## Appendix 1

# Approved Project Mitigation Monitoring and Reporting <u>Program</u>

#### RANCON MEDICAL OFFICE/RETAIL PROJECT PLOT PLAN & TENTATIVE PARCEL MAP NO. 36492 (PLANNING APPLICATION NO. 12-0053) MITIGATION MONITORING AND REPORTING PROGRAM

#### 1 INTRODUCTION

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the Rancon Medical Office/Retail Project Plot Plan & Tentative Parcel Map No. 36492 (Planning Application No. 12-0053) project (proposed Project). This MMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to "adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." An MMRP is required for the proposed project because the EIR has identified significant adverse impacts and measures have been identified to mitigate those impacts.

#### 2 MITIGATION MONITORING AND REPORTING PROGRAM

As the lead agency, the City of Wildomar will be responsible for monitoring compliance with all mitigation measures. Different departments within the City are responsible for aspects of the proposed Project. The MMRP identifies the department with the responsibility for ensuring the measure is completed; however, it is expected that one or more departments will coordinate efforts to ensure compliance.

The MMRP is presented in tabular form on the following pages. The components of the MMRP are described briefly below:

- **Mitigation Measure:** The mitigation measures are taken from the Initial Study/Mitigated Negative Declaration (IS/MND), in the same order that they appear in the IS/MND.
- **Timing:** Identifies at which stage of the proposed Project the mitigation must be completed.
- **Monitoring Responsibility:** Identifies the department within the City with responsibility for mitigation monitoring.
- Verification (Date and Initials): Provides a contact who reviewed the mitigation measure and the date the measure was determined complete.

#### RANCON MEDICAL OFFICE/RETAIL PROJECT PLOT PLAN & TENTATIVE PARCEL MAP NO. 36492 (PLANNING APPLICATION NO. 12-0053) MITIGATION MONITORING AND REPORTING PROGRAM

#### MITIGATION MONITORING AND REPORTING PROGRAM

	Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
3.1 Ae	sthetics – none required	N/A	N/A	N/A
3.2 Ag	ricultural Resources – none required	N/A	N/A	N/A
3.3 Air	Quality			
<b>AQ-1</b> a.	<u>Construction Mitigation</u> Install and maintain track-out control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (i.e., install wheel shakers, wheel washers, and limit site access.)	During construction activities	City of Wildomar Planning and Public Works Departments	
b.	Limit fugitive dust sources to 20 percent opacity.			
с.	Require a dust control plan for earthmoving operations.			
d.	When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.			
e.	The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite.			
f.	Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours.			
g.	Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered three times daily.			
h.	A high wind response plan shall be formulated for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period.			
i.	Require high pressure injectors on diesel construction equipment.*			
j.	Utilize only CARB Tier 3 or better certified equipment for			

	Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
	construction activities.*			
k.	The developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use and/or idling in excess of 3 minutes.*			
Ι.	Suspend use of all construction equipment operations during second stage smog alerts.*			
* Would	d reduce impacts to GHG's as well			
AQ-2	Operation Mitigation	Implemented during site plan	City of Wildomar	
a.	Install EV charging facilities for a minimum of 1% of all parking spaces.*	review and verified prior to Certificate of Occupancy	Planning and Public Works Departments	
b.	Provide preferential parking locations for EVs and CNG vehicles.*			
C.	Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.*			
d.	Plant Low-OFP, native, drought-resistant, tree and shrub species, 20% in excess of that required by city ordinance. Consider roadside, sidewalk, and driveway shading.*			
e.	Prohibit gas powered landscape maintenance equipment. Require landscape maintenance companies to use battery powered or electric equipment <b>or</b> contract only with commercial landscapers who operate with equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use or any combination of these two themes.*			
f.	Provide secure, bicycle parking for employees.*			
g.	Provide direct safe, direct bicycle access to adjacent bicycle routes.*			
h.	Provide short-term bicycle parking for retail customers and other non-commute trips.*			
* Would	d reduce impacts to GHGs as well			

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
3.4 Biological Resources			
<b>BIO-1</b> Prior to any off-site grading, a biologist should assess the area to determine if potentially suitable habitat for sensitive plant species occurs. If potentially suitable habitat is determined present, focused surveys should be conducted for sensitive plant species.	Implemented prior to any off- site grading	City of Wildomar Planning and Public Works Departments	
<b>BIO-2</b> The proposed Project site is within the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee area and will be subject to the SKR HCP Fee, per Riverside County Ordinance 336 (as amended through 663.10). This fee is currently \$500 per gross acre of the parcels proposed for development and must be paid upon issuance of a Grading Permit. The payment of this fee will mitigate for any impacts to the Stephen's Kangaroo Rat habitat.	The fee must be paid prior to the issuance of a grading permit	City of Wildomar Planning and Public Works Departments	
<b>BIO-3</b> Due to the presence of suitable habitat and in compliance with the MSHCP, a pre-construction survey for burrowing owl is required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future.	Implemented 30 days prior to ground disturbance	City of Wildomar Planning and Engineering Departments	
<b>BIO-4</b> If burrowing owls are determined present following focused surveys, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the <i>Staff Report on Burrowing Owl Mitigation</i> published by Department of Fish and Game (March 7, 2012) including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFG. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the <i>Staff Report on Burrowing Owl Mitigation</i> .	Implemented prior to ground any disturbance for Phase 2	City of Wildomar Planning and Engineering Departments	
<b>BIO-5</b> Prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests, the Project applicant shall demonstrate to the satisfaction of the City of Wildomar that either of the following have been or will be accomplished.	Implemented prior to the issuance of any grading permit that would all removal of habitat containing raptor	City of Wildomar Planning and Engineering Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<ol> <li>Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.</li> </ol>	and songbird nests		
2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.			
<b>BIO-6</b> Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features (Figure 13, Impacts to Jurisdictional Features, of the BRA), the Project applicant shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFG. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:	Implemented prior to ground any disturbance in areas designated as jurisdictional features	City of Wildomar Planning and Engineering Departments	
<ol> <li>On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" at a ratio no less than 1:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.</li> </ol>			
<ol> <li>On- and/or off-site replacement of CDFG jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.</li> </ol>			

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<b>BIO-7</b> Prior to the issuance of any grading permit, the Project applicant shall comply with all of the provisions of the MSHCP, including payment of the MSHCP Local Development Mitigation Fee and compliance with Section 6.1.2 of the MSHCP pertaining to Riparian/Riverine Areas.	Prior to the issuance of a grading permit.	City of Wildomar Planning and Engineering Departments	
3.5 Cultural Resources			
<b>CUL-1</b> Prior to any ground-disturbing activity, the Project applicant(s) shall include the following wording in all construction contract documentation: If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery and the Developer, the project archaeologist and the Pechanga Tribe shall assess the significance of such resources. If the developer and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director and a qualified, neutral archeologist hired by the applicant and the Tribe for decision. The Planning Director and shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar Planning Director shall be appealable to the City of Wildomar Planning Director shall be appealable to archaeologist determines the resources to be historic or unique, as defined by relevant state and local law, mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Building and Planning Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<b>CUL-2</b> At least 30 days prior to seeking a grading permit, the Project applicant(s) shall contact the appropriate Tribe <sup>1</sup> to notify the Tribe of grading, excavation, and the adopted monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for Tribal monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.	Prior to the issuance of a grading permit	City of Wildomar Engineering and Planning Departments	
<b>Cul-3</b> Prior to any authorizing ground-disturbing activity, the Project applicant(s) shall include the following wording on all construction contract documentation: If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant" within 24 hours of receiving notification from the Coroner. The most likely descendant shall then have 48 hours to make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section	As a condition of Project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Departments	

<sup>&</sup>lt;sup>1</sup> It is anticipated that the Pechanga Tribe will be the "appropriate" Tribe due to their prior and extensive coordination with the City and project applicant in determining potentially significant impacts and appropriate mitigation measures.

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
5097.98.			
<b>CUL-4</b> All cultural materials – with the exception of sacred items, burial goods and human remains which will be addressed in the Treatment Agreement required in CUL-2, that are collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to the Pechanga Tribe's curation facility which meets the standards set forth in 36 CRF Part 79 for federal repositories.	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Departments	
<b>CUL-5</b> All sacred sites, should they be encountered within the Project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with Pechanga Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Departments	
<b>CUL-6</b> To address the possibility that cultural resources may be encountered during grading or construction, in addition to Tribal monitors, a qualified archaeologist shall monitor all construction activities that could potentially impact archaeological (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources.	As a condition of future development approval, and implemented during ground- disturbing construction activities	City of Wildomar Engineering and Planning Departments	
<b>CUL-7</b> A qualified paleontologist or paleontological monitor shall monitor all mass grading and excavation activities in areas identified as likely to contain paleontological resources. Monitoring will be conducted in areas of grading or excavation in undisturbed outcrops of the Pleistocene-age Pauba Formation, as well as where over- excavation of surficial alluvial sediments will encounter these formations in the subsurface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be	As a condition of Project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.			
<b>CUL-8</b> Recovered specimens shall be prepared to a point of identification and permanent preservation, including screen-washing of sediments to recover small invertebrates and vertebrates if necessary.	As a condition of project approval, and implemented during ground-disturbing construction activities	City of Wildomar Engineering and Planning Departments	
<b>CUL-9</b> Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur (e.g., the Western Center for Archaeology and Paleontology Museum on Searl Parkway in Hemet, California).	As a condition of project approval, and implemented during ground-disturbing activities	City of Wildomar Engineering and Planning Departments	
3.6 Geology and Soils – none required	N/A	N/A	N/A
3.7 Greenhouse Gas Emissions			
<b>GHG-1</b> Prior to building permit approval, the City of Wildomar Planning Department shall require that the Project applicant implement the measures contained in Table 5.7-5, as well as mitigation Measures AQ-1 and AQ-2, to reduce short-term and long-term emissions of GHGs associated with construction and operation of the proposed Project.	During Construction Activities and Project Operations	City of Wildomar Planning and Building Departments	
3.8 Hazards and Hazardous Materials			
<b>HAZ-1</b> All spills or leakage of any hazardous products, including petroleum products, during regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure shall be incorporated into the Stormwater Pollution Prevention Plan prepared for the Project development.	Prior to the issuance of a grading permit	City of Wildomar Engineering Department	
<b>HAZ-2</b> Prior to the certificate of occupancy for a medical office use, a Hazardous Materials and Waste Management Plan shall be submitted to the City for review and retention. This Plan shall be	Prior to the issuance of a building permit	City of Wildomar Building and Safety	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
implemented by the medical offices (where hazardous substances are used) and annually a report of any accidental releases of hazardous substances, impacts to the environment or humans, and the management actions taken to control and remediate such spills shall be submitted to the City.		Department	
<b>HAZ-3</b> As part of a Business Plan submitted to the City of Wildomar Fire Department, the medical offices that handle hazardous materials shall include copies of Material Safety Data Sheets for the hazardous substances (other than medications) utilized by the facility(ies).	Prior to the issuance of a building permit	City of Wildomar Building and Safety and Fire Departments	
<b>HAZ-4</b> Any storage facility for gas canisters containing hazardous or toxic substances shall be enclosed and capable of containing any accidental releases of gas. A warning device shall be incorporated into the design of the gas storage containment facility that is capable of identifying accidental releases. Venting of any released gases shall be accomplished without creating hazards for the surrounding environment or population. Any leaks shall be reported immediately to the City Fire Department as well as other regulatory agencies that are in the reporting chain.	Prior to the issuance of a building permit	City of Wildomar Building and Safety and Fire Departments	
3.9 Hydrology and Water Quality			
<b>HYD-1</b> Prior to the approval of the grading permit on the proposed Project site, the Project applicant(s) shall be required to prepare a stormwater pollution and prevention plan (SWPPP) consistent with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2010-0014- DWQ), which is to be administered through all phases of grading and proposed Project construction. The SWPPP shall incorporate best management practices (BMPs) to ensure that potential water quality impacts during construction phases are minimized. The SWPPP shall be submitted to the Regional Water Quality Control Board and to the City of Wildomar for review. A copy of the SWPPP must be kept accessible on the proposed Project site at all times. In addition, the Project applicant(s) will be required to submit, and obtain City approval of, a Water Quality Management Plan prior to the issuance of any building or grading permit for future development on the proposed Project site in order to comply with the Areawide Urban Runoff Management	Prior to the issuance of a grading permit	City of Wildomar Engineering Department	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
Program. The proposed Project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. Site design BMPs shall include, but are not limited to, landscape buffer areas, on-site ponding areas, roof and paved area runoff directed to vegetated areas, and vegetated swales. Source control BMPs shall include, but are not limited to, education, landscape maintenance, litter control, parking lot sweeping, irrigation design to prevent overspray, and covered trash storage. Treatment control BMPs shall include vegetated swales and a detention basin, or an infiltration device.			
3.10 Land Use and Planning – none required	N/A	N/A	N/A
3.11 Mineral Resources – none required	N/A	N/A	N/A
3.12 Noise			
<b>NOI-1</b> To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Wildomar Building Department. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Wildomar Building Department.	Implemented during Project operations	City of Wildomar Building Department	
<b>NOI-2</b> The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors (within 100 feet of any occupied residence) nearest the proposed Project site during all proposed Project construction.	Implemented during Project operations	City of Wildomar Building Department	
<b>NOI-3</b> Stationary noise-generating construction equipment shall be placed a minimum of 320 feet from the property line of existing sensitive receptors (residences to the south), when and where feasible.	Implemented during Project operations	City of Wildomar Building Department	
<ul><li>NOI-4 Noise control barriers with a height of 6 feet are required where grading will occur within 100 feet of any occupied residence.</li><li>It is important to note that the barriers' attenuation will be</li></ul>	Prior to the issuance of occupancy permits and during project operations	City of Wildomar Building and Planning Departments	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
accomplished only if the minimum height is based from the pad or the roadway elevation, whichever is the greater of the two. If the barrier is being constructed at a position where the starting elevation is less than the pad or adjacent roadway, the barrier's ultimate height will need to be adjusted to fit the aforementioned criteria. Where applicable, the barriers shall wrap around the ends of the dwelling units to prevent flanking of noise into the site.			
<b>NOI-5</b> Roof-mounted air conditioning equipment shall be set back either 25 feet from the building's closest edge or to a distance capable of breaking the line-of-sight of equipment from neighboring potential receivers, whichever provides the greater set back from the building's edge of the two. A subsequent noise study shall be submitted by the applicant and reviewed and approved at building plan check stage by the City to ensure that the AC units are not generating noise in excess of what is allowed under Chapter 9.48 of the Wildomar Municipal Code.	Reviewed at building plan check	City of Wildomar Building Department	
3.13 Population and Housing – none required	N/A	N/A	N/A
3.14 Public Services – none required	N/A	N/A	N/A
3.15 Recreation – none required	N/A	N/A	N/A
3.16 Transportation/Traffic			
<ul> <li>TR-1 The direct traffic impacts generated by the proposed Project can be mitigated to a less than significant level, to meet the required level of service of the following recommended improvements are implemented, prior to the respective phase of development:</li> <li>On-Site Recommendations</li> </ul>	Implemented during the appropriate Phase of proposed Project construction	City of Wildomar Public Works Department	
Roadways			
<ul> <li>Construct partial width improvements on the southerly side of Clinton Keith Road at its ultimate cross-section as an urban arterial highway (152' right-of-way) adjacent to proposed Project boundary line.</li> <li>Construct partial width improvements on the westerly side of</li> </ul>			

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
<ul> <li>Elizabeth Lane at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line.</li> <li>Construct partial width improvements on the easterly side of Yamas Drive at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line.</li> </ul>			
Intersections (proposed Project's actual improvements necessary are shown in <b>bold, italic, underlined</b> . The items that are not bold, italic, underlined are already existing)			
Construct the intersection of proposed Project Driveway 1 (NS) and Clinton Keith Road (EW) to restrict movement to right-in and right-out only from the driveway with the following geometrics:			
Northbound:One right-turn lane. Stop controlled.Southbound:Not applicable.Eastbound:One through lane.Westbound:One through lane.			
Install a traffic signal at the intersection of Elizabeth Lane (NS) and Clinton Keith Road (EW) to include the following geometrics:			
Northbound: <u>One left-turn lane.</u> One shared through and right-turn lane.			
Southbound: <u>One left-turn lane.</u> One shared through and right-turn lane.			
Eastbound: One left-turn lane. One through lane. <u>One right-turn</u> <u>lane.</u>			
Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.			
Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 2 (EW) with the following geometrics:			
Northbound:One shared left-turn, through and right-turn lane.Southbound:One shared left-turn, through and right-turn lane.Eastbound:One shared left-turn, through and right-turn lane.			

	Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
controlled. Westbound: controlled.	One shared left-turn, through and right-turn lane. Stop			
	ntersection of Elizabeth Lane (NS) and proposed Project /) with the following geometrics:			
Northbound: Southbound: Eastbound: <u>controlled.</u> Westbound:	One shared left-turn and through lane. One shared through and right-turn lane. <u>One shared left-turn and right-turn lane. Stop</u> Not applicable.			
Construct the i the following g	ntersection of Yamas Drive (NS) and Bunny Trail (EW) with eometrics:			
Northbound: Southbound: Eastbound: <u>controlled</u> Westbound:	Not applicable. One right-turn lane. <u>One shared left-turn and right-turn lane. Stop</u> Not applicable.			
	ntersection of Project Driveway 4 (NS) and Bunny Trail bllowing geometrics:			
Northbound: Southbound: Eastbound: Westbound:	Not Applicable. <u>One shared left-turn &amp; right-turn lane. Stop controlled.</u> One shared left-turn and through lane. One shared through and right-turn lane.			
Driveway 5(EW Northbound: Southbound: Eastbound: Westbound:	ntersection of Yamas Drive (NS) and proposed Project ) with the following geometrics: <u>One shared through and right-turn lane.</u> <u>One shared left-turn and through lane.</u> Not applicable. <u>One shared left-turn and right-turn lane. Stop</u>			
<u>controlled.</u>				

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics: Northbound: <u>One shared through and right-turn lane.</u>			
Southbound:One shared left-turn and through lane.Eastbound:Not applicable.Westbound:One shared left-turn & right-turn lane. Stop controlled.			
3.17 Utilities and Service Systems - none required	N/A	N/A	N/A

## Appendix 2

Wildomar Commerce Center Air Quality, Greenhouse Gas, Health Risk, and Energy Impact Study, City of Wildomar, CA

## Wildomar Commerce Center

# Air Quality, Greenhouse Gas, Health Risk, and Energy Impact Study

City of Wildomar, CA

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Date: 9/20/2022



Noise Study Reports | Vibration Studies | Air Quality | Greenhouse Gas | Health Risk Assessments

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## LIST OF APPENDICES

#### **Appendix A:**

CalEEMod Daily Emission Output

#### Appendix B:

CalEEMod Annual Emission Output

#### **Appendix C:**

EMFAC2017 Output

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## **GLOSSARY OF TERMS**

aqmp Caaqs	Air Quality Management Plan California Ambient Air Quality Standards
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CFCs	Chlorofluorocarbons
CH <sub>4</sub>	Methane
CNG	Compressed natural gas
СО	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
DPM	Diesel particulate matter
GHG	Greenhouse gas
HFCs	Hydrofluorocarbons
LST	Localized Significant Thresholds
MTCO <sub>2</sub> e	Metric tons of carbon dioxide equivalent
MMTCO <sub>2</sub> e	Million metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NOx	Nitrogen Oxides
NO <sub>2</sub>	Nitrogen dioxide
N <sub>2</sub> O	Nitrous oxide
O <sub>3</sub>	Ozone
PFCs	Perfluorocarbons
PM	Particle matter
PM10	Particles that are less than 10 micrometers in diameter
PM2.5	Particles that are less than 2.5 micrometers in diameter
PMI	Point of maximum impact
PPM	Parts per million
PPB	Parts per billion
RTIP	Regional Transportation Improvement Plan
RTP	Regional Transportation Plan
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SF <sub>6</sub>	Sulfur hexafluoride
SIP	State Implementation Plan
SOx	Sulfur Oxides
SRA	Source/Receptor Area
ТАС	Toxic air contaminants
VOC	Volatile organic compounds
WRCC	Western Regional Climate Center

## 1.0 Introduction

#### **1.1** Purpose of Analysis and Study Objectives

This air quality and greenhouse gas (GHG) analysis was prepared to evaluate whether the estimated criteria pollutants and GHG emissions generated from the project would cause a significant impact to the air resources in the project area. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The assessment is consistent with the methodology and emission factors endorsed by South Coast Air Quality Management District (SCAQMD), California Air Resource Board (CARB), and the United States Environmental Protection Agency (US EPA).

#### 1.2 Project Summary

#### **1.2.1** Site Location

The project site is located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar, CA, as shown in Exhibit A. The site is current zoned Industrial Park in the City of Wildomar Zoning Map. The proposed use is a mix of industrial uses with some office and retail space. Land uses surrounding the site include vacant land to the south and west, an apartment complex to the southeast, Clinton Keith Road to the north with vacant land further, and Elizabeth Lane to the east with a self-storage facility further.

#### 1.2.2 Project Description

The Project proposes to develop the site with five industrial buildings, covering a total of 26.56 acres for the entire site. Building 1 consists of approximately 14,630 sqft, building 2 consists of approximately 16,860 sqft, building 3 consists of approximately 64,510 sqft, building 4 consists of 99,940 sqft with 22 loading docks and building 5 consists of 98,720 sqft with 28 loading docks. The site is also to include a parking lot with 574 parking stalls and 261,320 square feet of landscaping. Exhibit B demonstrates the site plan for the project.

Construction activities within the Project area will consist of site preparation, on-site grading, building, paving, and architectural coating. Table 1 summarizes the land use description for the Project Site.

<Table 1, next page>

Land Use	Unit Amount	Size Metric	
General Light Industry	85	1000sqft	
General Heavy Industry	188.66	1000sqft	
General Office Building	10.5	1000sqft	
Strip Mall	10.5	1000sqft	
Parking Lot	574	Space	
Other Asphalt Surfaces	8.62	Acre	
Other Non-Asphalt Surfaces	261.32	1000sqft	

#### Table 1: Land Use Summary

#### **1.2.3** Sensitive Receptors

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution than others due to their exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. For CEQA purposes, a sensitive receptor would be a location where a sensitive individual could remain for 24-hours or longer, such as residencies, hospitals, and schools (etc).

The closest existing sensitive receptors (to the site area) are the residential land uses located approximately 65 feet to the southwest and 210 feet northeast of the project site.

#### **1.3** Executive Summary of Findings and Mitigation Measures

The following is a summary of the analysis results:

#### **Construction-Source Emissions**

Project construction-source emissions would not exceed applicable regional thresholds of significance established by the SCAQMD. For localized emissions, the project will not exceed applicable Localized Significance Thresholds (LSTs) established by the SCAQMD.

Project construction-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). As discussed herein, the project will comply with all applicable SCAQMD construction-source emission reduction rules and guidelines. Project construction source emissions would not cause or substantively contribute to violation of the California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS).

Established requirements addressing construction equipment operations, and construction material use, storage, and disposal requirements act to minimize odor impacts that may result from construction activities. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect

substantial numbers of people. Potential construction-source odor impacts are therefore considered less-than-significant.

#### **Operational-Source Emissions**

The project operational-sourced emissions would not exceed applicable regional thresholds of significance established by the SCAQMD. Project operational-source emissions would not result in or cause a significant localized air quality impact as discussed in the Operations-Related Local Air Quality Impacts section of this report. Additionally, project-related traffic will not cause or result in CO concentrations exceeding applicable state and/or federal standards (CO "hotspots). Project operational-source emissions would therefore not adversely affect sensitive receptors within the vicinity of the project.

Project operational-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). The project's emissions meet SCAQMD regional thresholds and will not result in a significant cumulative impact. The project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential operational-source odor impacts are therefore considered less-than significant.

Project-related GHG emissions meet the SCAQMD industrial screening threshold of 10,000 metric tons of carbon dioxide equivalents (MTCO2e) per year and are also considered to be less than significant. The project also complies with the goals of the WRCOG Subregional CAP, CARB Scoping Plan, AB-32, and SB-32.

#### **Mitigation Measures**

#### A. <u>Construction Measures</u>

Adherence to SCAQMD Rule 403 is required.

No construction mitigation required.

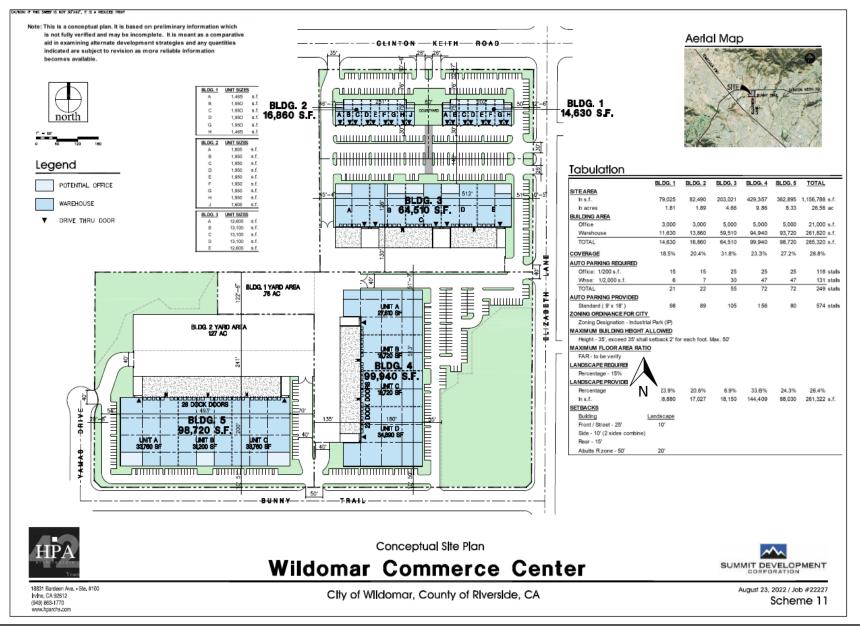
#### B. Operational Measures to Reduce Greenhouse Gas Emissions

No operational mitigation required.

## Exhibit A Location Map



## Exhibit B **Site Plan**



## 2.0 Regulatory Framework and Background

#### 2.1 Air Quality Regulatory Setting

Air pollutants are regulated at the national, state, and air basin level; each agency has a different level of regulatory responsibility. The United States Environmental Protection Agency (EPA) regulates at the national level. The California Air Resources Board (ARB) regulates at the state level. The South Coast Air Quality Management District (SCAQMD) regulates at the air basin level.

#### 2.1.1 National and State

The EPA is responsible for global, international, and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance for air pollution programs, and sets National Air Quality Standards, also known as federal standards. There are six common air pollutants, called criteria pollutants, which were identified from the provisions of the Clean Air Act of 1970.

- Ozone
- Nitrogen Dioxide
- Lead
- Particulate Matter (PM10 and PM2.5)
- Carbon Monoxide
- Particulate Matter
- Sulfur Dioxide

The federal standards were set to protect public health, including that of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to project the public health.

A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The State Implementation Plan for the State of California is administered by the ARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's State Implementation Plan incorporates individual federal attainment plans for regional air districts—air district prepares their federal attainment plan, which sent to ARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms. See http://www.arb.ca.gov/research/aags/aags.htm for additional information on criteria pollutants and air quality standards.

The federal and state ambient air quality standards are summarized in Table 2 and can also be found at <u>http://www.arb.ca.gov/research/aaqs/aaqs2.pdf</u>.

Pollutant	Averaging Time California S		itandards1	National Standards <sup>2</sup>		
Follutalit	Averaging fille	Concentrations <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>
0 (02)	1-Hour	0.09 ppm	Ultraviolet		Same as Primary	Ultraviolet
Ozone (O3)	8-Hour	0.070 ppm	Photometry	0.070 ppm (147 μg/m <sup>3</sup> )	Standard	Photometry
Respirable	24-Hour	50 μg/m³	Gravimetric or Beta	150 μ/m³	Same as Primary	Inertial Separation
Particulate Matter (PM10) <sup>8</sup>	Annual Arithmetic Mean	20 μg/m³	Attenuation		Standard	and Gravimetric Analysis
Fine Particulate	24-Hour			35 μg/m³	Same as Primary Standard	Inertial Separation and Gravimetric
Matter (PM2.5) <sup>8</sup>	Annual Arithmetic Mean	12 μg/m³	Gravimetric or Beta Attenuation	12 μg/m³	15 μg/m³	Analysis
	1-Hour	20 ppm (23 μg/m³)	Non-Dispersive	35 ppm (40 μg/m <sup>3</sup> )		Non-Dispersive
Carbon Monoxide	8-Hour	9.0 ppm (10 μg/m³)	Infrared Photometry	9 ppm (10 μg/m³)		Infrared
(CO)	8-Hour (Lake Tahoe)	6 ppm (7 μg/m³)	(NDIR)			Photometry (NDIR)
Nitrogen Dioxide	1-Hour	0.18 ppm (339 μg/m³)	Gas Phase	100 ppb (188 μg/m³)		Gas Phase Chemiluminescence
(NO <sub>2</sub> ) <sup>9</sup>	Annual Arithmetic Mean	0.030 ppm (357 μg/m³)	Chemiluminescence	0.053 ppm (100 μg/m³)	Same as Primary Standard	
	1-Hour	0.25 ppm (655 μg/m <sup>3</sup> )		75 ppb (196 μg/m³)		Ultraviolet Fluorescence;
	3-Hour		Ultraviolet		0.5 ppm (1300 mg/m <sup>3</sup> )	
Sulfur Dioxide (SO <sub>2</sub> ) <sup>10</sup>	24-Hour	0.04 ppm (105 μg/m³)	Fluorescence	0.14 ppm (for certain areas) <sup>10</sup>		Spectrophotometry (Pararosaniline
	Annual Arithmetic Mean			0.130ppm (for certain areas) <sup>10</sup>		Method)
	30 Day Average	1.5 μg/m³				
Lead <sup>11,12</sup>	Calendar Qrtr		Atomic Absorption	1.5 μg/m³ (for certain areas) <sup>12</sup>	Same as Primary Standard	High Volume Sampler and Atomic
	Rolling 3-Month Average			0.15 μg/m³		Absorption
Visibility Reducing Particles <sup>13</sup>	8-Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape		No	
Sulfates	24-Hour	25 μg/m³	Ion Chromatography		National	
Hydrogen Sulfide	1-Hour	0.03 ppm (42 μg/m <sup>3</sup> )	Ultraviolet		Standards	
Vinyl Chloride <sup>11</sup>	24-Hour	0.01 ppm (26 μg/m <sup>3</sup> )	Gas Chromatography			

#### **Table 2: Ambient Air Quality Standards**

Notes:

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

- 2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
- 3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- 4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- 5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

- 8. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 μg/m<sup>3</sup> to 12.0 μg/m<sup>3</sup>. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 μg/m<sup>3</sup>, as was the annual secondary standard of 15 μg/m<sup>3</sup>. The existing 24-hour PM10 standards (primary and secondary) of 150 μg/m<sup>3</sup> also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- 9. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- 10. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

- 11. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- 12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m<sup>3</sup> as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- 13. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Several pollutants listed in Table 2 are not addressed in this analysis. Analysis of lead is not included in this report because the project is not anticipated to emit lead. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed. The project is not expected to generate or be exposed to vinyl chloride because proposed project uses do not utilize the chemical processes that create this pollutant and there are no such uses in the project vicinity. The proposed project is not expected to cause exposure to hydrogen sulfide because it would not generate hydrogen sulfide in any substantial quantity.

#### 2.1.2 South Coast Air Quality Management District

The agency for air pollution control for the South Coast Air Basin (basin) is the South Coast Air Quality Management District (SCAQMD). SCAQMD is responsible for controlling emissions primarily from stationary sources. SCAQMD maintains air quality monitoring stations throughout the basin. SCAQMD, in coordination with the Southern California Association of Governments, is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the basin. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the federal and/or California ambient air quality standards. The term nonattainment area is used to refer to an air basin where one or more ambient air quality standards are exceeded.

Every three (3) years the SCAQMD prepares a new AQMP, updating the previous plan and having a 20-year horizon.

On March 23, 2017 CARB approved the 2016 AQMP. The 2016 AQMP is a regional blueprint for achieving the federal air quality standards and healthful air.

The 2016 AQMP includes both stationary and mobile source strategies to ensure that rapidly approaching attainment deadlines are met, that public health is protected to the maximum extent feasible, and that the region is not faced with burdensome sanctions if the Plan is not approved or if the NAAQS are not met on time. As with every AQMP, a comprehensive analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures is updated with the latest data and methods. The most significant air quality challenge in the Basin is to reduce nitrogen oxide (NOx) emissions sufficiently to meet the upcoming ozone standard deadlines. The primary goal of this Air Quality Management Plan is to meet clean air standards and protect public health, including ensuring benefits to environmental justice and disadvantaged communities. Now that the plan has been approved by CARB, it has been forwarded to the U.S. Environmental Protection Agency for its review. If approved by EPA, the plan becomes federally enforceable

The 2012 AQMP built upon the approaches taken in the 2007 AQMP for the attainment of federal PM and ozone standards, and highlights the significant amount of reductions needed and the need to engage in interagency coordinated planning of mobile sources to meet all of the federal criteria pollutant standards. Compared with the 2007 AQMP, the 2012 AQMP utilized revised emissions inventory projections that use 2008 as the base year. On-road emissions are calculated using CARB EMFAC2011 emission factors and the transportation activity data provided by SCAG from their 2012 Regional Transportation Plan (2012 RTP). Off-road emissions were updated using CARB's 2011 In-Use Off-Road Fleet Inventory Model. Since the 2007 AQMP was finalized new area source categories such as liquid propane gas (LPG) transmission losses, storage tank and pipeline cleaning and degassing, and architectural colorants, were created and included in the emissions inventories. The 2012 AQMP also includes analysis of several additional sources of GHG emissions such as landfills and could also assist in reaching the GHG target goals in the AB32 Scoping Plan.

#### South Coast Air Quality Management District Rules

The AQMP for the basin establishes a program of rules and regulations administered by SCAQMD to obtain attainment of the state and federal standards. Some of the rules and regulations that apply to this Project include, but are not limited to, the following:

**SCAQMD Rule 402** prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

**SCAQMD Rule 403** governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable suppression techniques are indicated below and include but are not limited to the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas in active for 10 days or more).
- Water active sites at least three times daily.
- Cover all trucks hauling dirt, san, soil, or other loose materials, or maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) section 23114.
- Pave construction access roads at least 100 feet onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Bumper strips or similar best management practices shall be provided where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.
- Replanting disturbed areas as soon as practical.
- During all construction activities, construction contractors shall sweep on-site and off-iste streets if silt is carried to adjacent public thoroughfares, to reduce the amount of particulate matter on public streets.

**SCAQMD Rule 1113** governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of project must comply with Rule 1113.

**Idling Diesel Vehicle Trucks** – Idling for more than 5 minutes in any one location is prohibited within California borders.

**Rule 2702.** The SCAQMD adopted Rule 2702 on February 6, 2009, which establishes a voluntary air quality investment program from which SCAQMD can collect funds from parties that desire certified GHG emission reductions, pool those funds, and use them to purchase or fund GHG emission reduction projects within two years, unless extended by the Governing Board. Priority will be given to projects that result in co-benefit emission reductions of GHG emissions and criteria or toxic air pollutants within environmental justice areas. Further, this voluntary program may compete with the cap-and-trade program identified for implementation in CARB's Scoping Plan, or a Federal cap and trade program.

#### 2.1.3 Local

Local jurisdictions, such as the County of Riverside and City of Wildomar, have the authority and responsibility to reduce air pollution through their police power and decision-making authority. Specifically, the County and City are responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The County and City are also responsible for the implementation of transportation control measures as outlined in the 2016 AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the County and City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

The County and City rely on the expertise of the SCAQMD and utilizes the SCAQMD CEQA Air Quality Handbook as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

#### County of Riverside General Plan

The Air Quality Element of the County of Riverside General Plan summarizes air quality issues in the Basin, air quality-related plans and programs administered by federal, state, and special purpose agencies, and establishes goals and policies to improve air quality. These goals and policies in the Air Quality Element that relate to the proposed project include:

#### Multi-jurisdictional Cooperation:

- AQ 1.1 Promote and participate with regional and local agencies, both public and private, to protect and improve air quality.
- AQ 1.2 Support the Southern California Association of Government's (SCAG) Regional Growth Management Plan by developing intergovernmental agreements with appropriate governmental entities such as the Western Riverside Council of Governments (WRCOG), the Coachella Valley Association of Governments (CVAG), sanitation districts, water districts, and those subregional entities identified in the Regional Growth Management Plan.
- AQ 1.3 Participate in the development and update of those regional air quality management plans required under federal and state law, and meet all standards established for clean air in these plans.
- AQ 1.4 Coordinate with the SCAQMD and MDAQMD to ensure that all elements of air quality plans regarding reduction of air pollutant emissions are being enforced.
- AQ 1.5 Establish and implement air quality, land use and circulation measures that improve not only the County's environment but the entire regions.

- AQ 1.6 Establish a level playing field by working with local jurisdictions to simultaneously adopt policies similar to those in this Air Quality Element.
- AQ 1.7 Support legislation which promotes cleaner industry, clean fuel vehicles and more efficient burning engines and fuels.
- AQ 1.8 Support the introduction of federal, state or regional enabling legislation to permit the County to promote inventive air quality programs, which otherwise could not be implemented.
- AQ 1.9 Encourage, publicly recognize and reward innovative approaches that improve air quality.
- AQ 1.10 Work with regional and local agencies to evaluate the feasibility of implementing a system of charges (e.g., pollution charges, user fees, congestion pricing and toll roads) that requires individuals who undertake polluting activities to bear the economic cost of their actions where possible.
- AQ 1.11 Involve environmental groups, the business community, special interests, and the general public in the formulation and implementation of programs that effectively reduce airborne pollutants.

#### Sensitive Receptors:

- AQ 2.1 The County land use planning efforts shall assure that sensitive receptors are separated and protected from polluting point sources to the greatest extent possible.
- AQ 2.2 Require site plan designs to protect people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources when possible.
- AQ 2.3 Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution.

#### Stationary Pollution Sources:

- AQ 4.1 Encourage the use of building materials/methods which reduce emissions.
- AQ 4.2 Require the use of all feasible efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.
- AQ 4.3 Require centrally heated facilities to utilize automated time clocks or occupant sensors to control heating where feasible.
- AQ 4.5 Require stationary pollution sources to minimize the release of toxic pollutants through:

- Design features;
- Operating procedures;
- Preventive maintenance;
- Operator training; and
- Emergency response planning
- AQ 4.6 Require stationary air pollution sources to comply with applicable air district rules and control measures.
- AQ 4.7 To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SOCAB, the Environmental Protection Agency and the California Air Resources Board.
- AQ 4.8 Expand, as appropriate, measures contained in the County's Fugitive Dust Reduction Program for the Coachella Valley to the entire County.
- AQ 4.9 Require compliance with SCAQMD Rules 403 and 403.1, and support appropriate future measures to reduce fugitive dust emanating from construction sites.
- AQ 4.10 Coordinate with the SCAQMD and MDAQMD to create a communications plan to alert those conducting grading operations in the County of first, second, and third stage smog alerts, and when wind speeds exceed 25 miles per hour. During these instances all grading operations should be suspended.

Energy Efficiency and Conservation:

- AQ 5.1 Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
- AQ 5.4 Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.

#### Particulate Matter:

AQ 15.1 Identify and monitor sources, enforce existing regulations, and promote stronger controls to reduce particulate matter.

#### Multi-jurisdictional Cooperation:

AQ 16.1 Cooperate with local, regional, state and federal jurisdictions to better control particulate matter.

Control Measures:

- AQ 17.1 Reduce particulate matter from agriculture, construction, demolition, debris hauling, street cleaning, utility maintenance, railroad rights-of-way, and off-road vehicles to the extent possible.
- AQ 17.3 Identify and create a control plan for areas within the County prone to wind erosion of soil.
- AQ 17.4 Adopt incentives, regulations and/or procedures to manage paved and unpaved roads and parking lots so they produce the minimum practicable level of particulates.
- AQ 17.5 Adopt incentives and/or procedures to limit dust from agricultural lands and operations, where applicable.
- AQ 17.6 Reduce emissions from building materials and methods that generate excessive pollutants, through incentives and/or regulations.

## 2.2 Greenhouse Gas Regulatory Setting

### 2.2.1 International

Many countries around the globe have made an effort to reduce GHGs since climate change is a global issue.

**Intergovernmental Panel on Climate Change.** In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change to assess the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

**United Nations.** The United States participates in the United Nations Framework Convention on Climate Change (UNFCCC) (signed on March 21, 1994). Under the Convention, governments gather and share information on greenhouse gas emissions, national policies, and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

The 2014 UN Climate Change Conference in Lima Peru provided a unique opportunity to engage all countries to assess how developed countries are implementing actions to reduce emissions.

**Kyoto Protocol.** The Kyoto Protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. It has been estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced by an estimated 5 percent from 1990 levels during the first commitment period of 2008 – 2012 (UNFCCC 1997). On December 8, 2012, the Doha Amendment to the Kyoto Protocol was adopted. The amendment includes: New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment

period from 2013 – 2020; a revised list of greenhouse gases (GHG) to be reported on by Parties in the second commitment period; and Amendments to several articles of the Kyoto Protocol which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period.

# 2.2.2 National

**Greenhouse Gas Endangerment.** On December 2, 2009, the EPA announced that GHGs threaten the public health and welfare of the American people. The EPA also states that GHG emissions from onroad vehicles contribute to that threat. The decision was based on *Massachusetts v. EPA* (Supreme Court Case 05-1120) which argued that GHGs are air pollutants covered by the Clean Air Act and that the EPA has authority to regulate those emissions.

**Clean Vehicles.** Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce greenhouse gas emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program would apply to passenger cars, light-duty trucks, and mediumduty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. Together, these standards would cut carbon dioxide emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016). The second phase of the national program would involve proposing new fuel economy and greenhouse gas standards for model years 2017 – 2025 by September 1, 2011.

On October 25, 2010, the EPA and the U.S. Department of Transportation proposed the first national standards to reduce greenhouse gas emissions and improve fuel efficiency of heavy-duty trucks and buses. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles and 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the agencies are proposing engine and vehicle standards starting in the 2014 model year which would achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions by 2018 model year.

**Mandatory Reporting of Greenhouse Gases.** On January 1, 2010, the EPA started requiring large emitters of heat-trapping emissions to begin collecting GHG data under a new reporting system. Under

the rule, suppliers of fossil fuels or industrial greenhouse gases, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of greenhouse gas emissions are required to submit annual reports to the EPA.

**Climate Adaption Plan.** The EPA Plan identifies priority actions the Agency will take to incorporate considerations of climate change into its programs, policies, rules and operations to ensure they are effective under future climatic conditions. The following link provides more information on the EPA Plan: <u>https://www.epa.gov/arc-x/planning-climate-change-adaptation</u>

# 2.2.3 California

**California Code of Regulations (CCR) Title 24, Part 6.** CCR Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

The Energy Commission adopted 2008 Standards on April 23, 2008 and Building Standards Commission approved them for publication on September 11, 2008. These updates became effective on August 1, 2009. 2013 and 2016 standards have been approved and became effective July 1, 2014 and January 1, 2016, respectively.

**California Code of Regulations (CCR) Title 24, Part 11.** All buildings for which an application for a building permit is submitted on or after January 1, 2020 must follow the 2019 standards.. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions. The following links provide more information on Title 24, Part 11:

https://www.dgs.ca.gov/BSC/Codes https://www.energy.ca.gov/sites/default/files/2020-03/Title\_24\_2019\_Building\_Standards\_FAQ\_ada.pdf

**California Green Building Standards.** On January 12, 2010, the State Building Standards Commission unanimously adopted updates to the California Green Building Standards Code, which went into effect on January 1, 2011. The Housing and Community Development (HCD) updated CALGreen through the 2015 Triennial Code Adoption Cycle, during the 2016 to 2017 fiscal year. During the 2019-2020 fiscal year, the Department of Housing and Community Development (HCD) updated CALGreen through the 2019 Triennial Code Adoption Cycle.

The Code is a comprehensive and uniform regulatory code for all residential, commercial and school buildings. CCR Title 24, Part 11: California Green Building Standards (Title 24) became effective in 2001 in response to continued efforts to reduce GHG emissions associated with energy consumption. CCR Title 24, Part 11 now require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and

install low pollutant-emitting finish materials. One focus of CCR Title 24, Part 11 is water conservation measures, which reduce GHG emissions by reducing electrical consumption associated with pumping and treating water. CCR Title 24, Part 11 has approximately 52 nonresidential mandatory measures and an additional 130 provisions for optional use. Some key mandatory measures for commercial occupancies include specified parking for clean air vehicles, a 20 percent reduction of potable water use within buildings, a 50 percent construction waste diversion from landfills, use of building finish materials that emit low levels of volatile organic compounds, and commissioning for new, nonresidential buildings over 10,000 square feet.

The 2019 CalGreen Code includes the following changes and/or additional regulations:

Single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards. Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades<sup>1</sup>.

HCD modified the best management practices for stormwater pollution prevention adding Section 5.106.2 for projects that disturb one or more acres of land. This section requires projects that disturb one acre or more of land or less than one acre of land but are part of a larger common plan of development or sale must comply with the post-construction requirement detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board. The NPDES permits require post-construction runoff (post-project hydrology) to match the preconstruction runoff pre-project hydrology) with installation of post-construction stormwater management measures.

HCD added sections 5.106.4.1.3 and 5.106.4.1.5 in regards to bicycle parking. Section 5.106.4.1.3 requires new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility. In addition, Section 5.106.4.1.5 states that acceptable bicycle parking facility for Sections 5.106.4.1.2 through 5.106.4.1.4 shall be convenient from the street and shall meeting one of the following: (1) covered, lockable enclosures with permanently anchored racks for bicycles; (2) lockable bicycle rooms with permanently anchored racks; or (3) lockable, permanently anchored bicycle lockers.

HCD amended section 5.106.5.3.5 allowing future charging spaces to qualify as designated parking for clean air vehicles.

<sup>&</sup>lt;sup>1</sup> https://ww2.energy.ca.gov/title24/2019standards/documents/2018\_Title\_24\_2019\_Building\_Standards\_FAQ.pdf

HCD updated section 5.303.3.3 in regards to showerhead flow rates. This update reduced the flow rate to 1.8 GPM.

HCD amended section 5.304.1 for outdoor potable water use in landscape areas and repealed sections 5.304.2 and 5.304.3. The update requires nonresidential developments to comply with a local water efficient landscape ordinance or the current California Department of Water Resource's' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent. Some updates were also made in regards to the outdoor potable water use in landscape areas for public schools and community colleges.

HCD updated Section 5.504.5.3 in regards to the use of MERV filters in mechanically ventilated buildings. This update changed the filter use from MERV 8 to MERV 13.

The California Green Building Standards Code does not prevent a local jurisdiction from adopting a more stringent code as state law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided they provide a minimum 50-percent diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. State building code provides the minimum standard that buildings need to meet in order to be certified for occupancy. Enforcement is generally through the local building official. The following link provides more on CalGreen Building Standards:

http://www.bsc.ca.gov/Home/CALGreen.aspx

**Executive Order S-3-05.** California Governor issued Executive Order S-3-05, GHG Emission, in June 2005, which established the following targets:

- By 2010, California shall reduce greenhouse gas emissions to 2000 levels;
- By 2020, California shall reduce greenhouse gas emissions to 1990 levels.
- By 2050, California shall reduce greenhouse gas emissions to 80 percent below 1990 levels.

The executive order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. To comply with the Executive Order, the secretary of CalEPA created the California Climate Action Team (CAT), made up of members from various state agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of businesses, local governments, and communities and through State incentive and regulatory programs.

**Executive Order S-01-07.** Executive Order S-1-07 was issued in 2007 and proclaims that the transportation sector is the main source of GHG emissions in the State, since it generates more than 40 percent of the State's GHG emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in the State by at least ten percent by 2020. This Order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

On April 23, 2009 CARB approved the proposed regulation to implement the low carbon fuel standard. The low carbon fuel standard is anticipated to reduce GHG emissions by about 16 MMT per year by 2020. The low carbon fuel standard is designed to provide a framework that uses market mechanisms to spur the steady introduction of lower carbon fuels. The framework establishes performance standards that fuel producers and importers must meet each year beginning in 2011. Separate standards are established for gasoline and diesel fuels and the alternative fuels that can replace each. The standards are "back-loaded", with more reductions required in the last five years, than the first five years. This schedule allows for the development of advanced fuels that are lower in carbon than today's fuels and the market penetration of plug-in hybrid electric vehicles, battery electric vehicles, fuel cell vehicles, and flexible fuel vehicles. It is anticipated that compliance with the low carbon fuel standard will be based on a combination of both lower carbon fuels and more efficient vehicles.

Reformulated gasoline mixed with corn-derived ethanol at ten percent by volume and low sulfur diesel fuel represent the baseline fuels. Lower carbon fuels may be ethanol, biodiesel, renewable diesel, or blends of these fuels with gasoline or diesel as appropriate. Compressed natural gas and liquefied natural gas also may be low carbon fuels. Hydrogen and electricity, when used in fuel cells or electric vehicles are also considered as low carbon fuels for the low carbon fuel standard.

**SB 97.** Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Resource Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Resources Agency was required to certify and adopt those guidelines by January 1, 2010.

Pursuant to the requirements of SB 97 as stated above, on December 30, 2009 the Natural Resources Agency adopted amendments to the state CEQA guidelines that address GHG emissions. The CEQA Guidelines Amendments changed 14 sections of the CEQA Guidelines and incorporate GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance are provided and no specific mitigation measures are identified. The GHG emission reduction amendments went into effect on March 18, 2010 and are summarized below:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.

- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."
- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- Environmental impact reports (EIRs) must specifically consider a project's energy use and energy efficiency potential.

**AB 32.** The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. ARB is the state agency charged with monitoring and regulating sources of greenhouse gases. AB 32 states the following:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

The ARB Board approved the 1990 greenhouse gas emissions level of 427 million metric tons of carbon dioxide equivalent (MMTCO2e) on December 6, 2007 (California Air Resources Board 2007). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 MMTCO2e. Emissions in 2020 in a "business as usual" scenario are estimated to be 596 MMTCO2e.

Under AB 32, the ARB published its Final Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California. Discrete early action measures are currently underway or are enforceable by January 1, 2010. The ARB has 44 early action measures that apply to the transportation, commercial, forestry, agriculture, cement, oil and gas, fire suppression, fuels, education, energy efficiency, electricity, and waste sectors. Of these early action measures, nine are considered discrete early action measures, as they are regulatory and enforceable by January 1, 2010. The ARB estimates that the 44 recommendations are expected to result in reductions of at least 42 MMTCO2e by 2020, representing approximately 25 percent of the 2020 target.

The ARB's Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 (California Air Resources Board 2008). The Scoping Plan identifies recommended measures for multiple greenhouse gas emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a

different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 greenhouse gas target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, Including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. "Capped" strategies are subject to the proposed cap-and-trade program. The Scoping Plan states that the inclusion of these emissions within the cap-and trade program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. "Uncapped" strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional greenhouse gas emission reductions.<sup>4</sup>

**Senate Bill 100.** Senate Bill 100 (SB 100) requires 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. SB 100 was adopted September 2018.

The interim thresholds from prior Senate Bills and Executive Orders would also remain in effect. These include Senate Bill 1078 (SB 1078), which requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. Senate Bill 107 (SB 107) which changed the target date to 2010. Executive Order S-14-08, which was signed on November 2008 and expanded the State's Renewable Energy Standard to 33 percent renewable energy by 2020. Executive Order S-21-09 directed the CARB to adopt regulations by July 31, 2010 to enforce S-14-08. Senate Bill X1-2 codifies the 33 percent renewable energy requirement by 2020.

**SB 375.** Senate Bill 375 (SB 375) was adopted September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375

requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP). CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's sustainable communities strategy or alternate planning strategy for consistency with its assigned targets.

The proposed project is located within the Southern California Association of Governments (SCAG), which has authority to develop the SCS or APS. For the SCAG region, the targets set by CARB are at eight percent below 2005 per capita GHG emissions levels by 2020 and 13 percent below 2005 per capita GHG emissions levels by 2035. On April 4, 2012, SCAG adopted the 2012-2035 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS), which meets the CARB emission reduction requirements. The Housing Element Update is required by the State to be completed within 18 months after RTP/SCS adoption or by October 2013.

City and County land use policies, including General Plans, are not required to be consistent with the RTP and associated SCS or APS. However, new provisions of CEQA would incentivize, through streamlining and other provisions, qualified projects that are consistent with an approved SCS or APS and categorized as "transit priority projects."

**Assembly Bill 939 and Senate Bill 1374.** Assembly Bill 939 (AB 939) requires that each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling or other means. Senate Bill 1374 (SB 1374) requires the California Integrated Waste Management Board to adopt a model ordinance by March 1, 2004 suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition of waste materials from landfills.

**Executive Order S-13-08.** Executive Order S-13-08 indicates that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (California Natural Resource Agency 2009) was adopted, which is the "... first statewide, multi-sector, region-specific, and information-based climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

**Executive Order B-30-15.** Executive Order B-30-15, establishing a new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030, was signed by Governor Brown in April 2015.

**Executive Order B-29-15.** Executive Order B-29-15, mandates a statewide 25% reduction in potable water usage and was signed into law on April 1, 2015.

**Executive Order B-37-16.** Executive Order B-37-16, continuing the State's adopted water reduction, was signed into law on May 9, 2016. The water reduction builds off the mandatory 25% reduction called for in EO B-29-15.

# 2.2.4 South Coast Air Quality Management District

The Project is within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD Regulation XXVII currently includes three rules:

- The purpose of Rule 2700 is to define terms and post global warming potentials.
- The purpose of Rule 2701, SoCal Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified greenhouse gas emission reductions in the SCAQMD.
- Rule 2702, Greenhouse Gas Reduction Program, was adopted on February 6, 2009. The purpose of this rule is to create a Greenhouse Gas Reduction Program for greenhouse gas emission reductions in the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

#### SCAQMD Threshold Development

The SCAQMD has established recommended significance thresholds for greenhouse gases for local lead agency consideration ("SCAQMD draft local agency threshold"). SCAQMD has published a five-tiered draft GHG threshold which includes a 10,000 metric ton of CO<sub>2</sub>e per year for stationary/industrial sources and 3,000 metric tons of CO<sub>2</sub>e per year significance threshold for residential/commercial projects (South Coast Air Quality Management District 2010c). Tier 3 is anticipated to be the primary tier by which the SCAQMD will determine significance for projects. The Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90-precent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to CEQA analysis. The 90-percent capture rate GHG significance screening level in Tier 3 for stationary sources was derived using the SCAQMD's annual Emissions Reporting Program.

The current draft thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether or not the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values, which the lead agency can choose but must be consistent. A project's construction emissions are averaged over 30 years and are added to a project's

operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:

- All land use types: 3,000 MTCO2e per year
- Based on land use types: residential is 3,500 MTCO2e per year; commercial is 1,400 MTCO2e per year; mixed use is 3,000 MTCO2e per year; and industrial is 10,000 MTCO2e per year
- Tier 4 has the following options:
  - Option 1: Reduce emissions from business as usual by a certain percentage; this percentage is currently undefined
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3: Year 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO2e/SP/year for projects and 6.6 MTCO2e/SP/year for plans;
  - Option 3, 2035 target: 3.0 MTCO2e/SP/year for projects and 4.1 MTCO2e/SP/year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

### 2.2.5 Local

#### WRCOG Subregional Climate Action Plan

The City of Wildomar is part of the Western Riverside Council of Government (WRCOG). The WRCOG adopted the WRCOG Subregional Climate Action Plan (CAP) in September 2014. Twelve cities in the subregion joined efforts to develop the Subregional CAP, which set forth a subregional emissions reduction target, emissions reduction measures, and action steps to assist each community to demonstrate consistency with California's Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32). The CAP consists of an emissions reduction target of 15% below 2010 levels by 2020, and 49% below 2010 levels by 2035. As indicated in the CAP the emission reduction target of 15% from 2010 levels equates to a GHG emissions reduction of nearly 2,330,647 metric tons below business-as-usual (BAU) conditions by 2020. In order to reach these goals, the CAP provides feasible strategies, while affording its communities other economic and environmental benefits.

Therefore, to determine whether the project's GHG emissions are significant, this analysis uses the SCAQMD draft local agency tier 3 screening threshold of 10,000 MTCO2e for industrial uses.

The project will be subject to the latest requirements of the California Green Building and Title 24 Energy Efficiency Standards (currently 2019) which would reduce project-related greenhouse gas emissions.

# 3.0 Setting

# 3.1 Existing Physical Setting

The project site is located in the City of Wildomar in of the County of Riverside, which is part of the South Coast Air Basin (SCAB) that includes all of Orange County as well as the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The South Coast Air Basin is located on a coastal plain with connecting broad valleys and low hills to the east. Regionally, the South Coast Air Basin is bounded by the Pacific Ocean to the southwest and high mountains to the east forming the inland perimeter.

# 3.1.1 Local Climate and Meteorology

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the region form natural horizontal barriers to the dispersion of air contaminants. Air pollution created in the coastal areas and around the Los Angeles area is transported inland until it reaches the mountains where the combination of mountains and inversion layers generally prevent further dispersion. This poor ventilation results in a gradual degradation of air quality from the coastal areas to inland areas. Air stagnation may occur during the early evening and early morning periods of transition between day and nighttime flows. The region also experiences periods of hot, dry winds from the desert, known as Santa Ana winds. If the Santa Ana winds are strong, they can surpass the sea breeze, which blows from the ocean to the land, and carry the suspended dust and pollutants out to the ocean. If the winds are weak, they are opposed by the sea breeze and cause stagnation, resulting in high pollution events.

The annual average temperature varies little throughout much of the basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas where the project site is located. The majority of the annual rainfall in the basin occurs between November and April. Summer rainfall is minimal and is generally limited to scattered thunderstorms in the coastal regions and slightly heavier showers in the eastern portion of the basin along the coastal side of the mountains. Year-to-year patterns in rainfall are unpredictable because of fluctuations in the weather.

Temperature inversions limit the vertical depth through which pollution can be mixed. Among the most common temperature inversions in the basin are radiation inversions, which form on clear winter nights when cold air off mountains sink to the valley floor while the air aloft over the valley remains warm. These inversions, in conjunction with calm winds, trap pollutants near the source. Other types of temperature inversions that affect the basin include marine, subsidence, and high-pressure inversions.

Summers are often periods of hazy visibility and occasionally unhealthful air. Strong temperature inversions may occur that limit the vertical depth through which air pollution can be dispersed. Air pollutants concentrate because they cannot rise through the inversion layer and disperse. These inversions are more common and persistent during the summer months. Over time, sunlight produces

photochemical reactions within this inversion layer that creates ozone, a particularly harmful air pollutant. Occasionally, strong thermal convections occur which allows the air pollutants to rise high enough to pass over the mountains and ultimately dilute the smog cloudtrap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution "hot spots" in heavily developed coastal areas of the basin, there is not enough traffic in inland valleys to cause any winter air pollution problems. Despite light wind conditions, especially at night and in the early morning, winter is generally a period of good air quality in the project vicinity.

In the winter, light nocturnal winds result mainly from the drainage of cool air off of the mountains toward the valley floor while the air aloft over the valley remains warm. This forms a type of inversion known as a radiation inversion. Such winds are characterized by stagnation and poor local mixing and trap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution "hot spots" in heavily developed coastal areas of the basin, there is not enough traffic to cause any winter air pollution problems. Despite light wind conditions, especially at night and in the early morning, winter is generally a period of good air quality in the project vicinity.

The temperature and precipitation levels for the City of Lake Elsinore, the nearest available data, are in Table 3. Table 3 shows that August is typically the warmest month and December is typically the coolest month. Rainfall in the project area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

Month	Tempera	Temperature (°F)		
wonth	Average High	Average Low	(inches)	
January	66.0	38.9	2.56	
February	67.7	40.9	2.68	
March	72.3	43.4	1.77	
April	77.7	47.0	0.67	
May	83.8	52.5	0.20	
June	91.0	56.5	0.05	
July	97.7	61.0	0.16	
August	98.6	62.5	0.05	
September	93.4	58.9	0.17	
October	83.4	52.0	0.59	
November	70.4	42.1	0.90	
December	65.8	38.5	2.11	
Annual Average	80.9	49.7	11.9	

### Table 3: Meteorological Summary

### **3.1.2** Local Air Quality

The SCAQMD is divided into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The project site is located in the City of Wildomar in the Lake Elsinore

Source Receptor Area (Area 25). The nearest air monitoring station to the project site is the Lake Elsinore – W Flint Street Station (Lake Elsinore Station). The Lake Elsinore Station is located approximately 7.85 miles northwest of the project site, at 506 W Flint Street, Lake Elsinore; however this location does not provide all ambient weather data. Therefore, additional data was pulled from the SCAQMD historical data for the Lake Elsinore Area (Area 25) for both sulfur dioxide and carbon monoxide to provide the existing levels. Table 4 presents the monitored pollutant levels within the vicinity. However, it should be noted that due to the air monitoring station distance from the project site, recorded air pollution levels at the air monitoring station reflect with varying degrees of accuracy, local air quality conditions at the project site.

	Year				
Pollutant (Standard) <sup>2</sup>	2018	2019	2020		
Ozone:					
Maximum 1-Hour Concentration (ppm)	0.116	0.108	0.130		
Days > CAAQS (0.09 ppm)	0	0	1		
Maximum 8-Hour Concentration (ppm)	0.960	0.089	0.100		
Days > NAAQS (0.07 ppm)	30	58	54		
Days > CAAQS (0.070 ppm)	31	31	55		
Carbon Monoxide:					
Maximum 1-Hour Concentration (ppm)	-	-	-		
Days > NAAQS (20 ppm)	-	-	-		
Maximum 8-Hour Concentration (ppm)	-	-	-		
Days > NAAQS (9 ppm)	-	-	-		
Nitrogen Dioxide:					
Maximum 1-Hour Concentration (ppm)	0.041	0.038	0.044		
Days > NAAQS (0.25 ppm)	0	0	0		
Sulfur Dioxide:					
Maximum 1-Hour Concentration (ppm)	-	-	-		
Days > CAAQS (0.25 ppm)	-	-	-		
Inhalable Particulates (PM10):					
Maximum 24-Hour Concentration (ug/m <sup>3</sup> )	105.3	93.8	192.4		
Days > NAAQS (150 ug/m <sup>3</sup> )	0	*	1		
Days > CAAQS (50 ug/m <sup>3</sup> )	*	*	*		
Annual Average (ug/m <sup>3</sup> )	23.3	19.7	23.7		
Annual > NAAQS (50 ug/m <sup>3</sup> )	No	No	No		
Annual > CAAQS (20 ug/m <sup>3</sup> )	Yes	No	Yes		
Ultra-Fine Particulates (PM2.5):					
Maximum 24-Hour Concentration (ug/m <sup>3</sup> )	31.3	17.6	41.6		
Days > NAAQS (35 ug/m <sup>3</sup> )	*	*	*		
Annual Average (ug/m <sup>3</sup> )	6.7	*	7.2		
Annual > NAAQS (15 ug/m3)	No	No	No		
Annual > CAAQS (12 ug/m <sup>3</sup> )	No	No	No		

#### Table 4: Local Area Air Quality Levels from the Lake Elsinore Monitoring Stations

https://www.arb.ca.gov/adam/topfour/topfour1.php

<sup>2</sup> CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million

<sup>3</sup> No data available.

The monitoring data presented in Table 4 shows that ozone and particulate matter (PM10) are the air pollutants of primary concern in the project area, which are detailed below.

#### Ozone

During the 2018 to 2020 monitoring period, the State 1-hour concentration standard for ozone has been exceeded one day in 2019 at the Lake Elsinore Station. The State 8-hour ozone standard has been exceeded between 30 and 58 days each year over the past three years at the Lake Elsinore Station. The Federal 8-hour ozone standard has been exceeded between 31 and 55 days each year over the past three years at the Lake Elsinore Station.

Ozone is a secondary pollutant as it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO<sub>2</sub>, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of the SCAQMD contribute to the ozone levels experienced at the monitoring station, with the more significant areas being those directly upwind.

#### **Carbon Monoxide**

CO is another important pollutant that is due mainly to motor vehicles. The Elsinore Area did not record an exceedance of the state or federal 1-hour or 8-hour CO standards for the last three years.

#### Nitrogen Dioxide

The Lake Elsinore Station did not record an exceedance of the State or Federal NO<sub>2</sub> standards for the last three years.

#### Sulfur Dioxide

The Elsinore Area did not record an exceedance of the State SO<sub>2</sub> standards for the last three years.

#### **Particulate Matter**

During the 2018 to 2020 monitoring period, there was insufficient data for the State 24-hour concentration standard for PM10 at the Lake Elsinore Station. Over the same time period, the Federal 24-hour standard for PM10 was exceeded once in 2020 and the Federal annual standard was not exceeded at the Lake Elsinore Station.

During the 2018 to 2020 monitoring period, there was insufficient data for the Federal 24-hour standard for PM2.5 at the Lake Elsinore Station.

According to the EPA, some people are much more sensitive than others to breathing fine particles (PM10 and PM2.5). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM10 and PM2.5. Other groups considered

sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive, because many breathe through their mouths during exercise.

### **3.1.3** Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or 'form' of what constitutes attainment, based on specific air quality statistics. For example, the Federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual PM<sub>2.5</sub> standard is met if the three-year average of the annual average PM<sub>2.5</sub> concentration is less than or equal to the standard. Table 5 lists the attainment status for the criteria pollutants in the basin.

Pollutant	Averaging Time	National Standards <sup>1</sup>	Attainment Date <sup>2</sup>	California Standards <sup>3</sup>
1979	1-Hour	Nonattainment	11/15/2010	Extreme
1-Hour Ozone <sup>4</sup>	(0.12 ppm)	(Extreme)	(Not attained <sup>4</sup> )	Nonattainment
1997 8-Hour Ozone⁵	8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024	
2008 8-Hour Ozone	8-Hour (0.075 ppm)	Nonattainment (Extreme)	12/31/2032	Nonattainment
2015 8-Hour Ozone	8-Hour (0.070 ppm)	Designations Pending	~2037	
СО	1-Hour (35 ppm) 8-Hour (9 ppm)	Attainment (Maintenance)	6/11/2007 (Attained)	Maintenance
NO <sub>2</sub> <sup>6</sup>	1-Hour (100 ppb) Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (Attained)	Attainment
SO <sub>2</sub> <sup>7</sup>	1-Hour (75 ppb) 24-Hour (0.14 ppm) Annual (0.03 ppm)	Designations Pending Unclassifiable/ Attainment	Pending 3/19/1979 (Attained)	Attainment
PM10	24-Hour (150 μg/m³)	Nonattainment (Serious) <sup>8</sup>	12/31/2006 (Redesignation request submitted) <sup>8</sup>	Nonattainment
PM2.5	24-Hour (35 μg/m³)	Nonattainment	12/31/2006 (Redesignation request submitted) <sup>8</sup>	Unclassified
Lead	3-Months Rolling (0.15 μg/m³)	Nonattainment (Partial) <sup>9</sup>	12/31/2015	Nonattainment (Partial) <sup>9</sup>

#### **Table 5: South Coast Air Basin Attainment Status**

Notes:

<sup>1</sup> Obtained from Draft 2012 AQMP, SCAQMD, 2012. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassified/Attainment or Unclassifiable.

<sup>2</sup> A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration.

<sup>3</sup> Obtained from http://www.arb.ca.gov/desig/adm/adm.htm.

<sup>4</sup> 1-hour O<sub>3</sub> standard (0.13 ppm) was revoked, effective June 15, 2005; however, the Basin has not attained this standard based on 2008-2010 data has some continuing obligations under the former standard.

<sup>5</sup> 1997 8-hour O<sub>3</sub> standard (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; the 1997 O3 standard and most related implementation rules remain in place until the 1997 standard is revoked by U.S. EPA.

<sup>6</sup> New NO<sub>2</sub> 1-hour standard, effective August 2, 2010; attainment designations June, 2013; annual NO<sub>2</sub> standard retained.

<sup>7</sup> The 1971 annual and 24-hour SO<sub>2</sub> standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO<sub>2</sub> 1-hour standard. Area designations expected in 2012, with SSAB designated Unclassifiable/Attainment.

<sup>8</sup> Annual PM10 standard was revoked, effective December 18, 2006; redesignation request to Attainment of the 24-hour PM10 standard is pending with U.S. EPA

<sup>9</sup> Partial Nonattainment designation - Los Angeles County portion of Basin only.

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHG), play a critical role in the Earth's radiation amount by trapping infrared radiation emitted from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), ozone, water vapor, nitrous oxide (N<sub>2</sub>O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses. Transportation is responsible for 41 percent of the State's greenhouse gas emissions, followed by electricity generation. Emissions of  $CO_2$  and nitrous oxide (NO<sub>2</sub>) are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO<sub>2</sub>, where CO<sub>2</sub> is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. Table 6 provides a description of each of the greenhouse gases and their global warming potential.

Additional information is available: <u>https://www.arb.ca.gov/cc/inventory/data/data.htm</u>

<Table 6 on next page>

Setting

Greenhouse Gas	Description and Physical Properties	Sources
Nitrous oxide	Nitrous oxide ( $N_2O$ ),also known as laughing gas is a colorless gas. It has a lifetime of 114 years. Its global warming potential is 298.	Microbial processes in soil and water, fuel combustion, and industrial processes. In addition to agricultural sources, some industrial processes (nylon production, nitric acid production) also emit N <sub>2</sub> 0.
Methane	Methane (CH <sub>4</sub> ) is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 25.	A natural source of CH <sub>4</sub> is from the decay of organic matter. Methane is extracted from geological deposits (natural gas fields). Other sources are from the decay of organic material in landfills, fermentation of manure, and cattle farming.
Carbon dioxide	Carbon dioxide (CO <sub>2</sub> ) is an odorless, colorless, natural greenhouse gas. Carbon dioxide's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
Chlorofluorocarbons	CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). They are gases formed synthetically by replacing all hydrogen atoms in methane or methane with chlorine and/or fluorine atoms. Global warming potentials range from 3,800 to 8,100.	Chlorofluorocarbons were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone, therefore their production was stopped as required by the Montreal Protocol.
Hydrofluorocarbons	Hydrofluorocarbons (HFCs) are a group of greenhouse gases containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 11,700.	Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.
Perfluorocarbons	Perfluorocarbons (PFCs) have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above the Earth's surface. They have a lifetime 10,000 to 50,000 years. They have a global warming potential range of 6,200 to 9,500.	Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	Sulfur hexafluoride (SF <sub>6</sub> ) is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 23,900.	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.
	vernmental Panel on Climate Change 2014a and Intergovernmental Panel c.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html	

## Table 6: Description of Greenhouse Gases

# 4.0 Modeling Parameters and Assumptions

# 4.1 Construction

Typical emission rates from construction activities were obtained from CalEEMod Version 2020.4.0 CalEEMod is a computer model published by the SCAQMD for estimating air pollutant emissions. The CalEEMod program uses the EMFAC2014 computer program to calculate the emission rates specific for the southwestern portion of Riverside County for construction-related employee vehicle trips and the OFFROAD2011 computer program to calculate emission rates for heavy truck operations. EMFAC2014 and OFFROAD2011 are computer programs generated by CARB that calculates composite emission rates for vehicles. Emission rates are reported by the program in grams per trip and grams per mile or grams per running hour. Using CalEEMod, the peak daily air pollutant emissions were calculated and presented below. These emissions represent the highest level of emissions for each of the construction phases in terms of air pollutant emissions.

The analysis assesses the emissions associated with the construction of the proposed project as indicated in Table 1. The project was modeled to be operational in 2023 and begin construction in the fourth quarter of 2022. The phases of the construction activities which have been analyzed below are: 1) site preparation, 2) grading, 3) building, 4) paving, and 5) architectural coating. For details on construction modeling and construction equipment for each phase, please see Appendix A.

The project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the Project area (disturbance area of approximately 26.56 acres) and the fact that the project won't export more than 5,000 cubic yards of material a day a Fugitive Dust Control Plan or Large Operation Notification would not be required.

SCAQMD's Rule 403 minimum requirements require that the application of the best available dust control measures are used for all grading operations and include the application of water or other soil stabilizers in sufficient quantity to prevent the generation of visible dust plumes. Compliance with Rule 403 would require the use of water trucks during all phases where earth moving operations would occur. Compliance with Rule 403 is required.

# 4.2 **Operations**

Operational or long-term emissions occur over the life of the Project. Both mobile and area sources generate operational emissions. Area source emissions arise from consumer product usage, heaters that consume natural gas, gasoline-powered landscape equipment, and architectural coatings

(painting). Mobile source emissions from motor vehicles are the largest single long-term source of air pollutants from the operation of the Project. Small amounts of emissions would also occur from area sources such as the consumption of natural gas for heating, hearths, from landscaping emissions, and consumer product usage. The operational emissions were estimated using the latest version of CalEEMod.

#### **Mobile Sources**

Mobile sources include emissions from the additional vehicle miles generated from the proposed project. The vehicle trips associated with the proposed project are based upon the trip generation rates give in the project-specific traffic impact analysis (TJW Engineering, 2022) which uses the ITE 11<sup>th</sup> Trip Generation Manual. The traffic analysis shows a trip generation rate of 2,997 trips per day.

The program then applies the emission factors for each trip which is provided by the EMFAC2017 model to determine the vehicular traffic pollutant emissions. The CalEEMod default trip lengths were used in this analysis. Please see CalEEMod output comments sections in Appendix A and B for details.

#### Area Sources

Area sources include emissions from consumer products, landscape equipment and architectural coatings. Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors, generators, and pumps. As specifics were not known about the landscaping equipment fleet, CalEEMod defaults were used to estimate emissions from landscaping equipment.

Per SCAQMD Rule 1113 as amended on June 3, 2011, the architectural coatings that would be applied after January 1, 2014 will be limited to an average of 50 grams per liter or less and the CalEEMod model default was utilized as the new model takes this rule into account.

#### **Energy Usage**

2020.4.0 CalEEMod defaults were utilized.

### 4.3 Localized Construction Analysis

The SCAQMD has published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" (South Coast Air Quality Management District 2011b). CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. In order to compare CalEEMod reported emissions against the localized significance threshold lookup tables, the CEQA document should contain in its project design features or its mitigation measures the following parameters:

- 1. The off-road equipment list (including type of equipment, horsepower, and hours of operation) assumed for the day of construction activity with maximum emissions.
- 2. The maximum number of acres disturbed on the peak day.
- 3. Any emission control devices added onto off-road equipment.
- 4. Specific dust suppression techniques used on the day of construction activity with maximum emissions.

The construction equipment showing the equipment associated with the maximum area of disturbance is shown in Table 7.

Activity	Equipment	Number	Acres/8hr-day	Total Acres
Site Dreporation	Rubber Tired Dozers	3	0.5	1.5
Site Preparation	Tractors/Loaders/Backhoes	4	0.5	2.0
Total Per Phase				1.5
<b>-</b>	Graders	1	0.5	0.5
	Rubber Tired Dozers	1	0.5	0.5
Grading	Scrapers	2	1	2.0
	Tractors/Loaders/Backhoes	2	0.5	1.0
Total Per Phase				4.0
Notes: <sup>1.</sup> Source: South Coast AQMD, F	act Sheet for Applying CalEEMod to Localized Signi	ificance Thresholds. http	o://www.aqmd.gov/docs/de	fault-

**Table 7: Construction Equipment Assumptions**<sup>1</sup>

source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2

As shown in Table 7, the maximum number of acres disturbed in a day would be 4.0 acres during grading.

The local air quality emissions from construction were analyzed using the SCAQMD's Mass Rate Localized Significant Threshold Look-up Tables and the methodology described in Localized Significance <u>Threshold Methodology</u>, prepared by SCAQMD, revised July 2008. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality. The emission thresholds were based on the Elsinore source receptor area (SRA 25) and a disturbance of 4 acres per day, interpolated from the 2- and 5-acre thresholds, at a distance of 25 meters (82 feet). The closest receptors are located 20 meters to the southeast of the site; therefore the 25-meter threshold was used.

# 4.4 Localized Operational Analysis

For operational emissions, the screening tables for a disturbance area of 4 acres per day and a distance of 25 meters were used to determine significance. The tables were compared to the project's onsite operational emissions.

# 5.0 Thresholds of Significance

# 5.1 Air Quality Thresholds of Significance

# 5.1.1 CEQA Guidelines for Air Quality

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on air quality, the type, level, and impact of emissions generated by the project must be evaluated.

The following air quality significance thresholds are contained in Appendix G of the CEQA Guidelines. A significant impact would occur if the project would:

- a) Conflict with or obstruct implementation of the applicable air quality plan;
- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable national or state ambient air quality standard;
- c) Expose sensitive receptors to substantial pollutant concentrations; or
- d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

While the final determination of whether a project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, SCAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. If the Lead Agency finds that the project has the potential to exceed these air pollution thresholds, the project should be considered to have significant air quality impacts. There are daily emission thresholds for construction and operation of a proposed project in the basin.

# 5.1.2 Regional Significance Thresholds for Construction Emissions

The following CEQA significance thresholds for construction emissions are established for the Basin:

- 75 pounds per day (lbs/day) of VOC
- 100 lbs/day of NO<sub>x</sub>
- 550 lbs/day of CO

- 150 lbs/day of PM<sub>10</sub>
- 55 lbs/day of PM<sub>2.5</sub>
- 150 lbs/day of SO<sub>2</sub>

Projects in the basin with construction-related emissions that exceed any of the emission thresholds are considered to be significant under SCAQMD guidelines.

# 5.1.3 Regional Significance Thresholds for Operational Emissions

The daily operational emissions significance thresholds for the basin are as follows:

- 55 pounds per day (lbs/day) of VOC
- 55 lbs/day of NO<sub>x</sub>
- 550 lbs/day of CO

- 150 lbs/day of PM<sub>10</sub>
- 55 lbs/day of PM<sub>2.5</sub>
- 150 lbs/day of SO<sub>2</sub>

**Local Microscale Concentration Standards** The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20.0 ppm
- California State 8-hour CO standard of 9.0 ppm

## 5.1.4 Thresholds for Localized Significance

Project-related construction air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin. In order to assess local air quality impacts the SCAQMD has developed Localized Significant Thresholds (LSTs) to assess the project-related air emissions in the project vicinity. The SCAQMD has also provided Final Localized Significant Threshold Methodology (LST Methodology), June 2003, which details the methodology to analyze local air emission impacts. The Localized Significant Threshold Methodology found that the primary emissions of concern are NO2, CO, PM10, and PM2.5.

The emission thresholds were calculated based on the Elsinore source receptor area (SRA 25) and a disturbance of 4 acres per day at a distance of 25 meters (82 feet), for construction and 4 acres a day for screening of localized operational emissions.

# 5.2 Greenhouse Gas Thresholds of Significance

# 5.2.1 CEQA Guidelines for Greenhouse Gas

CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on greenhouse gases, the type, level, and impact of emissions generated by the project must be evaluated.

The following greenhouse gas significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the project would:

- (a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- (b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

However, despite this, currently neither the CEQA statutes, OPR guidelines, nor the draft proposed changes to the CEQA Guidelines prescribe thresholds of significance or a particular methodology for performing an impact analysis; as with most environmental topics, significance criteria are left to the judgment and discretion of the Lead Agency. As previously discussed (Section 2.2.4 of this report), SCAQMD has drafted interim thresholds. The screening threshold of 10,000 MTCO2e per year for industrial land uses was used in this analysis.

# 6.0 Air Quality Emissions Impact

# 6.1 Construction Air Quality Emissions Impact

The latest version of CalEEMod was used to estimate the onsite and offsite construction emissions. The emissions incorporate Rule 402 and 403. Rule 402 and 403 (fugitive dust) are not considered mitigation measures as the project by default is required to incorporate these rules during construction.

# 6.1.1 Regional Construction Emissions

The construction emissions for the project would not exceed the SCAQMD's daily emission thresholds at the regional level as demonstrated in Table 8, and therefore would be considered less than significant.

		Pollutant Emissions (pounds/day)					
Activity	VOC	NOx	СО	SO <sub>2</sub>	PM10	PM2.5	
Site Preparation							
On-Site <sup>2</sup>	3.17	33.08	19.70	0.04	9.28	5.42	
Off-Site <sup>3</sup>	0.07	0.05	0.72	0.00	0.20	0.05	
Total	3.24	33.13	20.42	0.04	9.48	5.48	
Grading							
On-Site <sup>2</sup>	3.62	38.84	29.04	0.06	5.33	2.95	
Off-Site <sup>3</sup>	0.96	37.47	8.75	0.16	5.50	1.79	
Total	4.58	76.32	37.79	0.22	10.83	4.73	
Building Construction							
On-Site <sup>2</sup>	1.57	14.38	16.24	0.03	0.70	0.66	
Off-Site <sup>3</sup>	1.99	7.72	20.39	0.08	6.73	1.87	
Total	3.56	22.11	36.63	0.11	7.43	2.52	
Paving							
On-Site <sup>2</sup>	2.02	9.52	14.63	0.02	0.47	0.43	
Off-Site <sup>3</sup>	0.05	0.03	0.52	0.00	0.17	0.05	
Total	2.07	9.56	15.14	0.02	0.64	0.48	
Architectural Coating							
On-Site <sup>2</sup>	46.09	1.22	1.81	0.00	0.06	0.06	
Off-Site <sup>3</sup>	0.33	0.20	3.33	0.01	1.09	0.29	
Total	46.42	1.42	5.14	0.01	1.15	0.35	
Total of overlapping phases <sup>4</sup>	52.05	33.08	56.91	0.14	9.22	3.35	
SCAQMD Thresholds	75	100	550	150	150	55	
Exceeds Thresholds	No	No	No	No	No	No	

#### Table 8: Regional Significance - Construction Emissions (pounds/day)

Notes:

<sup>1</sup> Source: CalEEMod Version 2020.4.0

<sup>2</sup> On-site emissions from equipment operated on-site that is not operated on public roads.

<sup>3</sup> Off-site emissions from equipment operated on public roads.

<sup>4</sup> Construction, architectural coatings and paving phases may overlap.

# 6.1.2 Localized Construction Emissions

The data provided in Table 9 shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds at the nearest sensitive receptors. Therefore, a less than significant local air quality impact would occur from construction of the proposed project.

	On-Si	On-Site Pollutant Emissions (pounds/day) <sup>1</sup>			
Phase	NOx	СО	PM10	PM2.5	
Site Preparation	33.08	19.70	9.28	5.42	
Grading	38.84	29.04	5.33	2.95	
Building Construction	14.38	16.24	0.70	0.66	
Paving	9.52	14.63	0.47	0.43	
Architectural Coating	1.22	1.81	0.06	0.06	
Total of overlapping phases	25.13	32.68	1.23	1.15	
SCAQMD Threshold for 25 meters (82 feet) or less <sup>2</sup>	325.33	1,676.67	11.00	6.67	
Exceeds Threshold?	No	No	No	No	
<b>N</b> .					

#### Table 9: Localized Significance – Construction

Notes:

<sup>1</sup> Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for four acres in Lake Elsinore Source Receptor Area (SRA 25). Project will disturb a maximum of 4.0 acres per day (see Table 7).

<sup>2</sup> The nearest sensitive receptor is located 20 meters southeast; therefore, the 25-meter threshold has been used.

# 6.1.3 Odors

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement. The objectionable odors that may be produced during the construction process are of short-term in nature and the odor emissions are expected cease upon the drying or hardening of the odor producing materials. Diesel exhaust and VOCs would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore should not reach an objectionable level at the nearest sensitive receptors. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the proposed project.

The SCAQMD recommends that odor impacts be addressed in a qualitative manner. Such an analysis shall determine whether the project would result in excessive nuisance odors, as defined under the California Code of Regulations and Section 41700 of the California Health and Safety Code, and thus would constitute a public nuisance related to air quality.

Potential sources that may emit odors during the on-going operations of the proposed project would include odor emissions from the trash storage areas. Due to the distance of the nearest receptors from the project site and through compliance with SCAQMD's Rule 402 no significant impact related to odors would occur during the on-going operations of the proposed project.

# 6.1.4 Construction-Related Toxic Air Contaminant Impact

The greatest potential for toxic air contaminant emissions would be related to diesel particulate emissions associated with heavy equipment operations during construction of the proposed project. The Office of Environmental Health Hazard Assessment (OEHHA) has issued the Air Toxic Hot Spots Program Risk Assessment Guidelines and Guidance Manual for the Preparation of Health Risk Assessments, February 2015 to provide a description of the algorithms, recommended exposure variates, cancer and noncancer health values, and the air modeling protocols needed to perform a health risk assessment (HRA) under the Air Toxics Hot Spots Information and Assessment Act of 1987. Hazard identification includes identifying all substances that are evaluated for cancer risk and/or non-cancer acute, 8-hour, and chronic health impacts. In addition, identifying any multi-pathway substances that present a cancer risk or chronic non-cancer hazard via non-inhalation routes of exposure.

Given the relatively limited number of heavy-duty construction equipment and construction schedule, the proposed project would not result in a long-term substantial source of toxic air containment emissions and corresponding individual cancer risk. Furthermore, construction-based particulate matter (PM) emissions (including diesel exhaust emissions) do not exceed any local or regional thresholds. Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the proposed project.

# 6.2 Operational Air Quality Emissions Impact

# 6.2.1 Regional Operational Emissions

The operations-related criteria air quality impacts created by the proposed project have been analyzed through the use of CalEEMod model. The operating emissions were based on year 2023. The summer and winter emissions created by the proposed project's long-term operations were calculated and the highest emissions from either summer or winter are summarized in Table 10.

		Pollutant Emissions (pounds/day) <sup>1</sup>					
Activity	VOC	NOx	СО	SO2	PM10	PM2.5	
Area Sources <sup>2</sup>	6.59	0.00	0.12	0.00	0.00	0.00	
Energy Usage <sup>3</sup>	0.26	2.39	2.01	0.01	0.18	0.18	
Mobile Sources <sup>4</sup>	9.51	12.39	91.54	0.21	20.56	5.59	
Total Emissions	16.37	14.79	93.67	0.22	20.74	5.77	
SCAQMD Thresholds	55	55	550	150	150	55	
Exceeds Threshold?	No	No	No	No	No	No	
Notes:						•	

#### Table 10: Regional Significance - Unmitigated Operational Emissions (lbs/day)

<sup>1</sup> Source: CalEEMod Version 2020.4.0

<sup>2</sup> Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.

<sup>3</sup> Energy usage consists of emissions from on-site natural gas usage.

<sup>4</sup> Mobile sources consist of emissions from vehicles and road dust.

Table 10 provides the project's unmitigated operational emissions. Table 10 shows that the project does not exceed the SCAQMD daily emission threshold and regional operational emissions are considered to be less than significant.

# 6.2.2 Localized Operational Emissions

Table 11 shows the calculated emissions for the proposed operational activities compared with appropriate LSTs. The LST analysis only includes on-site sources; however, the CalEEMod software outputs do not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table 11 include all on-site project-related stationary sources and 10% of the project-related new mobile sources. This percentage is an estimate of the amount of project-related new vehicle traffic that will occur on-site.

Table 11: Localized Significance – Unmitigated Operational Emissions

	On-S	On-Site Pollutant Emissions (pounds/day) <sup>1</sup>				
On-Site Emission Source	NOx	СО	PM10	PM2.5		
Area Sources <sup>2</sup>	0.00	0.12	0.00	0.00		
Energy Usage <sup>3</sup>	2.39	2.01	0.18	0.18		
On-Site Vehicle Emissions <sup>4</sup>	1.24	9.15	2.06	0.56		
Total Emissions	3.63	11.28	2.24	0.74		
SCAQMD Threshold for 50 meters (164 feet) <sup>5</sup>	325.33	1,676.67	3.33	1.67		
Exceeds Threshold?	No	No	No	No		
Notes:						

<sup>1</sup> Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for four acres, to be conservative, in Lake Elsinore Source Receptor Area (SRA 25).

<sup>2</sup> Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.

<sup>3</sup> Energy usage consists of emissions from generation of electricity and on-site natural gas usage.

<sup>4</sup> On-site vehicular emissions based on 1/10 of the gross vehicular emissions and road dust.

<sup>5</sup> The nearest sensitive receptor is located 20 meters southeast; therefore, the 25-meter threshold has been used.

Table 11 indicates that the local operational emission would not exceed the LST thresholds at the nearest sensitive receptors, located adjacent to the project. Therefore, the project will not result in significant Localized Operational emissions.

# 6.3 CO Hot Spot Emissions

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the State and Federal CO standards which were presented in above in Section 5.0.

To determine if the proposed project could cause emission levels in excess of the CO standards discussed above in Section 5.0, a sensitivity analysis is typically conducted to determine the potential for CO "hot spots" at a number of intersections in the general project vicinity. Because of reduced speeds and vehicle queuing, "hot spots" potentially can occur at high traffic volume intersections with a Level of Service E or worse.

Micro-scale air quality emissions have traditionally been analyzed in environmental documents where the air basin was a non-attainment area for CO. However, the SCAQMD has demonstrated in the CO attainment redesignation request to EPA that there are no "hot spots" anywhere in the air basin, even at intersections with much higher volumes, much worse congestion, and much higher background CO levels than anywhere in Riverside County. If the worst-case intersections in the air basin have no "hot spot" potential, any local impacts will be below thresholds.

The traffic impact analysis showed that the project would generate 2,997 trips per day. The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. The volume of traffic at project buildout would be well below 100,000 vehicles and below the necessary volume to even get close to causing a violation of the CO standard. Therefore no CO "hot spot" modeling was performed and no significant long-term air quality impact is anticipated to local air quality with the on-going use of the proposed project.

# 6.4 Cumulative Regional Air Quality Impacts

Cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well out of the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered, would cover an even larger area. Accordingly, the cumulative analysis for the project's air quality must be generic by nature.

The project area is out of attainment for both ozone and PM10 particulate matter. Construction and operation of cumulative projects will further degrade the local air quality, as well as the air quality of the South Coast Air Basin. The greatest cumulative impact on the quality of regional air cell will be the incremental addition of pollutants mainly from increased traffic from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. Air quality will be temporarily degraded during construction activities that occur separately or simultaneously. However, in accordance with the SCAQMD methodology, projects that do not exceed the SCAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. The project does not exceed any of the thresholds of significance and therefore is considered less than significant.

# 6.5 Air Quality Compliance

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD Air Quality Management Plan (AQMP). Therefore, this section discusses any potential inconsistencies of the proposed project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the proposed project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-makers determine that

the proposed project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

- (1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- (2) Whether the project will exceed the assumptions in the AQMP in 2016 or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

#### A. Criterion 1 - Increase in the Frequency or Severity of Violations

Based on the air quality modeling analysis contained in this Air Analysis, short-term construction impacts will not result in significant impacts based on the SCAQMD regional and local thresholds of significance. This Air Analysis also found that, long-term operations impacts will not result in significant impacts based on the SCAQMD local and regional thresholds of significance.

Therefore, the proposed project is not projected to contribute to the exceedance of any air pollutant concentration standards and is found to be consistent with the AQMP for the first criterion.

#### B. Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The 2016-2040 Regional Transportation/Sustainable Communities Strategy, prepared by SCAG, 2016, includes chapters on: the challenges in a changing region, creating a plan for our future, and the road to greater mobility and sustainable growth. These chapters currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA. For this project, the County of Riverside and City of Wildomar Land Use Plans define the assumptions that are represented in the AQMP.

The City of Wildomar Zoning Map identifies the land use designation of the site as Industrial Park. Furthermore, the project site has a current land use classification of Business Park according to the City of Wildomar General Plan Land Use Map. The proposed project is to develop the site with five industrial buildings with additional retail and office space. Therefore, the proposed project would not result in an inconsistency with the land use designation in the City's General Plan. Therefore, the proposed project is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the proposed project will not result in an inconsistency with the SCAQMD AQMP. Therefore, a less than significant impact will occur.

# 7.0 Greenhouse Gas Impact Analysis

## 7.1 Construction Greenhouse Gas Emissions Impact

The greenhouse gas emissions from project construction equipment and worker vehicles are shown in Table 12. The emissions are from all phases of construction. The total construction emissions amortized over a period of 30 years are estimated at 90.69 metric tons of CO<sub>2</sub>e per year. Annual CalEEMod output calculations are provided in Appendix B.

A otivity (	Emissions (MTCO <sub>2</sub> e) <sup>1</sup>					
Activity	Onsite	Offsite	Total			
Site Preparation	33.71	1.58	35.29			
Grading	123.70	360.92	484.61			
Building Construction	513.04	1631.64	2,144.68			
Paving	35.33	2.19	37.52			
Coating	4.47	14.04	18.52			
Total	710.25	2010.37	2,720.61			
Averaged over 30 years <sup>2</sup>	23.67	67.01	90.69			
Notes:						

#### Table 12: Construction Greenhouse Gas Emissions

<sup>1.</sup> MTCO<sub>2</sub>e=metric tons of carbon dioxide equivalents (includes carbon dioxide, methane and nitrous oxide). <sup>2.</sup> The emissions are averaged over 30 years because the average is added to the operational emissions, pursuant to SCAQMD.

\* CalEEMod <u>output (Appendix B)</u>

# 7.2 Operational Greenhouse Gas Emissions Impact

Operational emissions occur over the life of the project. The operational emissions for the project are 4,903.35 metric tons of CO<sub>2</sub>e per year as shown in Table 13. These emissions do not exceed the SCAQMD screening threshold of 10,000 metric tons of CO<sub>2</sub>e per year for industrial uses. Therefore, the project's GHG emissions are considered to be less than significant.

<Table 13 next page>

	Greenhouse Gas Emissions (Metric Tons/Year) <sup>1</sup>					
Category	Bio-CO2	NonBio-CO <sub>2</sub>	CO <sub>2</sub>	CH4	N <sub>2</sub> O	CO <sub>2</sub> e
Area Sources <sup>2</sup>	0.00	0.03	0.03	0.00	0.00	0.03
Energy Usage <sup>3</sup>	0.00	1,010.70	1,010.70	0.05	0.01	1,016.29
Mobile Sources <sup>4</sup>	0.00	3,315.34	3,315.34	0.17	0.17	3,369.26
Solid Waste <sup>5</sup>	73.11	0.00	73.11	4.32	0.00	181.12
Water <sup>6</sup>	20.92	155.43	176.35	2.16	0.05	245.97
Construction <sup>7</sup>	0.00	88.71	88.71	0.01	0.01	90.69
Total Emissions	94.02	4,570.22	4,664.24	6.72	0.24	4,903.35
SCAQMD Draft Scree	ning Threshold					10,000
Exceeds Threshold?						No

#### Table 13: Opening Year Unmitigated Project-Related Greenhouse Gas Emissions

Notes:

<sup>1</sup> Source: CalEEMod Version 2020.4.0

<sup>2</sup> Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment.

<sup>3</sup> Energy usage consist of GHG emissions from electricity and natural gas usage.

<sup>4</sup> Mobile sources consist of GHG emissions from vehicles.

 $^{\rm 5}$  Solid waste includes the CO  $_{\rm 2}$  and CH  $_{\rm 4}$  emissions created from the solid waste placed in landfills.

<sup>6</sup> Water includes GHG emissions from electricity used for transport of water and processing of wastewater.

<sup>7</sup> Construction GHG emissions based on a 30-year amortization rate.

## 7.3 Greenhouse Gas Plan Consistency

The proposed project would have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. The City of Wildomar is participating the Western Riverside Council of Governments (WRCOG) Subregional Climate Action Plan. The WRCOG Subregional CAP establishes a community-wide emissions reduction target of 15% below 2010, following guidance from CARB and the Governor's Office of Planning and Research. CARB and the California Attorney General have determined this approach to be consistent with the state-wide AB 32 goal of reducing emissions to 1990 levels.

As discussed above, the project's emissions are 4,903.35 MTCO2e per year and do not exceed the SCAQMD draft threshold and is in compliance with the reduction goals of AB-32 and SB-32. Therefore, as the WRCOG Subregional CAP's emissions reduction target is consistent with the reduction goals of AB 32, the proposed project would also be anticipated to be consistent with the WRCOG Subregional CAP. Furthermore, as shown in Table 14, the project is consistent with applicable local reduction measures identified in the WRCOG Subregional CAP and would result in a less than significant impact.

#### CARB Scoping Plan Consistency

The ARB Board approved a Climate Change Scoping Plan in December 2008. The Scoping Plan outlines the State's strategy to achieve the 2020 greenhouse gas emissions limit. The Scoping Plan "proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (California Air Resources Board 2008). The measures in the Scoping Plan have been in place since 2012.

This Scoping Plan calls for an "ambitious but achievable" reduction in California's greenhouse gas emissions, cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from today's levels. On a per-capita basis, that means reducing annual emissions of 14 tons of carbon dioxide for every man, woman and child in California down to about 10 tons per person by 2020.

In May 2014, CARB released its *First Update to the Climate Change Scoping Plan* (CARB 2014). This *Update* identifies the next steps for California's leadership on climate change. While California continues on its path to meet the near-term 2020 greenhouse gas limit, it must also set a clear path toward long-term, deep GHG emission reductions. This report highlights California's success to date in reducing its GHG emissions and lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.

In November 2017, CARB release the 2017 Scoping Plan. This Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts and identifies new policies and actions to accomplish the State's climate goals, and includes a description of a suite of specific actions to meet the State's 2030 GHG limit. In addition, Chapter 4 provides a broader description of the many actions and proposals being explored across the sectors, including the natural resources sector, to achieve the State's mid and long-term climate goals.

Guided by legislative direction, the actions identified in the 2017 Scoping Plan reduce overall GHG emissions in California and deliver policy signals that will continue to drive investment and certainty in a low carbon economy. The 2017 Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and Trade Program, which constrains and reduces emissions at covered sources.

As the latest, 2017 Scoping Plan builds upon previous versions, project consistency with applicable strategies of both the 2008 and 2017 Plan are assessed in Table 15. As shown in Table 15, the project is consistent with the applicable strategies and would result in a less than significant impact.

Therefore, the project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. Furthermore, the project will also comply with applicable Green Building Standards and County of Riverside's policies regarding sustainability (as dictated by the County's General Plan). With incorporation of regulatory compliance and credit for reductions due to CAPCOA location-based efficiency measures, impacts are considered to be less than significant, further analysis is not warranted.

### Table 14: Applicable WRCOG Subregional CAP Local Reduction Measure Project Comparison<sup>1</sup>

E-1: Energy Action Plan E-1: Energy Action Plan E-3: Shade Trees T-2: Bicycle Parking T-8: Density T-8: Density T-10: Design/Site Planning T-14: Voluntary Transportation Demand Management SW-1: Yard Waste	rove municipal and community wide rgy efficiency and reduce energy sumption through the adoption of	Not directly applicable to the project; however, the
E-3: Shade Trees urban T-2: Bicycle Parking Provi parki Improvi T-8: Density vehic hous T-10: Design/Site Desig Planning VMT. T-14: Voluntary Transportation Demand Management Redu throu of tra drivin SW-1: Yard Waste Provi	l Energy Action Plans (EAP).	project will be compliant with the current Title 24 standards.
T-2: Bicycle ParkingparkiImproImproT-8: DensityvehichoushousT-10: Design/SiteDesigPlanningVMTT-14: VoluntaryReduTransportation DemandManagementManagementGrivinSW-1: Yard WasteProvi	tegically plant trees to reduce the an heat island effect.	The proposed project is to include trees per City requirements for new developments.
T-8: Densityvehic housT-10: Design/SiteDesig PlanningT-10: Voluntary Transportation Demand ManagementRedu throu of tra drivingSW-1: Yard WasteProvi	vide additional options for bicycle king.	The proposed project will follow City requirements for bicycle parking.
PlanningVMT.T-14: Voluntary Transportation Demand ManagementRedu throu of tra drivinSW-1: Yard WasteProvi	rove jobs-housing balance and reduce icle miles traveled by increasing sehold and employment densities.	The proposed project is industrial and located within 0.25 miles of a residential community.
1-14: Voluntary Transportation Demand Management SW-1: Yard Waste Provi	ign neighborhoods and sites to reduce T.	The proposed project is industrial and located within 0.25 miles of a residential community.
	uce demand for roadway travel ough incentives for alternative modes ransportation and disincentives for ing	The proposed project is industrial and located within 0.25 miles of a residential community.
	vide green waste collection bins munity-wide.	The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.
SW-7. Food Scrap and	ert food and paper waste from Ifills by implementing collection	The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.

## Table 15: Project Consistency with CARB Scoping Plan Policies and Measures<sup>1</sup>

2008 Scoping Plan Measures to Reduce Greenhouse Gas	
Emissions California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	Project Compliance with Measure Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. The project will be compliant with the current Title 24 standards.
Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Medium/Heavy-Duty Vehicles – Adopt medium and heavy- duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.
High Global Warming Potential Gases – Adopt measures to reduce high global warming potential gases.	Consistent. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the project that are required to comply with the measures will comply with the strategy.
Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	Consistent. The state is currently developing a regulation to reduce methane emissions from municipal solid waste landfills. The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.
Water – Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.

2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions	Project Compliance with Recommended Action
Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low- NOX standard.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement Mobile Source Strategy: Last Mile Delivery: New regulation that would result in the use of low NOX or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement SB 350 by 2030: Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.	Consistent. The project will be compliant with the current Title 24 standards.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	Consistent. The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.
Notes: 1 Source: CARB Scoping Plan (2008 and 2017)	

# 8.0 Health Risk Assessment

The greatest potential for toxic air contaminant emissions during the operation of the project would be related to diesel particulate emissions associated with truck idling at the loading docks throughout the project. The Office of Environmental Health Hazard Assessment (OEHHA) has issued the Air Toxic Hot Spots Program Risk Assessment Guidelines and Guidance Manual for the Preparation of Health Risk Assessments, February 2015 to provide a description of the algorithms, recommended exposure variates, cancer and noncancer health values, and the air modeling protocols needed to perform a health risk assessment (HRA) under the Air Toxics Hot Spots Information and Assessment Act of 1987. Hazard identification includes identifying all substances that are evaluated for cancer risk and/or non-cancer acute, 8-hour, and chronic health impacts. In addition, identifying any multi-pathway substances that present a cancer risk or chronic non-cancer hazard via non-inhalation routes of exposure.

All loading docks are facing away from residential uses and the closest loading dock to a sensitive receptor is 370 feet away; however, the 50 total loading docks onsite will be spread throughout the 26.56-acre site. Additionally, the CARB Airborne Toxic Control Measure idling limit of five minutes shall be enforced to ensure that no excessive idling occurs onsite. With these measures, the proposed project would not result in a substantial source of toxic air containment emissions and corresponding individual cancer risk. Therefore, no significant long-term toxic air contaminant impacts would occur during operation of the proposed project.

# 9.0 Energy Analysis

Information from the CalEEMod 2020.4.0 Daily and Annual Outputs contained in the air quality and greenhouse gas analyses above was utilized for this analysis. The CalEEMod outputs detail project related construction equipment, transportation energy demands, and facility energy demands.

# 9.1 Construction Energy Demand

# 9.1.1 Construction Equipment Electricity Usage Estimates

Electrical service will be provided by Southern California Edison (SCE). Based on the 2017 National Construction Estimator, Richard Pray (2017)<sup>2</sup>, the typical power cost per 1,000 square feet of building construction per month is estimated to be \$2.32. The project plans to develop the site with 132,800 square feet of new warehouse space over the course of approximately 48 months.<sup>3</sup> Based on Table 16, the total power cost of the on-site electricity usage during the construction of the proposed project is estimated to be approximately \$33,759.06. As shown in Table 16, the total electricity usage from Project construction related activities is estimated to be approximately 613,801 kWh.<sup>4</sup>

Power Cost (per 1,000 square	Total Building	Construction	Total Project
foot of building per month of	Size (1,000	Duration	Construction
construction)	Square Foot) <sup>1</sup>	(months)	Power Cost
\$2.32	285.32	51	\$33,759.06

## Table 16: Project Construction Power Cost and Electricity Usage

Cost per kWh	Total Project Construction Electricity Usage (kWh)
\$0.06	613,801

\* Assumes the project will be under the GS-1 General Service rate under SCE.

<sup>&</sup>lt;sup>2</sup> Pray, Richard. 2017 National Construction Estimator. Carlsbad: Craftsman Book Company, 2017.

<sup>&</sup>lt;sup>3</sup> As stated in the project description, the project involves the demolition of approximately 70,000 square feet of existing residences. <sup>4</sup> LADWP's Small Commercial & Multi-Family Service (A-1) is approximately \$0.06 per kWh of electricity Southern California Edison (SCE). Rates & Pricing Choices: General Service/Industrial Rates. https://library.sce.com/content/dam/sce-

doclib/public/regulatory/historical/electric/2020/schedules/general-service-&-industrial-rates/ELECTRIC\_SCHEDULES\_GS-1\_2020.pdf

#### 9.1.2 **Construction Equipment Fuel Estimates**

Using the CalEEMod data input, the project's construction phase would consume electricity and fossil fuels as a single energy demand, that is, once construction is completed their use would cease. CARB's 2017 Emissions Factors Tables show that on average aggregate fuel consumption (gasoline and diesel fuel) would be approximately 18.5 hp-hr-gal.<sup>5</sup> As presented in Table 17 below, project construction activities would consume an estimated 77,250 gallons of diesel fuel.

Phase	Number of Days	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	HP hrs/ day	Total Fuel Consumption (gal diesel fuel) <sup>1</sup>
Site	20	Rubber Tired Dozers	3	8	247	0.40	2371	2563
Preparation 20	Tractors/Loaders/Backhoes	4	8	97	0.37	1148	1242	
	45	Excavators	2	8	158	0.38	961	2,337
	45	Graders	1	8	187	0.41	613	1,492
Grading 45 45	Rubber Tired Dozers	1	8	247	0.40	790	1,923	
	Scrapers	2	8	367	0.48	2,81 9	6,856	
	45	Tractors/Loaders/Backhoes	2	8	97	0.37	574	1,397
5.11	440	Cranes	1	7	231	0.29	469	11,153
Building Construction	440	Forklifts	3	8	89	0.20	427	10,160
construction	440	Generator Sets	1	8	84	0.74	497	11,827
	440	Tractors/Loaders/Backhoes	3	7	97	0.37	754	17,926
	440	Welders	1	8	46	0.45	166	3,939
Paving	35	Pavers	2	8	130	0.42	874	1,653
35	35	Paving Equipment	2	8	132	0.36	760	1,438
Architectural Coating	35	Rollers	2	8	80	0.38	486	920
CONSTRUCTION	I FUEL DEM	AND (gallons of diesel fuel)						77,250

# **Table 17: Construction Equipment Fuel Consumption Estimates**

Notes:

<sup>1</sup>Using Carl Moyer Guidelines Table D-21 Fuel consumption rate factors (bhp-hr/gal) for engines less than 750 hp. (Source: https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017\_gl\_appendix\_d.pdf)

<sup>&</sup>lt;sup>5</sup> Aggregate fuel consumption rate for all equipment was estimated at 18.5 hp-hr/day (from CARB's 2017 Emissions Factors Tables and fuel consumption rate factors as shown in Table D-21 of the Moyer Guidelines:

# 9.1.3 Construction Worker Fuel Estimates

It is assumed that all construction worker trips are from light duty autos (LDA) along area roadways. With respect to estimated VMT, the construction worker trips would generate an estimated 3,238,116 VMT. Vehicle fuel efficiencies for construction workers were estimated in the air quality and greenhouse gas analysis using information generated using CARB's EMFAC model (see Appendix C for details). Table 18 shows that an estimated 104,624 gallons of fuel would be consumed for construction worker trips.

Phase	Number of Days	Worker Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)						
Site Preparation	20	18	14.7	5292	30.95	171						
Grading	45	20	14.7	13,230	30.95	427						
<b>Building Construction</b>	440	486	14.7	3,143,448	30.95	101,565						
Paving	35	51	14.7	26,240	30.95	848						
Architectural Coating	35	97	14.7	49,907	30.95	1,612						
<b>Total Construction Wor</b>	rker Fuel Consu	nption			Total Construction Worker Fuel Consumption							

## Table 18: Construction Worker Fuel Consumption Estimates

Notes:

<sup>1</sup>Assumptions for the worker trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.

# 9.1.4 Construction Vendor/Hauling Fuel Estimates

Tables 19 and 20 show the estimated fuel consumption for vendor and hauling during building construction and architectural coating. With respect to estimated VMT, the vendor and hauling trips would generate an estimated 826,840 VMT. For the architectural coatings it is assumed that the contractors would be responsible for bringing coatings and equipment with them in their light duty vehicles.<sup>6</sup> Tables 19 and 20 show that an estimated 99,656 gallons of fuel would be consumed for vendor and hauling trips.

<Tables 19 and 20, next page>

<sup>&</sup>lt;sup>6</sup> Vendors delivering construction material or hauling debris from the site during grading would use medium to heavy duty vehicles with an average fuel consumption of 9.22 mpg for medium heavy-duty trucks and 6.74 mpg for heavy heavy-duty trucks (see Appendix C for details).

Table 19: Construction Vendor Fuel Con	nsumption Estimates (MHD Trucks) <sup>1</sup>
--	---

Phase	Number of Days	Vendor Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)	
Site Preparation	20	0	6.9	0	9.22	0	
Grading	45	0	6.9	0	9.22	0	
<b>Building Construction</b>	440	190	6.9	576,840	9.22	62,564	
Paving	35	0	6.9	0	9.22	0	
Architectural Coating	35	0	6.9	0	9.22	0	
Total Vendor Fuel Cons	Total Vendor Fuel Consumption						

Notes:

<sup>1</sup>Assumptions for the vendor trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.

## Table 20: Construction Hauling Fuel Consumption Estimates (HHD Trucks)<sup>1</sup>

Phase	Number of Days	Hauling Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Site Preparation	20	0	20	0	6.74	0
Grading	45	277.8	20	250,000	6.74	37,092
<b>Building Construction</b>	440	0	20	0	6.74	0
Paving	35	0	20	0	6.74	0
Architectural Coating	35	0	20	0	6.74	0
Total Construction Hau	ling Fuel Consur	nption				37,092

Notes:

<sup>1</sup>Assumptions for the hauling trip length and vehicle miles traveled are consistent with CalEEMod 2020.40 defaults.

# 9.1.5 Construction Energy Efficiency/Conservation Measures

Construction equipment used over the approximately 21-month construction phase would conform to CARB regulations and California emissions standards and is evidence of related fuel efficiencies. In addition, the CARB Airborne Toxic Control Measure limits idling times of construction vehicles to no more than five minutes, thereby minimizing unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Furthermore, the project has been designed in compliance with California's Energy Efficiency Standards and 2019 CALGreen Standards.

Construction of the proposed warehouse development would require the typical use of energy resources. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

# 9.2 Operational Energy Demand

Energy consumption in support of or related to project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

# 9.2.1 Transportation Fuel Consumption

The largest source of operational energy use would be vehicle operation of customers. The site is located in an urbanized area just in close proximity to transit stops. Using the CalEEMod output, it is assumed that an average trip for autos were assumed to be 16.6 miles, light trucks were assumed to travel an average of 6.9 miles, and 3- 4-axle trucks were assumed to travel an average of 8.4 miles<sup>7</sup>. To show a worst-case analysis, as the proposed project is an office project, it was assumed that vehicles would operate 365 days per year. Table 21 shows the worst-case estimated annual fuel consumption for all classes of vehicles from autos to heavy-heavy trucks.<sup>8</sup> Table 21 shows that an estimated 495,840 gallons of fuel would be consumed per year for the operation of the proposed project.

Vehicle Type	Vehicle Mix	Number of Vehicles	Average Trip (miles) <sup>1</sup>	Daily VMT	Average Fuel Economy (mpg)	Total Gallons per Day	Total Annual Fuel Consumption (gallons)
Light Auto	Automobile	1,655	16.6	27,476	31.82	863.48	315,170
Light Truck	Automobile	173	6.9	1,196	27.16	44.04	16,076
Light Truck	Automobile	534	6.9	3,686	25.6	144.00	52,560
Medium Truck	Automobile	436	6.9	3,011	20.81	144.69	52,811
Light Heavy Truck	2-Axle Truck	82	8.4	691	13.81	50.06	18,274
Light Heavy Truck 10,000 lbs +	2-Axle Truck	23	8.4	190	14.18	13.40	4,891
Medium Heavy Truck	3-Axle Truck	35	8.4	294	9.58	30.74	11,218
Heavy Heavy Truck	4-Axle Truck	58	8.4	486	7.14	68.06	24,841
Total		2,997		37,031		1358.47	
<b>Total Annual Fuel Consumption</b>							495,840

## **Table 21: Estimated Vehicle Operations Fuel Consumption**

Notes:

<sup>1</sup>The trip generation assessment, the project is to generate 832 total net new trips after reduction of existing uses. Default CalEEMod vehicle fleet mix utilized. <sup>1</sup>Based on the size of the site and relative location, trips were assumed to be local rather than regional.

Trip generation generated by the proposed project are consistent with other similar industrial uses of similar scale and configuration as reflected in the Trip Generation Assessment (TJW Engineering, 2022). That is, the proposed project does not propose uses or operations that would inherently result in

<sup>&</sup>lt;sup>7</sup> CalEEMod default distance for H-W (home-work) or C-W (commercial-work) is 16.6 miles; 6.9 miles for H-S (home-shop) or C-C (commercial-customer); and 8.4 miles for H-O (home-other) or C-O (commercial-other).

<sup>&</sup>lt;sup>8</sup> Average fuel economy based on aggregate mileage calculated in EMFAC 2017 for opening year (2023). See Appendix C for EMFAC output.

excessive and wasteful vehicle trips, nor associated excess and wasteful vehicle energy consumption. Therefore, project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

# 9.2.2 Facility Energy Demands (Electricity and Natural Gas)

The annual natural gas and electricity demands were provided per the CalEEMod output and are provided in Table 22.

Natural Gas Demand	kBTU/year
General Heavy Industry	8,023,340
General Light Industry	824,092
General Office Building	36,015
Strip Mall	23,100
Total	8,906,547
Electricity Demand	kWh/year
General Heavy Industry	2,461,850
General Light Industry	252,861
General Office Building	96,495
Strip Mall	127,470
Parking Lot	80,360
Total	3,019,036

Table 22: Project Unmitigated Annual Operational Energy Demand Summary <sup>1</sup>

Notes:

<sup>1</sup>Taken from the CalEEMod 2020.4.0 annual output.

As shown in Table 22, the estimated electricity demand for the proposed project is approximately 276,542 kWh per year. In 2020, the non-residential sector of the County of Riverside consumed approximately 8,015 million kWh of electricity.<sup>9</sup> In addition, the estimated natural gas consumption for the proposed project is approximately 216,666 kBTU per year. In 2020, the non-residential sector of the County of Riverside consumed approximately 135 million therms of gas.<sup>10</sup> Therefore, the increase in both electricity and natural gas demand from the proposed project is insignificant compared to the County's 2020 demand.

# 9.3 Renewable Energy and Energy Efficiency Plan Consistency

Regarding federal transportation regulations, the project site is located in an already developed area. Access to/from the project site is from existing roads. These roads are already in place so the project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may

<sup>&</sup>lt;sup>9</sup> California Energy Commission, Electricity Consumption by County. https://ecdms.energy.ca.gov/elecbycounty.aspx

<sup>&</sup>lt;sup>10</sup> California Energy Commission, Gas Consumption by County. http://ecdms.energy.ca.gov/gasbycounty.aspx

be proposed pursuant to the ISTEA because SCAG is not planning for intermodal facilities in the project area.

Regarding the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the applicant is required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by the SCE and Southern California Gas Company.

Regarding the State's Renewable Energy Portfolio Standards, the project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CalGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials.

# 10.0 References

The following references were used in the preparing this analysis.

#### **California Air Pollution Control Officers Association**

2009 Health Risk Assessments for Proposed Land Use Projects

#### **California Air Resources Board**

- 2008 Resolution 08-43
- 2008 Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act
- 2008 ARB Recommended Interim Risk Management Policy for Inhalation-Based Residential Cancer Risk – Frequently Asked Questions
- 2008 Climate Change Scoping Plan, a framework for change.
- 2011 Supplement to the AB 32 Scoping Plan Functional Equivalent Document
- 2013 Revised Emission Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities
- 2014 First Update to the Climate Change Scoping Plan, Building on the Framework Pursuant to AB32, the California Global Warming Solutions Act of 2006. May.
- 2018 Historical Air Quality, Top 4 Summary

#### **City of Wildomar**

- 2018 City of Wildomar Zoning Map. August 15.
- 2018 City of Wildomar General Plan Land Use Map. August 15.

#### **County of Riverside**

2015 County of Riverside General Plan. December 8.

#### Governor's Office of Planning and Research

- 2008 CEQA and Climate: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review
- 2009 CEQA Guideline Sections to be Added or Amended

#### **Office of Environmental Health Hazard Assessment**

2015 Air Toxics Hot Spots Program Risk Assessment Guidelines

#### South Coast Air Quality Management District

- 1993 CEQA Air Quality Handbook
- 2005 Rule 403 Fugitive Dust
- 2007 Air Quality Management Plan
- 2008 Final Localized Significance Threshold Methodology, Revised
- 2011 Appendix A Calculation Details for CalEEMod
- 2012 Final 2012 Air Quality Management Plan
- 2016 Final 2016 Air Quality Management Plan

#### **TJW Engineering Group**

2022 Clinton Keith Corporate Center Trip Generation Analysis, City of Wildomar. September 13.

# Appendix A:

CalEEMod Daily Emission Output

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### Wildomar Commerce Center

**Riverside-South Coast County, Summer** 

## **1.0 Project Characteristics**

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	25.49	1000sqft	0.59	25,490.00	0
Strip Mall	10.50	1000sqft	0.24	10,500.00	0
General Office Building	10.50	1000sqft	0.24	10,500.00	0
Parking Lot	574.00	Space	5.17	229,600.00	0
General Heavy Industry	248.17	1000sqft	5.70	248,170.00	0
Other Non-Asphalt Surfaces	261.32	1000sqft	6.00	261,322.00	0
Other Asphalt Surfaces	8.62	Acre	8.62	375,487.20	0

#### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edisor	n			
CO2 Intensity (Ib/MWhr)	390.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

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

Project Characteristics -

Land Use - Per site plan, 26.56 acre site with 261,820 sqft of industrial space and 21,000 sqft of office/retail space with 261,320 sqft of landscaping and 574 parking spaces.

Construction Phase -

Grading -

Vehicle Trips - Per the Trip Generation Analysis memo from TJW Engineering, Inc., 2,997 trips estimated per day

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation -

Waste Mitigation - AB 341 requires each jurisdiction in CA to divert at least 75% of their waste away from landfills by 2020

Architectural Coating - SCAQMD Rule 1113

Area Coating - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblGrading	MaterialExported	0.00	100,000.00
tblLandUse	LandUseSquareFeet	261,320.00	261,322.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	ST_TR	2.21	285.43
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	SU_TR	0.70	285.43
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	4.96	0.00
tblVehicleTrips	WD_TR	9.74	285.43
tblVehicleTrips	WD_TR	44.32	0.00

# 2.0 Emissions Summary

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	со	SO2	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/e	day							lb/d	lay		
2022	4.5820	74.3708	37.7279	0.2238	19.8582	2.0484	21.4718	10.1558	1.8996	11.6403	0.0000	23,255.67 22	23,255.67 22	2.1798	2.6890	24,111.47 97
2023	4.0027	62.3007	36.6292	0.2167	14.5702	1.7603	16.3305	5.0885	1.6318	6.7203	0.0000	22,512.59 85	22,512.59 85	2.1800	2.5731	23,333.89 23
2024	46.4169	20.6295	35.3881	0.1059	6.6493	0.6914	7.3406	1.7911	0.6507	2.4418	0.0000	10,793.75 27	10,793.75 27	0.7426	0.6173	10,996.27 72
2025	46.3854	1.3205	4.9144	0.0119	1.0842	0.0561	1.1404	0.2875	0.0558	0.3433	0.0000	1,210.580 5	1,210.580 5	0.0335	0.0197	1,217.298 5
Maximum	46.4169	74.3708	37.7279	0.2238	19.8582	2.0484	21.4718	10.1558	1.8996	11.6403	0.0000	23,255.67 22	23,255.67 22	2.1800	2.6890	24,111.47 97

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 2.1 Overall Construction (Maximum Daily Emission)

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/e	day							lb/c	day		
2022	4.5820	74.3708	37.7279	0.2238	8.7845	2.0484	10.8329	3.9933	1.8996	5.4778	0.0000	23,255.67 22	23,255.67 22	2.1798	2.6890	24,111.47 97
2023	4.0027	62.3007	36.6292	0.2167	8.7843	1.7603	10.5447	2.8337	1.6318	4.4655	0.0000	22,512.59 85	22,512.59 85	2.1800	2.5731	23,333.89 23
2024	46.4169	20.6295	35.3881	0.1059	6.6493	0.6914	7.3406	1.7911	0.6507	2.4418	0.0000	10,793.75 27	10,793.75 27	0.7426	0.6173	10,996.27 72
2025	46.3854	1.3205	4.9144	0.0119	1.0842	0.0561	1.1404	0.2875	0.0558	0.3433	0.0000	1,210.580 5	1,210.580 5	0.0335	0.0197	1,217.298 5
Maximum	46.4169	74.3708	37.7279	0.2238	8.7845	2.0484	10.8329	3.9933	1.8996	5.4778	0.0000	23,255.67 22	23,255.67 22	2.1800	2.6890	24,111.47 97

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	39.99	0.00	35.49	48.59	0.00	39.81	0.00	0.00	0.00	0.00	0.00	0.00

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 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/e	day							lb/c	lay		
Area	6.5921	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655
Energy	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.763 2	2,870.763 2	0.0550	0.0526	2,887.822 7
Mobile	9.5128	12.3936	91.5447	0.2070	20.4018	0.1594	20.5611	5.4433	0.1494	5.5927		21,288.12 98	21,288.12 98	1.0345	0.9810	21,606.31 58
Total	16.3681	14.7870	93.6704	0.2214	20.4018	0.3416	20.7434	5.4433	0.3316	5.7749		24,159.14 22	24,159.14 22	1.0901	1.0336	24,494.40 40

#### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Area	6.5921	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655
Energy	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.763 2	2,870.763 2	0.0550	0.0526	2,887.822 7
Mobile	9.5128	12.3936	91.5447	0.2070	20.4018	0.1594	20.5611	5.4433	0.1494	5.5927		21,288.12 98	21,288.12 98	1.0345	0.9810	21,606.31 58
Total	16.3681	14.7870	93.6704	0.2214	20.4018	0.3416	20.7434	5.4433	0.3316	5.7749		24,159.14 22	24,159.14 22	1.0901	1.0336	24,494.40 40

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

# **3.0 Construction Detail**

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2022	11/28/2022	5	20	
2	Grading	Grading	11/29/2022	1/30/2023	5	45	
3	Building Construction	Building Construction	1/31/2023	10/7/2024	5	440	
4	Paving	Paving	10/8/2024	11/25/2024	5	35	
5	Architectural Coating	Architectural Coating	11/26/2024	1/13/2025	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 19.79

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 441,990; Non-Residential Outdoor: 147,330; Striped Parking Area: 51,985 (Architectural Coating – sqft)

#### OffRoad Equipment

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

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Scrapers	2	8.00	367	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	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	12,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	486.00	190.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	97.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

Water Exposed Area

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.2 Site Preparation - 2022

#### **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/d	day							lb/c	lay		
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	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	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
Worker	0.0709	0.0460	0.7176	1.8300e- 003	0.2012	1.0000e- 003	0.2022	0.0534	9.2000e- 004	0.0543		186.0370	186.0370	4.6100e- 003	4.5800e- 003	187.5158
Total	0.0709	0.0460	0.7176	1.8300e- 003	0.2012	1.0000e- 003	0.2022	0.0534	9.2000e- 004	0.0543		186.0370	186.0370	4.6100e- 003	4.5800e- 003	187.5158

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.2 Site Preparation - 2022

#### **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/d	day							lb/c	day		
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	7.6662	1.6126	9.2788	3.9400	1.4836	5.4235	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
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
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
Worker	0.0709	0.0460	0.7176	1.8300e- 003	0.2012	1.0000e- 003	0.2022	0.0534	9.2000e- 004	0.0543		186.0370	186.0370	4.6100e- 003	4.5800e- 003	187.5158
Total	0.0709	0.0460	0.7176	1.8300e- 003	0.2012	1.0000e- 003	0.2022	0.0534	9.2000e- 004	0.0543		186.0370	186.0370	4.6100e- 003	4.5800e- 003	187.5158

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.3 Grading - 2022

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Fugitive Dust					9.4850	0.0000	9.4850	3.6964	0.0000	3.6964			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	9.4850	1.6349	11.1199	3.6964	1.5041	5.2005		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.8784	35.4762	7.8891	0.1597	4.8618	0.4124	5.2742	1.3329	0.3945	1.7274		17,037.55 39	17,037.55 39	0.2305	2.6839	17,843.11 30
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
Worker	0.0788	0.0511	0.7973	2.0300e- 003	0.2236	1.1100e- 003	0.2247	0.0593	1.0300e- 003	0.0603		206.7078	206.7078	5.1200e- 003	5.0800e- 003	208.3509
Total	0.9572	35.5273	8.6864	0.1617	5.0854	0.4135	5.4989	1.3922	0.3955	1.7877		17,244.26 17	17,244.26 17	0.2356	2.6890	18,051.46 38

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.3 Grading - 2022

#### **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/d	day							lb/c	lay		
Fugitive Dust					3.6992	0.0000	3.6992	1.4416	0.0000	1.4416			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	3.6992	1.6349	5.3340	1.4416	1.5041	2.9457	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.8784	35.4762	7.8891	0.1597	4.8618	0.4124	5.2742	1.3329	0.3945	1.7274		17,037.55 39	17,037.55 39	0.2305	2.6839	17,843.11 30
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
Worker	0.0788	0.0511	0.7973	2.0300e- 003	0.2236	1.1100e- 003	0.2247	0.0593	1.0300e- 003	0.0603		206.7078	206.7078	5.1200e- 003	5.0800e- 003	208.3509
Total	0.9572	35.5273	8.6864	0.1617	5.0854	0.4135	5.4989	1.3922	0.3955	1.7877		17,244.26 17	17,244.26 17	0.2356	2.6890	18,051.46 38

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.3 Grading - 2023

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Fugitive Dust					9.4850	0.0000	9.4850	3.6964	0.0000	3.6964			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	9.4850	1.4245	10.9095	3.6964	1.3105	5.0069		6,011.477 7	6,011.477 7	1.9442		6,060.083 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	day		
Hauling	0.6079	27.7400	7.6281	0.1526	4.8616	0.3348	5.1964	1.3328	0.3203	1.6532		16,299.88 01	16,299.88 01	0.2312	2.5684	17,071.05 51
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
Worker	0.0731	0.0452	0.7337	1.9700e- 003	0.2236	1.0500e- 003	0.2246	0.0593	9.7000e- 004	0.0603		201.2406	201.2406	4.5900e- 003	4.6900e- 003	202.7537
Total	0.6810	27.7851	8.3618	0.1546	5.0852	0.3359	5.4210	1.3921	0.3213	1.7134		16,501.12 07	16,501.12 07	0.2358	2.5731	17,273.80 88

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.3 Grading - 2023

#### **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/d	day							lb/c	lay		
Fugitive Dust					3.6992	0.0000	3.6992	1.4416	0.0000	1.4416			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	3.6992	1.4245	5.1236	1.4416	1.3105	2.7521	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.6079	27.7400	7.6281	0.1526	4.8616	0.3348	5.1964	1.3328	0.3203	1.6532		16,299.88 01	16,299.88 01	0.2312	2.5684	17,071.05 51
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
Worker	0.0731	0.0452	0.7337	1.9700e- 003	0.2236	1.0500e- 003	0.2246	0.0593	9.7000e- 004	0.0603		201.2406	201.2406	4.5900e- 003	4.6900e- 003	202.7537
Total	0.6810	27.7851	8.3618	0.1546	5.0852	0.3359	5.4210	1.3921	0.3213	1.7134		16,501.12 07	16,501.12 07	0.2358	2.5731	17,273.80 88

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.4 Building Construction - 2023

# **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/e	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
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
Vendor	0.2142	6.2074	2.5559	0.0332	1.2170	0.0541	1.2710	0.3504	0.0517	0.4021		3,520.149 0	3,520.149 0	0.0359	0.5202	3,676.057 9
Worker	1.7756	1.0972	17.8293	0.0478	5.4323	0.0255	5.4578	1.4407	0.0235	1.4641		4,890.146 6	4,890.146 6	0.1117	0.1140	4,926.914 5
Total	1.9898	7.3046	20.3852	0.0810	6.6493	0.0795	6.7288	1.7911	0.0752	1.8663		8,410.295 7	8,410.295 7	0.1476	0.6342	8,602.972 4

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.4 Building Construction - 2023

#### **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/e	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	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	0.0000
Vendor	0.2142	6.2074	2.5559	0.0332	1.2170	0.0541	1.2710	0.3504	0.0517	0.4021		3,520.149 0	3,520.149 0	0.0359	0.5202	3,676.057 9
Worker	1.7756	1.0972	17.8293	0.0478	5.4323	0.0255	5.4578	1.4407	0.0235	1.4641		4,890.146 6	4,890.146 6	0.1117	0.1140	4,926.914 5
Total	1.9898	7.3046	20.3852	0.0810	6.6493	0.0795	6.7288	1.7911	0.0752	1.8663		8,410.295 7	8,410.295 7	0.1476	0.6342	8,602.972 4

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.4 Building Construction - 2024

# **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/e	day							lb/d	lay		
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
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
Vendor	0.2108	6.2079	2.5266	0.0327	1.2169	0.0537	1.2706	0.3504	0.0514	0.4018		3,465.896 0	3,465.896 0	0.0372	0.5114	3,619.217 4
Worker	1.6554	0.9778	16.6946	0.0463	5.4323	0.0244	5.4567	1.4407	0.0224	1.4631		4,772.157 8	4,772.157 8	0.1011	0.1059	4,806.252 1
Total	1.8662	7.1857	19.2213	0.0789	6.6493	0.0781	6.7273	1.7911	0.0738	1.8649		8,238.053 8	8,238.053 8	0.1383	0.6173	8,425.469 5

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.4 Building Construction - 2024

#### **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/e	day							lb/c	lay		
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	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	0.0000
Vendor	0.2108	6.2079	2.5266	0.0327	1.2169	0.0537	1.2706	0.3504	0.0514	0.4018		3,465.896 0	3,465.896 0	0.0372	0.5114	3,619.217 4
Worker	1.6554	0.9778	16.6946	0.0463	5.4323	0.0244	5.4567	1.4407	0.0224	1.4631		4,772.157 8	4,772.157 8	0.1011	0.1059	4,806.252 1
Total	1.8662	7.1857	19.2213	0.0789	6.6493	0.0781	6.7273	1.7911	0.0738	1.8649		8,238.053 8	8,238.053 8	0.1383	0.6173	8,425.469 5

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.5 Paving - 2024

#### 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/d	day							lb/c	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	1.0323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0204	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	lay		
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
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
Worker	0.0511	0.0302	0.5153	1.4300e- 003	0.1677	7.5000e- 004	0.1684	0.0445	6.9000e- 004	0.0452		147.2888	147.2888	3.1200e- 003	3.2700e- 003	148.3411
Total	0.0511	0.0302	0.5153	1.4300e- 003	0.1677	7.5000e- 004	0.1684	0.0445	6.9000e- 004	0.0452		147.2888	147.2888	3.1200e- 003	3.2700e- 003	148.3411

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.5 Paving - 2024

#### **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/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	1.0323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0204	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
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
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
Worker	0.0511	0.0302	0.5153	1.4300e- 003	0.1677	7.5000e- 004	0.1684	0.0445	6.9000e- 004	0.0452		147.2888	147.2888	3.1200e- 003	3.2700e- 003	148.3411
Total	0.0511	0.0302	0.5153	1.4300e- 003	0.1677	7.5000e- 004	0.1684	0.0445	6.9000e- 004	0.0452		147.2888	147.2888	3.1200e- 003	3.2700e- 003	148.3411

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Architectural Coating - 2024

#### **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/e	day							lb/c	day		
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	46.0865	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
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
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
Worker	0.3304	0.1952	3.3321	9.2300e- 003	1.0842	4.8600e- 003	1.0891	0.2875	4.4700e- 003	0.2920		952.4677	952.4677	0.0202	0.0211	959.2726
Total	0.3304	0.1952	3.3321	9.2300e- 003	1.0842	4.8600e- 003	1.0891	0.2875	4.4700e- 003	0.2920		952.4677	952.4677	0.0202	0.0211	959.2726

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Architectural Coating - 2024

#### **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/o	day							lb/c	lay		
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	46.0865	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
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
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
Worker	0.3304	0.1952	3.3321	9.2300e- 003	1.0842	4.8600e- 003	1.0891	0.2875	4.4700e- 003	0.2920		952.4677	952.4677	0.0202	0.0211	959.2726
Total	0.3304	0.1952	3.3321	9.2300e- 003	1.0842	4.8600e- 003	1.0891	0.2875	4.4700e- 003	0.2920		952.4677	952.4677	0.0202	0.0211	959.2726

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Architectural Coating - 2025

#### **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/e	day							lb/c	day		
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000	1		0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	46.0766	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	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	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
Worker	0.3089	0.1750	3.1052	8.9200e- 003	1.0842	4.6200e- 003	1.0889	0.2875	4.2600e- 003	0.2918		929.1324	929.1324	0.0182	0.0197	935.4667
Total	0.3089	0.1750	3.1052	8.9200e- 003	1.0842	4.6200e- 003	1.0889	0.2875	4.2600e- 003	0.2918		929.1324	929.1324	0.0182	0.0197	935.4667

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Architectural Coating - 2025

#### **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/d	day							lb/c	lay		
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	46.0766	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
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
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
Worker	0.3089	0.1750	3.1052	8.9200e- 003	1.0842	4.6200e- 003	1.0889	0.2875	4.2600e- 003	0.2918		929.1324	929.1324	0.0182	0.0197	935.4667
Total	0.3089	0.1750	3.1052	8.9200e- 003	1.0842	4.6200e- 003	1.0889	0.2875	4.2600e- 003	0.2918		929.1324	929.1324	0.0182	0.0197	935.4667

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Mitigated	9.5128	12.3936	91.5447	0.2070	20.4018	0.1594	20.5611	5.4433	0.1494	5.5927		21,288.12 98	21,288.12 98	1.0345	0.9810	21,606.31 58
Unmitigated	9.5128	12.3936	91.5447	0.2070	20.4018	0.1594	20.5611	5.4433	0.1494	5.5927		21,288.12 98	21,288.12 98	1.0345	0.9810	21,606.31 58

## **4.2 Trip Summary Information**

	Avei	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	2,997.02	2,997.02	2997.02	9,654,767	9,654,767
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	2,997.02	2,997.02	2,997.02	9,654,767	9,654,767

## 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

		Miles			Trip %			Trip Purpos	e %
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
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Light Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Office Building	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Strip Mall	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

## 5.0 Energy Detail

Historical Energy Use: N

# 5.1 Mitigation Measures Energy

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.763 2	2,870.763 2	0.0550	0.0526	2,887.822 7
NaturalGas Unmitigated	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.763 2	2,870.763 2	0.0550	0.0526	2,887.822 7

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 5.2 Energy by Land Use - NaturalGas

### **Unmitigated**

	NaturalGa s 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/e	day							lb/c	lay		
General Heavy Industry	21981.7	0.2371	2.1551	1.8103	0.0129		0.1638	0.1638		0.1638	0.1638		2,586.087 4	2,586.087 4	0.0496	0.0474	2,601.455 2
General Light Industry	2257.79	0.0244	0.2214	0.1859	1.3300e- 003		0.0168	0.0168		0.0168	0.0168		265.6218	265.6218	5.0900e- 003	4.8700e- 003	267.2003
General Office Building	98.6712	1.0600e- 003	9.6700e- 003	8.1300e- 003	6.0000e- 005		7.4000e- 004	7.4000e- 004		7.4000e- 004	7.4000e- 004		11.6084	11.6084	2.2000e- 004	2.1000e- 004	11.6774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	       	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	       	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.2877	6.8000e- 004	6.2000e- 003	5.2100e- 003	4.0000e- 005	       	4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004		7.4456	7.4456	1.4000e- 004	1.4000e- 004	7.4899
Total		0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.763 2	2,870.763 2	0.0550	0.0526	2,887.822 7

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 5.2 Energy by Land Use - NaturalGas

## Mitigated

	NaturalGa s 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/o	day							lb/c	lay		
General Heavy Industry	21.9817	0.2371	2.1551	1.8103	0.0129		0.1638	0.1638		0.1638	0.1638		2,586.087 4	2,586.087 4	0.0496	0.0474	2,601.455 2
General Light Industry	2.25779	0.0244	0.2214	0.1859	1.3300e- 003		0.0168	0.0168		0.0168	0.0168		265.6218	265.6218	5.0900e- 003	4.8700e- 003	267.2003
General Office Building	0.0986712	1.0600e- 003	9.6700e- 003	8.1300e- 003	6.0000e- 005		7.4000e- 004	7.4000e- 004		7.4000e- 004	7.4000e- 004		11.6084	11.6084	2.2000e- 004	2.1000e- 004	11.6774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.0632877	6.8000e- 004	6.2000e- 003	5.2100e- 003	4.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004		7.4456	7.4456	1.4000e- 004	1.4000e- 004	7.4899
Total		0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.763 2	2,870.763 2	0.0550	0.0526	2,887.822 7

# 6.0 Area Detail

6.1 Mitigation Measures Area

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Mitigated	6.5921	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655
Unmitigated	6.5921	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655

# 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	СО	SO2	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/e	day							lb/d	day		
Architectural Coating	0.4402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1412					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0108	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655
Total	6.5921	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 6.2 Area by SubCategory

## Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/c	day		
Architectural Coating	0.4402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1412					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0108	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655
Total	6.5921	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655

# 7.0 Water Detail

7.1 Mitigation Measures Water

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

# 9.0 Operational Offroad

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

## **10.0 Stationary Equipment**

## Fire Pumps and Emergency Generators

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

Equipment Type Number Heat Input/Day Heat In	out/Year Boiler Rating Fuel Type
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## **User Defined Equipment**

Equipment Type Number

## **11.0 Vegetation**

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## Wildomar Commerce Center

**Riverside-South Coast County, Winter** 

## **1.0 Project Characteristics**

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	25.49	1000sqft	0.59	25,490.00	0
Strip Mall	10.50	1000sqft	0.24	10,500.00	0
General Office Building	10.50	1000sqft	0.24	10,500.00	0
Parking Lot	574.00	Space	5.17	229,600.00	0
General Heavy Industry	248.17	1000sqft	5.70	248,170.00	0
Other Non-Asphalt Surfaces	261.32	1000sqft	6.00	261,322.00	0
Other Asphalt Surfaces	8.62	Acre	8.62	375,487.20	0

## **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edisor	ı			
CO2 Intensity (Ib/MWhr)	390.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

## 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per site plan, 26.56 acre site with 261,820 sqft of industrial space and 21,000 sqft of office/retail space with 261,320 sqft of landscaping and 574 parking spaces.

Construction Phase -

Grading -

Vehicle Trips - Per the Trip Generation Analysis memo from TJW Engineering, Inc., 2,997 trips estimated per day

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation -

Waste Mitigation - AB 341 requires each jurisdiction in CA to divert at least 75% of their waste away from landfills by 2020

Architectural Coating - SCAQMD Rule 1113

Area Coating - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblGrading	MaterialExported	0.00	100,000.00
tblLandUse	LandUseSquareFeet	261,320.00	261,322.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	ST_TR	2.21	285.43
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	SU_TR	0.70	285.43
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	4.96	0.00
tblVehicleTrips	WD_TR	9.74	285.43
tblVehicleTrips	WD_TR	44.32	0.00

# 2.0 Emissions Summary

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 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/e	day							lb/d	day		
2022	4.5350	76.3157	37.7933	0.2238	19.8582	2.0489	21.4718	10.1558	1.9002	11.6403	0.0000	23,249.20 59	23,249.20 59	2.1777	2.6912	24,105.61 46
2023	3.9490	63.9553	36.4357	0.2168	14.5702	1.7608	16.3310	5.0885	1.6323	6.7208	0.0000	22,519.19 13	22,519.19 13	2.1776	2.5773	23,341.65 99
2024	46.3971	21.0419	32.3420	0.1016	6.6493	0.6916	7.3408	1.7911	0.6509	2.4419	0.0000	10,355.06 63	10,355.06 63	0.7418	0.6215	10,558.80 52
2025	46.3678	1.3270	4.3351	0.0111	1.0842	0.0561	1.1404	0.2875	0.0558	0.3433	0.0000	1,123.701 6	1,123.701 6	0.0336	0.0202	1,130.555 3
Maximum	46.3971	76.3157	37.7933	0.2238	19.8582	2.0489	21.4718	10.1558	1.9002	11.6403	0.0000	23,249.20 59	23,249.20 59	2.1777	2.6912	24,105.61 46

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 2.1 Overall Construction (Maximum Daily Emission)

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/e	day							lb/d	day		
2022	4.5350	76.3157	37.7933	0.2238	8.7845	2.0489	10.8334	3.9933	1.9002	5.4778	0.0000	23,249.20 59	23,249.20 59	2.1777	2.6912	24,105.61 46
2023	3.9490	63.9553	36.4357	0.2168	8.7843	1.7608	10.5451	2.8337	1.6323	4.4660	0.0000	22,519.19 13	22,519.19 13	2.1776	2.5773	23,341.65 99
2024	46.3971	21.0419	32.3420	0.1016	6.6493	0.6916	7.3408	1.7911	0.6509	2.4419	0.0000	10,355.06 63	10,355.06 63	0.7418	0.6215	10,558.80 52
2025	46.3678	1.3270	4.3351	0.0111	1.0842	0.0561	1.1404	0.2875	0.0558	0.3433	0.0000	1,123.701 6	1,123.701 6	0.0336	0.0202	1,130.555 3
Maximum	46.3971	76.3157	37.7933	0.2238	8.7845	2.0489	10.8334	3.9933	1.9002	5.4778	0.0000	23,249.20 59	23,249.20 59	2.1777	2.6912	24,105.61 46

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	39.99	0.00	35.49	48.59	0.00	39.81	0.00	0.00	0.00	0.00	0.00	0.00

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 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/e	day							lb/d	day		
Area	6.5921	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655
Energy	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.763 2	2,870.763 2	0.0550	0.0526	2,887.822 7
Mobile	8.0843	13.1338	80.9539	0.1921	20.4018	0.1595	20.5613	5.4433	0.1495	5.5928		19,766.18 75	19,766.18 75	1.0600	1.0017	20,091.20 23
Total	14.9395	15.5271	83.0797	0.2065	20.4018	0.3417	20.7435	5.4433	0.3317	5.7750		22,637.19 99	22,637.19 99	1.1157	1.0544	22,979.29 05

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Area	6.5921	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655
Energy	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818	       	0.1818	0.1818		2,870.763 2	2,870.763 2	0.0550	0.0526	2,887.822 7
Mobile	8.0843	13.1338	80.9539	0.1921	20.4018	0.1595	20.5613	5.4433	0.1495	5.5928		19,766.18 75	19,766.18 75	1.0600	1.0017	20,091.20 23
Total	14.9395	15.5271	83.0797	0.2065	20.4018	0.3417	20.7435	5.4433	0.3317	5.7750		22,637.19 99	22,637.19 99	1.1157	1.0544	22,979.29 05

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

# **3.0 Construction Detail**

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2022	11/28/2022	5	20	
2	Grading	Grading	11/29/2022	1/30/2023	5	45	
3	Building Construction	Building Construction	1/31/2023	10/7/2024	5	440	
4	Paving	Paving	10/8/2024	11/25/2024	5	35	
5	Architectural Coating	Architectural Coating	11/26/2024	1/13/2025	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 19.79

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 441,990; Non-Residential Outdoor: 147,330; Striped Parking Area: 51,985 (Architectural Coating – sqft)

#### OffRoad Equipment

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

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Scrapers	2	8.00	367	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	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	12,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	486.00	190.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	97.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### **3.1 Mitigation Measures Construction**

Water Exposed Area

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.2 Site Preparation - 2022

## **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/d	day							lb/c	lay		
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	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	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
Worker	0.0663	0.0477	0.5816	1.6600e- 003	0.2012	1.0000e- 003	0.2022	0.0534	9.2000e- 004	0.0543		168.5113	168.5113	4.5800e- 003	4.6800e- 003	170.0216
Total	0.0663	0.0477	0.5816	1.6600e- 003	0.2012	1.0000e- 003	0.2022	0.0534	9.2000e- 004	0.0543		168.5113	168.5113	4.5800e- 003	4.6800e- 003	170.0216

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.2 Site Preparation - 2022

## **Mitigated Construction On-Site**

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	7.6662	1.6126	9.2788	3.9400	1.4836	5.4235	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
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
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
Worker	0.0663	0.0477	0.5816	1.6600e- 003	0.2012	1.0000e- 003	0.2022	0.0534	9.2000e- 004	0.0543		168.5113	168.5113	4.5800e- 003	4.6800e- 003	170.0216
Total	0.0663	0.0477	0.5816	1.6600e- 003	0.2012	1.0000e- 003	0.2022	0.0534	9.2000e- 004	0.0543		168.5113	168.5113	4.5800e- 003	4.6800e- 003	170.0216

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.3 Grading - 2022

**Unmitigated Construction On-Site** 

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Fugitive Dust					9.4850	0.0000	9.4850	3.6964	0.0000	3.6964			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	9.4850	1.6349	11.1199	3.6964	1.5041	5.2005		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Hauling	0.8366	37.4192	8.1056	0.1598	4.8618	0.4129	5.2747	1.3329	0.3950	1.7280		17,050.56 06	17,050.56 06	0.2284	2.6860	17,856.68 59
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
Worker	0.0736	0.0530	0.6462	1.8400e- 003	0.2236	1.1100e- 003	0.2247	0.0593	1.0300e- 003	0.0603		187.2348	187.2348	5.0800e- 003	5.2000e- 003	188.9129
Total	0.9102	37.4723	8.7518	0.1617	5.0854	0.4140	5.4994	1.3922	0.3961	1.7883		17,237.79 54	17,237.79 54	0.2335	2.6912	18,045.59 87

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.3 Grading - 2022

## **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/d	day							lb/c	lay		
Fugitive Dust					3.6992	0.0000	3.6992	1.4416	0.0000	1.4416			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	3.6992	1.6349	5.3340	1.4416	1.5041	2.9457	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
Hauling	0.8366	37.4192	8.1056	0.1598	4.8618	0.4129	5.2747	1.3329	0.3950	1.7280		17,050.56 06	17,050.56 06	0.2284	2.6860	17,856.68 59
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
Worker	0.0736	0.0530	0.6462	1.8400e- 003	0.2236	1.1100e- 003	0.2247	0.0593	1.0300e- 003	0.0603		187.2348	187.2348	5.0800e- 003	5.2000e- 003	188.9129
Total	0.9102	37.4723	8.7518	0.1617	5.0854	0.4140	5.4994	1.3922	0.3961	1.7883		17,237.79 54	17,237.79 54	0.2335	2.6912	18,045.59 87

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.3 Grading - 2023

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Fugitive Dust					9.4850	0.0000	9.4850	3.6964	0.0000	3.6964			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	9.4850	1.4245	10.9095	3.6964	1.3105	5.0069		6,011.477 7	6,011.477 7	1.9442		6,060.083 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
Hauling	0.5588	29.3929	7.7888	0.1529	4.8616	0.3353	5.1969	1.3328	0.3208	1.6536		16,325.37 16	16,325.37 16	0.2288	2.5725	17,097.68 88
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
Worker	0.0685	0.0469	0.5958	1.7800e- 003	0.2236	1.0500e- 003	0.2246	0.0593	9.7000e- 004	0.0603		182.3421	182.3421	4.5800e- 003	4.8000e- 003	183.8876
Total	0.6272	29.4397	8.3845	0.1547	5.0852	0.3363	5.4215	1.3921	0.3217	1.7139		16,507.71 36	16,507.71 36	0.2334	2.5773	17,281.57 63

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.3 Grading - 2023

## **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/d	day							lb/c	lay		
Fugitive Dust					3.6992	0.0000	3.6992	1.4416	0.0000	1.4416		- - - - -	0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	3.6992	1.4245	5.1236	1.4416	1.3105	2.7521	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	day		
Hauling	0.5588	29.3929	7.7888	0.1529	4.8616	0.3353	5.1969	1.3328	0.3208	1.6536		16,325.37 16	16,325.37 16	0.2288	2.5725	17,097.68 88
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
Worker	0.0685	0.0469	0.5958	1.7800e- 003	0.2236	1.0500e- 003	0.2246	0.0593	9.7000e- 004	0.0603		182.3421	182.3421	4.5800e- 003	4.8000e- 003	183.8876
Total	0.6272	29.4397	8.3845	0.1547	5.0852	0.3363	5.4215	1.3921	0.3217	1.7139		16,507.71 36	16,507.71 36	0.2334	2.5773	17,281.57 63

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.4 Building Construction - 2023

## **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/o	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0000
Vendor	0.1983	6.5831	2.6420	0.0333	1.2170	0.0543	1.2712	0.3504	0.0519	0.4023		3,528.885 2	3,528.885 2	0.0352	0.5219	3,685.292 5
Worker	1.6643	1.1384	14.4777	0.0433	5.4323	0.0255	5.4578	1.4407	0.0235	1.4641		4,430.912 2	4,430.912 2	0.1113	0.1167	4,468.467 5
Total	1.8626	7.7215	17.1197	0.0766	6.6493	0.0797	6.7290	1.7911	0.0754	1.8664		7,959.797 4	7,959.797 4	0.1465	0.6386	8,153.760 0

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.4 Building Construction - 2023

## **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/e	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	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	0.0000
Vendor	0.1983	6.5831	2.6420	0.0333	1.2170	0.0543	1.2712	0.3504	0.0519	0.4023		3,528.885 2	3,528.885 2	0.0352	0.5219	3,685.292 5
Worker	1.6643	1.1384	14.4777	0.0433	5.4323	0.0255	5.4578	1.4407	0.0235	1.4641		4,430.912 2	4,430.912 2	0.1113	0.1167	4,468.467 5
Total	1.8626	7.7215	17.1197	0.0766	6.6493	0.0797	6.7290	1.7911	0.0754	1.8664		7,959.797 4	7,959.797 4	0.1465	0.6386	8,153.760 0

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.4 Building Construction - 2024

## **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/e	day							lb/c	lay		
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133	- 	0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	lay		
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
Vendor	0.1950	6.5840	2.6124	0.0328	1.2169	0.0539	1.2708	0.3504	0.0516	0.4019		3,474.557 7	3,474.557 7	0.0365	0.5131	3,628.365 6
Worker	1.5563	1.0141	13.5628	0.0419	5.4323	0.0244	5.4567	1.4407	0.0224	1.4631		4,324.809 7	4,324.809 7	0.1010	0.1084	4,359.632 0
Total	1.7513	7.5981	16.1752	0.0747	6.6493	0.0782	6.7275	1.7911	0.0740	1.8650		7,799.367 4	7,799.367 4	0.1374	0.6215	7,987.997 6

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.4 Building Construction - 2024

## **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/e	day							lb/c	lay		
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	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	0.0000
Vendor	0.1950	6.5840	2.6124	0.0328	1.2169	0.0539	1.2708	0.3504	0.0516	0.4019		3,474.557 7	3,474.557 7	0.0365	0.5131	3,628.365 6
Worker	1.5563	1.0141	13.5628	0.0419	5.4323	0.0244	5.4567	1.4407	0.0224	1.4631		4,324.809 7	4,324.809 7	0.1010	0.1084	4,359.632 0
Total	1.7513	7.5981	16.1752	0.0747	6.6493	0.0782	6.7275	1.7911	0.0740	1.8650		7,799.367 4	7,799.367 4	0.1374	0.6215	7,987.997 6

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.5 Paving - 2024

## **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/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	1.0323					0.0000	0.0000		0.0000	0.0000			0.0000		,	0.0000
Total	2.0204	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	lay		
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
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
Worker	0.0480	0.0313	0.4186	1.2900e- 003	0.1677	7.5000e- 004	0.1684	0.0445	6.9000e- 004	0.0452		133.4818	133.4818	3.1200e- 003	3.3500e- 003	134.5565
Total	0.0480	0.0313	0.4186	1.2900e- 003	0.1677	7.5000e- 004	0.1684	0.0445	6.9000e- 004	0.0452		133.4818	133.4818	3.1200e- 003	3.3500e- 003	134.5565

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 3.5 Paving - 2024

### **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/e	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	1.0323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0204	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
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
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
Worker	0.0480	0.0313	0.4186	1.2900e- 003	0.1677	7.5000e- 004	0.1684	0.0445	6.9000e- 004	0.0452		133.4818	133.4818	3.1200e- 003	3.3500e- 003	134.5565
Total	0.0480	0.0313	0.4186	1.2900e- 003	0.1677	7.5000e- 004	0.1684	0.0445	6.9000e- 004	0.0452		133.4818	133.4818	3.1200e- 003	3.3500e- 003	134.5565

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Architectural Coating - 2024

## **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/o	day							lb/c	day		
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	46.0865	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	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	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
Worker	0.3106	0.2024	2.7070	8.3700e- 003	1.0842	4.8600e- 003	1.0891	0.2875	4.4700e- 003	0.2920		863.1822	863.1822	0.0202	0.0216	870.1323
Total	0.3106	0.2024	2.7070	8.3700e- 003	1.0842	4.8600e- 003	1.0891	0.2875	4.4700e- 003	0.2920		863.1822	863.1822	0.0202	0.0216	870.1323

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Architectural Coating - 2024

## **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/o	day							lb/c	lay		
Archit. Coating	45.9057					0.0000	0.0000	- - - - -	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	46.0865	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
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
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
Worker	0.3106	0.2024	2.7070	8.3700e- 003	1.0842	4.8600e- 003	1.0891	0.2875	4.4700e- 003	0.2920		863.1822	863.1822	0.0202	0.0216	870.1323
Total	0.3106	0.2024	2.7070	8.3700e- 003	1.0842	4.8600e- 003	1.0891	0.2875	4.4700e- 003	0.2920		863.1822	863.1822	0.0202	0.0216	870.1323

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Architectural Coating - 2025

## **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/o	day							lb/c	lay		
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	46.0766	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	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	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
Worker	0.2912	0.1815	2.5259	8.0800e- 003	1.0842	4.6200e- 003	1.0889	0.2875	4.2600e- 003	0.2918		842.2535	842.2535	0.0182	0.0202	848.7235
Total	0.2912	0.1815	2.5259	8.0800e- 003	1.0842	4.6200e- 003	1.0889	0.2875	4.2600e- 003	0.2918		842.2535	842.2535	0.0182	0.0202	848.7235

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Architectural Coating - 2025

## **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/e	day							lb/c	lay		
Archit. Coating	45.9057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	46.0766	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
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
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
Worker	0.2912	0.1815	2.5259	8.0800e- 003	1.0842	4.6200e- 003	1.0889	0.2875	4.2600e- 003	0.2918		842.2535	842.2535	0.0182	0.0202	848.7235
Total	0.2912	0.1815	2.5259	8.0800e- 003	1.0842	4.6200e- 003	1.0889	0.2875	4.2600e- 003	0.2918		842.2535	842.2535	0.0182	0.0202	848.7235

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Mitigated	8.0843	13.1338	80.9539	0.1921	20.4018	0.1595	20.5613	5.4433	0.1495	5.5928		19,766.18 75	19,766.18 75	1.0600	1.0017	20,091.20 23
Unmitigated	8.0843	13.1338	80.9539	0.1921	20.4018	0.1595	20.5613	5.4433	0.1495	5.5928		19,766.18 75	19,766.18 75	1.0600	1.0017	20,091.20 23

## **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	2,997.02	2,997.02	2997.02	9,654,767	9,654,767
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	2,997.02	2,997.02	2,997.02	9,654,767	9,654,767

## 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

		Miles			Trip %			Trip Purpos	e %
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
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Light Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Office Building	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Strip Mall	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

## 5.0 Energy Detail

Historical Energy Use: N

# 5.1 Mitigation Measures Energy

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	ay		
NaturalGas Mitigated	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.763 2	2,870.763 2	0.0550	0.0526	2,887.822 7
NaturalGas Unmitigated	0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.763 2	2,870.763 2	0.0550	0.0526	2,887.822 7

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 5.2 Energy by Land Use - NaturalGas

### **Unmitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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							
General Heavy Industry	21981.7	0.2371	2.1551	1.8103	0.0129		0.1638	0.1638		0.1638	0.1638		2,586.087 4	2,586.087 4	0.0496	0.0474	2,601.455 2				
General Light Industry	2257.79	0.0244	0.2214	0.1859	1.3300e- 003		0.0168	0.0168		0.0168	0.0168		265.6218	265.6218	5.0900e- 003	4.8700e- 003	267.2003				
General Office Building	98.6712	1.0600e- 003	9.6700e- 003	8.1300e- 003	6.0000e- 005	     	7.4000e- 004	7.4000e- 004		7.4000e- 004	7.4000e- 004		11.6084	11.6084	2.2000e- 004	2.1000e- 004	11.6774				
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000				
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000				
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000				
Strip Mall	63.2877	6.8000e- 004	6.2000e- 003	5.2100e- 003	4.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004		7.4456	7.4456	1.4000e- 004	1.4000e- 004	7.4899				
Total		0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.763 2	2,870.763 2	0.0550	0.0526	2,887.822 7				

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

## 5.2 Energy by Land Use - NaturalGas

## Mitigated

	NaturalGa s 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							
General Heavy Industry	21.9817	0.2371	2.1551	1.8103	0.0129		0.1638	0.1638		0.1638	0.1638		2,586.087 4	2,586.087 4	0.0496	0.0474	2,601.455 2			
General Light Industry	2.25779	0.0244	0.2214	0.1859	1.3300e- 003		0.0168	0.0168		0.0168	0.0168		265.6218	265.6218	5.0900e- 003	4.8700e- 003	267.2003			
General Office Building	0.0986712	1.0600e- 003	9.6700e- 003	8.1300e- 003	6.0000e- 005		7.4000e- 004	7.4000e- 004		7.4000e- 004	7.4000e- 004		11.6084	11.6084	2.2000e- 004	2.1000e- 004	11.6774			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000			
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000			
Strip Mall	0.0632877	6.8000e- 004	6.2000e- 003	5.2100e- 003	4.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004		7.4456	7.4456	1.4000e- 004	1.4000e- 004	7.4899			
Total		0.2632	2.3923	2.0095	0.0144		0.1818	0.1818		0.1818	0.1818		2,870.763 2	2,870.763 2	0.0550	0.0526	2,887.822 7			

# 6.0 Area Detail

6.1 Mitigation Measures Area

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Mitigated	6.5921	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655
Unmitigated	6.5921	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655

# 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	СО	SO2	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/e	lb/day												
Architectural Coating	0.4402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1412					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0108	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655
Total	6.5921	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		lb/day									lb/day					
Architectural Coating	0.4402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1412					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0108	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655
Total	6.5921	1.0600e- 003	0.1162	1.0000e- 005		4.1000e- 004	4.1000e- 004		4.1000e- 004	4.1000e- 004		0.2492	0.2492	6.5000e- 004		0.2655

# 7.0 Water Detail

7.1 Mitigation Measures Water

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

### 9.0 Operational Offroad

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

### **10.0 Stationary Equipment**

#### Fire Pumps and Emergency Generators

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

Equipment Type Numb	er Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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#### **User Defined Equipment**

Equipment Type Number

### **11.0 Vegetation**

# Appendix B:

CalEEMod Annual Emission Output

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### Wildomar Commerce Center

**Riverside-South Coast County, Annual** 

### **1.0 Project Characteristics**

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	25.49	1000sqft	0.59	25,490.00	0
Strip Mall	10.50	1000sqft	0.24	10,500.00	0
General Office Building	10.50	1000sqft	0.24	10,500.00	0
Parking Lot	574.00	Space	5.17	229,600.00	0
General Heavy Industry	248.17	1000sqft	5.70	248,170.00	0
Other Non-Asphalt Surfaces 261.32		1000sqft	6.00	261,322.00	0
Other Asphalt Surfaces	8.62	Acre	8.62	375,487.20	0

### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edisor	1			
CO2 Intensity (Ib/MWhr)	390.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

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

Project Characteristics -

Land Use - Per site plan, 26.56 acre site with 261,820 sqft of industrial space and 21,000 sqft of office/retail space with 261,320 sqft of landscaping and 574 parking spaces.

Construction Phase -

Grading -

Vehicle Trips - Per the Trip Generation Analysis memo from TJW Engineering, Inc., 2,997 trips estimated per day

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation -

Waste Mitigation - AB 341 requires each jurisdiction in CA to divert at least 75% of their waste away from landfills by 2020

Architectural Coating - SCAQMD Rule 1113

Area Coating - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value		
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00		
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00		
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50		
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50		
tblGrading	MaterialExported	0.00	100,000.00		
tblLandUse	LandUseSquareFeet	261,320.00	261,322.00		
tblVehicleTrips	ST_TR	6.42	0.00		
tblVehicleTrips	ST_TR	1.99	0.00		
tblVehicleTrips	ST_TR	2.21	285.43		
tblVehicleTrips	ST_TR	42.04	0.00		
tblVehicleTrips	SU_TR	5.09	0.00		
tblVehicleTrips	SU_TR	5.00	0.00		
tblVehicleTrips	SU_TR	0.70	285.43		
tblVehicleTrips	SU_TR	20.43	0.00		
tblVehicleTrips	WD_TR	3.93	0.00		
tblVehicleTrips	WD_TR	4.96	0.00		
tblVehicleTrips	WD_TR	9.74	285.43		
tblVehicleTrips	WD_TR	44.32	0.00		

# 2.0 Emissions Summary

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### 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							
2022	0.0870	1.2470	0.6555	3.0800e- 003	0.4089	0.0407	0.4496	0.1665	0.0376	0.2041	0.0000	288.0652	288.0652	0.0346	0.0293	297.6694
2023	0.4428	3.3073	4.4565	0.0148	0.9755	0.1116	1.0872	0.2688	0.1048	0.3736	0.0000	1,364.948 2	1,364.948 2	0.1026	0.0939	1,395.497 6
2024	0.9554	2.2962	3.6434	0.0109	0.6742	0.0786	0.7528	0.1818	0.0738	0.2556	0.0000	1,003.753 5	1,003.753 5	0.0795	0.0571	1,022.752 0
2025	0.2086	5.9900e- 003	0.0201	5.0000e- 005	4.8000e- 003	2.5000e- 004	5.0500e- 003	1.2700e- 003	2.5000e- 004	1.5200e- 003	0.0000	4.6670	4.6670	1.4000e- 004	8.0000e- 005	4.6955
Maximum	0.9554	3.3073	4.4565	0.0148	0.9755	0.1116	1.0872	0.2688	0.1048	0.3736	0.0000	1,364.948 2	1,364.948 2	0.1026	0.0939	1,395.497 6

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 2.1 Overall Construction

#### **Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr								MT/yr							
2022	0.0870	1.2470	0.6555	3.0800e- 003	0.1974	0.0407	0.2381	0.0753	0.0376	0.1129	0.0000	288.0651	288.0651	0.0346	0.0293	297.6692
2023	0.4428	3.3073	4.4565	0.0148	0.8894	0.1116	1.0011	0.2423	0.1048	0.3471	0.0000	1,364.947 8	1,364.947 8	0.1026	0.0939	1,395.497 2
2024	0.9554	2.2962	3.6434	0.0109	0.6742	0.0786	0.7528	0.1818	0.0738	0.2556	0.0000	1,003.753 1	1,003.753 1	0.0795	0.0571	1,022.751 7
2025	0.2086	5.9900e- 003	0.0201	5.0000e- 005	4.8000e- 003	2.5000e- 004	5.0500e- 003	1.2700e- 003	2.5000e- 004	1.5200e- 003	0.0000	4.6670	4.6670	1.4000e- 004	8.0000e- 005	4.6955
Maximum	0.9554	3.3073	4.4565	0.0148	0.8894	0.1116	1.0011	0.2423	0.1048	0.3471	0.0000	1,364.947 8	1,364.947 8	0.1026	0.0939	1,395.497 2

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	14.42	0.00	12.97	19.03	0.00	14.09	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-1-2022	1-31-2023	2.0532	2.0532
2	2-1-2023	4-30-2023	0.8088	0.8088
3	5-1-2023	7-31-2023	0.8297	0.8297
4	8-1-2023	10-31-2023	0.8329	0.8329
5	11-1-2023	1-31-2024	0.8251	0.8251
6	2-1-2024	4-30-2024	0.7768	0.7768
7	5-1-2024	7-31-2024	0.7875	0.7875
8	8-1-2024	10-31-2024	0.6824	0.6824

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9	11-1-2024	1-31-2025	0.9400	0.9400
		Highest	2.0532	2.0532

### 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					ton	s/yr							МТ	/yr		
Area	1.2024	1.3000e- 004	0.0145	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005	0.0000	0.0283	0.0283	7.0000e- 005	0.0000	0.0301
Energy	0.0480	0.4366	0.3667	2.6200e- 003		0.0332	0.0332		0.0332	0.0332	0.0000	1,010.699 0	1,010.699 0	0.0543	0.0142	1,016.285 5
Mobile	1.4877	2.4055	15.2239	0.0355	3.6519	0.0290	3.6809	0.9757	0.0272	1.0028	0.0000	3,315.339 6	3,315.339 6	0.1746	0.1663	3,369.259 2
Waste	n			,		0.0000	0.0000		0.0000	0.0000	73.1052	0.0000	73.1052	4.3204	0.0000	181.1150
Water	h			,		0.0000	0.0000		0.0000	0.0000	20.9159	155.4345	176.3504	2.1614	0.0523	245.9748
Total	2.7382	2.8423	15.6052	0.0381	3.6519	0.0622	3.7141	0.9757	0.0604	1.0361	94.0210	4,481.501 3	4,575.522 3	6.7107	0.2328	4,812.664 5

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 2.2 Overall Operational

#### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	1.2024	1.3000e- 004	0.0145	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005	0.0000	0.0283	0.0283	7.0000e- 005	0.0000	0.0301
Energy	0.0480	0.4366	0.3667	2.6200e- 003		0.0332	0.0332		0.0332	0.0332	0.0000	1,010.699 0	1,010.699 0	0.0543	0.0142	1,016.285 5
Mobile	1.4877	2.4055	15.2239	0.0355	3.6519	0.0290	3.6809	0.9757	0.0272	1.0028	0.0000	3,315.339 6	3,315.339 6	0.1746	0.1663	3,369.259 2
Waste	r:					0.0000	0.0000	       	0.0000	0.0000	18.2763	0.0000	18.2763	1.0801	0.0000	45.2787
Water	7,				       	0.0000	0.0000		0.0000	0.0000	20.9159	155.4345	176.3504	2.1614	0.0523	245.9748
Total	2.7382	2.8423	15.6052	0.0381	3.6519	0.0622	3.7141	0.9757	0.0604	1.0361	39.1922	4,481.501 3	4,520.693 4	3.4704	0.2328	4,676.828 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.32	0.00	1.20	48.29	0.00	2.82

# **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	11/1/2022	11/28/2022	5	20	
2	Grading	Grading	11/29/2022	1/30/2023	5	45	
3	Building Construction	Building Construction	1/31/2023	10/7/2024	5	440	

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Paving	Paving	10/8/2024	11/25/2024	5	35	
5	Architectural Coating	•		1/13/2025	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

#### Acres of Paving: 19.79

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 441,990; Non-Residential Outdoor: 147,330; Striped Parking Area: 51,985 (Architectural Coating – sqft)

#### OffRoad Equipment

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

Trips and VMT

### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	12,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	486.00	190.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	97.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

Water Exposed Area

### 3.2 Site Preparation - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3308	0.1970	3.8000e- 004		0.0161	0.0161		0.0148	0.0148	0.0000	33.4394	33.4394	0.0108	0.0000	33.7098
Total	0.0317	0.3308	0.1970	3.8000e- 004	0.1966	0.0161	0.2127	0.1010	0.0148	0.1159	0.0000	33.4394	33.4394	0.0108	0.0000	33.7098

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 3.2 Site Preparation - 2022

#### Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	6.3000e- 004	4.9000e- 004	6.1300e- 003	2.0000e- 005	1.9800e- 003	1.0000e- 005	1.9900e- 003	5.3000e- 004	1.0000e- 005	5.3000e- 004	0.0000	1.5644	1.5644	4.0000e- 005	4.0000e- 005	1.5784
Total	6.3000e- 004	4.9000e- 004	6.1300e- 003	2.0000e- 005	1.9800e- 003	1.0000e- 005	1.9900e- 003	5.3000e- 004	1.0000e- 005	5.3000e- 004	0.0000	1.5644	1.5644	4.0000e- 005	4.0000e- 005	1.5784

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0767	0.0000	0.0767	0.0394	0.0000	0.0394	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0317	0.3308	0.1970	3.8000e- 004		0.0161	0.0161		0.0148	0.0148	0.0000	33.4394	33.4394	0.0108	0.0000	33.7097
Total	0.0317	0.3308	0.1970	3.8000e- 004	0.0767	0.0161	0.0928	0.0394	0.0148	0.0542	0.0000	33.4394	33.4394	0.0108	0.0000	33.7097

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 3.2 Site Preparation - 2022

### **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					ton	s/yr							МТ	'/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	6.3000e- 004	4.9000e- 004	6.1300e- 003	2.0000e- 005	1.9800e- 003	1.0000e- 005	1.9900e- 003	5.3000e- 004	1.0000e- 005	5.3000e- 004	0.0000	1.5644	1.5644	4.0000e- 005	4.0000e- 005	1.5784
Total	6.3000e- 004	4.9000e- 004	6.1300e- 003	2.0000e- 005	1.9800e- 003	1.0000e- 005	1.9900e- 003	5.3000e- 004	1.0000e- 005	5.3000e- 004	0.0000	1.5644	1.5644	4.0000e- 005	4.0000e- 005	1.5784

### 3.3 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.1502	0.0000	0.1502	0.0484	0.0000	0.0484	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0435	0.4661	0.3485	7.4000e- 004		0.0196	0.0196		0.0181	0.0181	0.0000	65.4415	65.4415	0.0212	0.0000	65.9707
Total	0.0435	0.4661	0.3485	7.4000e- 004	0.1502	0.0196	0.1698	0.0484	0.0181	0.0665	0.0000	65.4415	65.4415	0.0212	0.0000	65.9707

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 3.3 Grading - 2022

#### Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0103	0.4489	0.0958	1.9200e- 003	0.0575	4.9500e- 003	0.0625	0.0158	4.7400e- 003	0.0205	0.0000	185.5340	185.5340	2.5000e- 003	0.0292	194.3061
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	8.4000e- 004	6.5000e- 004	8.1800e- 003	2.0000e- 005	2.6400e- 003	1.0000e- 005	2.6500e- 003	7.0000e- 004	1.0000e- 005	7.1000e- 004	0.0000	2.0859	2.0859	6.0000e- 005	6.0000e- 005	2.1045
Total	0.0112	0.4495	0.1039	1.9400e- 003	0.0601	4.9600e- 003	0.0651	0.0165	4.7500e- 003	0.0212	0.0000	187.6199	187.6199	2.5600e- 003	0.0293	196.4106

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0586	0.0000	0.0586	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0435	0.4661	0.3485	7.4000e- 004		0.0196	0.0196		0.0181	0.0181	0.0000	65.4414	65.4414	0.0212	0.0000	65.9706
Total	0.0435	0.4661	0.3485	7.4000e- 004	0.0586	0.0196	0.0782	0.0189	0.0181	0.0369	0.0000	65.4414	65.4414	0.0212	0.0000	65.9706

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.3 Grading - 2022

#### **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					ton	s/yr							МТ	/yr		
Hauling	0.0103	0.4489	0.0958	1.9200e- 003	0.0575	4.9500e- 003	0.0625	0.0158	4.7400e- 003	0.0205	0.0000	185.5340	185.5340	2.5000e- 003	0.0292	194.3061
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	8.4000e- 004	6.5000e- 004	8.1800e- 003	2.0000e- 005	2.6400e- 003	1.0000e- 005	2.6500e- 003	7.0000e- 004	1.0000e- 005	7.1000e- 004	0.0000	2.0859	2.0859	6.0000e- 005	6.0000e- 005	2.1045
Total	0.0112	0.4495	0.1039	1.9400e- 003	0.0601	4.9600e- 003	0.0651	0.0165	4.7500e- 003	0.0212	0.0000	187.6199	187.6199	2.5600e- 003	0.0293	196.4106

### 3.3 Grading - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Fugitive Dust					0.1412	0.0000	0.1412	0.0435	0.0000	0.0435	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0349	0.3624	0.2945	6.5000e- 004		0.0150	0.0150		0.0138	0.0138	0.0000	57.2620	57.2620	0.0185	0.0000	57.7250
Total	0.0349	0.3624	0.2945	6.5000e- 004	0.1412	0.0150	0.1561	0.0435	0.0138	0.0572	0.0000	57.2620	57.2620	0.0185	0.0000	57.7250

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 3.3 Grading - 2023

#### 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					ton	s/yr							МТ	/yr		
Hauling	6.1700e- 003	0.3073	0.0808	1.6000e- 003	0.0503	3.5200e- 003	0.0538	0.0138	3.3700e- 003	0.0172	0.0000	155.3655	155.3655	2.1900e- 003	0.0245	162.7159
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	6.8000e- 004	5.0000e- 004	6.5900e- 003	2.0000e- 005	2.3100e- 003	1.0000e- 005	2.3200e- 003	6.1000e- 004	1.0000e- 005	6.2000e- 004	0.0000	1.7773	1.7773	4.0000e- 005	5.0000e- 005	1.7923
Total	6.8500e- 003	0.3078	0.0874	1.6200e- 003	0.0526	3.5300e- 003	0.0561	0.0144	3.3800e- 003	0.0178	0.0000	157.1428	157.1428	2.2300e- 003	0.0245	164.5082

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0551	0.0000	0.0551	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0349	0.3624	0.2945	6.5000e- 004		0.0150	0.0150		0.0138	0.0138	0.0000	57.2619	57.2619	0.0185	0.0000	57.7249
Total	0.0349	0.3624	0.2945	6.5000e- 004	0.0551	0.0150	0.0700	0.0169	0.0138	0.0307	0.0000	57.2619	57.2619	0.0185	0.0000	57.7249

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.3 Grading - 2023

### **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					ton	s/yr							МТ	/yr		
Hauling	6.1700e- 003	0.3073	0.0808	1.6000e- 003	0.0503	3.5200e- 003	0.0538	0.0138	3.3700e- 003	0.0172	0.0000	155.3655	155.3655	2.1900e- 003	0.0245	162.7159
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	6.8000e- 004	5.0000e- 004	6.5900e- 003	2.0000e- 005	2.3100e- 003	1.0000e- 005	2.3200e- 003	6.1000e- 004	1.0000e- 005	6.2000e- 004	0.0000	1.7773	1.7773	4.0000e- 005	5.0000e- 005	1.7923
Total	6.8500e- 003	0.3078	0.0874	1.6200e- 003	0.0526	3.5300e- 003	0.0561	0.0144	3.3800e- 003	0.0178	0.0000	157.1428	157.1428	2.2300e- 003	0.0245	164.5082

### 3.4 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.1880	1.7190	1.9412	3.2200e- 003		0.0836	0.0836	- 	0.0787	0.0787	0.0000	277.0067	277.0067	0.0659	0.0000	278.6541
Total	0.1880	1.7190	1.9412	3.2200e- 003		0.0836	0.0836		0.0787	0.0787	0.0000	277.0067	277.0067	0.0659	0.0000	278.6541

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 3.4 Building Construction - 2023

### 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					ton	s/yr							МТ	/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	0.0246	0.7785	0.3101	3.9700e- 003	0.1434	6.4700e- 003	0.1499	0.0414	6.1900e- 003	0.0476	0.0000	382.0128	382.0128	3.8600e- 003	0.0565	398.9423
Worker	0.1885	0.1397	1.8232	5.2900e- 003	0.6383	3.0500e- 003	0.6414	0.1695	2.8000e- 003	0.1723	0.0000	491.5240	491.5240	0.0121	0.0129	495.6681
Total	0.2131	0.9181	2.1334	9.2600e- 003	0.7818	9.5200e- 003	0.7913	0.2109	8.9900e- 003	0.2199	0.0000	873.5368	873.5368	0.0160	0.0694	894.6104

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.1880	1.7190	1.9412	3.2200e- 003		0.0836	0.0836		0.0787	0.0787	0.0000	277.0063	277.0063	0.0659	0.0000	278.6537
Total	0.1880	1.7190	1.9412	3.2200e- 003		0.0836	0.0836		0.0787	0.0787	0.0000	277.0063	277.0063	0.0659	0.0000	278.6537

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 3.4 Building Construction - 2023

#### 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					ton	s/yr							МТ	'/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	0.0246	0.7785	0.3101	3.9700e- 003	0.1434	6.4700e- 003	0.1499	0.0414	6.1900e- 003	0.0476	0.0000	382.0128	382.0128	3.8600e- 003	0.0565	398.9423
Worker	0.1885	0.1397	1.8232	5.2900e- 003	0.6383	3.0500e- 003	0.6414	0.1695	2.8000e- 003	0.1723	0.0000	491.5240	491.5240	0.0121	0.0129	495.6681
Total	0.2131	0.9181	2.1334	9.2600e- 003	0.7818	9.5200e- 003	0.7913	0.2109	8.9900e- 003	0.2199	0.0000	873.5368	873.5368	0.0160	0.0694	894.6104

#### 3.4 Building Construction - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.1479	1.3511	1.6248	2.7100e- 003		0.0616	0.0616		0.0580	0.0580	0.0000	233.0084	233.0084	0.0551	0.0000	234.3859
Total	0.1479	1.3511	1.6248	2.7100e- 003		0.0616	0.0616		0.0580	0.0580	0.0000	233.0084	233.0084	0.0551	0.0000	234.3859

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 3.4 Building Construction - 2024

### Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	0.0204	0.6548	0.2579	3.2900e- 003	0.1206	5.4000e- 003	0.1260	0.0348	5.1700e- 003	0.0400	0.0000	316.3251	316.3251	3.3600e- 003	0.0467	330.3262
Worker	0.1480	0.1046	1.4364	4.3100e- 003	0.5369	2.4500e- 003	0.5393	0.1426	2.2500e- 003	0.1448	0.0000	403.4694	403.4694	9.2400e- 003	0.0101	406.7005
Total	0.1684	0.7594	1.6943	7.6000e- 003	0.6575	7.8500e- 003	0.6653	0.1774	7.4200e- 003	0.1848	0.0000	719.7945	719.7945	0.0126	0.0568	737.0267

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.1479	1.3511	1.6248	2.7100e- 003		0.0616	0.0616		0.0580	0.0580	0.0000	233.0081	233.0081	0.0551	0.0000	234.3856
Total	0.1479	1.3511	1.6248	2.7100e- 003		0.0616	0.0616		0.0580	0.0580	0.0000	233.0081	233.0081	0.0551	0.0000	234.3856

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 3.4 Building Construction - 2024

#### **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					ton	s/yr							МТ	/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	0.0204	0.6548	0.2579	3.2900e- 003	0.1206	5.4000e- 003	0.1260	0.0348	5.1700e- 003	0.0400	0.0000	316.3251	316.3251	3.3600e- 003	0.0467	330.3262
Worker	0.1480	0.1046	1.4364	4.3100e- 003	0.5369	2.4500e- 003	0.5393	0.1426	2.2500e- 003	0.1448	0.0000	403.4694	403.4694	9.2400e- 003	0.0101	406.7005
Total	0.1684	0.7594	1.6943	7.6000e- 003	0.6575	7.8500e- 003	0.6653	0.1774	7.4200e- 003	0.1848	0.0000	719.7945	719.7945	0.0126	0.0568	737.0267

#### 3.5 Paving - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	∵/yr		
Off-Road	0.0173	0.1667	0.2560	4.0000e- 004		8.2000e- 003	8.2000e- 003		7.5400e- 003	7.5400e- 003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298
Paving	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0354	0.1667	0.2560	4.0000e- 004		8.2000e- 003	8.2000e- 003		7.5400e- 003	7.5400e- 003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 3.5 Paving - 2024

#### Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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- 004	5.6000e- 004	7.7200e- 003	2.0000e- 005	2.8900e- 003	1.0000e- 005	2.9000e- 003	7.7000e- 004	1.0000e- 005	7.8000e- 004	0.0000	2.1684	2.1684	5.0000e- 005	5.0000e- 005	2.1858
Total	8.0000e- 004	5.6000e- 004	7.7200e- 003	2.0000e- 005	2.8900e- 003	1.0000e- 005	2.9000e- 003	7.7000e- 004	1.0000e- 005	7.8000e- 004	0.0000	2.1684	2.1684	5.0000e- 005	5.0000e- 005	2.1858

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0173	0.1667	0.2560	4.0000e- 004		8.2000e- 003	8.2000e- 003		7.5400e- 003	7.5400e- 003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298
Paving	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0354	0.1667	0.2560	4.0000e- 004		8.2000e- 003	8.2000e- 003		7.5400e- 003	7.5400e- 003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 3.5 Paving - 2024

### **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					ton	s/yr							МТ	/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- 004	5.6000e- 004	7.7200e- 003	2.0000e- 005	2.8900e- 003	1.0000e- 005	2.9000e- 003	7.7000e- 004	1.0000e- 005	7.8000e- 004	0.0000	2.1684	2.1684	5.0000e- 005	5.0000e- 005	2.1858
Total	8.0000e- 004	5.6000e- 004	7.7200e- 003	2.0000e- 005	2.8900e- 003	1.0000e- 005	2.9000e- 003	7.7000e- 004	1.0000e- 005	7.8000e- 004	0.0000	2.1684	2.1684	5.0000e- 005	5.0000e- 005	2.1858

### 3.6 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Archit. Coating	0.5968					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e- 003	0.0158	0.0235	4.0000e- 005		7.9000e- 004	7.9000e- 004		7.9000e- 004	7.9000e- 004	0.0000	3.3192	3.3192	1.9000e- 004	0.0000	3.3239
Total	0.5991	0.0158	0.0235	4.0000e- 005		7.9000e- 004	7.9000e- 004		7.9000e- 004	7.9000e- 004	0.0000	3.3192	3.3192	1.9000e- 004	0.0000	3.3239

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Architectural Coating - 2024

#### 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					ton	s/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	3.8200e- 003	2.7000e- 003	0.0371	1.1000e- 004	0.0139	6.0000e- 005	0.0139	3.6800e- 003	6.0000e- 005	3.7400e- 003	0.0000	10.4165	10.4165	2.4000e- 004	2.6000e- 004	10.5000
Total	3.8200e- 003	2.7000e- 003	0.0371	1.1000e- 004	0.0139	6.0000e- 005	0.0139	3.6800e- 003	6.0000e- 005	3.7400e- 003	0.0000	10.4165	10.4165	2.4000e- 004	2.6000e- 004	10.5000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.5968					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e- 003	0.0158	0.0235	4.0000e- 005		7.9000e- 004	7.9000e- 004		7.9000e- 004	7.9000e- 004	0.0000	3.3192	3.3192	1.9000e- 004	0.0000	3.3239
Total	0.5991	0.0158	0.0235	4.0000e- 005		7.9000e- 004	7.9000e- 004		7.9000e- 004	7.9000e- 004	0.0000	3.3192	3.3192	1.9000e- 004	0.0000	3.3239

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Architectural Coating - 2024

#### **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					ton	s/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	3.8200e- 003	2.7000e- 003	0.0371	1.1000e- 004	0.0139	6.0000e- 005	0.0139	3.6800e- 003	6.0000e- 005	3.7400e- 003	0.0000	10.4165	10.4165	2.4000e- 004	2.6000e- 004	10.5000
Total	3.8200e- 003	2.7000e- 003	0.0371	1.1000e- 004	0.0139	6.0000e- 005	0.0139	3.6800e- 003	6.0000e- 005	3.7400e- 003	0.0000	10.4165	10.4165	2.4000e- 004	2.6000e- 004	10.5000

#### 3.6 Architectural Coating - 2025

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.2066					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7000e- 004	5.1500e- 003	8.1400e- 003	1.0000e- 005		2.3000e- 004	2.3000e- 004		2.3000e- 004	2.3000e- 004	0.0000	1.1490	1.1490	6.0000e- 005	0.0000	1.1505
Total	0.2074	5.1500e- 003	8.1400e- 003	1.0000e- 005		2.3000e- 004	2.3000e- 004		2.3000e- 004	2.3000e- 004	0.0000	1.1490	1.1490	6.0000e- 005	0.0000	1.1505

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Architectural Coating - 2025

#### Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	1.2400e- 003	8.4000e- 004	0.0120	4.0000e- 005	4.8000e- 003	2.0000e- 005	4.8200e- 003	1.2700e- 003	2.0000e- 005	1.2900e- 003	0.0000	3.5181	3.5181	7.0000e- 005	8.0000e- 005	3.5449
Total	1.2400e- 003	8.4000e- 004	0.0120	4.0000e- 005	4.8000e- 003	2.0000e- 005	4.8200e- 003	1.2700e- 003	2.0000e- 005	1.2900e- 003	0.0000	3.5181	3.5181	7.0000e- 005	8.0000e- 005	3.5449

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.2066					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7000e- 004	5.1500e- 003	8.1400e- 003	1.0000e- 005		2.3000e- 004	2.3000e- 004		2.3000e- 004	2.3000e- 004	0.0000	1.1490	1.1490	6.0000e- 005	0.0000	1.1505
Total	0.2074	5.1500e- 003	8.1400e- 003	1.0000e- 005		2.3000e- 004	2.3000e- 004		2.3000e- 004	2.3000e- 004	0.0000	1.1490	1.1490	6.0000e- 005	0.0000	1.1505

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 3.6 Architectural Coating - 2025

#### 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					ton	s/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	1.2400e- 003	8.4000e- 004	0.0120	4.0000e- 005	4.8000e- 003	2.0000e- 005	4.8200e- 003	1.2700e- 003	2.0000e- 005	1.2900e- 003	0.0000	3.5181	3.5181	7.0000e- 005	8.0000e- 005	3.5449
Total	1.2400e- 003	8.4000e- 004	0.0120	4.0000e- 005	4.8000e- 003	2.0000e- 005	4.8200e- 003	1.2700e- 003	2.0000e- 005	1.2900e- 003	0.0000	3.5181	3.5181	7.0000e- 005	8.0000e- 005	3.5449

### 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											MT	/yr		
Mitigated	1.4877	2.4055	15.2239	0.0355	3.6519	0.0290	3.6809	0.9757	0.0272	1.0028	0.0000	3,315.339 6	3,315.339 6	0.1746	0.1663	3,369.259 2
Unmitigated	1.4877	2.4055	15.2239	0.0355	3.6519	0.0290	3.6809	0.9757	0.0272	1.0028	0.0000	3,315.339 6	3,315.339 6	0.1746	0.1663	3,369.259 2

# 4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	2,997.02	2,997.02	2997.02	9,654,767	9,654,767
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	2,997.02	2,997.02	2,997.02	9,654,767	9,654,767

### 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

#### γθηθείου Measures Energy

Historical Energy Use: N

# 5.0 Energy Detail

894200.0	001100.0	720420.0	0.000315	919000.0	£69810.0	726110.0	016700.0	765920.0	200141.0	6£9271.0	0.056022	6784830	IteM qitt2
894300.0	001100.0	720420.0	0.000315	919000.0	£69810.0	726110.0	016700.0	762920.0	200141.0	6£9271.0	0.056022	0.534849	Parking Lot
894300.0	001100.0	720420.0	0.000315	919000.0	£69810.0	726110.0	016700.0	762920.0	200141.0	6£9271.0	0.056022	6784830	Other Non-Asphalt Surfaces
894300.0	001100.0	720420.0	0.000315	919000.0	£69810.0	726110.0	016700.0	762920.0	200141.0	6£9271.0	0.056022	6784830	Other Asphalt Surfaces
894300.0	001100.0	720420.0	0.000315	919000.0	£69810.0	726110.0	016700.0	762920.0	200141.0	6£9271.0	0.056022	6784830	General Office Building
894300.0	001100.0	720420.0	0.000315	919000.0	£69810.0	726110.0	016700.0	762920.0	200141.0	6£9271.0	0.056022	6784830	General Light Industry
894200.0	001100.0	720420.0	0.000315	919000.0	£69810.0	726110.0	016700.0	762920.0	200141.0	6£9271.0	0.056022	0.534849	General Heavy Industry
НМ	SUBS	MCY	SUBUS	SUBOS	анн	анм	гноз	гнрі	MDV	LDT2	רסדו	ΓD∀	Sed Dae

#### xiM f99I7 4.4

Γ	12	40	9 <del>7</del>	00.01	64.40	09 <sup>.</sup> 91	06'9	8.40	09.91	Strip Mall
	0	0	0	00.0	00.0	00.0	06.9	6.40	09.91	Parking Lot
	Pass-by	Diverted	Primary	H-O or C-NM	H-S or C-C	H-W or C-W	H-O or C-NM	H-S or C-C	H-W or C-W	Land Use
	% ə	Trip Purpos			% dinT			səliM		

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	535.4119	535.4119	0.0452	5.4800e- 003	538.1740
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	535.4119	535.4119	0.0452	5.4800e- 003	538.1740
NaturalGas Mitigated	0.0480	0.4366	0.3667	2.6200e- 003		0.0332	0.0332		0.0332	0.0332	0.0000	475.2870	475.2870	9.1100e- 003	8.7100e- 003	478.1114
NaturalGas Unmitigated	0.0480	0.4366	0.3667	2.6200e- 003		0.0332	0.0332		0.0332	0.0332	0.0000	475.2870	475.2870	9.1100e- 003	8.7100e- 003	478.1114

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 5.2 Energy by Land Use - NaturalGas

#### **Unmitigated**

	NaturalGa s 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					ton	s/yr							MT	/yr		
General Heavy Industry	8.02334e +006	0.0433	0.3933	0.3304	2.3600e- 003		0.0299	0.0299		0.0299	0.0299	0.0000	428.1558	428.1558	8.2100e- 003	7.8500e- 003	430.7001
General Light Industry	824092	4.4400e- 003	0.0404	0.0339	2.4000e- 004		3.0700e- 003	3.0700e- 003		3.0700e- 003	3.0700e- 003	0.0000	43.9767	43.9767	8.4000e- 004	8.1000e- 004	44.2380
General Office Building	36015	1.9000e- 004	1.7700e- 003	1.4800e- 003	1.0000e- 005		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004	0.0000	1.9219	1.9219	4.0000e- 005	4.0000e- 005	1.9333
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	23100	1.2000e- 004	1.1300e- 003	9.5000e- 004	1.0000e- 005		9.0000e- 005	9.0000e- 005		9.0000e- 005	9.0000e- 005	0.0000	1.2327	1.2327	2.0000e- 005	2.0000e- 005	1.2400
Total		0.0480	0.4366	0.3667	2.6200e- 003		0.0332	0.0332		0.0332	0.0332	0.0000	475.2870	475.2870	9.1100e- 003	8.7200e- 003	478.1114

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 5.2 Energy by Land Use - NaturalGas

#### Mitigated

	NaturalGa s 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					ton	s/yr							МТ	/yr		
General Heavy Industry	8.02334e +006	0.0433	0.3933	0.3304	2.3600e- 003		0.0299	0.0299		0.0299	0.0299	0.0000	428.1558	428.1558	8.2100e- 003	7.8500e- 003	430.7001
General Light Industry	824092	4.4400e- 003	0.0404	0.0339	2.4000e- 004		3.0700e- 003	3.0700e- 003		3.0700e- 003	3.0700e- 003	0.0000	43.9767	43.9767	8.4000e- 004	8.1000e- 004	44.2380
General Office Building	36015	1.9000e- 004	1.7700e- 003	1.4800e- 003	1.0000e- 005		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004	0.0000	1.9219	1.9219	4.0000e- 005	4.0000e- 005	1.9333
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	23100	1.2000e- 004	1.1300e- 003	9.5000e- 004	1.0000e- 005		9.0000e- 005	9.0000e- 005		9.0000e- 005	9.0000e- 005	0.0000	1.2327	1.2327	2.0000e- 005	2.0000e- 005	1.2400
Total		0.0480	0.4366	0.3667	2.6200e- 003		0.0332	0.0332		0.0332	0.0332	0.0000	475.2870	475.2870	9.1100e- 003	8.7200e- 003	478.1114

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

# 5.3 Energy by Land Use - Electricity

#### **Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
General Heavy Industry	2.46185e +006	436.5975	0.0369	4.4700e- 003	438.8498
General Light Industry	252861	44.8437	3.7800e- 003	4.6000e- 004	45.0751
General Office Building	96495	17.1130	1.4400e- 003	1.8000e- 004	17.2012
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	80360	14.2515	1.2000e- 003	1.5000e- 004	14.3250
Strip Mall	127470	22.6062	1.9100e- 003	2.3000e- 004	22.7229
Total		535.4119	0.0452	5.4900e- 003	538.1740

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#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e								
Land Use	kWh/yr		MT/yr										
General Heavy Industry	2.46185e +006	436.5975	0.0369	4.4700e- 003	438.8498								
General Light Industry	252861	44.8437	3.7800e- 003	4.6000e- 004	45.0751								
General Office Building	96495	17.1130	1.4400e- 003	1.8000e- 004	17.2012								
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000								
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000								
Parking Lot	80360	14.2515	1.2000e- 003	1.5000e- 004	14.3250								
Strip Mall	127470	22.6062 1.9100e- 003		2.3000e- 004	22.7229								
Total		535.4119	0.0452	5.4900e- 003	538.1740								

# 6.0 Area Detail

6.1 Mitigation Measures Area

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT	/yr			
Mitigated	1.2024	1.3000e- 004	0.0145	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005	0.0000	0.0283	0.0283	7.0000e- 005	0.0000	0.0301
Unmitigated	1.2024	1.3000e- 004	0.0145	0.0000		5.0000e- 005	5.0000e- 005	<b></b>	5.0000e- 005	5.0000e- 005	0.0000	0.0283	0.0283	7.0000e- 005	0.0000	0.0301

# 6.2 Area by SubCategory

#### **Unmitigated**

	ROG	NOx	СО	SO2	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	0.0803					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1208					0.0000	0.0000	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3500e- 003	1.3000e- 004	0.0145	0.0000		5.0000e- 005	5.0000e- 005	1	5.0000e- 005	5.0000e- 005	0.0000	0.0283	0.0283	7.0000e- 005	0.0000	0.0301
Total	1.2024	1.3000e- 004	0.0145	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005	0.0000	0.0283	0.0283	7.0000e- 005	0.0000	0.0301

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

### 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr								MT/yr							
Architectural Coating	0.0803					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3500e- 003	1.3000e- 004	0.0145	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005	0.0000	0.0283	0.0283	7.0000e- 005	0.0000	0.0301
Total	1.2024	1.3000e- 004	0.0145	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005	0.0000	0.0283	0.0283	7.0000e- 005	0.0000	0.0301

# 7.0 Water Detail

7.1 Mitigation Measures Water

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#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e			
Category	MT/yr						
initigated	176.3504	2.1614	0.0523	245.9748			
	176.3504	2.1614	0.0523	245.9748			

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#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### 7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e			
Land Use	Mgal	MT/yr						
General Heavy Industry	57.3893 / 0	150.7313	1.8812	0.0455	211.3241			
General Light Industry	5.89456 / 0	15.4819	0.1932	4.6700e- 003	21.7055			
General Office Building	4 4 4 2 0	7.1552	0.0614	1.5000e- 003	9.1372			
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000			
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000			
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000			
Strip Mall	0.777761 / 0.476693	2.9820	0.0256	6.3000e- 004	3.8080			
Total		176.3504	2.1614	0.0523	245.9748			

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#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### 7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e				
Land Use	Mgal	MT/yr							
General Heavy Industry	57.3893 / 0	150.7313	1.8812	0.0455	211.3241				
General Light Industry	5.89456 / 0	15.4819	0.1932	4.6700e- 003	21.7055				
General Office Building	1.8662 / 1.1438	7.1552	0.0614	1.5000e- 003	9.1372				
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000				
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000				
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000				
Strip Mall	0.777761/ 0.476693	2.9820	0.0256	6.3000e- 004	3.8080				
Total		176.3504	2.1614	0.0523	245.9748				

#### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Wildomar Commerce Center - Riverside-South Coast County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### Category/Year

	Total CO2	CH4	N2O	CO2e					
	MT/yr								
initigated	18.2763	1.0801	0.0000	45.2787					
Unmitigated	73.1052	4.3204	0.0000	181.1150					

Wildomar Commerce Center - Riverside-South Coast County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### 8.2 Waste by Land Use

**Unmitigated** 

	Waste Disposed	Total CO2	CH4	N2O	CO2e				
Land Use	tons	MT/yr							
General Heavy Industry	307.73	62.4664	3.6917	0.0000	154.7579				
General Light Industry	31.61	6.4165	0.3792	0.0000	15.8967				
General Office Building	9.77	1.9832	0.1172	0.0000	4.9134				
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000				
Other Non- Asphalt Surfaces		0.0000	0.0000	0.0000	0.0000				
Parking Lot	0	0.0000	0.0000	0.0000	0.0000				
Strip Mall	11.03	2.2390	0.1323	0.0000	5.5470				
Total		73.1052	4.3204	0.0000	181.1150				

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#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### 8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	7/yr	
General Heavy Industry	76.9325	15.6166	0.9229	0.0000	38.6895
General Light Industry	7.9025	1.6041	0.0948	0.0000	3.9742
General Office Building	2.4425	0.4958	0.0293	0.0000	1.2283
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.7575	0.5598	0.0331	0.0000	1.3868
Total		18.2763	1.0801	0.0000	45.2787

#### 9.0 Operational Offroad

Equipment Type	Number	Hours/Day Days/Year		Horse Power Load Factor		Fuel Type						
10.0 Stationary Equipment												
10.0 Stationary Equipment												
Fire Pumps and Emergency Generators												
Equipment Type	Number	Hours/Day Hours/Year		Horse Power Load Factor		Fuel Type						

Wildomar Commerce Center - Riverside-South Coast County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
User Defined Equipment					
Equipment Type	Number				
11.0 Vegetation					

## Appendix C:

EMFAC2017 Output

#### Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year Vehicle (	CaModel Year	Speed	Fuel	Population Tr	rips	Fuel Consumption	Fuel Consumption	Total Fuel Consumption	VMT	Total VMT	Miles Per Gallon	Vehicle Class
South Coast AQMD	2022 HHDT	Aggregate	Aggregate	Gasoline	77.82251	1557.073	1.914672095	1914.672095	1984478.157	7970.981	13381402.09		6.74 HHD
South Coast AQMD	2022 HHDT	Aggregate	Aggregate	Diesel	108362	1118617	1982.563485	1982563.485		13373431			
South Coast AQMD	2022 LDA	Aggregate	Aggregate	Gasoline	6542832 3	80915701	8178.144259	8178144.259	8226568.36	2.52E+08	254602375.4		30.95 LDA
South Coast AQMD	2022 LDA	Aggregate	Aggregate	Diesel	58937.5	279973.4	48.42410045	48424.10045		2358230			
South Coast AQMD	2022 LDA	Aggregate	Aggregate	Electricity	127532.6	637025.4	0	0		5177709			
South Coast AQMD	2022 LDT1	Aggregate	Aggregate	Gasoline	736905.6	3399512	1031.447408	1031447.408	1031847.287	27300896	27309932.68		26.47 LDT1
South Coast AQMD	2022 LDT1	Aggregate	Aggregate	Diesel	387.1571	1348.408	0.39987912	399.8791198		9037.122			
South Coast AQMD	2022 LDT1	Aggregate	Aggregate	Electricity	5339.042	26794.47	0	0		221507.4			
South Coast AQMD	2022 LDT2	Aggregate	Aggregate	Gasoline	2246303 1	10535910	3436.155557	3436155.557	3453207.618	84740129	85348125.78		24.72 LDT2
South Coast AQMD	2022 LDT2	Aggregate	Aggregate	Diesel	14234.59	70193.22	17.05206088	17052.06088		607996.5			
South Coast AQMD	2022 LDT2	Aggregate	Aggregate	Electricity	22589.96	114302.6	0	0		734756.1			
South Coast AQMD	2022 LHDT1	Aggregate	Aggregate	Gasoline	175903.1	2620694	598.0685493	598068.5493	821513.5103	6298251	11115258.37		13.53 LHDT1
South Coast AQMD	2022 LHDT1	Aggregate	Aggregate	Diesel	119380.7	1501659	223.444961	223444.961		4817007			
South Coast AQMD	2022 LHDT2	Aggregate	Aggregate	Gasoline	30009.92	447103.1	113.5150695	113515.0695	209067.0531	1040649	2902289.397		13.88 LHDT2
South Coast AQMD	2022 LHDT2	Aggregate	Aggregate	Diesel	47335.63	595422.7	95.55198358	95551.98358		1861640			
South Coast AQMD	2022 MCY	Aggregate	Aggregate	Gasoline	295960.1	591920.2	56.92214589	56922.14589	56922.14589	2072370	2072370.126		36.41 MCY
South Coast AQMD	2022 MDV	Aggregate	Aggregate	Gasoline	1579640	7302407	2793.799561	2793799.561	2842944.316	55888916	57233722.8		20.13 MDV
South Coast AQMD	2022 MDV	Aggregate	Aggregate	Diesel		163526.3	49.14475473	49144.75473		1344806			
South Coast AQMD	2022 MDV	Aggregate	Aggregate	Electricity	11658.48	59625.3	0	0		391944.3			
South Coast AQMD	2022 MH	Aggregate	Aggregate	Gasoline	35097.75	3511.179	64.70410395	64704.10395	76270.38211	333282.4	455641.5746		5.97 MH
South Coast AQMD	2022 MH	Aggregate	Aggregate	Diesel	12758.81		11.56627815	11566.27815		122359.2			
South Coast AQMD	2022 MHDT	Aggregate	Aggregate	Gasoline	25445.41	509111.8	269.2842176	269284.2176	1009568.488	1367743	9307083.084		9.22 MHDT
South Coast AQMD	2022 MHDT	Aggregate	Aggregate	Diesel	123310	1231988	740.28427	740284.27		7939340			
South Coast AQMD	2022 OBUS	Aggregate	Aggregate	Gasoline	5959.443		49.67589796	49675.89796			576603.5972		6.54 OBUS
South Coast AQMD	2022 OBUS	Aggregate	Aggregate	Diesel	4274.499 4		38.46214418	38462.14418		325950.1			
South Coast AQMD	2022 SBUS	Aggregate	Aggregate	Gasoline		10523.32	11.7605267	11760.5267	39328.1885		316915.9173		8.06 SBUS
South Coast AQMD	2022 SBUS	Aggregate	Aggregate	Diesel	6631.313		27.5676618	27567.6618		209546.1			
South Coast AQMD	2022 UBUS	Aggregate	Aggregate	Gasoline	952.146		18.40085629	18400.85629	18647.65249				4.87 UBUS
South Coast AQMD	2022 UBUS	Aggregate	Aggregate	Diesel	14.14142 5		0.246796198	246.7961984		1478.086			
South Coast AQMD	2022 UBUS	Aggregate	Aggregate	Electricity	17.11694 6	68.46776	0			1343.185			

Source: EMFAC2017 (v1.0.3) Emissions Inventory Region Type: Air District Region: South Coast AQMD Calendar Year: 2023 Season: Annual Vehicle Classification: EMFAC2007 Categories Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y Vehicle C	at Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption	Fuel Consumption	Total Fuel Consumption	VMT	Total VMT	Miles Per Gallor	Vehicle Class
South Coas	s 2023 HHDT	Aggregate	Aggregate	Gasoline	75.10442936	8265.097	1502.689	1.936286145	1936.286145	1913466.474	8265.097	13656273.03		7.14 HHD
South Coas	s 2023 HHDT	Aggregate	Aggregate	Diesel	109818.6753	13648008	1133618	1911.530188	1911530.188		13648008			
South Coas	s 2023 LDA	Aggregate	Aggregate	Gasoline	6635002.295	2.53E+08	31352477	7971.24403	7971244.03	8020635.698	2.53E+08	255180358.3		31.82 LDA
South Coas	s 2023 LDA	Aggregate	Aggregate	Diesel	62492.97958	2469816	297086.6	49.3916685	49391.6685		2469816			
South Coas	s 2023 LDA	Aggregate	Aggregate	Electricity	150700.3971	6237106	751566	0	0		6237106			
South Coas	s 2023 LDT1	Aggregate	Aggregate	Gasoline	758467.6481	27812996	3504563	1023.913006	1023913.006	1024279.466	27812996	27821405.09		27.16 LDT1
South Coas	s 2023 LDT1	Aggregate	Aggregate	Diesel	360.7799144	8408.618	1256.88	0.366459477	366.4594769		8408.618			
South Coas	s 2023 LDT1	Aggregate	Aggregate	Electricity	7122.93373	303507.5	35798.19	0	0		303507.5			
South Coas	s 2023 LDT2	Aggregate	Aggregate	Gasoline	2285150.139	85272416	10723315	3338.798312	3338798.312	3356536.438	85272416	85922778.34		25.60 LDT2
South Coas	s 2023 LDT2	Aggregate	Aggregate	Diesel	15594.68309	650362.8	76635.83	17.73812611	17738.12611		650362.8			
South Coas	s 2023 LDT2	Aggregate	Aggregate	Electricity	28809.63735	917592.8	145405.4	0	0		917592.8			
South Coas	s 2023 LHDT1	Aggregate	Aggregate	Gasoline	174910.3847	6216643	2605904	583.3851736	583385.1736	811563.1022	6216643	11211395.79		13.81 LHDT1
South Coas	s 2023 LHDT1	Aggregate	Aggregate	Diesel	125545.0822	4994753	1579199	228.1779285	228177.9285		4994753			
South Coas	s 2023 LHDT2	Aggregate	Aggregate	Gasoline	30102.75324	1034569	448486.2	111.5753864	111575.3864	209423.5025	1034569	2969599.008		14.18 LHDT2
South Coas	s 2023 LHDT2	Aggregate	Aggregate	Diesel	50003.13116	1935030	628976.5	97.84811618	97848.11618		1935030			
South Coas	s 2023 MCY	Aggregate	Aggregate	Gasoline	305044.5141	2104624	610089	57.849018	57849.018	57849.018	2104624	2104623.657		36.38 MCY
South Coas	s 2023 MDV	Aggregate	Aggregate	Gasoline	1589862.703	55684188	7354860	2693.883526	2693883.526	2744536.341	55684188	57109879.73		20.81 MDV
South Coas	s 2023 MDV	Aggregate	Aggregate	Diesel	36128.1019	1425691	176566.9	50.65281491	50652.81491		1425691			
South Coas	s 2023 MDV	Aggregate	Aggregate	Electricity	16376.67653	537591.7	83475.95	0	0		537591.7			
South Coas	s 2023 MH	Aggregate	Aggregate	Gasoline	34679.50542	330042.9	3469.338	63.26295123	63262.95123	74893.26955	330042.9	454344.9436		6.07 MH
South Coas	s 2023 MH	Aggregate	Aggregate	Diesel	13122.69387	124302	1312.269	11.63031832	11630.31832		124302			
South Coas	s 2023 MHDT	Aggregate	Aggregate	Gasoline	25624.3151	1363694	512691.3	265.2060557	265206.0557	989975.6425	1363694	9484317.768		9.58 MHDT
South Coas	s 2023 MHDT	Aggregate	Aggregate	Diesel	122124.488	8120623	1221858	724.7695868	724769.5868		8120623			
South Coas	s 2023 OBUS	Aggregate	Aggregate	Gasoline	5955.291639	245774	119153.5	48.07750689	48077.50689	86265.88761	245774	579743.8353		6.72 OBUS
South Coas	s 2023 OBUS	Aggregate	Aggregate	Diesel	4286.940093	333969.8	41558.29	38.18838072	38188.38072		333969.8			
South Coas	s 2023 SBUS	Aggregate	Aggregate	Gasoline	2783.643068	112189.6	11134.57	12.19474692	12194.74692	39638.85935	112189.6	323043.5203		8.15 SBUS
South Coas	s 2023 SBUS	Aggregate	Aggregate	Diesel	6671.825716	210853.9	76991.94	27.44411242	27444.11242		210853.9			
South Coas	s 2023 UBUS	Aggregate	Aggregate	Gasoline	957.7686184	89782.63	3831.074	17.62416327	17624.16327	17863.66378	89782.63	91199.2533		5.11 UBUS
South Coas	s 2023 UBUS	Aggregate	Aggregate	Diesel	13.00046095	1416.622	52.00184	0.239500509	239.5005093		1416.622			
South Coas	s 2023 UBUS	Aggregate	Aggregate	Electricity	16.11693886	1320.163	64.46776	0			1320.163			

## Appendix 3

# Wildomar Commerce Center Noise Impact Study, City of Wildomar, CA

# Wildomar Commerce Center Noise Impact Study City of Wildomar, CA

Prepared for:

Mr. Michael Austin -- President Bluesky Management Corporation 9471 Irvine Center Drive, Ste 100 Irvine, CA 92618

Prepared by:

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Date: 9/30/2022



Noise Study Reports | Vibration Studies | Air Quality | Greenhouse Gas | Health Risk Assessments

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### 1.0 Introduction

### 1.1 Purpose of Analysis and Study Objectives

This noise assessment was prepared to evaluate the potential noise impacts for the project study area and to recommend noise mitigation measures, if necessary, to minimize the potential noise impacts. The assessment was conducted and compared to the noise standards set-forth by the Federal, State and Local agencies. Consistent with the City's Noise Guidelines, the project must demonstrate compliance to the applicable noise criterion as outlined within the City's Noise Element and Municipal Code.

The following is provided in this report:

- A description of the study area and the proposed project
- Information regarding the fundamentals of noise
- A description of the local noise guidelines and standards
- An analysis of traffic noise impacts to and from the project site
- An analysis of stationary noise impacts to and from the project site
- An analysis of construction noise impacts

This study assesses both the traffic noise and stationary noise to and from the project site and compares the results to the applicable City noise limits. The primary source of stationary noise propagates from loading areas and trucks coming and going from parking. The site plan used for this is illustrated in Exhibit B. Construction activities within the Project area will consist of site preparation, grading, building, paving, and architectural coating.

### 1.2 Site Location and Study Area

The project site is located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar, CA, as shown in Exhibit A. The site is zoned as Light Industrial (LI) and is located within the Specific Plan land use according to the City of Wildomar General Plan Zoning Map. Land uses surrounding the site include residences to the northeast and southwest, industrial uses to the east, and vacant land to the north, south, and west. All surrounding land uses are within the Specific Plan district.

### 1.3 Proposed Project Description

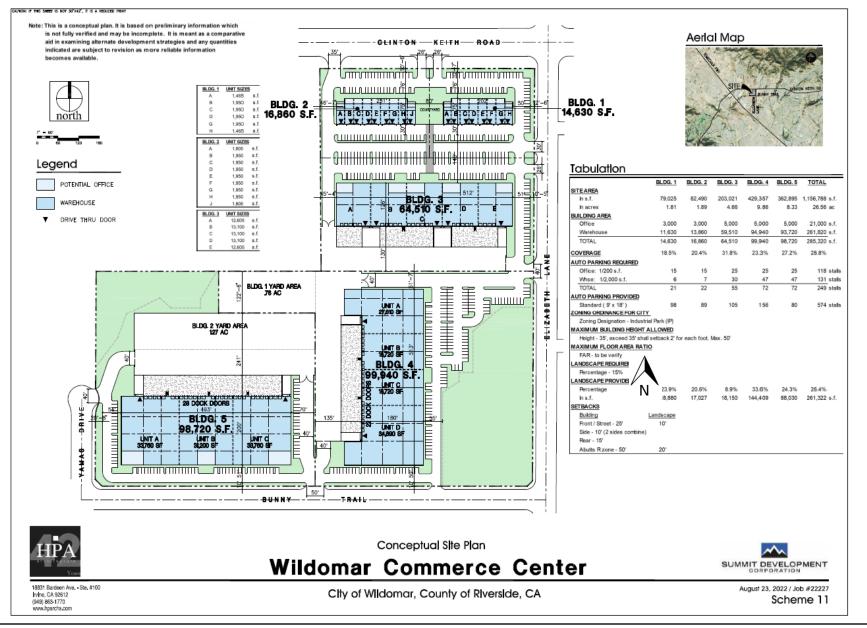
The project consists of five (5) buildings with sub-units within the buildings. Building 1 consists of approximately 14,630 sqft, building 2 consists of approximately 16,860 sqft, building 3 consists of approximately 64,510 sqft, building 4 consists of 99,940 sqft with 22 loading docks and building 5 consists of 98,720 sqft with 28 loading docks. The project site is approximately 26.56 acres and proposes a total of 574 parking spaces.

Introduction

# Exhibit A



# Exhibit B **Site Plan**



### 2.0 Fundamentals of Noise

This section of the report provides basic information about noise and presents some of the terms used within the report.

### 2.1 Sound, Noise and Acoustics

Sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. Sound may be thought of as mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. For traffic, or stationary noise, the medium of concern is air. *Noise* is defined as sound that is loud, unpleasant, unexpected, or unwanted.

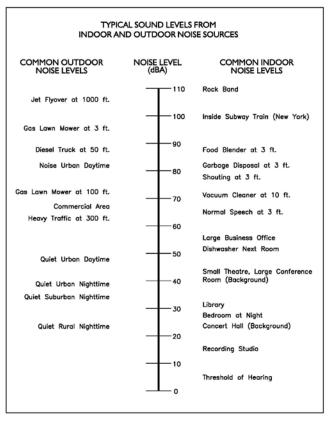
Exhibit C:

### 2.2 Frequency and Hertz

A continuous sound is described by its *frequency* (pitch) and its *amplitude* (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). The human ear can hear from the bass pitch starting out at 20 Hz all the way to the high pitch of 20,000 Hz.

### 2.3 Sound Pressure Levels and Decibels

The *amplitude* of a sound determines it loudness. The loudness of sound increases or decreases as the amplitude increases or decreases. Sound pressure amplitude is measure in units of micro-Newton per square inch meter (N/m2), also called micro-Pascal ( $\mu$ Pa). One  $\mu$ Pa is approximately one hundred billionths (0.0000000001) of normal atmospheric pressure. Sound pressure level (SPL or L<sub>p</sub>) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared.



Typical A-Weighted Noise Levels

These units are called decibels abbreviated dB. Exhibit C illustrates references sound levels for different noise sources.

### 2.4 Addition of Decibels

Because decibels are on a logarithmic scale, sound pressure levels cannot be added or subtracted by simple plus or minus addition. When two sounds or equal SPL are combined, they will produce an SPL 3 dB greater than the original single SPL. In other words, sound energy must be doubled to produce a 3 dB increase. If two sounds differ by approximately 10 dB, the higher sound level is the predominant sound.

### 2.5 Human Response to Changes in Noise Levels

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, (Aweighted scale) and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. For purposes of this report as well as with most environmental documents, the A-scale weighting is typically reported in terms of A-weighted decibel (dBA). Typically, the human ear can barely perceive the change in noise level of 3 dB. A change in 5 dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud. As previously discussed, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g. doubling the volume of traffic on a highway) would result in a barely perceptible change in sound level.

### 2.6 Noise Descriptors

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Some noise levels are constant while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels.

<u>A-Weighted Sound Level</u>: The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

<u>Ambient Noise Level</u>: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

<u>Community Noise Equivalent Level (CNEL)</u>: The average equivalent A-weighted sound level during a 24hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

**Decibel (dB)**: A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A): A-weighted sound level (see definition above).

**Equivalent Sound Level (LEQ):** The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level. The energy average noise level during the sample period.

**Habitable Room:** Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms and similar spaces.

<u>L(n)</u>: The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded 10 percent of the sample time. Similarly, L50, L90 and L99, etc.

<u>Noise</u>: Any unwanted sound or sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

**Outdoor Living Area:** Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

#### Percent Noise Levels: See L(n).

**Sound Level (Noise Level):** The weighted sound pressure level obtained by use of a sound level meter having a standard frequency-filter for attenuating part of the sound spectrum.

**Sound Level Meter:** An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

<u>Single Event Noise Exposure Level (SENEL)</u>: The dB(A) level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

### 2.7 Traffic Noise Prediction

Noise levels associated with traffic depends on a variety of factors: (1) volume of traffic, (2) speed of traffic, (3) auto, medium truck (2–3 axle) and heavy truck percentage (4 axle and greater), and sound propagation. The greater the volume of traffic, higher speeds and truck percentages equate to a louder volume in noise. A doubling of the Average Daily Traffic (ADT) along a roadway will increase noise levels by approximately 3 dB; reasons for this are discussed in the sections above.

### 2.8 Sound Propagation

As sound propagates from a source it spreads geometrically. Sound from a small, localized source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates at a rate of 6 dB per doubling of distance. The movement of vehicles down a roadway makes the source of the sound appear to propagate from a line (i.e., line source) rather than a point source. This line source results in the noise propagating from a roadway in a cylindrical spreading

versus a spherical spreading that results from a point source. The sound level attenuates for a line source at a rate of 3 dB per doubling of distance.

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the receiver. Soft site conditions such as grass, soft dirt or landscaping attenuate noise at a rate of 1.5 dB per doubling of distance. When added to the geometric spreading, the excess ground attenuation results in an overall noise attenuation of 4.5 dB per doubling of distance for a line source and 7.5 dB per doubling of distance for a point source.

Research has demonstrated that atmospheric conditions can have a significant effect on noise levels when noise receivers are located 200 feet from a noise source. Wind, temperature, air humidity and turbulence can further impact have far sound can travel.

### 3.0 Ground-Bourne Vibration Fundamentals

### **3.1** Vibration Descriptors

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude.

**PPV** – Known as the peak particle velocity (PPV) which is the maximum instantaneous peak in vibration velocity, typically given in inches per second.

RMS – Known as root mean squared (RMS) can be used to denote vibration amplitude

*VdB* – A commonly used abbreviation to describe the vibration level (VdB) for a vibration source.

### 3.2 Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Outdoor sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration. To counter the effects of ground-borne vibration, the Federal Transit Administration (FTA) has published guidance relative to vibration impacts. According to the FTA, fragile buildings can be exposed to ground-borne vibration levels of 0.3 inches per second without experiencing structural damage.

### 3.3 Vibration Propagation

There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be

effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

### 4.0 Regulatory Setting

The proposed project is located in the City of Wildomar and noise regulations are addressed through the efforts of various federal, state and local government agencies. The agencies responsible for regulating noise are discussed below.

### 4.1 Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Publicize noise emission standards for interstate commerce
- Assist state and local abatement efforts
- Promote noise education and research

The Federal Office of Noise Abatement and Control (ONAC) originally was tasked with implementing the Noise Control Act. However, it was eventually eliminated leaving other federal agencies and committees to develop noise policies and programs. Some examples of these agencies are as follows: The Department of Transportation (DOT) assumed a significant role in noise control through its various agencies. The Federal Aviation Agency (FAA) is responsible to regulate noise from aircraft and airports. The Federal Highway Administration (FHWA) is responsible to regulate noise from the interstate highway system. The Occupational Safety and Health Administration (OSHA) is responsible for the prohibition of excessive noise exposure to workers.

The federal government advocates that local jurisdiction use their land use regulatory authority to arrange new development in such a way that "noise sensitive" uses are either prohibited from being constructed adjacent to a highway or, or alternatively that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation source, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

### 4.2 State Regulations

Established in 1973, the California Department of Health Services Office of Noise Control (ONC) was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the "Land Use Compatibility for Community Noise Environments Matrix." The matrix allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise.

The State of California has established noise insulation standards as outlined in Title 24 and the Uniform Building Code (UBC) which in some cases requires acoustical analyses to outline exterior noise levels and to ensure interior noise levels do not exceed the interior threshold. The State mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan.

The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable as illustrated in Exhibit D and can be found in the City's General Plan Noise Element.

Table N-1:

Land Use C	ompatibility for Community Noise Exposure
LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE LEVEL Ldn or CNEL, dBA
Residential-Low Density Single Family, Duplex, Mobile Homes	55 60 65 70 75 80
Residential-Multiple Family	
Transient Lodging-Motels, Hotels	
Schools, Libraries, Churches, Hospita Nursing Homes	als,
Auditoriums, Concert Halls, Amphith	heaters
Sports Arena, Outdoor Spectator Spo	orts
Playgrounds, Neighborhood Parks	
Golf Courses, Riding Stables, Water I Cemeteries	Recreation,
Office Buildings, Businesses, Commer and Professional	rcial,
Industrial, Manufacturing, Utilities, Agriculture	
Specified land oue is satisfactory band upon the ansatzline factory bandlages involved are of normal coverentianal corrector(ins, without any specific socie insulation requirements, modeled are seen and the socie insulation requirements, security California Office of Nine Control versions are	issailly Acceptable: Institute of doublement should be nowly after a database industry of the second neutron sequences in indust of an issailly acceptable: Ner containation of acceptable: Ner

#### Exhibit D: Land Use Compatibility Guidelines

### 4.3 City of Wildomar Noise Regulations

The City of Wildomar outlines their noise regulations and follows the County of Riverside standards within the Noise Element from the General Plan and the Noise Ordinance from the Municipal Code.

#### **County of Riverside General Plan**

#### • Goals, Policies, and Implementation Measures

Policies, goals and implementation program measures from the Noise Element that would mitigate potential impacts on noise include the following.

**N 1.1** Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or block walls shall be used.

**N 1.2** Guide noise-tolerant land uses into areas irrevocably committed to land uses that are noiseproducing, such as transportation corridors or within the projected noise contours of any adjacent airports.

**N 1.4** Determine if existing land uses will present noise compatibility issues with proposed projects by undertaking site surveys.

**N 1.5** Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.

**N 1.6** Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or noise-sensitive uses.

**N 1.7** Require proposed land uses, affected by unacceptably high noise levels, to have an acoustical specialist prepare a study of the noise problems and recommend structural and site design features that will adequately mitigate the noise problem.

**N 2.2** Require a qualified acoustical specialist to prepare acoustical studies for proposed noise-sensitive projects within noise impacted areas to mitigate existing noise.

**N 2.3** Mitigate exterior and interior noises to the levels listed in the table below to the extent feasible, for stationary sources.

Stationary Source Land Ose Noise Standards						
Land Use	Interior Standards	Exterior Standards				
Residential						
10:00 p.m. to 7:00 a.m.	40 Leg (10 minute)	45 L <sub>eq</sub> (10 minute)				
7:00 a.m. to 10:00 p.m.	55 Leg (10 minute)	65 Leq (10 minute)				
1 These are only proferred stand	ande, final de alalan will be made by th	Diverside County Dianning				

#### Stationary Source Land Use Noise Standards<sup>1</sup>

1 These are only preferred standards; final decision will be made by the Riverside County Planning Department and Office of Public Health.

**N 3.2** Require acoustical studies and subsequent approval by the Planning Department and the Office of Industrial Hygiene, to help determine effective noise mitigation strategies in noise-producing areas.

**N 3.3** Ensure compatibility between industrial development and adjacent land uses. To achieve compatibility, industrial development projects may be required to include noise mitigation measures to avoid or minimize project impacts on adjacent uses.

**N 3.4** Identify point-source noise producers such as manufacturing plants, truck transfer stations, and commercial development by conducting a survey of individual sites.

N 3.5 Require that a noise analysis be conducted by an acoustical specialist for all proposed

projects that are noise producers. Include recommendations for design mitigation if the project is to be located either within proximity of a noise-sensitive land use, or land designated for noise sensitive land uses.

**N 3.6** Discourage projects that are incapable of successfully mitigating excessive noise.

**N 4.1** Prohibit facility-related noise received by any sensitive use from exceeding the following worstcase noise levels:

a. 45 dBA-10-minute Leq between 10:00 p.m. and 7:00 a.m.

b. 65 dBA-10-minute Leq between 7:00 a.m. and 10:00 p.m.

N 4.2 Develop measures to control non-transportation noise impacts.

**N 4.3** Ensure any use determined to be a potential generator of significant stationary noise impacts be properly analyzed and ensure that the recommended mitigation measures are implemented.

N 4.4 Require that detailed and independent acoustical studies be conducted for any new or renovated land uses or structures determined to be potential major stationary noise sources. N 4.5 Encourage major stationary noise-generating sources throughout the County of Riverside to install additional noise buffering or reduction mechanisms within their facilities to reduce noise generation levels to the lowest extent practicable prior to the renewal of conditional use permits or business licenses or prior to the approval and/or issuance of new conditional use permits for said facilities.

**N 4.7** Evaluate noise producers for the possibility of pure-tone producing noises. Mitigate any pure tones that may be emitted from a noise source.

**N 4.8** Require that the parking structures, terminals, and loading docks of commercial or industrial land uses be designed to minimize the potential noise impacts of vehicles on the site as well as on adjacent land uses.

**N 6.3** Require commercial or industrial truck delivery hours be limited when adjacent to noise- sensitive land uses unless there is no feasible alternative or there are overriding transportation benefits.

**N 9.3** Require development that generates increased traffic and subsequent increases in the ambient noise level adjacent to noise-sensitive land uses to provide for appropriate mitigation measures.

**N 9.4** Require that the loading and shipping facilities of commercial and industrial land uses, which abut residential parcels be located and designed to minimize the potential noise impacts upon residential parcels.

**N 13.1** Minimize the impacts of construction noise on adjacent uses within acceptable practices. **N 13.2** Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.

**N 13.3** Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses (see policy N 1.3) by requiring the developer to submit a construction-related noise mitigation plan to the County for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as: a. Temporary noise attenuation fences; b. Preferential location of equipment; and c. Use of current noise

suppression technology and equipment.

**N 13.4** Require that all construction equipment utilizes noise reduction features (e.g. mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

**N 14.5** Consider the issue of adjacent residential land uses when designing and configuring all new, nonresidential development. Design and configure on-site ingress and egress points that divert traffic away from nearby noise-sensitive land uses to the greatest degree practicable. (AI 106, 107)

**N 14.8** Review all development applications for consistency with the standards and policies of the Noise Element of the General Plan.

N 16.2 Consider the following land uses sensitive to vibration:

- Hospitals;
- Residential areas;
- Concert halls;
- Libraries;
- Sensitive research operations;
- Schools; and
- Offices

**N 19.5** Require new developments that have the potential to generate significant noise impacts to inform impacted users on the effects of these impacts during the environmental review process

#### **City of Wildomar Municipal Code**

Chapter 9.48 of the Wildomar Municipal Code outlines the acceptable maximum noise standards. Table 1 is taken from Section 9.48.040 of the Wildomar Municipal Code and shows that the City has a noise limit of 75 dBA L<sub>max</sub> for all industrial uses and 55 dBA L<sub>max</sub> for all residential uses for daytime hours.

GENERAL PLAN LAND USE	GENERAL PLAN LAND	MAXIMUM DECIBEL LEVEL		
DESIGNATION	USE DESIGNATION NAME	7 am - 10 pm	10 pm – 7 am	
LI	Light Industrial	75	65	
н	Heavy Industrial	75	75	
SP-C	Specific Plan Commercial	65	55	
HDR	High Density Residential	55	45	

#### Table 1: Sound Level Standards (dB Lmax)

### 5.0 Study Method and Procedure

The following section describes the noise modeling procedures and assumptions used for this assessment.

### 5.1 Noise Measurement Procedure and Criteria

Noise measurements are taken to determine the existing noise levels. A noise receiver or receptor is any location in the noise analysis in which noise might produce an impact. The following criteria are used to select measurement locations and receptors:

- Locations expected to receive the highest noise impacts, such as first row of houses
- Locations that are acoustically representative and equivalent of the area of concern
- Human land usage
- Sites clear of major obstruction and contamination

MD conducted the sound level measurements in accordance to Caltrans technical noise specifications and the City's noise ordinance. All measurements equipment meets American National Standards Institute (ANSI) specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA). The following gives a brief description of the Caltrans Technical Noise Supplement procedures for sound level measurements:

- Microphones for sound level meters were placed 5-feet above the ground for all measurements
- Sound level meters were calibrated (Larson Davis CAL 200) before and after each measurement
- Following the calibration of equipment, a wind screen was placed over the microphone
- Frequency weighting was set on "A" and slow response
- Results of the long-term noise measurements were recorded on field data sheets
- During any short-term noise measurements any noise contaminations such as barking dogs, local traffic, lawn mowers, or aircraft fly-overs were noted
- Temperature and sky conditions were observed and documented

#### 5.2 Noise Measurement Location

The primary source of ambient noise is traffic along the existing roadways. Noise monitoring locations were selected to provide a representative picture of the existing noise condition based on proximity to Clinton Keith Road and Elizabeth Lane . Three (3) short-term noise measurements were conducted on the project site and represent ambient levels at the site. Appendix A includes photos, field sheet, and measured noise data. Exhibit E illustrates the location of the measurements.

### 5.3 Stationary Noise Modeling

SoundPLAN (SP) acoustical modeling software was utilized to model future worst-case stationary noise impacts to the adjacent land uses. SP is capable of evaluating multiple stationary noise source impacts at various receiver locations. SP's software utilizes algorithms (based on the inverse square law and reference equipment noise level data) to calculate noise level projections. The software allows the user to input

specific noise sources, spectral content, sound barriers, building placement, topography, and sensitive receptor locations.

The future noise level projections were modeled using referenced sound level data for the various stationary on-site sources (parking spaces, loading/unloading bays, etc.). The model assumes that the building facility has a total of fifty (50) dock-high truck doors and five hundred seventy-four (574) auto parking spaces. Table 2 outlines the reference noise levels used for the model.

Source	Source Type	Reference Power Level Lw (dBA)	Descriptor
Parking (Car)	Area (SP Parking Tool)	77	1 car per hr per stall
Idling Truck	Point Source	91	10 min idling per hour
Backing Truck	Point Source	103	1 min sound per hour

 Table 2: Reference Sound Level Measurements for SoundPlan Model

The SP model assumes that all loading docks operate 24/7 and that each of these units has several trucks operating simultaneously, when in actuality the noise will be intermittent and lower in noise level. All loading docks were modeled with backup beepers and idling engines, which are typically only operating for a minute or two at a time. Parking lot noise with cars idling and coming and going in the parking spots were modeled at 1 car per hour per stall. The model also assumes an 8' CMU wall along the western property line. Input and output calculations are provided in Appendix C.

### 5.4 FHWA Traffic Noise Prediction Model

Traffic noise from vehicular traffic was projected using a computer program that replicates the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA model predicts a noise level increment of 3 dB per doubling the traffic volume. Roadway volumes and percentages correspond to the project's trip generation analysis as prepared by TJW Engineering, Inc. (TJW). The model assumes the same distribution for the affected roadways as pre in the Tentative Parcel Map 36492 (July 2013). The traffic data is included in Appendix B.

The traffic noise prediction model considers two (2) scenarios: the existing conditions and the existing plus project conditions. The project would generate 2997 daily trips. The roadway parameters and vehicle distributions prescribed by the County of Riverside for arterial and secondary roadways were utilized for this study.

### 5.5 FHWA Roadway Construction Noise Model

The construction noise analysis utilizes the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM), together with several key construction parameters. Key inputs include distance to the sensitive receiver, equipment usage, % usage factor, and baseline parameters for the project site.

The project was analyzed based on the different construction phases. Construction noise is expected to be loudest during the grading, concrete and building phases of construction. The construction noise calculation

output worksheet is located in Appendix D. The following assumptions relevant to short-term construction noise impacts were used:

• It is estimated that construction will occur over a 6 to 8 month time period. Construction noise is expected to be the loudest during the grading, concrete, and building phases.



= Short-Term Monitoring Location

# Exhibit E Measurement Locations



### 6.0 Existing Noise Environment

Three (3) 10-minute ambient noise measurements were conducted at the project on 9/16/22. The shortterm noise monitoring locations are illustrated in Exhibit E. The 10-minute Leq, Lmin, Lmax and other statistical data (e.g. L2, L8) were measured and are presented in Table 3. The noise measurements were taken to determine the existing baseline noise conditions.

### 6.1 Short-Term Noise Measurement Results

The results of the short-term noise data taken are presented in Table 3.

Location <sup>1</sup>	Start Time	Leq	Lmax	Lmin	L(2)	L(8)	L(25)	L(50)	L(90)
NM1	10:01 AM	61.3	84.1	40.4	66.5	57.6	53.8	51.3	45.1
NM2	10:15 AM	58.2	83.2	41.4	59.9	53.5	48.4	46.2	42.6
NM3	10:30 AM	72.5	79.9	48.7	77.9	76.6	74.1	71.2	59.2
Notes: <sup>1.</sup> See Appendix A for the field sheet.									

#### Table 3: Short-Term Noise Measurement Data (dBA)

Noise data indicates the ambient noise level ranged between 58 to 73 dBA Leq during the measuring period. The noise levels were highest along the north property line (close to Clinton Keith Road) and were quietest near the south property line (furthest from Clinton Keith Road). Additional field notes and photographs are provided in Appendix A.

### 7.0 Future Noise Environment Impacts and Mitigation

This assessment analyzes future noise impacts to and from the project and compares the results to the City's Noise Standards. The analysis details the estimated exterior noise levels associated with traffic from adjacent roadways and from on-site stationary noise sources.

### 7.1 Future Exterior Noise

The following outlines the exterior noise levels associated with the proposed project.

### 7.1.1 Noise Impacts to Off-Site Receptors Due to Stationary Sources

Due to the location of the proposed facilities, receptors that may be affected by project operational noise include the existing residential land uses to the southwest and northeast, as well as land zoned residential to the west and south of the project. The stationary noise was modeled using SoundPLAN acoustical modeling software. The model utilizes SoundPLAN's sound level data for the parking specified within Section 5.3 of this report. Loading activity constitutes the project's maximum operational noise levels.

A total of six (6) receptor locations were modeled to evaluate the proposed project's operational noise impact to adjacent noise sensitive land uses. A receptor is denoted by a yellow dot in Exhibit F. The receptors are on the project property lines.

#### **Project Operational Noise Levels**

Exhibit F shows the "project only" operational noise levels at the property lines and/or sensitive receptor areas and illustrates how the noise will propagate at the site. Worst-case operational noise levels are anticipated to range between 45 to 60 dBA Leq at the receptors R1 – R4. The noise projections are below the City's noise limits as given in Section 9.48.040 of the Municipal Code.

#### **Project Plus Ambient Operational Noise Levels**

Table 4 demonstrates the project plus ambient noise levels. Project plus ambient noise level projections are anticipated to range between 58 to 73 dBA Lmax at the receptors R1 - R6. In addition, Table 4 provides the anticipated change in noise level as a result of the proposed project during continuous operating conditions.

<Table 4, next page>

Receptor <sup>1</sup>	Existing Ambient Noise Level <sup>2</sup> (dBA)	Project Noise Level <sup>3</sup> (dBA)	Total Combined Noise Level (dBA)	Normally Acceptable Industrial Noise Level (dBA)	Change in Noise Level as Result of Project (dB)
1	73	39	73		0.0
2	61	60	64		2.5
3	58	42	58	75	0.1
4	58	40	58	75	0.1
5	61	44	61		0.1
6	61	54	62		0.8
	0 1 1	, ,	minant noise source is traff	ic along Clinton Keith Road.	

#### Table 4: Existing + Project Operational Noise Level, dBA CNEL

See Table 1 for existing ambient level. The dominant noise source is traffic along Clinton Keith Road to the north.

<sup>3.</sup> See Exhibit F for the operational noise level projections at said receptors.

As shown in Table 4, the project's maximum operational noise levels do not exceed the existing ambient noise levels at the project site. The proposed project would produce a 0-2.5 dB difference from the existing condition. Table 5 provides the characteristics associated with changes in noise levels.

#### Table 5: Change in Noise Level Characteristics<sup>1</sup>

Changes in Apparent Loudness
Not perceptible
Just perceptible
Clearly noticeable
Twice (or half) as loud

https://www.fhwa.dot.gov/environMent/noise/regulations\_and\_guidance/polguide/polguide02.cfm

The change in noise level would fall within the "Not Perceptible" acoustic characteristic depending on location. The change in noise level due to the project would be less than significant.

#### **Project Design Features**

In order to reduce the noise impact, the project will feature an 8' tall CMU wall along the west edge of the property, as illustrated in Exhibit F.

#### 7.1.2 Noise Impacts to On/Off-Site Receptors Due to Project Generated Traffic

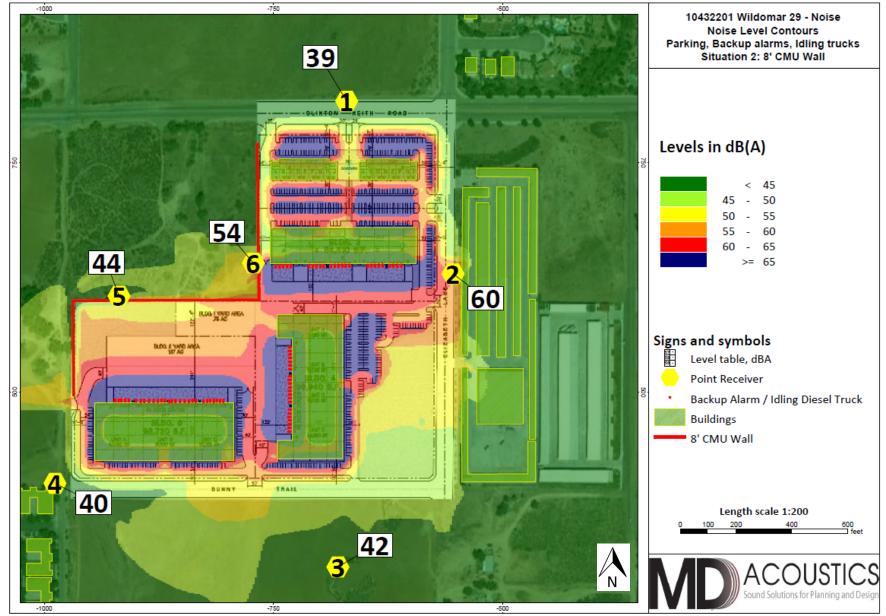
A worst-case project generated traffic noise level was modeled utilizing the FHWA Traffic Noise Prediction Model - FHWA-RD-77-108. Traffic noise levels were calculated 50 feet from the centerline of the analyzed roadway. The modeling is theoretical and does not take into account any existing barriers, structures, and/or topographical features that may further reduce noise levels. Therefore, the levels are shown for comparative purposes only to show the difference with and without the project. In addition, the noise contours for 60, 65 and 70 dBA CNEL were calculated (see Appendix B). The potential off-site noise impacts caused by an increase of traffic from operation of the proposed project on the nearby roadways were calculated and shown in Table 6.

	Existing		Existing Plus Project			
Road Segment	ADT	dB CNEL	ADT	Project Only ADT	Total dB CNEL	Change
N/S Road Segment						
Yamas Dr. s/o Project	987	56.9	1378	391	58.3	1.4
Elizabeth Ln s/o Clinton Keith	213	50.2	2886	2673	61.5	11.3
E/W Road Segment						
Clinton Keith w/o I-15	25264	75.2	26375	1111	75.4	0.2
Clinton Keith e/o I-15	23746	74.9	25916	2170	75.3	0.4
Clinton Keith w/o Inland Valley	22247	74.7	24475	2228	75.1	0.4
Clinton Keith w/o Salida del Sol	15713	73.2	17950	2237	73.7	0.5
Clinton Keith w/o Elizabeth Ln	15560	73.1	17797	2237	73.7	0.6
Clinton Keith w/o Nutmeg	13842	72.6	14551	709	72.8	0.2
Clinton Keith W/o Californa Oaks	19065	74	19459	394	74.1	0.1
Prielipp Rd e/o Yamas	5595	64.4	5986	391	64.7	0.3
Prielipp Rd e/o Elizabeth	6302	64.9	6693	391	65.2	0.3

#### Table 6: Noise Levels Along Roadways (dBA CNEL)

Table 6 compares the existing and existing plus project scenarios and shows the change in traffic noise levels as a result of the proposed project. It takes a change of 3 dB or more to hear a perceptible difference. As demonstrated in Table 6, the project is anticipated to change the noise by less than 2 decibels along roadways to the north, west, and south of the project. Although there is an increase in traffic noise levels along Elizabeth Lane, the impact is considered to have less than significant impact as the noise levels would be less than 65 dBA, and the change is within the "normally acceptable range" by use type as specified in the general plan (see Exhibit D in Section 4.2 above). The traffic noise impact is less than significant, and the project will comply with the noise limits given in the General Plan.

# Exhibit F Operational Noise Levels



#### 8.0 Construction Noise Impact

The degree of construction noise may vary for different areas of the project site and also vary depending on the construction activities. Noise levels associated with the construction will vary with the different phases of construction.

#### 8.1 Construction Noise

The Environmental Protection Agency (EPA) has compiled data regarding the noise generated characteristics of typical construction activities. The data is presented in Table 7.

Equipment Powered by Internal Combustion Engines					
Туре	Noise Levels (dBA) at 50 Feet				
Earth Me	oving				
Compactors (Rollers)	73 - 76				
Front Loaders	73 - 84				
Backhoes	73 - 92				
Tractors	75 - 95				
Scrapers, Graders	78 - 92				
Pavers	85 - 87				
Trucks	81 - 94				
Materials H	landling				
Concrete Mixers	72 - 87				
Concrete Pumps	81 - 83				
Cranes (Movable)	72 - 86				
Cranes (Derrick)	85 - 87				
Stati	onary				
Pumps	68 - 71				
Generators	71 - 83				
Compressors	75 - 86				

Table 7: Typical Construction Equipment Noise Levels <sup>1</sup>
Equipment Powered by Internal Combustion Engines

Туре	Noise Levels (dBA) at 50 Feet
Saws	71 - 82
Vibrators	68 - 82
Notes: <sup>1</sup> Referenced Noise Levels from the Environmental Protection Agency (EPA)	

Construction is considered a short-term impact and would be considered significant if construction activities are taken outside the allowable conditions described in the City's Municipal Code Section 9.48.040. Construction is anticipated to occur during the permissible hours according to the City's Municipal Code. Construction noise will have a temporary or periodic increase in the ambient noise level above the existing within the project vicinity. Furthermore, noise reduction measures are provided to further reduce construction noise. The impact is considered less than significant however construction noise level projections are provided in Appendix D.

Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Noise levels will be loudest during grading phase. A likely worst-case construction noise scenario during grading assumes the use of 1-grader, 1-dozer, 1-excavator, and 3-backhoes operating at 810 feet from the property boundary.

Assuming a usage factor of 40 percent for each piece of equipment, unmitigated noise levels at 810 feet (center of the site to the nearest southwestern residence) have the potential to reach 57 dBA  $L_{eq}$  at the closest residence property during building construction.

#### 8.2 Construction Vibration

Construction activities can produce vibration that may be felt by adjacent land uses. The construction of the proposed project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may be from a bulldozer. A large bulldozer has a vibration impact of 0.089 inches per second peak particle velocity (PPV) at 25 feet which is likely perceptible but below any risk to architectural damage.

The fundamental equation used to calculate vibration propagation through average soil conditions and distance is as follows:

 $PPV_{equipment} = PPV_{ref} (25/D_{rec})^n$ 

Where:  $PPV_{ref}$  = reference PPV at 25ft.  $D_{rec}$  = distance from equipment to receiver in ft. n = 1.1 (the value related to the attenuation rate through ground)

The thresholds from the Caltrans Transportation and Construction Induced Vibration Guidance Manual in Table 8 (below) provides general thresholds and guidelines as to the vibration damage potential from vibratory impacts.

	Maximum PPV (in/sec)			
Structure and Condition	Transient Sources	Continuous/Frequent		
	Transient Sources	Intermittent Sources		
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08		
Fragile buildings	0.2	0.1		
Historic and some old buildings	0.5	0.25		
Older residential structures	0.5	0.3		
New residential structures	1.0	0.5		
Modern industrial/commercial buildings	2.0	0.5		

#### Table 8: Guideline Vibration Damage Potential Threshold Criteria

Source: Table 19, Transportation and Construction Vibration Guidance Manual, Caltrans, Sept. 2013. Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment. Table 9 gives approximate vibration levels for particular construction activities. This data provides a reasonable estimate for a wide range of soil conditions.

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level LV (dVB) at 25 feet
	1.518 (upper range)	112
Pile driver (impact)	0.644 (typical)	104
Dila driver (conic)	0.734 upper range	105
Pile driver (sonic)	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.21	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58
<sup>1</sup> Source: Transit Noise and Vibration Impact Assessment,	Federal Transit Administration, May 2006.	•

#### Table 9: Vibration Source Levels for Construction Equipment<sup>1</sup>

At a distance of 810 feet (northern residence façade to the project site PL), a large bulldozer would yield a worst-case 0.002 PPV (in/sec) which below any risk of damage and likely imperceptible. The impact is less than significant, and no mitigation is required.

#### 8.3 Construction Noise Reduction Measures

Construction operations must follow the City's General Plan and the Noise Ordinance, which states that construction in private property needs to be evaluated by the City's authority.

- 1. During construction, the contractor shall ensure all construction equipment is equipped with appropriate noise attenuating devices.
- 2. The contractor should locate equipment staging areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the project site during all project construction.
- 3. Idling equipment should be turned off when not in use.
- 4. Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging.

### 9.0 References

State of California General Plan Guidelines: 1998. Governor's Office of Planning and Research

County of Riverside: General Plan Noise Element.

City of Wildomar: Municipal Code Chapter 9.48 Noise.

TJW Engineering, Inc – Clinton Keith Corporate Center Trip Generation Analysis, City of Wildomar. September 13, 2022.

Matthew Fagan Consulting Services – Initial Study for the Rancon Medical Office/Retail Project Plot Plan Tentative Parcel Map No. 36492 (Planning Application No. 12-0053. November 2013.

Federal Highway Administration. Noise Barrier Design Handbook. June 2017.

Federal Transit Administration. Transit Noise and Vibration Impact Assessment Manual. September 2018

# Appendix A:

Field Measurement Data

#### **10-Minute Continuous Noise Measurement Datasheet**

Project Name:	Wildomar Commerce Ce	enter			
Project: #/Name:	1043-2022-001				
Site Address/Location:	1043 Wildomar Comme	rce Center, W			
Date:	09/16/2022				
Field Tech/Engineer:	Jason Schuyler/Rachel Edelman/Samuel Hord				
Sound Meter:	XL2, NTI	<b>SN:</b> A2A-08562-E0			
Settings:	A-weighted, slow, 1-sec, 10-minute interval				
Site ld:	NM1, NM2, NM3				



Site Observations:



#### 10-Minute Continuous Noise Measurement Datasheet - Cont.

Figure 2: NM2

Project Name:Wildomar Commerce CenterSite Address/Location:1043 Wildomar Commerce Center, WSite Id:NM1, NM2, NM3

Figure 1: NM1





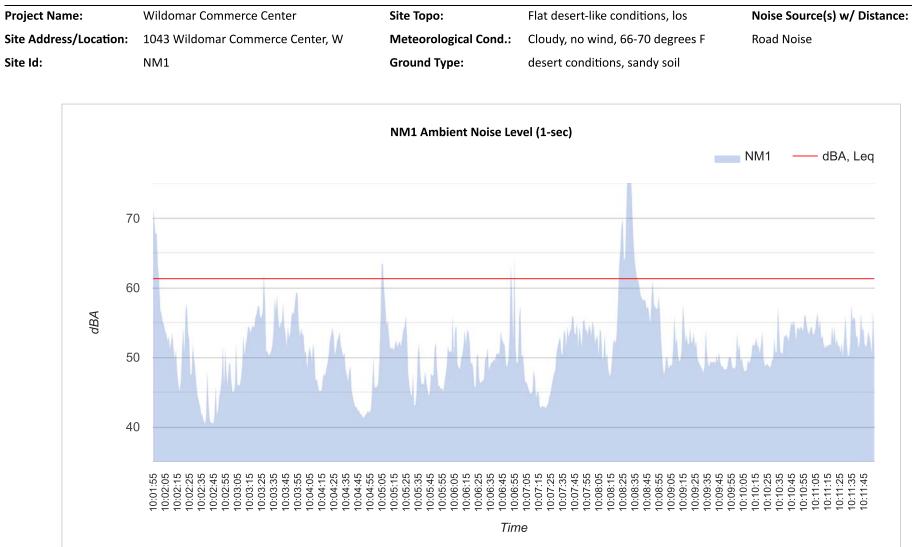
Figure 3: NM3



#### Table 1: Baseline Noise Measurement Summary

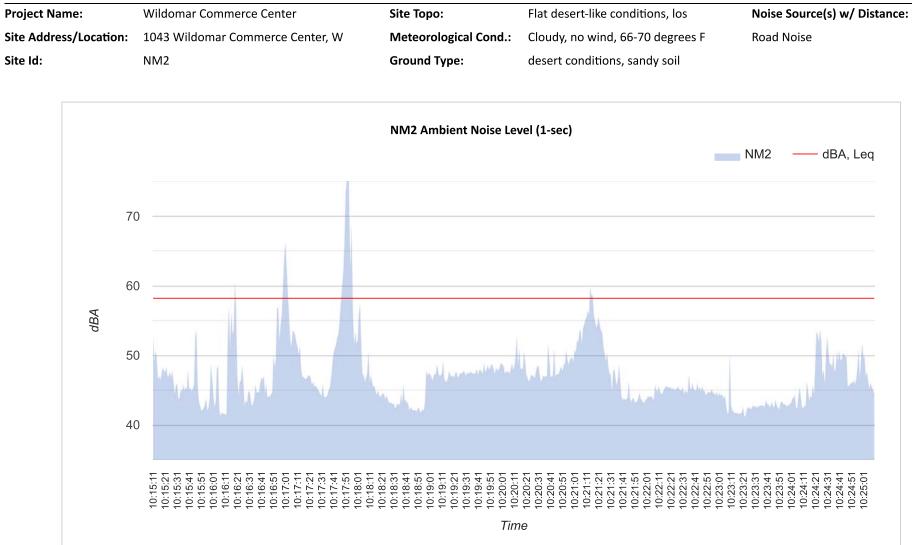
Location	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
NM1	10:01 AM	10:11 AM	61.3	84.1	40.4	66.5	57.6	53.8	51.3	45.1
NM2	10:15 AM	10:25 AM	58.2	83.2	41.4	59.9	53.5	48.4	46.2	42.6
NM3	10:30 AM	10:40 AM	72.5	79.9	48.7	77.9	76.6	74.1	71.2	59.2





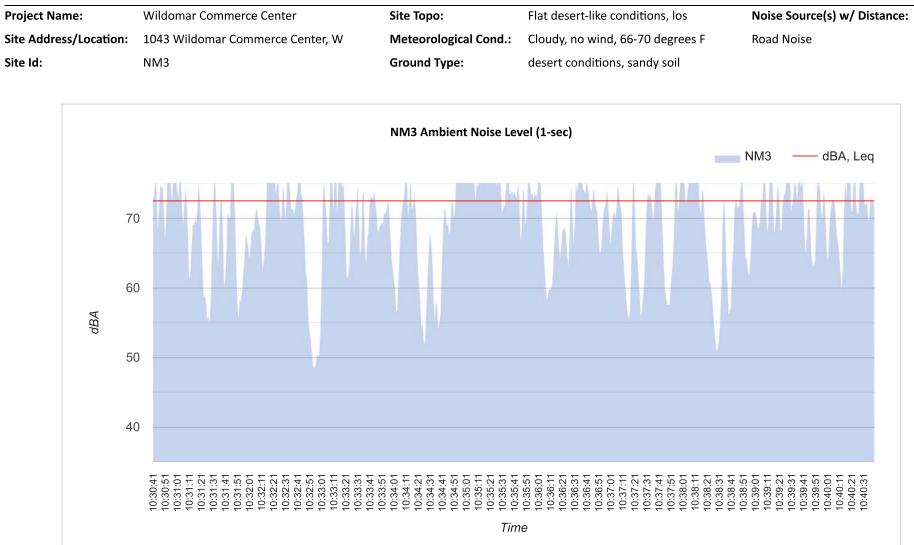
10-Minute Continuous Noise Measurement Datasheet - Cont.





10-Minute Continuous Noise Measurement Datasheet - Cont.





10-Minute Continuous Noise Measurement Datasheet - Cont.



**Appendix B:** Referenced Traffic Data and Calculations

	ILDOMAR COMN MAS DR S/O PR ISTING - NOISE (	OJECT									JOB #: 1043-22-01 DATE: 16-Sep-22 ENGINEER: S. HORD
					NOISE IN	NPUT DAT	Α				
	ROAD	WAY CONDITIO	NS					REC	EIVER INP	UT DATA	
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL =	1 IE DIST 1 0 0 9	87 40 10 15 .0 .0 % 99 E CONDITIONS				RECEIVER D DIST C/L TO RECEIVER H WALL DISTA PAD ELEVAT ROADWAY	WALL = EIGHT = NCE FROM RI TON = /IEW: L	F ANGLE= T ANGLE= PF ANGLE=	50 0 5.0 10 0.0 -90 90 180	) )	
AUTOMOBILES = MEDIUM TRUCKS = HEAVY TRUCKS =		15 15 15	(10 = HARD	9 SITE, 15 = SC	OFT SITE)	HTH WALL= AMBIENT= BARRIER =	0.0	) = WALL, 1	= BERM)		
						•		D/	ISC. VEHIC	LE INFO	
	VEH	IICLE MIX DATA						IVI			
/EHICLE TYPE	DAY	EVENING	NIGHT	DAILY			VEHICLE TYP	E		SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	<b>DAY</b> 0.755	<b>EVENING</b> 0.140	<b>NIGHT</b> 0.105	0.9742			AUTOMOBILE	E S	HEIGHT 2.0	49.53	
AUTOMOBILES MEDIUM TRUCKS	DAY	EVENING	NIGHT					E S ICKS	HEIGHT		
AUTOMOBILES MEDIUM TRUCKS	<b>DAY</b> 0.755 0.489	<b>EVENING</b> 0.140 0.022	<b>NIGHT</b> 0.105 0.489	0.9742 0.0184 0.0074	NOISE OL	JTPUT DA	AUTOMOBILE MEDIUM TRU HEAVY TRUCI	E S ICKS	HEIGHT 2.0 4.0	49.53 49.44	
AUTOMOBILES MEDIUM TRUCKS	<b>DAY</b> 0.755 0.489	<b>EVENING</b> 0.140 0.022	NIGHT 0.105 0.489 0.473	0.9742 0.0184 0.0074			AUTOMOBILE MEDIUM TRU HEAVY TRUCI	E IS ICKS (S	HEIGHT 2.0 4.0	49.53 49.44	
AUTOMOBILES MEDIUM TRUCKS	<b>DAY</b> 0.755 0.489	<b>EVENING</b> 0.140 0.022	NIGHT 0.105 0.489 0.473	0.9742 0.0184 0.0074		TOPO OR BA	AUTOMOBILE MEDIUM TRU HEAVY TRUCI	E IS ICKS (S	HEIGHT 2.0 4.0	49.53 49.44	
VEHICLE TYPE AUTOMOBILES MEDIUM TRUCKS HEAVY TRUCKS	<b>DAY</b> 0.755 0.489	EVENING 0.140 0.022 0.054	NIGHT 0.105 0.489 0.473 <i>NOI</i> PE LES	0.9742 0.0184 0.0074	(WITHOUT	TOPO OR BA	AUTOMOBILE MEDIUM TRU HEAVY TRUCI	E IS ICKS KS	HEIGHT 2.0 4.0 8.0	49.53 49.44	

NOISE LEVELS (dBA)	55.9	53.4	51.7	49.3	56.5	56.9

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	54.6	52.6	51.3	45.3	53.7	54.3
MEDIUM TRUCKS	46.3	42.5	35.0	43.7	49.9	49.9
HEAVY TRUCKS	47.2	43.2	39.8	44.4	50.6	50.7
NOISE LEVELS (dBA)	55.9	53.4	51.7	49.3	56.5	56.9

NOISE CONTOUR (FT)								
NOISE LEVELS 70 dBA 65 dBA 60 dBA 55 dBA								
CNEL	7	14	31	67				
LDN	6	14	29	63				

	S DR S/O PROJ NG PLUS PROJ		ONTOURS								JOB #:         1043-22-01           DATE:         16-Sep-22           ENGINEER:         S. HORD
					NOISE IN	NPUT DAT	A				
	ROADW	AY CONDITIO	NS					RE		UT DATA	
ADT =	1,378					RECEIVER D	ISTANCE =		50		
SPEED =	40					DIST C/L TO	WALL =		50		
PK HR % =	10					RECEIVER H	EIGHT =		5.0		
NEAR LANE/FAR LANE DI	ST 15					WALL DISTA	NCE FROM R	ECEIVER =	0		
ROAD ELEVATION =	0.0					PAD ELEVA	ION =		0.0		
GRADE =	0.0					ROADWAY		F ANGLE=	-90		
PK HR VOL =	138							T ANGLE=	90		
								F ANGLE=	180		
	SITE C	CONDITIONS						VV.	ALL INFORM	MATION	
AUTOMOBILES = MEDIUM TRUCKS = HEAVY TRUCKS =	15 15 15	5	(10 = HARD	SITE, 15 = S(	OFT SITE)	HTH WALL= AMBIENT= BARRIER =	0.0	0 = WALL, 1	= BERM)		
	VEHIC	CLE MIX DATA						M	ISC. VEHICI	le info	
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY	]		VEHICLE TYP	E	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	0.755	0.140	0.105	0.9742			AUTOMOBILI	S	2.0	49.53	
MEDIUM TRUCKS	0.489	0.022	0.489	0.0184			MEDIUM TRU	JCKS	4.0	49.44	
	0.473	0.054	0.473	0.0074			HEAVY TRUC	<s< td=""><td>8.0</td><td>49.53</td><td>0.00</td></s<>	8.0	49.53	0.00
HEAVY TRUCKS											
HEAVY TRUCKS					NOISE OI		ΓΑ				
HEAVY TRUCKS					NOISE OL	JTPUT DA	ГА				
HEAVY TRUCKS			NOI				TA RRIER SHIELD	ING)			
HEAVY TRUCKS				SE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD			1	
HEAVY TRUCKS			ΡE	SE IMPACTS	(WITHOUT DAY LEQ	TOPO OR BA	RRIER SHIELD	LDN	<u>CNEL</u>	]	
HEAVY TRUCKS		VEHICLE TYP AUTOMOBIL MEDIUM TR	<b>РЕ</b> .ES	SE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD		<b>CNEL</b> 55.8 51.4		

NOISE LEVELS (dBA)	57.3	54.9	53.1	50.7	58.0	58.3

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	56.1	54.1	52.7	46.7	55.2	55.8
MEDIUM TRUCKS	47.8	43.9	36.5	45.1	51.3	51.4
HEAVY TRUCKS	48.7	44.6	41.2	45.9	52.1	52.2
NOISE LEVELS (dBA)	57.3	54.9	53.1	50.7	58.0	58.3

NOISE CONTOUR (FT)								
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA				
CNEL	8	18	39	83				
LDN	8	17	37	79				

	IZABETH LN S/O ( ISTING - NOISE C										DATE: 16-Sep-22 ENGINEER: S. HORD
					NOISE IN	NPUT DAT	A				
	ROADW	AY CONDITIO	NS					RE		UT DATA	
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL =	0.0	0 0 5 0 0 %				RECEIVER D DIST C/L TC RECEIVER H WALL DISTA PAD ELEVA ROADWAY	WALL = EIGHT = NCE FROM RI TION = VIEW: L	ECEIVER = F ANGLE= T ANGLE= DF ANGLE=	50 0 5.0 10 0.0 -90 90 180	)	
AUTOMOBILES = MEDIUM TRUCKS = HEAVY TRUCKS =	1 1	CONDITIONS	(10 = HARD	) SITE, 15 = SC		HTH WALL= AMBIENT= BARRIER =	0.0	W 0 = WALL, 1	ALL INFORM	MATION	
	VEHI	CLE MIX DATA						N	1ISC. VEHIC	LE INFO	
	DAY	EVENING	NIGHT	DAILY	]		VEHICLE TYP	E	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
VEHICLE I YPE	0.755	0.140	0.105	0.9742			AUTOMOBILI	S	2.0	49.53	
		0.022	0.489	0.0184			MEDIUM TRU		4.0	49.44	
AUTOMOBILES MEDIUM TRUCKS	0.489							(C	8.0	49.53	0.00
AUTOMOBILES MEDIUM TRUCKS	0.489 0.473	0.054	0.473	0.0074	]		HEAVY TRUC	<5	0.0	19188	0.00
AUTOMOBILES MEDIUM TRUCKS				1		JTPUT DA		(5	0.0	10.00	0.00
AUTOMOBILES MEDIUM TRUCKS			0.473				ТА		0.0		
AUTOMOBILES MEDIUM TRUCKS			0.473						0.0		
VEHICLE TYPE AUTOMOBILES MEDIUM TRUCKS HEAVY TRUCKS		0.054 VEHICLE TYF	0.473 <i>NOI</i> PE	ISE IMPACTS	(WITHOUT	TOPO OR BA	TA RRIER SHIELD NIGHT LEQ	ING) LDN	CNEL		
AUTOMOBILES MEDIUM TRUCKS		0.054	0.473 <i>NOI</i> PE LES	ISE IMPACTS	(WITHOUT	TOPO OR BA	TA RRIER SHIELD	ING)			

NOISE LEVELS (dBA)	49.2	46.8	45.0	42.6	49.9	50.2

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	48.0	46.0	44.6	38.6	47.1	47.7
MEDIUM TRUCKS	39.7	35.8	28.3	37.0	43.2	43.3
HEAVY TRUCKS	40.6	36.5	33.1	37.8	44.0	44.1
NOISE LEVELS (dBA)	49.2	46.8	45.0	42.6	49.9	50.2

NOISE CONTOUR (FT)									
NOISE LEVELS 70 dBA 65 dBA 60 dBA 55 dBA									
CNEL	2	5	11	24					
LDN	2	5	11	23					

			ITOURS								DATE: 16-Sep-22 ENGINEER: S. HORD
					NOISE IN		A				
	ROADW	AY CONDITIONS						RE		UT DATA	
ADT = SPEED = PK HR % = NEAR LANE/FAR LANE ROAD ELEVATION = GRADE = PK HR VOL =	2,886 40 10 DIST 15 0.0 0.0 289					RECEIVER D DIST C/L TO RECEIVER H WALL DISTA PAD ELEVA <sup>T</sup> ROADWAY	WALL = EIGHT = NCE FROM R ION = /IEW: L	ECEIVER = F ANGLE= T ANGLE= DF ANGLE=	50 50 5.0 0 0.0 -90 90 180		
AUTOMOBILES = MEDIUM TRUCKS = HEAVY TRUCKS =	SITE ( 15 15 15	(10	) = HARD SIT	ΤΕ, 15 = SC	OFT SITE)	HTH WALL= AMBIENT= BARRIER =	0.0	W 0 = WALL, 2	ALL INFORM	MATION	
	VEHIC	LE MIX DATA						N	1ISC. VEHIC	LE INFO	
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY			VEHICLE TYP	E	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES MEDIUM TRUCKS HEAVY TRUCKS	0.755 0.489 0.473	0.022 0	0.489	0.9742 0.0184 0.0074			AUTOMOBILI MEDIUM TRU HEAVY TRUC	JCKS	2.0 4.0 8.0	49.53 49.44 49.53	  0.00
					NOISE OL		ГА				
			NOISE	IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD	DING)			
		VEHICLE TYPE	P	K HR LEQ	DAY LEQ	EVEN LEO	NIGHT LEQ	LDN	CNEL	1	
		AUTOMOBILES		59.3	57.3	56.0	49.9	58.4	59.0	1	

NOISE LEVELS (dBA)	60.5	58.1	56.4	54.0	61.2	61.5

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	59.3	57.3	56.0	49.9	58.4	59.0
MEDIUM TRUCKS	51.0	47.1	39.7	48.4	54.5	54.6
HEAVY TRUCKS	51.9	47.8	44.4	49.1	55.3	55.4
NOISE LEVELS (dBA)	60.5	58.1	56.4	54.0	61.2	61.5

NOISE CONTOUR (FT)								
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA				
CNEL	14	29	63	136				
LDN	13	28	60	129				

NOISE INPUT DATA         ROADWAY CONDITIONS       RECEIVER INPUT D.         ADT =       5,595       RECEIVER DISTANCE =       50         SPEED =       40       DIST C/L TO WALL =       0         PK HR % =       10       RECEIVER HEIGHT =       5.0         NEAR LANE/FAR LANE DIST       15       WALL DISTANCE FROM RECEIVER =       10         ROAD ELEVATION =       0.0       PAD ELEVATION =       0.0         RADE =       0.0 %       PAD ELEVATION =       0.0         PK HR VOL =       560       ROADWAY VIEW:       LF ANGLE=       -90         RT ANGLE=       90       DF ANGLE=       180         SITE CONDITIONS         WALL INFORMATI         AUTOMOBILES =       15       (10 = HARD SITE, 15 = SOFT SITE)       HTH WALL=       0.0         AUTOMOBILES =       15       (10 = HARD SITE, 15 = SOFT SITE)       AMBIENT=       0.0         BARRIER =       0 (0 = WALL, 1 = BERM)       BARRIER =       0 (0 = WALL, 1 = BERM)	
ADT = 5,595 SPEED = 40 PK HR % = 10 NEAR LANE/FAR LANE DIST 15 ROAD ELEVATION = 0.0 GRADE = 0.0 % PK HR VOL = 560 RT ANGLE= 90 DF ANGLE= 90 DF ANGLE= 180 AUTOMOBILES = 15 MEDIUM TRUCKS = 15 (10 = HARD SITE, 15 = SOFT SITE) AUTOMOBILES = 15 MEDIUM TRUCKS = 15 (10 = HARD SITE, 15 = SOFT SITE) AUTOMOBILES = 15 MEDIUM TRUCKS = 15 (10 = HARD SITE, 15 = SOFT SITE) RECEIVER DISTANCE = 50 DIST C/L TO WALL = 50 DIST C/L TO WALL = 0.0 RECEIVER HEIGHT = 50 WALL DISTANCE FROM RECEIVER = 10 WALL DISTANCE FROM RECEIVER = 10 WALL DISTANCE FROM RECEIVER = 10 PAD ELEVATION = 0.0 RT ANGLE = 90 DF ANGLE = 180 HTH WALL = 0.0 AMBIENT = 0.0	
SPEED =       40       DIST C/L TO WALL =       0         PK HR % =       10       RECEIVER HEIGHT =       5.0         NEAR LANE/FAR LANE DIST       15       WALL DISTANCE FROM RECEIVER =       10         ROAD ELEVATION =       0.0       PAD ELEVATION =       0.0         GRADE =       0.0 %       ROADWAY VIEW:       LF ANGLE=       -90         PK HR VOL =       560       RT ANGLE=       90       DF ANGLE=       180         VALL INFORMATION         AUTOMOBILES =       15       (10 = HARD SITE, 15 = SOFT SITE)       HTH WALL=       0.0         AMBIENT=       0.0	ION
AUTOMOBILES =15HTH WALL=0.0MEDIUM TRUCKS =15(10 = HARD SITE, 15 = SOFT SITE)AMBIENT=0.0	ION
HEAVY TRUCKS = 15	
VEHICLE MIX DATA MISC. VEHICLE IN	NFO
VEHICLE TYPE DAY EVENING NIGHT DAILY VEHICLE TYPE HEIGHT SLE	E DISTANCE GRADE ADJUSTMENT
	49.53
MEDIUM TRUCKS 0.489 0.022 0.489 0.0184 MEDIUM TRUCKS 4.0	49.44
IEAVY TRUCKS         0.473         0.054         0.473         0.0074         HEAVY TRUCKS         8.0	49.53 0.00
NOISE OUTPUT DATA	
NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)	
VEHICLE TYPE PK HR LEQ DAY LEQ EVEN LEQ NIGHT LEQ LDN CNEL	
AUTOMOBILES 62.2 60.1 58.8 52.8 61.2 61.9	
MEDIUM TRUCKS         53.9         50.0         42.5         51.2         57.4         57.4           HEAVY TRUCKS         54.8         50.7         47.3         52.0         58.2         58.3	

NOISE LEVELS (dBA)	63.4	61.0	59.2	56.8	64.0	64.4

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	62.2	60.1	58.8	52.8	61.2	61.9
MEDIUM TRUCKS	53.9	50.0	42.5	51.2	57.4	57.4
HEAVY TRUCKS	54.8	50.7	47.3	52.0	58.2	58.3
NOISE LEVELS (dBA)	63.4	61.0	59.2	56.8	64.0	64.4

NOISE CONTOUR (FT)								
NOISE LEVELS 70 dBA 65 dBA 60 dBA 55 dBA								
CNEL	21	46	98	212				
LDN	20	43	93	200				

ROADWAY: EL	ILDOMAR COMM IZABETH LN S/O C ISTING PLUS PRO	LINTON KEITH	ONTOURS								JOB #:         1043-22-01           DATE:         16-Sep-22           ENGINEER:         S. HORD
					NOISE IN	NPUT DAT	A				
	ROADW	AY CONDITION	IS					RE	CEIVER INP	UT DATA	
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL =	0.0 0.0 599	%				RECEIVER D DIST C/L TC RECEIVER H WALL DISTA PAD ELEVA ROADWAY	WALL = EIGHT = ANCE FROM R FION = VIEW: L	_F ANGLE= RT ANGLE= DF ANGLE=			
AUTOMOBILES = MEDIUM TRUCKS = HEAVY TRUCKS =	1 1 1	5 5 (:	10 = HARD	SITE, 15 = S(	OFT SITE)	HTH WALL= AMBIENT= BARRIER =	0.0	0 = WALL,			
	VEHIC	CLE MIX DATA						Ν	IISC. VEHIC	LE INFO	
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY	]		VEHICLE TYP	E	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES MEDIUM TRUCKS HEAVY TRUCKS	0.755 0.489 0.473	0.140 0.022 0.054	0.105 0.489 0.473	0.9742 0.0184 0.0074			AUTOMOBIL MEDIUM TRI HEAVY TRUC	JCKS	2.0 4.0 8.0	49.53 49.44 49.53	  0.00
					NOISE OL	JTPUT DA	ТА				
			NOIS	SE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD	DING)			
		VEHICLE TYPI AUTOMOBILE		<b>PK HR LEQ</b> 62.5	<b>DAY LEQ</b> 60.4	<b>EVEN LEQ</b> 59.1	NIGHT LEQ 53.1	<b>LDN</b> 61.5	<b>CNEL</b> 62.2	]	

NOISE LEVELS (dBA)	63.7	61.3	59.5	57.1	64.3	64.7

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	62.5	60.4	59.1	53.1	61.5	62.2
MEDIUM TRUCKS	54.2	50.3	42.8	51.5	57.7	57.7
HEAVY TRUCKS	55.1	51.0	47.6	52.3	58.5	58.6
NOISE LEVELS (dBA)	63.7	61.3	59.5	57.1	64.3	64.7

NOISE CONTOUR (FT)								
NOISE LEVELS 70 dBA 65 dBA 60 dBA 55 dBA								
CNEL	22	48	103	222				
LDN	21	45	97	210				

LOCATION: EX	KISTING - NOISE (	CONTOURS									ENGINEER: S. HORD
					NOISE IN		Α				
	ROADV	VAY CONDITIO	NS					RE	CEIVER INP	UT DATA	
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL =	1 NE DIST 1 0.	0 0 5 0 0 %				RECEIVER D DIST C/L TO RECEIVER H WALL DISTA PAD ELEVAT ROADWAY	WALL = EIGHT = NCE FROM R TON = /IEW: L	ECEIVER = .F ANGLE= RT ANGLE= DF ANGLE=		)	
AUTOMOBILES = MEDIUM TRUCKS =	:	CONDITIONS		SITE, 15 = S		HTH WALL= AMBIENT=		W	ALL INFORI	MATION	
		15	(10 – NAKD	511E, 15 – 50		BARRIER =	0.0 0 (	0 = WALL,	1 = BERM)		
				, SITE, 15 – 30		1			1 = BERM) ЛISC. VEHIC	LE INFO	
HEAVY TRUCKS =		15		DAILY	]	1		Ν	ЛISC. VEHIC	LE INFO	GRADE ADJUSTMENT
HEAVY TRUCKS =          VEHICLE TYPE         AUTOMOBILES	<b>VEH</b> 0.755	15 ICLE MIX DATA EVENING 0.140	<b>NIGHT</b> 0.105	DAILY 0.9742		1	0( <b>VEHICLE TYP</b> AUTOMOBIL	E ES	AISC. VEHIC HEIGHT 2.0	<b>SLE DISTANCE</b> 49.53	GRADE ADJUSTMENT
HEAVY TRUCKS =          VEHICLE TYPE         AUTOMOBILES         MEDIUM TRUCKS	VEH 0.755 0.489	15 ICLE MIX DATA EVENING 0.140 0.022	<b>NIGHT</b> 0.105 0.489	DAILY 0.9742 0.0184		1	0 ( <b>VEHICLE TYP</b> AUTOMOBIL MEDIUM TRI	E ES JCKS	ИІ <mark>SC. VEHIC</mark> НЕІ <mark>GHT</mark> 2.0 4.0	<b>SLE DISTANCE</b> 49.53 49.44	
HEAVY TRUCKS =          VEHICLE TYPE         AUTOMOBILES         MEDIUM TRUCKS	<b>VEH</b> 0.755	15 ICLE MIX DATA EVENING 0.140	<b>NIGHT</b> 0.105	DAILY 0.9742		1	0( <b>VEHICLE TYP</b> AUTOMOBIL	E ES JCKS	AISC. VEHIC HEIGHT 2.0	<b>SLE DISTANCE</b> 49.53	
HEAVY TRUCKS =          VEHICLE TYPE         AUTOMOBILES         MEDIUM TRUCKS	VEH 0.755 0.489	15 ICLE MIX DATA EVENING 0.140 0.022	<b>NIGHT</b> 0.105 0.489	<b>DAILY</b> 0.9742 0.0184 0.0074		1	0 ( <b>VEHICLE TYP</b> AUTOMOBIL MEDIUM TRU HEAVY TRUC	E ES JCKS	ИІ <mark>SC. VEHIC</mark> НЕІ <mark>GHT</mark> 2.0 4.0	<b>SLE DISTANCE</b> 49.53 49.44	
HEAVY TRUCKS =          VEHICLE TYPE         AUTOMOBILES         MEDIUM TRUCKS	VEH 0.755 0.489	15 ICLE MIX DATA EVENING 0.140 0.022	NIGHT 0.105 0.489 0.473	DAILY 0.9742 0.0184 0.0074	NOISE OL	BARRIER =	0 ( <b>VEHICLE TYP</b> AUTOMOBIL MEDIUM TRU HEAVY TRUC	E ES JCKS KS	ИІ <mark>SC. VEHIC</mark> НЕІ <mark>GHT</mark> 2.0 4.0	<b>SLE DISTANCE</b> 49.53 49.44	
HEAVY TRUCKS =          VEHICLE TYPE         AUTOMOBILES         MEDIUM TRUCKS	VEH 0.755 0.489	15 ICLE MIX DATA 0.140 0.022 0.054	NIGHT 0.105 0.489 0.473	DAILY 0.9742 0.0184 0.0074	NOISE OL (WITHOUT	BARRIER = JTPUT DA	0 ( VEHICLE TYP AUTOMOBILI MEDIUM TRU HEAVY TRUC TA RRIER SHIELD	E ES JCKS KS	ИІ <mark>SC. VEHIC</mark> НЕІ <mark>GHT</mark> 2.0 4.0	<b>SLE DISTANCE</b> 49.53 49.44	
WEDIOM TRUCKS =         HEAVY TRUCKS =         VEHICLE TYPE         AUTOMOBILES         MEDIUM TRUCKS         HEAVY TRUCKS	VEH 0.755 0.489	15 ICLE MIX DATA 0.140 0.022 0.054	NIGHT 0.105 0.489 0.473	DAILY 0.9742 0.0184 0.0074	NOISE OL (WITHOUT	BARRIER = JTPUT DA TOPO OR BA	0 ( VEHICLE TYP AUTOMOBILI MEDIUM TRI HEAVY TRUC TA RRIER SHIELD NIGHT LEQ	E ES JCKS KS	ИISC. VEHIC НЕІGHT 2.0 4.0 8.0	<b>SLE DISTANCE</b> 49.53 49.44	
HEAVY TRUCKS =          VEHICLE TYPE         AUTOMOBILES         MEDIUM TRUCKS	VEH 0.755 0.489	15 ICLE MIX DATA 0.140 0.022 0.054	NIGHT 0.105 0.489 0.473 <i>NOI</i> PE LES	DAILY 0.9742 0.0184 0.0074	NOISE OL (WITHOUT	BARRIER = JTPUT DA	0 ( VEHICLE TYP AUTOMOBILI MEDIUM TRU HEAVY TRUC TA RRIER SHIELD	E ES JCKS KS	ИISC. VEHIC НЕІGНТ 2.0 4.0 8.0	<b>SLE DISTANCE</b> 49.53 49.44	

NOISE LEVELS (dBA)	63.9	61.5	59.7	57.3	64.6	64.9

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	62.7	60.7	59.4	53.3	61.8	62.4
MEDIUM TRUCKS	54.4	50.5	43.1	51.7	57.9	58.0
HEAVY TRUCKS	55.3	51.2	47.8	52.5	58.7	58.8
NOISE LEVELS (dBA)	63.9	61.5	59.7	57.3	64.6	64.9

NOISE CONTOUR (FT)								
NOISE LEVELS 70 dBA 65 dBA 60 dBA 55 dBA								
CNEL	23	49	107	230				
LDN	22	47	101	217				

ROADWAY: PR	ILDOMAR COMM IELIPP RD E/O ELI ISTING PLUS PRO	IZABETH	ONTOURS							l	JOB #:         1043-22-01           DATE:         16-Sep-22           ENGINEER:         S. HORD
					NOISE IN	NPUT DAT	A				
	ROADW	AY CONDITIO	NS					RF			
ADT =	6,693	}				RECEIVER D	ISTANCE =		50		
SPEED =	40					DIST C/L TO			50		
PK HR % =	10	)				RECEIVER H			5.0		
NEAR LANE/FAR LAN	E DIST 15	<b>;</b>				WALL DISTA	NCE FROM R	ECEIVER =	0		
ROAD ELEVATION =	0.0	)				PAD ELEVA	ION =		0.0		
GRADE =		) %				ROADWAY		F ANGLE=	-90		
PK HR VOL =	669	)						T ANGLE=	90		
							[	F ANGLE=	180		
	CITE	CONDITIONS									
	SITE	CONDITIONS						VV.	ALL INFORM	WATION	
AUTOMOBILES = MEDIUM TRUCKS = HEAVY TRUCKS =	1. 1. 1.	5	(10 = HARD	SITE, 15 = S(	OFT SITE)	HTH WALL= AMBIENT= BARRIER =	0.0	0 = WALL, 1	= BERM)		
	VEHI	CLE MIX DATA						Μ	ISC. VEHIC	LE INFO	
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY	1		VEHICLE TYP	F	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	0.755	0.140	0.105	0.9742	1		AUTOMOBILI		2.0	49.53	
MEDIUM TRUCKS	0.489	0.022	0.489	0.0184	1		MEDIUM TRU		4.0	49.44	
HEAVY TRUCKS	0.473	0.054	0.473	0.0074			HEAVY TRUC		8.0	49.53	0.00
ILAVI INUUNS											
							٢٨				
					NOISE OL	JTPUT DA	ГА				
			NOI				Γ <mark>Α</mark> RRIER SHIELD	ING)			
			NOI					ING)			
		VEHICLE TYP		SE IMPACTS	(WITHOUT DAY LEQ	TOPO OR BA		ING) LDN	CNEL	]	
		AUTOMOBIL	<b>РЕ</b> .ES	SE IMPACTS PK HR LEQ 62.9	<b>(WITHOUT</b> <b>DAY LEQ</b> 60.9	<b>TOPO OR BA</b> <b>EVEN LEQ</b> 59.6	RRIER SHIELD NIGHT LEQ 53.6	LDN 62.0	62.6	]	
			PE ES UCKS	SE IMPACTS	(WITHOUT DAY LEQ	TOPO OR BA	RRIER SHIELD	LDN			

			-			
NOISE LEVELS (dBA)	64.2	61.8	60.0	57.6	64.8	65.2

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	62.9	60.9	59.6	53.6	62.0	62.6
MEDIUM TRUCKS	54.7	50.8	43.3	52.0	58.2	58.2
HEAVY TRUCKS	55.5	51.5	48.1	52.7	58.9	59.0
NOISE LEVELS (dBA)	64.2	61.8	60.0	57.6	64.8	65.2

NOISE CONTOUR (FT)									
NOISE LEVELS 70 dBA 65 dBA 60 dBA 55 dBA									
CNEL	24	51	111	239					
LDN	23	49	105	226					

ROADWAY: CL	LDOMAR COMM NTON KEITH W/O STING - NOISE CO	) I-15									JOB #:         1043-22-01           DATE:         16-Sep-22           ENGINEER:         S. HORD
					NOISE IN	NPUT DAT	A				
	ROADW	AY CONDITIO	NS					RI	ECEIVER INP	UT DATA	
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL =	0.0	%				RECEIVER D DIST C/L TC RECEIVER H WALL DISTA PAD ELEVA ROADWAY	WALL = EIGHT = NCE FROM R TON = VIEW: L	ECEIVER = .F ANGLE= RT ANGLE= DF ANGLE=	0.0 -9( = 9(	)	
AUTOMOBILES = MEDIUM TRUCKS = HEAVY TRUCKS =	SITE ( 1) 1) 1)	5	(10 = HARD	) SITE, 15 = S(	OFT SITE)	HTH WALL= AMBIENT= BARRIER =	0.0		VALL INFOR	MATION	
	VEHIC	CLE MIX DATA	1					۱	MISC. VEHIC	LE INFO	
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY			VEHICLE TYP	E	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	0.755	0.140	0.104	0.9200			AUTOMOBILI		2.0	48.09	
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300			MEDIUM TRU		4.0	48.01	
HEAVY TRUCKS	0.480	0.020	0.500	0.0500			HEAVY TRUC	KS	8.0	48.09	0.00
					NOISE OL	JTPUT DA	ГА				
			NOI	ISE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD	DING)			
		VEHICLE TY	PE	PK HR LEQ	DAY LEQ	EVEN LEO	NIGHT LEQ	LDN	CNEL	1	
		AUTOMOBI		68.6	66.6	65.3	59.3	67.7	68.3	1	
		MEDIUM TR	RUCKS	62.7	58.8	51.0	60.2	66.3	66.4	_	

HEAVY TRUCKS	69.8	65.8	58.0	67.2	73.4	73.4
	-	-	-	-		
NOISE LEVELS (dBA)	72.7	69.6	66.2	68.6	75.1	75.2

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	68.6	66.6	65.3	59.3	67.7	68.3
MEDIUM TRUCKS	62.7	58.8	51.0	60.2	66.3	66.4
HEAVY TRUCKS	69.8	65.8	58.0	67.2	73.4	73.4
NOISE LEVELS (dBA)	72.7	69.6	66.2	68.6	75.1	75.2

NOISE CONTOUR (FT)									
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA					
CNEL	111	240	517	1113					
LDN	109	234	505	1088					

	INTON KEITH W/ ISTING PLUS PRC		CONTOURS								DATE: 1 ENGINEER: S	6-Sep-22 . HORD
					NOISE IN	NPUT DAT	Α					
	ROADW	AY CONDITIO	NS					R	ECEIVER INP	UT DATA		
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL =	0. 0. 2,63 SITE	0 0 8 0 0 %				RECEIVER D DIST C/L TC RECEIVER H WALL DISTA PAD ELEVA ROADWAY	WALL = EIGHT = NCE FROM R TION = VIEW: L F	.F ANGLE= RT ANGLE= DF ANGLE=	0.0 -90 = 90	) )		
MEDIUM TRUCKS = HEAVY TRUCKS =	1	15 15		) SITE, 15 = S(	OFT SITE)	AMBIENT= BARRIER =	0.0		1 = BERM)			
	VEHI	CLE MIX DATA						l	MISC. VEHIC	LE INFO		
VEHICLE TYPE AUTOMOBILES MEDIUM TRUCKS HEAVY TRUCKS	DAY 0.755 0.480 0.480	EVENING           0.140           0.020           0.020	NIGHT 0.104 0.500 0.500	DAILY           0.9200           0.0300           0.0500			VEHICLE TYP AUTOMOBILI MEDIUM TRU HEAVY TRUC	es JCKS	HEIGHT           2.0           4.0           8.0	SLE DISTANCE           48.09           48.01           48.09	GRADE AD. - - 0.0	-
					NOISE OL		ГА					
			NOI	SE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD	DING)				
		VEHICLE TY AUTOMOBII MEDIUM TR	ES	<b>PK HR LEQ</b> 68.8 62.9	<b>DAY LEQ</b> 66.8 59.0	65.5	<b>NIGHT LEQ</b> 59.5	<b>LDN</b> 67.9	<b>CNEL</b> 68.5			
						51.2	60.4	66.5	66.6			

HEAVY TRUCKS	70.0	66.0	58.2	67.4	73.6	73.6
		-		-		
NOISE LEVELS (dBA)	72 9	69.8	66.4	68.8	75.3	75.4
	72.5	05.0	00.4	00.0	75.5	75.4

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	68.8	66.8	65.5	59.5	67.9	68.5
MEDIUM TRUCKS	62.9	59.0	51.2	60.4	66.5	66.6
HEAVY TRUCKS	70.0	66.0	58.2	67.4	73.6	73.6
NOISE LEVELS (dBA)	72.9	69.8	66.4	68.8	75.3	75.4

NOISE CONTOUR (FT)									
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA					
CNEL	115	247	532	1146					
LDN	112	241	520	1119					

	NTON KEITH E/O ISTING - NOISE CO										DATE: 16-Sep-22 ENGINEER: S. HORD
					NOISE IN	NPUT DAT	A				
	ROADW	AY CONDITIO	NS					RI	ECEIVER INP	UT DATA	
ADT =	23,746	5				RECEIVER D	ISTANCE =		50		
SPEED =	, 40					DIST C/L TO			0		
PK HR % =	10	)				<b>RECEIVER H</b>	EIGHT =		5.0		
NEAR LANE/FAR LAN	E DIST : 28	3				WALL DISTA	ANCE FROM R	ECEIVER =	50		
ROAD ELEVATION =	0.0					PAD ELEVA			0.0		
GRADE =		) %				ROADWAY		F ANGLE=			
PK HR VOL =	2,375	<b>)</b>						RT ANGLE=			
							[	OF ANGLE=	= 180	)	
	SITE	CONDITIONS						V		MATION	
MEDIUM TRUCKS = HEAVY TRUCKS =	19 19		(10 = HARD	) SITE, 15 = S(		AMBIENT= BARRIER =	0.0 0 (	0 = WALL,	1 = BERM)		
	VEHIC	CLE MIX DATA	l					Γ	MISC. VEHIC	LE INFO	
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY	1		VEHICLE TYP	E	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	0.755	0.140	0.104	0.9200	]		AUTOMOBILI		2.0	48.09	
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300			MEDIUM TRU	JCKS	4.0	48.01	
HEAVY TRUCKS	0.480	0.020	0.500	0.0500			HEAVY TRUC	KS	8.0	48.09	0.00
					NUISE OL	JTPUT DA	IA				
			NOI	ISE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD	DING)			
		VEHICLE TY	PE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL	]	
		<b>VEHICLE TYI</b> AUTOMOBII		68.4	<b>DAY LEQ</b> 66.4	<b>EVEN LEQ</b> 65.1	<b>NIGHT LEQ</b> 59.0	67.4	68.1		
			LES			1					

HEAVY TRUCKS	69.5	65.5	57.8	67.0	73.1	73.2
	-	-	-			-
NOISE LEVELS (dBA)	72.5	69.4	65.9	68.3	74.8	74.9

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	68.4	66.4	65.1	59.0	67.4	68.1
MEDIUM TRUCKS	62.5	58.5	50.7	59.9	66.1	66.1
HEAVY TRUCKS	69.5	65.5	57.8	67.0	73.1	73.2
NOISE LEVELS (dBA)	72.5	69.4	65.9	68.3	74.8	74.9

NOISE CONTOUR (FT)									
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA					
CNEL	107	230	496	1068					
LDN	104	225	484	1044					

	INTON KEITH E/C		CONTOURS								DATE: 16-Sep-22 ENGINEER: <mark>S. HORD</mark>
					NOISE IN	NPUT DAT	A				
	ROADW	VAY CONDITIO	NS					RI	ECEIVER INP	UT DATA	
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL = AUTOMOBILES =	0.( 0.( 2,592 SITE	0 0 8 0 0 % 2 <b>CONDITIONS</b>				PAD ELEVA ROADWAY HTH WALL=	WALL = IEIGHT = ANCE FROM RI TION = VIEW: L R E	F ANGLE= RT ANGLE= DF ANGLE=	0.0 -9( -9(	) )	
MEDIUM TRUCKS = HEAVY TRUCKS =	1	15 15 ICLE MIX DATA		) SITE, 15 = S(		AMBIENT= BARRIER =	0.0 0 (1		1 = BERM) MISC. VEHIC	LE INFO	
					I			_			
VEHICLE TYPE AUTOMOBILES	<b>DAY</b> 0.755	<b>EVENING</b> 0.140	<b>NIGHT</b> 0.104	<b>DAILY</b> 0.9200			VEHICLE TYP		<b>HEIGHT</b> 2.0	<b>SLE DISTANCE</b> 48.09	GRADE ADJUSTMENT
MEDIUM TRUCKS	0.480	0.140	0.104	0.9200			MEDIUM TRU		4.0	48.09	
HEAVY TRUCKS	0.480	0.020	0.500	0.0500			HEAVY TRUC		8.0	48.09	0.00
					NOISE OL	JTPUT DA	ТА				
			NOI	ISE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD	DING)			
				PK HR LEQ	DAY LEQ		NIGHT LEQ		CNEL	1	
			PF .								
		<b>VEHICLE TY</b>					1	LDN 67.8		-	
		AUTOMOBII MEDIUM TR	LES	68.8 62.9	66.7 58.9	65.4 51.1	59.4 60.3	67.8 66.5	68.5 66.5		

HEAVY TRUCKS	69.9	65.9	58.1	67.4	73.5	73.5
		-				
NOISE LEVELS (dBA)	72.8	69.7	66.3	68.7	75.2	75.3

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	68.8	66.7	65.4	59.4	67.8	68.5
MEDIUM TRUCKS	62.9	58.9	51.1	60.3	66.5	66.5
HEAVY TRUCKS	69.9	65.9	58.1	67.4	73.5	73.5
NOISE LEVELS (dBA)	72.8	69.7	66.3	68.7	75.2	75.3

NOISE CONTOUR (FT)									
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA					
CNEL	113	244	526	1132					
LDN	111	238	514	1106					

ROADWAY: CL	LDOMAR COMM INTON KEITH W/ ISTING - NOISE C	O INLAND VAL									JOB #:         1043-22-01           DATE:         16-Sep-22           ENGINEER:         S. HORD
					NOISE IN	NPUT DAT	Α				
	ROADV	VAY CONDITIO	NS					R	ECEIVER INP	UT DATA	
ADT =	22,24	7				RECEIVER D	ISTANCE =		50		
SPEED =	4	0				DIST C/L TO	WALL =		0		
PK HR % =	1	0				RECEIVER H	EIGHT =		5.0		
NEAR LANE/FAR LAN		8					NCE FROM R	ECEIVER =	50		
ROAD ELEVATION =	0.					PAD ELEVA			0.0		
GRADE =		0 %				ROADWAY		F ANGLE=			
PK HR VOL =	2,22	5						RT ANGLE=			
							L	DF ANGLE=	: 180	)	
	SITE	CONDITIONS						V	VALL INFOR	MATION	
HEAVY TRUCKS =		15				BARRIER =	0 (	0 = WALL,	1 = BERM)		
	VEHI	ICLE MIX DATA	l l					Γ	MISC. VEHIC	LE INFO	
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY	]		VEHICLE TYP	E	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	0.755	0.140	0.104	0.9200	-		AUTOMOBILI		2.0	48.09	
	0.480	0.020	0.500	0.0300	-		MEDIUM TRU		4.0	48.01	
HEAVY TRUCKS	0.480	0.020	0.500	0.0500			HEAVY TRUC	KS	8.0	48.09	0.00
					NOISE OL		ТА				
			NOI	ISE IIVIPACIS	WITHOUT	TOPO OR BA	RRIER SHIELD	mvG)			
		VEHICLE TY	DF	PK HR LEQ	DAY LEQ	EVEN LEQ		LDN	CNEL	1	
								LDIN			
		AUTOMOBI		68.1	66.1	64.8	58.7	67.2	67.8	1	
			LES	· · · · · · · · · · · · · · · · · · ·						-	

HEAVY TRUCKS	69.2	65.3	57.5	66.7	72.8	72.9
	-			-	-	-
NOISE LEVELS (dBA)	72.2	69.1	65.7	68.0	74.5	74.7

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	68.1	66.1	64.8	58.7	67.2	67.8
MEDIUM TRUCKS	62.2	58.2	50.4	59.6	65.8	65.8
HEAVY TRUCKS	69.2	65.3	57.5	66.7	72.8	72.9
NOISE LEVELS (dBA)	72.2	69.1	65.7	68.0	74.5	74.7

NOISE CONTOUR (FT)										
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA						
CNEL	102	220	475	1023						
LDN	100	215	464	999						

NOISE INPUT DATA           RECEIVER INPUT DATA           ROADWAY CONDITIONS         RECEIVER INPUT DATA           ADT =         24,475         RECEIVER INPUT DATA           SPEED =         40         DIST C/L TO WALL =         0           SPEED =         40         DIST C/L TO WALL =         0           SPEED =         40         DIST C/L TO WALL =         0           NORAD RELEVATION =         0.0           REA NAR/FAR LANE DIST :         28           WALL DISTANCE FROM RECEIVER =         50           ROAD RELEVATION =         0.0           ROAD WAY VIEW:         LIF ANGLE =         90           RCE HAVD IT TONS         WALL INFORMATION           AUTOMOBILES =         15           MEDIUM TRUCKS =         15           VEHICLE TYPE         DAY           VEHICLE MIX DATA         MISC VEHICLE INFO           VEHICLE TYPE         AUTOMOBILES            AUTOMOBILES         0.0           MEDIUM TRUCKS         0.0           MEDIUM TRUCKS <th></th> <th>INTON KEITH W/ ISTING PLUS PRO</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>DATE: 16-Sep- ENGINEER: S. HORI</th> <th></th>		INTON KEITH W/ ISTING PLUS PRO										DATE: 16-Sep- ENGINEER: S. HORI	
ADT = 24,475 SPEED = 40 SPEED = 40 DIST C/L TO WALL = 0 NERR LANE/FAR LANE DIST: 28 WALL DISTANCE HEIGHT = 50 RADO ELEVATION = 0.0 GRADD E = 0.0 % PAD ELEVATION = 0.0 GRADD = 2,447 SITE CONDITIONS WALL UNFORMATION AUTOMOBILES = 15 MEDIUM TRUCKS = 15 (10 = HARD SITE, 15 = SOFT SITE) HATH WALL = 0.0 BARRIER = 0 (0 = WALL, 1 = BERM) BARRIER = 0 (0 = WALL, 1 = BERM) WEINDUK SITE CONDITIONS WEINDUKS = 0.15 MEDIUM TRUCKS = 0.480 0.020 NOISE OUTPUT DATA NOISE OUTPUT DATA NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING) WEINDUK TRUCKS = 0.480 0.020 VEHICLE TYPE PRIME VIEW INFORMATION NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)						NOISE IN	NPUT DAT	A					
SPEED =         40         DIST C/L TO WALL =         0           PK HR %=         10         RECEIVER HEIGHT =         5.0           NCAR LANE/FAR LANE DIST :         28         WALL DISTANCE FROM RECEIVER =         50           RCADE =         0.0         %         PAD ELEVATION =         0.0           RCADE =         0.0         %         RCADE =         90           PK HR VOL =         2,447         RCADE =         90           STEC CONDITIONS         WALL DISTANCE FROM RECEIVER =         90           DF ANGLES =         15         (10 = HARD SITE, 15 = SOFT SITE)         AMBIENT =         0.0           MEDIUM TRUCKS =         15         (10 = HARD SITE, 15 = SOFT SITE)         AMBIENT =         0.0           BARRIER =         0 (0 = WALL, 1 = BERM)         BARRIER =         0 (0 = WALL, 1 = BERM)           VEHICLE MIX DATA           VEHICLE TYPE         DAY         EVENING         NIGHT         DAILY           VEHICLE TYPE         DAY         EVENING         NIGHT         DAILY           MISC. VEHICLE INFO           VEHICLE TYPE         DAY         EVENING         NOISE         OUTOMOBILES         2.0         48.00		ROADW	AY CONDITIO	NS					RI	ECEIVER INP	UT DATA		
VEHICLE TYPE         DAY         EVENING         NIGHT         DAILY           AUTOMOBILES         0.755         0.140         0.104         0.9200           MEDIUM TRUCKS         0.480         0.020         0.500         0.0300           HEAVY TRUCKS         0.480         0.020         0.500         0.0500           NOISE OUTPUT DATA         NOISE OUTPUT DATA           VEHICLE TYPE         HEIGHT         SLE DISTANCE         GRADE ADJUSTMEN           NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)         48.09         0.00           VEHICLE TYPE         PK HR LEQ         DAY LEQ         EVEN LEQ         NIGHT         CNEL           AUTOMOBILES         68.5         66.5         65.2         59.1         67.6         68.2	SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL = AUTOMOBILES = MEDIUM TRUCKS =	40 10 E DIST : 28 0.0 2,447 SITE 1	) 3 ) ) % 7 CONDITIONS 5 5	(10 = HARD	) SITE, 15 = S(	OFT SITE)	DIST C/L TC RECEIVER H WALL DISTA PAD ELEVA ROADWAY HTH WALL= AMBIENT=	WALL = EIGHT = NCE FROM RI TION = VIEW: L F C 0.0 0.0	F ANGLE= RT ANGLE= DF ANGLE= V	0 5.0 50 0.0 -9( = 9( = 18(	) )		
AUTOMOBILES         0.755         0.140         0.104         0.9200           MEDIUM TRUCKS         0.480         0.020         0.500         0.0300           HEAVY TRUCKS         0.480         0.020         0.500         0.0300           NOISE OUTPUT DATA         NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)         48.09            VEHICLE TYPE         PK HR LEQ         DAY LEQ         EVEN LEQ         NIGHT LEQ         LDN         CNEL           AUTOMOBILES         68.5         66.5         65.2         59.1         67.6         68.2		VEHI	CLE MIX DATA						٦	MISC. VEHIC	LE INFO		
AUTOMOBILES         0.755         0.140         0.104         0.9200           MEDIUM TRUCKS         0.480         0.020         0.500         0.0300           HEAVY TRUCKS         0.480         0.020         0.500         0.0300           NOISE OUTPUT DATA         NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)         48.09            VEHICLE TYPE         PK HR LEQ         DAY LEQ         EVEN LEQ         NIGHT LEQ         LDN         CNEL           AUTOMOBILES         68.5         66.5         65.2         59.1         67.6         68.2		ΠΔΥ	EVENING	NIGHT		l		<b>VEHICI E TYP</b>	F	HEIGHT	SLE DISTANCE		
MEDIUM TRUCKS         0.480         0.020         0.500         0.0300           HEAVY TRUCKS         0.480         0.020         0.500         0.0500         MEDIUM TRUCKS         4.0         48.01            HEAVY TRUCKS         0.480         0.020         0.500         0.0500         MEDIUM TRUCKS         4.0         48.01            HEAVY TRUCKS         0.480         0.020         0.500         0.0500         MEDIUM TRUCKS         8.0         48.09         0.00           NOISE OUTPUT DATA           NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)           VEHICLE TYPE         PK HR LEQ         DAY LEQ         EVEN LEQ         NIGHT LEQ         LDN         CNEL           AUTOMOBILES         68.5         66.5         65.2         59.1         67.6         68.2													
NOISE OUTPUT DATA         NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)         VEHICLE TYPE       PK HR LEQ       DAY LEQ       EVEN LEQ       NIGHT LEQ       LDN       CNEL         AUTOMOBILES       68.5       66.5       65.2       59.1       67.6       68.2													
NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)VEHICLE TYPEPK HR LEQDAY LEQEVEN LEQNIGHT LEQLDNCNELAUTOMOBILES68.566.565.259.167.668.2	HEAVY TRUCKS	0.480	0.020	0.500	0.0500			HEAVY TRUC	KS	8.0	48.09	0.00	
VEHICLE TYPE         PK HR LEQ         DAY LEQ         EVEN LEQ         NIGHT LEQ         LDN         CNEL           AUTOMOBILES         68.5         66.5         65.2         59.1         67.6         68.2						NOISE OL	JTPUT DA	ТА					
VEHICLE TYPE         PK HR LEQ         DAY LEQ         EVEN LEQ         NIGHT LEQ         LDN         CNEL           AUTOMOBILES         68.5         66.5         65.2         59.1         67.6         68.2				NOI	ISE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD	NG)				
AUTOMOBILES 68.5 66.5 65.2 59.1 67.6 68.2													
AUTOMOBILES 68.5 66.5 65.2 59.1 67.6 68.2			VEHICLE TY	PE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL	1		
MEDIUM TRUCKS 62.6 58.6 50.8 60.1 66.2 66.2			AUTOMOBI	LES	68.5	66.5			67.6	68.2			
HEAVY TRUCKS 69.7 65.7 57.9 67.1 73.3 73.3					1								

HEAVY TRUCKS	69.7	65./	57.9	67.1	/3.3	/3.3
	-		-	-		
NOISE LEVELS (dBA)	72.6	69.5	66.1	68.4	74.9	75.1

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	68.5	66.5	65.2	59.1	67.6	68.2
MEDIUM TRUCKS	62.6	58.6	50.8	60.1	66.2	66.2
HEAVY TRUCKS	69.7	65.7	57.9	67.1	73.3	73.3
NOISE LEVELS (dBA)	72.6	69.5	66.1	68.4	74.9	75.1

NOISE CONTOUR (FT)									
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA					
CNEL	109	235	506	1090					
LDN	107	229	494	1065					

ROADWAY: CL	ILDOMAR COMN INTON KEITH W, ISTING - NOISE (	/O SALIDA DEL										1043-22-01 16-Sep-22 S. HORD
					NOISE IN	NPUT DAT	A					
	ROADV	VAY CONDITIO	NS					RI	ECEIVER INP	UT DATA		
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL = AUTOMOBILES = MEDIUM TRUCKS = HEAVY TRUCKS =	1 E DIST : 2 0. 0. 1,57 SITE	0 0 28 .0 .0 % 71 CONDITIONS	(10 = HARD	) SITE, 15 = S(	OFT SITE)	RECEIVER D DIST C/L TC RECEIVER H WALL DISTA PAD ELEVA ROADWAY HTH WALL= AMBIENT= BARRIER =	WALL = EIGHT = NCE FROM R TION = VIEW: L F C 0.0 0.0	F ANGLE= RT ANGLE= DF ANGLE= V	0.0 -9( -9(	D D D		
	VEH	ICLE MIX DATA	l					[	MISC. VEHIC	LE INFO		
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY	]		VEHICLE TYP	E	HEIGHT	SLE DISTANCE	GRADE AD	JUSTMENT
AUTOMOBILES	0.755	0.140	0.104	0.9200			AUTOMOBIL	ES	2.0	48.09		
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300			MEDIUM TRU		4.0	48.01		
HEAVY TRUCKS	0.480	0.020	0.500	0.0500	J		HEAVY TRUC	KS	8.0	48.09	0.	00
					NOISE OL	JTPUT DA	ТА					
			NOI	ISE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD	DING)				
		VEHICLE TY	PF	PK HR LEQ	DAY LEQ		NIGHT LEQ	LDN	CNEL	7		
									I CIVEL			
		AUTOMOBI	LES	66.6	64.6	63.3	57.2	65.6	66.3			
		AUTOMOBI MEDIUM TR		66.6 60.7	64.6 56.7	63.3 48.9	57.2 58.1	65.6 64.3	66.3 64.3	-		

HEAVY TRUCKS	67.7	63.8	56.0	65.2	71.3	71.4
		-		-	· · · · · · · · · · · · · · · · · · ·	
NOISE LEVELS (dBA)	70.7	67.6	64.1	66.5	73.0	73.2

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	66.6	64.6	63.3	57.2	65.6	66.3
MEDIUM TRUCKS	60.7	56.7	48.9	58.1	64.3	64.3
HEAVY TRUCKS	67.7	63.8	56.0	65.2	71.3	71.4
NOISE LEVELS (dBA)	70.7	67.6	64.1	66.5	73.0	73.2

NOISE CONTOUR (FT)									
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA					
CNEL	81	175	376	811					
LDN	79	171	368	793					

	INTON KEITH W, ISTING PLUS PRO										DATE: ENGINEER:	16-Sep-22 <mark>S. HORD</mark>
					NOISE IN	NPUT DAT	A					
	ROADV	VAY CONDITIO	NS					RI	ECEIVER INP	UT DATA		
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL = AUTOMOBILES = MEDIUM TRUCKS =	1 E DIST : 2 0. 0. 1,79 SITE	0 0 8 0 0 % 5 5 <b>CONDITIONS</b>	(10 = HARD	) SITE, 15 = S(	OFT SITE)	RECEIVER D DIST C/L TC RECEIVER H WALL DISTA PAD ELEVA ROADWAY	WALL = EIGHT = NCE FROM RI TION = VIEW: L R C	F ANGLE= T ANGLE= DF ANGLE=	0.0 -9( -9(	) )		
HEAVY TRUCKS =		15 ICLE MIX DATA				BARRIER =	0 (		1 = BERM) MISC. VEHIC	LE INFO		
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY	1		VEHICLE TYP	F	HEIGHT	SLE DISTANCE	GRADE AL	JUSTMENT
AUTOMOBILES	0.755	0.140	0.104	0.9200	1		AUTOMOBIL		2.0	48.09		· -
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300			MEDIUM TRU	JCKS	4.0	48.01		
HEAVY TRUCKS	0.480	0.020	0.500	0.0500			HEAVY TRUC	KS	8.0	48.09	0.	00
					NOISE OL	JTPUT DA	ГА					
			NO	ISE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD	ING)				
		VEHICLE TY	PE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL	]		
		AUTOMOBI	LES	67.2	65.1	63.9	57.8	66.2	66.9			
		AUTOMOBI MEDIUM TR HEAVY TRU	RUCKS	67.2 61.3 68.3	65.1 57.3 64.3	63.9 49.5 56.6	57.8 58.7 65.8	66.2 64.9 71.9	66.9 64.9 71.9	-		

HEAVY TRUCKS	68.3	64.3	56.6	65.8	71.9	71.9
	-	-	-			
NOISE LEVELS (dBA)	71.2	68.1	64.7	67.1	73.6	73.7

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	67.2	65.1	63.9	57.8	66.2	66.9
MEDIUM TRUCKS	61.3	57.3	49.5	58.7	64.9	64.9
HEAVY TRUCKS	68.3	64.3	56.6	65.8	71.9	71.9
NOISE LEVELS (dBA)	71.2	68.1	64.7	67.1	73.6	73.7

NOISE CONTOUR (FT)									
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA					
CNEL	89	191	411	886					
LDN	87	187	402	866					

	INTON KEITH W/0 ISTING - NOISE CO		N								DATE: ENGINEER	16-Sep-22 : S. HORD
					NOISE IN		A					
	ROADW	AY CONDITIO	NS					R	ECEIVER INP	UT DATA		
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL =	0.0 0.0 1,556	) ) ) ) %				RECEIVER D DIST C/L TO RECEIVER H WALL DISTA PAD ELEVA <sup>T</sup> ROADWAY	WALL = EIGHT = NCE FROM R TON = /IEW: L	.F ANGLE= RT ANGLE= DF ANGLE=	0.0 -90 = 90	) ) )		
AUTOMOBILES = MEDIUM TRUCKS = HEAVY TRUCKS =	1 1 1	5	(10 = HARD	) SITE, 15 = S(	OFT SITE)	HTH WALL= AMBIENT= BARRIER =	0.0	0 = WALL,	1 = BERM)			
	VEHIC	CLE MIX DATA							MISC. VEHIC	LE INFO		
VEHICLE TYPE AUTOMOBILES MEDIUM TRUCKS HEAVY TRUCKS	<b>DAY</b> 0.755 0.480 0.480	<b>EVENING</b> 0.140 0.020 0.020	NIGHT 0.104 0.500 0.500	DAILY           0.9200           0.0300           0.0500			VEHICLE TYP AUTOMOBIL MEDIUM TRI HEAVY TRUC	ES JCKS	HEIGHT           2.0           4.0           8.0	SLE DISTANCE           48.09           48.01           48.09		ADJUSTMENT   0.00
					NOISE OL	JTPUT DA	ГА					
			NOI	SE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD	DING)				
		VEHICLE TY AUTOMOBI MEDIUM TR	LES	<b>PK HR LEQ</b> 66.5 60.6	<b>DAY LEQ</b> 64.5 56.7	<b>EVEN LEQ</b> 63.2 48.9	NIGHT LEQ 57.2 58.1	LDN 65.6 64.2	<b>CNEL</b> 66.2 64.3			
		HEAVY TRU		67.7	63.7	48.9 55.9	58.1 65.1	64.2 71.3	71.3	-1		

HEAVY TRUCKS	67.7	63.7	55.9	65.1	71.3	71.3
	-		-			-
NOISE LEVELS (dBA)	70.6	67.5	64.1	66.5	73.0	73.1

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	66.5	64.5	63.2	57.2	65.6	66.2
MEDIUM TRUCKS	60.6	56.7	48.9	58.1	64.2	64.3
HEAVY TRUCKS	67.7	63.7	55.9	65.1	71.3	71.3
NOISE LEVELS (dBA)	70.6	67.5	64.1	66.5	73.0	73.1

NOISE CONTOUR (FT)										
NOISE LEVELS 70 dBA 65 dBA 60 dBA 55 dBA										
CNEL	81	174	374	806						
LDN	79	170	366	787						

ROADWAY: CLIN	DOMAR COMME TON KEITH W/O TING PLUS PROJE	ELIZABETH LN									JOB #:         1043-22-01           DATE:         16-Sep-22           ENGINEER:         S. HORD
					NOISE IN		A				
	ROADWA		NS					RE	CEIVER INPU	JT DATA	
ADT = SPEED = PK HR % = NEAR LANE/FAR LANE ROAD ELEVATION = GRADE = PK HR VOL =	17,797 40 10 DIST : 28 0.0 0.0 1,780	%				RECEIVER D DIST C/L TO RECEIVER H WALL DISTA PAD ELEVAT ROADWAY	WALL = EIGHT = NCE FROM R ION = /IEW: L	ECEIVER = F ANGLE= RT ANGLE= DF ANGLE=	50 0 5.0 50 0.0 -90 90 180		
AUTOMOBILES = MEDIUM TRUCKS = HEAVY TRUCKS =	SITE C 15 15 15	(	(10 = HARD	9 SITE, 15 = SC	OFT SITE)	HTH WALL= AMBIENT= BARRIER =	0.0	W 0 = WALL, 1	ALL INFORN	ΛΑΤΙΟΝ	
	VEHICI	.E MIX DATA						N	1ISC. VEHICI	.e info	
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY			VEHICLE TYP	E		SLE DISTANCE	GRADE ADJUSTMENT
	0.755 0.480	0.140	0.104	0.9200 0.0300			AUTOMOBILI MEDIUM TRI		2.0 4.0	48.09 48.01	
MEDIUM TRUCKS	0.480	0.020	0.500	0.0500			HEAVY TRUC		4.0 8.0	48.01	0.00
HEAVY TRUCKS		<u> </u>			•						
HEAVY TRUCKS		L			NOISE OU	JTPUT DA	ГА				
HEAVY TRUCKS			NOL					ING)			
HEAVY TRUCKS				ISE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD				
HEAVY TRUCKS		VEHICLE TYP	PE	SE IMPACTS	(WITHOUT DAY LEQ	TOPO OR BA	RRIER SHIELD	LDN	<b>CNEL</b>		
HEAVY TRUCKS		AUTOMOBIL	<b>PE</b> .ES	SE IMPACTS PK HR LEQ 67.1	(WITHOUT DAY LEQ 65.1	<b>TOPO OR BA</b> <b>EVEN LEQ</b> 63.8	RRIER SHIELD NIGHT LEQ 57.8	<b>LDN</b> 66.2	66.8		
HEAVY TRUCKS			PE LES UCKS	SE IMPACTS	(WITHOUT DAY LEQ	TOPO OR BA	RRIER SHIELD	LDN			

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	67.1	65.1	63.8	57.8	66.2	66.8
MEDIUM TRUCKS	61.2	57.2	49.5	58.7	64.8	64.9
HEAVY TRUCKS	68.3	64.3	56.5	65.7	71.9	71.9
NOISE LEVELS (dBA)	71.2	68.1	64.7	67.0	73.5	73.7

NOISE CONTOUR (FT)										
NOISE LEVELS 70 dBA 65 dBA 60 dBA 55 dBA										
CNEL	88	190	409	881						
LDN	86	186	400	861						

ROADWAY: CL	LDOMAR COMM NTON KEITH W/ STING - NOISE C	O NUTMEG									JOB #:         1043-22-01           DATE:         16-Sep-22           ENGINEER:         S. HORD
					NOISE IN		A				
	ROADV		NS					RE	CEIVER INP	JT DATA	
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL =	0.	0 0 8 0 0 %				RECEIVER D DIST C/L TO RECEIVER H WALL DISTA PAD ELEVA ROADWAY	WALL = EIGHT = NCE FROM F TION = VIEW:	RECEIVER = LF ANGLE= RT ANGLE= DF ANGLE=			
AUTOMOBILES = MEDIUM TRUCKS = HEAVY TRUCKS =		CONDITIONS	(10 = HARD	9 SITE, 15 = SC	OFT SITE)	HTH WALL= AMBIENT= BARRIER =	0.0	W (0 = WALL, :	ALL INFORM 1 = BERM)	ΛΑΤΙΟΝ	
	VEHI	CLE MIX DATA						N	AISC. VEHICI	.E INFO	
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY			VEHICLE TYP	PE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	0.755	0.140	0.104	0.9200					2.0	48.09	
MEDIUM TRUCKS HEAVY TRUCKS	0.480 0.480	0.020	0.500 0.500	0.0300 0.0500			MEDIUM TR HEAVY TRUC		4.0 8.0	48.01 48.09	0.00
					NOISE OL	JTPUT DA	ΤΑ				
			NOI	SE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELI	DING)			
		VEHICLE TYP	PE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL	]	
		AUTOMOBIL MEDIUM TR HEAVY TRUC	UCKS	66.0 60.1 67.2	64.0 56.2 63.2	62.7 48.4 55.4	56.7 57.6 64.6	65.1 63.7 70.8	65.7 63.8 70.8		
				07.2	03.2	JJ. <del>1</del>	0.10	, 0.0	1 70.0		

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	66.0	64.0	62.7	56.7	65.1	65.7
MEDIUM TRUCKS	60.1	56.2	48.4	57.6	63.7	63.8
HEAVY TRUCKS	67.2	63.2	55.4	64.6	70.8	70.8
NOISE LEVELS (dBA)	70.1	67.0	63.6	66.0	72.5	72.6

NOISE CONTOUR (FT)										
NOISE LEVELS 70 dBA 65 dBA 60 dBA 55 dBA										
CNEL	75	161	346	745						
LDN	73	157	338	728						

ROADWAY: CL	LDOMAR COMM NTON KEITH W/ ISTING PLUS PRO	O NUTMEG									JOB #:         1043-22-01           DATE:         16-Sep-22           ENGINEER:         S. HORD
					NOISE IN	NPUT DAT	A				
	ROADV	VAY CONDITIO	NS					RI	ECEIVER INP	UT DATA	
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL = AUTOMOBILES = MEDIUM TRUCKS = HEAVY TRUCKS =	1 E DIST : 2 0. 0. 1,45 SITE	0 0 8 0 0 % 5 5	(10 = HARD	) SITE, 15 = S(	DFT SITE)	RECEIVER D DIST C/L TC RECEIVER H WALL DIST/ PAD ELEVA ROADWAY HTH WALL= AMBIENT= BARRIER =	9 WALL = IEIGHT = ANCE FROM RI ΓΙΟΝ = VIEW: L R C	F ANGLE= T ANGLE= DF ANGLE= V	0.0 -9( = 9(	) )	
	VEH	ICLE MIX DATA						1	MISC. VEHIC	LE INFO	
VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY			VEHICLE TYP	E	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	0.755	0.140	0.104	0.9200			AUTOMOBILE		2.0	48.09	
MEDIUM TRUCKS	0.480	0.020	0.500	0.0300			MEDIUM TRU	JCKS	4.0	48.01	
HEAVY TRUCKS	0.480	0.020	0.500	0.0500			HEAVY TRUC	KS	8.0	48.09	0.00
					NOISE OL	JTPUT DA	ТА				
			NOI	ISE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD	ING)			
		VEHICLE TY	PE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL	1	
		AUTOMOBI	LES	66.3	64.2	62.9	56.9	65.3	65.9		
		AUTOMOBI MEDIUM TR HEAVY TRU	RUCKS	66.3 60.3 67.4	64.2 56.4 63.4	62.9 48.6 55.6	56.9 57.8 64.8	65.3 63.9 71.0	65.9 64.0 71.0	_	

HEAVY TRUCKS	67.4	63.4	55.6	64.8	71.0	71.0
		-				
NOISE LEVELS (dBA)	70.3	67.2	63.8	66.2	72 7	72.8
	70.5	07.2	05.0	00.2	12.1	72.0

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	66.3	64.2	62.9	56.9	65.3	65.9
MEDIUM TRUCKS	60.3	56.4	48.6	57.8	63.9	64.0
HEAVY TRUCKS	67.4	63.4	55.6	64.8	71.0	71.0
NOISE LEVELS (dBA)	70.3	67.2	63.8	66.2	72.7	72.8

NOISE CONTOUR (FT)									
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA					
CNEL	77	166	358	771					
LDN	75	162	350	753					

SPEED =       40       DIST C/L TO WALL =       0         PK HR % =       10       RECEIVER HEIGHT =       5.0         NEAR LANE/FAR LANE DIST :       28       WALL DISTANCE FROM RECEIVER =       50         ROAD ELEVATION =       0.0       GRADE =       0.0       RCAUL DISTANCE FROM RECEIVER =       50         GRADE =       0.0 %       PAD ELEVATION =       0.0       RCAUL DISTANCE FROM RECEIVER =       50         GRADE =       0.0 %       PAD ELEVATION =       0.0       RCAUL DISTANCE FROM RECEIVER =       90         OF ANGLE =       1907       ROAD WAY VIEW:       LF ANGLE =       -90       DF ANGLE =       180         VEHICLE CONDITIONS         WALL INFORMATION         AUTOMOBILES =       15         VEHICLE MIX DATA         VEHICLE MIX DATA         VEHICLE MIX DATA         VEHICLE TYPE       MISC. VEHICLE INFO         VEHICLE TYPE         VEHICLE TYPE         VEHICLE TYPE       HEIGHT       SLE DISTANCE       GRADE ADJUSTMENT         AUTOMOBILES       0.040       0.9200         MEDIUM TRUCKS       4.0       48.01 </th <th>ROADWAY: CLINTON KE</th> <th>COMMERCE CENTER ITH W/O CALIFORNIA OAKS IOISE CONTOURS</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>JOB #:         1043-22-01           DATE:         16-Sep-22           ENGINEER:         S. HORD</th>	ROADWAY: CLINTON KE	COMMERCE CENTER ITH W/O CALIFORNIA OAKS IOISE CONTOURS								JOB #:         1043-22-01           DATE:         16-Sep-22           ENGINEER:         S. HORD
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		AUTOMOBILES MEDIUM TRUCKS	67.4 61.5	65.4 57.5	64.1 49.8	58.1 59.0	66.5 65.1	67.1 65.2		

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	67.4	65.4	64.1	58.1	66.5	67.1
MEDIUM TRUCKS	61.5	57.5	49.8	59.0	65.1	65.2
HEAVY TRUCKS	68.6	64.6	56.8	66.0	72.2	72.2
NOISE LEVELS (dBA)	71.5	68.4	65.0	67.3	73.8	74.0

NOISE CONTOUR (FT)									
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA					
CNEL	92	199	428	923					
LDN	90	194	419	902					

	INTON KEITH W, ISTING PLUS PRO										DATE: ENGINEER	16-Sep-22 : S. HORD
					NOISE IN	NPUT DAT	4					
	ROADV	VAY CONDITIO	NS					RI	ECEIVER INP	UT DATA		
ADT = SPEED = PK HR % = NEAR LANE/FAR LAN ROAD ELEVATION = GRADE = PK HR VOL = AUTOMOBILES =	1 E DIST : 2 0. 0. 1,94 SITE	0 0 8 0 0 %				RECEIVER D DIST C/L TO RECEIVER H WALL DISTA PAD ELEVA ROADWAY	WALL = EIGHT = NCE FROM R TON = /IEW: L F	F ANGLE= T ANGLE= DF ANGLE=	0.0 -9( = 9(	) )		
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I				1	I				1	1		
	DAY	EVENING	NIGHT	DAILY			VEHICLE TYP		HEIGHT	SLE DISTANCE	GRADE A	ADJUSTMENT
AUTOMOBILES MEDIUM TRUCKS	0.755	0.140	0.104	0.9200			AUTOMOBILI MEDIUM TRI		2.0	48.09 48.01		
HEAVY TRUCKS	0.480	0.020	0.500	0.0500			HEAVY TRUC		8.0	48.09		0.00
					NOISE OL	JTPUT DA	ГА					
			NOI	ISE IMPACTS	(WITHOUT	TOPO OR BA	RRIER SHIELD	DING)				
		VEHICLE TY	PE	PK HR LEQ	DAY LEQ	EVENIEO	NIGHT LEQ	LDN	CNEL	7		
		AUTOMOBI		67.5	65.5	64.2	58.1	66.6	67.2	1		
									-	-1		
		MEDIUM TR	RUCKS	61.6	57.6	49.8	59.1	65.2	65.2			

HEAVY TRUCKS	68.7	64.7	56.9	66.1	72.3	72.3
	-		-			
NOISE LEVELS (dBA)	71.6	68.5	65.1	67.4	73.9	74.1

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	<b>NIGHT LEQ</b>	LDN	CNEL
AUTOMOBILES	67.5	65.5	64.2	58.1	66.6	67.2
MEDIUM TRUCKS	61.6	57.6	49.8	59.1	65.2	65.2
HEAVY TRUCKS	68.7	64.7	56.9	66.1	72.3	72.3
NOISE LEVELS (dBA)	71.6	68.5	65.1	67.4	73.9	74.1

NOISE CONTOUR (FT)									
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA					
CNEL	94	202	434	935					
LDN	91	197	424	914					



TRAFFIC ENGINEERING & TRANSPORTATION PLANNING CONSULTANTS

September 13, 2022

Mr. Bryan Bentrott SUMMIT DEVELOPMENT CORPORATION 190 Newport Center Drive, Suite 220 Newport Beach, CA 92660

#### SUBJECT: Clinton Keith Corporate Center VMT Screening, City of Wildomar

Dear Mr. Bentrott,

*TJW Engineering, Inc.* (TJW) is pleased to submit this VMT Screening for the Clinton Keith Corporate Center project located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar. The proposed project includes 31,490 square feet (SF) of retail land use and 263,170 SF of industrial land use. A site plan is attached for reference. The purpose of this memorandum is to summarize the project's VMT Screening.

#### Proposed Project

The proposed site is located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar. The project includes a total of 294,660 SF comprised of 31,490 SF of retail land use and 263,170 SF of industrial land use. Site access will be provided along both Clinton Keith Road and Elizabeth Lane.

#### Vehicle Miles Traveled (VMT) Screening

Senate Bill (SB) 743 was adopted in 2013 requiring the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within the California Environmental Quality Act (CEQA). For land use projects, OPR has identified Vehicle Miles Traveled (VMT) as the new metric for transportation analysis under CEQA. The regulatory changes to the CEQA guidelines that implement SB 743 were approved on December 28<sup>th</sup>, 2018 with an implementation date of July 1<sup>st</sup>, 2020 as the new metric.

As the project falls within the County of Riverside jurisdiction, the County of Riverside Transportation Analysis Guidelines for Level of Service and Vehicle Miles Traveled (December 2020) was consulted. The document outlines guidelines for CEQA analysis including screening criteria and requirements for VMT assessment of land use projects. The VMT guidelines provide several screening criteria for projects. Mr. Bentrott Clinton Keith Corporate Center VMT Screening September 13, 2022 Page 2

The County of Riverside VMT Guidelines (December 2020) indicates projects within a low VMT generating TAZ can be presumed to cause a less-than-significant impact. Per the Western Riverside Council of Governments (WRCOG) VMT screening tool the proposed project is within a low VMT generating TAZ. The county regional VMT per service population is 34.5 and the project falls within a TAZ with a VMT per service population of 34; approximately 1.54% below the county regional average. Therefore, the project is screened from a VMT analysis and is presumed to have a less-than-significant impact.

#### <u>Summary</u>

This memorandum provides an overview of the trip generation analysis for the proposed project. Based on the County of Riverside Transportation Analysis Guidelines for Level of Service and Vehicle Miles Traveled (December 2020), the proposed project falls within a low VMT generating TAZ and is presumed to cause a less-than-significant impact. Consistent with the County guidelines, the proposed project does not require additional VMT analysis.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,

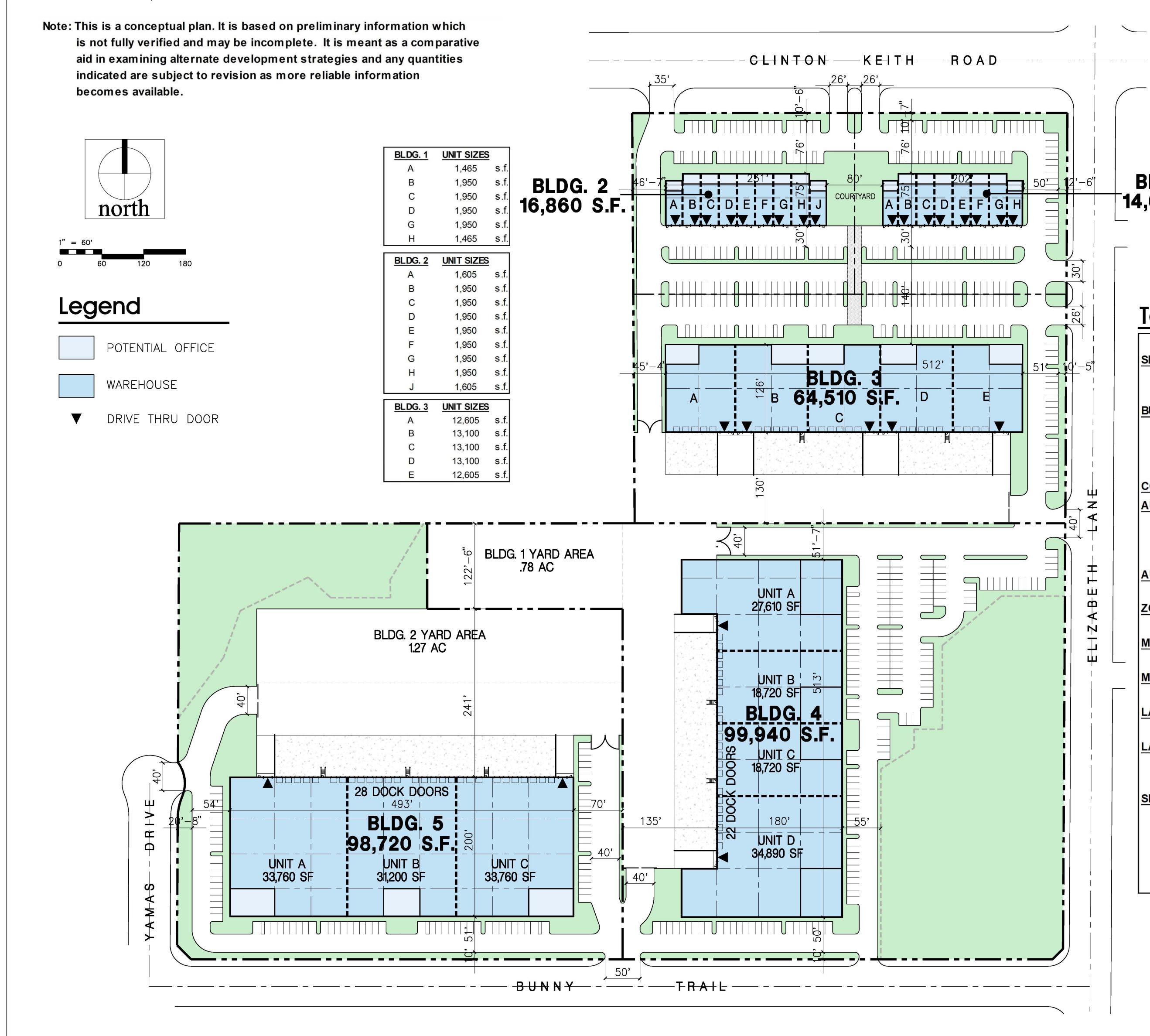
The Oalt

Thomas Wheat, PE, TE President

Registered Civil Engineer #69467 Registered Traffic Engineer #2565



David Chew, PTP Transportation Planner





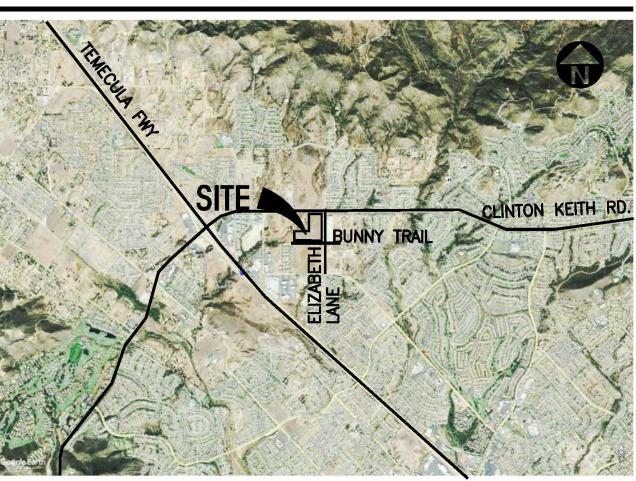
18831 Bardeen Ave. - Ste. #100 Irvine, CA 92612 (949) 863-1770 www.hparchs.com

City of Wildomar, County of Riverside, CA

# Wildomar Commerce Cente



# Aerial Map



# Tabulation

BLDG. 1

<sup>-</sup>14,630 S.F.

'–6"

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Tabulation							
	BLDG. 1	BLDG. 2	BLDG. 3	BLDG. 4	BLDG. 5	TOTAL	
SITEAREA							
In s.f.	79,025	82,490	203,021	429,357	362,895	1,156,788	s.f.
In acres	1.81	1.89	4.66	9.86	8.33	26.56	ac
BUILDING AREA							
Office	3,000	3,000	5,000	5,000	5,000	21,000	s.f.
Warehouse	11,630	13,860	59,510	94,940	93,720	261,820	s.f.
TOTAL	14,630	16,860	64,510	99,940	98,720	285,320	s.f.
COVERAGE	18.5%	20.4%	31.8%	23.3%	27.2%	28.8%	
AUTO PARKING REQUIRED							
Office: 1/200 s.f.	15	15	25	25	25	118	stalls
Whse: 1/2,000 s.f.	6	7	30	47	47		stalls
TOTAL	21	22	55	72	72		stalls
AUTO PARKING PROVIDED						210	o tano
Standard ( 9' x 18' )	98	89	105	156	80	574	stalls
ZONING ORDINANCE FOR CIT		00	100	100	00	014	otalio
Zoning Designation - Indust	the second se						
MAXIMUM BUILDING HEIGHT							
		r oach foot l	Max 50'				
Height - 35', exceed 35' sha			viax. Ju				
MAXIMUM FLOOR AREA RAT	10						
FAR - to be verify							
LANDSCAPE REQUIREMENT							
Percentage - 15%							
LANDSCAPE PROVIDED							
Percentage	23.9%	20.6%	8.9%	33.6%	24.3%	26.4%	
In s.f.	18,880	17,027	18,150	144,409	88,030	261,322	s.f.
SETBACKS							
Building	Landscape						
Front / Street - 25'	10'						
Side - 10' (2 sides combine	)						
Rear - 15'							
Abutts R zone - 50'	20'						
θľ					DRATION		-
			ł	August 23,	Scher		





# **INITIAL STUDY FOR THE**

Rancon Medical Office/Retail Project Plot Plan & Tentative Parcel Map No. 36492 (Planning Application No. 12-0053)

Lead Agency:

# **CITY OF WILDOMAR**

23873 Clinton Keith Road, Suite 201 Wildomar, CA 92595

Prepared by:

# **Matthew Fagan Consulting Services**

42011 Avenida Vista Ladera Temecula, CA 92591

# **NOVEMBER 2013**

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**Note to Reader**: to save natural resources the appendices are contained on a CD-ROM included with the printed copy of this Initial Study. The appendices are also available on the Environmental Documents Center of the City of Wildomar Planning Department website located at:

http://www.cityofwildomar.org/planning.asp

CD copies of the appendices are also available as part of the proposed Project file and can be reviewed at the following location:

Matthew C. Bassi, Planning Director City of Wildomar, Planning Department 23873 Clinton Keith Rd., Suite 201 Wildomar, CA 92595 Hours: Monday - Thursday 8am - 5pm (closed Fridays)

#### **APPENDICES**

#### (located on the CD in a pocket at the back of this Initial Study)

- A Site Photos
- B Air Quality and Greenhouse Gas Impact Analysis
- C Biological Resources Assessment
- D Historical/Archaeological Resources Survey Report
- E Paleontological Resources Assessment Report
- F Geologic Hazards Evaluation and Updated Preliminary Geotechnical/Fault Investigation
- G Phase I Environmental Study
- H Preliminary On-Site Hydrology
- I Project-Specific Preliminary Water Quality Management Plan (WQMP)
- J Preliminary Acoustical Analysis
- K Traffic Impact Analysis Report
- L EVMWD Will Serve Letter

#### I. INTRODUCTION

#### PURPOSE

This document is an Initial Study that evaluates the environmental impacts resulting from the implementation of a proposed Plot Plan and Tentative Parcel Map ("proposed Project") that would subdivide approximately 29.40 acres (gross)/25.99 acres (net) into thirteen (13) parcels for the initial development of approximately 96,240 square feet of proposed commercial, retail, restaurant, office (including medical) and light industrial uses. Ultimate development of the proposed Project will result in 294,900 square feet of business park uses, 42,420 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses and a 3,000 square foot drive-through fast food restaurant. These proposed Project components are discussed in greater detail in Section II.B, below.

#### **II. PROJECT DESCRIPTION**

#### A. PROJECT LOCATION AND SETTING

The proposed Project site is generally located at the southwest corner of Clinton Keith Road and Elizabeth Lane, (i.e., west of Elizabeth Lane, north of Bunny Trail and west of Yamas Drive, in City of Wildomar, Riverside County, California. The regional and local vicinity of the proposed Project site are shown in Figure 1, *Regional Vicinity Map* and Figure 2, *Local Vicinity Map*. The Assessor's Parcel Number (APN) for the proposed Project site is 380-250-022. The proposed Project site is located on the U.S. Geological Survey (USGS) 7.5' Murrieta topographic quadrangle map, Section 6, T.7 S., R. 3 W.

Currently, the proposed Project site is vacant. The topography of the proposed Project site is generally flat. The site slopes in a northwest to southwest direction, with the elevations ranging from approximately 1,308 feet above mean sea level (MSL) along the northern boundary, to approximately 1,360 square feet MSL along the southern boundary. The highest elevation is at 1,385 feet above MSL on top of a berm located adjacent to Clinton Keith Road in the northeast corner of the site, and the lowest elevation is at 1,341 feet above MSL within the channel bottom of a drainage located in the southeast corner of the site.

#### General Plan

The City of Wildomar General Plan land use designation for the proposed Project site is Business Park (BP). According to the General Plan:

"The Business Park land use designation allows for employee-intensive uses, including research and development, technology centers, corporate and support office uses, "clean" industry and supporting retail uses. Building intensity ranges from 0.25 to 0.6 floor area ratio (FAR)."

The General Plan land use designations for the properties immediately adjacent to the proposed Project site are as follows:

•	North:	Open Space-Recreation (OS-R)
•	South:	Business Park (BP)
•	Southwest:	Very High Density Residential (VHDR)
•	East:	Business Park (BP)
•	West:	Business Park (BP)

Reference Figure 3, City of Wildomar General Plan Land Use Plan

#### Zoning

The proposed Project site is zoned Industrial Park (IP). According to Section 17.88.010 (Permitted Uses) of the Wildomar Municipal Code, the IP zone district allows for industrial and manufacturing uses, as well as service and commercial uses.

The zoning designations for the properties immediately adjacent to the proposed Project site are as follows:

•	North:	R-R (Rural Residential)
٠	South:	R-R (Rural Residential) and I-P (Industrial Park)
٠	Southwest:	R-3 (General Residential Zone)
٠	East:	M-SC (Manufacturing-Service Commercial)
•	West:	R-R (Rural Residential)

Reference Figure 4, *City of Wildomar Zoning Map* 

#### B. PROJECT DESCRIPTION

#### 1. <u>Tentative Parcel Map</u>

Tentative Parcel Map (36492) is a proposal to subdivide one (1) existing parcel, totaling approximately 29.40 acres (gross)/25.99 acres (net), into thirteen (13) parcels for commercial, industrial, and open space purposes. The thirteen (13) new parcels would be numbered Parcels 1 through 13 and would be divided as shown in Table 1-1, *Proposed Parcel Acreage* and Figure 5, *Tentative Parcel Map No. 36492*.

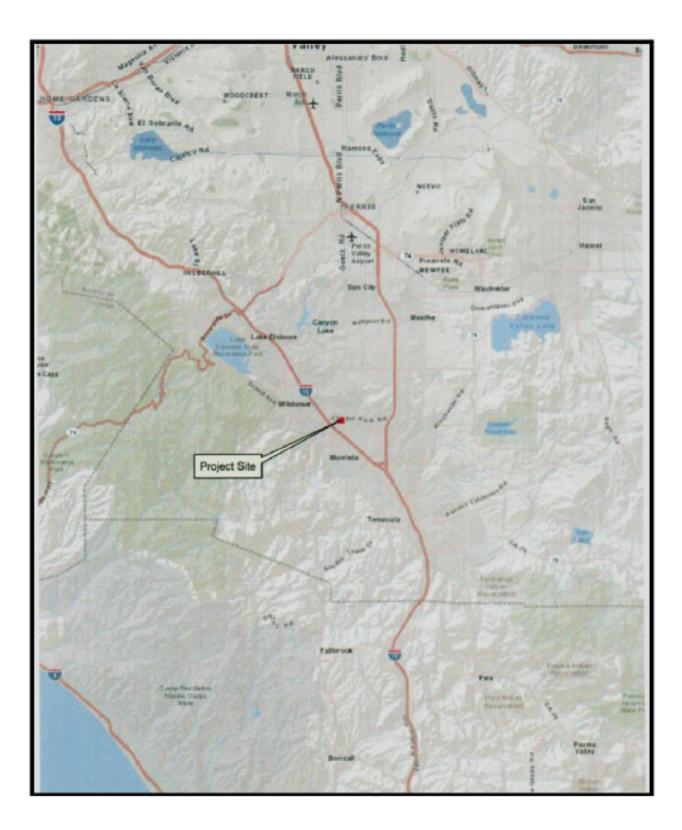


Figure 1 - Regional Vicinity Map

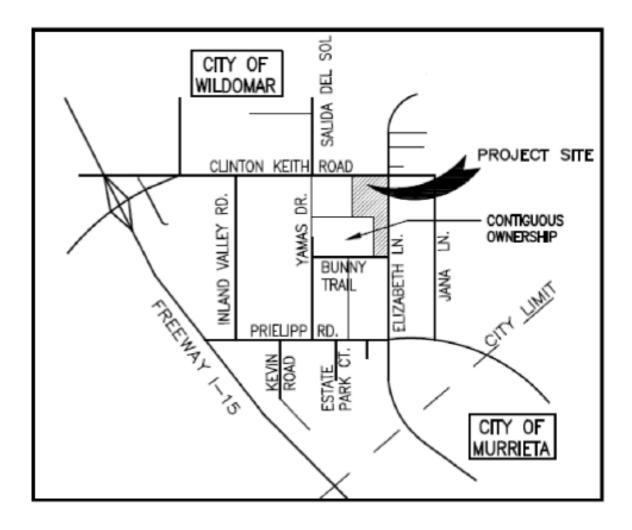
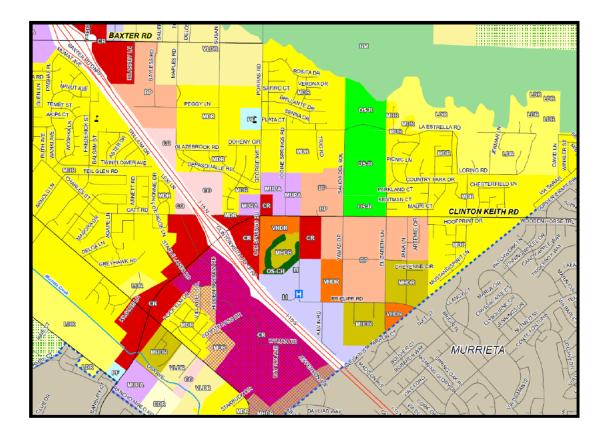


Figure 2 - Local Vicinity Map



#### GENERAL PLAN LEGEND

OVERLAY

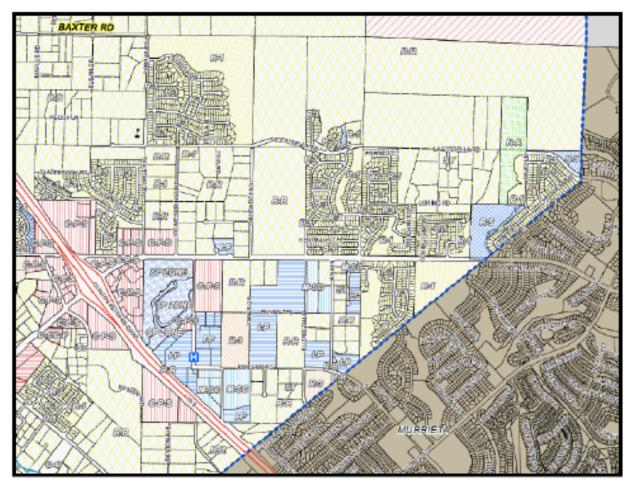
LAND USE

EDR-RC

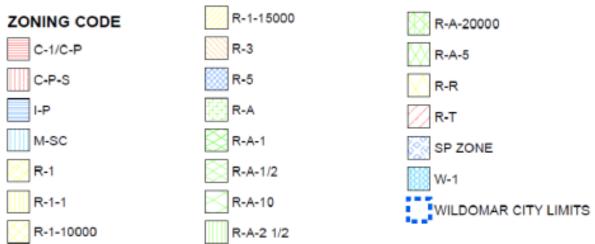
VLDR-RC



Figure 3 – City of Wildomar General Plan Land Use Map



# ZONING LEGEND



#### Figure 4 – City of Wildomar Zoning Map

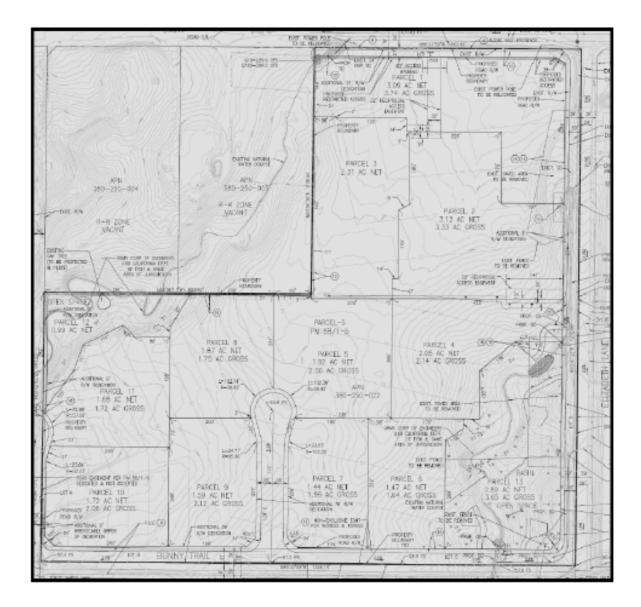


Figure 5 - Tentative Parcel Map No. 36492

Parcel Number	Project Site Acreage				
Parcel Number	Gross	Net	Dedicated Land		
1	3.74	3.09	0.65		
2	3.33	3.12	0.21		
3	2.31	2.31	-		
4	2.14	2.05	0.09		
5	2.00	1.92	0.08		
6	1.64	1.47	0.17		
7	1.96	1.44	0.52		
8	1.75	1.67	0.08		
9	2.12	1.59	0.53		
10	2.06	1.72	0.34		
11	1.72	1.68	0.04		
12	0.99	1.05	-		
(Open Space)					
13	3.65	2.89	0.76		
(Open Space)					
Totals	29.40	25.99	3.41		

# Table 1.2-1Proposed Parcel Acreage

Source: Figure 3, Tentative Parcel Map No. 36492

As noted in Table 1.2-1, *Proposed Project Acreage*, above, the proposed Project would dedicate approximately 3.41 acres of the proposed Project site to the City of Wildomar for right-of-way purposes for Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive and "Lot C" that will provide the necessary Proposed Project circulation and to accommodate access to/from the proposed development.

Anticipated future roadway improvements are discussed below.

#### Roadway Improvements

Implementation of the Project will result in improvements to several roadways within TPM 36492, as depicted on Figure 5, *Tentative Parcel Map No. 36492*. With the exception of "Lot C", all roadways are General Plan Circulation Element roadways.

#### <u>Clinton Keith Road</u>

Improvements to Clinton Keith Road are depicted on Figure 6, *Clinton Keith Road (Project frontage on Clinton Keith Road to Elizabeth Lane)*. The ultimate right-of-way for Clinton Keith Road, along the proposed Project's northern frontage is 152'. Clinton Keith Road is classified as an Urban Arterial Highway. Currently, there is 58' to 68' of existing pavement on Clinton Keith Road adjacent to the proposed Project's northerly frontage. The proposed roadway section, which will be dedicated an improved by the proposed Project, is described below:

- A 21' additional ROW dedication for a parkway, which will include a 5' meandering sidewalk along the proposed Project's northerly boundary;
- 29' of additional pavement, for a total of 48' feet of pavement within a 55' section; and

• 14' wide proposed raised median (7' on the proposed Project's ROW and 7' on the adjacent ROW.

These improvements will be constructed with Phase 1 of the proposed Project.

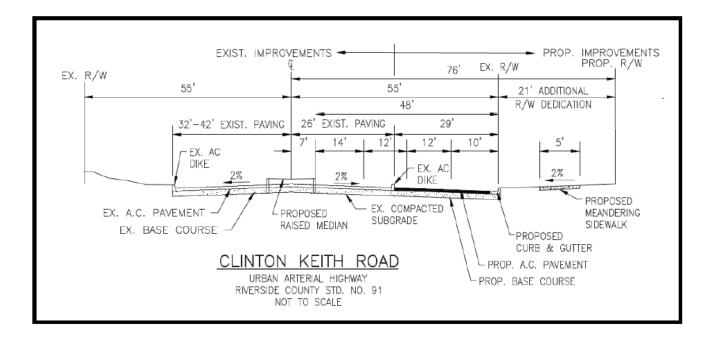


Figure 6 – Clinton Keith Road (Project Frontage on Clinton Keith Road to Elizabeth Lane)

#### Elizabeth Lane

Improvements to Elizabeth Lane are depicted on Figure 7, *Elizabeth Lane (from Clinton Keith Road to Bunny Trail)*. The ultimate right-of-way for Elizabeth Lane, along the proposed Project's easterly frontage is 78'. Elizabeth Lane is classified as an Industrial Collector Street. Currently, there is 34' of existing pavement on Elizabeth Lane, which is adjacent to the existing Clinton Keith Self Storage, easterly of the proposed Project site. In addition, an 11' parkway (6' curb adjacent sidewalk and 5' of landscaping) is also installed on the east side of Elizabeth Lane. The proposed roadway section, which will be dedicated an improved by the proposed Project, is described below:

- A 9' additional ROW dedication;
- 22' of additional pavement, for a total of 56' feet of pavement within a 78' section; and
- 11' parkway (6' curb adjacent sidewalk and 5' of landscaping).

These improvements will be constructed with Phase 1 of the proposed Project.

#### <u>Bunny Trail</u>

Improvements to Bunny Trail are depicted on Figure 8, *Bunny Trail (between Elizabeth Lane and Yamas Drive)*. The ultimate right-of-way for Bunny Trail, along the proposed Project's southerly frontage is 78'. Bunny Trail is classified as an Industrial Collector Street. Bunny Trail, along the southerly Proposed Project boundary, does not currently exist. Proposed roadway improvements include half-width improvements adjacent to the proposed Project's southerly boundary: 11' parkway (5' parkway and 6' curb-adjacent sidewalk), and 28' feet of pavement. An additional 18' of pavement (south of the roadway centerline) and an 8' shoulder. This portion is considered an off-site improvement. In total, 46' of pavement will be developed with the proposed Project.

Bunny Trail improvements will be constructed with Phase 2 of the proposed Project.

#### <u>Yamas Drive</u>

Improvements to Yamas Drive are depicted on Figure 9, Yamas Drive (north of Bunny Trail). The ultimate right-of-way for Yamas Drive, along the proposed Project's easterly frontage is 78'. Yamas Drive is classified as an Industrial Collector Street and will provide access to Parcels 10 and 11. Yamas Drive, along the southerly Proposed Project boundary, does not currently exist. Proposed roadway improvements include half-width improvements adjacent to the proposed Project's southerly boundary: 11' parkway (5' parkway and 6' curb-adjacent sidewalk), and 28' feet of pavement. An additional 18' of pavement (south of the roadway centerline) and an 8' shoulder. This portion is considered an off-site improvement. In total, 46' of pavement will be developed with the proposed Project. An additional 9' of ROW will be dedicated with the proposed Project for the Yamas Drive improvements. Yamas Drive will extend as a cul-de-sac to the existing drainage course (approximately 400' northerly of the existing terminus of Yamas Drive).

Yamas Drive improvements will be constructed with Phase 2 of the proposed Project.

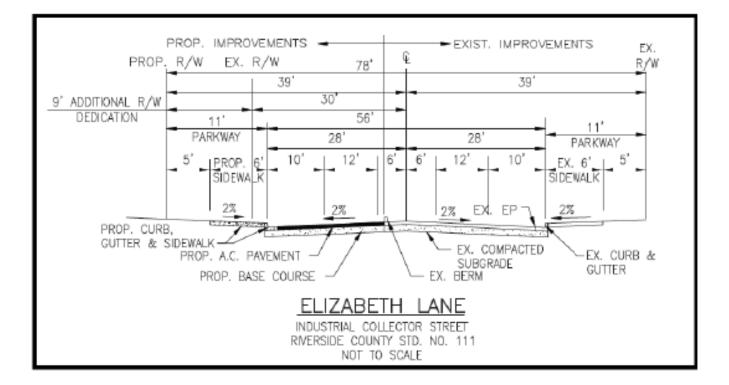


Figure 7 – Elizabeth Lane (From Clinton Keith Road to Bunny Trail)

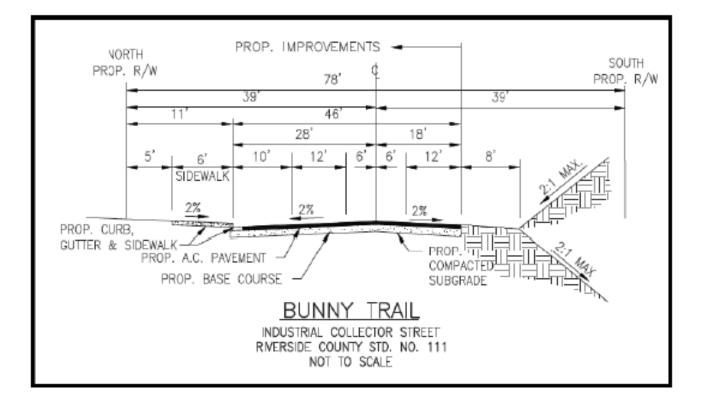


Figure 8 – Bunny Trail (Between Elizabeth Lane and Yamas Drive)

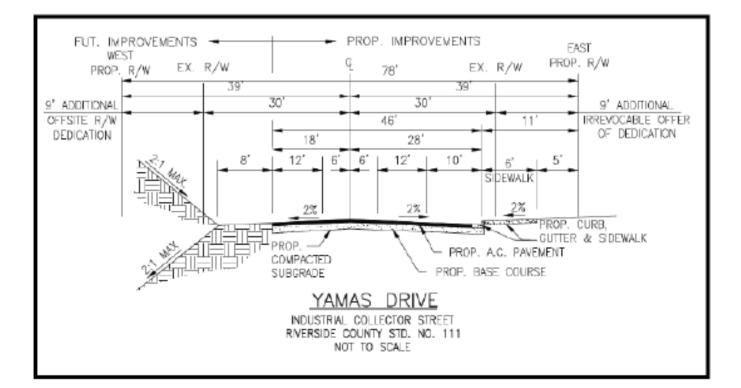


Figure 9 – Yamas Drive (North of Bunny Trail)

#### <u>Lot "C"</u>

Improvements to Lot "C" are depicted on Figure 10, *Lot "C" (north of Bunny Trail)*. The ultimate right-ofway for Lot "C" is 78'. Lot "C" is classified as an Industrial Collector Street and will allow access to Parcels 5, 7, 8 and 9 off of Bunny Trail. The proposed roadway section, which will be dedicated an improved by the proposed Project, is described below:

- A 78' ROW dedication;
- 56" of pavement (28' per half-width); and
- 11' parkway (6' curb adjacent sidewalk and 5' of landscaping) on both sides of Lot "C"

Lot "C" improvements will be constructed with Phase 2 of the proposed Project.

#### 2. <u>Plot Plan</u>

The Plot Plan will be developed in two (2) phases. Phase 1 of the proposed Project includes approximately 96,240 square feet of proposed commercial, retail, restaurant, office (including medical) and light industrial uses, as depicted on Figure 11, *Plot Plan*. Ultimate development (Phase 2) of the proposed Project will result in 294,900 square feet of business park uses, 42,400 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses and a 3,000 square foot drive-through fast food restaurant.

Phase 1 of the proposed Project includes six (6) buildings on the site. These buildings range in size from approximately 3,000 square feet to 42,420 square feet for a total of 96,240 square feet (11.8% of the site). Buildings 1 and 2 are located adjacent to Clinton Keith Road. Buildings 3 and 4 are located adjacent to Elizabeth Lane. Buildings 5 and 6 are located internal to the proposed Project. The individual building square footages, maximum heights and proposed uses and are listed in Table 1.2-2, *Plot Plan Square Footage and Proposed Uses*, below:

Building	Maximum Height	Square Footage	Proposed Use(s)
1	26'0"	8,200	Commercial Retail
2	26'0"	8,200	Commercial Retail
3	26'0"	3,000	Commercial Retail
4	26'0"	3,000	Drive-thru Fast Food
5	36'0"	31,420	Medical Office
6	36'0"	42,420	Office
Total		96,240	

Table 1.2-2Plot Plan Square Footage and Proposed Uses

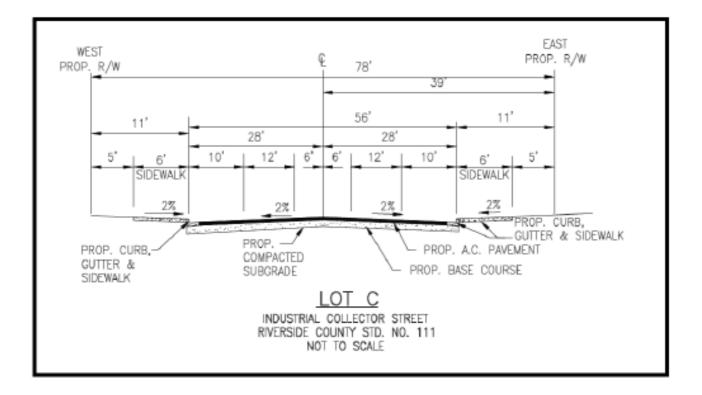


Figure 10 – Lot "C" (North of Bunny Trail)

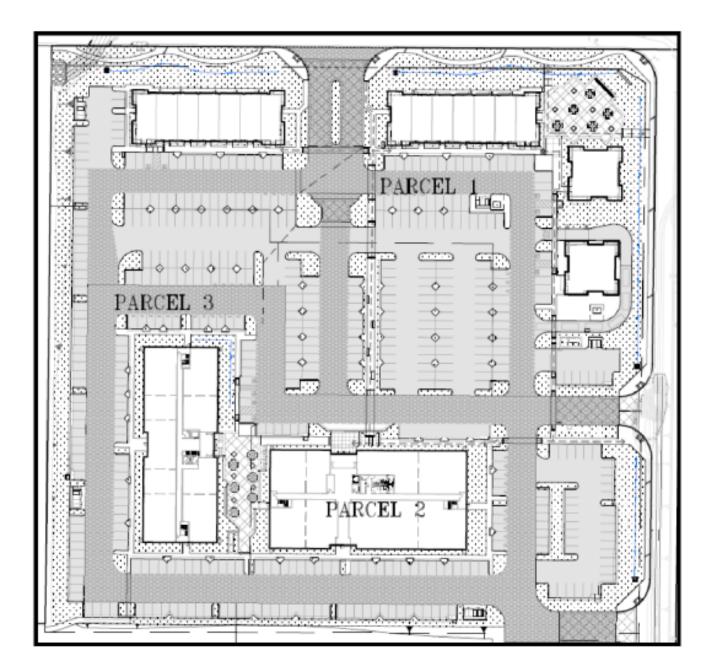


Figure 11 – Plot Plan

No portion of Phase 2 is planned at this time. However, as part of this analysis, the ultimate development of both phases of the proposed Project, which will result in a total of 294,900 square feet of business park uses, 42,420 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses and a 3,000 square foot drive-through fast food restaurant has been taken into account in this Initial Study. Therefore, it is anticipated that Phase 2 will include the remaining 198,660 square feet of development on the proposed Project site. Phase 2 development will be in accordance with the BP General Plan designation and the IP Zoning designation.

Two (2) gathering/outdoor spaces have been provided in Phase 1. These are located between Buildings 2 and 3 and 5 and 6 respectively, as shown on Figure 12, *Illustrative Plan*. These gathering areas will include, at a minimum: shade trees, seating areas, seat walls, lighting, decorative paving and potential water features. Reference Figure 13, *Patio Areas*.

#### Hours of Operation

The tenants and specific businesses for both Phases of development are unknown at this time, therefore, it is difficult to assess operational hours and number of employees. The days and hours of operation will be assumed to be typical of those associated with similar commercial retail office, medical office and, Drive-thru Fast Food restaurant uses of this type and scale.

#### **Building Architecture and Materials**

All six (6) buildings in Phase 1 will have a similar design theme and color motif. The architecture could be considered contemporary and consistent with other commercial and light industrial/office developments in the Proposed Project area. Buildings 1-4 will be wood frame construction. These building will be articulated on all sides through the use of a combination of the following items: stucco, glass, aluminum mullions, tile accents, metal canopies, storefront entries and decorative light fixtures. Building entry points have been accented and the building mass has been broken up with the use of colors, materials, pop-outs and roof height variations. Please see Figure 14, *Color Elevations Buildings 1 and 2* and Figure 15, *Color Elevations Buildings 3 and 4*. Buildings 5 and 6 are office buildings and have been designed to be complimentary to Buildings 1-4, yet at the same time provide the simple architecture and design that accompanies office building will be articulated on all sides through the use of a combination of the following items: glass, aluminum mullions, metal canopies, storefront entries, horizontal reveals and decorative light fixtures. Building will be articulated on all sides through the use of a combination of the following items: glass, aluminum mullions, metal canopies, storefront entries, horizontal reveals and decorative light fixtures. Building entry points have been accented and the building mass has been broken up with the use of colors, materials, pop-outs and roof height variations. Please see Figure 16, *Color Elevations Building 5* and Figure 17, *Color Elevations Building 6*.

Phase 2 architecture is not known at this time. I will be assumed that Phase 2 architecture will be complementary in style and massing as Phase 1.



Figure 12 – Illustrative Plan

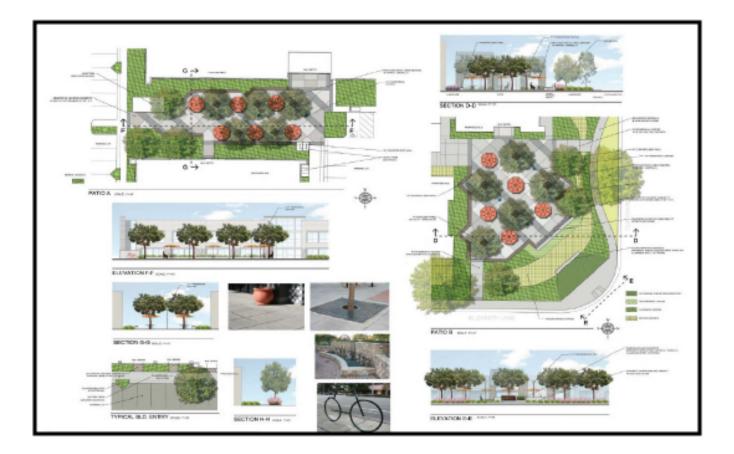
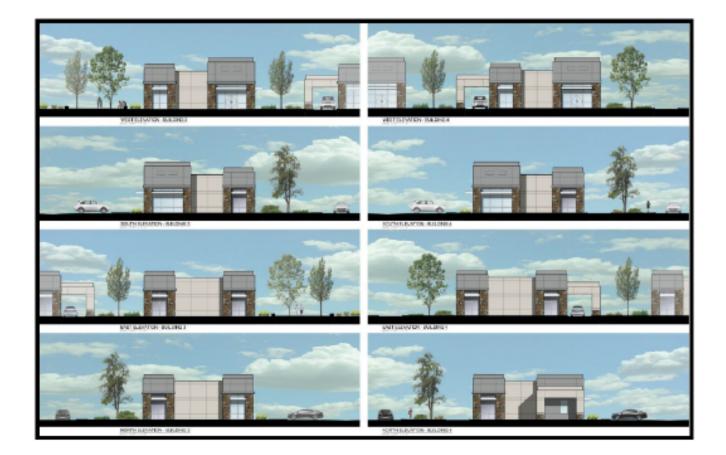


Figure 13 – Patio Areas



Figure 14 – Color Elevations Buildings 1 and 2



# Figure 15 – Color Elevations Buildings 3 and 4



### Figure 16 - Color Elevations Building 5



# Figure 17 – Color Elevations Building 6

#### Site Access, Roadway Improvements, Off-Street Parking and Landscaping

#### Site Access

The Proposed Project proposes three (3) access points in Phase 1. These access points will be from two (2) surrounding publicly maintained streets: Clinton Keith Road and Elizabeth Lane. The Clinton Keith Road access point will be restricted to right-in/right-out turning movements. The northerly Elizabeth Lane access will be restricted to right-in/right-out turning movements. Full-access driveway will be permitted on the more southerly access point on Elizabeth Lane. Phase 2 access points will be from Elizabeth Lane, Bunny Trail, Lot "C" and Yamas Drive. No turning movement restrictions are anticipated. Please reference Figure 11, *Plot Plan*.

#### **Roadway Improvements**

A detailed discussion of Roadway improvements has been described above under II.B.1, Tentative Parcel Map (36492).

#### Off-Street Parking

The City's parking requirement for Phase 1 has been calculated utilizing the following ratios:

Commercial Retail: 1 parking space per 200 square feet; Drive-thru Fast Food: 1 parking space per 100 square feet; Medical Office: 1 parking space per 200 square feet; and Office: 1 parking space per 200 square feet.

This formula results in a requirement for 498 parking spaces for Phase 1. Phase 1 of the proposed Project will provide a total of 502 spaces. These parking spaces include standard, handicap, compact and "clean air" parking spaces. Fifty (50) bike racks are required (25 short-term and 25 long-term spaces). Phase 1 of the proposed Project will provide 60 bicycle spaces. With the exception of the Clinton Keith frontage, parking will be along the proposed Project's perimeter, with a larger parking field centrally located within the proposed Project.

Phase2 parking requirements will be provided in accordance with the City's requirements.

#### Landscaping

According to the City's Zoning Code, approximately fifteen percent (15%) of the site must be landscaped in the IP Zone. For Phase 1, this minimum area to be landscape would be approximately 75,925 square feet). According to Figure 11, *Plot Plan*, approximately 91,453 square feet, or 18.1% of the site of Phase 1 will be landscaped. Landscaping will be along all of the proposed Project perimeters, with the largest landscaping setback along Clinton Keith Road, to be followed by Elizabeth Lane and then the southerly and westerly proposed Project boundaries.

#### **Grading/Construction**

According to the Air Quality and Greenhouse Gas Impact Analysis for the Rancon Medical Educational Center Plot Plan No. 36492, City of Wildomar, prepared by Albert A. Webb Associates, dated February

13, 2013, Revised July 17, 2013, the following grading/construction scenario for the proposed Project are:

- The Proposed Project site is currently vacant; thus, no demolition is necessary.
- Phase 1 construction will begin with site grading for the commercial and office uses no sooner than October 2013. Grading will last approximately four months. Building construction follows and will last approximately 12 months. Paving will follow building construction and last one month. Architectural coating/painting will last approximately six months and begin during building construction.
- Phase 2 construction will begin with site grading for the business park uses no sooner than March 2015. Grading will last approximately six months. Building construction follows and will last approximately 12 months. Paving will follow building construction and last one month. Architectural coating/painting will last approximately seven months and begin during building construction.

Phase 1 grading is shown on Figure 18a, *Preliminary Grading Plan – Northern Portion and* Figure 18b, *Preliminary Grading Plan – Southern Portion*. Grading for Phase 1 is proposed on Parcels 1-3 and Parcel 13. Phase 1 grading will result in 44,143 cubic yards of cut and 20,300 cubic yards of fill. Approximately 23,843 cubic yards will be exported to the Phase 2 portion of the proposed Project, and will not need to be further exported off the proposed Project site upon development of Phase 2 Grading in Phase 1 will provide developable areas for the Plot Plan, protection for the drainage course in Parcel 13, as well as grading for the improvements to Clinton Keith Road and Elizabeth Lane.

Phase 2 grading is not known at this time, but will encompass grading for Parcels 5-11, Bunny Trail, Yamas Drive and, Lot "C". It should be noted that default parameters within CalEEMod (Air Quality modeling software) were used for modeling air quality construction emissions for all phases of development of the proposed Project, and these default values reflect a worst-case scenario, which means that Proposed Project emissions are expected to be equal to or less than the estimated construction emissions. This is further elaborated upon in Section V.3 (Air Quality) of this Initial Study.

#### Hydrology / Water Quality

#### <u>Hydrology</u>

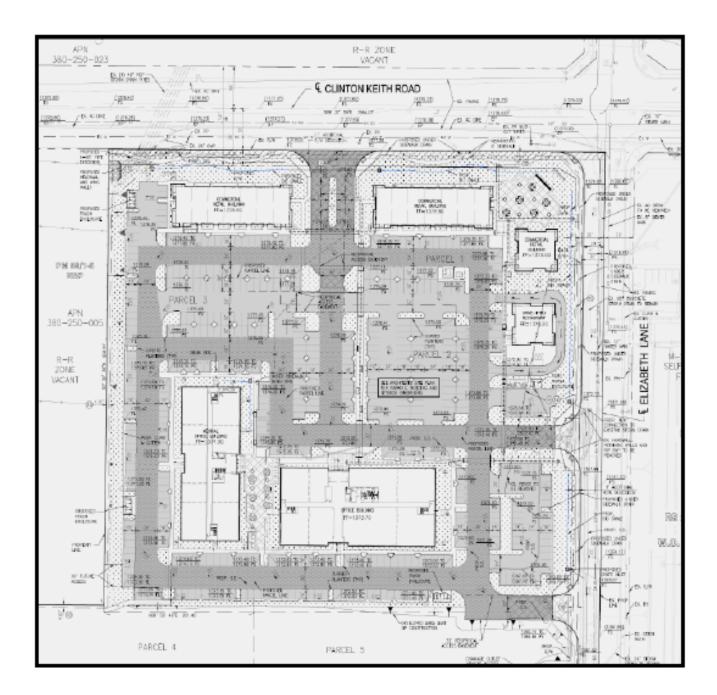
Proposed on-site storm drain system and drainage design for Phase 1 will maintain these existing flows by the following:

- The existing four 48" RCP culverts in the northwest corner that run under Clinton Keith Road will be extended under the widened southern half of the road, maintaining existing flows with no impact downstream. The site grading proposes that the north-west portion of 0.6 acres drains to Stream 3 in a manner that the proposed conditions flows do not exceed existing conditions flows generated from the 2.1 acres.
- Near the above mentioned culverts, an AC spillway inlet into a 24" CMP will be replaced with a catch basin along with the street improvement widening.
- The existing 60" RCP that carries flows from north side of Clinton Keith Road will be extended approximately 400 lineal feet and outlet back into the natural drainage channel approximately 150' south of the most southerly drive entrance from Elizabeth Lane.

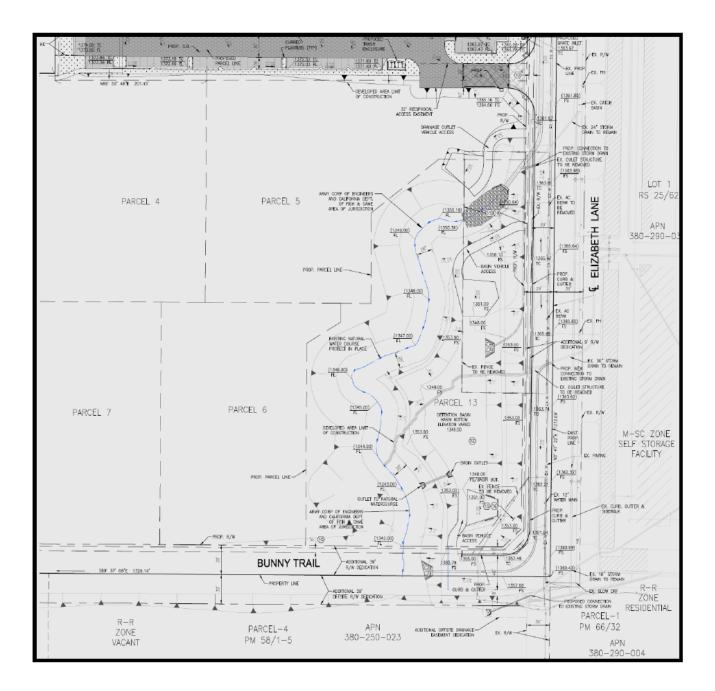
- An existing catch basin at a low point along the east side of Elizabeth Lane that directly discharges into a natural channel will join the above mentioned 60" RCP, as well as a proposed catch basin directly on the west side of Elizabeth Lane.
- The existing 30" RCP that carries flows from the adjacent mini-storage facility will be extended approximately 200 lineal feet and join a culvert that will be built under Bunny Lane.
- A 40' long culvert will be built under Bunny Lane to allow storm water to continue flowing in a southerly direction as it currently does.
- An on-site drainage system is proposed to capture the on-site flows and convey them to the proposed water quality/detention basin.
- Detention basins will be constructed at the outlet locations for each stream subareas to mitigate the increased runoff from the post-developed site conditions and release measured flows into the natural streams with no adverse impact downstream. For preliminary purposes, the basins are sized for the differences between the volumes of the 10-year, 24-hour pre- and post-developed conditions storm events. The 100-year events will bypass through.

A detention basin will be constructed in the southeast corner of Parcel 13 to mitigate the increased runoff from the post-developed parcels 1,2 and 3 proposed Project site and release measured flows into the natural Stream 1 with no adverse impact downstream. The proposed basin will serve dual purpose as being a water quality sand filtration basin and a detention mitigation basin.

Phase 2 drainage improvements are not known at this time. Phase 2 drainage improvements will be installed with the development of that portion of the proposed Project. All drainage facilities in Phase 2 will be consistent with City of Wildomar requirements, and will be subject to the current, or applicable standard conditions at the time of development, plus the proposed Project-specific mitigation measures contained in this Initial Study.



#### Figure 18a - Preliminary Grading Plan Northern Portion



#### Figure 18b - Preliminary Grading Southern Portion

#### Water Quality

Tentative Parcel Map 36492 proposes to create 13 parcels on approximately 29.5 acres of currently vacant, formerly agricultural land. Phase 1 of the proposed Project proposes to currently develop only three of those parcels (Parcel 1, 2, and 3 - 7.7 acres) along with Parcel 13 (open space – 2.88 acres) into an industrial park and a detention/sand filter basin respectively. The net disturbed area as a result of this Phase 1 will be 11.85 acres and will be limited to this partial development that consists of the following activities:

- Conduct grading operations for 7.7 acres and grade to existing topography along the southern boundary of the 3 parcels.
- Construct one medical office building, three commercial office buildings, one office building, one drive-thru restaurant, plus associated parking and landscape areas on Parcels 1 through 3.
- Construct a detention basin/sand filter basin on Parcel 13 (1.1 acres out of 2.88 acres of open space) for increased storm water runoff mitigation and water quality treatment.
- Construct sidewalk under drains along Clinton Keith Road and Elizabeth Lane to convey street tributary runoff to on-site vegetated swales that treat the storm water before entering the existing MS4 storm drain system.
- Conduct selective grading of the immediate surrounding area and modify existing storm drain design to prevent diversion of flows and maintain existing drainage patterns.

Phase 2 WQMP facilities are not known at this time. Phase 2 WQMP facilities will be installed with the development of that portion of the proposed Project. All WQMP facilities in Phase 2 will be consistent with City of Wildomar requirements for implementing water quality, and will be subject to the current, or applicable standard conditions at the time of development, plus the proposed Project-specific mitigation measures contained in this Initial Study.

#### Sewer and Water Facilities

The proposed Project will tie into an existing 20" water line located in Clinton Keith Road and a 12" water line in Elizabeth Lane, which will create a loop system. The proposed Project will tie into an existing 18" sewer line located in Clinton Keith Road.

#### **Utilities**

All utilities and public services are currently available on, or adjacent to, the proposed Project site. Utility and Service providers are as follows:

- Electricity: Southern California Edison
- Water: Elsinore Valley Municipal Water District
- Sewer: Elsinore Valley Municipal Water District
- Cable: Comcast Cablevision
- Gas: Southern California Gas Company
- Telephone: Verizon

#### **Biological Resources**

According to the *Biological Resources Assessment, Rancon Medical and Education Center. City of Wildomar, Riverside County, California*, prepared by PCR Services Corporation, dated September, 2012, the proposed Project site consists primarily of non-native grassland, with a smaller component of native vegetation dominated by California buckwheat (*Eriogonum fasciculatum*). The entire site is within the Western Riverside County MSHCP, but is not within any designated United States Fish and Wildlife Service (USFWS) critical habitat.

The proposed Project site supports two (2) drainage features observed to support field indicators associated with USACE, RWQCB, and CDFG (collectively "the resource agencies") jurisdictional waters, including Drainage D1 and Drainage D2. Drainage D1 is located near the eastern boundary of the site adjacent to Elizabeth Lane, and Drainage D2 is located in the northwest corner of the southern portion of the site, with a small portion adjacent to Clinton Keith Road to the north. Please refer to Figure 19, *Jurisdictional Features* (Figure 8 of BRA).

Mapped soils in the proposed Project site are within the Monserate-Arlington-Exeter Association, including eight soil types as follows:

- Arlington and Greenfield fine sandy loams, 2 to 8 percent slopes, eroded
- Handford sandy loam, 2 to 15 percent slopes
- Monserate sandy loam, 0 to 5 percent slopes (co-dominant soil type)
- Monserate sandy loam, shallow, 8 to 15 percent slopes, eroded
- Monserate sandy loam, shallow, 5 to 15 percent slopes, eroded
- Monserate sandy loam, shallow, 15 to 25 percent slopes, severely eroded
- Ramona and Buren loams, 5 to 15 percent slopes, eroded (co-dominant soil type)
- Ramona and Buren loams, 5 to 25 percent slopes, severely eroded

Biological Resources are discussed in greater detail in Section V. 4 (Biological Resources) of this Initial Study.



# Figure 19 – Jurisdictional Features

# III. EXECUTIVE SUMMARY

#### A. Summary of Impacts and Mitigation Measures

The following represents a summary of impacts and mitigation measures associated with the proposed Project. Note that the City has standard conditions and ordinances that may also address impacts. All subsequent development will be required to comply with the tentative parcel map and plot plan requirements of the City of Wildomar.

#### 1. Aesthetics

All impacts are less than significant without mitigation, or no impact.

2. Agricultural Resources

The proposed Project has no impact on agricultural resources.

3. Air Quality

The proposed Project has no impact on air quality resources. However, the Project applicant has agreed to the following mitigation measures, which contain methods to further reduce Project impacts from construction and operational emissions. It should be noted that several of these methods will also serve to reduce impacts to Greenhouse Gases (Section V.7, Greenhouse Gasses, of this Initial Study).

#### AQ-1 Construction Mitigation

- a. Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (i.e., install wheel shakers, wheel washers, and limit site access.)
- b. Limit fugitive dust sources to 20 percent opacity.
- c. Require a dust control plan for earthmoving operations.
- d. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- e. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite.
- f. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours.
- g. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered three times daily.
- h. A high wind response plan shall be formulated for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period.
- i. Require high pressure injectors on diesel construction equipment.\*
- j. Utilize only CARB Tier 3 or better certified equipment for construction activities.\*
- k. The developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use and/or idling in excess of 3 minutes.\*
- I. Suspend use of all construction equipment operations during second stage smog alerts.\*

\* Would reduce impacts to GHGs as well

*Timing/Implementation: Implemented during grading activities.* 

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

#### AQ-2 Operation Mitigation

- a. Install EV charging facilities for a minimum of 1% of all parking spaces.\*
- b. Provide preferential parking locations for EVs and CNG vehicles.\*
- c. Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.\*
- d. Plant Low-OFP, native, drought-resistant, tree and shrub species, 20% in excess of that required by city ordinance. Consider roadside, sidewalk, and driveway shading.\*
- e. Prohibit gas powered landscape maintenance equipment. Require landscape maintenance companies to use battery powered or electric equipment **or** contract only with commercial landscapers who operate with equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use or any combination of these two themes.\*
- f. Provide secure, bicycle parking for employees.\*
- g. Provide direct safe, direct bicycle access to adjacent bicycle routes.\*
- h. Provide short-term bicycle parking for retail customers and other non-commute trips.\*

\* Would reduce impacts to GHGs as well

*Timing/Implementation: Implemented during site plan review and verified prior to Certificate of Occupancy.* 

*Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.* 

4. Biological Resources

The following mitigation measure will reduce biological impacts to less than significant:

**BIO-1** Prior to any off-site grading, a biologist should assess the area to determine if potentially suitable habitat for sensitive plant species occurs. If potentially suitable habitat is determined present, focused surveys should be conducted for sensitive plant species.

*Timing/Implementation: Implemented prior to any off-site grading.* 

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

**BIO-2** The proposed Project site is within the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee area and will be subject to the SKR HCP Fee, per Riverside County Ordinance 336 (as amended through 663.10). This fee is currently \$500 per gross acre of the parcels proposed for development and must be paid upon issuance of a Grading Permit. The payment of this fee will mitigate for any impacts to the Stephen's Kangaroo Rat habitat.

*Timing/Implementation: The fee must be paid prior to the issuance of a grading permit.* 

*Enforcement/Monitoring: City of Wildomar Building and Planning Departments.* 

**BIO-3** Due to the presence of suitable habitat and in compliance with the MSHCP, a preconstruction survey for burrowing owl is required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future.

*Timing/Implementation: Implemented 30 days prior to ground disturbance.* 

*Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.* 

**BIO-4** If burrowing owls are determined present following focused surveys, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the *Staff Report on Burrowing Owl Mitigation* published by Department of Fish and Game (March 7, 2012) including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFG. The Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFG. The Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFG.

*Timing/Implementation: Implemented prior to ground any disturbance for Phase 2.* 

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

- **BIO-5** Prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests, the Project applicant shall demonstrate to the satisfaction of the City of Wildomar that either of the following have been or will be accomplished.
  - 1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.
  - 2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.

*Timing/Implementation:* Implemented prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

- **BIO-6** Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features (Figure 13, *Impacts to Jurisdictional Features*, of the BRA), the Project applicant shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFG. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:
  - On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" at a ratio no less than 1:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.
  - On- and/or off-site replacement of CDFG jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.

*Timing/Implementation: Implemented prior to ground any disturbance in areas designated as jurisdictional features.* 

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

5. Cultural Resources

The following mitigation measures will reduce impacts to cultural resources to a less than significant level:

**CUL-1** Prior to any ground-disturbing activity, the Project applicant(s) shall include the following wording in all construction contract documentation:

If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery and significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director and a qualified, neutral archeologist hired by the applicant and the Tribe for decision. The Planning Director and shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the appropriate Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar Planning Commission and/or City Council. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique, mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

*Timing/Implementation:* As a condition of project approval, and implemented during ground-disturbing construction activities.

*Enforcement/Monitoring:* City of Wildomar Building and Planning Departments.

**CUL-2** At least 30 days prior to seeking a grading permit, the Project applicant(s) shall contact the appropriate Tribe<sup>1</sup> to notify the Tribe of grading, excavation, and the adopted monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for Tribal monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

*Timing/Implementation:* Prior to the issuance of a grading permit.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

**CUL-3** Prior to any authorizing ground-disturbing activity, the Project applicant(s) shall include the following wording on all construction contract documentation:

If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

*Timing/Implementation:* As a condition of Project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

**CUL-4** The landowner shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts that are found on the Project site, to the appropriate Tribe for proper treatment and disposition as defined by the appropriate Tribe.

<sup>&</sup>lt;sup>1</sup> The appropriate Tribe will be selected from the list of Tribal representatives provided by the Native American Heritage Commission.

*Timing/Implementation:* As a condition of Project approval, and implemented during ground-disturbing construction activities.

*Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.* 

**CUL-5** All sacred sites, should they be encountered within the Project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the appropriate culturally affiliated Native American Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

*Timing/Implementation:* As a condition of Project approval, and implemented during ground-disturbing construction activities.

*Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments.

**CUL-6** To address the possibility that cultural resources may be encountered during grading or construction, in addition to Tribal monitors, a qualified professional shall monitor all construction activities that could potentially impact archaeological and/or paleontological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources.

*Timing/Implementation:* As a condition of Project approval, and implemented during ground-disturbing construction activities.

*Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments.

**CUL-7** A qualified paleontologist or paleontological monitor shall monitor all mass grading and excavation activities in areas identified as likely to contain paleontological resources. Monitoring will be conducted in areas of grading or excavation in undisturbed outcrops of the Pleistocene-age Pauba Formation, as well as where over-excavation of surficial alluvial sediments will encounter these formations in the subsurface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.

*Timing/Implementation: As a condition of Project approval, and implemented during ground-disturbing construction activities.* 

*Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.* 

**CUL-8** Recovered specimens shall be prepared to a point of identification and permanent preservation, including screen-washing of sediments to recover small invertebrates and vertebrates if necessary.

*Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities.* 

*Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.* 

**CUL-9** Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur (e.g., the Western Center for Archaeology and Paleontology Museum on Searl Parkway in Hemet, California).

*Timing/Implementation:* As a condition of project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

6. Geology and Soils

All impacts are less than significant without mitigation. Note that all development will be required to comply with the plot plan requirements of the City of Wildomar. See also *Standard Conditions & Requirements*.

7. Greenhouse Gas Emissions

The following mitigation measure will reduce impacts to greenhouse gas resources to a less than significant level:

**GHG-1** Prior to building permit approval, the City of Wildomar Planning Department shall require that the Project applicant implement the measures contained in Table 5.7-5, as well as mitigation Measures AQ-1 and AQ-2, to reduce short-term and long-term emissions of GHGs associated with construction and operation of the proposed Project.

*Timing/Implementation:* During Construction Activities and Project Operations.

Enforcement/Monitoring: City of Wildomar Planning and Building Departments.

8. Hazards and Hazardous Materials

The following mitigation measure will reduce impacts to hazards and hazardous materials to a less than significant level. See also *Standard Conditions & Requirements*.

**HAZ-1** All spills or leakage of any hazardous products, including petroleum products, during regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure shall be incorporated into the Stormwater Pollution Prevention Plan

prepared for the Project development.

*Timing/Implementation: Prior to the issuance of a grading permit.* 

*Enforcement/Monitoring: City of Wildomar Engineering Department.* 

**HAZ-2** Prior to the certificate of occupancy for a medical office use, a Hazardous Materials and Waste Management Plan shall be submitted to the City for review and retention. This Plan shall be implemented by the medical offices (where hazardous substances are used) and annually a report of any accidental releases of hazardous substances, impacts to the environment or humans, and the management actions taken to control and remediate such spills shall be submitted to the City.

*Timing/Implementation: Prior to the issuance of a building permit.* 

Enforcement/Monitoring: City of Wildomar Building and Safety Department.

**HAZ-3** As part of a Business Plan submitted to the City of Wildomar Fire Department, the medical offices that handle hazardous materials shall include copies of Material Safety Data Sheets for the hazardous substances (other than medications) utilized by the facility(ies).

*Timing/Implementation: Prior to the issuance of a building permit.* 

Enforcement/Monitoring: City of Wildomar Building and Safety and Fire Departments.

**HAZ-4** Any storage facility for gas canisters containing hazardous or toxic substances shall be enclosed and capable of containing any accidental releases of gas. A warning device shall be incorporated into the design of the gas storage containment facility that is capable of identifying accidental releases. Venting of any released gases shall be accomplished without creating hazards for the surrounding environment or population. Any leaks shall be reported immediately to the City Fire Department as well as other regulatory agencies that are in the reporting chain.

*Timing/Implementation: Prior to the issuance of a building permit.* 

Enforcement/Monitoring: City of Wildomar Building and Safety and Fire Departments.

9. Hydrology and Water Quality

The following mitigation measure will reduce impacts to hydrology and water quality to a less than significant level:

**HYD-1** Prior to the approval of the grading permit on the proposed Project site, the Project applicant(s) shall be required to prepare a stormwater pollution and prevention plan (SWPPP) consistent with the NPDES General Permit for Storm Water Discharges Associated

with Construction and Land Disturbance Activities (Order No. 2010-0014-DWQ), which is to be administered through all phases of grading and proposed Project construction. The SWPPP shall incorporate best management practices (BMPs) to ensure that potential water quality impacts during construction phases are minimized. The SWPPP shall be submitted to the Regional Water Quality Control Board and to the City of Wildomar for review. A copy of the SWPPP must be kept accessible on the proposed Project site at all times. In addition, the Project applicant(s) will be required to submit, and obtain City approval of, a Water Quality Management Plan prior to the issuance of any building or grading permit for future development on the proposed Project site in order to comply with the Areawide Urban Runoff Management Program. The proposed Project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. Site design BMPs shall include, but are not limited to, landscape buffer areas, on-site ponding areas, roof and paved area runoff directed to vegetated areas, and vegetated swales. Source control BMPs shall include, but are not limited to, education, landscape maintenance, litter control, parking lot sweeping, irrigation design to prevent overspray, and covered trash storage. Treatment control BMPs shall include vegetated swales and a detention basin, or an infiltration device.

*Timing/Implementation: Prior to the issuance of a grading permit.* 

Enforcement/Monitoring: City of Wildomar Engineering Department.

10. Land Use and Planning

All impacts are less than significant without mitigation, or no impact.

11. Mineral Resources

The proposed Project has no impact on mineral resources.

12. Noise

The following mitigation measure will reduce noise impacts to a less than significant level. See also *Standard Conditions & Requirements.* 

**NOI-1** To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Wildomar Building Department. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Wildomar Building Department.

*Timing/Implementation: Implemented during Project operations.* 

Enforcement/Monitoring: City of Wildomar Building Department.

**NOI-2** The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors (within 100 feet of any occupied residence) nearest the proposed Project site during all proposed Project construction.

*Timing/Implementation: Implemented during Project operations.* 

Enforcement/Monitoring: City of Wildomar Building Department.

**NOI-3** Stationary noise-generating construction equipment shall be placed a minimum of 320 feet from the property line of existing sensitive receptors (residences to the south), when and where feasible.

*Timing/Implementation: Implemented during Project operations.* 

*Enforcement/Monitoring: City of Wildomar Building Department.* 

**NOI-4** Noise control barriers with a height of 6 feet are required where grading will occur within 100 feet of any occupied residence.

It is important to note that the barriers' attenuation will be accomplished only if the minimum height is based from the pad or the roadway elevation, whichever is the greater of the two. If the barrier is being constructed at a position where the starting elevation is less than the pad or adjacent roadway, the barrier's ultimate height will need to be adjusted to fit the aforementioned criteria. Where applicable, the barriers shall wrap around the ends of the dwelling units to prevent flanking of noise into the site.

*Timing/Implementation: Prior to the issuance of occupancy permits and during project operations.* 

Enforcement/Monitoring: City of Wildomar Building and Planning Departments.

**NOI-5** Roof-mounted air conditioning equipment shall be set back either 25 feet from the building's closest edge or to a distance capable of breaking the line-of-sight of equipment from neighboring potential receivers, whichever provides the greater set back from the building's edge of the two. A subsequent noise study shall be submitted by the applicant and reviewed and approved at building plan check stage by the City to ensure that the AC units are not generating noise in excess of what is allowed under Chapter 9.48 of the Wildomar Municipal Code.

*Timing/Implementation: Reviewed at building plan check.* 

Enforcement/Monitoring: City of Wildomar Building Department.

#### 13. Population and Housing

The proposed Project has no impact on population and housing.

#### 14. Public Services

All impacts are less than significant without mitigation. Note that subsequent development will be required to comply with the plot plan requirements of the City of Wildomar. See also *Standard Conditions & Requirements.* 

#### 15. Recreation

The proposed Project has no impact on recreation.

#### 16. Transportation/Traffic

The following mitigation measure will reduce transportation/traffic impacts to a less than significant level. See also *Standard Conditions & Requirements*.

**TR-1** The direct traffic impacts generated by the proposed Project can be mitigated to a less than significant level, to meet the required level of service of the following recommended improvements are implemented, prior to the respective phase of development:

#### **On-Site Recommendations:**

#### <u>Roadways</u>

- Construct partial width improvements on the southerly side of Clinton Keith Road at its ultimate cross-section as an urban arterial highway (152' right-of-way) adjacent to proposed Project boundary line.
- Construct partial width improvements on the westerly side of Elizabeth Lane at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line.
- Construct partial width improvements on the easterly side of Yamas Drive at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line.

<u>Intersections</u> (proposed Project's actual improvements necessary are shown in <u>bold, italic,</u> <u>underlined</u>. The items that are not bold, italic, underlined are already existing)

Construct the intersection of proposed Project Driveway 1 (NS) and Clinton Keith Road (EW) to restrict movement to right-in and right-out only from the driveway with the following geometrics:

Northbound:	One right-turn lane. Stop controlled.
Southbound:	Not applicable.
Eastbound:	One through lane. <u>One right-turn lane.</u>
Westbound:	One through lane.
Install a traffic signal	at the intersection of Elizabeth Lane (NS) and Clinton Keith Road
(EW) to include the fo	Ilowing geometrics:
Northbound:	One left-turn lane. One shared through and right-turn lane.
Southbound:	One left-turn lane. One shared through and right-turn lane.
Eastbound:	One left-turn lane. One through lane. <i>One right-turn lane.</i>

Westbound:	One left-turn lane. One through lane. One shared through and
right-turn lane.	
	ction of Elizabeth Lane (NS) and proposed Project Driveway 2 (EW)
with the following ge	
Northbound:	One shared left-turn, through and right-turn lane.
Southbound:	One shared left-turn, through and right-turn lane.
Eastbound:	One shared left-turn, through and right-turn lane. Stop controlled.
Westbound:	One shared left-turn, through and right-turn lane. Stop controlled.
	ction of Elizabeth Lane (NS) and proposed Project Driveway 3 (EW)
with the following ge	
Northbound:	One shared left-turn and through lane.
Southbound:	One shared through and right-turn lane.
Eastbound:	One shared left-turn and right-turn lane. Stop controlled.
Westbound:	Not applicable.
Construct the interse	ction of Yamas Drive (NS) and Bunny Trail (EW) with the following
geometrics:	
Northbound:	Not applicable.
Southbound:	One right-turn lane.
Eastbound:	One shared left-turn and right-turn lane. Stop controlled
Westbound:	Not applicable.
Construct the interse	ction of Project Driveway 4 (NS) and Bunny Trail (EW) with the
following geometrics:	
Northbound:	Not Applicable.
Southbound:	One shared left-turn and right-turn lane. Stop controlled.
Eastbound:	One shared left-turn and through lane.
Westbound:	One shared through and right-turn lane.
Construct the interse	ction of Yamas Drive (NS) and proposed Project Driveway 5(EW)
with the following ge	ometrics:
Northbound:	One shared through and right-turn lane.
Southbound:	One shared left-turn and through lane.
Eastbound:	Not applicable.
Westbound:	One shared left-turn and right-turn lane. Stop controlled.
Construct the interse	ction of Yamas Drive (NS) and Bunny Trail (EW) with the following
geometrics:	
Northbound:	One shared through and right-turn lane.
Southbound:	One shared left-turn and through lane.
Eastbound:	Not applicable.
Westbound:	One shared left-turn and right-turn lane. Stop controlled.
Timing/Implementati	on: Implemented during the appropriate Phase of proposed
Due to stand a sector setters	

Project construction.

*Enforcement/Monitoring:* City of Wildomar Traffic Engineering Department.

#### 17. Utilities and Service Systems

All impacts are less than significant without mitigation. Note that all development will be required to comply with the plot plan requirements of the City of Wildomar. See also *Standard Conditions & Requirements*.

# **B. STANDARD CONDITIONS & REQUIREMENTS**

The following represent typical conditions and requirements of development in the City of Wildomar. These standards will be applied to the proposed Project per ordinance, policy, or county, state, or federal law. The standards also address many environmental impacts and as shown below are divided into the respective environmental sections.

# Aesthetics

1. The proposed Project must comply with Chapter 8.64 (Light Pollution) of the City's Municipal Code as it pertains to lighting.

# Air Quality

1. The proposed Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures.

# **Geology and Soils**

- 1. All grading shall conform to the California Building Code, Ordinance 457, and all other relevant laws, rules, and regulations governing grading in the City of Wildomar. Prior to commencing any grading which includes 50 or more cubic yards, the developer shall obtain a grading permit from the Building Department.
- 2. Erosion control-landscape plans, required for manufactured slopes greater than 3 feet in vertical height, are to be signed by a registered landscape architect and bonded per the requirements of Ordinance 457 (refer to dept. form 284-47). Planting shall occur within 30 days of meeting final grades to minimize erosion and to ensure slope coverage prior to the rainy season. The developer shall plant and irrigate all manufactured slopes steeper than a 4:1 (horizontal to vertical) ratio and 3 feet or greater in vertical height with grass or ground cover; slopes 15 feet or greater in vertical height shall be planted with additional shrubs or trees or as approved by the City Engineer.
- 3. Prior to the issuance of a grading permit, the developer shall submit a geotechnical soils reports to the City Engineer for review and approval prior to issuance of grading permit. All grading shall be in conformance with the recommendations of the geotechnical/soils reports as approved by the City of Wildomar.

#### **Hazards and Hazardous Materials**

1. As required by existing ordinance, subsequent development on the site will need to comply with the County of Riverside, Department of Environmental Health, Local Enforcement Agency (LEA) for all activities related to potential hazardous materials.

#### Land Use and Planning

1. Prior to the issuance of a grading permit, the developer shall pay the regional impact mitigation fee established by the Riverside County MSHCP.

#### <u>Noise</u>

1. The proposed Project shall comply with the development standard of Chapter 9.48 of the City of Wildomar Zoning Code.

# Public Services

- 1. Prior to issuance of any building permit for future development on the proposed Project site, the Project applicant(s) shall pay the required development impact fees for police and fire services pursuant to Chapter 4.60 of the Wildomar Municipal Code and in effect at the time of building permit issuance.
- 2. Prior to issuance of any building permit for future development on the proposed Project site, the Project applicant(s) shall pay the required school impact mitigation fees established by the Lake Elsinore Unified School District and in effect at the time of building permit issuance.

# Transportation/Traffic

- 1. Prior to issuance of any building permit on the proposed Project site, the Project applicant(s) shall pay the appropriate Transportation Uniform Mitigation Fee and the City of Wildomar Development Impact Fee (DIF).
- 2. Sight distance at the proposed Project entrance roadway should be reviewed with respect to standard City of Wildomar sight distance standards at the time of preparation of final grading, landscape and street improvement plans.
- 3. Participate in the phased construction of off-site traffic signals through payment of proposed Project's fair share of traffic signal mitigation fees.
- 4. Signing/striping should be implemented in conjunction with detailed construction plans for the proposed Project site.

#### **Utilities and Service Systems**

- 1. The Project applicant(s) for future development on the proposed Project site shall obtain approval from the Riverside County Department of Environmental Health before receiving water and wastewater service from the Elsinore Valley Municipal Water District.
- 2. Prior to issuance of a building permit, a recycling collection and loading area plan shall be submitted to the City and to Riverside County Waste Management Division.

# **IV. ENVIRONMENTAL CHECKLIST**

#### A. BACKGROUND

#### 1. Project Title:

Rancon Medical Office/Retail Project: Plot Plan and Tentative Parcel Map No. 36492 (Planning Application No. 12-0053)

#### 2. Lead Agency Name and Address:

City of Wildomar, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595

#### 3. Contact Person and Phone Number:

Matthew C. Bassi, Planning Director; (951) 677-7751, ext. 213

#### 4. Project Location:

The proposed Project site is generally located at the southwest corner of Clinton Keith Road and Elizabeth Lane, (i.e., west of Elizabeth Lane, north of Bunny Trail and west of Yamas Drive, in City of Wildomar, Riverside County, California. Assessor's Parcel Number: 380-250-022; Section 6, Township 7 South, Range 3 West.

#### 5. Project Sponsor's Name and Address:

Rancon Medical and Educational Center, LLC, 41391 Kalmia Street, Suite 206, Murrieta, CA 92562

#### 6. General Plan Designation:

Business Park (BP)

#### 7. Zoning:

I-P (Industrial Park)

#### 8. Description of Project:

A proposed Parcel Map ("proposed Project") that would subdivide approximately 29.40 acres (gross)/25.99 acres (net) into thirteen (13) parcels. The Plot Plan proposes development in two (2) phases. Phase 1 proposes approximately 96,240 square feet of commercial, retail, restaurant, office (including medical) and light industrial uses on 11.62 (gross acres)/10.07 (net acres). Ultimate development of the proposed Project will result in 295,900 square feet of business park uses, 42,420 square feet of general offices, 31,420 square feet of medical and dental offices, 19,400 square feet of commercial retail uses and a 3,000 square foot drive-through fast food restaurant.

#### 9. Surrounding Land Uses and Setting:

- North Zoning: Rural Residential; Land Use: Vacant
- South Zoning: Rural Residential and industrial Park; Land Use: Vacant
- Southwest Zoning: General Residential; Land Use: Multi-Family Residential
- East Zoning: Manufacturing-Service Commercial; Land Use: Self-Storage
- West Zoning: Rural Residential; Land Use: Vacant (west), Multi-Family Residential (southwest)

### 10. Other Public Agencies Whose Approval Is Required:

Riverside County Flood Control and Water Conservation District, United States Army Corps of Engineers, San Diego Regional Water Quality Control Board, California Department of Fish and Game.

### **B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

The environmental factors checked below would be potentially affected by this proposed Project involving at least one impact that is a "Potentially Significant Impact," or "Less Than Significant With Mitigation Incorporation" as indicated by the checklist on the following pages.

	Aesthetics		Greenhouse Gas Emissions		Population/Housing
	Agricultural Resources	$\boxtimes$	Hazards/Hazardous Materials		Public Services
	Air Quality	$\boxtimes$	Hydrology/Water Quality		Recreation
$\boxtimes$	Biological Resources		Land Use/Planning	$\square$	Transportation/Traffic
$\boxtimes$	Cultural Resources		Mineral Resources		Utilities/Service Systems
	Geology and Soils	$\boxtimes$	Noise	$\boxtimes$	Mandatory Findings of Significance

#### C. DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because of the incorporated mitigation measures and revisions in the proposed Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

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

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

#### **City Representative**

MattasBasu

11-15-2013

Signature Matthew C. Bassi Date Planning Director

#### Applicant

Pursuant to Section 15070(b)(1) of the California Environmental Quality Act, as the Project applicant, I agree to revisions of the Project plans or proposals as described in this Initial Study/Mitigated Negative Declaration to avoid or reduce environmental impacts of my Project to a less than significant level.

Signature

Date

Printed Name

# V. ENVIRONMENTAL ANALYSIS.

# **1. AESTHETICS.**

Issues, would	the proposal:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adver vista?	se effect on a scenic			$\checkmark$	
<ul> <li>b) Substantially damage sc including, but not limite outcroppings, and histor state scenic highway?</li> </ul>	d to, trees, rock				~
<ul> <li>c) Substantially degrade th character or quality of th surroundings?</li> </ul>				✓	
<ul> <li>d) Create a new source of s glare which would adver nighttime views in the a</li> </ul>	sely affect day or			$\checkmark$	
e) Interfere with the nightti Palomar Observatory, as the Mount Palomar Obse Ordinance?	protected through			$\checkmark$	

#### DISCUSSION

#### a) Have a substantial adverse effect on a scenic vista? <u>Less Than Significant Impact</u>

The proposed Project site is located south of Clinton Keith Road. According to Figure 9, Elsinore Area Plan Scenic Highways, of the Elsinore Area Plan (EAP), Interstate 15 (I-15) and SR-74 are identified as "State Eligible" roadways. The proposed Project site is located approximately 2 ¼ miles east of I-15 and approximately 9 miles south of SR-74. Therefore, the proposed Project site will not be visible from these roadways. The proposed Project site would mostly be visible from the immediate surrounding area. The scenic vistas in the vicinity of the proposed Project site are of the surrounding mountains and their ridgelines. Any Project-level visual impacts for current and future development are/will be addressed through the City's plot plan application process, which ensures compliance with City zoning and design standards regulating building design, mass, bulk, height, color, etc. Therefore, the proposed Project's effect on the scenic vista would be considered a less than significant impact. No additional mitigation is required.

# b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? <u>No Impact</u>

The proposed Project site does not contain any scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings; therefore, implementation of the proposed Project would not affect these resources. In addition, the proposed Project site is not located within a state scenic highway. No impacts are anticipated from the proposed Project. No mitigation is required.

# c) Substantially degrade the existing visual character or quality of the site and its surroundings? Less Than Significant Impact

The proposed Project site is a vacant lot, located southerly of Clinton Keith Road and westerly of Elizabeth Lane. The proposed Project would subdivide the existing property into thirteen (13) parcels, two (2) of which are open space, for future retail commercial and office development, consistent with the existing land use designations and zoning and most of the existing and proposed surrounding uses. The proposed Project includes building elevations, landscape plans or other specific building development details for Phase 1. It is reasonable to assume that Phase 2 development on the site will be complimentary to Phase 1 and similar to others in the area. For all Phases of the proposed Project's development, the City's plot plan application process will ensure compliance with City zoning and design standards regulating building design, mass, bulk, height, color, etc. Section 17.216 of the Wildomar Municipal Code regulates plot plan submittals and requires CEQA analysis based on the plot submittal. Through compliance with the plot plan process, the proposed Project will have a less than significant impact that would substantially degrade the existing visual character or quality of the site and its surroundings. No additional mitigation is required.

# d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? <u>Less Than Significant Impact</u>

All Phases of development of the proposed Project will create new sources of light and glare. The City's plot plan application process ensures compliance with City zoning and design standards regulating lighting, siding, materials, etc. A lighting photometric plan has been reviewed with the Plot Plan for Phase 1, and, a condition of approval requires review and approval of a construction level plan prior to issuance of building permits. Therefore, the proposed Project would not create new sources of light or glare that would adversely affect day or nighttime views in the area, and this would be considered a less than significant impact. This process will also be followed for all development within Phase 2. With compliance with the Wildomar Municipal Code 8.64 (Light Pollution), any impacts will be considered less than significant. No additional mitigation is required.

# e) Interfere with the nighttime use of the Mount Palomar Observatory, as protected through the Mount Palomar Observatory Lighting Ordinance? <u>Less Than Significant Impact</u>

All development within 45 miles of the Mt. Palomar Observatory is subject to Section 8.64, Light Pollution, of the Wildomar Municipal Code. Under this provision, exterior lighting above 4050 lumens is restricted, and all lighting must be fully shielded if feasible and partially shielded in all other cases, and must be focused to minimize spill light into the night sky and onto adjacent

properties (Wildomar Municipal Code 8.64.060). Implementation of all Phases of the proposed Project will not interfere with the nighttime use of the Mount Palomar Observatory, as protected through the Mount Palomar Observatory Lighting Ordinance. The proposed Project must comply with Chapter 8.64 (Light Pollution) of the City's Municipal Code as it pertains to lighting. Compliance with these provisions ensures that impacts will remain less than significant. No additional mitigation is required.

### **STANDARD CONDITIONS & REQUIREMENTS**

1. The proposed Project must comply with Chapter 8.64 (Light Pollution) of the City's Municipal Code as it pertains to lighting.

# MITIGATION MEASURES

None.

# 2. AGRICULTURAL RESOURCES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?				~
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				~
c) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				✓
d) Result in the loss of forestland or conversion of forestland to non-forest use?				~
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forestland to non-forest use?				$\checkmark$

#### DISCUSSION

a–e) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use; conflict with existing zoning for agricultural use or a Williamson Act contract; conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)); result in the loss of forestland or conversion of forestland to non-forest use; or Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forestland to non-forest use? <u>No Impact</u>

According to the Riverside County Land Information System (2013), the site is not located within the an agricultural preserve (Williamson Act) or classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring Program of the California Department of Conservation; therefore, there is no potential to convert farmland to nonagricultural uses. As seen in Appendix B (Site Photos), the site is not forested and there are no agricultural uses on the site. There is no evidence of recent agricultural activity on the site. According to the *Phase 1 Environmental Assessment*, prepared by EnviroSoil, Inc., dated January 5,

2011, the proposed Project site has historically been vacant since at least 1948. It appears to have been rough graded and apparently is/has been used for dry farming. There is no way of knowing the last time the site was used for agriculture. No impacts are anticipated and no mitigation is required.

### **STANDARD CONDITIONS & REQUIREMENTS**

None.

#### **MITIGATION MEASURES**

None.

# 3. AIR QUALITY.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul> <li>a) Conflict with or obstruct implementation of the applicable air quality plan?</li> </ul>			$\checkmark$	
<ul> <li>b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</li> </ul>			$\checkmark$	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			~	
<ul> <li>d) Expose sensitive receptors to substantial pollutant concentrations?</li> </ul>			$\checkmark$	
<ul> <li>e) Create objectionable odors affecting a substantial number of people?</li> </ul>			$\checkmark$	

#### DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Air Quality and Greenhouse Gas Impact Analysis for the Rancon Medical Educational Center Plot Plan No. 36492, City of Wildomar,* prepared by Albert A. Webb Associates, dated February 13, 2013, Revised July 17, 2013, Revised October 18, 2013 (AQ/GHG Analysis), and is contained Appendix B, of the enclosed CD. Please refer to the AQ/GHG Analysis in Appendix B for a detailed discussion of the background and physical setting as well as the regulatory setting for federal and California ambient air quality standards. The discussion below will center on the short- and long-term emissions as they relate to regional significance thresholds; as well as a CO hot spot analysis. Even though the following analysis, below, concludes that the Project has less than significant air quality impacts and no mitigation is required, the Project applicant has agreed to implement certain measures to further reduce the Project's air quality impacts. Therefore, mitigation measures **AQ-1** and **AQ-2**, though not legally required, have been incorporated into this document. These "mitigation measures" are voluntary and not legally required since the analysis shows that proposed Project's impacts, described below, have no significant impacts.

# a) Conflict with or obstruct implementation of the applicable air quality plan? <u>Less Than Significant</u> <u>Impact</u>

The proposed Project site is located within the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the basin is in nonattainment (i.e., ozone [O3], particulate matter equal to or less than 10 microns and less

than 2.5 microns in diameter [PM-10 and PM-2.5, respectively]), nitrogen oxide (NOx), and lead. These are considered criteria pollutants because they are four of several prevalent air pollutants known to be hazardous to human health. It should be noted that the proposed Project is not anticipated to generate a quantifiable amount of lead emissions.

The federal and California ambient air quality standards (AAQS) establish the context for the local air quality management plans and for determination of the significance of a project's contribution to local or regional pollutant concentrations. The AAQS represent the level of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other diseases or illness, and persons engaged in strenuous work or exercise, all referred to as "sensitive receptors." SCAQMD defines a "sensitive receptor" as a land use or facility such as residences, schools, child care centers, athletic facilities, playgrounds, retirement homes, and convalescent homes.

Both federal and state Clean Air Acts require that each non-attainment area prepare a plan to reduce air pollution to healthful levels. The 1988 California Clean Air Act and the 1990 amendments to the federal Clean Air Act (CAA) established new planning requirements and deadlines for attainment of the air quality standards within specified time frames which are contained in the State Implementation Plan (SIP). Amendments to the SIP have been proposed, revised, and approved over the past decade. The currently adopted clean air plan for the basin is the 1999 SIP Amendment, approved by the U.S. Environmental Protection Agency (EPA) in 2000.

The Air Quality Management Plan (AQMP) for the Basin establishes a program of rules and regulations directed at attainment of the state and national air quality standards. The AQMP control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections. The SCAQMD adopted an updated AQMP in December 2012, which outlines the air pollution measures needed to meet federal health-based standards for particulates (PM-2.5) in 2014 and also includes specific measures to further implement the ozone strategy in the 2007 AQMP to assist in attaining the ozone standard in 2023 (SCAQMD 2012). The 2012 AQMP was submitted to CARB and EPA for review and to be included as a revision to California's SIP.

The CARB maintains records as to the attainment status of air basins throughout the state, under both state and federal criteria. The portion of the Basin within which the proposed Project is located is designated as a non-attainment area for  $NO_x$  under state standards, and for ozone, PM-10, and PM-2.5 under both state and federal standards.

According to the Wildomar General Plan Environmental Impact Report (SCH No. 2002051143), the expected population growth resulting from buildout of the Wildomar General Plan is not expected to exceed the population growth projections of the SCAQMD's Air Quality Management Plan. In addition, the vehicle miles traveled growth rate under the County General Plan is consistent with the projected population growth utilized by the AQMP. Policies of the Wildomar General Plan are intended to reduce the air quality impact resulting from buildout of the General Plan; the air quality impact was found to be less than significant with respect to consistency with the AQMP.

The proposed Project's emissions from short-term construction of the proposed Project will not exceed SCAQMD regional thresholds for any criteria pollutant. The long-term operation will not exceed the regional daily threshold for  $NO_x$  during summer and winter as a result of the vehicle trips traveling to and from the site. Localized significance thresholds will also not be exceeded at sensitive receptor locations within the proposed Project vicinity during construction. In addition, the proposed Project will not result in CO hot spots.

Based on the regional significance threshold analysis for the proposed Project, the short-term construction emissions will not exceed the daily regional thresholds set by SCAQMD and the long-term operational emissions will also not exceed the daily regional thresholds set by SCAQMD during summer and winter.

# b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? *Less Than Significant Impact*

Regional Significance Threshold Analysis

The thresholds contained in the SCAQMD CEQA Air Quality Handbook are considered regional thresholds and are shown in Table 5.2-1, *SCAQMD CEQA Regional Significance Thresholds*. These regional thresholds were developed based on the SCAQMD's treatment of a major stationary source.

Emission Threshold	Units	VOC	NO <sub>x</sub>	СО	SOx	PM-10	PM-2.5
Construction	lbs/day	75	100	550	150	150	55
Operations	lbs/day	55	55	550	150	150	55

# Table 5.2-1 SCAQMD CEQA Regional Significance Thresholds

# Short-Term Analysis

Short-term emissions consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Short-term impacts will also include emissions generated during construction as a result of operation of personal vehicles by construction workers, asphalt degassing, and architectural coating (painting) operations.

The proposed Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. This is a standard condition for the proposed Project. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 miles per hour and establishing a permanent, and stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the proposed Project (approximately 25 acres) a Fugitive Dust Control Plan or Large Operation Notification Form to submit of the proposed Project (approximately 25 acres) a Fugitive Dust Control Plan or Large Operation Notification Form to submit of the proposed Project (approximately 25 acres) a Fugitive Dust Control Plan or Large Operation Notification Form to submit Plan or Large Operation Notification Form to project Plan or Large Operation Notification Form to SCAQMD.

Short-term emissions were evaluated using the CalEEMod version 2011.1.1 computer program. The model evaluated emissions resulting from construction of the proposed Project. The proposed Project will be developed in two Phases. Construction of Phase 1 is expected to last for approximately 17 months starting no sooner than October 2013. Construction of Phase 2 is expected to last for approximately 20 months starting no sooner than March 2015. The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that proposed Project emissions are expected to be equal to or less than the estimated construction emissions. In addition to the default values used, several assumptions relevant to model inputs for short-term construction are:

- The proposed Project site is currently vacant; thus, no demolition is necessary.
- Phase 1 construction will begin with site grading for the commercial and office uses no sooner than October 2013. Grading will last approximately four months. Building construction follow and last approximately 12 months. Paving will follow building construction and last one month. Architectural coating/painting will last approximately six months and begin during building construction.
- Phase 2 construction will begin with site grading for the business park uses no sooner than March 2015. Grading will last approximately six months. Building construction follow and last approximately 12 months. Paving will follow building construction and last one month. Architectural coating/painting will last approximately seven months and begin during building construction.

The construction equipment estimated to be used for each analyzed activity and detailed construction timing is shown in Appendix A of the AQ/GHG Analysis. Table 5.2-2, *Phase 1 Estimated Daily Construction Emissions*, and Table 5.2-3, *Phase 2 Estimated Daily Construction Emissions*, summarize the maximum estimated construction emissions from each Phase.

Table 5.2-2
Phase 1 Estimated Daily Construction Emissions

A shi iku Masu		Peak Daily Emissions (lb/day)							
Activity/Year	voc	NO <sub>x</sub>	со	SO <sub>2</sub>	PM-10	PM-2.5			
SCAQMD Daily Thresholds	75	100	550	150	150	55			
2013									
Grading			-	•	•	•			
Fugitive Dust	0.00	0.00	0.00	0.00	7.06	3.31			
Off-Road Emissions	11.85	97.47	52.85	0.10	4.59	4.59			
Worker/Vendor Trips	0.13	0.46	1.49	0.00	0.30	0.03			
Total	11.98	97.93	54.34	0.10	11.95	7.93			
Exceeds Threshold?	No	No	No	No	No	No			
2014									
Grading									
Fugitive Dust	0.00	0.00	0.00	0.00	7.06	3.31			
Off-Road Emissions	11.22	90.65	50.83	0.10	4.18	4.18			
Worker/Vendor Trips	0.11	0.41	1.37	0.00	0.30	0.03			
Total	11.33	91.06	52.20	0.10	11.54	7.52			
Building Construction									
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00			
Off-Road Emissions	4.74	32.06	23.20	0.04	2.02	2.02			
Worker/Vendor Trips	1.34	10.37	12.00	0.03	2.58	0.47			
Total	6.08	42.43	35.20	0.07	4.60	2.49			
Architectural Coating									
Architectural Coating	67.09	0.00	0.00	0.00	0.00	0.00			
Off-Road Emissions	0.45	2.77	1.92	0.00	0.24	0.24			
Worker/Vendor Trips	0.11	0.13	1.53	0.00	0.34	0.02			
Total	67.65	2.90	3.45	0.00	0.58	0.26			
2014 Maximum <sup>1</sup>	73.73	91.06	52.20	0.10	11.54	7.52			
Exceeds Threshold?	No	No	No	No	No	No			
2015									
Building Construction									
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00			
Off-Road Emissions	4.34	29.16	22.98	0.04	1.80	1.80			
Worker/Vendor Trips	1.22	9.43	11.29	0.03	2.55	0.44			

Antivity /Voor	Peak Daily Emissions (lb/day)							
Activity/Year	voc	NO <sub>x</sub>	со	SO2	PM-10	PM-2.5		
SCAQMD Daily Thresholds	75	100	550	150	150	55		
Total	5.56	38.59	34.27	0.07	4,35	2.24		
Paving								
Paving	2.07	0.00	0.00	0.00	0.00	0.00		
Off-Road Emissions	4.89	30.10	20.54	0.03	2.54	2.54		
Worker/Vendor Trips	0.08	0.35	0.97	0.00	0.23	0.02		
Total	7.04	30.45	21.51	0.03	2.77	2.56		
Architectural Coating								
Architectural Coating	67.09	0.00	0.00	0.00	0.00	0.00		
Off-Road Emissions	0.41	2.57	1.90	0.00	0.22	0.22		
Worker/Vendor Trips	0.10	0.13	1.39	0.00	0.34	0.02		
Total	67.60	2.70	3.29	0.00	0.56	0.24		
2015 Maximum <sup>2</sup>	74.64	41.29	37.56	0.07	4.91	2.80		
Exceeds Threshold?	No	No	No	No	No	No		

Notes: See Appendix A of the AQ/HGH Analysis for model output report. Numbers may not match due to rounding within the model.

<sup>1</sup> Maximum emissions are the greater of grading alone or building construction and architectural coatings since those activities overlap.

<sup>2</sup> Maximum emissions are the greater of building construction and architectural coatings or architectural coatings and paving since those activities overlap.

Table 5.2-3
Phase 2 Estimated Daily Construction Emissions

Activity (Veer	Peak Daily Emissions (lb/day)							
Activity/Year	voc	NO <sub>x</sub>	со	SO <sub>2</sub>	PM-10	PM-2.5		
SCAQMD Daily Thresholds	75	100	550	150	150	55		
2015								
Grading								
Fugitive Dust	0.00	0.00	0.00	0.00	8.67	3.31		
Off-Road Emissions	10.57	83.24	49.03	0.10	3.80	3.80		
Worker/Vendor Trips	0.10	0.37	1.25	0.00	0.30	0.03		
Total	10.67	83.61	50.28	0.10	12.77	7.14		
Exceeds Threshold?	No	No	No	No	No	No		
Building Construction								
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00		
Off-Road Emissions	4.34	29.16	22.98	0.04	1.80	1.80		
Worker/Vendor Trips	1.15	8.84	10.57	0.03	2.39	0.41		
Total	5.49	38.00	33.55	0.07	4.19	2.21		
2015 Maximum <sup>1</sup>	10.67	83.61	50.28	0.10	12.77	7.14		
Exceeds Threshold?	No	No	No	No	No	No		
2016	-							
Building Construction								
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00		
Off-Road Emissions	3.99	26.52	22.80	0.04	1.58	1.58		
Worker/Vendor Trips	1.14	8.57	10.56	0.03	2.52	0.41		
Total	5.13	35.09	33.36	0.07	4.10	1.99		
Paving		I	1	I	I			
Paving	2.07	0.00	0.00	0.00	0.00	0.00		
Off-Road Emissions	4.58	28.21	20.38	0.03	2.35	2.35		
Worker/Vendor Trips	0.08	0.32	0.91	0.00	0.23	0.02		
Total	6.73	28.53	21.29	0.03	2.58	2.37		
Architectural Coating	1	1	1	1	1	1		
Architectural Coating	63.78	0.00	0.00	0.00	0.00	0.00		
Off-Road Emissions	0.37	2.37	1.88	0.00	0.20	0.20		
Worker/Vendor Trips	0.10	0.12	1.31	0.00	0.34	0.02		
Total	64.25	2.49	3.19	0.00	0.54	0.22		

Activity/Year	Peak Daily Emissions (lb/day)					
	voc	NO <sub>x</sub>	со	SO <sub>2</sub>	PM-10	PM-2.5
SCAQMD Daily Thresholds	75	100	550	150	150	55
2016 Maximum <sup>2</sup>	70.98	37.58	36.55	0.07	4.64	2.59
Exceeds Threshold?	No	No	No	No	No	No

Notes: See Appendix A of the AQ/HGH Analysis for model output report. Numbers may not match due to rounding within the model.

<sup>1</sup> Maximum emissions are the greater of grading alone or building construction alone since those activities don't overlap.

<sup>2</sup> Maximum emissions are the greater of building construction and architectural coatings or architectural coatings and paving since those activities overlap.

Evaluation of Tables 5.2-2 and 5.2-3, above indicates that the maximum criteria pollutant emissions from construction during each year from Phase 1 and Phase 2 will not exceed the SCAQMD regional daily thresholds. Therefore, these impacts are considered less than significant.

Even though these impacts are considered less than significant, the Project applicant has agreed to Mitigation Measure **AQ-1**, which contains methods to further reduce Project impacts from construction emissions. It should be noted that several of these methods will also serve to reduce impacts to Greenhouse Gases (Section V.7, Greenhouse Gases, of this Initial Study).

#### Long-Term Analysis

Long-term air quality impacts will occur once the proposed Project is in operation. The proposed Project is assumed to be operational in 2016. Mobile source emissions refer to on-road motor vehicle emissions generated from the proposed Project's traffic. These emissions are estimated by using the information provided in the proposed Project-specific Traffic Study (reference Appendix L). Area source emissions include stationary combustion emissions of natural gas used for space and water heating (shown in a separate row as natural gas), yard and landscape maintenance (assumed to occur throughout the year in Southern California), consumer use of solvents and personal care products, and an average building square footage to be repainted each year. CalEEMod computes area source emissions based upon default factors and land use assumptions.

Separate emissions were computed for both summer and winter as seen in Table 5.2-4, *Estimated Daily Project Operation Emissions (Summer)*, and Table 5.2-5, *Estimated Daily Project Operation Emissions (Winter)*.

 Table 5.2-4

 Estimated Daily Project Operation Emissions (Summer)

	Peak Daily Emissions (lb/day)					
Source	VOC	NO <sub>x</sub>	СО	SO <sub>2</sub>	PM-10	PM-2.5
SCAQMD Daily Thresholds	55	55	550	150	150	55
Mobile	24.97	52.65	206.75	0.32	34.29	4.03
Natural Gas	0.06	0.55	0.46	0.00	0.04	0.04
Area	10.23	0.00	0.00	0.00	0.00	0.00
Total	35.26	53.20	207.21	0.32	34.33	3.08
Exceeds Threshold?	No	No	No	No	No	No

 Table 5.2-5

 Estimated Daily Project Operation Emissions (Winter)

	Peak Daily Emissions (lb/day)					
Source	VOC	NO <sub>x</sub>	СО	SO <sub>2</sub>	PM-10	PM-2.5
SCAQMD Daily Thresholds	55	55	550	150	150	55
Mobile	23.18	53.94	207.53	0.29	34.33	3.09
Natural Gas	0.06	0.55	0.46	0.00	0.04	0.04
Area	10.23	0.00	0.00	0.00	0.00	0.00
Total	33.47	54.49	207.99	0.29	34.37	3.13
Exceeds Threshold?	No	No	No	No	No	No

Evaluation of the data presented in Tables 5.2-4 and 5.2-5, above, indicates that criteria pollutant emissions from operation of the proposed Project will not exceed the SCAQMD regional daily thresholds during summer and winter. Impacts are considered less than significant and no mitigation is required.

Even though these impacts are considered less than significant, the Project applicant has agreed to Mitigation Measure **AQ-2** through which contains methods to further reduce Project impacts from operational emissions. It should be noted that several of these methods will also serve to reduce impacts to Greenhouse Gases (Section V.7, Greenhouse Gases, of this Initial Study).

# Localized Significance Threshold Analysis

As part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD has developed localized significance threshold (LST) methodology (SCAQMD 2008) that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short-term and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to

an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The proposed Project is located on the edge of SRA 25/26.

#### Short-Term Analysis

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with hauling, vendor trips, and worker trips are mobile source emissions that occur offsite and need not be considered. SCAQMD has provided LST lookup tables and sample construction scenarios to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. Although the proposed Project site is larger than five acres, it is anticipated that an area no larger than five acres would be disturbed per day during construction. Therefore, the sample construction scenario for the five-acre site was modified using Project-specific information such as the construction equipment usage information from the CalEEMod data found in Appendix A of the AQ/GHG Analysis.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of a project to the nearest sensitive receptors (in meters). Sensitive receptors in the proposed Project vicinity include existing residences northeast and southwest of the proposed Project site. The closest receptor distance on the LST look-up tables is 25 meters. According to SCAQMD Methodology, projects with boundaries closer than 25 meters to the nearest receptor should use LST's for receptors located at 25 meters. Therefore, a receptor distance of 25 meters was chosen. The results are summarized in Table 5.2-6, *LST Results for Construction Estimates*.

	Peak Daily Emissions (lb/day)					
Activity	NO <sub>X</sub>	со	PM-10	PM-2.5		
25 meter LST for 5-acres	371	1,965	13	8		
Grading	95.0	46.6	8.7	5.0		
Building Construction	35.1	19.6	2.0	1.8		
Paving	41.8	24.5	2.9	2.7		
Exceeds Threshold?	No	No	No	No		

Table 5.2-6 LST Results for Construction Emissions

According to Table 5.2-6, short-term construction emissions from the proposed Project will not exceed the SCAQMD-established LST for any criteria pollutant.

#### Long-Term Analysis

According the LST methodology, LST's would only apply to the operational phase if a project includes stationary sources or attracts mobile sources that may spend long periods of time idling at the site; such as warehouse/transfer facilities. The proposed Project is a mixed-use commercial/office and business park and does not include such uses. Therefore, no long-term LST analysis is needed.

Based on the LST analysis, the short-term construction of the proposed Project will not result in localized air quality impacts to sensitive receptors within the proposed Project vicinity. Due to lack of stationary source emissions, no long-term analysis is needed. No impacts are anticipated and no mitigation is required.

#### CO Hot Spots Analysis

A carbon monoxide (CO) "hot spot" is a localized concentration of CO that is above the state or federal 1-hour or 8-hour ambient air quality standards (AAQS). Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles.

Based on the information presented below, a CO "hot spot" analysis is not needed to determine whether the addition of the proposed Project related traffic will contribute to an exceedance of either the state or federal AAQS for CO emissions in the proposed Project area.

Considering proposed Project-related traffic as well as existing conditions, ambient growth, and cumulative project traffic, the highest average daily trips would be 31,434 on Clinton Keith Road between the Interstate 15 northbound ramps and George Avenue, which is lower than the values studied by SCAQMD. Therefore, none of the intersections in the vicinity of the proposed Project site would have peak hourly traffic volumes exceeding those at the intersections modeled in the 2003 AQMP, nor would there be any reason unique to the meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail. No impacts are anticipated and no mitigation is required.

# c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? <u>Less</u> <u>Than Significant Impact</u>

Please reference the discussions in Responses 3.a and 3.b, above. Evaluation of Tables 5.2-2 and 5.2-3, above indicates that the maximum criteria pollutant emissions from construction during each year from Phase 1 and Phase 2 will not exceed the SCAQMD regional daily thresholds. Criteria pollutant emissions from operation of the proposed Project will not exceed the SCAQMD regional daily thresholds during summer and winter. According to Table 5.2-6, short-term construction emissions from the proposed Project will not exceed the SCAQMD-established LST for any criteria pollutant. Compliance with the SCAQMD standards deems the impacts not cumulatively considerable. Any impacts are considered less than significant and no mitigation is required.

#### d) Expose sensitive receptors to substantial pollutant concentrations? <u>Less Than Significant Impact</u>

Please reference the discussions in Responses 3.a, 3.b, and 3.c, above. The maximum criteria pollutant emissions from construction during each year from Phase 1 and Phase 2 will not exceed the SCAQMD regional daily thresholds. Therefore these impacts are considered less than significant.

Criteria pollutant emissions from operation of the proposed Project will not exceed the SCAQMD regional daily thresholds during summer and winter.

Short-term construction emissions from the proposed Project will not exceed the SCAQMD-established LST for any criteria pollutant.

Based on the LST analysis, the short-term construction of the proposed Project will not result in localized air quality impacts to sensitive receptors within the proposed Project vicinity. Due to lack of stationary source emissions, no long-term analysis is needed. No impacts are anticipated and no mitigation is required.

None of the intersections in the vicinity of the proposed Project site would have peak hourly traffic volumes exceeding those at the intersections modeled in the 2003 AQMP, nor would there be any reason unique to the meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail.

#### e) Create objectionable odors affecting a substantial number of people? <u>Less Than Significant</u> <u>Impact</u>

During construction, the proposed Project will include operations that will have diesel combustion and other odors associated with equipment and materials. Diesel fuel odors from construction equipment and new asphalt paving fall into this category. None of these odors are permanent, nor are they normally considered so offensive as to cause sensitive receptors to complain. These impacts will be of short duration and are considered less than significant.

The SCAQMD CEQA Air Quality Handbook (1993) identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed Project does not anticipate including any of these land uses that have been identified by the SCAQMD as odor sources. Therefore, there would be no odor impacts from the operational phase of the proposed Project.

#### **STANDARD CONDITIONS & REQUIREMENTS**

1. The proposed Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures.

#### MITIGATION MEASURES

#### AQ-1 <u>Construction Mitigation</u>

m. Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (i.e., install wheel shakers, wheel washers, and limit site access.)

- n. Limit fugitive dust sources to 20 percent opacity.
- o. Require a dust control plan for earthmoving operations.
- p. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- q. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite.
- r. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hours.
- s. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered three times daily.
- t. A high wind response plan shall be formulated for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period.
- u. Require high pressure injectors on diesel construction equipment.\*
- v. Utilize only CARB Tier 3 or better certified equipment for construction activities.\*
- w. The developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use and/or idling in excess of 3 minutes.\*
- x. Suspend use of all construction equipment operations during second stage smog alerts.\*
- \* Would reduce impacts to GHGs as well

*Timing/Implementation: Implemented during grading activities.* 

*Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.* 

#### AQ-2 Operation Mitigation

- i. Install EV charging facilities for a minimum of 1% of all parking spaces.\*
- j. Provide preferential parking locations for EVs and CNG vehicles.\*
- k. Plant shade trees in parking lots to provide minimum 50% cover to reduce evaporative emissions from parked vehicles.\*
- I. Plant Low-OFP, native, drought-resistant, tree and shrub species, 20% in excess of that required by city ordinance. Consider roadside, sidewalk, and driveway shading.\*
- Prohibit gas powered landscape maintenance equipment. Require landscape maintenance companies to use battery powered or electric equipment or contract only with commercial landscapers who operate with equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use or any combination of these two themes.\*
- n. Provide secure, bicycle parking for employees.\*
- o. Provide direct safe, direct bicycle access to adjacent bicycle routes.\*
- p. Provide short-term bicycle parking for retail customers and other non-commute trips.\*
- \* Would reduce impacts to GHGs as well

Timing/Implementation: Implemented during site plan review and verified prior to Certificate of Occupancy.

*Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.* 

#### 4. BIOLOGICAL RESOURCES.

Issues, would the proj	ect:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, or through habitat modifications, identified as a candidate, sensitive status species in local or regional or regulations, or by the California of Fish and Game or US Fish and V Service?	on any species e, or special- plans, policies, a Department		~		
<ul> <li>b) Have a substantial adverse effect riparian habitat or other sensitive community identified in local or re policies, regulations, or by the Cal Department of Fish and Game or Wildlife Service?</li> </ul>	natural egional plans, ifornia		$\checkmark$		
<ul> <li>c) Have a substantial adverse effect protected wetlands as defined by the Clean Water Act (including, bu to, marsh, vernal pool, coastal, et direct removal, filling, hydrologica or other means?</li> </ul>	Section 404 of It not limited c.) through		$\checkmark$		
d) Interfere substantially with the m any native resident or migratory f species or with established native migratory wildlife corridors, or im of native wildlife nursery sites?	ish or wildlife resident or		$\checkmark$		
e) Conflict with any local policies or protecting biological resources, su preservation policy or ordinance?					$\checkmark$
<ul> <li>f) Conflict with the provisions of an habitat conservation plan, natural conservation plan, or other appro regional or state habitat conserva</li> </ul>	community ved local,			$\checkmark$	

#### DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Biological Resources Assessment*, prepared by PCR Services Corporation, dated September 2012 (BRA), and is contained Appendix C, of the enclosed CD. Please refer to the BRA in Appendix C for a detailed discussion of the background, project description, methods of study, existing setting, regulatory framework and thresholds of significance. The discussion below will center on potential impacts from the proposed Project to sensitive plant species, sensitive wildlife species, riparian habitat or other sensitive natural communities, wetlands, wildlife movement, and consistency with local, regional and state habitat conservation plans.

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? <u>Less Than Significant with Mitigation Incorporated</u>

#### Sensitive Plant Species

Development of the proposed Project site would result in the direct removal of numerous common plant species; a list of plant species observed within the proposed Project site. Common plant species present within the proposed Project site occur in large numbers throughout the region and their removal does not meet any the significance thresholds for biological resources (see Section 6.0, *Thresholds of Significance* of the BRA). Therefore, impacts to common plant species would be considered a less than significant impact and no mitigation measures would be required.

Only one listed species was observed on the proposed Project site, paniculate tarplant (Section 4.8.3, *Sensitive Plant Species*, of the BRA). The majority of the occupied areas on-site supported low densities of the species, with a few scattered high density patches. The majority of the paniculate tarplant would be permanently impacted as a result of the proposed Project, with the exception of an unimpacted open space area associated with the preserved portion of Drainage D1 in the southeastern portion of the site (see Figure 11, *Impacts to Distribution of Paniculate Tarplant* of the BRA). Permanent on-site impacts to paniculate tarplant total approximately 20.02 acres, including approximately 1.80 acres of densely distributed areas and approximately 1.82 acres of sparsely distributed areas. A total of approximately 0.09 acre of densely distributed areas and approximately 0.50 acre of sparsely distributed areas will be avoided. This species is widely distributed in Riverside County. This species is a Covered Species under the MSHCP; therefore, with payment of the MSHCP Local Development Mitigation Fee, impacts will remain less than significant. Therefore, impacts to paniculate tarplant would be considered a less than significant impact and no mitigation measures would be required.

No other sensitive plant species were observed on-site. If off-site impacts are proposed within potentially suitable habitat for sensitive plant species, additional surveys may be warranted. Mitigation Measure **BIO-1** has been added to reduce any potential impacts to a less than significant level. No additional mitigation is required.

#### Sensitive Wildlife Species

Development of the proposed Project would result in the disruption and removal of habitat and the loss and displacement of non-sensitive common wildlife species. A list of wildlife species observed within the proposed Project site is included in Appendix A, *Floral and Faunal Compendium* of the BRA. Due to the limited amount of native habitat to be removed and the high level of existing disturbance from human activity, these impacts would not be expected to reduce the general wildlife populations below self-sustaining levels within the region and impacts to non-sensitive wildlife species do not meet the significance thresholds (see Section 6.0, *Thresholds of Significance* of the BRA). Therefore, impacts to common wildlife species would be considered less than significant impact and no mitigation measures would be required.

Several of the sensitive wildlife species are not expected to occur within the proposed Project site due to the lack of suitable habitat, including but not limited to federally threatened species such as vernal pool fairy shrimp (*Branchinecta lynchi*) and coastal California gnatcatcher

(*Polioptila californica californica*), and federally endangered species such as San Diego fairy shrimp (*Branchinecta sandiegonensis*), and Riverside fairy shrimp (*Streptocephalus woottoni*). Suitable habitat is also absent on-site for the federally and state endangered least Bell's vireo (*Vireo bellii pusillus*), and the federally endangered and state threatened Stephen's kangaroo rat (*Dipodomys stephensi*). Mitigation Measure **BIO-2** has been added, requiring payment of Stephen's kangaroo rat, per acre of disturbed area. After mitigation is incorporated impacts will be considered less than significant.

Focused surveys for burrowing owl (Species of Special Concern) also determined that this species does not occupy the proposed Project site. Therefore, no impacts to these sensitive wildlife species would occur and no mitigation measures would be required with the exception of the burrowing owl. Due to the presence of suitable habitat and in compliance with the MSHCP, Mitigation Measure **BIO-3**, requiring a pre-construction survey for burrowing owl be required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future has been added to the proposed Project. In addition, Mitigation Measure **BIO-4**, pertaining to the burrowing owl, has been added to the proposed Project, since there will be a potential lag between development of Phases 1 and 2 of the proposed Project, requiring subsequent focused studies. With the implementation of these two (2) mitigation measures, proposed Project impacts will be reduced to a less than significant level. No additional mitigation is required.

One Species of Special Concern Species, the San Diego black-tailed jackrabbit, was observed on the proposed Project site. This species is a Covered Species under the MSHCP; therefore, with payment of the MSHCP Local Development Mitigation Fee, impacts will remain less than significant. No additional mitigation is required for this species.

The site supports potential nesting and foraging habitat for migratory birds, in addition to potential foraging habitat for raptors. Based on the disturbed nature and the presence of development surrounding the proposed Project site, the quality of foraging habitat is considered to be low. The loss of foraging habitat as a result of the proposed Project would not expect to impact the foraging of these species. Direct impacts to these species would be avoided through compliance with the Migratory Bird Treaty Act (MBTA). The proposed Project is required by law to comply with the MBTA and perform site work to avoid impacts to birds as described above. Mitigation Measure **BIO-5** has been included to reduce any potential impacts to nesting and foraging habitat. With the implementation of this mitigation measure, impacts to foraging habitat would be considered adverse but less than significant.

# b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? <u>Less than Significant with Mitigation</u> <u>Incorporated</u>

The proposed Project supports two native habitats on-site totaling 1.2 acres, including California buckwheat scrub (0.97 acre) and chamise chaparral (0.23 acre). The remainder of the proposed Project site supports non-native communities including non-native grassland and non-native grassland/California buckwheat scrub. None of the plant communities on-site are considered sensitive pursuant to CDFG, USFWS, or the MSHCP. Furthermore, the native communities within the proposed Project site are small, scattered, and are of low quality for sensitive plant and

wildlife species. The majority of the on-site plant communities would be impacted by the proposed Project, excluding the open space areas proposed in the northwestern corner of the southern portion of the site (adjacent to Yamas Road), and associated with Drainage D1 in the southeastern corner. Impacts to natural plant communities are summarized in Table 5.4-1, *Permanent Impacts to Natural Plant Communities and Developed Areas*, below. Since none of these habitats are sensitive, impacts would be considered less than significant. No mitigation measures would be required.

	On-site (acres)	Off-site (acres)	Total (acres)
Non-native Grassland	20.57	1.35	21.92
Non-native Grassland/California Buckwheat Scrub	6.01	0.16	6.17
California Buckwheat Scrub	0.94	0.67	1.61
Chamise Chaparral	0.18	0.02	0.20
Developed	0.55	0.03	0.58
Total	28.25	2.23	30.48

Table 5.4-1
Permanent Impacts to Natural Plant Communities and Developed Areas

Source: PCR Services Corporation, 2012

The proposed Project site does not support any riparian habitat, but does support drainages that are considered jurisdictional pursuant to CDFG. Impacts are proposed to a portion of these jurisdictional drainages. Impact acreages are summarized below in Table 5.4-2, *Permanent Impacts to CDFG Jurisdictional Drainages*. Impacts, in all, total 0.062 acre of permanent on-site impacts (881.65 linear feet) and 0.012 acre of permanent off-site impacts (106.97 linear feet permanent impacts). Impacts to these jurisdictional areas would be required to comply with Section 1602 of the California Fish and Game Code, including applying for a permit and mitigation subject to approval by CDFG. Mitigation Measure BIO-6 has been added to ensure compliance with this regulation. After mitigation is incorporated, proposed Project impacts would be reduced to a less than significant level. It should be noted that the drainages have been avoided to the greatest extent feasible including the central portion of Drainage D1, and the majority of Drainage D2 (see Figure 13 of the BRA).

	On-Site (acres)	Off-site (acres)	Total (acres)
D1	0.042	0.012	0.054
D1T1	0.017	-	0.017
D2	0.003	-	0.003
Total	0.062	0.012	0.074

#### Table 5.4-2 Permanent Impacts to CDFG Jurisdictional Drainages

Source: PCR Services Corporation, 2012

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? <u>Less than Significant with</u> <u>Mitigation Incorporated</u>

No federally protected wetlands occur on the proposed Project site. The proposed Project site does, however, support non-wetland, ephemeral USACE/RWQCB "waters of the U.S." that are regulated pursuant to Section 404 and 401 of the Clean Water Act. Impact acreages are summarized in Table 5.4-3, *Permanent Impacts to USACE/RWQCB Jurisdictional Drainages*. Impacts, in all, total 0.025 acre of permanent on-site impacts (881.65 linear feet) and 0.007 acre of permanent off-site impacts (106.97 linear feet). Impacts to these jurisdictional areas would be required to comply with Sections 404 and 401 of the Clean Water Act, including applying for a permit and mitigation subject to approval by USACE and RWQCB, respectively. Mitigation Measure **BIO-6** has been added requiring compliance with these regulations. After mitigation is implemented, proposed Project impacts would be reduced to a less than significant level. The drainages have been avoided to the greatest extent feasible including the central portion of Drainage D1, and the majority of Drainage D2 (see Figure 13 of the BRA).

	On-Site (acres)	Off-site (acres)	Total (acres)
D1	0.016	0.007	0.023
D1T1	0.006	-	0.006
D2	0.003	-	0.003
Total	0.025	0.007	0.032

Table 5.4-3
Permanent Impacts to USACE/RWQCB Jurisdictional Drainages

Source: PCR Services Corporation, 2012

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? <u>Less than Significant with Mitigation Incorporated/No Impact</u>

#### Wildlife Movement

The proposed Project site supports potential live-in and movement habitat for species on a local scale (i.e., some limited live-in and at least marginal movement habitat for reptile, bird, and mammal species), but it likely provides little to no function to facilitate wildlife movement for wildlife species on a regional scale, and is not identified as a regionally important dispersal or seasonal migration corridor. Movement on a local scale likely occurs with species adapted to urban environments due to the high level of development in the vicinity of the proposed Project site. Although implementation of the proposed Project would result in disturbances to local wildlife movement within the proposed Project site, those species adapted to urban areas would be expected to persist on-site following construction, particularly within the open space areas. As such, impacts would be less than significant and no mitigation measures would be required.

Since the proposed Project site does not function as a regional wildlife corridor and is not known to support wildlife nursery area(s), no impacts would occur and no mitigation measures would be required.

#### **Migratory Species**

The proposed Project site has the potential to support songbird nests due to the presence of limited shrubs and ground cover on-site, and trees off-site. Nesting activity typically occurs from February 15 to August 31. Disturbing or destroying active nests is a violation of the MBTA (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Game Code Section 3503. The removal of vegetation during the breeding season is considered a potentially significant impact as defined by the thresholds of significance. Any potential impacts to raptor and songbird nests would be considered potentially significant. The proposed Project is required by law to comply with the MBTA and perform site work to avoid impacts to birds as described above. Mitigation Measure **BIO-5** has been included to reduce any potential impacts to nesting and foraging habitat. With the implementation of this mitigation measure, impacts to foraging habitat would be considered adverse but less than significant.

## e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? <u>No Impacts</u>

The proposed Project site supports limited trees, including one coast live oak tree that is proposed for preservation within an open space area along the western boundary, and the canopy of another smaller oak tree along the western boundary (the trunk of this oak tree is off-site; the canopy that extends on-site will not be impacted). Since no impacts are proposed to trees, no conflicts would occur with any local ordinances.

## f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional or state habitat conservation plan? <u>Less</u> <u>than Significant Impact</u>

The proposed Project site is within the Western Riverside County MSHCP and requires compliance with the Burrowing Owl Survey Area (Section 6.3.2 of the MSHCP), and the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2 of the MSHCP). The proposed Project site is not within a cell, a designated cell group, or a subunit within the Elsinore Area Plan; therefore, conservation of land on the proposed Project site is not required pursuant to the MSHCP. The proposed Project site is also not within the survey overlays for Narrow Endemic Plant Species (Section 6.1.3 of the MSHCP), Criteria Area Species, Amphibian Species, or Mammal Species (Section 6.3.2 of the MSHCP). The proposed Project site will not result in edge effects that will adversely affect biological resources within the MSHCP Conservation Area and, as such, will not be subject to the Guidelines Pertaining to the Urban/Wildlands Interface for the treatment and management of edge factors such as lighting, urban runoff, toxics, and domestic predators (Section 6.1.3 of the MSHCP). Compliance with the Burrowing Owl and Riparian/Riverine requirements of the MSHCP are summarized below:

• Focused burrowing owl surveys were conducted and were negative; a 30-day pre-construction survey will be conducted;

The two ephemeral drainages on the proposed Project site meet the definition of Riverine Areas pursuant to the MSHCP ("areas with fresh water flow during all or a portion of the year"). Apart from the one coast live oak tree along the western ephemeral drainage, the biological functions and values of Riparian/Riverine Areas do not exist on-site. As such, the protection of associated species of amphibians, birds, fish, invertebrate-crustacean, and plant species is not required. A portion of the western ephemeral drainage has been placed in an open space lot for 100 percent avoidance, including the coast live oak tree. The proposed Project will result in temporary impacts to Riverine Areas. As required by the City of Wildomar, a site-specific storm drain system will be designed and engineered for the proposed Project that will adequately mitigate this impact. Temporary impacts will only occur until the on-site storm drain system is constructed, and will improve existing conditions by carrying flows consistent with local and regional storm flow requirements. In addition, the storm water runoff captured by the on-site storm drain system will be treated in water quality basins and/or biological swales before being discharged off-site. With this drain system, the proposed Project will have no impact on existing water quality downstream and off-site.

Other kinds of aquatic features that could provide suitable habitat for Riparian/Riverine species, such as fairy shrimp, are not present on-site (i.e. vernal pools, swales, vernal pool-like ephemeral ponds, stock ponds, or other human-modified depressions such as tire ruts, etc.).

#### **STANDARD CONDITIONS & REQUIREMENTS**

None.

#### **MITIGATION MEASURES**

**BIO-1** Prior to any off-site grading, a biologist should assess the area to determine if potentially suitable habitat for sensitive plant species occurs. If potentially suitable habitat is determined present, focused surveys should be conducted for sensitive plant species.

*Timing/Implementation: Implemented prior to any off-site grading.* 

*Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.* 

**BIO-2** The proposed Project site is within the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee area and will be subject to the SKR HCP Fee, per Riverside County Ordinance 336 (as amended through 663.10). This fee is currently \$500 per gross acre of the parcels proposed for development and must be paid upon issuance of a Grading Permit. The payment of this fee will mitigate for any impacts to the Stephen's Kangaroo Rat habitat.

*Timing/Implementation: The fee must be paid prior to the issuance of a grading permit.* 

*Enforcement/Monitoring:* City of Wildomar Building and Planning Departments.

**BIO-3** Due to the presence of suitable habitat and in compliance with the MSHCP, a preconstruction survey for burrowing owl is required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future.

*Timing/Implementation: Implemented 30 days prior to ground disturbance.* 

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

**BIO-4** If burrowing owls are determined present following focused surveys, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the *Staff Report on Burrowing Owl Mitigation* published by Department of Fish and Game (March 7, 2012) including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFG. The Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFG. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the *Staff Report on Burrowing Owl Mitigation*.

*Timing/Implementation: Implemented prior to ground any disturbance for Phase 2.* 

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

- **BIO-5** Prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests, the proposed Project applicant shall demonstrate to the satisfaction of the City of Wildomar that either of the following have been or will be accomplished.
  - 1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.
  - 2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.

*Timing/Implementation: Implemented prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests.* 

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

- **BIO-6** Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features (Figure 13, *Impacts to Jurisdictional Features*, of the BRA), the Project applicant shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFG. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:
  - On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" at a ratio no less than 1:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.
  - On- and/or off-site replacement of CDFG jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-Project conditions (i.e., pre-Project contours and revegetate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.

Timing/Implementation: Implemented prior to ground any disturbance in areas designated as jurisdictional features.

Enforcement/Monitoring: City of Wildomar Planning and Engineering Departments.

#### 5. CULTURAL RESOURCES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		$\checkmark$		
<ul> <li>b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?</li> </ul>		$\checkmark$		
<ul> <li>c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</li> </ul>		$\checkmark$		
d) Disturb any human remains, including those interred outside of formal cemeteries?		$\checkmark$		

#### DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Historical/Archaeological Resources Survey Report, Assessor's Parcel No. 380-350-022, City of Wildomar, Riverside County, California,* prepared by CRM TECH, dated August 1, 2012 (Archaeo Report), and the *Paleontologic Resources Assessment Report, Assessor's Parcel No. 380-350-022, City of Wildomar, Riverside County, California,* prepared by CRM TECH, dated August 3, 2012 (Paleo Report). The Archaeo Report is contained Appendix D, and the Paleo Report is contained Appendix E, of the enclosed CD.

a,b) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5; or, cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? <u>Less Than Significant Impact with Mitigation Incorporated</u>

#### **Records Search**

On July 6, 2012, CRM TECH (Project Archaeologist) conducted the historical/archaeological resources records search at the Eastern Information Center (EIC), University of California, Riverside. During the records search, maps and records on file at the EIC were examined for previously identified cultural resources in or near the proposed Project area and existing cultural resources reports pertaining to the proposed Project vicinity. Previously identified cultural resources include properties designated as California Historical Landmarks, Points of Historical Interest, or Riverside County Landmarks, as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resources Inventory.

#### 1. Historical Research

Historical background research for this study was conducted by CRM TECH on the basis of published literature in local and regional history and historic maps of the region. Among maps

consulted for the Archaeo Report were U.S. General Land Office (GLO) land survey plat maps dated 1857-1899 and U.S. Geological Survey (USGS) topographic maps dated 1901-1953. These maps are collected at the Science Library of the University of California, Riverside, and the California Desert District of the U.S. Bureau of Land Management, located in Moreno Valley.

#### 2. Native American Participation

On June 28, 2012, CRM TECH submitted a written request to the State of California's Native American Heritage Commission for a records search in the commission's sacred lands file. Following the Native American Heritage Commission's recommendations, CRM TECH contacted 19 Native American representatives in the region in writing on July 17,2012 to solicit local Native American input regarding potential cultural resources concerns associated with the proposed Project. The correspondences between CRM TECH and the Native American representatives are included as Appendix 2 of the Archaeo Report. In addition, representatives of the City of Wildomar, Matthew Bassi, City Planner, and Matthew Fagan, City CEQA Consultant met with the Pechanga Band on January 3, 2013 for consultation pursuant to SB 18. At that time, a General Plan Amendment was included within the scope of the proposed Project to amend the City's Circulation Element. Since that meeting, it was determined by the City Staff that a GPA is not required as part of the proposed Project. Still, it should be noted that this consultation occurred.

#### 3. Field Survey

On July 5, 2012, CRM TECH carried out the intensive-level, on-foot field survey of the proposed Project area. During the survey, the Project Archaeologist walked parallel east-west transects spaced 15 meters (approx. 50 feet) apart. The areas enclosed by fences were inspected from the perimeter. In this way, the ground surface in the proposed Project area was systematically and carefully examined for any evidence of human activities dating to the prehistoric or historic periods (i.e., 50 years ago or older). Due to recent disking, ground visibility in the proposed Project area was good (50%-80%) except along the drainages where the vegetation was densest. The areas covered by pavement offered no visibility of the natural ground surface, as would be expected.

#### **Results and Findings**

#### 1. Records Search

According to EIC records, the proposed Project area was included in a 2008 study, but no cultural resources were recorded within or adjacent to the proposed Project area as a result of that or any other previous study (Goodman 2008). Outside the proposed Project boundaries, but within a one-mile radius, EIC records show some 67 additional studies covering various tracts of land or linear features, in all covering approximately 50% of the area within the scope of the records search (reference Figure 4 of the Archaeo Report).

Despite the substantial number of studies in the vicinity, only 12 historical/archaeological sites and 5 isolates—i.e., localities with fewer than three artifacts—have been previously recorded within the one-mile radius, as listed in Table 1 of the Archaeo Report. Seven of the sites, and all of the isolates were prehistoric—i.e., Native American—in origin, consisting of lithic scatters, flakes, and bedrock milling features. The closest of these to the proposed Project location was a stone flake isolate (33-011436) that was recorded approximately ¼-mile to the southeast. The other five sites dated to the historic period, and included three buildings, trash scatters, and the remains of an

olive orchard. None of these previously recorded sites or isolates was located in the immediate vicinity of the proposed Project area, and thus none of them requires further consideration.

#### 2. Historical Research

Historic maps consulted for the Archaeo Report (Figures 5-8 of the Archaeo Report) indicate that the proposed Project area is low in sensitivity for cultural resources from the historic period. In the mid-1850s, when the U.S. government conducted the first systematic land surveys in southern California, no man-made features were found anywhere in the vicinity of the proposed Project area (Figure 5 of the Archaeo Report). Around the turn of the century, a few scattered buildings, likely farmsteads, and meandering roads were observed nearby, but none of them within or adjacent to the proposed Project area (Figure 6 of the Archaeo Report). The forerunner of today's Clinton Keith Road was in place along the northern proposed Project boundary by the late 1930s, and a building with a windmill had appeared just to the northwest by the 1950s, but the proposed Project area evidently remained undeveloped throughout the historic period, except perhaps as farmland (Figures 7, 8 of the Archaeo Report).

#### 3. Native American Participation

In response to CRM TECH's inquiry, the Native American Heritage Commission reports in a letter dated June 29, 2012, that the sacred lands record search identified no Native American cultural resources within the proposed Project area, but recommends that local Native American groups be contacted for further information. For that purpose, the commission provided a list of potential contacts in the region (see Appendix 2 of the Archaeo Report).

Upon receiving the commission's response, CRM TECH initiated correspondence with all 15 individuals on the referral list and the organizations they represent. In addition, Yvonne Markle, Environmental Office Manager for the Cahuilla Band of Indians, John Gomez, Jr., Cultural Resources Coordinator for the Ramona Band of Cahuilla Indians, Steve Estrada, Environmental Director for the Santa Rosa Band of Cahuilla Indians, and Rob Roy, Environmental Director for the La Jolla Band of Mission Indians, were also contacted. As of this time, four of the tribal representatives have responded in writing (see Appendix 2 of the Archaeo Report).

Shasta Gaughen, Tribal Historic Preservation Officer for the Pala Band of Mission Indians, states in a letter that her tribe has no concerns and wishes to defer to other tribes located closer to the proposed Project area. On behalf of the Santa Rosa Band of Cahuilla Indians, Tribal Council member Gabriella Rubalcava responded via e-mail, stating that the Santa Rosa Band also has no specific concerns and would defer further consultations specifically to the Soboba Band of Luiseño Indians.

Joseph Ontiveros, Cultural Resources Director for the Soboba Band of Luiseño Indians, identifies the proposed Project area as a part the tribe's Traditional Use Area and finds it to be in close proximity to known village sites in an area of shared use by both the Luiseño and the Cahuilla. He requests further consultation with the Project developer/landowner, and that a Native American monitor from the Soboba Band is present during earth-moving activities. Similarly, Tuba Ebru Ozdil, Cultural Planner for the Pechanga Band of Luiseño Indians, states that the proposed Project area lies within the tribe's ancestral territory and is close to known cultural sites. The Pechanga Band also wishes to be present during earth-moving activities, and requests tribal review of all archaeological and environmental documentation, as well as proposed Project plans, and further government-to-government consultation with the lead agency. The City has determined that they will consult with the Pechanga Band for the proposed Project.

#### 4. Field Survey

The intensive-level field survey produced completely negative results for potential cultural resources. The ground surface in the entire proposed Project area was closely inspected for any evidence of human activities dating to the prehistoric or historic periods, but none was found. A metal trough was noted in the southwest portion of the proposed Project area, and a small amount of modern refuse was observed in a light scatter over the property, but none of these items holds any historical or archaeological interest. In sum, no evidence of any buildings, structures, objects, sites, features, or artifacts more than 50 years of age was encountered during the field survey.

#### <u>Summary</u>

In summary of the research results presented above, no potential "historical resources" were previously recorded within or adjacent to the proposed Project area, and none was encountered during the present survey. In addition, Native American input during this study did not identify any sites of traditional cultural value in the vicinity, and historic maps show no notable cultural features within the proposed Project area during the historic period. Based on these findings, and in light of the criteria listed above, the present report concludes that no historical resources exist within or adjacent to the proposed Project area.

However, because archaeological resource sites have been identified within the City of Wildomar, there is the potential for the unanticipated discovery of these resources. Because these resources are known to exist in the general area, the mitigation measures listed in this section (**CUL-1** through **CUL-6**) will ensure that any unanticipated discovery would not have a significant impact on archeological resources. Impacts will remain less than significant with mitigation incorporated. No additional mitigation is required.

## c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? <u>Less Than Significant Impact with Mitigation Incorporated</u>

#### **Methods and Procedures**

#### 1. Records Searches

The records search service was provided by the San Bernardino County Museum (SBCM) in Redlands and the Natural History Museum of Los Angeles County (NHMLAC) in Los Angeles. These institutions maintain files of regional paleontological localities as well as supporting maps and documents. The records search results were used to identify known paleontological localities in or near the proposed Project area, or in the general vicinity.

#### 2. Literature Review

In addition to the records searches, a literature search was conducted using materials in the CRM TECH library, including unpublished reports produced during surveys of other properties in the area, and the personal library of CRM TECH geologist/paleontologist Harry M. Quinn, California Professional Geologist #3477.

#### 3. Field Survey

On July 5, 2012, CRM TECH (Project paleontologist) conducted the field survey of the proposed Project area. During the survey, the Project paleontologist walked parallel east-west transects spaced 15 meters (approx. 50 feet) apart. The areas enclosed by fencing were inspected from the perimeter. Using these methods, the ground surface in the entire proposed Project area was systematically and carefully examined to determine the soil types, to verify the geological formations, and to look for any indications of paleontological remains. Visibility of the native ground surface was virtually zero where the proposed Project area lies under pavement, and varied from fair to good (50-80%) in the open fields, depending on the density of the vegetation.

#### **Results and Findings**

#### 1. Records Searches

The Natural History Museum of Los Angeles County and the San Bernardino County Museum found no known paleontological localities within the proposed Project area. However, numerous paleontological localities have been reported nearby from sediment lithologies similar to those known to occur at this location, namely the Pleistocene-age Pauba Formation and an unnamed sandstone and conglomerate formation.

Based on previous discoveries, the San Bernardino County Museum considers the proposed Project vicinity to be an area of high paleontologic sensitivity, with a demonstrated high potential to contain "significant nonrenewable fossil resources present at the surface and in the subsurface" primarily Pleistocene-age vertebrate fossils. The Natural History Museum also notes that the entire proposed Project area contains exposures of the Plio-Pleistocene Pauba Formation that may contain significant fossil vertebrate remains. Both of the museums note the presence of small vertebrate fossils in the Pauba Formation and the need, therefore, to collect and process sediment samples to inspect them for small specimens.

#### 2. Literature Review

The proposed Project area has been mapped by Mann as *Qp*, namely the Pauba Formation of Pleistocene age, and *Qfa*, the Temecula Arkose of probable Pleistocene age. Rogers maps it as *Qc*, or nonmarine sedimentary rocks of Pleistocene age. Kennedy maps the surface geology at this location as *Qps*, the sandstone portion of the Pauba Formation, with some *Kgdd*, or Granodiorite, in the northern portion. The Pauba Formation is assigned a late Pleistocene age and the Granodiorite a Mesozoic age.

Hill et al. also map the surface geology in the proposed Project area as *Qps* with some *Kgd* in the northern portion. The *Qps* represents the sandstone member of the Pleistocene-age Pauba

Formation, described as "light-brown, moderately well indurated sandstone and siltstone facies," and the *Kgd* is described as granodiorite of Cretaceous age (*ibid*.). Kennedy and Morton (2003) map the surface geology at the proposed Project location as *Qpfs*, which is defined as the sandstone member of the Pauba Formation, with *Kpvg*, or monzogranite to granodiorite, in the northern portion. Based on the mapping, the proposed Project area is located on an uplifted block north of the Wildomar Fault.

Knecht maps the surface soils as *AtC2*, *AtD2*, *MmB*, *MnD2*, *MnE3*, *PID*, *RnD2*, and *RnE3*. The *AtC2* and *AtD2* soil belong to the Arlington and Greenfield Series. These soils are found on terraces and ridges and in concave areas where dissected terraces and alluvial fans merge and are commonly eroded. The *MmB*, *MnD2*, and *MnE3* soils belong to the Monserate Series, which form on terraces and old alluvial fans composed predominantly of granitic material. The *PID* soils belong to the Placentia Series. They develop on alluvial fans and terraces in alluvium derived mainly from metasedimentary sandstones. The *RnD2* and *RnE3* soils belong to the Ramona and Buren Series. These soils form on old dissected terrace deposits.

#### 3. Field Survey

The field survey produced negative results for any indication of paleontological resources, and no surficial evidence of fossil remains or potentially fossiliferous sediments were encountered. As mentioned above, the surface soils in most of the proposed Project area have been disturbed in the past by disking and various construction activities. Consequently, no intact paleontological deposits are likely to survive in the surface soils, and none were observed.

#### Discussion

The results of the records searches and the literature research indicate that the proposed Project area is located upon outcrops of the Pleistocene-age Pauba Formation, which has uplifted along the north flank of the Wildomar Fault Zone. Sediments of this group have produced a number of vertebrate and some invertebrate fossils during construction monitoring on properties located approximately 3-5 miles to the southeast of the proposed Project area and throughout the region. Based on these findings, the proposed Project area is assigned a high potential to contain nonrenewable paleontological remains.

CEQA guidelines (Title 14 CCR App. G, Sec. V(c)) require that public agencies in the State of California determine whether a proposed Project would "directly or indirectly destroy a unique paleontological resource" during the environmental review process. The present Paleo Report, conducted in compliance with this provision, is designed to identify any significant, non-renewable paleontological resources that may exist within or adjacent to the proposed Project area, and to assess the possibility for such resources to be encountered in future excavation and construction activities.

In summary of the research results presented above, the proposed Project's potential to impact paleontological resources has been determined to be high, especially for Pleistocene-age vertebrate fossils. Therefore, it is recommended that a paleontological resource impact mitigation program shall be implemented during the proposed Project to prevent such impacts or reduce them to a level less than significant. With the incorporation of Mitigation Measures **CUL-7** through **CUL-9**, any proposed Project impacts can be reduced to a less than significant level.

#### d) Disturb any human remains, including those interred outside of formal cemeteries? Less Than Significant Impact With Mitigation Incorporated

Neither the City nor the County have records of the proposed Project site containing any previously identified formal or informal cemetery. Although there are no known archaeological resources on the proposed Project site, in the event human remains are encountered during ground-disturbing activities, mitigation measures (**CUL-1** through **CUL-6**) identified below would reduce any impacts to a level of less than significant. No additional mitigation is required.

#### **STANDARD CONDITIONS & REQUIREMENTS**

None.

#### **MITIGATION MEASURES**

**CUL-1** Prior to any ground-disturbing activity, the Project applicant(s) shall include the following wording in all construction contract documentation:

If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery and significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director and a qualified, neutral archeologist hired by the applicant and the Tribe for decision. The Planning Director and shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the appropriate Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar Planning Commission and/or City Council. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique, mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

*Timing/Implementation:* As a condition of project approval, and implemented during ground-disturbing construction activities.

*Enforcement/Monitoring:* City of Wildomar Building and Planning Departments.

**CUL-2** At least 30 days prior to seeking a grading permit, the Project applicant(s) shall contact the appropriate Tribe<sup>3</sup> to notify the Tribe of grading, excavation, and the adopted monitoring program and to coordinate with the City of Wildomar and the Tribe to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for Tribal

<sup>&</sup>lt;sup>3</sup> The appropriate Tribe will be selected from the list of Tribal representatives provided by the Native American Heritage Commission.

monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

*Timing/Implementation:* Prior to the issuance of a grading permit.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

**CUL-3** Prior to any authorizing ground-disturbing activity, the Project applicant(s) shall include the following wording on all construction contract documentation:

If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

*Timing/Implementation:* As a condition of Project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

**CUL-4** The landowner shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts that are found on the Project site, to the appropriate Tribe for proper treatment and disposition as defined by the appropriate Tribe.

*Timing/Implementation:* As a condition of Project approval, and implemented during ground-disturbing construction activities.

*Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments.

**CUL-5** All sacred sites, should they be encountered within the Project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the appropriate culturally affiliated Native American Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

*Timing/Implementation:* As a condition of Project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

**CUL-6** To address the possibility that cultural resources may be encountered during grading or construction, in addition to Tribal monitors, a qualified professional shall monitor all construction activities that could potentially impact archaeological and/or paleontological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources.

*Timing/Implementation:* As a condition of Project approval, and implemented during ground-disturbing construction activities.

*Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.* 

**CUL-7** A qualified paleontologist or paleontological monitor shall monitor all mass grading and excavation activities in areas identified as likely to contain paleontological resources. Monitoring will be conducted in areas of grading or excavation in undisturbed outcrops of the Pleistocene-age Pauba Formation, as well as where over-excavation of surficial alluvial sediments will encounter these formations in the subsurface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.

*Timing/Implementation:* As a condition of Project approval, and implemented during ground-disturbing construction activities.

*Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments.

- **CUL-8** Recovered specimens shall be prepared to a point of identification and permanent preservation, including screen-washing of sediments to recover small invertebrates and vertebrates if necessary.
  - *Timing/Implementation:* As a condition of project approval, and implemented during ground-disturbing construction activities.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.

**CUL-9** Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur (e.g., the Western Center for Archaeology and Paleontology Museum on Searl Parkway in Hemet, California).

*Timing/Implementation:* As a condition of project approval, and implemented during ground-disturbing construction activities.

*Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments.* 

#### 6. GEOLOGY AND SOILS.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul> <li>a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</li> </ul>				
<ul> <li>Rupture of a known earthquake fault, as delineated on the most recent Alquist- Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault?</li> </ul>			~	
ii) Strong seismic ground shaking?			$\checkmark$	
iii) Seismic-related ground failure, including liquefaction?			$\checkmark$	
iv) Landslides?				$\checkmark$
b) Result in substantial soil erosion or the loss of topsoil?			$\checkmark$	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			$\checkmark$	
<ul> <li>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</li> </ul>			$\checkmark$	
<ul> <li>e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?</li> </ul>				~

#### DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Geologic* Hazards Evaluation and Updated Preliminary Geotechnical/Fault Investigation, Proposed 9-Acre Medical ad Education Center Development and Associated 29.4-Acre Tentative Parcel Map 36492, Located East of Yamas Drive, South of Clinton Keith Road and West of Elizabeth Lane in the City of Wildomar, Riverside County, California, prepared by LGC, dated August 24, 2012 (Geo Study), and is contained Appendix F, of the enclosed CD.

a) i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? <u>Less Than Significant Impact</u>

The proposed Project is located within seismically active Southern California (Seismic Zone 4) and is expected to experience occasional strong ground motions from earthquakes caused by both local and regional faults. According to the Geo Study, based on a review of published and unpublished geologic/geotechnical maps and literature pertaining to the proposed Project site and regional geology, the closest active faults are the Elsinore-Temecula Fault located approximately 3.0 miles from the proposed Project site and the Elsinore-Glen Ivy Fault located approximately 7.8 miles from the proposed Project site. Other active faults, within 20 miles of the proposed Project site are the Elsinore-Julian Fault, approximately 19.6 miles; and the San Jacinto Fault, approximately 20 miles. These faults are capable of producing a moderate to strong magnitude earthquake.

The Geo Study indicates that no faults (active, potentially active, or inactive) are known to traverse through the proposed Project site, based on review of geologic literature and aerial photographs, as well as geologic mapping. The site does not lie within an Alquist-Priolo Earthquake Fault Hazard Zone as defined by the State of California in the Alquist-Priolo Earthquake Fault Hazard Zoning Act or a Riverside County Fault Zone. The possibility of damage due to ground rupture is considered negligible since active faults are not known to cross the proposed Project site.

As there is no evidence of a known fault on the proposed Project site, the proposed Project would not expose people or structure to potential substantial adverse effects associated with ground rupture and this would be considered a less than significant impact.

#### ii) Strong seismic ground shaking? <u>Less Than Significant Impact</u>

Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the Southern California region, which may affect the proposed Project site, include soil liquefaction and dynamic settlement. Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. According to the Geo Study, the potential for liquefaction is considered remote.

Other secondary seismic effects include shallow ground rupture, and seiches and tsunamis. In general, these secondary effects of seismic shaking are a possibility throughout the Southern California region and are dependent on the distance between the site and causative fault, and the on-site geology. According to the Geo Study, ground rupture due to active faulting is not likely on-site due to the absence of known active fault traces. Cracking due to shaking from distant seismic events is not considered a significant hazard, although it is a possibility at any time. Based on the elevation of the development at the proposed Project site with respect to sea level, and its distance from large, open bodies of water, the potential of seiche and/or tsunami are considered to be negligible.

Completion of a geotechnical soils report and compliance with the California Building Code will minimize the potential for damage associated with strong seismic ground shaking and reduce any impacts to a less than significant level. This is a standard condition and is not considered unique mitigation under CEQA. Impacts will remain less than significant. No additional mitigation is required.

#### iii) Seismic-related ground failure, including liquefaction? Less Than Significant Impact

Please reference the discussion in Response 6.a.ii, above. To address any potential impacts from other seismic-related ground failure, including liquefaction, compliance with the standard requirements contained in the California Building Code are expected to reduce the impacts associated with ground failure hazards to a less than significant level. No additional mitigation is required.

#### iv) Landslides? <u>No Impact</u>

According to the Geo Study, review of geologic literature and aerial photographs, as well as geologic mapping and previous field exploration does not indicate the presence of landslides on, or directly adjacent to, the proposed Project site. Based on this information, no impacts are anticipated. No mitigation is required.

#### b) Result in substantial soil erosion or the loss of topsoil? <u>Less Than Significant Impact</u>

Soil erosion may result during construction, as grading and construction can loosen surface soils and make soils susceptible to effects of wind and water movement across the surface. The City routinely requires the submittal of detailed Erosion Control Plans with any grading plans. The implementation of this standard requirement is expected to address any erosion issues associated with the future grading of the site. As a result, these impacts are considered to be less than significant with the implementation of the necessary erosion and runoff control measures required as part of the approval of a grading plan. No additional mitigation is required.

## c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? <u>Less Than Significant Impact</u>

Please reference the discussion in Response 6.a.ii, above. To address any potential impacts as a result of being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, compliance with the standard requirements contained in the California Building Code are expected to reduce the impacts associated with ground failure hazards to a less than significant level. No additional mitigation is required.

## d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? <u>Less Than Significant Impact</u>

According to the Geo Study, the majority of the proposed Project site is underlain by 2 feet to 15 feet of potentially compressible undocumented artificial fill, young alluvium and very weathered bedrock, which may be prone to potential intolerable post-grading settlement and/or hydroconsolidation, under the surcharge of the development proposed structural loads and/or fill loads. It is recommended that these materials be overexcavated to underlying bedrock.

Any development proposed on the site is required to comply with the California Building Code and commonly accepted engineering practices, which require special design and construction methods for dealing with expansive and unstable soil behavior. Compliance with recommendations included

in the soils report that is required prior to issuance of a grading plan, as well as with applicable building codes, would ensure that soils at development sites would be capable of supporting the structures resulting from the proposed Project. This compliance would reduce impacts resulting from expansive and unstable soils to a less than significant level. No additional mitigation is required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? <u>No Impact</u>

The proposed Project does not propose the use or construction of septic tanks or alternative wastewater disposal systems. No impacts are anticipated. No mitigation is required.

#### **STANDARD CONDITIONS & REQUIREMENTS**

- 1. All grading shall conform to the California Building Code, Ordinance 457, and all other relevant laws, rules, and regulations governing grading in the City of Wildomar. Prior to commencing any grading which includes 50 or more cubic yards, the developer shall obtain a grading permit from the Building Department.
- 2. Erosion control-landscape plans, required for manufactured slopes greater than 3 feet in vertical height, are to be signed by a registered landscape architect and bonded per the requirements of Ordinance 457 (refer to dept. form 284-47). Planting shall occur within 30 days of meeting final grades to minimize erosion and to ensure slope coverage prior to the rainy season. The developer shall plant and irrigate all manufactured slopes steeper than a 4:1 (horizontal to vertical) ratio and 3 feet or greater in vertical height with grass or ground cover; slopes 15 feet or greater in vertical height shall be planted with additional shrubs or trees or as approved by the City Engineer.
- 3. Prior to the issuance of a grading permit, the developer shall submit a geotechnical soils reports to the City Engineer for review and approval prior to issuance of grading permit. All grading shall be in conformance with the recommendations of the geotechnical/soils reports as approved by the City of Wildomar.

#### **MITIGATION MEASURES**

None.

#### 7. GREENHOUSE GAS EMISSIONS.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			$\checkmark$	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			$\checkmark$	

#### DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Air Quality and Greenhouse Gas Impact Analysis for the Rancon Medical Educational Center Plot Plan No. 36492, City of Wildomar,* prepared by Albert A. Webb Associates, dated February 13, 2013, Revised July 17, 2013, Revised October 18, 2013 (AQ/GHG Analysis), and is contained Appendix B, of the enclosed CD. Please refer to the AQ/GHG Analysis in Appendix B for a detailed discussion of the federal, state and regional regulatory setting. The discussion below will center on the short- and long-term emissions analysis. Even though the following analysis, below, concludes that the Project has less than significant greenhouse gas Emissions impacts and no mitigation is required, the Project applicant has agreed to implement certain measures to further reduce the Project's greenhouse gas impacts. Therefore, mitigation measure **GHG-1**, though not legally required, has been incorporated into this document. This "mitigation measure" is voluntary and not legally required since the analysis shows that proposed Project's impacts, described below, have no significant impacts.

a,b) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or, conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? <u>Less Than Significant Impact</u>

#### Methodology

At this time, there are no adopted numeric thresholds that govern the determination of the significance of the Project's GHG emissions. This analysis in the AQ/GHG Analysis used the AB 32 reduction target as a significance threshold, which called for the state to achieve 1990 levels of GHG emissions by 2020. This equates to a 28.5 percent reduction in GHG emissions. The AQ/GHG Analysis's methodology is to compare the Project's GHG emissions as proposed to the Project's emissions if the Project were constructed before AB 32, which is often referred to as a Business-As-Usual (BAU) analysis.

Many aspects of the GHG estimates for the BAU analysis are similar to those analyzed for the proposed Project. BAU emissions for construction will be similar to those shown for the Project, as the same Project footprint will be disturbed. Therefore, construction under the BAU analysis is assumed to be equivalent to that of the Project and was not modeled separately. BAU emissions

for the remaining sources of GHG emissions were estimated using CalEEMod and are similar to the GHG estimates for the Project with the following exceptions:

- The energy-related GHG emissions were estimated according to the historical 2005 Title 24 standards.
- Mobile source emissions factors do not include the Pavley motor vehicle standards for cars and light trucks and the Low Carbon Fuel Standard (LCFS) for motor vehicle fuels;
- No adjustments were made for the water efficient landscape requirements in the City Municipal Code or the CalGreen code requirements that were not in effect at the time AB 32 was passed.

#### **Emissions Estimates**

It should be noted that the release of GHG in general and  $CO_2$  specifically into the atmosphere is not of itself an adverse environmental affect. It is the affect that increased concentrations of GHG including  $CO_2$  in the atmosphere has upon the Earth's climate (i.e., climate change) and the associated consequences of climate change that results in adverse environmental affects (e.g., sea level rise, loss of snowpack, severe weather events). Although air quality modeling can estimate a project's incremental contribution of  $CO_2$  into the atmosphere, it is not feasible to determine whether or how an individual project's relatively small incremental contribution (on a global scale) might translate into physical effects on the environment. Since the Earth's climate is determined by the complex interaction of different components of the Earth and its atmosphere, it is not possible to discern whether the presence or absence of GHG emitted by the Project would result in any measurable impact that would cause climate change.

The following Project activities were analyzed below for their contribution to global GHG emissions:

#### Short-Term Analysis

#### **Construction-Related Activities**

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for the proposed Project. The CalEEMod estimate does not analyze emissions from construction-related electricity or natural gas. Construction-related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify. Life-cycle emissions associated with the manufacture of building materials are also not quantified in this analysis although they undoubtedly exist. Quantification was not attempted because of the large spatio-temporal variation in sources for building products used to construct the proposed Project and the consequent large uncertainty associated with the resulting emissions. For this reason, to attempt to quantify life-cycle emissions of materials would be speculative. This conclusion is consistent with recent guidance on quantification of emissions for commercial projects presented by the California Air Pollution Control Officer's Association guidance. *CEQA and Climate Change* (CAPCOA, p. 65).

Table 5.7-1, *Project Construction Equipment GHG Emissions*, summarizes the CalEEMod output results and presents the GHG emissions estimates for the proposed Project in metric tonnes per year (MT/yr) for  $CO_2$ ,  $CH_4$ ,  $N_2O$ , and  $CO_2E$  (GHG and ozone-depleting gases).

Year	Metric Tons per year (MT/yr)			
fear	CO2	CH₄	N <sub>2</sub> O	Total CO₂E
2013	332.35	0.03	0.00	333.03
2014	888.53	0.07	0.00	889.99
2015	1,026.99	0.08	0.00	1,026.76
2016	617.91	0.04	0.00	618.80
Total	2,827.01	0.23	0.00	2,868.58
Amortized Total				95.62

Table 5.7-1Project Construction Equipment GHG Emissions

Evaluation of Table 5.7-1, above indicates that an estimated 2,868.58  $MTCO_2E$  will occur from proposed Project construction equipment over the course of the estimated construction period. The draft SCAQMD GHG threshold Guidance document released in October 2008 (SCAQMD 2008b, p. 3-8) recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies. Therefore, the proposed Project's GHG emissions were spread evening over 30 years to yield and average of 95.62 MTCO\_2E/yr.

#### Long-Term Analysis

#### Area Source Emissions

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

#### Energy-Related Emissions

CalEEMod estimates the GHG emissions associated with building electricity and natural gas usage (non-hearth) for each land use type. Electricity and natural gas used in buildings is typically

generated at an off-site power plant which indirectly generates GHG emissions. The electricity intensity factor for the Project was modified to reflect the 2020 Renewable Portfolio Standard (RPS), which requires a 33 percent mix of renewable energy sources (see footnote #11 of the AQ/GHG Analysis). The default electricity intensity factor was used for the BAU.

The default energy usage values used in CalEEMod are based on the CEC sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies and reflect current 2008 Title 24 improvements (CalEEMod User's Guide, p. 30). The 2013 Title 24 standards were approved in May 2013 and take effect on January 1, 2014 and are 30 percent more efficient than the 2008 standards (see footnote #12 of the AQ/GHG Analysis). To reflect the 2013 Title 24 standards which the Project will be subject to, a 30 percent reduction was in energy usage was input in CalEEMod. In addition, the Project will install high-efficiency lighting throughout the Project as a design feature. A 40 percent reduction was input within CalEEMod to account for this design feature, which is conservative since Energy Star lighting is approximately 75 percent more efficient than traditional lighting (see footnote #13 of the AQ/GHG Analysis). The BAU scenario utilized historical 2005 Title 24 standards available within CalEEMod.

Table 5.7-2, *Annual Project Energy-Related GHG Emissions*, summarizes the GHG emissions estimates reported by CalEEMod for the proposed Project.

		Metric Tons per year (MT/yr)		
	CO2	CH₄	N <sub>2</sub> O	Total CO₂E
Project 2020				
Electricity	748.65	0.04	0.02	754.70
Natural Gas	886.16	0.00	0.00	86.69
Total	834.81	0.04	0.02	841.39
		BAU 2020		
Electricity	1,389.93	0.06	0.02	1,398.64
Natural Gas	121.24	0.00	0.00	121.97
Total	1,511.17	0.06	0.02	1,520.61

Table 5.7-2 Annual Project Energy-Related GHG Emissions

#### Mobile Source Emissions

CalEEMod estimates the annual GHG emissions from Project-related vehicle usage based on trip generation data contained in defaults or in Project-specific traffic analyses. The information provided in the Project-specific Traffic Study (*Traffic Impact Analysis Report, Tentative Parcel Map* 

*No. 36492* (TIA), prepared by Albert A. Webb Associates, dated February 2013, Revised July 15, 2013) was used for the Mobile Source Emissions analysis in the AQ/GHG Analysis. The GHG emissions estimated in CalEEMod for the Project include the Pavley motor vehicle standards for cars and light trucks and the Low Carbon Fuel Standard (LCFS) for motor vehicle fuels whereas the GHG emissions for the BAU scenario do not (see footnote #14 of the AQ/GHG Analysis).

Table 5.7-3, *Annual Project Mobile Source GHG Emissions*, shows the proposed Project's mobile source emissions.

Table 5.7-3
Annual Project Mobile Source GHG Emissions

	Metric Tons per year (MT/yr)			
Source	CO2	CH₄	N <sub>2</sub> O	Total CO₂E
Project 2020				
Mobile	3,196.48	0.14	0.00	3,199.32
BAU 2020				
Mobile	4,113.06	0.14	0.00	4,115.90

Solid Waste-Related Emissions

CalEEMod also calculates the GHG emissions associated with the disposal of solid waste into landfills based on default data contained within the model for waste disposal rates, composition, and the characteristics of landfills throughout the state. The waste generation rates and emission estimates were based on CalEEMod default factors. However, this analysis assumes that additional waste will be diverted from landfills through recycling, reduction in waste generated, and/or composting to meet the 2020 statewide goal of 75 percent waste diverted (see footnote #15 of the AQ/GHG Analysis). The BAU scenario assumes a solid waste diversion rate from landfills of 53 percent which is what was reported in 2006, the year AB 32 was passed (see footnote #16 of the AQ/GHG Analysis).

Table 5.7-4
Annual Project Waste-Related GHG Emissions

	Metric Tons per year (MT/yr)			
Source	CO2	CH₄	N <sub>2</sub> O	Total CO <sub>2</sub> E
Project 2020				
Solid Waste	35.93	2.12	0.00	80.52
BAU 2020				
Solid Waste	67.55	3.99	0.00	151.37

Table 5.7-4, Annual Project Waste-Related GHG Emissions, above, indicates that total proposed Project-related GHG emissions from solid waste disposal are estimated to be approximately 80.52 MTCO<sub>2</sub>E annually and 151.37 MTCO<sub>2</sub>E annually for the Project and BAU, respectively. Biogenic CO<sub>2</sub> emissions<sup>[1]</sup> (which equal the total CO<sub>2</sub> emissions in *Table 5.7-4, Annual Project Waste-Related GHG Emissions*) were not included when CARB analyzed the GHG emissions inventory under AB 32. Therefore, they are not included in the Project's total GHG emissions shown in *Table 5.7-6, Total Annual Project-Related GHG Emissions*, below.

#### Water-Related Energy Usage

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

There are three (3) processes necessary to supply potable water to urban users (i.e., residential, commercial, and industrial):

- (1) Supply and conveyance of the water from the source;
- (2) Treatment of the water to potable standards; and
- (3) Distribution of the water to individual users.

After use, the wastewater is treated and either reused as reclaimed/recycled water or returned to the environment (CEC 2005, p. 21). CalEEMod calculates the GHG emissions from these processes based on default emissions factors and water/wastewater generation rates for a project's location. Default values were used for electricity intensity factor associated with the supply and conveyance of water from its source which assumes that the water is being imported from northern California.

The Project's indoor water use was reduced by 20 percent to account for the mandatory reduction outlined in the CalGreen code (CalGreen, p. 30). Outdoor water use from the Project will also be reduced as a result of Project compliance with the water efficient landscape ordinances enforced

<sup>&</sup>lt;sup>[1]</sup> <u>Biogenic emissions are emissions from natural sources, such as plants and trees.</u>

by the City under Municipal Code Section 17.276 (WMC) which requires a 30 percent reduction. Since neither of these requirements was in place when AB 32 was passed, the BAU scenario assumed no reductions were taken for indoor or outdoor water use.

The following table shows the GHG emissions from water-related energy usage for the Project and BAU.

Source	Metric Tons per year (MT/yr)			
	CO2	CH₄	N <sub>2</sub> O	Total CO₂E
Project 2020				
Water-Related Energy	223.67	1.63	0.05	271.88
BAU 2020				
Water-Related Energy	375.84	2.04	0.06	436.20

 Table 5.7-5

 Annual Project Water-Related GHG Emissions

Total Project GHG Emissions

As shown in Table 5.7-6, *Total Annual Project-Related GHG Emissions*, using all the emissions quantified above, the total GHG emissions generated from the Project is approximately 4,453 MTCO<sub>2</sub>E per year which includes construction-related emissions amortized over a typical project life of 30 years. The GHG emissions from the BAU scenario are approximately 6,252 MTCO<sub>2</sub>E per year. The table below indicates that the majority of GHG emissions are from vehicle use (mobile sources) followed by energy consumption.

As shown in Table 5.7-6, *Total Annual Project-Related GHG Emissions*, a comparison of the Project's GHG emissions in 2020 and the BAU GHG emissions corresponds to a 28.7 percent reduction. This achieves the 28.5 percent reduction target set by AB 32.

## Table 5.7-6Total Annual Project-Related GHG Emissions

	Metric Tons per year (MT/yr)		
Source	Project 2020	BAU 2020	
Amortized Construction	95.62	95.62	
Energy	841.39	1,520.61	
Mobile	3,199.32	4,115.90	
Solid Waste	44.59	83.83	
Water	271.88	436.20	
Total	4,452.80	6,252.16	
Percent Reduction from BAU	28.7		

#### Conclusion

The above analysis indicates that the proposed Project along with its design feature of high efficiency lighting and the implementation of statewide GHG reduction measures would result in a 28.7 percent reduction compared to the BAU emissions level, which achieves the AB 32 reduction target of 28.5 percent. Therefore, the Project has demonstrated compliance with AB 32 and no additional analysis or mitigation is required.

Regarding compliance with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHG, the City does not currently have an adopted plan (e.g., Climate Action Plan, or GHG reduction plan) for the purposes of reducing GHG emissions. Although there are no plans or policies at the local level, the CARB Scoping Plan is applicable at the state level. As described above, beginning on page 24, AB 32 directed CARB to adopt the Scoping Plan for achieving GHG reductions.

Project consistency with the applicable measures in the Scoping Plan is shown in Table 5.7-7, CARB Scoping Plan Measure Project Comparison. Most of the reduction measures are not applicable to the Project and were not listed. The Project is consistent with the feasible measures. Examples of inapplicable measures include the California Cap-and-Trade Program, Industrial Emissions, High-Speed Rail, and Sustainable Forests.

The strategies listed in Table 5.7-7, *CARB Scoping Plan Measure Project Comparison*, as well as mitigation measures **AQ-1** and **AQ-2**, shall be required as mitigation measures for the proposed Project (mitigation measure **GHG-1**) to further reduce impacts to Greenhouse Gasses. The majority of these strategies are designed to apply to construction and operation of buildings. During the plot plan review process the City will determine which of the strategies described in Table 5.7-7, (as well as any that may occur subsequent to this document) should be applied to the

proposed Project. The City will apply the appropriate strategies at the time of building permit application. In addition, development on the proposed Project site would be subject to all future applicable regulatory requirements, which would also reduce the GHG emissions of the proposed Project.

Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	Consistent. These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. The Project will be compliant with the 2013 Title 24 standards, which become effective January 1, 2014.
Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard.	Consistent. These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Vehicle Efficiency Measures – Implement light- duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards and became mandatory in the 2010 edition of the Code (January 2011), on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The Project will be subject to these mandatory standards.

## Table 5.7-7CARB Scoping Plan Measure Project Comparison

High Global Warming Potential Gases –Adopt measures to reduce high global warming potential gases.	Consistent. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the Project that are required to comply with the measures will comply with the strategy.
Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	Consistent. The Project will be required to comply with the 75 percent waste reduction required in AB 341.
Water – Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. The Project will comply with all applicable section of the City's Municipal Code, including Section 17.276 (WMC).
Source: CARB Scoping Plan	•

#### **STANDARD CONDITIONS & REQUIREMENTS**

1. None.

#### MITIGATION MEASURES

**GHG-1** Prior to building permit approval, the City of Wildomar Planning Department shall require that the Project applicant implement the measures contained in Table 5.7-5, as well as mitigation Measures AQ-1 and AQ-2, to reduce short-term and long-term emissions of GHGs associated with construction and operation of the proposed Project.

*Timing/Implementation:* During Construction Activities and Project Operations.

*Enforcement/Monitoring: City of Wildomar Planning and Building Departments.* 

#### 8. HAZARDS AND HAZARDOUS MATERIALS.

	Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		$\checkmark$		
b)	Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		$\checkmark$		
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				~
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				~
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				~
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				~
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				$\checkmark$
h)	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				$\checkmark$

#### DISCUSSION

## a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? <u>Less Than Significant Impact with Mitigation Incorporated</u>

The Riverside County Environmental Health Department issues permits to and conducts inspections of businesses that use, store, or handle quantities of hazardous materials and/or waste

greater than or equal to 55 gallons or 500 pounds, or 200 cubic feet of compressed gas, at any time. The Riverside County Environmental Health Department also implements the Hazardous Material Management Plans (Business Emergency Plans) that include an inventory of hazardous materials used, handled, or stored at any business in Wildomar.

The proposed Project may create an additional possible hazard to the public or the environment through the routine transport, use or disposal of hazardous materials. During the construction phase, there is a potential for accidental release of petroleum products in sufficient quantity to pose a hazard to people and the environment. Prior to initiating construction, a Stormwater Pollution Prevention Plan will be approved by the City to address any construction-related spills or accidents. This requirement is included in Mitigation Measure **HAZ-1**. With Mitigation Measure **HAZ-1**, the proposed Project is not expected to result in a significant impact on the environment.

In addition, the proposed Project is located immediately adjacent to Clinton Keith Road. It is possible that an accident or spill may expose future building occupants to hazardous materials. However, the likelihood of this type of event is rare and it is not considered to be significant. In addition, some hazardous materials will be stored on the premises; however, those used are commonly associated with office, restaurant, and commercial retail development. No impacts are anticipated beyond those commonly associated with these types of developments. No additional mitigation is required.

There is the potential for upset of hazardous materials associated with medical uses on the proposed Project site. A hallmark of medical services in general, is the use of a variety of hazardous materials and the generation of hazardous waste in support of medical services. There are two potential sources of accidental release of hazardous or toxic substances from medical office operations and these two sources can occur under three different circumstances. The first source of an accidental release can occur during delivery of the hazardous materials. Such accident release can occur anywhere between the chemical storage location and the proposed facilities. The second source of an accidental release can occur within the medical office, but under conditions where the spill is contained within the medical offices and does not result in general exposure of the surrounding population. Finally, an accidental release can occur that could be released into the general environment where surrounding land uses and people may be affected.

The transport of hazardous materials and wastes is strictly controlled by the State of California. A regulatory structure has been created to respond to the accidental release of hazardous or toxic materials during transport. The change in circumstances from the existing environmental setting is that if the proposed Project is approved for implementation, future operations may require delivery of hazardous and toxic materials to the proposed Project site to support operations. Deliveries will be random and are expected to occur on a daily basis to support operations.

Each day our communities experience the delivery of a variety of hazardous or toxic materials, ranging from petroleum products (gasoline and diesel) to large gas canisters, such as chlorine for water and wastewater treatment plants and compressed natural gas (propane). The proposed project will add to the existing transport of hazardous and toxic materials entering the City of Wildomar. If a transport accident occurs, it may or may not be accompanied by an accidental release of the hazardous or toxic materials. Thus, a potential exists to experience an accidental release of medical-related hazardous or toxic materials to the local environment.

The key to determining whether this change in the environment represents a significant adverse impact is to assess whether this change represents a high probability of accidental release and whether such a release poses a significant hazard based on the known response capability to such an accident. Most of the medical office related hazardous material may be either solid, containerized (gas canisters), or stringently packaged (radioactive material). Based on these facts regarding the type and character of hazardous materials and the response capabilities of the City and regional agencies to a transport accident, the City finds that the potential for significant risk due transport is a less than significant impact to the environment from implementing the proposed Project.

Within the medical office building a potential for accidental release of hazardous material also exists. Mitigation measures are provided below (**HAZ-2** and **HAZ-3**) to ensure that a plan is implemented as part of medical office operations. The City finds that the potential for significant risk due to internal hospital/medical office use of hazardous and toxic materials will be less than significant, with implementation of the mitigation measures.

The final source of accidental release to the environment is from a release that would escape the medical offices into the surrounding environment. Because of the small quantities of solid and liquid hazardous materials at the site during operations, most of the medical office hazardous materials cannot escape to the surrounding environment. Mitigation is required to control the release of stored hazardous gases in canisters is identified below (HAZ-4). Based on the analysis presented in this section and with implementation of these mitigation measures, the City finds the potential for risk to the surrounding environment and population from an accidental release of hazardous substances within the medical offices is considered to be less than significant.

# b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment? <u>Less Than Significant Impact with Mitigation Incorporation</u>

The proposed Project may create a hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment; however, due to the quantity and nature of these materials, commonly associated with office, restaurant, and retail development, these impacts will be considered less than significant. No impacts are anticipated beyond those commonly associated with office, restaurant, and retail development measures are required. Please reference the discussion in 8.a., above, as it relates to potential upset and accidental conditions involving the release of hazardous materials into the environment as it pertains to medical offices. Impacts will be reduced to a less than significant level with mitigation incorporation.

### c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? <u>No Impact</u>

No existing or proposed schools are located within one-quarter mile the proposed Project site. Ronald Reagan Elementary School is located approximately 1-mile to the northwest of the proposed Project site. Donald Graham Elementary School is located on the west side of I-15, approximately 1.6 miles from the proposed Project site. Tovashal Elementary School is located southeasterly of the proposed Project site, approximately 1.4 miles away. Therefore, implementation of the proposed Project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impacts are anticipated. No mitigation is required.

# d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? <u>No Impact</u>

The proposed Project is not located on any hazardous materials site as designated by Government Code Section 65962.5. According to the *RMEC, LLC Phase I Environmental Study*, prepared by EnviroSoil, Inc., dated January 5, 2011, contained in Appendix G of this Initial Study, EnviroSoil, Inc. did not identify any current on-site environmental concerns in connection with the subject property. This review included all list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impacts are anticipated. No mitigation is required.

# e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? <u>No Impact</u>

The proposed Project site is not located within any airport land use plan. The closest public airport is French Valley Airport, which is located approximately 5.6 miles southeast of the proposed Project site. Given the distance between the proposed Project and the French Valley Airport, and since the proposed Project site is not within in the airport land use plan for the French Valley Airport, no impacts are anticipated from the proposed Project that would result in a safety hazard for people residing or working in the proposed Project area. No mitigation is required.

### f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? <u>No Impact</u>

The closest private airstrip to the proposed Project site is Skylark Field, which is located approximately 4.6 miles northwest of the proposed Project site. Based on this distance between Skylark Park and the proposed Project site, implementation of the proposed Project will not result in a safety hazard for people residing or working in the proposed Project area. No impacts are anticipated. No mitigation is required.

### g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? <u>No Impact</u>

Access to the proposed Project site is from Clinton Keith Road and Elizabeth Lane, which are currently improved and will be additionally improved through the implementation of the proposed Project, as well as future improvements to Bunny Trail, Lot "C," and Yamas Drive, which are currently unimproved/ non-existent. Development of the proposed Project will not require the closure or relocation of any roadways and operation of the proposed Project is not expected to interfere with access to any roadways. Therefore, the proposed Project will have no impact on any plans for emergency evacuation. No mitigation is required.

## h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? <u>No Impact</u>

According to the Riverside County Land Information System (2013), the proposed Project site is not located in the High Wildfire Zone area. These areas are more often found in more rural areas of Riverside County. The purpose of the wildland fire hazard area designation is to address safety concerns in potentially dangerous wildland fire areas. Since the proposed Project site is located outside the High Wildfire Zone area, development on the proposed Project site would not expose people or structures to a significant risk of loss, injury, or death involving wildland fire. No impacts are anticipated and no mitigation is required.

#### **STANDARD CONDITIONS & REQUIREMENTS**

1. As required by existing ordinance 8.56, subsequent development on the site will need to comply with the County of Riverside, Department of Environmental Health, Local Enforcement Agency (LEA) for all activities related to potential hazardous materials.

#### MITIGATION MEASURES

**HAZ-1** All spills or leakage of any hazardous products, including petroleum products, during construction and operational activities shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure shall be incorporated into the Stormwater Pollution Prevention Plan prepared for the Project development.

*Timing/Implementation: Prior to the issuance of a grading permit.* 

*Enforcement/Monitoring: City of Wildomar Engineering Department.* 

**HAZ-2** Prior to the certificate of occupancy for a medical office use, a Hazardous Materials and Waste Management Plan shall be submitted to the City for review and retention. This Plan shall be implemented by the medical offices (where hazardous substances are used) and annually a report of any accidental releases of hazardous substances, impacts to the environment or humans, and the management actions taken to control and remediate such spills shall be submitted to the City.

*Timing/Implementation: Prior to the issuance of a building permit.* 

Enforcement/Monitoring: City of Wildomar Building and Safety Department.

**HAZ-3** As part of a Business Plan submitted to the City of Wildomar Fire Department, the medical offices that handle hazardous materials shall include copies of Material Safety Data Sheets for the hazardous substances (other than medications) utilized by the facility(ies).

*Timing/Implementation: Prior to the issuance of a building permit.* 

Enforcement/Monitoring: City of Wildomar Building and Safety Department and Fire Departments.

**HAZ-4** Any storage facility for gas canisters containing hazardous or toxic substances shall be enclosed and capable of containing any accidental releases of gas. A warning device shall be incorporated into the design of the gas storage containment facility that is capable of identifying accidental releases. Venting of any released gases shall be accomplished without creating hazards for the surrounding environment or population. Any leaks shall be reported immediately to the City Fire Department as well as other regulatory agencies that are in the reporting chain.

*Timing/Implementation: Prior to the issuance of a building permit.* 

Enforcement/Monitoring: City of Wildomar Building and Safety Department and Fire Departments.

#### 9. HYDROLOGY AND WATER QUALITY.

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

#### DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Preliminary On-Site Hydrology for Rancon Medical and Educational Center, Tentative Parcel Map 36492, Plot Plan for Parcels 1, 2, 3 and* 13, prepared by Albert A. Webb Associates, dated September 2012 (Hydrology Report), and the *Project-Specific Preliminary Water Quality Management Plan (WQMP), Rancon Medical and Educational Center (RMEC), Tentative Parcel Map 36492, Plot Plan for Parcels 1, 2, 3 and 13,* prepared by Albert A. Webb Associates, dated September 2012 (WQMP), *Rancon Medical and Educational Center (RMEC), Tentative Parcel Map 36492, Plot Plan for Parcels 1, 2, 3 and 13,* prepared by Albert A. Webb Associates, dated September 2012 (WQMP). The Hydrology Report is contained Appendix H, and the WQMP is contained Appendix I, of the enclosed CD. Please refer to the WQMP for detailed information on hydrologic conditions of concern, Best Management Practices (BMPs), operation and maintenance responsibility for treatment control BMPs, and funding. Please refer to the Hydrology Report for detailed information on hydrological data, hydrology results, and methodologies.

#### a) Violate any water quality standards or waste discharge requirements? <u>Less Than Significant</u> <u>Impact with Mitigation Incorporated</u>

The storm water for the proposed Project will discharge into a natural channel that meanders in a southerly direction for approximately 3 miles until joining with Murrieta Creek. Murrieta Creek then runs in a southeasterly direction for approximately 9 miles until it joins with Temecula Creek to form the Santa Margarita River. The Santa Margarita River continues in a southwesterly direction for approximately 29.2 miles until forming the Santa Margarita Lagoon and outfalling into the Pacific Ocean near Camp Pendleton (San Diego County). Murrieta Creek (Channel), the Santa Margarita River, as well as the Santa Margarita Lagoon are all on the federal 303(d) list of impaired water bodies. Listing a water body as impaired in California is governed by the Water Quality Control Policy for developing California's Clean Water Act Section 303(d) Listing Policy. The State and Regional Water Boards assess water quality data for California's waters every two years to determine if they contain pollutants at levels that exceed protective water quality criteria and standards. This biennial assessment is required under Section 303(d) of the Federal Clean Water Act.

Potential pollutants from both Phases of the proposed Project (which may potentially include: an industrial park uses, medical offices, commercial retail, a restaurant, and associated parking areas), would be sediment/turbidity, nutrients, organic compounds, trash/debris, oxygen demanding substances, pathogens (bacteria & viruses), oil and grease, pesticides, and metals.

The on-site runoff from the proposed Project site will ultimately flow through Murrieta Creek and the Santa Margarita River. These two water bodies do not meet water quality standards associated with their beneficial uses and are impaired by nutrients, oxygen demanding substances, pathogens (bacteria & viruses), and metals. Therefore, treatment controls BMPs, with a medium to high effectiveness for treating these pollutants of concern, will be incorporated into the proposed Project design. In addition, Mitigation Measure HYD-1 requires the preparation and implementation of a SWPPP and WQMP for all Phases of development. BMPs will be an integral component of the SWPPP and WQMP.

The following types of wastes are expected to be generated from the developed condition:

- Oil and grease from trucks and cars and other automotive fluids;
- Pesticides, herbicides, and fertilizers in landscaped areas;

- Food waste from restaurant;
- Trash; and
- Medical waste.

Lastly, the proposed Project site has historically been used for agriculture. Nutrients are the most common pollutant associated with this practice. However, since nutrients are an existing "pollutant of concern", future treatment control BMPs will address this issue, as contained in Mitigation Measure **HYD-1**.

The proposed Project is required to prepare a stormwater pollution and prevention plan (SWPPP) to be administered during and post construction. The SWPPP incorporates best management practices (BMPs) to ensure that potential water quality impacts are minimized. BMPs typically include vegetative cover, silt fencing, regular watering of the soil, sedimentation areas, covering of the soil, etc. Each set of BMPs is written specifically for the project for which the SWPPP is required. The SWPPP is submitted to the Regional Water Quality Control Board and to the City for review, and a copy of the SWPPP must be kept accessible on the proposed Project site at all times.

Future development associated with the proposed Project would be subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Stormwater Permit No. R9-2010-0014, which requires that the City impose water quality and watershed protection measures for all development projects and prohibits discharges from causing violations of applicable water quality standards or from resulting in conditions that create a nuisance or water quality impairment in receiving waters. A key component of the NPDES permit is the implementation of the Areawide Urban Runoff Management Program for the City, which includes the requirement of stormwater quality treatment and/or BMPs in project design for both construction and operation for new development.

The proposed Project will also be required to submit to the City for review and approval of a new or modified Water Quality Management Plan (WQMP) that identifies specific BMPs and other measures necessary to protect water quality for all Phases of development. The preliminary WQMP included as Appendix J is designed to address construction 11.62 acres for the commercial development of Parcels 1, 2, 3, and 13 of Tentative Parcel Map 36492 (APN: 380-250-022) and Plot Plan for Parcels 1, 2, 3, and 13.

Mitigation Measure **HYD-1** has been included, requiring a SWPPP and WQMP for all Phases of development. Therefore, the any development on the proposed Project site is not expected to violate any water quality standards, waste discharge requirements, or have a significant impact on the environment after mitigation is incorporated.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? <u>Less Than Significant Impact</u>

The proposed Project will modify on-site local drainage patterns and absorption rates; however, these modifications will be incorporated into an existing drainage system. The description of the on-and off-site drainage system is discussed below in Response 9.c. Due to the nature and design

of the proposed Project, implementation of the proposed Project will 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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). While there will be an increase in the amount of impervious surfaces as a result of implementation of the proposed Project, any impacts from this increase will be off-set through the use of on-site detention and retention, which is included in the proposed Project design. Any impacts are considered less than significant. No mitigation is required.

# c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? <u>Less Than Significant Impact with Mitigation Incorporated</u>

Off-site flows, north of Clinton Keith Road, enter the site at two locations along Clinton Keith Road. One location is in the extreme northwest corner of Parcel 1. Here, four 48" Reinforced Concrete Pipes (RCPs) convey flows under Clinton Keith Road to a natural channel that continues southwesterly until joining Murrieta Creek. Also, there is a 24" Corrugated Metal Pipe (CMP) that conveys street flows from an Asphalt Concrete (AC) curb/spillway along Clinton Keith Road. The other location is approximately 350' south of the northeast corner. At this location, flows are conveyed through a basin just east of Elizabeth Lane into a 60" RCP that crosses under Elizabeth Lane and outlets into a natural channel. This channel meanders in a southerly direction until joining Murrieta Creek. In addition, flows from the adjacent mini-storage building and parking area to the east confluence with this channel and enter the site at two locations. The first location is at a low point in Elizabeth Lane where a catch basin with 24" RCP to the east street side and a curb opening to the west street side convey street flows and outlet midway along the eastern boundary of the site into this natural channel. The second location is approximately 250' north of the intersection of Elizabeth Lane and Bunny Trail where a 30" RCP culvert outlets into the natural channel. Once the combined flows exit the site, they continue in natural channels for approximately 3 miles until they join Murrieta Creek.

On-site flows presently drain towards three meandering natural drainage courses. The north-west area of the Plot Plan site (2.1 acres) drains into Stream 3, where the existing four 48" RCPs under Clinton Keith Road outlet. The mid-area of the site consists of 3.3 acres and drains into the natural Stream 2. The easterly site area drains into the natural Stream 1 where the proposed Plot Plan for Parcels 1, 2, 3 and 13 will drain to during the post-developed conditions.

The proposed on-site storm drain system and drainage design will maintain these existing flows by the following:

- The existing four 48" RCP culverts in the northwest corner that run under Clinton Keith Road will be extended under the widened southern half of the road, maintaining existing flows with no impact downstream. The site grading proposes that the north-west portion of 0.6 acres drains to Stream 3 in a manner that the proposed condition flows do not exceed existing condition flows generated from the 2.1 acres.
- Near the above mentioned culverts, an AC spillway inlet into a 24" CMP will be replaced with a catch basin along with the street improvement widening.

- The existing 60" RCP that carries flows from north side of Clinton Keith Road will be extended approximately 400 lineal feet and outlet back into the natural drainage channel approximately 150' south of the most southerly drive entrance from Elizabeth Lane.
- An existing catch basin at a low point along the east side of Elizabeth Lane that directly discharges into a natural channel will join the above mentioned 60" RCP, as well as a proposed catch basin directly on the west side of Elizabeth Lane.
- The existing 30" RCP that carries flows from the adjacent mini-storage facility will be extended approximately 200 lineal feet and join a culvert that will be built under Bunny Lane.
- A 40' long culvert will be built under Bunny Lane to allow storm water to continue flowing in a southerly direction as it currently does.
- An on-site drainage system is proposed to capture the on-site flows and convey them to the proposed water quality/detention basin.
- Detention basins will be constructed at the outlet locations for each stream subareas to mitigate the increased runoff from the post-developed site conditions and release measured flows into the natural streams with no adverse impact downstream. For preliminary purposes, the basins are sized for the differences between the volumes of the 10-year, 24-hour pre- and post-developed conditions storm events. The 100-year events will bypass through.

A detention basin will be constructed in the southeast corner of Parcel 13 to mitigate the increased runoff from the post-developed parcels 1, 2 and 3 proposed Project site and release measured flows into the natural Stream 1 with no adverse impact downstream. The proposed basin will serve dual purpose as being a water quality sand filtration basin and a detention mitigation basin. The 2-year, 24-hour and the 10-year, 24-hour storm events were mitigated through the basin which is sufficient to prove the basin capacity. The 100-year events will bypass through. The proposed basin outlet structure will have orifices to restrict the 2- and the 10-year flows and a weir on top of the structure for bypassing the 100-year flows. The post development flows for the 2 and 10 year storms will be no greater than pre-development flows.

Based upon the results of the Hydrology Report, it is concluded that the proposed facilities will adequately provide drainage conveyance in accordance with a 100-Year design storm event. The proposed facilities, with adequate maintenance, will convey flows safely through the region in accordance with Riverside County Flood Control and Water Conservation District requirements for drainage conveyance and without an impact upon the existing storm drain improvements.

As discussed above, all Phases of the proposed Project will require preparation of a stormwater pollution and prevention plan (SWPPP), which will incorporate BMPs to ensure that potential water quality impacts are minimized. The SWPPP is required to include a counter-measure plan describing measures to ensure proper collection of sedimentation produced on the site. Mitigation Measure **HYD-1** has been included, requiring a SWPPP and WQMP for all Phases of development. Therefore, the any development on the proposed Project site is not expected to substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site after mitigation is incorporated.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site? <u>Less Than Significant</u> <u>Impact with Mitigation Incorporated</u>

Please reference the discussion in 8.c, above. Impacts are considered less than significant with mitigation incorporated.

# e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? <u>Less</u> <u>Than Significant Impact with Mitigation Incorporated</u>

While the proposed Project will result in both immediate and future increases in runoff water, these increases will be adequately conveyed via the improvements proposed by mitigation measure **HYD-1**. The proposed Project will be required to prepare a WQMP and a SWPPP that will include BMPs designed to reduce and manage increases in runoff water at the site. With the incorporation of mitigation, proposed Project impacts will be reduced to a less than significant level. No additional mitigation measures are required.

#### f) Otherwise substantially degrade water quality? <u>Less Than Significant Impact with Mitigation</u> <u>Incorporated</u>

The proposed Project and/or future development associated with the proposed Project would not otherwise substantially degrade water quality. All development on the proposed Project site would be subject to the requirements of the NPDES Stormwater Permit No. R8-2010-0033, which requires that the City impose water quality and watershed protection measures for all development projects and prohibits discharges from causing violations of applicable water quality standards or from resulting in conditions that create a nuisance or water quality impairment in receiving waters. A key component of the NPDES permit is the implementation of the Area-wide Urban Runoff Management Program for the City, which includes the requirement of stormwater quality treatment and/or BMPs in project design for both construction and operation for new development.

Implementation of Mitigation Measure **HYD-1** would condition future development to prepare and comply with the requirements of the SWPPP and final Water Quality Management Plan, which would ensure that significant water quality impacts and violations of standards and requirements do not occur. With the incorporation of mitigation, proposed Project impacts will be reduced to a less than significant level. No additional mitigation measures are required.

#### g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map? <u>No Impact</u>

The proposed Project would not result in the development of housing on the proposed Project site. According to the Riverside County Land Information System (2013), the proposed Project site is not located within a 100-year flood hazard. Therefore, the proposed Project would not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map. No impacts are anticipated. No mitigation is required.

### h) Place within 100-year flood hazard area structures which would impede or redirect flood flows? <u>No Impact</u>

The proposed Project does not propose to impede or redirect any flood flows. The proposed Project site is located outside of the 100-year flood hazard area. No impacts are anticipated. No mitigation is required.

## i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? <u>No Impact</u>

According to Figure 11 of the Elsinore Area Plan, the proposed Project site is located outside of the inundation area of Lake Elsinore. No impacts are anticipated. No mitigation is required.

#### j) Inundation by seiche, tsunami, or mudflow? <u>No Impact</u>

The proposed Project site is not located in an area that is subject to seiches, mudflows, or tsunamis. No impacts are anticipated. No mitigation is required.

#### **STANDARD CONDITIONS & REQUIREMENTS**

None.

#### **MITIGATION MEASURES**

HYD-1 Prior to the approval of the grading permit on the proposed Project site, the Project applicant(s) shall be required to prepare a stormwater pollution and prevention plan (SWPPP) consistent with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2010-0014-DWQ), which is to be administered through all phases of grading and proposed Project construction. The SWPPP shall incorporate best management practices (BMPs) to ensure that potential water quality impacts during construction phases are minimized to below a level of significance. The SWPPP shall be submitted to the Regional Water Quality Control Board and to the City of Wildomar for review. A copy of the SWPPP must be kept accessible on the proposed Project site at all times. In addition, the Project applicant(s) will be required to submit, and obtain City approval of, a Water Quality Management Plan prior to the issuance of any building or grading permit for future development on the proposed Project site in order to comply with the Areawide Urban Runoff Management Program. The proposed Project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. Site design BMPs shall include, but are not limited to, landscape buffer areas, on-site ponding areas, roof and paved area runoff directed to vegetated areas, and vegetated swales. Source control BMPs shall include, but are not limited to, education, landscape maintenance, litter control, parking lot sweeping, irrigation design to prevent overspray, and covered trash storage. Treatment control BMPs shall include vegetated swales and a detention basin, or an infiltration device.

*Timing/Implementation: Prior to the issuance of a building permit.* 

*Enforcement/Monitoring: City of Wildomar Engineering Department.* 

#### **10. LAND USE AND PLANNING.**

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul> <li>a) Physically divide an established community?</li> </ul>				$\checkmark$
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				$\checkmark$
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				$\checkmark$

#### DISCUSSION

#### a) Physically divide an established community? <u>No Impact</u>

The proposed Project site is located on the south side of Clinton Keith Road, west of Elizabeth Lane. The General Plan land use designations for the properties immediately adjacent to the proposed Project site are as follows:

- North: Open Space-Recreation (OS-R)
- South: Business Park (BP)
- Southwest: Very High Density Residential (VHDR)
- East: Business Park (BP)
- West: Business Park (BP)

The Wildomar General Plan land use designation for the proposed Project site is Business Park (BP). The land surrounding the proposed Project, with the exception of land across Clinton Keith Road to the north, which is physically separated from the proposed Project site contain Business Park (BP) land use designations. All Phase 1 and Phase 2 development of the proposed Project will be consistent with the General Plan land use designation. Only the parcel to the east of the proposed Project site, a self-storage use is currently developed. Based on these circumstances, the proposed Project will not physically divide an established community. No impacts are anticipated. No mitigation is required.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? <u>No Impact</u>

The proposed Project will serve to implement the vision, goals and policies of multiple Elements of the City's General Plan, including, but not limited to Chapter 3 (Land Use Element), Chapter 4 (Circulation Element), Chapter 6 (Safety Element), Chapter 7 (Noise Element), and Chapter 9 (Air Quality Element). As discussed in Section V.4 (Biological Resources) of this Initial Study, the proposed Project is consistent with the Riverside County Multiple Species Habitat Conservation Plan (MSHCP). As a result, implementation of the proposed Project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed Project (including, but not limited to the policies of the general plan, specific plan, local coastal program, or zoning ordinance) adopted to protect environmental resources. Any potential conflicts were anticipated in the General Plan and/or MHSCP. No impacts are anticipated. No mitigation is required.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan? <u>No Impact</u>

As stated above in Response 10.b., the City of Wildomar participates in the MSHCP. The MSHCP establishes areas of sensitivity considered criteria areas or cells. Projects outside of these areas can proceed consistent with the provisions of CEQA and are subject to payment of an MSHCP Mitigation Fee. This is a standard condition and not considered unique mitigation under CEQA. The MSHCP establishes procedures for the determination of sensitivity. The proposed Project is subject to the MSHCP but is outside of any criteria area or cell. The proposed Project will not conflict with any habitat conservation plan or natural community conservation plan. No impacts are anticipated. No mitigation is required.

#### **STANDARD CONDITIONS & REQUIREMENTS**

1. Prior to the issuance of a grading permit, the developer shall pay the regional impact mitigation fee established by the Riverside County MSHCP.

#### MITIGATION MEASURES

None.

#### **11. MINERAL RESOURCES.**

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				$\checkmark$
<ul> <li>b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?</li> </ul>				$\checkmark$

#### DISCUSSION

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state? <u>No Impact</u>

The proposed Project site is located within an area designated at MRZ-3 by the Wildomar General Plan. The proposed Project site is designated MRZ-3 (areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposits is undetermined). The proposed Project site has not known to have been mined in the past. Since the proposed Project site has not been used for mining, the proposed Project is not expected to result in the loss of availability of a known mineral resource in an area classified or designated by the State that would be of value to the region or the residents of the State. No impacts are expected from the proposed Project and no mitigation is required.

### b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? <u>No Impact</u>

There are no known locally important mineral resource recovery sites identified on the proposed Project site in the Wildomar General Plan or in a specific plan or other land use plan of value to the region or to the residents of the state. No impacts are anticipated. No mitigation measure is required.

#### **STANDARD CONDITIONS & REQUIREMENTS**

None.

#### **MITIGATION MEASURES**

None.

#### 12. NOISE.

	Issues, would the project result in:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	The exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		$\checkmark$		
b)	The exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			$\checkmark$	
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		$\checkmark$		
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		$\checkmark$		
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				$\checkmark$

#### DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Preliminary Acoustical Analysis – Rancon Medical and Educational Center, Plot Plan No. 36492*, prepared by Albert A. Webb Associates, dated July 2012, Revised July 17, 2013, (Acoustical Analysis), and is contained Appendix J, of the enclosed CD. Please refer to the Acoustical Analysis for a detailed discussion of the setting and methodology uses for the Acoustical Analysis. The discussion below will center on noise impacts to and from the proposed Project.

a) The exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? <u>Less Than</u> <u>Significant Impact with Mitigation Incorporated</u>

Temporary on-site noise increases will occur during proposed Project construction. Once the proposed Project is operational, potentially long-term or permanent noise increases will occur on site as a result of proposed Project operations and off site as a result of Project-generated traffic on area roadways.

Temporary noise impacts will result during Proposed Project construction. Construction noise levels will vary significantly based upon the size and topographical features of the active construction zone, duration of the work day, and types of equipment utilized. Proposed Project construction will involve multiple phases (site preparation, grading, building construction, paving, architectural coating) employing differing types and quantities of mechanical equipment. Each piece of equipment will produce varying levels of noise at varying distances from within the active maintenance/construction area, as indicated in Table 5.12-1, *Construction Equipment Noise Levels*. **Table 5.12-1** 

Type of Equipment	Range of Maximum Sound Levels Measured at 50 Feet (dBA)	Suggested Maximum Sound Levels for Analysis (dBA)	Maximum Sound Levels at 70 Feet (dBA)
Pile Drivers, 12,000 to 18,000 feet-lb/blow <sup>a</sup>	81–96	93	90
Rock Drills	83–99	96	93
Jack Hammers	75–85	82	79
Pneumatic Tools	78–88	85	82
Pumps	74–84	80	77
Scrapers	83–91	87	84
Haul Trucks	83–94	88	85
Cranes	79–86	82	79
Portable Generators	71–87	80	77
Rollers	75–82	80	77
Dozers	77–90	85	82
Tractors	77–82	80	77
Front-End Loaders	77–90	86	83
Hydraulic Backhoe	81–90	86	83
Hydraulic Excavators	81–90	86	83
Graders	79–89	86	83
Air Compressors	76–89	86	83
Trucks	81–87	86	83

Construction	Equipment	Noise	Levels				

Source: Bolt, Beranek & Newman, Noise Control for Buildings and Manufacturing Plants, 1987

<sup>a</sup> feet-lb/blow = foot-pounds per blow

To provide a point of reference, a typical construction day with an 8-hour duration can potentially generate 84 dBA CNEL at a distance of 50 feet from the noise source, on average. Using soft site parameters (a loss of 6 dBA per doubling of distance from the source), the 65 dBA CNEL contour (applicable to exterior areas of Residential uses) is calculated to occur at a distance of approximately 320 feet.

The City of Wildomar has determined that certain noise levels may jeopardize the health or general welfare of City residents; therefore, City Municipal Code Chapter 9.48 established noise standards, as shown in Table 5.12-2, *Sound Level Standards (dB L<sub>max</sub>)*, below.

General Plan	General Plan Land	General Plan Land Use		Maximum Decibel Level		
Foundation Component	Use Designation Designation Name		Density	7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.	
	LDR	Low Density Residential	½ acre	55	45	
	MDR	Medium Density Residential	2-5	55	45	
Community	MHDR	Medium High Density Residential	5-8	55	45	
Community Development	VHDR	Very High Density Residential	14-20	55	45	
	CR	Retail Commercial		65	55	
	LI	Light Industrial		75	55	
	BP	Business Park		65	45	
0000 50000	СН	Conservation Habitat		45	45	
Open Space	REC	Recreation		45	45	

Table 5.12-2 Sound Level Standards (dB L<sub>max</sub>)

Source: City Municipal Code Section 9.48.040, Table 1 (abridged based on designations in vicinity of the Project shown on **Figure 4**).

The City Municipal Code determined that construction noise is exempt from noise restrictions if private projects located within one-fourth mile of occupied residences adhere to certain hours. Since occupied residential uses are within one-fourth mile of the Project site, Project-related noise shall be regulated pursuant to the hours set forth in the Municipal Code. Consistent with the intent of this restriction on construction noise hours, noise impacts resulting from construction within specified hours are not considered to jeopardize the health or general welfare of City residents. Therefore, compliance with the construction hours outlined in Section 9.48.020(I)(2) ensures compliance with City standards, as detailed in mitigation measure **NOI-1**.

There are two areas with existing sensitive receptors that could be affected by Project-related construction activity. The closest area includes a multi-family residential development located to the southwest of the proposed Project's southern boundary. There are also single-family residences northeast of the proposed Project site, across Clinton Keith Road, an urban arterial roadway, behind an existing block wall. Mitigation measures will be incorporated to further minimize exposure upon neighboring residential properties from noise generated by typical construction methods anticipated to be used by the proposed Project. **NOI-1** requires proper tuning of equipment, **NOI-2**, requires staging for the greatest distance between noise sources and receptors is incorporated and **NOI-3** requires stationary noise-generating construction equipment be placed a minimum of 320 feet from the property line of the closest existing residences. **NOI-4** requires noises barriers for impacts to existing residential development adjacent to the proposed Project. With incorporation of these mitigation measures, proposed Project impacts will remain less than significant.

#### Noise Impacts from Future On-Site Activities

The proposed Project consists of a multi use development consisting of a mix of business park, general offices, medical and dental-use facilities, commercial retail, and a drive-thru fast food restaurant. Noise impact sources typically associated with these types of uses could include mechanical equipment, such as air conditioning units. Limited amounts of truck trips also occur with business park uses and commercial retail uses. Commercial retail uses typically contain one to three loading areas that are located at the rear of the building and screened from view and considering the small size of the business park parcels (approximately two acres or less), truck trips within the proposed Project site would be limited and at low speeds. Therefore, the noise from these sources is not anticipated to exceed the City's normally acceptable noise levels. On-site noise associated with any manufacturing uses would not be substantial as they would be conducted indoors.

#### Mechanical Equipment

It is anticipated that all buildings will be air conditioned. Air conditioning units will be roofmounted. A mitigation measure (**NOI-5**) has been included to ensure mechanical air conditioning equipment has a 25-foot setback from the roof's edge, or the equipment is set back from the building's edge far enough to break the line of sight between the air conditioning units and potential receivers, whichever is greater of the two. This will provide a minimum 3 to 5 dBA reduction immediately at the building's edge, prior to spacial distance from this noise source, which will provide an additional 3 dBA attenuation per doubling of distance. With this mitigation incorporated, impacts will remain less than significant. In addition, **NOI-5** requires a subsequent noise analysis be submitted prior to building permit issuance to ensure the noise generated by the AC units do not exceed the maximum noise allowed under the Wildomar Municipal Code.

#### Noise Impacts from Project-Specific Traffic Increases

It is widely accepted that most people only notice a change in the noise environment when the difference in noise levels is greater than 3 dBA. However, it is widely accepted that the average healthy ear can barely perceive changes of 3 dBA and that a change of 5 dBA is readily perceptible.

There is the potential for noise increases along area roadways, resulting from Project-related traffic. The City Municipal Code exempts roadway noise from motor vehicles; it only regulates off-highway vehicle noise produced by its tailpipe and motor vehicle sound systems (Section 9.48.060(A)). These regulations are enforced by the Riverside County Sheriff's Department. Nonetheless, for purposes of this analysis, noise level increases resulting from Project-related increases in traffic volumes on Clinton Keith Road, Elizabeth Lane and Yamas Drive are quantified and evaluated for the proposed Project area for the following scenarios:

- Existing and Existing plus proposed Project; and
- Existing plus cumulative projects plus proposed Project conditions.

The two (2) scenarios, above, were modeled to determine increases in noise levels. The increase in traffic due to the addition of proposed Project traffic allows for direct comparisons of potential increases or decreases in noise levels based upon the associated growth in traffic. Therefore, the incremental change in a noise level is the focus of this portion of the analysis results, rather than the resulting independent noise level for any given receiver.

Table 5.12-3, *Noise Contours at 50 feet from Roadway Centerline from Existing Plus Project Conditions*, compares existing noise levels (without the proposed Project) with predicted noise levels resulting from Project-specific traffic. Noise levels associated from Project-specific traffic increases are expected to increase by approximately 18.4 dBA over existing levels along Elizabeth Lane, south of Clinton Keith Road. Although this increase in noise levels is perceptible, it does not exceed the acceptable levels (reference Figure 6 of the Acoustical Analysis - Land Use Compatibility for Community Noise Exposure) for adjacent land uses and there are no sensitive receivers adjacent to this segment. There is an existing mini-storage development located east of Elizabeth Lane and south of Clinton Keith; however, there is an existing wall along the perimeter of this mini-storage facility along Elizabeth Lane. The wall is approximately 6 feet in height and is elevated on an existing landscaped berm which will provide additional attenuation to the neighboring mini-storage facility.

#### Table 5.12-3 Noise Contours at 50 feet from Roadway Centerline from Existing Plus Project Conditions

	Existing		Existing Plus Project				
Road Segment	ADT	dB CNEL	ADT	Project Only ADT	dB CNEL	Total dB CNEL	Change
N/S Road Segment							
Yamas Dr. s/o Project	810	56.8	1,725	915	60.3	61.9	5.1
Elizabeth Ln s/o Clinton Keith	175	50.1	6,443	6,258	68.7	68.7	18.6
E/W Road Segment							
Clinton Keith w/o I-15	20,725	70.9	23,528	2,603	65.2	71.9	1.0
Clinton Keith e/o I-15	19,480	70.6	24,561	5,081	67.8	72.4	1.8
Clinton Keith w/o Inland Valley	18,250	70.3	23,467	5,217	67.9	72.3	2.0
Clinton Keith w/o Salida del Sol	12,890	68.8	18,127	5,237	67.9	71.4	2.6
Clinton Keith w/o Elizabeth Ln	12,765	68.8	18,002	5,237	67.9	71.4	2.6
Clinton Keith w/o Nutmeg	11,355	68.3	13,015	1,660	62.9	69.4	1.1
Clinton Keith w/o California Oaks	15,640	69.6	16,563	923	60.4	70.1	0.5
Prielipp Rd e/o Yamas	4,590	64.3	5,504	914	60.3	65.8	1.5
Prielipp Rd e/o Elizabeth	5,170	64.8	6,084	914	60.3	66.1	1.3

Table 5.12-4
Noise Contours at 50 feet from Roadway Centerline from Existing
Plus Cumulative Project Traffic Plus Project Conditions

	Existing+Cumulative		Existing Plus Cumulative Plus Project				
Road Segment	ADT	dB CNEL	ADT	Project Only ADT	dB CNEL	Total	Change
N/S Road Segment				-		_	
Yamas Dr. s/o Project	851	57.0	1,766	915	60.3	62.0	5.0
Elizabeth Ln s/o Clinton Keith	184	50.3	6,452	6,268	68.7	68.7	18.4
E/W Road Segment							
Clinton Keith w/o I-15	27.497	72.1	30,300	2,803	65.2	72.9	0.8
Clinton Keith e/o I-15	26,353	71.9	31,434	5,081	67.8	73.3	1.4
Clinton Keith w/o Inland Valley	24,209	71.5	29,446	5,237	67.9	73.1	1.6
Clinton Keith w/o Salida del Sol	16,667	69.9	21,904	5,237	67.9	72.0	2.1
Clinton Keith w/o Elizabeth Ln	16,535	69.9	21,772	5,237	67.9	72.0	2.1
Clinton Keith w/o Nutmeg	14,675	69.4	16,335	1,660	62.9	70.3	0.9
Clinton Keith w/o California Oaks	18,257	70.3	19,180	923	60.4	70.7	0.4
Prielipp Rd e/o Yamas	6,924	66.1	7,838	914	60.3	67.1	1.0
Prielipp Rd e/o Elizabeth	7,662	66.5	8,576	914	60.3	67.5	0.9

As shown in Table 5.12-4, above, the proposed Project's traffic increases noise levels compared to that existing without the proposed Project, but is also not expected to exceed acceptable levels for adjacent land uses. Any impacts are considered less than significant.

### b) The exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? <u>Less Than Significant Impact</u>

Regarding the proposed Project's potential to generate ground-borne vibrations during construction, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Common sources of ground-borne vibration are trains, buses on rough roads, and heavy construction activities such as blasting, pile-driving, and extensive grading and heavy earth-moving equipment. Construction of the proposed Project will not incorporate the use of blasting or pile-driving. Vibration from equipment can only be felt out to a distance of approximately 50 feet from

the source. Additionally, ground-borne vibrations are not associated with the typical operation of the land uses proposed by the proposed Project. Thus, construction and operation will not produce any substantial ground-borne vibration. Any impacts would be considered less than significant. No mitigation is required.

## c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? <u>Less Than Significant Impact with Mitigation Incorporated</u>

Please reference Response 12.a, above. Construction impacts will be of short duration and, with the incorporation of mitigation measures, will be considered less than significant. Operational impacts have been determined to be less than significant. Therefore, implementation of the proposed Project will not result in a substantial permanent increase in ambient noise levels in the proposed Project vicinity above levels existing without the proposed Project.

### d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? <u>Less Than Significant Impact with Mitigation Incorporated</u>

Please reference Response 12.a, above. Construction impacts will be of short duration and, with the incorporation of mitigation measures, will be considered less than significant. Operational impacts have been determined to be less than significant. Therefore, implementation of the proposed Project will not result in a substantial temporary or periodic increase in ambient noise levels in the proposed Project vicinity above levels existing without the proposed Project.

# e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? <u>No Impact</u>

The closest public airport is French Valley Airport, which is located approximately 5.6 miles southeast of the proposed Project site. The proposed Project site is outside of the airport noise and safety influence or flight surface control areas. As a result, no impacts are anticipated, and no mitigation measures are required.

### f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? <u>No Impact</u>

The closest private airstrip to the proposed Project site is Skylark Field, which is located approximately 4.6 miles northwest of the proposed Project site. Skylark Airport is used primarily by skydiving aircraft. Given the proximity of the proposed Project to Skylark Field, no impacts are anticipated, and no mitigation measures are required.

#### **STANDARD CONDITIONS & REQUIREMENTS**

1. The proposed Project shall comply with the development standard of Chapter 9.48 of the City of Wildomar Zoning Code.

#### **MITIGATION MEASURES**

**NOI-1** To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Wildomar Building Department. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Wildomar Building Department.

*Timing/Implementation: Implemented during Project operations.* 

Enforcement/Monitoring: City of Wildomar Building Department.

**NOI-2** The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors (within 100 feet of any occupied residence) nearest the proposed Project site during all proposed Project construction.

*Timing/Implementation: Implemented during Project operations.* 

Enforcement/Monitoring: City of Wildomar Building Department.

**NOI-3** Stationary noise-generating construction equipment shall be placed a minimum of 320 feet from the property line of existing sensitive receptors (residences to the south), when and where feasible.

*Timing/Implementation: Implemented during Project operations.* 

Enforcement/Monitoring: City of Wildomar Building Department.

**NOI-4** Noise control barriers with a height of 6 feet are required where grading will occur within 100 feet of any occupied residence.

It is important to note that the barriers' attenuation will be accomplished only if the minimum height is based from the pad or the roadway elevation, whichever is the greater of the two. If the barrier is being constructed at a position where the starting elevation is less than the pad or adjacent roadway, the barrier's ultimate height will need to be adjusted to fit the aforementioned criteria. Where applicable, the barriers shall wrap around the ends of the dwelling units to prevent flanking of noise into the site.

*Timing/Implementation:* Prior to the issuance of occupancy permits and during project operations.

*Enforcement/Monitoring: City of Wildomar Building and Planning Departments.* 

**NOI-5** Roof-mounted air conditioning equipment shall be set back either 25 feet from the building's closest edge or to a distance capable of breaking the line-of-sight of equipment from neighboring potential receivers, whichever provides the greater set back from the building's edge of the two. A subsequent noise study shall be submitted by the applicant and reviewed and approved at building plan check stage by the City to ensure that the AC units are not generating noise in excess of what is allowed under Chapter 9.48 of the Wildomar Municipal Code.

*Timing/Implementation: Reviewed at building plan check.* 

Enforcement/Monitoring: City of Wildomar Building Department.

#### **13. POPULATION AND HOUSING.**

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				$\checkmark$
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				$\checkmark$
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				$\checkmark$

#### DISCUSSION

## a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? <u>No Impact</u>

The proposed Project would not result in any increase in substantial population growth. Development of Phase 1 and Phase 2 on the proposed Project site will be consistent with the current land use designation and included in the anticipated buildout of the General Plan. The California Employment Development Department estimates that the unemployment rate in Riverside County is 11.1 percent. (EDD). The California Department of Finance estimates that the vacancy rate of homes in Wildomar is less than 8 percent, which means that of the 10,857 homes in the City, approximately 800 of them are vacant. While the number of employees is unknown at this time, it is reasonable to assume that the new jobs created by this development could be accommodated by existing residents in Wildomar. If new employees did move to the area, the existing number of vacant homes would accommodate their housing needs. As the proposed Project would not result in the construction of new homes, and the development is consistent with the General Plan, no significant impacts are anticipated.

## b,c) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or, displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? <u>No Impact</u>

Since the proposed Project site is vacant, no housing units or people would be affected and the construction of replacement housing is not required. No significant impacts are anticipated. No mitigation is required.

#### **STANDARD CONDITIONS & REQUIREMENTS**

None.

#### MITIGATION MEASURES

None.

#### 14. PUBLIC SERVICES.

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact				
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:								
a) Fire protection?			$\checkmark$					
b) Police protection?			$\checkmark$					
c) Schools?			$\checkmark$					
d) Parks?				$\checkmark$				
e) Other public facilities?			$\checkmark$					

#### DISCUSSION

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Fire protection? <u>Less Than Significant Impact</u>

The Riverside County Fire Department provides fire protection and safety services to the City of Wildomar. The nearest fire station is Wildomar Fire Station #61, located at 32637 Gruwell Street, 2%-miles from the proposed Project site. In addition to Fire Station #61, several other Riverside County fire stations in the surrounding area would be able to provide fire protection safety services to the proposed Project site if needed. The proposed Project must comply with the requirements of the Riverside Fire Protection Department and the payment of standard development impact fees, prior to the issuance of a building permit, pursuant to Chapter 3.44.070 of the Wildomar Municipal Code. All Phases of the proposed Project are not expected to result in activities that create unusual fire protection needs or significant impacts. Any impacts would be considered incremental, and would be offset through the payment of the development impact fee. No additional mitigation is required.

b) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Police protection? <u>Less Than Significant Impact</u>

Police protection services are provided the Riverside County Sheriff's Department. The nearest sheriff's station is located at 333 Limited Street in Lake Elsinore, approximately 7.4 miles from the proposed Project site. Traffic enforcement is provided for Riverside County in this area by the California Highway Patrol, with additional support from the local Riverside County Sheriff's Department. The proposed Project is required to pay the standard development impact fees, prior to the issuance of a building permit, pursuant to Chapter 3.44.070 of the Wildomar Municipal Code. Therefore, implementation of the proposed Project is not expected to result in activities that create unusual police protection needs or significant impacts. Any impacts would be considered incremental, and would be offset through the payment of the development impact fee. No additional mitigation is required.

c) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Schools? <u>Less Than Significant Impact</u>

The proposed Project site is located within the Lake Elsinore Unified School District (LEUSD). The LEUSD has established school impact mitigation fees to address the facility impacts created by residential, commercial, and industrial development. Due to the Business Park (BP) land use designation of the proposed Project site, any development associated with the proposed Project would not generate any additional students into the LEUSD, and, therefore; has no potential to directly impact the local school system. No new population would be generated as a result of implementing the proposed Project; however, indirect impacts may result from people relocating to the area due to the potential employment opportunities created by the proposed Project. All development will be required to pay school mitigation impact fees, prior to the issuance of a building permit, which has been established by the Lake Elsinore Unified School District to mitigate any potential effects to school services. Any impacts would be considered incremental, and would be offset through the payment of the school impact mitigation fee. No additional mitigation is required.

d) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Parks? <u>No Impact</u>

Development associated with the proposed Project would be commercial retail or office in nature and would not be expected to directly affect community recreational facilities. In addition, as discussed in V.15 a and b (Recreation Resources) in the next section of this IS, the proposed Project would also not adversely affect any existing parks, recreation sites, or programs. No impacts are anticipated. No mitigation is required.

e) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities? <u>Less Than Significant Impact</u>

Development associated with the proposed Project may result in a slight increase in the demand for other governmental services such as economic development and the other community support services commonly provided by the City of Wildomar. The demand for these additional public service impacts would be incremental. This increment of impact will be off-set through the payment of the appropriate development impact fees and through the City budget for nonimpact-fee programs and expenses. The City budget is based on a combination of property tax, sales tax, user fees, and state and federal government pass-through funding. Most of these revenue sources are from commercial sales, population, or development related, which means the more residents or business activity within the city, the greater the amount of funding that could be available. Therefore, while the proposed Project may add a small incremental impact to other public faculties, these impacts are considered less than significant. No additional mitigation measures, beyond the standard requirements, are required.

#### **STANDARD CONDITIONS & REQUIREMENTS**

- 1. Prior to issuance of any building permit for future development on the proposed Project site, the Project applicant(s) shall pay the required development impact fees for police and fire services pursuant to Chapter 3.44.070 of the Wildomar Municipal Code and in effect at the time of building permit issuance.
- 2. Prior to issuance of any building permit for future development on the proposed Project site, the Project applicant(s) shall pay the required school impact mitigation fees established by the Lake Elsinore Unified School District and in effect at the time of building permit issuance.

#### MITIGATION MEASURES

None.

#### **15. RECREATION.**

Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?			$\checkmark$	
<ul> <li>b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?</li> </ul>			$\checkmark$	

#### DISCUSSION

### a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated? <u>Less</u> <u>Than Significant Impact</u>

All Phases of development associated with the proposed Project are not expected to result in an increase in use of existing neighborhood and regional parks or other recreational facilities. Retail commercial and office uses do not typically result in increases in impacts to recreation resources. However, there may be a potential increase in residential growth, due to persons relocating to the area as a result of the jobs created by the proposed Project. This growth and the associated impacts would be indirect, or secondary impacts, are would be at most, a small, incremental increase. Due to this, any impacts to recreation resources, as a result of implementation of the proposed Project, would be considered less than significant. No mitigation is required.

### b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? <u>Less Than Significant Impact</u>

The proposed Project will not require the construction or expansion of new recreational facilities. There are no parks or recreational facilities included as part of any Phase of the proposed Project. Please reference the discussion above about incremental impacts due to increased residential growth. Any impacts to recreation resources, as a result of implementation of the proposed Project, would be considered less than significant. No mitigation is required.

#### **STANDARD CONDITIONS & REQUIREMENTS**

None.

#### **MITIGATION MEASURES**

None.

#### **16. TRANSPORTATION / TRAFFIC.**

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

#### DISCUSSION

The following information utilized in this Section of the Initial Study was obtained from the *Traffic Impact Analysis Report, Tentative Parcel Map No. 36492* (TIA), prepared by Albert A. Webb Associates, dated February 2013, Revised July 15, 2013, and is contained Appendix K, of the enclosed CD. Please refer to the TIA for a detailed discussion of the setting and methodology uses for the TIA. The discussion below will center on impacts to transportation/traffic resources from the proposed Project.

Based on direction from the City's Traffic Engineer, the study area for the proposed Project includes the following intersections:

- 1. I-15 Southbound Ramps (NS) / Clinton Keith Road (EW)
- 2. I-15 Northbound Ramps (NS) / Clinton Keith Road (EW)
- 3. George Avenue (NS) / Clinton Keith Road (EW)
- 4. Inland Valley Drive (NS) / Clinton Keith Road (EW)
- 5. Salida Del Sol (NS) / Clinton Keith Road (EW)
- 6. Project Driveway 1 (NS) / Clinton Keith Road (EW)
- 7. Elizabeth Lane (NS) / Clinton Keith Road (EW)
- 8. Nutmeg Street (NS) / Clinton Keith Road (EW)
- 9. California Oaks Road (NS) / Clinton Keith Road (EW)
- 10. Elizabeth Lane (NS) / Project Driveway 2 (EW)
- 11. Elizabeth Lane (NS) / Project Driveway 3 (EW)
- 12. Elizabeth Lane (NS) / Project Driveway 4 (EW)
- 13. Elizabeth Lane (NS) / Project Driveway 5 (EW)
- 14. Yamas Drive (NS) / Project Driveway 6 (EW)
- 15. Yamas Drive (NS) / Project Driveway 7 (EW)
- 16. Yamas Drive (NS) / Prielipp Road (EW)
- 17. Elizabeth Lane (NS) / Prielipp Road (EW)
- 18. Nutmeg Street (NS) / Jackson Avenue (EW)

The method of traffic projection for the proposed Project is based on the following criteria:

- Existing traffic conditions;
- Ambient growth projections;
- Project generated traffic; and
- Cumulative project generated traffic.

As is standards practice in traffic forecasting and impact analysis, an opening year of the proposed Project is provided as a starting, or reference point, for the TIA. The proposed Project TIA uses a study year for the proposed Project of 2017 for analysis purposes.

a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? <u>Less Than Significant Impact with Mitigation Incorporated</u>

Intersection and roadway functioning is often described by its level of service (LOS). LOS A constitutes light traffic conditions with no interruptions in service or delays at intersections, while LOS F represents congested and unstable conditions with slow moving traffic accompanied by significant delays at many intersections. The City of Wildomar has adopted the County of Riverside General Plan. According to the County of Riverside General Plan, Policy C 2.1:

Maintain the following countywide target Levels of Service:

LOS "C" along all County maintained roads and conventional state highways. As an exception, LOS "D" may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways, Arterials, Urban Arterials, Expressways, conventional state highways or freeway ramp intersections.

LOS "E" may be allowed in designated community centers to the extent that it would support transit-oriented development and walkable communities.

Table 5.16-1, *Project Trip Generation*, presents the daily and peak hour trip generation for the proposed Project. As shown, the proposed Project is anticipated to generate approximately 9,193 gross daily trip-ends. These gross daily trip-ends are reduced due to internal trip-ends, and pass-by trips; thereby, netting 7,969 daily trip ends, including 713 gross trip-ends during the AM peak hour and 782 gross trip-ends during the PM peak hour.

Land Use	0.51	Unit	AM Peak Hour		PM Peak Hour			Daily	
	Qty	Onn	Total	In	Out	Total	In	Out	Dally
Business Park	294.9	TSF	413	347	66	408	94	314	3,918
General Office Building	42.42	TSF	94	83	11	126	21	105	689
Internal Trips						(9)	(5)	(4)	(148)
NET NEW TRIPS FOR LAND USE	1		94	83	11	117	16	101	541
Medical-Dental Office Building	31.42	TSF	72	57	15	109	29	80	1,135
Internal Trips						(9)	(5)	(4)	(148)
NET NEW TRIPS FOR LAND USE			72	57	15	100	24	76	987
Shopping Center	19.4	TSF	59	36	23	212	104	108	2,339
Internal Trips						(31)	(14)	(17)	(595)
Pass-by Trips (34% for PM Peak only) <sup>2</sup>						(62)	(31)	(31)	(62)
NET NEW TRIPS FOR LAND USE	1		59	36	<u>23</u>	119	59	60	1,682
Fast-Food Restaurant with Drive- Through Window	3	TSF	148	75	73	102	53	49	1,488
Internal Trips						(25)	(13)	(12)	(535)
Pass-by Trips (49% for AM Peak, 50% for PM Peak) <sup>2</sup>			(73)	(37)	(36)	(39)	(20)	(19)	(112)
NET NEW TRIPS FOR LAND USE			75	38	37	38	20	18	841
NET NEW TRIPS FOR TOTAL PROJECT			713	561	152	<u>782</u>	213	<del>569</del>	<del>7,969</del>

#### Table 5.16-1 Project Trip Generation

TSF = 1,000 Square Feet Gross Floor Area

<sup>1</sup> See Multi-Use Development Trip Generation and Internal Capture Summary in Appendix A for internal trip calculations.

<sup>2</sup> Average pass-by trip percentages from *Trip Generation Handbook* by Institute of Transportation Engineers (ITE), 2001.

#### Level of Service

#### Levels of Service – Existing Conditions

The existing levels of service for proposed Project the study area intersections vary from LOS A to D. The existing intersection of I-15 Southbound Ramps @ Clinton Keith Road operates at a LOS "D". Based on this information, none of the proposed Project study area intersections operate at an unacceptable LOS.

#### Levels of Service – Existing Plus proposed Project Conditions

For existing plus proposed Project traffic conditions without off-site improvements, the proposed Project study area intersections are expected to operate at levels of service that vary from LOS A to F. The following study area intersection is expected to operate at an unacceptable LOS:

7. Elizabeth Lane (NS) / Clinton Keith Road (EW)

With the recommended improvements presented in Mitigation Measure TR-1, levels of service at the impacted proposed Project study area intersection could be improved to meet the required level of service as required in County of Riverside General Plan, Policy C 2.1, discussed above. Impacts will be considered less than significant with mitigation incorporated.

#### Levels of Service – Existing Plus Ambient Growth Plus Cumulative Conditions

For existing plus ambient growth plus cumulative traffic conditions, the proposed Project study area intersections are expected to operate at levels of service that vary from LOS A to C. None of the proposed Project study area intersections are expected to operate at an unacceptable LOS.

#### <u>Levels of Service – Existing Plus Ambient Growth Plus Cumulative Plus proposed Project</u> <u>Conditions</u>

For existing plus ambient growth plus cumulative plus proposed Project traffic conditions without off-site improvements, the proposed Project study area intersections are expected to operate at levels of service that vary from LOS A to F. The following proposed Project study area intersection is expected to operate at an unacceptable LOS:

7. Elizabeth Lane (NS) / Clinton Keith Road (EW)

With the recommended improvements presented in Mitigation Measure TR-1, levels of service at the impacted proposed Project study area intersection could be improved to meet the required level of service as required in County of Riverside General Plan, Policy C 2.1, discussed above. Impacts will be considered less than significant with mitigation incorporated.

#### Traffic Signal Warrants

#### Traffic Signal Warrants – Existing Conditions

For existing traffic conditions, the peak hour traffic control signal warrant is not satisfied for any of the proposed Project study area unsignalized intersections (see Appendix D of the TIA for technical calculations).

#### Traffic Signal Warrants – Existing Plus proposed Project Conditions

For existing plus proposed Project traffic conditions, the peak hour traffic control signal warrant is expected to be satisfied for the following proposed Project study area unsignalized intersections (see Appendix D of the TIA for technical calculations):

- 7. Elizabeth Lane (NS) / Clinton Keith Road (EW)
- 10. Elizabeth Lane (NS) / Project Driveway 2 (EW)

With the recommended improvements presented in Mitigation Measure TR-1, traffic control service at the impacted proposed Project study area intersections could be improved to meet the City's requirements. Impacts will be considered less than significant with mitigation incorporated.

#### Traffic Signal Warrants – Existing Plus Ambient Growth Plus Cumulative Conditions

For existing plus ambient growth plus cumulative traffic conditions, no proposed Project study area unsignalized intersections are expected to meet the peak hour traffic control signal warrant (see Appendix D of the TIA for technical calculations).

#### <u>Levels of Service – Existing Plus Ambient Growth Plus Cumulative Plus proposed Project</u> <u>Conditions</u>

For existing plus ambient growth plus other projects plus proposed Project traffic conditions, the peak hour traffic control signal warrant is expected to be satisfied for the following proposed Project study area unsignalized intersections (see Appendix D of the TIA for technical calculations):

- 7. Elizabeth Lane (NS) / Clinton Keith Road (EW)
- 10. Elizabeth Lane (NS) / Project Driveway 2 (EW)

With the recommended improvements presented in Mitigation Measure **TR-1**, traffic control service at the impacted proposed Project study area intersections could be improved to meet the City's requirements. Impacts will be considered less than significant with mitigation incorporated.

In addition to Mitigation Measure **TR-1**, the proposed Project will pay fees to the City pursuant to the TUMF program and the City's DIF Program. Payment of these fees is a standard condition to off-set cumulative and region wide traffic increment added by the implementation of the proposed Project.

# b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? <u>Less Than</u> <u>Significant Impact</u>

Clinton Keith Road is not designated as part of the Riverside County Congestion Management Program (CMP). However, it is possible that some of the vehicle trips generated by development on the proposed Project site may connect to the CMP network at Interstate 15 (I-15). Development associated with the proposed Project could add an additional increment of traffic to the designated CMP network. The increment of potential impact associated with this proposed Project would be off-set through standard conditions of approval that require payment of existing roadway network fees (e.g., development impact fees and the Transportation Uniform Mitigation Fee). Consequently, the proposed Project and associated future development would not significantly affect the designated CMP road network. Any impacts would be considered incremental, yet less than significant.

# c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? <u>No Impact</u>

No elements of the proposed Project would result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. The maximum height of the buildings in Phase 1 is 36'0" and the maximum height allowed in Industrial Park (IP) for Phase II development would be 50 feet. As discussed in Section 8 Hazards and Hazardous Materials), the proposed Project site is not located in proximity to a public or private use airport. Since the location and height of the proposed Project would not affect air traffic patterns or aircraft operations from any private or public airport, no impacts are foreseen; therefore, no mitigation measures are required.

# d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? <u>Less Than Significant Impact</u>

The proposed Project includes dedication of right-to-way to the City to accommodate anticipated vehicle movement as a result of development on the proposed Project site. This dedication of right-of-way would be for the proposed Project's perimeter roadways (Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive and Lot "C"). The City has site design criteria that govern the placement of driveways to allow for adequate site distance and turning movements. These provisions would become effective at the time of plot plan consideration and approval. As the proposed Project will widen existing roadways and install improvements along its frontage, and existing city ordinances will review the placement of driveways for sight distance and turning movements, this impact is considered less than significant.

#### e) Result in inadequate emergency access? Less Than Significant Impact

Development associated with the proposed Project would include access from Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive and Lot "C". However, the proposed Project includes right-of-way dedication along these roadways that will serve to enhance circulation in the immediate vicinity of the proposed Project. Therefore, the proposed Project would not

interfere with area wide emergency access or the implementation of local emergency response plans. Any impacts would be considered less than significant. No mitigation is required.

# f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? <u>Less</u> <u>Than Significant Impact</u>

The proposed Project includes sidewalk improvements along Clinton Keith Road, Elizabeth Lane, Bunny Trail, Yamas Drive and Lot "C". All improvements would be designed to comply with design criteria contained in Chapter 16.08 of the Wildomar Municipal Code, including the construction of sidewalks, curbs, and gutters along the property frontage. The City's plot plan application process would review future development's need to provide bicycle lanes, bus turnouts, or other design components to support alternative transportation as part of the proposed Project design. Any necessary improvements would be a condition of future development approval. Therefore, the proposed Project would not conflict with adopted policies supporting alternative transportation. Any impacts would be considered less than significant. No mitigation is required.

#### **STANDARD CONDITIONS & REQUIREMENTS**

- 1. Prior to issuance of any building permit on the proposed Project site, the Project applicant(s) shall pay the appropriate Transportation Uniform Mitigation Fee and the City of Wildomar Development Impact Fee (DIF).
- 2. Sight distance at the proposed Project entrance roadway should be reviewed with respect to standard City of Wildomar sight distance standards at the time of preparation of final grading, landscape and street improvement plans.
- 3. Participate in the phased construction of off-site traffic signals through payment of proposed Project's fair share of traffic signal fees.
- 4. Signing/striping should be implemented in conjunction with detailed construction plans for the proposed Project site.

#### MITIGATION MEASURES

**TR-1** The direct traffic impacts generated by the proposed Project can be mitigated to a less than significant level, to meet the required level of service. The following improvements shall be constructed:

#### Roadways

- Construct partial width improvements on the southerly side of Clinton Keith Road at its ultimate cross-section as an urban arterial highway (152' right-of-way) adjacent to proposed Project boundary line (Phase 1).
- Construct partial width improvements on the westerly side of Elizabeth Lane at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line (Phase 1).
- Construct partial width improvements on the easterly side of Yamas Drive at its ultimate cross-section as a collector street (78' right-of-way) adjacent to proposed Project boundary line (Phase 2).

<u>Intersections</u> (proposed Project's actual improvements necessary are shown in bold, italic, underlined. The items that are not bold, italic, underlined are already existing)

• Construct the intersection of proposed Project Driveway 1 (NS) and Clinton Keith Road (EW) to restrict movement to right-in and right-out only from the driveway with the following geometrics (Phase 1):

Northbound:	One right-turn lane. Stop controlled.			
Southbound:	Not applicable.			
Eastbound:	One through lane. <u>One right-turn lane.</u>			
Westbound:	One through lane.			

Install a traffic signal at the intersection of Elizabeth Lane (NS) and Clinton Keith Road (EW) to include the following geometrics (Phase 1):

Northbound:	<u>One left-turn lane.</u> One shared through and right-turn lane.
Southbound:	<u>One left-turn lane.</u> One shared through and right-turn lane.
Eastbound:	One left-turn lane. One through lane. <u>One right-turn lane.</u>
Westbound:	One left-turn lane. One through lane. One shared through and
right-turn lane.	

• Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 2 (EW) with the following geometrics (Phase 1):

Northbound:	One shared left-turn, through and right-turn lane.
Southbound:	One shared left-turn, through and right-turn lane.
Eastbound:	One shared left-turn, through and right-turn lane. Stop

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controlled.
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Westbound: One shared left-turn, through and right-turn lane. Stop controlled.

• Construct the intersection of Elizabeth Lane (NS) and proposed Project Driveway 3 (EW) with the following geometrics (Phase 1):

Northbound:	One shared left-turn and through lane.
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Southbound: One shared through and right-turn lane.

Eastbound: One shared left-turn and right-turn lane. Stop controlled.

Westbound: Not applicable.

- Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics (Phase 2):
  - Northbound: Not applicable.
  - Southbound: One right-turn lane.
  - Eastbound:One shared left-turn and right-turn lane. Stop controlledWestbound:Not applicable.
- Construct the intersection of Project Driveway 4 (NS) and Bunny Trail (EW) with the following geometrics (Phase 2):
  - Northbound: Not Applicable.
  - Southbound: One shared left-turn and right-turn lane. Stop controlled.
  - Eastbound: One shared left-turn and through lane.
  - Westbound: One shared through and right-turn lane.
- Construct the intersection of Yamas Drive (NS) and proposed Project Driveway 5(EW) with the following geometrics (Phase 2):

Northbound: <u>One shared through and rigi</u>	
Southbound: <u>One shared left-turn and thr</u>	<u>rough lane.</u>
Eastbound: Not applicable.	
Westbound: <u>One shared left-turn and rig</u>	ht-turn lane. Stop controlled.

• Construct the intersection of Yamas Drive (NS) and Bunny Trail (EW) with the following geometrics (Phase 2):

Northbound:	One shared through and right-turn lane.
Southbound:	<u>One shared left-turn and through lane.</u>
Eastbound:	Not applicable.
Westbound:	One shared left-turn and right-turn lane. Stop controlled.

*Timing/Implementation: Implemented during the appropriate Phase of proposed Project construction.* 

Enforcement/Monitoring: City of Wildomar Traffic Engineering Department.

#### **17. UTILITIES AND SERVICES SYSTEMS.**

	Issues, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			$\checkmark$	
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			$\checkmark$	
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			$\checkmark$	
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?			$\checkmark$	
e)	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			$\checkmark$	
g)	Comply with federal, state, and local statutes and regulations related to solid waste?			$\checkmark$	

The Elsinore Valley Municipal Water District (EVWMD) will provide water and sewer services for the proposed Project. Electric, gas, cable, and telephone services would be extended onto the site from existing main lines, either in Clinton Keith Road or Elizabeth Lane. Electricity would be provided by Southern California Edison, gas by Southern California Gas, and telephone service would be provided by Verizon. The site is located within the boundaries of the Lake Elsinore Unified School District (LEUSD). Municipal or local government services are provided by the City of Wildomar. Fire and security services are provided by the City of Wildomar through contracts with the Riverside County Fire Department and the Riverside County Sheriff's Department. Solid waste disposal services are provided to the City of Wildomar by Waste Management, Inc.

#### DISCUSSION

# a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? <u>Less Than Significant Impact</u>

The San Diego Regional Water Quality Control Board regulates wastewater discharges within the portion of the City of Wildomar encompassing the proposed Project site. Development on the proposed Project site would receive wastewater services from the Elsinore Valley Municipal Water District (EVMWD). The proposed Project will not require or will not result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects. Therefore, impacts are considered less than significant and no additional mitigation measures are required. For a complete discussion of urban runoff-related water quality impacts associated with construction and operation of the proposed Project, please refer to Section 9, Hydrology and Water Quality, of this Initial Study.

# b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? <u>Less Than Significant Impact</u>

The proposed Project site is within the service boundary for EVMWD. All development on the proposed Project site would be connecting to EVMWD water and sewer service infrastructure. Phase 1 development would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Service Planning Letter #2448-0 (see Appendix M of this Initial Study) has been issued by EVWMD for Phase 1 of development. As a result, any potential impacts are considered incremental and less than significant. No additional mitigation is required

The proposed Project is consistent with the City's General Plan designations. No amendments to the current General Plan designations are included as part of the proposed Project. These General Plan Land Use designations have been in place on the proposed Project site since 2003. According to the Elsinore Valley Municipal Water District, *Draft Program Environmental Impact Report Water Distribution System Master Plan and Wastewater Master Plan (SCH No. 2008111100),* April 2010(http://www.evmwd.com/civica/filebank/blobdload.asp?BlobID=5369), (p. 1-3), the Wastewater Master Plan (WMP) anticipated an increase the capacity of water and wastewater infrastructure and would therefore accommodate the population growth projected for the service area through 2030. As a result, the development proposed in Phase 2 has been anticipated as part of the WMP. Any impacts from Phase 2 would be considered less than significant and no additional mitigation is required.

# c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? <u>Less</u> <u>Than Significant Impact</u>

The proposed Project would not result in the generation of stormwater. Phase 2 development on the proposed Project site would connect to the existing storm drainage facilities. On-site runoff would be incorporated into the existing drainage system after treatment by the best management practices identified in the required Water Quality Management Plan (and discussed in Section 9, Hydrology and Water Quality, of this Initial Study). All development would be required to be designed to ensure that post-construction stormwater runoff rates do not exceed pre-construction flows. Therefore, existing infrastructure would have adequate capacity to serve future development on the proposed Project site and no new or expansion of existing stormwater drainage facilities would be necessary. Impacts associated with new or expanded stormwater water drainage facilities are considered less than significant. No additional mitigation is required.

# d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed? <u>Less Than Significant Impact</u>

The proposed Project site is within the service boundary for the EVMWD, and future development on the proposed Project site would be connecting to EVMWD water service infrastructure. EVMWD utilizes both groundwater and imported water supplies to ensure adequate water is available for consumers. Imported water is utilized to ensure that significant overdraft of local groundwater supplies does not occur. Based on the EVMWD's Urban Water Master Plan, no adverse impacts to groundwater resources are forecast to occur from implementing the proposed Project. Service Planning Letter #2448-0 (see Appendix L of this Initial Study) has been issued by EVWMD for Phase 1 of development. Any impacts are considered less than significant. No mitigation is required.

# e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? <u>Less Than Significant Impact</u>

As described above, all development on the proposed Project site would connect to water and sewer service infrastructure. All Phases of development would be conditioned to obtain approvals from the Riverside County Department of Environmental Health. The proposed Project would not impact the EVMWD's ability to serve existing customers. Impacts are considered less than significant. No additional mitigation is required.

# f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? <u>Less Than Significant Impact</u>

The main disposal site in the vicinity of the proposed Project site is the El Sobrante Landfill in Corona. The El Sobrante Landfill is projected to reach capacity in 2030. Development on the proposed Project site would be served by a landfill with sufficient permitted capacity to accommodate the proposed Project's solid waste disposal needs. Impacts are considered incremental, yet less than significant. No additional mitigation is required.

The proposed Project would not substantially alter existing or future solid waste generation patterns and disposal services. The proposed Project would be consistent with the County Integrated Waste Management Plan. All development would be required to comply with the recommendations of the Riverside County Waste Management Department and be consistent with the County Integrated Waste Management Plan. These requirements are standard to all retail commercial, restaurant and office projects, and are not considered mitigation pursuant to CEQA. Any impacts would be less than significant. No additional mitigation is required.

#### g) Comply with federal, state, and local statutes and regulations related to solid waste? <u>Less Than</u> <u>Significant Impact</u>

The proposed Project will comply with federal, state, and local statutes and regulations related to solid waste. Please refer to Response 17.f., above. The proposed Project does not any propose activities that would conflict with the any applicable programmatic requirements. In addition, any future development shall comply with construction and debris removal and recycling requirements and shall contract with the City's waste hauler/franchisee for all bins and their removal in accordance with City Ordinance. As a result, the proposed Project will comply with all of the applicable requirements and any impacts will be less than significant. No additional mitigation measures are required.

#### **STANDARD CONDITIONS & REQUIREMENTS**

- 1. The Project applicant(s) for future development on the proposed Project site shall obtain approval from the Riverside County Department of Environmental Health before receiving water and wastewater service from the Elsinore Valley Municipal Water District.
- 2. Prior to issuance of a building permit, a recycling collection and loading area plan shall be submitted to the City and to Riverside County Waste Management Division.

#### MITIGATION MEASURES

None.

#### **VI. MANDATORY FINDINGS OF SIGNIFICANCE**

	Issues, does the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		√		
b)	Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		V		
c)	Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?		$\checkmark$		

#### DISCUSSION

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? <u>Less Than Significant Impact with Mitigation</u> <u>Incorporated</u>

Based on evaluations and discussions contained in this IS, the proposed Project and associated future commercial development on the proposed Project site has a very limited potential to incrementally degrade the quality of the environment because it is not in an environmentally sensitive location, and it is consistent with the City of Wildomar General Plan. As a result, the proposed Project would not significantly affect the environment with implementation of the mitigation measures contained in this IS.

b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) *Less Than Significant Impact with Mitigation Incorporated* 

#### Aesthetics

Implementation of the proposed Project would not contribute to cumulative visual resource or aesthetic impacts. The City's plot plan application process will ensure development is in compliance with City zoning and design standards regulating building design, mass, bulk, height, color, etc. Thus, while incremental, impacts to aesthetic resources are not considered cumulatively considerable. Cumulative conditions were anticipated in the City's General Plan Land Use Plan designation of BP (Business Park). The proposed Project is consistent with the General Plan.

#### Agricultural Resources

Implementation of the proposed project would not contribute to cumulative impacts to agricultural resources or forestland impacts. No agricultural resources will be impacted through the implementation of the proposed Project. Thus, less than cumulatively considerable impacts to agricultural resources and forestland resources are anticipated under cumulative conditions.

#### Air Quality

The proposed project may contribute to cumulative air quality impacts in the vicinity. As previously stated, the SCAQMD's approach for assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. In other words, the SCAQMD considers projects that are consistent with the AQMP, which is intended to bring the basin into attainment for all criteria pollutants, to also have less than significant cumulative impacts. The discussion under Impact a) describes the SCAQMD criteria for determining consistency with the AQMP and further demonstrates that the proposed project would be consistent with it. As such, cumulative impacts would be less than significant per the SCAQMD significance threshold since the project would be consistent with the AQMP.

#### **Biological Resources**

The potential for biological impacts is addressed through mitigation measures **BIO-1** through **BIO-6**, resulting in the proposed Project having a less than cumulatively considerable impact on biological resources. The proposed Project is consistent with the Riverside County MSHCP, which was created to address biological resources County-wide. In addition, Project impacts to state and federal resources will be avoided to the greatest extent possible, and where impacts shall occur, will be mitigated to result in a no net loss of resources.

#### **Cultural Resources**

Development on the proposed Project site would contribute to an increase in cultural resource impacts. Based on the analysis contained in this Initial Study, the potential for there is potential

for these sub-surface resources to be present on the proposed Project site. However, mitigation measures **CUL-1** though **CUL-8** would reduce the potential impacts associated with development on the Project site, resulting in either: avoidance, preservation, or curation of any resources found on site during ground disturbance and grading activities. Thus, the proposed Project would have a less than cumulatively considerable impact, as determined by the agencies that have jurisdiction over these resources.

#### **Geology and Soils**

Project-related impacts on geology and soils associated with development on the proposed Project site are site-specific, and development on the site would not contribute to seismic hazards or water quality impacts associated with soil erosion. However compliance with Standard Conditions and Requirements would result in a decreased exposure to the risks associated with seismic activity. Therefore, the proposed Project is anticipated to have no impact on cumulative geophysical conditions in the region.

#### Greenhouse Gas Emissions

The greenhouse gas analysis provided in subsection 7, Greenhouse Gas Emissions, analyzed the proposed Project's cumulative contribution to global climate change and determined that the proposed Project would not create a cumulatively considerable environmental impact resulting from greenhouse gas emissions. The proposed Project will provide jobs in a housing rich environment.

#### Hazards and Hazardous Materials

The proposed Project is not expected to utilize or contribute to hazards associated with the accidental release of hazardous materials. However, even if hazardous materials are used on the site, implementation of mitigation measures **HAZ-1** through **HAZ-4** and compliance with federal, state, and City regulations will ensure that cumulative hazard conditions are less than cumulatively considerable.

#### Hydrology and Water Quality

Development on the proposed Project site has the potential to result in cumulative hydrology and water quality impacts; however, implementation of mitigation measure **HYD-1** would reduce the proposed Project's potential cumulative impacts on hydrology and water quality to less than cumulatively considerable. There will be no changes to off-site and on-site drainage patterns as a result of Project design and compliance with mitigation measure **HYD-1**.

#### Land Use and Planning

The proposed Project is consistent with the existing land use designation of the General Plan and is consistent with the existing zoning. The proposed Project is consistent with existing and proposed development in the project vicinity. Because the proposed Project area is surrounded by existing urban development and land designated for urban development, and the proposed Project is consistent with both the General Plan and zoning designations for the site, the proposed Project would result in no cumulative impacts to land uses.

#### **Mineral Resources**

Currently, no mineral resources are known to exist at the proposed Project site and there is no significant potential that unknown mineral resources exist at the site. There are no known locally important mineral resource recovery sites identified by the Wildomar General Plan and the proposed project will not impact access to any unknown mineral sites located outside of the proposed project boundaries. Any impacts would be less than cumulatively considerable.

#### Noise

Development on the proposed Project site would result in temporary and permanent changes in the ambient noise levels in the vicinity; however, implementation of mitigation measures **NOI-1** though **NOI-5** would reduce cumulative noise impacts to less than cumulatively considerable. With mitigation incorporation, construction noise and noise from Project operations, will be within the acceptable standards mandated in the City's General Plan.

#### Population and Housing

Cumulative development in the vicinity of the proposed Project would indirectly increase the population and number of housing units in Wildomar and Riverside County. However, development at the proposed Project site is consistent with current land use designations and growth assumed in the Land Use Element of the Wildomar General Plan. The cumulative environmental and growth inducement effects are evaluated in the technical sections of this IS/MND. Given that this growth is anticipated in the General Plan, this impact is considered less than cumulatively considerable.

#### **Public Services**

Implementation of the proposed Project, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the immediate area, may increase the demand for public services. However, with the implementation of the City's Standard Conditions and Requirements, any necessary infrastructure or facilities expansion will be reviewed for potential impacts. Impacts related to the proposed Project are less than cumulatively considerable.

#### Recreation

Implementation of the proposed Project will have a minimal impact upon Recreation Resources. Because the proposed Project is non-residential, any impacts are considered indirect, incremental and less than significant. Impacts related to the proposed Project are less than cumulatively considerable.

#### Transportation/Traffic

Development on the proposed Project site would contribute trips to the circulation network under cumulative conditions. As a standard condition, the Project applicant will be responsible to implement and pay its fair-share contribution toward necessary improvements through a payment of the TUMF. Mitigation Measure **TR-1** requires improvements to roadways and intersections that will be affected by the implementation of the proposed Project. The proposed Project's impacts to cumulative traffic conditions would be less than cumulatively considerable as analyzed in the proposed Project TIA. The TIA analyzed Levels of Service – Existing Plus Ambient Growth Plus Cumulative Plus proposed Project Conditions and determined that all impacts could be mitigated to a less than significant level.

#### **Utilities and Service Systems**

Construction and operational activities related to the development on the proposed Project may result in impacts to utilities and service systems, including solid waste. However, any impacts would be less than cumulatively considerable. As discussed and analyzed in Section V.17, Utilities and Service Systems, of this Initial Study, implementation of the proposed Project will not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Sufficient water supplies are available to serve the project from existing entitlements and resources and no new or expanded entitlements are needed. Adequate wastewater capacity exists to serve the project's projected demand in addition to the provider's existing commitments. Lastly, the proposed Project will be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and the proposed Project will comply with federal, state, and local statutes and regulations related to solid waste. Project impacts, while incremental, will not be cumulatively considerable.

#### c) Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly? <u>Less Than Significant Impact with Mitigation Incorporated</u>

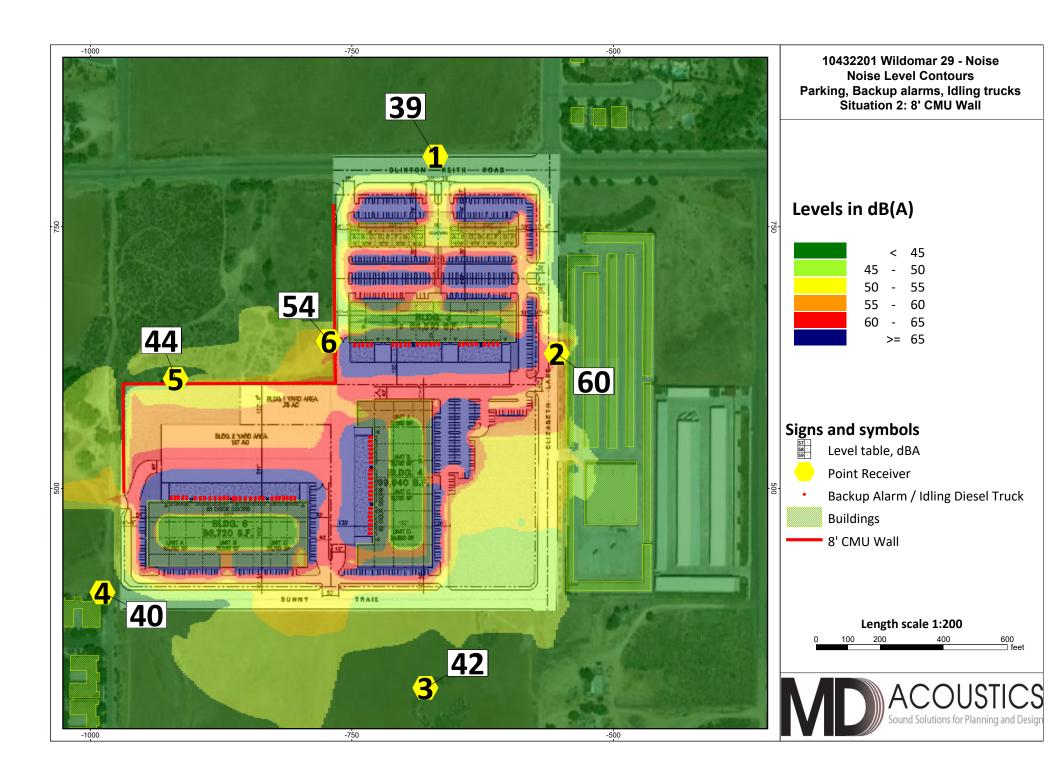
The proposed Project does not have the potential to significantly adversely affect humans, either directly or indirectly. While a number of impacts were identified as having a potential to significantly impact humans, with the identified mitigation measures and standard requirements, these impacts are expected to be less than significant. With implementation of the identified measures, the proposed Project and associated future development are not expected to cause significant adverse impacts to humans. All significant impacts are avoidable, and the City of Wildomar will ensure that measures imposed to protect human beings are implemented.

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Appendix C: SoundPLAN Input and Output



Source	Source ty	pel max	А	
		dB(A)	dB	
Receiver R1 FI G	Lmax,lim dB(A) L	max 38.8		
Backup beep	Point	20.4	0.0	
Idling Diesel	Point	12.1	0.0	
Backup beep	Point	20.7	0.0	
Idling Diesel	Point	12.2	0.0	
Backup beep	Point	20.7	0.0	
Idling Diesel	Point	12.1	0.0	
Backup beep	Point	20.8	0.0	
Idling Diesel	Point	12.2	0.0	
Backup beep	Point	20.8	0.0	
Idling Diesel	Point	12.2	0.0	
Backup beep	Point	21.1	0.0	
Idling Diesel	Point	12.3	0.0	
Backup beep	Point	21.4	0.0	
Idling Diesel	Point	12.5	0.0	
Backup beep	Point	21.5	0.0	
Idling Diesel	Point	12.5	0.0	
Backup beep	Point	21.3	0.0	
Idling Diesel	Point	12.5	0.0	
Backup beep	Point	21.3	0.0	
Idling Diesel	Point	12.6	0.0	
Backup beep	Point	21.2	0.0	
Idling Diesel	Point	12.8	0.0	
Backup beep	Point	21.1	0.0	
Idling Diesel	Point	12.7	0.0	
Backup beep	Point	21.5	0.0	
Idling Diesel	Point	12.8	0.0	
Backup beep	Point	21.5	0.0	
Idling Diesel	Point	12.8	0.0	
Backup beep	Point	21.1	0.0	
Idling Diesel	Point	12.7	0.0	
Backup beep	Point	21.5	0.0	
Idling Diesel	Point	12.7	0.0	
Backup beep	Point	22.0	0.0	
Idling Diesel	Point	13.1	0.0	
Backup beep	Point	22.0	0.0	
Idling Diesel Backup beep	Point Point	13.0 21.8	0.0 0.0	
Idling Diesel	Point	12.6	0.0	
Backup beep	Point	21.6	0.0	
Idling Diesel	Point	12.5	0.0	
Backup beep	Point	21.6	0.0	
Idling Diesel	Point	12.4	0.0	
Backup beep	Point	20.7	0.0	
Idling Diesel	Point	12.1	0.0	
	րտու	12.1	0.0	

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Source	Source ty	hel max	А
		1	dB
Deslam heen	Deint	dB(A)	
Backup beep	Point	20.7	0.0
Idling Diesel	Point	12.1	0.0
Backup beep	Point	20.6	0.0
Idling Diesel	Point	12.0	0.0
Backup beep	Point	20.6	0.0
Idling Diesel	Point	12.0	0.0
Backup beep	Point	18.7	0.0
Idling Diesel	Point	11.3	0.0
Backup beep	Point	18.6	0.0
Idling Diesel	Point	12.3	0.0
Backup beep	Point	18.2	0.0
Idling Diesel	Point	12.4	0.0
Backup beep	Point	17.9	0.0
Idling Diesel	Point	12.3	0.0
Backup beep	Point	17.8	0.0
Idling Diesel	Point	12.2	0.0
Backup beep	Point	17.5	0.0
Idling Diesel	Point	12.0	0.0
Backup beep	Point	17.4	0.0
Idling Diesel	Point	11.9	0.0
Backup beep	Point	17.8	0.0
Idling Diesel	Point	12.1	0.0
Backup beep	Point	18.0	0.0
Idling Diesel	Point	12.3	0.0
Backup beep	Point	17.6	0.0
Idling Diesel	Point	12.0	0.0
Backup beep	Point	17.4	0.0
Idling Diesel	Point	11.9	0.0
Backup beep	Point	17.5	0.0
Idling Diesel	Point	17.5	0.0
-	Point	17.4	0.0
Backup beep Idling Diesel	Point	17.4	0.0
0			
Backup beep	Point	17.3	0.0
Idling Diesel	Point	11.8	0.0
Backup beep	Point	17.2	0.0
Idling Diesel	Point	11.7	0.0
Backup beep	Point	17.1	0.0
Idling Diesel	Point	11.6	0.0
Backup beep	Point	17.6	0.0
Idling Diesel	Point	11.9	0.0
Backup beep	Point	17.7	0.0
Idling Diesel	Point	11.9	0.0
Backup beep	Point	17.1	0.0
Idling Diesel	Point	13.2	0.0
Backup beep	Point	17.4	0.0

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Source	Source ty	nel max	А
		dB(A)	dB
Idling Dises!	Deint		
Idling Diesel	Point	13.4	0.0
Backup beep	Point	17.5	0.0
Idling Diesel	Point	13.6	0.0
Backup beep	Point	19.9	0.0
Idling Diesel	Point	13.7	0.0
Backup beep	Point	29.6	0.0
Idling Diesel	Point	20.7	0.0
Backup beep	Point	29.6	0.0
Idling Diesel	Point	20.7	0.0
Backup beep	Point	29.7	0.0
Idling Diesel	Point	20.7	0.0
Backup beep	Point	29.7	0.0
Idling Diesel	Point	20.7	0.0
Backup beep	Point	29.7	0.0
Idling Diesel	Point	20.7	0.0
Backup beep	Point	29.7	0.0
Idling Diesel	Point	20.8	0.0
Backup beep	Point	32.2	0.0
Idling Diesel	Point	23.3	0.0
Backup beep	Point	32.2	0.0
	Point	23.3	0.0
Idling Diesel			
Backup beep	Point	32.2	0.0
Idling Diesel	Point	23.3	0.0
Backup beep	Point	32.2	0.0
Idling Diesel	Point	23.3	0.0
Backup beep	Point	31.8	0.0
Idling Diesel	Point	23.0	0.0
Backup beep	Point	32.2	0.0
Idling Diesel	Point	23.3	0.0
Backup beep	Point	32.2	0.0
Idling Diesel	Point	23.3	0.0
Backup beep	Point	31.3	0.0
Idling Diesel	Point	22.5	0.0
Backup beep	Point	31.3	0.0
Idling Diesel	Point	22.5	0.0
Backup beep	Point	31.2	0.0
Idling Diesel	Point	22.4	0.0
Backup beep	Point	31.1	0.0
Idling Diesel	Point	22.4	0.0
Backup beep	Point	31.0	0.0
Idling Diesel	Point	22.3	0.0
Backup beep	Point	30.8	0.0
	Point	22.1	0.0
Idling Diesel			
Backup beep	Point	30.8	0.0
Idling Diesel	Point	22.1	0.0

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Source	Source ty	bel max	А			
		dB(A)	dB			
Rackup boon	Point	30.9	0.0			
Backup beep Idling Diesel	Point	22.2	0.0			
Backup beep	Point	30.5	0.0			
Idling Diesel	Point	21.9	0.0			
Backup beep	Point	30.5	0.0			
Idling Diesel	Point	21.8	0.0			
Backup beep	Point	30.5	0.0			
Idling Diesel	Point	21.8	0.0			
Backup beep	Point	30.4	0.0			
Idling Diesel	Point	21.8	0.0			
Backup beep	Point	30.5	0.0			
Idling Diesel	Point	21.8	0.0			
Backup beep	Point	30.4	0.0			
Idling Diesel	Point	21.8	0.0			
Backup beep	Point	30.4	0.0			
Idling Diesel	Point	21.7	0.0			
151	PLot	14.7	0.0			
152	PLot	19.2	0.0			
153	PLot	13.7	0.0			
154	PLot	3.7	0.0			
155	PLot	3.8	0.0			
156	PLot	7.5	0.0			
157	PLot	9.7	0.0			
158	PLot	9.1	0.0			
159	PLot	7.0	0.0			
160	PLot	14.8	0.0			
161	PLot	11.6	0.0			
162	PLot	38.8	0.0			
163	PLot	37.2	0.0			
164	PLot	38.4	0.0			
165	PLot	36.0	0.0			
166	PLot	34.2	0.0			
167	PLot	32.4	0.0			
168	PLot	33.2	0.0			
169	PLot	36.0	0.0			
170	PLot	30.2	0.0			
171	PLot	20.4	0.0			
172	PLot	20.0	0.0			
173	PLot	30.7	0.0			
174	PLot	21.9	0.0			
175	PLot	13.9	0.0			
176	PLot	-0.1	0.0			
177	PLot	-0.3	0.0			
178	PLot	11.7	0.0			
Receiver R2 FI G Lmax,lim dB(A) Lmax 60.1 dB(A)						

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Source	Source typeLmax		A
		dB(A)	dB
Baakun baan	Deint	. ,	
Backup beep	Point	49.8	0.0
Idling Diesel	Point	38.8	0.0
Backup beep	Point	49.1	0.0
Idling Diesel	Point Point	38.8 49.4	0.0 0.0
Backup beep	Point Point	49.4 38.9	0.0
Idling Diesel			
Backup beep	Point	49.6	0.0
Idling Diesel	Point	39.1	0.0
Backup beep	Point	49.8	0.0
Idling Diesel	Point	39.3	0.0
Backup beep	Point	50.8	0.0
Idling Diesel	Point	40.3	0.0
Backup beep	Point	51.0	0.0
Idling Diesel	Point	40.6	0.0
Backup beep	Point	51.3	0.0
Idling Diesel	Point	40.8	0.0
Backup beep	Point	51.6	0.0
Idling Diesel	Point	41.1	0.0
Backup beep	Point	51.8	0.0
Idling Diesel	Point	41.3	0.0
Backup beep	Point	52.3	0.0
Idling Diesel	Point	41.8	0.0
Backup beep	Point	52.6	0.0
Idling Diesel	Point	42.1	0.0
Backup beep	Point	52.9	0.0
Idling Diesel	Point	42.3	0.0
Backup beep	Point	53.2	0.0
Idling Diesel	Point	42.6	0.0
Backup beep	Point	53.5	0.0
Idling Diesel	Point	42.9	0.0
Backup beep	Point	53.8	0.0
Idling Diesel	Point	43.2	0.0
Backup beep	Point	55.6	0.0
Idling Diesel	Point	44.8	0.0
Backup beep	Point	55.9	0.0
Idling Diesel	Point	45.2	0.0
Backup beep	Point	56.3	0.0
Idling Diesel	Point	45.5	0.0
Backup beep	Point	56.8	0.0
Idling Diesel	Point	46.0	0.0
Backup beep	Point	57.3	0.0
Idling Diesel	Point	46.4	0.0
Backup beep	Point	58.3	0.0
Idling Diesel	Point	47.3	0.0
Backup beep	Point	58.8	0.0
Васкир веер	Foint	50.0	0.0

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Source	Source ty	nel max	A
		dB(A)	dB
Lellin er Die eret	Deint	. ,	
Idling Diesel	Point	47.9	0.0
Backup beep	Point	59.4	0.0
Idling Diesel	Point	48.4	0.0
Backup beep	Point	60.1	0.0
Idling Diesel	Point	48.5	0.0
Backup beep	Point	22.7	0.0
Idling Diesel	Point	13.8	0.0
Backup beep	Point	22.6	0.0
Idling Diesel	Point	13.7	0.0
Backup beep	Point	22.5	0.0
Idling Diesel	Point	13.6	0.0
Backup beep	Point	22.4	0.0
Idling Diesel	Point	13.5	0.0
Backup beep	Point	22.3	0.0
Idling Diesel	Point	13.4	0.0
Backup beep	Point	22.2	0.0
Idling Diesel	Point	13.3	0.0
Backup beep	Point	22.1	0.0
Idling Diesel	Point	13.2	0.0
Backup beep	Point	22.0	0.0
Idling Diesel	Point	13.2	0.0
Backup beep	Point	21.9	0.0
Idling Diesel	Point	13.2	0.0
Backup beep	Point	21.8	0.0
	Point	13.0	0.0
Idling Diesel			
Backup beep	Point	21.7	0.0
Idling Diesel	Point	12.9	0.0
Backup beep	Point	21.6	0.0
Idling Diesel	Point	12.9	0.0
Backup beep	Point	21.5	0.0
Idling Diesel	Point	12.9	0.0
Backup beep	Point	21.3	0.0
Idling Diesel	Point	12.8	0.0
Backup beep	Point	21.2	0.0
Idling Diesel	Point	12.7	0.0
Backup beep	Point	21.0	0.0
Idling Diesel	Point	12.6	0.0
Backup beep	Point	21.0	0.0
Idling Diesel	Point	12.7	0.0
Backup beep	Point	21.0	0.0
Idling Diesel	Point	12.7	0.0
Backup beep	Point	20.8	0.0
Idling Diesel	Point	12.4	0.0
Backup beep	Point	20.7	0.0
Idling Diesel	Point	12.5	0.0
		12.0	0.0

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Source	Source ty		A
Source		1	dB
Deslam heen	Deint	dB(A)	
Backup beep	Point	20.7	0.0
Idling Diesel	Point	12.5	0.0
Backup beep	Point	20.6	0.0
Idling Diesel	Point	12.5	0.0
Backup beep	Point	33.5	0.0
Idling Diesel	Point	24.2	0.0
Backup beep	Point	33.5	0.0
Idling Diesel	Point	24.3	0.0
Backup beep	Point	33.5	0.0
Idling Diesel	Point	24.3	0.0
Backup beep	Point	33.6	0.0
Idling Diesel	Point	24.4	0.0
Backup beep	Point	33.9	0.0
Idling Diesel	Point	24.5	0.0
Backup beep	Point	34.0	0.0
Idling Diesel	Point	24.6	0.0
Backup beep	Point	34.1	0.0
Idling Diesel	Point	24.6	0.0
Backup beep	Point	34.1	0.0
Idling Diesel	Point	24.6	0.0
Backup beep	Point	34.1	0.0
Idling Diesel	Point	24.7	0.0
Backup beep	Point	34.1	0.0
Idling Diesel	Point	24.7	0.0
-	Point		
Backup beep		34.1	0.0
Idling Diesel	Point	24.7	0.0
Backup beep	Point	34.1	0.0
Idling Diesel	Point	24.7	0.0
Backup beep	Point	34.1	0.0
Idling Diesel	Point	24.7	0.0
Backup beep	Point	34.4	0.0
Idling Diesel	Point	24.8	0.0
Backup beep	Point	34.4	0.0
Idling Diesel	Point	24.7	0.0
Backup beep	Point	34.4	0.0
Idling Diesel	Point	24.7	0.0
Backup beep	Point	34.3	0.0
Idling Diesel	Point	24.7	0.0
Backup beep	Point	36.5	0.0
Idling Diesel	Point	27.1	0.0
Backup beep	Point	36.9	0.0
Idling Diesel	Point	27.0	0.0
Backup beep	Point	36.5	0.0
Idling Diesel	Point	27.0	0.0
Backup beep	Point	36.5	0.0
Saonap Boop	. on .	00.0	0.0

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Source	Source ty	beLmax	А	
		dB(A)	dB	
Idling Diesel	Point	27.1	0.0	
Backup beep	Point	36.7	0.0	
Idling Diesel	Point	27.0	0.0	
Backup beep	Point	36.6	0.0	
Idling Diesel	Point	26.9	0.0	
Backup beep	Point	36.4	0.0	
Idling Diesel	Point	26.8	0.0	
Backup beep	Point	36.2	0.0	
Idling Diesel	Point	26.7	0.0	
Backup beep	Point	36.1	0.0	
Idling Diesel	Point	26.6	0.0	
Backup beep	Point	36.0	0.0	
Idling Diesel	Point	26.4	0.0	
Backup beep	Point	35.8	0.0	
Idling Diesel	Point	26.3	0.0	
151	PLot	31.5	0.0	
152	PLot	36.1	0.0	
153	PLot	31.7	0.0	
154	PLot	29.0	0.0	
155	PLot	24.2	0.0	
156	PLot	30.8	0.0	
157	PLot	26.0	0.0	
158	PLot	24.3	0.0	
159	PLot	21.9	0.0	
160	PLot	29.1	0.0	
161	PLot	25.3	0.0	
162	PLot	20.4	0.0	
163	PLot	21.0	0.0	
164	PLot	29.4	0.0	
165	PLot	25.2	0.0	
166	PLot	26.2	0.0	
167	PLot	25.7	0.0	
168	PLot	34.0	0.0	
169	PLot	38.9	0.0	
170	PLot	34.7	0.0	
171	PLot	18.2	0.0	
172	PLot	14.4	0.0	
173	PLot	31.5	0.0	
174	PLot	45.0	0.0	
175	PLot	17.9	0.0	
176	PLot	7.7	0.0	
177	PLot	3.8	0.0	
178 Receiver P2 ELC L may lim	PLot	2.7	0.0	
Receiver R3 FI G Lmax,lim Backup beep	Point	max 41.8 28.8	dB(A) 0.0	
Daorah neeh	րտու	20.0	0.0	

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Source	Source ty	nel max	A
		dB(A)	dB
Idling Dissel	Deint	. ,	
Idling Diesel	Point	20.2	0.0
Backup beep	Point	28.7	0.0
Idling Diesel	Point	20.2	0.0
Backup beep	Point	28.7	0.0
Idling Diesel	Point	20.2	0.0
Backup beep	Point	28.7	0.0
Idling Diesel	Point	20.2	0.0
Backup beep	Point	28.7	0.0
Idling Diesel	Point	20.2	0.0
Backup beep	Point	29.2	0.0
Idling Diesel	Point	20.6	0.0
Backup beep	Point	29.2	0.0
Idling Diesel	Point	20.6	0.0
Backup beep	Point	29.2	0.0
Idling Diesel	Point	20.6	0.0
Backup beep	Point	29.3	0.0
Idling Diesel	Point	20.8	0.0
Backup beep	Point	30.8	0.0
Idling Diesel	Point	20.8	0.0
Backup beep	Point	30.9	0.0
Idling Diesel	Point	21.4	0.0
Backup beep	Point	31.0	0.0
Idling Diesel	Point	21.6	0.0
Backup beep	Point	33.9	0.0
	Point	22.6	0.0
Idling Diesel			
Backup beep	Point	35.6	0.0
Idling Diesel	Point	23.4	0.0
Backup beep	Point	37.5	0.0
Idling Diesel	Point	26.8	0.0
	Point	38.8	0.0
Idling Diesel	Point	28.3	0.0
Backup beep	Point	41.8	0.0
Idling Diesel	Point	31.7	0.0
Backup beep	Point	41.8	0.0
Idling Diesel	Point	31.7	0.0
Backup beep	Point	41.8	0.0
Idling Diesel	Point	31.7	0.0
Backup beep	Point	41.8	0.0
Idling Diesel	Point	31.7	0.0
Backup beep	Point	41.8	0.0
Idling Diesel	Point	31.7	0.0
Backup beep	Point	41.8	0.0
Idling Diesel	Point	31.6	0.0
Backup beep	Point	41.8	0.0
Idling Diesel	Point	31.6	0.0
		01.0	0.0

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Source	Source typeLmax		A	
		dB(A)	dB	
Backup beep	Point	41.4	0.0	
Idling Diesel	Point	31.5	0.0	
Backup beep	Point	40.8	0.0	
Idling Diesel	Point	31.3	0.0	
Backup beep	Point	40.4	0.0	
Idling Diesel	Point	28.8	0.0	
Backup beep	Point	40.4	0.0	
Idling Diesel	Point	28.8	0.0	
Backup beep	Point	40.4	0.0	
Idling Diesel	Point	28.7	0.0	
Backup beep	Point	40.5	0.0	
Idling Diesel	Point	27.9	0.0	
Backup beep	Point	39.6	0.0	
Idling Diesel	Point	28.5	0.0	
Backup beep	Point	38.8	0.0	
Idling Diesel	Point	28.6	0.0	
Backup beep	Point	39.0	0.0	
Idling Diesel	Point	28.1	0.0	
Backup beep	Point	39.2	0.0	
Idling Diesel	Point	28.3	0.0	
Backup beep	Point	39.4	0.0	
Idling Diesel	Point	28.4	0.0	
Backup beep	Point	39.5	0.0	
Idling Diesel	Point	28.5	0.0	
Backup beep	Point	39.6	0.0	
Idling Diesel	Point	28.7	0.0	
Backup beep	Point	39.8	0.0	
Idling Diesel	Point	28.8	0.0	
Backup beep	Point	39.9	0.0	
Idling Diesel	Point	28.9	0.0	
Backup beep	Point	40.0	0.0	
Idling Diesel	Point	26.7	0.0	
Backup beep Idling Diesel	Point Point	22.3	0.0	
Backup beep	Point	26.9 22.6	0.0 0.0	
Idling Diesel	Point	22.0 16.6	0.0	
Backup beep	Point	23.2	0.0	
Idling Diesel	Point	23.2 17.0	0.0	
Backup beep	Point	23.5	0.0	
Idling Diesel	Point	17.2	0.0	
Backup beep	Point	23.3	0.0	
Idling Diesel	Point	17.1	0.0	
Backup beep	Point	23.7	0.0	
Idling Diesel	Point	17.5	0.0	
Backup beep	Point	24.0	0.0	
	1. 0	<u> </u>	0.0	1

Source	Source typeLmax		А	
Course		dB(A)	dB	
Idling Diesel	Point	17.8	0.0	<u> </u>
Backup beep	Point	24.3	0.0	
Idling Diesel	Point	17.4	0.0	
Backup beep	Point	17.4	0.0	
Idling Diesel	Point	9.2	0.0	
Backup beep	Point	9.2 16.4	0.0	
Idling Diesel	Point	9.1	0.0	
Backup beep	Point	16.5	0.0	
Idling Diesel	Point	9.3	0.0	
Backup beep	Point	16.7	0.0	
Idling Diesel	Point	9.4	0.0	
Backup beep	Point	16.8	0.0	
Idling Diesel	Point	9.5	0.0	
Backup beep	Point	16.8	0.0	
Idling Diesel	Point	9.3	0.0	
Backup beep	Point	16.9	0.0	
Idling Diesel	Point	9.3	0.0	
Backup beep	Point	17.0	0.0	
Idling Diesel	Point	9.3	0.0	
Backup beep	Point	17.2	0.0	
Idling Diesel	Point	9.5	0.0	
Backup beep	Point	17.3	0.0	
Idling Diesel	Point	9.6	0.0	
Backup beep	Point	17.8	0.0	
Idling Diesel	Point	10.1	0.0	
Backup beep	Point	17.7	0.0	
Idling Diesel	Point	10.1	0.0	
Backup beep	Point	17.5	0.0	
Idling Diesel	Point	9.7	0.0	
Backup beep	Point	17.8	0.0	
Idling Diesel	Point	9.8	0.0	
Backup beep	Point	17.9	0.0	
Idling Diesel	Point	9.9	0.0	
Backup beep	Point	18.0	0.0	
Idling Diesel	Point	10.1	0.0	
Backup beep	Point	18.2	0.0	
Idling Diesel	Point	10.2	0.0	
Backup beep	Point	18.4	0.0	
Idling Diesel	Point	10.4	0.0	
Backup beep	Point	19.0	0.0	
Idling Diesel	Point	11.1	0.0	
Backup beep	Point	18.9	0.0	
Idling Diesel	Point	11.0	0.0	
Backup beep	Point	18.6	0.0	
Idling Diesel	Point	10.6	0.0	

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Source	Source ty	beLmax	А	
		dB(A)	dB	
Backup beep	Point	19.3	0.0	
Idling Diesel	Point	11.4	0.0	
Backup beep	Point	19.6	0.0	
Idling Diesel	Point	11.8	0.0	
Backup beep	Point	19.9	0.0	
Idling Diesel	Point	12.1	0.0	
Backup beep	Point	20.2	0.0	
Idling Diesel	Point	12.5	0.0	
Backup beep	Point	20.6	0.0	
Idling Diesel	Point	13.1	0.0	
Backup beep	Point	21.0	0.0	
Idling Diesel	Point	13.6	0.0	
Backup beep	Point	21.6	0.0	
Idling Diesel	Point	14.6	0.0	
151	PLot	24.2	0.0	
152	PLot	28.1	0.0	
153	PLot	20.9	0.0	
154	PLot	12.0	0.0	
155	PLot	12.8	0.0	
156	PLot	16.5	0.0	
157	PLot	18.7	0.0	
158	PLot	19.3	0.0	
159	PLot	17.9	0.0	
160	PLot	29.6	0.0	
161	PLot	33.6	0.0	
162	PLot	4.2	0.0	
163	PLot	2.2	0.0	
164	PLot	11.2	0.0	
165	PLot	2.0	0.0	
166	PLot	10.2	0.0	
167	PLot	8.8	0.0	
168	PLot	11.4	0.0	
169	PLot	13.5	0.0	
170	PLot	6.0	0.0	
171	PLot	1.2	0.0	
172	PLot	-7.1	0.0	
173	PLot	11.3	0.0	
174	PLot	20.2	0.0	
175	PLot	28.7	0.0	
176	PLot	27.1	0.0	
177	PLot	24.1	0.0	
178	PLot	23.1	0.0	
Receiver R4 FI G Lmax,lim		max 39.6		
Backup beep	Point	27.5	0.0	
Idling Diesel	Point	19.1	0.0	

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Source	Source ty	el max	А	
		dB(A)	dB	
Backup beep	Point	27.7	0.0	
Idling Diesel	Point	19.2	0.0	
Backup beep	Point	27.8	0.0	
Idling Diesel	Point	19.3	0.0	
Backup beep	Point	27.8	0.0	
Idling Diesel	Point	19.3	0.0	
Backup beep	Point	30.6	0.0	
Idling Diesel	Point	21.9	0.0	
Backup beep	Point	30.3	0.0	
Idling Diesel	Point	21.6	0.0	
Backup beep	Point	30.2	0.0	
Idling Diesel	Point	21.5	0.0	
Backup beep	Point	30.1	0.0	
Idling Diesel	Point	21.4	0.0	
Backup beep	Point	30.0	0.0	
Idling Diesel	Point	21.3	0.0	
Backup beep	Point	30.0	0.0	
Idling Diesel	Point	21.3	0.0	
Backup beep	Point	27.3	0.0	
Idling Diesel	Point	18.6	0.0	
Backup beep	Point	27.2	0.0	
Idling Diesel	Point	18.6	0.0	
Backup beep	Point	27.2	0.0	
Idling Diesel	Point	18.5	0.0	
Backup beep	Point	23.7	0.0	
Idling Diesel	Point	15.2	0.0	
Backup beep	Point Point	23.6 15.2	0.0 0.0	
Idling Diesel	Point	23.6	0.0	
Backup beep Idling Diesel	Point	23.0 15.1	0.0	
Backup beep	Point	23.2	0.0	
Idling Diesel	Point	23.2 14.8	0.0	
Backup beep	Point	23.2	0.0	
Idling Diesel	Point	14.7	0.0	
Backup beep	Point	23.1	0.0	
Idling Diesel	Point	14.7	0.0	
Backup beep	Point	23.1	0.0	
Idling Diesel	Point	14.6	0.0	
Backup beep	Point	22.9	0.0	
Idling Diesel	Point	14.5	0.0	
Backup beep	Point	22.8	0.0	
Idling Diesel	Point	14.4	0.0	
Backup beep	Point	22.8	0.0	
Idling Diesel	Point	14.3	0.0	
Backup beep	Point	22.7	0.0	
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Source	Source typeLmax		A	
		dB(A)	dB	
Idling Diesel	Point	14.3	0.0	
Backup beep	Point	22.7	0.0	
Idling Diesel	Point	14.2	0.0	
Backup beep	Point	30.4	0.0	
Idling Diesel	Point	21.7	0.0	
Backup beep	Point	21.7	0.0	
Idling Diesel	Point	20.7	0.0	
Backup beep	Point	20.7	0.0	
Idling Diesel	Point	20.7	0.0	
Backup beep	Point	20.7	0.0	
Idling Diesel	Point	29.2	0.0	
Backup beep	Point	20.0	0.0	
Idling Diesel	Point	20.6	0.0	
Backup beep	Point	20.0	0.0	
Idling Diesel	Point	20.6	0.0	
Backup beep	Point	30.7	0.0	
Idling Diesel	Point	21.1	0.0	
Backup beep	Point	30.3	0.0	
Idling Diesel	Point	21.4	0.0	
Backup beep	Point	30.3	0.0	
Idling Diesel	Point	21.4	0.0	
Backup beep	Point	30.4	0.0	
Idling Diesel	Point	21.5	0.0	
Backup beep	Point	29.6	0.0	
Idling Diesel	Point	21.3	0.0	
Backup beep	Point	29.4	0.0	
Idling Diesel	Point	20.8	0.0	
Backup beep	Point	29.5	0.0	
Idling Diesel	Point	21.0	0.0	
Backup beep	Point	29.7	0.0	
Idling Diesel	Point	21.1	0.0	
Backup beep	Point	29.9	0.0	
Idling Diesel	Point	21.2	0.0	
Backup beep	Point	30.2	0.0	
Idling Diesel	Point	21.6	0.0	
Backup beep	Point	30.4	0.0	
Idling Diesel	Point	21.7	0.0	
Backup beep	Point	30.5	0.0	
Idling Diesel	Point	21.9	0.0	
Backup beep	Point	30.7	0.0	
Idling Diesel	Point	22.1	0.0	
Backup beep	Point	30.9	0.0	
Idling Diesel	Point	22.3	0.0	
Backup beep	Point	31.2	0.0	
Idling Diesel	Point	22.6	0.0	

Source	Source typeLmax		A	
		dB(A)	dB	
Backup beep	Point	31.5	0.0	
Idling Diesel	Point	22.9	0.0	
Backup beep	Point	22.9	0.0	
Idling Diesel	Point	18.5	0.0	
Backup beep	Point	26.5	0.0	
Idling Diesel	Point	18.1	0.0	
Backup beep	Point	26.3	0.0	
Idling Diesel	Point	17.9	0.0	
Backup beep	Point	26.0	0.0	
Idling Diesel	Point	17.5	0.0	
Backup beep	Point	25.7	0.0	
Idling Diesel	Point	17.3	0.0	
Backup beep	Point	25.1	0.0	
Idling Diesel	Point	16.6	0.0	
Backup beep	Point	24.7	0.0	
Idling Diesel	Point	16.2	0.0	
Backup beep	Point	24.5	0.0	
Idling Diesel	Point	16.0	0.0	
Backup beep	Point	24.2	0.0	
Idling Diesel	Point	15.7	0.0	
Backup beep	Point	23.9	0.0	
Idling Diesel	Point	15.5	0.0	
Backup beep	Point	23.3	0.0	
Idling Diesel	Point	15.1	0.0	
Backup beep	Point	23.5	0.0	
Idling Diesel	Point	15.3	0.0	
Backup beep	Point	23.6	0.0	
Idling Diesel	Point	15.3	0.0	
Backup beep	Point	22.9	0.0	
Idling Diesel	Point	14.5	0.0	
Backup beep	Point	22.7	0.0	
Idling Diesel	Point	14.5	0.0	
Backup beep	Point	22.5	0.0	
Idling Diesel	Point	14.3	0.0	
Backup beep	Point Point	22.3	0.0	
Idling Diesel Backup beep	Point	14.1 22.0	0.0 0.0	
Idling Diesel	Point	22.0 13.9	0.0	
Backup beep	Point	21.5	0.0	
Idling Diesel	Point	13.6	0.0	
Backup beep	Point	21.7	0.0	
Idling Diesel	Point	13.8	0.0	
Backup beep	Point	21.8	0.0	
Idling Diesel	Point	13.7	0.0	
Backup beep	Point	21.0	0.0	
	l, our	21.0	0.0	1

Source	Source ty	beLmax	А	
		dB(A)	dB	
Idling Diesel	Point	13.1	0.0	
Backup beep	Point	20.9	0.0	
Idling Diesel	Point	13.2	0.0	
Backup beep	Point	20.9	0.0	
Idling Diesel	Point	13.2	0.0	
-	Point	20.6	0.0	
Backup beep	Point	20.0 13.0	0.0	
Idling Diesel	1			
Backup beep	Point	20.6	0.0	
Idling Diesel	Point	13.1	0.0	
Backup beep	Point	20.3	0.0	
Idling Diesel	Point	12.8	0.0	
Backup beep	Point	21.2	0.0	
Idling Diesel	Point	12.7	0.0	
151	PLot	2.1	0.0	
152	PLot	10.2	0.0	
153	PLot	5.7	0.0	
154	PLot	-0.1	0.0	
155	PLot	-1.3	0.0	
156	PLot	3.7	0.0	
157	PLot	2.2	0.0	
158	PLot	1.7	0.0	
159	PLot	-1.5	0.0	
160	PLot	8.7	0.0	
161	PLot	25.7	0.0	
162	PLot	9.2	0.0	
163	PLot	9.4	0.0	
164	PLot	7.9	0.0	
165	PLot	7.2	0.0	
166	PLot	12.2	0.0	
167	PLot	11.4	0.0	
168	PLot	7.6	0.0	
169	PLot	9.9	0.0	
170	PLot	1.0	0.0	
171	PLot	7.2	0.0	
172	PLot	-9.2	0.0	
173	PLot	5.0	0.0	
174	PLot	8.9	0.0	
175	PLot	19.8	0.0	
176	PLot	29.5	0.0	
177	PLot	37.1	0.0	
178	PLot	39.6	0.0	
Receiver R5 FIG Lmax,lim		max 43.7		
Backup beep	Point	40.7	0.0	
Idling Diesel	Point	30.7	0.0	
Backup beep	Point	41.8	0.0	
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Source	Source typeLmax A			
		dB(A)	dB	
Idling Dissol	Doint			
Idling Diesel	Point	30.7	0.0	
Backup beep	Point	43.7	0.0	
Idling Diesel	Point	30.6	0.0	
Backup beep	Point	43.6	0.0	
Idling Diesel	Point	30.9	0.0	
Backup beep	Point	43.0	0.0	
Idling Diesel	Point	32.8	0.0	
	Point Point	42.1 31.7	0.0 0.0	
Idling Diesel	Point			
Backup beep	Point	41.9	0.0 0.0	
Idling Diesel Backup boop	Point Point	31.6 41.7	0.0	
Backup beep Idling Diesel	Point	41.7 31.3	0.0	
Backup beep	Point	41.3	0.0	
Idling Diesel	Point	41.3 31.1	0.0	
	Point	41.1	0.0	
Backup beep Idling Diesel	Point	30.8	0.0	
Backup beep	Point	40.8	0.0	
Idling Diesel	Point	40.8 30.5	0.0	
Backup beep	Point	40.6	0.0	
Idling Diesel	Point	40.8 30.4	0.0	
Backup beep	Point	40.4	0.0	
Idling Diesel	Point	30.3	0.0	
	Point	40.2	0.0	
Idling Diesel	Point	30.0	0.0	
Backup beep	Point	40.1	0.0	
Idling Diesel	Point	29.9	0.0	
Backup beep	Point	39.9	0.0	
Idling Diesel	Point	29.7	0.0	
Backup beep	Point	39.0	0.0	
	Point	28.9	0.0	
	Point	38.9	0.0	
Idling Diesel	Point	28.8	0.0	
Backup beep	Point	38.7	0.0	
Idling Diesel	Point	28.6	0.0	
Backup beep	Point	38.6	0.0	
Idling Diesel	Point	28.5	0.0	
Backup beep	Point	38.4	0.0	
Idling Diesel	Point	28.3	0.0	
	Point	38.1	0.0	
Idling Diesel	Point	28.1	0.0	
Backup beep	Point	37.9	0.0	
Idling Diesel	Point	27.9	0.0	
Backup beep	Point	37.8	0.0	
Idling Diesel	Point	27.8	0.0	

Source	Source ty	nel max	A
		dB(A)	dB
Backup beep	Point	37.6	0.0
Idling Diesel	Point	27.6	0.0
Backup beep	Point	42.1	0.0
Idling Diesel	Point	32.2	0.0
Backup beep	Point	41.7	0.0
Idling Diesel	Point	32.0	0.0
Backup beep	Point	41.4	0.0
Idling Diesel	Point	31.6	0.0
Backup beep	Point	41.1	0.0
Idling Diesel	Point	31.4	0.0
Backup beep	Point	40.9	0.0
Idling Diesel	Point	31.3	0.0
Backup beep	Point	40.8	0.0
Idling Diesel	Point	31.2	0.0
Backup beep	Point	40.6	0.0
Idling Diesel	Point	31.1	0.0
Backup beep	Point	40.4	0.0
Idling Diesel	Point	30.8	0.0
Backup beep	Point	40.2	0.0
Idling Diesel	Point	30.7	0.0
Backup beep	Point	40.1	0.0
Idling Diesel	Point	30.6	0.0
Backup beep	Point	39.9	0.0
Idling Diesel	Point	30.4	0.0
Backup beep	Point	39.8	0.0
Idling Diesel	Point	30.3	0.0
Backup beep	Point	39.6	0.0
Idling Diesel	Point	30.2	0.0
Backup beep	Point	39.5	0.0
Idling Diesel	Point	30.0	0.0
Backup beep	Point	39.3	0.0
Idling Diesel	Point	29.9	0.0
Backup beep	Point	39.1	0.0
Idling Diesel	Point	29.6	0.0
Backup beep	Point	38.9	0.0
Idling Diesel	Point	29.5	0.0
Backup beep	Point	38.8	0.0
Idling Diesel	Point	29.4	0.0
Backup beep	Point	38.7	0.0
Idling Diesel	Point	29.3	0.0
Backup beep	Point	38.5	0.0
Idling Diesel	Point	30.0	0.0
Backup beep	Point	39.4	0.0
Idling Diesel	Point	30.0	0.0
Backup beep	Point	40.4	0.0

Source	Source ty	pelmax	A	
		dB(A)	dB	
Idling Diesel	Point	31.0	0.0	
Backup beep	Point	43.0	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	43.0	0.0	
Idling Diesel	Point	43.0 33.6	0.0	
Backup beep	Point	43.0	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	43.0	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	43.0	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	42.9	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	42.9	0.0	
Idling Diesel	Point	33.5	0.0	
Backup beep	Point	42.9	0.0	
Idling Diesel	Point	33.5	0.0	
Backup beep	Point	42.8	0.0	
Idling Diesel	Point	33.4	0.0	
Backup beep	Point	42.8	0.0	
Idling Diesel	Point	33.4	0.0	
Backup beep	Point	42.6	0.0	
Idling Diesel	Point	33.2	0.0	
Backup beep	Point	42.6	0.0	
Idling Diesel	Point	33.2	0.0	
Backup beep	Point	42.7	0.0	
Idling Diesel	Point	33.3	0.0	
Backup beep	Point	42.5	0.0	
Idling Diesel	Point	33.1	0.0	
Backup beep	Point	42.5	0.0	
Idling Diesel	Point	33.1	0.0	
Backup beep	Point	42.4	0.0	
Idling Diesel	Point	33.0	0.0	
Backup beep	Point	42.3	0.0	
Idling Diesel	Point	32.9	0.0	
Backup beep	Point	42.2	0.0	
Idling Diesel	Point	32.8	0.0	
Backup beep	Point	42.2	0.0	
Idling Diesel	Point	32.6	0.0	
Backup beep	Point	42.2	0.0	
Idling Diesel	Point	32.7	0.0	
Backup beep	Point	42.3	0.0	
Idling Diesel	Point	32.8	0.0	
Backup beep	Point	42.0	0.0	
Idling Diesel	Point	32.5	0.0	

Source	Source ty	beLmax	А	
		dB(A)	dB	
Backup beep	Point	42.0	0.0	
Idling Diesel	Point	32.5	0.0	
Backup beep	Point	41.9	0.0	
Idling Diesel	Point	32.4	0.0	
Backup beep	Point	41.8	0.0	
Idling Diesel	Point	32.4	0.0	
Backup beep	Point	41.8	0.0	
Idling Diesel	Point	32.3	0.0	
Backup beep	Point	41.7	0.0	
Idling Diesel	Point	32.2	0.0	
Backup beep	Point	41.7	0.0	
Idling Diesel	Point	32.1	0.0	
151	PLot	4.5	0.0	
152	PLot	21.5	0.0	
153	PLot	15.3	0.0	
154	PLot	6.4	0.0	
155	PLot	2.9	0.0	
156	PLot	8.6	0.0	
157	PLot	4.4	0.0	
158	PLot	3.4	0.0	
159	PLot	0.1	0.0	
160	PLot	5.0	0.0	
161	PLot	14.0	0.0	
162	PLot	19.0	0.0	
163	PLot	19.4	0.0	
164	PLot	12.7	0.0	
165	PLot	10.9	0.0	
166	PLot	23.1	0.0	
167	PLot	22.5	0.0	
168	PLot	17.4	0.0	
169	PLot	18.3	0.0	
170	PLot	9.1	0.0	
171	PLot	17.9	0.0	
172	PLot	-0.5	0.0	
173	PLot	12.2	0.0	
174	PLot	17.1	0.0	
175	PLot	23.1	0.0	
176	PLot	8.6	0.0	
177	PLot	7.3	0.0	
178	PLot	23.0	0.0	
Receiver R6 FI G Lmax,lim		max 53.9		
Backup beep	Point	53.9	0.0	
Idling Diesel	Point	44.3	0.0	
Backup beep	Point	52.6	0.0	
Idling Diesel	Point	43.0	0.0	

MD Acoustics 1197 E Los Angeles Ave, Unit C 256 Simi Valley, CA 93065 USA

Sour	Source typeLmax	A	
	dB(A)	dB	
ep Point			
•			
		0.0	
		0.0	
•	•	0.0	
		0.0	
•		0.0	
		0.0	
	•	0.0	
		0.0	
	•	0.0	
		0.0	
	•	0.0	
ep Point	ep Point 46.2	0.0	
el Point	Point 36.6	0.0	
ep Point	ep Point 45.5	0.0	
el Point	el Point 35.8	0.0	
ep Point		0.0	
		0.0	
		0.0	
•		0.0	
		0.0	
•		0.0	
		0.0	
		0.0	
		0.0	
•		0.0	
		0.0	
		0.0	
· .			
		0.0	
· .		0.0	
el Point ep Point el Point ep Point el Point ep Point el Point el Point el Point el Point el Point	Point32.4PpPoint39.1PpPoint39.1PointPoint32.2PpPoint38.9PlPoint32.0PpPoint38.5PlPoint38.5PlPoint31.6PpPoint38.3PlPoint38.3PlPoint31.4PpPoint38.1PlPoint31.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	

Source	Source ty	beLmax	А	
		dB(A)	dB	
Idling Diesel	Point	31.0	0.0	
Backup beep	Point	36.2	0.0	
Idling Diesel	Point	24.3	0.0	
Backup beep	Point	36.5	0.0	
Idling Diesel	Point	25.2	0.0	
Backup beep	Point	36.7	0.0	
Idling Diesel	Point	26.7	0.0	
Backup beep	Point	36.5	0.0	
Idling Diesel	Point	26.7	0.0	
Backup beep	Point	36.8	0.0	
Idling Diesel	Point	27.4	0.0	
Backup beep	Point	37.0	0.0	
Idling Diesel	Point	27.6	0.0	
Backup beep	Point	37.3	0.0	
Idling Diesel	Point	28.0	0.0	
Backup beep	Point	39.3	0.0	
Idling Diesel	Point	34.0	0.0	
Backup beep	Point	40.0	0.0	
Idling Diesel	Point	33.9	0.0	
Backup beep	Point	43.8	0.0	
Idling Diesel	Point	33.8	0.0	
Backup beep	Point	43.8	0.0	
Idling Diesel	Point	33.7	0.0	
Backup beep	Point	43.9	0.0	
Idling Diesel	Point	33.6	0.0	
Backup beep	Point	45.2	0.0	
Idling Diesel	Point	33.8	0.0	
Backup beep	Point	45.0	0.0	
Idling Diesel	Point	35.0	0.0	
Backup beep	Point	44.9	0.0	
Idling Diesel	Point	34.8	0.0	
Backup beep	Point	44.7	0.0	
Idling Diesel	Point	34.7	0.0	
Backup beep	Point	44.8	0.0	
Idling Diesel	Point	34.7	0.0	
Backup beep	Point	44.7	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	44.7	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	44.6	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	44.6	0.0	
Idling Diesel	Point	34.5	0.0	
Backup beep	Point	44.5	0.0	
Idling Diesel	Point	34.5	0.0	

Source	Source ty	hel max	A	
		dB(A)	dB	
Dealum hear	Deint	. ,		
Backup beep	Point	43.4	0.0	
Idling Diesel	Point	33.1	0.0	
Backup beep	Point	43.5	0.0	
Idling Diesel	Point	33.3 43.6	0.0	
Backup beep	Point Point	43.0 33.3	0.0 0.0	
Idling Diesel Backup beep	Point	33.3 43.7	0.0	
Idling Diesel	Point	43.7 33.5	0.0	
Backup beep	Point	43.9	0.0	
Idling Diesel	Point	43.9 33.6	0.0	
Backup beep	Point	44.1	0.0	
Idling Diesel	Point	33.8	0.0	
Backup beep	Point	44.3	0.0	
Idling Diesel	Point	34.0	0.0	
Backup beep	Point	44.4	0.0	
Idling Diesel	Point	34.1	0.0	
Backup beep	Point	44.6	0.0	
Idling Diesel	Point	34.3	0.0	
Backup beep	Point	44.4	0.0	
Idling Diesel	Point	34.1	0.0	
Backup beep	Point	44.4	0.0	
Idling Diesel	Point	34.0	0.0	
Backup beep	Point	44.3	0.0	
Idling Diesel	Point	33.9	0.0	
Backup beep	Point	44.2	0.0	
Idling Diesel	Point	33.8	0.0	
Backup beep	Point	44.5	0.0	
Idling Diesel	Point	34.2	0.0	
Backup beep	Point	44.6	0.0	
Idling Diesel	Point	34.2	0.0	
Backup beep	Point	44.7	0.0	
Idling Diesel	Point	34.4	0.0	
Backup beep	Point	44.9	0.0	
Idling Diesel	Point	34.5	0.0	
Backup beep	Point	45.0	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	45.3	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	45.2	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	45.1	0.0	
Idling Diesel	Point	34.6	0.0	
Backup beep	Point	45.5	0.0	
Idling Diesel	Point	34.8	0.0	
Backup beep	Point	45.5	0.0	

Source	Source ty	peLmax	А
		dB(A)	dB
Idling Diesel	Point	34.9	0.0
Backup beep	Point	45.6	0.0
Idling Diesel	Point	34.6	0.0
Backup beep	Point	45.7	0.0
Idling Diesel	Point	34.7	0.0
Backup beep	Point	45.7	0.0
Idling Diesel	Point	34.8	0.0
Backup beep	Point	45.8	0.0
Idling Diesel	Point	34.8	0.0
Backup beep	Point	45.4	0.0
Idling Diesel	Point	34.7	0.0
151	PLot	14.2	0.0
152	PLot	27.4	0.0
152	PLot	27.4	0.0
154	PLot	10.3	0.0
155	PLot	11.4	0.0
156	PLot	15.3	0.0
157	PLot	9.9	0.0
158	PLot	8.1	0.0
159	PLot	5.0	0.0
160	PLot	10.0	0.0
161	PLot	21.5	0.0
162	PLot	16.7	0.0
163	PLot	15.6	0.0
164	PLot	14.4	0.0
165	PLot	14.7	0.0
166	PLot	30.1	0.0
167	PLot	31.5	0.0
168	PLot	16.5	0.0
169	PLot	20.4	0.0
170	PLot	13.2	0.0
171	PLot	20.5	0.0
172	PLot	4.7	0.0
173	PLot	11.3	0.0
174	PLot	20.6	0.0
175	PLot	25.4	0.0
176	PLot	6.5	0.0
177	PLot	5.9	0.0
178	PLot	19.6	0.0

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Name	l or A	Li	R'w	L'w	Lw	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
	m,m²	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		1		103.0	103.0	İ	İ	İ	İ	70.0	İ	İ	80.0			87.0			93.0	1		96.0			97.0			97.0			95.0	
Backup beep		İ		103.0	103.0	İ	İ		1	70.0	İ		80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		İ		103.0	103.0	İ	İ		1	70.0	İ		80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		1		103.0	103.0	İ	İ		1	70.0	İ		80.0			87.0			93.0	1		96.0			97.0			97.0			95.0	
Backup beep		1		103.0	103.0	İ	İ	İ	İ	70.0	İ	İ	80.0			87.0			93.0	1		96.0			97.0			97.0			95.0	
Backup beep		İ		103.0	103.0	İ	İ		1	70.0	İ		80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		İ		103.0	103.0	İ	İ		1	70.0	İ		80.0			87.0			93.0	1		96.0			97.0			97.0			95.0	
Backup beep		1		103.0	103.0	İ	İ		1	70.0	İ		80.0			87.0			93.0	1		96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0				1	70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		i		103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	Ì
Backup beep		i		103.0	103.0	İ	i	i		70.0	i	i	80.0			87.0			93.0	İ		96.0			97.0			97.0			95.0	1
Backup beep		i		103.0	103.0	İ	i	i		70.0	i	i	80.0			87.0			93.0	i		96.0			97.0			97.0			95.0	İ
Backup beep		1		103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	İ
Backup beep	1	1		103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	

Name	l or A	Li	R'w	L'w	Lw	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
																																1
	m,m²	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		1		103.0	103.0	İ	1			70.0	İ		80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		İ		103.0	103.0	İ	1			70.0	İ		80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		İ		103.0	103.0	İ	İ			70.0	İ		80.0			87.0			93.0	1		96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0	İ				70.0	İ		80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		1		103.0	103.0	İ	1			70.0	İ		80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		İ		103.0	103.0	İ	İ			70.0	İ		80.0			87.0			93.0	1		96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0	İ				70.0	İ		80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		1		103.0	103.0	İ				70.0	İ		80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		İ		103.0	103.0	İ	1			70.0	İ		80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		İ		103.0	103.0	İ	İ			70.0	İ		80.0			87.0			93.0	1		96.0			97.0			97.0			95.0	
Backup beep		1		103.0	103.0	İ	İ			70.0	İ		80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		1		103.0	103.0	İ				70.0	İ		80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep		İ		103.0	103.0	İ	İ			70.0	İ		80.0			87.0			93.0	1		96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0	İ	İ			70.0	İ		80.0			87.0			93.0	İ		96.0			97.0			97.0			95.0	1
Backup beep		İ		103.0	103.0	İ	İ			70.0	İ		80.0			87.0			93.0	İ		96.0			97.0			97.0			95.0	İ
Backup beep	İ	i		103.0	103.0	İ	i		l	70.0	i	l	80.0			87.0	l	l	93.0	İ	l	96.0			97.0			97.0			95.0	<u> </u>

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Name	l or A	Li	R'w	L'w	Lw	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
	m,m²	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Backup beep				103.0	103.0					70.0			80.0			87.0			93.0			96.0			97.0			97.0			95.0	
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel		1		91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9

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Name	l or A	Li	R'w	L'w	Lw	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
	m,m²	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9

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Name	l or A	Li	R'w	L'w	Lw	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
	m.m <sup>2</sup>	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
Idlina Diesel	,	uD() ()	uD	91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5		38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5		38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5		38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
Idling Diesel				91.5	91.5	38.4	42.8	47.3	49	53.9	59.1	63.3	78.3	68.0	70.9	71.7	74.3	77.9	78.8	80.0	81.1	85.7	80.8	80.8	80.9	78.5	76.0	75.1	73.1	69.9	65.6	61.9
-	753.78			58.3	87.0					70.4			82.0			74.5			79.0			79.1			79.5			76.8			70.6	
	345.81			56.5	81.9					65.3			76.9			69.4			73.9			74.0			74.4			71.7			65.5	
	275.36			55.8	80.2					63.6			75.2			67.7			72.2			72.3			72.7			70.0		1	63.8	
	397.16			56.9	82.9					66.3	1		77.9			70.4			74.9			75.0			75.4			72.7		1	66.5	
	355.41			56.1	81.6					64.9			76.5			69.0			73.5			73.6			74.0			71.3		1	65.1	
	486.92			57.1	84.0					67.3			78.9			71.4			75.9			76.0			76.4			73.7			67.5	
	931.88			54.3	84.0					67.3			78.9			71.4			75.9			76.0			76.4			73.7			67.5	
	378.23			56.2	81.9					65.3			76.9			69.4			73.9			74.0			74.4			71.7			65.5	
	387.79			56.4	82.3					65.6			77.2			69.7			74.2			74.3			74.7			72.0			65.8	
	349.83			57.2	82.6					66.0			77.6			70.1			74.6			74.7			75.1			72.4			66.2	
	481.98			56.7	83.5					66.8			78.4			70.9			75.4			75.5			75.9			73.2			67.0	
	56.13			54.3	71.8					55.1			66.7			59.2			63.7			63.8			64.2			61.5			55.3	
	303.56			56.3	81.2					64.5			76.1			68.6			73.1			73.2			73.6			70.9			64.7	
	448.95			56.7	83.2					66.6			78.2			70.7			75.2			75.3			75.7			73.0			66.8	
	74.52			54.3	73.0					56.4			68.0			60.5			65.0			65.1			65.5			62.8			56.6	

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Name	l or A	Li	R'w	L'w	Lw	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
	m,m²	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
	171.07			54.7	77.0					60.3			71.9			64.4			68.9			69.0			69.4			66.7			60.5	
	180.22			54.4	77.0					60.3			71.9			64.4			68.9			69.0			69.4			66.7			60.5	
	70.69			54.5						56.4			68.0			60.5			65.0			65.1			65.5			62.8			56.6	
	355.15			56.4	81.9					65.3			76.9			69.4			73.9			74.0			74.4			71.7			65.5	
	671.08			58.2	86.5					69.8			81.4			73.9			78.4			78.5			78.9			76.2			70.0	
	245.67			56.8 56.3	80.7					64.1			75.7			68.2 69.7			72.7 74.2			72.8			73.2			70.5 72.0			64.3	
	397.28 455.28			56.0	82.3 82.6					65.6 66.0			77.2 77.6			70.1			74.2			74.3 74.7			74.7 75.1			72.0			65.8 66.2	
	435.28			56.8	83.2					66.6			78.2			70.1			74.0			75.3			75.1			72.4			66.8	
	562.47			56.7	84.2					67.6			79.2			71.7			76.2			76.3			76.7			74.0			67.8	
	56.09			52.5	70.0					53.4			65.0			57.5			62.0			62.1			62.5			59.8			53.6	
	123.94			53.8	74.8					58.1			69.7			62.2			66.7		1	66.8			67.2			64.5			58.3	
	381.10			57.4	83.2					66.6			78.2			70.7			75.2	1		75.3			75.7			73.0	1	1	66.8	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice		Лпал	тнах	2.00	10	U	71011	/ gi	7 10 01	/ tatin	1.01	7 11100	GEIGH	20	omet		
	Silce																15(1)	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Receiver R1 FI G Lmax, li	m dB(A) L	_max 38.8 dB(A	4)															
Backup beep	Lmax	Point	-731.4	476.6	103.0	0	346.1	-61.8	1.5	-22.5	-2.6	0.0		0.0	17.6	0.0	17.6	
Backup beep	Lmax	Point	-731.5	472.8	103.0	0	349.8	-61.9	1.5	-22.4	-2.6	0.0		0.0	17.7	0.0	17.7	
Backup beep	Lmax	Point	-731.2	469.2	103.0	0	353.3	-62.0	1.5	-22.8	-2.7	0.0		0.0	17.1	0.0	17.1	
Backup beep	Lmax	Point	-731.1	493.4	103.0	0	329.5	-61.3	1.5	-23.0	-2.8	0.0		0.0	17.3	0.0	17.3	
Backup beep	Lmax	Point	-731.1	489.2	103.0	0	333.6	-61.5	1.5	-23.0	-2.8	0.0		0.0	17.2	0.0	17.2	
Backup beep	Lmax	Point	-731.1	480.8	103.0	0	341.9	-61.7	1.5	-22.9	-2.8	0.0		0.0	17.1	0.0	17.1	
Backup beep	Lmax	Point	-922.6	490.0	103.0	0	413.3	-63.3	1.5	-8.2	-3.4	0.0		0.0	29.6	0.0	29.6	
Backup beep	Lmax	Point	-918.9	489.8	103.0	0	411.2	-63.3	1.5	-8.2	-3.4	0.0		0.0	29.6	0.0	29.6	
Backup beep	Lmax	Point	-915.9	490.0	103.0	0	409.2	-63.2	1.5	-8.3	-3.3	0.0		0.0	29.7	0.0	29.7	
Backup beep	Lmax	Point	-731.4	465.1	103.0	0	357.4	-62.1	1.5	-22.4	-2.6	0.0		0.0	17.4	0.0	17.4	
Backup beep	Lmax	Point	-731.5	460.9	103.0	0	361.5	-62.2	1.5	-22.2	-2.6	0.0		0.0	17.5	0.0	17.5	
Backup beep	Lmax	Point	-731.6	456.9	103.0	0	365.5	-62.3	1.5	-22.1	-2.5	0.0		2.3	19.9	0.0	19.9	
Backup beep	Lmax	Point	-731.1	497.3	103.0	0	325.7	-61.2	1.5	-23.1	-2.8	0.0		0.0	17.4	0.0	17.4	
Backup beep	Lmax	Point	-730.9	537.2	103.0	0	286.5	-60.1	1.4	-23.5	-2.9	0.0		0.0	17.9	0.0	17.9	
Backup beep	Lmax	Point	-730.9	533.0	103.0	0	290.7	-60.3	1.4	-23.5	-2.9	0.0		0.0	17.8	0.0	17.8	
Backup beep	Lmax	Point	-730.8	529.0	103.0	0	294.5	-60.4	1.4	-23.6	-2.9	0.0		0.0	17.5	0.0	17.5	
Backup beep	Lmax	Point	-731.2	548.7	103.0	0	275.4	-59.8	1.4	-23.3	-2.7	0.0		0.0	18.7	0.0	18.7	
Backup beep	Lmax	Point	-731.2	544.9	103.0	0	279.1	-59.9	1.4	-23.3	-2.7	0.0		0.0	18.6	0.0	18.6	
Backup beep	Lmax	Point	-731.0	541.1	103.0	0	282.8	-60.0	1.4	-23.4	-2.8	0.0		0.0	18.2	0.0	18.2	
Backup beep	Lmax	Point	-731.1	509.4	103.0	0	313.8	-60.9	1.4	-23.1	-2.8	0.0		0.0	17.6	0.0	17.6	
Backup beep	Lmax	Point	-731.0	505.1	103.0	0	318.0	-61.0	1.5	-23.2	-2.8	0.0		0.0	17.4	0.0	17.4	
Backup beep	Lmax	Point	-731.1	501.2	103.0	0	321.8	-61.1	1.5	-23.1	-2.8	0.0		0.0	17.5	0.0	17.5	
Backup beep	Lmax	Point	-730.8	524.9	103.0	0	298.5	-60.5	1.4	-23.6	-2.9	0.0		0.0	17.4	0.0	17.4	
Backup beep	Lmax	Point	-731.1	517.3	103.0	0	306.0	-60.7	1.4	-23.2	-2.7	0.0		0.0	17.8	0.0	17.8	
Backup beep	Lmax	Point	-731.3	513.4	103.0	0	309.9	-60.8	1.4	-23.0	-2.6	0.0		0.0	18.0	0.0	18.0	
Backup beep	Lmax	Point	-838.4	489.6	103.0	0	368.3	-62.3	1.5	-11.4	-2.6	0.0		2.6	30.8	0.0	30.8	
Backup beep	Lmax	Point	-842.3	489.1	103.0	0	370.5	-62.4	1.5	-11.2	-2.6	0.0		2.6	30.9	0.0	30.9	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-826.4	489.1	103.0	0	363.4	-62.2	1.5	-11.9	-2.5	0.0		2.6	30.5	0.0	30.5	
Backup beep	Lmax	Point	-851.8	489.1	103.0	0	375.0	-62.5	1.5	-10.8	-2.7	0.0		2.6	31.1	0.0	31.1	
Backup beep	Lmax	Point	-846.9	489.1	103.0	0	372.6	-62.4	1.5	-11.0	-2.6	0.0		2.6	31.0	0.0	31.0	
Backup beep	Lmax	Point	-834.7	489.4	103.0	0	366.8	-62.3	1.5	-11.5	-2.6	0.0		2.6	30.8	0.0	30.8	
Backup beep	Lmax	Point	-811.9	489.7	103.0	0	356.9	-62.0	1.5	-12.1	-2.4	0.0		2.6	30.5	0.0	30.5	
Backup beep	Lmax	Point	-808.2	489.4	103.0	0	355.7	-62.0	1.5	-12.2	-2.4	0.0		2.6	30.4	0.0	30.4	
Backup beep	Lmax	Point	-804.6	489.4	103.0	0	354.3	-62.0	1.5	-12.2	-2.4	0.0		2.6	30.4	0.0	30.4	
Backup beep	Lmax	Point	-822.4	489.4	103.0	0	361.4	-62.2	1.5	-12.0	-2.5	0.0		2.6	30.5	0.0	30.5	
Backup beep	Lmax	Point	-819.2	489.5	103.0	0	360.0	-62.1	1.5	-12.0	-2.5	0.0		2.6	30.5	0.0	30.5	
Backup beep	Lmax	Point	-815.2	489.4	103.0	0	358.5	-62.1	1.5	-12.1	-2.5	0.0		2.6	30.4	0.0	30.4	
Backup beep	Lmax	Point	-857.0	489.1	103.0	0	377.5	-62.5	1.5	-10.6	-2.7	0.0		2.6	31.2	0.0	31.2	
Backup beep	Lmax	Point	-894.8	489.4	103.0	0	397.4	-63.0	1.5	-8.7	-3.2	0.0		2.5	32.2	0.0	32.2	
Backup beep	Lmax	Point	-890.8	489.4	103.0	0	395.2	-62.9	1.5	-8.8	-3.2	0.0		2.5	32.2	0.0	32.2	
Backup beep	Lmax	Point	-885.7	489.4	103.0	0	392.3	-62.9	1.5	-8.9	-3.1	0.0		2.5	32.2	0.0	32.2	
Backup beep	Lmax	Point	-911.6	490.0	103.0	0	406.7	-63.2	1.5	-8.4	-3.3	0.0		0.0	29.7	0.0	29.7	
Backup beep	Lmax	Point	-907.8	490.0	103.0	0	404.4	-63.1	1.5	-8.5	-3.3	0.0		0.0	29.7	0.0	29.7	
Backup beep	Lmax	Point	-899.9	489.5	103.0	0	400.2	-63.0	1.5	-8.6	-3.2	0.0		0.0	29.7	0.0	29.7	
Backup beep	Lmax	Point	-876.2	489.4	103.0	0	387.2	-62.8	1.5	-9.1	-3.1	0.0		2.5	32.2	0.0	32.2	
Backup beep	Lmax	Point	-863.5	489.1	103.0	0	380.8	-62.6	1.5	-10.4	-2.8	0.0		2.6	31.3	0.0	31.3	
Backup beep	Lmax	Point	-860.9	489.1	103.0	0	379.5	-62.6	1.5	-10.5	-2.8	0.0		2.6	31.3	0.0	31.3	
Backup beep	Lmax	Point	-880.8	489.4	103.0	0	389.6	-62.8	1.5	-9.0	-3.1	0.0		2.5	32.2	0.0	32.2	
Backup beep	Lmax	Point	-868.6	489.7	103.0	0	383.0	-62.7	1.5	-9.2	-3.0	0.0		2.2	31.8	0.0	31.8	
Backup beep	Lmax	Point	-872.3	489.8	103.0	0	384.7	-62.7	1.5	-9.1	-3.0	0.0		2.5	32.2	0.0	32.2	
Backup beep	Lmax	Point	-711.2	638.2	103.0	0	183.7	-56.3	1.2	-24.4	-2.7	0.0		0.2	21.1	0.0	21.1	
Backup beep	Lmax	Point	-643.2	638.6	103.0	0	180.7	-56.1	1.2	-24.3	-2.7	0.0		0.9	22.0	0.0	22.0	
Backup beep	Lmax	Point	-707.1	638.1	103.0	0	182.9	-56.2	1.2	-24.3	-2.7	0.0		0.5	21.4	0.0	21.4	
Backup beep	Lmax	Point	-646.9	638.4	103.0	0	180.3	-56.1	1.2	-24.3	-2.7	0.0		0.9	22.0	0.0	22.0	
Backup beep	Lmax	Point	-630.9	638.8	103.0	0	182.7	-56.2	1.2	-24.4	-2.8	0.0		0.8	21.6	0.0	21.6	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-635.1	638.8	103.0	0	181.9	-56.2	1.2	-24.4	-2.8	0.0		0.8	21.6	0.0	21.6	
Backup beep	Lmax	Point	-731.3	638.2	103.0	0	189.2	-56.5	1.2	-24.3	-2.8	0.0		0.2	20.8	0.0	20.8	
Backup beep	Lmax	Point	-639.3	638.7	103.0	0	181.2	-56.2	1.2	-24.4	-2.8	0.0		1.0	21.8	0.0	21.8	
Backup beep	Lmax	Point	-667.1	638.7	103.0	0	178.6	-56.0	1.2	-24.4	-2.7	0.0		0.4	21.5	0.0	21.5	
Backup beep	Lmax	Point	-695.2	638.1	103.0	0	180.8	-56.1	1.2	-24.4	-2.7	0.0		0.3	21.3	0.0	21.3	
Backup beep	Lmax	Point	-679.1	638.6	103.0	0	178.9	-56.0	1.2	-24.3	-2.7	0.0		0.4	21.5	0.0	21.5	
Backup beep	Lmax	Point	-682.9	638.6	103.0	0	179.1	-56.1	1.2	-24.3	-2.7	0.0		0.0	21.1	0.0	21.1	
Backup beep	Lmax	Point	-687.2	638.3	103.0	0	179.7	-56.1	1.2	-24.3	-2.7	0.0		0.0	21.2	0.0	21.2	
Backup beep	Lmax	Point	-703.3	638.2	103.0	0	182.1	-56.2	1.2	-24.4	-2.7	0.0		0.5	21.5	0.0	21.5	
Backup beep	Lmax	Point	-671.5	638.6	103.0	0	178.6	-56.0	1.2	-24.4	-2.7	0.0		0.0	21.1	0.0	21.1	
Backup beep	Lmax	Point	-698.9	638.2	103.0	0	181.3	-56.2	1.2	-24.4	-2.7	0.0		0.3	21.3	0.0	21.3	
Backup beep	Lmax	Point	-674.9	638.6	103.0	0	178.7	-56.0	1.2	-24.4	-2.7	0.0		0.4	21.5	0.0	21.5	
Backup beep	Lmax	Point	-735.1	638.1	103.0	0	190.6	-56.6	1.2	-24.3	-2.8	0.0		0.2	20.8	0.0	20.8	
Backup beep	Lmax	Point	-610.4	638.6	103.0	0	188.3	-56.5	1.2	-24.4	-2.8	0.0		0.0	20.6	0.0	20.6	
Backup beep	Lmax	Point	-739.4	638.1	103.0	0	192.1	-56.7	1.2	-24.3	-2.8	0.0		0.2	20.7	0.0	20.7	
Backup beep	Lmax	Point	-619.1	638.6	103.0	0	185.8	-56.4	1.2	-24.4	-2.8	0.0		0.0	20.7	0.0	20.7	
Backup beep	Lmax	Point	-614.9	638.6	103.0	0	187.0	-56.4	1.2	-24.4	-2.8	0.0		0.0	20.6	0.0	20.6	
Backup beep	Lmax	Point	-743.2	637.8	103.0	0	193.7	-56.7	1.2	-24.2	-2.8	0.0		0.2	20.7	0.0	20.7	
Backup beep	Lmax	Point	-623.1	638.5	103.0	0	184.8	-56.3	1.2	-24.4	-2.8	0.0		0.0	20.7	0.0	20.7	
Backup beep	Lmax	Point	-747.4	637.9	103.0	0	195.3	-56.8	1.2	-24.2	-2.8	0.0		0.0	20.4	0.0	20.4	
Idling Diesel	Lmax	Point	-811.8	491.6	91.5	0	355.0	-62.0	0.8	-9.9	-1.3	0.0		2.6	21.8	0.0	21.8	
Idling Diesel	Lmax	Point	-872.1	491.8	91.5	0	383.0	-62.7	0.9	-7.3	-1.6	0.0		2.5	23.3	0.0	23.3	
Idling Diesel	Lmax	Point	-804.4	491.3	91.5	0	352.5	-61.9	0.8	-9.9	-1.3	0.0		2.6	21.7	0.0	21.7	
Idling Diesel	Lmax	Point	-894.7	491.3	91.5	0	395.7	-62.9	0.9	-7.0	-1.7	0.0		2.5	23.3	0.0	23.3	
Idling Diesel	Lmax	Point	-876.1	491.3	91.5	0	385.5	-62.7	0.9	-7.3	-1.6	0.0		2.5	23.3	0.0	23.3	
Idling Diesel	Lmax	Point	-703.3	636.2	91.5	0	184.0	-56.3	0.6	-22.7	-0.8	0.0		0.1	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-868.5	491.6	91.5	0	381.2	-62.6	0.9	-7.4	-1.6	0.0		2.2	23.0	0.0	23.0	
Idling Diesel	Lmax	Point	-808.1	491.3	91.5	0	353.9	-62.0	0.8	-9.9	-1.3	0.0		2.6	21.8	0.0	21.8	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice						-		5.									
	3100									-10			dB					
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	aв	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-695.2	636.2	91.5	0	182.8	-56.2	0.6	-22.7	-0.8	0.0		0.1	12.6	0.0	12.6	
Idling Diesel	Lmax	Point	-885.6	491.3	91.5	0	390.6	-62.8	0.9	-7.1	-1.7	0.0		2.5	23.3	0.0	23.3	
Idling Diesel	Lmax	Point	-880.6	491.3	91.5	0	387.9	-62.8	0.9	-7.2	-1.6	0.0		2.5	23.3	0.0	23.3	
Idling Diesel	Lmax	Point	-747.4	635.9	91.5	0	197.1	-56.9	0.7	-22.4	-0.8	0.0		0.1	12.1	0.0	12.1	
Idling Diesel	Lmax	Point	-698.9	636.2	91.5	0	183.2	-56.3	0.6	-22.7	-0.8	0.0		0.1	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-890.7	491.3	91.5	0	393.5	-62.9	0.9	-7.0	-1.7	0.0		2.5	23.3	0.0	23.3	
Idling Diesel	Lmax	Point	-834.6	491.4	91.5	0	365.0	-62.2	0.9	-9.3	-1.4	0.0		2.6	22.1	0.0	22.1	
Idling Diesel	Lmax	Point	-731.3	636.2	91.5	0	191.0	-56.6	0.7	-22.6	-0.8	0.0		0.1	12.2	0.0	12.2	
Idling Diesel	Lmax	Point	-822.3	491.3	91.5	0	359.6	-62.1	0.9	-9.7	-1.3	0.0		2.7	21.8	0.0	21.8	
Idling Diesel	Lmax	Point	-846.7	491.1	91.5	0	370.9	-62.4	0.9	-8.9	-1.4	0.0		2.6	22.3	0.0	22.3	
Idling Diesel	Lmax	Point	-739.4	636.1	91.5	0	193.9	-56.7	0.7	-22.5	-0.8	0.0		0.0	12.1	0.0	12.1	
Idling Diesel	Lmax	Point	-826.2	491.1	91.5	0	361.6	-62.2	0.9	-9.6	-1.3	0.0		2.6	21.9	0.0	21.9	
Idling Diesel	Lmax	Point	-842.2	491.1	91.5	0	368.7	-62.3	0.9	-9.0	-1.4	0.0		2.6	22.2	0.0	22.2	
Idling Diesel	Lmax	Point	-735.2	636.1	91.5	0	192.4	-56.7	0.7	-22.6	-0.8	0.0		0.1	12.2	0.0	12.2	
Idling Diesel	Lmax	Point	-838.3	491.5	91.5	0	366.5	-62.3	0.9	-9.2	-1.4	0.0		2.6	22.1	0.0	22.1	
Idling Diesel	Lmax	Point	-860.8	491.1	91.5	0	377.7	-62.5	0.9	-8.4	-1.5	0.0		2.6	22.5	0.0	22.5	
Idling Diesel	Lmax	Point	-707.1	636.1	91.5	0	184.8	-56.3	0.6	-22.7	-0.8	0.0		0.2	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-863.4	491.1	91.5	0	379.1	-62.6	0.9	-8.4	-1.5	0.0		2.5	22.5	0.0	22.5	
Idling Diesel	Lmax	Point	-815.1	491.3	91.5	0	356.7	-62.0	0.8	-9.8	-1.3	0.0		2.6	21.8	0.0	21.8	
Idling Diesel	Lmax	Point	-743.2	635.9	91.5	0	195.5	-56.8	0.7	-22.4	-0.8	0.0		0.1	12.2	0.0	12.2	
Idling Diesel	Lmax	Point	-851.7	491.1	91.5	0	373.3	-62.4	0.9	-8.7	-1.5	0.0		2.6	22.4	0.0	22.4	
Idling Diesel	Lmax	Point	-819.1	491.5	91.5	0	358.1	-62.1	0.9	-9.8	-1.3	0.0		2.6	21.8	0.0	21.8	
Idling Diesel	Lmax	Point	-711.2	636.2	91.5	0	185.6	-56.4	0.6	-22.7	-0.8	0.0		0.1	12.3	0.0	12.3	
Idling Diesel	Lmax	Point	-856.8	491.1	91.5	0	375.8	-62.5	0.9	-8.6	-1.5	0.0		2.6	22.4	0.0	22.4	
Idling Diesel	Lmax	Point	-635.2	636.8	91.5	0	183.8	-56.3	0.6	-22.9	-0.8	0.0		0.3	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-733.0	509.3	91.5	0	314.3	-60.9	0.8	-18.4	-0.9	0.0		0.0	12.0	0.0	12.0	
Idling Diesel	Lmax	Point	-733.2	513.3	91.5	0	310.4	-60.8	0.8	-18.3	-0.9	0.0		0.0	12.3	0.0	12.3	
Idling Diesel	Lmax	Point	-631.0	636.8	91.5	0	184.6	-56.3	0.6	-22.9	-0.8	0.0		0.3	12.4	0.0	12.4	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	I
	slice								5							-		
	01100		m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	,
		-			. ,								uв					
Idling Diesel	Lmax	Point	-733.0	517.3	91.5	0	306.5	-60.7	0.8	-18.5	-0.9	0.0		0.0	12.1	0.0	12.1	
Idling Diesel	Lmax	Point	-733.0	493.4	91.5	0	329.9	-61.4	0.8	-18.2	-1.0	0.0		0.0	11.8	0.0	11.8	
Idling Diesel	Lmax	Point	-733.0	497.2	91.5	0	326.2	-61.3	0.8	-18.2	-1.0	0.0		0.0	11.9	0.0	11.9	
Idling Diesel	Lmax	Point	-639.3	636.7	91.5	0	183.1	-56.2	0.6	-22.9	-0.8	0.0		0.4	12.6	0.0	12.6	
Idling Diesel	Lmax	Point	-733.0	501.1	91.5	0	322.3	-61.2	0.8	-18.3	-1.0	0.0		0.0	11.9	0.0	11.9	
Idling Diesel	Lmax	Point	-732.9	505.1	91.5	0	318.4	-61.1	0.8	-18.5	-1.0	0.0		0.0	11.9	0.0	11.9	
Idling Diesel	Lmax	Point	-732.7	524.8	91.5	0	299.0	-60.5	0.8	-18.9	-0.9	0.0		0.0	11.9	0.0	11.9	, /
Idling Diesel	Lmax	Point	-732.9	541.0	91.5	0	283.3	-60.0	0.8	-19.0	-0.9	0.0		0.0	12.4	0.0	12.4	,
Idling Diesel	Lmax	Point	-614.9	636.7	91.5	0	188.8	-56.5	0.6	-22.8	-0.8	0.0		0.0	12.0	0.0	12.0	
Idling Diesel	Lmax	Point	-733.1	544.8	91.5	0	279.6	-59.9	0.8	-19.2	-0.9	0.0		0.0	12.3	0.0	12.3	
Idling Diesel	Lmax	Point	-733.1	548.6	91.5	0	275.9	-59.8	0.8	-20.4	-0.9	0.0		0.0	11.3	0.0	11.3	
Idling Diesel	Lmax	Point	-610.5	636.7	91.5	0	190.2	-56.6	0.6	-22.8	-0.8	0.0		0.0	12.0	0.0	12.0	, /
Idling Diesel	Lmax	Point	-623.2	636.6	91.5	0	186.7	-56.4	0.6	-22.8	-0.8	0.0		0.0	12.1	0.0	12.1	
Idling Diesel	Lmax	Point	-732.7	529.0	91.5	0	295.0	-60.4	0.8	-19.0	-0.9	0.0		0.0	12.0	0.0	12.0	, /
Idling Diesel	Lmax	Point	-732.8	532.9	91.5	0	291.1	-60.3	0.8	-19.0	-0.9	0.0		0.0	12.2	0.0	12.2	, /
Idling Diesel	Lmax	Point	-619.1	636.6	91.5	0	187.7	-56.5	0.6	-22.8	-0.8	0.0		0.0	12.1	0.0	12.1	, /
Idling Diesel	Lmax	Point	-732.8	537.2	91.5	0	287.0	-60.1	0.8	-19.0	-0.9	0.0		0.0	12.3	0.0	12.3	
Idling Diesel	Lmax	Point	-643.3	636.6	91.5	0	182.6	-56.2	0.6	-22.5	-0.8	0.0		0.3	13.0	0.0	13.0	
Idling Diesel	Lmax	Point	-915.7	491.9	91.5	0	407.6	-63.2	0.9	-6.7	-1.8	0.0		0.0	20.7	0.0	20.7	, /
Idling Diesel	Lmax	Point	-679.1	636.6	91.5	0	180.8	-56.1	0.6	-22.5	-0.7	0.0		0.1	12.8	0.0	12.8	
Idling Diesel	Lmax	Point	-918.8	491.8	91.5	0	409.5	-63.2	0.9	-6.6	-1.8	0.0		0.0	20.7	0.0	20.7	
Idling Diesel	Lmax	Point	-922.5	491.9	91.5	0	411.7	-63.3	0.9	-6.6	-1.8	0.0		0.0	20.7	0.0	20.7	, , , , , , , , , , , , , , , , , , ,
Idling Diesel	Lmax	Point	-674.9	636.7	91.5	0	180.6	-56.1	0.6	-22.6	-0.7	0.0		0.1	12.8	0.0	12.8	, , , , , , , , , , , , , , , , , , ,
Idling Diesel	Lmax	Point	-687.2	636.4	91.5	0	181.7	-56.2	0.6	-22.4	-0.7	0.0		0.0	12.8	0.0	12.8	, , , , , , , , , , , , , , , , , , ,
Idling Diesel	Lmax	Point	-899.8	491.5	91.5	0	398.5	-63.0	0.9	-6.9	-1.7	0.0		0.0	20.8	0.0	20.8	, , , , , , , , , , , , , , , , , , ,
Idling Diesel	Lmax	Point	-907.7	491.9	91.5	0	402.8	-63.1	0.9	-6.8	-1.7	0.0		0.0	20.7	0.0	20.7	, , , , , , , , , , , , , , , , , , ,
Idling Diesel	Lmax	Point	-683.0	636.6	91.5	0	181.1	-56.1	0.6	-22.5	-0.7	0.0		0.0	12.7	0.0	12.7	,
Idling Diesel	Lmax	Point	-911.5	491.9	91.5	0	405.0	-63.1	0.9	-6.7	-1.8	0.0		0.0	20.7	0.0	20.7	1

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice		Andx	THOA	2	1.0	U	, (a)	, igi	7 10 01		<i>,</i> (D)	/	u Li oli	20	omot		
	SILCE																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-733.6	456.8	91.5	0	365.9	-62.3	0.9	-17.2	-1.1	0.0		1.9	13.7	0.0	13.7	
Idling Diesel	Lmax	Point	-733.5	472.8	91.5	0	350.2	-61.9	0.8	-17.5	-1.0	0.0		0.0	11.9	0.0	11.9	
Idling Diesel	Lmax	Point	-733.3	476.5	91.5	0	346.6	-61.8	0.8	-17.7	-1.0	0.0		0.0	11.9	0.0	11.9	
Idling Diesel	Lmax	Point	-647.0	636.5	91.5	0	182.2	-56.2	0.6	-22.5	-0.7	0.0		0.3	13.1	0.0	13.1	
Idling Diesel	Lmax	Point	-733.0	480.7	91.5	0	342.3	-61.7	0.8	-18.0	-1.0	0.0		0.0	11.6	0.0	11.6	
Idling Diesel	Lmax	Point	-733.0	489.1	91.5	0	334.1	-61.5	0.8	-18.1	-1.0	0.0		0.0	11.7	0.0	11.7	
Idling Diesel	Lmax	Point	-733.5	460.8	91.5	0	362.0	-62.2	0.9	-17.4	-1.1	0.0		1.8	13.6	0.0	13.6	
Idling Diesel	Lmax	Point	-671.5	636.7	91.5	0	180.5	-56.1	0.6	-22.6	-0.7	0.0		0.0	12.7	0.0	12.7	
Idling Diesel	Lmax	Point	-733.3	465.0	91.5	0	357.9	-62.1	0.9	-17.5	-1.1	0.0		1.7	13.4	0.0	13.4	
Idling Diesel	Lmax	Point	-733.1	469.1	91.5	0	353.7	-62.0	0.8	-17.8	-1.1	0.0		1.6	13.2	0.0	13.2	
Idling Diesel	Lmax	Point	-667.1	636.7	91.5	0	180.5	-56.1	0.6	-22.6	-0.8	0.0		0.0	12.7	0.0	12.7	
169	Lmax	PLot	-663.0	706.7	87.0	0	110.7	-51.9	0.3	0.0	-0.9	0.0		1.4	36.0	0.0	36.0	
170	Lmax	PLot	-652.9	687.2	82.0	0	131.1	-53.3	0.3	0.0	-1.0	0.0		2.2	30.2	0.0	30.2	
171	Lmax	PLot	-700.0	686.7	80.0	0	133.9	-53.5	0.3	-8.9	-0.1	0.0		2.6	20.4	0.0	20.4	
168	Lmax	PLot	-662.0	723.0	83.0	0	94.6	-50.5	0.2	0.0	-0.8	0.0		1.2	33.2	0.0	33.2	
165	Lmax	PLot	-653.8	764.8	81.6	0	55.0	-45.8	0.0	0.0	-0.5	0.0		0.7	36.0	0.0	36.0	
166	Lmax	PLot	-677.4	722.7	84.0	0	94.8	-50.5	0.2	0.0	-0.8	0.0		1.2	34.2	0.0	34.2	
167	Lmax	PLot	-675.3	706.8	84.0	0	110.6	-51.9	0.3	0.0	-0.9	0.0		0.9	32.4	0.0	32.4	
176	Lmax	PLot	-806.6	417.4	82.0	0	422.5	-63.5	0.0	-18.0	-0.6	0.0		0.0	-0.1	0.0	-0.1	
177	Lmax	PLot	-886.5	418.5	82.0	0	453.6	-64.1	0.0	-17.6	-0.6	0.0		0.0	-0.3	0.0	-0.3	
178	Lmax	PLot	-950.1	483.6	82.6	0	435.5	-63.8	0.0	-5.8	-1.3	0.0		0.0	11.7	0.0	11.7	
175	Lmax	PLot	-791.3	483.8	83.5	0	354.8	-62.0	0.2	-8.2	-0.6	0.0		1.0	13.9	0.0	13.9	
172	Lmax	PLot	-686.5	686.9	71.8	0	131.3	-53.4	0.3	0.0	-1.0	0.0		2.2	20.0	0.0	20.0	
173	Lmax	PLot	-584.3	772.1	81.0	0	97.0	-50.7	0.3	0.0	-0.8	0.0		1.0	30.7	0.0	30.7	
174	Lmax	PLot	-578.7	682.7	83.0	0	162.7	-55.2	0.4	-10.0	-0.2	0.0		3.9	21.9	0.0	21.9	
155	Lmax	PLot	-620.7	568.9	73.0	0	253.2	-59.1	0.3	-10.5	-0.3	0.0		0.4	3.8	0.0	3.8	
156	Lmax	PLot	-613.5	575.8	77.0	0	248.0	-58.9	0.3	-10.9	-0.3	0.0		0.3	7.5	0.0	7.5	
157	Lmax	PLot	-639.4	546.4	77.0	0	272.6	-59.7	0.3	-7.6	-0.6	0.0		0.3	9.7	0.0	9.7	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice		Anax	THIGK	2	1.0	Ū	71011	, igi	7 10 01	/ tettin	1.01	7 411100	GEIGH	20	omot		
	SILCE														15(1)			
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
154	Lmax	PLot	-584.1	587.9	73.0	0	244.9	-58.8	0.3	-11.1	-0.3	0.0		0.6	3.7	0.0	3.7	
151	Lmax	PLot	-666.4	542.0	82.0	0	275.2	-59.8	0.3	-7.5	-0.6	0.0		0.3	14.7	0.0	14.7	
152	Lmax	PLot	-658.8	554.9	86.5	0	262.6	-59.4	0.3	-7.9	-0.5	0.0		0.2	19.2	0.0	19.2	
153	Lmax	PLot	-639.7	583.8	81.0	0	235.5	-58.4	0.3	-9.1	-0.3	0.0		0.3	13.7	0.0	13.7	
162	Lmax	PLot	-686.4	777.9	82.3	0	42.6	-43.6	0.1	0.0	-0.4	0.0		0.3	38.8	0.0	38.8	
163	Lmax	PLot	-684.2	765.1	82.6	0	54.0	-45.6	0.0	0.0	-0.5	0.0		0.7	37.2	0.0	37.2	
164	Lmax	PLot	-650.7	778.0	82.2	0	43.8	-43.8	0.1	0.0	-0.4	0.0		0.3	38.4	0.0	38.4	
161	Lmax	PLot	-750.9	424.1	84.0	0	401.3	-63.1	0.1	-8.8	-0.6	0.0		0.0	11.6	0.0	11.6	
158	Lmax	PLot	-642.6	515.8	77.0	0	302.7	-60.6	0.2	-7.2	-0.7	0.0		0.4	9.1	0.0	9.1	
159	Lmax	PLot	-658.8	513.5	75.0	0	304.0	-60.6	0.2	-7.0	-0.7	0.0		0.2	7.0	0.0	7.0	
160	Lmax	PLot	-666.6	499.9	83.0	0	317.4	-61.0	0.2	-6.6	-0.9	0.0		0.2	14.8	0.0	14.8	
Receiver R2 FI G Lmax,lin	m dB(A) L	_max 60.1 dB(A	۹)															
Backup beep	Lmax	Point	-731.4	476.6	103.0	0	233.7	-58.4	1.3	-24.2	-3.0	0.0		2.2	21.0	0.0	21.0	
Backup beep	Lmax	Point	-731.5	472.8	103.0	0	236.2	-58.5	1.3	-24.1	-3.0	0.0		2.2	21.0	0.0	21.0	
Backup beep	Lmax	Point	-731.2	469.2	103.0	0	238.4	-58.5	1.3	-24.2	-3.1	0.0		2.2	20.8	0.0	20.8	
Backup beep	Lmax	Point	-731.1	493.4	103.0	0	222.8	-58.0	1.3	-24.3	-3.0	0.0		2.3	21.3	0.0	21.3	
Backup beep	Lmax	Point	-731.1	489.2	103.0	0	225.4	-58.1	1.3	-24.3	-3.0	0.0		2.3	21.2	0.0	21.2	
Backup beep	Lmax	Point	-731.1	480.8	103.0	0	230.7	-58.3	1.3	-24.2	-3.0	0.0		2.2	21.0	0.0	21.0	
Backup beep	Lmax	Point	-922.6	490.0	103.0	0	393.7	-62.9	1.5	-7.2	-3.6	0.0		2.6	33.5	0.0	33.5	
Backup beep	Lmax	Point	-918.9	489.8	103.0	0	390.4	-62.8	1.5	-7.2	-3.5	0.0		2.6	33.5	0.0	33.5	
Backup beep	Lmax	Point	-915.9	490.0	103.0	0	387.4	-62.8	1.5	-7.3	-3.5	0.0		2.6	33.5	0.0	33.5	
Backup beep	Lmax	Point	-731.4	465.1	103.0	0	241.3	-58.6	1.3	-24.1	-3.1	0.0		2.2	20.7	0.0	20.7	
Backup beep	Lmax	Point	-731.5	460.9	103.0	0	244.3	-58.7	1.4	-24.1	-3.1	0.0		2.2	20.7	0.0	20.7	
Backup beep	Lmax	Point	-731.6	456.9	103.0	0	247.1	-58.9	1.4	-24.1	-3.1	0.0		2.2	20.6	0.0	20.6	
Backup beep	Lmax	Point	-731.1	497.3	103.0	0	220.5	-57.9	1.3	-24.3	-3.0	0.0		2.4	21.5	0.0	21.5	
Backup beep	Lmax	Point	-730.9	537.2	103.0	0	199.1	-57.0	1.3	-24.4	-2.9	0.0		2.4	22.4	0.0	22.4	
Backup beep	Lmax	Point	-730.9	533.0	103.0	0	201.1	-57.1	1.3	-24.4	-2.9	0.0		2.4	22.3	0.0	22.3	
Backup beep	Lmax	Point	-730.8	529.0	103.0	0	202.9	-57.1	1.3	-24.4	-2.9	0.0		2.4	22.2	0.0	22.2	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice																	
	3100		-		dB(A)	dB	-	dB	٩D	ЧD	dB	dB	dB			dB		
			m	m	( )		m		dB	dB			uБ	dB(A)	dB(A)		dB(A)	
Backup beep	Lmax	Point	-731.2	548.7	103.0	0	194.3	-56.8	1.2	-24.3	-2.8	0.0		2.4	22.7	0.0	22.7	
Backup beep	Lmax	Point	-731.2	544.9	103.0	0	195.9	-56.8	1.2	-24.3	-2.8	0.0		2.4	22.6	0.0	22.6	
Backup beep	Lmax	Point	-731.0	541.1	103.0	0	197.4	-56.9	1.3	-24.4	-2.9	0.0		2.4	22.5	0.0	22.5	
Backup beep	Lmax	Point	-731.1	509.4	103.0	0	213.5	-57.6	1.3	-24.3	-3.0	0.0		2.4	21.8	0.0	21.8	
Backup beep	Lmax	Point	-731.0	505.1	103.0	0	215.8	-57.7	1.3	-24.4	-3.0	0.0		2.4	21.7	0.0	21.7	
Backup beep	Lmax	Point	-731.1	501.2	103.0	0	218.2	-57.8	1.3	-24.3	-3.0	0.0		2.4	21.6	0.0	21.6	
Backup beep	Lmax	Point	-730.8	524.9	103.0	0	204.9	-57.2	1.3	-24.4	-2.9	0.0		2.4	22.1	0.0	22.1	
Backup beep	Lmax	Point	-731.1	517.3	103.0	0	209.1	-57.4	1.3	-24.3	-2.9	0.0		2.4	22.0	0.0	22.0	
Backup beep	Lmax	Point	-731.3	513.4	103.0	0	211.4	-57.5	1.3	-24.3	-2.9	0.0		2.4	21.9	0.0	21.9	
Backup beep	Lmax	Point	-838.4	489.6	103.0	0	316.5	-61.0	1.5	-10.0	-2.5	0.0		5.5	36.5	0.0	36.5	
Backup beep	Lmax	Point	-842.3	489.1	103.0	0	320.3	-61.1	1.5	-9.8	-2.6	0.0		5.5	36.5	0.0	36.5	
Backup beep	Lmax	Point	-826.4	489.1	103.0	0	306.0	-60.7	1.4	-10.6	-2.4	0.0		6.0	36.7	0.0	36.7	
Backup beep	Lmax	Point	-851.8	489.1	103.0	0	328.8	-61.3	1.5	-9.3	-2.7	0.0		3.2	34.3	0.0	34.3	
Backup beep	Lmax	Point	-846.9	489.1	103.0	0	324.4	-61.2	1.5	-9.6	-2.6	0.0		5.5	36.5	0.0	36.5	
Backup beep	Lmax	Point	-834.7	489.4	103.0	0	313.3	-60.9	1.4	-10.2	-2.5	0.0		6.0	36.9	0.0	36.9	
Backup beep	Lmax	Point	-811.9	489.7	103.0	0	292.9	-60.3	1.4	-11.5	-2.2	0.0		5.7	36.1	0.0	36.1	
Backup beep	Lmax	Point	-808.2	489.4	103.0	0	289.8	-60.2	1.4	-11.7	-2.1	0.0		5.7	36.0	0.0	36.0	
Backup beep	Lmax	Point	-804.6	489.4	103.0	0	286.6	-60.1	1.4	-12.0	-2.1	0.0		5.6	35.8	0.0	35.8	
Backup beep	Lmax	Point	-822.4	489.4	103.0	0	302.3	-60.6	1.4	-10.8	-2.3	0.0		5.9	36.6	0.0	36.6	
Backup beep	Lmax	Point	-819.2	489.5	103.0	0	299.4	-60.5	1.4	-11.0	-2.3	0.0		5.7	36.4	0.0	36.4	
Backup beep	Lmax	Point	-815.2	489.4	103.0	0	296.0	-60.4	1.4	-11.3	-2.2	0.0		5.7	36.2	0.0	36.2	
Backup beep	Lmax	Point	-857.0	489.1	103.0	0	333.5	-61.5	1.5	-9.1	-2.8	0.0		3.2	34.4	0.0	34.4	
Backup beep	Lmax	Point	-894.8	489.4	103.0	0	368.1	-62.3	1.5	-7.7	-3.3	0.0		2.9	34.1	0.0	34.1	
Backup beep	Lmax	Point	-890.8	489.4	103.0	0	364.4	-62.2	1.5	-7.8	-3.2	0.0		2.9	34.1	0.0	34.1	
Backup beep	Lmax	Point	-885.7	489.4	103.0	0	359.7	-62.1	1.5	-8.0	-3.1	0.0		2.9	34.1	0.0	34.1	
Backup beep	Lmax	Point	-911.6	490.0	103.0	0	383.5	-62.7	1.5	-7.3	-3.5	0.0		2.5	33.6	0.0	33.6	
Backup beep	Lmax	Point	-907.8	490.0	103.0	0	379.9	-62.6	1.5	-7.4	-3.4	0.0		2.8	33.9	0.0	33.9	
Backup beep	Lmax	Point	-899.9	489.5	103.0	0	372.8	-62.4	1.5	-7.6	-3.3	0.0		2.8	34.0	0.0	34.0	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice								Ŭ									
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
	<u> </u>												чD	( )	( )		. ,	
Backup beep	Lmax	Point	-876.2	489.4	103.0	0	351.0	-61.9	1.5	-8.4	-3.0	0.0		2.9	34.1	0.0	34.1	
Backup beep	Lmax	Point	-863.5	489.1	103.0	0	339.5	-61.6	1.5	-8.8	-2.8	0.0		3.2	34.4	0.0	34.4	
Backup beep	Lmax	Point	-860.9	489.1	103.0	0	337.1	-61.5	1.5	-8.9	-2.8	0.0		3.2	34.4	0.0	34.4	
Backup beep	Lmax	Point	-880.8	489.4	103.0	0	355.1	-62.0	1.5	-8.2	-3.1	0.0		2.9	34.1	0.0	34.1	
Backup beep	Lmax	Point	-868.6	489.7	103.0	0	343.9	-61.7	1.5	-8.6	-2.9	0.0		2.9	34.1	0.0	34.1	
Backup beep	Lmax	Point	-872.3	489.8	103.0	0	347.2	-61.8	1.5	-8.5	-3.0	0.0		2.9	34.1	0.0	34.1	
Backup beep	Lmax	Point	-711.2	638.2	103.0	0	157.3	-54.9	1.1	0.0	-3.0	0.0		4.5	50.8	0.0	50.8	
Backup beep	Lmax	Point	-643.2	638.6	103.0	0	89.6	-50.0	0.7	0.0	-2.0	0.0		4.3	55.9	0.0	55.9	
Backup beep	Lmax	Point	-707.1	638.1	103.0	0	153.2	-54.7	1.1	0.0	-2.9	0.0		4.5	51.0	0.0	51.0	
Backup beep	Lmax	Point	-646.9	638.4	103.0	0	93.3	-50.4	0.7	0.0	-2.1	0.0		4.3	55.6	0.0	55.6	
Backup beep	Lmax	Point	-630.9	638.8	103.0	0	77.4	-48.8	0.7	0.0	-1.8	0.0		4.2	57.3	0.0	57.3	
Backup beep	Lmax	Point	-635.1	638.8	103.0	0	81.6	-49.2	0.7	0.0	-1.9	0.0		4.2	56.8	0.0	56.8	
Backup beep	Lmax	Point	-731.3	638.2	103.0	0	177.3	-56.0	1.2	0.0	-3.2	0.0		4.8	49.8	0.0	49.8	
Backup beep	Lmax	Point	-639.3	638.7	103.0	0	85.7	-49.7	0.7	0.0	-2.0	0.0		4.3	56.3	0.0	56.3	
Backup beep	Lmax	Point	-667.1	638.7	103.0	0	113.4	-52.1	0.9	0.0	-2.4	0.0		4.4	53.8	0.0	53.8	
Backup beep	Lmax	Point	-695.2	638.1	103.0	0	141.3	-54.0	1.0	0.0	-2.8	0.0		4.5	51.8	0.0	51.8	
Backup beep	Lmax	Point	-679.1	638.6	103.0	0	125.3	-53.0	1.0	0.0	-2.6	0.0		4.5	52.9	0.0	52.9	
Backup beep	Lmax	Point	-682.9	638.6	103.0	0	129.1	-53.2	1.0	0.0	-2.6	0.0		4.5	52.6	0.0	52.6	
Backup beep	Lmax	Point	-687.2	638.3	103.0	0	133.4	-53.5	1.0	0.0	-2.7	0.0		4.5	52.3	0.0	52.3	
Backup beep	Lmax	Point	-703.3	638.2	103.0	0	149.4	-54.5	1.1	0.0	-2.9	0.0		4.5	51.3	0.0	51.3	
Backup beep	Lmax	Point	-671.5	638.6	103.0	0	117.7	-52.4	0.9	0.0	-2.4	0.0		4.4	53.5	0.0	53.5	
Backup beep	Lmax	Point	-698.9	638.2	103.0	0	145.0	-54.2	1.1	0.0	-2.8	0.0		4.5	51.6	0.0	51.6	
Backup beep	Lmax	Point	-674.9	638.6	103.0	0	121.1	-52.7	0.9	0.0	-2.5	0.0		4.4	53.2	0.0	53.2	
Backup beep	Lmax	Point	-735.1	638.1	103.0	0	181.2	-56.2	1.2	0.0	-3.2	0.0		4.7	49.6	0.0	49.6	
Backup beep	Lmax	Point	-610.4	638.6	103.0	0	57.1	-46.1	0.7	0.0	-1.4	0.0		4.0	60.1	0.0	60.1	
Backup beep	Lmax	Point	-739.4	638.1	103.0	0	185.4	-56.4	1.2	0.0	-3.3	0.0		4.8	49.4	0.0	49.4	
Backup beep	Lmax	Point	-619.1	638.6	103.0	0	65.6	-47.3	0.7	0.0	-1.6	0.0		4.0	58.8	0.0	58.8	
Backup beep	Lmax	Point	-614.9	638.6	103.0	0	61.5	-46.8	0.7	0.0	-1.5	0.0		4.0	59.4	0.0	59.4	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice								Ŭ									
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
					. ,								uв	( )	, ,		. ,	
Backup beep	Lmax	Point	-743.2	637.8	103.0	0	189.2	-56.5	1.2	0.0	-3.3	0.0		4.7	49.1	0.0	49.1	
Backup beep	Lmax	Point	-623.1	638.5	103.0	0	69.6	-47.9	0.7	0.0	-1.7	0.0		4.1	58.3	0.0	58.3	
Backup beep	Lmax	Point	-747.4	637.9	103.0	0	193.5	-56.7	1.2	0.0	-3.4	0.0		5.6	49.8	0.0	49.8	
Idling Diesel	Lmax	Point	-811.8	491.6	91.5	0	291.9	-60.3	0.8	-9.3	-1.1	0.0		4.9	26.6	0.0	26.6	
Idling Diesel	Lmax	Point	-872.1	491.8	91.5	0	346.3	-61.8	0.8	-6.8	-1.5	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-804.4	491.3	91.5	0	285.6	-60.1	0.8	-9.7	-1.1	0.0		4.9	26.3	0.0	26.3	
Idling Diesel	Lmax	Point	-894.7	491.3	91.5	0	367.2	-62.3	0.9	-6.2	-1.7	0.0		2.4	24.6	0.0	24.6	
Idling Diesel	Lmax	Point	-876.1	491.3	91.5	0	350.1	-61.9	0.8	-6.7	-1.5	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-703.3	636.2	91.5	0	149.4	-54.5	0.5	0.0	-1.0	0.0		4.3	40.8	0.0	40.8	
Idling Diesel	Lmax	Point	-868.5	491.6	91.5	0	343.0	-61.7	0.8	-6.9	-1.5	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-808.1	491.3	91.5	0	288.8	-60.2	0.8	-9.5	-1.1	0.0		4.9	26.4	0.0	26.4	
Idling Diesel	Lmax	Point	-695.2	636.2	91.5	0	141.2	-54.0	0.5	0.0	-1.0	0.0		4.3	41.3	0.0	41.3	
Idling Diesel	Lmax	Point	-885.6	491.3	91.5	0	358.8	-62.1	0.9	-6.5	-1.6	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-880.6	491.3	91.5	0	354.3	-62.0	0.8	-6.6	-1.6	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-747.4	635.9	91.5	0	193.4	-56.7	0.7	0.0	-1.3	0.0		4.6	38.8	0.0	38.8	
Idling Diesel	Lmax	Point	-698.9	636.2	91.5	0	144.9	-54.2	0.5	0.0	-1.0	0.0		4.3	41.1	0.0	41.1	
Idling Diesel	Lmax	Point	-890.7	491.3	91.5	0	363.6	-62.2	0.9	-6.3	-1.6	0.0		2.4	24.6	0.0	24.6	
Idling Diesel	Lmax	Point	-834.6	491.4	91.5	0	312.3	-60.9	0.8	-8.2	-1.3	0.0		5.0	27.0	0.0	27.0	
Idling Diesel	Lmax	Point	-731.3	636.2	91.5	0	177.3	-56.0	0.6	0.0	-1.2	0.0		4.3	39.3	0.0	39.3	
Idling Diesel	Lmax	Point	-822.3	491.3	91.5	0	301.3	-60.6	0.8	-8.7	-1.2	0.0		5.1	26.9	0.0	26.9	
Idling Diesel	Lmax	Point	-846.7	491.1	91.5	0	323.4	-61.2	0.8	-7.7	-1.4	0.0		5.0	27.1	0.0	27.1	
Idling Diesel	Lmax	Point	-739.4	636.1	91.5	0	185.4	-56.4	0.6	0.0	-1.2	0.0		4.4	38.9	0.0	38.9	
Idling Diesel	Lmax	Point	-826.2	491.1	91.5	0	305.0	-60.7	0.8	-8.5	-1.2	0.0		5.1	27.0	0.0	27.0	
Idling Diesel	Lmax	Point	-842.2	491.1	91.5	0	319.3	-61.1	0.8	-7.8	-1.3	0.0		5.0	27.1	0.0	27.1	
Idling Diesel	Lmax	Point	-735.2	636.1	91.5	0	181.2	-56.2	0.6	0.0	-1.2	0.0		4.3	39.1	0.0	39.1	
Idling Diesel	Lmax	Point	-838.3	491.5	91.5	0	315.6	-61.0	0.8	-8.0	-1.3	0.0		4.9	27.0	0.0	27.0	
Idling Diesel	Lmax	Point	-860.8	491.1	91.5	0	336.2	-61.5	0.8	-7.2	-1.4	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-707.1	636.1	91.5	0	153.2		0.5	0.0	-1.1	0.0		4.3	40.6	0.0	40.6	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice								5							-		
	01100				dB(A)	dB	-	dB	dB	dB	dB	dB	dB		dB(A)	dB		
			m	m	( )		m						uв	dB(A)			dB(A)	
Idling Diesel	Lmax	Point	-863.4	491.1	91.5	0	338.5	-61.6	0.8	-7.1	-1.5	0.0		2.5	24.8	0.0	24.8	
Idling Diesel	Lmax	Point	-815.1	491.3	91.5	0	295.0	-60.4	0.8	-9.1	-1.1	0.0		5.0	26.7	0.0	26.7	
Idling Diesel	Lmax	Point	-743.2	635.9	91.5	0	189.2	-56.5	0.6	0.0	-1.3	0.0		4.5	38.8	0.0	38.8	
Idling Diesel	Lmax	Point	-851.7	491.1	91.5	0	327.9	-61.3	0.8	-7.5	-1.4	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-819.1	491.5	91.5	0	298.4	-60.5	0.8	-8.9	-1.2	0.0		5.0	26.8	0.0	26.8	
Idling Diesel	Lmax	Point	-711.2	636.2	91.5	0	157.2	-54.9	0.6	0.0	-1.1	0.0		4.3	40.3	0.0	40.3	
Idling Diesel	Lmax	Point	-856.8	491.1	91.5	0	332.6	-61.4	0.8	-7.3	-1.4	0.0		2.5	24.7	0.0	24.7	
Idling Diesel	Lmax	Point	-635.2	636.8	91.5	0	81.4	-49.2	0.2	0.0	-0.6	0.0		4.1	46.0	0.0	46.0	
Idling Diesel	Lmax	Point	-733.0	509.3	91.5	0	215.2	-57.6	0.7	-22.4	-0.9	0.0		1.7	13.0	0.0	13.0	
Idling Diesel	Lmax	Point	-733.2	513.3	91.5	0	213.1	-57.6	0.7	-22.3	-0.8	0.0		1.7	13.2	0.0	13.2	
Idling Diesel	Lmax	Point	-631.0	636.8	91.5	0	77.2	-48.7	0.2	0.0	-0.6	0.0		4.0	46.4	0.0	46.4	
Idling Diesel	Lmax	Point	-733.0	517.3	91.5	0	210.8	-57.5	0.7	-22.5	-0.8	0.0		1.8	13.2	0.0	13.2	
Idling Diesel	Lmax	Point	-733.0	493.4	91.5	0	224.4	-58.0	0.7	-22.2	-0.9	0.0		1.6	12.8	0.0	12.8	
Idling Diesel	Lmax	Point	-733.0	497.2	91.5	0	222.1	-57.9	0.7	-22.2	-0.9	0.0		1.7	12.9	0.0	12.9	
Idling Diesel	Lmax	Point	-639.3	636.7	91.5	0	85.6	-49.6	0.2	0.0	-0.6	0.0		4.1	45.5	0.0	45.5	
Idling Diesel	Lmax	Point	-733.0	501.1	91.5	0	219.8	-57.8	0.7	-22.4	-0.9	0.0		1.7	12.9	0.0	12.9	
Idling Diesel	Lmax	Point	-732.9	505.1	91.5	0	217.5	-57.7	0.7	-22.5	-0.9	0.0		1.7	12.9	0.0	12.9	
Idling Diesel	Lmax	Point	-732.7	524.8	91.5	0	206.7	-57.3	0.7	-22.6	-0.9	0.0		1.8	13.2	0.0	13.2	
Idling Diesel	Lmax	Point	-732.9	541.0	91.5	0	199.2	-57.0	0.7	-22.6	-0.8	0.0		1.8	13.6	0.0	13.6	
Idling Diesel	Lmax	Point	-614.9	636.7	91.5	0	61.3	-46.7	0.3	0.0	-0.5	0.0		3.8	48.4	0.0	48.4	
Idling Diesel	Lmax	Point	-733.1	544.8	91.5	0	197.7	-56.9	0.7	-22.5	-0.8	0.0		1.8	13.7	0.0	13.7	
Idling Diesel	Lmax	Point	-733.1	548.6	91.5	0	196.1	-56.8	0.7	-22.5	-0.8	0.0		1.8	13.8	0.0	13.8	
Idling Diesel	Lmax	Point	-610.5	636.7	91.5	0	56.9	-46.1	0.3	0.0	-0.4	0.0		3.2	48.5	0.0	48.5	
Idling Diesel	Lmax	Point	-623.2	636.6	91.5	0	69.4	-47.8	0.2	0.0	-0.5	0.0		3.9	47.3	0.0	47.3	
Idling Diesel	Lmax	Point	-732.7	529.0	91.5	0	204.6	-57.2	0.7	-22.6	-0.8	0.0		1.8	13.3	0.0	13.3	
Idling Diesel	Lmax	Point	-732.8	532.9	91.5	0	202.8	-57.1	0.7	-22.6	-0.8	0.0		1.8	13.4	0.0	13.4	
Idling Diesel	Lmax	Point	-619.1	636.6	91.5	0	65.4	-47.3	0.3	0.0	-0.5	0.0		3.9	47.9	0.0	47.9	
Idling Diesel	Lmax	Point	-732.8	537.2	91.5	0	200.8	-57.0	0.7	-22.6	-0.8	0.0		1.8	13.5	0.0	13.5	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice						-											
	31100												-10					
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-643.3	636.6	91.5	0	89.5	-50.0	0.2	0.0	-0.7	0.0		4.2	45.2	0.0	45.2	
Idling Diesel	Lmax	Point	-915.7	491.9	91.5	0	386.6	-62.7	0.9	-5.9	-1.8	0.0		2.4	24.3	0.0	24.3	
Idling Diesel	Lmax	Point	-679.1	636.6	91.5	0	125.2	-52.9	0.4	0.0	-0.9	0.0		4.3	42.3	0.0	42.3	
Idling Diesel	Lmax	Point	-918.8	491.8	91.5	0	389.6	-62.8	0.9	-5.9	-1.8	0.0		2.4	24.3	0.0	24.3	
Idling Diesel	Lmax	Point	-922.5	491.9	91.5	0	392.9	-62.9	0.9	-5.9	-1.8	0.0		2.4	24.2	0.0	24.2	
Idling Diesel	Lmax	Point	-674.9	636.7	91.5	0	121.0	-52.6	0.4	0.0	-0.9	0.0		4.3	42.6	0.0	42.6	
Idling Diesel	Lmax	Point	-687.2	636.4	91.5	0	133.3	-53.5	0.5	0.0	-0.9	0.0		4.3	41.8	0.0	41.8	
Idling Diesel	Lmax	Point	-899.8	491.5	91.5	0	371.9	-62.4	0.9	-6.1	-1.7	0.0		2.4	24.6	0.0	24.6	
Idling Diesel	Lmax	Point	-907.7	491.9	91.5	0	379.1	-62.6	0.9	-6.0	-1.7	0.0		2.5	24.5	0.0	24.5	
Idling Diesel	Lmax	Point	-683.0	636.6	91.5	0	129.1	-53.2	0.4	0.0	-0.9	0.0		4.3	42.1	0.0	42.1	
Idling Diesel	Lmax	Point	-911.5	491.9	91.5	0	382.7	-62.6	0.9	-6.0	-1.8	0.0		2.4	24.4	0.0	24.4	
Idling Diesel	Lmax	Point	-733.6	456.8	91.5	0	248.6	-58.9	0.8	-21.7	-0.9	0.0		1.7	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-733.5	472.8	91.5	0	237.7	-58.5	0.7	-21.9	-0.9	0.0		1.7	12.7	0.0	12.7	
Idling Diesel	Lmax	Point	-733.3	476.5	91.5	0	235.2	-58.4	0.7	-21.9	-0.9	0.0		1.7	12.7	0.0	12.7	
Idling Diesel	Lmax	Point	-647.0	636.5	91.5	0	93.1	-50.4	0.2	0.0	-0.7	0.0		4.2	44.8	0.0	44.8	
Idling Diesel	Lmax	Point	-733.0	480.7	91.5	0	232.3	-58.3	0.7	-22.1	-0.9	0.0		1.7	12.6	0.0	12.6	
Idling Diesel	Lmax	Point	-733.0	489.1	91.5	0	227.0	-58.1	0.7	-22.2	-0.9	0.0		1.6	12.7	0.0	12.7	
Idling Diesel	Lmax	Point	-733.5	460.8	91.5	0	245.7	-58.8	0.8	-21.8	-0.9	0.0		1.7	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-671.5	636.7	91.5	0	117.6	-52.4	0.4	0.0	-0.8	0.0		4.3	42.9	0.0	42.9	
Idling Diesel	Lmax	Point	-733.3	465.0	91.5	0	242.8	-58.7	0.7	-21.9	-0.9	0.0		1.7	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-733.1	469.1	91.5	0	239.9	-58.6	0.7	-22.0	-0.9	0.0		1.7	12.4	0.0	12.4	
Idling Diesel	Lmax	Point	-667.1	636.7	91.5	0	113.2	-52.1	0.3	0.0	-0.8	0.0		4.3	43.2	0.0	43.2	
169	Lmax	PLot	-599.0	695.1	87.0	0	80.0	-49.0	0.2	0.0	-0.7	0.0		1.4	38.9	0.0	38.9	
170	Lmax	PLot	-599.6	685.4	82.0	0	72.6	-48.2	0.1	0.0	-0.6	0.0		1.4	34.7	0.0	34.7	
171	Lmax	PLot	-700.0	686.7	80.0	0	156.9	-54.9	0.4	-16.3	-0.2	0.0		9.2	18.2	0.0	18.2	
168	Lmax	PLot	-603.8	716.7	83.0	0	100.9	-51.1	0.3	0.0	-0.8	0.0		2.6	34.0	0.0	34.0	
165	Lmax	PLot	-599.5	762.5	81.6	0	141.1	-54.0	0.4	-9.0	-0.2	0.0		6.5	25.2	0.0	25.2	
166	Lmax	PLot	-673.9	716.7	84.0	0	148.5	-54.4	0.4	-10.4	-0.2	0.0		6.8	26.2	0.0	26.2	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
167	Lmax	PLot	-673.4	695.2	84.0	0	136.5	-53.7	0.4	-12.2	-0.2	0.0		7.4	25.7	0.0	25.7	
176	Lmax	PLot	-803.2	417.6	82.0	0	326.6	-61.3	0.2	-19.3	-0.6	0.0		6.6	7.7	0.0	7.7	
177	Lmax	PLot	-891.3	417.1	82.0	0	398.2	-63.0	0.1	-15.3	-0.4	0.0		0.4	3.8	0.0	3.8	
178	Lmax	PLot	-953.1	483.6	82.6	0	424.6	-63.6	0.0	-16.2	-0.5	0.0		0.4	2.7	0.0	2.7	
175	Lmax	PLot	-791.3	485.8	83.5	0	277.0	-59.8	0.3	-9.1	-0.4	0.0		3.4	17.9	0.0	17.9	
172	Lmax	PLot	-678.0	681.9	71.8	0	134.7	-53.6	0.3	-16.4	-0.2	0.0		12.4	14.4	0.0	14.4	
173	Lmax	PLot	-578.2	722.9	81.0	0	97.1	-50.7	0.3	0.0	-0.8	0.0		1.7	31.5	0.0	31.5	
174	Lmax	PLot	-578.5	629.4	83.0	0	24.3	-38.7	0.4	0.0	-0.2	0.0		0.5	45.0	0.0	45.0	
155	Lmax	PLot	-614.7	572.9	73.0	0	82.4	-49.3	0.2	0.0	-0.7	0.0		1.1	24.2	0.0	24.2	
156	Lmax	PLot	-584.6	575.8	77.0	0	61.2	-46.7	0.0	0.0	-0.5	0.0		1.1	30.8	0.0	30.8	
157	Lmax	PLot	-633.4	546.4	77.0	0	114.4	-52.2	0.3	0.0	-0.9	0.0		1.7	26.0	0.0	26.0	
154	Lmax	PLot	-579.2	587.9	73.0	0	48.0	-44.6	0.0	0.0	-0.4	0.0		1.0	29.0	0.0	29.0	
151	Lmax	PLot	-666.9	572.5	82.0	0	126.0	-53.0	0.3	0.0	-1.0	0.0		3.1	31.5	0.0	31.5	
152	Lmax	PLot	-647.2	573.9	86.5	0	108.1	-51.7	0.3	0.0	-0.9	0.0		1.9	36.1	0.0	36.1	
153	Lmax	PLot	-628.5	583.6	81.0	0	87.0	-49.8	0.2	0.0	-0.7	0.0		1.0	31.7	0.0	31.7	
162	Lmax	PLot	-704.4	771.4	82.3	0	207.2	-57.3	0.4	-10.0	-0.2	0.0		5.2	20.4	0.0	20.4	
163	Lmax	PLot	-684.2	758.3	82.6	0	183.5	-56.3	0.4	-7.3	-0.2	0.0		1.9	21.0	0.0	21.0	
164	Lmax	PLot	-585.1	771.7	82.2	0	146.2	-54.3	0.4	0.0	-1.1	0.0		2.2	29.4	0.0	29.4	
161	Lmax	PLot	-677.9	421.6	84.0	0	241.4	-58.6	0.3	0.0	-1.6	0.0		1.2	25.3	0.0	25.3	
158	Lmax	PLot	-640.2	515.7	77.0	0	142.2	-54.0	0.4	0.0	-1.1	0.0		2.0	24.3	0.0	24.3	
159	Lmax	PLot	-652.8	513.5	75.0	0	151.8	-54.6	0.4	0.0	-1.1	0.0		2.3	21.9	0.0	21.9	
160	Lmax	PLot	-666.6	499.9	83.0	0	171.1	-55.7	0.4	0.0	-1.2	0.0		2.6	29.1	0.0	29.1	
Receiver R3 FI G Lmax,li	m dB(A) l	Lmax 41.8 dB(A	۹)															
Backup beep	Lmax	Point	-731.4	476.6	103.0	0	175.1	-55.9	1.2	-23.1	-2.0	0.0		0.0	23.2	0.0	23.2	
Backup beep	Lmax	Point	-731.5	472.8	103.0	0	171.5	-55.7	1.2	-23.1	-2.0	0.0		0.0	23.5	0.0	23.5	
Backup beep	Lmax	Point	-731.2	469.2	103.0	0	168.0	-55.5	1.2	-23.3	-2.1	0.0		0.0	23.3	0.0	23.3	
Backup beep	Lmax	Point	-731.1	493.4	103.0	0	191.2	-56.6	1.2	-23.3	-2.2	0.0		17.9	40.0	0.0	40.0	
Backup beep	Lmax	Point	-731.1	489.2	103.0	0	187.1	-56.4	1.2	-23.3	-2.2	0.0		0.0	22.3	0.0	22.3	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice								Ŭ									
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-731.1	480.8	103.0	0	179.0	-56.1	1.2	-23.4	-2.2	0.0	чв	0.0	22.6	0.0	22.6	
	Lmax	Point	-922.6	480.8 490.0	103.0		302.7	-50.1	1.2		-2.2	0.0		0.0	22.0 16.4	0.0	22.0 16.4	
Backup beep		1 1	-922.0	490.0 489.8	103.0	0	302.7 299.7	-60.6	1.4	-24.0 -24.1	-3.4	0.0		0.0	16.4	0.0	16.4 16.4	
Backup beep	Lmax	Point				0												
Backup beep	Lmax	Point	-915.9	490.0	103.0	0	297.3	-60.5	1.4	-24.0	-3.4	0.0		0.0	16.5	0.0	16.5	
Backup beep	Lmax	Point	-731.4	465.1	103.0	0	164.1	-55.3	1.1	-23.2	-2.0	0.0		0.0	23.7	0.0	23.7	
Backup beep	Lmax	Point	-731.5	460.9	103.0	0	160.2	-55.1	1.1	-23.2	-1.9	0.0		0.0	24.0	0.0	24.0	
Backup beep	Lmax	Point	-731.6	456.9	103.0	0	156.4	-54.9	1.1	-23.1	-1.9	0.0		0.0	24.3	0.0	24.3	
Backup beep	Lmax	Point	-731.1	497.3	103.0	0	194.9	-56.8	1.2	-23.3	-2.2	0.0		17.9	39.9	0.0	39.9	
Backup beep	Lmax	Point	-730.9	537.2	103.0	0	233.6	-58.4	1.3	-23.2	-2.4	0.0		20.2	40.5	0.0	40.5	
Backup beep	Lmax	Point	-730.9	533.0	103.0	0	229.5	-58.2	1.3	-23.2	-2.4	0.0		19.1	39.6	0.0	39.6	
Backup beep	Lmax	Point	-730.8	529.0	103.0	0	225.6	-58.1	1.3	-23.4	-2.5	0.0		18.4	38.8	0.0	38.8	
Backup beep	Lmax	Point	-731.2	548.7	103.0	0	244.9	-58.8	1.4	-22.8	-2.3	0.0		19.9	40.4	0.0	40.4	
Backup beep	Lmax	Point	-731.2	544.9	103.0	0	241.1	-58.6	1.3	-22.8	-2.3	0.0		19.8	40.4	0.0	40.4	
Backup beep	Lmax	Point	-731.0	541.1	103.0	0	237.4	-58.5	1.3	-23.1	-2.4	0.0		20.1	40.4	0.0	40.4	
Backup beep	Lmax	Point	-731.1	509.4	103.0	0	206.6	-57.3	1.3	-23.2	-2.3	0.0		17.9	39.5	0.0	39.5	
Backup beep	Lmax	Point	-731.0	505.1	103.0	0	202.4	-57.1	1.3	-23.3	-2.3	0.0		18.1	39.6	0.0	39.6	
Backup beep	Lmax	Point	-731.1	501.2	103.0	0	198.7	-57.0	1.3	-23.2	-2.2	0.0		17.9	39.8	0.0	39.8	
Backup beep	Lmax	Point	-730.8	524.9	103.0	0	221.6	-57.9	1.3	-23.4	-2.5	0.0		18.4	39.0	0.0	39.0	
Backup beep	Lmax	Point	-731.1	517.3	103.0	0	214.3	-57.6	1.3	-23.1	-2.3	0.0		17.9	39.2	0.0	39.2	
Backup beep	Lmax	Point	-731.3	513.4	103.0	0	210.5	-57.5	1.3	-23.0	-2.2	0.0		17.7	39.4	0.0	39.4	
Backup beep	Lmax	Point	-838.4	489.6	103.0	0	240.2	-58.6	1.3	-23.8	-3.0	0.0		0.0	18.9	0.0	18.9	
Backup beep	Lmax	Point	-842.3	489.1	103.0	0	242.5	-58.7	1.4	-24.0	-3.1	0.0		0.0	18.6	0.0	18.6	
Backup beep	Lmax	Point	-826.4	489.1	103.0	0	232.0	-58.3	1.3	-23.7	-3.0	0.0		0.0	19.3	0.0	19.3	
Backup beep	Lmax	Point	-851.8	489.1	103.0	0	248.9	-58.9	1.4	-24.0	-3.2	0.0		0.0	18.2	0.0	18.2	
Backup beep	Lmax	Point	-846.9	489.1	103.0	0	245.5	-58.8	1.4	-24.0	-3.2	0.0		0.0	18.4	0.0	18.4	
Backup beep	Lmax	Point	-834.7	489.4	103.0	0	237.6	-58.5	1.3	-23.8	-3.0	0.0		0.0	19.0	0.0	19.0	
Backup beep	Lmax	Point	-811.9	489.7	103.0	0	223.6	-58.0	1.3	-23.1	-2.7	0.0		0.0	20.6	0.0	20.6	
Backup beep	Lmax	Point	-808.2	489.4	103.0	0	223.0		1.3	-22.9	-2.7	0.0		0.0	20.0	0.0	20.0	
Dackup Deep			-000.2	409.4	103.0		221.2	-57.9	1.3	-22.9	-2.0	0.0	l	0.0	21.0	0.0	21.0	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,														-		
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
De alava la car	1	Definet			( )									( )	, ,			
Backup beep	Lmax	Point	-804.6	489.4	103.0	0	219.1	-57.8	1.3	-22.4	-2.5	0.0		0.0	21.6	0.0	21.6	
Backup beep	Lmax	Point	-822.4	489.4	103.0	0	229.8	-58.2	1.3	-23.6	-2.9	0.0		0.0	19.6	0.0	19.6	
Backup beep	Lmax	Point	-819.2	489.5	103.0	0	227.9	-58.1	1.3	-23.5	-2.8	0.0		0.0	19.9	0.0	19.9	
Backup beep	Lmax	Point	-815.2	489.4	103.0	0	225.4	-58.1	1.3	-23.3	-2.8	0.0		0.0	20.2	0.0	20.2	
Backup beep	Lmax	Point	-857.0	489.1	103.0	0	252.5	-59.0	1.4	-24.1	-3.2	0.0		0.0	18.0	0.0	18.0	
Backup beep	Lmax	Point	-894.8	489.4	103.0	0	280.5	-60.0	1.4	-24.1	-3.4	0.0		0.0	16.9	0.0	16.9	
Backup beep	Lmax	Point	-890.8	489.4	103.0	0	277.5	-59.9	1.4	-24.1	-3.4	0.0		0.0	17.0	0.0	17.0	
Backup beep	Lmax	Point	-885.7	489.4	103.0	0	273.6	-59.7	1.4	-24.1	-3.4	0.0		0.0	17.2	0.0	17.2	
Backup beep	Lmax	Point	-911.6	490.0	103.0	0	294.0	-60.4	1.4	-24.0	-3.4	0.0		0.0	16.7	0.0	16.7	
Backup beep	Lmax	Point	-907.8	490.0	103.0	0	291.0	-60.3	1.4	-24.0	-3.4	0.0		0.0	16.8	0.0	16.8	
Backup beep	Lmax	Point	-899.9	489.5	103.0	0	284.5	-60.1	1.4	-24.1	-3.4	0.0		0.0	16.8	0.0	16.8	
Backup beep	Lmax	Point	-876.2	489.4	103.0	0	266.5	-59.5	1.4	-24.1	-3.3	0.0		0.0	17.5	0.0	17.5	
Backup beep	Lmax	Point	-863.5	489.1	103.0	0	257.1	-59.2	1.4	-24.1	-3.3	0.0		0.0	17.8	0.0	17.8	
Backup beep	Lmax	Point	-860.9	489.1	103.0	0	255.3	-59.1	1.4	-24.1	-3.3	0.0		0.0	17.9	0.0	17.9	
Backup beep	Lmax	Point	-880.8	489.4	103.0	0	269.9	-59.6	1.4	-24.1	-3.3	0.0		0.0	17.3	0.0	17.3	
Backup beep	Lmax	Point	-868.6	489.7	103.0	0	261.2	-59.3	1.4	-24.0	-3.2	0.0		0.0	17.8	0.0	17.8	
Backup beep	Lmax	Point	-872.3	489.8	103.0	0	263.9	-59.4	1.4	-24.0	-3.2	0.0		0.0	17.7	0.0	17.7	
Backup beep	Lmax	Point	-711.2	638.2	103.0	0	330.4	-61.4	1.5	-15.0	-2.1	0.0		3.2	29.2	0.0	29.2	
Backup beep	Lmax	Point	-643.2	638.6	103.0	0	331.3	-61.4	1.5	0.0	-4.6	0.0		3.4	41.8	0.0	41.8	
Backup beep	Lmax	Point	-707.1	638.1	103.0	0	329.9	-61.4	1.5	-15.0	-2.1	0.0		3.2	29.2	0.0	29.2	
Backup beep	Lmax	Point	-646.9	638.4	103.0	0	330.8	-61.4	1.5	0.0	-4.6	0.0		3.4	41.8	0.0	41.8	
Backup beep	Lmax	Point	-630.9	638.8	103.0	0	333.1	-61.4	1.5	0.0	-4.6	0.0		3.4	41.8	0.0	41.8	
Backup beep	Lmax	Point	-635.1	638.8	103.0	0	332.5	-61.4	1.5	0.0	-4.6	0.0		3.4	41.8	0.0	41.8	
Backup beep	Lmax	Point	-731.3	638.2	103.0	0	332.9	-61.4	1.5	-14.9	-2.1	0.0		2.7	28.7	0.0	28.7	
Backup beep	Lmax	Point	-639.3	638.7	103.0	0	331.9	-61.4	1.5	0.0	-4.6	0.0		3.4	41.8	0.0	41.8	
Backup beep	Lmax	Point	-667.1	638.7	103.0	0	329.6	-61.4	1.5	-3.6	-3.8	0.0		3.1	38.8	0.0	38.8	
Backup beep	Lmax	Point	-695.2	638.1	103.0	0	329.2	-61.3	1.5	-14.9	-2.1	0.0		4.7	30.8	0.0	30.8	
Backup beep	Lmax	Point	-679.1	638.6	103.0	0	329.2		1.5	-13.8	-2.1	0.0		6.8	33.9	0.0	33.9	
Dackup Deep			-079.1	030.0	105.0		529.5	-01.5	1.5	-15.0	-2.2	0.0	I	0.0	55.9	0.0	55.9	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-682.9	638.6	103.0	0	329.3	-61.3	1.5	-14.5	-2.1	0.0		4.5	31.0	0.0	31.0	
Backup beep	Lmax	Point	-687.2	638.3	103.0	0	329.1	-61.3	1.5	-14.8	-2.1	0.0		4.6	30.9	0.0	30.9	
Backup beep	Lmax	Point	-703.3	638.2	103.0	0	329.7	-61.4	1.5	-15.0	-2.1	0.0		3.2	29.2	0.0	29.2	
Backup beep	Lmax	Point	-671.5	638.6	103.0	0	329.4	-61.3	1.5	-6.6	-2.9	0.0		4.0	37.5	0.0	37.5	
Backup beep	Lmax	Point	-698.9	638.2	103.0	0	329.5	-61.3	1.5	-14.9	-2.1	0.0		3.2	29.3	0.0	29.3	
Backup beep	Lmax	Point	-674.9	638.6	103.0	0	329.4	-61.3	1.5	-12.0	-2.3	0.0		6.8	35.6	0.0	35.6	
Backup beep	Lmax	Point	-735.1	638.1	103.0	0	333.4	-61.5	1.5	-14.9	-2.1	0.0		2.7	28.7	0.0	28.7	
Backup beep	Lmax	Point	-610.4	638.6	103.0	0	336.6	-61.5	1.5	0.0	-4.7	0.0		2.6	40.8	0.0	40.8	
Backup beep	Lmax	Point	-739.4	638.1	103.0	0	334.1	-61.5	1.5	-14.8	-2.1	0.0		2.7	28.7	0.0	28.7	
Backup beep	Lmax	Point	-619.1	638.6	103.0	0	334.8	-61.5	1.5	0.0	-4.6	0.0		3.5	41.8	0.0	41.8	
Backup beep	Lmax	Point	-614.9	638.6	103.0	0	335.7	-61.5	1.5	0.0	-4.7	0.0		3.1	41.4	0.0	41.4	
Backup beep	Lmax	Point	-743.2	637.8	103.0	0	334.6	-61.5	1.5	-14.9	-2.1	0.0		2.7	28.7	0.0	28.7	
Backup beep	Lmax	Point	-623.1	638.5	103.0	0	334.0	-61.5	1.5	0.0	-4.6	0.0		3.5	41.8	0.0	41.8	
Backup beep	Lmax	Point	-747.4	637.9	103.0	0	335.5	-61.5	1.5	-14.7	-2.1	0.0		2.7	28.8	0.0	28.8	
Idling Diesel	Lmax	Point	-811.8	491.6	91.5	0	225.1	-58.0	0.7	-20.3	-0.8	0.0		0.0	13.1	0.0	13.1	
Idling Diesel	Lmax	Point	-872.1	491.8	91.5	0	265.2	-59.5	0.8	-21.7	-1.0	0.0		0.0	10.1	0.0	10.1	
Idling Diesel	Lmax	Point	-804.4	491.3	91.5	0	220.7	-57.9	0.7	-19.0	-0.8	0.0		0.0	14.6	0.0	14.6	
Idling Diesel	Lmax	Point	-894.7	491.3	91.5	0	281.7	-60.0	0.8	-22.0	-1.1	0.0		0.0	9.3	0.0	9.3	
Idling Diesel	Lmax	Point	-876.1	491.3	91.5	0	267.8	-59.5	0.8	-22.0	-1.0	0.0		0.0	9.7	0.0	9.7	
Idling Diesel	Lmax	Point	-703.3	636.2	91.5	0	327.8	-61.3	0.8	-12.5	-1.1	0.0		3.2	20.6	0.0	20.6	
Idling Diesel	Lmax	Point	-868.5	491.6	91.5	0	262.4	-59.4	0.8	-21.8	-1.0	0.0		0.0	10.1	0.0	10.1	
Idling Diesel	Lmax	Point	-808.1	491.3	91.5	0	222.8	-57.9	0.7	-19.9	-0.8	0.0		0.0	13.6	0.0	13.6	
Idling Diesel	Lmax	Point	-695.2	636.2	91.5	0	327.2	-61.3	0.8	-12.5	-1.1	0.0		3.4	20.8	0.0	20.8	
Idling Diesel	Lmax	Point	-885.6	491.3	91.5	0	274.8	-59.8	0.8	-22.0	-1.0	0.0		0.0	9.5	0.0	9.5	
Idling Diesel	Lmax	Point	-880.6	491.3	91.5	0	271.1	-59.7	0.8	-22.0	-1.0	0.0		0.0	9.6	0.0	9.6	
Idling Diesel	Lmax	Point	-747.4	635.9	91.5	0	333.6	-61.5	0.8	-12.3	-1.1	0.0		2.8	20.2	0.0	20.2	
Idling Diesel	Lmax	Point	-698.9	636.2	91.5	0	327.5	-61.3	0.8	-12.5	-1.1	0.0		3.4	20.8	0.0	20.8	
Idling Diesel	Lmax	Point	-890.7	491.3	91.5	0	278.7	-59.9	0.8	-22.0	-1.0	0.0		0.0	9.3	0.0	9.3	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-834.6	491.4	91.5	0	239.0	-58.6	0.7	-21.7	-0.9	0.0		0.0	11.1	0.0	11.1	
Idling Diesel	Lmax	Point	-731.3	636.2	91.5	0	331.0	-61.4	0.8	-12.4	-1.1	0.0		2.8	20.2	0.0	20.2	
Idling Diesel	Lmax	Point	-822.3	491.3	91.5	0	231.2	-58.3	0.7	-21.3	-0.9	0.0		0.0	11.8	0.0	11.8	
Idling Diesel	Lmax	Point	-846.7	491.1	91.5	0	246.9	-58.8	0.8	-22.0	-1.0	0.0		0.0	10.4	0.0	10.4	
Idling Diesel	Lmax	Point	-739.4	636.1	91.5	0	332.2	-61.4	0.8	-12.4	-1.1	0.0		2.8	20.2	0.0	20.2	
Idling Diesel	Lmax	Point	-826.2	491.1	91.5	0	233.4	-58.4	0.7	-21.6	-0.9	0.0		0.0	11.4	0.0	11.4	
Idling Diesel	Lmax	Point	-842.2	491.1	91.5	0	243.8	-58.7	0.7	-22.0	-1.0	0.0		0.0	10.6	0.0	10.6	
Idling Diesel	Lmax	Point	-735.2	636.1	91.5	0	331.5	-61.4	0.8	-12.4	-1.1	0.0		2.8	20.2	0.0	20.2	
Idling Diesel	Lmax	Point	-838.3	491.5	91.5	0	241.5	-58.7	0.7	-21.7	-0.9	0.0		0.0	11.0	0.0	11.0	
Idling Diesel	Lmax	Point	-860.8	491.1	91.5	0	256.6	-59.2	0.8	-22.1	-1.0	0.0		0.0	9.9	0.0	9.9	
Idling Diesel	Lmax	Point	-707.1	636.1	91.5	0	328.0	-61.3	0.8	-12.5	-1.1	0.0		3.2	20.6	0.0	20.6	
Idling Diesel	Lmax	Point	-863.4	491.1	91.5	0	258.4	-59.2	0.8	-22.2	-1.0	0.0		0.0	9.8	0.0	9.8	
Idling Diesel	Lmax	Point	-815.1	491.3	91.5	0	226.9	-58.1	0.7	-20.8	-0.8	0.0		0.0	12.5	0.0	12.5	
Idling Diesel	Lmax	Point	-743.2	635.9	91.5	0	332.7	-61.4	0.8	-12.4	-1.1	0.0		2.8	20.2	0.0	20.2	
Idling Diesel	Lmax	Point	-851.7	491.1	91.5	0	250.2	-59.0	0.8	-22.1	-1.0	0.0		0.0	10.2	0.0	10.2	
Idling Diesel	Lmax	Point	-819.1	491.5	91.5	0	229.4	-58.2	0.7	-21.0	-0.8	0.0		0.0	12.1	0.0	12.1	
Idling Diesel	Lmax	Point	-711.2	636.2	91.5	0	328.5	-61.3	0.8	-12.5	-1.1	0.0		3.2	20.6	0.0	20.6	
Idling Diesel	Lmax	Point	-856.8	491.1	91.5	0	253.8	-59.1	0.8	-22.1	-1.0	0.0		0.0	10.1	0.0	10.1	
Idling Diesel	Lmax	Point	-635.2	636.8	91.5	0	330.5	-61.4	0.8	0.0	-2.0	0.0		2.7	31.7	0.0	31.7	
Idling Diesel	Lmax	Point	-733.0	509.3	91.5	0	207.0	-57.3	0.7	-18.5	-0.6	0.0		12.8	28.5	0.0	28.5	
Idling Diesel	Lmax	Point	-733.2	513.3	91.5	0	210.9	-57.5	0.7	-18.2	-0.6	0.0		12.6	28.4	0.0	28.4	
Idling Diesel	Lmax	Point	-631.0	636.8	91.5	0	331.1	-61.4	0.8	0.0	-2.0	0.0		2.7	31.7	0.0	31.7	
Idling Diesel	Lmax	Point	-733.0	517.3	91.5	0	214.7	-57.6	0.7	-18.4	-0.7	0.0		12.8	28.3	0.0	28.3	
Idling Diesel	Lmax	Point	-733.0	493.4	91.5	0	191.6	-56.6	0.7	-18.8	-0.6	0.0		10.6	26.7	0.0	26.7	
Idling Diesel	Lmax	Point	-733.0	497.2	91.5	0	195.3	-56.8	0.7	-18.7	-0.6	0.0		12.9	28.9	0.0	28.9	
Idling Diesel	Lmax	Point	-639.3	636.7	91.5	0	329.9	-61.4	0.8	0.0	-2.0	0.0		2.7	31.7	0.0	31.7	
Idling Diesel	Lmax	Point	-733.0	501.1	91.5	0	199.1	-57.0	0.7	-18.7	-0.6	0.0		12.8	28.8	0.0	28.8	
Idling Diesel	Lmax	Point	-732.9	505.1	91.5	0	202.9	-57.1	0.7	-18.7	-0.6	0.0		12.9	28.7	0.0	28.7	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice						-											
	31100		-	~				٩D	٩D	٩D	aD	dD	dB			٩D		
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	aв	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-732.7	524.8	91.5	0	222.0	-57.9	0.7	-18.6	-0.7	0.0		13.0	28.1	0.0	28.1	
Idling Diesel	Lmax	Point	-732.9	541.0	91.5	0	237.7	-58.5	0.7	-18.1	-0.7	0.0		13.8	28.7	0.0	28.7	
Idling Diesel	Lmax	Point	-614.9	636.7	91.5	0	333.7	-61.5	0.8	0.0	-2.0	0.0		2.6	31.5	0.0	31.5	
Idling Diesel	Lmax	Point	-733.1	544.8	91.5	0	241.5	-58.7	0.7	-17.8	-0.7	0.0		13.7	28.8	0.0	28.8	
Idling Diesel	Lmax	Point	-733.1	548.6	91.5	0	245.2	-58.8	0.8	-17.7	-0.7	0.0		13.8	28.8	0.0	28.8	
Idling Diesel	Lmax	Point	-610.5	636.7	91.5	0	334.6	-61.5	0.8	0.0	-2.0	0.0		2.5	31.3	0.0	31.3	
Idling Diesel	Lmax	Point	-623.2	636.6	91.5	0	332.1	-61.4	0.8	0.0	-2.0	0.0		2.8	31.6	0.0	31.6	
Idling Diesel	Lmax	Point	-732.7	529.0	91.5	0	226.0	-58.1	0.7	-18.5	-0.7	0.0		13.6	28.6	0.0	28.6	
Idling Diesel	Lmax	Point	-732.8	532.9	91.5	0	229.8	-58.2	0.7	-18.4	-0.7	0.0		13.5	28.5	0.0	28.5	
Idling Diesel	Lmax	Point	-619.1	636.6	91.5	0	332.9	-61.4	0.8	0.0	-2.0	0.0		2.8	31.6	0.0	31.6	
Idling Diesel	Lmax	Point	-732.8	537.2	91.5	0	234.0	-58.4	0.7	-18.3	-0.7	0.0		13.1	27.9	0.0	27.9	
Idling Diesel	Lmax	Point	-643.3	636.6	91.5	0	329.4	-61.3	0.8	0.0	-2.0	0.0		2.7	31.7	0.0	31.7	
Idling Diesel	Lmax	Point	-915.7	491.9	91.5	0	298.4	-60.5	0.8	-21.5	-1.0	0.0		0.0	9.3	0.0	9.3	
Idling Diesel	Lmax	Point	-679.1	636.6	91.5	0	327.3	-61.3	0.8	-11.3	-1.1	0.0		4.0	22.6	0.0	22.6	
Idling Diesel	Lmax	Point	-918.8	491.8	91.5	0	300.8	-60.6	0.8	-21.5	-1.1	0.0		0.0	9.1	0.0	9.1	
Idling Diesel	Lmax	Point	-922.5	491.9	91.5	0	303.8	-60.6	0.8	-21.4	-1.1	0.0		0.0	9.2	0.0	9.2	
Idling Diesel	Lmax	Point	-674.9	636.7	91.5	0	327.4	-61.3	0.8	-9.5	-1.2	0.0		3.0	23.4	0.0	23.4	
Idling Diesel	Lmax	Point	-687.2	636.4	91.5	0	327.2	-61.3	0.8	-12.3	-1.1	0.0		3.7	21.4	0.0	21.4	
Idling Diesel	Lmax	Point	-899.8	491.5	91.5	0	285.7	-60.1	0.8	-21.9	-1.1	0.0		0.0	9.3	0.0	9.3	
Idling Diesel	Lmax	Point	-907.7	491.9	91.5	0	292.1	-60.3	0.8	-21.5	-1.0	0.0		0.0	9.5	0.0	9.5	
Idling Diesel	Lmax	Point	-683.0	636.6	91.5	0	327.3	-61.3	0.8	-12.0	-1.1	0.0		3.6	21.6	0.0	21.6	
Idling Diesel	Lmax	Point	-911.5	491.9	91.5	0	295.1	-60.4	0.8	-21.5	-1.0	0.0		0.0	9.4	0.0	9.4	
Idling Diesel	Lmax	Point	-733.6	456.8	91.5	0	157.0	-54.9	0.6	-19.3	-0.5	0.0		0.0	17.4	0.0	17.4	
Idling Diesel	Lmax	Point	-733.5	472.8	91.5	0	172.1	-55.7	0.6	-18.6	-0.5	0.0		0.0	17.2	0.0	17.2	
Idling Diesel	Lmax	Point	-733.3	476.5	91.5	0	175.6	-55.9	0.6	-18.7	-0.5	0.0		0.0	17.0	0.0	17.0	
Idling Diesel	Lmax	Point	-647.0	636.5	91.5	0	328.8	-61.3	0.8	0.0	-2.0	0.0		2.7	31.7	0.0	31.7	
Idling Diesel	Lmax	Point	-733.0	480.7	91.5	0	179.5	-56.1	0.6	-18.9	-0.5	0.0		0.0	16.6	0.0	16.6	
Idling Diesel	Lmax	Point	-733.0	489.1	91.5	0	187.5	-56.5	0.6	-18.8	-0.6	0.0		10.6	26.9	0.0	26.9	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-733.5	460.8	91.5	0	160.8	-55.1	0.6	-18.7	-0.5	0.0		0.0	17.8	0.0	17.8	
Idling Diesel	Lmax	Point	-671.5	636.7	91.5	0	327.5	-61.3	0.8	-4.9	-1.5	0.0		2.2	26.8	0.0	26.8	
Idling Diesel	Lmax	Point	-733.3	465.0	91.5	0	164.7	-55.3	0.6	-18.8	-0.5	0.0		0.0	17.5	0.0	17.5	
Idling Diesel	Lmax	Point	-733.1	469.1	91.5	0	168.5	-55.5	0.6	-19.0	-0.5	0.0		0.0	17.1	0.0	17.1	
Idling Diesel	Lmax	Point	-667.1	636.7	91.5	0	327.7	-61.3	0.8	-2.8	-1.7	0.0		1.9	28.3	0.0	28.3	
169	Lmax	PLot	-613.5	700.5	87.0	0	396.8	-63.0	0.1	-11.4	-0.4	0.0		1.2	13.5	0.0	13.5	
170	Lmax	PLot	-622.0	687.0	82.0	0	382.1	-62.6	0.1	-16.3	-0.4	0.0		3.3	6.0	0.0	6.0	
171	Lmax	PLot	-727.2	687.1	80.0	0	380.8	-62.6	0.1	-17.7	-0.5	0.0		1.9	1.2	0.0	1.2	
168	Lmax	PLot	-626.8	716.7	83.0	0	410.8	-63.3	0.0	-9.0	-0.5	0.0		1.2	11.4	0.0	11.4	
165	Lmax	PLot	-654.1	763.3	81.6	0	454.8	-64.1	0.0	-14.9	-0.5	0.0		0.0	2.0	0.0	2.0	
166	Lmax	PLot	-717.2	716.5	84.0	0	408.9	-63.2	0.0	-11.2	-0.5	0.0		1.0	10.2	0.0	10.2	
167	Lmax	PLot	-751.1	699.4	84.0	0	396.6	-63.0	0.1	-13.2	-0.4	0.0		1.3	8.8	0.0	8.8	
176	Lmax	PLot	-803.2	417.6	82.0	0	164.3	-55.3	0.4	0.0	-1.2	0.0		1.2	27.1	0.0	27.1	
177	Lmax	PLot	-875.9	417.4	82.0	0	224.0	-58.0	0.3	0.0	-1.5	0.0		1.2	24.1	0.0	24.1	
178	Lmax	PLot	-947.7	424.3	82.6	0	291.6	-60.3	0.3	0.0	-1.8	0.0		2.3	23.1	0.0	23.1	
175	Lmax	PLot	-788.0	431.5	83.5	0	163.2	-55.2	0.4	0.0	-1.2	0.0		1.2	28.7	0.0	28.7	
172	Lmax	PLot	-689.0	685.8	71.8	0	376.7	-62.5	0.1	-17.9	-0.5	0.0		2.0	-7.1	0.0	-7.1	
173	Lmax	PLot	-583.2	722.9	81.0	0	424.7	-63.6	0.0	-5.4	-0.8	0.0		0.0	11.3	0.0	11.3	
174	Lmax	PLot	-584.7	613.1	83.0	0	318.3	-61.0	0.2	0.0	-2.0	0.0		0.0	20.2	0.0	20.2	
155	Lmax	PLot	-620.2	560.7	73.0	0	258.4	-59.2	0.3	0.0	-1.7	0.0		0.4	12.8	0.0	12.8	
156	Lmax	PLot	-613.5	569.9	77.0	0	268.9	-59.6	0.3	0.0	-1.7	0.0		0.5	16.5	0.0	16.5	
157	Lmax	PLot	-639.4	517.7	77.0	0	212.3	-57.5	0.4	0.0	-1.4	0.0		0.3	18.7	0.0	18.7	
154	Lmax	PLot	-584.1	575.2	73.0	0	282.6	-60.0	0.3	0.0	-1.8	0.0		0.6	12.0	0.0	12.0	
151	Lmax	PLot	-669.9	513.5	82.0	0	204.5	-57.2	0.4	0.0	-1.4	0.0		0.4	24.2	0.0	24.2	
152	Lmax	PLot	-658.5	526.4	86.5	0	218.2	-57.8	0.3	0.0	-1.5	0.0		0.5	28.1	0.0	28.1	
153	Lmax	PLot	-639.2	560.6	81.0	0	254.5	-59.1	0.3	0.0	-1.6	0.0		0.4	20.9	0.0	20.9	
162	Lmax	PLot	-683.4	771.4	82.3	0	462.2	-64.3	0.0	-13.3	-0.5	0.0		0.0	4.2	0.0	4.2	
163	Lmax	PLot	-748.3	763.7	82.6	0	459.6	-64.2	0.0	-15.7	-0.5	0.0		0.0	2.2	0.0	2.2	

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Source	Time	Course tune	Xmax	Vmay	1	Ko	S	Adiv	Aar	Abar	Aatm	ADI	Amisc	dLrefl		Cmet	١r	1
Source		Source type	Amax	Ymax	Lw	ΝU	3	Auiv	Agr	Abai	Aaun	ADI	Amisc	uLieli	Ls	Ciller	LI	
	slice																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
164	Lmax	PLot	-586.1	771.7	82.2	0	471.8	-64.5	-0.1	-5.2	-1.4	0.0		0.0	11.2	0.0	11.2	
161	Lmax	PLot	-679.9	417.1	84.0	0	107.8	-51.6	0.3	0.0	-0.8	0.0		1.8	33.6	0.0	33.6	
158	Lmax	PLot	-648.6	509.5	77.0	0	202.7	-57.1	0.4	0.0	-1.4	0.0		0.4	19.3	0.0	19.3	
159	Lmax	PLot	-658.8	495.1	75.0	0	187.0	-56.4	0.4	0.0	-1.3	0.0		0.2	17.9	0.0	17.9	
160	Lmax	PLot	-671.6	431.3	83.0	0	122.3	-52.7	0.3	0.0	-0.9	0.0		0.0	29.6	0.0	29.6	
Receiver R4 FI G Lmax, lir	n dB(A) L	.max 39.6 dB(A	4)															
Backup beep	Lmax	Point	-731.4	476.6	103.0	0	268.0	-59.6	1.4	-15.3	-1.8	0.0		2.7	30.4	0.0	30.4	
Backup beep	Lmax	Point	-731.5	472.8	103.0	0	266.9	-59.5	1.4	-15.2	-1.8	0.0		2.6	30.5	0.0	30.5	
Backup beep	Lmax	Point	-731.2	469.2	103.0	0	266.2	-59.5	1.4	-15.0	-1.8	0.0		2.5	30.7	0.0	30.7	
Backup beep	Lmax	Point	-731.1	493.4	103.0	0	273.6	-59.7	1.4	-15.9	-1.8	0.0		2.7	29.7	0.0	29.7	
Backup beep	Lmax	Point	-731.1	489.2	103.0	0	272.1	-59.7	1.4	-15.8	-1.8	0.0		2.7	29.9	0.0	29.9	
Backup beep	Lmax	Point	-731.1	480.8	103.0	0	269.5	-59.6	1.4	-15.5	-1.8	0.0		2.7	30.2	0.0	30.2	
Backup beep	Lmax	Point	-922.6	490.0	103.0	0	111.1	-51.9	0.9	-23.3	-1.8	0.0		0.0	26.9	0.0	26.9	
Backup beep	Lmax	Point	-918.9	489.8	103.0	0	113.2	-52.1	0.9	-23.5	-1.8	0.0		0.0	26.5	0.0	26.5	
Backup beep	Lmax	Point	-915.9	490.0	103.0	0	115.2	-52.2	0.9	-23.5	-1.8	0.0		0.0	26.3	0.0	26.3	
Backup beep	Lmax	Point	-731.4	465.1	103.0	0	265.0	-59.5	1.4	-14.8	-1.8	0.0		2.5	30.9	0.0	30.9	
Backup beep	Lmax	Point	-731.5	460.9	103.0	0	263.9	-59.4	1.4	-14.5	-1.8	0.0		2.5	31.2	0.0	31.2	
Backup beep	Lmax	Point	-731.6	456.9	103.0	0	262.9	-59.4	1.4	-14.2	-1.8	0.0		2.5	31.5	0.0	31.5	
Backup beep	Lmax	Point	-731.1	497.3	103.0	0	274.9	-59.8	1.4	-16.0	-1.8	0.0		2.7	29.5	0.0	29.5	
Backup beep	Lmax	Point	-730.9	537.2	103.0	0	291.5	-60.3	1.4	-15.6	-1.9	0.0		2.5	29.2	0.0	29.2	
Backup beep	Lmax	Point	-730.9	533.0	103.0	0	289.6	-60.2	1.4	-15.7	-1.9	0.0		2.5	29.1	0.0	29.1	
Backup beep	Lmax	Point	-730.8	529.0	103.0	0	287.9	-60.2	1.4	-15.8	-1.9	0.0		2.5	29.1	0.0	29.1	
Backup beep	Lmax	Point	-731.2	548.7	103.0	0	296.8	-60.4	1.4	-15.4	-1.9	0.0		3.7	30.4	0.0	30.4	
Backup beep	Lmax	Point	-731.2	544.9	103.0	0	294.9	-60.4	1.4	-15.4	-1.9	0.0		2.5	29.2	0.0	29.2	
Backup beep	Lmax	Point	-731.0	541.1	103.0	0	293.3	-60.3	1.4	-15.5	-1.9	0.0		2.5	29.2	0.0	29.2	
Backup beep	Lmax	Point	-731.1	509.4	103.0	0	279.4	-59.9	1.4	-16.3	-1.8	0.0		4.1	30.4	0.0	30.4	
Backup beep	Lmax	Point	-731.0	505.1	103.0	0	277.8	-59.9	1.4	-16.2	-1.8	0.0		3.1	29.6	0.0	29.6	
Backup beep	Lmax	Point	-731.1	501.2	103.0	0	276.3	-59.8	1.4	-16.1	-1.8	0.0		2.7	29.4	0.0	29.4	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice								5							-		
	0100		m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB			dB		
			m	m			m						uБ	dB(A)	dB(A)		dB(A)	
Backup beep	Lmax	Point	-730.8	524.9	103.0	0	286.1	-60.1	1.4	-16.0	-1.9	0.0		4.2	30.7	0.0	30.7	
Backup beep	Lmax	Point	-731.1	517.3	103.0	0	282.6	-60.0	1.4	-16.4	-1.8	0.0		4.1	30.3	0.0	30.3	
Backup beep	Lmax	Point	-731.3	513.4	103.0	0	280.8	-60.0	1.4	-16.5	-1.8	0.0		4.1	30.3	0.0	30.3	
Backup beep	Lmax	Point	-838.4	489.6	103.0	0	174.5	-55.8	1.2	-24.1	-2.6	0.0		0.0	21.7	0.0	21.7	
Backup beep	Lmax	Point	-842.3	489.1	103.0	0	170.8	-55.6	1.2	-24.2	-2.6	0.0		0.0	21.8	0.0	21.8	
Backup beep	Lmax	Point	-826.4	489.1	103.0	0	184.7	-56.3	1.2	-24.2	-2.7	0.0		0.0	21.0	0.0	21.0	
Backup beep	Lmax	Point	-851.8	489.1	103.0	0	162.8	-55.2	1.1	-24.1	-2.5	0.0		0.0	22.3	0.0	22.3	
Backup beep	Lmax	Point	-846.9	489.1	103.0	0	167.0	-55.4	1.2	-24.1	-2.6	0.0		0.0	22.0	0.0	22.0	
Backup beep	Lmax	Point	-834.7	489.4	103.0	0	177.5	-56.0	1.2	-24.1	-2.6	0.0		0.0	21.5	0.0	21.5	
Backup beep	Lmax	Point	-811.9	489.7	103.0	0	197.8	-56.9	1.3	-24.0	-2.7	0.0		0.0	20.6	0.0	20.6	
Backup beep	Lmax	Point	-808.2	489.4	103.0	0	200.9	-57.1	1.3	-24.1	-2.8	0.0		0.0	20.3	0.0	20.3	
Backup beep	Lmax	Point	-804.6	489.4	103.0	0	204.2	-57.2	1.3	-24.1	-2.8	0.0		1.0	21.2	0.0	21.2	
Backup beep	Lmax	Point	-822.4	489.4	103.0	0	188.3	-56.5	1.2	-24.1	-2.7	0.0		0.0	20.9	0.0	20.9	
Backup beep	Lmax	Point	-819.2	489.5	103.0	0	191.2	-56.6	1.2	-24.1	-2.7	0.0		0.0	20.9	0.0	20.9	
Backup beep	Lmax	Point	-815.2	489.4	103.0	0	194.6	-56.8	1.2	-24.1	-2.7	0.0		0.0	20.6	0.0	20.6	
Backup beep	Lmax	Point	-857.0	489.1	103.0	0	158.5	-55.0	1.1	-24.1	-2.5	0.0		0.0	22.5	0.0	22.5	
Backup beep	Lmax	Point	-894.8	489.4	103.0	0	129.1	-53.2	1.0	-23.9	-2.1	0.0		0.0	24.7	0.0	24.7	
Backup beep	Lmax	Point	-890.8	489.4	103.0	0	132.0	-53.4	1.0	-24.0	-2.1	0.0		0.0	24.5	0.0	24.5	
Backup beep	Lmax	Point	-885.7	489.4	103.0	0	135.8	-53.7	1.0	-24.0	-2.2	0.0		0.0	24.2	0.0	24.2	
Backup beep	Lmax	Point	-911.6	490.0	103.0	0	117.9	-52.4	0.9	-23.6	-1.9	0.0		0.0	26.0	0.0	26.0	
Backup beep	Lmax	Point	-907.8	490.0	103.0	0	120.4	-52.6	0.9	-23.7	-1.9	0.0		0.0	25.7	0.0	25.7	
Backup beep	Lmax	Point	-899.9	489.5	103.0	0	125.5	-53.0	1.0	-23.9	-2.0	0.0		0.0	25.1	0.0	25.1	
Backup beep	Lmax	Point	-876.2	489.4	103.0	0	143.1	-54.1	1.1	-24.0	-2.3	0.0		0.0	23.6	0.0	23.6	
Backup beep	Lmax	Point	-863.5	489.1	103.0	0	153.1	-54.7	1.1	-24.1	-2.4	0.0		0.0	22.9	0.0	22.9	
Backup beep	Lmax	Point	-860.9	489.1	103.0	0	155.3	-54.8	1.1	-24.1	-2.4	0.0		0.0	22.7	0.0	22.7	
Backup beep	Lmax	Point	-880.8	489.4	103.0	0	139.6	-53.9	1.0	-24.0	-2.2	0.0		0.0	23.9	0.0	23.9	
Backup beep	Lmax	Point	-868.6	489.7	103.0	0	149.3	-54.5	1.1	-24.0	-2.3	0.0		0.0	23.3	0.0	23.3	
Backup beep	Lmax	Point	-872.3	489.8	103.0	0	146.5		1.1	-24.0	-2.3	0.0		0.0	23.5	0.0	23.5	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	Í
	slice								Ŭ									
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-711.2	638.2	103.0	0	365.2	-62.2	1.5	-12.0	-2.5	0.0	uD	2.5	30.3	0.0	30.3	
		Point	-643.2	638.6	103.0		419.3	-63.4	1.5	-12.0	-2.5	0.0		0.0		0.0	23.2	
Backup beep	Lmax	Point	-643.2			0	419.3 368.2	-63.4 -62.3			-2.5				23.2			
Backup beep	Lmax	1 1	-	638.1	103.0	0			1.5	-12.0		0.0		2.5	30.2	0.0	30.2	
Backup beep	Lmax	Point	-646.9	638.4	103.0	0	416.2	-63.4	1.5	-15.5	-2.4	0.0		0.0	23.2	0.0	23.2	
Backup beep	Lmax	Point	-630.9	638.8	103.0	0	429.6	-63.7	1.5	-15.4	-2.5	0.0		0.0	22.9	0.0	22.9	
Backup beep	Lmax	Point	-635.1	638.8	103.0	0	426.1	-63.6	1.5	-15.4	-2.5	0.0		0.0	23.1	0.0	23.1	
Backup beep	Lmax	Point	-731.3	638.2	103.0	0	350.2	-61.9	1.5	-12.1	-2.4	0.0		2.6	30.6	0.0	30.6	
Backup beep	Lmax	Point	-639.3	638.7	103.0	0	422.6	-63.5	1.5	-15.4	-2.5	0.0		0.0	23.1	0.0	23.1	
Backup beep	Lmax	Point	-667.1	638.7	103.0	0	400.0	-63.0	1.5	-15.6	-2.4	0.0		0.0	23.6	0.0	23.6	
Backup beep	Lmax	Point	-695.2	638.1	103.0	0	377.4	-62.5	1.5	-12.0	-2.5	0.0		2.5	30.0	0.0	30.0	
Backup beep	Lmax	Point	-679.1	638.6	103.0	0	390.3	-62.8	1.5	-11.9	-2.6	0.0		0.0	27.2	0.0	27.2	
Backup beep	Lmax	Point	-682.9	638.6	103.0	0	387.3	-62.8	1.5	-11.9	-2.6	0.0		0.0	27.2	0.0	27.2	
Backup beep	Lmax	Point	-687.2	638.3	103.0	0	383.8	-62.7	1.5	-12.0	-2.6	0.0		0.0	27.3	0.0	27.3	
Backup beep	Lmax	Point	-703.3	638.2	103.0	0	371.2	-62.4	1.5	-12.0	-2.5	0.0		2.5	30.1	0.0	30.1	
Backup beep	Lmax	Point	-671.5	638.6	103.0	0	396.4	-63.0	1.5	-15.6	-2.4	0.0		0.0	23.6	0.0	23.6	
Backup beep	Lmax	Point	-698.9	638.2	103.0	0	374.6	-62.5	1.5	-12.0	-2.5	0.0		2.5	30.0	0.0	30.0	
Backup beep	Lmax	Point	-674.9	638.6	103.0	0	393.7	-62.9	1.5	-15.6	-2.3	0.0		0.0	23.7	0.0	23.7	
Backup beep	Lmax	Point	-735.1	638.1	103.0	0	347.2	-61.8	1.5	-15.2	-2.2	0.0		2.5	27.8	0.0	27.8	
Backup beep	Lmax	Point	-610.4	638.6	103.0	0	446.7	-64.0	1.5	-15.3	-2.6	0.0		0.0	22.7	0.0	22.7	
Backup beep	Lmax	Point	-739.4	638.1	103.0	0	344.2	-61.7	1.5	-15.4	-2.1	0.0		2.5	27.8	0.0	27.8	
Backup beep	Lmax	Point	-619.1	638.6	103.0	0	439.4	-63.8	1.5	-15.4	-2.5	0.0		0.0	22.8	0.0	22.8	
Backup beep	Lmax	Point	-614.9	638.6	103.0	0	443.0	-63.9	1.5	-15.4	-2.6	0.0		0.0	22.7	0.0	22.7	
Backup beep	Lmax	Point	-743.2	637.8	103.0	0	341.2	-61.7	1.5	-15.5	-2.1	0.0		2.5	27.7	0.0	27.7	
Backup beep	Lmax	Point	-623.1	638.5	103.0	0	436.0	-63.8	1.5	-15.4	-2.5	0.0		0.0	22.8	0.0	22.8	
Backup beep	Lmax	Point	-747.4	637.9	103.0	0	338.3	-61.6	1.5	-15.8	-2.1	0.0		2.5	27.5	0.0	27.5	
Idling Diesel	Lmax	Point	-811.8	491.6	91.5	0	198.8	-57.0	0.7	-21.4	-0.7	0.0		0.0	13.1	0.0	13.1	
Idling Diesel	Lmax	Point	-872.1	491.8	91.5	0	147.8	-54.4	0.5	-21.7	-0.6	0.0		0.0	15.3	0.0	15.3	
Idling Diesel	Lmax	Point	-804.4	491.3	91.5	0	205.1	-57.2	0.7	-21.5	-0.8	0.0		0.0	12.7	0.0	12.7	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice																	1
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	1
Idling Diesel	Lmax	Point	-894.7	491.3	91.5	0	130.5	-53.3	0.4	-21.9	-0.6	0.0		0.0	16.2	0.0	16.2	
Idling Diesel	Lmax	Point	-876.1	491.3	91.5	0	144.4	-54.2	0.5	-21.9	-0.6	0.0		0.0	15.3	0.0	15.3	1
Idling Diesel	Lmax	Point	-703.3	636.2	91.5	0	369.9	-62.4	0.9	-9.7	-1.4	0.0		2.5	21.4	0.0	21.4	1
Idling Diesel	Lmax	Point	-868.5	491.6	91.5	0	150.6	-54.5	0.5	-21.8	-0.6	0.0		0.0	15.1	0.0	15.1	1
Idling Diesel	Lmax	Point	-808.1	491.3	91.5	0	201.9	-57.1	0.7	-21.5	-0.8	0.0		0.0	12.8	0.0	12.8	1
Idling Diesel	Lmax	Point	-695.2	636.2	91.5	0	376.2	-62.5	0.9	-9.7	-1.4	0.0		2.5	21.3	0.0	21.3	1
Idling Diesel	Lmax	Point	-885.6	491.3	91.5	0	137.2	-53.7	0.5	-21.9	-0.6	0.0		0.0	15.7	0.0	15.7	1
Idling Diesel	Lmax	Point	-880.6	491.3	91.5	0	140.9	-54.0	0.5	-21.9	-0.6	0.0		0.0	15.5	0.0	15.5	1
Idling Diesel	Lmax	Point	-747.4	635.9	91.5	0	336.9	-61.5	0.8	-13.1	-1.1	0.0		2.5	19.1	0.0	19.1	1
Idling Diesel	Lmax	Point	-698.9	636.2	91.5	0	373.3	-62.4	0.9	-9.7	-1.4	0.0		2.5	21.3	0.0	21.3	1
Idling Diesel	Lmax	Point	-890.7	491.3	91.5	0	133.4	-53.5	0.5	-21.9	-0.6	0.0		0.0	16.0	0.0	16.0	1
Idling Diesel	Lmax	Point	-834.6	491.4	91.5	0	178.6	-56.0	0.6	-21.8	-0.7	0.0		0.0	13.6	0.0	13.6	1
Idling Diesel	Lmax	Point	-731.3	636.2	91.5	0	348.8	-61.8	0.8	-9.8	-1.3	0.0		2.5	21.9	0.0	21.9	1
Idling Diesel	Lmax	Point	-822.3	491.3	91.5	0	189.3	-56.5	0.6	-21.7	-0.7	0.0		0.0	13.2	0.0	13.2	1
Idling Diesel	Lmax	Point	-846.7	491.1	91.5	0	168.1	-55.5	0.6	-22.0	-0.7	0.0		0.0	13.9	0.0	13.9	1
Idling Diesel	Lmax	Point	-739.4	636.1	91.5	0	342.8	-61.7	0.8	-12.7	-1.1	0.0		2.5	19.3	0.0	19.3	1
Idling Diesel	Lmax	Point	-826.2	491.1	91.5	0	185.7	-56.4	0.6	-21.9	-0.7	0.0		0.0	13.1	0.0	13.1	1
Idling Diesel	Lmax	Point	-842.2	491.1	91.5	0	172.0	-55.7	0.6	-22.0	-0.7	0.0		0.0	13.7	0.0	13.7	1
Idling Diesel	Lmax	Point	-735.2	636.1	91.5	0	345.9	-61.8	0.8	-12.6	-1.2	0.0		2.5	19.3	0.0	19.3	1
Idling Diesel	Lmax	Point	-838.3	491.5	91.5	0	175.6	-55.9	0.6	-21.7	-0.7	0.0		0.0	13.8	0.0	13.8	1
Idling Diesel	Lmax	Point	-860.8	491.1	91.5	0	156.5	-54.9	0.6	-22.1	-0.7	0.0		0.0	14.5	0.0	14.5	1
Idling Diesel	Lmax	Point	-707.1	636.1	91.5	0	366.9	-62.3	0.9	-9.7	-1.3	0.0		2.5	21.5	0.0	21.5	1
Idling Diesel	Lmax	Point	-863.4	491.1	91.5	0	154.4	-54.8	0.5	-22.1	-0.6	0.0		0.0	14.5	0.0	14.5	1
Idling Diesel	Lmax	Point	-815.1	491.3	91.5	0	195.6	-56.8	0.7	-21.6	-0.7	0.0		0.0	13.0	0.0	13.0	1
Idling Diesel	Lmax	Point	-743.2	635.9	91.5	0	339.9	-61.6	0.8	-12.9	-1.1	0.0		2.5	19.2	0.0	19.2	1
Idling Diesel	Lmax	Point	-851.7	491.1	91.5	0	164.0	-55.3	0.6	-22.0	-0.7	0.0		0.0	14.1	0.0	14.1	1
Idling Diesel	Lmax	Point	-819.1	491.5	91.5	0	192.2	-56.7	0.7	-21.6	-0.7	0.0		0.0	13.2	0.0	13.2	1
Idling Diesel	Lmax	Point	-711.2	636.2	91.5	0	363.9	-62.2	0.9	-9.7	-1.3	0.0		2.5	21.6	0.0	21.6	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice								5							-		
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
					. ,								uВ	( )				
Idling Diesel	Lmax	Point	-856.8	491.1	91.5	0	159.7	-55.1	0.6	-22.1	-0.7	0.0		0.0	14.3	0.0	14.3	
Idling Diesel	Lmax	Point	-635.2	636.8	91.5	0	425.0	-63.6	0.9	-12.9	-1.4	0.0		0.0	14.6	0.0	14.6	
Idling Diesel	Lmax	Point	-733.0	509.3	91.5	0	277.6	-59.9	0.8	-13.7	-0.9	0.0		3.7	21.5	0.0	21.5	
Idling Diesel	Lmax	Point	-733.2	513.3	91.5	0	279.0	-59.9	0.8	-13.8	-0.9	0.0		3.7	21.4	0.0	21.4	
Idling Diesel	Lmax	Point	-631.0	636.8	91.5	0	428.5	-63.6	0.9	-12.9	-1.4	0.0		0.0	14.5	0.0	14.5	
Idling Diesel	Lmax	Point	-733.0	517.3	91.5	0	280.8	-60.0	0.8	-13.7	-0.9	0.0		3.7	21.4	0.0	21.4	
Idling Diesel	Lmax	Point	-733.0	493.4	91.5	0	271.7	-59.7	0.8	-13.3	-0.9	0.0		2.7	21.1	0.0	21.1	
Idling Diesel	Lmax	Point	-733.0	497.2	91.5	0	273.0	-59.7	0.8	-13.4	-0.9	0.0		2.7	21.0	0.0	21.0	
Idling Diesel	Lmax	Point	-639.3	636.7	91.5	0	421.5	-63.5	0.9	-12.9	-1.4	0.0		0.0	14.7	0.0	14.7	
Idling Diesel	Lmax	Point	-733.0	501.1	91.5	0	274.5	-59.8	0.8	-13.5	-0.9	0.0		2.7	20.8	0.0	20.8	
Idling Diesel	Lmax	Point	-732.9	505.1	91.5	0	276.0	-59.8	0.8	-13.6	-0.9	0.0		3.3	21.3	0.0	21.3	
Idling Diesel	Lmax	Point	-732.7	524.8	91.5	0	284.3	-60.1	0.8	-13.3	-0.9	0.0		3.1	21.1	0.0	21.1	
Idling Diesel	Lmax	Point	-732.9	541.0	91.5	0	291.5	-60.3	0.8	-12.9	-1.0	0.0		2.5	20.7	0.0	20.7	
Idling Diesel	Lmax	Point	-614.9	636.7	91.5	0	441.9	-63.9	0.9	-12.8	-1.4	0.0		0.0	14.3	0.0	14.3	
Idling Diesel	Lmax	Point	-733.1	544.8	91.5	0	293.2	-60.3	0.8	-12.8	-1.0	0.0		2.5	20.7	0.0	20.7	
Idling Diesel	Lmax	Point	-733.1	548.6	91.5	0	295.1	-60.4	0.8	-12.8	-1.0	0.0		3.5	21.7	0.0	21.7	
Idling Diesel	Lmax	Point	-610.5	636.7	91.5	0	445.6	-64.0	0.9	-12.8	-1.4	0.0		0.0	14.2	0.0	14.2	
Idling Diesel	Lmax	Point	-623.2	636.6	91.5	0	434.9	-63.8	0.9	-12.8	-1.4	0.0		0.0	14.4	0.0	14.4	
Idling Diesel	Lmax	Point	-732.7	529.0	91.5	0	286.1	-60.1	0.8	-13.1	-0.9	0.0		2.5	20.6	0.0	20.6	
Idling Diesel	Lmax	Point	-732.8	532.9	91.5	0	287.8	-60.2	0.8	-13.0	-1.0	0.0		2.5	20.6	0.0	20.6	
Idling Diesel	Lmax	Point	-619.1	636.6	91.5	0	438.3	-63.8	0.9	-12.8	-1.4	0.0		0.0	14.3	0.0	14.3	
Idling Diesel	Lmax	Point	-732.8	537.2	91.5	0	289.8	-60.2	0.8	-12.9	-1.0	0.0		2.5	20.6	0.0	20.6	
Idling Diesel	Lmax	Point	-643.3	636.6	91.5	0	418.2	-63.4	0.9	-12.9	-1.3	0.0		0.0	14.7	0.0	14.7	
Idling Diesel	Lmax	Point	-915.7	491.9	91.5	0	116.8	-52.3	0.4	-21.2	-0.5	0.0		0.0	17.9	0.0	17.9	
Idling Diesel	Lmax	Point	-679.1	636.6	91.5	0	389.1	-62.8	0.9	-9.7	-1.4	0.0		0.0	18.5	0.0	18.5	
Idling Diesel	Lmax	Point	-918.8	491.8	91.5	0	114.8	-52.2	0.4	-21.1	-0.5	0.0		0.0	18.1	0.0	18.1	
Idling Diesel	Lmax	Point	-922.5	491.9	91.5	0	112.7	-52.0	0.3	-20.8	-0.4	0.0		0.0	18.5	0.0	18.5	
Idling Diesel	Lmax	Point	-674.9	636.7	91.5	0	392.5	-62.9	0.9	-13.0	-1.3	0.0		0.0	15.2	0.0	15.2	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-687.2	636.4	91.5	0	382.5	-62.6	0.9	-9.7	-1.4	0.0		0.0	18.6	0.0	18.6	
Idling Diesel	Lmax	Point	-899.8	491.5	91.5	0	127.0	-53.1	0.4	-21.7	-0.5	0.0		0.0	16.6	0.0	16.6	
Idling Diesel	Lmax	Point	-907.7	491.9	91.5	0	122.0	-52.7	0.4	-21.4	-0.5	0.0		0.0	17.3	0.0	17.3	
Idling Diesel	Lmax	Point	-683.0	636.6	91.5	0	386.0	-62.7	0.9	-9.7	-1.4	0.0		0.0	18.6	0.0	18.6	
Idling Diesel	Lmax	Point	-911.5	491.9	91.5	0	119.5	-52.5	0.4	-21.3	-0.5	0.0		0.0	17.5	0.0	17.5	
Idling Diesel	Lmax	Point	-733.6	456.8	91.5	0	261.0	-59.3	0.8	-11.7	-0.9	0.0		2.5	22.9	0.0	22.9	
Idling Diesel	Lmax	Point	-733.5	472.8	91.5	0	265.0	-59.5	0.8	-12.6	-0.9	0.0		2.6	21.9	0.0	21.9	
Idling Diesel	Lmax	Point	-733.3	476.5	91.5	0	266.1	-59.5	0.8	-12.8	-0.9	0.0		2.6	21.7	0.0	21.7	
Idling Diesel	Lmax	Point	-647.0	636.5	91.5	0	415.1	-63.4	0.9	-12.9	-1.3	0.0		0.0	14.8	0.0	14.8	
Idling Diesel	Lmax	Point	-733.0	480.7	91.5	0	267.6	-59.5	0.8	-12.9	-0.9	0.0		2.6	21.6	0.0	21.6	
Idling Diesel	Lmax	Point	-733.0	489.1	91.5	0	270.3	-59.6	0.8	-13.2	-0.9	0.0		2.7	21.2	0.0	21.2	
Idling Diesel	Lmax	Point	-733.5	460.8	91.5	0	262.0	-59.4	0.8	-12.0	-0.9	0.0		2.6	22.6	0.0	22.6	
Idling Diesel	Lmax	Point	-671.5	636.7	91.5	0	395.2	-62.9	0.9	-13.0	-1.3	0.0		0.0	15.2	0.0	15.2	
Idling Diesel	Lmax	Point	-733.3	465.0	91.5	0	263.1	-59.4	0.8	-12.2	-0.9	0.0		2.6	22.3	0.0	22.3	
Idling Diesel	Lmax	Point	-733.1	469.1	91.5	0	264.3	-59.4	0.8	-12.4	-0.9	0.0		2.6	22.1	0.0	22.1	
Idling Diesel	Lmax	Point	-667.1	636.7	91.5	0	398.8	-63.0	0.9	-13.0	-1.3	0.0		0.0	15.1	0.0	15.1	
169	Lmax	PLot	-631.5	706.5	87.0	0	470.1	-64.4	0.0	-12.6	-0.5	0.0		0.5	9.9	0.0	9.9	
170	Lmax	PLot	-655.9	687.3	82.0	0	439.0	-63.8	0.0	-16.7	-0.5	0.0		0.0	1.0	0.0	1.0	
171	Lmax	PLot	-747.5	686.1	80.0	0	373.6	-62.4	0.1	-10.0	-0.5	0.0		0.0	7.2	0.0	7.2	
168	Lmax	PLot	-648.0	722.9	83.0	0	468.9	-64.4	0.0	-11.1	-0.5	0.0		0.7	7.6	0.0	7.6	
165	Lmax	PLot	-653.8	757.9	81.6	0	489.6	-64.8	-0.1	-8.8	-0.7	0.0		0.0	7.2	0.0	7.2	
166	Lmax	PLot	-742.2	716.5	84.0	0	400.6	-63.0	0.1	-9.0	-0.6	0.0		0.7	12.2	0.0	12.2	
167	Lmax	PLot	-750.9	694.9	84.0	0	378.2	-62.5	0.1	-9.7	-0.5	0.0		0.0	11.4	0.0	11.4	
176	Lmax	PLot	-862.0	417.6	82.0	0	127.6	-53.1	0.3	0.0	-1.0	0.0		1.3	29.5	0.0	29.5	
177	Lmax	PLot	-934.8	422.4	82.0	0	57.9	-46.2	0.0	0.0	-0.5	0.0		1.9	37.1	0.0	37.1	
178	Lmax	PLot	-947.7	427.3	82.6	0	48.7	-44.7	0.1	0.0	-0.4	0.0		2.1	39.6	0.0	39.6	
175	Lmax	PLot	-784.6	433.8	83.5	0	206.5	-57.3	0.4	-15.6	-0.3	0.0		9.1	19.8	0.0	19.8	
172	Lmax	PLot	-678.5	681.8	71.8	0	418.5	-63.4	0.0	-17.1	-0.5	0.0		0.0	-9.2	0.0	-9.2	

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SoundPLAN 8.2

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice								, .g.	7 10 01		1.21	,	42.01		0		
	Silce																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
173	Lmax	PLot	-584.2	722.9	81.0	0	517.0	-65.3	-0.1	-10.0	-0.6	0.0		0.0	5.0	0.0	5.0	
174	Lmax	PLot	-584.9	613.4	83.0	0	456.2	-64.2	0.0	-9.7	-0.6	0.0		0.5	8.9	0.0	8.9	
155	Lmax	PLot	-620.7	560.9	73.0	0	401.2	-63.1	0.1	-11.0	-0.5	0.0		0.2	-1.3	0.0	-1.3	
156	Lmax	PLot	-609.5	569.9	77.0	0	415.0	-63.4	0.0	-9.7	-0.6	0.0		0.3	3.7	0.0	3.7	
157	Lmax	PLot	-639.6	518.1	77.0	0	368.1	-62.3	0.1	-12.3	-0.4	0.0		0.0	2.2	0.0	2.2	
154	Lmax	PLot	-584.4	575.6	73.0	0	440.3	-63.9	0.0	-9.3	-0.6	0.0		0.7	-0.1	0.0	-0.1	
151	Lmax	PLot	-670.5	535.5	82.0	0	345.4	-61.8	0.2	-18.0	-0.5	0.0		0.1	2.1	0.0	2.1	
152	Lmax	PLot	-655.5	544.5	86.5	0	362.7	-62.2	0.1	-14.0	-0.4	0.0		0.1	10.2	0.0	10.2	
153	Lmax	PLot	-632.9	563.9	81.0	0	391.2	-62.8	0.1	-12.1	-0.4	0.0		0.0	5.7	0.0	5.7	
162	Lmax	PLot	-744.8	771.7	82.3	0	444.0	-63.9	0.0	-8.4	-0.7	0.0		0.0	9.2	0.0	9.2	
163	Lmax	PLot	-748.2	758.3	82.6	0	430.9	-63.7	0.0	-8.9	-0.6	0.0		0.0	9.4	0.0	9.4	
164	Lmax	PLot	-643.1	771.6	82.2	0	506.9	-65.1	-0.1	-8.3	-0.8	0.0		0.0	7.9	0.0	7.9	
161	Lmax	PLot	-758.0	417.6	84.0	0	231.0	-58.3	0.3	0.0	-1.5	0.0		1.2	25.7	0.0	25.7	
158	Lmax	PLot	-649.1	509.7	77.0	0	356.5	-62.0	0.1	-13.0	-0.4	0.0		0.0	1.7	0.0	1.7	
159	Lmax	PLot	-652.8	495.1	75.0	0	348.7	-61.8	0.2	-14.4	-0.4	0.0		0.0	-1.5	0.0	-1.5	
160	Lmax	PLot	-667.5	433.5	83.0	0	322.6	-61.2	0.2	-13.0	-0.3	0.0		0.0	8.7	0.0	8.7	
Receiver R5 FI G Lmax, lin	m dB(A) l	_max 43.7 dB(A	<b>\</b> )															
Backup beep	Lmax	Point	-731.4	476.6	103.0	0	226.8	-58.1	1.3	-7.3	-2.5	0.0		2.5	38.9	0.0	38.9	
Backup beep	Lmax	Point	-731.5	472.8	103.0	0	228.8	-58.2	1.3	-7.4	-2.5	0.0		2.5	38.8	0.0	38.8	
Backup beep	Lmax	Point	-731.2	469.2	103.0	0	231.2	-58.3	1.3	-7.4	-2.5	0.0		2.5	38.7	0.0	38.7	
Backup beep	Lmax	Point	-731.1	493.4	103.0	0	217.9	-57.8	1.3	-7.1	-2.5	0.0		2.5	39.5	0.0	39.5	
Backup beep	Lmax	Point	-731.1	489.2	103.0	0	220.1	-57.8	1.3	-7.2	-2.5	0.0		2.5	39.3	0.0	39.3	
Backup beep	Lmax	Point	-731.1	480.8	103.0	0	224.6	-58.0	1.3	-7.3	-2.5	0.0		2.5	39.1	0.0	39.1	
Backup beep	Lmax	Point	-922.6	490.0	103.0	0	114.7	-52.2	0.9	-10.1	-1.2	0.0		2.5	43.0	0.0	43.0	
Backup beep	Lmax	Point	-918.9	489.8	103.0	0	114.8	-52.2	0.9	-10.1	-1.2	0.0		2.6	43.0	0.0	43.0	
Backup beep	Lmax	Point	-915.9	490.0	103.0	0	114.7	-52.2	0.9	-10.1	-1.2	0.0		2.6	43.0	0.0	43.0	
Backup beep	Lmax	Point	-731.4	465.1	103.0	0	233.4	-58.4	1.3	-7.5	-2.5	0.0		2.5	38.5	0.0	38.5	
Backup beep	Lmax	Point	-731.5	460.9	103.0	0	235.9	-58.4	1.3	-7.5	-2.5	0.0		3.5	39.4	0.0	39.4	

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SoundPLAN 8.2

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice								5							-		
	01100		-	-	dB(A)	dB	-	dB	dB	dB	dB	dB	dB			dB		
			m	m	( )		m						uБ	dB(A)	dB(A)		dB(A)	
Backup beep	Lmax	Point	-731.6	456.9	103.0	0	238.3	-58.5	1.3	-7.6	-2.5	0.0		4.7	40.4	0.0	40.4	
Backup beep	Lmax	Point	-731.1	497.3	103.0	0	216.0	-57.7	1.3	-7.0	-2.5	0.0		2.5	39.6	0.0	39.6	
Backup beep	Lmax	Point	-730.9	537.2	103.0	0	199.4	-57.0	1.3	-6.1	-2.6	0.0		2.5	41.1	0.0	41.1	
Backup beep	Lmax	Point	-730.9	533.0	103.0	0	200.8	-57.0	1.3	-6.2	-2.6	0.0		2.5	40.9	0.0	40.9	
Backup beep	Lmax	Point	-730.8	529.0	103.0	0	202.4	-57.1	1.3	-6.3	-2.6	0.0		2.5	40.8	0.0	40.8	
Backup beep	Lmax	Point	-731.2	548.7	103.0	0	195.5	-56.8	1.2	-5.7	-2.7	0.0		3.0	42.1	0.0	42.1	
Backup beep	Lmax	Point	-731.2	544.9	103.0	0	196.6	-56.9	1.3	-5.8	-2.6	0.0		2.8	41.7	0.0	41.7	
Backup beep	Lmax	Point	-731.0	541.1	103.0	0	198.0	-56.9	1.3	-5.9	-2.6	0.0		2.6	41.4	0.0	41.4	
Backup beep	Lmax	Point	-731.1	509.4	103.0	0	210.2	-57.4	1.3	-6.8	-2.5	0.0		2.5	40.1	0.0	40.1	
Backup beep	Lmax	Point	-731.0	505.1	103.0	0	212.3	-57.5	1.3	-6.9	-2.5	0.0		2.5	39.9	0.0	39.9	
Backup beep	Lmax	Point	-731.1	501.2	103.0	0	214.1	-57.6	1.3	-6.9	-2.5	0.0		2.5	39.8	0.0	39.8	
Backup beep	Lmax	Point	-730.8	524.9	103.0	0	204.0	-57.2	1.3	-6.4	-2.5	0.0		2.5	40.6	0.0	40.6	
Backup beep	Lmax	Point	-731.1	517.3	103.0	0	206.8	-57.3	1.3	-6.6	-2.5	0.0		2.5	40.4	0.0	40.4	
Backup beep	Lmax	Point	-731.3	513.4	103.0	0	208.3	-57.4	1.3	-6.7	-2.5	0.0		2.5	40.2	0.0	40.2	
Backup beep	Lmax	Point	-838.4	489.6	103.0	0	140.2	-53.9	1.0	-9.3	-1.5	0.0		2.9	42.2	0.0	42.2	
Backup beep	Lmax	Point	-842.3	489.1	103.0	0	138.4	-53.8	1.0	-9.4	-1.4	0.0		2.9	42.3	0.0	42.3	
Backup beep	Lmax	Point	-826.4	489.1	103.0	0	147.8	-54.4	1.1	-9.1	-1.6	0.0		3.0	42.0	0.0	42.0	
Backup beep	Lmax	Point	-851.8	489.1	103.0	0	133.4	-53.5	1.0	-9.5	-1.4	0.0		2.7	42.3	0.0	42.3	
Backup beep	Lmax	Point	-846.9	489.1	103.0	0	135.9	-53.7	1.0	-9.4	-1.4	0.0		2.7	42.2	0.0	42.2	
Backup beep	Lmax	Point	-834.7	489.4	103.0	0	142.5	-54.1	1.1	-9.2	-1.5	0.0		2.9	42.2	0.0	42.2	
Backup beep	Lmax	Point	-811.9	489.7	103.0	0	156.8	-54.9	1.1	-8.8	-1.7	0.0		3.0	41.8	0.0	41.8	
Backup beep	Lmax	Point	-808.2	489.4	103.0	0	159.5	-55.0	1.1	-8.7	-1.7	0.0		3.0	41.7	0.0	41.7	
Backup beep	Lmax	Point	-804.6	489.4	103.0	0	162.1	-55.2	1.1	-8.6	-1.7	0.0		3.1	41.7	0.0	41.7	
Backup beep	Lmax	Point	-822.4	489.4	103.0	0	150.1	-54.5	1.1	-9.0	-1.6	0.0		3.0	42.0	0.0	42.0	
Backup beep	Lmax	Point	-819.2	489.5	103.0	0	152.0	-54.6	1.1	-8.9	-1.6	0.0		3.0	41.9	0.0	41.9	
Backup beep	Lmax	Point	-815.2	489.4	103.0	0	154.7	-54.8	1.1	-8.9	-1.6	0.0		3.0	41.8	0.0	41.8	
Backup beep	Lmax	Point	-857.0	489.1	103.0	0	130.9	-53.3	1.0	-9.6	-1.4	0.0		2.7	42.4	0.0	42.4	
Backup beep	Lmax	Point	-894.8	489.4	103.0	0	117.7	-52.4	0.9	-10.0	-1.2	0.0		2.6	42.9	0.0	42.9	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice								Ū									
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
					( )								чD	( )				
Backup beep	Lmax	Point	-890.8	489.4	103.0	0	118.5	-52.5	0.9	-10.0	-1.2	0.0		2.6	42.9	0.0	42.9	
Backup beep	Lmax	Point	-885.7	489.4	103.0	0	119.8	-52.6	0.9	-9.9	-1.2	0.0		2.6	42.8	0.0	42.8	
Backup beep	Lmax	Point	-911.6	490.0	103.0	0	114.9	-52.2	0.9	-10.1	-1.2	0.0		2.6	43.0	0.0	43.0	
Backup beep	Lmax	Point	-907.8	490.0	103.0	0	115.2	-52.2	0.9	-10.1	-1.2	0.0		2.6	43.0	0.0	43.0	
Backup beep	Lmax	Point	-899.9	489.5	103.0	0	116.6	-52.3	0.9	-10.0	-1.2	0.0		2.6	42.9	0.0	42.9	
Backup beep	Lmax	Point	-876.2	489.4	103.0	0	122.8	-52.8	0.9	-9.8	-1.3	0.0		2.6	42.7	0.0	42.7	
Backup beep	Lmax	Point	-863.5	489.1	103.0	0	128.0	-53.1	1.0	-9.7	-1.3	0.0		2.7	42.5	0.0	42.5	
Backup beep	Lmax	Point	-860.9	489.1	103.0	0	129.1	-53.2	1.0	-9.6	-1.3	0.0		2.7	42.5	0.0	42.5	
Backup beep	Lmax	Point	-880.8	489.4	103.0	0	121.3	-52.7	0.9	-9.9	-1.3	0.0		2.6	42.8	0.0	42.8	
Backup beep	Lmax	Point	-868.6	489.7	103.0	0	125.3	-53.0	1.0	-9.8	-1.3	0.0		2.6	42.6	0.0	42.6	
Backup beep	Lmax	Point	-872.3	489.8	103.0	0	123.8	-52.8	0.9	-9.8	-1.3	0.0		2.6	42.6	0.0	42.6	
Backup beep	Lmax	Point	-711.2	638.2	103.0	0	210.0	-57.4	1.3	-4.6	-3.3	0.0		3.1	42.1	0.0	42.1	
Backup beep	Lmax	Point	-643.2	638.6	103.0	0	277.4	-59.9	1.4	-4.6	-3.9	0.0		2.8	38.9	0.0	38.9	
Backup beep	Lmax	Point	-707.1	638.1	103.0	0	214.0	-57.6	1.3	-4.6	-3.3	0.0		3.1	41.9	0.0	41.9	
Backup beep	Lmax	Point	-646.9	638.4	103.0	0	273.7	-59.7	1.4	-4.6	-3.9	0.0		2.8	39.0	0.0	39.0	
Backup beep	Lmax	Point	-630.9	638.8	103.0	0	289.6	-60.2	1.4	-4.6	-4.0	0.0		2.8	38.4	0.0	38.4	
Backup beep	Lmax	Point	-635.1	638.8	103.0	0	285.4	-60.1	1.4	-4.6	-4.0	0.0		2.8	38.6	0.0	38.6	
Backup beep	Lmax	Point	-731.3	638.2	103.0	0	190.2	-56.6	1.2	-4.7	-3.0	0.0		3.1	43.0	0.0	43.0	
Backup beep	Lmax	Point	-639.3	638.7	103.0	0	281.3	-60.0	1.4	-4.6	-3.9	0.0		2.8	38.7	0.0	38.7	
Backup beep	Lmax	Point	-667.1	638.7	103.0	0	253.7	-59.1	1.4	-4.6	-3.7	0.0		2.8	39.9	0.0	39.9	
Backup beep	Lmax	Point	-695.2	638.1	103.0	0	225.8	-58.1	1.3	-4.6	-3.5	0.0		2.9	41.1	0.0	41.1	
Backup beep	Lmax	Point	-679.1	638.6	103.0	0	241.8	-58.7	1.3	-4.6	-3.6	0.0		2.9	40.4	0.0	40.4	
Backup beep	Lmax	Point	-682.9	638.6	103.0	0	238.0	-58.5	1.3	-4.6	-3.6	0.0		2.9	40.6	0.0	40.6	
Backup beep	Lmax	Point	-687.2	638.3	103.0	0	233.8	-58.4	1.3	-4.6	-3.5	0.0		2.9	40.8	0.0	40.8	
Backup beep	Lmax	Point	-703.3	638.2	103.0	0	217.8	-57.8	1.3	-4.6	-3.4	0.0		3.1	41.7	0.0	41.7	
Backup beep	Lmax	Point	-671.5	638.6	103.0	0	249.4	-58.9	1.4	-4.6	-3.7	0.0		2.8	40.1	0.0	40.1	
Backup beep	Lmax	Point	-698.9	638.2	103.0	0	222.2	-57.9	1.3	-4.6	-3.4	0.0		2.9	41.3	0.0	41.3	
Backup beep	Lmax	Point	-674.9	638.6	103.0	0	246.0	-58.8	1.4	-4.6	-3.6	0.0		2.9	40.2	0.0	40.2	
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MD Acoustics 1197 E Los Angeles Ave, Unit C 256 Simi Valley, CA 93065 USA

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice						-											
	31100					dD		dD	٩D	dD	aD	ЧD	dB			dB		
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	uБ	dB(A)	dB(A)		dB(A)	
Backup beep	Lmax	Point	-735.1	638.1	103.0	0	186.4	-56.4	1.2	-4.8	-2.9	0.0		3.5	43.6	0.0	43.6	
Backup beep	Lmax	Point	-610.4	638.6	103.0	0	309.9	-60.8	1.4	-4.6	-4.2	0.0		2.7	37.6	0.0	37.6	
Backup beep	Lmax	Point	-739.4	638.1	103.0	0	182.2	-56.2	1.2	-5.0	-2.8	0.0		3.5	43.7	0.0	43.7	
Backup beep	Lmax	Point	-619.1	638.6	103.0	0	301.4	-60.6	1.4	-4.6	-4.1	0.0		2.7	37.9	0.0	37.9	
Backup beep	Lmax	Point	-614.9	638.6	103.0	0	305.5	-60.7	1.4	-4.6	-4.1	0.0		2.7	37.8	0.0	37.8	
Backup beep	Lmax	Point	-743.2	637.8	103.0	0	178.4	-56.0	1.2	-5.2	-2.7	0.0		1.5	41.8	0.0	41.8	
Backup beep	Lmax	Point	-623.1	638.5	103.0	0	297.3	-60.5	1.4	-4.6	-4.1	0.0		2.7	38.1	0.0	38.1	
Backup beep	Lmax	Point	-747.4	637.9	103.0	0	174.3	-55.8	1.2	-5.6	-2.5	0.0		0.5	40.7	0.0	40.7	
Idling Diesel	Lmax	Point	-811.8	491.6	91.5	0	155.5	-54.8	0.5	-7.0	-0.7	0.0		2.8	32.3	0.0	32.3	
Idling Diesel	Lmax	Point	-872.1	491.8	91.5	0	122.0	-52.7	0.4	-7.8	-0.5	0.0		2.4	33.2	0.0	33.2	
Idling Diesel	Lmax	Point	-804.4	491.3	91.5	0	160.8	-55.1	0.6	-6.9	-0.8	0.0		2.8	32.1	0.0	32.1	
Idling Diesel	Lmax	Point	-894.7	491.3	91.5	0	115.8	-52.3	0.4	-8.0	-0.5	0.0		2.4	33.5	0.0	33.5	
Idling Diesel	Lmax	Point	-876.1	491.3	91.5	0	121.0	-52.6	0.4	-7.8	-0.5	0.0		2.4	33.3	0.0	33.3	
Idling Diesel	Lmax	Point	-703.3	636.2	91.5	0	217.5	-57.7	0.7	-4.4	-1.3	0.0		2.5	31.3	0.0	31.3	
Idling Diesel	Lmax	Point	-868.5	491.6	91.5	0	123.6	-52.8	0.4	-7.8	-0.5	0.0		2.4	33.2	0.0	33.2	
Idling Diesel	Lmax	Point	-808.1	491.3	91.5	0	158.2	-55.0	0.6	-7.0	-0.7	0.0		2.8	32.2	0.0	32.2	
Idling Diesel	Lmax	Point	-695.2	636.2	91.5	0	225.5	-58.1	0.7	-4.4	-1.4	0.0		2.4	30.8	0.0	30.8	
Idling Diesel	Lmax	Point	-885.6	491.3	91.5	0	118.0	-52.4	0.4	-7.9	-0.5	0.0		2.4	33.4	0.0	33.4	
Idling Diesel	Lmax	Point	-880.6	491.3	91.5	0	119.5	-52.5	0.4	-7.9	-0.5	0.0		2.4	33.4	0.0	33.4	
Idling Diesel	Lmax	Point	-747.4	635.9	91.5	0	173.9	-55.8	0.6	-4.9	-1.0	0.0		0.3	30.7	0.0	30.7	
Idling Diesel	Lmax	Point	-698.9	636.2	91.5	0	221.9	-57.9	0.7	-4.4	-1.3	0.0		2.5	31.1	0.0	31.1	
Idling Diesel	Lmax	Point	-890.7	491.3	91.5	0	116.7	-52.3	0.4	-8.0	-0.5	0.0		2.4	33.5	0.0	33.5	
Idling Diesel	Lmax	Point	-834.6	491.4	91.5	0	141.0	-54.0	0.5	-7.3	-0.6	0.0		2.6	32.6	0.0	32.6	
Idling Diesel	Lmax	Point	-731.3	636.2	91.5	0	189.9	-56.6	0.6	-4.4	-1.2	0.0		2.8	32.8	0.0	32.8	
Idling Diesel	Lmax	Point	-822.3	491.3	91.5	0	148.7	-54.4	0.5	-7.2	-0.7	0.0		2.7	32.5	0.0	32.5	
Idling Diesel	Lmax	Point	-846.7	491.1	91.5	0	134.3	-53.6	0.5	-7.5	-0.6	0.0		2.5	32.8	0.0	32.8	
Idling Diesel	Lmax	Point	-739.4	636.1	91.5	0	181.8	-56.2	0.6	-4.6	-1.1	0.0		0.4	30.6	0.0	30.6	
Idling Diesel	Lmax	Point	-826.2	491.1	91.5	0	146.4	-54.3	0.5	-7.2	-0.7	0.0		2.7	32.5	0.0	32.5	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice								Ŭ									
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
		-			( )								uв	( )	( )		, ,	
Idling Diesel	Lmax	Point	-842.2	491.1	91.5	0	136.8	-53.7	0.5	-7.4	-0.6	0.0		2.6	32.8	0.0	32.8	
Idling Diesel	Lmax	Point	-735.2	636.1	91.5	0	186.0	-56.4	0.6	-4.5	-1.1	0.0		0.8	30.9	0.0	30.9	
Idling Diesel	Lmax	Point	-838.3	491.5	91.5	0	138.7	-53.8	0.5	-7.4	-0.6	0.0		2.6	32.7	0.0	32.7	
Idling Diesel	Lmax	Point	-860.8	491.1	91.5	0	127.4	-53.1	0.4	-7.7	-0.6	0.0		2.5	33.1	0.0	33.1	
Idling Diesel	Lmax	Point	-707.1	636.1	91.5	0	213.7	-57.6	0.7	-4.4	-1.3	0.0		2.6	31.6	0.0	31.6	
Idling Diesel	Lmax	Point	-863.4	491.1	91.5	0	126.3	-53.0	0.4	-7.7	-0.6	0.0		2.5	33.1	0.0	33.1	
Idling Diesel	Lmax	Point	-815.1	491.3	91.5	0	153.4	-54.7	0.5	-7.1	-0.7	0.0		2.8	32.4	0.0	32.4	
Idling Diesel	Lmax	Point	-743.2	635.9	91.5	0	178.0	-56.0	0.6	-4.7	-1.1	0.0		0.3	30.7	0.0	30.7	
Idling Diesel	Lmax	Point	-851.7	491.1	91.5	0	131.7	-53.4	0.4	-7.6	-0.6	0.0		2.5	32.9	0.0	32.9	
Idling Diesel	Lmax	Point	-819.1	491.5	91.5	0	150.6	-54.6	0.5	-7.1	-0.7	0.0		2.8	32.4	0.0	32.4	
Idling Diesel	Lmax	Point	-711.2	636.2	91.5	0	209.7	-57.4	0.7	-4.4	-1.3	0.0		2.6	31.7	0.0	31.7	
Idling Diesel	Lmax	Point	-856.8	491.1	91.5	0	129.2	-53.2	0.4	-7.6	-0.6	0.0		2.5	33.0	0.0	33.0	
Idling Diesel	Lmax	Point	-635.2	636.8	91.5	0	285.2	-60.1	0.8	-4.4	-1.7	0.0		2.3	28.5	0.0	28.5	
Idling Diesel	Lmax	Point	-733.0	509.3	91.5	0	208.5	-57.4	0.7	-5.6	-1.1	0.0		2.4	30.6	0.0	30.6	
Idling Diesel	Lmax	Point	-733.2	513.3	91.5	0	206.5	-57.3	0.7	-5.6	-1.1	0.0		2.4	30.7	0.0	30.7	
Idling Diesel	Lmax	Point	-631.0	636.8	91.5	0	289.3	-60.2	0.8	-4.4	-1.7	0.0		2.3	28.3	0.0	28.3	
Idling Diesel	Lmax	Point	-733.0	517.3	91.5	0	205.0	-57.2	0.7	-5.5	-1.1	0.0		2.4	30.8	0.0	30.8	
Idling Diesel	Lmax	Point	-733.0	493.4	91.5	0	216.3	-57.7	0.7	-5.8	-1.1	0.0		2.5	30.0	0.0	30.0	
Idling Diesel	Lmax	Point	-733.0	497.2	91.5	0	214.4	-57.6	0.7	-5.8	-1.1	0.0		2.5	30.2	0.0	30.2	
Idling Diesel	Lmax	Point	-639.3	636.7	91.5	0	281.0	-60.0	0.8	-4.4	-1.6	0.0		2.3	28.6	0.0	28.6	
Idling Diesel	Lmax	Point	-733.0	501.1	91.5	0	212.4	-57.5	0.7	-5.7	-1.1	0.0		2.4	30.3	0.0	30.3	
Idling Diesel	Lmax	Point	-732.9	505.1	91.5	0	210.6	-57.5	0.7	-5.7	-1.1	0.0		2.4	30.4	0.0	30.4	
Idling Diesel	Lmax	Point	-732.7	524.8	91.5	0	202.2	-57.1	0.7	-5.4	-1.1	0.0		2.4	31.1	0.0	31.1	
Idling Diesel	Lmax	Point	-732.9	541.0	91.5	0	196.2	-56.8	0.7	-5.1	-1.1	0.0		2.5	31.6	0.0	31.6	
Idling Diesel	Lmax	Point	-614.9	636.7	91.5	0	305.3	-60.7	0.8	-4.4	-1.8	0.0		2.3	27.8	0.0	27.8	
Idling Diesel	Lmax	Point	-733.1	544.8	91.5	0	194.8	-56.8	0.7	-5.0	-1.1	0.0		2.7	32.0	0.0	32.0	
Idling Diesel	Lmax	Point	-733.1	548.6	91.5	0	193.6	-56.7	0.7	-5.0	-1.1	0.0		2.9	32.2	0.0	32.2	
Idling Diesel	Lmax	Point	-610.5	636.7	91.5	0	309.7	-60.8	0.8	-4.4	-1.8	0.0		2.3	27.6	0.0	27.6	

MD Acoustics 1197 E Los Angeles Ave, Unit C 256 Simi Valley, CA 93065 USA

SoundPLAN 8.2

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice		Amax	THIGK		110	Ū	71011	, igi	7 10 01	/ tatin	1.01	/	GEIGH	20	omot	-	
	SILCE																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-623.2	636.6	91.5	0	297.1	-60.4	0.8	-4.4	-1.7	0.0		2.3	28.1	0.0	28.1	
Idling Diesel	Lmax	Point	-732.7	529.0	91.5	0	200.6	-57.0	0.7	-5.3	-1.1	0.0		2.4	31.2	0.0	31.2	
Idling Diesel	Lmax	Point	-732.8	532.9	91.5	0	199.1	-57.0	0.7	-5.2	-1.1	0.0		2.4	31.3	0.0	31.3	
Idling Diesel	Lmax	Point	-619.1	636.6	91.5	0	301.1	-60.6	0.8	-4.4	-1.7	0.0		2.3	27.9	0.0	27.9	
Idling Diesel	Lmax	Point	-732.8	537.2	91.5	0	197.6	-56.9	0.7	-5.2	-1.1	0.0		2.4	31.4	0.0	31.4	
Idling Diesel	Lmax	Point	-643.3	636.6	91.5	0	277.1	-59.8	0.8	-4.4	-1.6	0.0		2.3	28.8	0.0	28.8	
Idling Diesel	Lmax	Point	-915.7	491.9	91.5	0	112.8	-52.0	0.3	-8.1	-0.5	0.0		2.4	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-679.1	636.6	91.5	0	241.5	-58.7	0.7	-4.4	-1.4	0.0		2.5	30.3	0.0	30.3	
Idling Diesel	Lmax	Point	-918.8	491.8	91.5	0	112.9	-52.0	0.3	-8.1	-0.5	0.0		2.4	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-922.5	491.9	91.5	0	112.8	-52.0	0.3	-8.0	-0.5	0.0		2.4	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-674.9	636.7	91.5	0	245.7	-58.8	0.8	-4.4	-1.5	0.0		2.4	30.0	0.0	30.0	
Idling Diesel	Lmax	Point	-687.2	636.4	91.5	0	233.5	-58.4	0.7	-4.4	-1.4	0.0		2.4	30.5	0.0	30.5	
Idling Diesel	Lmax	Point	-899.8	491.5	91.5	0	114.7	-52.2	0.4	-8.0	-0.5	0.0		2.4	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-907.7	491.9	91.5	0	113.2	-52.1	0.3	-8.0	-0.5	0.0		2.4	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-683.0	636.6	91.5	0	237.7	-58.5	0.7	-4.4	-1.4	0.0		2.5	30.4	0.0	30.4	
Idling Diesel	Lmax	Point	-911.5	491.9	91.5	0	112.9	-52.0	0.3	-8.0	-0.5	0.0		2.4	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-733.6	456.8	91.5	0	236.8	-58.5	0.7	-6.2	-1.2	0.0		4.6	31.0	0.0	31.0	
Idling Diesel	Lmax	Point	-733.5	472.8	91.5	0	227.3	-58.1	0.7	-6.0	-1.1	0.0		2.4	29.4	0.0	29.4	
Idling Diesel	Lmax	Point	-733.3	476.5	91.5	0	225.2	-58.0	0.7	-6.0	-1.1	0.0		2.4	29.5	0.0	29.5	
Idling Diesel	Lmax	Point	-647.0	636.5	91.5	0	273.4	-59.7	0.8	-4.4	-1.6	0.0		2.3	28.9	0.0	28.9	
Idling Diesel	Lmax	Point	-733.0	480.7	91.5	0	223.1	-58.0	0.7	-6.0	-1.1	0.0		2.5	29.6	0.0	29.6	
Idling Diesel	Lmax	Point	-733.0	489.1	91.5	0	218.5	-57.8	0.7	-5.9	-1.1	0.0		2.5	29.9	0.0	29.9	
Idling Diesel	Lmax	Point	-733.5	460.8	91.5	0	234.4	-58.4	0.7	-6.1	-1.1	0.0		3.4	30.0	0.0	30.0	
Idling Diesel	Lmax	Point	-671.5	636.7	91.5	0	249.1	-58.9	0.8	-4.4	-1.5	0.0		2.4	29.9	0.0	29.9	
Idling Diesel	Lmax	Point	-733.3	465.0	91.5	0	231.9	-58.3	0.7	-6.1	-1.1	0.0		3.3	30.0	0.0	30.0	
Idling Diesel	Lmax	Point	-733.1	469.1	91.5	0	229.6	-58.2	0.7	-6.1	-1.1	0.0		2.5	29.3	0.0	29.3	
Idling Diesel	Lmax	Point	-667.1	636.7	91.5	0	253.4	-59.1	0.8	-4.4	-1.5	0.0		2.3	29.7	0.0	29.7	
169	Lmax	PLot	-649.5	706.5	87.0	0	287.6	-60.2	0.3	-8.4	-0.5	0.0		0.1	18.3	0.0	18.3	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
170	Lmax	PLot	-641.9	687.2	82.0	0	288.6	-60.2	0.3	-12.7	-0.3	0.0		0.1	9.1	0.0	9.1	
171	Lmax	PLot	-747.5	682.1	80.0	0	187.7	-56.5	0.4	-5.9	-0.7	0.0		0.6	17.9	0.0	17.9	
168	Lmax	PLot	-663.2	719.8	83.0	0	280.1	-59.9	0.3	-4.4	-1.6	0.0		0.1	17.4	0.0	17.4	
165	Lmax	PLot	-649.5	763.5	81.6	0	312.4	-60.9	0.2	-9.8	-0.4	0.0		0.1	10.9	0.0	10.9	
166	Lmax	PLot	-731.2	716.5	84.0	0	218.2	-57.8	0.3	-4.7	-1.2	0.0		2.5	23.1	0.0	23.1	
167	Lmax	PLot	-720.1	706.9	84.0	0	223.2	-58.0	0.3	-4.6	-1.3	0.0		2.0	22.5	0.0	22.5	
176	Lmax	PLot	-803.2	417.6	82.0	0	219.7	-57.8	0.4	-18.1	-0.3	0.0		2.5	8.6	0.0	8.6	
177	Lmax	PLot	-922.5	418.5	82.0	0	186.2	-56.4	0.4	-18.4	-0.3	0.0		0.0	7.3	0.0	7.3	
178	Lmax	PLot	-948.1	483.6	82.6	0	124.6	-52.9	0.3	-6.8	-0.4	0.0		0.1	23.0	0.0	23.0	
175	Lmax	PLot	-791.3	502.8	83.5	0	163.0	-55.2	0.4	-6.1	-0.6	0.0		1.2	23.1	0.0	23.1	
172	Lmax	PLot	-679.5	681.8	71.8	0	251.1	-59.0	0.3	-13.4	-0.3	0.0		0.1	-0.5	0.0	-0.5	
173	Lmax	PLot	-584.2	722.9	81.0	0	354.6	-62.0	0.1	-6.2	-1.1	0.0		0.3	12.2	0.0	12.2	
174	Lmax	PLot	-584.9	613.4	83.0	0	333.7	-61.5	0.2	-4.4	-1.9	0.0		1.7	17.1	0.0	17.1	
155	Lmax	PLot	-620.7	572.9	73.0	0	299.5	-60.5	0.2	-9.4	-0.4	0.0		0.0	2.9	0.0	2.9	
156	Lmax	PLot	-598.6	575.8	77.0	0	321.3	-61.1	0.2	-7.7	-0.6	0.0		0.9	8.6	0.0	8.6	
157	Lmax	PLot	-636.4	546.4	77.0	0	288.1	-60.2	0.3	-12.4	-0.3	0.0		0.0	4.4	0.0	4.4	
154	Lmax	PLot	-584.4	587.5	73.0	0	334.5	-61.5	0.2	-4.4	-1.9	0.0		0.9	6.4	0.0	6.4	
151	Lmax	PLot	-667.5	559.5	82.0	0	255.0	-59.1	0.3	-18.3	-0.4	0.0		0.0	4.5	0.0	4.5	
152	Lmax	PLot	-658.8	583.9	86.5	0	260.5	-59.3	0.3	-4.4	-1.6	0.0		0.0	21.5	0.0	21.5	
153	Lmax	PLot	-639.7	583.8	81.0	0	279.6	-59.9	0.3	-4.4	-1.6	0.0		0.0	15.3	0.0	15.3	
162	Lmax	PLot	-744.8	771.7	82.3	0	241.0	-58.6	0.3	-4.7	-1.3	0.0		1.0	19.0	0.0	19.0	
163	Lmax	PLot	-748.3	758.7	82.6	0	229.5	-58.2	0.3	-5.3	-1.0	0.0		1.0	19.4	0.0	19.4	
164	Lmax	PLot	-647.1	771.6	82.2	0	318.6	-61.1	0.2	-8.2	-0.5	0.0		0.1	12.7	0.0	12.7	
161	Lmax	PLot	-757.9	424.1	84.0	0	241.6	-58.7	0.3	-12.1	-0.3	0.0		0.7	14.0	0.0	14.0	
158	Lmax	PLot	-645.6	509.5	77.0	0	289.0	-60.2	0.3	-13.4	-0.3	0.0		0.0	3.4	0.0	3.4	
159	Lmax	PLot	-659.2	495.3	75.0	0	281.5	-60.0	0.3	-14.9	-0.3	0.0		0.0	0.1	0.0	0.1	
160	Lmax	PLot	-666.3	493.6	83.0	0	275.6	-59.8	0.3	-18.1	-0.4	0.0		0.0	5.0	0.0	5.0	

B(A) dB 44.8 0.0 44.7 0.0	dB(A)
44.8 0.0	dB(A)
44.8 0.0	
	44.0
	44.8
	44.7
44.7 0.0	44.7
45.0 0.0	45.0
44.9 0.0	44.9
44.7 0.0	44.7
43.4 0.0	43.4
43.5 0.0	43.5
43.6 0.0	43.6
44.6 0.0	44.6
44.6 0.0	44.6
44.5 0.0	44.5
45.2 0.0	45.2
36.5 0.0	36.5
36.8 0.0	36.8
37.0 0.0	37.0
36.2 0.0	36.2
36.5 0.0	36.5
36.7 0.0	36.7
43.8 0.0	43.8
43.8 0.0	43.8
43.9 0.0	43.9
37.3 0.0	37.3
39.3 0.0	39.3
	40.0
	45.2
	45.1
	45.5
	36.2       0.0         36.5       0.0         36.7       0.0         43.8       0.0         43.8       0.0         43.9       0.0         37.3       0.0         39.3       0.0         40.0       0.0

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-851.8	489.1	103.0	0	171.3	-55.7	1.2	-4.7	-2.9	0.0		3.9	44.9	0.0	44.9	
Backup beep	Lmax	Point	-846.9	489.1	103.0	0	169.0	-55.6	1.2	-4.7	-2.8	0.0		3.9	45.0	0.0	45.0	
Backup beep	Lmax	Point	-834.7	489.4	103.0	0	163.8	-55.3	1.1	-4.7	-2.8	0.0		3.9	45.3	0.0	45.3	
Backup beep	Lmax	Point	-811.9	489.7	103.0	0	156.2	-54.9	1.1	-4.8	-2.6	0.0		3.9	45.7	0.0	45.7	
Backup beep	Lmax	Point	-808.2	489.4	103.0	0	155.6	-54.8	1.1	-4.8	-2.6	0.0		3.9	45.8	0.0	45.8	
Backup beep	Lmax	Point	-804.6	489.4	103.0	0	154.8	-54.8	1.1	-4.8	-2.6	0.0		3.5	45.4	0.0	45.4	
Backup beep	Lmax	Point	-822.4	489.4	103.0	0	159.5	-55.0	1.1	-4.8	-2.7	0.0		3.9	45.5	0.0	45.5	
Backup beep	Lmax	Point	-819.2	489.4	103.0	0	158.4	-55.0	1.1	-4.8	-2.7	0.0		3.9	45.6	0.0	45.6	
Backup beep	Lmax	Point	-815.2	489.4	103.0	0	157.4	-54.9	1.1	-4.8	-2.7	0.0		3.9	45.7	0.0	45.7	
Backup beep	Lmax	Point	-857.0	489.1	103.0	0	173.7	-55.8	1.1	-4.7	-2.9	0.0		3.9	44.7	0.0	44.7	
Backup beep		Point	-894.8	489.4	103.0		173.7	-56.8	1.2	-4.6	-2.9	0.0		4.5	44.7	0.0	44.7	
	Lmax	Point	-890.8	469.4 489.4	103.0	0 0	194.9	-56.7	1.2	-4.0 -4.6	-3.1	0.0		4.5 4.6	44.3	0.0	44.3	
Backup beep	Lmax	Point	-890.8	489.4 489.4	103.0	0	192.4	-56.5		-4.0 -4.6	-3.1	0.0		4.0	44.4	0.0	44.4	
Backup beep	Lmax	Point	-005.7 -911.6		103.0		205.4	-56.5 -57.2	1.2					_			44.0	
Backup beep	Lmax	1 1		490.0		0		-	1.3	-4.6	-3.2	0.0		4.5	43.7	0.0	-	
Backup beep	Lmax	Point	-907.8	490.0	103.0	0	202.9	-57.1	1.3	-4.6	-3.2	0.0		4.5	43.9	0.0	43.9	
Backup beep	Lmax	Point	-899.9	489.5	103.0	0	198.0	-56.9	1.3	-4.6	-3.2	0.0		4.5	44.1	0.0	44.1	
Backup beep	Lmax	Point	-876.2	489.4	103.0	0	183.7	-56.3	1.2	-4.6	-3.0	0.0		3.9	44.2	0.0	44.2	
Backup beep	Lmax	Point	-863.5	489.1	103.0	0	177.1	-56.0	1.2	-4.7	-2.9	0.0		3.9	44.5	0.0	44.5	
Backup beep	Lmax	Point	-860.9	489.1	103.0	0	175.7	-55.9	1.2	-4.7	-2.9	0.0		3.9	44.6	0.0	44.6	
Backup beep	Lmax	Point	-880.8	489.4	103.0	0	186.3	-56.4	1.2	-4.6	-3.0	0.0		4.3	44.4	0.0	44.4	
Backup beep	Lmax	Point	-868.6	489.7	103.0	0	179.3	-56.1	1.2	-4.6	-3.0	0.0		3.9	44.4	0.0	44.4	
Backup beep	Lmax	Point	-872.3	489.8	103.0	0	181.2	-56.2	1.2	-4.6	-3.0	0.0		3.8	44.3	0.0	44.3	
Backup beep	Lmax	Point	-711.2	638.2	103.0	0	60.9	-46.7	0.7	-10.0	-0.7	0.0		1.5	47.9	0.0	47.9	
Backup beep	Lmax	Point	-643.2	638.6	103.0	0	128.8	-53.2	1.0	-18.6	-0.8	0.0		8.3	39.6	0.0	39.6	
Backup beep	Lmax	Point	-707.1	638.1	103.0	0	65.0	-47.2	0.7	-9.9	-0.8	0.0		1.6	47.4	0.0	47.4	
Backup beep	Lmax	Point	-646.9	638.4	103.0	0	125.1	-52.9	1.0	-17.3	-0.8	0.0		7.4	40.4	0.0	40.4	
Backup beep	Lmax	Point	-630.9	638.8	103.0	0	141.1	-54.0	1.0	-19.8	-1.0	0.0		9.5	38.9	0.0	38.9	
Backup beep	Lmax	Point	-635.1	638.8	103.0	0	136.9	-53.7	1.0	-19.7	-1.0	0.0		9.4	39.1	0.0	39.1	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice								_									
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Backup beep	Lmax	Point	-731.3	638.2	103.0	0	40.8	-43.2	0.8	-10.3	-0.5	0.0	40	0.0	49.7	0.0	49.7	
Backup beep	Lmax	Point	-639.3	638.7	103.0	0	132.7	-43.2	1.0	-19.4	-0.9	0.0		9.0	39.3	0.0	39.3	
Backup beep	Lmax	Point	-667.1	638.7	103.0	0	104.9	-51.4	0.8	-19.4	-0.9	0.0		9.0 2.4	44.2	0.0	44.2	
Backup beep	Linax	Point	-695.2	638.1	103.0	0	76.9	-48.7	0.8	-9.5 -9.8	-0.9	0.0		2.4 1.9	44.2	0.0	44.2	
						-		-										
Backup beep	Lmax	Point	-679.1	638.6	103.0	0	93.0	-50.4	0.7	-9.6	-1.0	0.0		2.1	44.8	0.0	44.8	
Backup beep	Lmax	Point	-682.9	638.6	103.0	0	89.1	-50.0	0.7	-9.6	-1.0	0.0		2.1	45.1	0.0	45.1	
Backup beep	Lmax	Point	-687.2	638.3	103.0	0	84.9	-49.6	0.7	-9.7	-0.9	0.0		2.0	45.5	0.0	45.5	
Backup beep	Lmax	Point	-703.3	638.2	103.0	0	68.8	-47.7	0.7	-9.9	-0.8	0.0		1.7	47.0	0.0	47.0	
Backup beep	Lmax	Point	-671.5	638.6	103.0	0	100.6	-51.0	0.8	-9.6	-1.1	0.0		2.2	44.3	0.0	44.3	
Backup beep	Lmax	Point	-698.9	638.2	103.0	0	73.2	-48.3	0.7	-9.8	-0.8	0.0		1.8	46.5	0.0	46.5	
Backup beep	Lmax	Point	-674.9	638.6	103.0	0	97.2	-50.7	0.7	-9.6	-1.1	0.0		2.2	44.5	0.0	44.5	
Backup beep	Lmax	Point	-735.1	638.1	103.0	0	37.0	-42.4	0.8	-10.4	-0.5	0.0		0.0	50.6	0.0	50.6	
Backup beep	Lmax	Point	-610.4	638.6	103.0	0	161.6	-55.2	1.1	-19.8	-1.1	0.0		9.9	37.9	0.0	37.9	
Backup beep	Lmax	Point	-739.4	638.1	103.0	0	32.7	-41.3	0.8	-10.6	-0.4	0.0		0.0	51.6	0.0	51.6	
Backup beep	Lmax	Point	-619.1	638.6	103.0	0	153.0	-54.7	1.1	-19.6	-1.0	0.0		9.5	38.3	0.0	38.3	
Backup beep	Lmax	Point	-614.9	638.6	103.0	0	157.1	-54.9	1.1	-19.8	-1.1	0.0		9.8	38.1	0.0	38.1	
Backup beep	Lmax	Point	-743.2	637.8	103.0	0	29.0	-40.2	0.9	-10.7	-0.4	0.0		0.0	52.6	0.0	52.6	
Backup beep	Lmax	Point	-623.1	638.5	103.0	0	148.9	-54.4	1.1	-19.4	-1.0	0.0		9.3	38.5	0.0	38.5	
Backup beep	Lmax	Point	-747.4	637.9	103.0	0	24.8	-38.9	0.9	-10.9	-0.3	0.0		0.0	53.9	0.0	53.9	
Idling Diesel	Lmax	Point	-811.8	491.6	91.5	0	154.3	-54.8	0.5	-4.5	-1.0	0.0		2.9	34.8	0.0	34.8	
Idling Diesel	Lmax	Point	-872.1	491.8	91.5	0	179.5	-56.1	0.6	-4.4	-1.1	0.0		3.4	33.9	0.0	33.9	
Idling Diesel	Lmax	Point	-804.4	491.3	91.5	0	152.8	-54.7	0.5	-4.5	-1.0	0.0		2.8	34.7	0.0	34.7	
Idling Diesel	Lmax	Point	-894.7	491.3	91.5	0	193.3	-56.7	0.7	-4.4	-1.2	0.0		4.1	34.0	0.0	34.0	
Idling Diesel	Lmax	Point	-876.1	491.3	91.5	0	182.1	-56.2	0.6	-4.4	-1.1	0.0		3.4	33.8	0.0	33.8	
Idling Diesel	Lmax	Point	-703.3	636.2	91.5	0	68.8	-47.7	0.3	-7.9	-0.3	0.0		1.6	37.4	0.0	37.4	
Idling Diesel	Lmax	Point	-868.5	491.6	91.5	0	177.6	-56.0	0.6	-4.4	-1.1	0.0		3.4	34.0	0.0	34.0	
Idling Diesel	Lmax	Point	-808.1	491.3	91.5	0	153.7	-54.7	0.5	-4.5	-1.0	0.0		2.9	34.8	0.0	34.8	
Idling Diesel	Lmax	Point	-695.2	636.2	91.5	0	76.9	-48.7	0.2	-7.8	-0.3	0.0		1.7	36.6	0.0	36.6	

Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice						-											
	31100		-	~		dD	-	٩D	٩D	٩D	dB	ЧD	dB			dB		
			m	m	dB(A)	dB	m	dB	dB	dB		dB	aв	dB(A)	dB(A)		dB(A)	
Idling Diesel	Lmax	Point	-885.6	491.3	91.5	0	187.7	-56.5	0.6	-4.4	-1.2	0.0		4.1	34.3	0.0	34.3	
Idling Diesel	Lmax	Point	-880.6	491.3	91.5	0	184.7	-56.3	0.6	-4.4	-1.1	0.0		3.8	34.1	0.0	34.1	
Idling Diesel	Lmax	Point	-747.4	635.9	91.5	0	25.0	-39.0	0.6	-8.8	-0.1	0.0		0.0	44.3	0.0	44.3	
Idling Diesel	Lmax	Point	-698.9	636.2	91.5	0	73.3	-48.3	0.2	-7.8	-0.3	0.0		1.7	36.9	0.0	36.9	
Idling Diesel	Lmax	Point	-890.7	491.3	91.5	0	190.8	-56.6	0.7	-4.4	-1.2	0.0		4.1	34.1	0.0	34.1	
Idling Diesel	Lmax	Point	-834.6	491.4	91.5	0	161.9	-55.2	0.6	-4.4	-1.0	0.0		3.2	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-731.3	636.2	91.5	0	41.0	-43.2	0.4	-8.3	-0.2	0.0		0.0	40.2	0.0	40.2	
Idling Diesel	Lmax	Point	-822.3	491.3	91.5	0	157.6	-54.9	0.6	-4.5	-1.0	0.0		3.2	34.9	0.0	34.9	
Idling Diesel	Lmax	Point	-846.7	491.1	91.5	0	167.2	-55.5	0.6	-4.4	-1.0	0.0		3.4	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-739.4	636.1	91.5	0	32.9	-41.3	0.5	-8.5	-0.1	0.0		0.0	42.0	0.0	42.0	
Idling Diesel	Lmax	Point	-826.2	491.1	91.5	0	159.2	-55.0	0.6	-4.4	-1.0	0.0		3.2	34.8	0.0	34.8	
Idling Diesel	Lmax	Point	-842.2	491.1	91.5	0	165.3	-55.4	0.6	-4.4	-1.0	0.0		3.3	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-735.2	636.1	91.5	0	37.1	-42.4	0.5	-8.4	-0.2	0.0		0.0	41.0	0.0	41.0	
Idling Diesel	Lmax	Point	-838.3	491.5	91.5	0	163.2	-55.2	0.6	-4.4	-1.0	0.0		3.2	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-860.8	491.1	91.5	0	174.0	-55.8	0.6	-4.4	-1.1	0.0		3.4	34.2	0.0	34.2	
Idling Diesel	Lmax	Point	-707.1	636.1	91.5	0	65.0	-47.3	0.3	-7.9	-0.3	0.0		1.6	37.8	0.0	37.8	
Idling Diesel	Lmax	Point	-863.4	491.1	91.5	0	175.3	-55.9	0.6	-4.4	-1.1	0.0		3.4	34.2	0.0	34.2	
Idling Diesel	Lmax	Point	-815.1	491.3	91.5	0	155.5	-54.8	0.5	-4.5	-1.0	0.0		2.9	34.7	0.0	34.7	
Idling Diesel	Lmax	Point	-743.2	635.9	91.5	0	29.2	-40.3	0.6	-8.6	-0.1	0.0		0.0	43.0	0.0	43.0	
Idling Diesel	Lmax	Point	-851.7	491.1	91.5	0	169.5	-55.6	0.6	-4.4	-1.1	0.0		3.4	34.5	0.0	34.5	
Idling Diesel	Lmax	Point	-819.1	491.5	91.5	0	156.5	-54.9	0.6	-4.5	-1.0	0.0		2.9	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-711.2	636.2	91.5	0	61.0	-46.7	0.3	-8.0	-0.3	0.0		1.5	38.3	0.0	38.3	
Idling Diesel	Lmax	Point	-856.8	491.1	91.5	0	172.0	-55.7	0.6	-4.4	-1.1	0.0		3.4	34.4	0.0	34.4	
Idling Diesel	Lmax	Point	-635.2	636.8	91.5	0	136.9	-53.7	0.5	-7.4	-0.6	0.0		2.0	32.2	0.0	32.2	
Idling Diesel	Lmax	Point	-733.0	509.3	91.5	0	137.1	-53.7	0.5	-5.0	-0.8	0.0		1.3	33.8	0.0	33.8	
Idling Diesel	Lmax	Point	-733.2	513.3	91.5	0	133.1	-53.5	0.5	-5.0	-0.8	0.0		1.2	33.9	0.0	33.9	
Idling Diesel	Lmax	Point	-631.0	636.8	91.5	0	141.1	-54.0	0.5	-7.4	-0.6	0.0		2.0	32.0	0.0	32.0	
Idling Diesel	Lmax	Point	-733.0	517.3	91.5	0	129.4	-53.2	0.4	-5.1	-0.7	0.0		1.1	34.0	0.0	34.0	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice						-											
	31100		-			dD		ЧD	٩D	dD	dB	ЧD	dB			dB		
			m	m	dB(A)	dB	m	dB	dB	dB		dB	aв	dB(A)	dB(A)		dB(A)	
Idling Diesel	Lmax	Point	-733.0	493.4	91.5	0	152.4	-54.7	0.5	-4.8	-0.9	0.0		3.3	35.0	0.0	35.0	
Idling Diesel	Lmax	Point	-733.0	497.2	91.5	0	148.7	-54.4	0.5	-4.8	-0.9	0.0		1.9	33.8	0.0	33.8	
Idling Diesel	Lmax	Point	-639.3	636.7	91.5	0	132.7	-53.5	0.5	-7.4	-0.6	0.0		2.0	32.4	0.0	32.4	
Idling Diesel	Lmax	Point	-733.0	501.1	91.5	0	144.9	-54.2	0.5	-4.9	-0.9	0.0		1.5	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-732.9	505.1	91.5	0	141.2	-54.0	0.5	-4.9	-0.8	0.0		1.4	33.7	0.0	33.7	
Idling Diesel	Lmax	Point	-732.7	524.8	91.5	0	122.4	-52.7	0.4	-14.4	-0.3	0.0		3.6	28.0	0.0	28.0	
Idling Diesel	Lmax	Point	-732.9	541.0	91.5	0	107.1	-51.6	0.3	-17.6	-0.3	0.0		4.4	26.7	0.0	26.7	
Idling Diesel	Lmax	Point	-614.9	636.7	91.5	0	157.1	-54.9	0.6	-7.3	-0.7	0.0		2.1	31.2	0.0	31.2	
Idling Diesel	Lmax	Point	-733.1	544.8	91.5	0	103.5	-51.3	0.3	-18.5	-0.3	0.0		3.5	25.2	0.0	25.2	
Idling Diesel	Lmax	Point	-733.1	548.6	91.5	0	99.9	-51.0	0.2	-19.6	-0.3	0.0		3.5	24.3	0.0	24.3	
Idling Diesel	Lmax	Point	-610.5	636.7	91.5	0	161.6	-55.2	0.6	-7.3	-0.7	0.0		2.1	31.0	0.0	31.0	
Idling Diesel	Lmax	Point	-623.2	636.6	91.5	0	148.9	-54.4	0.5	-7.3	-0.7	0.0		2.1	31.6	0.0	31.6	
Idling Diesel	Lmax	Point	-732.7	529.0	91.5	0	118.4	-52.5	0.4	-15.3	-0.3	0.0		3.8	27.6	0.0	27.6	
Idling Diesel	Lmax	Point	-732.8	532.9	91.5	0	114.7	-52.2	0.4	-16.0	-0.3	0.0		4.0	27.4	0.0	27.4	
Idling Diesel	Lmax	Point	-619.1	636.6	91.5	0	153.0	-54.7	0.5	-7.3	-0.7	0.0		2.1	31.4	0.0	31.4	
Idling Diesel	Lmax	Point	-732.8	537.2	91.5	0	110.7	-51.9	0.3	-16.8	-0.3	0.0		3.9	26.7	0.0	26.7	
Idling Diesel	Lmax	Point	-643.3	636.6	91.5	0	128.8	-53.2	0.4	-7.4	-0.6	0.0		2.1	32.8	0.0	32.8	
Idling Diesel	Lmax	Point	-915.7	491.9	91.5	0	206.9	-57.3	0.7	-4.4	-1.3	0.0		4.1	33.3	0.0	33.3	
Idling Diesel	Lmax	Point	-679.1	636.6	91.5	0	93.0	-50.4	0.2	-7.6	-0.4	0.0		1.9	35.2	0.0	35.2	
Idling Diesel	Lmax	Point	-918.8	491.8	91.5	0	209.1	-57.4	0.7	-4.4	-1.3	0.0		4.1	33.3	0.0	33.3	
Idling Diesel	Lmax	Point	-922.5	491.9	91.5	0	211.6	-57.5	0.7	-4.4	-1.3	0.0		4.1	33.1	0.0	33.1	
Idling Diesel	Lmax	Point	-674.9	636.7	91.5	0	97.2	-50.7	0.2	-7.6	-0.4	0.0		2.0	34.9	0.0	34.9	
Idling Diesel	Lmax	Point	-687.2	636.4	91.5	0	84.9	-49.6	0.2	-7.7	-0.4	0.0		1.8	35.8	0.0	35.8	
Idling Diesel	Lmax	Point	-899.8	491.5	91.5	0	196.5	-56.9	0.7	-4.4	-1.2	0.0		4.1	33.8	0.0	33.8	
Idling Diesel	Lmax	Point	-907.7	491.9	91.5	0	201.4	-57.1	0.7	-4.4	-1.2	0.0		4.1	33.6	0.0	33.6	
Idling Diesel	Lmax	Point	-683.0	636.6	91.5	0	89.1	-50.0	0.2	-7.7	-0.4	0.0		1.9	35.5	0.0	35.5	
Idling Diesel	Lmax	Point	-911.5	491.9	91.5	0	203.9	-57.2	0.7	-4.4	-1.3	0.0		4.1	33.5	0.0	33.5	
Idling Diesel	Lmax	Point	-733.6	456.8	91.5	0	187.9	-56.5	0.6	-4.5	-1.1	0.0		4.4	34.5	0.0	34.5	

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Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr	
	slice																	
			m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)	
Idling Diesel	Lmax	Point	-733.5	472.8	91.5	0	172.3	-55.7	0.6	-4.6	-1.0	0.0		3.9	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-733.3	476.5	91.5	0	168.7	-55.5	0.6	-4.6	-1.0	0.0		3.8	34.7	0.0	34.7	
Idling Diesel	Lmax	Point	-647.0	636.5	91.5	0	125.1	-52.9	0.4	-7.5	-0.6	0.0		2.2	33.2	0.0	33.2	
Idling Diesel	Lmax	Point	-733.0	480.7	91.5	0	164.7	-55.3	0.6	-4.7	-1.0	0.0		3.6	34.7	0.0	34.7	
Idling Diesel	Lmax	Point	-733.0	489.1	91.5	0	156.5	-54.9	0.6	-4.7	-0.9	0.0		3.3	34.8	0.0	34.8	
Idling Diesel	Lmax	Point	-733.5	460.8	91.5	0	184.0	-56.3	0.6	-4.5	-1.1	0.0		4.3	34.5	0.0	34.5	
Idling Diesel	Lmax	Point	-671.5	636.7	91.5	0	100.6	-51.0	0.3	-7.6	-0.5	0.0		2.0	34.7	0.0	34.7	
Idling Diesel	Lmax	Point	-733.3	465.0	91.5	0	179.9	-56.1	0.6	-4.5	-1.1	0.0		4.2	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-733.1	469.1	91.5	0	175.9	-55.9	0.6	-4.6	-1.1	0.0		4.0	34.6	0.0	34.6	
Idling Diesel	Lmax	Point	-667.1	636.7	91.5	0	105.0	-51.4	0.3	-7.6	-0.5	0.0		2.2	34.5	0.0	34.5	
169	Lmax	PLot	-663.0	695.2	87.0	0	121.9	-52.7	0.3	-14.5	-0.2	0.0		0.5	20.4	0.0	20.4	
170	Lmax	PLot	-655.5	682.5	82.0	0	123.8	-52.8	0.3	-16.8	-0.2	0.0		0.7	13.2	0.0	13.2	
171	Lmax	PLot	-740.2	687.2	80.0	0	56.3	-46.0	0.0	-16.3	-0.1	0.0		2.9	20.5	0.0	20.5	
168	Lmax	PLot	-663.2	716.8	83.0	0	132.8	-53.5	0.3	-13.4	-0.2	0.0		0.2	16.5	0.0	16.5	
165	Lmax	PLot	-653.8	757.9	81.6	0	166.5	-55.4	0.4	-11.9	-0.2	0.0		0.2	14.7	0.0	14.7	
166	Lmax	PLot	-749.2	716.5	84.0	0	79.1	-49.0	0.2	-5.7	-0.3	0.0		0.9	30.1	0.0	30.1	
167	Lmax	PLot	-750.9	694.9	84.0	0	58.1	-46.3	0.0	-6.1	-0.2	0.0		0.0	31.5	0.0	31.5	
176	Lmax	PLot	-808.5	418.5	82.0	0	225.2	-58.0	0.3	-17.6	-0.3	0.0		0.2	6.5	0.0	6.5	
177	Lmax	PLot	-888.3	417.1	82.0	0	252.1	-59.0	0.3	-17.2	-0.3	0.0		0.1	5.9	0.0	5.9	
178	Lmax	PLot	-952.1	483.6	82.6	0	239.0	-58.6	0.3	-4.4	-1.4	0.0		1.1	19.6	0.0	19.6	
175	Lmax	PLot	-791.3	476.8	83.5	0	165.1	-55.3	0.4	-4.7	-1.0	0.0		2.5	25.4	0.0	25.4	
172	Lmax	PLot	-682.5	681.8	71.8	0	98.5	-50.9	0.3	-17.0	-0.2	0.0		0.6	4.7	0.0	4.7	
173	Lmax	PLot	-584.3	726.1	81.0	0	206.2	-57.3	0.4	-13.2	-0.2	0.0		0.6	11.3	0.0	11.3	
174	Lmax	PLot	-584.9	633.4	83.0	0	187.3	-56.4	0.4	-6.4	-0.6	0.0		0.6	20.6	0.0	20.6	
155	Lmax	PLot	-620.7	572.9	73.0	0	165.8	-55.4	0.4	-6.3	-0.5	0.0		0.2	11.4	0.0	11.4	
156	Lmax	PLot	-613.5	575.8	77.0	0	171.3	-55.7	0.4	-6.3	-0.6	0.0		0.5	15.3	0.0	15.3	
157	Lmax	PLot	-639.4	546.4	77.0	0	162.7	-55.2	0.4	-12.9	-0.2	0.0		0.9	9.9	0.0	9.9	
154	Lmax	PLot	-584.4	583.5	73.0	0	196.1	-56.8	0.4	-6.3	-0.6	0.0		0.7	10.3	0.0	10.3	

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SoundPLAN 8.2

slice         m         m         m         dB(A)         dB         m         dB         d	Image base base base base base base base bas	mmdB(A)dBmdBdBdBdBdBdBdBdBdBdBdBdB(A)dB(A)dB(A)dBdB(A)dD(A)dE(A)dE(A)dE(A)dE(A)dE(A)dE(A)dE(A)dE(A)dE(A)dE(A)dE(A)dE(A)dE(A)dE(A)dE(A)dE(A)dE(A) <th>Source</th> <th>Time</th> <th>Source type</th> <th>Xmax</th> <th>Ymax</th> <th>Lw</th> <th>Ko</th> <th>S</th> <th>Adiv</th> <th>Agr</th> <th>Abar</th> <th>Aatm</th> <th>ADI</th> <th>Amisc</th> <th>dLrefl</th> <th>Ls</th> <th>Cmet</th> <th>Lr</th>	Source	Time	Source type	Xmax	Ymax	Lw	Ko	S	Adiv	Agr	Abar	Aatm	ADI	Amisc	dLrefl	Ls	Cmet	Lr
151LmaxPLot-666.4572.082.00126.0-53.00.3-18.5-0.20.03.614.20.014.2152LmaxPLot-658.8583.986.50126.7-53.00.3-6.4-0.40.00.327.40.027.4153LmaxPLot-639.6583.981.00144.1-54.20.4-6.4-0.50.00.420.70.020.7162LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.7163LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.014.4164LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0 <td>151LmaxPLot-666.4572.082.00126.0-53.00.3-18.5-0.20.03.614.20.014.2152LmaxPLot-658.8583.986.50126.7-53.00.3-6.4-0.40.00.327.40.027.4153LmaxPLot-639.6583.981.00144.1-54.20.4-6.4-0.50.00.420.70.020.7162LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.7163LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.6164LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-14.2-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0<td>51LmaxPLot-666.4572.082.00126.0-53.00.3-18.5-0.20.03.614.20.014.252LmaxPLot-658.8583.986.50126.7-53.00.3-6.4-0.40.00.327.40.027.453LmaxPLot-639.6583.981.00144.1-54.20.4-6.4-0.50.00.420.70.020.762LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.763LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.664LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.558LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0</td><td></td><td>slice</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td>	151LmaxPLot-666.4572.082.00126.0-53.00.3-18.5-0.20.03.614.20.014.2152LmaxPLot-658.8583.986.50126.7-53.00.3-6.4-0.40.00.327.40.027.4153LmaxPLot-639.6583.981.00144.1-54.20.4-6.4-0.50.00.420.70.020.7162LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.7163LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.6164LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-14.2-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0 <td>51LmaxPLot-666.4572.082.00126.0-53.00.3-18.5-0.20.03.614.20.014.252LmaxPLot-658.8583.986.50126.7-53.00.3-6.4-0.40.00.327.40.027.453LmaxPLot-639.6583.981.00144.1-54.20.4-6.4-0.50.00.420.70.020.762LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.763LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.664LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.558LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0</td> <td></td> <td>slice</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	51LmaxPLot-666.4572.082.00126.0-53.00.3-18.5-0.20.03.614.20.014.252LmaxPLot-658.8583.986.50126.7-53.00.3-6.4-0.40.00.327.40.027.453LmaxPLot-639.6583.981.00144.1-54.20.4-6.4-0.50.00.420.70.020.762LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.763LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.664LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.558LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0		slice																
152LmaxPLot-658.8583.988.50126.7-53.00.3-6.4-0.40.00.327.40.027.4153LmaxPLot-639.6583.981.00144.1-54.20.4-6.4-0.50.00.420.70.020.7162LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.7163LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.6164LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-13.3-0.20.00.00.721.50.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	152LmaxPLot-658.8583.986.50126.7-53.00.3-6.4-0.40.00.327.40.027.4153LmaxPLot-639.6583.981.00144.1-54.20.4-64-0.50.00.420.70.020.7162LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.7163LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.6164LmaxPLot-640.1771.682.20185.8-64.40.44.16-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-13.30.00.00.114.40.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-14.2-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	52LmaxPLot-658.8583.986.50126.7-53.00.3-6.4-0.40.00.327.40.027.453LmaxPLot-639.6583.981.00144.1-54.20.4-6.4-0.50.00.420.70.020.762LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.763LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.664LmaxPLot-640.1771.682.20185.8-66.40.4-11.6-0.20.00.014.40.014.461LmaxPLot-747.9424.184.00217.9-57.80.4-13.30.00.00.014.40.014.461LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.08.159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0 <td></td> <td></td> <td></td> <td>m</td> <td>m</td> <td>dB(A)</td> <td>dB</td> <td>m</td> <td>dB</td> <td>dB</td> <td>dB</td> <td>dB</td> <td>dB</td> <td>dB</td> <td>dB(A)</td> <td>dB(A)</td> <td>dB</td> <td>dB(A)</td>				m	m	dB(A)	dB	m	dB	dB	dB	dB	dB	dB	dB(A)	dB(A)	dB	dB(A)
152LmaxPLot-658.8583.988.50126.7-53.00.3-6.4-0.40.00.327.40.027.4153LmaxPLot-639.6583.981.00144.1-54.20.4-6.4-0.50.00.420.70.020.7162LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.7163LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.6164LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-13.3-0.20.00.00.721.50.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	152LmaxPLot-658.8583.986.50126.7-53.00.3-6.4-0.40.00.327.40.027.4153LmaxPLot-639.6583.981.00144.1-54.20.4-6.4-0.50.00.420.70.020.7162LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.7163LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.6164LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-13.30.00.00.014.40.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	52LmaxPLot-658.8583.986.50126.7-53.00.3-6.4-0.40.00.327.40.027.453LmaxPLot-639.6583.981.00144.1-54.20.4-6.4-0.50.00.420.70.020.762LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.763LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.664LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.461LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.014.40.014.461LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.08.159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0 <td>151</td> <td>Lmax</td> <td>PLot</td> <td>-666.4</td> <td>572.0</td> <td>82.0</td> <td>0</td> <td>126.0</td> <td>-53.0</td> <td>0.3</td> <td>-18.5</td> <td>-0.2</td> <td>0.0</td> <td></td> <td>3.6</td> <td>14.2</td> <td>0.0</td> <td>14.2</td>	151	Lmax	PLot	-666.4	572.0	82.0	0	126.0	-53.0	0.3	-18.5	-0.2	0.0		3.6	14.2	0.0	14.2
162LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.7163LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.6164LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-1.30.00.00.18.10.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-14.2-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	162LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.7163LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.6164LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-13.30.00.00.18.10.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-14.2-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	62LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.763LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.664LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.461LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.558LmaxPLot-649.1515.777.00179.2-56.10.4-14.2-0.20.00.18.10.08.159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	152	Lmax	PLot	-658.8		86.5	0	126.7							0.3			
162LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.7163LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.6164LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-1.30.00.00.18.10.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-14.2-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	162LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.7163LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.6164LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-13.30.00.00.18.10.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-14.2-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	62LmaxPLot-744.8771.782.30133.8-53.50.3-12.3-0.10.00.016.70.016.763LmaxPLot-748.3762.782.60124.3-52.90.3-14.3-0.10.00.015.60.015.664LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.461LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.558LmaxPLot-649.1515.777.00179.2-56.10.4-14.2-0.20.00.18.10.08.159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	153	Lmax	PLot	-639.6	583.9	81.0	0	144.1	-54.2	0.4	-6.4	-0.5	0.0		0.4	20.7	0.0	20.7
164LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	164LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.4161LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	64LmaxPLot-640.1771.682.20185.8-56.40.4-11.6-0.20.00.014.40.014.461LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.558LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	162	Lmax	PLot	-744.8	771.7	82.3	0	133.8		0.3	-12.3	-0.1	0.0		0.0	16.7	0.0	16.7
161LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	161LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.5158LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	61LmaxPLot-747.9424.184.00217.9-57.80.4-4.5-1.30.00.721.50.021.558LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	163	Lmax	PLot	-748.3	762.7	82.6	0	124.3	-52.9	0.3	-14.3	-0.1	0.0		0.0	15.6	0.0	15.6
158LmaxPLot-649.1515.777.00175.4-55.90.4-13.3-0.20.00.18.10.08.1159LmaxPLot-652.4507.375.00179.2-56.10.4-14.2-0.20.00.15.00.05.0	158       Lmax       PLot       -649.1       515.7       77.0       0       175.4       -55.9       0.4       -13.3       -0.2       0.0       0.1       8.1       0.0       8.1         159       Lmax       PLot       -652.4       507.3       75.0       0       179.2       -56.1       0.4       -13.3       -0.2       0.0       0.1       8.1       0.0       8.1         159       Lmax       PLot       -652.4       507.3       75.0       0       179.2       -56.1       0.4       -14.2       -0.2       0.0       0.1       5.0       0.0       5.0	58       Lmax       PLot       -649.1       515.7       77.0       0       175.4       -55.9       0.4       -13.3       -0.2       0.0       0.1       8.1       0.0       8.1         59       Lmax       PLot       -652.4       507.3       75.0       0       179.2       -56.1       0.4       -14.2       -0.2       0.0       0.1       8.1       0.0       8.1	164	Lmax	PLot	-640.1	771.6	82.2	0	185.8	-56.4	0.4	-11.6	-0.2	0.0		0.0	14.4	0.0	14.4
159 Lmax PLot -652.4 507.3 75.0 0 179.2 -56.1 0.4 -14.2 -0.2 0.0 0.1 5.0 0.0 5.0	159 Lmax PLot -652.4 507.3 75.0 0 179.2 -56.1 0.4 -14.2 -0.2 0.0 0.1 5.0 0.0 5.0	59 Lmax PLot -652.4 507.3 75.0 0 179.2 -56.1 0.4 -14.2 -0.2 0.0 0.1 5.0 0.0 5.0	161	Lmax	PLot	-747.9	424.1	84.0	0	217.9	-57.8	0.4	-4.5	-1.3	0.0		0.7	21.5	0.0	21.5
			158	Lmax	PLot	-649.1	515.7	77.0	0	175.4	-55.9	0.4	-13.3	-0.2	0.0		0.1	8.1	0.0	8.1
160 Lmax PLot -671.9 487.6 83.0 0 183.0 -56.2 0.4 -16.9 -0.3 0.0 0.0 10.0 0.0 10.0 10.0	160 Lmax PLot -671.9 487.6 83.0 0 183.0 -56.2 0.4 -16.9 -0.3 0.0 0.0 10.0 0.0 10.0	50 Lmax PLot -671.9 487.6 83.0 0 183.0 -56.2 0.4 -16.9 -0.3 0.0 0.0 10.0 0.0 10.0	159	Lmax	PLot	-652.4	507.3	75.0	0	179.2	-56.1	0.4	-14.2	-0.2	0.0		0.1	5.0	0.0	5.0
			160	Lmax	PLot	-671.9	487.6	83.0	0	183.0	-56.2	0.4	-16.9	-0.3	0.0		0.0	10.0	0.0	10.0

## Appendix D:

Construction Modeling Output

Activity	L <sub>eq</sub> at 810 feet dBA	L <sub>Max</sub> at 810 feet dBA
Grading	57	58
Building Construction	55	56
Paving	55	58

	Reference (dBA)
Equipment Summary	50 ft Lmax
Rock Drills	96
Jack Hammers	82
Pneumatic Tools	85
Pavers	80
Dozers	85
Scrappers	87
Haul Trucks	88
Cranes	82
Portable Generators	80
Rollers	80
Tractors	80
Front-End Loaders	86
Hydraulic Excavators	86
Graders	86
Air Compressors	86
Trucks	86

#### L<sub>eq</sub> at 660 feet dBA L<sub>Max</sub> at 660 feet dBA

		Noise Level Calcula	ation Prior to	Implementat	ion of Noise A	ttenuation Ro	equirements			
					Distance to					
		Reference (dBA)		Usage	Receptor	Ground	Shielding	Calculate	ed (dBA)	
No.	<b>Equipment Description</b>	50 ft Lmax	Quantity	Factor <sup>1</sup>	( <b>ft</b> )	Effect	(dBA)	Lmax	Leq	Energy
1	Grader	86	1	40	810	0.5	0	55.8	51.8	150755.253
2	Dozer	85	1	40	810	0.5	0	54.8	50.8	119749.154
3	Excavator	86	1	40	810	0.5	0	55.8	51.8	150755.253
4	Tractor/Backhoe	80	3	40	810	0.5	0	54.5	50.6	113604.023
Source: MD	Acoustics, January 2022.						Lmax*	58	Leq	57
1- Percentag	ge of time that a piece of equipment	nt is operating at full por	wer.				Lw	90	Lw	89

dBA – A-weighted Decibels

Lmax- Maximum Level Leg- Equivalent Level

Leq- Equiva	lent Level																	
			No	1 dBA	2 dBA	3 dBA	4 dBA	5 dBA	6 dBA	7 dBA	8 dBA	9 dBA	10 dBA	11 dBA	12 dBA	13 dBA	14 dBA	15 dBA
			Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding
Feet	Meters	<b>Ground Effect</b>	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	LeqdBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA
50	15.2			56	55	54	53		51	50			47	46		44	43	42
60	18.3	0.5	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40
70	21.3	0.5	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39
80	24.4	0.5	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37
90	27.4	0.5	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36
100	30.5	0.5	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35
110	33.5	0.5	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34
120	36.6	0.5	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33
130	39.6	0.5	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
140	42.7	0.5	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
150	45.7	0.5	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
160	48.8	0.5	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
170	51.8	0.5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
180	54.9	0.5	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
190	57.9	0.5	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
200	61.0	0.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
210	64.0	0.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
220	67.1	0.5	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
230	70.1	0.5	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
240	73.1	0.5	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
250	76.2	0.5	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
260	79.2	0.5	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
270	82.3	0.5	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
280	85.3	0.5	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
290	88.4	0.5	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23
300	91.4	0.5	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23
310	94.5	0.5	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22
320		0.5	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22
330			37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22
340	103.6	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
350	106.7	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
360	109.7	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
370	112.8	0.5	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21

#### L<sub>eq</sub> at 660 feet dBA L<sub>Max</sub> at 660 feet dBA

		Noise Level Calcula	ation Prior to	Implementat	ion of Noise A	ttenuation R	equirements			
					Distance to					
		Reference (dBA)		Usage	Receptor	Ground	Shielding	Calculate	ed (dBA)	
No.	<b>Equipment Description</b>	50 ft Lmax	Quantity	Factor <sup>1</sup>	( <b>ft</b> )	Effect	(dBA)	Lmax	Leq	Energy
1	Cranes	82	1	40	810	0.5	0	51.8	47.8	60016.7474
2	Forklift/Tractor	80	3	40	810	0.5	0	54.5	50.6	113604.023
3	Generator	80	1	40	810	0.5	0	49.8	45.8	37868.0075
4	Tractor/Backhoe	80	3	40	810	0.5	0	54.5	50.6	113604.023
Source: MD	Acoustics, January 2022.						Lmax*	56	Leq	55
1- Percentag	ge of time that a piece of equipment	nt is operating at full pov	wer.				Lw	88	Lw	87

dBA – A-weighted Decibels

Lmax- Maximum Level Leg- Equivalent Level

Leq- Equiva	alent Level																	
			No	1 dBA	2 dBA	3 dBA	4 dBA	5 dBA	6 dBA	7 dBA	8 dBA	9 dBA	10 dBA	11 dBA	12 dBA	13 dBA	14 dBA	15 dBA
			Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding		Shielding	Shielding	Shielding		Shielding	Shielding
Feet	Meters	<b>Ground Effect</b>	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	LeqdBA	Leq dBA	_	Leq dBA	Leq dBA
50	15.2		55	54	53	52	51	50	49	48	47		45	44	43	42	41	40
60	18.3	0.5	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38
70	21.3	0.5	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36
80		0.5	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35
90	27.4	0.5	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34
100	30.5	0.5	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33
110	33.5	0.5	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
120	36.6	0.5	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
130	39.6	0.5	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
140	42.7	0.5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
150	45.7	0.5	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
160	48.8	0.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
170	51.8	0.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
180	54.9	0.5	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
190	57.9	0.5	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
200		0.5	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
210		0.5	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
220		0.5	39	38	37	36	35	34	33	32	31		29	28	27	26	25	24
230		0.5	39	38	37	36	35		33	32			29	28	27	26	25	24
240		0.5	38	37	36	35	34	33	32	31		29	28	27	26	25	24	23
250		0.5	38	37	36	35	34	33	32	31		29	28	27	26	25	24	23
260		0.5	37	36	35	34	33	32	31	30	29		27	26	25	24	23	22
270		0.5	37	36	35	34	33	32	31	30	29		27	26	25	24	23	22
280		0.5	36	35	34	33	32	31	30	29	28		26	25	24	23	22	21
290		0.5	36	35	34	33	32	31	30	29	28		26	25	24	23	22	21
300	91.4	0.5	36	35	34	33	32	31	30	29		27	26	25	24	23	22	21
310			35	34	33	32	31	30	29	28	27	20	25	24	23	22	21	20
320		0.5	35	34	33	32	31		29	28			25	24	23	22	21	20
330			35	34	33		31		29	28				24		22		20
340			34	33	32	31	30		28	27			24	23	22	21	20	19
350			34	33	32	31	30		28	27			24	23	22	21	20	19
360			34	33	32	31	30	29	28	27			24	23	22	21	20	19
370	112.8	0.5	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18

#### L<sub>eq</sub> at 660 feet dBA L<sub>Max</sub> at 660 feet dBA

		Noise Level Calcula	ation Prior to	Implementat	ion of Noise A	ttenuation Ro	equirements			
					Distance to					
		Reference (dBA)		Usage	Receptor	Ground	Shielding	Calculat	ed (dBA)	
No.	<b>Equipment Description</b>	50 ft Lmax	Quantity	Factor <sup>1</sup>	( <b>ft</b> )	Effect	(dBA)	Lmax	Leq	Energy
1	Pavers	86	1	40	810	0.5	0	55.8	51.8	150755.253
2	Rollers	80	2	40	810	0.5	0	52.8	48.8	75736.0151
3	Paving Equipment	80	2	40	810	0.5	0	52.8	48.8	75736.0151
Source: MD	Acoustics, January 2022.						Lmax*	58	Leq	55
1- Percentage	e of time that a piece of equipment	nt is operating at full pov	wer.				Lw	89	Lw	86

dBA – A-weighted Decibels

Lmax- Maximum Level

Leq- Equivalent Level

Leq- Equiva	lent Level																	
			No	1 dBA	2 dBA	3 dBA	4 dBA	5 dBA	6 dBA	7 dBA	8 dBA	9 dBA	10 dBA	11 dBA	12 dBA	13 dBA	14 dBA	15 dBA
			Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding	Shielding		Shielding		Shielding	Shielding
Feet	Meters	<b>Ground Effect</b>	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	Leq dBA	0	Leq dBA	Leq dBA	0	Leq dBA	LeqdBA	Leq dBA	0	Leq dBA	Leq dBA
50	15.2	0.5	55	54	53	52		50		48	47			44	43	42	41	40
60	18.3		53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38
70	21.3		51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36
80	24.4	0.5	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35
90	27.4	0.5	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33
100	30.5	0.5	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
110	33.5	0.5	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
120	36.6	0.5	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
130	39.6	0.5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
140	42.7	0.5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
150	45.7	0.5	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
160	48.8	0.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
170	51.8	0.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
180	54.9	0.5	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
190	57.9	0.5	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
200	61.0		40	39	38	37	36	35	34	33	32		30	29	28	27	26	25
210	64.0	0.5	39	38	37	36	35	34	33	32	31		29	28	27	26	25	24
220	67.1	0.5	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
230	70.1	0.5	38	37	36	35	34	33	32	31	30			27	26	25	24	23
240	73.1	0.5	38	37	36	35	34	33	32	31	30			27	26	25	24	23
250	76.2		37	36	35	34	33	32	31	30	29			26		24	23	22
260	79.2		37	36	35	34	33	32	31	30	29			26	25	24	23	22
270	82.3		36	35	34	33	32	31	30	29	28			25	24	23	22	21
280	85.3		36	35	34	33	32	31	30	29	28			25	24	23	22	21
290	88.4		36	35	34	33	32	31	30	29	28			25	24	23	22	21
300	91.4	0.5	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
310	94.5	0.5	35	34	33	32	31	30	29	28	27	26		24	23	22	21	20
320	97.5			34	33			30		28				24		22	21	20
330	100.6			33	32		30	29						23		21	20	19
340	103.6			33	32	31	30	29	28	27				23	22	21	20	19
350	106.7			33	32	31	30	29	28	27	26			23	22	21	20	19
360	109.7			32	31	30	29	28	27	26	25			22	21	20	19	18
370	112.8	0.5	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18

### Appendix 4

## Clinton Keith Corporate Center Trip Generation Analysis, City of Wildomar

TJW ENGINEERING, INC.

TRAFFIC ENGINEERING & TRANSPORTATION PLANNING CONSULTANTS

January 18, 2023

Mr. Bryan Bentrott SUMMIT DEVELOPMENT CORPORATION 190 Newport Center Drive, Suite 220 Newport Beach, CA 92660

#### SUBJECT: Clinton Keith Corporate Center Trip Generation Analysis, City of Wildomar

Dear Mr. Bentrott,

*TJW Engineering, Inc.* (TJW) is pleased to submit this Trip Generation Analysis for Clinton Keith Corporate Center project located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar. The purpose of this memorandum is to evaluate the Project's trip generation, compare it to the previously approved Tentative Parcel Map 36492 (July 2013), and determine if further traffic analysis is required.

#### Project Description

The Project is located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar. The Tentative Parcel Map (TPM) 36492 proposed business, office, and retail land uses for a total of 391,140 square feet. Since the approval of the project, modifications have been made to the proposed project. The project is now comprised of retail and industrial uses for a total of 294,080 square feet.

Access will be provided along all adjacent frontage streets including Clinton Keith, Elizabeth Lane, Bunny Trail, and Yamas Drive. The attached site plan illustrates truck access to and from these local streets and onsite turning and circulation.

#### Site Plan and Trip Generation Comparison

The TPM 36492 proposed site plan (attached for reference) from the Traffic Impact Analysis Report (July 2013) consisted of the following land uses:

- Total area 391,140 Square Feet (SF)
  - o Business Park 294,900 SF
  - $\circ~$  General Office Building 42,420 SF
  - $\circ$   $\,$  Medical Dental Office Building 31,420 SF  $\,$
  - Shopping Center 19,400 SF
  - Fast-Food Restaurant with Drive-Through 3,000 SF

Mr. Bentrott Clinton Keith Corporate Center Trip Gen Analysis January 18, 2023 Page 2

The revised site plan (attached for reference) includes the following land uses:

- Total area 294,080 SF
  - Retail Building 32,260 SF
  - Industrial Building 261,820 SF

To provide consistency, the trip generation for the previously proposed site plan and the revised site plan was determined using the latest edition of the Institute of Transportation Engineers Trip Generation Manual (11<sup>th</sup> Edition). The attached table provides a summary of the proposed project trips for both the previously proposed land uses and the revised site plan.

It should be noted, the site plan's intended use is shifting from office development to industrial development. The trip patterns and distributions would differ in which industrial development generally provides more heavy truck usage than passenger vehicle usage associated with office developments. As a result, the trip distribution would more heavily utilize truck routes and freeways than local and collector streets. Of particular note, the revised site plan is anticipated to result in heavier trip distribution to and from Highway 15 to the west of the project and Highway 215 to the east of the project and fewer trips to local collector streets.

#### **Summary**

The peak hour trip generation decreases by 350 trips in the AM peak hour, decreases by 287 trips in the PM peak hour, and decreases by 3,628 daily trips. As the proposed site plan would result in fewer trips than the previously approved site plan, the revised site plan would not require additional traffic analysis.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,

The Salt

Thomas Wheat, PE, TE President

Registered Civil Engineer #69467 Registered Traffic Engineer #2565



David Chew, PTP Transportation Planner

#### Previously Proposed Site Plan (2013)

Proposed Land Use <sup>1</sup> Qty			Daily Trips (ADTs)			А	M Peak Hou	ır			Р	M Peak Hou	ır		Pace		
	Qty	Unit <sup>2</sup>	Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume			rass-by // reduction		
			nate	volume	nate	m.out spire	In	Out	Total	nate	m.out spire	In	Out	Total	AM	PM	Daily
Business Park (770)	294.90	TSF	12.44	3,669	1.35	85:15	339	60	399	1.22	26:74	94	266	360			
General Office Building (710)	42.42	TSF	10.84	460	1.52	88:12	57	8	65	1.44	17:83	11	51	62			
Medical Dental Office Building (720)	31.42	TSF	36.00	1,131	3.10	79:21	77	21	98	3.93	30:70	37	87	124			
Shopping Center (822)	19.40	TSF	54.45	1,056	2.36	60:40	28	18	46	6.59	50:50	64	64	128			
Fast-Food with Drive-Through (934)	3.00	TSF	467.48	1,402	44.61	51:49	68	66	134	33.03	52:48	52	48	100	50%	55%	50%
Sub Total				7,718			570	172	742			257	517	774			
Pass-By Trips				-701			-34	-33	-67			-29	-26	-55			
Net Total				7,017			536	139	675			229	490	719			

1: Rates from ITE Trip Generation (11th Edition, 2021)

2: TSF = Thousand Square Feet

#### Revised Site Plan (2023)

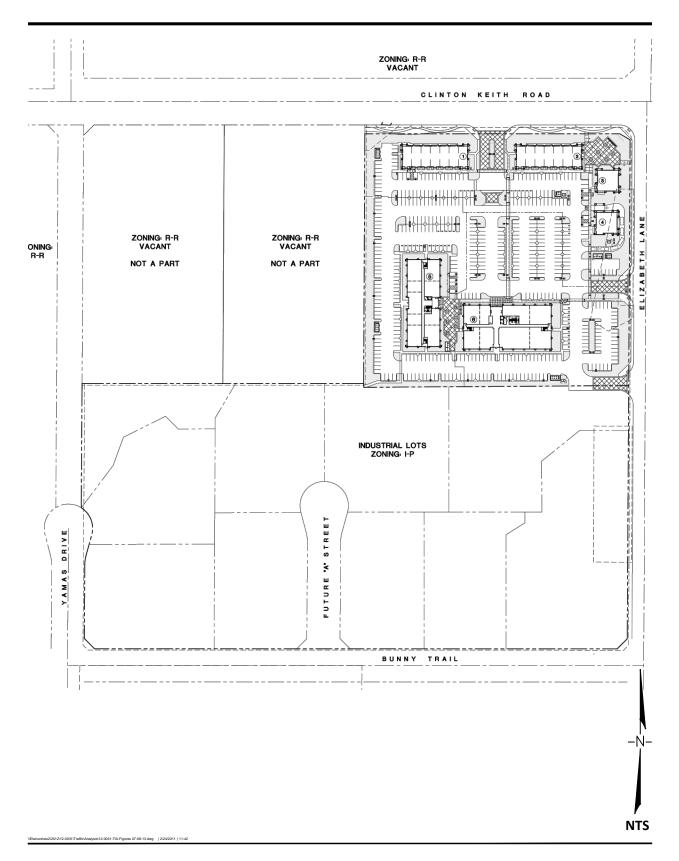
			Daily Tri	ps (ADTs)		A	M Peak Hou	ır			P	M Peak Hou	ır		Pass	-By % Podu	ction
Proposed Land Use <sup>1</sup>	Qty	Unit <sup>2,3</sup>	Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume			Pass-By % Reduction		
			Rate			in:Out spiit	In	Out	Total	Nate	m.out spire	In	Out	Total	AM	PM	Daily
Shopping Center (822)	32.26	TSF	54.45	1,757	2.36	60:40	46	31	77	6.59	50:50	106	106	212			
General Industrial (110)	261.82	TSF	4.87	1,275	0.74	88:12	171	23	194	0.65	14:86	24	147	171			
Passenger Vehicles (78%) <sup>3</sup>	1.000	PCE <sup>3</sup>		995			133	18	151			19	115	134			
2-Axle Trucks (8%) <sup>3</sup>	1.500	PCE <sup>3</sup>		153			20	3	23			3	18	21			
3-Axle Trucks (4%) <sup>3</sup>	2.000	PCE <sup>3</sup>		102			14	2	16			2	12	14			
4-Axle Trucks (10%) <sup>3</sup>	3.000	PCE <sup>3</sup>		383			51	7	58			7	44	51			
PCE Sub Total				3,389			265	60	325			137	295	432			
Pass-By Trips				0			0	0	0			0	0	0			
PCE Net Total				3,389			265	60	325			137	295	432			

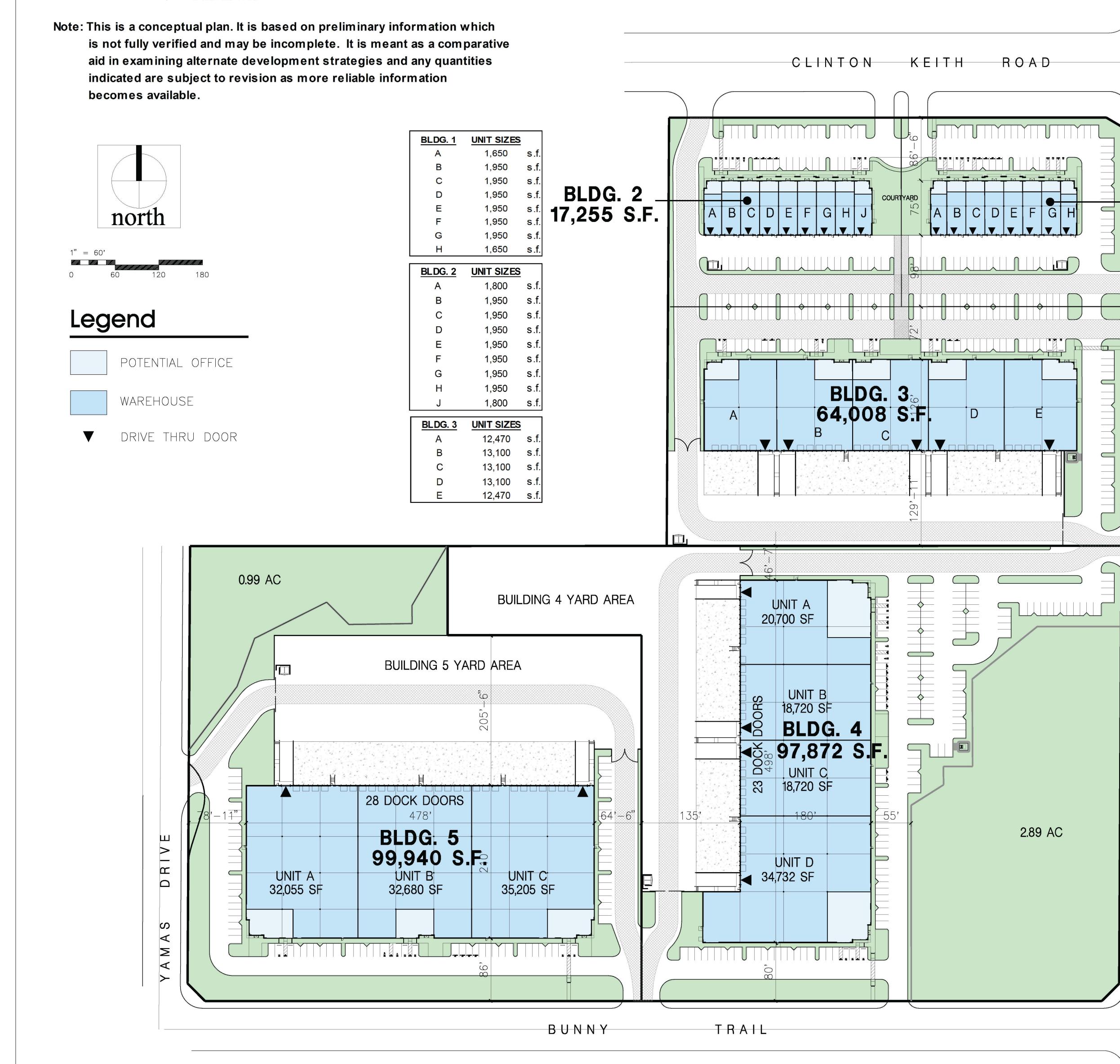
1: Rates from ITE Trip Generation (11th Edition, 2021)

2: TSF = Thousand Square Feet

3: PCE=Passenger Car Equivalent; rates based on Fontana Truck Study 2003 for Industrial land use and County of Riverside TIA Guidelines 2020







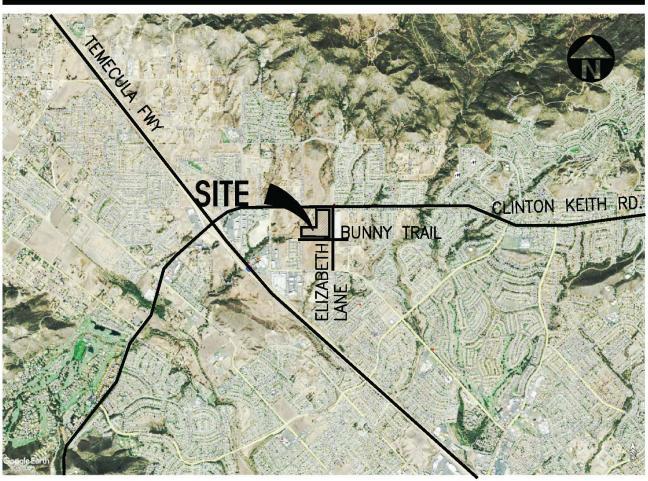


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## Aerial Map



15,005 S.F.

BLDG. 1

# **Tabulation**

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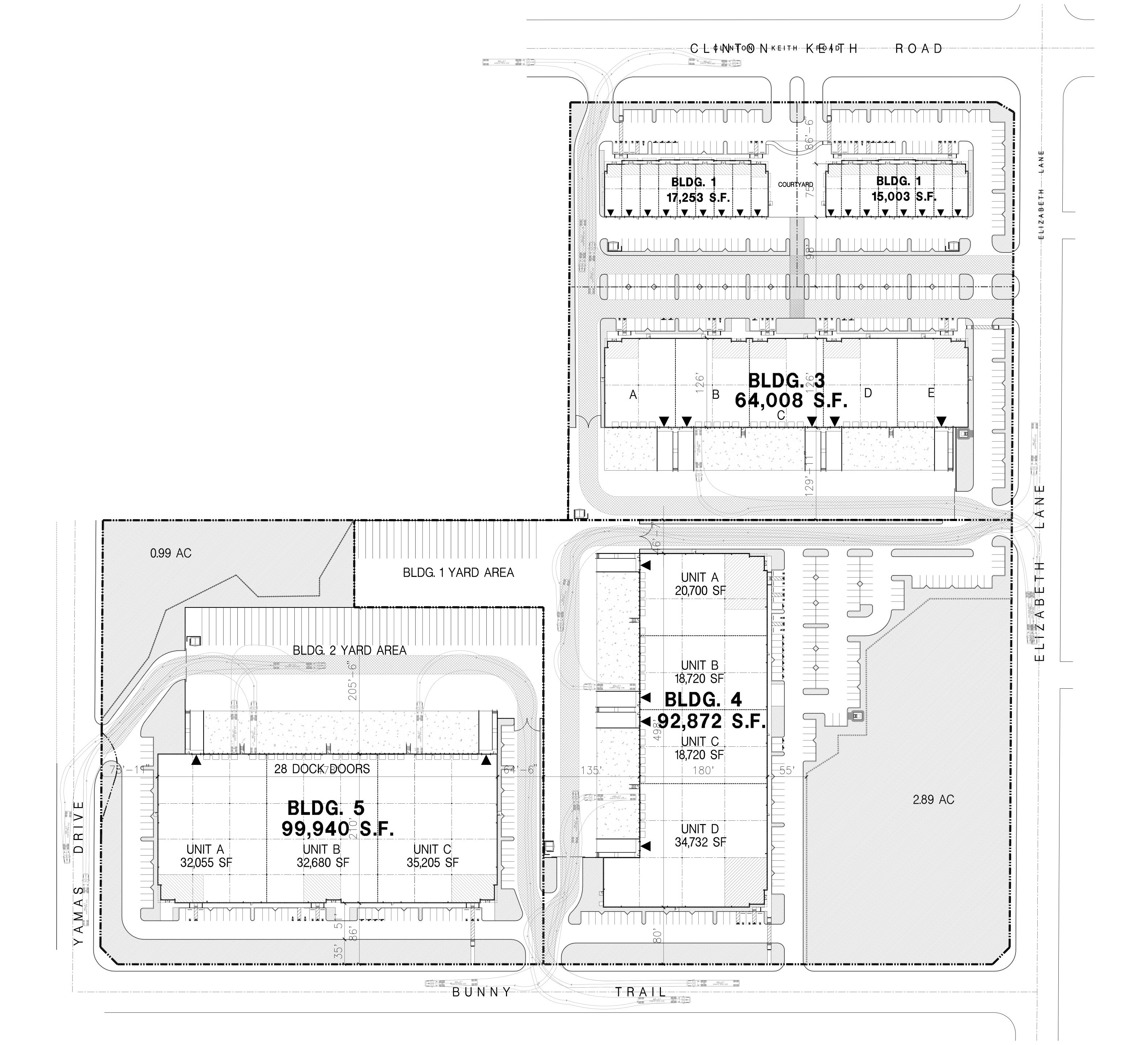
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	BLDG. 1	BLDG. 2	BLDG. 3	BLDG. 4	BLDG. 5	TOTAL	
SITE AREA							
In s.f.	79,025	82,490	203,021	386,612	314,776	1,065,924	s.f.
In acres	1.81	1.89	4.66	8.88	7.23	24.47	ac
BUILDING AREA							
Office	3,000	3,000	5,000	5,000	5,000	21,000	s.f.
Office - Mezzanine	0	0	0	5,000	0	5,000	s.f.
Warehouse	12,005	14,255	59,008	87,872	94,940	268,080	s.f.
TOTAL	15,005	17,255	64,008	97,872	99,940	294,080	s.f.
COVERAGE	19.0%	20.9%	31.5%	25.3%	31.7%	27.6%	
AUTO PARKING REQUIRED							
Office: 1/200 s.f.	15	15	25	50	25	130	stalls
Whse: 1/2,000 s.f.	6	7	30	44	47	134	stalls
TOTAL	21	22	55	94	72	264	stalls
AUTO PARKING PROVIDED							
Standard(9' x 18')	81	88	97	144	76	486	stalls
ZONING ORDINANCE FOR CITY	<u>Y</u>						
Zoning Designation - Industr	ial Park (IP)						
MAXIMUM BUILDING HEIGHT	ALLOWED						
Height - 35', exceed 35' shal	ll setback 2' fo	r each foot.	Max. 50'				
MAXIMUM FLOOR AREA RAT	<u>10</u>						
FAR - to be verify							
LANDSCAPE REQUIREMENT							
Percentage - 15%							
LANDSCAPE PROVIDED							
Percentage	23.1%	20.5%	9.7%	41.6%	26.8%	28.2%	
ln s.f.	18,293	16,927	19,745	160,800	84,463	300,228	s.f.
SETBACKS							
Building	Landscape						
Front / Street - 25'	10'						
Side - 10' (2 sides combine)							
Rear - 15'							
Abutts R zone - 50'	20'						







### Appendix 5

## <u>Clinton Keith Corporate Center VMT Screening, City of</u> <u>Wildomar</u>



TRAFFIC ENGINEERING & TRANSPORTATION PLANNING CONSULTANTS

January 18, 2023

Mr. Bryan Bentrott SUMMIT DEVELOPMENT CORPORATION 190 Newport Center Drive, Suite 220 Newport Beach, CA 92660

#### SUBJECT: Clinton Keith Corporate Center VMT Screening, City of Wildomar

Dear Mr. Bentrott,

*TJW Engineering, Inc.* (TJW) is pleased to submit this VMT Screening for the Clinton Keith Corporate Center project located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar. The proposed project includes 32,260 square feet (SF) of retail land use and 261,820 SF of industrial land use. A site plan is attached for reference. The purpose of this memorandum is to summarize the project's VMT Screening.

#### Proposed Project

The Project is located at the southwest corner of Clinton Keith Road and Elizabeth Lane in the City of Wildomar. The Tentative Parcel Map (TPM) 36492 proposed business, office, and retail land uses for a total of 391,140 square feet. Since the approval of the project, modifications have been made to the proposed project. The project is now comprised of retail and industrial uses for a total of 294,080 square feet.

#### Vehicle Miles Traveled (VMT) Screening

Senate Bill (SB) 743 was adopted in 2013 requiring the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within the California Environmental Quality Act (CEQA). For land use projects, OPR has identified Vehicle Miles Traveled (VMT) as the new metric for transportation analysis under CEQA. The regulatory changes to the CEQA guidelines that implement SB 743 were approved on December 28<sup>th</sup>, 2018 with an implementation date of July 1<sup>st</sup>, 2020 as the new metric.

As the project falls within the City of Wildomar jurisdiction, the City of Wildomar adopted VMT CEQA Threshold Policy Guidelines (June 2020) was consulted. The document outlines guidelines for CEQA analysis including screening criteria and requirements for VMT assessment of land use projects. The VMT guidelines provide several screening criteria for projects. Mr. Bentrott Clinton Keith Corporate Center VMT Screening January 18, 2023 Page 2

The City of Wildomar Threshold Policy Guidelines (June 2020) indicates projects generating less than 110 trips per day are assumed to have a "de minimis" effect on VMT and is screened from further VMT analysis. To estimate the project's anticipated trip generation, and to provide consistency, the trip generation for the previously proposed site plan and the revised site plan was determined using the latest edition of the Institute of Transportation Engineers Trip Generation Manual (11<sup>th</sup> Edition). The attached table provides a summary of the proposed project trips for both the previously proposed land uses and the revised site plan. The proposed project will generate fewer daily trips than the previously approved Tentative Parcel Map 36492 (July 2013) and therefore would generate less than 110 trips per day. As a result, the proposed project is screened from a VMT analysis and is presumed to have a less-than-significant impact.

#### <u>Summary</u>

This memorandum provides an overview of the trip generation analysis for the proposed project. Based on the City of Wildomar Threshold Policy Guidelines (June 2020), the proposed project generates less than 110 daily trips and is screened from VMT analysis. Consistent with the City guidelines, the proposed project does not require additional VMT analysis.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,

The Oalt

Thomas Wheat, PE, TE President

Registered Civil Engineer #69467 Registered Traffic Engineer #2565





David Chew, PTP Transportation Planner

#### Previously Proposed Site Plan (2013)

Proposed Land Use <sup>1</sup> Qty			Daily Trips (ADTs)			А	M Peak Hou	ır			Р	M Peak Hou	ır		Pace		
	Qty	Unit <sup>2</sup>	Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume			rass-by // reduction		
			nate	volume	nate	m.out spire	In	Out	Total	nute	m.out spire	In	Out	Total	AM	PM	Daily
Business Park (770)	294.90	TSF	12.44	3,669	1.35	85:15	339	60	399	1.22	26:74	94	266	360			
General Office Building (710)	42.42	TSF	10.84	460	1.52	88:12	57	8	65	1.44	17:83	11	51	62			
Medical Dental Office Building (720)	31.42	TSF	36.00	1,131	3.10	79:21	77	21	98	3.93	30:70	37	87	124			
Shopping Center (822)	19.40	TSF	54.45	1,056	2.36	60:40	28	18	46	6.59	50:50	64	64	128			
Fast-Food with Drive-Through (934)	3.00	TSF	467.48	1,402	44.61	51:49	68	66	134	33.03	52:48	52	48	100	50%	55%	50%
Sub Total				7,718			570	172	742			257	517	774			
Pass-By Trips				-701			-34	-33	-67			-29	-26	-55			
Net Total				7,017			536	139	675			229	490	719			

1: Rates from ITE Trip Generation (11th Edition, 2021)

2: TSF = Thousand Square Feet

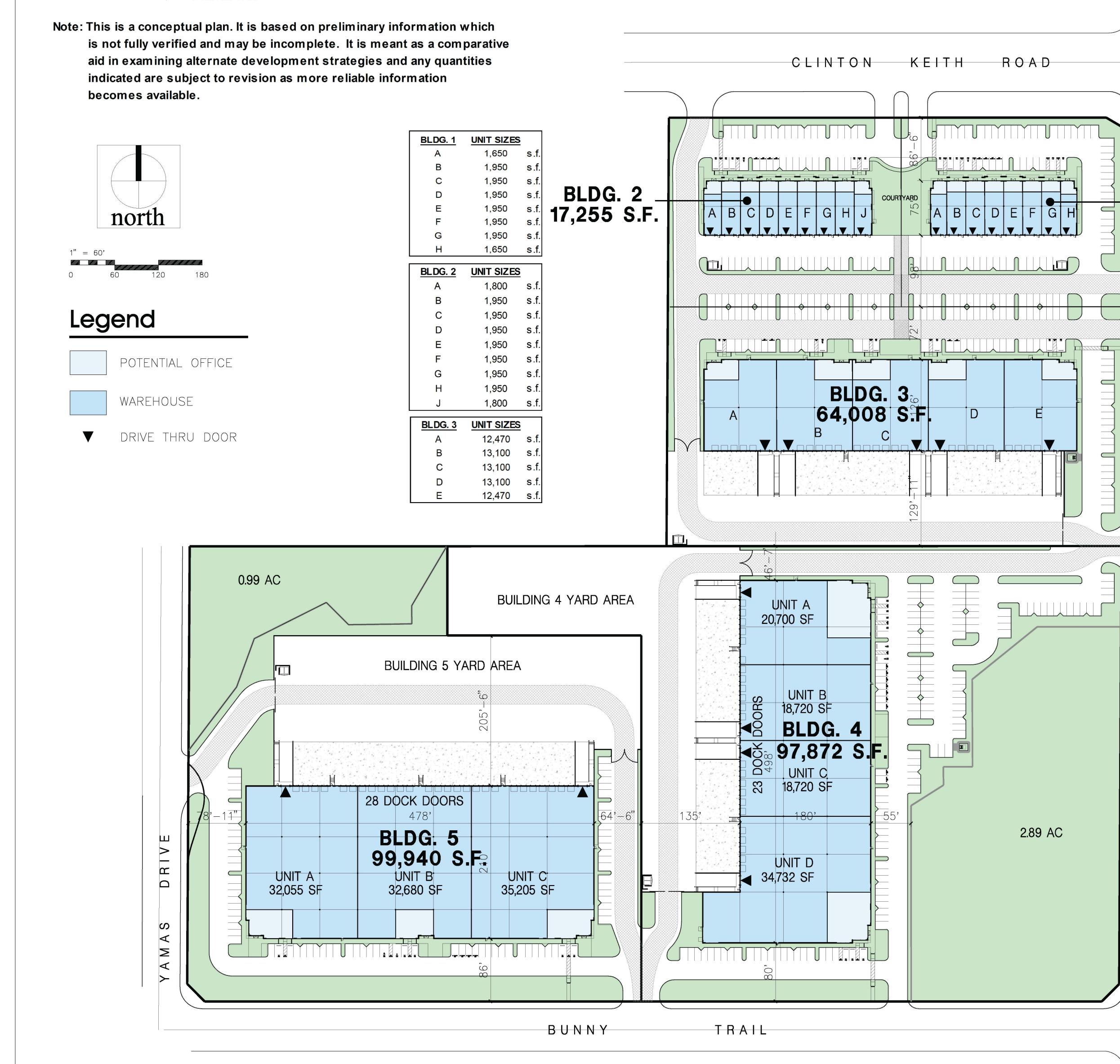
#### Revised Site Plan (2023)

			Daily Tri	ps (ADTs)		A	M Peak Hou	ır			P	M Peak Hou	ır		Pass	-By % Podu	ction
Proposed Land Use <sup>1</sup>	Qty	Unit <sup>2,3</sup>	Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume			Pass-By % Reduction		
			Rate			in:Out spiit	In	Out	Total	Nate	m.out spire	In	Out	Total	AM	PM	Daily
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General Industrial (110)	261.82	TSF	4.87	1,275	0.74	88:12	171	23	194	0.65	14:86	24	147	171			
Passenger Vehicles (78%) <sup>3</sup>	1.000	PCE <sup>3</sup>		995			133	18	151			19	115	134			
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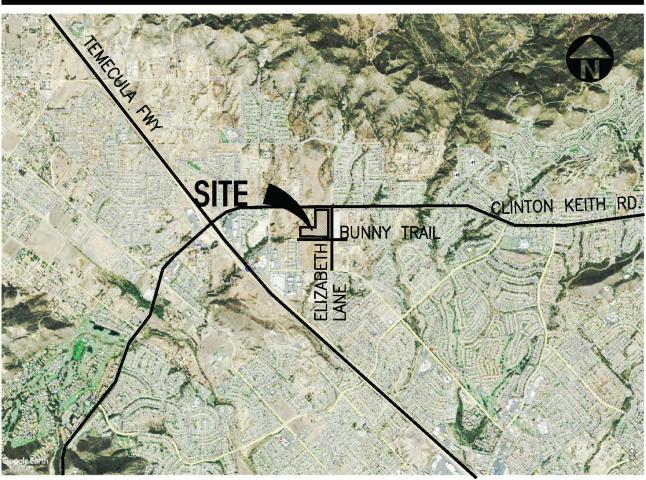


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## Aerial Map



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	BLDG. 1	BLDG. 2	BLDG. 3	BLDG. 4	BLDG. 5	TOTAL	
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ln s.f.	79,025	82,490	203,021	386 <mark>,</mark> 612	314,776	1,065,924	s.f.
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Office - Mezzanine	0	0	0	5,000	0	5,000	s.f.
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TOTAL	21	22	55	94	72	264	stalls
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Zoning Designation - Indust	rial Park (IP)						
MAXIMUM BUILDING HEIGHT	ALLOWED						
Height - 35', exceed 35' sha	all setback 2' fo	r each foot.	Max. 50'				
MAXIMUM FLOOR AREA RAT	<u>'IO</u>						
FAR - to be verify							
LANDSCAPE REQUIREMENT							
Percentage - 15%							
LANDSCAPE PROVIDED							
Percentage	23.1%	20.5%	9.7%	41.6%	26.8%	28.2%	
ln s.f.	18,293	16,927	19,745	160,800	84,463	300,228	s.f.
SETBACKS							
Building	Landscape						
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Side - 10' (2 sides combine)	)						
Rear - 15'							
Abutts R zone - 50'	20'						



