Appendices

APPENDIX 1.0 NOP COMMENTS

CITY OF ORLAND

NOTICE OF PREPARATION

Date: October 31, 2014

To: Responsible, Trustee and Interested Agencies, Organizations, and Individuals

Subject: *Notice of Preparation* of a Draft Environmental Impact Report and Notice of a Public Scoping Meeting for the Pilot Flying J Travel Center Project in Orland

Lead Agency: City of Orland

The City of Orland is proposing to prepare an Environmental Impact Report (EIR) for the **Pilot Flying J Travel Center Project** (proposed project) and is issuing this Notice of Preparation (NOP) per Section 15082 of the California Environmental Quality Act (CEQA) Guidelines. The City is requesting input from the public and your agency on environmental issues associated with development of the proposed project as described in this NOP. As a responsible or trustee agency, your agency may need to use this EIR when considering issuance of a permit or other discretionary approval for the proposed project. Comments received during this public comment period will be used to focus the environmental analysis in the EIR.

Pilot Flying J Travel Center Project Overview

The project site is located adjacent to Orland in Glenn County (see **Figure 1, Project Location**). The proposed Pilot Flying J Travel Center is on Glenn County Assessor's Parcel 045-170-005. In addition, five other parcels, identified as Glenn County Assessor's Parcel Numbers 045-170-003, 045-140-003, -010, -011, and -012, are proposed to be annexed into the Orland city limits as a part of this project. The parcels are located to the west of Interstate 5 and north of County Road 13 (**Figure 2, Proposed Area of Annexation**). County Road 200 and County Road 13 are improved with public utilities including water, wastewater, and power. The proposed project will include a 12,964-square-foot travel center that includes 9 diesel fueling lanes, 12 gasoline fueling lanes, and 2 recreational vehicle fueling lanes along with a convenience store, fast food eatery, drivers lounge and necessary project support and site improvements.

Comment Period

The 30-day NOP comment period commences on **October 31, 2014**, and ends on **November 29, 2014**. When submitting comments, please be specific in describing your environmental concerns. In particular, if there are changes to the project you believe the City should take that would reduce the environmental

impact of the project or address issues of concern, please include them in your response to this NOP. Please also include contact information so that the City can follow up with questions regarding comments if necessary. Comments must be sent to:

Scott Friend, AICP, City Planner
City of Orland
815 Fourth Street
Orland, CA 95963
cityplanner@cityoforland.com
(530) 865-1608

Scoping Meeting

A scoping meeting will be conducted at **6:00 p.m.** on **Thursday, November 20, 2014**, in the Carnegie Center, 912 Third Street in Orland to provide public agencies and other interested parties with the opportunity to learn more about the proposed project and to discuss environmental issues. The scoping meeting will include a presentation of the proposed project and a summary of the environmental issues to be analyzed in the EIR. Comments provided during the scoping meeting will assist the City in scoping the potential environmental effects of the project to be addressed by the EIR.

Pilot Flying J Travel Center Project Description

Project Location and Setting

Regionally, the project site is located adjacent to Orland in Glenn County (see **Figure 1, Project Location**). The annexation area is located on parcels to the west of Interstate 5 and north of County Road 13 (**Figure 2, Proposed Area of Annexation**). The associated Assessor's Parcels are shown below in **Table 1, Area of Annexation General Plan Designations**.

The Pilot Flying J Travel Center is proposed on Assessor's Parcel Number 045-170-005. There are no buildings or other visible improvements on the property. The property is designated as Commercial in the City of Orland General Plan and Highway and Visitor Service Commercial in the Glenn County General Plan.

Surrounding land uses neighboring the Pilot Flying J Travel Center site and the Annexation Area include agriculture, commercial, and residential uses. Directly to the west of the site are agricultural land and two single-family homes. The area north of the project site is the Neville Road/Interstate 5 interchange; across Newville Road are commercial uses (fast-food and sit-down restaurants). Northwest of the site, also across Newville Road, is a mobile home park. East of the site is Interstate 5. South of the site is vacant land, a single-family home, and pastureland. Those areas north of the project site are within the Orland city limits and have the Orland General Plan land use designation of Commercial for the commercial areas and High Density Residential for the mobile home park. The lands south of the project site are in Glenn County and have the Glenn County General Plan land use designation of Service Commercial.

Project Description

Project Components

The proposed project includes two components: (1) the annexation by the City of Orland of a total of six parcels, and (2) the development of a proposed Pilot Flying J Travel Center. While all of the six parcels would be annexed by the City, for clarification purposes the Annexation Area analyzed in this EIR consists of five parcels totaling approximately 10.43 acres which are analyzed at a program-level. The 9.2-acre Pilot Flying J Travel Center site is analyzed separately in this EIR at the project-level. Other than development of the Pilot Flying J Travel Center on the 9.2-acre site, all uses in the Annexation Area are to remain as currently existing; no development of these areas has been proposed as a part of this project. However, in order to ascertain the potential for environmental impact resulting from annexation of the Annexation Area, a development potential for each individual parcel has been assumed based on the application of intensity standards identified in the Orland General Plan Land Use Element.

Annexation / Annexation Elements

As discussed above, the annexation to the city would include six parcels (APNs 045-170-005 (Pilot Flying J Travel Center location), 045-140-003, 045-140-012, 045-140-010, 045-140-011, and 045-170-003). The total project area is 19.63 acres. However, as stated previously, the 9.2-acre Pilot Flying J Travel Center site is analyzed separately in this EIR at a project level. This is done because the Pilot Flying J Travel Center site has specific development proposed, while the remaining parcels do not. Therefore, for discussions referring to project annexations in this EIR, the Annexation Area is composed of five parcels and a total of 10.43 acres for this analysis.

Table 1 identifies the current uses and the General Plan land use designations for Glenn County and the City of Orland for the Annexation Area properties as well as the Pilot Flying J Travel Center site. **Table 1** also shows the assumed use of each of the annexation parcels. These assumed new uses have been determined by considering the existing use and whether that use is consistent with the Orland General Plan for the Commercial land use designation. Based on this, for environmental analysis purposes, it is assumed that the Annexation Area has the potential to result in 235,200 square feet of new commercial uses. **Figure 1** provides an illustration of the proposed Annexation Area.

TABLE 1
AREA OF ANNEXATION GENERAL PLAN DESIGNATIONS

APN	Existing Use	Acreage	General Plan Land Use Designation		Assumed Use[1]
			Glenn County	City of Orland	
Annexation Area					
045-140-012	Single-family home	0.59	Service Commercial	Commercial	15,400 sq. ft. commercial
045-140-003	Gas Station	0.44	Suburban Residential	High Density Residential	8.8 dwelling units
045-140-010	Eagles Hall	0.40	Service Commercial	Commercial	Existing use to remain
045-140-011	Single-family home	0.50	Service Commercial	Commercial	13,050 sq. ft. commercial
045-170-003	Agriculture, single-family home	8.50	Suburban Residential	Commercial	222,150 sq. ft. commercial
Pilot/Flying J Travel Center Project					
045-170-005	Vacant land	9.20 (7.5 and 1.7)[2]	Highway and Visitor Service Commercial	Commercial	Pilot/Flying J Travel Center[2]
					44,400 sq. ft. commercial[2]

[1] New assumed use building size is based on a maximum building coverage of 60 percent as defined by the Orland General Plan for the Commercial land use designation.
[2] This parcel will be split, 7.5 acres to the Pilot Flying J Travel Center project and a 1.7-acre remainder. This parcel is analyzed as a part of the Pilot Flying J Travel Center project in this EIR.

Pilot Flying J Travel Center Project

Location and Land Use Designations

The proposed Pilot Flying J Travel Center Project is located at the southwest quadrant of Interstate 5 (I-5) and Newville Road. The triangular-shaped site is bordered to the northeast by Newville Road/County Road 200 and the southbound I-5 on-ramp, to the west by County Road HH, and to the south by County Road 13. The property is located in Section 21, Township 22 North, Range 3 West, MDM, County of Glenn, California.

The project site is currently within the jurisdiction of Glenn County; however, the project applicant proposes annexation of the site by the City of Orland. The proposed project includes the approval of a tentative parcel map to divide the 9.2-acre site (APN 045-170-005) into two parcels (see **Figure 3, Proposed Tentative Parcel Map**). Parcel A would be 7.5 acres and the location of the Pilot Flying J Travel Center. Parcel B would be 1.7 acres in size. All proposed improvements for the project are located on Parcel A. While no development requests have been made regarding Parcel B, as a part of this environmental analysis Parcel B is assumed to be developed as 44,400 square feet of commercial uses.

The Pilot Flying J Travel Center project site is within the Orland General Plan Sphere of Influence (SOI) and Planning Area. The project site is currently designated in the Orland General Plan as Commercial (C). The Glenn County General Plan land use designation for the project site is Highway and Visitor

Service Commercial. Because the project is outside of the Orland city limits, the City does not currently have zoning for the site. Glenn County zoning for the site is Highway and Visitor Commercial (HVC). The proposed project includes a request to the City of Orland to prezone the site as Commercial Service Highway (C-H).

For the following discussion, semi trucks and heavy delivery trucks that would normally use diesel fueling stations are referred to as trucks. Automobile and pickup trucks are referred to as autos.

Operational Characteristics

The Pilot Flying J Travel Center site is 9.2 acres in size and is currently vacant land. This land was used for agricultural purposes in the past but is no longer used for that purpose. The project proposes the development of an automobile/truck fueling station and a 12,964-square-foot building including a fast-food restaurant, retail convenience store, deli, and travelers lounge (See **Figure 4, Proposed Site Plan Pilot Flying J Travel Center Parcel**). The project will be open 24 hours a day seven days a week and anticipates employing 75 persons. The project anticipates serving 400 trucks per day and approximately 400 autos. Project amenities are as follows:

- Fueling facilities offering 10 diesel lanes (includes diesel, diesel exhaust fluid (DEF), and biodiesel), 12 gas lanes, and 2 recreational vehicle lanes
- CAT Certified Scales
- 100-foot-tall pole sign for interstate traffic
- 38-foot-tall goalpost sign along Newville Road
- 62 truck parking spaces
- 61 automobile parking spaces
- Bio shed building
- 21.9-foot-tall, 12,964-square-foot commercial building that will include the following:
    - Drivers lounge, game room, and pay phones
    - Restroom facilities, seven showers for rent, and public laundry
    - 2,585-square-foot retail convenience store
    - 1,215-square-foot deli
    - 2,605-square-foot fast food restaurant (1,140 square feet of dining area and 1,465-square-foot kitchen)
    - Fast food kiosk

Project Details

The proposed project will include the following actions:

1. Certification of the Environmental Impact Report
2. Prezoning for annexation of the project site
3. Tentative Map approval
4. Use Permit approval
5. Site Plan review
6. Development Agreement approval
7. Annexation approval
8. Issuance of grading, encroachment, and building permits

Anticipated Significant Environmental Impacts

The City has determined that the proposed project will require preparation of an EIR. As permitted by CEQA Section 15060(d), the City will not prepare an Initial Study. For the portion of the site on which a development application has been presented, the City will prepare a project EIR as defined in Section 15161 of the CEQA Guidelines.

The City anticipates the following significant environmental impacts:

Air Quality: Development of a fueling center will result in trucks and autos traveling to and from the proposed project. While the project site is adjacent to Interstate 5, project traffic will increase the amount of diesel and other air emissions in the city. The EIR will evaluate the air quality impacts associated with the proposed project.

Biological Resources: Development of the proposed project may result in impacts to special status species as well as other biological resources. The EIR will evaluate the potential impacts to biological resources as a result of the development of the project.

Cultural Resources: While no structures are located on the project site, unknown historical, archeological and paleontological resources may be uncovered during project development. As such, the project site will be surveyed for cultural resources and the EIR will analyze the potential for impacts to cultural resources.

Greenhouse Gases: It is likely that the proposed project may contribute to cumulative increases in greenhouse gases. Measures contained in the California Building Standards Code as well as project-specific mitigation may reduce the proposed project's impacts related to greenhouse gases. The EIR will estimate the proposed project's potential to generate greenhouse gases.

Hazards and Hazardous Materials: The storage of gasoline and diesel fuel may result in an increased risk of a fuel spill or fueling truck accident. The EIR will evaluate the hazards and hazardous materials impacts associated with the proposed project.

Land Use: Annexation of the project may result in conflicts with existing land use regulations and requirements. As a result, the EIR will analyze the potential for impact to land use.

Noise: Increases in truck and auto traffic may result in an increase in ambient noise near the proposed project and transportation noise on routes leading to the proposed project. The EIR will estimate noise impacts associated with construction and operation of the proposed project.

Transportation: Traffic associated with the proposed project may result in impacts on area roadways and intersections, including those outside of the City's jurisdiction. The EIR will evaluate impacts to the transportation network resulting from development and operation of the proposed project.

Effects Found Not To Be Significant

In the course of evaluating the proposed project, certain impacts were found to be less than significant. The project will have environmental impacts found not to be significant in the following areas:

Aesthetics: The development of the Annexation Area into commercial uses may result in impacts to aesthetics and scenic resources. However, at this time, no development projects have been proposed for this area. If and when such development is proposed, environmental review would be required to comply with CEQA and City regulations. At such time, aesthetics and scenic resources impacts would be analyzed.

The Orland General Plan does not identify any areas considered to be scenic vistas that need to be protected and preserved within the city. Additionally, the Pilot Flying J Travel Center site is not considered to be in an area of significant visual qualities, nor does it have any significant visual features. There are no state or locally designated scenic highways in the project area.

The visual character of the project site and surroundings is a combination of commercial development to the north of the site, Interstate 5 to the east, and rural development to the west and south. The Pilot Flying J Travel Center site and surrounding parcels are designated as Commercial in the Orland General Plan and either Highway and Visitor Service Commercial, Service Commercial, or Suburban Residential in the Glenn County General Plan. The proposed project would be consistent with the Orland General Plan land use designation as well as with the Glenn County land use designation for the site.

The proposed project would introduce new sources of light and glare to the area, primarily due to parking area and exterior building lighting required to ensure safety. Future development on the project site would be subject to City of Orland Municipal Code Section 17.44.110, which requires the shielding of lighting to prevent illumination of the adjacent properties and prevent glare or direct illumination of public streets, highways, and Interstate 5; limits the height of light poles to the height of the main building; and requires suitable lights to properly illuminate any parking area.

Based on the lack of identified scenic views, the lack of a state-designated scenic highway, and the lighting requirements of the Municipal Code, the proposed project would not adversely affect the daytime or nighttime views in the area. Therefore, the proposed project would have no impact on aesthetics.

Agricultural and Forest Resources: The development of the Annexation Area into commercial uses may result in impacts to agricultural resources, as some of this property is consider Prime Farmland. However, at this time, no development projects have been proposed for this area. If and when such development is proposed, environmental review would be required to comply with CEQA and City regulations. At such time, agricultural and forest resources impacts would be analyzed.

The project site is zoned Highway and Visitor Service Commercial in Glenn County and does not contain any active agricultural uses or forestland or support trees that could be commercially harvested. The California Department of Conservation's (DOC) online Important Farmland Finder mapping program identifies the site as Farmland of Local Importance (DOC 2014a). The DOC also shows that the site and

all surrounding adjacent lands are not under Williamson Act contracts (DOC 2014b). While the site is identified as Farmland of Local Importance, this category of farmland does not meet the standard of significance presented in CEQA Appendix G. Appendix G indicates that the loss of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be considered a significant impact. Additionally, the development of the proposed project would not result in the conversion of farmland to a non-farmland use. The conversion of farmland is generally attributed to the development of residential units next to an operating farm, which may result in conflicts between the residential uses and agricultural uses. The project does not propose any residential uses. Additionally, the extension of public utilities, such as water and sewer infrastructure, may result in further urban development and thus convert farmland; however, both water and sewer infrastructure already exists in the roadways adjacent to the project site and would be available to properties surrounding the site whether the project is developed or not. Therefore, the project would not result in the conversion of farmland or convert forestland to non-forest use. No impacts would occur.

Geology, Seismicity, and Soils: The development of the Annexation Area into commercial uses may result in impacts to geology, seismicity, and soils. However, at this time, no development projects have been proposed for this area. If and when such development is proposed, environmental review would be required to comply with CEQA and City regulations. At such time, these impact areas would be analyzed.

According to the Orland General Plan EIR, the primary seismic hazard associated with the Orland Planning Area is minor ground shaking. The Orland Planning Area is not located in an Alquist-Priolo earthquake hazard zone. The closest active fault system is the 40-mile-long Willows fault, located about 10 miles west of the city. As such, future seismic events associated with this fault system are not anticipated to adversely affect the Planning Area, and ground rupture due to faulting is considered to be unlikely (Orland 2010, p. 4.6-20). Because the proposed project is located in an area determined to have a low chance of seismic hazard and all projects in Orland are required to comply with the seismic building standards of the California Building Standards Code, the potential for impacts resulting from seismic activity (i.e., ground shaking, liquefaction, and landslides) is considered less than significant.

The Orland Planning Area, which includes the project site, is identified as having a low potential for subsidence (Orland 2010, p. 4.6-9). General Plan Policy 4.6.A and Program 4.6.A.1 require the City to consider the potential for expansive soils and earthquake-related hazards when reviewing applications for development projects. As a result, the City requires a soils report in order to evaluate shrink-swell and liquefaction potential of proposed project sites and the implementation of measures to minimize unstable soil hazards.

The grading and site preparation activities associated with proposed project development would remove topsoil, disturbing and potentially exposing the underlying soils to erosion from a variety of sources, including wind and water. However, the project site is flat, which would reduce the potential for substantial erosion. Because construction and the resulting potential erosion may affect water quality, any development involving clearing, grading, or excavation that causes soil disturbance on 1 or more acres is subject to a National Pollutant Discharge Elimination System (NPDES) General

Construction Storm Water Permit. The proposed Pilot Flying J project would be required to prepare and comply with an approved stormwater pollution prevention plan (SWPPP). Compliance with this requirement as well as the flat topography of the site would reduce potential erosion impacts to a less than significant level.

The proposed project is located in an area which is relatively flat, so landslides would not occur. There are no large bodies of water near the site and the site is not located near the ocean, so the possibility of seiches or tsunamis would be nonexistent.

The project would be connected to the City's sewer system. No septic system would be used at the site. There would be no impact in this area.

Hydrology and Water Quality: The development of the Annexation Area into commercial uses may result in impacts to hydrology and water quality. However, at this time, no development projects have been proposed for this area. If and when such development is proposed, environmental review would be required to comply with CEQA and City regulations. At such time, these impact areas would be analyzed.

As discussed above, the proposed Pilot Flying J Travel Center project would be required to prepare and comply with an approved stormwater pollution prevention plan (SWPPP). Compliance with this requirement would reduce the potential water quality impacts to less than significant.

Development of the proposed project would increase the demand for groundwater in the city. The City has determined that current water supplies are adequate to serve the project and the project would not result in the increase of groundwater pumping beyond the City's current estimates.

The City of Orland uses groundwater as the source for potable water in the city. This groundwater is extracted from the Colusa Groundwater Subbasin, part of the Sacramento Valley Groundwater Basin. California Department of Water Resources (2006, p. 4) Bulletin 118 identified the Colusa Subbasin groundwater supply as follows: "Generally, groundwater level data show an average seasonal fluctuation of approximately 5 feet for normal and dry years. Overall there does not appear to be any increasing or decreasing trends in groundwater levels."

Additionally, development of the Pilot Flying J Travel Center site would remove 5.9 acres of potential groundwater recharge area due to the development of this area as impervious surfaces (1.6 acres of the 7.5-acre site is landscaping, allowing for groundwater recharge in that area). However, according to the Orland General Plan EIR, the majority groundwater recharge in the city comes from Stony Creek (Orland 2010, p. 4.7-23). Development of the proposed project would not affect the recharge ability of Stony Creek. Additionally, the development of 5.9 acres of impervious surfaces would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Therefore, the project would have a less than significant impact on groundwater supply or recharge.

The Pilot Flying J Travel Center site does not have any streams, creeks, or rivers on-site. All on-site stormwater runoff would be directed into the project's storm drainage system, which would be required to comply with City storm drainage regulations. Because the project site does not have any existing waterways, development of the site would not result in the alteration of existing natural drainage patterns that would result in substantial erosion or siltation on- or off-site. There would be no impact in this area.

According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps 06021C0165D and 0621C0400D, the Pilot Flying J Travel Center site is not located within a flood zone. While the Orland Planning Area has been identified as having the potential for dam inundation as a result of the failure of Black Butte Dam, the Orland General Plan EIR determined that Black Butte Dam was rated to be in good condition. Therefore, an event such as the failure of Black Butte Dam has an extremely low probability (Orland 2010, p. 4.7-26). As such, the potential for flooding impacts would be less than significant.

Mineral Resources: According to the Orland General Plan Draft EIR, no mineral resources zones are designated within the boundaries of the Orland Planning Area. Neither the City's existing General Plan nor the Glenn County General Plan identifies any mineral resources in the Planning Area (Orland 2010, p. 4.6-10). Therefore, no impacts would occur to mineral resources.

Population and Housing: The development of the Annexation Area into commercial uses may result in impacts as a result of an increase of population or the loss of housing. However, at this time, no development projects have been proposed for this area. If and when such development is proposed, environmental review would be required to comply with CEQA and City regulations. At such time, these impact areas would be analyzed.

The Pilot Flying J Travel Center project would not increase the population or amount of housing in Orland. The project is the development of a fueling station and convenience store and would not produce residential units. While the project is projected to employ approximately 75 persons, the majority of these employees are anticipated to already live in the surrounding community. Therefore, the project would not result in new persons moving into the area. Additionally, the project site is currently vacant and therefore would not result in the displacement of persons or the removal of housing units.

Public Services: The development of the Annexation Area into commercial uses may result in impacts to public services; however, at this time, no development projects have been proposed for this area. If and when such development is proposed, environmental review would be required to comply with CEQA and City regulations. At such time, these impact areas would be analyzed.

Public services include fire protection, police protection, parks and recreation, and schools. Generally, impacts in these areas are related to an increase in population from a residential development. Levels of service are generally based on a service to population ratio, except for fire protection, which is usually based on a response time. For example, in Orland, the Police Department seeks to maintain an officer per citizen ratio of 1.9 sworn officers per 1,000 residents (Orland 2010, p. 4.11-9). Further, in 2003, the

Orland City Council set the park dedication standard at 8.4 acres per 1,000 residents (Orland 2010, p. 4.11-20). Finally, the average response time for fire protection and emergency medical services in Orland is 3 to 5 minutes for arrival at the station, approximately 1 minute to prepare and leave the station, and an additional 2 to 3 minutes to the actual call site (Orland 2010, p. 4.11-2).

Because the proposed Pilot Flying J Travel Center project is a commercial development, not residential, this project would not have an impact on police, parks and recreation, and school facilities. While the Pilot Flying J project is projected to employ 75 persons, these persons are anticipated to come from the surrounding areas. Therefore, the proposed project would not increase population in the area. The Pilot Flying J Travel Center project would have no impact on these public services.

The Orland Fire Department is located at 810 Fifth Street, less than a mile from the Pilot Flying J site. The existing commercial uses adjacent to the Pilot Flying J site are currently served by the Orland Fire Department and are within the Department's average response times. As such, development of the site would not require a new station or expansion of the existing fire station. The project would have a less than significant impact on fire protection services.

Other Utilities: The development of the Annexation Area into commercial uses may result in impacts to other utilities, including natural gas, electrical, telephone, and cable services, storm drainage, and/or solid waste. However, at this time, no development projects have been proposed for this area. If and when such development is proposed, environmental review would be required to comply with CEQA and City regulations. At such time, these impact areas would be analyzed.

Utilities, including natural gas, electrical, telephone, and cable services, would be extended to the project site by the applicable utility company. Natural gas service and electricity for the Pilot Flying J Travel Center site is provided by Pacific Gas and Electric Company (PG&E). A multitude of local and long-distance phone service providers serve the project site. Installation of telephone infrastructure would be through AT&T. Storm drainage is proved by the City of Orland.

Existing electrical facilities are located on County Road HH, Newville Road, and the Interstate 5 on-ramp. Existing natural gas pipelines are located on County Road HH and County Road 13 adjacent to the project site. Telephone lines are also located on County Road HH and County Road 13. Storm drainage pipes are located in Newville Road and the Interstate 5 on-ramp adjacent to the site. Development of the Pilot Flying J Travel Center project would not require the expansion of these facilities or any off-site improvements. There would be no impact to these facilities.

The City of Orland is a member of the Glenn County Waste Management Regional Agency (GCWMRA). The California Department of Resources Recycling and Recovery (CalRecycle) provides solid waste disposal and recycling information for jurisdictions in the state, including the GCWMRA. According to CalRecycle (2014), 99 percent of all solid waste in the county was disposed of at the Glenn County Landfill. The landfill is located at the west end of County Road 33, near Artois. This landfill is the only waste disposal area in Glenn County.

The Glenn County Landfill has a cease operation date of July 1, 2016. Total capacity of the landfill is 2,400,000 cubic yards. The remaining capacity, as of June 8, 2010, was 348,223 cubic yards. The maximum tonnage per day the landfill is permitted is 200 tons (CalRecycle 2014). According to CalRecycle (2014), the employee solid waste category (which is an average of all non-residential solid waste generated in a community divided by the number of employees in a community) in Glenn County (including the cities of Orland and Willows) disposed of an average 13.2 pounds per day of solid waste in 2012. Based on this information, the project would produce approximately 990 pounds (13.2 pounds per employee per day X 75 employees = 990 pounds per day) or 0.5 tons per day.

The project is required to comply with all state, county, and city regulations for solid waste disposal. The addition of solid waste to the landfill resulting from development of the project would not increase the tonnage beyond the landfill's permitted amount or result in the closure of the landfill prior to the anticipated 2016 date. During 2012, solid waste coming from the county was also disposed of at eight other solid waste disposal facilities. Upon the closure of the Glenn County Landfill, these other landfills would be used to dispose of solid waste produced in Glenn County, including the proposed project's waste. As a result, the development of the proposed project would have a less than significant impact to solid waste disposal.

References

CalRecycle (California Department of Resources Recycling and Recovery). 2014. *CalRecycle website*. Accessed October 16. http://www.calrecycle.ca.gov/LGCentral/Reports/DRS/Destination /JurDspFa.aspx.

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———. 2014b. *Glenn County Williamson Act FY 2013/2014*. Accessed October 2. ftp://ftp.consrv.ca.gov/pub/dlrp/wa/.

DWR (California Department of Water Resources). 2006. *California Groundwater Bulletin 118 Sacramento Valley Groundwater Basin, Colusa Subbasin*. http://www.water.ca.gov/pubs/groundwater/bulletin_118/basindescriptions/5-21.52.pdf.

Federal Emergency Management Agency. n.d. Flood Insurance Rate Maps 06021C0165D and 0621C0400D.

Orland, City of. 2010. *General Plan Update Draft Environmental Impact Report* (SCH No. 2008102073).

T:_GIS\Glenn_County\MXDs\Orland\Pilot Flying J\Project Location.mxd (10/30/2014)

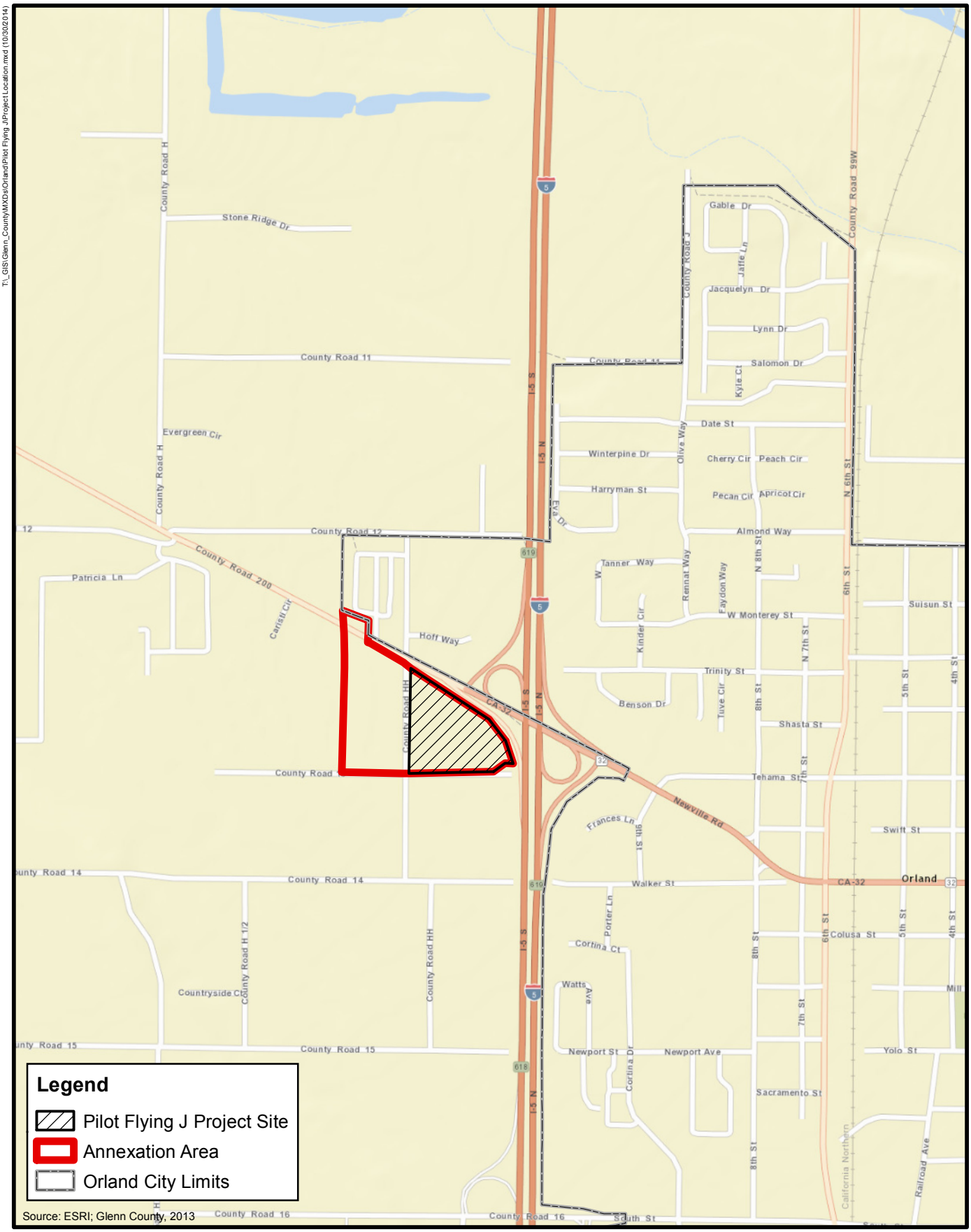

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Figure 1

Project Location

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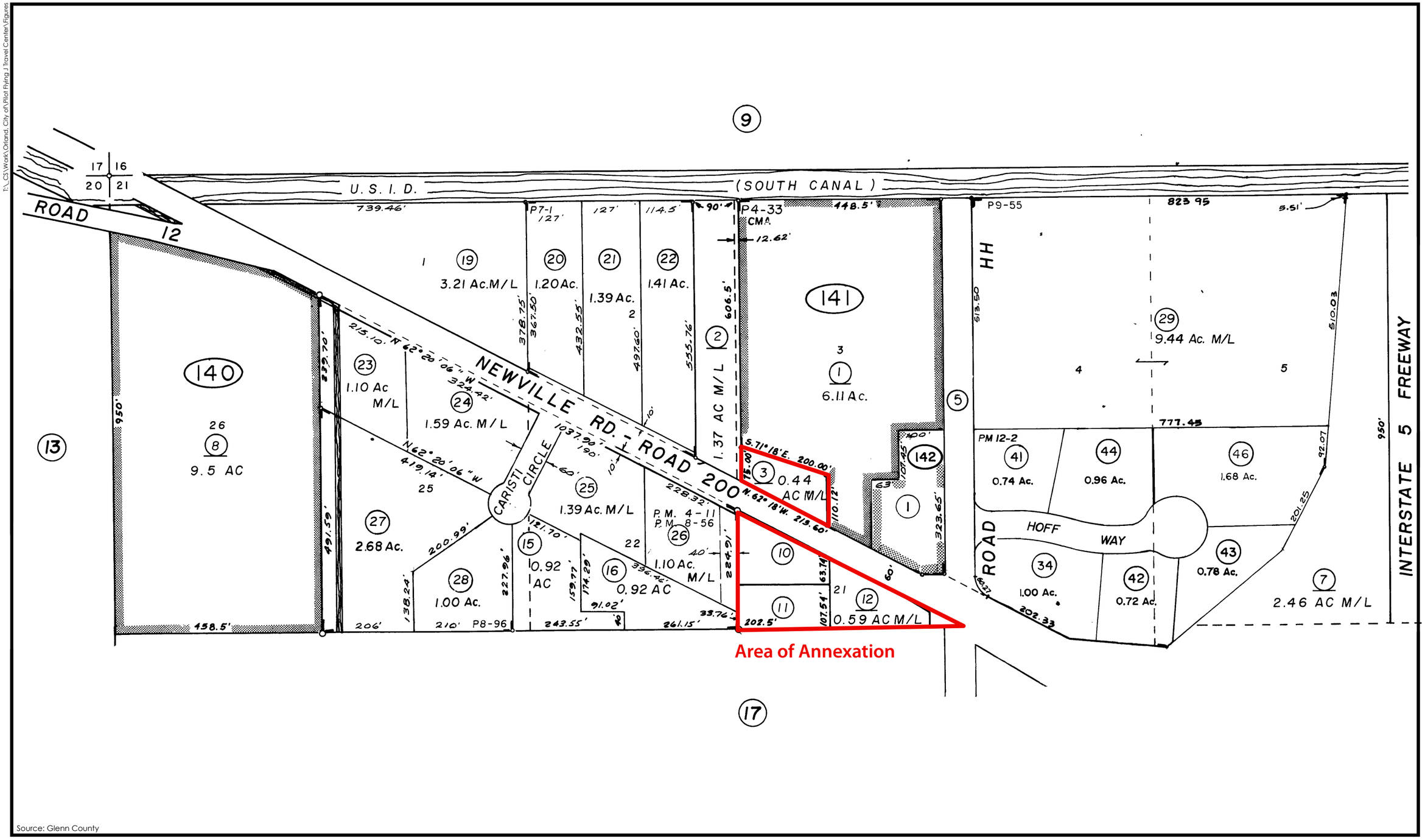

Source: Glenn County

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Figure 2a
Area of Annexation

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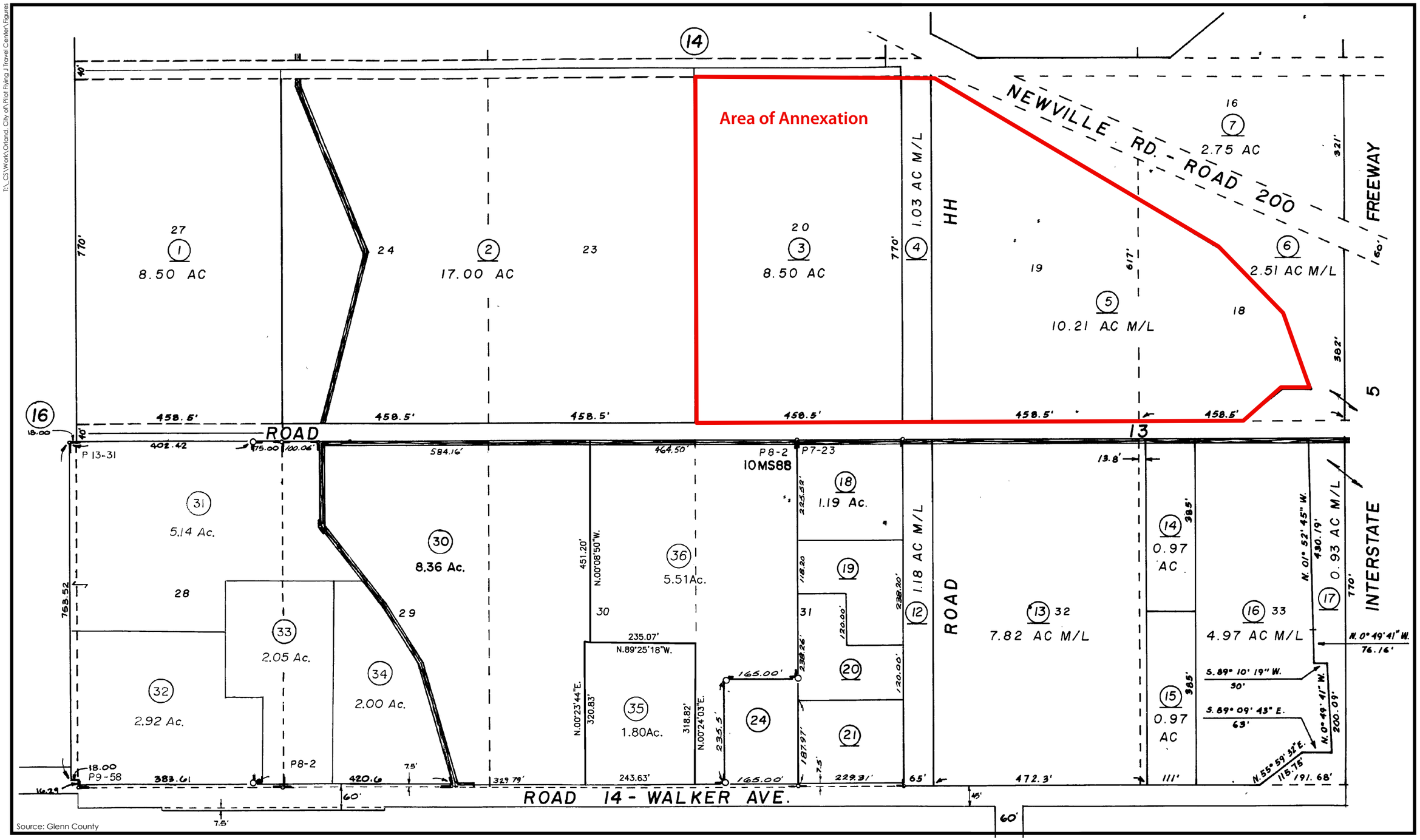

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Figure 2b

Area of Annexation

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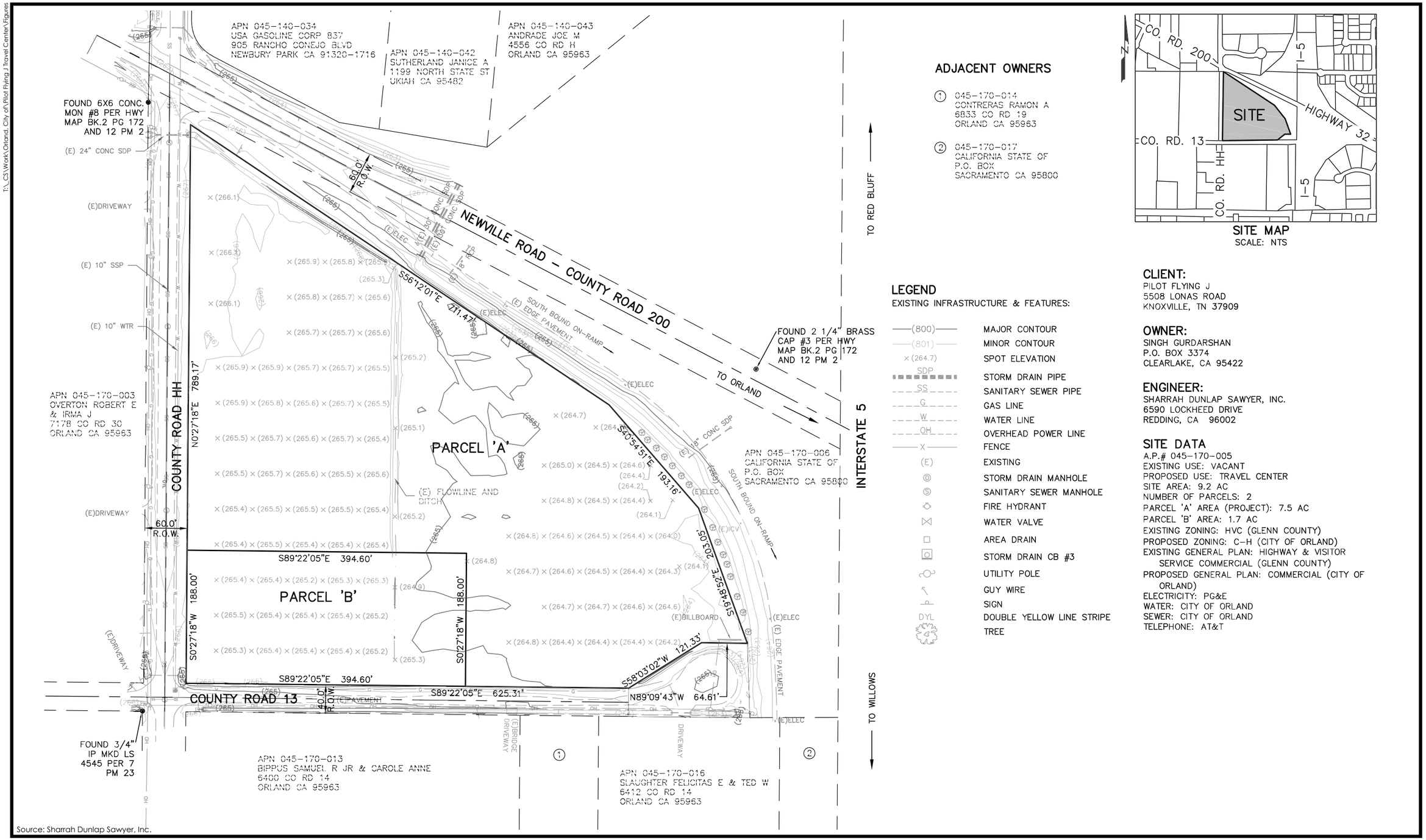

Source: Sharrah Dunlap Sawyer, Inc.

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1. 045-170-014
CONTRERAS RAMON A
6833 CO RD 19
ORLAND CA 95963

2. 045-170-017
CALIFORNIA STATE OF
P.O. BOX
SACRAMENTO CA 95800

SITE MAP
SCALE: NTS

LEGEND

EXISTING INFRASTRUCTURE & FEATURES:

(800)	MAJOR CONTOUR
(801)	MINOR CONTOUR
× (264.7)	SPOT ELEVATION
SDP	STORM DRAIN PIPE
SS	SANITARY SEWER PIPE
G	GAS LINE
W	WATER LINE
OH	OVERHEAD POWER LINE
X	FENCE
(E)	EXISTING
D	STORM DRAIN MANHOLE
S	SANITARY SEWER MANHOLE
	FIRE HYDRANT
	WATER VALVE
	AREA DRAIN
	STORM DRAIN CB #3
	UTILITY POLE
	GUY WIRE
	SIGN
DYL	DOUBLE YELLOW LINE STRIPE
	TREE

CLIENT:
PILOT FLYING J
5508 LONAS ROAD
KNOXVILLE, TN 37909

OWNER:
SINGH GURDARSHAN
P.O. BOX 3374
CLEARLAKE, CA 95422

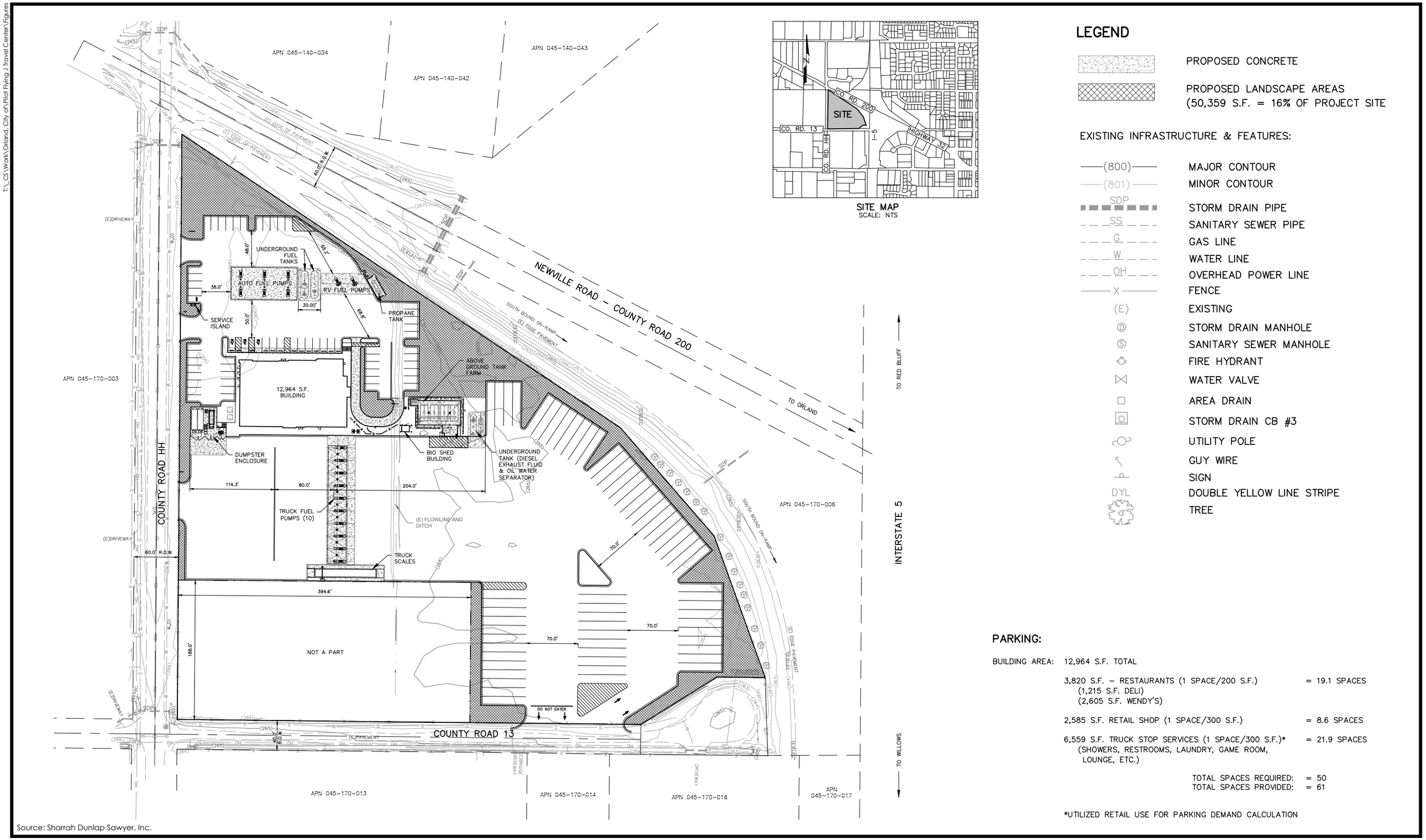
ENGINEER:
SHARRAH DUNLAP SAWYER, INC.
6590 LOCKHEED DRIVE
REDDING, CA 96002

SITE DATA
A.P.# 045-170-005
EXISTING USE: VACANT
PROPOSED USE: TRAVEL CENTER
SITE AREA: 9.2 AC
NUMBER OF PARCELS: 2
PARCEL 'A' AREA (PROJECT): 7.5 AC
PARCEL 'B' AREA: 1.7 AC
EXISTING ZONING: HVC (GLENN COUNTY)
PROPOSED ZONING: C-H (CITY OF ORLAND)
EXISTING GENERAL PLAN: HIGHWAY & VISITOR SERVICE COMMERCIAL (GLENN COUNTY)
PROPOSED GENERAL PLAN: COMMERCIAL (CITY OF ORLAND)
ELECTRICITY: PG&E
WATER: CITY OF ORLAND
SEWER: CITY OF ORLAND
TELEPHONE: AT&T

Figure 3
Tentative Parcel Map

PMC®

T:_CS\Work\Orland, City of\Pilot Flying J Travel Center\Figures



LEGEND

- PROPOSED CONCRETE
- PROPOSED LANDSCAPE AREAS (50,359 S.F. = 16% OF PROJECT SITE

EXISTING INFRASTRUCTURE & FEATURES:

- (800) MAJOR CONTOUR
- (801) MINOR CONTOUR
- SDP STORM DRAIN PIPE
- SS SANITARY SEWER PIPE
- G GAS LINE
- W WATER LINE
- OH OVERHEAD POWER LINE
- X FENCE
- (E) EXISTING
- STORM DRAIN MANHOLE
- SANITARY SEWER MANHOLE
- FIRE HYDRANT
- WATER VALVE
- AREA DRAIN
- STORM DRAIN CB #3
- UTILITY POLE
- GUY WIRE
- SIGN
- DYL DOUBLE YELLOW LINE STRIPE
- TREE

PARKING:

BUILDING AREA: 12,964 S.F. TOTAL

3,820 S.F. – RESTAURANTS (1 SPACE/200 S.F.) (1,215 S.F. DELI) (2,605 S.F. WENDY'S)	= 19.1 SPACES
2,585 S.F. RETAIL SHOP (1 SPACE/300 S.F.)	= 8.6 SPACES
6,559 S.F. TRUCK STOP SERVICES (1 SPACE/300 S.F.)* (SHOWERS, RESTROOMS, LAUNDRY, GAME ROOM, LOUNGE, ETC.)	= 21.9 SPACES
TOTAL SPACES REQUIRED:	= 50
TOTAL SPACES PROVIDED:	= 61

*UTILIZED RETAIL USE FOR PARKING DEMAND CALCULATION

Source: Sharrah Dunlap Sawyer, Inc.

50 0 50
FEET

N

Figure 4
Site Plan

PMC®

GLENN LOCAL AGENCY FORMATION COMMISSION
525 West Sycamore Street, Suite B1, Willows, CA 95988
Phone: 530.934.6400, Fax: 530.934.6519, http://lafco.misystems.net/
Christy Leighton, Executive Officer

Commissioners:

Michael Murray	County Commissioner
John Viegas	County Commissioner
Bruce Roundy, Chair	City Commissioner
Terry Taylor-Vodden, Vice-Chair	City Commissioner
Mike Yalow	Public Commissioner

Alternates:

Steve Soeth	County Alternate
Salina J. Edwards	City Alternate
Christine A. Stifter	Public Alternate

November 5, 2014

Scott Friend, AICP, City Planner
City of Orland
815 Fourth Street
Orland CA 95963

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Pilot Flying J Travel Center Project in Orland

Glenn LAFCO appreciates the opportunity to comment on the Notice of Preparation of a Draft Environmental Impact Report for the Pilot Flying J Travel Center Project in Orland. The comments are as follows:

1. Project Description

The Project Description should include both the "Annexation to the City of Orland" and the "Detachment from the Orland Rural Fire Protection District."

2. Area of Annexation

The area to be annexed should include all roads and road rights-of-way for County Road 200, County Road HH, and County Road 13 adjacent to or within the proposed annexation. This will allow the City to require the necessary improvements to these roads to minimize traffic impacts and to improve traffic safety. In addition to the on-site improvements which are proposed the off-site improvements should also be included in the project description.

Thank you for the opportunity to comment on this project.

Christy Leighton

Christy Leighton,
Glenn LAFCO Executive Officer

STATE OF CALIFORNIA
NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

Edmond G. Brown, Jr., *Governor*

November 6, 2014

Scott Friend
City of Orland
815 Fourth Street
Orland, CA 95963

RE: SCH# 2014102084 Pilot Flying J Travel Center Project, Glenn County.

Dear Mr. Friend,

The Native American Heritage Commission (NAHC) has reviewed the Notice of Preparation (NOP) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- ✓ Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check. **USGS 7.5-minute quadrangle name, township, range, and section required**
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures.
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) Guidelines §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered cultural items that are not burial associated, which are addressed in Public Resources Code (PRC) §5097.98, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, PRC §5097.98, and CEQA Guidelines §15064.5(e), address the process to be followed in the event of an accidental discovery of any human remains and associated grave goods in a location other than a dedicated cemetery.

Sincerely,

Katy Sanchez

Katy Sanchez
Associate Government Program Analyst

CC: State Clearinghouse

APPENDIX 3.1-A - AIR QUALITY EMISSIONS

Pilot Flying J Travel Center

Glenn County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	61.00	Space	4.01	175,000.00	0
Fast Food Restaurant w/o Drive Thru	2.61	1000sqft	0.06	2,605.00	0
High Turnover (Sit Down Restaurant)	1.22	1000sqft	0.03	1,215.00	0
Convenience Market (24 Hour)	9.14	1000sqft	0.21	9,144.00	0
Gasoline/Service Station	24.00	Pump	0.08	3,388.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	61
Climate Zone	3				
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	445	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2012 CO2 Intensity Factor

Land Use - Accounts for 12,964 square foot building with 3,820 s.f of restaurant space & 9,144 s.f. of retail/truck stip services

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Grading - Project site= 7.5 acres

Vehicle Trips - Trip generation per Traffic Impact Analysis

Construction Off-road Equipment Mitigation - Mitigation measure MM 3.1.2

Vechicle Emission Factors - Fleet mix per Traffic Impact Analysis

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
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	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	85.00
tblConstructionPhase	NumDays	230.00	85.00
tblConstructionPhase	NumDays	18.00	85.00
tblGrading	AcresOfGrading	4.00	7.50
tblLandUse	LandUseSquareFeet	24,400.00	175,000.00
tblLandUse	LandUseSquareFeet	2,610.00	2,605.00

tblLandUse	LandUseSquareFeet	1,220.00	1,215.00
tblLandUse	LandUseSquareFeet	9,140.00	9,144.00
tblLandUse	LotAcreage	0.55	4.01
tblProjectCharacteristics	CO2IntensityFactor	641.35	445
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleEF	HHD	0.13	0.40
tblVehicleEF	HHD	0.13	0.40
tblVehicleEF	HHD	0.13	0.40
tblVehicleEF	LDA	0.36	0.22
tblVehicleEF	LDA	0.36	0.22
tblVehicleEF	LDA	0.36	0.22
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	MCY	4.8300e-003	0.01
tblVehicleEF	MCY	4.8300e-003	0.01
tblVehicleEF	MCY	4.8300e-003	0.01
tblVehicleEF	MDV	0.16	0.10
tblVehicleEF	MDV	0.16	0.10
tblVehicleEF	MDV	0.16	0.10
tblVehicleEF	MH	2.0520e-003	0.02

tblVehicleEF	MH	2.0520e-003	0.02
tblVehicleEF	MH	2.0520e-003	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	OBUS	8.4400e-004	6.5138e-003
tblVehicleEF	OBUS	8.4400e-004	6.5138e-003
tblVehicleEF	OBUS	8.4400e-004	6.5138e-003
tblVehicleEF	SBUS	1.0880e-003	0.00
tblVehicleEF	SBUS	1.0880e-003	0.00
tblVehicleEF	SBUS	1.0880e-003	0.00
tblVehicleEF	UBUS	8.3400e-004	6.5138e-003
tblVehicleEF	UBUS	8.3400e-004	6.5138e-003
tblVehicleEF	UBUS	8.3400e-004	6.5138e-003
tblVehicleTrips	ST_TR	863.10	145.51
tblVehicleTrips	ST_TR	696.00	509.57
tblVehicleTrips	ST_TR	162.78	55.41
tblVehicleTrips	ST_TR	158.37	127.15
tblVehicleTrips	SU_TR	758.45	145.51
tblVehicleTrips	SU_TR	500.00	509.57
tblVehicleTrips	SU_TR	162.78	55.41
tblVehicleTrips	SU_TR	131.84	127.15
tblVehicleTrips	WD_TR	737.99	145.51
tblVehicleTrips	WD_TR	716.00	509.57
tblVehicleTrips	WD_TR	162.78	55.41

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.3494	54.7225	42.1998	0.0426	18.2141	2.9399	21.1540	9.9699	2.7047	12.6746	0.0000	4,221.2715	4,221.2715	1.2347	0.0000	4,247.1995
2017	6.3001	2.2552	2.7154	4.6900e-003	0.1314	0.1743	0.3058	0.0349	0.1743	0.2091	0.0000	414.8385	414.8385	0.0365	0.0000	415.6051
Total	**12.6495**	**56.9777**	**44.9152**	**0.0473**	**18.3456**	**3.1142**	**21.4598**	**10.0048**	**2.8789**	**12.8837**	**0.0000**	**4,636.1100**	**4,636.1100**	**1.2712**	**0.0000**	**4,662.8046**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.3494	19.5486	28.1475	0.0426	7.0068	0.9916	7.9691	3.8251	0.9874	4.7872	0.0000	4,221.2715	4,221.2715	1.2347	0.0000	4,247.1995
2017	6.3001	2.2552	2.7154	4.6900e-003	0.0857	0.1743	0.2601	0.0237	0.1743	0.1979	0.0000	414.8385	414.8385	0.0365	0.0000	415.6051
Total	**12.6495**	**21.8038**	**30.8629**	**0.0473**	**7.0926**	**1.1659**	**8.2291**	**3.8487**	**1.1616**	**4.9851**	**0.0000**	**4,636.1100**	**4,636.1100**	**1.2712**	**0.0000**	**4,662.8046**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**61.73**	**31.29**	**0.00**	**61.34**	**62.56**	**61.65**	**61.53**	**59.65**	**61.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.2331	1.0000e-004	0.0104	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0214	0.0214	6.0000e-005		0.0227
Energy	0.0292	0.2650	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0115	318.0115	6.1000e-003	5.8300e-003	319.9469
Mobile	47.4312	113.9862	457.5017	0.2838	9.2130	1.4342	10.6471	2.4984	1.3111	3.8094		27,268.8551	27,268.8551	0.6580		27,282.6729
Total	**51.6935**	**114.2513**	**457.7346**	**0.2854**	**9.2130**	**1.4543**	**10.6673**	**2.4984**	**1.3313**	**3.8296**		**27,586.8880**	**27,586.8880**	**0.6642**	**5.8300e-003**	**27,602.6424**

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	1/1/2016	1/7/2016	5	5	
2	Grading	Grading	1/8/2016	1/19/2016	5	8	
3	Building Construction	Building Construction	1/20/2016	5/17/2016	5	85	
4	Paving	Paving	5/18/2016	9/13/2016	5	85	
5	Architectural Coating	Architectural Coating	9/14/2016	1/10/2017	5	85	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 32,403; Non-Residential Outdoor: 10,801 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	79.00	31.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**		**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

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	0.1027	0.0901	1.0946	1.9400e-003	0.1479	1.1900e-003	0.1491	0.0392	1.0800e-003	0.0403		156.2662	156.2662	8.5200e-003		156.4451
Total	**0.1027**	**0.0901**	**1.0946**	**1.9400e-003**	**0.1479**	**1.1900e-003**	**0.1491**	**0.0392**	**1.0800e-003**	**0.0403**		**156.2662**	**156.2662**	**8.5200e-003**		**156.4451**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.9103	0.0000	6.9103	3.7985	0.0000	3.7985			0.0000			0.0000
Off-Road	0.9515	19.4584	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**0.9515**	**19.4584**	**23.4003**	**0.0391**	**6.9103**	**0.9611**	**7.8714**	**3.7985**	**0.9611**	**4.7596**	**0.0000**	**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

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	0.1027	0.0901	1.0946	1.9400e-003	0.0965	1.1900e-003	0.0977	0.0266	1.0800e-003	0.0277		156.2662	156.2662	8.5200e-003		156.4451
Total	**0.1027**	**0.0901**	**1.0946**	**1.9400e-003**	**0.0965**	**1.1900e-003**	**0.0977**	**0.0266**	**1.0800e-003**	**0.0277**		**156.2662**	**156.2662**	**8.5200e-003**		**156.4451**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0163	0.0000	7.0163	3.4176	0.0000	3.4176			0.0000			0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225		3,093.7889	3,093.7889	0.9332		3,113.3860
Total	**3.6669**	**38.4466**	**26.0787**	**0.0298**	**7.0163**	**2.1984**	**9.2147**	**3.4176**	**2.0225**	**5.4401**		**3,093.7889**	**3,093.7889**	**0.9332**		**3,113.3860**

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	0.0855	0.0751	0.9121	1.6200e-003	0.1232	9.9000e-004	0.1242	0.0327	9.0000e-004	0.0336		130.2219	130.2219	7.1000e-003		130.3709
Total	**0.0855**	**0.0751**	**0.9121**	**1.6200e-003**	**0.1232**	**9.9000e-004**	**0.1242**	**0.0327**	**9.0000e-004**	**0.0336**		**130.2219**	**130.2219**	**7.1000e-003**		**130.3709**

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					2.6837	0.0000	2.6837	1.3072	0.0000	1.3072			0.0000			0.0000
Off-Road	0.7250	14.8148	20.3762	0.0298		0.7854	0.7854		0.7854	0.7854	0.0000	3,093.7889	3,093.7889	0.9332		3,113.3860
Total	**0.7250**	**14.8148**	**20.3762**	**0.0298**	**2.6837**	**0.7854**	**3.4692**	**1.3072**	**0.7854**	**2.0927**	**0.0000**	**3,093.7889**	**3,093.7889**	**0.9332**		**3,113.3860**

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	0.0855	0.0751	0.9121	1.6200e-003	0.0804	9.9000e-004	0.0814	0.0222	9.0000e-004	0.0231		130.2219	130.2219	7.1000e-003		130.3709
Total	**0.0855**	**0.0751**	**0.9121**	**1.6200e-003**	**0.0804**	**9.9000e-004**	**0.0814**	**0.0222**	**9.0000e-004**	**0.0231**		**130.2219**	**130.2219**	**7.1000e-003**		**130.3709**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

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	0.5088	2.6750	5.0552	7.3000e-003	0.2031	0.0450	0.2480	0.0576	0.0413	0.0988		727.7186	727.7186	5.5500e-003		727.8351
Worker	0.4505	0.3956	4.8039	8.5200e-003	0.6490	5.2200e-003	0.6542	0.1721	4.7500e-003	0.1769		685.8351	685.8351	0.0374		686.6201
Total	**0.9593**	**3.0706**	**9.8591**	**0.0158**	**0.8520**	**0.0502**	**0.9022**	**0.2297**	**0.0460**	**0.2757**		**1,413.5536**	**1,413.5536**	**0.0429**		**1,414.4552**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1276	14.2859	18.2884	0.0268		0.9414	0.9414		0.9414	0.9414	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**1.1276**	**14.2859**	**18.2884**	**0.0268**		**0.9414**	**0.9414**		**0.9414**	**0.9414**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

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	0.5088	2.6750	5.0552	7.3000e-003	0.1432	0.0450	0.1882	0.0429	0.0413	0.0841		727.7186	727.7186	5.5500e-003		727.8351
Worker	0.4505	0.3956	4.8039	8.5200e-003	0.4234	5.2200e-003	0.4286	0.1168	4.7500e-003	0.1215		685.8351	685.8351	0.0374		686.6201
Total	**0.9593**	**3.0706**	**9.8591**	**0.0158**	**0.5666**	**0.0502**	**0.6168**	**0.1596**	**0.0460**	**0.2056**		**1,413.5536**	**1,413.5536**	**0.0429**		**1,414.4552**

3.5 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588		1,913.9557
Paving	0.1236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9192**	**18.3417**	**12.5623**	**0.0186**		**1.1065**	**1.1065**		**1.0198**	**1.0198**		**1,902.2212**	**1,902.2212**	**0.5588**		**1,913.9557**

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	0.1141	0.1002	1.2162	2.1600e-003	0.1643	1.3200e-003	0.1656	0.0436	1.2000e-003	0.0448		173.6291	173.6291	9.4600e-003		173.8279
Total	**0.1141**	**0.1002**	**1.2162**	**2.1600e-003**	**0.1643**	**1.3200e-003**	**0.1656**	**0.0436**	**1.2000e-003**	**0.0448**		**173.6291**	**173.6291**	**9.4600e-003**		**173.8279**

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	0.4322	8.9586	13.3248	0.0186		0.5183	0.5183		0.5183	0.5183	0.0000	1,902.2212	1,902.2212	0.5588		1,913.9557
Paving	0.1236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5558**	**8.9586**	**13.3248**	**0.0186**		**0.5183**	**0.5183**		**0.5183**	**0.5183**	**0.0000**	**1,902.2212**	**1,902.2212**	**0.5588**		**1,913.9557**

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	0.1141	0.1002	1.2162	2.1600e-003	0.1072	1.3200e-003	0.1085	0.0296	1.2000e-003	0.0308		173.6291	173.6291	9.4600e-003		173.8279
Total	**0.1141**	**0.1002**	**1.2162**	**2.1600e-003**	**0.1072**	**1.3200e-003**	**0.1085**	**0.0296**	**1.2000e-003**	**0.0308**		**173.6291**	**173.6291**	**9.4600e-003**		**173.8279**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8897					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**6.2582**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0912	0.0801	0.9729	1.7300e-003	0.1314	1.0600e-003	0.1325	0.0349	9.6000e-004	0.0358		138.9033	138.9033	7.5700e-003		139.0623
Total	**0.0912**	**0.0801**	**0.9729**	**1.7300e-003**	**0.1314**	**1.0600e-003**	**0.1325**	**0.0349**	**9.6000e-004**	**0.0358**		**138.9033**	**138.9033**	**7.5700e-003**		**139.0623**

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	5.8897					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**6.2582**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0912	0.0801	0.9729	1.7300e-003	0.0857	1.0600e-003	0.0868	0.0237	9.6000e-004	0.0246		138.9033	138.9033	7.5700e-003		139.0623
Total	**0.0912**	**0.0801**	**0.9729**	**1.7300e-003**	**0.0857**	**1.0600e-003**	**0.0868**	**0.0237**	**9.6000e-004**	**0.0246**		**138.9033**	**138.9033**	**7.5700e-003**		**139.0623**

3.6 Architectural Coating - 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					
Archit. Coating	5.8897					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**6.2220**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0780	0.0702	0.8474	1.7200e-003	0.1314	1.0000e-003	0.1324	0.0349	9.2000e-004	0.0358		133.3905	133.3905	6.7900e-003		133.5330
Total	**0.0780**	**0.0702**	**0.8474**	**1.7200e-003**	**0.1314**	**1.0000e-003**	**0.1324**	**0.0349**	**9.2000e-004**	**0.0358**		**133.3905**	**133.3905**	**6.7900e-003**		**133.5330**

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	5.8897					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**6.2220**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0780	0.0702	0.8474	1.7200e-003	0.0857	1.0000e-003	0.0867	0.0237	9.2000e-004	0.0246		133.3905	133.3905	6.7900e-003		133.5330
Total	**0.0780**	**0.0702**	**0.8474**	**1.7200e-003**	**0.0857**	**1.0000e-003**	**0.0867**	**0.0237**	**9.2000e-004**	**0.0246**		**133.3905**	**133.3905**	**6.7900e-003**		**133.5330**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	47.4312	113.9862	457.5017	0.2838	9.2130	1.4342	10.6471	2.4984	1.3111	3.8094		27,268.8551	27,268.8551	0.6580		27,282.6729

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	1,329.96	1,329.96	1329.96	1,012,868	1,012,868
Fast Food Restaurant w/o Drive Thru	1,329.98	1,329.98	1329.98	2,144,680	2,144,680
Gasoline/Service Station	1,329.84	1,329.84	1329.84	766,212	766,212
High Turnover (Sit Down Restaurant)	155.12	155.12	155.12	179,984	179,984
Parking Lot	0.00	0.00	0.00		
Total	4,144.90	4,144.90	4,144.90	4,103,743	4,103,743

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
Fast Food Restaurant w/o Drive Thru	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59
High Turnover (Sit Down Restaurant)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.224608	0.031846	0.115561	0.095778	0.057419	0.012063	0.019783	0.400965	0.006514	0.006514	0.012063	0.000000	0.016888

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Unmitigated	0.0292	0.2650	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0115	318.0115	6.1000e-003	5.8300e-003	319.9469

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					
Fast Food Restaurant w/o Drive Thru	1515.11	0.0163	0.1485	0.1248	8.9000e-004		0.0113	0.0113		0.0113	0.0113		178.2483	178.2483	3.4200e-003	3.2700e-003	179.3331
Gasoline/Service Station	201.992	2.1800e-003	0.0198	0.0166	1.2000e-004		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003		23.7638	23.7638	4.6000e-004	4.4000e-004	23.9084
High Turnover (Sit Down Restaurant)	706.664	7.6200e-003	0.0693	0.0582	4.2000e-004		5.2700e-003	5.2700e-003		5.2700e-003	5.2700e-003		83.1369	83.1369	1.5900e-003	1.5200e-003	83.6429
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Convenience Market (24 Hour)	279.33	3.0100e-003	0.0274	0.0230	1.6000e-004		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003		32.8624	32.8624	6.3000e-004	6.0000e-004	33.0624
Total		**0.0292**	**0.2650**	**0.2226**	**1.5900e-003**		**0.0202**	**0.0202**		**0.0202**	**0.0202**		**318.0115**	**318.0115**	**6.1000e-003**	**5.8300e-003**	**319.9469**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	4.2331	1.0000e-004	0.0104	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0214	0.0214	6.0000e-005		0.0227

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1372					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.0949					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0200e-003	1.0000e-004	0.0104	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0214	0.0214	6.0000e-005		0.0227
Total	**4.2331**	**1.0000e-004**	**0.0104**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0214**	**0.0214**	**6.0000e-005**		**0.0227**

Pilot Flying J Travel Center

Glenn County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	61.00	Space	4.01	175,000.00	0
Fast Food Restaurant w/o Drive Thru	2.61	1000sqft	0.06	2,605.00	0
High Turnover (Sit Down Restaurant)	1.22	1000sqft	0.03	1,215.00	0
Convenience Market (24 Hour)	9.14	1000sqft	0.21	9,144.00	0
Gasoline/Service Station	24.00	Pump	0.08	3,388.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	61
Climate Zone	3			**Operational Year**	2015
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	445	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2012 CO2 Intensity Factor

Land Use - Accounts for 12,964 square foot building with 3,820 s.f of restaurant space & 9,144 s.f. of retail/truck stip services

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Grading - Project site= 7.5 acres

Vehicle Trips - Trip generation per Traffic Impact Analysis

Construction Off-road Equipment Mitigation - Mitigation measure MM 3.1.2

Vechicle Emission Factors - Fleet mix per Traffic Impact Analysis

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
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	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	85.00
tblConstructionPhase	NumDays	230.00	85.00
tblConstructionPhase	NumDays	18.00	85.00
tblGrading	AcresOfGrading	4.00	7.50
tblLandUse	LandUseSquareFeet	24,400.00	175,000.00
tblLandUse	LandUseSquareFeet	2,610.00	2,605.00

tblLandUse	LandUseSquareFeet	1,220.00	1,215.00
tblLandUse	LandUseSquareFeet	9,140.00	9,144.00
tblLandUse	LotAcreage	0.55	4.01
tblProjectCharacteristics	CO2IntensityFactor	641.35	445
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleEF	HHD	0.13	0.40
tblVehicleEF	HHD	0.13	0.40
tblVehicleEF	HHD	0.13	0.40
tblVehicleEF	LDA	0.36	0.22
tblVehicleEF	LDA	0.36	0.22
tblVehicleEF	LDA	0.36	0.22
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	MCY	4.8300e-003	0.01
tblVehicleEF	MCY	4.8300e-003	0.01
tblVehicleEF	MCY	4.8300e-003	0.01
tblVehicleEF	MDV	0.16	0.10
tblVehicleEF	MDV	0.16	0.10
tblVehicleEF	MDV	0.16	0.10
tblVehicleEF	MH	2.0520e-003	0.02

tblVehicleEF	MH	2.0520e-003	0.02
tblVehicleEF	MH	2.0520e-003	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	OBUS	8.4400e-004	6.5138e-003
tblVehicleEF	OBUS	8.4400e-004	6.5138e-003
tblVehicleEF	OBUS	8.4400e-004	6.5138e-003
tblVehicleEF	SBUS	1.0880e-003	0.00
tblVehicleEF	SBUS	1.0880e-003	0.00
tblVehicleEF	SBUS	1.0880e-003	0.00
tblVehicleEF	UBUS	8.3400e-004	6.5138e-003
tblVehicleEF	UBUS	8.3400e-004	6.5138e-003
tblVehicleEF	UBUS	8.3400e-004	6.5138e-003
tblVehicleTrips	ST_TR	863.10	145.51
tblVehicleTrips	ST_TR	696.00	509.57
tblVehicleTrips	ST_TR	162.78	55.41
tblVehicleTrips	ST_TR	158.37	127.15
tblVehicleTrips	SU_TR	758.45	145.51
tblVehicleTrips	SU_TR	500.00	509.57
tblVehicleTrips	SU_TR	162.78	55.41
tblVehicleTrips	SU_TR	131.84	127.15
tblVehicleTrips	WD_TR	737.99	145.51
tblVehicleTrips	WD_TR	716.00	509.57
tblVehicleTrips	WD_TR	162.78	55.41

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.3377	54.7451	42.1323	0.0416	18.2141	2.9399	21.1540	9.9699	2.7047	12.6746	0.0000	4,201.7795	4,201.7795	1.2347	0.0000	4,227.7075
2017	6.2893	2.2728	2.6567	4.4800e-003	0.1314	0.1743	0.3058	0.0349	0.1743	0.2091	0.0000	398.1737	398.1737	0.0365	0.0000	398.9403
Total	**12.6270**	**57.0179**	**44.7889**	**0.0460**	**18.3456**	**3.1142**	**21.4598**	**10.0048**	**2.8789**	**12.8837**	**0.0000**	**4,599.9532**	**4,599.9532**	**1.2712**	**0.0000**	**4,626.6477**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.3377	19.5712	30.7472	0.0416	7.0068	0.9922	7.9691	3.8251	0.9880	4.7872	0.0000	4,201.7795	4,201.7795	1.2347	0.0000	4,227.7075
2017	6.2893	2.2728	2.6567	4.4800e-003	0.0857	0.1743	0.2601	0.0237	0.1743	0.1979	0.0000	398.1737	398.1737	0.0365	0.0000	398.9403
Total	**12.6270**	**21.8440**	**33.4039**	**0.0460**	**7.0926**	**1.1665**	**8.2291**	**3.8487**	**1.1622**	**4.9851**	**0.0000**	**4,599.9532**	**4,599.9532**	**1.2712**	**0.0000**	**4,626.6477**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**61.69**	**25.42**	**0.00**	**61.34**	**62.54**	**61.65**	**61.53**	**59.63**	**61.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.2331	1.0000e-004	0.0104	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0214	0.0214	6.0000e-005		0.0227
Energy	0.0292	0.2650	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0115	318.0115	6.1000e-003	5.8300e-003	319.9469
Mobile	60.5463	122.4010	718.5897	0.2781	9.2130	1.4678	10.6807	2.4984	1.3420	3.8404		26,339.1521	26,339.1521	0.6706		26,353.2343
Total	**64.8086**	**122.6662**	**718.8226**	**0.2797**	**9.2130**	**1.4880**	**10.7009**	**2.4984**	**1.3622**	**3.8606**		**26,657.1850**	**26,657.1850**	**0.6767**	**5.8300e-003**	**26,673.2039**

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	1/1/2016	1/7/2016	5	5	
2	Grading	Grading	1/8/2016	1/19/2016	5	8	
3	Building Construction	Building Construction	1/20/2016	5/17/2016	5	85	
4	Paving	Paving	5/18/2016	9/13/2016	5	85	
5	Architectural Coating	Architectural Coating	9/14/2016	1/10/2017	5	85	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 32,403; Non-Residential Outdoor: 10,801 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	79.00	31.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**		**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

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	0.0895	0.1128	1.0270	1.7000e-003	0.1479	1.1900e-003	0.1491	0.0392	1.0800e-003	0.0403		136.7742	136.7742	8.5200e-003		136.9531
Total	**0.0895**	**0.1128**	**1.0270**	**1.7000e-003**	**0.1479**	**1.1900e-003**	**0.1491**	**0.0392**	**1.0800e-003**	**0.0403**		**136.7742**	**136.7742**	**8.5200e-003**		**136.9531**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.9103	0.0000	6.9103	3.7985	0.0000	3.7985			0.0000			0.0000
Off-Road	0.9515	19.4584	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**0.9515**	**19.4584**	**23.4003**	**0.0391**	**6.9103**	**0.9611**	**7.8714**	**3.7985**	**0.9611**	**4.7596**	**0.0000**	**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

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	0.0895	0.1128	1.0270	1.7000e-003	0.0965	1.1900e-003	0.0977	0.0266	1.0800e-003	0.0277		136.7742	136.7742	8.5200e-003		136.9531
Total	**0.0895**	**0.1128**	**1.0270**	**1.7000e-003**	**0.0965**	**1.1900e-003**	**0.0977**	**0.0266**	**1.0800e-003**	**0.0277**		**136.7742**	**136.7742**	**8.5200e-003**		**136.9531**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0163	0.0000	7.0163	3.4176	0.0000	3.4176			0.0000			0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225		3,093.7889	3,093.7889	0.9332		3,113.3860
Total	**3.6669**	**38.4466**	**26.0787**	**0.0298**	**7.0163**	**2.1984**	**9.2147**	**3.4176**	**2.0225**	**5.4401**		**3,093.7889**	**3,093.7889**	**0.9332**		**3,113.3860**

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	0.0746	0.0940	0.8558	1.4200e-003	0.1232	9.9000e-004	0.1242	0.0327	9.0000e-004	0.0336		113.9785	113.9785	7.1000e-003		114.1276
Total	**0.0746**	**0.0940**	**0.8558**	**1.4200e-003**	**0.1232**	**9.9000e-004**	**0.1242**	**0.0327**	**9.0000e-004**	**0.0336**		**113.9785**	**113.9785**	**7.1000e-003**		**114.1276**

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					2.6837	0.0000	2.6837	1.3072	0.0000	1.3072			0.0000			0.0000
Off-Road	0.7250	14.8148	20.3762	0.0298		0.7854	0.7854		0.7854	0.7854	0.0000	3,093.7889	3,093.7889	0.9332		3,113.3860
Total	**0.7250**	**14.8148**	**20.3762**	**0.0298**	**2.6837**	**0.7854**	**3.4692**	**1.3072**	**0.7854**	**2.0927**	**0.0000**	**3,093.7889**	**3,093.7889**	**0.9332**		**3,113.3860**

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	0.0746	0.0940	0.8558	1.4200e-003	0.0804	9.9000e-004	0.0814	0.0222	9.0000e-004	0.0231		113.9785	113.9785	7.1000e-003		114.1276
Total	**0.0746**	**0.0940**	**0.8558**	**1.4200e-003**	**0.0804**	**9.9000e-004**	**0.0814**	**0.0222**	**9.0000e-004**	**0.0231**		**113.9785**	**113.9785**	**7.1000e-003**		**114.1276**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

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	0.6973	2.8617	7.9514	7.2900e-003	0.2031	0.0456	0.2487	0.0576	0.0418	0.0994		722.0795	722.0795	5.7000e-003		722.1992
Worker	0.3927	0.4951	4.5074	7.4500e-003	0.6490	5.2200e-003	0.6542	0.1721	4.7500e-003	0.1769		600.2868	600.2868	0.0374		601.0719
Total	**1.0900**	**3.3568**	**12.4588**	**0.0147**	**0.8520**	**0.0508**	**0.9029**	**0.2297**	**0.0466**	**0.2763**		**1,322.3663**	**1,322.3663**	**0.0431**		**1,323.2711**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1276	14.2859	18.2884	0.0268		0.9414	0.9414		0.9414	0.9414	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**1.1276**	**14.2859**	**18.2884**	**0.0268**		**0.9414**	**0.9414**		**0.9414**	**0.9414**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

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	0.6973	2.8617	7.9514	7.2900e-003	0.1432	0.0456	0.1888	0.0429	0.0418	0.0847		722.0795	722.0795	5.7000e-003		722.1992
Worker	0.3927	0.4951	4.5074	7.4500e-003	0.4234	5.2200e-003	0.4286	0.1168	4.7500e-003	0.1215		600.2868	600.2868	0.0374		601.0719
Total	**1.0900**	**3.3568**	**12.4588**	**0.0147**	**0.5666**	**0.0508**	**0.6174**	**0.1596**	**0.0466**	**0.2062**		**1,322.3663**	**1,322.3663**	**0.0431**		**1,323.2711**

3.5 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588		1,913.9557
Paving	0.1236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9192**	**18.3417**	**12.5623**	**0.0186**		**1.1065**	**1.1065**		**1.0198**	**1.0198**		**1,902.2212**	**1,902.2212**	**0.5588**		**1,913.9557**

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	0.0994	0.1253	1.1411	1.8900e-003	0.1643	1.3200e-003	0.1656	0.0436	1.2000e-003	0.0448		151.9714	151.9714	9.4600e-003		152.1701
Total	**0.0994**	**0.1253**	**1.1411**	**1.8900e-003**	**0.1643**	**1.3200e-003**	**0.1656**	**0.0436**	**1.2000e-003**	**0.0448**		**151.9714**	**151.9714**	**9.4600e-003**		**152.1701**

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	0.4322	8.9586	13.3248	0.0186		0.5183	0.5183		0.5183	0.5183	0.0000	1,902.2212	1,902.2212	0.5588		1,913.9557
Paving	0.1236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5558**	**8.9586**	**13.3248**	**0.0186**		**0.5183**	**0.5183**		**0.5183**	**0.5183**	**0.0000**	**1,902.2212**	**1,902.2212**	**0.5588**		**1,913.9557**

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	0.0994	0.1253	1.1411	1.8900e-003	0.1072	1.3200e-003	0.1085	0.0296	1.2000e-003	0.0308		151.9714	151.9714	9.4600e-003		152.1701
Total	**0.0994**	**0.1253**	**1.1411**	**1.8900e-003**	**0.1072**	**1.3200e-003**	**0.1085**	**0.0296**	**1.2000e-003**	**0.0308**		**151.9714**	**151.9714**	**9.4600e-003**		**152.1701**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.8897					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**6.2582**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0795	0.1003	0.9129	1.5100e-003	0.1314	1.0600e-003	0.1325	0.0349	9.6000e-004	0.0358		121.5771	121.5771	7.5700e-003		121.7361
Total	**0.0795**	**0.1003**	**0.9129**	**1.5100e-003**	**0.1314**	**1.0600e-003**	**0.1325**	**0.0349**	**9.6000e-004**	**0.0358**		**121.5771**	**121.5771**	**7.5700e-003**		**121.7361**

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	5.8897					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**6.2582**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0795	0.1003	0.9129	1.5100e-003	0.0857	1.0600e-003	0.0868	0.0237	9.6000e-004	0.0246		121.5771	121.5771	7.5700e-003		121.7361
Total	**0.0795**	**0.1003**	**0.9129**	**1.5100e-003**	**0.0857**	**1.0600e-003**	**0.0868**	**0.0237**	**9.6000e-004**	**0.0246**		**121.5771**	**121.5771**	**7.5700e-003**		**121.7361**

3.6 Architectural Coating - 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					
Archit. Coating	5.8897					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**6.2220**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0672	0.0877	0.7886	1.5100e-003	0.1314	1.0000e-003	0.1324	0.0349	9.2000e-004	0.0358		116.7256	116.7256	6.7900e-003		116.8682
Total	**0.0672**	**0.0877**	**0.7886**	**1.5100e-003**	**0.1314**	**1.0000e-003**	**0.1324**	**0.0349**	**9.2000e-004**	**0.0358**		**116.7256**	**116.7256**	**6.7900e-003**		**116.8682**

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	5.8897					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**6.2220**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0672	0.0877	0.7886	1.5100e-003	0.0857	1.0000e-003	0.0867	0.0237	9.2000e-004	0.0246		116.7256	116.7256	6.7900e-003		116.8682
Total	**0.0672**	**0.0877**	**0.7886**	**1.5100e-003**	**0.0857**	**1.0000e-003**	**0.0867**	**0.0237**	**9.2000e-004**	**0.0246**		**116.7256**	**116.7256**	**6.7900e-003**		**116.8682**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	60.5463	122.4010	718.5897	0.2781	9.2130	1.4678	10.6807	2.4984	1.3420	3.8404		26,339.1521	26,339.1521	0.6706		26,353.2343

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	1,329.96	1,329.96	1329.96	1,012,868	1,012,868
Fast Food Restaurant w/o Drive Thru	1,329.98	1,329.98	1329.98	2,144,680	2,144,680
Gasoline/Service Station	1,329.84	1,329.84	1329.84	766,212	766,212
High Turnover (Sit Down Restaurant)	155.12	155.12	155.12	179,984	179,984
Parking Lot	0.00	0.00	0.00		
Total	4,144.90	4,144.90	4,144.90	4,103,743	4,103,743

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
Fast Food Restaurant w/o Drive Thru	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59
High Turnover (Sit Down Restaurant)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.224608	0.031846	0.115561	0.095778	0.057419	0.012063	0.019783	0.400965	0.006514	0.006514	0.012063	0.000000	0.016888

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Unmitigated	0.0292	0.2650	0.2226	1.5900e-003		0.0201	0.0201		0.0201	0.0201		318.0115	318.0115	6.1000e-003	5.8300e-003	319.9469

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					
Fast Food Restaurant w/o Drive Thru	1515.11	0.0163	0.1485	0.1248	8.9000e-004		0.0113	0.0113		0.0113	0.0113		178.2483	178.2483	3.4200e-003	3.2700e-003	179.3331
Gasoline/Service Station	201.992	2.1800e-003	0.0198	0.0166	1.2000e-004		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003		23.7638	23.7638	4.6000e-004	4.4000e-004	23.9084
High Turnover (Sit Down Restaurant)	706.664	7.6200e-003	0.0693	0.0582	4.2000e-004		5.2700e-003	5.2700e-003		5.2700e-003	5.2700e-003		83.1369	83.1369	1.5900e-003	1.5200e-003	83.6429
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Convenience Market (24 Hour)	279.33	3.0100e-003	0.0274	0.0230	1.6000e-004		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003		32.8624	32.8624	6.3000e-004	6.0000e-004	33.0624
Total		**0.0292**	**0.2650**	**0.2226**	**1.5900e-003**		**0.0202**	**0.0202**		**0.0202**	**0.0202**		**318.0115**	**318.0115**	**6.1000e-003**	**5.8300e-003**	**319.9469**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	4.2331	1.0000e-004	0.0104	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0214	0.0214	6.0000e-005		0.0227

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1372					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.0949					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0200e-003	1.0000e-004	0.0104	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0214	0.0214	6.0000e-005		0.0227
Total	**4.2331**	**1.0000e-004**	**0.0104**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0214**	**0.0214**	**6.0000e-005**		**0.0227**

Westside Annexation Area

Glenn County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Strip Mall	44.00	1000sqft	1.70	44,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	61
Climate Zone	3				
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	445	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2012 CO2 Intensity Factor

Land Use - Accounts for 44,000 square feet of commercial building space

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Grading - Project site= 1.7 acres

Construction Off-road Equipment Mitigation -

Energy Use - 2012 CO2 Intensity factor

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	PhaseEndDate	7/21/2017	10/14/2016
tblConstructionPhase	PhaseEndDate	7/21/2017	10/14/2016
tblConstructionPhase	PhaseStartDate	10/15/2016	1/9/2016
tblConstructionPhase	PhaseStartDate	10/15/2016	1/9/2016
tblLandUse	LotAcreage	1.01	1.70
tblProjectCharacteristics	CO2IntensityFactor	641.35	445
tblProjectCharacteristics	OperationalYear	2014	2015

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	10.3316	36.8799	28.6450	0.0431	5.8653	2.3819	7.2643	2.9711	2.2691	4.2582	0.0000	4,121.5951	4,121.5951	0.9038	0.0000	4,140.5752
Total	**10.3316**	**36.8799**	**28.6450**	**0.0431**	**5.8653**	**2.3819**	**7.2643**	**2.9711**	**2.2691**	**4.2582**	**0.0000**	**4,121.5951**	**4,121.5951**	**0.9038**	**0.0000**	**4,140.5752**

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	1.2214	4.0000e-005	4.6500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.6300e-003	9.6300e-003	3.0000e-005		0.0102
Energy	0.0145	0.1318	0.1107	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1305	158.1305	3.0300e-003	2.9000e-003	159.0929
Mobile	14.5848	33.1894	123.1461	0.1308	6.4834	0.4396	6.9230	1.7414	0.4027	2.1441		12,105.0708	12,105.0708	0.5017		12,115.6061
Total	**15.8207**	**33.3212**	**123.2615**	**0.1316**	**6.4834**	**0.4496**	**6.9330**	**1.7414**	**0.4127**	**2.1541**		**12,263.2110**	**12,263.2110**	**0.5047**	**2.9000e-003**	**12,274.7092**

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	1/1/2016	1/4/2016	5	2	
2	Grading	Grading	1/5/2016	1/8/2016	5	4	
3	Building Construction	Building Construction	1/9/2016	10/14/2016	5	200	
4	Paving	Paving	1/9/2016	10/14/2016	5	200	
5	Architectural Coating	Architectural Coating	1/9/2016	10/14/2016	5	200	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 66,000; Non-Residential Outdoor: 22,000 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42

Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	14.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	2.4428	25.7718	16.5144	0.0171		1.3985	1.3985		1.2866	1.2866		1,781.0872	1,781.0872	0.5372		1,792.3693
Total	**2.4428**	**25.7718**	**16.5144**	**0.0171**	**5.7996**	**1.3985**	**7.1981**	**2.9537**	**1.2866**	**4.2403**		**1,781.0872**	**1,781.0872**	**0.5372**		**1,792.3693**

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	0.0456	0.0401	0.4865	8.6000e-004	0.0657	5.3000e-004	0.0663	0.0174	4.8000e-004	0.0179		69.4517	69.4517	3.7900e-003		69.5312
Total	**0.0456**	**0.0401**	**0.4865**	**8.6000e-004**	**0.0657**	**5.3000e-004**	**0.0663**	**0.0174**	**4.8000e-004**	**0.0179**		**69.4517**	**69.4517**	**3.7900e-003**		**69.5312**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.9908	21.0361	13.6704	0.0141		1.1407	1.1407		1.0494	1.0494		1,462.8468	1,462.8468	0.4413		1,472.1130
Total	**1.9908**	**21.0361**	**13.6704**	**0.0141**	**4.9143**	**1.1407**	**6.0549**	**2.5256**	**1.0494**	**3.5750**		**1,462.8468**	**1,462.8468**	**0.4413**		**1,472.1130**

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	0.0456	0.0401	0.4865	8.6000e-004	0.0657	5.3000e-004	0.0663	0.0174	4.8000e-004	0.0179		69.4517	69.4517	3.7900e-003		69.5312
Total	**0.0456**	**0.0401**	**0.4865**	**8.6000e-004**	**0.0657**	**5.3000e-004**	**0.0663**	**0.0174**	**4.8000e-004**	**0.0179**		**69.4517**	**69.4517**	**3.7900e-003**		**69.5312**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176		2,046.9432	2,046.9432	0.4499		2,056.3913
Total	**3.2915**	**20.5459**	**14.7074**	**0.0220**		**1.3656**	**1.3656**		**1.3176**	**1.3176**		**2,046.9432**	**2,046.9432**	**0.4499**		**2,056.3913**

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	0.1149	0.6040	1.1415	1.6500e-003	0.0459	0.0102	0.0560	0.0130	9.3200e-003	0.0223		164.3236	164.3236	1.2500e-003		164.3499
Worker	0.0798	0.0701	0.8513	1.5100e-003	0.1150	9.2000e-004	0.1159	0.0305	8.4000e-004	0.0314		121.5404	121.5404	6.6300e-003		121.6795
Total	**0.1947**	**0.6742**	**1.9928**	**3.1600e-003**	**0.1609**	**0.0111**	**0.1719**	**0.0435**	**0.0102**	**0.0537**		**285.8639**	**285.8639**	**7.8800e-003**		**286.0294**

3.5 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2872	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438		1,368.4366	1,368.4366	0.4053		1,376.9473
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2872**	**13.2076**	**9.0880**	**0.0133**		**0.8075**	**0.8075**		**0.7438**	**0.7438**		**1,368.4366**	**1,368.4366**	**0.4053**		**1,376.9473**

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	0.0741	0.0651	0.7905	1.4000e-003	0.1068	8.6000e-004	0.1077	0.0283	7.8000e-004	0.0291		112.8589	112.8589	6.1500e-003		112.9881
Total	**0.0741**	**0.0651**	**0.7905**	**1.4000e-003**	**0.1068**	**8.6000e-004**	**0.1077**	**0.0283**	**7.8000e-004**	**0.0291**		**112.8589**	**112.8589**	**6.1500e-003**		**112.9881**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.0985					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**5.4670**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0171	0.0150	0.1824	3.2000e-004	0.0246	2.0000e-004	0.0248	6.5400e-003	1.8000e-004	6.7200e-003		26.0444	26.0444	1.4200e-003		26.0742
Total	**0.0171**	**0.0150**	**0.1824**	**3.2000e-004**	**0.0246**	**2.0000e-004**	**0.0248**	**6.5400e-003**	**1.8000e-004**	**6.7200e-003**		**26.0444**	**26.0444**	**1.4200e-003**		**26.0742**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	14.5848	33.1894	123.1461	0.1308	6.4834	0.4396	6.9230	1.7414	0.4027	2.1441		12,105.0708	12,105.0708	0.5017		12,115.6061

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	1,950.08	1,849.76	898.92	2,749,857	2,749,857
Total	1,950.08	1,849.76	898.92	2,749,857	2,749,857

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.355139	0.043168	0.183149	0.160394	0.086453	0.010507	0.023108	0.128434	0.000844	0.000834	0.004830	0.001088	0.002052

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Unmitigated	0.0145	0.1318	0.1107	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1305	158.1305	3.0300e-003	2.9000e-003	159.0929

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					
Strip Mall	1344.11	0.0145	0.1318	0.1107	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1305	158.1305	3.0300e-003	2.9000e-003	159.0929
Total		**0.0145**	**0.1318**	**0.1107**	**7.9000e-004**		**0.0100**	**0.0100**		**0.0100**	**0.0100**		**158.1305**	**158.1305**	**3.0300e-003**	**2.9000e-003**	**159.0929**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	1.2214	4.0000e-005	4.6500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.6300e-003	9.6300e-003	3.0000e-005		0.0102

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9416					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.6000e-004	4.0000e-005	4.6500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.6300e-003	9.6300e-003	3.0000e-005		0.0102
Total	**1.2214**	**4.0000e-005**	**4.6500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**9.6300e-003**	**9.6300e-003**	**3.0000e-005**		**0.0102**

Westside Annexation Area

Glenn County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Strip Mall	44.00	1000sqft	1.70	44,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	61
Climate Zone	3				
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	445	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2012 CO2 Intensity Factor

Land Use - Accounts for 44,000 square feet of commercial building space

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Grading - Project site= 1.7 acres

Construction Off-road Equipment Mitigation -

Energy Use - 2012 CO2 Intensity factor

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	PhaseEndDate	7/21/2017	10/14/2016
tblConstructionPhase	PhaseEndDate	7/21/2017	10/14/2016
tblConstructionPhase	PhaseStartDate	10/15/2016	1/9/2016
tblConstructionPhase	PhaseStartDate	10/15/2016	1/9/2016
tblLandUse	LotAcreage	1.01	1.70
tblProjectCharacteristics	CO2IntensityFactor	641.35	445
tblProjectCharacteristics	OperationalYear	2014	2015

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	10.3522	36.9598	29.1864	0.0427	5.8653	2.3820	7.2643	2.9711	2.2692	4.2582	0.0000	4,087.8351	4,087.8351	0.9039	0.0000	4,106.8159
Total	**10.3522**	**36.9598**	**29.1864**	**0.0427**	**5.8653**	**2.3820**	**7.2643**	**2.9711**	**2.2692**	**4.2582**	**0.0000**	**4,087.8351**	**4,087.8351**	**0.9039**	**0.0000**	**4,106.8159**

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	1.2214	4.0000e-005	4.6500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.6300e-003	9.6300e-003	3.0000e-005		0.0102
Energy	0.0145	0.1318	0.1107	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1305	158.1305	3.0300e-003	2.9000e-003	159.0929
Mobile	16.1905	36.5200	167.1606	0.1228	6.4834	0.4457	6.9290	1.7414	0.4082	2.1497		11,334.9890	11,334.9890	0.5037		11,345.5657
Total	**17.4264**	**36.6518**	**167.2759**	**0.1236**	**6.4834**	**0.4557**	**6.9391**	**1.7414**	**0.4183**	**2.1597**		**11,493.1291**	**11,493.1291**	**0.5067**	**2.9000e-003**	**11,504.6688**

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	1/1/2016	1/4/2016	5	2	
2	Grading	Grading	1/5/2016	1/8/2016	5	4	
3	Building Construction	Building Construction	1/9/2016	10/14/2016	5	200	
4	Paving	Paving	1/9/2016	10/14/2016	5	200	
5	Architectural Coating	Architectural Coating	1/9/2016	10/14/2016	5	200	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 66,000; Non-Residential Outdoor: 22,000 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42

Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	14.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	2.4428	25.7718	16.5144	0.0171		1.3985	1.3985		1.2866	1.2866		1,781.0872	1,781.0872	0.5372		1,792.3693
Total	**2.4428**	**25.7718**	**16.5144**	**0.0171**	**5.7996**	**1.3985**	**7.1981**	**2.9537**	**1.2866**	**4.2403**		**1,781.0872**	**1,781.0872**	**0.5372**		**1,792.3693**

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	0.0398	0.0501	0.4565	7.5000e-004	0.0657	5.3000e-004	0.0663	0.0174	4.8000e-004	0.0179		60.7885	60.7885	3.7900e-003		60.8680
Total	**0.0398**	**0.0501**	**0.4565**	**7.5000e-004**	**0.0657**	**5.3000e-004**	**0.0663**	**0.0174**	**4.8000e-004**	**0.0179**		**60.7885**	**60.7885**	**3.7900e-003**		**60.8680**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.9908	21.0361	13.6704	0.0141		1.1407	1.1407		1.0494	1.0494		1,462.8468	1,462.8468	0.4413		1,472.1130
Total	**1.9908**	**21.0361**	**13.6704**	**0.0141**	**4.9143**	**1.1407**	**6.0549**	**2.5256**	**1.0494**	**3.5750**		**1,462.8468**	**1,462.8468**	**0.4413**		**1,472.1130**

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	0.0398	0.0501	0.4565	7.5000e-004	0.0657	5.3000e-004	0.0663	0.0174	4.8000e-004	0.0179		60.7885	60.7885	3.7900e-003		60.8680
Total	**0.0398**	**0.0501**	**0.4565**	**7.5000e-004**	**0.0657**	**5.3000e-004**	**0.0663**	**0.0174**	**4.8000e-004**	**0.0179**		**60.7885**	**60.7885**	**3.7900e-003**		**60.8680**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176		2,046.9432	2,046.9432	0.4499		2,056.3913
Total	**3.2915**	**20.5459**	**14.7074**	**0.0220**		**1.3656**	**1.3656**		**1.3176**	**1.3176**		**2,046.9432**	**2,046.9432**	**0.4499**		**2,056.3913**

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	0.1575	0.6462	1.7955	1.6500e-003	0.0459	0.0103	0.0562	0.0130	9.4400e-003	0.0224		163.0502	163.0502	1.2900e-003		163.0772
Worker	0.0696	0.0877	0.7988	1.3200e-003	0.1150	9.2000e-004	0.1159	0.0305	8.4000e-004	0.0314		106.3799	106.3799	6.6300e-003		106.5191
Total	**0.2270**	**0.7339**	**2.5943**	**2.9700e-003**	**0.1609**	**0.0112**	**0.1721**	**0.0435**	**0.0103**	**0.0538**		**269.4302**	**269.4302**	**7.9200e-003**		**269.5963**

3.5 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2872	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438		1,368.4366	1,368.4366	0.4053		1,376.9473
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2872**	**13.2076**	**9.0880**	**0.0133**		**0.8075**	**0.8075**		**0.7438**	**0.7438**		**1,368.4366**	**1,368.4366**	**0.4053**		**1,376.9473**

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	0.0815	0.7417	1.2300e-003	0.1068	8.6000e-004	0.1077	0.0283	7.8000e-004	0.0291		98.7814	98.7814	6.1500e-003		98.9106
Total	**0.0646**	**0.0815**	**0.7417**	**1.2300e-003**	**0.1068**	**8.6000e-004**	**0.1077**	**0.0283**	**7.8000e-004**	**0.0291**		**98.7814**	**98.7814**	**6.1500e-003**		**98.9106**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.0985					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**5.4670**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

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	0.0149	0.0188	0.1712	2.8000e-004	0.0246	2.0000e-004	0.0248	6.5400e-003	1.8000e-004	6.7200e-003		22.7957	22.7957	1.4200e-003		22.8255
Total	**0.0149**	**0.0188**	**0.1712**	**2.8000e-004**	**0.0246**	**2.0000e-004**	**0.0248**	**6.5400e-003**	**1.8000e-004**	**6.7200e-003**		**22.7957**	**22.7957**	**1.4200e-003**		**22.8255**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	16.1905	36.5200	167.1606	0.1228	6.4834	0.4457	6.9290	1.7414	0.4082	2.1497		11,334.9890	11,334.9890	0.5037		11,345.5657

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	1,950.08	1,849.76	898.92	2,749,857	2,749,857
Total	1,950.08	1,849.76	898.92	2,749,857	2,749,857

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.355139	0.043168	0.183149	0.160394	0.086453	0.010507	0.023108	0.128434	0.000844	0.000834	0.004830	0.001088	0.002052

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Unmitigated	0.0145	0.1318	0.1107	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1305	158.1305	3.0300e-003	2.9000e-003	159.0929

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					
Strip Mall	1344.11	0.0145	0.1318	0.1107	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.1305	158.1305	3.0300e-003	2.9000e-003	159.0929
Total		**0.0145**	**0.1318**	**0.1107**	**7.9000e-004**		**0.0100**	**0.0100**		**0.0100**	**0.0100**		**158.1305**	**158.1305**	**3.0300e-003**	**2.9000e-003**	**159.0929**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	1.2214	4.0000e-005	4.6500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.6300e-003	9.6300e-003	3.0000e-005		0.0102

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9416					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.6000e-004	4.0000e-005	4.6500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.6300e-003	9.6300e-003	3.0000e-005		0.0102
Total	**1.2214**	**4.0000e-005**	**4.6500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**9.6300e-003**	**9.6300e-003**	**3.0000e-005**		**0.0102**

APPENDIX 3.1-B - HEALTH RISK ASSESSMENT

PILOT FLYING J TRAVEL CENTER

HEALTH RISK ASSESSMENT

PREPARED BY

FEBRUARY 2015

1.0 INTRODUCTION

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1.0 INTRODUCTION

In 2005, the California Air Resources Board (CARB) promulgated an advisory recommendation to address the potential cancer risks from some common sources of toxic emissions such as high traffic volumes and gasoline dispensing facilities. The 2005 CARB Handbook identified the potential cancer risks at various distances from these sources and recommended buffer distances between those sources and receptors. Notwithstanding, CARB notes that a site specific analysis would be required to determine the actual risk near a particular land use and should consider factors such as prevailing wind direction, local topography and climate.

The proposed Pilot Flying J Travel Center would involve construction activities estimated to last 4 ½ month, numerous heavy-duty truck trips on-site daily and thus diesel particulate matter (PM) emissions, and gasoline dispensing facilities, all of which could potentially result in a negative effect to residences in the vicinity of the site. As such, a health risk assessment was prepared to assess the impact of these emissions on individuals residing at the proposed project site.

The assessment and dispersion modeling methodologies used in the preparation of this report were composed of all relevant and appropriate procedures presented by the U.S. Environmental Protection Agency and the California Office of Environmental Health Hazard Assessment (OEHHA). The methodologies and assumptions offered under this regulatory guidance were used to ensure that the assessment effectively quantified residential exposures associated with the generation of contaminant emissions from the proposed Pilot Flying J Travel Center.

This report summarizes the protocol used to evaluate contaminant exposures and presents the results of the health risk assessment (HRA) prepared by PMC for the proposed Pilot Flying J Travel Center.

1.1 PROJECT LOCATION

The proposed Pilot Flying J Travel Center is located at the southwest quadrant of Interstate 5 and Newville Road directly adjacent to the western city limits of Orland. The triangular shaped site is bordered to the northeast by Newville Road/County Road 200 and the southbound Interstate 5 on-ramp, to the west by County Road HH, and to the south by County Road 13. The property is located in Section 21, Township 22 North, Range 3 West, MDM, County of Glenn, California.

Land uses surrounding the Pilot Flying J Travel Center project site include agriculture, commercial, and residential uses. Directly west of the Pilot Flying J site is a hand-cultivated agricultural site and an occupied single family dwelling located at the southwest corner of County Road HH and Newville Road. The area north of the project site is the Newville Road/Interstate 5 interchange and, across Newville Road, commercial uses (gas station, fast food and sit-down restaurants, and offices). Northwest of the site, also across Newville Road, is a mobile home park. The Eagles Hall is also northwest of the site. East of the site and adjacent to both the Pilot Flying J project site is Interstate 5. South of the site is vacant land, a single family home and pasture land.

Those areas north of the project site are within the Orland city limits and have the General Plan land use designation of Commercial for the commercial areas and High Density Residential for the mobile home park. The lands south of the project site are in the unincorporated area of Glenn County and have the Glenn County General Plan land use designation of Service Commercial.

1.2 PROJECT DESCRIPTION

The proposed Pilot Flying J site is 7.5 acres in size and is currently vacant land. This land was used for agricultural purposes in the past; however, it is no longer used for that purpose. The Pilot Flying J project proposes the development of an automobile/truck fueling station and a 12,964 building including a fast food restaurant, retail convenience store, a deli and rental showers. The Pilot Flying J will be open 24 hours per day seven days per week and anticipates employing 75 persons. Project amenities are as follows:

Facilities

- Fueling facilities offering 9 diesel lanes (includes Diesel, Diesel Exhaust Fluid (DEF) and Bio Diesel), 12 gas lanes and 2 R.V. lanes
- CAT Certified Scales
- A 21.9 foot tall, 12,964 square foot commercial building that will include the following:
    - Driver's lounge, game room & payphones
    - Restroom Facilities, 7 showers for rent and public laundry
    - ATMS, Western Union, and Check Cashing
    - Wi-Fi Internet
    - A 2,585 square foot retail convenience store
    - A 1,215 square foot PJ Fresh Marketplace Deli
    - A 2,605 square foot Wendy's restaurant (1,140 sq. ft. dining & 1,465 sq. ft. kitchen)
    - A Cinnabon kiosk
- Dumpster enclosure
- 62 truck parking spaces (allowing overnight parking)
- 61 automobile parking spaces
- A 100 foot tall pole sign for interstate traffic
- A 38 foot tall goalpost sign along Newville Road
- Bio shed building (houses a mixing blender used to blend Diesel Fuel and B100 Fuel to sale the bio-diesel product)
- Transflo Express (trip documents)

Fuel Storage

- Two aboveground storage tank farms which include:
    - Six 12,000 gallon diesel fuel aboveground storage tanks
    - Two 12,000 gallon B100 fuel tanks aboveground storage tanks
- One 12,000 gallon Diesel Exhaust Fluid underground tank
- One 4,000 gallon Oil Water Separator underground tank
- One 25,000 gallon gasoline fuel underground storage tank
- One 1,000 gallon above ground propane storage tank

2.0 HEALTH RISK

Sensitive receptors near the Pilot Flying J site include a single-family residential home to the south (80 feet), with rural residences beyond (600+ feet), a single-family residential home adjacent to the southwest corner of the site (200 feet), and another single-family home adjacent to the northwest corner of the site (215 feet) with a mobile home park beyond (325 feet). In addition, single-family neighborhoods and planned single-family neighborhoods exist on the other side of Interstate 5 and to the east of the site (500+ feet).

Diesel-fuel construction equipment and heavy-duty truck vehicle emissions contribute significantly to localized concentrations of air contaminants. Typically, emissions generated from these sources are characterized by equipment/vehicle mix, the rate pollutants are generated during the course of travel and the number of vehicles operating. Currently, emission factors are generated from a series of computer based programs to produce a composite emission rate for vehicles traveling at various speeds within a defined geographical area. To account for the emission standards imposed on heavy-duty trucks, CARB has developed the EMFAC2011 emission factor model. EMFAC2011 was utilized to identify pollutant emission rates for diesel particulates (diesel PM) associated with the idling of heavy-duty trucks. In order to identify pollutant emission rates for diesel particulates associated with the travel of heavy-duty trucks, the California Emissions Estimator Model (CalEEMod) was employed. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The CalEEMod software itself utilizes EMFAC2011.

Fueling stations are a source of gasoline vapors that would include the pollutant, benzene, a carcinogen. Exposure to carcinogens can result in cancer. Gasoline vapors are also a source of the chemical emissions, toluene and xylene; however, these substances are not carcinogenic. Nonetheless, their exposure can still result in negative non-cancer health effects. Gasoline vapors would be released during the filling of the proposed stationary aboveground and underground storage tanks as well as during the transfer from those tanks to individual vehicles. Specifically, each of these substances are released during the filling of the stationary aboveground and underground storage tanks, the transfer from those tanks to individual vehicles, as well as accidental spillage. Emission rates of benzene, toluene, and xylene were obtained from the Mall Health Risk Screening Tool (2012) authored by the San Joaquin Valley Air Pollution Control District, and coupled with the amount of fuel that would be dispensed from the proposed Travel Center, as estimated by the applicant. The Pilot Flying J Travel Center applicant estimates dispensing 7,500 gallons of automotive fuel and 40,000 gallons of diesel fuel daily.

Employing the identified emissions rates from the various air pollutant sources that would be generated by the proposed Travel Center, quantification of diesel PM, benzene, toluene, and xylene were modeled for using the EPA's AERMOD air toxic dispersion model. AERMOD is a steady-state plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. AERMOD can be employed to generally map the dispersion of pollutants from the Pilot Flying J site.

2.0 HEALTH RISK

2.1 CONSTRUCTION-GENERATED DIESEL PARTICULATE MATTER

Diesel PM quantification was modeled for the construction of the proposed Pilot Flying J Travel Center using the EPA's AERMOD air toxic dispersion model. In order to provide a more conservative analysis, fugitive dust PM generated during construction of the Travel Center was also quantified. Potential construction-generated air toxic concentration impacts (fugitive dust PM_{10} and exhaust PM_{10} concentrations) and associated health risks resultant of the Pilot Flying J Travel Center were evaluated by a comparison of estimated PM_{10} concentrations with the significance threshold established by the State of California as well as the Sacramento Metropolitan Air Quality Management District (a 24-Hour PM_{10} concentration, including fugitive dust and exhaust emissions, of greater than 50 $\mu g/m^3$ [$\mu g/m^3$ = micrograms per cubic meter]). While significance thresholds established in the Sacramento area are not binding on the City of Orland, they are instructive for comparison purposes. Furthermore, the Sacramento area is located within the same air basin as the proposed Travel Center and is therefore generally representative of the meteorological conditions at the site.

Estimated PM_{10} concentrations were modeled as being released by seven equally spaced volume sources (the number of off-road construction equipment pieces estimated by the CalEEMod software) covering the roughly 7.5-acre Pilot Flying J construction site. The AERMOD dispersion model calculated concentrations for the nearest discrete receptors in the vicinity of the proposed Travel Center site (see **Figure 1**). The AERMOD program generated an estimate of 24-hour average concentrations using a 1-year data file of hourly weather observations recorded at the Redding Airport. The model results were compared to the significance threshold for construction-generated PM_{10} fugitive dust combined with PM_{10} exhaust (diesel PM). As shown in **Figure 1**, toxic concentrations at the sensitive receptors in the project site vicinity would not reach a level beyond the health risk threshold of 50 micrograms per cubic meter ($\mu g/m^3$) over a 24-hour period (state and SMAQMD threshold). As shown, the maximum 24-hour period concentration would only reach 17.9 $\mu g/m^3$.

T:_CS\Work\Orland, City of\Pilot Flying J Travel Center\Figures

PLOT FILE OF HIGH 1ST HIGH 24-HR VALUES FOR SOURCE GROUP: ALL

ug/m^3

Max: 17.9 [ug/m^3] at (567750.85, 4400473.53)

2.4 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 17.9

COMMENTS:	SOURCES: 14	COMPANY NAME:	
	RECEPTORS: 14	MODELER:	
	OUTPUT TYPE: Concentration		
	MAX: 17.9 ug/m^3	DATE: 12/4/2014	

Source: AERMOD

0 500 1,000 FEET

N

Figure 1

Construction Particulate Matter Dispersion and Concentration

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2.2 OPERATIONS-GENERATED DIESEL PARTICULATE MATTER

The Pilot Flying J Travel Center would involve numerous heavy-duty truck trips on-site daily and thus diesel PM emissions, and therefore could negatively affect sensitive land uses in the vicinity of the site. The estimated number of trucks that would travel to the Travel Center site was counted as part of the traffic impact analysis prepared and used for this analysis (KD Anderson 2015). The emissions of diesel PM emitted from trucks while they are approaching and departing the travel center on adjacent roadways as well as idling at the within the site were calculated using the EPA's AERMOD air pollutant dispersion model.

Estimated diesel PM concentrations were modeled as being released by 1,662 heavy-duty trucks daily as they approach the proposed Travel Center after existing Interstate 5 and as they depart the Travel Center and head back to Interstate 5 (0.68 mile total). These estimated diesel PM concentrations are added to those modeled as being released by the same daily heavy-duty truck traffic as idling occurs on the Travel Center site. All trucks were assumed to idle on-site for 5 minutes in conformance with the California State Heavy-Duty Vehicle Idling Emission Reduction Program, which contains regulations that prohibit idling of heavy-duty trucks beyond 5 minutes. The AERMOD dispersion model calculated concentrations at the nearest discrete receptors in the vicinity of the site (see **Figure 2a** through **Figure 3b**). The AERMOD program generated an estimate of the annual average concentrations using a 1-year data file of hourly weather observations recorded at the Redding Airport. The model results were compared to the significance thresholds for operational diesel PM established by the Sacramento Metropolitan Air Quality Management District (see **Table 1**). As shown in **Table 1**, the maximum toxic concentrations at the sensitive receptors in the vicinity would not reach a level beyond the health risk significance thresholds.

TABLE 1
MAXIMUM DIESEL PM CONCENTRATIONS FROM PROJECT HEAVY-DUTY TRUCK TRAFFIC

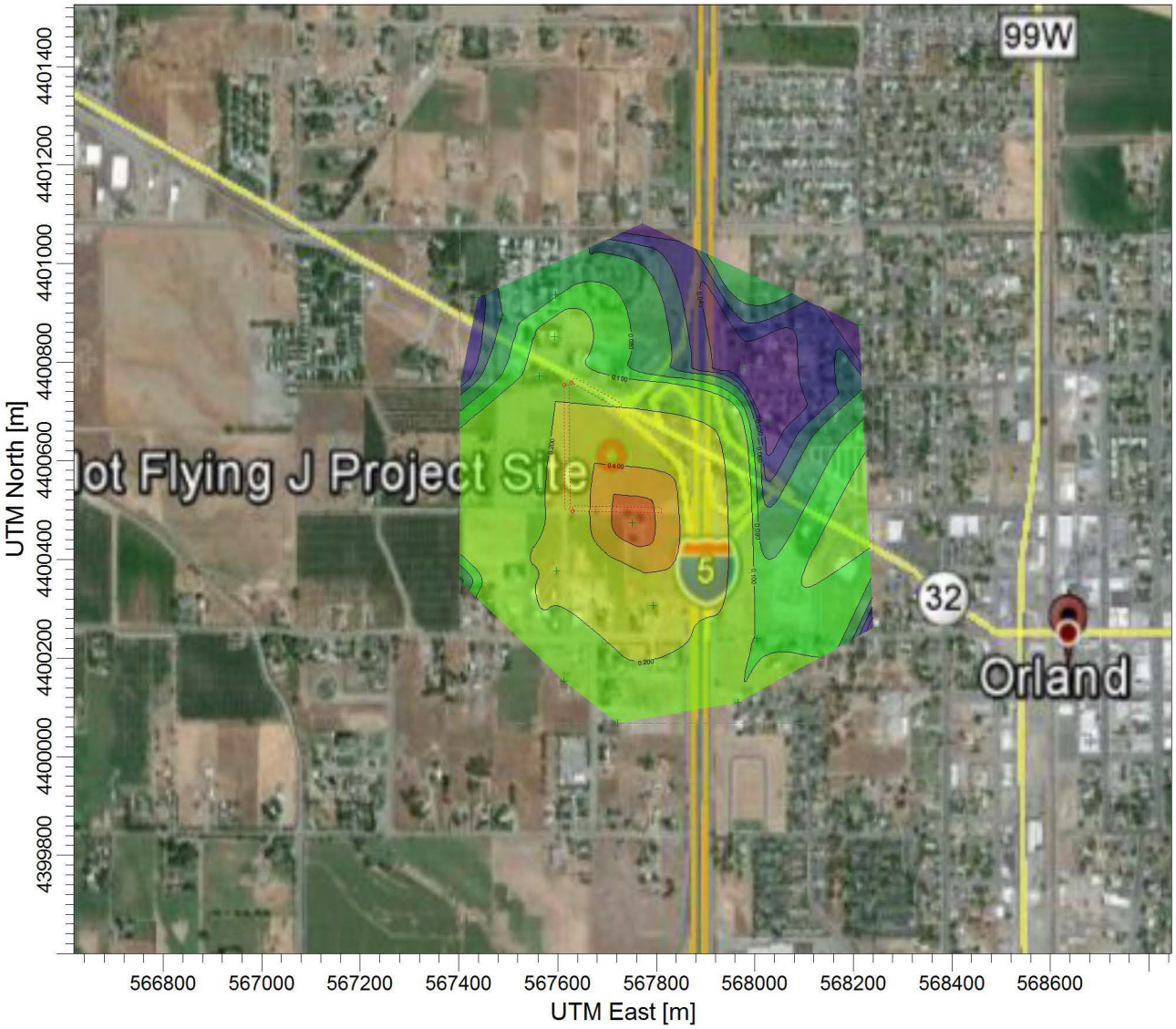
Activity	Pollutant Concentration (Annual Average)
Exhaust PM_{10}	
Local Circulation	0.594
On-Site Idling	0.473
Total	**1.067**
Significance Threshold	*20 $\mu g/m^3$ Annual Average*
Exceed Threshold?	**No**
Exhaust $PM_{2.5}$	
Local Circulation	0.594
On-Site Idling	0.236
Total	**0.83**
Significance Threshold	*12 $\mu g/m^3$ Annual Average*
Exceed Threshold?	**No**

Source: Diesel PM concentrations were modeled with the AERMOD software.

In addition, it is noted that emissions projected to result from operation of the proposed Travel Center are primarily the result of heavy-duty truck traffic. The USEPA and the National Highway

Transportation Safety Administration (NHTSA) have announced fuel economy standards for medium- and heavy-duty trucks, which apply to vehicles in model years 2014–2018. The NHTSA has adopted standards for fuel consumption tailored to each of three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this program will reduce fuel consumption, and thus air pollutant emissions, for affected vehicles by 6 percent to 23 percent. While this analysis does not rely on this program for purposes of mitigating impacts, this program should help further reduce the long-term operational impacts of the project.

T:_CS\Work\Orland, City of\Pilot Flying J Travel Center\Figures



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m^3

Max: 0.594 [ug/m^3] at (567750.85, 4400473.53)

0.011 0.040 0.050 0.060 0.080 0.100 0.200 0.400 0.500 0.594

COMMENTS:	SOURCES: 3	COMPANY NAME:	
	RECEPTORS: 22	MODELER:	
	OUTPUT TYPE: Concentration		
	MAX: 0.594 ug/m^3	DATE: 1/14/2015	

Source: AERMOD

0 500 1,000

FEET

N

Figure 2a

Local Circulation Particulate Matter Dispersion and Concentration – PM10

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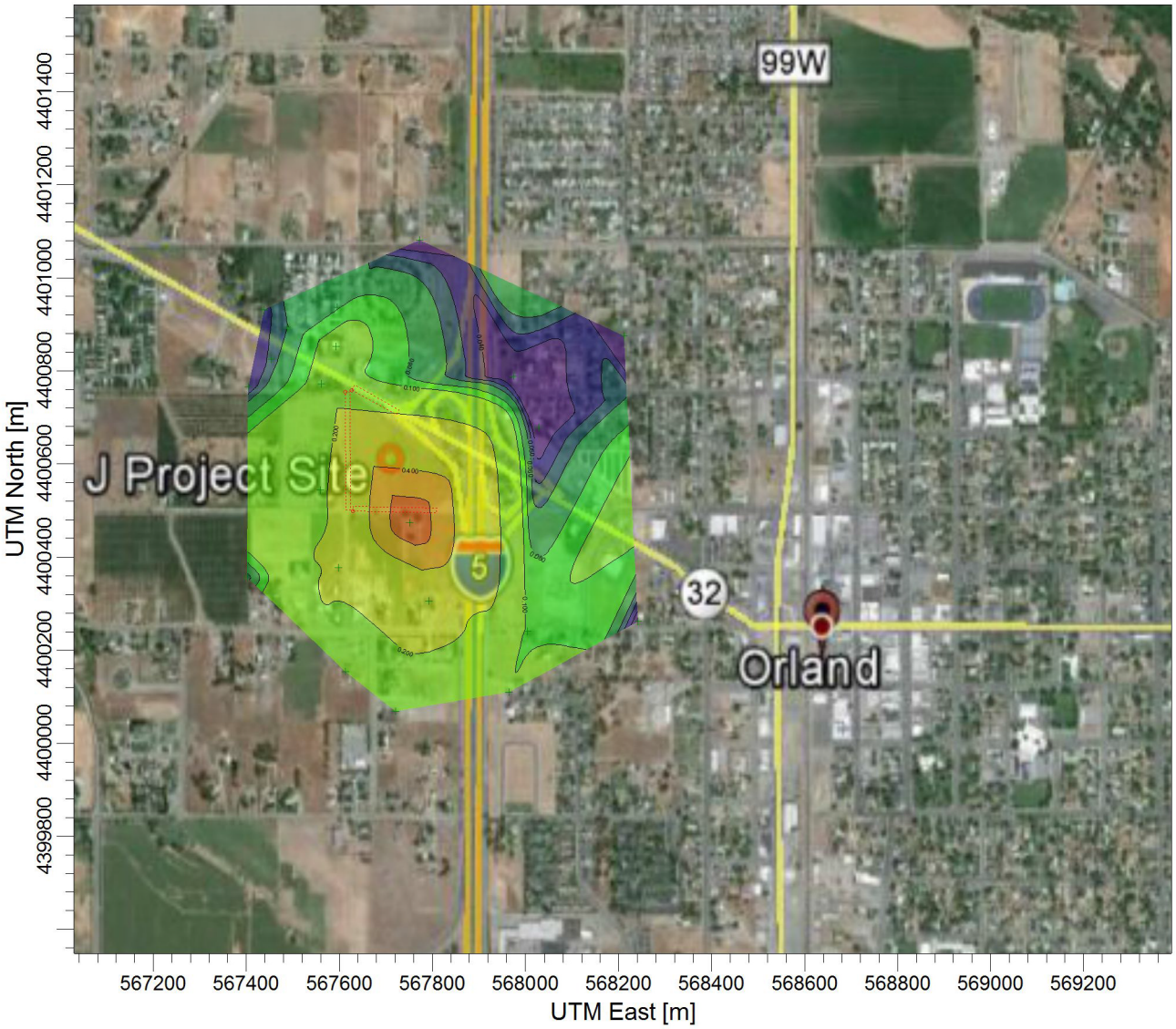
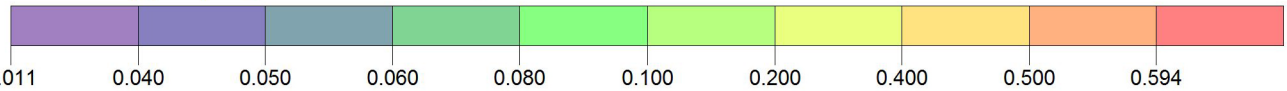
T:_GS\Work\Orland, City of\Pilot Flying J Travel Center\Figures



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m^3

Max: 0.594 [ug/m^3] at (567750.85, 4400473.53)



COMMENTS:	SOURCES: 3	COMPANY NAME:	
	RECEPTORS: 22	MODELER:	
	OUTPUT TYPE: Concentration		
	MAX: 0.594 ug/m^3	DATE: 1/14/2015	

Source: AERMOD

0 500 1,000
FEET

N

Figure 2b

Local Circulation Particulate Matter Dispersion and Concentration – PM2.5

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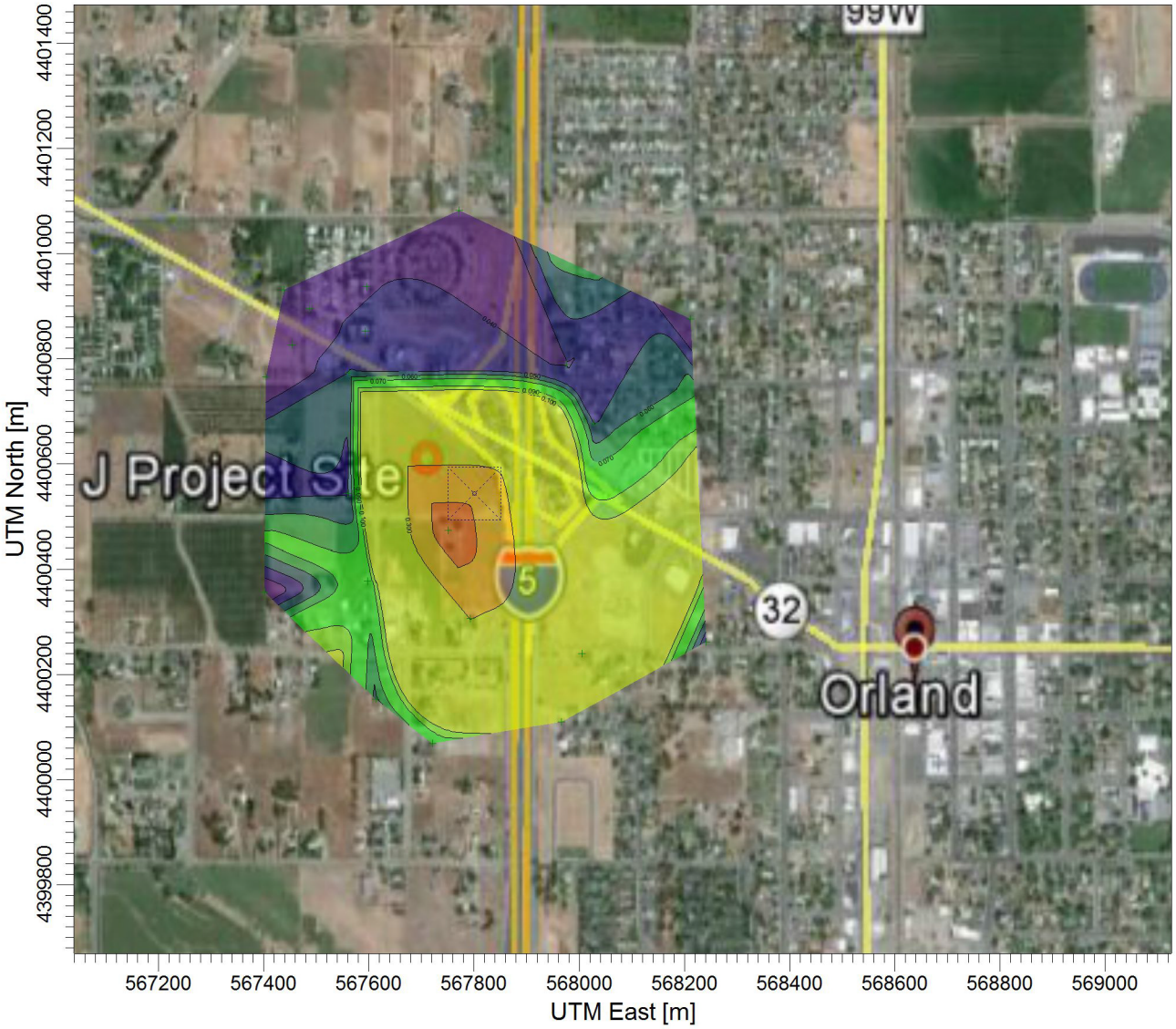
T:_GS\Work\Orland, City of\Pilot Flying J Travel Center\Figures



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m^3

Max: 0.474 [ug/m^3] at (567751.36, 4400473.55)

0.018 0.040 0.050 0.060 0.070 0.090 0.100 0.300 0.400 0.474

COMMENTS:	SOURCES: 1	COMPANY NAME:	
	RECEPTORS: 22	MODELER:	
	OUTPUT TYPE: Concentration		
	MAX: 0.474 ug/m^3	DATE: 1/13/2015	

Source: AERMOD

0 500 1,000 FEET

N

Figure 3a

On-Site Idling Particulate Matter Dispersion and Concentration – PM10

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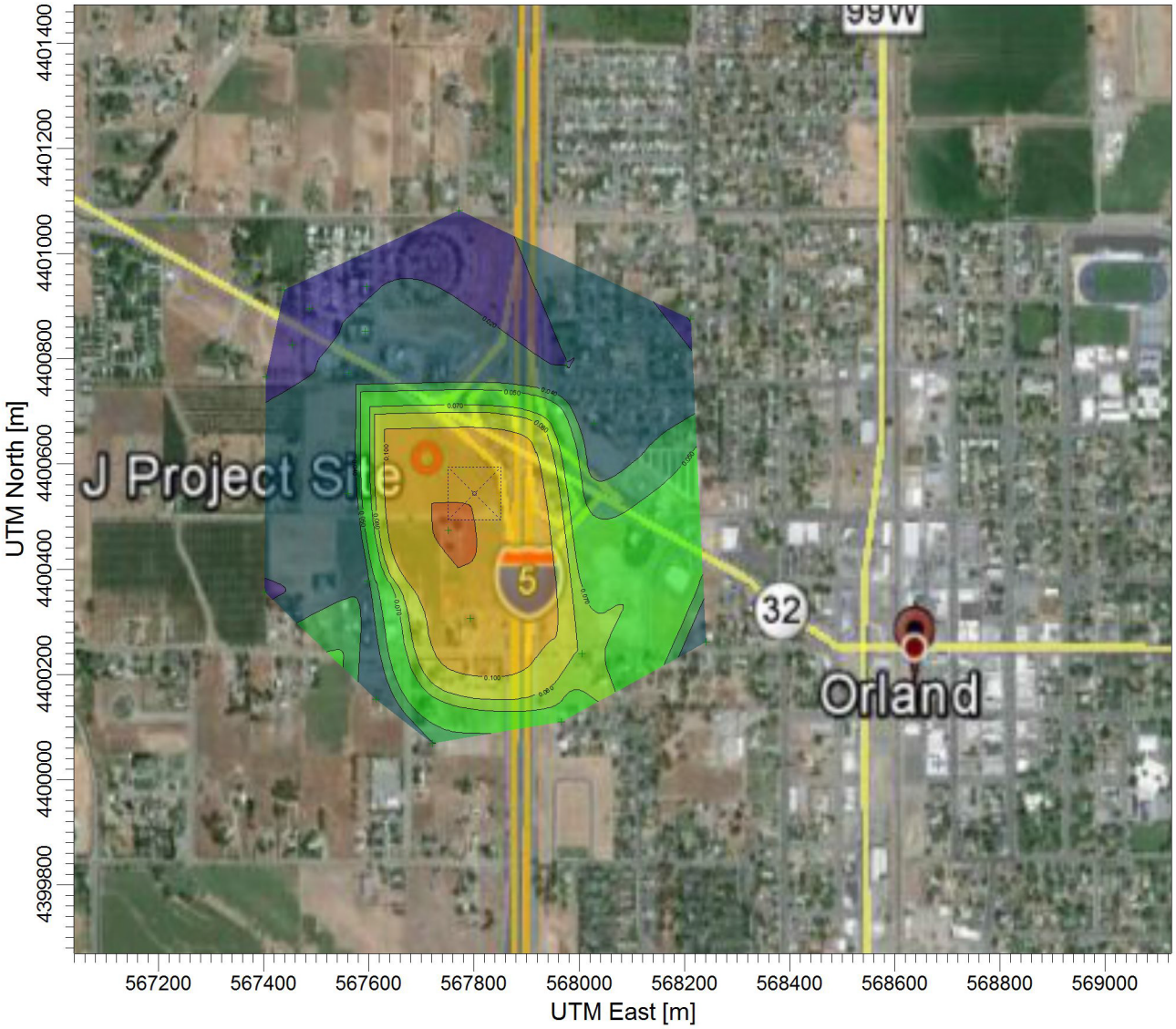

PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m^3

Max: 0.237 [ug/m^3] at (567751.36, 4400473.55)

0.009 0.010 0.020 0.040 0.050 0.070 0.080 0.100 0.200 0.237

COMMENTS:	SOURCES: 1	COMPANY NAME:	
	RECEPTORS: 22	MODELER:	
	OUTPUT TYPE: Concentration		
	MAX: 0.237 ug/m^3	DATE: 1/13/2015	

Source: AERMOD

0 500 1,000 FEET

N

Figure 3b

On-Site Idling Particulate Matter Dispersion and Concentration – PM2.5

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2.3 OPERATIONS-GENERATED GASOLINE VAPORS

The Pilot Flying J Travel Center proposes a 10-diesel pump station, a 12-auto pump station, and 2 RV pumps. Fueling stations are a source of gasoline vapors that would include the pollutant, benzene, which is a carcinogen, and toluene and xylene (toluene and xylene are not carcinogenic, nonetheless, their exposure can still result in negative non-cancer health effects). Gasoline vapors are released during the filling of stationary aboveground and underground storage tanks as well as during the transfer from those tanks to individual vehicles. The emissions of benzene, toluene, and xylene were calculated using the EPA's AERMOD air pollutant dispersion model (see **Figures 4** through **6**) for the purpose of evaluating the potential cancer risk associated with benzene and the potential non-cancer risk associated with benzene, toluene and xylene. Potential health risk impacts (cancer and non-cancer) associated with gasoline vapors on surrounding land uses in proximity to the Pilot Flying J Travel Center site are evaluated using CAPCOA's Health Risk Assessments for Proposed Land Use Projects (2009), CAPCOA's Gasoline Service Station Industry-Wide Risk Assessment Guidelines (1997), and the OEHHA Tier I risk assessment methodology (OEHHA 2003).

Cancer Risk

Cancer risks are based on mathematical calculations that estimate the probability of the number of people who will develop cancer after exposure to benzene utilizing the very conservative assumptions of exposure occurring 24 hours a day, 350 days a year at the same concentration for a period of 70 years. A 70-year period is the exposure parameter recommended by OEHHA for "residents," which is the appropriate parameter to assess risks to surrounding receptors. A period of 350 days a year is also recommended by OEHHA to account for days when residents are away from home (OEHHA 2012). The cancer risks from benzene vapors occur exclusively through the inhalation pathway; therefore, the cancer risks can be estimated from the following equation, defined below.

$$*CR_{Benzene} = CP_{DPM} \bullet DI_{DPM}$$

$CR_{Benzene}$ Cancer risk from benzene; the probability of an individual developing cancer as a result of exposure to benzene vapors

$CP_{Benzene}$ Cancer Potency factor for benzene $(mg/kg\text{-}day)^{-1}$; estimated probability that a person will contract cancer as a result of inhalation of a benzene vapor concentration of 1 mg per kilogram of body weight continuously over a period of 70 years; $CP_{Benzene}$ value of 0.1 $(mg/kg\text{-}day)^{-1}$

$DI_{Benzene}$ Dose through inhalation (mg/kg-day)

- obtained by multiplying C_{air} x DBR x EVF x 10^{-6}
  - C_{air} is the annual average 24-hour per day concentration of benzene in air ($\mu g/m^3$) (calculated by AERMOD)
  - DBR is the daily breathing rate
    - OEHHA value of 302 (liters/kg-day) used
  - EVF is the exposure factor
    - OEHHA value of 0.96 used

This probability is usually expressed in terms of the number of people who will develop cancer per one million people who are also exposed. It is important to understand that this cancer risk represents the probability that a person develops some form of cancer; the estimated risk does

not represent actual mortality rates. **Table 2** shows the estimated cancer risk to the five receptors subject to the highest benzene concentrations attributable to the proposed Travel Center.

TABLE 2
CANCER RISK AT RECEPTORS IN PROJECT VICINITY FROM PROJECT-GENERATED BENZENE VAPORS

Receptors	Benzene Concentration (Annual Average)	Predicted Cancer Risk per Million
Single Family Residence (at Road 13 south of the site)	0.249 $\mu g/m^3$	4.94
Single Family Residence (at Road 14 south of the site)	0.115 $\mu g/m^3$	2.28
Single Family Residence (at Road HH southwest of the site)	0.111 $\mu g/m^3$	2.20
Single Family Residence (at Road 200 northwest of the site)	0.107 $\mu g/m^3$	2.12
Mobile Home Park (at Road 200 northwest of the site)	0.101 $\mu g/m^3$	2.01
Potentially Significant Impact Threshold	10	
Exceed Threshold?	**No**	

Source: Benzene concentrations were modeled with AERMOD software; cancer risk was calculated per OEHHA Tier 1 risk assessment methodology for "Residents".

As shown in **Table 2**, the estimated maximum individual cancer risk does not exceed the cancer risk threshold of 10 in one million at any of the vicinity receptors.

Non-Cancer Risk

Non-cancer risks can be described as acute (short-term, generally 1-hour peak exposure) or chronic (long-term exposure, defined as 12 percent of a lifetime or about 8 years for humans) health impacts. This analysis uses the acute and chronic reference exposure levels (REL) developed by the OEHHA for determining the non-cancer health impacts of toxic substances. Exceeding the acute or chronic REL does not necessarily indicate that an adverse health impact will occur; however, levels of exposure above the REL have an increasing but undefined probability of resulting in an adverse health impact, particularly in sensitive individuals. For benzene, there is no value for the acute REL, and the chronic REL is 71 $\mu g/m^3$. Therefore, non-cancer health risks are expected when people are exposed to benzene concentrations greater than 71 $\mu g/m^3$. For toluene, there is also no value for the acute REL; the chronic REL is 200 $\mu g/m^3$. Therefore, non-cancer health risks are expected when people are exposed to toluene concentrations greater than 200 $\mu g/m^3$. For xylene, the acute REL is 300 and the chronic REL is 4,400 $\mu g/m^3$.

Since the hazard index is the ratio between the vapor concentration at each receptor (estimated using AERMOD) and the REL, non-cancer health risks are significant if the hazard index exceeds 1.0. This threshold for significance is sanctioned by CARB explicitly to determine the non-cancerous health impacts attributable to projects that introduce new sources of pollutant emissions in an area.

The relationship for the non-cancer health effects of benzene, toluene, and xylene are given by the following equation:

$$HI_{air} = C_{air} / REL_{air}$$

HI_{air} Hazard Index; an expression of the potential for non-cancer health effects

C_{air} Annual average pollutant concentration in $\mu g/m^3$

REL_{air} REL for benzene, toluene, and xylene; the pollutant concentration at which no adverse health effects are anticipated

Table 3 shows the estimated non-cancer risk to the receptors subject to the highest benzene, toluene, and xylene concentrations attributable to the proposed Travel Center.

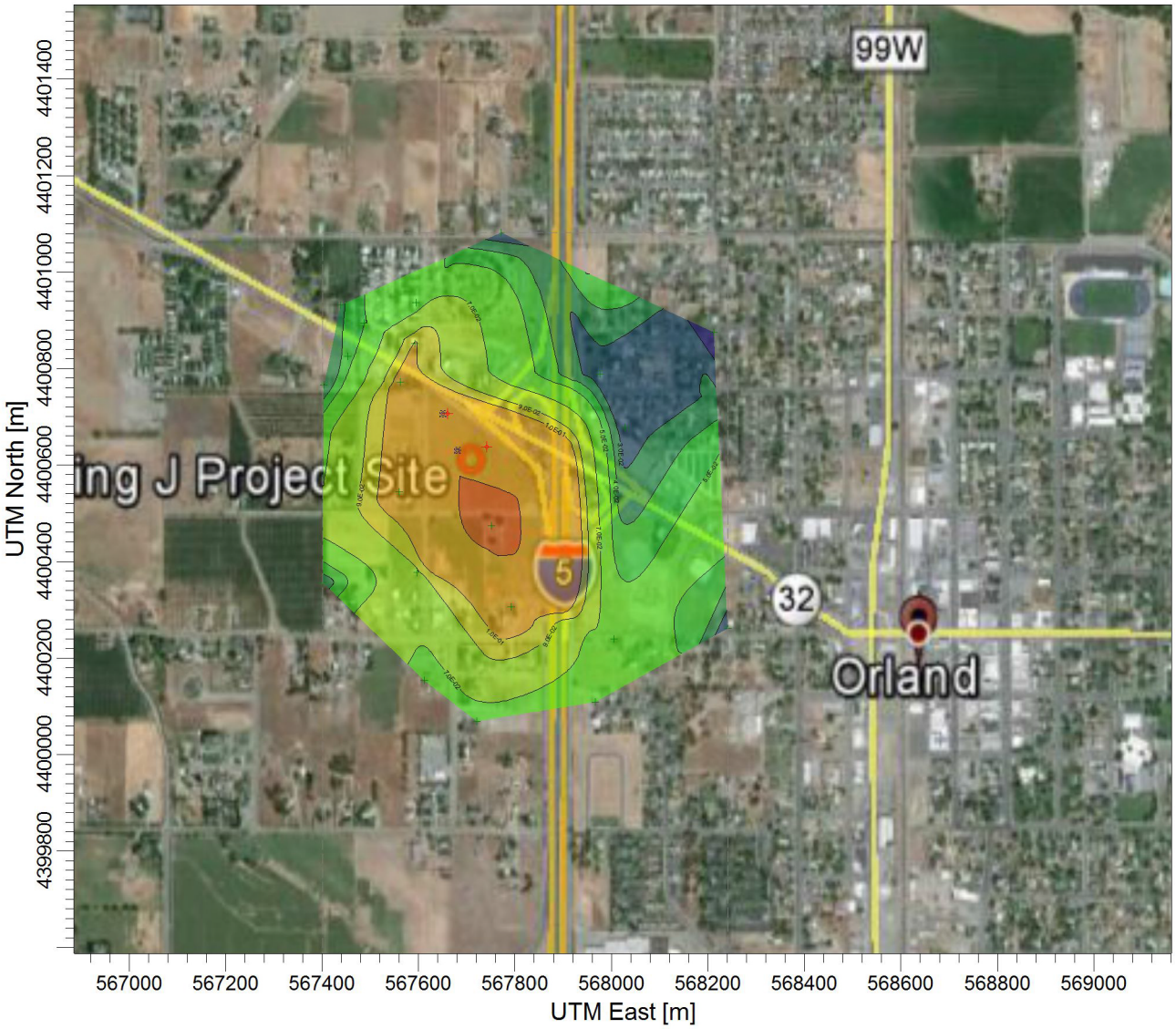
TABLE 3
NON-CANCER RISK AT RECEPTORS IN PROJECT VICINITY FROM PROJECT-GENERATED BENZENE, TOLUENE, AND XYLENE VAPORS

Receptors	Benzene Predicted Non-Cancer Risk Hazard Index	Toluene Predicted Non-Cancer Risk Hazard Index	Xylene Predicted Non-Cancer Risk Hazard Index	
	Chronic Risk (Concentration ÷ 71)	Chronic Risk (Concentration ÷ 200)	Chronic Risk (Concentration ÷ 300)	Acute Risk (Concentration ÷ 4,400)
Single Family Residence (at Road 13 south of the site)	0.003	0.02	0.004	0.0003
Single Family Residence (at Road 14 south of the site)	0.001	0.01	0.002	0.0001
Single Family Residence (at Road HH southwest of the site)	0.001	0.01	0.001	0.0001
Single Family Residence (at Road 200 northwest of the site)	0.001	0.01	0.001	0.0001
Mobile Home Park (at Road 200 northwest of the site)	0.001	0.01	0.001	0.0001
Potentially Significant Impact Threshold	1.0			
Exceed Threshold?	**No**			

Source: Pollutant concentrations were modeled with AERMOD software; non-cancer risk was calculated per OEHHA Tier 1 risk assessment methodology.

As shown in **Table 3**, the estimated maximum individual non-cancer risk does not exceed the non-cancer risk hazard index of 1.0 at any of the vicinity receptors. In addition, a combined benzene, toluene, xylene non-cancer risk would also not exceed the hazard index of 1.0.

T:_GS\Work\Orland, City of\Pilot Flying J Travel Center\Figures



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL ug/m^3

Max: 2.5E-01 [ug/m^3] at (567750.85, 4400473.53)

9.7E-03 1.0E-02 2.0E-02 3.0E-02 4.0E-02 5.0E-02 7.0E-02 9.0E-02 1.0E-01 2.0E-01 2.5E-01

COMMENTS:	SOURCES: 8	COMPANY NAME:	
	RECEPTORS: 22	MODELER:	
	OUTPUT TYPE: Concentration		
	MAX: 2.5E-01 ug/m^3	DATE: 1/15/2015	

Source: AERMOD

0 500 1,000 FEET

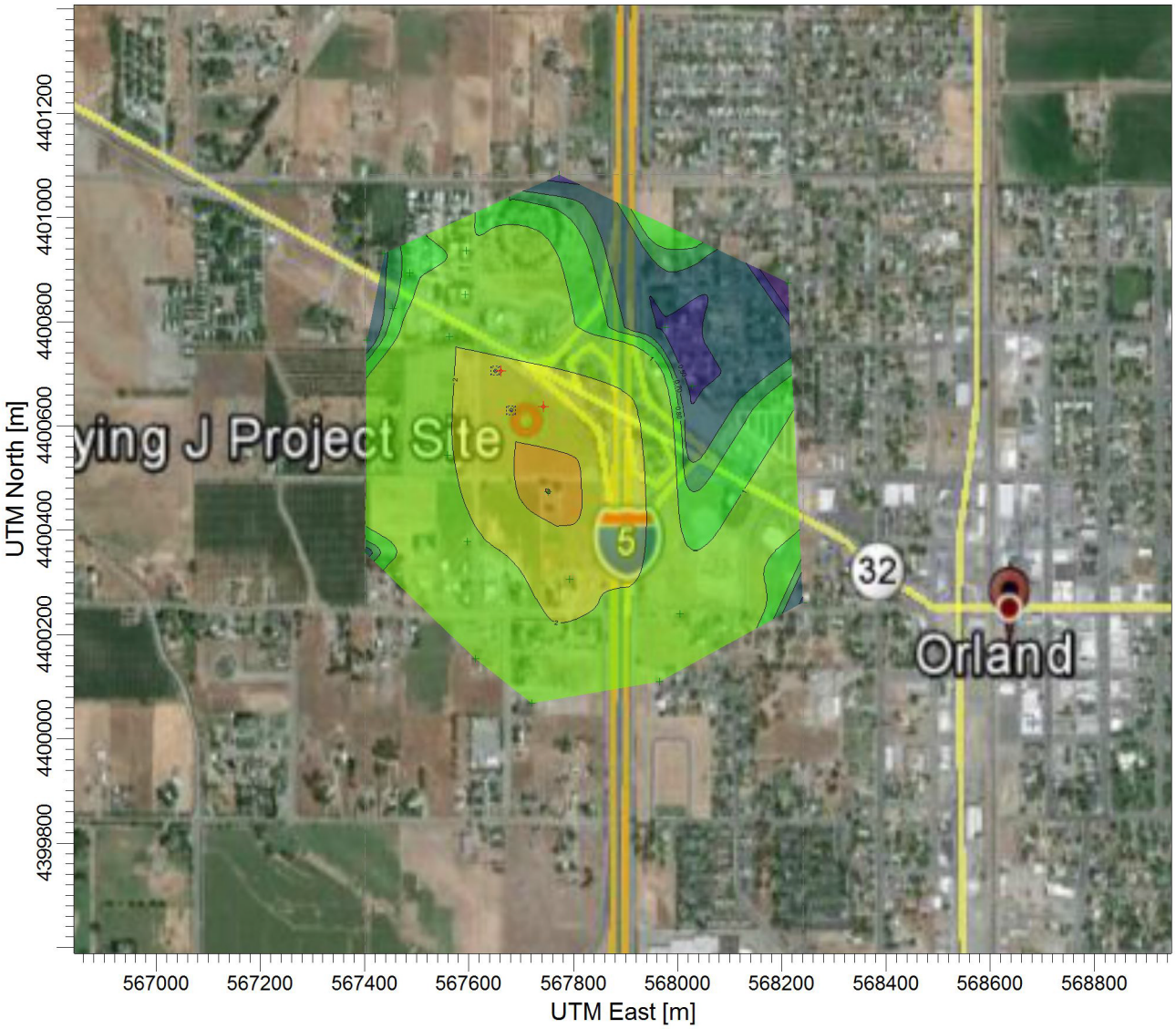
N

Figure 4

Benzene Dispersion and Concentration

PMC®

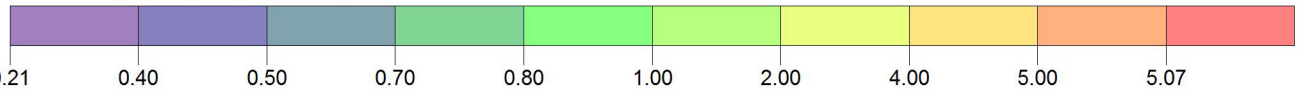
T:_GS\Work\Orland, City of\Pilot Flying J Travel Center\Figures



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m^3

Max: 5.07 [ug/m^3] at (567750.85, 4400473.53)



COMMENTS:	SOURCES: 8	COMPANY NAME:	
	RECEPTORS: 22	MODELER:	
	OUTPUT TYPE: Concentration		
	MAX: 5.07 ug/m^3	DATE: 1/15/2015	

Source: AERMOD

0 500 1,000
FEET

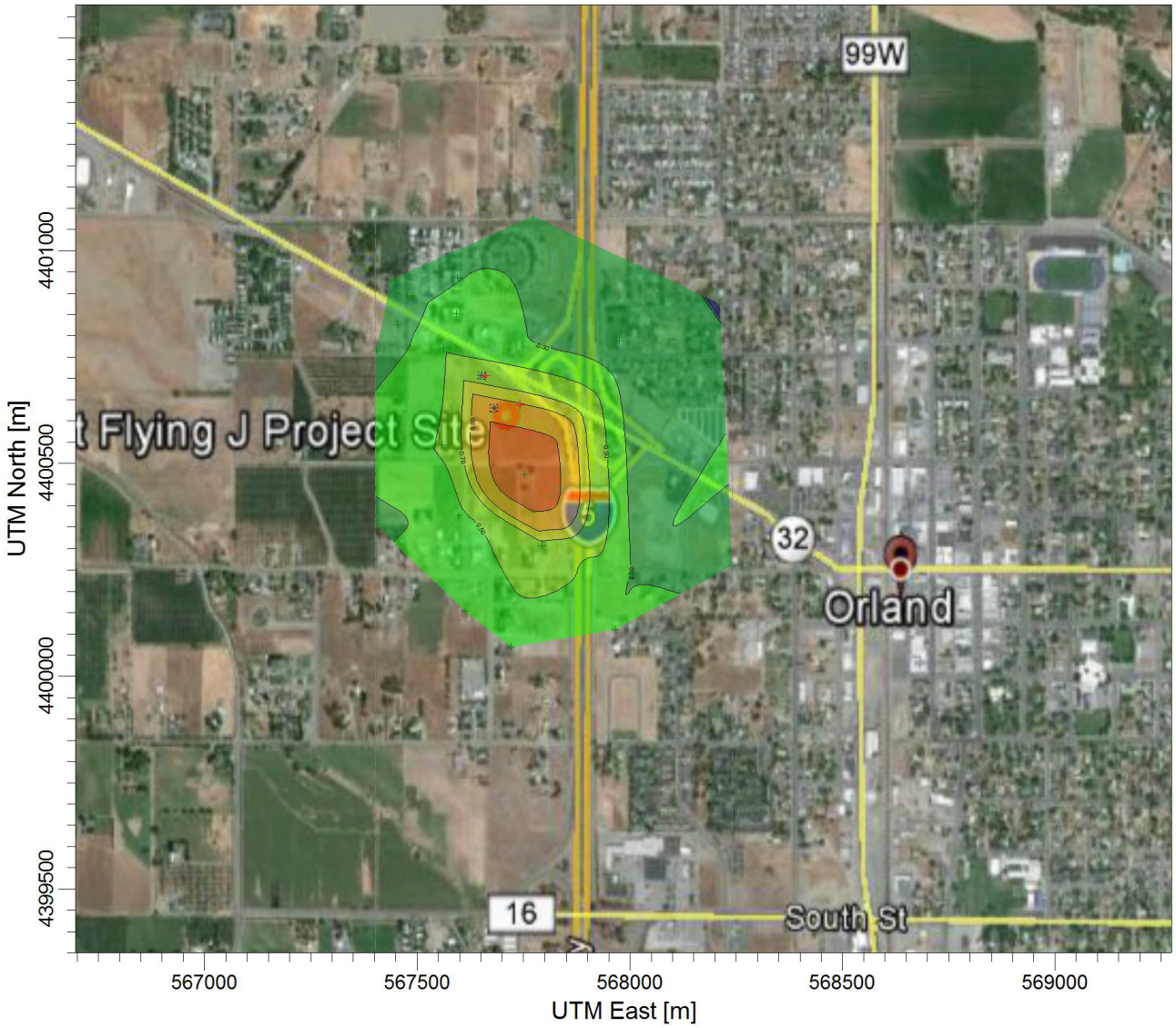
N

Figure 5

Toluene Dispersion and Concentration

PMC®

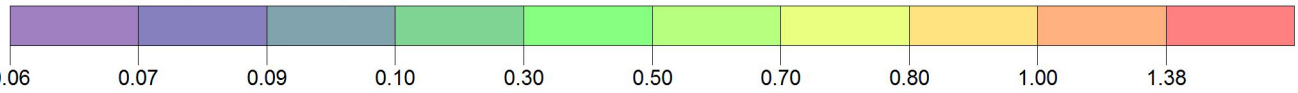
T:_GS\Work\Orland, City of\Pilot Flying J Travel Center\Figures



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m^3

Max: 1.38 [ug/m^3] at (567750.85, 4400473.53)



COMMENTS:	SOURCES: 8	COMPANY NAME:	
	RECEPTORS: 22	MODELER:	
	OUTPUT TYPE: Concentration		
	MAX: 1.38 ug/m^3	DATE: 1/15/2015	

Source: AERMOD

0 500 1,000
FEET

N

Figure 6

Xylene Dispersion and Concentration

PMC®

2.4 CONCLUSION

The proposed Travel Center would not result in impacts associated with health risks as no health risk-related significance threshold would be surpassed.

REFERENCES

CAPCOA (California Air Pollution Control Officers Association). 1997. *Gasoline Service Station Industry-Wide Risk Assessment Guidelines.* November 1997.

———. 2009. *Health Risk Assessments for Proposed Land Use Projects.*

CARB (California Air Resources Board). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.*

SJVAPCD (San Joaquin Valley Air Pollution Control District). 2012. *Mall Health Risk Screening Tool.* 2012. http://www.valleyair.org/busind/pto/Resources/resources_idx.htm.

KD Anderson (KD Anderson and Associates Inc.). 2015. *Traffic Impact Analysis for Pilot Flying J Travel Center.* January 7, 2015.

OEHHA (Office of Environmental Health Hazard Assessment). 2003. *The Air Toxics Hot Spot Program Guidance Manual for Preparation of Health Risk Assessments.*

———. 2007. *Air Toxicology and Epidemiology: Air Pollution and Children's Health*. http://oehha.ca.gov/public_info/facts/airkids.html.

———. 2012. *The Air Toxics Hot Spot Program Risk Assessment: Technical Support Document for Exposure Assessment and Stochastic Analysis*. February 2012.

EMFAC 2011 Heavy-Duty Truck Particulate Matter Emission Rates

CY	EMFAC2007 Vehicle Category	Fuel_Type	air_basin	season	PM10 (g/hr-veh)	PM2.5 (g/hr-veh)
1990	HHDT	D	SV	a	7.41367957	6.820585206
1991	HHDT	D	SV	a	7.00505128	6.444647174
1992	HHDT	D	SV	a	6.50999519	5.989195577
1993	HHDT	D	SV	a	5.97427884	5.496336529
1994	HHDT	D	SV	a	4.08907558	3.761949537
1995	HHDT	D	SV	a	3.76932286	3.467777035
1996	HHDT	D	SV	a	3.49473286	3.215154231
1997	HHDT	D	SV	a	3.20335743	2.947088836
1998	HHDT	D	SV	a	2.90008683	2.668079879
1999	HHDT	D	SV	a	2.65540353	2.442971248
2000	HHDT	D	SV	a	2.47605201	2.277967849
2001	HHDT	D	SV	a	2.33323063	2.146572176
2002	HHDT	D	SV	a	2.17992854	2.005534257
2003	HHDT	D	SV	a	2.00493516	1.844540351
2004	HHDT	D	SV	a	1.8447587	1.697178005
2005	HHDT	D	SV	a	1.77346479	1.631587609
2006	HHDT	D	SV	a	1.58027899	1.45385667
2007	HHDT	D	SV	a	1.37561153	1.265562612
2008	HHDT	D	SV	a	1.25035651	1.150327992
2009	HHDT	D	SV	a	1.14903016	1.057107751
2010	HHDT	D	SV	a	1.04083872	0.957571618
2011	HHDT	D	SV	a	0.93315039	0.858498363
2012	HHDT	D	SV	a	0.78258528	0.719978456
2013	HHDT	D	SV	a	0.54646829	0.502750826
2014	HHDT	D	SV	a	0.33665923	0.309726488
2015	HHDT	D	SV	a	0.26838502	0.246914214
2016	HHDT	D	SV	a	0.19285046	0.177422423
2017	HHDT	D	SV	a	0.16005667	0.147252138
2018	HHDT	D	SV	a	0.15444552	0.142089875
2019	HHDT	D	SV	a	0.14905351	0.137129231
2020	HHDT	D	SV	a	0.14325025	0.131790233
2021	HHDT	D	SV	a	0.13778684	0.12676389
2022	HHDT	D	SV	a	0.13332593	0.122659855
2023	HHDT	D	SV	a	0.11126756	0.102366158
2024	HHDT	D	SV	a	0.11089508	0.102023471
2025	HHDT	D	SV	a	0.11057831	0.101732047
2026	HHDT	D	SV	a	0.11030984	0.101485048
2027	HHDT	D	SV	a	0.11005745	0.101252852
2028	HHDT	D	SV	a	0.10983099	0.101044512
2029	HHDT	D	SV	a	0.10960769	0.100839074
2030	HHDT	D	SV	a	0.1093131	0.100568051
2031	HHDT	D	SV	a	0.10886205	0.100153087
2032	HHDT	D	SV	a	0.10876099	0.100060114
2033	HHDT	D	SV	a	0.10863414	0.099943412
2034	HHDT	D	SV	a	0.1084851	0.099806292
2035	HHDT	D	SV	a	0.1082977	0.099633888
					Average Emission Factor	
					1.55187798	1.427727742

SJVAPCD Mall Health Risk Screening Tool Gasoline Vapors Emission Rates

VOC Emissions Calculations			Gallons / Year	Lbs/ Yr			
Scenario	**Type**	**Description**		**Loading**	**Breathing**	**Refueling**	**Spillage**
1	Aboveground	No Controls	**0**	0.00	0.00	0.00	0.00
2	Aboveground	Pahse I Only	**0**	0.00	0.00	0.00	0.00
3A	Aboveground	Phase I & II w/o Vent Values (90% Controls Breathing & Refueling)	**0**	0.00	0.00	0.00	0.00
3B	Aboveground	Phase I & II w/ Vent Values (90% Controls Breathing & Refueling)	**14,600,000**	6132.00	773.80	9198.00	6132.00
4	Underground	No Controls	**0**	0.00	0.00	0.00	0.00
5A	Underground	Phase I Only	**0**	0.00	0.00	0.00	0.00
5B	Underground	Phase I w/ Vent Values	**0**	0.00	0.00	0.00	0.00
6A	Underground	Phase I & II w/o Vent Values (90% Controls Breathing & Refueling)	**0**	0.00	0.00	0.00	0.00
6B	Underground	Phase I & II w/ Vent Values (90% Controls Breathing & Refueling)	**2,737,500**	229.95	68.44	1149.75	1149.75

Toxic Emissions		Loading (Lb/Yr)			Breathing (Lb/Yr)			Refueling (Lb/Yr)			Spillage (Lb/Yr)		
Scenario	**Type**	Benzene	Toluene	Xylene	Benzene	Toluene	Xylene	Benzene	Toluene	Xylene	Benzene	Toluene	Xylene
1	Aboveground	0	0	0	0	0	0	0	0	0	0	0	0
2	Aboveground	0	0	0	0	0	0	0	0	0	0	0	0
3A	Aboveground	0	0	0	0	0	0	0	0	0	0	0	0
3B	Aboveground	18.396	490.56	147.168	2.3214	61.904	18.5712	27.594	735.84	220.752	18.396	490.56	147.168
4	Underground	0	0	0	0	0	0	0	0	0	0	0	0
5A	Underground	0	0	0	0	0	0	0	0	0	0	0	0
5B	Underground	0	0	0	0	0	0	0	0	0	0	0	0
6A	Underground	0	0	0	0	0	0	0	0	0	0	0	0
6B	Underground	0.68985	18.396	5.5188	0.205313	5.475	1.6425	3.44925	91.98	27.594	3.44925	91.98	27.594

AERMOD Dispersion Model Outputs

```
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 8.8.9
** Lakes Environmental Software Inc.
** Date: 1/13/2015
** File: C:\Emissions Models\Orland\Flying J\AERMOD\Construction
\Flying J Construction\Flying J Construction.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Emissions Models\Orland\Flying J\AERMOD\Pilot
Flying J Project Co
   MODELOPT CONC FLAT
   AVERTIME 1 8 24 ANNUAL
   POLLUTID PM_10
   FLAGPOLE 1.60
   RUNORNOT RUN
   ERRORFIL "Flying J Construction.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION 1FUGITIVE    VOLUME     567631.000  4400655.000
0.0
   LOCATION 2FUGITIVE    VOLUME     567668.000  4400652.000
0.0
   LOCATION 3FUGITIVE    VOLUME     567704.000  4400667.000
0.0
   LOCATION 4FUGITIVE    VOLUME     567748.000  4400637.000
0.0
   LOCATION 5FUGITIVE    VOLUME     567767.000  4400607.000
0.0
   LOCATION 6FUGITIVE    VOLUME     567805.000  4400568.000
0.0
   LOCATION 1EXHAUST     VOLUME     567631.000  4400655.000
0.0
   LOCATION 2EXHAUST     VOLUME     567668.000  4400652.000
```

```
0.0
   LOCATION 3EXHAUST     VOLUME     567704.000   400667.000
0.0
   LOCATION 4EXHAUST     VOLUME     567748.000  4400637.000
0.0
   LOCATION 5EXHAUST     VOLUME     567767.000  4400607.000
0.0
   LOCATION 6EXHAUST     VOLUME     567805.000  4400568.000
0.0
   LOCATION 7FUGITIVE    VOLUME     567836.000  4400549.000
0.0
   LOCATION 7EXHAUST     VOLUME     836567.000  4400549.000
0.0
** Source Parameters **
   SRCPARAM 1FUGITIVE        0.004     0.000     0.233     1.000
   SRCPARAM 2FUGITIVE        0.004     0.000     0.233     1.000
   SRCPARAM 3FUGITIVE        0.004     0.000     0.233     1.000
   SRCPARAM 4FUGITIVE        0.004     0.000     0.233     1.000
   SRCPARAM 5FUGITIVE        0.004     0.000     0.233     1.000
   SRCPARAM 6FUGITIVE        0.004     0.000     0.233     1.000
   SRCPARAM 1EXHAUST        0.0007     5.000     0.233     1.000
   SRCPARAM 2EXHAUST        0.0007     5.000     0.233     1.000
   SRCPARAM 3EXHAUST        0.0007     5.000     0.233     1.000
   SRCPARAM 4EXHAUST        0.0007     5.000     0.233     1.000
   SRCPARAM 5EXHAUST        0.0007     5.000     0.233     1.000
   SRCPARAM 6EXHAUST        0.0007     5.000     0.233     1.000
   SRCPARAM 7FUGITIVE        0.004     0.000     0.233     1.000
   SRCPARAM 7EXHAUST        0.0007     5.000     0.233     1.000
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
** DESCRREC "" ""
   DISCCART    568027.46   4400677.48    1.60
   DISCCART    567750.85   4400473.53    1.60
   DISCCART    567559.65   4400543.64    1.60
   DISCCART    567562.20   4400771.81    1.60
   DISCCART    567592.79   4400852.12    1.60
   DISCCART    567792.92   4400306.55    1.60
   DISCCART    567597.89   4400377.93    1.60
   DISCCART    567595.34   4400936.25    1.60
   DISCCART    567975.20   4400788.38    1.60
   DISCCART    567486.99   4400894.18    1.60
   DISCCART    567453.85   4400825.35    1.60
   DISCCART    567404.13   4400765.44    1.60
   DISCCART    568004.52   4400240.26    1.60
   DISCCART    567438.55   4400931.15    1.60
```

```
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\..\AERMET.SFC
   PROFFILE ..\..\AERMET.PFL
   SURFDATA 24257 1992 REDDING/AAF
   UAIRDATA 23110 1992
   PROFBASE 33.0 FEET
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "FLYING J CONSTRUCTION.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "FLYING J CONSTRUCTION.AD\08H1GALL.PLT" 32
   PLOTFILE 24 ALL 1ST "FLYING J CONSTRUCTION.AD\24H1GALL.PLT" 33
   PLOTFILE ANNUAL ALL "FLYING J CONSTRUCTION.AD\AN00GALL.PLT" 34
   SUMMFILE "Flying J Construction.sum"
OU FINISHED

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Pilot Flying J Project Co ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        14:38:36

PAGE   1
 **MODELOPTs:   NonDFAULT CONC      FLAT      FLGPOL

                                                ***     MODEL SETUP
OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration
Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses RURAL Dispersion Only.

 **Model Allows User-Specified Options:
         1. Stack-tip Downwash.
         2. Model Assumes Receptors on FLAT Terrain.
         3. Use Calms Processing Routine.
         4. Use Missing Data Processing Routine.
         5. No Exponential Decay.

 **Other Options Specified:
         CCVR_Sub - Meteorological data includes CCVR
substitutions
         TEMP_Sub - Meteorological data includes TEMP
substitutions

 **Model Accepts FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  PM_10

 **Model Calculates  3 Short Term Average(s) of:   1-HR   8-HR
24-HR
     and Calculates ANNUAL Averages

 **This Run Includes:     14 Source(s);       1 Source Group(s);
and      14 Receptor(s)

 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134
```

```
 **Output Options Selected:
          Model Outputs Tables of ANNUAL Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by
Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked
Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =
10.06 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC
;  Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of
RAM.

 **Detailed Error/Message File:   Flying J Construction.err
 **File for Summary of Results:   Flying J Construction.sum
```

**MODELOPTs: NonDFAULT CONC FLAT FLGPOL

*** VOLUME SOURCE DATA ***

RELEASE	INIT.	INIT.	URBAN	EMISSION RATE			BASE				
SOURCE	NUMBER	EMISSION RATE		X	Y	ELEV.	HEIGHT	SY	SZ	SOURCE	SCALAR VARY
ID	PART.	(GRAMS/SEC)		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)		BY
1FUGITIVE	0	0.40000E-02		567631.0	4400655.0	10.1	0.00	0.23	1.00	NO	
2FUGITIVE	0	0.40000E-02		567668.0	4400652.0	10.1	0.00	0.23	1.00	NO	
3FUGITIVE	0	0.40000E-02		567704.0	4400667.0	10.1	0.00	0.23	1.00	NO	
4FUGITIVE	0	0.40000E-02		567748.0	4400637.0	10.1	0.00	0.23	1.00	NO	
5FUGITIVE	0	0.40000E-02		567767.0	4400607.0	10.1	0.00	0.23	1.00	NO	
6FUGITIVE	0	0.40000E-02		567805.0	4400568.0	10.1	0.00	0.23	1.00	NO	
1EXHAUST	0	0.70000E-03		567631.0	4400655.0	10.1	5.00	0.23	1.00	NO	
2EXHAUST	0	0.70000E-03		567668.0	4400652.0	10.1	5.00	0.23	1.00	NO	
3EXHAUST	0	0.70000E-03		567704.0	400667.0	10.1	5.00	0.23	1.00	NO	
4EXHAUST	0	0.70000E-03		567748.0	4400637.0	10.1	5.00	0.23	1.00	NO	
5EXHAUST	0	0.70000E-03		567767.0	4400607.0	10.1	5.00	0.23	1.00	NO	
6EXHAUST	0	0.70000E-03		567805.0	4400568.0	10.1	5.00	0.23	1.00	NO	
7FUGITIVE	0	0.40000E-02		567836.0	4400549.0	10.1	0.00	0.23	1.00	NO	
7EXHAUST	0	0.70000E-03		836567.0	4400549.0	10.1	5.00	0.23	1.00	NO	

**MODELOPTs: NonDFAULT CONC FLAT FLGPOL

*** SOURCE IDs
DEFINING SOURCE GROUPS ***

SRCGROUP ID SOURCE
IDs

ALL 1FUGITIVE , 2FUGITIVE , 3FUGITIVE , 4FUGITIVE
, 5FUGITIVE , 6FUGITIVE , 1EXHAUST , 2EXHAUST ,

3EXHAUST , 4EXHAUST , 5EXHAUST , 6EXHAUST
, 7FUGITIVE , 7EXHAUST ,

**MODELOPTs: NonDFAULT CONC FLAT FLGPOL

*** DISCRETE CARTESIAN RECEPTORS ***

(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)

(METERS)

```
     ( 568027.5, 4400677.5,      10.1,      10.1,       1.6);
( 567750.9, 4400473.5,      10.1,      10.1,       1.6);
     ( 567559.7, 4400543.6,      10.1,      10.1,       1.6);
( 567562.2, 4400771.8,      10.1,      10.1,       1.6);
     ( 567592.8, 4400852.1,      10.1,      10.1,       1.6);
( 567792.9, 4400306.5,      10.1,      10.1,       1.6);
     ( 567597.9, 4400377.9,      10.1,      10.1,       1.6);
( 567595.3, 4400936.2,      10.1,      10.1,       1.6);
     ( 567975.2, 4400788.4,      10.1,      10.1,       1.6);
( 567487.0, 4400894.2,      10.1,      10.1,       1.6);
     ( 567453.9, 4400825.3,      10.1,      10.1,       1.6);
( 567404.1, 4400765.4,      10.1,      10.1,       1.6);
     ( 568004.5, 4400240.3,      10.1,      10.1,       1.6);
( 567438.6, 4400931.1,      10.1,      10.1,       1.6);
```

**MODELOPTs: NonDFAULT CONC FLAT FLGPOL

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING *** (1 =YES; 0=NO)

```
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Pilot Flying J Project Co ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        14:38:36

PAGE   6
 **MODELOPTs:   NonDFAULT CONC      FLAT      FLGPOL

                                    *** UP TO THE FIRST 24 HOURS
OF METEOROLOGICAL DATA ***

   Surface file:   ..\..\AERMET.SFC
Met Version:  14134
   Profile file:   ..\..\AERMET.PFL
   Surface format: FREE
   Profile format: FREE
   Surface station no.:    24257                  Upper air
station no.:    23110
                  Name: REDDING/AAF
Name: UNKNOWN
                  Year:   1992
Year:   1992

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN
Z0  BOWEN ALBEDO  REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 92 01 01   1 01   -5.8  0.095 -9.000 -9.000 -999.   70.     13.4
0.05   0.87   1.00    3.10   11.   33.0  274.2    2.0
 92 01 01   1 02   -5.0  0.085 -9.000 -9.000 -999.   60.     11.3
0.02   0.87   1.00    3.10  358.   33.0  274.2    2.0
 92 01 01   1 03   -5.8  0.095 -9.000 -9.000 -999.   70.     13.3
0.05   0.87   1.00    3.10    4.   33.0  273.1    2.0
 92 01 01   1 04   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60   13.   33.0  272.5    2.0
 92 01 01   1 05   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60    3.   33.0  272.5    2.0
 92 01 01   1 06 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 07 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 08 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  271.4    2.0
 92 01 01   1 09 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.45    0.00    0.   33.0  273.8    2.0
 92 01 01   1 10   27.6 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.30    0.00    0.   33.0  278.1    2.0
 92 01 01   1 11   60.7 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.25    0.00    0.   33.0  281.4    2.0
 92 01 01   1 12   80.1  0.194 -9.000 -9.000 -999.  205.     -8.2
0.02   0.87   0.23    2.60  346.   33.0  284.9    2.0
```

```
 92 01 01   1 13   86.2 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.22    0.00    0.   33.0  287.0    2.0
 92 01 01   1 14   75.5  0.164 -9.000 -9.000 -999.  160.     -5.3
0.02   0.87   0.24    2.10  109.   33.0  287.0    2.0
 92 01 01   1 15   48.0  0.124 -9.000 -9.000 -999.  105.     -3.6
0.02   0.87   0.27    1.50  162.   33.0  287.0    2.0
 92 01 01   1 16   10.0  0.126 -9.000 -9.000 -999.  108.    -18.2
0.07   0.87   0.37    1.50  254.   33.0  285.4    2.0
 92 01 01   1 17 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.63    0.00    0.   33.0  282.5    2.0
 92 01 01   1 18 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  280.4    2.0
 92 01 01   1 19   -2.7  0.064 -9.000 -9.000 -999.   39.      9.1
0.05   0.87   1.00    2.10   24.   33.0  277.0    2.0
 92 01 01   1 20   -5.6  0.093 -9.000 -9.000 -999.   68.     13.0
0.04   0.87   1.00    3.10  297.   33.0  276.4    2.0
 92 01 01   1 21   -4.9  0.085 -9.000 -9.000 -999.   60.     11.5
0.02   0.87   1.00    3.10  330.   33.0  277.0    2.0
 92 01 01   1 22   -2.6  0.064 -9.000 -9.000 -999.   39.      9.3
0.05   0.87   1.00    2.10   12.   33.0  275.9    2.0
 92 01 01   1 23   -3.4  0.072 -9.000 -9.000 -999.   46.      9.6
0.02   0.87   1.00    2.60  350.   33.0  277.0    2.0
 92 01 01   1 24 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  274.9    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW
sigmaV
 92 01 01 01   33.0 1   11.    3.10   274.3   99.0  -99.00  -
99.00

 F indicates top of profile (=1) or below (=0)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Pilot Flying J Project Co ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        14:38:36

PAGE   7
 **MODELOPTs:   NonDFAULT CONC      FLAT      FLGPOL

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES
AVERAGED OVER   1 YEARS FOR SOURCE GROUP: ALL      ***
                                    INCLUDING SOURCE(S):
1FUGITIVE   , 2FUGITIVE   , 3FUGITIVE   , 4FUGITIVE   , 5FUGITIVE
,
                 6FUGITIVE   , 1EXHAUST    , 2EXHAUST    ,
3EXHAUST    , 4EXHAUST    , 5EXHAUST    , 6EXHAUST    , 7FUGITIVE
,
                 7EXHAUST    ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_10    IN
MICROGRAMS/M**3                            **

       X-COORD (M)   Y-COORD (M)        CONC
X-COORD (M)   Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         568027.46    4400677.48        0.72908
567750.85    4400473.53        9.06196
         567559.65    4400543.64        2.40630
567562.20    4400771.81        2.07127
         567592.79    4400852.12        1.48584
567792.92    4400306.55        3.92453
         567597.89    4400377.93        1.97450
567595.34    4400936.25        1.06521
         567975.20    4400788.38        0.73897
567486.99    4400894.18        0.94029
         567453.85    4400825.35        0.87558
567404.13    4400765.44        0.65946
         568004.52    4400240.26        1.99348
567438.55    4400931.15        0.69900
```

**MODELOPTs: NonDFAULT CONC FLAT FLGPOL

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S):
1FUGITIVE , 2FUGITIVE , 3FUGITIVE , 4FUGITIVE , 5FUGITIVE ,
6FUGITIVE , 1EXHAUST , 2EXHAUST ,
3EXHAUST , 4EXHAUST , 5EXHAUST , 6EXHAUST , 7FUGITIVE ,
7EXHAUST ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
568027.46	4400677.48	28.23299	(92011003)
567750.85	4400473.53	65.75373	(92022603)
567559.65	4400543.64	58.27616	(92042822)
567562.20	4400771.81	127.39371	(92010223)
567592.79	4400852.12	65.97273	(92120803)
567792.92	4400306.55	38.01292	(92020121)
567597.89	4400377.93	25.47700	(92011220)
567595.34	4400936.25	56.90922	(92122506)
567975.20	4400788.38	27.20996	(92051302)
567486.99	4400894.18	101.10320	(92011921)
567453.85	4400825.35	76.36240	(92010223)
567404.13	4400765.44	88.27336	(92121020)
568004.52	4400240.26	56.03105	(92010906)
567438.55	4400931.15	70.02834	(92011921)

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Pilot Flying J Project Co ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        14:38:36

PAGE   9
 **MODELOPTs:   NonDFAULT CONC      FLAT      FLGPOL

                              *** THE   1ST HIGHEST  8-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):
1FUGITIVE   , 2FUGITIVE   , 3FUGITIVE   , 4FUGITIVE   , 5FUGITIVE
,
                 6FUGITIVE   , 1EXHAUST    , 2EXHAUST    ,
3EXHAUST    , 4EXHAUST    , 5EXHAUST    , 6EXHAUST    , 7FUGITIVE
,
                 7EXHAUST    ,

                                                  *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_10    IN
MICROGRAMS/M**3                            **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        568027.46   4400677.48        7.07089c (92120124)
567750.85   4400473.53       28.74251c (92122008)
        567559.65   4400543.64       16.21618m (92101524)
567562.20   4400771.81       30.39034c (92122408)
        567592.79   4400852.12       23.81259c (92122624)
567792.92   4400306.55       16.80198m (92052608)
        567597.89   4400377.93       10.62674b (92091108)
567595.34   4400936.25       13.94305c (92122408)
        567975.20   4400788.38        6.49673c (92022508)
567486.99   4400894.18       23.86565c (92011924)
        567453.85   4400825.35       19.31008c (92011524)
567404.13   4400765.44       16.02201c (92011624)
        568004.52   4400240.26       16.03148c (92122024)
567438.55   4400931.15       16.48275c (92011624)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Pilot Flying J Project Co ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        14:38:36

PAGE  10
 **MODELOPTs:   NonDFAULT CONC      FLAT      FLGPOL

                              *** THE   1ST HIGHEST 24-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):
1FUGITIVE   , 2FUGITIVE   , 3FUGITIVE   , 4FUGITIVE   , 5FUGITIVE
,
                 6FUGITIVE   , 1EXHAUST    , 2EXHAUST    ,
3EXHAUST    , 4EXHAUST    , 5EXHAUST    , 6EXHAUST    , 7FUGITIVE
,
                 7EXHAUST    ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF PM_10    IN
MICROGRAMS/M**3                              **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        568027.46   4400677.48        3.00232b (92051924)
567750.85   4400473.53       17.86726b (92122024)
        567559.65   4400543.64        7.48830b (92012324)
567562.20   4400771.81       14.86906b (92012224)
        567592.79   4400852.12       11.46254b (92122624)
567792.92   4400306.55        8.48591c (92121824)
        567597.89   4400377.93        5.13933b (92091124)
567595.34   4400936.25        7.02874b (92122624)
        567975.20   4400788.38        2.40378m (92103124)
567486.99   4400894.18       10.59473b (92012224)
        567453.85   4400825.35        8.58712b (92011924)
567404.13   4400765.44        5.34067b (92011624)
        568004.52   4400240.26        8.85900b (92122024)
567438.55   4400931.15        8.48725b (92012224)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Pilot Flying J Project Co ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        14:38:36

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 **MODELOPTs:   NonDFAULT CONC      FLAT      FLGPOL

                                   *** THE SUMMARY OF MAXIMUM
ANNUAL RESULTS AVERAGED OVER   1 YEARS ***


                                    ** CONC OF PM_10    IN
MICROGRAMS/M**3                          **


NETWORK
GROUP ID                        AVERAGE CONC
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       9.06196 AT (  567750.85,
4400473.53,    10.06,    10.06,    1.60)  DC
          2ND HIGHEST VALUE IS       3.92453 AT (  567792.92,
4400306.55,    10.06,    10.06,    1.60)  DC
          3RD HIGHEST VALUE IS       2.40630 AT (  567559.65,
4400543.64,    10.06,    10.06,    1.60)  DC
          4TH HIGHEST VALUE IS       2.07127 AT (  567562.20,
4400771.81,    10.06,    10.06,    1.60)  DC
          5TH HIGHEST VALUE IS       1.99348 AT (  568004.52,
4400240.26,    10.06,    10.06,    1.60)  DC
          6TH HIGHEST VALUE IS       1.97450 AT (  567597.89,
4400377.93,    10.06,    10.06,    1.60)  DC
          7TH HIGHEST VALUE IS       1.48584 AT (  567592.79,
4400852.12,    10.06,    10.06,    1.60)  DC
          8TH HIGHEST VALUE IS       1.06521 AT (  567595.34,
4400936.25,    10.06,    10.06,    1.60)  DC
          9TH HIGHEST VALUE IS       0.94029 AT (  567486.99,
4400894.18,    10.06,    10.06,    1.60)  DC
         10TH HIGHEST VALUE IS       0.87558 AT (  567453.85,
4400825.35,    10.06,    10.06,    1.60)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Pilot Flying J Project Co ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        14:38:36

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 **MODELOPTs:   NonDFAULT CONC      FLAT      FLGPOL

                                                  *** THE SUMMARY
OF HIGHEST  1-HR RESULTS ***


                                     ** CONC OF PM_10    IN
MICROGRAMS/M**3                          **

                                                         DATE
NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS     127.39371  ON 92010223: AT
(  567562.20,  4400771.81,    10.06,    10.06,    1.60)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Pilot Flying J Project Co ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        14:38:36

PAGE  13
 **MODELOPTs:   NonDFAULT CONC      FLAT      FLGPOL

                                                  *** THE SUMMARY
OF HIGHEST  8-HR RESULTS ***


                                     ** CONC OF PM_10    IN
MICROGRAMS/M**3                          **

                                                         DATE
NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      30.39034c ON 92122408: AT
(  567562.20,  4400771.81,    10.06,    10.06,    1.60)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Pilot Flying J Project Co ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        14:38:36

PAGE  14
 **MODELOPTs:   NonDFAULT CONC      FLAT      FLGPOL

                                                  *** THE SUMMARY
OF HIGHEST 24-HR RESULTS ***


                                     ** CONC OF PM_10    IN
MICROGRAMS/M**3                           **

                                                         DATE
NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      17.86726b ON 92122024: AT
(  567750.85,  4400473.53,    10.06,    10.06,    1.60)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Pilot Flying J Project Co ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        14:38:36

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 **MODELOPTs:   NonDFAULT CONC      FLAT      FLGPOL

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            0 Warning Message(s)
 A Total of         4945 Informational Message(s)

 A Total of         8784 Hours Were Processed

 A Total of         1674 Calm Hours Identified

 A Total of         3271 Missing Hours Identified ( 37.24
Percent)

 CAUTION!:  Number of Missing Hours Exceeds 10 Percent of Total!
            Data May Not Be Acceptable for Regulatory
Applications.
            See Section 5.3.2 of "Meteorological Monitoring
Guidance
            for Regulatory Modeling Applications" (EPA-454/R-99-
005).


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
               ***  NONE  ***


    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```

```
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 8.8.9
** Lakes Environmental Software Inc.
** Date: 1/13/2015
** File: C:\Emissions Models\Orland\Flying J\AERMOD\Idling Trucks
\Idling Trucks.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Emissions Models\Orland\Flying J\AERMOD\Idling
Trucks\Idling Truc
   MODELOPT CONC FLAT ELEV
   AVERTIME 1 8 24 ANNUAL
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL "Idling Trucks.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION IDLINGTRUCKS VOLUME     567801.000  4400543.000
0.000
** DESCRSRC Idling Trucks in Parking Area
** Source Parameters **
   SRCPARAM IDLINGTRUCKS     0.002     4.000    23.256     4.800
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
** DESCRREC "" ""
   DISCCART    567751.36   4400473.55    0.00    0.00
```

```
   DISCCART    568027.46   4400677.48    0.00    0.00
   DISCCART    567750.85   4400473.53    0.00    0.00
   DISCCART    567559.65   4400543.64    0.00    0.00
   DISCCART    567562.20   4400771.81    0.00    0.00
   DISCCART    567592.79   4400852.12    0.00    0.00
   DISCCART    567792.92   4400306.55    0.00    0.00
   DISCCART    567597.89   4400377.93    0.00    0.00
   DISCCART    567595.34   4400936.25    0.00    0.00
   DISCCART    567975.20   4400788.38    0.00    0.00
   DISCCART    567486.99   4400894.18    0.00    0.00
   DISCCART    567453.85   4400825.35    0.00    0.00
   DISCCART    567404.13   4400765.44    0.00    0.00
   DISCCART    568004.52   4400240.26    0.00    0.00
   DISCCART    567438.55   4400931.15    0.00    0.00
   DISCCART    568240.58   4400261.90    0.00    0.00
   DISCCART    568211.31   4400875.23    0.00    0.00
   DISCCART    567772.17   4401081.63    0.00    0.00
   DISCCART    567401.83   4400357.05    0.00    0.00
   DISCCART    567612.62   4400153.58    0.00    0.00
   DISCCART    567720.94   4400068.68    0.00    0.00
   DISCCART    567965.39   4400109.67    0.00    0.00
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\AERMET.SFC
   PROFFILE ..\AERMET.PFL
   SURFDATA 24257 1992 REDDING/AAF
   UAIRDATA 23110 1992
   PROFBASE 0.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "Idling Trucks.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "Idling Trucks.AD\08H1GALL.PLT" 32
   PLOTFILE 24 ALL 1ST "Idling Trucks.AD\24H1GALL.PLT" 33
   PLOTFILE ANNUAL ALL "Idling Trucks.AD\AN00GALL.PLT" 34
   SUMMFILE "Idling Trucks.sum"
```

```
OU FINISHED

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Idling Trucks\Idling Truc ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        15:38:21

PAGE   1
 **MODELOPTs:   NonDFAULT CONC      FLAT and  ELEV

                                                ***     MODEL SETUP
OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration
Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses RURAL Dispersion Only.

 **Model Allows User-Specified Options:
         1. Stack-tip Downwash.
         2. Allow FLAT/ELEV Terrain Option by Source,
            with      0 FLAT and      1 ELEV Source(s).
         3. Use Calms Processing Routine.
         4. Use Missing Data Processing Routine.
         5. No Exponential Decay.

 **Other Options Specified:
         CCVR_Sub - Meteorological data includes CCVR
substitutions
         TEMP_Sub - Meteorological data includes TEMP
substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  PM_10

 **Model Calculates  3 Short Term Average(s) of:   1-HR   8-HR
24-HR
     and Calculates ANNUAL Averages

 **This Run Includes:      1 Source(s);       1 Source Group(s);
and      22 Receptor(s)

 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134
```

```
 **Output Options Selected:
          Model Outputs Tables of ANNUAL Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by
Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked
Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =
0.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC
;  Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of
RAM.

 **Detailed Error/Message File:   Idling Trucks.err
 **File for Summary of Results:   Idling Trucks.sum
```

**MODELOPTs: NonDFAULT CONC FLAT and ELEV

*** VOLUME
SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	ELEV. (METERS)	HEIGHT (METERS)	SY (METERS)	SZ (METERS)	BASE SOURCE	RELEASE INIT. SCALAR	INIT. VARY BY	URBAN	EMISSION RATE
IDLINGTRUCKS	0	0.20000E-02	567801.0	4400543.0	0.0	4.00	23.26	4.80	NO				

**MODELOPTs: NonDFAULT CONC FLAT and ELEV

*** SOURCE IDs
DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	IDLINGTRUCKS,

**MODELOPTs: NonDFAULT CONC FLAT and ELEV

*** DISCRETE CARTESIAN RECEPTORS ***

(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)

(METERS)

```
     ( 567751.4, 4400473.5,       0.0,       0.0,       0.0);
( 568027.5, 4400677.5,       0.0,       0.0,       0.0);
     ( 567750.9, 4400473.5,       0.0,       0.0,       0.0);
( 567559.7, 4400543.6,       0.0,       0.0,       0.0);
     ( 567562.2, 4400771.8,       0.0,       0.0,       0.0);
( 567592.8, 4400852.1,       0.0,       0.0,       0.0);
     ( 567792.9, 4400306.5,       0.0,       0.0,       0.0);
( 567597.9, 4400377.9,       0.0,       0.0,       0.0);
     ( 567595.3, 4400936.2,       0.0,       0.0,       0.0);
( 567975.2, 4400788.4,       0.0,       0.0,       0.0);
     ( 567487.0, 4400894.2,       0.0,       0.0,       0.0);
( 567453.9, 4400825.3,       0.0,       0.0,       0.0);
     ( 567404.1, 4400765.4,       0.0,       0.0,       0.0);
( 568004.5, 4400240.3,       0.0,       0.0,       0.0);
     ( 567438.6, 4400931.1,       0.0,       0.0,       0.0);
( 568240.6, 4400261.9,       0.0,       0.0,       0.0);
     ( 568211.3, 4400875.2,       0.0,       0.0,       0.0);
( 567772.2, 4401081.6,       0.0,       0.0,       0.0);
     ( 567401.8, 4400357.0,       0.0,       0.0,       0.0);
( 567612.6, 4400153.6,       0.0,       0.0,       0.0);
     ( 567720.9, 4400068.7,       0.0,       0.0,       0.0);
( 567965.4, 4400109.7,       0.0,       0.0,       0.0);
```

**MODELOPTs: NonDFAULT CONC FLAT and ELEV

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING *** (1=YES; 0=NO)

```
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Idling Trucks\Idling Truc ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        15:38:21

PAGE   6
 **MODELOPTs:   NonDFAULT CONC      FLAT and  ELEV

                                    *** UP TO THE FIRST 24 HOURS
OF METEOROLOGICAL DATA ***

   Surface file:   ..\AERMET.SFC
Met Version:  14134
   Profile file:   ..\AERMET.PFL
   Surface format: FREE
   Profile format: FREE
   Surface station no.:    24257                  Upper air
station no.:    23110
                  Name: REDDING/AAF
Name: UNKNOWN
                  Year:   1992
Year:   1992

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN
Z0  BOWEN ALBEDO  REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 92 01 01   1 01   -5.8  0.095 -9.000 -9.000 -999.   70.     13.4
0.05   0.87   1.00    3.10   11.   33.0  274.2    2.0
 92 01 01   1 02   -5.0  0.085 -9.000 -9.000 -999.   60.     11.3
0.02   0.87   1.00    3.10  358.   33.0  274.2    2.0
 92 01 01   1 03   -5.8  0.095 -9.000 -9.000 -999.   70.     13.3
0.05   0.87   1.00    3.10    4.   33.0  273.1    2.0
 92 01 01   1 04   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60   13.   33.0  272.5    2.0
 92 01 01   1 05   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60    3.   33.0  272.5    2.0
 92 01 01   1 06 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 07 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 08 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  271.4    2.0
 92 01 01   1 09 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.45    0.00    0.   33.0  273.8    2.0
 92 01 01   1 10   27.6 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.30    0.00    0.   33.0  278.1    2.0
 92 01 01   1 11   60.7 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.25    0.00    0.   33.0  281.4    2.0
 92 01 01   1 12   80.1  0.194 -9.000 -9.000 -999.  205.     -8.2
0.02   0.87   0.23    2.60  346.   33.0  284.9    2.0
```

```
 92 01 01   1 13   86.2 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.22    0.00    0.   33.0  287.0    2.0
 92 01 01   1 14   75.5  0.164 -9.000 -9.000 -999.  160.     -5.3
0.02   0.87   0.24    2.10  109.   33.0  287.0    2.0
 92 01 01   1 15   48.0  0.124 -9.000 -9.000 -999.  105.     -3.6
0.02   0.87   0.27    1.50  162.   33.0  287.0    2.0
 92 01 01   1 16   10.0  0.126 -9.000 -9.000 -999.  108.    -18.2
0.07   0.87   0.37    1.50  254.   33.0  285.4    2.0
 92 01 01   1 17 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.63    0.00    0.   33.0  282.5    2.0
 92 01 01   1 18 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  280.4    2.0
 92 01 01   1 19   -2.7  0.064 -9.000 -9.000 -999.   39.      9.1
0.05   0.87   1.00    2.10   24.   33.0  277.0    2.0
 92 01 01   1 20   -5.6  0.093 -9.000 -9.000 -999.   68.     13.0
0.04   0.87   1.00    3.10  297.   33.0  276.4    2.0
 92 01 01   1 21   -4.9  0.085 -9.000 -9.000 -999.   60.     11.5
0.02   0.87   1.00    3.10  330.   33.0  277.0    2.0
 92 01 01   1 22   -2.6  0.064 -9.000 -9.000 -999.   39.      9.3
0.05   0.87   1.00    2.10   12.   33.0  275.9    2.0
 92 01 01   1 23   -3.4  0.072 -9.000 -9.000 -999.   46.      9.6
0.02   0.87   1.00    2.60  350.   33.0  277.0    2.0
 92 01 01   1 24 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  274.9    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW
sigmaV
 92 01 01 01   33.0 1   11.    3.10   274.3   99.0  -99.00  -
99.00

 F indicates top of profile (=1) or below (=0)
```

**MODELOPTs: NonDFAULT CONC FLAT and ELEV

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): IDLINGTRUCKS,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC
567751.36	4400473.55	0.47367
568027.46	4400677.48	0.04939
567750.85	4400473.53	0.46801
567559.65	4400543.64	0.04904
567562.20	4400771.81	0.05062
567592.79	4400852.12	0.04550
567792.92	4400306.55	0.30142
567597.89	4400377.93	0.07497
567595.34	4400936.25	0.03757
567975.20	4400788.38	0.03929
567486.99	4400894.18	0.03180
567453.85	4400825.35	0.03073
567404.13	4400765.44	0.02562
568004.52	4400240.26	0.15190
567438.55	4400931.15	0.02684
568240.58	4400261.90	0.04089
568211.31	4400875.23	0.01760
567772.17	4401081.63	0.03228
567401.83	4400357.05	0.02769
567612.62	4400153.58	0.05722
567720.94	4400068.68	0.07898
567965.39	4400109.67	0.12541

**MODELOPTs: NonDFAULT CONC FLAT and ELEV

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): IDLINGTRUCKS,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
567751.36	4400473.55	4.44331	(92012509)
568027.46	4400677.48	2.78192	(92120118)
567750.85	4400473.53	4.43237	(92012509)
567559.65	4400543.64	3.03423	(92010917)
567562.20	4400771.81	2.77296	(92011921)
567592.79	4400852.12	2.07694	(92122405)
567792.92	4400306.55	3.01055	(92121208)
567597.89	4400377.93	2.74333	(92012104)
567595.34	4400936.25	2.10357	(92122506)
567975.20	4400788.38	2.60464	(92022504)
567486.99	4400894.18	2.45995	(92011921)
567453.85	4400825.35	1.99530	(92010223)
567404.13	4400765.44	2.03340	(92011619)
568004.52	4400240.26	2.34292	(92122004)
567438.55	4400931.15	2.32061	(92011921)
568240.58	4400261.90	1.67169	(92013001)
568211.31	4400875.23	1.71662	(92120720)
567772.17	4401081.63	1.53286	(92022121)
567401.83	4400357.05	1.95310	(92022407)
567612.62	4400153.58	1.86617	(92022807)
567720.94	4400068.68	1.58051	(92022704)
567965.39	4400109.67	1.94365	(92022906)

**MODELOPTs: NonDFAULT CONC FLAT and ELEV

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): IDLINGTRUCKS,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
567751.36	4400473.55	1.92077b	(92091108)
568027.46	4400677.48	0.76005c	(92120124)
567750.85	4400473.53	1.89729c	(92021708)
567559.65	4400543.64	0.69951c	(92012408)
567562.20	4400771.81	0.86095c	(92011624)
567592.79	4400852.12	1.09038c	(92122624)
567792.92	4400306.55	1.68979c	(92092908)
567597.89	4400377.93	0.94328b	(92051108)
567595.34	4400936.25	0.68549c	(92122624)
567975.20	4400788.38	0.73191c	(92022508)
567486.99	4400894.18	0.68270c	(92011924)
567453.85	4400825.35	0.56074c	(92011624)
567404.13	4400765.44	0.47179c	(92011624)
568004.52	4400240.26	0.93683c	(92122024)
567438.55	4400931.15	0.62888c	(92011924)
568240.58	4400261.90	0.40395b	(92030624)
568211.31	4400875.23	0.28991c	(92120724)
567772.17	4401081.63	0.37815c	(92122608)
567401.83	4400357.05	0.40510b	(92032308)
567612.62	4400153.58	0.52616m	(92053108)
567720.94	4400068.68	0.57512b	(92040608)
567965.39	4400109.67	0.75668c	(92012524)

**MODELOPTs: NonDFAULT CONC FLAT and ELEV

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S):
IDLINGTRUCKS,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
567751.36	4400473.55	0.95855b	(92101724)
568027.46	4400677.48	0.26165b	(92120124)
567750.85	4400473.53	0.95014b	(92101724)
567559.65	4400543.64	0.34623b	(92013124)
567562.20	4400771.81	0.50704b	(92012224)
567592.79	4400852.12	0.42759b	(92122624)
567792.92	4400306.55	0.77427c	(92121824)
567597.89	4400377.93	0.31985b	(92051124)
567595.34	4400936.25	0.27029b	(92122624)
567975.20	4400788.38	0.24753b	(92022524)
567486.99	4400894.18	0.36812b	(92012224)
567453.85	4400825.35	0.24711b	(92012224)
567404.13	4400765.44	0.15852b	(92012624)
568004.52	4400240.26	0.51196b	(92122024)
567438.55	4400931.15	0.33112b	(92012224)
568240.58	4400261.90	0.18854b	(92030624)
568211.31	4400875.23	0.09794b	(92120724)
567772.17	4401081.63	0.18330b	(92122624)
567401.83	4400357.05	0.20260b	(92012324)
567612.62	4400153.58	0.24025b	(92053124)
567720.94	4400068.68	0.26765b	(92091124)
567965.39	4400109.67	0.37525m	(92022324)

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Idling Trucks\Idling Truc ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        15:38:21

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 **MODELOPTs:   NonDFAULT CONC      FLAT and  ELEV

                                   *** THE SUMMARY OF MAXIMUM
ANNUAL RESULTS AVERAGED OVER   1 YEARS ***


                                    ** CONC OF PM_10    IN
MICROGRAMS/M**3                          **


NETWORK
GROUP ID                        AVERAGE CONC
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       0.47367 AT (  567751.36,
4400473.55,     0.00,     0.00,    0.00)  DC
          2ND HIGHEST VALUE IS       0.46801 AT (  567750.85,
4400473.53,     0.00,     0.00,    0.00)  DC
          3RD HIGHEST VALUE IS       0.30142 AT (  567792.92,
4400306.55,     0.00,     0.00,    0.00)  DC
          4TH HIGHEST VALUE IS       0.15190 AT (  568004.52,
4400240.26,     0.00,     0.00,    0.00)  DC
          5TH HIGHEST VALUE IS       0.12541 AT (  567965.39,
4400109.67,     0.00,     0.00,    0.00)  DC
          6TH HIGHEST VALUE IS       0.07898 AT (  567720.94,
4400068.68,     0.00,     0.00,    0.00)  DC
          7TH HIGHEST VALUE IS       0.07497 AT (  567597.89,
4400377.93,     0.00,     0.00,    0.00)  DC
          8TH HIGHEST VALUE IS       0.05722 AT (  567612.62,
4400153.58,     0.00,     0.00,    0.00)  DC
          9TH HIGHEST VALUE IS       0.05062 AT (  567562.20,
4400771.81,     0.00,     0.00,    0.00)  DC
         10TH HIGHEST VALUE IS       0.04939 AT (  568027.46,
4400677.48,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Idling Trucks\Idling Truc ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        15:38:21

PAGE  12
 **MODELOPTs:   NonDFAULT CONC      FLAT and  ELEV

                                                  *** THE SUMMARY
OF HIGHEST  1-HR RESULTS ***


                                     ** CONC OF PM_10    IN
MICROGRAMS/M**3                           **

                                                        DATE
NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       4.44331  ON 92012509: AT
(  567751.36,  4400473.55,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Idling Trucks\Idling Truc ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        15:38:21

PAGE  13
 **MODELOPTs:   NonDFAULT CONC      FLAT and  ELEV

                                                  *** THE SUMMARY
OF HIGHEST  8-HR RESULTS ***


                                     ** CONC OF PM_10    IN
MICROGRAMS/M**3                           **

                                                         DATE
NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       1.92077b ON 92091108: AT
(  567751.36,  4400473.55,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Idling Trucks\Idling Truc ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        15:38:21

PAGE  14
 **MODELOPTs:   NonDFAULT CONC      FLAT and  ELEV

                                                  *** THE SUMMARY
OF HIGHEST 24-HR RESULTS ***


                                     ** CONC OF PM_10    IN
MICROGRAMS/M**3                           **

                                                         DATE
NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       0.95855b ON 92101724: AT
(  567751.36,  4400473.55,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Idling Trucks\Idling Truc ***        01/13/15
 *** AERMET - VERSION  14134 ***   ***
***        15:38:21

PAGE  15
 **MODELOPTs:   NonDFAULT CONC      FLAT and  ELEV

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            0 Warning Message(s)
 A Total of         4945 Informational Message(s)

 A Total of         8784 Hours Were Processed

 A Total of         1674 Calm Hours Identified

 A Total of         3271 Missing Hours Identified ( 37.24
Percent)

 CAUTION!:  Number of Missing Hours Exceeds 10 Percent of Total!
            Data May Not Be Acceptable for Regulatory
Applications.
            See Section 5.3.2 of "Meteorological Monitoring
Guidance
            for Regulatory Modeling Applications" (EPA-454/R-99-
005).


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
               ***  NONE  ***


    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```

```
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 8.8.9
** Lakes Environmental Software Inc.
** Date: 1/14/2015
** File: C:\Emissions Models\Orland\Flying J\AERMOD\Local
Circulation PM10\Local Circulation PM10.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Emissions Models\Orland\Flying J\AERMOD\Local
Circulation\Local C
   MODELOPT DFAULT CONC
   AVERTIME 1 8 24 ANNUAL
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL "LOCAL CIRCULATION.ERR"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION RD200        AREA       567626.890  4400758.380
0.000
   LOCATION RDHH         AREA       567613.220  4400754.070
0.000
   LOCATION RD13         AREA       567629.610  4400497.920
0.000
** Source Parameters **
   SRCPARAM RD200        5.5218E-07     4.800   110.000    12.286
28.811     4.800
   SRCPARAM RDHH         3.3223E-07     4.800   253.144    10.000
89.659     4.800
   SRCPARAM RD13         3.8889E-07     4.800   180.000    10.000
1.134     4.800
   SRCGROUP ALL
SO FINISHED
**
```

```
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
** DESCRREC "" ""
   DISCCART    567751.36   4400473.55    0.00    0.00
   DISCCART    568027.46   4400677.48    0.00    0.00
   DISCCART    567750.85   4400473.53    0.00    0.00
   DISCCART    567559.65   4400543.64    0.00    0.00
   DISCCART    567562.20   4400771.81    0.00    0.00
   DISCCART    567592.79   4400852.12    0.00    0.00
   DISCCART    567792.92   4400306.55    0.00    0.00
   DISCCART    567597.89   4400377.93    0.00    0.00
   DISCCART    567595.34   4400936.25    0.00    0.00
   DISCCART    567975.20   4400788.38    0.00    0.00
   DISCCART    567486.99   4400894.18    0.00    0.00
   DISCCART    567453.85   4400825.35    0.00    0.00
   DISCCART    567404.13   4400765.44    0.00    0.00
   DISCCART    568004.52   4400240.26    0.00    0.00
   DISCCART    567438.55   4400931.15    0.00    0.00
   DISCCART    568240.58   4400261.90    0.00    0.00
   DISCCART    568211.31   4400875.23    0.00    0.00
   DISCCART    567772.17   4401081.63    0.00    0.00
   DISCCART    567401.83   4400357.05    0.00    0.00
   DISCCART    567612.62   4400153.58    0.00    0.00
   DISCCART    567720.94   4400068.68    0.00    0.00
   DISCCART    567965.39   4400109.67    0.00    0.00
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\AERMET.SFC
   PROFFILE ..\AERMET.PFL
   SURFDATA 24257 1992 REDDING/AAF
   UAIRDATA 23110 1992
   PROFBASE 0.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
```

```
   RECTABLE 8 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "Local Circulation PM10.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "Local Circulation PM10.AD\08H1GALL.PLT" 32
   PLOTFILE 24 ALL 1ST "Local Circulation PM10.AD\24H1GALL.PLT"
33
   PLOTFILE ANNUAL ALL "Local Circulation PM10.AD\AN00GALL.PLT"
34
   SUMMFILE "LOCAL CIRCULATION.SUM"
OU FINISHED

 ************************************
 *** SETUP Finishes Successfully ***
 ************************************
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        11:15:15

PAGE   1
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                  ***     MODEL SETUP
OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration
Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses RURAL Dispersion Only.

 **Model Uses Regulatory DEFAULT Options:
         1. Stack-tip Downwash.
         2. Model Accounts for ELEVated Terrain Effects.
         3. Use Calms Processing Routine.
         4. Use Missing Data Processing Routine.
         5. No Exponential Decay.

 **Other Options Specified:
         CCVR_Sub - Meteorological data includes CCVR
substitutions
         TEMP_Sub - Meteorological data includes TEMP
substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  PM_10

 **Model Calculates  3 Short Term Average(s) of:   1-HR   8-HR
24-HR
     and Calculates ANNUAL Averages

 **This Run Includes:      3 Source(s);       1 Source Group(s);
and      22 Receptor(s)

 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134
```

```
 **Output Options Selected:
          Model Outputs Tables of ANNUAL Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by
Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked
Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =
0.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC
;  Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of
RAM.

 **Detailed Error/Message File:   LOCAL CIRCULATION.ERR
 **File for Summary of Results:   LOCAL CIRCULATION.SUM
```

**MODELOPTs: RegDFAULT CONC ELEV

*** AREA SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	COORD (SW CORNER) X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
RD200	0	0.55218E-06	567626.9	4400758.4	0.0	4.80	110.00	12.29	28.81	4.80	NO	
RDHH	0	0.33223E-06	567613.2	4400754.1	0.0	4.80	253.14	10.00	89.66	4.80	NO	
RD13	0	0.38889E-06	567629.6	4400497.9	0.0	4.80	180.00	10.00	1.13	4.80	NO	

**MODELOPTs: RegDFAULT CONC ELEV

*** SOURCE IDs
DEFINING SOURCE GROUPS ***

SRCGROUP ID SOURCE
IDs

ALL RD200 , RDHH , RD13 ,

**MODELOPTs: RegDFAULT CONC ELEV

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)

(METERS)

```
     ( 567751.4, 4400473.5,       0.0,       0.0,       0.0);
( 568027.5, 4400677.5,       0.0,       0.0,       0.0);
     ( 567750.9, 4400473.5,       0.0,       0.0,       0.0);
( 567559.7, 4400543.6,       0.0,       0.0,       0.0);
     ( 567562.2, 4400771.8,       0.0,       0.0,       0.0);
( 567592.8, 4400852.1,       0.0,       0.0,       0.0);
     ( 567792.9, 4400306.5,       0.0,       0.0,       0.0);
( 567597.9, 4400377.9,       0.0,       0.0,       0.0);
     ( 567595.3, 4400936.2,       0.0,       0.0,       0.0);
( 567975.2, 4400788.4,       0.0,       0.0,       0.0);
     ( 567487.0, 4400894.2,       0.0,       0.0,       0.0);
( 567453.9, 4400825.3,       0.0,       0.0,       0.0);
     ( 567404.1, 4400765.4,       0.0,       0.0,       0.0);
( 568004.5, 4400240.3,       0.0,       0.0,       0.0);
     ( 567438.6, 4400931.1,       0.0,       0.0,       0.0);
( 568240.6, 4400261.9,       0.0,       0.0,       0.0);
     ( 568211.3, 4400875.2,       0.0,       0.0,       0.0);
( 567772.2, 4401081.6,       0.0,       0.0,       0.0);
     ( 567401.8, 4400357.0,       0.0,       0.0,       0.0);
( 567612.6, 4400153.6,       0.0,       0.0,       0.0);
     ( 567720.9, 4400068.7,       0.0,       0.0,       0.0);
( 567965.4, 4400109.7,       0.0,       0.0,       0.0);
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        11:15:15

PAGE   5
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                *** METEOROLOGICAL
DAYS SELECTED FOR PROCESSING ***
                                                                    (1
=YES; 0=NO)

            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1

                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED
WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.


                                  *** UPPER BOUND OF FIRST
THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

                                                     1.54,   3.09,
5.14,   8.23,  10.80,
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        11:15:15

PAGE   6
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                     *** UP TO THE FIRST 24 HOURS
OF METEOROLOGICAL DATA ***

   Surface file:   ..\AERMET.SFC
Met Version:  14134
   Profile file:   ..\AERMET.PFL
   Surface format: FREE
   Profile format: FREE
   Surface station no.:    24257                  Upper air
station no.:    23110
                  Name: REDDING/AAF
Name: UNKNOWN
                  Year:   1992
Year:   1992

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN
Z0  BOWEN ALBEDO  REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 92 01 01   1 01   -5.8  0.095 -9.000 -9.000 -999.   70.     13.4
0.05   0.87   1.00    3.10   11.   33.0  274.2    2.0
 92 01 01   1 02   -5.0  0.085 -9.000 -9.000 -999.   60.     11.3
0.02   0.87   1.00    3.10  358.   33.0  274.2    2.0
 92 01 01   1 03   -5.8  0.095 -9.000 -9.000 -999.   70.     13.3
0.05   0.87   1.00    3.10    4.   33.0  273.1    2.0
 92 01 01   1 04   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60   13.   33.0  272.5    2.0
 92 01 01   1 05   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60    3.   33.0  272.5    2.0
 92 01 01   1 06 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 07 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 08 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  271.4    2.0
 92 01 01   1 09 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.45    0.00    0.   33.0  273.8    2.0
 92 01 01   1 10   27.6 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.30    0.00    0.   33.0  278.1    2.0
 92 01 01   1 11   60.7 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.25    0.00    0.   33.0  281.4    2.0
 92 01 01   1 12   80.1  0.194 -9.000 -9.000 -999.  205.     -8.2
0.02   0.87   0.23    2.60  346.   33.0  284.9    2.0
```

```
 92 01 01   1 13   86.2 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.22    0.00    0.   33.0  287.0    2.0
 92 01 01   1 14   75.5  0.164 -9.000 -9.000 -999.  160.     -5.3
0.02   0.87   0.24    2.10  109.   33.0  287.0    2.0
 92 01 01   1 15   48.0  0.124 -9.000 -9.000 -999.  105.     -3.6
0.02   0.87   0.27    1.50  162.   33.0  287.0    2.0
 92 01 01   1 16   10.0  0.126 -9.000 -9.000 -999.  108.    -18.2
0.07   0.87   0.37    1.50  254.   33.0  285.4    2.0
 92 01 01   1 17 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.63    0.00    0.   33.0  282.5    2.0
 92 01 01   1 18 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  280.4    2.0
 92 01 01   1 19   -2.7  0.064 -9.000 -9.000 -999.   39.      9.1
0.05   0.87   1.00    2.10   24.   33.0  277.0    2.0
 92 01 01   1 20   -5.6  0.093 -9.000 -9.000 -999.   68.     13.0
0.04   0.87   1.00    3.10  297.   33.0  276.4    2.0
 92 01 01   1 21   -4.9  0.085 -9.000 -9.000 -999.   60.     11.5
0.02   0.87   1.00    3.10  330.   33.0  277.0    2.0
 92 01 01   1 22   -2.6  0.064 -9.000 -9.000 -999.   39.      9.3
0.05   0.87   1.00    2.10   12.   33.0  275.9    2.0
 92 01 01   1 23   -3.4  0.072 -9.000 -9.000 -999.   46.      9.6
0.02   0.87   1.00    2.60  350.   33.0  277.0    2.0
 92 01 01   1 24 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  274.9    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW
sigmaV
 92 01 01 01   33.0 1   11.    3.10   274.3   99.0  -99.00  -
99.00

 F indicates top of profile (=1) or below (=0)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        11:15:15

PAGE   7
 **MODELOPTs:   RegDFAULT CONC      ELEV

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES
AVERAGED OVER   1 YEARS FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     RD200
, RDHH        , RD13        ,

                                                *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF PM_10    IN
MICROGRAMS/M**3                              **

       X-COORD (M)   Y-COORD (M)        CONC
X-COORD (M)   Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         567751.36    4400473.55        0.59318
568027.46    4400677.48        0.02712
         567750.85    4400473.53        0.59390
567559.65    4400543.64        0.17397
         567562.20    4400771.81        0.11697
567592.79    4400852.12        0.12116
         567792.92    4400306.55        0.27301
567597.89    4400377.93        0.22773
         567595.34    4400936.25        0.07752
567975.20    4400788.38        0.02547
         567486.99    4400894.18        0.05930
567453.85    4400825.35        0.05253
         567404.13    4400765.44        0.04079
568004.52    4400240.26        0.09350
         567438.55    4400931.15        0.04507
568240.58    4400261.90        0.02929
         568211.31    4400875.23        0.01126
567772.17    4401081.63        0.02605
         567401.83    4400357.05        0.05221
567612.62    4400153.58        0.12551
         567720.94    4400068.68        0.13337
567965.39    4400109.67        0.10091
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        11:15:15

PAGE   8
 **MODELOPTs:   RegDFAULT CONC      ELEV

                              *** THE   1ST HIGHEST  1-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     RD200
, RDHH        , RD13        ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_10    IN
MICROGRAMS/M**3                            **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        567751.36   4400473.55        2.47386  (92091102)
568027.46   4400677.48        1.18048  (92011017)
        567750.85   4400473.53        2.46860  (92091102)
567559.65   4400543.64        2.49912  (92060520)
        567562.20   4400771.81        2.76507  (92012924)
567592.79   4400852.12        2.60757  (92053121)
        567792.92   4400306.55        1.67947  (92072821)
567597.89   4400377.93        2.37564  (92122003)
        567595.34   4400936.25        2.12148  (92122608)
567975.20   4400788.38        1.36292  (92011324)
        567486.99   4400894.18        1.71104  (92011921)
567453.85   4400825.35        1.81123  (92010604)
        567404.13   4400765.44        1.65686  (92012003)
568004.52   4400240.26        1.30265  (92122107)
        567438.55   4400931.15        1.59120  (92011921)
568240.58   4400261.90        0.91934  (92022903)
        568211.31   4400875.23        0.74682  (92011324)
567772.17   4401081.63        1.50058  (92082105)
        567401.83   4400357.05        1.33785  (92020606)
567612.62   4400153.58        1.62124  (92120507)
        567720.94   4400068.68        1.54852  (92020423)
567965.39   4400109.67        1.34272  (92123122)
```

**MODELOPTs: RegDFAULT CONC ELEV

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): RD200 , RDHH , RD13 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
567751.36	4400473.55	1.72213b	(92030624)
568027.46	4400677.48	0.35734c	(92012608)
567750.85	4400473.53	1.72235b	(92030624)
567559.65	4400543.64	0.84403c	(92012408)
567562.20	4400771.81	1.01467c	(92012208)
567592.79	4400852.12	1.23909c	(92122624)
567792.92	4400306.55	1.07278b	(92032208)
567597.89	4400377.93	1.31290c	(92092908)
567595.34	4400936.25	0.69948c	(92020808)
567975.20	4400788.38	0.30207m	(92092324)
567486.99	4400894.18	0.82073c	(92122624)
567453.85	4400825.35	0.86037c	(92011624)
567404.13	4400765.44	0.62439c	(92011624)
568004.52	4400240.26	0.64040c	(92032124)
567438.55	4400931.15	0.72953c	(92122624)
568240.58	4400261.90	0.28596b	(92030624)
568211.31	4400875.23	0.15315c	(92120124)
567772.17	4401081.63	0.30952b	(92082108)
567401.83	4400357.05	0.43494m	(92101524)
567612.62	4400153.58	0.90957c	(92092908)
567720.94	4400068.68	0.83897m	(92052608)
567965.39	4400109.67	0.60958c	(92122024)

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        11:15:15

PAGE  10
 **MODELOPTs:   RegDFAULT CONC      ELEV

                              *** THE   1ST HIGHEST 24-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     RD200
, RDHH        , RD13        ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_10    IN
MICROGRAMS/M**3                            **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        567751.36   4400473.55        0.98020b (92122024)
568027.46   4400677.48        0.16749b (92120724)
        567750.85   4400473.53        0.98083b (92122024)
567559.65   4400543.64        0.46956b (92101724)
        567562.20   4400771.81        0.59689b (92012224)
567592.79   4400852.12        0.75676b (92122624)
        567792.92   4400306.55        0.56366b (92020224)
567597.89   4400377.93        0.57227b (92092924)
        567595.34   4400936.25        0.40920b (92122624)
567975.20   4400788.38        0.14591m (92103124)
        567486.99   4400894.18        0.42497b (92012224)
567453.85   4400825.35        0.43457b (92012224)
        567404.13   4400765.44        0.30789b (92012224)
568004.52   4400240.26        0.34879b (92122024)
        567438.55   4400931.15        0.36069b (92012224)
568240.58   4400261.90        0.12351b (92030624)
        568211.31   4400875.23        0.08069m (92103124)
567772.17   4401081.63        0.12483b (92020824)
        567401.83   4400357.05        0.19144b (92032324)
567612.62   4400153.58        0.38216b (92092924)
        567720.94   4400068.68        0.34699b (92052624)
567965.39   4400109.67        0.32538b (92122024)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        11:15:15

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                                   *** THE SUMMARY OF MAXIMUM
ANNUAL RESULTS AVERAGED OVER   1 YEARS ***


                                    ** CONC OF PM_10    IN
MICROGRAMS/M**3                          **


NETWORK
GROUP ID                        AVERAGE CONC
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       0.59390 AT (  567750.85,
4400473.53,     0.00,     0.00,    0.00)  DC
          2ND HIGHEST VALUE IS       0.59318 AT (  567751.36,
4400473.55,     0.00,     0.00,    0.00)  DC
          3RD HIGHEST VALUE IS       0.27301 AT (  567792.92,
4400306.55,     0.00,     0.00,    0.00)  DC
          4TH HIGHEST VALUE IS       0.22773 AT (  567597.89,
4400377.93,     0.00,     0.00,    0.00)  DC
          5TH HIGHEST VALUE IS       0.17397 AT (  567559.65,
4400543.64,     0.00,     0.00,    0.00)  DC
          6TH HIGHEST VALUE IS       0.13337 AT (  567720.94,
4400068.68,     0.00,     0.00,    0.00)  DC
          7TH HIGHEST VALUE IS       0.12551 AT (  567612.62,
4400153.58,     0.00,     0.00,    0.00)  DC
          8TH HIGHEST VALUE IS       0.12116 AT (  567592.79,
4400852.12,     0.00,     0.00,    0.00)  DC
          9TH HIGHEST VALUE IS       0.11697 AT (  567562.20,
4400771.81,     0.00,     0.00,    0.00)  DC
         10TH HIGHEST VALUE IS       0.10091 AT (  567965.39,
4400109.67,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        11:15:15

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST  1-HR RESULTS ***


                                     ** CONC OF PM_10    IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       2.76507  ON 92012924: AT
(  567562.20,  4400771.81,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        11:15:15

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST  8-HR RESULTS ***


                                     ** CONC OF PM_10    IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       1.72235b ON 92030624: AT
(  567750.85,  4400473.53,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        11:15:15

PAGE  14
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST 24-HR RESULTS ***


                                     ** CONC OF PM_10    IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       0.98083b ON 92122024: AT
(  567750.85,  4400473.53,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        11:15:15

PAGE  15
 **MODELOPTs:   RegDFAULT CONC      ELEV

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            0 Warning Message(s)
 A Total of         4945 Informational Message(s)

 A Total of         8784 Hours Were Processed

 A Total of         1674 Calm Hours Identified

 A Total of         3271 Missing Hours Identified ( 37.24
Percent)

 CAUTION!:  Number of Missing Hours Exceeds 10 Percent of Total!
            Data May Not Be Acceptable for Regulatory
Applications.
            See Section 5.3.2 of "Meteorological Monitoring
Guidance
            for Regulatory Modeling Applications" (EPA-454/R-99-
005).


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
               ***  NONE  ***


    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```

```
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 8.8.9
** Lakes Environmental Software Inc.
** Date: 1/14/2015
** File: C:\Emissions Models\Orland\Flying J\AERMOD\Local
Circulation\Local Circulation.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Emissions Models\Orland\Flying J\AERMOD\Local
Circulation\Local C
   MODELOPT DFAULT CONC
   AVERTIME 1 8 24 ANNUAL
   POLLUTID PM_2.5
   RUNORNOT RUN
   ERRORFIL "Local Circulation.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION RD200        AREA       567626.890  4400758.380
0.000
   LOCATION RDHH         AREA       567613.220  4400754.070
0.000
   LOCATION RD13         AREA       567629.610  4400497.920
0.000
** Source Parameters **
   SRCPARAM RD200        5.5218E-07     4.800   110.000    12.286
28.811     4.800
   SRCPARAM RDHH         3.3223E-07     4.800   253.144    10.000
89.659     4.800
   SRCPARAM RD13         3.8889E-07     4.800   180.000    10.000
1.134     4.800
   SRCGROUP ALL
SO FINISHED
**
```

```
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
** DESCRREC "" ""
   DISCCART    567751.36   4400473.55    0.00    0.00
   DISCCART    568027.46   4400677.48    0.00    0.00
   DISCCART    567750.85   4400473.53    0.00    0.00
   DISCCART    567559.65   4400543.64    0.00    0.00
   DISCCART    567562.20   4400771.81    0.00    0.00
   DISCCART    567592.79   4400852.12    0.00    0.00
   DISCCART    567792.92   4400306.55    0.00    0.00
   DISCCART    567597.89   4400377.93    0.00    0.00
   DISCCART    567595.34   4400936.25    0.00    0.00
   DISCCART    567975.20   4400788.38    0.00    0.00
   DISCCART    567486.99   4400894.18    0.00    0.00
   DISCCART    567453.85   4400825.35    0.00    0.00
   DISCCART    567404.13   4400765.44    0.00    0.00
   DISCCART    568004.52   4400240.26    0.00    0.00
   DISCCART    567438.55   4400931.15    0.00    0.00
   DISCCART    568240.58   4400261.90    0.00    0.00
   DISCCART    568211.31   4400875.23    0.00    0.00
   DISCCART    567772.17   4401081.63    0.00    0.00
   DISCCART    567401.83   4400357.05    0.00    0.00
   DISCCART    567612.62   4400153.58    0.00    0.00
   DISCCART    567720.94   4400068.68    0.00    0.00
   DISCCART    567965.39   4400109.67    0.00    0.00
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\AERMET.SFC
   PROFFILE ..\AERMET.PFL
   SURFDATA 24257 1992 REDDING/AAF
   UAIRDATA 23110 1992
   PROFBASE 0.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
```

```
   RECTABLE 8 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "Local Circulation.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "Local Circulation.AD\08H1GALL.PLT" 32
   PLOTFILE 24 ALL 1ST "Local Circulation.AD\24H1GALL.PLT" 33
   PLOTFILE ANNUAL ALL "Local Circulation.AD\AN00GALL.PLT" 34
   SUMMFILE "Local Circulation.sum"
OU FINISHED

 ************************************
 *** SETUP Finishes Successfully ***
 ************************************
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        10:39:10

PAGE   1
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                  ***     MODEL SETUP
OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration
Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses RURAL Dispersion Only.

 **Model Uses Regulatory DEFAULT Options:
         1. Stack-tip Downwash.
         2. Model Accounts for ELEVated Terrain Effects.
         3. Use Calms Processing Routine.
         4. Use Missing Data Processing Routine.
         5. No Exponential Decay.

 **Other Options Specified:
         CCVR_Sub - Meteorological data includes CCVR
substitutions
         TEMP_Sub - Meteorological data includes TEMP
substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  PM_2.5

 **Model Calculates  3 Short Term Average(s) of:   1-HR   8-HR
24-HR
     and Calculates ANNUAL Averages

 **This Run Includes:      3 Source(s);       1 Source Group(s);
and      22 Receptor(s)

 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134
```

```
 **Output Options Selected:
          Model Outputs Tables of ANNUAL Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by
Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked
Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =
0.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC
;  Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of
RAM.

 **Detailed Error/Message File:   Local Circulation.err
 **File for Summary of Results:   Local Circulation.sum
```

**MODELOPTs: RegDFAULT CONC ELEV

*** AREA SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	COORD (SW CORNER) X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
RD200	0	0.55218E-06	567626.9	4400758.4	0.0	4.80	110.00	12.29	28.81	4.80	NO	
RDHH	0	0.33223E-06	567613.2	4400754.1	0.0	4.80	253.14	10.00	89.66	4.80	NO	
RD13	0	0.38889E-06	567629.6	4400497.9	0.0	4.80	180.00	10.00	1.13	4.80	NO	

**MODELOPTs: RegDFAULT CONC ELEV

*** SOURCE IDs
DEFINING SOURCE GROUPS ***

SRCGROUP ID SOURCE
IDs

ALL RD200 , RDHH , RD13 ,

**MODELOPTs: RegDFAULT CONC ELEV

*** DISCRETE
CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD,
ZELEV, ZHILL, ZFLAG)

(METERS)

```
     ( 567751.4, 4400473.5,       0.0,       0.0,       0.0);
( 568027.5, 4400677.5,       0.0,       0.0,       0.0);
     ( 567750.9, 4400473.5,       0.0,       0.0,       0.0);
( 567559.7, 4400543.6,       0.0,       0.0,       0.0);
     ( 567562.2, 4400771.8,       0.0,       0.0,       0.0);
( 567592.8, 4400852.1,       0.0,       0.0,       0.0);
     ( 567792.9, 4400306.5,       0.0,       0.0,       0.0);
( 567597.9, 4400377.9,       0.0,       0.0,       0.0);
     ( 567595.3, 4400936.2,       0.0,       0.0,       0.0);
( 567975.2, 4400788.4,       0.0,       0.0,       0.0);
     ( 567487.0, 4400894.2,       0.0,       0.0,       0.0);
( 567453.9, 4400825.3,       0.0,       0.0,       0.0);
     ( 567404.1, 4400765.4,       0.0,       0.0,       0.0);
( 568004.5, 4400240.3,       0.0,       0.0,       0.0);
     ( 567438.6, 4400931.1,       0.0,       0.0,       0.0);
( 568240.6, 4400261.9,       0.0,       0.0,       0.0);
     ( 568211.3, 4400875.2,       0.0,       0.0,       0.0);
( 567772.2, 4401081.6,       0.0,       0.0,       0.0);
     ( 567401.8, 4400357.0,       0.0,       0.0,       0.0);
( 567612.6, 4400153.6,       0.0,       0.0,       0.0);
     ( 567720.9, 4400068.7,       0.0,       0.0,       0.0);
( 567965.4, 4400109.7,       0.0,       0.0,       0.0);
```

**MODELOPTs: RegDFAULT CONC ELEV

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING *** (1=YES; 0=NO)

```
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        10:39:10

PAGE   6
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                     *** UP TO THE FIRST 24 HOURS
OF METEOROLOGICAL DATA ***

   Surface file:   ..\AERMET.SFC
Met Version:  14134
   Profile file:   ..\AERMET.PFL
   Surface format: FREE
   Profile format: FREE
   Surface station no.:    24257                  Upper air
station no.:    23110
                  Name: REDDING/AAF
Name: UNKNOWN
                  Year:   1992
Year:   1992

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN
Z0  BOWEN ALBEDO  REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 92 01 01   1 01   -5.8  0.095 -9.000 -9.000 -999.   70.     13.4
0.05   0.87   1.00    3.10   11.   33.0  274.2    2.0
 92 01 01   1 02   -5.0  0.085 -9.000 -9.000 -999.   60.     11.3
0.02   0.87   1.00    3.10  358.   33.0  274.2    2.0
 92 01 01   1 03   -5.8  0.095 -9.000 -9.000 -999.   70.     13.3
0.05   0.87   1.00    3.10    4.   33.0  273.1    2.0
 92 01 01   1 04   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60   13.   33.0  272.5    2.0
 92 01 01   1 05   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60    3.   33.0  272.5    2.0
 92 01 01   1 06 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 07 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 08 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  271.4    2.0
 92 01 01   1 09 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.45    0.00    0.   33.0  273.8    2.0
 92 01 01   1 10   27.6 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.30    0.00    0.   33.0  278.1    2.0
 92 01 01   1 11   60.7 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.25    0.00    0.   33.0  281.4    2.0
 92 01 01   1 12   80.1  0.194 -9.000 -9.000 -999.  205.     -8.2
0.02   0.87   0.23    2.60  346.   33.0  284.9    2.0
```

```
 92 01 01   1 13   86.2 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.22    0.00    0.   33.0  287.0    2.0
 92 01 01   1 14   75.5  0.164 -9.000 -9.000 -999.  160.     -5.3
0.02   0.87   0.24    2.10  109.   33.0  287.0    2.0
 92 01 01   1 15   48.0  0.124 -9.000 -9.000 -999.  105.     -3.6
0.02   0.87   0.27    1.50  162.   33.0  287.0    2.0
 92 01 01   1 16   10.0  0.126 -9.000 -9.000 -999.  108.    -18.2
0.07   0.87   0.37    1.50  254.   33.0  285.4    2.0
 92 01 01   1 17 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.63    0.00    0.   33.0  282.5    2.0
 92 01 01   1 18 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  280.4    2.0
 92 01 01   1 19   -2.7  0.064 -9.000 -9.000 -999.   39.      9.1
0.05   0.87   1.00    2.10   24.   33.0  277.0    2.0
 92 01 01   1 20   -5.6  0.093 -9.000 -9.000 -999.   68.     13.0
0.04   0.87   1.00    3.10  297.   33.0  276.4    2.0
 92 01 01   1 21   -4.9  0.085 -9.000 -9.000 -999.   60.     11.5
0.02   0.87   1.00    3.10  330.   33.0  277.0    2.0
 92 01 01   1 22   -2.6  0.064 -9.000 -9.000 -999.   39.      9.3
0.05   0.87   1.00    2.10   12.   33.0  275.9    2.0
 92 01 01   1 23   -3.4  0.072 -9.000 -9.000 -999.   46.      9.6
0.02   0.87   1.00    2.60  350.   33.0  277.0    2.0
 92 01 01   1 24 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  274.9    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW
sigmaV
 92 01 01 01   33.0 1   11.    3.10   274.3   99.0  -99.00  -
99.00

 F indicates top of profile (=1) or below (=0)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        10:39:10

PAGE   7
 **MODELOPTs:   RegDFAULT CONC      ELEV

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES
AVERAGED OVER   1 YEARS FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     RD200
, RDHH        , RD13        ,

                                                *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF PM_2.5   IN
MICROGRAMS/M**3                              **

       X-COORD (M)   Y-COORD (M)        CONC
X-COORD (M)   Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         567751.36    4400473.55        0.59318
568027.46    4400677.48        0.02712
         567750.85    4400473.53        0.59390
567559.65    4400543.64        0.17397
         567562.20    4400771.81        0.11697
567592.79    4400852.12        0.12116
         567792.92    4400306.55        0.27301
567597.89    4400377.93        0.22773
         567595.34    4400936.25        0.07752
567975.20    4400788.38        0.02547
         567486.99    4400894.18        0.05930
567453.85    4400825.35        0.05253
         567404.13    4400765.44        0.04079
568004.52    4400240.26        0.09350
         567438.55    4400931.15        0.04507
568240.58    4400261.90        0.02929
         568211.31    4400875.23        0.01126
567772.17    4401081.63        0.02605
         567401.83    4400357.05        0.05221
567612.62    4400153.58        0.12551
         567720.94    4400068.68        0.13337
567965.39    4400109.67        0.10091
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        10:39:10

PAGE   8
 **MODELOPTs:   RegDFAULT CONC      ELEV

                              *** THE   1ST HIGHEST  1-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     RD200
, RDHH        , RD13        ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_2.5   IN
MICROGRAMS/M**3                            **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        567751.36   4400473.55        2.47386  (92091102)
568027.46   4400677.48        1.18048  (92011017)
        567750.85   4400473.53        2.46860  (92091102)
567559.65   4400543.64        2.49912  (92060520)
        567562.20   4400771.81        2.76507  (92012924)
567592.79   4400852.12        2.60757  (92053121)
        567792.92   4400306.55        1.67947  (92072821)
567597.89   4400377.93        2.37564  (92122003)
        567595.34   4400936.25        2.12148  (92122608)
567975.20   4400788.38        1.36292  (92011324)
        567486.99   4400894.18        1.71104  (92011921)
567453.85   4400825.35        1.81123  (92010604)
        567404.13   4400765.44        1.65686  (92012003)
568004.52   4400240.26        1.30265  (92122107)
        567438.55   4400931.15        1.59120  (92011921)
568240.58   4400261.90        0.91934  (92022903)
        568211.31   4400875.23        0.74682  (92011324)
567772.17   4401081.63        1.50058  (92082105)
        567401.83   4400357.05        1.33785  (92020606)
567612.62   4400153.58        1.62124  (92120507)
        567720.94   4400068.68        1.54852  (92020423)
567965.39   4400109.67        1.34272  (92123122)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        10:39:10

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                              *** THE   1ST HIGHEST  8-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     RD200
, RDHH        , RD13        ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_2.5   IN
MICROGRAMS/M**3                            **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        567751.36   4400473.55        1.72213b (92030624)
568027.46   4400677.48        0.35734c (92012608)
        567750.85   4400473.53        1.72235b (92030624)
567559.65   4400543.64        0.84403c (92012408)
        567562.20   4400771.81        1.01467c (92012208)
567592.79   4400852.12        1.23909c (92122624)
        567792.92   4400306.55        1.07278b (92032208)
567597.89   4400377.93        1.31290c (92092908)
        567595.34   4400936.25        0.69948c (92020808)
567975.20   4400788.38        0.30207m (92092324)
        567486.99   4400894.18        0.82073c (92122624)
567453.85   4400825.35        0.86037c (92011624)
        567404.13   4400765.44        0.62439c (92011624)
568004.52   4400240.26        0.64040c (92032124)
        567438.55   4400931.15        0.72953c (92122624)
568240.58   4400261.90        0.28596b (92030624)
        568211.31   4400875.23        0.15315c (92120124)
567772.17   4401081.63        0.30952b (92082108)
        567401.83   4400357.05        0.43494m (92101524)
567612.62   4400153.58        0.90957c (92092908)
        567720.94   4400068.68        0.83897m (92052608)
567965.39   4400109.67        0.60958c (92122024)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        10:39:10

PAGE  10
 **MODELOPTs:   RegDFAULT CONC      ELEV

                              *** THE   1ST HIGHEST 24-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     RD200
, RDHH        , RD13        ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF PM_2.5   IN
MICROGRAMS/M**3                              **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        567751.36   4400473.55        0.98020b (92122024)
568027.46   4400677.48        0.16749b (92120724)
        567750.85   4400473.53        0.98083b (92122024)
567559.65   4400543.64        0.46956b (92101724)
        567562.20   4400771.81        0.59689b (92012224)
567592.79   4400852.12        0.75676b (92122624)
        567792.92   4400306.55        0.56366b (92020224)
567597.89   4400377.93        0.57227b (92092924)
        567595.34   4400936.25        0.40920b (92122624)
567975.20   4400788.38        0.14591m (92103124)
        567486.99   4400894.18        0.42497b (92012224)
567453.85   4400825.35        0.43457b (92012224)
        567404.13   4400765.44        0.30789b (92012224)
568004.52   4400240.26        0.34879b (92122024)
        567438.55   4400931.15        0.36069b (92012224)
568240.58   4400261.90        0.12351b (92030624)
        568211.31   4400875.23        0.08069m (92103124)
567772.17   4401081.63        0.12483b (92020824)
        567401.83   4400357.05        0.19144b (92032324)
567612.62   4400153.58        0.38216b (92092924)
        567720.94   4400068.68        0.34699b (92052624)
567965.39   4400109.67        0.32538b (92122024)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        10:39:10

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                                   *** THE SUMMARY OF MAXIMUM
ANNUAL RESULTS AVERAGED OVER   1 YEARS ***


                                    ** CONC OF PM_2.5   IN
MICROGRAMS/M**3                          **


NETWORK
GROUP ID                        AVERAGE CONC
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       0.59390 AT (  567750.85,
4400473.53,     0.00,     0.00,    0.00)  DC
          2ND HIGHEST VALUE IS       0.59318 AT (  567751.36,
4400473.55,     0.00,     0.00,    0.00)  DC
          3RD HIGHEST VALUE IS       0.27301 AT (  567792.92,
4400306.55,     0.00,     0.00,    0.00)  DC
          4TH HIGHEST VALUE IS       0.22773 AT (  567597.89,
4400377.93,     0.00,     0.00,    0.00)  DC
          5TH HIGHEST VALUE IS       0.17397 AT (  567559.65,
4400543.64,     0.00,     0.00,    0.00)  DC
          6TH HIGHEST VALUE IS       0.13337 AT (  567720.94,
4400068.68,     0.00,     0.00,    0.00)  DC
          7TH HIGHEST VALUE IS       0.12551 AT (  567612.62,
4400153.58,     0.00,     0.00,    0.00)  DC
          8TH HIGHEST VALUE IS       0.12116 AT (  567592.79,
4400852.12,     0.00,     0.00,    0.00)  DC
          9TH HIGHEST VALUE IS       0.11697 AT (  567562.20,
4400771.81,     0.00,     0.00,    0.00)  DC
         10TH HIGHEST VALUE IS       0.10091 AT (  567965.39,
4400109.67,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        10:39:10

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST  1-HR RESULTS ***


                                     ** CONC OF PM_2.5   IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       2.76507  ON 92012924: AT
(  567562.20,  4400771.81,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        10:39:10

PAGE  13
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST  8-HR RESULTS ***


                                     ** CONC OF PM_2.5   IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       1.72235b ON 92030624: AT
(  567750.85,  4400473.53,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        10:39:10

PAGE  14
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST 24-HR RESULTS ***


                                     ** CONC OF PM_2.5   IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       0.98083b ON 92122024: AT
(  567750.85,  4400473.53,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/14/15
 *** AERMET - VERSION  14134 ***   ***
***        10:39:10

PAGE  15
 **MODELOPTs:   RegDFAULT CONC      ELEV

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            0 Warning Message(s)
 A Total of         4945 Informational Message(s)

 A Total of         8784 Hours Were Processed

 A Total of         1674 Calm Hours Identified

 A Total of         3271 Missing Hours Identified ( 37.24
Percent)

 CAUTION!:  Number of Missing Hours Exceeds 10 Percent of Total!
            Data May Not Be Acceptable for Regulatory
Applications.
            See Section 5.3.2 of "Meteorological Monitoring
Guidance
            for Regulatory Modeling Applications" (EPA-454/R-99-
005).


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
               ***  NONE  ***


    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```

```
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 8.8.9
** Lakes Environmental Software Inc.
** Date: 1/15/2015
** File: C:\Emissions Models\Orland\Flying J\AERMOD\Gasoline
Dispensers - Benzne\Gasoline Dispensers - Benzne.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Emissions Models\Orland\Flying J\AERMOD\Local
Circulation\Local C
   MODELOPT DFAULT CONC
   AVERTIME 1 8 24 ANNUAL
   POLLUTID BENZENE
   RUNORNOT RUN
   ERRORFIL "LOCAL CIRCULATION.ERR"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION LOADUNDERGRD POINT      567661.000  4400706.000
0.000
   LOCATION BREATHUNDRGD POINT      567661.000  4400706.000
0.000
   LOCATION REFUELAUTO   VOLUME     567651.000  4400706.000
0.000
   LOCATION SPILLAUTO    VOLUME     567651.000  4400706.000
0.000
   LOCATION LOADABOVEGRD POINT      567742.000    63744.000
1.000
   LOCATION BREATHABVGRD POINT      567742.000  4400637.000
1.000
   LOCATION REFUELDIESEL VOLUME     567681.000  4400630.000
0.000
   LOCATION SPILLDIESEL  VOLUME     567681.000  4400630.000
0.000
```

```
** Source Parameters **
   SRCPARAM LOADUNDERGRD   5.0E-06     3.658   291.483   0.00030
0.050
   SRCPARAM BREATHUNDRGD    0.0006     3.658   288.706   0.00035
0.050
   SRCPARAM REFUELAUTO      0.0003     1.000     4.000    13.000
   SRCPARAM SPILLAUTO       0.0002     0.000     4.000    13.000
   SRCPARAM LOADABOVEGRD    0.0002     3.658   291.483   0.00177
0.050
   SRCPARAM BREATHABVGRD   0.00003     3.658   291.483   0.00177
0.050
   SRCPARAM REFUELDIESEL    0.0003     1.000     4.000    13.000
   SRCPARAM SPILLDIESEL     0.0002     0.000     4.000    13.000
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
** DESCRREC "" ""
   DISCCART    567751.36   4400473.55    0.00    0.00
   DISCCART    568027.46   4400677.48    0.00    0.00
   DISCCART    567750.85   4400473.53    0.00    0.00
   DISCCART    567559.65   4400543.64    0.00    0.00
   DISCCART    567562.20   4400771.81    0.00    0.00
   DISCCART    567592.79   4400852.12    0.00    0.00
   DISCCART    567792.92   4400306.55    0.00    0.00
   DISCCART    567597.89   4400377.93    0.00    0.00
   DISCCART    567595.34   4400936.25    0.00    0.00
   DISCCART    567975.20   4400788.38    0.00    0.00
   DISCCART    567486.99   4400894.18    0.00    0.00
   DISCCART    567453.85   4400825.35    0.00    0.00
   DISCCART    567404.13   4400765.44    0.00    0.00
   DISCCART    568004.52   4400240.26    0.00    0.00
   DISCCART    567438.55   4400931.15    0.00    0.00
   DISCCART    568240.58   4400261.90    0.00    0.00
   DISCCART    568211.31   4400875.23    0.00    0.00
   DISCCART    567772.17   4401081.63    0.00    0.00
   DISCCART    567401.83   4400357.05    0.00    0.00
   DISCCART    567612.62   4400153.58    0.00    0.00
   DISCCART    567720.94   4400068.68    0.00    0.00
   DISCCART    567965.39   4400109.67    0.00    0.00
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
```

```
ME STARTING
   SURFFILE ..\AERMET.SFC
   PROFFILE ..\AERMET.PFL
   SURFDATA 24257 1992 REDDING/AAF
   UAIRDATA 23110 1992
   PROFBASE 0.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "Gasoline Dispensers - Benzne.AD
\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "Gasoline Dispensers - Benzne.AD
\08H1GALL.PLT" 32
   PLOTFILE 24 ALL 1ST "Gasoline Dispensers - Benzne.AD
\24H1GALL.PLT" 33
   PLOTFILE ANNUAL ALL "Gasoline Dispensers - Benzne.AD
\AN00GALL.PLT" 34
   SUMMFILE "LOCAL CIRCULATION.SUM"
OU FINISHED

 ************************************
 *** SETUP Finishes Successfully ***
 ************************************
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        11:25:06

PAGE   1
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                  ***     MODEL SETUP
OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration
Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses RURAL Dispersion Only.

 **Model Uses Regulatory DEFAULT Options:
         1. Stack-tip Downwash.
         2. Model Accounts for ELEVated Terrain Effects.
         3. Use Calms Processing Routine.
         4. Use Missing Data Processing Routine.
         5. No Exponential Decay.

 **Other Options Specified:
         CCVR_Sub - Meteorological data includes CCVR
substitutions
         TEMP_Sub - Meteorological data includes TEMP
substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  BENZENE

 **Model Calculates  3 Short Term Average(s) of:   1-HR   8-HR
24-HR
     and Calculates ANNUAL Averages

 **This Run Includes:      8 Source(s);       1 Source Group(s);
and      22 Receptor(s)

 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134
```

```
 **Output Options Selected:
          Model Outputs Tables of ANNUAL Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by
Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked
Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =
0.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC
;  Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of
RAM.

 **Detailed Error/Message File:   LOCAL CIRCULATION.ERR
 **File for Summary of Results:   LOCAL CIRCULATION.SUM
```

**MODELOPTs: RegDFAULT CONC ELEV

*** POINT
SOURCE DATA ***

STACK SOURCE ID	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	BASE ELEV. (METERS)	X (METERS)	Y (METERS)	EMIS RATE SCALAR VARY BY
LOADUNDERGRD	3.66	291.48	0	0.50000E-05	0.00	0.05	NO	NO	NO	0.0	567661.0	4400706.0	
BREATHUNDRGD	3.66	288.71	0	0.60000E-03	0.00	0.05	NO	NO	NO	0.0	567661.0	4400706.0	
LOADABOVEGRD	3.66	291.48	0	0.20000E-03	0.00	0.05	NO	NO	NO	1.0	567742.0	63744.0	
BREATHABVGRD	3.66	291.48	0	0.30000E-04	0.00	0.05	NO	NO	NO	1.0	567742.0	4400637.0	

**MODELOPTs: RegDFAULT CONC ELEV

*** VOLUME
SOURCE DATA ***

```
               NUMBER EMISSION RATE                    BASE
RELEASE    INIT.    INIT.   URBAN  EMISSION RATE
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.
HEIGHT      SY       SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS)
(METERS) (METERS) (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 REFUELAUTO       0   0.30000E-03  567651.0 4400706.0     0.0
1.00     4.00    13.00     NO
 SPILLAUTO        0   0.20000E-03  567651.0 4400706.0     0.0
0.00     4.00    13.00     NO
 REFUELDIESEL     0   0.30000E-03  567681.0 4400630.0     0.0
1.00     4.00    13.00     NO
 SPILLDIESEL      0   0.20000E-03  567681.0 4400630.0     0.0
0.00     4.00    13.00     NO
```

**MODELOPTs: RegDFAULT CONC ELEV

*** SOURCE IDs
DEFINING SOURCE GROUPS ***

SRCGROUP ID SOURCE
IDs

ALL LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO , SPILLAUTO
, LOADABOVEGRD, BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

**MODELOPTs: RegDFAULT CONC ELEV

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)

(METERS)

```
     ( 567751.4, 4400473.5,       0.0,       0.0,       0.0);
( 568027.5, 4400677.5,       0.0,       0.0,       0.0);
     ( 567750.9, 4400473.5,       0.0,       0.0,       0.0);
( 567559.7, 4400543.6,       0.0,       0.0,       0.0);
     ( 567562.2, 4400771.8,       0.0,       0.0,       0.0);
( 567592.8, 4400852.1,       0.0,       0.0,       0.0);
     ( 567792.9, 4400306.5,       0.0,       0.0,       0.0);
( 567597.9, 4400377.9,       0.0,       0.0,       0.0);
     ( 567595.3, 4400936.2,       0.0,       0.0,       0.0);
( 567975.2, 4400788.4,       0.0,       0.0,       0.0);
     ( 567487.0, 4400894.2,       0.0,       0.0,       0.0);
( 567453.9, 4400825.3,       0.0,       0.0,       0.0);
     ( 567404.1, 4400765.4,       0.0,       0.0,       0.0);
( 568004.5, 4400240.3,       0.0,       0.0,       0.0);
     ( 567438.6, 4400931.1,       0.0,       0.0,       0.0);
( 568240.6, 4400261.9,       0.0,       0.0,       0.0);
     ( 568211.3, 4400875.2,       0.0,       0.0,       0.0);
( 567772.2, 4401081.6,       0.0,       0.0,       0.0);
     ( 567401.8, 4400357.0,       0.0,       0.0,       0.0);
( 567612.6, 4400153.6,       0.0,       0.0,       0.0);
     ( 567720.9, 4400068.7,       0.0,       0.0,       0.0);
( 567965.4, 4400109.7,       0.0,       0.0,       0.0);
```

**MODELOPTs: RegDFAULT CONC ELEV

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING *** (1=YES; 0=NO)

```
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        11:25:06

PAGE   7
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                     *** UP TO THE FIRST 24 HOURS
OF METEOROLOGICAL DATA ***

   Surface file:   ..\AERMET.SFC
Met Version:  14134
   Profile file:   ..\AERMET.PFL
   Surface format: FREE
   Profile format: FREE
   Surface station no.:    24257                  Upper air
station no.:    23110
                  Name: REDDING/AAF
Name: UNKNOWN
                  Year:   1992
Year:   1992

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN
Z0  BOWEN ALBEDO  REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 92 01 01   1 01   -5.8  0.095 -9.000 -9.000 -999.   70.     13.4
0.05   0.87   1.00    3.10   11.   33.0  274.2    2.0
 92 01 01   1 02   -5.0  0.085 -9.000 -9.000 -999.   60.     11.3
0.02   0.87   1.00    3.10  358.   33.0  274.2    2.0
 92 01 01   1 03   -5.8  0.095 -9.000 -9.000 -999.   70.     13.3
0.05   0.87   1.00    3.10    4.   33.0  273.1    2.0
 92 01 01   1 04   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60   13.   33.0  272.5    2.0
 92 01 01   1 05   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60    3.   33.0  272.5    2.0
 92 01 01   1 06 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 07 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 08 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  271.4    2.0
 92 01 01   1 09 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.45    0.00    0.   33.0  273.8    2.0
 92 01 01   1 10   27.6 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.30    0.00    0.   33.0  278.1    2.0
 92 01 01   1 11   60.7 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.25    0.00    0.   33.0  281.4    2.0
 92 01 01   1 12   80.1  0.194 -9.000 -9.000 -999.  205.     -8.2
0.02   0.87   0.23    2.60  346.   33.0  284.9    2.0
```

```
 92 01 01   1 13   86.2 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.22    0.00    0.   33.0  287.0    2.0
 92 01 01   1 14   75.5  0.164 -9.000 -9.000 -999.  160.     -5.3
0.02   0.87   0.24    2.10  109.   33.0  287.0    2.0
 92 01 01   1 15   48.0  0.124 -9.000 -9.000 -999.  105.     -3.6
0.02   0.87   0.27    1.50  162.   33.0  287.0    2.0
 92 01 01   1 16   10.0  0.126 -9.000 -9.000 -999.  108.    -18.2
0.07   0.87   0.37    1.50  254.   33.0  285.4    2.0
 92 01 01   1 17 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.63    0.00    0.   33.0  282.5    2.0
 92 01 01   1 18 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  280.4    2.0
 92 01 01   1 19   -2.7  0.064 -9.000 -9.000 -999.   39.      9.1
0.05   0.87   1.00    2.10   24.   33.0  277.0    2.0
 92 01 01   1 20   -5.6  0.093 -9.000 -9.000 -999.   68.     13.0
0.04   0.87   1.00    3.10  297.   33.0  276.4    2.0
 92 01 01   1 21   -4.9  0.085 -9.000 -9.000 -999.   60.     11.5
0.02   0.87   1.00    3.10  330.   33.0  277.0    2.0
 92 01 01   1 22   -2.6  0.064 -9.000 -9.000 -999.   39.      9.3
0.05   0.87   1.00    2.10   12.   33.0  275.9    2.0
 92 01 01   1 23   -3.4  0.072 -9.000 -9.000 -999.   46.      9.6
0.02   0.87   1.00    2.60  350.   33.0  277.0    2.0
 92 01 01   1 24 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  274.9    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW
sigmaV
 92 01 01 01   33.0 1   11.    3.10   274.3   99.0  -99.00  -
99.00

 F indicates top of profile (=1) or below (=0)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        11:25:06

PAGE   8
 **MODELOPTs:   RegDFAULT CONC      ELEV

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES
AVERAGED OVER   1 YEARS FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):
LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO  , SPILLAUTO   ,
LOADABOVEGRD,
                 BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF BENZENE  IN
MICROGRAMS/M**3                              **

       X-COORD (M)   Y-COORD (M)        CONC
X-COORD (M)   Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         567751.36    4400473.55        0.24866
568027.46    4400677.48        0.02282
         567750.85    4400473.53        0.24913
567559.65    4400543.64        0.11156
         567562.20    4400771.81        0.10718
567592.79    4400852.12        0.10109
         567792.92    4400306.55        0.11514
567597.89    4400377.93        0.08783
         567595.34    4400936.25        0.06024
567975.20    4400788.38        0.02239
         567486.99    4400894.18        0.04922
567453.85    4400825.35        0.04395
         567404.13    4400765.44        0.02988
568004.52    4400240.26        0.05276
         567438.55    4400931.15        0.03779
568240.58    4400261.90        0.02227
         568211.31    4400875.23        0.00971
567772.17    4401081.63        0.02127
         567401.83    4400357.05        0.03236
567612.62    4400153.58        0.05899
         567720.94    4400068.68        0.06629
567965.39    4400109.67        0.05321
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        11:25:06

PAGE   9
 **MODELOPTs:   RegDFAULT CONC      ELEV

                              *** THE   1ST HIGHEST  1-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):
LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO  , SPILLAUTO   ,
LOADABOVEGRD,
                 BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF BENZENE  IN
MICROGRAMS/M**3                              **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        567751.36   4400473.55        3.47738  (92022906)
568027.46   4400677.48        1.67394  (92121422)
        567750.85   4400473.53        3.50415  (92022906)
567559.65   4400543.64        2.88639  (92022603)
        567562.20   4400771.81        3.74631  (92030222)
567592.79   4400852.12        4.11851  (92013117)
        567792.92   4400306.55        2.26322  (92022604)
567597.89   4400377.93        1.79836  (92022704)
        567595.34   4400936.25        2.54376  (92122717)
567975.20   4400788.38        1.47709  (92011324)
        567486.99   4400894.18        2.72618  (92012203)
567453.85   4400825.35        2.63215  (92010703)
        567404.13   4400765.44        2.40397  (92012408)
568004.52   4400240.26        1.62356  (92011105)
        567438.55   4400931.15        2.67261  (92011921)
568240.58   4400261.90        1.19867  (92010905)
        568211.31   4400875.23        0.55219  (92122406)
567772.17   4401081.63        1.33208  (92082105)
        567401.83   4400357.05        1.44644  (92120304)
567612.62   4400153.58        1.33793  (92010901)
        567720.94   4400068.68        1.50961  (92020121)
567965.39   4400109.67        1.28148  (92123122)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        11:25:06

PAGE  10
 **MODELOPTs:   RegDFAULT CONC      ELEV

                              *** THE   1ST HIGHEST  8-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):
LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO  , SPILLAUTO   ,
LOADABOVEGRD,
                 BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF BENZENE  IN
MICROGRAMS/M**3                              **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        567751.36   4400473.55        1.47651c (92012524)
568027.46   4400677.48        0.37648c (92120708)
        567750.85   4400473.53        1.47082c (92012524)
567559.65   4400543.64        0.80288m (92101524)
        567562.20   4400771.81        1.55839c (92011524)
567592.79   4400852.12        0.91786b (92060708)
        567792.92   4400306.55        0.64002  (92020208)
567597.89   4400377.93        0.65142b (92091108)
        567595.34   4400936.25        0.61992b (92051724)
567975.20   4400788.38        0.25139  (92103108)
        567486.99   4400894.18        0.82779c (92011924)
567453.85   4400825.35        0.81746c (92011524)
        567404.13   4400765.44        0.71680c (92012408)
568004.52   4400240.26        0.46945c (92020708)
        567438.55   4400931.15        0.77333c (92011924)
568240.58   4400261.90        0.20305c (92010908)
        568211.31   4400875.23        0.12134m (92040108)
567772.17   4401081.63        0.26168b (92042024)
        567401.83   4400357.05        0.33991b (92041324)
567612.62   4400153.58        0.48598c (92092908)
        567720.94   4400068.68        0.50292m (92052608)
567965.39   4400109.67        0.45102c (92012524)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        11:25:06

PAGE  11
 **MODELOPTs:   RegDFAULT CONC      ELEV

                              *** THE   1ST HIGHEST 24-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):
LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO  , SPILLAUTO   ,
LOADABOVEGRD,
                 BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF BENZENE  IN
MICROGRAMS/M**3                              **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        567751.36   4400473.55        0.60071m (92022324)
568027.46   4400677.48        0.16032b (92120724)
        567750.85   4400473.53        0.61109m (92022324)
567559.65   4400543.64        0.34395b (92010624)
        567562.20   4400771.81        0.64592b (92011924)
567592.79   4400852.12        0.50364b (92020824)
        567792.92   4400306.55        0.44126m (92022324)
567597.89   4400377.93        0.35114b (92091124)
        567595.34   4400936.25        0.28156b (92122724)
567975.20   4400788.38        0.11648m (92103124)
        567486.99   4400894.18        0.51470b (92012224)
567453.85   4400825.35        0.27448b (92011524)
        567404.13   4400765.44        0.25551b (92012424)
568004.52   4400240.26        0.23853b (92020224)
        567438.55   4400931.15        0.44572b (92012224)
568240.58   4400261.90        0.09915b (92022224)
        568211.31   4400875.23        0.04976b (92040124)
567772.17   4401081.63        0.08943b (92042024)
        567401.83   4400357.05        0.12896b (92101524)
567612.62   4400153.58        0.21499b (92092924)
        567720.94   4400068.68        0.22420c (92121824)
567965.39   4400109.67        0.18114b (92012924)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        11:25:06

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                                   *** THE SUMMARY OF MAXIMUM
ANNUAL RESULTS AVERAGED OVER   1 YEARS ***


                                    ** CONC OF BENZENE  IN
MICROGRAMS/M**3                          **


NETWORK
GROUP ID                        AVERAGE CONC
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       0.24913 AT (  567750.85,
4400473.53,     0.00,     0.00,    0.00)  DC
          2ND HIGHEST VALUE IS       0.24866 AT (  567751.36,
4400473.55,     0.00,     0.00,    0.00)  DC
          3RD HIGHEST VALUE IS       0.11514 AT (  567792.92,
4400306.55,     0.00,     0.00,    0.00)  DC
          4TH HIGHEST VALUE IS       0.11156 AT (  567559.65,
4400543.64,     0.00,     0.00,    0.00)  DC
          5TH HIGHEST VALUE IS       0.10718 AT (  567562.20,
4400771.81,     0.00,     0.00,    0.00)  DC
          6TH HIGHEST VALUE IS       0.10109 AT (  567592.79,
4400852.12,     0.00,     0.00,    0.00)  DC
          7TH HIGHEST VALUE IS       0.08783 AT (  567597.89,
4400377.93,     0.00,     0.00,    0.00)  DC
          8TH HIGHEST VALUE IS       0.06629 AT (  567720.94,
4400068.68,     0.00,     0.00,    0.00)  DC
          9TH HIGHEST VALUE IS       0.06024 AT (  567595.34,
4400936.25,     0.00,     0.00,    0.00)  DC
         10TH HIGHEST VALUE IS       0.05899 AT (  567612.62,
4400153.58,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        11:25:06

PAGE  13
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST  1-HR RESULTS ***


                                     ** CONC OF BENZENE  IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       4.11851  ON 92013117: AT
(  567592.79,  4400852.12,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        11:25:06

PAGE  14
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST  8-HR RESULTS ***


                                     ** CONC OF BENZENE  IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       1.55839c ON 92011524: AT
(  567562.20,  4400771.81,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        11:25:06

PAGE  15
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST 24-HR RESULTS ***


                                     ** CONC OF BENZENE  IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       0.64592b ON 92011924: AT
(  567562.20,  4400771.81,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        11:25:06

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 **MODELOPTs:   RegDFAULT CONC      ELEV

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            0 Warning Message(s)
 A Total of         4945 Informational Message(s)

 A Total of         8784 Hours Were Processed

 A Total of         1674 Calm Hours Identified

 A Total of         3271 Missing Hours Identified ( 37.24
Percent)

 CAUTION!:  Number of Missing Hours Exceeds 10 Percent of Total!
            Data May Not Be Acceptable for Regulatory
Applications.
            See Section 5.3.2 of "Meteorological Monitoring
Guidance
            for Regulatory Modeling Applications" (EPA-454/R-99-
005).


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
               ***  NONE  ***


    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```

```
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 8.8.9
** Lakes Environmental Software Inc.
** Date: 1/15/2015
** File: C:\Emissions Models\Orland\Flying J\AERMOD\Gas
Dispensers - Toluene\Gas Dispensers - Toluene.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Emissions Models\Orland\Flying J\AERMOD\Local
Circulation\Local C
   MODELOPT DFAULT CONC
   AVERTIME 1 8 24 ANNUAL
   POLLUTID TOLUENE
   RUNORNOT RUN
   ERRORFIL "LOCAL CIRCULATION.ERR"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION LOADUNDERGRD POINT      567661.000  4400706.000
0.000
   LOCATION BREATHUNDRGD POINT      567661.000  4400706.000
0.000
   LOCATION REFUELAUTO   VOLUME     567651.000  4400706.000
0.000
   LOCATION SPILLAUTO    VOLUME     567651.000  4400706.000
0.000
   LOCATION LOADABOVEGRD POINT      567742.000    63744.000
1.000
   LOCATION BREATHABVGRD POINT      567742.000  4400637.000
1.000
   LOCATION REFUELDIESEL VOLUME     567681.000  4400630.000
0.000
   LOCATION SPILLDIESEL  VOLUME     567681.000  4400630.000
0.000
```

```
** Source Parameters **
   SRCPARAM LOADUNDERGRD     0.002     3.658   291.483   0.00030
0.050
   SRCPARAM BREATHUNDRGD   0.00005     3.658   288.706   0.00035
0.050
   SRCPARAM REFUELAUTO        0.01     1.000     4.000    13.000
   SRCPARAM SPILLAUTO        0.007     0.000     4.000    13.000
   SRCPARAM LOADABOVEGRD     0.007     3.658   291.483   0.00177
0.050
   SRCPARAM BREATHABVGRD    0.0008     3.658   291.483   0.00177
0.050
   SRCPARAM REFUELDIESEL      0.01     1.000     4.000    13.000
   SRCPARAM SPILLDIESEL      0.007     0.000     4.000    13.000
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
** DESCRREC "" ""
   DISCCART    567751.36   4400473.55    0.00    0.00
   DISCCART    568027.46   4400677.48    0.00    0.00
   DISCCART    567750.85   4400473.53    0.00    0.00
   DISCCART    567559.65   4400543.64    0.00    0.00
   DISCCART    567562.20   4400771.81    0.00    0.00
   DISCCART    567592.79   4400852.12    0.00    0.00
   DISCCART    567792.92   4400306.55    0.00    0.00
   DISCCART    567597.89   4400377.93    0.00    0.00
   DISCCART    567595.34   4400936.25    0.00    0.00
   DISCCART    567975.20   4400788.38    0.00    0.00
   DISCCART    567486.99   4400894.18    0.00    0.00
   DISCCART    567453.85   4400825.35    0.00    0.00
   DISCCART    567404.13   4400765.44    0.00    0.00
   DISCCART    568004.52   4400240.26    0.00    0.00
   DISCCART    567438.55   4400931.15    0.00    0.00
   DISCCART    568240.58   4400261.90    0.00    0.00
   DISCCART    568211.31   4400875.23    0.00    0.00
   DISCCART    567772.17   4401081.63    0.00    0.00
   DISCCART    567401.83   4400357.05    0.00    0.00
   DISCCART    567612.62   4400153.58    0.00    0.00
   DISCCART    567720.94   4400068.68    0.00    0.00
   DISCCART    567965.39   4400109.67    0.00    0.00
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
```

```
ME STARTING
   SURFFILE ..\AERMET.SFC
   PROFFILE ..\AERMET.PFL
   SURFDATA 24257 1992 REDDING/AAF
   UAIRDATA 23110 1992
   PROFBASE 0.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "Gas Dispensers - Toluene.AD\01H1GALL.PLT"
31
   PLOTFILE 8 ALL 1ST "Gas Dispensers - Toluene.AD\08H1GALL.PLT"
32
   PLOTFILE 24 ALL 1ST "Gas Dispensers - Toluene.AD\24H1GALL.PLT"
33
   PLOTFILE ANNUAL ALL "Gas Dispensers - Toluene.AD\AN00GALL.PLT"
34
   SUMMFILE "LOCAL CIRCULATION.SUM"
OU FINISHED

 ************************************
 *** SETUP Finishes Successfully ***
 ************************************
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:14:07

PAGE   1
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                  ***     MODEL SETUP
OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration
Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses RURAL Dispersion Only.

 **Model Uses Regulatory DEFAULT Options:
         1. Stack-tip Downwash.
         2. Model Accounts for ELEVated Terrain Effects.
         3. Use Calms Processing Routine.
         4. Use Missing Data Processing Routine.
         5. No Exponential Decay.

 **Other Options Specified:
         CCVR_Sub - Meteorological data includes CCVR
substitutions
         TEMP_Sub - Meteorological data includes TEMP
substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  TOLUENE

 **Model Calculates  3 Short Term Average(s) of:   1-HR   8-HR
24-HR
     and Calculates ANNUAL Averages

 **This Run Includes:      8 Source(s);       1 Source Group(s);
and      22 Receptor(s)

 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134
```

```
 **Output Options Selected:
          Model Outputs Tables of ANNUAL Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by
Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked
Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =
0.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC
;  Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of
RAM.

 **Detailed Error/Message File:   LOCAL CIRCULATION.ERR
 **File for Summary of Results:   LOCAL CIRCULATION.SUM
```

**MODELOPTs: RegDFAULT CONC ELEV

*** POINT
SOURCE DATA ***

STACK SOURCE ID	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	NUMBER PART. CATS.	STACK EXIT VEL. (M/SEC)	EMISSION RATE (GRAMS/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	X SOURCE (METERS)	Y HOR (METERS)	URBAN CAP/ SCALAR (METERS)	BASE ELEV. VARY BY
LOADUNDERGRD	3.66	291.48	0	0.00	0.20000E-02	0.05	NO	567661.0	4400706.0	NO	0.0
BREATHUNDRGD	3.66	288.71	0	0.00	0.50000E-04	0.05	NO	567661.0	4400706.0	NO	0.0
LOADABOVEGRD	3.66	291.48	0	0.00	0.70000E-02	0.05	NO	567742.0	63744.0	NO	1.0
BREATHABVGRD	3.66	291.48	0	0.00	0.80000E-03	0.05	NO	567742.0	4400637.0	NO	1.0

**MODELOPTs: RegDFAULT CONC ELEV

*** VOLUME
SOURCE DATA ***

RELEASE SOURCE ID	INIT. PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC)	INIT. SY	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	HEIGHT (METERS)
REFUELAUTO	0	0.10000E-01	567651.0	4400706.0	0.0	1.00	4.00	13.00	NO	
SPILLAUTO	0	0.70000E-02	567651.0	4400706.0	0.0	0.00	4.00	13.00	NO	
REFUELDIESEL	0	0.10000E-01	567681.0	4400630.0	0.0	1.00	4.00	13.00	NO	
SPILLDIESEL	0	0.70000E-02	567681.0	4400630.0	0.0	0.00	4.00	13.00	NO	

**MODELOPTs: RegDFAULT CONC ELEV

*** SOURCE IDs
DEFINING SOURCE GROUPS ***

SRCGROUP ID SOURCE
IDs

ALL LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO , SPILLAUTO
, LOADABOVEGRD, BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

**MODELOPTs: RegDFAULT CONC ELEV

*** DISCRETE
CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD,
ZELEV, ZHILL, ZFLAG)

(METERS)

```
     ( 567751.4, 4400473.5,       0.0,       0.0,       0.0);
( 568027.5, 4400677.5,       0.0,       0.0,       0.0);
     ( 567750.9, 4400473.5,       0.0,       0.0,       0.0);
( 567559.7, 4400543.6,       0.0,       0.0,       0.0);
     ( 567562.2, 4400771.8,       0.0,       0.0,       0.0);
( 567592.8, 4400852.1,       0.0,       0.0,       0.0);
     ( 567792.9, 4400306.5,       0.0,       0.0,       0.0);
( 567597.9, 4400377.9,       0.0,       0.0,       0.0);
     ( 567595.3, 4400936.2,       0.0,       0.0,       0.0);
( 567975.2, 4400788.4,       0.0,       0.0,       0.0);
     ( 567487.0, 4400894.2,       0.0,       0.0,       0.0);
( 567453.9, 4400825.3,       0.0,       0.0,       0.0);
     ( 567404.1, 4400765.4,       0.0,       0.0,       0.0);
( 568004.5, 4400240.3,       0.0,       0.0,       0.0);
     ( 567438.6, 4400931.1,       0.0,       0.0,       0.0);
( 568240.6, 4400261.9,       0.0,       0.0,       0.0);
     ( 568211.3, 4400875.2,       0.0,       0.0,       0.0);
( 567772.2, 4401081.6,       0.0,       0.0,       0.0);
     ( 567401.8, 4400357.0,       0.0,       0.0,       0.0);
( 567612.6, 4400153.6,       0.0,       0.0,       0.0);
     ( 567720.9, 4400068.7,       0.0,       0.0,       0.0);
( 567965.4, 4400109.7,       0.0,       0.0,       0.0);
```

**MODELOPTs: RegDFAULT CONC ELEV

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING *** (1=YES; 0=NO)

```
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:14:07

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                                     *** UP TO THE FIRST 24 HOURS
OF METEOROLOGICAL DATA ***

   Surface file:   ..\AERMET.SFC
Met Version:  14134
   Profile file:   ..\AERMET.PFL
   Surface format: FREE
   Profile format: FREE
   Surface station no.:    24257                  Upper air
station no.:    23110
                  Name: REDDING/AAF
Name: UNKNOWN
                  Year:   1992
Year:   1992

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN
Z0  BOWEN ALBEDO  REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 92 01 01   1 01   -5.8  0.095 -9.000 -9.000 -999.   70.     13.4
0.05   0.87   1.00    3.10   11.   33.0  274.2    2.0
 92 01 01   1 02   -5.0  0.085 -9.000 -9.000 -999.   60.     11.3
0.02   0.87   1.00    3.10  358.   33.0  274.2    2.0
 92 01 01   1 03   -5.8  0.095 -9.000 -9.000 -999.   70.     13.3
0.05   0.87   1.00    3.10    4.   33.0  273.1    2.0
 92 01 01   1 04   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60   13.   33.0  272.5    2.0
 92 01 01   1 05   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60    3.   33.0  272.5    2.0
 92 01 01   1 06 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 07 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 08 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  271.4    2.0
 92 01 01   1 09 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.45    0.00    0.   33.0  273.8    2.0
 92 01 01   1 10   27.6 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.30    0.00    0.   33.0  278.1    2.0
 92 01 01   1 11   60.7 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.25    0.00    0.   33.0  281.4    2.0
 92 01 01   1 12   80.1  0.194 -9.000 -9.000 -999.  205.     -8.2
0.02   0.87   0.23    2.60  346.   33.0  284.9    2.0
```

```
 92 01 01   1 13   86.2 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.22    0.00    0.   33.0  287.0    2.0
 92 01 01   1 14   75.5  0.164 -9.000 -9.000 -999.  160.     -5.3
0.02   0.87   0.24    2.10  109.   33.0  287.0    2.0
 92 01 01   1 15   48.0  0.124 -9.000 -9.000 -999.  105.     -3.6
0.02   0.87   0.27    1.50  162.   33.0  287.0    2.0
 92 01 01   1 16   10.0  0.126 -9.000 -9.000 -999.  108.    -18.2
0.07   0.87   0.37    1.50  254.   33.0  285.4    2.0
 92 01 01   1 17 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.63    0.00    0.   33.0  282.5    2.0
 92 01 01   1 18 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  280.4    2.0
 92 01 01   1 19   -2.7  0.064 -9.000 -9.000 -999.   39.      9.1
0.05   0.87   1.00    2.10   24.   33.0  277.0    2.0
 92 01 01   1 20   -5.6  0.093 -9.000 -9.000 -999.   68.     13.0
0.04   0.87   1.00    3.10  297.   33.0  276.4    2.0
 92 01 01   1 21   -4.9  0.085 -9.000 -9.000 -999.   60.     11.5
0.02   0.87   1.00    3.10  330.   33.0  277.0    2.0
 92 01 01   1 22   -2.6  0.064 -9.000 -9.000 -999.   39.      9.3
0.05   0.87   1.00    2.10   12.   33.0  275.9    2.0
 92 01 01   1 23   -3.4  0.072 -9.000 -9.000 -999.   46.      9.6
0.02   0.87   1.00    2.60  350.   33.0  277.0    2.0
 92 01 01   1 24 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  274.9    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW
sigmaV
 92 01 01 01   33.0 1   11.    3.10   274.3   99.0  -99.00  -
99.00

 F indicates top of profile (=1) or below (=0)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
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 **MODELOPTs:   RegDFAULT CONC      ELEV

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES
AVERAGED OVER   1 YEARS FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):
LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO  , SPILLAUTO   ,
LOADABOVEGRD,
                 BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF TOLUENE  IN
MICROGRAMS/M**3                              **

       X-COORD (M)   Y-COORD (M)        CONC
X-COORD (M)   Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         567751.36    4400473.55        5.05635
568027.46    4400677.48        0.43734
         567750.85    4400473.53        5.06589
567559.65    4400543.64        1.95354
         567562.20    4400771.81        1.77149
567592.79    4400852.12        1.65502
         567792.92    4400306.55        2.38188
567597.89    4400377.93        1.65739
         567595.34    4400936.25        1.04701
567975.20    4400788.38        0.45006
         567486.99    4400894.18        0.84612
567453.85    4400825.35        0.78197
         567404.13    4400765.44        0.53810
568004.52    4400240.26        1.06163
         567438.55    4400931.15        0.67659
568240.58    4400261.90        0.45568
         568211.31    4400875.23        0.20557
567772.17    4401081.63        0.40095
         567401.83    4400357.05        0.61615
567612.62    4400153.58        1.19959
         567720.94    4400068.68        1.39657
567965.39    4400109.67        1.13042
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
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 **MODELOPTs:   RegDFAULT CONC      ELEV

                              *** THE   1ST HIGHEST  1-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):
LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO  , SPILLAUTO   ,
LOADABOVEGRD,
                 BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF TOLUENE  IN
MICROGRAMS/M**3                              **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        567751.36   4400473.55       73.30067  (92021724)
568027.46   4400677.48       25.05933  (92121422)
        567750.85   4400473.53       73.19356  (92021724)
567559.65   4400543.64       42.87724  (92011004)
        567562.20   4400771.81       60.90523  (92010223)
567592.79   4400852.12       78.20720  (92013117)
        567792.92   4400306.55       46.59387  (92012518)
567597.89   4400377.93       29.30543  (92022022)
        567595.34   4400936.25       49.35508  (92122717)
567975.20   4400788.38       21.41703  (92011324)
        567486.99   4400894.18       48.80126  (92012203)
567453.85   4400825.35       37.94571  (92010703)
        567404.13   4400765.44       35.25435  (92012408)
568004.52   4400240.26       32.65942  (92021823)
        567438.55   4400931.15       46.76147  (92011921)
568240.58   4400261.90       23.64739  (92013001)
        568211.31   4400875.23       13.05606  (92051302)
567772.17   4401081.63       24.00797  (92082105)
        567401.83   4400357.05       22.48591  (92120304)
567612.62   4400153.58       26.61521  (92051701)
        567720.94   4400068.68       31.34548  (92020121)
567965.39   4400109.67       28.96640  (92123122)
```

**MODELOPTs: RegDFAULT CONC ELEV

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S):
LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO , SPILLAUTO , LOADABOVEGRD,
BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF TOLUENE IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
567751.36	4400473.55	29.80501c	(92012524)
568027.46	4400677.48	5.69575c	(92120708)
567750.85	4400473.53	29.72208c	(92012524)
567559.65	4400543.64	13.66489c	(92010608)
567562.20	4400771.81	23.55250c	(92011524)
567592.79	4400852.12	17.69855b	(92060708)
567792.92	4400306.55	13.49413	(92020208)
567597.89	4400377.93	13.32039b	(92091108)
567595.34	4400936.25	11.86709b	(92051724)
567975.20	4400788.38	6.21773c	(92120124)
567486.99	4400894.18	15.49128c	(92122624)
567453.85	4400825.35	14.16764c	(92011524)
567404.13	4400765.44	10.60081c	(92012408)
568004.52	4400240.26	9.33483c	(92020708)
567438.55	4400931.15	13.72806c	(92011924)
568240.58	4400261.90	4.31991m	(92042108)
568211.31	4400875.23	2.95148m	(92040108)
567772.17	4401081.63	5.06733b	(92042024)
567401.83	4400357.05	6.93327b	(92041324)
567612.62	4400153.58	9.62919c	(92092908)
567720.94	4400068.68	10.64345m	(92052608)
567965.39	4400109.67	9.69743c	(92012524)

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:14:07

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                              *** THE   1ST HIGHEST 24-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):
LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO  , SPILLAUTO   ,
LOADABOVEGRD,
                 BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF TOLUENE  IN
MICROGRAMS/M**3                              **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        567751.36   4400473.55       13.01154m (92052724)
568027.46   4400677.48        2.87589b (92120724)
        567750.85   4400473.53       13.02938m (92052724)
567559.65   4400543.64        7.42019b (92010624)
        567562.20   4400771.81       10.93073b (92011924)
567592.79   4400852.12        7.75808b (92020824)
        567792.92   4400306.55        9.61465m (92022324)
567597.89   4400377.93        6.85105b (92091124)
        567595.34   4400936.25        5.20798b (92122724)
567975.20   4400788.38        2.63850m (92103124)
        567486.99   4400894.18        7.63296b (92012224)
567453.85   4400825.35        4.75526b (92011524)
        567404.13   4400765.44        3.78630b (92012424)
568004.52   4400240.26        4.99253b (92020224)
        567438.55   4400931.15        7.51344b (92012224)
568240.58   4400261.90        2.21979b (92030624)
        568211.31   4400875.23        1.17800b (92040124)
567772.17   4401081.63        1.72907b (92042024)
        567401.83   4400357.05        2.31573b (92041324)
567612.62   4400153.58        4.28187b (92092924)
        567720.94   4400068.68        4.82830c (92121824)
567965.39   4400109.67        4.03088b (92012924)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:14:07

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                                   *** THE SUMMARY OF MAXIMUM
ANNUAL RESULTS AVERAGED OVER   1 YEARS ***


                                    ** CONC OF TOLUENE  IN
MICROGRAMS/M**3                          **


NETWORK
GROUP ID                        AVERAGE CONC
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       5.06589 AT (  567750.85,
4400473.53,     0.00,     0.00,    0.00)  DC
          2ND HIGHEST VALUE IS       5.05635 AT (  567751.36,
4400473.55,     0.00,     0.00,    0.00)  DC
          3RD HIGHEST VALUE IS       2.38188 AT (  567792.92,
4400306.55,     0.00,     0.00,    0.00)  DC
          4TH HIGHEST VALUE IS       1.95354 AT (  567559.65,
4400543.64,     0.00,     0.00,    0.00)  DC
          5TH HIGHEST VALUE IS       1.77149 AT (  567562.20,
4400771.81,     0.00,     0.00,    0.00)  DC
          6TH HIGHEST VALUE IS       1.65739 AT (  567597.89,
4400377.93,     0.00,     0.00,    0.00)  DC
          7TH HIGHEST VALUE IS       1.65502 AT (  567592.79,
4400852.12,     0.00,     0.00,    0.00)  DC
          8TH HIGHEST VALUE IS       1.39657 AT (  567720.94,
4400068.68,     0.00,     0.00,    0.00)  DC
          9TH HIGHEST VALUE IS       1.19959 AT (  567612.62,
4400153.58,     0.00,     0.00,    0.00)  DC
         10TH HIGHEST VALUE IS       1.13042 AT (  567965.39,
4400109.67,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:14:07

PAGE  13
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST  1-HR RESULTS ***


                                     ** CONC OF TOLUENE  IN
MICROGRAMS/M**3                           **

                                                        DATE
NETWORK
GROUP ID                           AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      78.20720  ON 92013117: AT
(  567592.79,  4400852.12,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:14:07

PAGE  14
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST  8-HR RESULTS ***


                                     ** CONC OF TOLUENE  IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      29.80501c ON 92012524: AT
(  567751.36,  4400473.55,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:14:07

PAGE  15
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST 24-HR RESULTS ***


                                     ** CONC OF TOLUENE  IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      13.02938m ON 92052724: AT
(  567750.85,  4400473.53,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:14:07

PAGE  16
 **MODELOPTs:   RegDFAULT CONC      ELEV

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            0 Warning Message(s)
 A Total of         4945 Informational Message(s)

 A Total of         8784 Hours Were Processed

 A Total of         1674 Calm Hours Identified

 A Total of         3271 Missing Hours Identified ( 37.24
Percent)

 CAUTION!:  Number of Missing Hours Exceeds 10 Percent of Total!
            Data May Not Be Acceptable for Regulatory
Applications.
            See Section 5.3.2 of "Meteorological Monitoring
Guidance
            for Regulatory Modeling Applications" (EPA-454/R-99-
005).


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
               ***  NONE  ***


    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```

```
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 8.8.9
** Lakes Environmental Software Inc.
** Date: 1/15/2015
** File: C:\Emissions Models\Orland\Flying J\AERMOD\Gas
Dispensers - Xylene\Gas Dispensers - Xylene.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Emissions Models\Orland\Flying J\AERMOD\Local
Circulation\Local C
   MODELOPT DFAULT CONC
   AVERTIME 1 8 24 ANNUAL
   POLLUTID XYLENE
   RUNORNOT RUN
   ERRORFIL "LOCAL CIRCULATION.ERR"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION LOADUNDERGRD POINT      567661.000  4400706.000
0.000
   LOCATION BREATHUNDRGD POINT      567661.000  4400706.000
0.000
   LOCATION REFUELAUTO   VOLUME     567651.000  4400706.000
0.000
   LOCATION SPILLAUTO    VOLUME     567651.000  4400706.000
0.000
   LOCATION LOADABOVEGRD POINT      567742.000    63744.000
1.000
   LOCATION BREATHABVGRD POINT      567742.000  4400637.000
1.000
   LOCATION REFUELDIESEL VOLUME     567681.000  4400630.000
0.000
   LOCATION SPILLDIESEL  VOLUME     567681.000  4400630.000
0.000
```

```
** Source Parameters **
   SRCPARAM LOADUNDERGRD   0.00005     3.658   291.483   0.00030
0.050
   SRCPARAM BREATHUNDRGD   0.00002     3.658   288.706   0.00035
0.050
   SRCPARAM REFUELAUTO       0.003     1.000     4.000    13.000
   SRCPARAM SPILLAUTO        0.002     0.000     4.000    13.000
   SRCPARAM LOADABOVEGRD     0.002     3.658   291.483   0.00177
0.050
   SRCPARAM BREATHABVGRD    0.0002     3.658   291.483   0.00177
0.050
   SRCPARAM REFUELDIESEL     0.003     1.000     4.000    13.000
   SRCPARAM SPILLDIESEL      0.002     0.000     4.000    13.000
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
** DESCRREC "" ""
   DISCCART    567751.36   4400473.55    0.00    0.00
   DISCCART    568027.46   4400677.48    0.00    0.00
   DISCCART    567750.85   4400473.53    0.00    0.00
   DISCCART    567559.65   4400543.64    0.00    0.00
   DISCCART    567562.20   4400771.81    0.00    0.00
   DISCCART    567592.79   4400852.12    0.00    0.00
   DISCCART    567792.92   4400306.55    0.00    0.00
   DISCCART    567597.89   4400377.93    0.00    0.00
   DISCCART    567595.34   4400936.25    0.00    0.00
   DISCCART    567975.20   4400788.38    0.00    0.00
   DISCCART    567486.99   4400894.18    0.00    0.00
   DISCCART    567453.85   4400825.35    0.00    0.00
   DISCCART    567404.13   4400765.44    0.00    0.00
   DISCCART    568004.52   4400240.26    0.00    0.00
   DISCCART    567438.55   4400931.15    0.00    0.00
   DISCCART    568240.58   4400261.90    0.00    0.00
   DISCCART    568211.31   4400875.23    0.00    0.00
   DISCCART    567772.17   4401081.63    0.00    0.00
   DISCCART    567401.83   4400357.05    0.00    0.00
   DISCCART    567612.62   4400153.58    0.00    0.00
   DISCCART    567720.94   4400068.68    0.00    0.00
   DISCCART    567965.39   4400109.67    0.00    0.00
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
```

```
ME STARTING
   SURFFILE ..\AERMET.SFC
   PROFFILE ..\AERMET.PFL
   SURFDATA 24257 1992 REDDING/AAF
   UAIRDATA 23110 1992
   PROFBASE 0.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "Gas Dispensers - Xylene.AD\01H1GALL.PLT"
31
   PLOTFILE 8 ALL 1ST "Gas Dispensers - Xylene.AD\08H1GALL.PLT"
32
   PLOTFILE 24 ALL 1ST "Gas Dispensers - Xylene.AD\24H1GALL.PLT"
33
   PLOTFILE ANNUAL ALL "Gas Dispensers - Xylene.AD\AN00GALL.PLT"
34
   SUMMFILE "LOCAL CIRCULATION.SUM"
OU FINISHED

 ************************************
 *** SETUP Finishes Successfully ***
 ************************************
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:33:58

PAGE   1
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                  ***     MODEL SETUP
OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration
Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses RURAL Dispersion Only.

 **Model Uses Regulatory DEFAULT Options:
         1. Stack-tip Downwash.
         2. Model Accounts for ELEVated Terrain Effects.
         3. Use Calms Processing Routine.
         4. Use Missing Data Processing Routine.
         5. No Exponential Decay.

 **Other Options Specified:
         CCVR_Sub - Meteorological data includes CCVR
substitutions
         TEMP_Sub - Meteorological data includes TEMP
substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  XYLENE

 **Model Calculates  3 Short Term Average(s) of:   1-HR   8-HR
24-HR
     and Calculates ANNUAL Averages

 **This Run Includes:      8 Source(s);       1 Source Group(s);
and      22 Receptor(s)

 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134
```

```
 **Output Options Selected:
          Model Outputs Tables of ANNUAL Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by
Receptor (RECTABLE Keyword)
          Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked
Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =
0.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC
;  Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of
RAM.

 **Detailed Error/Message File:   LOCAL CIRCULATION.ERR
 **File for Summary of Results:   LOCAL CIRCULATION.SUM
```

**MODELOPTs: RegDFAULT CONC ELEV

*** POINT SOURCE DATA ***

STACK SOURCE ID	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS (METERS)	URBAN SOURCE (METERS)	CAP/ HOR (METERS)	BASE ELEV. (METERS)	EMIS RATE SCALAR VARY BY
LOADUNDERGRD	3.66	291.48	0	0.50000E-04	0.00	0.05	567661.0 NO	4400706.0 NO	NO	0.0	
BREATHUNDRGD	3.66	288.71	0	0.20000E-04	0.00	0.05	567661.0 NO	4400706.0 NO	NO	0.0	
LOADABOVEGRD	3.66	291.48	0	0.20000E-02	0.00	0.05	567742.0 NO	63744.0 NO	NO	1.0	
BREATHABVGRD	3.66	291.48	0	0.20000E-03	0.00	0.05	567742.0 NO	4400637.0 NO	NO	1.0	

**MODELOPTs: RegDFAULT CONC ELEV

*** VOLUME SOURCE DATA ***

RELEASE SOURCE ID	INIT. PART. CATS.	NUMBER EMISSION RATE (GRAMS/SEC)	INIT. SOURCE	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	HEIGHT (METERS)	SY (METERS)	SZ (METERS)
REFUELAUTO	0	0.30000E-02				567651.0	4400706.0	0.0	1.00	4.00	13.00
SPILLAUTO	0	0.20000E-02				567651.0	4400706.0	0.0	0.00	4.00	13.00
REFUELDIESEL	0	0.30000E-02				567681.0	4400630.0	0.0	1.00	4.00	13.00
SPILLDIESEL	0	0.20000E-02				567681.0	4400630.0	0.0	0.00	4.00	13.00

**MODELOPTs: RegDFAULT CONC ELEV

*** SOURCE IDs
DEFINING SOURCE GROUPS ***

SRCGROUP ID SOURCE
IDs

ALL LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO , SPILLAUTO
, LOADABOVEGRD, BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

**MODELOPTs: RegDFAULT CONC ELEV

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)

(METERS)

```
     ( 567751.4, 4400473.5,       0.0,       0.0,       0.0);
( 568027.5, 4400677.5,       0.0,       0.0,       0.0);
     ( 567750.9, 4400473.5,       0.0,       0.0,       0.0);
( 567559.7, 4400543.6,       0.0,       0.0,       0.0);
     ( 567562.2, 4400771.8,       0.0,       0.0,       0.0);
( 567592.8, 4400852.1,       0.0,       0.0,       0.0);
     ( 567792.9, 4400306.5,       0.0,       0.0,       0.0);
( 567597.9, 4400377.9,       0.0,       0.0,       0.0);
     ( 567595.3, 4400936.2,       0.0,       0.0,       0.0);
( 567975.2, 4400788.4,       0.0,       0.0,       0.0);
     ( 567487.0, 4400894.2,       0.0,       0.0,       0.0);
( 567453.9, 4400825.3,       0.0,       0.0,       0.0);
     ( 567404.1, 4400765.4,       0.0,       0.0,       0.0);
( 568004.5, 4400240.3,       0.0,       0.0,       0.0);
     ( 567438.6, 4400931.1,       0.0,       0.0,       0.0);
( 568240.6, 4400261.9,       0.0,       0.0,       0.0);
     ( 568211.3, 4400875.2,       0.0,       0.0,       0.0);
( 567772.2, 4401081.6,       0.0,       0.0,       0.0);
     ( 567401.8, 4400357.0,       0.0,       0.0,       0.0);
( 567612.6, 4400153.6,       0.0,       0.0,       0.0);
     ( 567720.9, 4400068.7,       0.0,       0.0,       0.0);
( 567965.4, 4400109.7,       0.0,       0.0,       0.0);
```

**MODELOPTs: RegDFAULT CONC ELEV

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING *** (1=YES; 0=NO)

```
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
1 1 1 1 1  1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:33:58

PAGE   7
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                     *** UP TO THE FIRST 24 HOURS
OF METEOROLOGICAL DATA ***

   Surface file:   ..\AERMET.SFC
Met Version:  14134
   Profile file:   ..\AERMET.PFL
   Surface format: FREE
   Profile format: FREE
   Surface station no.:    24257                  Upper air
station no.:    23110
                  Name: REDDING/AAF
Name: UNKNOWN
                  Year:   1992
Year:   1992

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN
Z0  BOWEN ALBEDO  REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 92 01 01   1 01   -5.8  0.095 -9.000 -9.000 -999.   70.     13.4
0.05   0.87   1.00    3.10   11.   33.0  274.2    2.0
 92 01 01   1 02   -5.0  0.085 -9.000 -9.000 -999.   60.     11.3
0.02   0.87   1.00    3.10  358.   33.0  274.2    2.0
 92 01 01   1 03   -5.8  0.095 -9.000 -9.000 -999.   70.     13.3
0.05   0.87   1.00    3.10    4.   33.0  273.1    2.0
 92 01 01   1 04   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60   13.   33.0  272.5    2.0
 92 01 01   1 05   -4.1  0.080 -9.000 -9.000 -999.   54.     11.2
0.05   0.87   1.00    2.60    3.   33.0  272.5    2.0
 92 01 01   1 06 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 07 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  272.0    2.0
 92 01 01   1 08 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  271.4    2.0
 92 01 01   1 09 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.45    0.00    0.   33.0  273.8    2.0
 92 01 01   1 10   27.6 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.30    0.00    0.   33.0  278.1    2.0
 92 01 01   1 11   60.7 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.25    0.00    0.   33.0  281.4    2.0
 92 01 01   1 12   80.1  0.194 -9.000 -9.000 -999.  205.     -8.2
0.02   0.87   0.23    2.60  346.   33.0  284.9    2.0
```

```
 92 01 01   1 13   86.2 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.22    0.00    0.   33.0  287.0    2.0
 92 01 01   1 14   75.5  0.164 -9.000 -9.000 -999.  160.     -5.3
0.02   0.87   0.24    2.10  109.   33.0  287.0    2.0
 92 01 01   1 15   48.0  0.124 -9.000 -9.000 -999.  105.     -3.6
0.02   0.87   0.27    1.50  162.   33.0  287.0    2.0
 92 01 01   1 16   10.0  0.126 -9.000 -9.000 -999.  108.    -18.2
0.07   0.87   0.37    1.50  254.   33.0  285.4    2.0
 92 01 01   1 17 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   0.63    0.00    0.   33.0  282.5    2.0
 92 01 01   1 18 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  280.4    2.0
 92 01 01   1 19   -2.7  0.064 -9.000 -9.000 -999.   39.      9.1
0.05   0.87   1.00    2.10   24.   33.0  277.0    2.0
 92 01 01   1 20   -5.6  0.093 -9.000 -9.000 -999.   68.     13.0
0.04   0.87   1.00    3.10  297.   33.0  276.4    2.0
 92 01 01   1 21   -4.9  0.085 -9.000 -9.000 -999.   60.     11.5
0.02   0.87   1.00    3.10  330.   33.0  277.0    2.0
 92 01 01   1 22   -2.6  0.064 -9.000 -9.000 -999.   39.      9.3
0.05   0.87   1.00    2.10   12.   33.0  275.9    2.0
 92 01 01   1 23   -3.4  0.072 -9.000 -9.000 -999.   46.      9.6
0.02   0.87   1.00    2.60  350.   33.0  277.0    2.0
 92 01 01   1 24 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0
0.03   0.87   1.00    0.00    0.   33.0  274.9    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW
sigmaV
 92 01 01 01   33.0 1   11.    3.10   274.3   99.0  -99.00  -
99.00

 F indicates top of profile (=1) or below (=0)
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
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***        13:33:58

PAGE   8
 **MODELOPTs:   RegDFAULT CONC      ELEV

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES
AVERAGED OVER   1 YEARS FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):
LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO  , SPILLAUTO   ,
LOADABOVEGRD,
                 BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF XYLENE   IN
MICROGRAMS/M**3                              **

       X-COORD (M)   Y-COORD (M)        CONC
X-COORD (M)   Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         567751.36    4400473.55        1.37984
568027.46    4400677.48        0.11828
         567750.85    4400473.53        1.38249
567559.65    4400543.64        0.52016
         567562.20    4400771.81        0.46592
567592.79    4400852.12        0.43428
         567792.92    4400306.55        0.65292
567597.89    4400377.93        0.44788
         567595.34    4400936.25        0.27826
567975.20    4400788.38        0.12270
         567486.99    4400894.18        0.22434
567453.85    4400825.35        0.20884
         567404.13    4400765.44        0.14406
568004.52    4400240.26        0.28963
         567438.55    4400931.15        0.18089
568240.58    4400261.90        0.12476
         568211.31    4400875.23        0.05661
567772.17    4401081.63        0.10805
         567401.83    4400357.05        0.16673
567612.62    4400153.58        0.32881
         567720.94    4400068.68        0.38477
567965.39    4400109.67        0.31159
```

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 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
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***        13:33:58

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                              *** THE   1ST HIGHEST  1-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):
LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO  , SPILLAUTO   ,
LOADABOVEGRD,
                 BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF XYLENE   IN
MICROGRAMS/M**3                              **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        567751.36   4400473.55       20.25288  (92021724)
568027.46   4400677.48        6.42973  (92121422)
        567750.85   4400473.53       20.23176  (92021724)
567559.65   4400543.64       12.52087  (92011004)
        567562.20   4400771.81       16.34614  (92010223)
567592.79   4400852.12       21.15835  (92013117)
        567792.92   4400306.55       12.82290  (92012518)
567597.89   4400377.93        8.01941  (92022022)
        567595.34   4400936.25       13.40641  (92122717)
567975.20   4400788.38        5.56320  (92120118)
        567486.99   4400894.18       13.09379  (92120803)
567453.85   4400825.35        9.61211  (92010703)
        567404.13   4400765.44        8.99095  (92012408)
568004.52   4400240.26        9.00894  (92021823)
        567438.55   4400931.15       12.42209  (92011921)
568240.58   4400261.90        6.50779  (92013001)
        568211.31   4400875.23        3.68551  (92051302)
567772.17   4401081.63        6.43831  (92082105)
        567401.83   4400357.05        5.96580  (92041322)
567612.62   4400153.58        7.33080  (92051701)
        567720.94   4400068.68        8.61478  (92020121)
567965.39   4400109.67        8.06582  (92123122)
```

**MODELOPTs: RegDFAULT CONC ELEV

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S):
LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO , SPILLAUTO , LOADABOVEGRD,
BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF XYLENE IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
567751.36	4400473.55	8.17509c	(92012524)
568027.46	4400677.48	1.46712c	(92120708)
567750.85	4400473.53	8.15382c	(92012524)
567559.65	4400543.64	3.87124c	(92010608)
567562.20	4400771.81	6.06002c	(92011524)
567592.79	4400852.12	4.80164b	(92060708)
567792.92	4400306.55	3.72292	(92020208)
567597.89	4400377.93	3.65082b	(92091108)
567595.34	4400936.25	3.21720b	(92051724)
567975.20	4400788.38	1.78836c	(92120124)
567486.99	4400894.18	4.21114c	(92122624)
567453.85	4400825.35	3.75641c	(92011524)
567404.13	4400765.44	2.71032c	(92012408)
568004.52	4400240.26	2.54208c	(92020708)
567438.55	4400931.15	3.65912c	(92011924)
568240.58	4400261.90	1.20780m	(92042108)
568211.31	4400875.23	0.82973m	(92040108)
567772.17	4401081.63	1.37781b	(92042024)
567401.83	4400357.05	1.89798b	(92041324)
567612.62	4400153.58	2.63067c	(92092908)
567720.94	4400068.68	2.93514m	(92052608)
567965.39	4400109.67	2.67672c	(92012524)

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
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***        13:33:58

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                              *** THE   1ST HIGHEST 24-HR AVERAGE
CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):
LOADUNDERGRD, BREATHUNDRGD, REFUELAUTO  , SPILLAUTO   ,
LOADABOVEGRD,
                 BREATHABVGRD, REFUELDIESEL, SPILLDIESEL ,

                                                 *** DISCRETE
CARTESIAN RECEPTOR POINTS ***

                                            ** CONC OF XYLENE   IN
MICROGRAMS/M**3                              **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-
        567751.36   4400473.55        3.63077m (92052724)
568027.46   4400677.48        0.76804b (92120724)
        567750.85   4400473.53        3.63671m (92052724)
567559.65   4400543.64        2.05296b (92010624)
        567562.20   4400771.81        2.92693b (92012224)
567592.79   4400852.12        2.00740b (92020824)
        567792.92   4400306.55        2.66425m (92022324)
567597.89   4400377.93        1.86357b (92091124)
        567595.34   4400936.25        1.40101b (92122724)
567975.20   4400788.38        0.73321m (92103124)
        567486.99   4400894.18        1.95095b (92012224)
567453.85   4400825.35        1.26072b (92011524)
        567404.13   4400765.44        0.96875b (92012424)
568004.52   4400240.26        1.37264b (92020224)
        567438.55   4400931.15        1.98100b (92012224)
568240.58   4400261.90        0.61943b (92030624)
        568211.31   4400875.23        0.32992b (92040124)
567772.17   4401081.63        0.46997b (92042024)
        567401.83   4400357.05        0.63395b (92041324)
567612.62   4400153.58        1.17081b (92092924)
        567720.94   4400068.68        1.33505c (92121824)
567965.39   4400109.67        1.12049b (92012924)
```

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 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:33:58

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                                   *** THE SUMMARY OF MAXIMUM
ANNUAL RESULTS AVERAGED OVER   1 YEARS ***


                                    ** CONC OF XYLENE   IN
MICROGRAMS/M**3                          **


NETWORK
GROUP ID                        AVERAGE CONC
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       1.38249 AT (  567750.85,
4400473.53,     0.00,     0.00,    0.00)  DC
          2ND HIGHEST VALUE IS       1.37984 AT (  567751.36,
4400473.55,     0.00,     0.00,    0.00)  DC
          3RD HIGHEST VALUE IS       0.65292 AT (  567792.92,
4400306.55,     0.00,     0.00,    0.00)  DC
          4TH HIGHEST VALUE IS       0.52016 AT (  567559.65,
4400543.64,     0.00,     0.00,    0.00)  DC
          5TH HIGHEST VALUE IS       0.46592 AT (  567562.20,
4400771.81,     0.00,     0.00,    0.00)  DC
          6TH HIGHEST VALUE IS       0.44788 AT (  567597.89,
4400377.93,     0.00,     0.00,    0.00)  DC
          7TH HIGHEST VALUE IS       0.43428 AT (  567592.79,
4400852.12,     0.00,     0.00,    0.00)  DC
          8TH HIGHEST VALUE IS       0.38477 AT (  567720.94,
4400068.68,     0.00,     0.00,    0.00)  DC
          9TH HIGHEST VALUE IS       0.32881 AT (  567612.62,
4400153.58,     0.00,     0.00,    0.00)  DC
         10TH HIGHEST VALUE IS       0.31159 AT (  567965.39,
4400109.67,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:33:58

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST  1-HR RESULTS ***


                                     ** CONC OF XYLENE   IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      21.15835  ON 92013117: AT
(  567592.79,  4400852.12,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:33:58

PAGE  14
 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST  8-HR RESULTS ***


                                     ** CONC OF XYLENE   IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       8.17509c ON 92012524: AT
(  567751.36,  4400473.55,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:33:58

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 **MODELOPTs:   RegDFAULT CONC      ELEV

                                                     *** THE SUMMARY
OF HIGHEST 24-HR RESULTS ***


                                     ** CONC OF XYLENE   IN
MICROGRAMS/M**3                          **

                                                        DATE
NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)
RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       3.63671m ON 92052724: AT
(  567750.85,  4400473.53,     0.00,     0.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   *** C:\Emissions Models\Orland
\Flying J\AERMOD\Local Circulation\Local C ***        01/15/15
 *** AERMET - VERSION  14134 ***   ***
***        13:33:58

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 **MODELOPTs:   RegDFAULT CONC      ELEV

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            0 Warning Message(s)
 A Total of         4945 Informational Message(s)

 A Total of         8784 Hours Were Processed

 A Total of         1674 Calm Hours Identified

 A Total of         3271 Missing Hours Identified ( 37.24
Percent)

 CAUTION!:  Number of Missing Hours Exceeds 10 Percent of Total!
            Data May Not Be Acceptable for Regulatory
Applications.
            See Section 5.3.2 of "Meteorological Monitoring
Guidance
            for Regulatory Modeling Applications" (EPA-454/R-99-
005).


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
               ***  NONE  ***


    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```

CANCER RISK CALCULATIONS - BENZENE

Highest Concentration Benzene Cancer Risk Equation

Model Output	**Breath Rate**	**Exposure Factor**	**Days per Year**	**Years of Exposure**	**Inhalation Dose (mg/kg/day)**	**Subtotal**	**Cancer Dose (**Days of Exposure in 70 Years is 25,550)
0.249	302	0.96	250	70	0.000001	1.2633264	0.00004945

Cancer Potency Factor	**Cancer Risk**
0.1	**4.94**

Highest Concentration Benzene Cancer Risk Equation

Model Output	Breath Rate	Exposure Factor	Days per Year	Years of Exposure	Inhalation Dose (mg/kg/day)	Subtotal	Cancer Dose (Days of Exposure in 70 Years is 25,550)
0.115	302	0.96	250	70	0.000001	0.583464	0.00002284

Cancer Potency F	Cancer Risk
0.1	**2.28**

2nd Highest Concentration Benzene Cancer Risk Equation

Model Output	**Breath Rate**	**Exposure Factor**	**Days per Year**	**Years of Exposure**	**Inhalation Dose (mg/kg/day)**	**Subtotal**	**Cancer Dose (**Days of Exposure in 70 Years is 25,550)
0.115	302	0.96	250	70	0.000001	0.583464	0.00002284

Cancer Potency Factor	**Cancer Risk**
0.1	**2.28**

3rd Highest Concentration Benzene Cancer Risk Equation

Model Output	Breath Rate	Exposure Factor	Days per Year	Years of Exposure	Inhalation Dose (mg/kg/day)	Subtotal	Cancer Dose (Days of Exposure in 70 Years is 25,550)
0.111	302	0.96	250	70	0.000001	0.5631696	0.00002204

Cancer Potency Factor	Cancer Risk
0.1	**2.20**

5th Highest Concentration Benzene Cancer Risk Equation

Model Output	**Breath Rate**	**Exposure Factor**	**Days per Year**	**Years of Exposure**	**Inhalation Dose (mg/kg/day)**	**Subtotal**	**Cancer Dose (**Days of Exposure in 70 Years is 25,550)
0.101	302	0.96	250	70	0.000001	0.5124336	0.00002006

Cancer Potency Factor	**Cancer Risk**
0.1	**2.01**

APPENDIX 3.3 CULTURAL REPORT

ARCHAEOLOGICAL RESOURCE SURVEY REPORT
for the
Proposed Pilot Flying J Travel Center Project

DRAFT

View east from northeast boundary of the project site

Submitted by:

Northern California Resource Center
(N.C.R.C)
P.O. Box 146
Fort Jones, CA 96032

For

Pilot Flying J Travel Center Project

Report Prepared for the City of Orland, California

By:
Kathleen Tyler
(Archaeologist)

Eric Ritter, R.P.A., Ph.D.
(Archaeologist and Principal Investigator)

January 2015

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Aerial map with small field ditch location
1855 GLO Plat map

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Faxed response from Native American Heritage Commission
Requests for Information to the Enterprise Rancheria of Maidu Indians (2)
Requests for Information to the Grindstone Rancheria of Wintun-Wallaki (2)
Request for information to Paskenta Ban of Nomlaki Indians
Faxed response from Enterprise Rancheria of Maidu Indians

Abstract

This is an Archaeological Resource Survey Report for the City of Orland, Pilot Flying J Travel Center Project.

The project site is located adjacent to Orland in Glenn County. The proposed Pilot Flying J Travel Center is on Glenn County Assessor's Parcel 045-170-005. In addition, five other parcels, identified as Glenn County Assessor's Parcel Numbers 045-170-003, 045-140-003, -010, -011, and -012, are proposed to be annexed into the Orland city limits as a part of this project. The archaeological field survey was conducted by archaeologist Kathleen Tyler and Archaeology Field Technician Allenya Manning on December 22, 2014.

Representatives from the local and regional Native American groups were contacted as well as the Native American Heritage Commission regarding known cultural resources or sacred sites at or near the project area. An archaeological records search from Chico's C.H.R. I. S, literature review, and a complete pedestrian archaeological survey of the project area was conducted.

Letters were sent out to the different Native American representatives that might have concerns or information pertinent to the implementation of the project. At the time of this report no cultural resource concerns were expressed by the tribes. On December 31, 2014, The Native American Heritage Commission in Sacramento, indicated by fax, no sacred land was recorded in the project area.

The complete archaeological survey revealed no cultural resources of concern that would be affected by the proposed Pilot Flying J Travel Center construction or the action to annex five Glenn County Parcels as identified above. However, further documentation might be needed if development on parcel 045-170-003 involving the single residence and it's out buildings and barns were affected.

This report will be filed by Northern California Resource Center (Ft. Jones, CA), on behalf of The City of Orland to the Northeast Information Center, California State University, Chico, California.

INTRODUCTION

Examination of existing documentation and an archaeological reconnaissance of the City of Orland Pilot Flying J Travel Center Project and proposed annexation of described parcels were undertaken in compliance with the California Environmental Policy Act (CEQA) standards, Section 15161 of the CEQA Guidelines. The project constitutes an undertaking which could have a potential to adversely affect resources within the project's Area of Potential Effect (APE). Therefore, studies must conform to state guidelines, any other pertinent regulations.

PROJECT DESCRIPTION

The proposed project includes two components:

1. Annexation by the City of Orland of six parcels (APNs 045-170-005, 045-140-003, 045-140-012, 045-140-010, 045-140-011, and 045-170-003) totaling 19.63 acres.

2. Development of one of those parcels a proposed Pilot Flying J Travel Center (APN 045-170-005) which is 9.2 acres.

The scope of this archaeological investigation is focused on these six parcels proposing to be annexed by the City of Orland.

LOCATION

The project is located in Section 21, Township 22 North, Range 3 West, MDM, in Glenn County, California. The project is west of Interstate 5. The proposed Pilot Flying J Travel Center is located at the southwest quadrant of Interstate 5 (I-5) and Newville Road. The triangular-shaped site is bordered to the northeast by Newville Road/County Road 200 and the southbound I-5 on-ramp, to the west by County Road HH, and to the south by County Road 13.

NATURAL SETTING

The project area lies at an elevation of about 260' above sea level. The project is within a rural agricultural land that is situated in the northern Sacramento Valley, with a 0-3% slope. This flat valley area is primarily part of massive alluvial fan deposits. The Sacramento River is approximately 10 miles to east of the project site and Black Butte Lake is located 8 miles west of the project. The Black Butte Lake dam drains into Stoney Creek. Stoney Creek flows about a half-mile north of Orland and the project site. The Orland area is described as having a Mediterranean climate. The Natural Resources Conservation Service describes majority of soil at the project site as Czk. (Cortina, gravelly fine sandy loam, shallow). The smaller portion to the west is labeled Wh (Wyo gravelly loam, moderately deep over gravel.)

The land that was historically covered by native grasslands and riparian forest is currently land that is dedicated to agriculture. Agriculture is the most extensive land use in Glenn County and the most significant component of the county's economy. Two-thirds of Glenn County's 1,317 square miles are comprised of agricultural croplands and pasture.

CULTURAL SETTING

Pre-Contact Period

Ethnographic descriptions of the Wintun Indian people are found in early twentieth century accounts recorded by anthropologists. Earlier accounts by European-American travelers and settlers supplemented this information. The project area is located within what is historically documented as the Central Wintun (Nomlaki) territory. There were two major divisions of

Nomlaki Indians in California: the Hill Nomlaki and the River Nomlaki. The Hill Nomlaki are identified as The Paskenta Band of Nomlaki Indians. It is this group to who have ancestral ties to the Orland area which includes the project area.

Early 20th century ethnographers studying the Wintun groups described them as culturally and linguistically distinct. This makes sense given the rich diversity and density of fauna and flora; many triblets were not reliant on their neighbors for survival. However, these groups did share linguistic roots to the Penutian language. The Central Wintun (Nomlaki) essentially inhabited the foothill and valley area west of the Sacramento River to the crest of the coast range. Cottonwood Creek tended to be the North boundary and southerly to approximately where the town of Willows is situated.

The Nomlaki and their neighbors had for centuries led a nonagrarian life; a life style described as a hunter-gatherer, with the intricate knowledge of their territory as to where and when to gather food sources and passed their knowledge the generations that followed them.

These people had a sophisticated knowledge of the local and plants and animal sources to use in their everyday lives. The Nomlaki subsisted on plant foods such as acorns (blue oak, black oak, valley oak), hazelnut, grey pine seeds, probably California black walnut, and buckeye. Wild fruit such as elderberry, Sierra plum, coffeberry, manzanita berries, and wild grape were readily available. Many herbaceous plants and grasses native to the area were also consumed. Elk, black tail deer, rabbits, game birds, and other small game were available. Plant bulbs such as brodiaeas, lilies, and wild onions were also eaten plus varieties of mushrooms. Typical anadromous species utilized were salmon, trout, sturgeon, and lamprey.

Besides food sources plants were used for medicinal purposes as well as for making baskets. Other plant use examples were in women's skirts which were typically made from the inner bark of a cottonwood tree. The shredded bark was also used for padding baby cradles. Shredded maple bark could also be used for a woman's apron (standard piece of clothing for women). In construction of houses normal materials used were bark from the incense cedar for wall covering, oak poles for structure, wild tules for mats, and wild grape vines to fasten poles to the bark.

To aid with hunting the wood of an ash tree was used to make bows. Typically currant, dogwood, greasewood, mock orange, or mountain mahogany was used to make arrow shafts. Indian hemp was commonly used to make rope for rabbit nets. Yew was considered the favorite wood to use to make bows and war clubs.

The tribelets were led by a headman. In the villages most of the people were blood relatives. Traditionally and commonly it was accepted to have contact with other tribelets and neighboring groups for marriage purposes. Typically in larger villages a communal gathering place was constructed. These buildings had various names, roundhouse, assembly house, earth lodge or dance house. These buildings could be huge up to sixty feet in diameter. The communal building was generally underground or partially concealed but it took a group of people working together to excavate and assemble it, poles were constructed to hold the ceiling of thatched material. Sweathouses were built in the same way but on a much smaller scale and usually constructed by a small group or an individual.

Trading was a common practice among California tribes of which the Wintun tribes traded. Trade items included deer hides, clams, pine nut beads, acorns, baskets, and woodpecker scalps. In return they received such items as obsidian and dentalia and clam disk bead money, their primary currency was traded for from the south.

Having some knowledge of the Nomlaki lifestyle aids in understanding what evidence might be found in search of artifacts or archaeological sites. Evidence can be found on the surface, but below the surface of most prehistoric archaeological sites are clusters of burned rocks as are the remains of hearths and ovens. Sometimes these are not as evident. Animal remains and artifacts that are products of prehistoric domestic and ceremonial life can also be found. Hollowed out earthen holes caused by the excavation, ovens, storage facilities, and burials could also be present. Physical evidence can be the products of past organized human life. Information on the distribution of hearths, ovens, house depressions, storage facilities, manufacturing areas, middens, and artifacts can be used to reconstruct the organization of human societies which existed in the past.

Post-Contact Period

A.L. Kroeber's post-epidemic estimate of Wintun population was 12,000. It is estimated that disease (possibly smallpox) killed at least 3/4 of the Wintun people. Euro-Americans bought up the land to farm especially with the advent of a canal systems and railroad hub nearby; this made the land particularly attractive. The population of California was growing and food producers were needed. The Orland area was particularly suited for fruit and nut trees. Early during the turn of the century alfalfa, sugar beets, and grains were the more common crops produced in the irrigated fields. A historical 1855 GLO plat map of the area was viewed (Map 3 Appendix II). During that time nothing was present to plot on the map, but Stony Creek is evident as well as a small drainage was would have been located east of the project, probably were Interstate 5 is currently located.

The town of Orland was founded in early 1870. With the coming of the Central Pacific Railroad, Orland became one of the major grain shipping points in Northern California. The town was

also the center of the Orland federal irrigation project. In 1893 John H. Graves started the irrigation canal system using Stony Creek as the water source. Between 1893 and 1907 the system became inadequate and could not meet the growing needs of the agriculture lands surrounding the town of Orland. In 1908 the government stepped in to provide Federal reclamation workers and engineers to complete and enhance the irrigation project. Completion of the project provided an irrigated water system to 14,000 acres. Eventually the project involved 20,000 acres watered by East Park Reservoir (Stony Creek). In an agricultural report of 1911 it was stated there were over 100 miles of small field ditches associated with the Stoney Creek Canal Irrigation system, besides approximately 10 miles of a larger ditch system. In 1963 the U.S. Army Corps of Engineers constructed Black Butte Lake for flood control purposes. Orland is now a major processing center for almonds, olives, and oranges.

The Paskenta Rancheria was created, along with other Wintu Rancherias, in 1906 and 1909. In 1920, the Rancheria was 260-acres. In 1959, the Rancheria was terminated under the California Rancheria Termination Act, and the lands were sold to non-Native peoples. Despite the denial of federally recognized tribal status, the Paskenta Band maintained its tribal identity and culture while it worked for restoration as a Native American tribe. Finally in 1994, the federal government restored the Paskenta Band of Nomlaki Indians to full tribal status. The current Rancheria is 2000-acres large.

PREVIOUS ARCHAEOLOGICAL SURVEYS

The Northeast Center of the California Historical Resources Information System (C.H.R.I.S) was contacted on December 15, 2014 requesting information as to previous archaeological surveys within ¼ mile proximity to the Pilot Flying J Travel Center Project in Orland. A letter of response was received on January 6, 2015 (on file at NCRC) indicating no previously documented projects are within ¼ mile of the current project area.

According to the January 6, 2015 written response received from C.H.R.I.S., no prehistoric or pre-contact archaeological sites are documented anywhere within the project-area vicinity. According to C.H.R.I.S. no historic sites have been recorded within the project area or its ¼ mile vicinity.

SURVEY STRATEGY and FIELD WORK

The survey conducted on December 22, 2014, was a complete pedestrian survey by Kathleen Tyler and Allenya Manning. This survey was conducted on Glenn County APNs 045-170-005, 045-140-003, 045-140-012, 045-140-010, 045-140-011, and 045-170-003) totally 19.63 acres as shown on the project map (Appendix I Map 1).

RESULTS

Parcel 045-170-005 (Area of proposed Pilot Flying J Travel Center), was flat and easily walked, except for the abundance of tall dried weeds in several areas. Along the west side bordering the I-5, a large real estate “for sale” sign is currently on the ground, by the size of it, it was probably for viewing by freeway travelers. There was other debris, probably blown in from freeway littering, various papers, and empty plastic containers. On the north border of this parcel just

inside the fence, a feral cat feeding station, new plastic dishes and recent cat food cans could be seen as well as a cardboard shelter. Other miscellaneous items found in this field were aluminum beer cans, aluminum soda cans, plastic bottles, and various other debris from recent times.

Figure 1 Cardboard shelter constructed for feral cats

Figure 2 Plastic dishes and buckets for cat feeding.

Figure 3 View south looking at small field ditch

Figure 4 Cement base to hold small wooden gate for irrigation ditch. Notice the slots for the removable wooden gate. The pen used for scale on the left measured 6” in length,.

A small field ditch running north to south was located in the parcel identified for the Fly J Pilot Center project location (045-170-005), the ditch was mapped. The length of the ditch spanned the length of the fenced field (See map 2 Appendix I). Eight small gates were located along the segment of the small field ditch (see figure 4). It appears this feature had been used for flood irrigating the pasture. The small gate bases were constructed out of cement and the removable gates were made of thin milled wood. Nine gates were found, some of the gates are still in place, and five are scattered or broken. The ditch is shallow approximately a foot in depth, 1.5' wide, heavily overgrown, and appears to have been abandoned for many years. Historically the general area around Orland, in the early 1900's was used for alfalfa, grains, and pasture. It is likely this small ditch was one of many throughout the vicinity used for irrigation purposes. As mentioned earlier there were over 100 miles of small field ditches used in this way getting their water from the Stoney Creek Canal and Irrigation system. Although this ditch may be more than 50 years old they are part of an un-used lateral ditch system which is prolific throughout this area of agriculture land in California. They are very common and do not appear to represent anything unique or sensitive.

Several areas were exposed to see barren ground, orange pin flags were at these locations, it is assumed these were for recent perk holes.

Along the west boundary fence of this field was an aluminum water trough. It is currently filled in with weeds and soil.

Crossing over to the west side County Road HH Parcel Numbers 045-170-003, 045-140-003, -010, -011, and -012 are proposed to be annexed into the Orland city limits as a part of this project. Recent activity was observed at these locations. A contemporary truck farm operation seems have been in operation. There were rows of crops with plastic drip line irrigation installed. It has been abandoned but it appears only recently. Some of the vegetables growing were onions and kale; there were various herbs such as thyme and rosemary. This was definitely a modern endeavor. The house on parcel 045-170-003, (current use agriculture and single family home) and surrounding out buildings appears to be of an older style. There are modern fixtures and an electric meter; however the concrete on the side of the house with the date 1950 impressed on it could indicate the house's age, but more likely was poured after the house was built. Judging by the size of the grapefruit tree, tangerine, and orange tree on the side yard, the building could be older than that, it would be hard to tell without further investigation and a study of the house specifically. For the scope of this project, just annexing the property the historical documentation of the house and out building was not necessary. In the backyard area there is a very large producing olive tree. On the north end of this parcel (045-170-003) there is an old barn with and an abandoned ditch with cottonwood trees and saplings overgrown in front. The barn looks pre 1950, but again, it is currently being used. The other parcels have current use as a single family home (045-140-012), gas station (045-140-003), Eagles Hall (045-170-003), and a single-family home (045-140-011). These parcels have current use, pavement, modern facilities and compacted gravel with lots of use.

CONCLUSIONS, RECOMMENDATIONS

CEQA requires that impacts to archaeological resources be identified and, if impacts will be significant, that mitigation measures be implemented to reduce those impacts to the extent feasible. Archaeological resources fall into three categories: (1) unique archeological resources; (2) archaeological resources that are not unique, but fall under the definition of historical resources, above; and (3) archaeological resources that are neither unique nor historical resources.

As defined in Section 21083.2 (g) of CEQA a "unique archaeological resource" is as follows: **An archaeological artifact, object, or site about which it can clearly demonstrate that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria**:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
(2) Has a special and particular quality such as being the oldest or its type or the best available example of its type.
(3) Is directly associate with a scientifically recognized important prehistoric or historical even or person.

Under this definition, there are no unique historic or archaeological resources at the proposed Pilot Flying J Travel Center project site.

This was a surface survey. No surface survey can guarantee to have located subsurface archaeological materials if they are present. If prehistoric or historic material is discovered in the course of future project implementation, work at the site should be suspended until the finds are evaluated by a qualified archaeologist and, in the case of prehistoric material, the appropriate Native American tribe consulted

NATIVE AMERICAN CONSULTATION

A letter was sent to the Native American Heritage Commission on December 12, 2014. This letter requested information on any known archaeological or cultural sites or any unrecorded traditional cultural properties. (See Appendix II) December 30, 2014 a FAX was received from The Native American Heritage Commission. The response letter indicated an absence of cultural resources or known sacred land sites through their record search of the sacred land files. The Native American Heritage Commission sent a list of Native American individuals and groups to contact regarding the project area. Letters were written to each of those recommended Native American contacts, copies of the letters are included in Appendix II. At the time of this report, a FAX was received from Ren Reynolds of the Enterprise Rancheria of Maidu Indians. His response was that the area was not Maidu area (response in Appendix II).

_____
Kathleen Tyler

_____
Eric Ritter

REFERENCES CITED AND/OR UTILIZED

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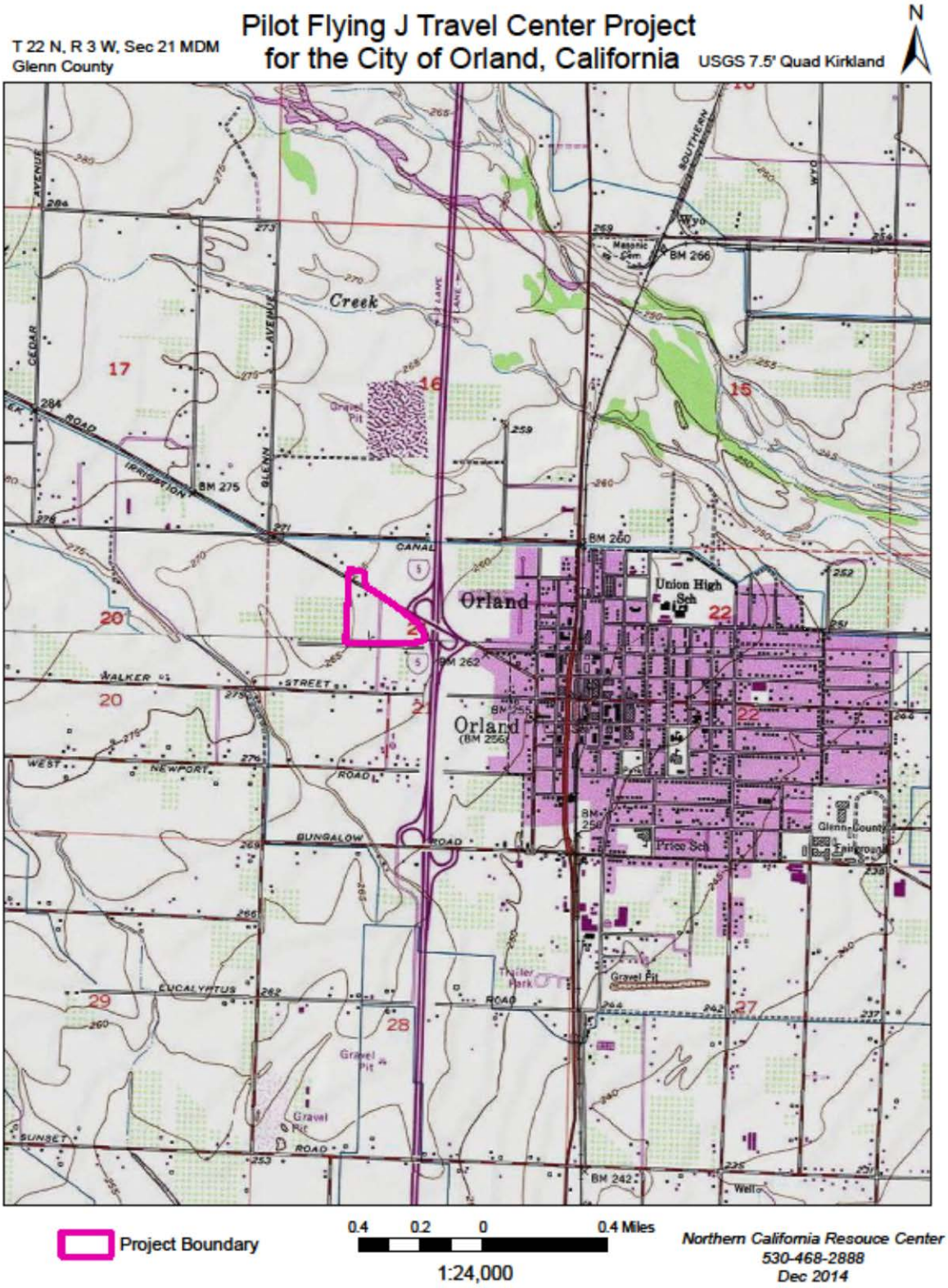
Other Reference Materials:

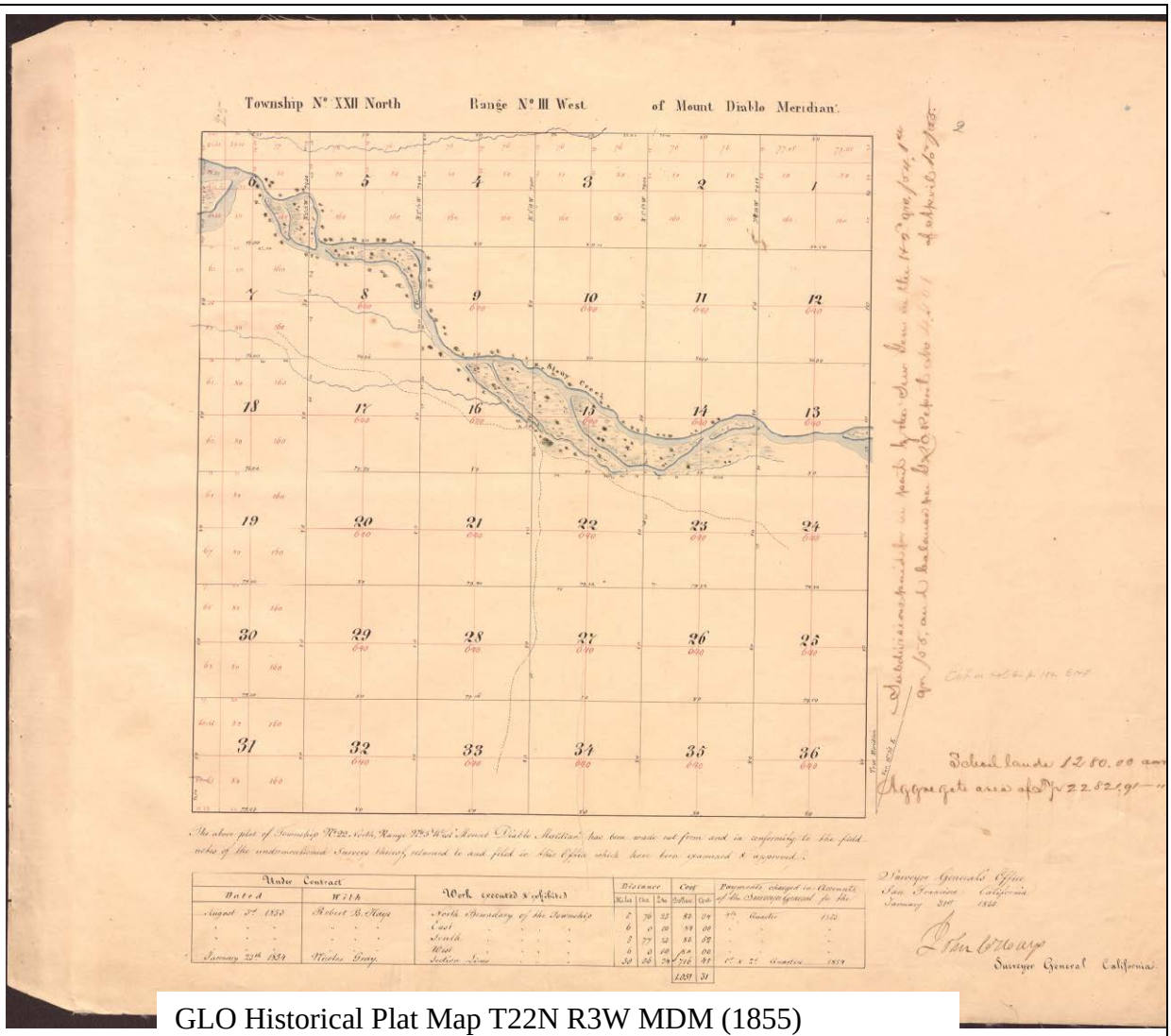
NCRC Soil Survey Glenn County, California
United States Department of Agriculture, Soil Conservation Service

APPENDIX I – MAPS
MAP 1



MAP 2

T 22 N, R 3 W, Sec 21 MDM
Glenn County
Pilot Flying J Travel Center Project
for the City of Orland, California
USGS 7.5' Quad Kirkland
N
Orland
Project Boundary
abandoned small field ditch
0.04 0.02 0 0.04 Miles
1:2,352
Northern California Resouce Center
530-468-2888
Dec 2014



GLO Historical Plat Map T22N R3W MDM (1855)

Dec. 12, 2014

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Room 100

West Sacramento, CA 95691

(916) 373-3710

This letter is in reference to the proposed Pilot Flying J Travel Center Project

For the City of Orland, California

Project Description:

The project is located in Section 21, Township 22 North, Range 3 West, MDM, in Glenn County, California.

The project site is located adjacent west of Orland in Glenn County (see enclosed map). The proposed Pilot Flying J Travel Center is on Glenn County Assessor's Parcel 045-170-005. In addition, five other parcels, identified as Glenn County Assessor's Parcel Numbers 045-170-003, 045-140-003, -010, -011, and -012, are proposed to be annexed into the Orland city limits as a part of this project. The parcels are located to the west of Interstate 5 and north of County Road 13. County Road 200 and County Road 13 are improved with public utilities including water, wastewater, and power. The proposed project will include a 12,964-square-foot travel center that includes 9 diesel fueling lanes, 12 gasoline fueling lanes, and 2 recreational vehicle fueling lanes along with a convenience store, fast food eatery, drivers lounge and necessary project support and site improvements.

This letter is a request for information regarding any unrecorded traditional cultural properties, archaeological, or other cultural concerns within or adjacent to the project area. If there are any issues or concerns, they will be included within the final Archaeological Resource Report.

Sincerely, Kathleen Tyler

Archaeologist

Enclosure: Project Area Map

Northern California Resource Center
P.O. Box 146 Fort Jones, CA 96032
Phone: 530-468-2888 FAX: 530-468-4426

STATE OF CALIFORNIA Edmund G. Brown Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Room 100
West Sacramento, CA 95691
(916) 373-3710
Fax (916) 373-5471

December 30, 2014

Kathleen Tyler
NORTHERN CALIFORNIA RESOUCE CENTER
P.O. Box 146
Fort Jones, CA 96032

RE: Pilot Flying J Travel center Project, Glenn County
Sent by FAX: 530-468-4426
2 Pages

Ms. Tyler;

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3712.

Sincerely,

Katy Sanchez
Associated Government Program Analyst

Native American Contacts
Glenn County
December 30, 2014

Grindstone Rancheria of Wintun-Wailaki
Ronald Kirk, Chairperson
P.O. Box 63 Nomlaki
Elk Creek , CA 95939 Wintun (Patwin)
(530) 968-5365 Wailaki
(530) 968-5366 Fax Mulmok

Grindstone Rancheria of Wintun-Wailaki
Regina Dock
P.O. Box 63 Nomlaki
Elk Creek , CA 95939 Wintun (Patwin)
(530) 968-5365 Wailaki
(530) 968-5366 Fax Mulmok

Paskenta Band of Nomlaki Indians
Andrew Freeman, Chairperson
P.O. Box 709 Nomlaki
Corning , CA 96021 Wintun
office@paskenta.org
530-528-3538

530-528-3595 fax

Enterprise Rancheria of Maidu Indians
Art Angle, Vice Chairperson
2133 Monte Vista Avenue Maidu
Oroville , CA 95966
info@enterpriserancheria.
(530) 532-9214
(530) 532-1768 Fax

Enterprise Rancheria of Maidu Indians
Glenda Nelson, Chairperson
2133 Monte Vista Avenue Maidu
Oroville , CA 95966
info@enterpriserancheria.
(530) 532-9214
(530) 532-1768 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting Native Americans with regard to cultural resources for the proposed Pilot Flying J Travel Center Project, City of Orland, Glenn County.

Jan. 7, 2015

Enterprise Rancheria of Maidu Indians
Glenda Nelson, Chairperson
2133 Monte Vista Avenue
Oroville, CA 95966
530-532-9214

This letter is in reference to the proposed Pilot Flying J Travel Center Project
For the City of Orland, California

Project Description:

The project is located in Section 21, Township 22 North, Range 3 West, MDM, in Glenn County, California.

The project site is located adjacent west of Orland in Glenn County (see enclosed map). The proposed Pilot Flying J Travel Center is on Glenn County Assessor's Parcel 045-170-005. In addition, five other parcels, identified as Glenn County Assessor's Parcel Numbers 045-170-003, 045-140-003, -010, -011, and -012, are proposed to be annexed into the Orland city limits as a part of this project. The parcels are located to the west of Interstate 5 and north of County Road 13. County Road 200 and County Road 13 are improved with public utilities including water, wastewater, and power. The proposed project will include a 12,964-square-foot travel center that includes 9 diesel fueling lanes, 12 gasoline fueling lanes, and 2 recreational vehicle fueling lanes along with a convenience store, fast food eatery, drivers lounge and necessary project support and site improvements.

This letter is a request for information regarding any unrecorded traditional cultural properties, archaeological, or other cultural concerns within or adjacent to the project area. If there are any issues or concerns, they will be included within the final Archaeological Resource Report.

Sincerely, Kathleen Tyler
Archaeologist
Enclosure: Project Area Map

Northern California Resource Center
P.O. Box 146 Fort Jones, CA 96032
Phone: 530-468-2888 FAX: 530-468-4426

Jan. 7, 2015

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Art Angie, Vice Chairperson
2133 Monte Vista Avenue
Oroville, CA 95966
530-532-9214

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Jan. 7, 2015

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Ronald Kirk, Chairperson
P.O. Box 63
Elk Creek, CA 95939
530-968-5365

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Jan. 7, 2015

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Regina Dock
P.O. Box 63
Elk Creek, CA 95939
530-968-5365

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Northern California Resource Center
P.O. Box 146 Fort Jones, CA 96032
Phone: 530-468-2888 FAX: 530-468-4426

Jan. 7, 2015

Paskenta Band of Nomlaki Indians
Andrew Freeman, Chairperson
P.O. Box 709
Corning CA 96021

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For the City of Orland, California

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Enterprise Rancheria
Estom Yumeka Maidu
2133 Monte Vista Ave.
Oroville, CA 95966

Phone: 530-532-9214
Fax: 530-532-1768
Email: info@enterpriserancheria.org

Fax

To:	Kathleen Tyler	From:	Ren Reynolds
Fax:		Pages:	
Phone:		Date:	January 12, 2015
Re:		CC:	

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Confidential

01/12/2015 16:23 5305321768 PAGE 01/03

This is not our area!

We suggest you contact the tribes in that area!

EPA Department Cultural Division

Ren Reynolds

APPENDIX 3.4 - GREENHOUSE GAS EMISSIONS

Pilot Flying J Travel Center

Glenn County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	61.00	Space	4.01	175,000.00	0
Fast Food Restaurant w/o Drive Thru	2.61	1000sqft	0.06	2,605.00	0
High Turnover (Sit Down Restaurant)	1.22	1000sqft	0.03	1,215.00	0
Convenience Market (24 Hour)	9.14	1000sqft	0.21	9,144.00	0
Gasoline/Service Station	24.00	Pump	0.08	3,388.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	61
Climate Zone	3			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	445	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2012 CO2 Intensity Factor

Land Use - Accounts for 12,964 square foot building with 3,820 s.f of restaurant space & 9,144 s.f. of retail/truck stip services

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Grading - Project site= 7.5 acres

Vehicle Trips - Trip generation per Traffic Impact Analysis

Vechicle Emission Factors - Fleet mix per Traffic Impact Analysis

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstructionPhase	NumDays	18.00	85.00
tblConstructionPhase	NumDays	230.00	85.00
tblConstructionPhase	NumDays	18.00	85.00
tblConstructionPhase	PhaseEndDate	9/13/2016	5/17/2016
tblConstructionPhase	PhaseEndDate	9/13/2016	5/17/2016
tblConstructionPhase	PhaseStartDate	5/18/2016	1/20/2016
tblConstructionPhase	PhaseStartDate	5/18/2016	1/20/2016
tblGrading	AcresOfGrading	4.00	7.50
tblLandUse	LandUseSquareFeet	24,400.00	175,000.00
tblLandUse	LandUseSquareFeet	2,610.00	2,605.00
tblLandUse	LandUseSquareFeet	1,220.00	1,215.00
tblLandUse	LandUseSquareFeet	9,140.00	9,144.00
tblLandUse	LotAcreage	0.55	4.01
tblProjectCharacteristics	CO2IntensityFactor	641.35	445
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleEF	HHD	0.14	0.40
tblVehicleEF	HHD	0.14	0.04
tblVehicleEF	HHD	0.14	0.40
tblVehicleEF	LDA	0.35	0.22
tblVehicleEF	LDA	0.35	0.22
tblVehicleEF	LDA	0.35	0.22
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LHD1	0.09	0.06

tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	MCY	4.8470e-003	0.01
tblVehicleEF	MCY	4.8470e-003	0.01
tblVehicleEF	MCY	4.8470e-003	0.01
tblVehicleEF	MDV	0.16	0.10
tblVehicleEF	MDV	0.16	0.10
tblVehicleEF	MDV	0.16	0.10
tblVehicleEF	MH	2.0410e-003	0.02
tblVehicleEF	MH	2.0410e-003	0.02
tblVehicleEF	MH	2.0410e-003	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	OBUS	8.7000e-004	6.5138e-003
tblVehicleEF	OBUS	8.7000e-004	6.5138e-003
tblVehicleEF	OBUS	8.7000e-004	6.5138e-003
tblVehicleEF	SBUS	1.0360e-003	0.00
tblVehicleEF	SBUS	1.0360e-003	0.00
tblVehicleEF	SBUS	1.0360e-003	0.00
tblVehicleEF	UBUS	7.9700e-004	6.5138e-003
tblVehicleEF	UBUS	7.9700e-004	6.5138e-003
tblVehicleEF	UBUS	7.9700e-004	6.5138e-003
tblVehicleTrips	ST_TR	863.10	145.51
tblVehicleTrips	ST_TR	696.00	509.57
tblVehicleTrips	ST_TR	162.78	55.41
tblVehicleTrips	ST_TR	158.37	127.15

tblVehicleTrips	SU_TR	758.45	145.51
tblVehicleTrips	SU_TR	500.00	509.57
tblVehicleTrips	SU_TR	162.78	55.41
tblVehicleTrips	SU_TR	131.84	127.15
tblVehicleTrips	WD_TR	737.99	145.51
tblVehicleTrips	WD_TR	716.00	509.57
tblVehicleTrips	WD_TR	162.78	55.41

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.5680	2.5295	2.1385	3.0700e-003	0.1211	0.1574	0.2785	0.0514	0.1472	0.1986	0.0000	271.1422	271.1422	0.0569	0.0000	272.3366
Total	**0.5680**	**2.5295**	**2.1385**	**3.0700e-003**	**0.1211**	**0.1574**	**0.2785**	**0.0514**	**0.1472**	**0.1986**	**0.0000**	**271.1422**	**271.1422**	**0.0569**	**0.0000**	**272.3366**

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	0.7724	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7500e-003	1.7500e-003	0.0000	0.0000	1.8500e-003
Energy	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	131.2423	131.2423	6.1300e-003	2.0200e-003	131.9987
Mobile	5.9694	13.5789	77.0692	0.0499	1.6201	0.1694	1.7895	0.4408	0.1555	0.5963	0.0000	3,955.5273	3,955.5273	0.0794	0.0000	3,957.1956
Waste						0.0000	0.0000		0.0000	0.0000	17.2502	0.0000	17.2502	1.0195	0.0000	38.6588
Water						0.0000	0.0000		0.0000	0.0000	0.6847	2.8409	3.5257	0.0705	1.7000e-003	5.5331
Total	**6.7472**	**13.6273**	**77.1107**	**0.0501**	**1.6201**	**0.1731**	**1.7932**	**0.4408**	**0.1592**	**0.5999**	**17.9349**	**4,089.6122**	**4,107.5471**	**1.1755**	**3.7200e-003**	**4,133.3880**

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	1/1/2016	1/7/2016	5	5	
2	Grading	Grading	1/8/2016	1/19/2016	5	8	
3	Building Construction	Building Construction	1/20/2016	5/17/2016	5	85	
4	Paving	Paving	1/20/2016	5/17/2016	5	85	
5	Architectural Coating	Architectural Coating	1/20/2016	5/17/2016	5	85	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 32,403; Non-Residential Outdoor: 10,801 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42

Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	79.00	31.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1366	0.1028	1.0000e-004		7.3500e-003	7.3500e-003		6.7600e-003	6.7600e-003	0.0000	9.2193	9.2193	2.7800e-003	0.0000	9.2777
Total	**0.0127**	**0.1366**	**0.1028**	**1.0000e-004**	**0.0452**	**7.3500e-003**	**0.0525**	**0.0248**	**6.7600e-003**	**0.0316**	**0.0000**	**9.2193**	**9.2193**	**2.7800e-003**	**0.0000**	**9.2777**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	2.5000e-004	2.4400e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3211	0.3211	2.0000e-005	0.0000	0.3215
Total	**2.2000e-004**	**2.5000e-004**	**2.4400e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3211**	**0.3211**	**2.0000e-005**	**0.0000**	**0.3215**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0281	0.0000	0.0281	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1538	0.1043	1.2000e-004		8.7900e-003	8.7900e-003		8.0900e-003	8.0900e-003	0.0000	11.2266	11.2266	3.3900e-003	0.0000	11.2977
Total	**0.0147**	**0.1538**	**0.1043**	**1.2000e-004**	**0.0281**	**8.7900e-003**	**0.0369**	**0.0137**	**8.0900e-003**	**0.0218**	**0.0000**	**11.2266**	**11.2266**	**3.3900e-003**	**0.0000**	**11.2977**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	3.3000e-004	3.2600e-003	1.0000e-005	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4281	0.4281	3.0000e-005	0.0000	0.4287
Total	**2.9000e-004**	**3.3000e-004**	**3.2600e-003**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4281**	**0.4281**	**3.0000e-005**	**0.0000**	**0.4287**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1448	1.2115	0.7865	1.1400e-003		0.0836	0.0836		0.0786	0.0786	0.0000	102.9153	102.9153	0.0255	0.0000	103.4513
Total	**0.1448**	**1.2115**	**0.7865**	**1.1400e-003**		**0.0836**	**0.0836**		**0.0786**	**0.0786**	**0.0000**	**102.9153**	**102.9153**	**0.0255**	**0.0000**	**103.4513**

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	0.0243	0.1194	0.2598	3.1000e-004	8.3600e-003	1.9200e-003	0.0103	2.3800e-003	1.7600e-003	4.1400e-003	0.0000	27.9661	27.9661	2.2000e-004	0.0000	27.9707
Worker	0.0162	0.0187	0.1823	3.3000e-004	0.0266	2.2000e-004	0.0268	7.0700e-003	2.0000e-004	7.2700e-003	0.0000	23.9567	23.9567	1.4400e-003	0.0000	23.9870
Total	**0.0405**	**0.1382**	**0.4421**	**6.4000e-004**	**0.0349**	**2.1400e-003**	**0.0371**	**9.4500e-003**	**1.9600e-003**	**0.0114**	**0.0000**	**51.9228**	**51.9228**	**1.6600e-003**	**0.0000**	**51.9576**

3.5 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0763	0.7795	0.5339	7.9000e-004		0.0470	0.0470		0.0433	0.0433	0.0000	73.3408	73.3408	0.0215	0.0000	73.7932
Paving	5.2500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0816**	**0.7795**	**0.5339**	**7.9000e-004**		**0.0470**	**0.0470**		**0.0433**	**0.0433**	**0.0000**	**73.3408**	**73.3408**	**0.0215**	**0.0000**	**73.7932**

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	4.1000e-003	4.7400e-003	0.0462	8.0000e-005	6.7300e-003	6.0000e-005	6.7900e-003	1.7900e-003	5.0000e-005	1.8400e-003	0.0000	6.0650	6.0650	3.6000e-004	0.0000	6.0727
Total	**4.1000e-003**	**4.7400e-003**	**0.0462**	**8.0000e-005**	**6.7300e-003**	**6.0000e-005**	**6.7900e-003**	**1.7900e-003**	**5.0000e-005**	**1.8400e-003**	**0.0000**	**6.0650**	**6.0650**	**3.6000e-004**	**0.0000**	**6.0727**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2503					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0157	0.1008	0.0801	1.3000e-004		8.3600e-003	8.3600e-003		8.3600e-003	8.3600e-003	0.0000	10.8513	10.8513	1.2800e-003	0.0000	10.8782
Total	**0.2660**	**0.1008**	**0.0801**	**1.3000e-004**		**8.3600e-003**	**8.3600e-003**		**8.3600e-003**	**8.3600e-003**	**0.0000**	**10.8513**	**10.8513**	**1.2800e-003**	**0.0000**	**10.8782**

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	3.2800e-003	3.7900e-003	0.0369	7.0000e-005	5.3800e-003	4.0000e-005	5.4300e-003	1.4300e-003	4.0000e-005	1.4700e-003	0.0000	4.8520	4.8520	2.9000e-004	0.0000	4.8581
Total	**3.2800e-003**	**3.7900e-003**	**0.0369**	**7.0000e-005**	**5.3800e-003**	**4.0000e-005**	**5.4300e-003**	**1.4300e-003**	**4.0000e-005**	**1.4700e-003**	**0.0000**	**4.8520**	**4.8520**	**2.9000e-004**	**0.0000**	**4.8581**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	5.9694	13.5789	77.0692	0.0499	1.6201	0.1694	1.7895	0.4408	0.1555	0.5963	0.0000	3,955.5273	3,955.5273	0.0794	0.0000	3,957.1956

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	1,329.96	1,329.96	1329.96	1,012,868	1,012,868
Fast Food Restaurant w/o Drive Thru	1,329.98	1,329.98	1329.98	2,144,680	2,144,680
Gasoline/Service Station	1,329.84	1,329.84	1329.84	766,212	766,212
High Turnover (Sit Down Restaurant)	155.12	155.12	155.12	179,984	179,984
Parking Lot	0.00	0.00	0.00		
Total	4,144.90	4,144.90	4,144.90	4,103,743	4,103,743

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
Fast Food Restaurant w/o Drive Thru	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59
High Turnover (Sit Down Restaurant)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.224608	0.031846	0.115561	0.095778	0.057419	0.012063	0.019783	0.400965	0.006514	0.006514	0.012063	0.000000	0.016888

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	78.5919	78.5919	5.1200e-003	1.0600e-003	79.0279
NaturalGas Unmitigated	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	52.6504	52.6504	1.0100e-003	9.7000e-004	52.9708

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					
Convenience Market (24 Hour)	101956	5.5000e-004	5.0000e-003	4.2000e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.4407	5.4407	1.0000e-004	1.0000e-004	5.4739
Fast Food Restaurant w/o Drive Thru	553015	2.9800e-003	0.0271	0.0228	1.6000e-004		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	29.5110	29.5110	5.7000e-004	5.4000e-004	29.6906
Gasoline/Service Station	73727.2	4.0000e-004	3.6100e-003	3.0400e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.9344	3.9344	8.0000e-005	7.0000e-005	3.9583
High Turnover (Sit Down Restaurant)	257932	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	13.7643	13.7643	2.6000e-004	2.5000e-004	13.8480
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.3200e-003**	**0.0484**	**0.0406**	**2.9000e-004**		**3.6700e-003**	**3.6700e-003**		**3.6700e-003**	**3.6700e-003**	**0.0000**	**52.6504**	**52.6504**	**1.0100e-003**	**9.6000e-004**	**52.9708**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market (24 Hour)	83484.7	16.8513	1.1000e-003	2.3000e-004	16.9448
Fast Food Restaurant w/o Drive Thru	81249.9	16.4002	1.0700e-003	2.2000e-004	16.4912
Gasoline/Service Station	32730	6.6065	4.3000e-004	9.0000e-005	6.6432
High Turnover (Sit Down Restaurant)	37895.8	7.6492	5.0000e-004	1.0000e-004	7.6917
Parking Lot	154000	31.0847	2.0300e-003	4.2000e-004	31.2572
Total		**78.5919**	**5.1300e-003**	**1.0600e-003**	**79.0279**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	0.7724	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7500e-003	1.7500e-003	0.0000	0.0000	1.8500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0250					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7473					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7500e-003	1.7500e-003	0.0000	0.0000	1.8500e-003
Total	**0.7725**	**1.0000e-005**	**9.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.7500e-003**	**1.7500e-003**	**0.0000**	**0.0000**	**1.8500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	3.5257	0.0705	1.7000e-003	5.5331

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market (24 Hour)	0.677023 / 0.414949	1.2474	0.0221	5.3000e-004	1.8779
Fast Food Restaurant w/o Drive Thru	0.792223 / 0.0505674	1.1523	0.0259	6.2000e-004	1.8884
Gasoline/Service Station	0.318765 / 0.195372	0.5873	0.0104	2.5000e-004	0.8842
High Turnover (Sit Down Restaurant)	0.370311 / 0.0236369	0.5386	0.0121	2.9000e-004	0.8827
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**3.5257**	**0.0705**	**1.6900e-003**	**5.5331**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	17.2502	1.0195	0.0000	38.6588

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market (24 Hour)	27.47	5.5762	0.3295	0.0000	12.4965
Fast Food Restaurant w/o Drive Thru	30.06	6.1019	0.3606	0.0000	13.6748
Gasoline/Service Station	12.93	2.6247	0.1551	0.0000	5.8821
High Turnover (Sit Down Restaurant)	14.52	2.9474	0.1742	0.0000	6.6054
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**17.2502**	**1.0195**	**0.0000**	**38.6588**

Pilot Flying J Travel Center - Business As Usual

Glenn County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	61.00	Space	4.01	175,000.00	0
Fast Food Restaurant w/o Drive Thru	2.61	1000sqft	0.06	2,605.00	0
High Turnover (Sit Down Restaurant)	1.22	1000sqft	0.03	1,215.00	0
Convenience Market (24 Hour)	9.14	1000sqft	0.21	9,144.00	0
Gasoline/Service Station	24.00	Pump	0.08	3,388.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	61
Climate Zone	3			**Operational Year**	2005
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	489	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2005 CO2 Intensity Factor

Land Use - Accounts for 12,964 square foot building with 3,820 s.f of restaurant space & 9,144 s.f. of retail/truck stip services

Construction Phase - Building construction, paving, and painting assumed to occur simultaneously

Grading - Project site= 7.5 acres

Vehicle Trips - Trip generation per Traffic Impact Analysis

Vechicle Emission Factors - Fleet mix per Traffic Impact Analysis

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstructionPhase	NumDays	18.00	85.00
tblConstructionPhase	NumDays	230.00	85.00
tblConstructionPhase	NumDays	18.00	85.00
tblConstructionPhase	PhaseEndDate	9/14/2005	5/18/2005
tblConstructionPhase	PhaseEndDate	9/14/2005	5/18/2005
tblConstructionPhase	PhaseStartDate	5/19/2005	1/20/2005
tblConstructionPhase	PhaseStartDate	5/19/2005	1/20/2005
tblGrading	AcresOfGrading	4.00	7.50
tblLandUse	LandUseSquareFeet	24,400.00	175,000.00
tblLandUse	LandUseSquareFeet	2,610.00	2,605.00
tblLandUse	LandUseSquareFeet	1,220.00	1,215.00
tblLandUse	LandUseSquareFeet	9,140.00	9,144.00
tblLandUse	LotAcreage	0.55	4.01
tblProjectCharacteristics	CO2IntensityFactor	641.35	489
tblProjectCharacteristics	OperationalYear	2014	2005
tblVehicleEF	HHD	0.15	0.40
tblVehicleEF	HHD	0.15	0.40
tblVehicleEF	HHD	0.15	0.40
tblVehicleEF	LDA	0.33	0.22
tblVehicleEF	LDA	0.33	0.22
tblVehicleEF	LDA	0.33	0.22
tblVehicleEF	LDT1	0.22	0.03
tblVehicleEF	LDT1	0.22	0.03
tblVehicleEF	LDT1	0.22	0.03
tblVehicleEF	LDT2	0.16	0.12
tblVehicleEF	LDT2	0.16	0.12
tblVehicleEF	LDT2	0.16	0.12
tblVehicleEF	LHD1	0.03	0.06

tblVehicleEF	LHD1	0.03	0.06
tblVehicleEF	LHD1	0.03	0.06
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	MCY	9.6520e-003	0.01
tblVehicleEF	MCY	9.6520e-003	0.01
tblVehicleEF	MCY	9.6520e-003	0.01
tblVehicleEF	MDV	0.07	0.10
tblVehicleEF	MDV	0.07	0.10
tblVehicleEF	MDV	0.07	0.10
tblVehicleEF	MH	3.1810e-003	0.02
tblVehicleEF	MH	3.1810e-003	0.02
tblVehicleEF	MH	3.1810e-003	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	OBUS	6.3400e-004	6.5140e-003
tblVehicleEF	OBUS	6.3400e-004	6.5140e-003
tblVehicleEF	OBUS	6.3400e-004	6.5140e-003
tblVehicleEF	SBUS	1.5670e-003	0.00
tblVehicleEF	SBUS	1.5670e-003	0.00
tblVehicleEF	SBUS	1.5670e-003	0.00
tblVehicleEF	UBUS	6.2800e-004	6.5140e-003
tblVehicleEF	UBUS	6.2800e-004	6.5140e-003
tblVehicleEF	UBUS	6.2800e-004	6.5140e-003
tblVehicleTrips	ST_TR	863.10	145.51
tblVehicleTrips	ST_TR	696.00	509.57
tblVehicleTrips	ST_TR	162.78	55.41
tblVehicleTrips	ST_TR	158.37	127.15

tblVehicleTrips	SU_TR	758.45	145.51
tblVehicleTrips	SU_TR	500.00	509.57
tblVehicleTrips	SU_TR	162.78	55.41
tblVehicleTrips	SU_TR	131.84	127.15
tblVehicleTrips	WD_TR	737.99	145.51
tblVehicleTrips	WD_TR	716.00	509.57
tblVehicleTrips	WD_TR	162.78	55.41

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2005	0.9804	4.1739	3.1212	0.0296	0.1169	0.3003	0.4171	0.0518	0.3003	0.3520	0.0000	304.6273	304.6273	0.0584	0.0000	305.8529
Total	**0.9804**	**4.1739**	**3.1212**	**0.0296**	**0.1169**	**0.3003**	**0.4171**	**0.0518**	**0.3003**	**0.3520**	**0.0000**	**304.6273**	**304.6273**	**0.0584**	**0.0000**	**305.8529**

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	0.7725	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7500e-003	1.7500e-003	1.0000e-005	0.0000	1.9200e-003
Energy	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	139.0131	139.0131	6.1300e-003	2.0200e-003	139.7696
Mobile	12.7122	58.7654	95.0841	0.4111	1.4399	2.0514	3.4912	0.4592	2.0514	2.5105	0.0000	5,286.3674	5,286.3674	0.5521	0.0000	5,297.9624
Waste						0.0000	0.0000		0.0000	0.0000	17.2502	0.0000	17.2502	1.0195	0.0000	38.6588
Water						0.0000	0.0000		0.0000	0.0000	0.6847	3.1218	3.8066	0.0705	1.7000e-003	5.8140
Total	**13.4901**	**58.8138**	**95.1258**	**0.4114**	**1.4399**	**2.0551**	**3.4949**	**0.4592**	**2.0551**	**2.5142**	**17.9349**	**5,428.5041**	**5,446.4390**	**1.6483**	**3.7200e-003**	**5,482.2067**

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	1/1/2005	1/7/2005	5	5	
2	Grading	Grading	1/8/2005	1/19/2005	5	8	
3	Building Construction	Building Construction	1/20/2005	5/18/2005	5	85	
4	Paving	Paving	1/20/2005	5/18/2005	5	85	
5	Architectural Coating	Architectural Coating	1/20/2005	5/18/2005	5	85	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 32,403; Non-Residential Outdoor: 10,801 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42

Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	79.00	31.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2005

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					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0221	0.1684	0.0963	1.0500e-003		0.0102	0.0102		0.0102	0.0102	0.0000	10.2194	10.2194	1.8000e-003	0.0000	10.2573
Total	**0.0221**	**0.1684**	**0.0963**	**1.0500e-003**	**0.0452**	**0.0102**	**0.0554**	**0.0248**	**0.0102**	**0.0350**	**0.0000**	**10.2194**	**10.2194**	**1.8000e-003**	**0.0000**	**10.2573**

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	6.7000e-004	9.2000e-004	8.4100e-003	1.0000e-005	3.3000e-004	2.0000e-005	3.5000e-004	1.0000e-004	2.0000e-005	1.2000e-004	0.0000	0.4087	0.4087	6.0000e-005	0.0000	0.4100
Total	**6.7000e-004**	**9.2000e-004**	**8.4100e-003**	**1.0000e-005**	**3.3000e-004**	**2.0000e-005**	**3.5000e-004**	**1.0000e-004**	**2.0000e-005**	**1.2000e-004**	**0.0000**	**0.4087**	**0.4087**	**6.0000e-005**	**0.0000**	**0.4100**

3.3 Grading - 2005

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					0.0281	0.0000	0.0281	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0280	0.2007	0.1019	1.3500e-003		0.0132	0.0132		0.0132	0.0132	0.0000	12.4597	12.4597	2.2800e-003	0.0000	12.5075
Total	**0.0280**	**0.2007**	**0.1019**	**1.3500e-003**	**0.0281**	**0.0132**	**0.0413**	**0.0137**	**0.0132**	**0.0269**	**0.0000**	**12.4597**	**12.4597**	**2.2800e-003**	**0.0000**	**12.5075**

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	8.9000e-004	1.2300e-003	0.0112	1.0000e-005	4.4000e-004	3.0000e-005	4.7000e-004	1.3000e-004	3.0000e-005	1.6000e-004	0.0000	0.5450	0.5450	8.0000e-005	0.0000	0.5467
Total	**8.9000e-004**	**1.2300e-003**	**0.0112**	**1.0000e-005**	**4.4000e-004**	**3.0000e-005**	**4.7000e-004**	**1.3000e-004**	**3.0000e-005**	**1.6000e-004**	**0.0000**	**0.5450**	**0.5450**	**8.0000e-005**	**0.0000**	**0.5467**

3.4 Building Construction - 2005

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	0.3186	1.7537	0.8643	0.0129		0.1476	0.1476		0.1476	0.1476	0.0000	111.2256	111.2256	0.0260	0.0000	111.7717
Total	**0.3186**	**1.7537**	**0.8643**	**0.0129**		**0.1476**	**0.1476**		**0.1476**	**0.1476**	**0.0000**	**111.2256**	**111.2256**	**0.0260**	**0.0000**	**111.7717**

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	0.0456	0.3831	0.4137	3.0600e-003	7.0400e-003	0.0138	0.0209	2.4400e-003	0.0138	0.0163	0.0000	32.6975	32.6975	2.1300e-003	0.0000	32.7422
Worker	0.0500	0.0686	0.6276	4.4000e-004	0.0246	1.5200e-003	0.0262	7.2900e-003	1.5200e-003	8.8200e-003	0.0000	30.4946	30.4946	4.6100e-003	0.0000	30.5913
Total	**0.0956**	**0.4517**	**1.0414**	**3.5000e-003**	**0.0317**	**0.0154**	**0.0470**	**9.7300e-003**	**0.0154**	**0.0251**	**0.0000**	**63.1920**	**63.1920**	**6.7400e-003**	**0.0000**	**63.3335**

3.5 Paving - 2005

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	0.2043	1.3840	0.6234	9.3600e-003		0.0969	0.0969		0.0969	0.0969	0.0000	81.8294	81.8294	0.0167	0.0000	82.1796
Paving	5.2500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2095**	**1.3840**	**0.6234**	**9.3600e-003**		**0.0969**	**0.0969**		**0.0969**	**0.0969**	**0.0000**	**81.8294**	**81.8294**	**0.0167**	**0.0000**	**82.1796**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0127	0.0174	0.1589	1.1000e-004	6.2300e-003	3.9000e-004	6.6200e-003	1.8500e-003	3.9000e-004	2.2300e-003	0.0000	7.7201	7.7201	1.1700e-003	0.0000	7.7446
Total	**0.0127**	**0.0174**	**0.1589**	**1.1000e-004**	**6.2300e-003**	**3.9000e-004**	**6.6200e-003**	**1.8500e-003**	**3.9000e-004**	**2.2300e-003**	**0.0000**	**7.7201**	**7.7201**	**1.1700e-003**	**0.0000**	**7.7446**

3.6 Architectural Coating - 2005

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	0.2503					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0320	0.1820	0.0883	1.2600e-003		0.0163	0.0163		0.0163	0.0163	0.0000	10.8513	10.8513	2.6200e-003	0.0000	10.9063
Total	**0.2823**	**0.1820**	**0.0883**	**1.2600e-003**		**0.0163**	**0.0163**		**0.0163**	**0.0163**	**0.0000**	**10.8513**	**10.8513**	**2.6200e-003**	**0.0000**	**10.9063**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	0.0139	0.1271	9.0000e-005	4.9900e-003	3.1000e-004	5.3000e-003	1.4800e-003	3.1000e-004	1.7900e-003	0.0000	6.1761	6.1761	9.3000e-004	0.0000	6.1957
Total	**0.0101**	**0.0139**	**0.1271**	**9.0000e-005**	**4.9900e-003**	**3.1000e-004**	**5.3000e-003**	**1.4800e-003**	**3.1000e-004**	**1.7900e-003**	**0.0000**	**6.1761**	**6.1761**	**9.3000e-004**	**0.0000**	**6.1957**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	12.7122	58.7654	95.0841	0.4111	1.4399	2.0514	3.4912	0.4592	2.0514	2.5105	0.0000	5,286.3674	5,286.3674	0.5521	0.0000	5,297.9624

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	1,329.96	1,329.96	1329.96	1,012,868	1,012,868
Fast Food Restaurant w/o Drive Thru	1,329.98	1,329.98	1329.98	2,144,680	2,144,680
Gasoline/Service Station	1,329.84	1,329.84	1329.84	766,212	766,212
High Turnover (Sit Down Restaurant)	155.12	155.12	155.12	179,984	179,984
Parking Lot	0.00	0.00	0.00		
Total	4,144.90	4,144.90	4,144.90	4,103,743	4,103,743

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00	24	15	61
Fast Food Restaurant w/o Drive	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.224608	0.031846	0.115561	0.095778	0.057419	0.012063	0.019783	0.400965	0.006514	0.006514	0.012063	0.000000	0.016888

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	86.3628	86.3628	5.1200e-003	1.0600e-003	86.7988
NaturalGas Unmitigated	5.3200e-003	0.0484	0.0406	2.9000e-004		3.6800e-003	3.6800e-003		3.6800e-003	3.6800e-003	0.0000	52.6504	52.6504	1.0100e-003	9.7000e-004	52.9708

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					
Convenience Market (24 Hour)	101956	5.5000e-004	5.0000e-003	4.2000e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.4407	5.4407	1.0000e-004	1.0000e-004	5.4739
Fast Food Restaurant w/o Drive Thru	553015	2.9800e-003	0.0271	0.0228	1.6000e-004		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	29.5110	29.5110	5.7000e-004	5.4000e-004	29.6906
Gasoline/Service Station	73727.2	4.0000e-004	3.6100e-003	3.0400e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.9344	3.9344	8.0000e-005	7.0000e-005	3.9583
High Turnover (Sit Down Restaurant)	257932	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	13.7643	13.7643	2.6000e-004	2.5000e-004	13.8480
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.3200e-003**	**0.0484**	**0.0406**	**2.9000e-004**		**3.6700e-003**	**3.6700e-003**		**3.6700e-003**	**3.6700e-003**	**0.0000**	**52.6504**	**52.6504**	**1.0100e-003**	**9.6000e-004**	**52.9708**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market (24 Hour)	83484.7	18.5175	1.1000e-003	2.3000e-004	18.6110
Fast Food Restaurant w/o Drive Thru	81249.9	18.0218	1.0700e-003	2.2000e-004	18.1128
Gasoline/Service Station	32730	7.2597	4.3000e-004	9.0000e-005	7.2964
High Turnover (Sit Down Restaurant)	37895.8	8.4056	5.0000e-004	1.0000e-004	8.4480
Parking Lot	154000	34.1582	2.0300e-003	4.2000e-004	34.3307
Total		**86.3628**	**5.1300e-003**	**1.0600e-003**	**86.7988**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	0.7725	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7500e-003	1.7500e-003	1.0000e-005	0.0000	1.9200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0250					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7473					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7500e-003	1.7500e-003	1.0000e-005	0.0000	1.9200e-003
Total	**0.7725**	**1.0000e-005**	**1.1500e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.7500e-003**	**1.7500e-003**	**1.0000e-005**	**0.0000**	**1.9200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	3.8066	0.0705	1.7000e-003	5.8140

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market (24 Hour)	0.677023 / 0.414949	1.3495	0.0221	5.3000e-004	1.9800
Fast Food Restaurant w/o Drive Thru	0.792223 / 0.0505674	1.2414	0.0259	6.2000e-004	1.9775
Gasoline/Service Station	0.318765 / 0.195372	0.6354	0.0104	2.5000e-004	0.9322
High Turnover (Sit Down Restaurant)	0.370311 / 0.0236369	0.5803	0.0121	2.9000e-004	0.9243
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**3.8066**	**0.0705**	**1.6900e-003**	**5.8140**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	17.2502	1.0195	0.0000	38.6588

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market (24 Hour)	27.47	5.5762	0.3295	0.0000	12.4965
Fast Food Restaurant w/o Drive Thru	30.06	6.1019	0.3606	0.0000	13.6748
Gasoline/Service Station	12.93	2.6247	0.1551	0.0000	5.8821
High Turnover (Sit Down Restaurant)	14.52	2.9474	0.1742	0.0000	6.6054
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**17.2502**	**1.0195**	**0.0000**	**38.6588**

Westside Annexation Area

Glenn County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Strip Mall	44.00	1000sqft	1.70	44,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	61
Climate Zone	3			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	445	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2012 PGE CO2 Intensity Factor

Land Use - Annexation Area = 1.7 acres

Construction Phase - Building Construction, paving, and painting assumed to occur simultaneously

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	PhaseEndDate	7/21/2017	10/14/2016
tblConstructionPhase	PhaseEndDate	7/21/2017	10/14/2016
tblConstructionPhase	PhaseStartDate	10/15/2016	1/9/2016
tblConstructionPhase	PhaseStartDate	10/15/2016	1/9/2016
tblLandUse	LotAcreage	1.01	1.70
tblProjectCharacteristics	CO2IntensityFactor	641.35	445
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	1.0385	3.7607	2.9140	4.3300e-003	0.0440	0.2419	0.2859	0.0156	0.2303	0.2459	0.0000	376.0762	376.0762	0.0833	0.0000	377.8254
Total	**1.0385**	**3.7607**	**2.9140**	**4.3300e-003**	**0.0440**	**0.2419**	**0.2859**	**0.0156**	**0.2303**	**0.2459**	**0.0000**	**376.0762**	**376.0762**	**0.0833**	**0.0000**	**377.8254**

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	0.2229	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.9000e-004	7.9000e-004	0.0000	0.0000	8.3000e-004
Energy	2.6500e-003	0.0241	0.0202	1.4000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	107.2669	107.2669	5.7900e-003	1.5700e-003	107.8761
Mobile	1.5657	3.7477	16.7321	0.0211	1.0445	0.0514	1.0959	0.2816	0.0473	0.3288	0.0000	1,577.5483	1,577.5483	0.0505	0.0000	1,578.6091
Waste						0.0000	0.0000		0.0000	0.0000	9.3782	0.0000	9.3782	0.5542	0.0000	21.0171
Water						0.0000	0.0000		0.0000	0.0000	1.0340	4.9709	6.0049	0.1065	2.5700e-003	9.0401
Total	**1.7913**	**3.7717**	**16.7527**	**0.0212**	**1.0445**	**0.0532**	**1.0977**	**0.2816**	**0.0491**	**0.3307**	**10.4122**	**1,689.7869**	**1,700.1990**	**0.7171**	**4.1400e-003**	**1,716.5433**

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	1/1/2016	1/4/2016	5	2	
2	Grading	Grading	1/5/2016	1/8/2016	5	4	
3	Building Construction	Building Construction	1/9/2016	10/14/2016	5	200	
4	Paving	Paving	1/9/2016	10/14/2016	5	200	
5	Architectural Coating	Architectural Coating	1/9/2016	10/14/2016	5	200	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 66,000; Non-Residential Outdoor: 22,000 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	14.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4400e-003	0.0258	0.0165	2.0000e-005		1.4000e-003	1.4000e-003		1.2900e-003	1.2900e-003	0.0000	1.6158	1.6158	4.9000e-004	0.0000	1.6260
Total	**2.4400e-003**	**0.0258**	**0.0165**	**2.0000e-005**	**5.8000e-003**	**1.4000e-003**	**7.2000e-003**	**2.9500e-003**	**1.2900e-003**	**4.2400e-003**	**0.0000**	**1.6158**	**1.6158**	**4.9000e-004**	**0.0000**	**1.6260**

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	4.0000e-005	4.0000e-005	4.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0571	0.0571	0.0000	0.0000	0.0572
Total	**4.0000e-005**	**4.0000e-005**	**4.3000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0571**	**0.0571**	**0.0000**	**0.0000**	**0.0572**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9800e-003	0.0421	0.0273	3.0000e-005		2.2800e-003	2.2800e-003		2.1000e-003	2.1000e-003	0.0000	2.6541	2.6541	8.0000e-004	0.0000	2.6710
Total	**3.9800e-003**	**0.0421**	**0.0273**	**3.0000e-005**	**9.8300e-003**	**2.2800e-003**	**0.0121**	**5.0500e-003**	**2.1000e-003**	**7.1500e-003**	**0.0000**	**2.6541**	**2.6541**	**8.0000e-004**	**0.0000**	**2.6710**

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	8.0000e-005	9.0000e-005	8.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1142	0.1142	1.0000e-005	0.0000	0.1143
Total	**8.0000e-005**	**9.0000e-005**	**8.7000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1142**	**0.1142**	**1.0000e-005**	**0.0000**	**0.1143**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3292	2.0546	1.4707	2.2000e-003		0.1366	0.1366		0.1318	0.1318	0.0000	185.6956	185.6956	0.0408	0.0000	186.5527
Total	**0.3292**	**2.0546**	**1.4707**	**2.2000e-003**		**0.1366**	**0.1366**		**0.1318**	**0.1318**	**0.0000**	**185.6956**	**185.6956**	**0.0408**	**0.0000**	**186.5527**

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	0.0129	0.0635	0.1380	1.6000e-004	4.4400e-003	1.0200e-003	5.4700e-003	1.2600e-003	9.4000e-004	2.2000e-003	0.0000	14.8587	14.8587	1.1000e-004	0.0000	14.8611
Worker	6.7500e-003	7.8100e-003	0.0760	1.4000e-004	0.0111	9.0000e-005	0.0112	2.9500e-003	8.0000e-005	3.0300e-003	0.0000	9.9894	9.9894	6.0000e-004	0.0000	10.0020
Total	**0.0197**	**0.0713**	**0.2140**	**3.0000e-004**	**0.0155**	**1.1100e-003**	**0.0167**	**4.2100e-003**	**1.0200e-003**	**5.2300e-003**	**0.0000**	**24.8481**	**24.8481**	**7.1000e-004**	**0.0000**	**24.8631**

3.5 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1287	1.3208	0.9088	1.3300e-003		0.0808	0.0808		0.0744	0.0744	0.0000	124.1425	124.1425	0.0368	0.0000	124.9146
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1287**	**1.3208**	**0.9088**	**1.3300e-003**		**0.0808**	**0.0808**		**0.0744**	**0.0744**	**0.0000**	**124.1425**	**124.1425**	**0.0368**	**0.0000**	**124.9146**

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	6.2700e-003	7.2500e-003	0.0706	1.3000e-004	0.0103	9.0000e-005	0.0104	2.7400e-003	8.0000e-005	2.8200e-003	0.0000	9.2759	9.2759	5.6000e-004	0.0000	9.2876
Total	**6.2700e-003**	**7.2500e-003**	**0.0706**	**1.3000e-004**	**0.0103**	**9.0000e-005**	**0.0104**	**2.7400e-003**	**8.0000e-005**	**2.8200e-003**	**0.0000**	**9.2759**	**9.2759**	**5.6000e-004**	**0.0000**	**9.2876**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5099					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0369	0.2372	0.1884	3.0000e-004		0.0197	0.0197		0.0197	0.0197	0.0000	25.5325	25.5325	3.0100e-003	0.0000	25.5958
Total	**0.5467**	**0.2372**	**0.1884**	**3.0000e-004**		**0.0197**	**0.0197**		**0.0197**	**0.0197**	**0.0000**	**25.5325**	**25.5325**	**3.0100e-003**	**0.0000**	**25.5958**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4500e-003	1.6700e-003	0.0163	3.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.1406	2.1406	1.3000e-004	0.0000	2.1433
Total	**1.4500e-003**	**1.6700e-003**	**0.0163**	**3.0000e-005**	**2.3700e-003**	**2.0000e-005**	**2.3900e-003**	**6.3000e-004**	**2.0000e-005**	**6.5000e-004**	**0.0000**	**2.1406**	**2.1406**	**1.3000e-004**	**0.0000**	**2.1433**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	1.5657	3.7477	16.7321	0.0211	1.0445	0.0514	1.0959	0.2816	0.0473	0.3288	0.0000	1,577.5483	1,577.5483	0.0505	0.0000	1,578.6091

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	1,950.08	1,849.76	898.92	2,749,857	2,749,857
Total	1,950.08	1,849.76	898.92	2,749,857	2,749,857

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.347075	0.043419	0.180730	0.157642	0.085435	0.010187	0.025654	0.140267	0.000870	0.000797	0.004847	0.001036	0.002041

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	81.0866	81.0866	5.2800e-003	1.0900e-003	81.5365
NaturalGas Unmitigated	2.6500e-003	0.0241	0.0202	1.4000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	26.1803	26.1803	5.0000e-004	4.8000e-004	26.3396

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					
Strip Mall	490600	2.6500e-003	0.0241	0.0202	1.4000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	26.1803	26.1803	5.0000e-004	4.8000e-004	26.3396
Total		**2.6500e-003**	**0.0241**	**0.0202**	**1.4000e-004**		**1.8300e-003**	**1.8300e-003**		**1.8300e-003**	**1.8300e-003**	**0.0000**	**26.1803**	**26.1803**	**5.0000e-004**	**4.8000e-004**	**26.3396**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	401720	81.0866	5.2800e-003	1.0900e-003	81.5365
Total		**81.0866**	**5.2800e-003**	**1.0900e-003**	**81.5365**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	0.2229	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.9000e-004	7.9000e-004	0.0000	0.0000	8.3000e-004

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	0.0510					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1718					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.9000e-004	7.9000e-004	0.0000	0.0000	8.3000e-004
Total	**0.2229**	**0.0000**	**4.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.9000e-004**	**7.9000e-004**	**0.0000**	**0.0000**	**8.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	6.0049	0.1065	2.5700e-003	9.0401

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	3.25919 / 1.99757	6.0049	0.1065	2.5700e-003	9.0401
Total		**6.0049**	**0.1065**	**2.5700e-003**	**9.0401**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	9.3782	0.5542	0.0000	21.0171

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	46.2	9.3782	0.5542	0.0000	21.0171
Total		**9.3782**	**0.5542**	**0.0000**	**21.0171**

Westside Annexation Area - Business As Usual

Glenn County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Strip Mall	44.00	1000sqft	1.70	44,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	61
Climate Zone	3			**Operational Year**	2005
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	489	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2005 PGE CO2 Intensity Factor

Land Use - Annexation Area = 1.7 acres

Construction Phase - Building Construction, paving, and painting assumed to occur simultaneously

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	PhaseEndDate	8/18/2006	11/11/2005
tblConstructionPhase	PhaseEndDate	11/14/2005	11/11/2005
tblConstructionPhase	PhaseEndDate	8/18/2006	11/11/2005
tblConstructionPhase	PhaseStartDate	11/12/2005	2/6/2005
tblConstructionPhase	PhaseStartDate	2/8/2005	2/6/2005
tblConstructionPhase	PhaseStartDate	11/12/2005	2/6/2005
tblLandUse	LotAcreage	1.01	1.70
tblProjectCharacteristics	CO2IntensityFactor	641.35	489
tblProjectCharacteristics	OperationalYear	2014	2005

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2005	1.6964	5.9876	3.8047	0.0443	0.0416	0.4577	0.4992	0.0159	0.4577	0.4736	0.0000	408.0042	408.0042	0.0965	0.0000	410.0309
Total	**1.6964**	**5.9876**	**3.8047**	**0.0443**	**0.0416**	**0.4577**	**0.4992**	**0.0159**	**0.4577**	**0.4736**	**0.0000**	**408.0042**	**408.0042**	**0.0965**	**0.0000**	**410.0309**

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	0.2229	1.0000e-005	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.9000e-004	7.9000e-004	0.0000	0.0000	8.6000e-004
Energy	2.6500e-003	0.0241	0.0202	1.4000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	115.2845	115.2845	5.7900e-003	1.5700e-003	115.8937
Mobile	4.6143	15.1543	38.2808	0.1078	0.9398	0.5027	1.4424	0.2826	0.5027	0.7853	0.0000	2,002.3699	2,002.3699	0.2296	0.0000	2,007.1913
Waste						0.0000	0.0000		0.0000	0.0000	9.3782	0.0000	9.3782	0.5542	0.0000	21.0171
Water						0.0000	0.0000		0.0000	0.0000	1.0340	5.4624	6.4964	0.1065	2.5700e-003	9.5316
Total	**4.8398**	**15.1784**	**38.3015**	**0.1079**	**0.9398**	**0.5045**	**1.4443**	**0.2826**	**0.5045**	**0.7871**	**10.4122**	**2,123.1176**	**2,133.5297**	**0.8961**	**4.1400e-003**	**2,153.6345**

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	1/29/2005	2/1/2005	5	2	
2	Grading	Grading	2/2/2005	2/7/2005	5	4	
3	Building Construction	Building Construction	2/6/2005	11/11/2005	5	200	
4	Paving	Paving	2/6/2005	11/11/2005	5	200	
5	Architectural Coating	Architectural Coating	2/6/2005	11/11/2005	5	200	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 66,000; Non-Residential Outdoor: 22,000 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	6.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45

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	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	14.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2005

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					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7600e-003	0.0291	0.0152	1.9000e-004		1.7000e-003	1.7000e-003		1.7000e-003	1.7000e-003	0.0000	1.7866	1.7866	3.1000e-004	0.0000	1.7930
Total	**3.7600e-003**	**0.0291**	**0.0152**	**1.9000e-004**	**5.8000e-003**	**1.7000e-003**	**7.5000e-003**	**2.9500e-003**	**1.7000e-003**	**4.6500e-003**	**0.0000**	**1.7866**	**1.7866**	**3.1000e-004**	**0.0000**	**1.7930**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.6000e-004	1.5000e-003	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0727	0.0727	1.0000e-005	0.0000	0.0729
Total	**1.2000e-004**	**1.6000e-004**	**1.5000e-003**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0727**	**0.0727**	**1.0000e-005**	**0.0000**	**0.0729**

3.3 Grading - 2005

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					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1900e-003	0.0479	0.0252	3.1000e-004		2.8000e-003	2.8000e-003		2.8000e-003	2.8000e-003	0.0000	2.9353	2.9353	5.0000e-004	0.0000	2.9459
Total	**6.1900e-003**	**0.0479**	**0.0252**	**3.1000e-004**	**9.8300e-003**	**2.8000e-003**	**0.0126**	**5.0500e-003**	**2.8000e-003**	**7.8500e-003**	**0.0000**	**2.9353**	**2.9353**	**5.0000e-004**	**0.0000**	**2.9459**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	3.3000e-004	2.9900e-003	0.0000	1.2000e-004	1.0000e-005	1.2000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.1453	0.1453	2.0000e-005	0.0000	0.1458
Total	**2.4000e-004**	**3.3000e-004**	**2.9900e-003**	**0.0000**	**1.2000e-004**	**1.0000e-005**	**1.2000e-004**	**3.0000e-005**	**1.0000e-005**	**4.0000e-005**	**0.0000**	**0.1453**	**0.1453**	**2.0000e-005**	**0.0000**	**0.1458**

3.4 Building Construction - 2005

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	0.6840	2.8757	1.7128	0.0230		0.2397	0.2397		0.2397	0.2397	0.0000	194.2969	194.2969	0.0558	0.0000	195.4694
Total	**0.6840**	**2.8757**	**1.7128**	**0.0230**		**0.2397**	**0.2397**		**0.2397**	**0.2397**	**0.0000**	**194.2969**	**194.2969**	**0.0558**	**0.0000**	**195.4694**

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	0.0242	0.2036	0.2198	1.6300e-003	3.7400e-003	7.3500e-003	0.0111	1.3000e-003	7.3500e-003	8.6500e-003	0.0000	17.3725	17.3725	1.1300e-003	0.0000	17.3962
Worker	0.0208	0.0286	0.2617	1.8000e-004	0.0103	6.4000e-004	0.0109	3.0400e-003	6.4000e-004	3.6800e-003	0.0000	12.7155	12.7155	1.9200e-003	0.0000	12.7559
Total	**0.0451**	**0.2322**	**0.4815**	**1.8100e-003**	**0.0140**	**7.9900e-003**	**0.0220**	**4.3400e-003**	**7.9900e-003**	**0.0123**	**0.0000**	**30.0880**	**30.0880**	**3.0500e-003**	**0.0000**	**30.1521**

3.5 Paving - 2005

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	0.3482	2.3414	1.0585	0.0158		0.1664	0.1664		0.1664	0.1664	0.0000	138.6150	138.6150	0.0284	0.0000	139.2119
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3482**	**2.3414**	**1.0585**	**0.0158**		**0.1664**	**0.1664**		**0.1664**	**0.1664**	**0.0000**	**138.6150**	**138.6150**	**0.0284**	**0.0000**	**139.2119**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0194	0.0266	0.2430	1.7000e-004	9.5300e-003	5.9000e-004	0.0101	2.8200e-003	5.9000e-004	3.4100e-003	0.0000	11.8073	11.8073	1.7800e-003	0.0000	11.8447
Total	**0.0194**	**0.0266**	**0.2430**	**1.7000e-004**	**9.5300e-003**	**5.9000e-004**	**0.0101**	**2.8200e-003**	**5.9000e-004**	**3.4100e-003**	**0.0000**	**11.8073**	**11.8073**	**1.7800e-003**	**0.0000**	**11.8447**

3.6 Architectural Coating - 2005

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	0.5099					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0752	0.4282	0.2078	2.9700e-003		0.0384	0.0384		0.0384	0.0384	0.0000	25.5325	25.5325	6.1600e-003	0.0000	25.6618
Total	**0.5850**	**0.4282**	**0.2078**	**2.9700e-003**		**0.0384**	**0.0384**		**0.0384**	**0.0384**	**0.0000**	**25.5325**	**25.5325**	**6.1600e-003**	**0.0000**	**25.6618**

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	4.4700e-003	6.1300e-003	0.0561	4.0000e-005	2.2000e-003	1.4000e-004	2.3400e-003	6.5000e-004	1.4000e-004	7.9000e-004	0.0000	2.7248	2.7248	4.1000e-004	0.0000	2.7334
Total	**4.4700e-003**	**6.1300e-003**	**0.0561**	**4.0000e-005**	**2.2000e-003**	**1.4000e-004**	**2.3400e-003**	**6.5000e-004**	**1.4000e-004**	**7.9000e-004**	**0.0000**	**2.7248**	**2.7248**	**4.1000e-004**	**0.0000**	**2.7334**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	4.6143	15.1543	38.2808	0.1078	0.9398	0.5027	1.4424	0.2826	0.5027	0.7853	0.0000	2,002.3699	2,002.3699	0.2296	0.0000	2,007.1913

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	1,950.08	1,849.76	898.92	2,749,857	2,749,857
Total	1,950.08	1,849.76	898.92	2,749,857	2,749,857

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.326778	0.215021	0.163010	0.071890	0.032554	0.013790	0.016235	0.145060	0.000634	0.000628	0.009652	0.001567	0.003181

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	89.1042	89.1042	5.2800e-003	1.0900e-003	89.5541
NaturalGas Unmitigated	2.6500e-003	0.0241	0.0202	1.4000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	26.1803	26.1803	5.0000e-004	4.8000e-004	26.3396

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					
Strip Mall	490600	2.6500e-003	0.0241	0.0202	1.4000e-004		1.8300e-003	1.8300e-003		1.8300e-003	1.8300e-003	0.0000	26.1803	26.1803	5.0000e-004	4.8000e-004	26.3396
Total		**2.6500e-003**	**0.0241**	**0.0202**	**1.4000e-004**		**1.8300e-003**	**1.8300e-003**		**1.8300e-003**	**1.8300e-003**	**0.0000**	**26.1803**	**26.1803**	**5.0000e-004**	**4.8000e-004**	**26.3396**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	401720	89.1042	5.2800e-003	1.0900e-003	89.5541
Total		**89.1042**	**5.2800e-003**	**1.0900e-003**	**89.5541**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	0.2229	1.0000e-005	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.9000e-004	7.9000e-004	0.0000	0.0000	8.6000e-004

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	0.0510					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1718					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	5.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.9000e-004	7.9000e-004	0.0000	0.0000	8.6000e-004
Total	**0.2229**	**1.0000e-005**	**5.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.9000e-004**	**7.9000e-004**	**0.0000**	**0.0000**	**8.6000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	6.4964	0.1065	2.5700e-003	9.5316

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	3.25919 / 1.99757	6.4964	0.1065	2.5700e-003	9.5316
Total		**6.4964**	**0.1065**	**2.5700e-003**	**9.5316**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	9.3782	0.5542	0.0000	21.0171

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	46.2	9.3782	0.5542	0.0000	21.0171
Total		**9.3782**	**0.5542**	**0.0000**	**21.0171**

APPENDIX 3.7 - NOISE DATA

Existing Conditions - Ambient Noise Measurements

General Information

Serial Number	03788
Model	SoundExpert™ LxT
Firmware Version	2.206
Filename	ORLAND__.001
User	
Job Description	
Location	

Measurement Description	
Start Time	Wednesday, 2014 October 15 13:42:48
Stop Time	Wednesday, 2014 October 15 13:57:48
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	Wednesday, 2014 October 15 13:40:37
Post Calibration	None
Calibration Deviation	---

Note

Overall Data

LASeq		64.0	dB
LASmax	2014 Oct 15 13:48:53	83.3	dB
LZpeak (max)	2014 Oct 15 13:50:30	100.9	dB
LASmin	2014 Oct 15 13:48:17	50.1	dB
LCSeq		72.5	dB
LASeq		64.0	dB
LCSeq - LASeq		8.5	dB
LAIeq		66.5	dB
LAeq		64.0	dB
LAIeq - LAeq		2.5	dB
Ldn		64.0	dB
LDay 07:00-23:00		64.0	dB
LNight 23:00-07:00		---	dB
Lden		64.0	dB
LDay 07:00-19:00		64.0	dB
LEvening 19:00-23:00		---	dB
LNight 23:00-07:00		---	dB
LASE		93.5	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS5.00	69.3	dBA
LAS10.00	65.6	dBA
LAS33.30	60.9	dBA
LAS50.00	59.2	dBA
LAS66.60	57.6	dBA
LAS90.00	55.3	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	Z Weighting
OBA Max Spectrum	At Lmax

Under Range Limit	25.9	dB
Under Range Peak	79.7	dB
Noise Floor	16.2	dB
Overload	121.5	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZSeq	66.8	64.0	65.1	69.8	66.4	60.6	57.9	59.9	57.3	52.0	43.4	32.8
LZSmax	61.9	67.9	68.6	71.9	71.7	73.1	72.1	78.7	79.1	72.3	60.9	44.3
LZSmin	51.6	54.4	54.7	56.3	51.7	43.3	45.2	47.5	40.9	30.8	25.0	22.6

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZSeq	63.7	62.1	60.2	58.9	60.0	58.9	59.3	59.1	62.1	62.5	66.2	65.4
LZSmax	51.3	57.6	58.0	66.8	64.7	59.7	59.4	63.1	66.5	67.2	68.9	65.9
LZSmin	43.5	45.3	46.8	47.4	48.9	50.7	50.4	49.4	48.1	50.7	51.9	50.9

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZSeq	63.1	62.4	57.6	56.4	57.1	53.1	52.0	53.1	54.1	54.6	55.9	54.8
LZSmax	68.5	67.0	66.9	70.2	68.8	67.0	65.5	67.2	68.8	70.8	75.8	74.3
LZSmin	48.5	45.4	42.5	40.5	35.8	33.7	36.3	40.9	42.5	43.5	43.4	40.9

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZSeq	54.0	52.4	50.7	49.8	46.0	43.2	41.5	37.7	33.3	29.9	27.3	25.5
LZSmax	76.6	73.5	71.6	70.5	65.8	62.4	59.7	54.1	50.6	42.7	36.7	28.3
LZSmin	37.5	36.7	31.5	28.1	24.7	22.2	20.7	19.1	18.5	17.1	17.2	18.7

Calibration History

Preamp	Date	dB re. 1V/Pa
Direct	01 Jul 2014 09:45:44	-27.0
PRMLxT1L	15 Oct 2014 13:40:29	-27.8
PRMLxT1L	08 Oct 2014 08:57:55	-27.8
PRMLxT1L	08 Jul 2014 13:30:19	-27.7
PRMLxT1L	08 Jul 2014 09:22:52	-27.7
PRMLxT1L	25 Jun 2014 11:41:42	-27.8
PRMLxT1L	16 Jun 2014 23:15:06	-27.9
PRMLxT1L	15 Jun 2014 21:43:57	-27.9
PRMLxT1L	14 Jun 2014 19:34:17	-27.8
PRMLxT1L	12 Jun 2014 15:55:40	-27.9
PRMLxT1L	11 Jun 2014 14:34:51	-27.9
PRMLxT1L	10 Jun 2014 11:53:17	-27.8

General Information

Serial Number	03788
Model	SoundExpert™ LxT
Firmware Version	2.206
Filename	ORLAND__.002
User	
Job Description	
Location	

Measurement Description	
Start Time	Wednesday, 2014 October 15 14:00:57
Stop Time	Wednesday, 2014 October 15 14:15:57
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	Wednesday, 2014 October 15 13:40:29
Post Calibration	None
Calibration Deviation	---

Note

Overall Data

LASeq		64.4	dB
LASmax	2014 Oct 15 14:04:45	79.4	dB
LZpeak (max)	2014 Oct 15 14:14:27	99.3	dB
LASmin	2014 Oct 15 14:08:34	49.4	dB
LCSeq		74.2	dB
LASeq		64.4	dB
LCSeq - LASeq		9.8	dB
LAIeq		65.9	dB
LAeq		64.4	dB
LAIeq - LAeq		1.4	dB
Ldn		64.4	dB
LDay 07:00-23:00		64.4	dB
LNight 23:00-07:00		---	dB
Lden		64.4	dB
LDay 07:00-19:00		64.4	dB
LEvening 19:00-23:00		---	dB
LNight 23:00-07:00		---	dB
LASE		94.0	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS5.00	69.2	dBA
LAS10.00	67.8	dBA
LAS33.30	63.7	dBA
LAS50.00	61.4	dBA
LAS66.60	59.1	dBA
LAS90.00	55.0	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	Z Weighting
OBA Max Spectrum	At Lmax

Under Range Limit	25.9	dB
Under Range Peak	79.7	dB
Noise Floor	16.2	dB
Overload	121.5	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZSeq	68.5	65.6	65.5	70.7	70.1	62.6	57.7	60.3	57.7	50.8	43.7	35.4
LZSmax	70.1	66.8	65.7	69.9	73.5	77.4	74.2	73.2	72.9	72.2	64.5	53.3
LZSmin	50.6	55.3	57.6	59.1	53.4	46.6	41.9	45.0	39.5	29.7	22.7	21.7

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZSeq	65.4	63.5	61.5	60.9	61.3	60.5	60.1	60.6	61.4	62.8	68.0	65.6
LZSmax	64.8	66.1	64.7	62.1	62.1	63.8	60.8	61.4	61.9	63.2	66.6	66.2
LZSmin	39.9	45.5	45.1	46.7	49.2	50.6	50.0	51.3	51.5	52.6	52.6	50.4

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZSeq	67.6	64.6	62.2	59.9	57.0	55.1	52.9	53.0	52.8	54.7	56.3	55.5
LZSmax	67.1	65.7	72.3	74.4	72.7	69.5	70.5	69.2	67.5	66.9	69.9	68.3
LZSmin	48.7	47.5	46.0	43.3	40.4	38.7	36.0	36.0	38.4	39.9	40.8	38.6

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZSeq	54.6	52.9	50.2	47.6	46.3	43.0	39.9	39.2	37.3	33.4	29.2	27.0
LZSmax	68.3	68.4	67.5	66.6	69.4	65.4	62.1	59.2	55.5	51.6	47.3	40.8
LZSmin	37.2	34.3	30.6	27.5	23.3	20.5	18.8	17.4	16.8	15.7	16.5	18.2

Calibration History

Preamp	Date	dB re. 1V/Pa
Direct	01 Jul 2014 09:45:44	-27.0
PRMLxT1L	15 Oct 2014 13:40:29	-27.8
PRMLxT1L	08 Oct 2014 08:57:55	-27.8
PRMLxT1L	08 Jul 2014 13:30:19	-27.7
PRMLxT1L	08 Jul 2014 09:22:52	-27.7
PRMLxT1L	25 Jun 2014 11:41:42	-27.8
PRMLxT1L	16 Jun 2014 23:15:06	-27.9
PRMLxT1L	15 Jun 2014 21:43:57	-27.9
PRMLxT1L	14 Jun 2014 19:34:17	-27.8
PRMLxT1L	12 Jun 2014 15:55:40	-27.9
PRMLxT1L	11 Jun 2014 14:34:51	-27.9
PRMLxT1L	10 Jun 2014 11:53:17	-27.8

General Information

Serial Number	03788
Model	SoundExpert™ LxT
Firmware Version	2.206
Filename	ORLAND__.003
User	
Job Description	
Location	

Measurement Description	
Start Time	Wednesday, 2014 October 15 14:20:48
Stop Time	Wednesday, 2014 October 15 14:35:48
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	Wednesday, 2014 October 15 13:40:29
Post Calibration	None
Calibration Deviation	---

Note

Overall Data

LASeq		60.2	dB
LASmax	2014 Oct 15 14:24:41	78.8	dB
LZpeak (max)	2014 Oct 15 14:24:40	99.0	dB
LASmin	2014 Oct 15 14:24:26	46.4	dB
LCSeq		67.4	dB
LASeq		60.2	dB
LCSeq - LASeq		7.2	dB
LAIeq		62.9	dB
LAeq		60.2	dB
LAIeq - LAeq		2.7	dB
Ldn		60.2	dB
LDay 07:00-23:00		60.2	dB
LNight 23:00-07:00		---	dB
Lden		60.2	dB
LDay 07:00-19:00		60.2	dB
LEvening 19:00-23:00		---	dB
LNight 23:00-07:00		---	dB
LASE		89.7	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS5.00	64.8	dBA
LAS10.00	56.6	dBA
LAS33.30	52.8	dBA
LAS50.00	51.7	dBA
LAS66.60	50.7	dBA
LAS90.00	48.8	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	Z Weighting
OBA Max Spectrum	At Lmax

Under Range Limit	25.9	dB
Under Range Peak	79.7	dB
Noise Floor	16.2	dB
Overload	121.5	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZSeq	71.7	65.6	61.9	63.4	58.8	54.4	55.3	57.7	52.1	42.8	35.2	29.8
LZSmax	78.8	71.3	66.5	69.0	71.9	74.3	74.4	76.3	70.9	61.2	53.4	45.8
LZSmin	52.9	54.8	53.7	53.7	48.7	39.4	42.3	35.6	35.8	26.6	21.3	22.1

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZSeq	68.8	66.5	65.0	62.3	60.8	58.9	57.8	57.0	56.6	57.1	60.4	57.5
LZSmax	73.4	73.6	72.3	65.4	68.0	66.9	61.4	60.8	61.7	62.4	62.9	67.0
LZSmin	48.9	47.3	46.3	47.7	49.0	48.0	47.6	48.0	49.1	49.3	47.8	48.3

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZSeq	56.9	53.2	49.8	51.1	49.5	48.2	48.6	50.4	51.9	53.9	52.9	51.9
LZSmax	65.9	69.5	65.4	69.7	72.2	65.5	65.8	68.8	71.5	73.1	70.1	70.6
LZSmin	40.3	39.5	37.8	35.1	31.6	32.9	34.3	31.4	35.6	33.9	35.4	35.2

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZSeq	50.2	46.1	42.8	39.8	37.7	35.4	32.3	29.7	28.2	26.5	24.9	22.9
LZSmax	69.1	65.0	61.1	58.2	56.1	54.2	51.3	47.5	44.0	44.7	38.5	36.6
LZSmin	31.9	29.7	26.3	23.6	20.6	17.4	15.7	16.2	17.5	16.4	16.4	18.4

Calibration History

Preamp	Date	dB re. 1V/Pa
Direct	01 Jul 2014 09:45:44	-27.0
PRMLxT1L	15 Oct 2014 13:40:29	-27.8
PRMLxT1L	08 Oct 2014 08:57:55	-27.8
PRMLxT1L	08 Jul 2014 13:30:19	-27.7
PRMLxT1L	08 Jul 2014 09:22:52	-27.7
PRMLxT1L	25 Jun 2014 11:41:42	-27.8
PRMLxT1L	16 Jun 2014 23:15:06	-27.9
PRMLxT1L	15 Jun 2014 21:43:57	-27.9
PRMLxT1L	14 Jun 2014 19:34:17	-27.8
PRMLxT1L	12 Jun 2014 15:55:40	-27.9
PRMLxT1L	11 Jun 2014 14:34:51	-27.9
PRMLxT1L	10 Jun 2014 11:53:17	-27.8

General Information

Serial Number	03788
Model	SoundExpert™ LxT
Firmware Version	2.206
Filename	ORLAND__.004
User	
Job Description	
Location	

Measurement Description	
Start Time	Wednesday, 2014 October 15 14:41:22
Stop Time	Wednesday, 2014 October 15 14:56:22
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	Wednesday, 2014 October 15 13:40:29
Post Calibration	None
Calibration Deviation	---

Note

Overall Data

LASeq		56.0	dB
LASmax	2014 Oct 15 14:56:19	63.6	dB
LZpeak (max)	2014 Oct 15 14:49:00	101.8	dB
LASmin	2014 Oct 15 14:45:57	47.0	dB
LCSeq		70.6	dB
LASeq		56.0	dB
LCSeq - LASeq		14.6	dB
LAIeq		56.9	dB
LAeq		56.0	dB
LAIeq - LAeq		0.9	dB
Ldn		56.0	dB
LDay 07:00-23:00		56.0	dB
LNight 23:00-07:00		---	dB
Lden		56.0	dB
LDay 07:00-19:00		56.0	dB
LEvening 19:00-23:00		---	dB
LNight 23:00-07:00		---	dB
LASE		85.6	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS5.00	59.4	dBA
LAS10.00	58.6	dBA
LAS33.30	56.6	dBA
LAS50.00	55.1	dBA
LAS66.60	53.8	dBA
LAS90.00	51.3	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	Z Weighting
OBA Max Spectrum	At Lmax

Under Range Limit	25.9	dB
Under Range Peak	79.7	dB
Noise Floor	16.2	dB
Overload	121.5	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZSeq	74.3	69.7	66.1	68.0	62.6	54.5	52.7	50.8	48.2	40.2	29.4	28.1
LZSmax	75.3	69.4	67.4	68.9	74.5	69.9	59.2	52.8	50.4	46.1	31.8	26.6
LZSmin	58.2	56.7	56.0	56.6	50.6	42.4	42.0	42.6	38.6	29.3	22.6	22.6

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZSeq	71.2	69.2	67.7	66.0	65.0	63.5	61.9	61.5	60.6	61.1	64.1	64.1
LZSmax	70.4	71.7	69.5	67.4	66.8	66.3	62.4	62.7	61.8	66.7	63.1	62.3
LZSmin	53.2	49.3	51.8	49.9	51.2	47.9	50.3	50.1	51.0	51.4	51.9	48.1

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZSeq	59.8	57.1	54.4	51.9	48.8	46.9	47.2	49.1	47.3	46.3	46.2	45.5
LZSmax	73.3	68.7	64.1	66.7	65.7	60.6	58.5	50.1	48.3	49.2	47.1	48.6
LZSmin	47.3	43.2	35.2	36.7	36.3	35.4	32.0	37.4	36.6	37.4	37.8	36.2

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZSeq	44.9	43.6	41.1	38.3	34.5	29.8	26.2	23.8	23.1	22.9	23.6	23.6
LZSmax	47.7	45.9	44.1	43.4	42.0	35.1	30.2	24.7	21.9	21.2	22.0	22.2
LZSmin	35.5	33.8	30.2	26.8	23.3	19.8	18.2	16.8	17.2	16.8	17.5	18.7

Calibration History

Preamp	Date	dB re. 1V/Pa
Direct	01 Jul 2014 09:45:44	-27.0
PRMLxT1L	15 Oct 2014 13:40:29	-27.8
PRMLxT1L	08 Oct 2014 08:57:55	-27.8
PRMLxT1L	08 Jul 2014 13:30:19	-27.7
PRMLxT1L	08 Jul 2014 09:22:52	-27.7
PRMLxT1L	25 Jun 2014 11:41:42	-27.8
PRMLxT1L	16 Jun 2014 23:15:06	-27.9
PRMLxT1L	15 Jun 2014 21:43:57	-27.9
PRMLxT1L	14 Jun 2014 19:34:17	-27.8
PRMLxT1L	12 Jun 2014 15:55:40	-27.9
PRMLxT1L	11 Jun 2014 14:34:51	-27.9
PRMLxT1L	10 Jun 2014 11:53:17	-27.8

General Information

Serial Number	03788
Model	SoundExpert™ LxT
Firmware Version	2.206
Filename	ORLAND__.005
User	
Job Description	
Location	

Measurement Description	
Start Time	Wednesday, 2014 October 15 15:02:08
Stop Time	Wednesday, 2014 October 15 15:17:08
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	Wednesday, 2014 October 15 13:40:29
Post Calibration	None
Calibration Deviation	---

Note

Overall Data

LASeq		66.2	dB
LASmax	2014 Oct 15 15:17:00	73.4	dB
LZpeak (max)	2014 Oct 15 15:11:12	119.8	dB
LASmin	2014 Oct 15 15:07:15	51.0	dB
LCSeq		75.4	dB
LASeq		66.2	dB
LCSeq - LASeq		9.2	dB
LAIeq		67.1	dB
LAeq		66.2	dB
LAIeq - LAeq		0.9	dB
Ldn		66.2	dB
LDay 07:00-23:00		66.2	dB
LNight 23:00-07:00		---	dB
Lden		66.2	dB
LDay 07:00-19:00		66.2	dB
LEvening 19:00-23:00		---	dB
LNight 23:00-07:00		---	dB
LASE		95.7	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS5.00	70.4	dBA
LAS10.00	69.4	dBA
LAS33.30	66.8	dBA
LAS50.00	65.1	dBA
LAS66.60	63.4	dBA
LAS90.00	58.6	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LZpeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	Z Weighting
OBA Max Spectrum	At Lmax

Under Range Limit	25.9	dB
Under Range Peak	79.7	dB
Noise Floor	16.2	dB
Overload	121.5	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZSeq	73.8	70.0	68.5	72.2	69.4	62.7	64.0	62.1	57.8	47.2	34.2	25.9
LZSmax	66.7	79.2	72.1	72.6	69.7	63.5	75.9	65.6	60.0	49.2	34.0	23.4
LZSmin	51.8	54.5	56.2	56.4	53.2	45.5	46.4	47.3	41.5	32.1	23.8	22.0

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZSeq	70.6	68.8	66.4	64.4	66.0	65.2	63.8	63.6	63.6	64.2	68.1	68.8
LZSmax	72.4	65.1	61.3	60.2	68.7	78.9	69.3	67.0	64.8	67.8	71.2	67.7
LZSmin	45.3	48.1	45.7	49.0	49.1	48.7	48.8	51.5	50.9	50.1	50.6	52.3

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZSeq	65.6	65.2	62.0	60.0	55.6	56.9	57.8	60.4	59.0	57.9	57.8	56.3
LZSmax	65.9	65.4	61.3	61.0	56.6	59.2	63.9	75.4	61.1	61.6	61.7	59.1
LZSmin	50.2	48.7	42.5	40.2	38.1	39.8	41.1	41.7	42.0	43.6	42.8	40.4

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZSeq	54.8	53.0	49.7	45.5	41.0	35.9	32.0	28.4	25.1	22.2	20.6	20.1
LZSmax	57.2	55.6	51.7	47.6	42.7	36.6	32.4	27.1	23.2	19.0	17.8	18.8
LZSmin	38.6	36.1	32.6	29.9	26.2	22.9	20.5	17.8	17.6	16.2	16.8	18.4

Calibration History

Preamp	Date	dB re. 1V/Pa
Direct	01 Jul 2014 09:45:44	-27.0
PRMLxT1L	15 Oct 2014 13:40:29	-27.8
PRMLxT1L	08 Oct 2014 08:57:55	-27.8
PRMLxT1L	08 Jul 2014 13:30:19	-27.7
PRMLxT1L	08 Jul 2014 09:22:52	-27.7
PRMLxT1L	25 Jun 2014 11:41:42	-27.8
PRMLxT1L	16 Jun 2014 23:15:06	-27.9
PRMLxT1L	15 Jun 2014 21:43:57	-27.9
PRMLxT1L	14 Jun 2014 19:34:17	-27.8
PRMLxT1L	12 Jun 2014 15:55:40	-27.9
PRMLxT1L	11 Jun 2014 14:34:51	-27.9
PRMLxT1L	10 Jun 2014 11:53:17	-27.8

Traffic Noise

TRAFFIC NOISE LEVELS

Project Name: Orland Pilot Flying J & Westside Annexation Area

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): **Existing Conditions**
Source of Traffic Volumes: KDA
Community Noise Descriptor: L_{dn}: x CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
Newville Road													
West of RD HH Intersection	Residential	2	0	446	4,460	35	75	0	0	2.3%	12.8%	65.7	64.6
RD HH to I-5 SB Ramp	Commercial	2	0	614	6,140	35	75	0	0	2.3%	12.8%	67.1	66.0
I-5 NB Ramp to 9th Street	Commercial	2	0	820	8,200	35	75	0	0	2.3%	12.8%	68.3	67.3
9th Street to 8th Street	Commercial	2	0	707	7,070	35	75	0	0	2.3%	12.8%	67.7	66.6
East of 8th Street	Commercial	2	0	721	7,210	35	75	0	0	2.3%	12.8%	67.8	66.7
County Road HH													
Newville Road to RD 13	Residential	2	0	76	760	35	75	0	0	2.3%	12.8%	58.0	57.0

Existing Condition Fleet Mix derived from the CalEEMod modeling software.

TRAFFIC NOISE LEVELS

Project Name: Orland Pilot Flying J & Westside Annexation Area

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): **Existing plus Westside Annexation Area Development Potential**
Source of Traffic Volumes: KDA - [Potential developoment within Westside Annexation Area equals a trip generation of approximately half that of the Pilot Flying J (46%).
Community Noise Descriptor: L_{dn}: x CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
Newville Road													
West of RD HH Intersection	Residential	2	0	446	4,460	35	75	0	0	2.3%	12.8%	65.7	64.6
RD HH to I-5 SB Ramp	Commercial	2	0	743	7,430	35	75	0	0	2.3%	12.8%	67.9	66.9
I-5 NB Ramp to 9th Street	Commercial	2	0	853	8,530	35	75	0	0	2.3%	12.8%	68.5	67.5
9th Street to 8th Street	Commercial	2	0	735	7,350	35	75	0	0	2.3%	12.8%	67.8	66.8
East of 8th Street	Commercial	2	0	745	7,450	35	75	0	0	2.3%	12.8%	67.9	66.9
County Road HH													
Newville Road to RD 13	Residential	2	0	149	1,490	35	75	0	0	2.3%	12.8%	60.9	59.9

Fleet Mix derived from the CalEEMod modeling software.

TRAFFIC NOISE LEVELS

Project Name: Orland Pilot Flying J & Westside Annexation Area

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): **Existing plus Pilot Flying J**
Source of Traffic Volumes: KDA
Community Noise Descriptor: L_{dn}: x CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
Newville Road													
West of RD HH Intersection	Residential	2	0	446	4,460	35	75	0	0	1.9%	40.1%	69.8	68.8
RD HH to I-5 SB Ramp	Commercial	2	0	895	8,950	35	75	0	0	1.9%	40.1%	72.8	71.8
I-5 NB Ramp to 9th Street	Commercial	2	0	892	8,920	35	75	0	0	1.9%	40.1%	72.8	71.8
9th Street to 8th Street	Commercial	2	0	767	7,670	35	75	0	0	1.9%	40.1%	72.2	71.2
East of 8th Street	Commercial	2	0	773	7,730	35	75	0	0	1.9%	40.1%	72.2	71.2
County Road HH													
Newville Road to RD 13	Residential	2	0	235	2,350	35	75	0	0	1.9%	40.1%	67.0	66.0

Fleet Mix derived from KDA.

CUMULATIVE TRAFFIC NOISE LEVELS

Project Name: Orland Pilot Flying J & Westside Annexation Area

Background Information

Model Description:	FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s):	**Cumulative No Project Conditions**
Source of Traffic Volumes:	KDA
Community Noise Descriptor:	L_{dn}: x CNEL:

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
Newville Road													
West of RD HH Intersection	Residential	2	0	571	5,710	35	75	0	0	2.3%	12.8%	66.8	65.7
RD HH to I-5 SB Ramp	Commercial	2	0	833	8,330	35	75	0	0	2.3%	12.8%	68.4	67.4
I-5 NB Ramp to 9th Street	Commercial	2	0	1,888	18,880	35	75	0	0	2.3%	12.8%	71.9	70.9
9th Street to 8th Street	Commercial	2	0	1,725	17,250	35	75	0	0	2.3%	12.8%	71.6	70.5
East of 8th Street	Commercial	2	0	1,756	17,560	35	75	0	0	2.3%	12.8%	71.6	70.6
County Road HH													
Newville Road to RD 13	Residential	2	0	96	960	35	75	0	0	2.3%	12.8%	59.0	58.0

Fleet Mix derived from the CalEEMod modeling software.

CUMULATIVE TRAFFIC NOISE LEVELS

Project Name: Orland Pilot Flying J & Westside Annexation Area

Background Information

Model Description:	FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s):	**Cumulative Plus Project Conditions**
Source of Traffic Volumes:	KDA
Community Noise Descriptor:	L_{dn}: x CNEL:

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
Newville Road													
West of RD HH Intersection	Residential	2	0	595	5,950	35	75	0	0	1.8%	40.1%	71.1	70.1
RD HH to I-5 SB Ramp	Commercial	2	0	1,274	12,740	35	75	0	0	1.8%	40.1%	74.4	73.4
I-5 NB Ramp to 9th Street	Commercial	2	0	2,040	20,400	35	75	0	0	1.8%	40.1%	76.4	75.4
9th Street to 8th Street	Commercial	2	0	1,859	18,590	35	75	0	0	1.8%	40.1%	76.0	75.0
East of 8th Street	Commercial	2	0	1,878	18,780	35	75	0	0	1.8%	40.1%	76.0	75.0
County Road HH													
Newville Road to RD 13	Residential	2	0	419	4,190	35	75	0	0	1.8%	40.1%	69.5	68.5

Fleet Mix derived from KDA.

Onsite Circulation Noise

ONSITE TRAFFIC CIRCULATION NOISE LEVELS

Project Name: Orland Pilot Flying J & Westside Annexation Area

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): **On-Site Traffic Circulation - Westside Annexation Area**
Source of Traffic Volumes: KDA
Community Noise Descriptor: L_{dn}: x CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
On-Site Circulation													
House at RD 13 - South of Site	Residential	2	0	164	1,907	5	60	0	0	2.3%	12.8%	55.0	54.6
House at RD HH - West of Site	Residential	2	0	164	1,907	5	60	0	0	2.3%	12.8%	55.0	54.6
House at Newville RD - NW of Site	Residential	2	0	164	1,907	5	630	0	0	2.3%	12.8%	44.7	44.4

Fleet Mix derived from the CalEEMod modeling software.

ONSITE TRAFFIC CIRCULATION NOISE LEVELS

Project Name: Orland Pilot Flying J & Westside Annexation Area

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): **On-Site Traffic Circulation - Pilot Flying J**
Source of Traffic Volumes: KDA
Community Noise Descriptor: L_{dn}: x CNEL: _____

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor[1]	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hou dB(A) L_{eq}	24-Hour dB(A) Ldn
On-Site Circulation													
House at RD 13 - South of Site	Residential	2	0	343	4,145	5	65	0	0	1.9%	40.8%	62.8	62.7
House at RD HH - West of Site	Residential	2	0	343	4,145	5	104	0	0	1.9%	40.8%	60.8	60.6
House at Newville RD - NW of Site	Residential	2	0	343	4,145	5	50	0	0	1.9%	40.8%	64.0	63.8

APPENDIX 5.0 - ENERGY CONSUMPTION

Total Construction
Fuel Usage

Project Action	CO2e (Metric tons)	Total Gallons of Fuel Consumed
Construction		
Westside Annexation Area	**378**	37,241
Pilot Flying J	**272**	26,798
Total		**64,039**

Notes:
Fuel used by vehicle hauling trips and processing equipment assumed to be diesel.

Sources:
Carbon Dioxide Equivalent Emissions: See Section 3.6; Conversion Ratios: California Climate Action Registry 2009

Title : Westside Annexation Area
Version : Emfac2011-LDV V2.50.57.246 ** WIS Enabled **
Run Date : 2015/01/23 08:42:24
Scen Year: 2017 -- All model years in the range 1973 to 2017 selected
Season : Annual
Area : Glenn County
I/M Stat : Enhanced Basic (2005)
Emissions: Tons Per Day
****

	ALL-TOT
Vehicles	273
VMT/1000	10
Trips	1906
Fuel Consumption (000 gallons)	
Gasoline	0.52
Diesel	0.04