b>	<b>4.4642</b>	<b>3.7735</b>	<b>6.5800e-003</b>		<b>0.3004</b>	<b>0.3004</b>		<b>0.3004</b>	<b>0.3004</b>		<b>623.0346</b>	<b>623.0346</b>	<b>0.0504</b>		<b>624.0936</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2060	1.1557	3.6652	2.5900e-003	0.0808	0.0153	0.0962	0.0230	0.0141	0.0371		250.4465	250.4465	2.0600e-003		250.4897
Worker	0.3344	0.4047	3.9576	8.3200e-003	0.7303	5.6400e-003	0.7359	0.1937	5.1800e-003	0.1989		658.1329	658.1329	0.0350		658.8670
<b>Total</b>	<b>0.5404</b>	<b>1.5604</b>	<b>7.6228</b>	<b>0.0109</b>	<b>0.8111</b>	<b>0.0210</b>	<b>0.8321</b>	<b>0.2167</b>	<b>0.0193</b>	<b>0.2360</b>		<b>908.5795</b>	<b>908.5795</b>	<b>0.0370</b>		<b>909.3567</b>

**3.5 Building Construction - generator powered - 2017****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0658	0.2850	4.0564	6.5800e-003		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	623.0346	623.0346	0.0504		624.0936
<b>Total</b>	<b>0.0658</b>	<b>0.2850</b>	<b>4.0564</b>	<b>6.5800e-003</b>		<b>8.7700e-003</b>	<b>8.7700e-003</b>		<b>8.7700e-003</b>	<b>8.7700e-003</b>	<b>0.0000</b>	<b>623.0346</b>	<b>623.0346</b>	<b>0.0504</b>		<b>624.0936</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2060	1.1557	3.6652	2.5900e-003	0.0808	0.0153	0.0962	0.0230	0.0141	0.0371		250.4465	250.4465	2.0600e-003		250.4897
Worker	0.3344	0.4047	3.9576	8.3200e-003	0.7303	5.6400e-003	0.7359	0.1937	5.1800e-003	0.1989		658.1329	658.1329	0.0350		658.8670
<b>Total</b>	<b>0.5404</b>	<b>1.5604</b>	<b>7.6228</b>	<b>0.0109</b>	<b>0.8111</b>	<b>0.0210</b>	<b>0.8321</b>	<b>0.2167</b>	<b>0.0193</b>	<b>0.2360</b>		<b>908.5795</b>	<b>908.5795</b>	<b>0.0370</b>		<b>909.3567</b>

### 3.6 Building Construction - HVAC - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6480	7.6930	2.7563	5.6400e-003		0.3430	0.3430		0.3155	0.3155		577.2380	577.2380	0.1769		580.9522
<b>Total</b>	<b>0.6480</b>	<b>7.6930</b>	<b>2.7563</b>	<b>5.6400e-003</b>		<b>0.3430</b>	<b>0.3430</b>		<b>0.3155</b>	<b>0.3155</b>		<b>577.2380</b>	<b>577.2380</b>	<b>0.1769</b>		<b>580.9522</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2060	1.1557	3.6652	2.5900e-003	0.0808	0.0153	0.0962	0.0230	0.0141	0.0371		250.4465	250.4465	2.0600e-003		250.4897
Worker	0.3344	0.4047	3.9576	8.3200e-003	0.7303	5.6400e-003	0.7359	0.1937	5.1800e-003	0.1989		658.1329	658.1329	0.0350		658.8670
<b>Total</b>	<b>0.5404</b>	<b>1.5604</b>	<b>7.6228</b>	<b>0.0109</b>	<b>0.8111</b>	<b>0.0210</b>	<b>0.8321</b>	<b>0.2167</b>	<b>0.0193</b>	<b>0.2360</b>		<b>908.5795</b>	<b>908.5795</b>	<b>0.0370</b>		<b>909.3567</b>

### 3.6 Building Construction - HVAC - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0694	0.3005	2.5430	5.6400e-003		9.2500e-003	9.2500e-003		9.2500e-003	9.2500e-003	0.0000	577.2380	577.2380	0.1769		580.9522
<b>Total</b>	<b>0.0694</b>	<b>0.3005</b>	<b>2.5430</b>	<b>5.6400e-003</b>		<b>9.2500e-003</b>	<b>9.2500e-003</b>		<b>9.2500e-003</b>	<b>9.2500e-003</b>	<b>0.0000</b>	<b>577.2380</b>	<b>577.2380</b>	<b>0.1769</b>		<b>580.9522</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2060	1.1557	3.6652	2.5900e-003	0.0808	0.0153	0.0962	0.0230	0.0141	0.0371		250.4465	250.4465	2.0600e-003		250.4897
Worker	0.3344	0.4047	3.9576	8.3200e-003	0.7303	5.6400e-003	0.7359	0.1937	5.1800e-003	0.1989		658.1329	658.1329	0.0350		658.8670
<b>Total</b>	<b>0.5404</b>	<b>1.5604</b>	<b>7.6228</b>	<b>0.0109</b>	<b>0.8111</b>	<b>0.0210</b>	<b>0.8321</b>	<b>0.2167</b>	<b>0.0193</b>	<b>0.2360</b>		<b>908.5795</b>	<b>908.5795</b>	<b>0.0370</b>		<b>909.3567</b>



### 3.7 Paving - 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					
Off-Road	1.3885	14.0727	11.8278	0.0176		0.8417	0.8417		0.7755	0.7755		1,749.8334	1,749.8334	0.5343		1,761.0529
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3885</b>	<b>14.0727</b>	<b>11.8278</b>	<b>0.0176</b>		<b>0.8417</b>	<b>0.8417</b>		<b>0.7755</b>	<b>0.7755</b>		<b>1,749.8334</b>	<b>1,749.8334</b>	<b>0.5343</b>		<b>1,761.0529</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0454	0.0563	0.5434	1.3000e-003	0.1141	8.5000e-004	0.1150	0.0303	7.9000e-004	0.0311		98.9317	98.9317	4.9800e-003		99.0364
<b>Total</b>	<b>0.0454</b>	<b>0.0563</b>	<b>0.5434</b>	<b>1.3000e-003</b>	<b>0.1141</b>	<b>8.5000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>7.9000e-004</b>	<b>0.0311</b>		<b>98.9317</b>	<b>98.9317</b>	<b>4.9800e-003</b>		<b>99.0364</b>

### 3.7 Paving - 2018

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2074	0.8987	12.7897	0.0176		0.0277	0.0277		0.0277	0.0277	0.0000	1,749.8334	1,749.8334	0.5343		1,761.0529
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2074</b>	<b>0.8987</b>	<b>12.7897</b>	<b>0.0176</b>		<b>0.0277</b>	<b>0.0277</b>		<b>0.0277</b>	<b>0.0277</b>	<b>0.0000</b>	<b>1,749.8334</b>	<b>1,749.8334</b>	<b>0.5343</b>		<b>1,761.0529</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0454	0.0563	0.5434	1.3000e-003	0.1141	8.5000e-004	0.1150	0.0303	7.9000e-004	0.0311		98.9317	98.9317	4.9800e-003		99.0364
<b>Total</b>	<b>0.0454</b>	<b>0.0563</b>	<b>0.5434</b>	<b>1.3000e-003</b>	<b>0.1141</b>	<b>8.5000e-004</b>	<b>0.1150</b>	<b>0.0303</b>	<b>7.9000e-004</b>	<b>0.0311</b>		<b>98.9317</b>	<b>98.9317</b>	<b>4.9800e-003</b>		<b>99.0364</b>

### 3.8 Architectural Coating - 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					
Archit. Coating	107.4575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
<b>Total</b>	<b>107.7561</b>	<b>2.0058</b>	<b>1.8542</b>	<b>2.9700e-003</b>		<b>0.1506</b>	<b>0.1506</b>		<b>0.1506</b>	<b>0.1506</b>		<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.0102</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0575	0.0714	0.6883	1.6500e-003	0.1445	1.0800e-003	0.1456	0.0383	1.0000e-003	0.0393		125.3135	125.3135	6.3100e-003		125.4461
<b>Total</b>	<b>0.0575</b>	<b>0.0714</b>	<b>0.6883</b>	<b>1.6500e-003</b>	<b>0.1445</b>	<b>1.0800e-003</b>	<b>0.1456</b>	<b>0.0383</b>	<b>1.0000e-003</b>	<b>0.0393</b>		<b>125.3135</b>	<b>125.3135</b>	<b>6.3100e-003</b>		<b>125.4461</b>

### 3.8 Architectural Coating - 2018

#### 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	107.4575					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4485	281.4485	0.0267		282.0102
<b>Total</b>	<b>107.4872</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4485</b>	<b>281.4485</b>	<b>0.0267</b>		<b>282.0102</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	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	0.0575	0.0714	0.6883	1.6500e-003	0.1445	1.0800e-003	0.1456	0.0383	1.0000e-003	0.0393		125.3135	125.3135	6.3100e-003		125.4461
<b>Total</b>	<b>0.0575</b>	<b>0.0714</b>	<b>0.6883</b>	<b>1.6500e-003</b>	<b>0.1445</b>	<b>1.0800e-003</b>	<b>0.1456</b>	<b>0.0383</b>	<b>1.0000e-003</b>	<b>0.0393</b>		<b>125.3135</b>	<b>125.3135</b>	<b>6.3100e-003</b>		<b>125.4461</b>

### 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

- Increase Density
- Increase Transit Accessibility
- Improve Pedestrian Network
- Employee Vanpool/Shuttle

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.2801	2.7070	12.5025	0.0268	2.0364	0.0330	2.0695	0.5435	0.0304	0.5739		2,170.1311	2,170.1311	0.0951		2,172.1274
Unmitigated	1.3164	2.9230	13.3000	0.0292	2.2211	0.0358	2.2569	0.5927	0.0330	0.6257		2,361.3585	2,361.3585	0.1027		2,363.5149

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	367.16	294.80	326.96	1,005,684	922,061
Total	367.16	294.80	326.96	1,005,684	922,061

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted Living)	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.456845	0.078463	0.189736	0.161142	0.074925	0.010638	0.010772	0.000982	0.001366	0.000775	0.008718	0.000744	0.004895

**5.0 Energy Detail**

**4.4 Fleet Mix**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable 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	0.0146	0.1246	0.0530	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.0197	159.0197	3.0500e-003	2.9200e-003	159.9874
NaturalGas Unmitigated	0.0172	0.1473	0.0627	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.0984	188.0984	3.6100e-003	3.4500e-003	189.2432

### 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					
Congregate Care (Assisted Living)	1598.84	0.0172	0.1473	0.0627	9.4000e-004		0.0119	0.0119		0.0119	0.0119		188.0984	188.0984	3.6100e-003	3.4500e-003	189.2432
<b>Total</b>		<b>0.0172</b>	<b>0.1473</b>	<b>0.0627</b>	<b>9.4000e-004</b>		<b>0.0119</b>	<b>0.0119</b>		<b>0.0119</b>	<b>0.0119</b>		<b>188.0984</b>	<b>188.0984</b>	<b>3.6100e-003</b>	<b>3.4500e-003</b>	<b>189.2432</b>

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	1.35167	0.0146	0.1246	0.0530	8.0000e-004		0.0101	0.0101		0.0101	0.0101		159.0197	159.0197	3.0500e-003	2.9200e-003	159.9874
<b>Total</b>		<b>0.0146</b>	<b>0.1246</b>	<b>0.0530</b>	<b>8.0000e-004</b>		<b>0.0101</b>	<b>0.0101</b>		<b>0.0101</b>	<b>0.0101</b>		<b>159.0197</b>	<b>159.0197</b>	<b>3.0500e-003</b>	<b>2.9200e-003</b>	<b>159.9874</b>

### 6.0 Area Detail

#### 6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.9807	0.1018	8.4721	3.8000e-004		0.0451	0.0451		0.0451	0.0451	0.0000	13.9960	13.9960	0.0107	0.0000	14.2211
Unmitigated	3.9462	0.1292	11.1334	5.8000e-004		0.0608	0.0608		0.0608	0.0608	0.0000	19.9060	19.9060	0.0197	0.0000	20.3203



## 6.2 Area by SubCategory

### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0304					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5726					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3432	0.1292	11.1334	5.8000e-004		0.0608	0.0608		0.0608	0.0608		19.9060	19.9060	0.0197		20.3203
<b>Total</b>	<b>3.9462</b>	<b>0.1292</b>	<b>11.1334</b>	<b>5.8000e-004</b>		<b>0.0608</b>	<b>0.0608</b>		<b>0.0608</b>	<b>0.0608</b>	<b>0.0000</b>	<b>19.9060</b>	<b>19.9060</b>	<b>0.0197</b>	<b>0.0000</b>	<b>20.3203</b>

## 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	2.3802					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1883	0.1018	8.4721	3.8000e-004		0.0451	0.0451		0.0451	0.0451		13.9960	13.9960	0.0107		14.2211
Architectural Coating	0.4122					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.9807</b>	<b>0.1018</b>	<b>8.4721</b>	<b>3.8000e-004</b>		<b>0.0451</b>	<b>0.0451</b>		<b>0.0451</b>	<b>0.0451</b>	<b>0.0000</b>	<b>13.9960</b>	<b>13.9960</b>	<b>0.0107</b>	<b>0.0000</b>	<b>14.2211</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Turf Reduction

Use Water Efficient Irrigation System

Use Water Efficient Landscaping

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

### 9.0 Operational Offroad

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

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T. KEAR

TRANSPORTATION PLANNING  
& MANAGEMENT, INC.

## Appendix B

# Memorandum

TO: Michael O'Rourke (Westmont Development, LLC)  
FROM: Tom Kear, PhD, PE  
Date: September 30, 2015  
RE: Westmont of El Dorado Hills On-site Transportation Review



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## Summary

As detailed in the body this memorandum, the On-site Transportation Review of the Westmont of El Dorado Hills project (the proposed project) finds:

- With modification of the roadway striping plans for Golden Foothill Parkway fronting the proposed project, approval of a conditional use permit for the existing site plan will not result in traffic operations issues under existing (2015) or near-term (2025) conditions. Anticipated 95% queue lengths are one vehicle long or shorter.
- The eastbound approach to the Golden Foothill Parkway/Carson Crossing Drive intersection should be striped as a single shared lane, which differs from the proposed striping in the October 2014 plan set for the intersection. The westbound approach should be striped as a through lane plus a left turn pocket (consistent with the October 2014 plan set for the intersection). The northbound approach should be striped as a shared through-left lane plus a right turn pocket (consistent with the October 2014 plan set for the intersection).
- Under cumulative (2035) conditions the Golden Foothill Parkway/Carson Crossing Drive intersection is anticipated to require signalization. El Dorado County should condition the proposed project to allow for a future raised median on Golden Foothill Parkway that would restrict driveway turning movements to right-in/right-out.
- The on-site parking lot aisle design is unlikely to accommodate the swept path for the turning movements of a California legal truck (CA Legal-65)<sup>1</sup>. Full size commercial vehicles may need to park on Golden Foothill Parkway or Carson Crossing Drive to service the proposed project. This limitation is common and is not anticipated to be a problem.

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<sup>1</sup> California statutes limit the overall length of a tractor semi-trailer combination to 65'. The law also limits the kingpin to rearmost axle dimension to 40' for semi-trailers with two or more axles and 38' for single axle semi-trailers. Turning templates for the CA Legal-65 "design vehicle" are used to identify where these full sized trucks cannot be accommodated by proposed roadway and parking lot geometry.

## Introduction

This memorandum presents results of an On-site Transportation Review, consistent with the El Dorado County's requirements for approval of the conditional use permit for the proposed Westmont of El Dorado Hills project. The proposed project is a continuing care community that provides senior adult living. These facilities combine aspects of independent living with increased care, as lifestyle needs change with time. Westmont of El Dorado Hills will offer attached senior housing, assisted living, skilled nursing, and cognitive care aimed at allowing residents to live in one community, as their medical needs change. The proposed project includes 134 attached units (15 two-bedroom units, 59 one-bedroom units, 25 studios, and 35 memory care units). A site plan is attached; proposed access would be via driveways to both Golden Foothill Parkway and Carson Crossing Drive.

The proposed project is located on the southwest corner of the planned Golden Foothill Parkway/Carson Crossing Drive intersection within Unit 2 of the Carson Creek Specific Plan. A Carson Creek Traffic Impact Study was completed by AECOM in 2010 for both Carson Creek Units 2 and 3. This 2010 study documented Unit 2 with 136 attached and 488 detached senior housing units. A revision to the study occurred in 2012 that changed the Unit 2 description to 634 detached senior housing units. The proposed continuing care facility produces fewer trips than either attached or detached senior housing would on the same parcel. The existing traffic studies adequately address off-site circulation. El Dorado County has limited its analysis request to an On-site Transportation Review. To facilitate the timely approval of the conditional use permit for the proposed project, this review includes items 1-8 below, which are required by El Dorado County<sup>2</sup>. For the proposed project, Item 2 (in bold font) is the factor that El Dorado County is most interested in.

1. *Existence of any current traffic problems in the local area such as a high-accident location, non-standard intersection or roadway, or an intersection in need of a traffic signal.*
2. ***Proximity of proposed site driveway(s) to other driveways or intersections.***
3. *Adequacy of vehicle parking relative to both the anticipated demand and zoning code requirements.*
4. *Adequacy of the project site design to fully satisfy truck loading demand on-site, when the anticipated number of deliveries and service calls may exceed 10 per day.*
5. *Adequacy of the project site design to provide at least a 25' minimum required throat depth (MRTD) at project driveways. Include calculation of the MRTD.*
6. *Adequacy of the project site design to convey all vehicle types.*
7. *Adequacy of sight distance on-site.*
8. *Queueing analysis of drive-through facilities.*

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<sup>2</sup> El Dorado County (2014) Transportation Impact Study Guidelines, <http://www.edcgov.us/Government/LongRangePlanning/Transportation/TIS-Guidelines/transportation-impact-study-guidelines.aspx>.

Based on the information provided by El Dorado County staff and Westmont Development, the focus of this review is on the potential for vehicle queueing to block turning movements at the project’s proposed driveway or the future intersection of Golden Foothill Parkway and Carson Crossing Drive, located adjacent to the proposed project. As part of Item 2, specific review of the future need for a left turn pocket from eastbound Golden Foothill Parkway to the northbound extension of Carson Crossing Drive, and a review of anticipated 95% queue lengths at the proposed Westmont of El Dorado Hills driveway and the planned Golden Foothill Parkway/Carson Crossing Drive intersection was conducted.

## Methods

### Traffic Forecasts

For this On-site Transportation Review, the El Dorado County Travel Demand Model was utilized to grow existing traffic counts to reflect cumulative 2035 conditions, and then linear interpolation was used to estimate near-term (2025) conditions. Modeling procedures are detailed in an attached memorandum. AM and PM peak-hour loaded model networks and the existing traffic count are also attached. Traffic to and from the northern leg of Carson Crossing Drive was estimated assuming that it would be the access point for 614 office jobs by 2035. Forecasts for this project was adapted from modeling for work near the Promontory.

### Trip Generation and Distribution

Trip generation for the proposed project was based on published Institute of Transportation Engineers<sup>3</sup> trip generation rates (land use 255 - continuing care facilities).

**Table 1. Project Trip Generation for 134 Units**

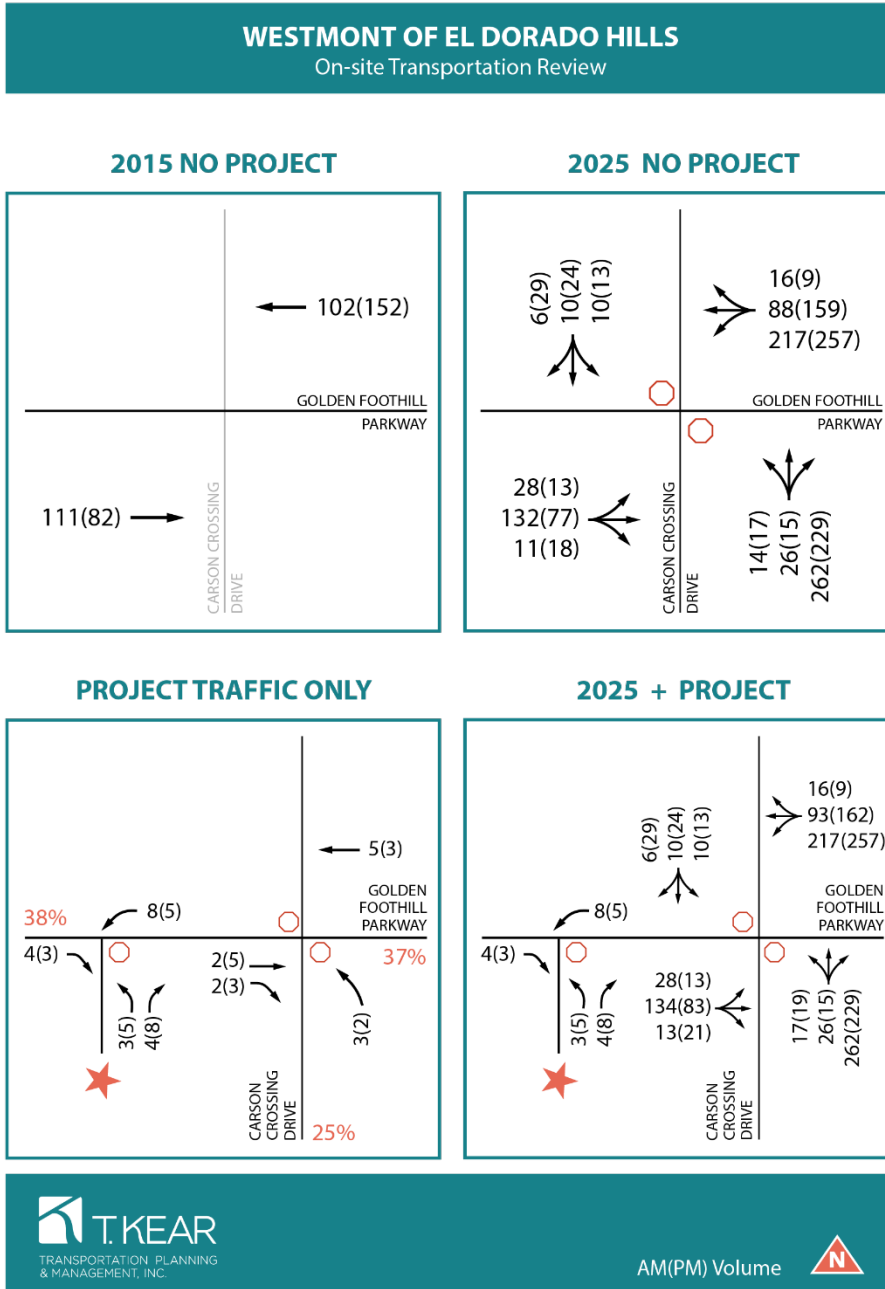
Description	ITE Land Use	Units	Daily	AM Peak Hour of Generator				PM Peak Hour of Generator					
			Total Trips	Total Trips	In %	In Trips	Out %	Out Trips	Total Trips	In %	In Trips	Out %	Out Trips
Continuing Care Units	255	134	322	19	65%	12	35%	7	21	39%	8	61%	13
Daily rate: 2.4, AM peak-hour rate: 0.14, PM peak-hour rate 0.16													

Source: Trip Generation 9th Ed., 2012, ITE , land use 255 (Continuing Care Facility)

The distribution of project trips was based on results of select zone analysis from the TDM, trip distribution assumptions from previous traffic impact studies in the vicinity (including previous studies for this group of projects), discussion with the project team, input from County staff, and local area knowledge. Project trips, derived from the trip generation and distribution above, were assigned to study intersection(s) to estimate near-term (2025) traffic levels with the proposed project. **Figure 1** below shows existing and forecast peak-hour turning movements.

<sup>3</sup> ITE (2012) Trip Generation, 9<sup>th</sup> Edition, Institute of Transportation Engineers, Washington, DC 20006

**Figure 1. Existing 2015 traffic, near-term 2025 traffic, project trip assignment, and near-term (2025) plus project traffic**



## Analysis

Each of the eight required elements of the On-site Transportation review are addressed below.

### 1. Existence of any current traffic problems in the local area such as a high-accident location, non-standard intersection or roadway, or an intersection in need of a traffic signal.

The Statewide Integrated Traffic Records System (SWITRS) maintained by the California Highway Patrol was used to identify accidents near the project. Additionally a site visit was conducted to evaluate roadway geometry and identify any existing traffic concerns. No existing traffic problems were identified.

### 2. Proximity of proposed site driveway(s) to other driveways or intersections.

The proposed Golden Foothill Parkway driveway was reviewed for intersection spacing relative to the planned Golden Foothill Parkway/Carson Crossing Drive intersection along with traffic operations and queuing at both the driveway and intersection.

#### **Driveway location**

The proposed driveway is consistent with El Dorado County requirements. El Dorado County Zoning Ordinance<sup>4</sup> requires that parking area ingress and egress driveways be located a minimum of one hundred fifty feet from the intersection of two major arterials; one hundred feet from the intersection of a major arterial and collector street; and seventy feet from the intersection of two collector streets or a collector and local street. Measurements are taken from the centerline of the nearest travel lane of the intersecting streets and the centerline of the driveway. The centerline of the proposed Golden Foothill Parkway driveway is located more than two hundred feet from the centerline of Carson Crossing Drive.

#### **Near Term (2025) Traffic Operations**

Traffic operations were evaluated based on Highway Capacity Manual 2010 level-of-service methods for Side Street Stop Controlled (SSSC) intersections. Two sets of geometry were studied for the AM and the PM peak hours:

- The first set of geometry reflected the El Dorado County intersection layout dated June 9, 2015, which includes a westbound left turn pocket at the Golden Foothill Parkway/Carson Crossing Drive intersection and striped median in front of the proposed project's driveway. For this scenario, the driveway traffic was limited to right-in/right-out (RIRO) operation. Traffic desiring to turn left from the driveway instead turns right and then makes a U-turn at the Golden Foothill Parkway/Carson Crossing Drive intersection.
- The second set of geometry restripes the westbound approach to the Golden Foothill Parkway/Carson Crossing Drive intersection so that it has a single shared left-through-right

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<sup>4</sup> El Dorado County Zoning Ordinance (Revised November 2010) Section 17.18.030 (B) 4.



lane. The striped median blocking the proposed project driveway is removed so that the driveway operates as a full access driveway.

Level-of-service for SSSC intersections is defined by the amount of control delay on either the worst approach on single lane approaches, or the worst lane for multi-lane approaches. Level-of-service is graded on an A (best) through F (worst) scale. Results are reported below. Synchro (version 9) was used to perform level-of-service calculations; calculation sheets are included as attachments.

**Table 2. Anticipated near term 2025 delay, level-of-service, and worst approach (SSSC analysis)**

Location	2025 AM Peak-Hour, RIRO Driveway	2025 PM Peak-hour, RIRO Driveway	2025 AM Peak-Hour, Full-access Driveway	2025 PM Peak-Hour, Full-access Driveway
<b>Golden Foothill Parkway/Carson Crossing Drive</b>	22.5 seconds, C, NB left turn	26.4 seconds, D, NB left turn	22.3 seconds, C, NB left turn	25.9 seconds, D, NB left turn
<b>Project Driveway</b>	Driveway was not analyzed for RIRO scenario	Driveway was not analyzed for RIRO scenario	9.8 seconds, A, NB left turn	9.6 seconds, A, NB left turn

Within the Carson Creek Specific Plan area, The El Dorado County General Plan established level-of-service E or better as acceptable. The peak hour signal warrant was checked to confirm that the Golden Foothill Parkway/Carson Crossing Drive intersection did not meet the signal warrant in 2025. Anticipated 2035 traffic volumes were also used to check the peak-hour signal warrant, by 2035 the intersection is expected to require signalization, and El Dorado County may need to restrict driveway movements at that time.

A sensitivity test was done insure that additional traffic in and out of the Carson Creek Corporate Center would not alter these findings. In the test, traffic accessing the northern leg of Carson Crossing Drive was increased by about 50%. The northbound through-left delay at the Golden Foothill Parkway/Carson Crossing Drive intersection increased by just about four seconds and the 95% queue length increased by about ten feet. Neither result effects the findings if this study.

### **Queueing**

The 95<sup>th</sup> percentile queue length was also checked to confirm that queueing from the driveway or intersection would not block traffic. The longest 95% queues at either the driveway or intersection are not anticipated to be longer than 1 vehicle (about 25 feet) in length. There are no queueing issues.

### 3. Adequacy of vehicle parking relative to both the anticipated demand and zoning code requirements.

Parking adequacy was checked against both the El Dorado County Standard of one space per three beds for convalescent hospitals, nursing homes, and clinics, and more specific estimates for continuing care parking demand of 0.404 spaces per bed from the literature<sup>5</sup>. The proposed project provides 70 parking spaces to accommodate the proposed 149 bed facility: 15 two-bedroom units (30 beds), 59 one-bedroom units (59 beds), 25 studios (25 beds), and 35 memory care units (35 beds).

- The 70 parking spaces provided exceeds the 50 parking spaces required by El Dorado County zoning ordinance.
- The 70 parking spaces provided also exceeds the estimated demand of 60 parking spaces derived from the literature.

The provided parking is adequate relative to both anticipated demand and zoning code requirements.

### 4. Adequacy of the project site design to fully satisfy truck loading demand on-site, when the anticipated number of deliveries and service calls may exceed 10 per day.

The anticipated number of deliveries and service calls is not expected to exceed 10 per day.

### 5. Adequacy of the project site design to provide at least a 25' minimum required throat depth (MRTD) at project driveways. Include calculation of the MRTD.

The provided throat depth of approximately 34' is adequate to accommodate the anticipated queue lengths. See the queuing discussion and calculation sheets for item 2 above.

### 6. Adequacy of the project site design to convey all vehicle types.

The on-site parking lot aisle design is unlikely to accommodate the swept path for the turning movements of a California legal truck (CA Legal-65). Full size commercial vehicles may need to park on Golden Foothill Parkway or Carson Crossing Drive to service the proposed project. This limitation is common and is not anticipated to be a problem.

### 7. Adequacy of sight distance on-site.

Site distance was checked in the field and found to be more than adequate.

### 8. Queuing analysis of drive-through facilities.

This check is not applicable.

## Findings and Recommendations

Findings and recommendations are reported in the summary at the beginning of this memorandum.

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<sup>5</sup> Stephen Corcoran (1996) Senior housing Trip Generation and Parking Demand Characteristics, presented at the Institute of Transportation Engineers 66th Annual Meeting.

## Attachments





T. KEAR

TRANSPORTATION PLANNING  
& MANAGEMENT, INC.

# Memorandum

TO: file

FROM: Tom Kear, PhD, PE

Date: September 18, 2015

RE: Network edits, land use edits, and select zone scripting for El Dorado County travel demand model, version EDC-CAT\_7525\_090514 for Westmont of El Dorado Hills On-site Transportation Review

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This document summarizes changes made to the El Dorado County travel demand model (EDC-CAT\_7525\_090514) land use and networks for use in the Westmont of El Dorado Hills On-site Transportation Review. Select-zone code has also been hard coded into the assignment scripts. Modification to each network and land use file are detailed below.

## [HWNetwork\\_2010](#)

This network is used along with observed counts to derive localized calibration factors for link level volume estimates from the model.

- Added connection for Windfield Way (nodes 2028 ↔ 3123), and removed Centroid connector from TAZ 610 to node 2028. This edit allows the model to reflect traffic to/from the business parks west of Latrobe Road that directly access White Rock Road.
- Added new centroid connector from TAZ 193 to node 2199, representing Olson Way.
- Added a new node (#15928) on Golden Foothill Parkway between nodes #3127 and #3125 for the future Carson Crossing Drive and connected TAZ 611 through the new node.

## [HWNetwork\\_2035](#)

This is the cumulative model network.

- Added connection for Windfield Way (nodes 2028 ↔ 3123), and removed Centroid connector from TAZ 610 to node 2028. This edit allows the model to reflect traffic to/from the business parks west of Latrobe Road that directly access White Rock Road.
- Added new centroid connector from TAZ 193 to node 2199, representing Olson Way.
- Split TAZ 180 into TAZ 180 and TAZ 626. The new TAZ 626 represents the Valley View Specific Plan East Ridge Village development, and is connected to the Valley View Parkway at node 2045.
- Confirmed Removal of US-50 HOV lanes east of Cameron Park Drive (in both directions)
- Removed Country Club extension (Bass Lake to Silva Valley)

- Confirmed Reduction of Serrano Parkway from 4 to 2 lanes between Bass Lake and Villagio.
- Added a new node (#15925) on Golden Foothill Parkway between nodes #3127 and #3125 and rerouted Carson Crossing Drive through the new node and connected TAZ 611 through the new node.
- Split the 250 acre TAZ 164 into a 195 acre TAZ 164 and 55 acre TAZ 627. The new TAZ 627 represents parcels 117-210-28, 117-210-30, and 117-210-33 and loads via the northerly extension of Carson Crossing Drive at node #15925.

### [NoEmpRnch\\_HWNetwork\\_2035](#)

This is the same cumulative network as above , however the empire ranch interchange is turned off, including the proposed overpass crossing US 50 and all freeway ramps. This scenario is used in EPAP 2025 traffic forecasts.

### [2010 Land Use \(2010zbas.dbf and 2010hhmv.dbf\)](#)

Increased 2010 land use as follows to reflect development between 2010 and 2015.

#### 2010zbas.dbf (land use and employment data)

- TAZ 171 (part of Carson Creek Specific Plan): Added 20 additional dwelling units (DUs).
- TAZ 203 (part of the El Dorado Hills Specific Plan): Added 50 additional DUs.

#### 2010hhmv.dbf (distribution of households by socioeconomic characteristics)

- No edits to the HHMV data were required.

### [2035 Land Use \(2035zbas.dbf and 2035hhmv.dbf\)](#)

Increased 2035 land use as follows to reflect build-out of the Carson Creek Specific Plan, Valley View Specific Plan, El Dorado Hills Specific Plan, and Dixon Ranch. Land use in the TAZs that include Promontory Village 7 and “Lot C” project, was reduced by 131 DUs to reflect a no-project scenario.

#### 2035zbas.dbf (land use and employment data)

- TAZ 171 (part of Carson Creek Specific Plan): Added 20 additional DUs.
- TAZ 611 (part of Carson Creek Specific Plan): Added 324 additional DUs.
- TAZ 167 (Valley View Specific Plan, Blackstone): Added 375 DUs.
- TAZ 626 (new TAZ for Valley View Specific Plan, East Ridge): Added 339 DU and shifted 362 DUs from TAZ 180 for a total of 701 DUs.
- TAZ 203 (part of the El Dorado Hills Specific Plan): Added 218 additional DUs.
- TAZ 180: Shifted 362 DUs to TAZ 626, leaving 457 in the balance of TAZ 180.
- TAZ 212 (Dixon Ranch): Added 525 DUs<sup>1</sup>.

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<sup>1</sup> Dixon Ranch contains 160 new age-restricted DUs, 444 new single family DUs, and one existing home, totaling 605 DUs. The travel demand model does not include an age restricted housing type; the age

- TAZ 193 (Promontory): Reduced land use by 113 DUs reflecting the portion of the 131 DUs from Promontory Village 7 and “Lot C” that lay within TAZ 193.
- TAZ 615 (Promontory): Reduced land use by 18 DUs, reflecting the portion of the 131 DUs from Promontory Village 7 and “Lot C” that lay within TAZ 615.
- TAZ 169 (Town Center) removed 114 retail employees and added 250 high density DUs to account for the approved Town Center Apartments project (4.565 ac \* 24.96 emp/ac = 114 emp).
- TAZ 164 (**Carson Creek Corporate Center**) TAZ 627 was moved in to load Carson Crossing Drive. Employment was split into TAZ 164 and 627 based on acreage, resulting in 614 office jobs being allocated to TAZ 627.

2035hmv.dbf (distribution of households by socioeconomic characteristics)

- TAZ 180: Rescaled “HHLDS” so that it summed to 457 DUs but maintained the same distribution of persons, workers, and income within the TAZ.
- TAZ 626: used the hmv data from TAZ 180. Rescaled “HHLDS” so that it summed to 701 DUs while maintaining the same distribution of persons, workers, and income from TAZ 180.
- TAZ 169: used the distributions from TAZ 168 hmv data to represent the Town Center Apartments .

Script edits for Select Zone

The following highway load and related scripts were updated to add select zone group and select link code. The target zone is hard coded in the LINKREAD phase.

Multi-hour period assignments

- 3AHL00a.s (AM 3-hour peak period assignment)
- 3AHL00b.s (Mid-day 5-hour period assignment)
- 3AHL00c.s (PM 3-hour peak period assignment)
- 3AHL00d.s (Evening 13-hour period assignment)

Peak Period Assignments

- 02HWY00a.s (AM Peak Hour)
- 02HWY00b.s (PM Peak Hour)

Reporting scripts

- 02NET00c.s (AM and PM peak hour network summary)
- 3CHWN00e.s (Daily network assignment summary)

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restricted land use was modeled at 50% of actual based on the ratio of Institute of Transportation Engineers Generation Manual data for land use 210 (single Family) and 251 (detached senior housing).

The zone selected for tracking is listed in a line of code similar to the highlighted line in the LINKREAD phase of script example shown below (where TAZ 193 is selected). The tracking of the trips in and out of the selected TAZ is performed via the SELECTLINKGROUP syntax within the second PATHLOAD command, highlighted further down in the example.

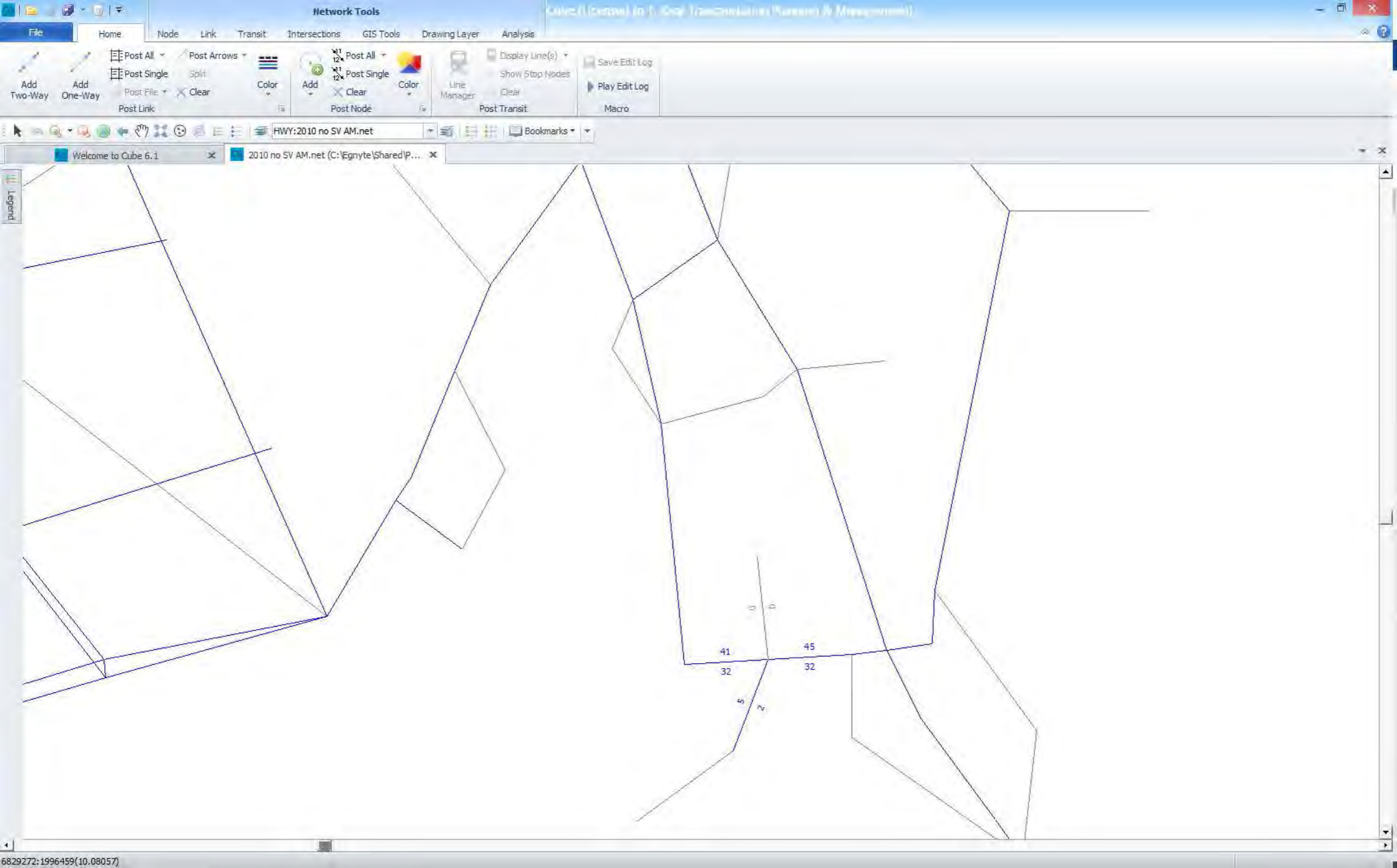
```
30 PHASE=LINKREAD
31 SPEED=LI.TSVA*.1
32 LINKCLASS=LI.SPDCURV
33 IF (LI.HOVLINK=0) ADDTOGROUP=1 ;no restriction
34 IF (LI.HOVLINK=1) ADDTOGROUP=2 ;walk
35 IF (LI.HOVLINK=2) ADDTOGROUP=3 ;HOV lanes
36 IF (LI.HOVLINK=3) ADDTOGROUP=4 ;HOV bypasses
37 IF (LI.CAPCLASS=99) ADDTOGROUP=5 ;switched off links
38 IF (A=193 || B=193)ADDTOGROUP=6 ;SLEECT ZONE GROUP T.Kear 20150107 tkear@tkearinc.com
39
40 ;----- ramp meter flag
41 IF (LI.DELCURV=1)
42 RAMP=1
43 ELSE
44 RAMP=0
45 ENDIF
46 ENDPHASE
47 ;----- path load
48 PHASE=ILOOP
49 PATHLOAD PATH=TIME,EXCLUDEGRP=2-5 VOL[1]=MI.1.1+MI.1.5+MI.1.6,PENI=1 ;No HOV lanes/bypasses
50 PATH=TIME,EXCLUDEGRP=2-3,5 VOL[2]=MI.1.2,PENI=1 ;No HOV lanes but bypas.
51 PATH=TIME,EXCLUDEGRP=2,5 VOL[3]=MI.1.3+MI.1.4,PENI=1 ;HOV lanes/bypasses
52
53 PATHLOAD PATH=TIME,EXCLUDEGRP=2-5 MW[19]=(MI.1.1+MI.1.5+MI.1.6),SELECTLINKGROUP=(GRP[6]>0) ;S.
54 PATH=TIME,EXCLUDEGRP=2-3,5 MW[18]=(MI.1.2), SELECTLINKGROUP=(GRP[6]>0) ;S.
55 PATH=TIME,EXCLUDEGRP=2,5 MW[17]=MI.1.3+MI.1.4, SELECTLINKGROUP=(GRP[6]>0), ;S.
56 VOL[6]=(MW[19]+MW[18]+MW[17]); ;S.
57
```

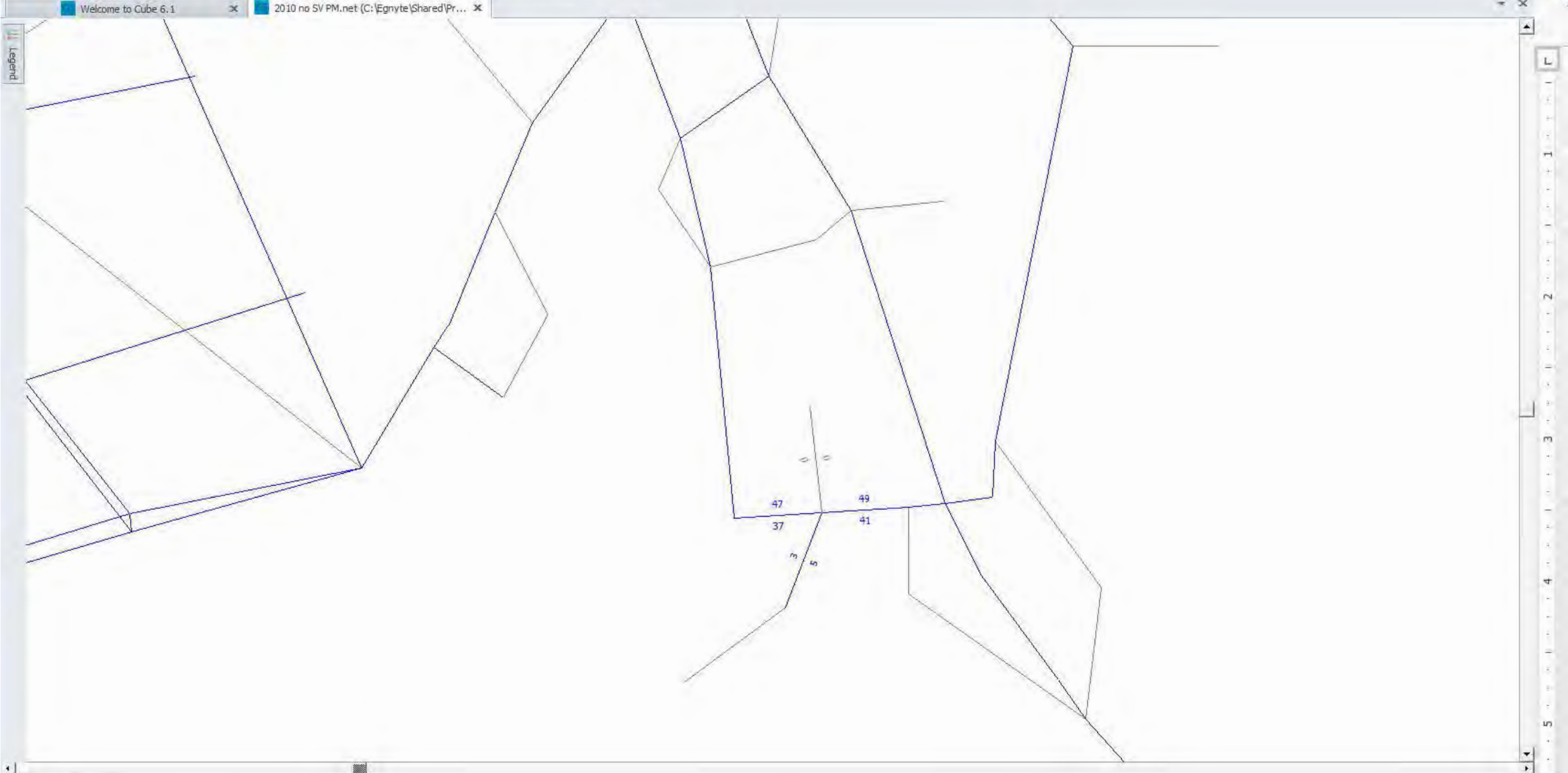
Editing this line in the six assignment scripts listed previously allows the tracking of trips to/from the TAZ under study. There is no need to edit the network summary scripts.



<b>LOCATION:</b> Golden Foothill Parkway <b>SPECIFIC LOCATION:</b> Golden Foothill Parkway <b>CITY/STATE:</b> El Dorado Hills, CA						<b>QC JOB #:</b> 13580401 <b>DIRECTION:</b> EB <b>DATE:</b> Sep 02 2015 - Sep 02 2015				
Start Time	Mon	Tue	Wed 02-Sep-15	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			0			0			0	
1:00 AM			1			1			1	
2:00 AM			1			1			1	
3:00 AM			0			0			0	
4:00 AM			2			2			2	
5:00 AM			20			20			20	
6:00 AM			47			47			47	
7:00 AM			92			92			92	
8:00 AM			111			111			111	
9:00 AM			78			78			78	
10:00 AM			83			83			83	
11:00 AM			63			63			63	
12:00 PM			79			79			79	
1:00 PM			54			54			54	
2:00 PM			77			77			77	
3:00 PM			82			82			82	
4:00 PM			72			72			72	
5:00 PM			81			81			81	
6:00 PM			31			31			31	
7:00 PM			25			25			25	
8:00 PM			10			10			10	
9:00 PM			5			5			5	
10:00 PM			0			0			0	
11:00 PM			0			0			0	
<b>Day Total</b>			1014			1014			1014	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak Volume			8:00 AM 111			8:00 AM 111			8:00 AM 111	
PM Peak Volume			3:00 PM 82			3:00 PM 82			3:00 PM 82	
<i>Comments:</i>										

<b>LOCATION:</b> Golden Foothill Parkway <b>SPECIFIC LOCATION:</b> Golden Foothill Parkway <b>CITY/STATE:</b> El Dorado Hills, CA						<b>QC JOB #:</b> 13580401 <b>DIRECTION:</b> WB <b>DATE:</b> Sep 02 2015 - Sep 02 2015				
Start Time	Mon	Tue	Wed 02-Sep-15	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			0			0			0	
1:00 AM			1			1			1	
2:00 AM			1			1			1	
3:00 AM			0			0			0	
4:00 AM			2			2			2	
5:00 AM			23			23			23	
6:00 AM			82			82			82	
7:00 AM			54			54			54	
8:00 AM			102			102			102	
9:00 AM			57			57			57	
10:00 AM			47			47			47	
11:00 AM			66			66			66	
12:00 PM			53			53			53	
1:00 PM			56			56			56	
2:00 PM			61			61			61	
3:00 PM			81			81			81	
4:00 PM			152			152			152	
5:00 PM			130			130			130	
6:00 PM			56			56			56	
7:00 PM			13			13			13	
8:00 PM			10			10			10	
9:00 PM			6			6			6	
10:00 PM			1			1			1	
11:00 PM			2			2			2	
<b>Day Total</b>			1056			1056			1056	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak			8:00 AM			8:00 AM			8:00 AM	
Volume			102			102			102	
PM Peak			4:00 PM			4:00 PM			4:00 PM	
Volume			152			152			152	
<i>Comments:</i>										







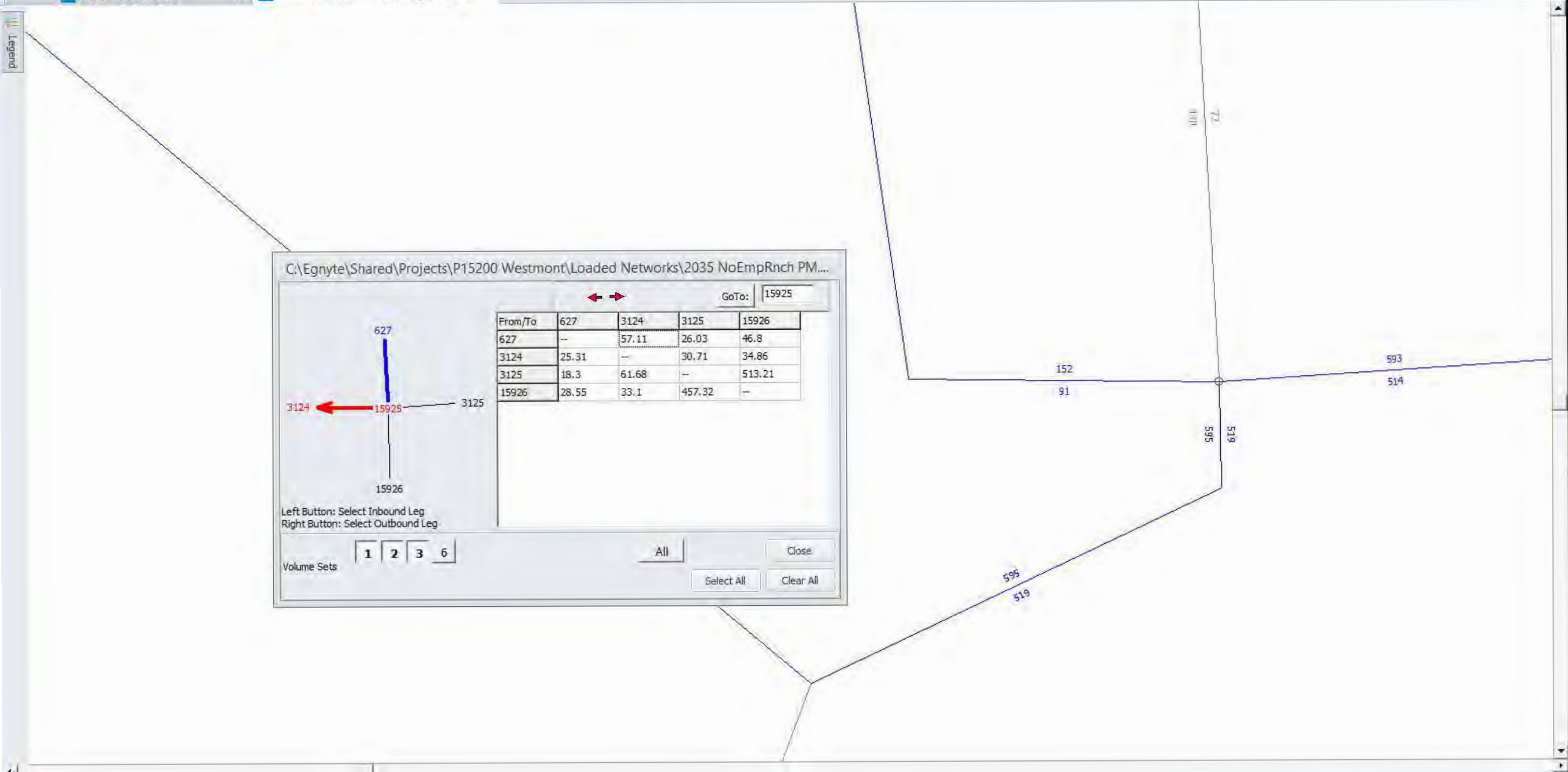
C:\Egnyte\Shared\Projects\P15200 Westmont\Loaded Networks\2035 NoEmpRnch PM...

GoTo: 15925

From/To	627	3124	3125	15926
627	--	57.11	26.03	46.8
3124	25.31	--	30.71	34.86
3125	18.3	61.68	--	513.21
15926	28.55	33.1	457.32	--

Left Button: Select Inbound Leg  
Right Button: Select Outbound Leg

Volume Sets: 1 2 3 6 All Close Select All Clear All



**Intersection**

Int Delay, s/veh 7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	31	134	13	217	93	16	17	26	262	10	10	6
Future Vol, veh/h	31	134	13	217	93	16	17	26	262	10	10	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	224	-	-	220	-	-	-	-	37	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	146	14	236	101	17	18	28	285	11	11	7

Major/Minor	Major1	Major2	Minor1	Minor2								
Conflicting Flow All	118	0	0	160	0	0	810	810	153	816	809	110
Stage 1	-	-	-	-	-	-	220	220	-	582	582	-
Stage 2	-	-	-	-	-	-	590	590	-	234	227	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1470	-	-	1419	-	-	298	314	893	296	314	943
Stage 1	-	-	-	-	-	-	782	721	-	499	499	-
Stage 2	-	-	-	-	-	-	494	495	-	769	716	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1470	-	-	1419	-	-	246	256	893	159	256	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	246	256	-	159	256	-
Stage 1	-	-	-	-	-	-	764	704	-	487	416	-
Stage 2	-	-	-	-	-	-	398	413	-	491	699	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	5.4	12.5	22
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	252	893	1470	-	-	1419	-	-	240
HCM Lane V/C Ratio	0.185	0.319	0.023	-	-	0.166	-	-	0.118
HCM Control Delay (s)	22.5	10.9	7.5	-	-	8	-	-	22
HCM Lane LOS	C	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.7	1.4	0.1	-	-	0.6	-	-	0.4

**Intersection**

Int Delay, s/veh 7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	28	134	13	217	93	16	17	26	262	10	10	6
Future Vol, veh/h	28	134	13	217	93	16	17	26	262	10	10	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	220	-	-	-	-	37	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	146	14	236	101	17	18	28	285	11	11	7

Major/Minor	Major1	Major2	Minor1	Minor2								
Conflicting Flow All	118	0	0	160	0	0	804	804	153	810	803	110
Stage 1	-	-	-	-	-	-	214	214	-	582	582	-
Stage 2	-	-	-	-	-	-	590	590	-	228	221	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1470	-	-	1419	-	-	301	316	893	298	317	943
Stage 1	-	-	-	-	-	-	788	725	-	499	499	-
Stage 2	-	-	-	-	-	-	494	495	-	775	720	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1470	-	-	1419	-	-	249	258	893	160	258	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	249	258	-	160	258	-
Stage 1	-	-	-	-	-	-	771	709	-	488	416	-
Stage 2	-	-	-	-	-	-	398	413	-	496	704	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	5.4	12.5	21.8
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	254	893	1470	-	-	1419	-	-	242
HCM Lane V/C Ratio	0.184	0.319	0.021	-	-	0.166	-	-	0.117
HCM Control Delay (s)	22.3	10.9	7.5	0	-	8	-	-	21.8
HCM Lane LOS	C	B	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0.7	1.4	0.1	-	-	0.6	-	-	0.4



**Intersection**

Int Delay, s/veh 0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	171	4	8	108	0	3	0	4	0	0	0
Future Vol, veh/h	0	171	4	8	108	0	3	0	4	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	186	4	9	117	0	3	0	4	0	0	0

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	117	0	0	190	0	0	323	323	188
Stage 1	-	-	-	-	-	-	188	188	-
Stage 2	-	-	-	-	-	-	135	135	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1471	-	-	1384	-	-	671	595	854
Stage 1	-	-	-	-	-	-	844	745	-
Stage 2	-	-	-	-	-	-	891	785	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1471	-	-	1384	-	-	666	0	854
Mov Cap-2 Maneuver	-	-	-	-	-	-	666	0	-
Stage 1	-	-	-	-	-	-	844	0	-
Stage 2	-	-	-	-	-	-	885	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	762	1471	-	-	1384	-	-
HCM Lane V/C Ratio	0.01	-	-	-	0.006	-	-
HCM Control Delay (s)	9.8	0	-	-	7.6	0	-
HCM Lane LOS	A	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-

**Intersection**

Int Delay, s/veh 7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	18	82	21	257	162	9	19	15	229	13	24	29
Future Vol, veh/h	18	82	21	257	162	9	19	15	229	13	24	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	224	-	-	220	-	-	-	-	37	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	89	23	279	176	10	21	16	249	14	26	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	186	0	0	112	0	0	908	885	101	888	891	181
Stage 1	-	-	-	-	-	-	140	140	-	740	740	-
Stage 2	-	-	-	-	-	-	768	745	-	148	151	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1388	-	-	1478	-	-	256	284	954	264	282	862
Stage 1	-	-	-	-	-	-	863	781	-	409	423	-
Stage 2	-	-	-	-	-	-	394	421	-	855	772	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1388	-	-	1478	-	-	191	227	954	156	225	862
Mov Cap-2 Maneuver	-	-	-	-	-	-	191	227	-	156	225	-
Stage 1	-	-	-	-	-	-	851	770	-	403	343	-
Stage 2	-	-	-	-	-	-	285	342	-	610	761	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	4.8	12.2	21.1
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	205	954	1388	-	-	1478	-	-	295
HCM Lane V/C Ratio	0.18	0.261	0.014	-	-	0.189	-	-	0.243
HCM Control Delay (s)	26.4	10.1	7.6	-	-	8	-	-	21.1
HCM Lane LOS	D	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	1	0	-	-	0.7	-	-	0.9

**Intersection**

Int Delay, s/veh 7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	13	82	21	257	162	9	19	15	229	13	24	29
Future Vol, veh/h	13	82	21	257	162	9	19	15	229	13	24	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	220	-	-	-	-	37	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	89	23	279	176	10	21	16	249	14	26	32

Major/Minor	Major1	Major2	Minor1	Minor2								
Conflicting Flow All	186	0	0	112	0	0	897	874	101	877	880	181
Stage 1	-	-	-	-	-	-	129	129	-	740	740	-
Stage 2	-	-	-	-	-	-	768	745	-	137	140	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1388	-	-	1478	-	-	261	288	954	269	286	862
Stage 1	-	-	-	-	-	-	875	789	-	409	423	-
Stage 2	-	-	-	-	-	-	394	421	-	866	781	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1388	-	-	1478	-	-	195	231	954	160	229	862
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	231	-	160	229	-
Stage 1	-	-	-	-	-	-	865	780	-	405	343	-
Stage 2	-	-	-	-	-	-	285	342	-	620	772	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	4.8	12.1	20.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	209	954	1388	-	-	1478	-	-	300
HCM Lane V/C Ratio	0.177	0.261	0.01	-	-	0.189	-	-	0.239
HCM Control Delay (s)	25.9	10.1	7.6	0	-	8	-	-	20.7
HCM Lane LOS	D	B	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	1	0	-	-	0.7	-	-	0.9

**Intersection**

Int Delay, s/veh 0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	108	3	5	205	0	5	0	8	0	0	0
Future Vol, veh/h	0	108	3	5	205	0	5	0	8	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	117	3	5	223	0	5	0	9	0	0	0

Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	223	0	0	121	0	0	353	353	119
Stage 1	-	-	-	-	-	-	119	119	-
Stage 2	-	-	-	-	-	-	234	234	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1346	-	-	1467	-	-	645	572	933
Stage 1	-	-	-	-	-	-	906	797	-
Stage 2	-	-	-	-	-	-	805	711	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1346	-	-	1467	-	-	642	0	933
Mov Cap-2 Maneuver	-	-	-	-	-	-	642	0	-
Stage 1	-	-	-	-	-	-	906	0	-
Stage 2	-	-	-	-	-	-	802	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	794	1346	-	-	1467	-	-
HCM Lane V/C Ratio	0.018	-	-	-	0.004	-	-
HCM Control Delay (s)	9.6	0	-	-	7.5	0	-
HCM Lane LOS	A	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-