



Rincon Consultants, Inc.

1980 Orange Tree Lane
Suite 105
Redlands, California 92374

909 253 0705 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

March 15, 2021
Project No. 20-10104

Subject: Response to Colton Joint Unified School District Comments on the Bloomington Center Project the Draft Initial Study-Mitigated Negative Declaration

This memorandum includes responses to comments received from the Colton Joint Unified School District (CJUSD) during the circulation of the Draft Initial Study-Mitigated Negative Declaration (IS-MND) prepared for the P-2019-00079 Bloomington Center Project (project).

The Draft IS-MND was circulated for a 30-day public review period that began on October 14, 2020 and ended on November 13, 2020. The County of San Bernardino (County) received a comment letter from Owen Chang, Director of Facilities/Energy Management, Colton Joint Unified School District, on November 11, 2020.

The responses are presented directly below, with the CJUSD letter presented after the responses.

Letter A

COMMENTER: Owen Chang, Director of Facilities/Energy Management, Colton Joint Unified School District (CJUSD)

DATE: November 11, 2020

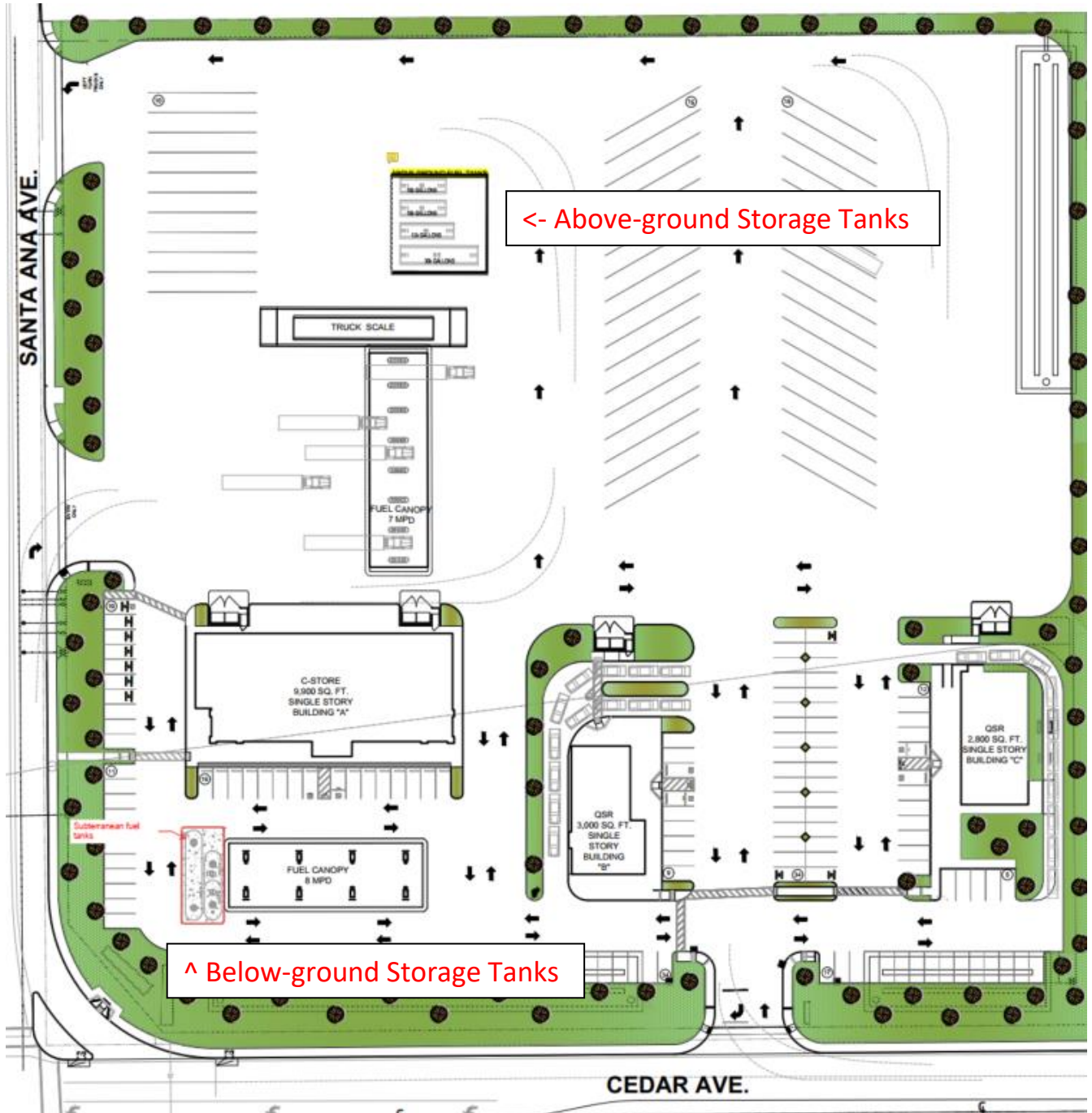
Response A-1

The commenter, representing CJUSD, acknowledges receipt of the Draft IS-MND prepared for the Bloomington Center Project, and provides a summary of the project description. This comment is noted, and no additional changes to the Draft IS-MND are required.

Response A-2

See Figure A-1, below, for a site plan that displays the current positioning of the fuel tanks. Some tanks will be above ground on the eastern portion of the site, and would be screened from surrounding uses. Other tanks would be underground located next to the fueling stations on the western portion of the site. In regards to maintenance measure, the project would adhere to the Certified Unified Program Agency requirements (CUPA is the Hazardous Materials Division of the San Bernardino County Fire Department).

Figure A-1 Storage Tank Locations



Response A-3

The commenter notes a discrepancy in the project description specific to proposed Lots 4 and 5; wherein the project description notes that no development would occur on Lots 4 and 5, but the site plan shows development of a surface parking lot and on-site vehicular circulation drive aisles.

The project description is modified as follows:

3. A Tentative Parcel Map (TPM) to divide the parcel into 6 commercial lots:
 - Lot 1: 9,900 sf. Convenience Store and 8 pump Fuel Station – 1.47 acres
 - Lot 2: 3,000 sf. Quick Serve Drive-thru Restaurant – 0.80 acres
 - Lot 3: 2,800 sf. Quick Serve Drive-thru Restaurant – 1.03 acres
 - Lot 4: ~~No Development~~ On-site vehicular drive aisle - 0.83 acres
 - Lot 5: ~~No Development~~ On-site truck parking – 0.57 acres
 - Lot 6: Truck fuel canopy with 6 pumps, truck scale and fuel tanks – 3.74 acres

This comment does not alter the conclusions of the IS-MND.

Response A-4

The commenter shares an opinion that the discussion for threshold ‘c’ in Section I, Aesthetics, should expand on how the community of Bloomington meets the definition of an “urbanized area,” pursuant to California Public Resources Codes Section 21071. The unincorporated community of Bloomington is a US Census Designated Place, bordered by the Cities of Fontana, Rialto, and Colton which have estimated 2019 populations of 214,500, 103,500, and 54,800 residents, respectively¹. The combined total populations of Bloomington, Fontana, Rialto, and Colton exceed 100,000 residents. The population density of Bloomington is 3,980 persons per square mile, which is greater than the density of Colton (3,400 persons per square mile) but less than the densities of Fontana (4,620 persons per square mile) and Rialto (4,440 persons per square mile). Therefore, the unincorporated community of Bloomington meets the definition of an “urbanized area” pursuant to California Public Resources Code Section 21071 (b)(1)(A).

This comment does not alter the conclusions of the IS-MND that the project would have a less than significant impact on project consistency with applicable zoning and other regulations governing scenic quality.

¹ US Census Bureau. 2020. QuickFacts: Colton city, California; Rialto city, California; Fontana city, California; Bloomington CDP, California. Available online: <https://www.census.gov/quickfacts/fact/table/coltoncitycalifornia,rialtocitycalifornia,fontanacitycalifornia,bloomingtoncdpcalifornia/PST045219>. Accessed November 2020.

Response A-5

The commenter states that the 5-acre localized significance thresholds (LSTs) used were not correct. However, per the referenced South Coast Air Quality Management District (SCAQMD) Fact Sheet methodology for determining which LSTs to use, the 5-acre LSTs are appropriate.

Per that Fact Sheet, 0.5 acre per day are to be assigned to each tractor, grader or dozer used, and 1.0 acre per day are to be assigned for each scraper. In California Emissions Estimator Model (CalEEMod), the site preparation phase would use three dozers and four tractors, which would equate to 3.5 acres using the Fact Sheet methodology. The Fact Sheet does not provide guidance on whether to round up or round down to the 2-acre or 5-acre LSTs in this scenario. Given that the site is 8.9 acres, and that grading would occur over this distance multiple times, is it reasonable to assume that 3.5 acres is on the lower end of estimates for daily grading coverage. It is reasonable that seven pieces of equipment operating during one day would be on a wide swath of the project (i.e., seven pieces of equipment do not operate within a tight space together). Therefore, using the 5-acre LSTs is most appropriate for the project during site preparation, which is when the highest emissions occur that are shown in Table 5 of the Draft IS-MND.

The grading phase would use one excavator, one grader, one dozer, and three tractors, which would equate to 3.0 acres using the Fact Sheet methodology. As this is closer to 2.0 acres than 5.0 acres, the project's grading phase emissions are compared to the 2-acre LSTs are shown below. As shown below in Table A-1, these emissions would not exceed the 2-acre LSTs.

Table A-1 Project Construction Local Criteria Pollutant Emissions - Grading

	Onsite Pollutant Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Grading	24.74	15.86	4.11	2.58
SCAQMD LSTs (2-acre)	170	972	7	8
Threshold Exceeded?	No	No	No	No

This comment does not alter the conclusions of the IS-MND.

Response A-6

The commenter states that the Draft IS-MND does not sufficiently address cumulative air quality impacts to sensitive receptors in environmental justice communities.

Environmental justice is not an issue that needs to be addressed under the California Environmental Quality Act (CEQA), and is therefore not analyzed in the IS-MND. It should be noted that the regional and local analysis that occurs as part of the air quality analysis is cumulative in nature. In other words, the regional and local SCAQMD standards are determined with consideration of all pollutants in the regional and local area. As described in the Draft IS-MND, regional and local emissions during construction would not violate an air quality standard or contribute substantially to an existing or projected air quality violation; and would be less than significant.

This comment does not alter the conclusions of the IS-MND.

Response A-7

The commenter notes that the County is in the process of adopting an updated Countywide Plan. The updated Countywide Plan includes Policy HZ-3.1, which requires health risk assessments (HRAs) to evaluate the impacts of truck traffic from the project to freeways. The commenter states that the HRA methodology should be revised to be consistent with this policy.

Pursuant to Section 15004(d) of the *CEQA Guidelines*, the environmental document preparation and review should be coordinated in a timely fashion with the existing planning, review, and project approval processes being used by each public agency. As such, the evaluation contained in the Draft IS-MND is based on the existing planning and review standards in place at the time of preparation. While the County formally adopted the updated Countywide Plan on October 27, 2020—nearly two weeks after the public review period for the Draft IS-MND had commenced—the policy cited by the commenter was a draft policy which was not yet formally adopted when the Draft IS-MND was prepared. Therefore, the analysis in the Draft IS-MND was prepared in accordance with the adopted policies in place at the time of its preparation.

Furthermore, although the HRA does not evaluate truck traffic from the project site to the nearest freeway (Interstate-10, I-10, approximately 0.9 mile to the north), the analysis does evaluate truck traffic on local roadways to account for diesel particulate matter (DPM) emissions from trucks accessing and egressing from the site. As noted by the commenter, DPM emissions associated with truck traffic along Cedar Avenue and Santa Ana Avenue within 1,000 feet of the project site were included in the air dispersion and health risk modeling. Beyond this distance, it is not anticipated that truck emissions on local roadways en route to or from the freeway would substantially affect the localized health risk at the Maximally Exposed Individual Receptor (MEIR) identified in the HRA. Health risk at the MEIR is driven largely by the location's proximity to the project site and emissions associated with on-site circulation and truck idling. Consequently, incorporating off-site emissions along local roadways beyond 1,000 feet from the project site to account for truck travel to and from I-10 (located nearly one mile north of the MEIR) would not be expected to substantially increase health risk at the MEIR or change the conclusions of the IS-MND.

Response A-8

The commenter states that the analysis of health risk from diesel-fueled trucks did not use the SCAQMD- and California Air Resources Board (CARB)-recommended risk tool, the Hotspots Analysis and Reporting Program (HARP), which incorporates the Office of Environmental Health Hazard Assessment (OEHHA) guidance for the use of age-sensitivity factors. As such, the commenter expresses concern that the Draft IS-MND underreports health risks associated diesel-fueled trucks.

As noted on page 29 of the Draft IS-MND, potential risk values associated with the project were quantified based on the U.S. Environmental Protection Agency's (USEPA) *Guidelines for Carcinogen Risk Assessment* (USEPA 2005) and the OEHHA's *Risk Assessment Guidelines* (OEHHA 2015). Specifically, the HRA relies upon the USEPA's guidance regarding the use of age-sensitivity factors, also known as early-life exposure adjustments. Under this guidance, age-sensitivity factors are only applied when the carcinogen in question has been shown to elicit a mutagenic mechanism of action, meaning it causes cancer through genetic mutation. As noted in the Draft IS-MND, DPM as a carcinogen has not been shown to elicit a mutagenic mechanism of action. As such, in accordance with USEPA guidance, age-sensitivity factors have not been applied to the health risk calculations contained in the IS-MND.

The commenter is correct in noting that the use of OEHHA’s methodology regarding early-life exposure, which applies age-sensitivity factors to all carcinogens regardless of their mechanism of action, results in a more conservative estimation of potential health risks associated with the project. However, simply because an approach is more conservative does not make it more scientifically appropriate. OEHHA guidance regarding age-sensitivity factors is not required for CEQA analyses, and the methodology employed in the Draft IS-MND has been applied by various lead agencies throughout the SCAQMD jurisdiction when assessing the potential health risk associated with DPM emissions.²³⁴⁵ Furthermore, the commenter’s concern regarding the potential underreporting of health risk in the Draft IS-MND is understandable, but unfounded. The analysis contained in the Draft IS-MND includes a number of conservative assumptions. For example, as a conservative simplifying assumption, the analysis presumes that residents would have the windows open sufficiently to equalize the concentration of pollutants between the indoor and outdoor environment, not accounting for any settling of DPM outside of residences on window screens, doors, or other surfaces. Furthermore, the analysis assumes diesel trucks at the project would idle for up to 15 minutes, even though idling of diesel-fueled commercial motor vehicles is limited to 5 minutes pursuant to CARB’s Diesel-Fueled Commercial Motor Vehicle Idling Airborne Toxic Control Measure. As a result of these conservative simplifying assumptions, the analysis in the Draft IS-MND likely over-estimates potential health risks associated with the project. Nevertheless, the health risks reported in the Draft IS-MND remain below SCAQMD health risk significance thresholds, and the project would result in a less than significant impact.

This comment does not alter the conclusions of the IS-MND.

Response A-9

The commenter states that the *Air Quality, Greenhouse Gas Emissions and Health Risk Assessment Impact Analysis for the Bloomington Commercial Center Project* (“air quality study,” Appendix A to the Draft IS-MND) describes a methodology used to calculate emissions of volatile organic compounds (VOCs) from the proposed gasoline dispensing facility but that such emissions are not employed in the calculation of health risks from the proposed gas station. Furthermore, the commenter notes a discrepancy between the maximum annual throughput of 3.6 million gallons of gasoline per year used in the VOC emissions calculations and 2.5 million gallons per year used in the gasoline dispensing facility screening health risk assessment. The commenter adds that the calculation of daily VOC emissions from the annual emissions reported is unclear and that there are discrepancies between the gasoline dispensing facility screening tool output and the description provided in the air quality study, specifically regarding the distance to receptors and the meteorological station used.

² Burbank, City of. 2019. 777 North Front Street Project – Construction Health Risk Assessment. Prepared by Air Quality Dynamics.

³ Fullerton, City of. 2020. Construction Health Risk Assessment Memorandum fore the Goodman Logistics Center Fullerton Project. Prepared by Urban Crossroads. Available online: <https://www.cityoffullerton.com/civicax/filebank/blobdload.aspx?BlobID=27903>

⁴ Ontario, City of. 2018. West Ontario Commerce Center Specific Plan, Final EIR. June 2018. Available online: https://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/Reports/environmental-reports/wocc_final_eir.pdf

⁵ Menifee, City of. Legado Specific Plan Final Environmental Impact Report. 2020. Available online: <https://cityofmenifee.us/DocumentCenter/View/10335/Legado-Final-EIR>

As described in detail in the air quality study, the air quality analysis prepared for the project includes separate calculations for VOC emissions from the proposed gasoline dispensing facility because the CalEEMod does not report VOC emissions created from the transfer and dispensing of gasoline. The VOC emissions calculations are based on the methodology provided in the California Air Pollution Control Officers Association (CAPCOA) *Gasoline Service Station Industrywide Risk Assessment Guidelines* and provide a reasonable worst-case emissions scenario. Section 6.2, *Gasoline Transfer and Dispensing VOC Modeling*, of the air quality study erroneously states that the 4,572 pounds (lbs) per year of VOC emissions would result in 9.94 lbs per day of VOC emissions from gasoline transfer and dispensing. The corrected daily VOC emissions from gasoline dispensing and transfer would equal approximately 12.53 lbs per day (4,572 lbs per year/365 days).

The VOC emissions calculations described above were prepared to more accurately compare the project's anticipated operational emissions to SCAQMD's operational VOC criteria pollutant threshold. For the purposes of analyzing project health risk impacts, however, SCAQMD's RiskTool V1.103 was used. The RiskTool V1.103 is a spreadsheet tool used to provide health risk screening values for various emissions sources, including gasoline dispensing facilities. By their nature, screening tools are intended to provide a conservative assessment of potential health risks in order to determine whether more refined, site-specific analysis is warranted. The RiskTool V1.103 analyzes health risks from gasoline dispensing facilities based on annual throughput, regional meteorological data, and the distance of receptors from the proposed facility. Receptors are conservatively assumed to be downwind of emissions sources. The RiskTool V1.103 does not require project-specific VOC emissions to determine its conservative, screening-level health risk value. As noted in the air quality study and under Threshold c of Section III, *Air Quality*, of the Draft IS-MND, the screening analysis for the gas station determined that potential health risks at the nearest receptor would remain below SCAQMD's health risk thresholds and a refined HRA for the gas station is not warranted. For this reason, the gasoline transfer and dispensing VOC emissions calculated in support the criteria pollutant analysis are not necessary to assess potential health risk from the gasoline dispensing facility.

The screening health risk value for the gasoline dispensing facility reported in the air quality study and Draft IS-MND was correctly based on a distance of 60 meters (146 feet) to the nearest receptor and the Fontana meteorological station. Additionally, the anticipated annual throughput of the gasoline dispensing facility has been revised in the screening analysis to be 3.6 million gallons per year, resulting in an increase in the screening-level maximum incremental cancer risk from 2.56 in one million to 3.68 in one million. Nevertheless, this value remains below SCAQMD's health risk threshold of 10 in one million. As such, the conclusions of the IS-MND have not changed, and impacts would remain less than significant.

This comment does not alter the conclusions of the IS-MND.

Response A-10

The commenter states that the Draft IS-MND should be revised to discuss the combined health risk to off-site receptors from both the project's diesel emissions and the gasoline dispensing facility, as both project activities would generate potential health risks.

The total operational health risk of the project must consider both health risk to off-site receptors posed by the proposed gasoline dispensing facility and the project's diesel emissions. Conservatively assuming the Maximally Exposed Individual Receptor for the project's diesel emissions is also exposed to the

maximum incremental cancer risk associated with the gasoline dispensing facility, the project would result in a combined maximum incremental excess cancer risk of 7.89 in one million (3.68 in one million from the gasoline dispensing facility + 4.21 in one million from the project's diesel emissions). This combined cancer risk from the project remains below the SCAQMD cancer risk threshold of 10 in one million.

SCAQMD's RiskTool does not provide non-cancer chronic or acute hazard indices for gasoline dispensing facilities, noting that such values are negligible relative to cancer risk. Furthermore, SCAQMD's Risk Assessment Procedures for Rules 1401, 1401.1 & 212 note that for a maximum permitted cancer risk of 10 in one million for gasoline dispensing facilities, non-cancer (chronic and acute) hazard indices are generally less than 0.1, and well below the recommended threshold of 1.0. As such, when combined with the non-cancer chronic health risk for the project's diesel emissions described above, the project's overall non-cancer chronic or acute health risks would not exceed the applicable SCAQMD threshold of 1.0. Combined health risk impacts from the project would be less than significant.

As noted above, health risks associated with the proposed gasoline dispensing facility and the project's diesel emissions would remain below SCAQMD health risk thresholds, and impacts would remain less than significant.

This comment does not affect the conclusion of the IS-MND that the project would have a less than significant impact on air quality and associated health risks from operation of the proposed uses.

Response A-11

The commenter states the greenhouse gas (GHG) threshold is not applicable as the County's CAP is not based upon Senate Bill 32 (SB 32) goals.

The comment has been noted; while the County's CAP is not based upon SB 32 goals, an alternative threshold is the SCAQMD's 3,000 MT CO₂e threshold for non-industrial projects which may be used in place of the County CAP threshold. The SCAQMD's 3,000 MT CO₂e threshold is not determined per Assembly Bill 32 (AB 32) or SB 32 goals, and was developed based upon substantial evidence that projects that exceed 3,000 MT CO₂e represent 90 percent of the GHG emissions in the region. In relation to 2040 and 2050 Countywide GHG emissions, this threshold is also used in Tables 5.7-8 and 5.7-9, of the Countywide Plan (CWP) Program Environmental Impact Report (EIR) referenced by the commenter. In addition, this threshold is used frequently in the County of San Bernardino and throughout the SCAQMD region.

Regarding SB 32 compliance, there are numerous State plans, policies, and regulations adopted to reduce GHG emissions. The principal State plan and policy is AB 32, the California Global Warming Solutions Act of 2006, and the follow up, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Pursuant to the SB 32 goal, the 2017 Scoping Plan was created to outline goals and measures for the state to achieve the reductions. The 2017 Scoping Plan's goals include reducing fossil fuel use and energy demand, and maximizing recycling and diversion from landfills. The project would be consistent with these goals through project design, which includes complying with the latest Title 24 Green Building Code and Building Efficiency Energy Standards, providing EV parking spaces and charging equipment, and complying with the Assembly Bill 341 (AB 341) waste diversion goals. Therefore, the project is consistent with the applicable GHG reduction strategies in the 2017 Scoping Plan.

Lastly, the commenter references the Final SAFE Rule and how it is not included in CalEEMod. To account for the effects of the Part One Rule, CARB released off-model adjustment factors on November 20, 2019 to adjust criteria air pollutant emissions outputs from the EMFAC model. These off-model adjustment factors are to be applied by multiplying the emissions calculated for light- and medium-duty vehicles by the adjustment factor. With the incorporation of these adjustment factors, operational emissions generated by light-duty automobiles, light-duty trucks, and medium-duty trucks associated with project-related vehicle trips at the year 2021, would be approximately 0.01 percent greater for ROG, 0.09 percent greater for particulate matter, 0.02 percent greater for NO_x, and 0.05 percent greater for CO (see Table A-2 below). These increases would have a negligible impact on overall operational emissions generated by the project and would not alter the significance of the project's operational emissions as discussed in the Draft IS-MND.

Table A-2 San Bernardino County EMFAC Criteria Pollutant SAFE Rule Adjustments

Pollutant	Daily Emissions (tons)			
	EMFAC	Adjusted	Difference	Change
TOG	5.68E+00	5.68E+00	8.30E-04	0.01%
PM	8.53E-02	8.53E-02	7.67E-05	0.09%
NOX	4.08E+00	4.08E+00	8.16E-04	0.02%
CO	4.96E+01	4.97E+01	2.48E-02	0.05%

The information stated above do not alter the conclusions of the IS-MND.

Response A-12

The commenter states the schools located nearest to the project site and states the Draft IS-MND needs to reevaluate the operation of a hazardous materials within 0.25 miles of an existing school, and that the project site is listed on the California Department of Toxic Substances Control's (DTSC) EnviroStor database. The schools nearest to the project site are Crestmore Elementary School (18870 Jurupa Avenue) located approximately 0.5 mile south of the project site; Walter Zimmermann Elementary School (11050 Linden Avenue) located approximately 0.25 mile west of the project site, and Slover Mountain High School (18829 Orange Street) located approximately 0.5 mile north of the project site. The project site is also adjacent to vacant properties owned by the Colton Joint Unified School District, for which development plans do not appear to be in place at this time. As described under Section IX.a and b of the Draft IS-MND, operation of the project would entail activities typical for gas stations, convenience stores, and restaurants, and the project would comply with applicable regulatory requirements for hazardous materials. Therefore, the project would not emit hazardous emissions or create significant hazards from hazardous materials within one-quarter mile of an existing or proposed school, and no impacts would occur.

Upon additional review of DTSC's EnviroStor database, the project site is listed on EnviroStor as part of a larger site located between Cedar Avenue and Larch Avenue (40 acres, High School – Cedar Avenue [36010018]). The High School – Cedar Avenue site was listed due to prior agricultural uses that may have used pesticides or herbicides containing heavy metals, carbamates and urea, organophosphates, and/or organochlorine compounds. However, the cleanup status of the High School – Cedar Avenue site is listed as "No Further Action as of 5/30/2002." DTSC issued a letter, dated May 30, 2002, confirming "neither an actual or potential release of hazardous materials nor the presence of a naturally occurring

hazardous material, which would pose a threat to human health or the environment under unrestricted land use, was indicated at the site. The PEA [Preliminary Endangerment Assessment] concludes that a further investigation of the site is not required.”

This comment does not alter the conclusions of the IS-MND that the project would have a less than significant impact on hazardous emissions or materials to schools located within 0.25 mile of the project site, nor that the project would have no impact on hazardous sites identified on the Cortese List.

Response A-13

The commenter states that the discussion for threshold ‘b’ in Section X, *Hydrology and Water Quality*, should discuss how the development of the project site with impervious surfaces would impact groundwater recharge.

A project-specific Geotechnical Investigation was prepared⁶, which included drilling eight exploratory boreholes to depths of approximately 10 to 51 feet below ground surface to evaluate the subsurface soil conditions. Groundwater was not encountered at the maximum explored depth of 51 feet below ground surface during the subsurface exploration; and the Geotechnical Investigation states that groundwater should not be a factor in the design or construction of the project based upon the depth to groundwater in the project vicinity. Furthermore, the project does not propose any additions of wells. In addition, and the project would be served by West Valley Water District (WVWD) whose supplies from the Riverside Arlington sub-basin are limited by the sub-basin’s adjudication.

The project would increase the amount of impervious surface on the site than compared to existing conditions. According to the project-specific Hydrology Study, the project site has two main drainage areas, which drain to the southwest down an existing slope and to the south (Black Gold Engineering 2020; included as Appendix E). Drainage improvements would be made on the project site as part of the project, and post-construction drainage would be directed toward Cedar Avenue which was recently improved with a curb and gutter. The proposed on-site drainage improvements were determined to be sufficient in managing the anticipated rain-event water flows.

Given the above considerations, the project’s impacts to its respective groundwater basin, supplies, or recharge would be less than significant. This comment does not change the conclusions of the IS-MND that the project would have a less than significant impact on groundwater supplies or recharge.

Response A-14

The project requires a General Plan Amendment (GPA) to change the land use/zoning from Bloomington/Single Residential-one acre minimum with Additional Agriculture (BL/RS-1/AA) to Bloomington/ General Commercial (BL/CG). This parcel was identified as one to be changed to (CG) with the adoption of the CWP update, which was formally adopted by the County Board of Supervisors on October 27, 2020. Following the adoption of the CWP update, the project site has a General Plan land use designation of CG; therefore, a GPA is not required as part of the project. Section 82.05 lists standards for commercial land use zoning districts; through the planning process with the County, the project has been designed and conditioned to be consistent with this section.

⁶ Sladden Engineering. 2019. Geotechnical Investigation, Proposed Mixed-use Development SEC Cedar Avenue & Santa Ana Avenue. September 17.

Response A-15

The commenter recommends identifying Crestmore Elementary School, located approximately 0.25 mile south of the project site, as a sensitive receiver, and to analyze project noise impacts to it.

At a distance of 100 feet, a dozer and an excavator would generate a noise level of 74.2 dBA Leq. This would be well below the Federal Transportation Administration (FTA) daytime threshold of 80 dBA Leq for an 8-hour period. In addition, with distance attenuation, this would result in a noise level of 51.8 dBA Leq at Crestmore Elementary School, also well below the limit. Therefore, through adherence to the limitation of allowable construction times provided in Section 83.01.080(g)(3) of the County Code and with noise levels below FTA construction noise standards, construction-related noise levels would not exceed noise standards and impacts would be less than significant at Crestmore Elementary School.

Regarding operational noise levels, at a distance of a quarter mile from the noise sources, without consideration of building attenuation or attenuation from the future project wall, operational noise sources would be:

- Rooftop HVAC: 24 dBA
- Parking Lot: 15 dBA
- Semi Truck: 39 dBA
- Drive Thru Speaker: 19 dBA
- Gas Station: 27 dBA

These noise sources would be negligible at the school; operation-related noise levels would not exceed noise standards and impacts would be less than significant at Crestmore Elementary School

This comment does not alter the conclusions of the IS-MND that the project would have a less than significant impact on noise during construction and operation for nearby schools.

Response A-16

The commenter request clarification on the (FHWA) model that was used to analyze the project. The FHWA Highway Traffic Noise Prediction Model (RD-77-108) was used to model traffic noise levels.

Response A-17

The commenter asks for clarification on the source of data used in Table 9, *Roadway Vehicle Mixes*, in the Noise and Vibration Study that was prepared for the project and included as Appendix F in the Draft IS-MND. The vehicle mixes were determined by Greg Tonkovich at Vista Environmental based upon typical vehicles mixes observed in southern California.

Response A-18

The commenter suggests using Federal Aviation Administration thresholds. Using the referenced thresholds, traffic noise would not exceed the standards. It should be noted that an error was discovered in the calculation for Santa Ana Avenue, east of Cedar Avenue. In the previous calculations, 120 percent of project traffic was assigned to this segment, leading to much higher noise levels than any other segment analyzed. This was an overestimate and unrealistic noise contribution from the project. In rereviewing Figure 9 of the traffic report, it was determined that 50 percent of project traffic would travel on this segment. The noise levels for this segment have been revised as shown in Table A-3.



Calculations are shown in Attachment 1. Traffic noise levels would not exceed the thresholds provided by the commentor.

Table A-3 Revised Traffic Noise Levels For Santa Ana Avenue, East of Cedar Avenue

dBA CNEL								
Existing + Project			Opening Year 2021 + Project			Horizon Year 2040 + Project		
Existing	Project	Increase	Opening Year 2021	Project	Increase	Horizon Year 2040	+ Project	Increase
56.2	58.3	2.1	57.6	59.2	1.6	62.3	62.9	0.6

Response A-19

The commenter requests further explanation on why two pieces of construction equipment were used.

Based upon the professional experience of observing construction sites of Rincon's air quality and noise staff, construction equipment during the louder construction phases such as grading typically operates with two pieces of construction equipment in close proximity to each other. In other words, a dozer and excavator would be operating near each other, and therefore at the most conservative location to sensitive receivers, would be in operation simultaneously nearest to those sensitive receivers. Analyzing more than two pieces of construction equipment together would overestimate noise levels as due to the size, physical limitations, and logistics of a construction site, it is not typical to have many pieces of equipment operating in close proximity. While some pieces of construction equipment may be operating at areas of the site further from sensitive receivers than the two analyzed pieces, the greater distances that that equipment would be operating would make their noise levels negligible compared to the combined noise levels of the closer construction equipment.

The commenter also requests clarification on the use of 100 feet as the distance analyzed for construction noise levels. As stated in the first paragraph under Section XIII.a, "project construction would occur nearest to the single-family and mobile home residences to the north of the project site. Over the course of a typical construction day, construction equipment would be located as close as 100 feet to the nearest residential property line." This is a conservative assumption as it does not consider that through the course of a typical construction day, construction equipment would move across the project site and would average a further distance away from a single sensitive receiver. Given that the FTA construction noise thresholds are based off the average noise level over an 8-hour period, it is appropriate to use the construction equipment's average distance to the nearest sensitive receiver. The analysis takes a more conservative approach by using the approximate closest distance that the construction equipment would be to the nearest sensitive receivers.

This comment does not affect the conclusion of the IS-MND that the project would have a less than significant impact from construction noise.

Response A-20

The commenter suggests including distances from noise sources for the operational noise table, and asks for confirmation of the semi-truck noise reference. The footnote under Table 24 in the Draft IS-MND contained an error; the semi-truck reference noise level is 67.4 dBA at 50 feet. This is shown in the measurements and calculations contained in Attachment 1 of this memorandum. The calculations clarify distances and formulas used.

Response A-21

The commenter suggests a noise barrier between the project and CJUSD-owned property, and also asks for clarification on the use of the operational noise thresholds. The noise thresholds do not specify that a project's noise levels need to comply with vacant properties. A potential future use on the adjacent properties is speculative, as no projects are currently in the planning phase on those properties. Regardless, noise levels do not exceed the analyzed standards. The thresholds are different for the semi-trucks and parking lot due to the mobile nature of those noise sources as they move about the project site. In addition, since the noise analysis was performed, a six-foot block wall has been added to the project design along the southern and eastern property boundaries; this would provide at least a 5-dBA reduction that would further reduce noise levels over those analyzed.

Response A-22

The commenter states the project should look at vibratory roller vibration impacts, as the project involves paving and, according to the commenter, may include a vibratory roller.

Paving equipment can include equipment such as a static roller to compact soil, or through the use of general equipment such as excavators or dozers. Based upon the professional experience of observing construction sites of Rincon's air quality and noise staff, most projects do not use a vibratory roller as that type of roller is typically used on sites with greater topography modifications that need substantial compaction; the site is relatively flat and would require minimal compaction.

In addition, even with use of the aforementioned vibratory roller, vibration levels at the nearest structure (85 feet) would be 0.0627 in/sec PPV, well below the 0.2 in/sec PPV threshold.

This comment does not alter the conclusions of the IS-MND.

Response A-23

The commenter asks for an appendix for the noise calculations. The construction noise, traffic noise, and operational noise files have been added as Attachment 1 to this memorandum.

Response A-24

The commenter states that the IS-MND should address the project's impact regarding plans, ordinances and policies related to transit, bicycle and pedestrian facilities. The project is designed to comply with all applicable County of San Bernardino transportation policies. Under existing conditions, a dirt path lines Cedar Avenue and Santa Ana Avenue; the project would improve this pedestrian connection with installation of sidewalks along the roadways. This would allow easier and safer access to the project site and surrounding areas. The project does not include any element that would prevent the implementation of or preclude the use of the existing or planned bike, pedestrian, or transit facilities in the project site vicinity. No significant impacts would occur.

Response A-25

The commenter states the IS-MND should evaluate VMT impacts. The Traffic Impact Analysis was revised on January 20, 2021 to further address VMT issues. The VMT discussion from that report is provided below:

As mentioned previously, Caltrans emphasizes their Traffic Impact Studies for land uses focus on VMT methodology. From the Caltrans TIS Guide dated May 20, 2020, there is an emphasis on determining the project environmental impact in a manner consistent with OPR's Technical advisory and state GHG emissions reductions goals. The updated CEQA Guidelines allow for lead agency discretion in establishing methodologies and thresholds provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. From OPR's Technical Advisory, agencies can assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The thresholds for these assessments are commonly referred to as the VMT "Screening Criteria."

11.1 – Project Screening Criteria

11.1.1 - Land Use Type

For project's that meet the following conditions, they are presumed to have a less than significant impact on VMT unless proven otherwise and can be exempted from further VMT analysis.

- Local Serving Retail less than 50,000 square feet
- Local Serving K-12 Schools
- Local Parks
- Day Care Centers
- Local-Serving Gas Stations
- Local-Serving Banks
- Local-Serving Hotels (e.g. non-destination hotels)
- Student Housing Projects on or adjacent to college campuses
- Local-serving assembly uses (Places of Worship, Community Organizations)
- Community Institutions (Public Libraries, Fire Stations, Local Government)
- Local Serving Community Colleges
- Affordable or Supportive Housing
- Assisted Living Facilities
- Senior Housing

Performing a Site Analysis for each individual component of the Commercial Center, as the project itself is assumed to not be a destination, but are pass-bys (e.g. vehicles do not actively plan to visit the project site) of unknown origins, these project trips cannot be accounted for. Therefore, the remaining vehicular trips to the project site can be assumed to be local traffic. Using these assumptions, the two (2) gas stations with 16 and 14 vehicle fueling positions (VFP) pass the screening criteria and are NOT required to have further VMT analysis.

Similarly, there are three (3) retail locations: 9,900 square feet convenience store, 3,000 square feet fast-food restaurant with drive-through, and 2,800 square feet fast-food restaurant with drive-through. Each of these retail locations are less than 50,000 square feet per the screening criteria and are therefore exempt from further VMT Analysis.

Therefore, utilizing the Land Use Type Screening Criteria, each component of the project passes their respective screening criteria, and the project site is NOT required to perform further VMT analysis.

1.1.2 - Project Traffic

If a project is found to generate fewer than 110 daily vehicular trips, then it can be assumed that there is a less than significant transportation impact, and the project can be exempt from further analysis. As the project is planned to generate 6,410 Daily Vehicular Trips, it is NOT exempt using the Project Traffic Screening Criteria.

11.1.3 Low VMT Area

For residential and office projects, if the vicinity near the project site is determined to be a low VMT region, it can be assumed that the project itself will generate a low VMT, and thereby be exempt. Based on the SBCTA VMT Screening Tool by Fehr & Peers, the project site is NOT located in a low VMT area and is thereby NOT exempt using this screening parameter.

11.1.4 Transit Priority

A project can be screened to be exempt from further VMT analysis if the project has a close proximity (within ½ mile) to a High Quality Transit Corridor. Per Public Resources Code Section 21064.3, it is defined as “a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. Based on the SBCTA VMT Screening Tool by Fehr & Peers, the project site is NOT located in a Transit Priority area and is thereby NOT exempt using this screening parameter.

This comment does not alter the conclusions of the IS-MND.

Response A-26

The commenter provides information about another project that is proposed for a site located approximately 750 feet north of the project site, and requests that this project also be considered in the analysis of cumulative project impacts.

As described in the Draft IS-MND, the project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated with respect to all environmental issues. As described in *Air Quality*, construction and operational criteria pollutant emissions from the proposed project would not be cumulatively considerable. In addition, localized emissions that take into context the surrounding area under the SCAQMD LSTs would not exceed thresholds. The project's GHGs emissions, which is inherently a cumulative discussion and analyzed under *Greenhouse Gas Emissions* would result in impacts that would be a less than significant impact with mitigation. As discussed in *Noise*, under cumulative scenarios project traffic would not result in a potentially significant impact. At a distance of 750 feet, noise levels from construction or operation from one project to the other would be negligible and would not cause a cumulative impact. Therefore, the project would not contribute to cumulative impacts related to these issues. Several resource issues (e.g., geology, hazards and hazardous materials) are project-specific by nature and impacts at one location do not add to impacts at other locations or create additive impacts. Furthermore, future projects in the vicinity of the project site would be required to undergo the appropriate level of environmental review and mitigate potential impacts, as necessary.

Letter A

Colton Joint Unified School District

Frank Miranda, Ed.D., Superintendent
 Rick Jensen, Assistant Superintendent, Business Services
 Owen Chang, Director, Facilities, Planning & Construction

**BOARD OF EDUCATION**

Mrs. Patt Haro, *President*
 Mr. Dan Flores, *Vice-President*
 Mrs. Bertha Arreguin, *Clerk*
 Mr. Israel Fuentes
 Mr. Frank A. Ibarra
 Ms. Berenice Sandoval
 Mrs. Joanne E. Thoring-Ojeda

Commitment to Equal Opportunity

November 11, 2020

Anthony DeLuca, Senior Planner
 County of San Bernardino
 Land Use Services Department, Planning Division
 385 N. Arrowhead Avenue, 1st Floor
 San Bernardino, CA 92415

Subject: Response to Notice of Intent to Adopt Mitigated Negative Declaration for the
 Bloomington Center Project, 10951 Cedar Avenue, Bloomington

Dear Mr. DeLuca:

A-1

Thank you for the opportunity to provide our input on the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the Bloomington Center Project ("Proposed Project") located at 10951 Cedar Avenue in the community of Bloomington ("Project Site"). Colton Joint Unified School District (District or CJUSD) owns the property adjacent to the Project Site with APNs: 025710123, 025710124, 025710113, and 025710103. Our property is currently vacant. In addition, the District operates Crestmore Elementary School, located at 18870 Jurupa Avenue, and Walter Zimmerman Elementary School, located 11050 Linden Avenue. Both schools are approximately 0.25 miles from the Project Site. Below we outline our understanding of the project and provide our comments.

Understanding of the Project

The Proposed Project includes the construction and operation of a commercial center with a 9,900 square foot convenience store with eight multi-product fuel dispensers and seven diesel bays, two fast food restaurants with drive-throughs (one 3,000 square feet and the other 2,800 square feet), and 143 parking spaces for cars and 33 parking spaces for trucks. The Proposed Project requires a General Plan Amendment to General Commercial, Conditional Use Permit, and Tentative Parcel Map.

Letter A (continued)

Colton Joint Unified School District

Frank Miranda, Ed.D., Superintendent
 Rick Jensen, Assistant Superintendent, Business Services
 Owen Chang, Director, Facilities, Planning & Construction

**BOARD OF EDUCATION**

Mrs. Patt Haro, *President*
 Mr. Dan Flores, *Vice-President*
 Mrs. Bertha Arreguin, *Clerk*
 Mr. Israel Fuentes
 Mr. Frank A. Ibarra
 Ms. Berenice Sandoval
 Mrs. Joanne E. Thoring-Ojeda

Commitment to Equal Opportunity

Comments**» Project Description**

A-2

- **Page 2.** Proposed Project includes eight fuel dispensers and seven diesel bays. The Project Description states that fuel tanks would be provided on lot 6. However, it is unclear from the Site Plan (Figure 3) where the specific location of these tanks will be. The Project Description should include a discussion of the location of these fuel tanks, and project design features and maintenance measures put in place to ensure that such tanks are safe from cracks, breaks, and leaks. Additional specific questions include:
 - Will these fuel tanks hold fuel for both the multi-fuel pumps on the west side of the Proposed Project and the diesel tanks toward the east side of the Proposed Project? Or are there separate tanks proposed for the west side of the Project Site?
 - Will these tanks be above ground or subterranean?

A-3

- **Page 2.** The description for proposed lots 4 and 5 is "no development." However, the Site Plan shows that these areas would be used for vehicular circulation with truck parking spaces provided on the south side of lot 6. If no development is proposed for these lots, will these lots remain unpaved and in their current state? If this is not the case, then the Project Description should describe what will occur within these lots.

» Aesthetics

A-4

- **Threshold (c).** PRC §21071 defines "urbanized area." The discussion for this threshold identifies the Project Site as being within an urbanized area. The discussion should expand on how the community of Bloomington meets the definition for "urbanized area."

» Air Quality

A-5

- The South Coast AQMD localized significance (LST) screening tables were not applied correctly to the project's construction emissions. The LST look-up tables are not based on the size of the project site (5+ acres) but are based on the acreage that is graded on a daily basis, based on the project's construction equipment.¹

¹ South Coast AQMD. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds.
<http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>

Letter A (continued)

Colton Joint Unified School District

Frank Miranda, Ed.D., Superintendent
 Rick Jensen, Assistant Superintendent, Business Services
 Owen Chang, Director, Facilities, Planning & Construction

**BOARD OF EDUCATION**

Mrs. Patt Haro, *President*
 Mr. Dan Flores, *Vice-President*
 Mrs. Bertha Arreguin, *Clerk*
 Mr. Israel Fuentes
 Mr. Frank A. Ibarra
 Ms. Berenice Sandoval
 Mrs. Joanne E. Thoring-Ojeda

Commitment to Equal Opportunity

A-6

- The air quality analysis in the IS/MND does not sufficiently address cumulative air quality impacts to sensitive receptors in environmental justice communities, of which the Bloomington community has been identified as such a community in the Countywide Plan (CWP). Low-income communities and communities of color often bear a disproportionate burden of pollution and associated health risks when compared to their more affluent neighbors. Environmental justice aims to correct the legacy of concentrating pollution and other hazards in or near low-income communities and communities of color by reducing these hazards and involving the impacted communities in any decisions that affect their environmental health. CalEnviroScreen 3.0 and the CWP identifies that the Bloomington community is an environmental justice community that is disproportionately affected by and vulnerable to poor air quality. Consequently, the IS/MND needs to consider not only project-related emissions but also the project's emissions in context with the existing and planned sources in the Bloomington community. Residents proximate to the project site already experience elevated levels of air pollutants associated with proximity to the Colton Rail Yard, the freeway, and warehousing/industrial sources. The proposed project would incrementally increase health risks. Pursuant to Policy HZ-3.2, Studying and monitoring, of the CWP, the County is planning to study the cumulative health risks affecting areas like Bloomington. However, this study has not yet been initiated. Projects that have the potential to increase toxic air contaminants in environmental justice communities should evaluate the cumulative health risks for affected residents are evaluated in the project's technical analysis so that the project's cumulative contribution to the health risks can be disclosed and decision makers can make findings regarding potential air quality impacts.

» **Health Risk Assessment**

A-7

- It should be noted that the County is in the process of adopting an updated general plan, Countywide Plan (CWP). As part of the CWP, Policy HZ-3.1 Health risk assessment, the County requires a health risk assessment that includes truck traffic from the project to the freeway. The risk assessment includes diesel particulate matter from trucks associated with the project site and off-site within approximately 1,000 feet of the site but does not include travel on local roadways to the freeway. As a result, a full HRA using AERMOD is required to evaluate the potential project-level and cumulative health risk impacts of the project.

A-8

- The evaluation of DPM emissions from trucks did not use the South Coast AQMD and CARB recommended risk calculation tool (Hot Spots Analysis and Reporting Program, HARP). By not using the recommended

Letter A (continued)

Colton Joint Unified School District

Frank Miranda, Ed.D., Superintendent
 Rick Jensen, Assistant Superintendent, Business Services
 Owen Chang, Director, Facilities, Planning & Construction

**BOARD OF EDUCATION**

Mrs. Patt Haro, *President*
 Mr. Dan Flores, *Vice-President*
 Mrs. Bertha Arreguin, *Clerk*
 Mr. Israel Fuentes
 Mr. Frank A. Ibarra
 Ms. Berenice Sandoval
 Mrs. Joanne E. Thoring-Ojeda

Commitment to Equal Opportunity

A-8
cont.

HARP, no age sensitivity factors for the third trimester of pregnancy, infants, and young children were applied to the cancer risk determination for the residents to the north. Although the consultant describes that the USEPA states DPM has not been shown to elicit a mutagenic mode of action, the use of HARP with the CARB, South Coast AQMD and OEHHA recommended use of age sensitivity factors is the most conservative way to determine potential off-site risks to sensitive land uses. As the District owns the property directly adjacent and downwind of the proposed Bloomington Center, the District is concerned the health risks from diesel-fueled trucks are underreported and could possibly be significant due to the large number of trucks per day (up to 3,833 one-way trips per day). For instance, using HARP, the 30-year weighted average DPM concentration of 0.0173 micrograms per cubed meters is 15 in a million, which exceeds the air districts threshold of 10 in a million for excess cancer risk for nearby residences.

A-9

- There are several discrepancies in the health risk assessment analysis and discussion that could result in underestimated risks to nearby sensitive receptors.
 - A description of how to calculate VOC emissions for gasoline dispensing is described on page 42 of the AQ-GHG Report. However, these values do not appear to be used in the risk calculations as the consultant used South Coast AQMD's Risk Tool V1.103 to determine screening level risks for the gas dispensing operation. Using the Risk Tool, only the maximum throughput of 2.5 million gallons per year and the distance to receptors is needed. Additionally, the 2nd paragraph of Section 6.2 states the maximum throughput for the gas station is 3.6 million gallons instead of 2.5 million gallons. It is also unclear how the daily emission rate of 9.94 lbs VOC/day is determined from 4,572 lbs VOC/year.
 - The inputs used in South Coast AQMD's Risk Tool V1.103 do not match the provided description in the report. For instance, a distance between the gas dispensing and residents of 75 m (246 ft) was used to determine risks whereas a distance of 60 m (197 feet) is described on page 58. Additionally, the Banning Meteorological Station was selected instead of the closer Fontana Meteorological Station (which was used in the air dispersion model for trucks). These discrepancies should be addressed and could lead to underreporting of health risks.

A-10

- The combined risk values for the gasoline dispensing and truck stop operations are never discussed. The risks to off-site receptors would be from a combination of both activities, thus the combined risks should be discussed and provided.

Letter A (continued)

Colton Joint Unified School District

Frank Miranda, Ed.D., Superintendent
 Rick Jensen, Assistant Superintendent, Business Services
 Owen Chang, Director, Facilities, Planning & Construction

**BOARD OF EDUCATION**

Mrs. Patt Haro, *President*
 Mr. Dan Flores, *Vice-President*
 Mrs. Bertha Arreguin, *Clerk*
 Mr. Israel Fuentes
 Mr. Frank A. Ibarra
 Ms. Berenice Sandoval
 Mrs. Joanne E. Thoring-Ojeda

Commitment to Equal Opportunity

» **Greenhouse Gas Emissions**

A-11

- Table 15 shows emissions are slightly over 3,000 MTCO₂e. However, the IS/MND mitigates these emissions by requiring 100 points of the County's GHG Reduction Plan. This mitigation strategy would not fully mitigate GHG emissions impacts under Senate Bill 32 (SB 32). The County's GHG Reduction Plan is no longer considered a qualified GHG reduction strategy because it does not achieve the SB 32 targets. As part of the CWP, the County identified the need to update the GHG Reduction Plan for the new GHG targets of SB 32 (and beyond) (see Mitigation Measure GHG-1 and GHG-2 in the Draft PEIR). The IS/MND needs to consider onsite emissions reductions (e.g., energy use) to reduce emissions that are 3 tons per year over the 3,000 MTCO₂e threshold. Without onsite reductions to reduce emissions below 3,000 MTCO₂e, GHG emissions impacts under threshold (a) would be a significant impact of the project and would warrant a full Environmental Impact Report (EIR).
- CalEEMod and EMFAC 2017 does not include the emissions factor adjustments released in the Final Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021-2016 (Final SAFE Rule). The California Air Resources Board has identified Adjustment Factors for both criteria air pollutants and also GHG emissions that should be applied to the EMFAC2017 emissions factors (travel and idling).

» **Hazards and Hazardous Materials**

A-12

- Threshold (c).** The IS/MND states that the nearest school to the Project Site is Village Christian School approximately 0.7 mile northeast from the Project Site. Village Christian School at the identified address is 56 miles west of the Project Site. CJUSD operates Crestmore Elementary School approximately 0.25 miles south of the Project Site, Walter Zimmermann Elementary school approximately 0.25 miles west from the Project Site, and Slover Mountain High School approximately 0.5 miles north of the Project Site. Additionally, the District owns the property immediately adjacent to the Proposed Project. Therefore, the Proposed Project would operate hazardous materials, i.e. gasoline and diesel, approximately one quarter mile of an existing school. The IS/MND needs to evaluate the operation of a hazardous materials within 0.25 miles of an existing school.

Letter A (continued)

Colton Joint Unified School District

Frank Miranda, Ed.D., Superintendent
 Rick Jensen, Assistant Superintendent, Business Services
 Owen Chang, Director, Facilities, Planning & Construction

BOARD OF EDUCATION

Mrs. Patt Haro, *President*
 Mr. Dan Flores, *Vice-President*
 Mrs. Bertha Arreguin, *Clerk*
 Mr. Israel Fuentes
 Mr. Frank A. Ibarra
 Ms. Berenice Sandoval
 Mrs. Joanne E. Thoring-Ojeda

Commitment to Equal Opportunity

- | | |
|---------------|---|
| A-12
cont. | <ul style="list-style-type: none"> • Threshold (d). The IS/MND missed that the Project Site is listed on EnviroStor due to a Preliminary Environmental Assessment completed under DTSC.² |
| | » Hydrology and Water Quality |
| A-13 | <ul style="list-style-type: none"> • Threshold (b). The Project Site is currently undeveloped and contains approximately 100 percent pervious surfaces. Threshold (b) should discuss how the development of the Project Site with impervious surfaces would impact groundwater recharge. |
| | » Land Use and Planning |
| A-14 | <ul style="list-style-type: none"> • Threshold (b). The analysis states that "In addition, the proposed project meets the development standards described in Section 82.05 of the County Development Code." However, the discussion does not indicate how the Proposed Project meets the requirements of this section. |
| | » Noise and Vibration |
| A-15 | <ul style="list-style-type: none"> • Section 2.3 Sensitive Receptors. The IS/MND should identify Crestmore Elementary School as a sensitive receptor in the vicinity of the Proposed Project. Crestmore Elementary School is approximately 0.25 miles south of the Project Site. The IS/MND should identify this as a sensitive receiver and analyze project impacts to it. |
| A-16 | <ul style="list-style-type: none"> • Section 3.2 Traffic Noise Methodology. This section states that the "FHWA model" was used. What FHWA model? |
| A-17 | <ul style="list-style-type: none"> • Tables 7 and 8 give the source of the data. What is the source of the data for Table 9? |
| A-18 | <ul style="list-style-type: none"> • For permanent traffic noise, the adopted threshold of ambient increases at noise-sensitive locations by 3 dBA or more if the locations are subject to noise levels in excess of normally acceptable noise levels in Table IV-K-1 of the County General Plan Final Program Environmental Impact Report (County of San Bernardino 2007), or by 5 dBA or more if the land uses are exposed to conditionally acceptable or unacceptable noise levels, seems backwards. This seems counterintuitive as the allowable increase is |

² California Department of Toxic Substances Control.
https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=36010018

Letter A (continued)

Colton Joint Unified School District

Frank Miranda, Ed.D., Superintendent
 Rick Jensen, Assistant Superintendent, Business Services
 Owen Chang, Director, Facilities, Planning & Construction

BOARD OF EDUCATION

Mrs. Patt Haro, *President*
 Mr. Dan Flores, *Vice-President*
 Mrs. Bertha Arreguin, *Clerk*
 Mr. Israel Fuentes
 Mr. Frank A. Ibarra
 Ms. Berenice Sandoval
 Mrs. Joanne E. Thoring-Ojeda

Commitment to Equal Opportunity

A-18
cont.

more if the existing environment is louder and within the conditionally acceptable or unacceptable categories of the County's Table IV-K-1. Secondly, Table IV-K-1 should be provided in the analysis and/or appendix.

Consider tiered thresholds for traffic noise. For example, based on FAA 2020 (Federal Aviation Administration, 2020. 1050.1F Desk Reference, Version 2. February), the following thresholds may be considered for permanent ambient noise increase. These take into account the existing ambient in outdoor environments due to a given source and that traffic noise is made up of many events/pass-bys over a 24-hour period. They also consider that above certain ambient conditions (i.e., 65 dBA CNEL), sensitive receptors are already noise impacted and, therefore, a lower threshold such as 1.5 dBA CNEL may be used.

Up to 1.5 dBA increase for ambient noise environments of 65 dBA CNEL and higher;

Up to 3 dBA increase for ambient noise environments of 60-64 CNEL; and

Up to 5 dBA increase for ambient noise environments of less than 60 dBA CNEL.

A-19

- **Section 4.1 Issue 1, Construction.** The first paragraph mentions the projected noise level of a dozer and an excavator at a distance of 100 feet but does not state why only these two pieces of equipment were considered for construction of the entire Proposed Project. Are these the only two pieces of equipment proposed for use? The construction analysis also provides the noise level for these two pieces of equipment at a distance of 100 feet. Please clarify if this is from the property line or some other point on the project site.

Secondly, the analysis addresses residential sensitive receptors, but should also analyze noise levels at the property line of Crestmore Elementary School to the south.

A-20

- **Section 4.1 Issue 1, Operation.** Table 10 should include the distances from the noise source to the sensitive receptors. The source of the reference noise measurements given in Table 10 should be cited. Table 10 also shows that the semi-truck reference noise measurement of 61.2 at 10 feet. Assuming that Table 10 uses the nearest distance of 85 feet mentioned in the preceding paragraph, it would not attenuate to 59 dBA. The table footnotes also mention that noise would attenuate (drop-off) 6 dB for each doubling of distance. At 85 feet the noise level from semi-trucks would be 42.6 dBA. The parking lot

Letter A (continued)

Colton Joint Unified School District

Frank Miranda, Ed.D., Superintendent
 Rick Jensen, Assistant Superintendent, Business Services
 Owen Chang, Director, Facilities, Planning & Construction

BOARD OF EDUCATION

Mrs. Patt Haro, *President*
 Mr. Dan Flores, *Vice-President*
 Mrs. Bertha Arreguin, *Clerk*
 Mr. Israel Fuentes
 Mr. Frank A. Ibarra
 Ms. Berenice Sandoval
 Mrs. Joanne E. Thoring-Ojeda

Commitment to Equal Opportunity

- | | |
|---------------|---|
| A-20
cont. | noise would be 38.5 and so on. Please revise, and again add the exact distances used for attenuation for clarification. |
| A-21 | <ul style="list-style-type: none"> It is unclear why the thresholds used in Table 10 for semi-trucks and parking lot (i.e., 60/60 dBA day/night) are different than for other sources. When on the project site they would all generally be considered stationary noise sources (e.g., loading and unloading). Table 4 contains thresholds of 55/45 dBA day/night for such sources affecting residential properties. The IS/MND should also analyze the Proposed Project's impact to the adjacent school district property. The Proposed Project will affect the viability to develop future noise sensitive uses due to the noise from the Proposed Project (i.e., stationary noise). Due to new stationary noise sources the Proposed Project would introduce (truck idling, drive thru speakers, truck loading, parking lot noise, and HVAC equipment), a noise barrier/sound wall along the adjacent District-owned property would be appropriate. |
| A-22 | <ul style="list-style-type: none"> Section 4.2 Issue 2, Construction. The second paragraph of this analysis states that the primary source of vibration during construction would be from a dozer. However, the site plan clearly shows a parking lot, which would include paving. Paving activities may include the use of a vibratory roller, which generates vibration levels greater than a dozer (0.21 in/sec PPV at 25 feet per FTA 2018). The vibration analysis needs to consider equipment for paving activities. |
| A-23 | <ul style="list-style-type: none"> RCNM construction noise inputs and outputs, traffic noise increase calculations, and operational stationary source attenuation calculations to all nearby sensitive receptors (including schools) should all be included in an appendix. |
| | » Transportation |
| A-24 | <ul style="list-style-type: none"> Threshold (a). The IS/MND should address the Proposed Project's impact regarding plans, ordinances and policies related to transit, bicycle and pedestrian facilities. |
| A-25 | <ul style="list-style-type: none"> Threshold (b). The VMT assessment is not consistent with the County's recently adopted Senate Bill 743 (SB 743) threshold.³ Page 91 through 92 states that "it would not be feasible to analyze the VMT of a truck stop" yet the air quality and GHG emissions impacts include transportation-related emissions based on VMT generated using CalEEMod. It is not clear if the County's SB 743 Transportation Impact Study |

³ San Bernardino County. 2019, July 9. <https://cms.sbcounty.gov/Portals/50/transportation/Traffic-Study-Guidelines.pdf?ver=2019-10-03-155637-153>

Letter A (continued)

Colton Joint Unified School District

Frank Miranda, Ed.D., Superintendent
 Rick Jensen, Assistant Superintendent, Business Services
 Owen Chang, Director, Facilities, Planning & Construction

BOARD OF EDUCATION

Mrs. Patt Haro, *President*
 Mr. Dan Flores, *Vice-President*
 Mrs. Bertha Arreguin, *Clerk*
 Mr. Israel Fuentes
 Mr. Frank A. Ibarra
 Ms. Berenice Sandoval
 Mrs. Joanne E. Thoring-Ojeda

Commitment to Equal Opportunity

A-25
cont.

Guidelines were followed. At the very least, the IS/MND should make a significance determination based on the adopted screening criteria identified in the Transportation Impact Study Guidelines. Currently, the VMT assessment states that "VMT analysis is irrelevant to the Traffic Study completed for this project." As such, the IS/MND makes no attempt to evaluate VMT impacts; and this is a critical flaw that needs to be corrected prior to consideration of the project.

A-26

- » **Cumulative Impacts.** The District learned of another project (PROJ-2020-00035; APN: 0257-031-12) that includes the construction and operation of a truck terminal with a two story building with office and truck repair, 321 truck parking spaces, and 13 vehicle parking spaces. This truck terminal project is located approximately 750 feet north of the Project Site. Given the close proximity of the Bloomington Center Project and the truck terminal project along with the projects' proximity to District schools and property, the environmental analysis for the Proposed Project should evaluate the Proposed Project's cumulative impacts with the truck terminal project.

We appreciate the opportunity to submit comments on the project and its CEQA document. We identified above, we have serious concerns regarding the adequacy of the environmental review and look forward to your responses to these concerns.

Sincerely,

Owen Chang
 Director of Facilities/Energy Management

Cc: Rick Jensen, Assistant Superintendent of Business



Attachment 1

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/20/2020

Case Description: Bloomington

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Residential	Residential	80	80	80

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	100	0
Excavator	No	40		80.7	100	0

Results

Calculated (dBA)			
Equipment	*Lmax	Leq	
Dozer	75.6	71.7	
Excavator	74.7	70.7	
Total	75.6	74.2	

*Calculated Lmax is the Loudest value.

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Vehicle Type	Vehicle Mix 1 (Local)				Vehicle Mix 2 (Arterial)				Vehicle Mix 3 (Hwy 111)			
	Day	Evening	Night	Daily	Day	Evening	Night	Daily	Day	Evening	Night	Daily
Automobiles	73.60%	13.60%	10.22%	97.42%	69.50%	12.90%	9.60%	92.00%	61.54%	12.61%	14.75%	88.90%
Medium Trucks	0.90%	0.90%	0.04%	1.84%	1.44%	0.06%	1.50%	3.00%	4.98%	0.98%	3.21%	9.17%
Heavy Trucks	0.35%	0.04%	0.35%	0.74%	2.40%	0.10%	2.50%	5.00%	0.96%	0.10%	0.87%	1.93%

Road Name: Linden Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 4430 Vehicles

Vehicle Speed: 25 MPH

Vehicle Mix: 1

Roadway Classification: Collector

	NOISE PARAMETERS AT 60 FEET FROM CENTERLINE (Equiv. Lane Dist: 59.46 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-2.93	-1.23	-1.20	54.07	51.95	50.64	44.63	53.04	53.67	70 dBA:	4	5
Medium Trucks	71.09	-20.17	-1.23	-1.20	48.48	27.23	33.25	14.96	28.10	30.86	65 dBA:	10	11
Heavy Trucks	78.74	-24.13	-1.23	-1.20	52.18	26.83	23.43	28.08	34.28	34.37	60 dBA:	21	23
	Total:				56.91	51.98	50.72	44.72	53.12	53.74	55 dBA:	45	49

Road Name: Linden Avenue

Segment: South of Santa Ana Avenue

Average Daily Traffic: 5140 Vehicles

Vehicle Speed: 25 MPH

Vehicle Mix: 1

Roadway Classification: Collector

	NOISE PARAMETERS AT 45 FEET FROM CENTERLINE (Equiv. Lane Dist: 44.28 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-2.29	0.69	-1.20	56.64	54.52	53.20	47.19	55.61	56.24	70 dBA:	5	6
Medium Trucks	71.09	-19.53	0.69	-1.20	51.05	29.80	35.82	17.53	30.67	33.42	65 dBA:	11	12
Heavy Trucks	78.74	-23.48	0.69	-1.20	54.75	29.39	25.99	30.64	36.84	36.94	60 dBA:	23	26
Total:					59.48	54.54	53.29	47.29	55.68	56.31	55 dBA:	50	55

Road Name: Cedar Avenue

Segment: North of Slover Avenue

Average Daily Traffic: 10260 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels						Centerline Distance to Noise Contour (in feet)		
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL			
Automobiles	69.34	-2.09	-0.04	-1.20	66.02	63.65	62.35	56.30	64.73	65.36	70 dBA:	27	30
Medium Trucks	77.62	-16.95	-0.04	-1.20	59.43	40.22	32.44	41.65	47.80	47.84	65 dBA:	59	64
Heavy Trucks	82.14	-14.74	-0.04	-1.20	66.17	49.18	41.40	50.61	56.76	56.79	60 dBA:	127	138
Total:					69.55	63.82	62.39	57.45	65.45	66.00	55 dBA:	274	297

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Cedar Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 10200 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	69.34	-2.11	-1.34	-1.20	64.70	62.32	61.03	54.98	63.41	64.04	70 dBA: 26	29
Medium Trucks	77.62	-16.98	-1.34	-1.20	58.11	38.90	31.12	40.33	46.48	46.51	65 dBA: 57	62
Heavy Trucks	82.14	-14.76	-1.34	-1.20	64.84	47.86	40.07	49.28	55.44	55.47	60 dBA: 122	133
Total:					68.23	62.50	61.07	56.13	64.13	64.67	55 dBA: 264	287

Road Name: Cedar Avenue

Segment: South of Project Driveway 1

Average Daily Traffic: 11030 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	69.34	-1.77	-1.34	-1.20	65.04	62.66	61.37	55.32	63.75	64.38	70 dBA: 28	30
Medium Trucks	77.62	-16.64	-1.34	-1.20	58.45	39.24	31.46	40.67	46.82	46.85	65 dBA: 60	65
Heavy Trucks	82.14	-14.42	-1.34	-1.20	65.18	48.19	40.41	49.62	55.78	55.81	60 dBA: 129	140
Total:					68.57	62.84	61.41	56.47	64.47	65.01	55 dBA: 278	302

Road Name: Cedar Avenue

Segment: South of Jurupa Avenue

Average Daily Traffic: 10400 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 75 FEET FROM CENTERLINE (Equiv. Lane Dist: 71.06 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	69.34	-2.03	-2.39	-1.20	63.72	61.35	60.06	54.00	62.43	63.07	70 dBA: 26	29
Medium Trucks	77.62	-16.90	-2.39	-1.20	57.13	37.93	30.14	39.35	45.51	45.54	65 dBA: 56	61
Heavy Trucks	82.14	-14.68	-2.39	-1.20	63.87	46.88	39.10	48.31	54.46	54.50	60 dBA: 122	132
Total:					67.25	61.52	60.10	55.15	63.15	63.70	55 dBA: 262	285

Road Name: Larch Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 3670 Vehicles

Vehicle Speed: 35 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 54.42 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	65.11	-5.21	-0.65	-1.20	58.04	55.92	54.61	48.59	57.01	57.64	70 dBA: 8	8
Medium Trucks	74.83	-22.45	-0.65	-1.20	50.52	29.27	35.29	17.00	30.14	32.90	65 dBA: 16	18
Heavy Trucks	80.05	-26.41	-0.65	-1.20	51.78	26.43	23.03	27.68	33.88	33.98	60 dBA: 35	38
Total:					59.55	55.93	54.66	48.63	57.04	57.67	55 dBA: 75	83

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Larch Avenue

Segment: South of Santa Ana Avenue

Average Daily Traffic: 2620 Vehicles

Vehicle Speed: 35 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 69.54 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	65.11	-6.68	-2.25	-1.20	54.98	52.86	51.54	45.53	53.95	54.58	70 dBA: 6	7
Medium Trucks	74.83	-23.91	-2.25	-1.20	47.46	26.21	32.23	13.94	27.08	29.84	65 dBA: 13	14
Heavy Trucks	80.05	-27.87	-2.25	-1.20	48.72	23.37	19.97	24.62	30.82	30.92	60 dBA: 28	31
Total:					56.48	52.87	51.60	45.57	53.98	54.61	55 dBA: 60	66

Road Name: Slover Avenue

Segment: West of Cedar Avenue

Average Daily Traffic: 4750 Vehicles

Vehicle Speed: 50 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	71.12	-5.89	-0.04	-1.20	63.99	61.62	60.33	54.27	62.71	63.34	70 dBA: 20	21
Medium Trucks	78.79	-20.76	-0.04	-1.20	56.80	37.59	29.81	39.02	45.17	45.21	65 dBA: 42	46
Heavy Trucks	83.02	-18.54	-0.04	-1.20	63.25	46.26	38.47	47.68	53.84	53.87	60 dBA: 91	99
Total:					67.07	61.76	60.36	55.24	63.30	63.86	55 dBA: 197	214

Road Name: Slover Avenue

Segment: East of Cedar Avenue

Average Daily Traffic: 4940 Vehicles

Vehicle Speed: 50 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	71.12	-5.72	-1.34	-1.20	62.86	60.49	59.20	53.15	61.58	62.21	70 dBA: 20	21
Medium Trucks	78.79	-20.59	-1.34	-1.20	55.67	36.46	28.68	37.89	44.04	44.08	65 dBA: 42	46
Heavy Trucks	83.02	-18.37	-1.34	-1.20	62.12	45.13	37.35	46.55	52.71	52.74	60 dBA: 91	99
Total:					65.95	60.63	59.23	54.11	62.17	62.73	55 dBA: 196	213

Road Name: Santa Ana Avenue

Segment: West of Linden Avenue

Average Daily Traffic: 2660 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 66.78 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-7.44	-1.99	-1.20	56.73	54.36	53.07	47.01	55.44	56.08	70 dBA: 9	9
Medium Trucks	76.31	-22.31	-1.99	-1.20	50.82	31.61	23.83	33.04	39.19	39.23	65 dBA: 18	20
Heavy Trucks	81.16	-20.09	-1.99	-1.20	57.88	40.89	33.11	42.32	48.48	48.51	60 dBA: 40	43
Total:					60.81	54.57	53.12	48.41	56.32	56.85	55 dBA: 86	93

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Santa Ana Avenue

Segment: West of Cedar Avenue

Average Daily Traffic: 3920 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 80 FEET FROM CENTERLINE (Equiv. Lane Dist: 77.19 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-5.76	-2.93	-1.20	57.47	55.10	53.81	47.75	56.18	56.81	70 dBA: 11	12
Medium Trucks	76.31	-20.62	-2.93	-1.20	51.56	32.35	24.57	33.78	39.93	39.96	65 dBA: 24	26
Heavy Trucks	81.16	-18.40	-2.93	-1.20	58.62	41.63	33.85	43.06	49.21	49.25	60 dBA: 51	55
Total:					61.55	55.31	53.86	49.15	57.06	57.59	55 dBA: 110	119

Road Name: Santa Ana Avenue

Segment: East of Cedar Avenue

Average Daily Traffic: 2590 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 75 FEET FROM CENTERLINE (Equiv. Lane Dist: 72 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-7.56	-2.48	-1.20	56.13	53.75	52.46	46.41	54.84	55.47	70 dBA: 8	9
Medium Trucks	76.31	-22.42	-2.48	-1.20	50.21	31.00	23.22	32.43	38.58	38.62	65 dBA: 18	20
Heavy Trucks	81.16	-20.20	-2.48	-1.20	57.28	40.29	32.51	41.71	47.87	47.90	60 dBA: 39	42
Total:					60.21	53.97	52.51	47.80	55.72	56.25	55 dBA: 84	91

Road Name: Santa Ana Avenue

Segment: East of Larch Avenue

Average Daily Traffic: 1120 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 66.78 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-11.20	-1.99	-1.20	52.98	50.60	49.31	43.26	51.69	52.32	70 dBA: 5	5
Medium Trucks	76.31	-26.06	-1.99	-1.20	47.06	27.85	20.07	29.28	35.43	35.47	65 dBA: 10	11
Heavy Trucks	81.16	-23.84	-1.99	-1.20	54.13	37.14	29.36	38.56	44.72	44.75	60 dBA: 22	24
Total:					57.06	50.82	49.36	44.65	52.57	53.10	55 dBA: 48	52

Road Name: Jurupa Avenue

Segment: West of Cedar Avenue

Average Daily Traffic: 3070 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-6.82	-0.04	-1.20	59.31	56.93	55.64	49.59	58.02	58.65	70 dBA: 10	11
Medium Trucks	76.31	-21.68	-0.04	-1.20	53.39	34.18	26.40	35.61	41.77	41.80	65 dBA: 22	23
Heavy Trucks	81.16	-19.46	-0.04	-1.20	60.46	43.47	35.69	44.90	51.05	51.08	60 dBA: 46	50
Total:					63.39	57.15	55.69	50.98	58.90	59.43	55 dBA: 100	109

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Jurupa Avenue

Segment: East of Cedar Avenue

Average Daily Traffic: 4250 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Major

	NOISE PARAMETERS AT 50 FEET FROM CENTERLINE (Equiv. Lane Dist: 43.86 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	67.36	-5.40	0.75	-1.20	61.51	59.13	57.84	51.79	60.22	60.85	70 dBA:	13	14
Medium Trucks	76.31	-20.27	0.75	-1.20	55.59	36.38	28.60	37.81	43.96	44.00	65 dBA:	27	30
Heavy Trucks	81.16	-18.05	0.75	-1.20	62.66	45.67	37.89	47.09	53.25	53.28	60 dBA:	59	64
Total:					65.59	59.35	57.89	53.18	61.10	61.62	55 dBA:	127	138

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING WITH PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Vehicle Type	Vehicle Mix 1 (Local)				Vehicle Mix 2 (Arterial)				Vehicle Mix 3 (Hwy 111)			
	Day	Evening	Night	Daily	Day	Evening	Night	Daily	Day	Evening	Night	Daily
Automobiles	73.60%	13.60%	10.22%	97.42%	69.50%	12.90%	9.60%	92.00%	61.54%	12.61%	14.75%	88.90%
Medium Trucks	0.90%	0.90%	0.04%	1.84%	1.44%	0.06%	1.50%	3.00%	4.98%	0.98%	3.21%	9.17%
Heavy Trucks	0.35%	0.04%	0.35%	0.74%	2.40%	0.10%	2.50%	5.00%	0.96%	0.10%	0.87%	1.93%

Road Name: Linden Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 4590 Vehicles

Vehicle Speed: 25 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 60 FEET FROM CENTERLINE (Equiv. Lane Dist: 59.46 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night				
Automobiles	59.44	-2.78	-1.23	-1.20	54.23	52.10	50.79	44.78	53.20	53.83	70 dBA: 5	5
Medium Trucks	71.09	-20.02	-1.23	-1.20	48.64	27.39	33.41	15.11	28.26	31.01	65 dBA: 10	11
Heavy Trucks	78.74	-23.97	-1.23	-1.20	52.33	26.98	23.58	28.23	34.43	34.53	60 dBA: 21	24
Total:					57.07	52.13	50.88	44.88	53.27	53.90	55 dBA: 46	51

Road Name: Linden Avenue

Segment: South of Santa Ana Avenue

Average Daily Traffic: 5300 Vehicles

Vehicle Speed: 25 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 45 FEET FROM CENTERLINE (Equiv. Lane Dist: 44.28 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night				
Automobiles	59.44	-2.16	0.69	-1.20	56.77	54.65	53.34	47.32	55.74	56.37	70 dBA: 5	6
Medium Trucks	71.09	-19.39	0.69	-1.20	51.18	29.93	35.95	17.66	30.80	33.56	65 dBA: 11	12
Heavy Trucks	78.74	-23.35	0.69	-1.20	54.88	29.53	26.13	30.78	36.98	37.07	60 dBA: 24	26
Total:					59.61	54.68	53.42	47.42	55.82	56.44	55 dBA: 51	56

Road Name: Cedar Avenue

Segment: North of Slover Avenue

Average Daily Traffic: 12183 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night				
Automobiles	69.34	-1.34	-0.04	-1.20	66.77	64.39	63.10	57.05	65.48	66.11	70 dBA: 31	33
Medium Trucks	77.62	-16.21	-0.04	-1.20	60.18	40.97	33.19	42.40	48.55	48.58	65 dBA: 66	72
Heavy Trucks	82.14	-13.99	-0.04	-1.20	66.92	49.93	42.14	51.35	57.51	57.54	60 dBA: 142	155
Total:					70.30	64.57	63.14	58.20	66.20	66.74	55 dBA: 307	334

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING WITH PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Cedar Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 12764 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	69.34	-1.14	-1.34	-1.20	65.67	63.30	62.00	55.95	64.38	65.01	70 dBA: 31	33
Medium Trucks	77.62	-16.01	-1.34	-1.20	59.08	39.87	32.09	41.30	47.45	47.49	65 dBA: 66	72
Heavy Trucks	82.14	-13.79	-1.34	-1.20	65.82	48.83	41.05	50.26	56.41	56.44	60 dBA: 142	155
Total:					69.20	63.47	62.04	57.10	65.10	65.64	55 dBA: 306	333

Road Name: Cedar Avenue

Segment: South of Project Driveway 1

Average Daily Traffic: 12633 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	69.34	-1.18	-1.34	-1.20	65.62	63.25	61.96	55.91	64.34	64.97	70 dBA: 30	33
Medium Trucks	77.62	-16.05	-1.34	-1.20	59.04	39.83	32.05	41.25	47.41	47.44	65 dBA: 66	71
Heavy Trucks	82.14	-13.83	-1.34	-1.20	65.77	48.78	41.00	50.21	56.36	56.40	60 dBA: 141	154
Total:					69.15	63.42	62.00	57.06	65.05	65.60	55 dBA: 304	331

Road Name: Cedar Avenue

Segment: South of Jurupa Avenue

Average Daily Traffic: 11201 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 75 FEET FROM CENTERLINE (Equiv. Lane Dist: 71.06 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	69.34	-1.71	-2.39	-1.20	64.04	61.67	60.38	54.33	62.76	63.39	70 dBA: 28	30
Medium Trucks	77.62	-16.57	-2.39	-1.20	57.46	38.25	30.47	39.67	45.83	45.86	65 dBA: 59	65
Heavy Trucks	82.14	-14.36	-2.39	-1.20	64.19	47.20	39.42	48.63	54.78	54.82	60 dBA: 128	139
Total:					67.57	61.84	60.42	55.48	63.47	64.02	55 dBA: 275	299

Road Name: Larch Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 3830 Vehicles

Vehicle Speed: 35 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 54.42 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	65.11	-5.03	-0.65	-1.20	58.23	56.10	54.79	48.78	57.20	57.83	70 dBA: 8	9
Medium Trucks	74.83	-22.27	-0.65	-1.20	50.71	29.46	35.48	17.19	30.33	33.08	65 dBA: 17	18
Heavy Trucks	80.05	-26.22	-0.65	-1.20	51.97	26.62	23.22	27.87	34.07	34.16	60 dBA: 36	40
Total:					59.73	56.12	54.85	48.82	57.23	57.86	55 dBA: 77	85

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING WITH PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Larch Avenue **Segment: South of Santa Ana Avenue**
Average Daily Traffic: 2780 Vehicles Vehicle Speed: 35 MPH Vehicle Mix: 1 Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 69.54 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	65.11	-6.42	-2.25	-1.20	55.24	53.12	51.80	45.79	54.21	54.84	70 dBA: 6	7
Medium Trucks	74.83	-23.66	-2.25	-1.20	47.72	26.47	32.49	14.20	27.34	30.09	65 dBA: 13	15
Heavy Trucks	80.05	-27.61	-2.25	-1.20	48.98	23.63	20.23	24.88	31.08	31.17	60 dBA: 29	32
Total:					56.74	53.13	51.86	45.83	54.24	54.87	55 dBA: 62	69

Road Name: Slover Avenue **Segment: West of Cedar Avenue**
Average Daily Traffic: 5231 Vehicles Vehicle Speed: 50 MPH Vehicle Mix: 2 Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	71.12	-5.47	-0.04	-1.20	64.41	62.04	60.75	54.69	63.12	63.75	70 dBA: 21	23
Medium Trucks	78.79	-20.34	-0.04	-1.20	57.22	38.01	30.23	39.44	45.59	45.63	65 dBA: 45	49
Heavy Trucks	83.02	-18.12	-0.04	-1.20	63.66	46.67	38.89	48.10	54.26	54.29	60 dBA: 97	106
Total:					67.49	62.18	60.78	55.66	63.72	64.28	55 dBA: 210	229

Road Name: Slover Avenue **Segment: East of Cedar Avenue**
Average Daily Traffic: 5421 Vehicles Vehicle Speed: 50 MPH Vehicle Mix: 2 Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	71.12	-5.32	-1.34	-1.20	63.27	60.90	59.60	53.55	61.98	62.61	70 dBA: 21	23
Medium Trucks	78.79	-20.18	-1.34	-1.20	56.08	36.87	29.09	38.29	44.45	44.48	65 dBA: 45	49
Heavy Trucks	83.02	-17.96	-1.34	-1.20	62.52	45.53	37.75	46.96	53.11	53.15	60 dBA: 97	105
Total:					66.35	61.04	59.64	54.51	62.58	63.14	55 dBA: 208	227

Road Name: Santa Ana Avenue **Segment: West of Linden Avenue**
Average Daily Traffic: 3461 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 66.78 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-6.30	-1.99	-1.20	57.88	55.50	54.21	48.16	56.59	57.22	70 dBA: 10	11
Medium Trucks	76.31	-21.16	-1.99	-1.20	51.96	32.75	24.97	34.18	40.33	40.37	65 dBA: 22	24
Heavy Trucks	81.16	-18.94	-1.99	-1.20	59.03	42.04	34.26	43.46	49.62	49.65	60 dBA: 47	51
Total:					61.96	55.72	54.26	49.55	57.47	58.00	55 dBA: 102	111

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING WITH PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Santa Ana Avenue **Segment: West of Cedar Avenue**
Average Daily Traffic: 5042 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 80 FEET FROM CENTERLINE (Equiv. Lane Dist: 77.19 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-4.66	-2.93	-1.20	58.56	56.19	54.90	48.85	57.28	57.91	70 dBA: 13	14
Medium Trucks	76.31	-19.53	-2.93	-1.20	52.65	33.44	25.66	34.87	41.02	41.06	65 dBA: 28	30
Heavy Trucks	81.16	-17.31	-2.93	-1.20	59.72	42.73	34.95	44.15	50.31	50.34	60 dBA: 60	65
Total:					62.65	56.41	54.95	50.24	58.16	58.68	55 dBA: 130	141

Road Name: Santa Ana Avenue **Segment: East of Cedar Avenue**
Average Daily Traffic: 4193 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 75 FEET FROM CENTERLINE (Equiv. Lane Dist: 72 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-5.46	-2.48	-1.20	58.22	55.85	54.55	48.50	56.93	57.56	70 dBA: 12	13
Medium Trucks	76.31	-20.33	-2.48	-1.20	52.30	33.10	25.31	34.52	40.68	40.71	65 dBA: 25	27
Heavy Trucks	81.16	-18.11	-2.48	-1.20	59.37	42.38	34.60	43.81	49.96	49.99	60 dBA: 54	58
Total:					62.30	56.06	54.60	49.90	57.81	58.34	55 dBA: 115	125

Road Name: Santa Ana Avenue **Segment: East of Larch Avenue**
Average Daily Traffic: 1761 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 66.78 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-9.23	-1.99	-1.20	54.94	52.57	51.28	45.22	53.65	54.28	70 dBA: 7	7
Medium Trucks	76.31	-24.10	-1.99	-1.20	49.03	29.82	22.04	31.25	37.40	37.43	65 dBA: 14	15
Heavy Trucks	81.16	-21.88	-1.99	-1.20	56.09	39.10	31.32	40.53	46.68	46.72	60 dBA: 30	33
Total:					59.02	52.78	51.32	46.62	54.53	55.06	55 dBA: 65	71

Road Name: Jurupa Avenue **Segment: West of Cedar Avenue**
Average Daily Traffic: 3551 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-6.18	-0.04	-1.20	59.94	57.57	56.27	50.22	58.65	59.28	70 dBA: 11	12
Medium Trucks	76.31	-21.05	-0.04	-1.20	54.02	34.82	27.04	36.24	42.40	42.43	65 dBA: 24	26
Heavy Trucks	81.16	-18.83	-0.04	-1.20	61.09	44.10	36.32	45.53	51.68	51.72	60 dBA: 51	55
Total:					64.02	57.78	56.32	51.62	59.53	60.06	55 dBA: 110	120

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING WITH PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Jurupa Avenue

Segment: East of Cedar Avenue

Average Daily Traffic: 4731 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Major

	NOISE PARAMETERS AT 50 FEET FROM CENTERLINE (Equiv. Lane Dist: 43.86 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	67.36	-4.94	0.75	-1.20	61.97	59.60	58.31	52.25	60.68	61.31	70 dBA:	14	15
Medium Trucks	76.31	-19.81	0.75	-1.20	56.06	36.85	29.07	38.28	44.43	44.46	65 dBA:	29	32
Heavy Trucks	81.16	-17.59	0.75	-1.20	63.12	46.13	38.35	47.56	53.71	53.75	60 dBA:	64	69
Total:					66.05	59.81	58.35	53.65	61.56	62.09	55 dBA:	137	148

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: OPENING YEAR 2021 WITHOUT PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Vehicle Type	Vehicle Mix 1 (Local)				Vehicle Mix 2 (Arterial)				Vehicle Mix 3 (Hwy 111)			
	Day	Evening	Night	Daily	Day	Evening	Night	Daily	Day	Evening	Night	Daily
Automobiles	73.60%	13.60%	10.22%	97.42%	69.50%	12.90%	9.60%	92.00%	61.54%	12.61%	14.75%	88.90%
Medium Trucks	0.90%	0.90%	0.04%	1.84%	1.44%	0.06%	1.50%	3.00%	4.98%	0.98%	3.21%	9.17%
Heavy Trucks	0.35%	0.04%	0.35%	0.74%	2.40%	0.10%	2.50%	5.00%	0.96%	0.10%	0.87%	1.93%

Road Name: Linden Avenue **Segment: North of Santa Ana Avenue**
Average Daily Traffic: 7520 Vehicles Vehicle Speed: 25 MPH Vehicle Mix: 1 Roadway Classification: Collector

Average Daily Traffic: 1626 Vehicles													
Vehicle Speed: 25 mi/h													
Vehicle Mix: 1													
Roadway Classification: Collector													
Vehicle Type	NOISE PARAMETERS AT 60 FEET FROM CENTERLINE (Equiv. Lane Dist: 59.46 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL	Ldn	CNEL	
Automobiles	59.44	-0.64	-1.23	-1.20	56.37	54.25	52.94	46.92	55.34	55.97	70 dBA:	6	7
Medium Trucks	71.09	-17.87	-1.23	-1.20	50.78	29.53	35.55	17.26	30.40	33.15	65 dBA:	14	15
Heavy Trucks	78.74	-21.83	-1.23	-1.20	54.48	29.13	25.73	30.38	36.57	36.67	60 dBA:	30	33
Total:					59.21	54.28	53.02	47.02	55.41	56.04	55 dBA:	64	70

Road Name: Linden Avenue **Segment: South of Santa Ana Avenue**
Average Daily Traffic: 8280 Vehicles Vehicle Speed: 25 MPH Vehicle Mix: 1 Roadway Classification: Collector

NOISE PARAMETERS AT 45 FEET FROM CENTERLINE (Equiv. Lane Dist: 44.28 ft)											Centerline Distance to Noise Contour (in feet)		
Noise Adjustments					Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL	Ldn	CNEL		
Automobiles	59.44	-0.22	0.69	-1.20	58.71	56.59	55.27	49.26	57.68	58.31	70 dBA: 7	8	
Medium Trucks	71.09	-17.46	0.69	-1.20	53.12	31.87	37.89	19.60	32.74	35.49	65 dBA: 15	16	
Heavy Trucks	78.74	-21.41	0.69	-1.20	56.82	31.46	28.07	32.71	38.91	39.01	60 dBA: 32	35	
Total:					61.55	56.61	55.36	49.36	57.75	58.38	55 dBA: 69	76	

Road Name: Cedar Avenue **Segment: North of Slover Avenue**
Average Daily Traffic: 23210 Vehicles Vehicle Speed: 45 MPH Vehicle Mix: 2 Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	69.34	1.46	-0.04	-1.20	69.57	67.19	65.90	59.85	68.28	68.91	70 dBA:	47	51
Medium Trucks	77.62	-13.41	-0.04	-1.20	62.98	43.77	35.99	45.19	51.35	51.38	65 dBA:	102	110
Heavy Trucks	82.14	-11.19	-0.04	-1.20	69.71	52.72	44.94	54.15	60.31	60.34	60 dBA:	219	238
Total:					73.10	67.37	65.94	61.00	69.00	69.54	55 dBA:	471	513

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: OPENING YEAR 2021 WITHOUT PROJECT CONDITIONS

**Project: Bloomington Commercial Center
Site Conditions: Soft**

Road Name: Cedar Avenue					Segment:		North of Santa Ana Avenue							
Average Daily Traffic: 22910 Vehicles					Vehicle Speed: 45 MPH		Vehicle Mix: 2			Roadway Classification: Major				
Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)			
	Noise Adjustments				Unmitigated Noise Levels									
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL	Ldn	CNEL			
	Automobiles	69.34	1.40	-1.34	-1.20	68.21	65.84	64.54	58.49	66.92	67.55	70 dBA:	45	49
Medium Trucks	77.62	-13.47	-1.34	-1.20	61.62	42.41	34.63	43.84	49.99	50.03	65 dBA:	97	106	
Heavy Trucks	82.14	-11.25	-1.34	-1.20	68.36	51.37	43.59	52.80	58.95	58.98	60 dBA:	210	228	
Total:					71.74	66.01	64.58	59.64	67.64	68.19	55 dBA:	452	492	

Road Name: Cedar Avenue				Segment: South of Project Driveway 1								
Average Daily Traffic: 23170 Vehicles				Vehicle Speed: 45 MPH		Vehicle Mix: 2				Roadway Classification: Major		
	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)									Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels							
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL	Ldn	CNEL	
Automobiles	69.34	1.45	-1.34	-1.20	68.26	65.89	64.59	58.54	66.97	67.60	70 dBA: 46 50	
Medium Trucks	77.62	-13.42	-1.34	-1.20	61.67	42.46	34.68	43.89	50.04	50.08	65 dBA: 98 107	
Heavy Trucks	82.14	-11.20	-1.34	-1.20	68.41	51.42	43.64	52.84	59.00	59.03	60 dBA: 212 230	
Total:				71.79	66.06	64.63	59.69	67.69	68.23	55 dBA: 456 496		

Road Name: Cedar Avenue					Segment: South of Jurupa Avenue								
Average Daily Traffic: 14300 Vehicles					Vehicle Speed: 45 MPH		Vehicle Mix: 2		Roadway Classification: Major				
	NOISE PARAMETERS AT 75 FEET FROM CENTERLINE (Equiv. Lane Dist: 71.06 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	69.34	-0.65	-2.39	-1.20	65.11	62.73	61.44	55.39	63.82	64.45	70 dBA:	32	35
Medium Trucks	77.62	-15.51	-2.39	-1.20	58.52	39.31	31.53	40.73	46.89	46.92	65 dBA:	70	76
Heavy Trucks	82.14	-13.29	-2.39	-1.20	65.25	48.26	40.48	49.69	55.85	55.88	60 dBA:	150	164
	Total:				68.64	62.91	61.48	56.54	64.54	65.08	55 dBA:	324	352

Road Name: Larch Avenue				Segment: North of Santa Ana Avenue								
Average Daily Traffic: 3790 Vehicles				Vehicle Speed: 35 MPH		Vehicle Mix: 1		Roadway Classification: Collector				
	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 54.42 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels							
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL	Ldn	CNEL	
Automobiles	65.11	-5.07	-0.65	-1.20	58.18	56.06	54.75	48.73	57.15	57.78	70 dBA: 8 8	
Medium Trucks	74.83	-22.31	-0.65	-1.20	50.66	29.41	35.43	17.14	30.28	33.04	65 dBA: 17 18	
Heavy Trucks	80.05	-26.27	-0.65	-1.20	51.92	26.57	23.17	27.82	34.02	34.12	60 dBA: 36 39	
Total:				59.69	56.07	54.80	48.77	57.18	57.81	55 dBA: 77 85		

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: OPENING YEAR 2021 WITHOUT PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Larch Avenue

Segment: South of Santa Ana Avenue

Average Daily Traffic: 2710 Vehicles

Vehicle Speed: 35 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 69.54 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	65.11	-6.53	-2.25	-1.20	55.13	53.00	51.69	45.68	54.10	54.73	70 dBA: 6	7
Medium Trucks	74.83	-23.77	-2.25	-1.20	47.61	26.36	32.38	14.09	27.23	29.98	65 dBA: 13	15
Heavy Trucks	80.05	-27.72	-2.25	-1.20	48.87	23.52	20.12	24.77	30.97	31.06	60 dBA: 28	31
Total:					56.63	53.02	51.75	45.72	54.13	54.76	55 dBA: 61	67

Road Name: Slover Avenue

Segment: West of Cedar Avenue

Average Daily Traffic: 6720 Vehicles

Vehicle Speed: 50 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	71.12	-4.38	-0.04	-1.20	65.50	63.13	61.83	55.78	64.21	64.84	70 dBA: 25	27
Medium Trucks	78.79	-19.25	-0.04	-1.20	58.31	39.10	31.32	40.53	46.68	46.71	65 dBA: 53	58
Heavy Trucks	83.02	-17.03	-0.04	-1.20	64.75	47.76	39.98	49.19	55.34	55.38	60 dBA: 115	125
Total:					68.58	63.27	61.87	56.75	64.81	65.37	55 dBA: 248	270

Road Name: Slover Avenue

Segment: East of Cedar Avenue

Average Daily Traffic: 7140 Vehicles

Vehicle Speed: 50 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	71.12	-4.12	-1.34	-1.20	64.46	62.09	60.80	54.74	63.18	63.81	70 dBA: 25	27
Medium Trucks	78.79	-18.99	-1.34	-1.20	57.27	38.06	30.28	39.49	45.64	45.68	65 dBA: 54	59
Heavy Trucks	83.02	-16.77	-1.34	-1.20	63.72	46.73	38.95	48.15	54.31	54.34	60 dBA: 116	126
Total:					67.55	62.23	60.83	55.71	63.77	64.33	55 dBA: 250	272

Road Name: Santa Ana Avenue

Segment: West of Linden Avenue

Average Daily Traffic: 2880 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 66.78 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-7.09	-1.99	-1.20	57.08	54.71	53.41	47.36	55.79	56.42	70 dBA: 9	10
Medium Trucks	76.31	-21.96	-1.99	-1.20	51.16	31.96	24.17	33.38	39.54	39.57	65 dBA: 19	21
Heavy Trucks	81.16	-19.74	-1.99	-1.20	58.23	41.24	33.46	42.67	48.82	48.85	60 dBA: 42	46
Total:					61.16	54.92	53.46	48.76	56.67	57.20	55 dBA: 90	98

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: OPENING YEAR 2021 WITHOUT PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Santa Ana Avenue **Segment: West of Cedar Avenue**
Average Daily Traffic: 4160 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 80 FEET FROM CENTERLINE (Equiv. Lane Dist: 77.19 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	67.36	-5.50	-2.93	-1.20	57.73	55.36	54.06	48.01	56.44	57.07	70 dBA:	11	12
Medium Trucks	76.31	-20.36	-2.93	-1.20	51.82	32.61	24.83	34.03	40.19	40.22	65 dBA:	25	27
Heavy Trucks	81.16	-18.15	-2.93	-1.20	58.88	41.89	34.11	43.32	49.47	49.51	60 dBA:	53	58
Total:					61.81	55.57	54.11	49.41	57.32	57.85	55 dBA:	114	124

Road Name: Santa Ana Avenue **Segment: East of Cedar Avenue**
Average Daily Traffic: 3560 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Average Daily Traffic: 6000 Vehicles												Vehicle Speed: 15 mi/h				Vehicle Mix: 2				Roadway Classification: Secondary			
Vehicle Type	NOISE PARAMETERS AT 75 FEET FROM CENTERLINE (Equiv. Lane Dist: 72 ft)										Centerline Distance to Noise Contour (in feet)												
	Noise Adjustments				Unmitigated Noise Levels																		
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL	Ldn	CNEL											
Automobiles	67.36	-6.17	-2.48	-1.20	57.51	55.14	53.84	47.79	56.22	56.85	70 dBA:	10	11										
Medium Trucks	76.31	-21.04	-2.48	-1.20	51.59	32.39	24.60	33.81	39.97	40.00	65 dBA:	22	24										
Heavy Trucks	81.16	-18.82	-2.48	-1.20	58.66	41.67	33.89	43.10	49.25	49.28	60 dBA:	48	52										
Total:					61.59	55.35	53.89	49.19	57.10	57.63	55 dBA:	104	112										

Road Name: Santa Ana Avenue **Segment: East of Larch Avenue**
Average Daily Traffic: 1270 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 66.78 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	67.36	-10.65	-1.99	-1.20	53.52	51.15	49.86	43.80	52.23	52.86	70 dBA:	5	6
Medium Trucks	76.31	-25.52	-1.99	-1.20	47.61	28.40	20.62	29.83	35.98	36.01	65 dBA:	11	12
Heavy Trucks	81.16	-23.30	-1.99	-1.20	54.67	37.68	29.90	39.11	45.26	45.30	60 dBA:	24	26
Total:					57.60	51.36	49.91	45.20	53.11	53.64	55 dBA:	52	57

Road Name: Jurupa Avenue **Segment: West of Cedar Avenue**
Average Daily Traffic: 2800 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	67.36	-7.22	-0.04	-1.20	58.91	56.54	55.24	49.19	57.62	58.25	70 dBA:	9	10
Medium Trucks	76.31	-22.08	-0.04	-1.20	52.99	33.79	26.00	35.21	41.37	41.40	65 dBA:	20	22
Heavy Trucks	81.16	-19.86	-0.04	-1.20	60.06	43.07	35.29	44.50	50.65	50.68	60 dBA:	44	47
Total:					62.99	56.75	55.29	50.58	58.50	59.03	55 dBA:	94	102

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: OPENING YEAR 2021 WITHOUT PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Jurupa Avenue

Segment: East of Cedar Avenue

Average Daily Traffic: 4390 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 50 FEET FROM CENTERLINE (Equiv. Lane Dist: 43.86 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	67.36	-5.26	0.75	-1.20	61.65	59.27	57.98	51.93	60.36	60.99	70 dBA:	13	14
Medium Trucks	76.31	-20.13	0.75	-1.20	55.73	36.52	28.74	37.95	44.10	44.14	65 dBA:	28	30
Heavy Trucks	81.16	-17.91	0.75	-1.20	62.80	45.81	38.03	47.23	53.39	53.42	60 dBA:	60	66
Total:					65.73	59.49	58.03	53.32	61.24	61.77	55 dBA:	130	141

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: OPENING YEAR 2021 WITH PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Vehicle Type	Vehicle Mix 1 (Local)				Vehicle Mix 2 (Arterial)				Vehicle Mix 3 (Hwy 111)			
	Day	Evening	Night	Daily	Day	Evening	Night	Daily	Day	Evening	Night	Daily
Automobiles	73.60%	13.60%	10.22%	97.42%	69.50%	12.90%	9.60%	92.00%	61.54%	12.61%	14.75%	88.90%
Medium Trucks	0.90%	0.90%	0.04%	1.84%	1.44%	0.06%	1.50%	3.00%	4.98%	0.98%	3.21%	9.17%
Heavy Trucks	0.35%	0.04%	0.35%	0.74%	2.40%	0.10%	2.50%	5.00%	0.96%	0.10%	0.87%	1.93%

Road Name: Linden Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 7680 Vehicles

Vehicle Speed: 25 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Average Daily Traffic: 7000 Vehicles Vehicles Speed: 25 mi/h Vehicles Mix: 4 Roadway Classification: Collector													
	NOISE PARAMETERS AT 60 FEET FROM CENTERLINE (Equiv. Lane Dist: 59.46 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL	Ldn	CNEL	
Automobiles	59.44	-0.54	-1.23	-1.20	56.46	54.34	53.03	47.01	55.43	56.06	70 dBA:	6	7
Medium Trucks	71.09	-17.78	-1.23	-1.20	50.87	29.62	35.64	17.35	30.49	33.25	65 dBA:	14	15
Heavy Trucks	78.74	-21.74	-1.23	-1.20	54.57	29.22	25.82	30.47	36.67	36.76	60 dBA:	30	33
	Total:				59.30	54.37	53.11	47.11	55.51	56.13	55 dBA:	65	71

Road Name: Linden Avenue

Segment: South of Santa Ana Avenue

Average Daily Traffic: 8440 Vehicles

Vehicle Speed: 25 MPH

Vehicle Mix: 1

Roadway Classification: Collector

	NOISE PARAMETERS AT 45 FEET FROM CENTERLINE (Equiv. Lane Dist: 44.28 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-0.13	0.69	-1.20	58.79	56.67	55.36	49.34	57.76	58.39	70 dBA:	7	8
Medium Trucks	71.09	-17.37	0.69	-1.20	53.20	31.95	37.97	19.68	32.82	35.58	65 dBA:	15	17
Heavy Trucks	78.74	-21.33	0.69	-1.20	56.90	31.55	28.15	32.80	39.00	39.09	60 dBA:	32	36
Total:					61.63	56.70	55.44	49.44	57.84	58.46	55 dBA:	70	77

Road Name: Cedar Avenue

Segment: North of Slover Avenue

Average Daily Traffic: 25133 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels						Noise Contour (in feet)		
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	69.34	1.80	-0.04	-1.20	69.91	67.54	66.25	60.19	68.62	69.25	70 dBA:	50	54
Medium Trucks	77.62	-13.06	-0.04	-1.20	63.32	44.11	36.33	45.54	51.69	51.73	65 dBA:	107	116
Heavy Trucks	82.14	-10.85	-0.04	-1.20	70.06	53.07	45.29	54.50	60.65	60.69	60 dBA:	231	251
Total:					73.44	67.71	66.28	61.34	69.34	69.89	55 dBA:	497	540

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: OPENING YEAR 2021 WITH PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Cedar Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 25474 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	69.34	1.86	-1.34	-1.20	68.67	66.30	65.01	58.95	67.38	68.01	70 dBA: 49	53
Medium Trucks	77.62	-13.01	-1.34	-1.20	62.08	42.87	35.09	44.30	50.45	50.49	65 dBA: 105	114
Heavy Trucks	82.14	-10.79	-1.34	-1.20	68.82	51.83	44.05	53.26	59.41	59.44	60 dBA: 225	245
Total:					72.20	66.47	65.04	60.10	68.10	68.65	55 dBA: 486	528

Road Name: Cedar Avenue

Segment: South of Project Driveway 1

Average Daily Traffic: 24773 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	69.34	1.74	-1.34	-1.20	68.55	66.18	64.88	58.83	67.26	67.89	70 dBA: 48	52
Medium Trucks	77.62	-13.13	-1.34	-1.20	61.96	42.75	34.97	44.18	50.33	50.37	65 dBA: 103	112
Heavy Trucks	82.14	-10.91	-1.34	-1.20	68.70	51.71	43.93	53.14	59.29	59.32	60 dBA: 221	241
Total:					72.08	66.35	64.92	59.98	67.98	68.52	55 dBA: 477	518

Road Name: Cedar Avenue

Segment: South of Jurupa Avenue

Average Daily Traffic: 15101 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 75 FEET FROM CENTERLINE (Equiv. Lane Dist: 71.06 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	69.34	-0.41	-2.39	-1.20	65.34	62.97	61.68	55.62	64.05	64.68	70 dBA: 34	37
Medium Trucks	77.62	-15.28	-2.39	-1.20	58.75	39.54	31.76	40.97	47.13	47.16	65 dBA: 72	79
Heavy Trucks	82.14	-13.06	-2.39	-1.20	65.49	48.50	40.72	49.93	56.08	56.12	60 dBA: 156	170
Total:					68.87	63.14	61.72	56.77	64.77	65.32	55 dBA: 336	365

Road Name: Larch Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 3950 Vehicles

Vehicle Speed: 35 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 54.42 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	65.11	-4.89	-0.65	-1.20	58.36	56.24	54.93	48.91	57.33	57.96	70 dBA: 8	9
Medium Trucks	74.83	-22.13	-0.65	-1.20	50.84	29.59	35.61	17.32	30.46	33.22	65 dBA: 17	19
Heavy Trucks	80.05	-26.09	-0.65	-1.20	52.10	26.75	23.35	28.00	34.20	34.30	60 dBA: 37	40
Total:					59.87	56.25	54.98	48.95	57.36	57.99	55 dBA: 79	87

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: OPENING YEAR 2021 WITH PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Larch Avenue

Segment: South of Santa Ana Avenue

Average Daily Traffic: 2870 Vehicles

Vehicle Speed: 35 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 69.54 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	65.11	-6.28	-2.25	-1.20	55.38	53.25	51.94	45.93	54.35	54.98	70 dBA: 6	7
Medium Trucks	74.83	-23.52	-2.25	-1.20	47.86	26.61	32.63	14.34	27.48	30.23	65 dBA: 14	15
Heavy Trucks	80.05	-27.47	-2.25	-1.20	49.12	23.77	20.37	25.02	31.22	31.31	60 dBA: 30	33
Total:					56.88	53.27	51.99	45.97	54.38	55.01	55 dBA: 64	70

Road Name: Slover Avenue

Segment: West of Cedar Avenue

Average Daily Traffic: 7201 Vehicles

Vehicle Speed: 50 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	71.12	-4.08	-0.04	-1.20	65.80	63.43	62.14	56.08	64.51	65.14	70 dBA: 26	28
Medium Trucks	78.79	-18.95	-0.04	-1.20	58.61	39.40	31.62	40.83	46.98	47.01	65 dBA: 56	61
Heavy Trucks	83.02	-16.73	-0.04	-1.20	65.05	48.06	40.28	49.49	55.64	55.68	60 dBA: 121	131
Total:					68.88	63.57	62.17	57.05	65.11	65.67	55 dBA: 260	283

Road Name: Slover Avenue

Segment: East of Cedar Avenue

Average Daily Traffic: 7621 Vehicles

Vehicle Speed: 50 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	71.12	-3.84	-1.34	-1.20	64.75	62.38	61.08	55.03	63.46	64.09	70 dBA: 26	28
Medium Trucks	78.79	-18.70	-1.34	-1.20	57.55	38.35	30.56	39.77	45.93	45.96	65 dBA: 56	61
Heavy Trucks	83.02	-16.49	-1.34	-1.20	64.00	47.01	39.23	48.44	54.59	54.62	60 dBA: 121	132
Total:					67.83	62.52	61.11	55.99	64.06	64.62	55 dBA: 261	284

Road Name: Santa Ana Avenue

Segment: West of Linden Avenue

Average Daily Traffic: 3681 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 66.78 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-6.03	-1.99	-1.20	58.14	55.77	54.48	48.42	56.86	57.49	70 dBA: 11	12
Medium Trucks	76.31	-20.89	-1.99	-1.20	52.23	33.02	25.24	34.45	40.60	40.64	65 dBA: 23	25
Heavy Trucks	81.16	-18.68	-1.99	-1.20	59.30	42.31	34.52	43.73	49.89	49.92	60 dBA: 49	54
Total:					62.23	55.98	54.53	49.82	57.74	58.26	55 dBA: 107	116

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: OPENING YEAR 2021 WITH PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Santa Ana Avenue **Segment: West of Cedar Avenue**
Average Daily Traffic: 5282 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 80 FEET FROM CENTERLINE (Equiv. Lane Dist: 77.19 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-4.46	-2.93	-1.20	58.77	56.39	55.10	49.05	57.48	58.11	70 dBA: 13	15
Medium Trucks	76.31	-19.33	-2.93	-1.20	52.85	33.64	25.86	35.07	41.23	41.26	65 dBA: 29	31
Heavy Trucks	81.16	-17.11	-2.93	-1.20	59.92	42.93	35.15	44.36	50.51	50.54	60 dBA: 62	67
Total:					62.85	56.61	55.15	50.44	58.36	58.89	55 dBA: 134	145

Road Name: Santa Ana Avenue **Segment: East of Cedar Avenue**
Average Daily Traffic: 5163 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 75 FEET FROM CENTERLINE (Equiv. Lane Dist: 72 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-4.56	-2.48	-1.20	59.12	56.75	55.46	49.40	57.83	58.46	70 dBA: 13	14
Medium Trucks	76.31	-19.43	-2.48	-1.20	53.21	34.00	26.22	35.43	41.58	41.61	65 dBA: 29	31
Heavy Trucks	81.16	-17.21	-2.48	-1.20	60.27	43.28	35.50	44.71	50.86	50.90	60 dBA: 62	67
Total:					63.20	56.96	55.51	50.80	58.71	59.24	55 dBA: 133	144

Road Name: Santa Ana Avenue **Segment: East of Larch Avenue**
Average Daily Traffic: 1911 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 66.78 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-8.88	-1.99	-1.20	55.30	52.92	51.63	45.58	54.01	54.64	70 dBA: 7	7
Medium Trucks	76.31	-23.74	-1.99	-1.20	49.38	30.17	22.39	31.60	37.76	37.79	65 dBA: 15	16
Heavy Trucks	81.16	-21.52	-1.99	-1.20	56.45	39.46	31.68	40.88	47.04	47.07	60 dBA: 32	35
Total:					59.38	53.14	51.68	46.97	54.89	55.42	55 dBA: 69	75

Road Name: Jurupa Avenue **Segment: West of Cedar Avenue**
Average Daily Traffic: 3281 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-6.53	-0.04	-1.20	59.60	57.22	55.93	49.88	58.31	58.94	70 dBA: 10	11
Medium Trucks	76.31	-21.40	-0.04	-1.20	53.68	34.47	26.69	35.90	42.05	42.09	65 dBA: 23	24
Heavy Trucks	81.16	-19.18	-0.04	-1.20	60.75	43.76	35.98	45.18	51.34	51.37	60 dBA: 49	53
Total:					63.68	57.44	55.98	51.27	59.19	59.71	55 dBA: 105	113

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: OPENING YEAR 2021 WITH PROJECT CONDITIONS

Project: Bloomington Commercial Center
Site Conditions: Soft

Road Name: Jurupa Avenue

Segment: East of Cedar Avenue

Average Daily Traffic: 4871 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Major

	NOISE PARAMETERS AT 50 FEET FROM CENTERLINE (Equiv. Lane Dist: 43.86 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	67.36	-4.81	0.75	-1.20	62.10	59.73	58.43	52.38	60.81	61.44	70 dBA:	14	15
Medium Trucks	76.31	-19.68	0.75	-1.20	56.18	36.98	29.19	38.40	44.56	44.59	65 dBA:	30	33
Heavy Trucks	81.16	-17.46	0.75	-1.20	63.25	46.26	38.48	47.69	53.84	53.87	60 dBA:	65	70
Total:					66.18	59.94	58.48	53.77	61.69	62.22	55 dBA:	140	151

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: HORIZON YEAR 2040 WITHOUT PROJECT CONDITIONS

Project Name: Commerce Retail Center

Site Conditions: Soft

Vehicle Type	Vehicle Mix 1 (Local)				Vehicle Mix 2 (Arterial)				Vehicle Mix 3 (Hwy 111)			
	Day	Evening	Night	Daily	Day	Evening	Night	Daily	Day	Evening	Night	Daily
Automobiles	73.60%	13.60%	10.22%	97.42%	69.50%	12.90%	9.60%	92.00%	61.54%	12.61%	14.75%	88.90%
Medium Trucks	0.90%	0.90%	0.04%	1.84%	1.44%	0.06%	1.50%	3.00%	4.98%	0.98%	3.21%	9.17%
Heavy Trucks	9.00%	0.04%	0.35%	0.74%	2.40%	0.10%	2.50%	5.00%	0.96%	0.10%	0.87%	1.93%

Road Name: Linden Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 10320 Vehicles

Vehicle Speed: 25 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Average Daily Traffic: 10020 Vehicles Vehicle Speed: 25 MI/Hr Vehicle Mix: 4 Roadway Classification: Collector													
Vehicle Type	NOISE PARAMETERS AT 60 FEET FROM CENTERLINE (Equiv. Lane Dist: 59.46 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL	
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL			
Automobiles	59.44	0.74	-1.23	-1.20	57.75	55.62	54.31	48.30	56.72	57.34	70 dBA:	8	9
Medium Trucks	71.09	-16.50	-1.23	-1.20	52.15	30.91	36.93	18.63	31.78	34.53	65 dBA:	17	19
Heavy Trucks	78.74	-20.46	-1.23	-1.20	55.85	44.60	27.10	31.75	43.03	43.06	60 dBA:	37	41
Total:					60.58	55.97	54.40	48.40	56.91	57.53	55 dBA:	80	88

Road Name: Linden Avenue

Segment: South of Santa Ana Avenue

Average Daily Traffic: 11340 Vehicles

Vehicle Speed: 25 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Average Daily Traffic: 14610 Vehicles Vehicle Speed: 25 mi/h Vehicle Mix: 1 Roadway Classification: Collector													
Vehicle Type	NOISE PARAMETERS AT 45 FEET FROM CENTERLINE (Equiv. Lane Dist: 44.28 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL	
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL			
Automobiles	59.44	1.15	0.69	-1.20	60.08	57.95	56.64	50.63	59.05	59.67	70 dBA:	9	9
Medium Trucks	71.09	-16.09	0.69	-1.20	54.48	33.23	39.26	20.96	34.11	36.86	65 dBA:	19	20
Heavy Trucks	78.74	-20.05	0.69	-1.20	58.18	46.93	29.43	34.08	45.36	45.39	60 dBA:	40	44
Total:					62.91	58.30	56.73	50.73	59.24	59.85	55 dBA:	86	95

Road Name: Cedar Avenue

Segment: North of Slover Avenue

Average Daily Traffic: 35900 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	69.34	3.35	-0.04	-1.20	71.46	69.09	67.79	61.74	70.17	70.80	70 dBA:	63	69
Medium Trucks	77.62	-11.52	-0.04	-1.20	64.87	45.66	37.88	47.09	53.24	53.28	65 dBA:	136	148
Heavy Trucks	82.14	-9.30	-0.04	-1.20	71.61	54.62	46.84	56.05	62.20	62.23	60 dBA:	293	318
	Total:				74.99	69.26	67.83	62.89	70.89	71.43	55 dBA:	630	686

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: HORIZON YEAR 2040 WITHOUT PROJECT CONDITIONS

Project Name: Commerce Retail Center
Site Conditions: Soft

Road Name: Cedar Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 33310 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night				
Automobiles	69.34	3.03	-1.34	-1.20	69.84	67.46	66.17	60.12	68.55	69.18	70 dBA: 58	63
Medium Trucks	77.62	-11.84	-1.34	-1.20	63.25	44.04	36.26	45.47	51.62	51.65	65 dBA: 125	136
Heavy Trucks	82.14	-9.62	-1.34	-1.20	69.98	52.99	45.21	54.42	60.58	60.61	60 dBA: 270	293
Total:					73.37	67.64	66.21	61.27	69.27	69.81	55 dBA: 581	631

Road Name: Cedar Avenue

Segment: South of Project Driveway 1

Average Daily Traffic: 33120 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night				
Automobiles	69.34	3.00	-1.34	-1.20	69.81	67.44	66.15	60.09	68.52	69.15	70 dBA: 58	63
Medium Trucks	77.62	-11.87	-1.34	-1.20	63.22	44.01	36.23	45.44	51.59	51.63	65 dBA: 125	136
Heavy Trucks	82.14	-9.65	-1.34	-1.20	69.96	52.97	45.19	54.40	60.55	60.58	60 dBA: 269	292
Total:					73.34	67.61	66.18	61.24	69.24	69.79	55 dBA: 578	629

Road Name: Cedar Avenue

Segment: South of Jurupa Avenue

Average Daily Traffic: 35170 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 75 FEET FROM CENTERLINE (Equiv. Lane Dist: 71.06 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night				
Automobiles	69.34	3.26	-2.39	-1.20	69.01	66.64	65.35	59.29	67.73	68.36	70 dBA: 59	64
Medium Trucks	77.62	-11.60	-2.39	-1.20	62.42	43.22	35.44	44.64	50.80	50.83	65 dBA: 127	138
Heavy Trucks	82.14	-9.39	-2.39	-1.20	69.16	52.17	44.39	53.60	59.75	59.79	60 dBA: 274	298
Total:					72.54	66.81	65.39	60.45	68.44	68.99	55 dBA: 591	642

Road Name: Larch Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 5270 Vehicles

Vehicle Speed: 35 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 54.42 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night				
Automobiles	65.11	-3.64	-0.65	-1.20	59.61	57.49	56.18	50.17	58.59	59.21	70 dBA: 10	11
Medium Trucks	74.83	-20.88	-0.65	-1.20	52.09	30.84	36.86	18.57	31.72	34.47	65 dBA: 21	23
Heavy Trucks	80.05	-24.84	-0.65	-1.20	53.36	42.11	24.61	29.25	40.54	40.57	60 dBA: 45	49
Total:					61.12	57.62	56.23	50.20	58.66	59.29	55 dBA: 96	106

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: HORIZON YEAR 2040 WITHOUT PROJECT CONDITIONS

Project Name: Commerce Retail Center

Site Conditions: Soft

Road Name: Larch Avenue

Segment: South of Santa Ana Avenue

Average Daily Traffic: 4140 Vehicles

Vehicle Speed: 35 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 69.54 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	65.11	-4.69	-2.25	-1.20	56.97	54.84	53.53	47.52	55.94	56.57	70 dBA: 8	9
Medium Trucks	74.83	-21.93	-2.25	-1.20	49.45	28.20	34.22	15.93	29.07	31.82	65 dBA: 18	19
Heavy Trucks	80.05	-25.88	-2.25	-1.20	50.71	39.46	21.96	26.61	37.89	37.92	60 dBA: 38	42
Total:					58.47	54.98	53.59	47.56	56.02	56.64	55 dBA: 82	90

Road Name: Slover Avenue

Segment: West of Cedar Avenue

Average Daily Traffic: 21430 Vehicles

Vehicle Speed: 50 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	71.12	0.65	-0.04	-1.20	70.54	68.16	66.87	60.82	69.25	69.88	70 dBA: 54	59
Medium Trucks	78.79	-14.21	-0.04	-1.20	63.34	44.14	36.35	45.56	51.72	51.75	65 dBA: 116	126
Heavy Trucks	83.02	-12.00	-0.04	-1.20	69.79	52.80	45.02	54.23	60.38	60.41	60 dBA: 249	272
Total:					73.62	68.31	66.90	61.78	69.85	70.40	55 dBA: 537	585

Road Name: Slover Avenue

Segment: East of Cedar Avenue

Average Daily Traffic: 17440 Vehicles

Vehicle Speed: 50 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	71.12	-0.24	-1.34	-1.20	68.34	65.97	64.68	58.62	67.05	67.69	70 dBA: 45	49
Medium Trucks	78.79	-15.11	-1.34	-1.20	61.15	41.94	34.16	43.37	49.52	49.56	65 dBA: 98	106
Heavy Trucks	83.02	-12.89	-1.34	-1.20	67.60	50.61	42.82	52.03	58.19	58.22	60 dBA: 210	229
Total:					71.42	66.11	64.71	59.59	67.65	68.21	55 dBA: 453	494

Road Name: Santa Ana Avenue

Segment: West of Linden Avenue

Average Daily Traffic: 6610 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 66.78 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-3.49	-1.99	-1.20	60.69	58.31	57.02	50.97	59.40	60.03	70 dBA: 16	17
Medium Trucks	76.31	-18.35	-1.99	-1.20	54.77	35.56	27.78	36.99	43.14	43.18	65 dBA: 34	37
Heavy Trucks	81.16	-16.13	-1.99	-1.20	61.84	44.85	37.07	46.27	52.43	52.46	60 dBA: 73	79
Total:					64.77	58.53	57.07	52.36	60.28	60.81	55 dBA: 157	171

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: HORIZON YEAR 2040 WITHOUT PROJECT CONDITIONS

Project Name: Commerce Retail Center
Site Conditions: Soft

Road Name: Santa Ana Avenue **Segment: West of Cedar Avenue**
Average Daily Traffic: 8640 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 80 FEET FROM CENTERLINE (Equiv. Lane Dist: 77.19 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-2.32	-2.93	-1.20	60.90	58.53	57.24	51.18	59.62	60.25	70 dBA: 19	20
Medium Trucks	76.31	-17.19	-2.93	-1.20	54.99	35.78	28.00	37.21	43.36	43.40	65 dBA: 40	43
Heavy Trucks	81.16	-14.97	-2.93	-1.20	62.06	45.07	37.28	46.49	52.65	52.68	60 dBA: 86	94
Total:					64.99	58.75	57.29	52.58	60.50	61.02	55 dBA: 186	202

Road Name: Santa Ana Avenue **Segment: East of Cedar Avenue**
Average Daily Traffic: 10440 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 75 FEET FROM CENTERLINE (Equiv. Lane Dist: 72 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-1.50	-2.48	-1.20	62.18	59.81	58.51	52.46	60.89	61.52	70 dBA: 21	23
Medium Trucks	76.31	-16.37	-2.48	-1.20	56.27	37.06	29.28	38.48	44.64	44.67	65 dBA: 46	50
Heavy Trucks	81.16	-14.15	-2.48	-1.20	63.33	46.34	38.56	47.77	53.92	53.96	60 dBA: 98	107
Total:					66.26	60.02	58.56	53.86	61.77	62.30	55 dBA: 212	230

Road Name: Santa Ana Avenue **Segment: East of Larch Avenue**
Average Daily Traffic: 8440 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 66.78 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-2.42	-1.99	-1.20	61.75	59.38	58.08	52.03	60.46	61.09	70 dBA: 19	20
Medium Trucks	76.31	-17.29	-1.99	-1.20	55.83	36.63	28.84	38.05	44.21	44.24	65 dBA: 40	43
Heavy Trucks	81.16	-15.07	-1.99	-1.20	62.90	45.91	38.13	47.34	53.49	53.52	60 dBA: 86	93
Total:					65.83	59.59	58.13	53.42	61.34	61.87	55 dBA: 185	201

Road Name: Jurupa Avenue **Segment: West of Cedar Avenue**
Average Daily Traffic: 11590 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-1.05	-0.04	-1.20	65.08	62.70	61.41	55.36	63.79	64.42	70 dBA: 24	26
Medium Trucks	76.31	-15.91	-0.04	-1.20	59.16	39.95	32.17	41.38	47.54	47.57	65 dBA: 52	57
Heavy Trucks	81.16	-13.70	-0.04	-1.20	66.23	49.24	41.46	50.66	56.82	56.85	60 dBA: 113	122
Total:					69.16	62.92	61.46	56.75	64.67	65.20	55 dBA: 243	263

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: HORIZON YEAR 2040 WITHOUT PROJECT CONDITIONS

Project Name: Commerce Retail Center
Site Conditions: Soft

Road Name: Jurupa Avenue

Segment: East of Cedar Avenue

Average Daily Traffic: 13740 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Major

	NOISE PARAMETERS AT 50 FEET FROM CENTERLINE (Equiv. Lane Dist: 43.86 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	67.36	-0.31	0.75	-1.20	66.60	64.23	62.94	56.88	65.31	65.94	70 dBA:	28	30
Medium Trucks	76.31	-15.17	0.75	-1.20	60.69	41.48	33.70	42.91	49.06	49.09	65 dBA:	60	65
Heavy Trucks	81.16	-12.96	0.75	-1.20	67.75	50.76	42.98	52.19	58.34	58.38	60 dBA:	129	140
Total:					70.68	64.44	62.98	58.28	66.19	66.72	55 dBA:	279	302

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: HORIZON YEAR 2040 WITH PROJECT CONDITIONS

Project Name: Commerce Retail Center

Site Conditions: Soft

Vehicle Type	Vehicle Mix 1 (Local)				Vehicle Mix 2 (Arterial)				Vehicle Mix 3 (Hwy 111)			
	Day	Evening	Night	Daily	Day	Evening	Night	Daily	Day	Evening	Night	Daily
Automobiles	73.60%	13.60%	10.22%	97.42%	69.50%	12.90%	9.60%	92.00%	61.54%	12.61%	14.75%	88.90%
Medium Trucks	0.90%	0.90%	0.04%	1.84%	1.44%	0.06%	1.50%	3.00%	4.98%	0.98%	3.21%	9.17%
Heavy Trucks	9.00%	0.04%	0.35%	0.74%	2.40%	0.10%	2.50%	5.00%	0.96%	0.10%	0.87%	1.93%

Road Name: Linden Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 10480 Vehicles

Vehicle Speed: 25 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Average Daily Traffic: 15,100 Vehicles Vehicle Speed: 25 mi/h Vehicle Mix: 10% Trucks Roadway Classification: Collector													
	NOISE PARAMETERS AT 60 FEET FROM CENTERLINE (Equiv. Lane Dist: 59.46 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL	Ldn	CNEL	
Automobiles	59.44	0.81	-1.23	-1.20	57.81	55.69	54.38	48.36	56.78	57.41	70 dBA:	8	9
Medium Trucks	71.09	-16.43	-1.23	-1.20	52.22	30.97	36.99	18.70	31.84	34.60	65 dBA:	18	19
Heavy Trucks	78.74	-20.39	-1.23	-1.20	55.92	44.67	27.17	31.82	43.10	43.13	60 dBA:	38	41
	Total:				60.65	56.03	54.46	48.46	56.98	57.59	55 dBA:	81	89

Road Name: Linden Avenue

Segment: South of Santa Ana Avenue

Average Daily Traffic: 11500 Vehicles

Vehicle Speed: 25 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Average Daily Traffic: 17000 Vehicles Vehicle Speed: 25 mi/h Vehicle Mix: 1 Roadway Classification: Collector													
Vehicle Type	NOISE PARAMETERS AT 45 FEET FROM CENTERLINE (Equiv. Lane Dist: 44.28 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL	Ldn	CNEL	
Automobiles	59.44	1.21	0.69	-1.20	60.14	58.01	56.70	50.69	59.11	59.73	70 dBA:	9	10
Medium Trucks	71.09	-16.03	0.69	-1.20	54.55	33.30	39.32	21.02	34.17	36.92	65 dBA:	19	21
Heavy Trucks	78.74	-19.99	0.69	-1.20	58.24	46.99	29.49	34.14	45.42	45.45	60 dBA:	40	44
Total:					62.98	58.36	56.79	50.79	59.30	59.92	55 dBA:	87	96

Road Name: Cedar Avenue

Segment: North of Slover Avenue

Average Daily Traffic: 37823 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL	Ldn	CNEL	
Automobiles	69.34	3.58	-0.04	-1.20	71.69	69.31	68.02	61.97	70.40	71.03	70 dBA:	65	71
Medium Trucks	77.62	-11.29	-0.04	-1.20	65.10	45.89	38.11	47.32	53.47	53.50	65 dBA:	141	153
Heavy Trucks	82.14	-9.07	-0.04	-1.20	71.84	54.85	47.06	56.27	62.43	62.46	60 dBA:	303	329
Total:					75.22	69.49	68.06	63.12	71.12	71.66	55 dBA:	653	710

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: HORIZON YEAR 2040 WITH PROJECT CONDITIONS

Project Name: Commerce Retail Center
Site Conditions: Soft

Road Name: Cedar Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 35874 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	69.34	3.35	-1.34	-1.20	70.16	67.79	66.49	60.44	68.87	69.50	70 dBA: 61	66
Medium Trucks	77.62	-11.52	-1.34	-1.20	63.57	44.36	36.58	45.79	51.94	51.98	65 dBA: 131	143
Heavy Trucks	82.14	-9.30	-1.34	-1.20	70.31	53.32	45.54	54.74	60.90	60.93	60 dBA: 283	308
Total:					73.69	67.96	66.53	61.59	69.59	70.13	55 dBA: 610	663

Road Name: Cedar Avenue

Segment: South of Project Driveway 1

Average Daily Traffic: 34723 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	69.34	3.21	-1.34	-1.20	70.02	67.64	66.35	60.30	68.73	69.36	70 dBA: 60	65
Medium Trucks	77.62	-11.66	-1.34	-1.20	63.43	44.22	36.44	45.65	51.80	51.83	65 dBA: 129	140
Heavy Trucks	82.14	-9.44	-1.34	-1.20	70.16	53.18	45.39	54.60	60.76	60.79	60 dBA: 277	301
Total:					73.55	67.82	66.39	61.45	69.45	69.99	55 dBA: 597	649

Road Name: Cedar Avenue

Segment: South of Jurupa Avenue

Average Daily Traffic: 35971 Vehicles

Vehicle Speed: 45 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 75 FEET FROM CENTERLINE (Equiv. Lane Dist: 71.06 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	69.34	3.36	-2.39	-1.20	69.11	66.74	65.45	59.39	67.82	68.45	70 dBA: 60	65
Medium Trucks	77.62	-11.51	-2.39	-1.20	62.52	43.31	35.53	44.74	50.90	50.93	65 dBA: 129	140
Heavy Trucks	82.14	-9.29	-2.39	-1.20	69.26	52.27	44.49	53.70	59.85	59.89	60 dBA: 278	303
Total:					72.64	66.91	65.49	60.54	68.54	69.09	55 dBA: 600	652

Road Name: Larch Avenue

Segment: North of Santa Ana Avenue

Average Daily Traffic: 5430 Vehicles

Vehicle Speed: 35 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 54.42 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	65.11	-3.51	-0.65	-1.20	59.74	57.62	56.31	50.30	58.72	59.34	70 dBA: 10	11
Medium Trucks	74.83	-20.75	-0.65	-1.20	52.22	30.97	37.00	18.70	31.85	34.60	65 dBA: 21	23
Heavy Trucks	80.05	-24.71	-0.65	-1.20	53.49	42.24	24.74	29.38	40.67	40.70	60 dBA: 46	50
Total:					61.25	57.75	56.36	50.33	58.79	59.42	55 dBA: 98	108

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: HORIZON YEAR 2040 WITH PROJECT CONDITIONS

Project Name: Commerce Retail Center
Site Conditions: Soft

Road Name: Larch Avenue

Segment: South of Santa Ana Avenue

Average Daily Traffic: 4300 Vehicles

Vehicle Speed: 35 MPH

Vehicle Mix: 1

Roadway Classification: Collector

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 69.54 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	65.11	-4.52	-2.25	-1.20	57.13	55.01	53.70	47.68	56.10	56.73	70 dBA: 8	9
Medium Trucks	74.83	-21.76	-2.25	-1.20	49.61	28.36	34.38	16.09	29.23	31.99	65 dBA: 18	20
Heavy Trucks	80.05	-25.72	-2.25	-1.20	50.87	39.63	22.12	26.77	38.06	38.09	60 dBA: 39	43
Total:					58.64	55.14	53.75	47.72	56.18	56.80	55 dBA: 84	92

Road Name: Slover Avenue

Segment: West of Cedar Avenue

Average Daily Traffic: 21911 Vehicles

Vehicle Speed: 50 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	71.12	0.75	-0.04	-1.20	70.63	68.26	66.97	60.91	69.34	69.98	70 dBA: 55	59
Medium Trucks	78.79	-14.12	-0.04	-1.20	63.44	44.23	36.45	45.66	51.81	51.85	65 dBA: 117	128
Heavy Trucks	83.02	-11.90	-0.04	-1.20	69.89	52.90	45.11	54.32	60.48	60.51	60 dBA: 253	276
Total:					73.71	68.40	67.00	61.88	69.94	70.50	55 dBA: 545	594

Road Name: Slover Avenue

Segment: East of Cedar Avenue

Average Daily Traffic: 17921 Vehicles

Vehicle Speed: 50 MPH

Vehicle Mix: 2

Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 65 FEET FROM CENTERLINE (Equiv. Lane Dist: 60.41 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	71.12	-0.12	-1.34	-1.20	68.46	66.09	64.80	58.74	67.17	67.80	70 dBA: 46	50
Medium Trucks	78.79	-14.99	-1.34	-1.20	61.27	42.06	34.28	43.49	49.64	49.67	65 dBA: 99	108
Heavy Trucks	83.02	-12.77	-1.34	-1.20	67.71	50.72	42.94	52.15	58.30	58.34	60 dBA: 214	233
Total:					71.54	66.23	64.83	59.71	67.77	68.33	55 dBA: 462	503

Road Name: Santa Ana Avenue

Segment: West of Linden Avenue

Average Daily Traffic: 7411 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 66.78 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-2.99	-1.99	-1.20	61.18	58.81	57.52	51.46	59.89	60.53	70 dBA: 17	18
Medium Trucks	76.31	-17.86	-1.99	-1.20	55.27	36.06	28.28	37.49	43.64	43.68	65 dBA: 37	40
Heavy Trucks	81.16	-15.64	-1.99	-1.20	62.33	45.34	37.56	46.77	52.93	52.96	60 dBA: 79	85
Total:					65.26	59.02	57.57	52.86	60.77	61.30	55 dBA: 170	184

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: HORIZON YEAR 2040 WITH PROJECT CONDITIONS

Project Name: Commerce Retail Center
Site Conditions: Soft

Road Name: Santa Ana Avenue **Segment: West of Cedar Avenue**
Average Daily Traffic: 9762 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 80 FEET FROM CENTERLINE (Equiv. Lane Dist: 77.19 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-1.79	-2.93	-1.20	61.43	59.06	57.77	51.71	60.15	60.78	70 dBA: 20	22
Medium Trucks	76.31	-16.66	-2.93	-1.20	55.52	36.31	28.53	37.74	43.89	43.93	65 dBA: 43	47
Heavy Trucks	81.16	-14.44	-2.93	-1.20	62.59	45.60	37.81	47.02	53.18	53.21	60 dBA: 94	102
Total:					65.52	59.28	57.82	53.11	61.03	61.55	55 dBA: 202	219

Road Name: Santa Ana Avenue **Segment: East of Cedar Avenue**
Average Daily Traffic: 12043 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 75 FEET FROM CENTERLINE (Equiv. Lane Dist: 72 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-0.88	-2.48	-1.20	62.80	60.43	59.13	53.08	61.51	62.14	70 dBA: 23	25
Medium Trucks	76.31	-15.75	-2.48	-1.20	56.89	37.68	29.90	39.10	45.26	45.29	65 dBA: 50	54
Heavy Trucks	81.16	-13.53	-2.48	-1.20	63.95	46.96	39.18	48.39	54.54	54.58	60 dBA: 108	117
Total:					66.88	60.64	59.18	54.48	62.39	62.92	55 dBA: 233	253

Road Name: Santa Ana Avenue **Segment: East of Larch Avenue**
Average Daily Traffic: 9081 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Secondary

Vehicle Type	NOISE PARAMETERS AT 70 FEET FROM CENTERLINE (Equiv. Lane Dist: 66.78 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-2.11	-1.99	-1.20	62.07	59.69	58.40	52.35	60.78	61.41	70 dBA: 19	21
Medium Trucks	76.31	-16.97	-1.99	-1.20	56.15	36.94	29.16	38.37	44.52	44.56	65 dBA: 42	45
Heavy Trucks	81.16	-14.75	-1.99	-1.20	63.22	46.23	38.45	47.65	53.81	53.84	60 dBA: 90	98
Total:					66.15	59.91	58.45	53.74	61.66	62.18	55 dBA: 194	211

Road Name: Jurupa Avenue **Segment: West of Cedar Avenue**
Average Daily Traffic: 12071 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Major

Vehicle Type	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.49 ft)										Centerline Distance to Noise Contour (in feet)	
	Noise Adjustments				Unmitigated Noise Levels						Ldn	CNEL
	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		
Automobiles	67.36	-0.87	-0.04	-1.20	65.25	62.88	61.59	55.53	63.96	64.60	70 dBA: 25	27
Medium Trucks	76.31	-15.74	-0.04	-1.20	59.34	40.13	32.35	41.56	47.71	47.75	65 dBA: 54	58
Heavy Trucks	81.16	-13.52	-0.04	-1.20	66.40	49.41	41.63	50.84	57.00	57.03	60 dBA: 116	125
Total:					69.33	63.09	61.64	56.93	64.84	65.37	55 dBA: 249	270

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: HORIZON YEAR 2040 WITH PROJECT CONDITIONS

Project Name: Commerce Retail Center
Site Conditions: Soft

Road Name: Jurupa Avenue

Segment: East of Cedar Avenue

Average Daily Traffic: 14221 Vehicles

Vehicle Speed: 40 MPH

Vehicle Mix: 2

Roadway Classification: Major

	NOISE PARAMETERS AT 50 FEET FROM CENTERLINE (Equiv. Lane Dist: 43.86 ft)										Centerline Distance to Noise Contour (in feet)		
	Noise Adjustments				Unmitigated Noise Levels								
Vehicle Type	REMEL Traffic Adj.	Dist Adj.	Finite Adj.		Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	67.36	-0.16	0.75	-1.20	66.75	64.38	63.09	57.03	65.46	66.09	70 dBA:	29	31
Medium Trucks	76.31	-15.03	0.75	-1.20	60.84	41.63	33.85	43.06	49.21	49.24	65 dBA:	61	67
Heavy Trucks	81.16	-12.81	0.75	-1.20	67.90	50.91	43.13	52.34	58.49	58.53	60 dBA:	132	144
Total:					70.83	64.59	63.13	58.43	66.34	66.87	55 dBA:	285	309

General Information													
Serial Number	02509												
Model	831												
Firmware Version	2.112												
Filename	831_Data.005												
User	GT												
Job Description	Northwest Fresno Walmart Relocation												
Location	Rooftop HVAC Unit												
Measurement Description													
Start Time	Saturday, 2013 July 27 18:31:43												
Stop Time	Saturday, 2013 July 27 18:41:44												
Duration	00:10:01.1												
Run Time	00:10:01.1												
Pause	00:00:00.0												
Pre Calibration	Saturday, 2013 July 27 17:53:07												
Post Calibration	None												
Calibration Deviation	---												
Note													
Located 10 feet southeast of rooftop HVAC Unit 14 located on western side of roof													
94 F, 30% Hu., 29.45 in Hg, no wind, partly cloudy													
Overall Data													
LAeq												66.6	dB
LASmax	2013 Jul 27 18:33:16											67.6	dB
LApeak (max)	2013 Jul 27 18:32:17											81.6	dB
LASmin	2013 Jul 27 18:41:08											65.8	dB
LCeq												75.8	dB
LAeq												66.6	dB
LCeq - LAeq												9.2	dB
LA1eq												67.2	dB
LAeq												66.6	dB
LA1eq - LAeq												0.6	dB
Ldn												66.6	dB
LDay 07:00-23:00												66.6	dB
LNight 23:00-07:00												---	dB
Lden												66.6	dB
LDay 07:00-19:00												66.6	dB
LEvening 19:00-23:00												---	dB
LNight 23:00-07:00												---	dB
LAE												94.4	dB
# Overloads												0	
Overload Duration												0.0	s
# OBA Overloads												0	
OBA Overload Duration												0.0	s
Statistics													
LAS5.00												67.0	dBA
LAS10.00												66.9	dBA
LAS33.30												66.7	dBA
LAS50.00												66.6	dBA
LAS66.60												66.5	dBA
LAS90.00												66.3	dBA
LAS > 65.0 dB (Exceedence Counts / Duration)												1 / 601.1	s
LAS > 85.0 dB (Exceedence Counts / Duration)												0 / 0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)												0 / 0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)												0 / 0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)												0 / 0.0	s
Settings													
RMS Weight												A Weighting	
Peak Weight												A Weighting	
Detector												Slow	
Preamp												PRM831	
Integration Method												Linear	
OBA Range												Normal	
OBA Bandwidth												1/1 and 1/3	
OBA Freq. Weighting												Z Weighting	
OBA Max Spectrum												Bin Max	
Gain												+0	dB
Under Range Limit												26.2	dB
Under Range Peak												75.8	dB
Noise Floor												17.1	dB
Overload												143.4	dB
1/1 Spectra													
Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k	
LZeq	70.9	64.4	61.4	74.2	68.2	64.9	66.3	61.7	55.1	49.9	44.3	44.0	
LZSmax	83.8	78.9	70.0	78.4	72.3	66.1	67.8	63.1	56.9	53.2	46.7	45.4	
LZSmin	53.2	56.5	56.7	67.7	66.1	63.5	65.0	60.7	53.9	48.4	43.2	43.7	

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZeq	68.1	65.7	63.2	61.0	58.0	59.3	56.0	57.8	55.8	69.7	72.0	59.3
LZSmax	82.3	79.5	78.7	77.2	72.8	72.3	67.9	63.5	64.0	74.2	76.1	72.0
LZSmin	41.9	46.3	48.8	48.7	46.5	49.7	50.1	51.8	41.2	63.9	67.9	54.5
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZeq	61.6	63.7	64.5	59.0	58.7	60.9	63.2	60.8	59.9	59.2	56.1	54.6
LZSmax	71.3	68.0	67.3	61.6	61.7	64.1	65.5	64.2	62.0	60.7	57.6	58.6
LZSmin	52.9	60.0	57.2	45.1	56.0	58.9	61.1	58.4	58.4	57.1	54.9	53.3
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZeq	52.0	49.8	48.4	46.4	45.4	42.8	41.1	38.6	38.5	38.4	39.0	40.2
LZSmax	54.4	52.3	51.2	50.2	49.7	45.7	45.4	41.6	40.4	40.4	41.4	41.3
LZSmin	50.9	48.4	46.9	45.0	43.7	41.4	39.6	37.5	37.9	38.0	38.7	39.9

Calibration History												
Preamp	Date						dB re. 1V/Pa					
PRM831	27	Jul	2013	17:53:07				-25.9				
PRM831	27	Jul	2013	13:36:08				-25.6				
PRM831	28	Apr	2013	15:34:24				-25.9				
PRM831	23	Apr	2013	10:17:33				-25.0				
PRM831	27	Feb	2013	19:15:30				-25.7				
PRM831	24	Jan	2013	12:00:16				-25.6				
PRM831	15	Jan	2013	07:50:44				-26.2				
PRM831	04	Jan	2013	13:47:46				-26.5				

General Information												
Serial Number	02509											
Model	831											
Firmware Version	2.112											
Filename	831_Data.002											
User	GT											
Job Description	Northwest Fresno Walmart Relocation											
Location	Northwest Fresno Walmart											
Measurement Description												
Start Time	Saturday, 2013 July 27 15:49:15											
Stop Time	Saturday, 2013 July 27 16:09:15											
Duration	00:20:00.6											
Run Time	00:20:00.6											
Pause	00:00:00.0											
Pre Calibration	Saturday, 2013 July 27 13:36:08											
Post Calibration	None											
Calibration Deviation	---											
Note												
Located at the eastern portion of the southern parking lot and approx 140 feet south of the front door												
96 F, 35% Humidity, 29.48 in Hg, 3 mph wind, partly cloudy												
Overall Data												
LAeq			63.1	dB								
LASmax	2013 Jul 27 15:59:44		79.2	dB								
LApeak (max)	2013 Jul 27 16:06:25		102.2	dB								
LASmin	2013 Jul 27 15:50:20		49.6	dB								
LCeq			74.0	dB								
LAeq			63.1	dB								
LCeq - LAeq			10.9	dB								
LA1eq			67.4	dB								
LAeq			63.1	dB								
LA1eq - LAeq			4.3	dB								
Ldn			63.1	dB								
LDay 07:00-23:00			63.1	dB								
LNight 23:00-07:00			---	dB								
Lden			63.1	dB								
LDay 07:00-19:00			63.1	dB								
LEvening 19:00-23:00			---	dB								
LNight 23:00-07:00			---	dB								
LAE			93.9	dB								
# Overloads			0									
Overload Duration			0.0	s								
# OBA Overloads			0									
OBA Overload Duration			0.0	s								
Statistics												
LAS5.00			66.7	dBA								
LAS10.00			66.3	dBA								
LAS33.30			62.8	dBA								
LAS50.00			61.7	dBA								
LAS66.60			57.7	dBA								
LAS90.00			52.8	dBA								
LAS > 65.0 dB (Exceedence Counts / Duration)		17 / 347.8		s								
LAS > 85.0 dB (Exceedence Counts / Duration)		0 / 0.0		s								
LApeak > 135.0 dB (Exceedence Counts / Duration)		0 / 0.0		s								
LApeak > 137.0 dB (Exceedence Counts / Duration)		0 / 0.0		s								
LApeak > 140.0 dB (Exceedence Counts / Duration)		0 / 0.0		s								
Settings												
RMS Weight			A Weighting									
Peak Weight			A Weighting									
Detector			Slow									
Preamp			PRM831									
Integration Method			Linear									
OBA Range			Normal									
OBA Bandwidth			1/1 and 1/3									
OBA Freq. Weighting			Z Weighting									
OBA Max Spectrum			Bin Max									
Gain			+0	dB								
Under Range Limit			26.1	dB								
Under Range Peak			75.6	dB								
Noise Floor			17.0	dB								
Overload			143.1	dB								
1/1 Spectra												
Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZeq	66.7	66.1	71.1	71.6	64.9	59.5	59.6	58.3	56.2	51.8	46.8	44.6
LZSmax	82.6	84.9	82.2	89.3	77.1	67.1	72.4	76.6	76.6	69.0	67.7	63.1
LZSmin	46.5	55.4	53.6	59.0	55.2	49.9	45.5	43.6	40.9	37.7	39.6	42.8

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZeq	63.6	61.5	59.8	58.7	60.7	63.4	67.2	66.6	65.3	65.7	67.5	67.2
LZSmax	80.9	76.9	73.6	75.5	79.8	83.7	80.9	76.8	78.9	83.8	87.4	88.8
LZSmin	37.3	40.3	43.7	45.3	48.2	51.5	55.9	60.4	54.9	53.2	57.5	47.0
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZeq	61.7	61.0	54.9	52.9	57.0	53.2	57.3	54.1	52.1	54.5	53.3	52.7
LZSmax	76.0	71.0	69.8	65.8	64.6	65.6	67.0	71.0	67.1	65.9	72.9	73.0
LZSmin	52.1	48.8	46.7	42.4	46.2	44.6	43.2	38.5	38.6	39.0	39.4	38.2
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZeq	52.5	50.9	50.7	49.0	46.4	44.5	43.0	41.7	41.1	40.0	39.6	40.0
LZSmax	75.9	69.6	63.7	63.8	64.4	64.7	63.3	62.7	62.7	60.8	57.9	52.5
LZSmin	37.2	35.4	34.6	33.1	32.6	32.8	33.6	34.7	35.9	36.7	37.7	39.4

Calibration History												
Preamp	Date					dB re. 1V/Pa						
PRM831	27	Jul	2013	13:36:08								-25.6
PRM831	28	Apr	2013	15:34:24								-25.9
PRM831	23	Apr	2013	10:17:33								-25.0
PRM831	27	Feb	2013	19:15:30								-25.7
PRM831	24	Jan	2013	12:00:16								-25.6
PRM831	15	Jan	2013	07:50:44								-26.2
PRM831	04	Jan	2013	13:47:46								-26.5

File Translated: V:\Vista Env\2010\10022-Fresno Walmart\Noise Measurements\LD\15.slm1
 Model/Serial Number: 824 / A3176
 Firmware/Software Revs: 4.283 / 3.120
 Name:
 Descr1: 1021 Didrikson Way
 Descr2: Laguna Beach, CA 92651
 Setup/Setup Descr: slm&rta.ssa / SLM & Real-Time Analyzer
 Location: 30' N of vendor truck loading area for Fresno Walmart
 Notel: Approx 70' S of Locust Ave CL
 Note2: 52F, 29.57 in Hg, 67% Humid., no wind, clear sky

Overall Any Data

Start Time: 19-May-2011 07:05:53
 Elapsed Time: 00:08:30.5

	A Weight	C Weight	Flat
Leq:	54.8 dBA	65.1 dBC	66.1 dBF
SEL:	81.9 dBA	92.2 dBC	93.2 dBF
Peak:	85.2 dBA	85.8 dBC	86.0 dBF
19-May-2011 07:09:58	19-May-2011 07:09:52	19-May-2011 07:09:52	
Lmax (slow):	67.9 dBA	73.2 dBC	73.8 dBF
19-May-2011 07:09:50	19-May-2011 07:13:57	19-May-2011 07:13:57	
Lmin (slow):	43.7 dBA	60.0 dBC	61.6 dBF
19-May-2011 07:11:17	19-May-2011 07:06:52	19-May-2011 07:06:51	
Lmax (fast):	70.7 dBA	75.5 dBC	75.7 dBF
19-May-2011 07:09:58	19-May-2011 07:11:34	19-May-2011 07:11:34	
Lmin (fast):	43.1 dBA	57.8 dBC	58.9 dBF
19-May-2011 07:11:17	19-May-2011 07:09:10	19-May-2011 07:09:10	
Lmax (impulse):	72.1 dBA	76.8 dBC	77.1 dBF
19-May-2011 07:09:58	19-May-2011 07:11:34	19-May-2011 07:11:34	
Lmin (impulse):	43.6 dBA	61.1 dBC	62.4 dBF
19-May-2011 07:11:17	19-May-2011 07:06:51	19-May-2011 07:09:10	

Spectra

Date: 19-May-2011
 Time: 07:05:53
 Run Time: 00:08:30.5

Hz	Leq1/3	Leq1/1	Max1/3	Max1/1	Min1/3	Min1/1	Hz	Leq1/3	Leq1/1	Max1/3	Max1/1	Min1/3	Min1/1
12.5	50.2		56.3		35.5		630	46.5		61.4		31.0	
16.0	50.9	55.5	56.1	61.5	37.1	41.8	800	45.4		60.8		30.5	
20.0	51.0		57.6		38.0		1000	44.5	49.3	56.1	63.9	31.7	35.6
25.0	55.8		57.5		41.1		1250	43.5		59.4		30.2	
31.5	57.7	61.6	57.1	63.3	46.2	49.9	1600	42.6		56.3		28.1	
40.0	56.7		60.3		46.3		2000	41.1	46.1	56.4	61.9	24.9	30.4
50.0	56.8		57.9		44.0		2500	40.0		58.4		21.7	
63.0	55.7	61.0	56.5	62.1	45.9	49.1	3150	40.2		60.8		19.4	
80.0	56.2		57.4		42.2		4000	39.5	43.8	58.6	63.4	18.7	24.1
100	55.6		55.1		42.3		5000	36.7		54.4		19.7	
125	54.3	59.2	59.0	63.8	40.7	45.7	6300	32.8		50.2		21.5	
160	52.8		61.0		39.4		8000	30.2	35.2	57.7	58.5	21.2	25.9
200	51.1		57.3		35.5		10000	25.4		41.5		20.5	
250	51.4	55.2	70.6	71.0	34.6	39.0	12500	22.9		32.2		19.4	
315	48.2		58.2		32.0		16000	20.8	26.5	27.4	33.9	19.1	24.4
400	47.0		59.0		30.1		20000	21.2		23.8		20.3	
500	47.0	51.6	64.3	66.9	30.4	35.3							

Ln Start Level: 15 dBA
 L1.00 0.0 dBA L50.00 0.0 dBA L95.00 0.0 dBA
 L5.00 0.0 dBA L90.00 0.0 dBA L99.00 0.0 dBA

Detector: Slow
 Weighting: A
 SPL Exceedance Level 1: 85.0 dB Exceeded: 0 times
 SPL Exceedance level 2: 120 dB Exceeded: 0 times
 Peak-1 Exceedance Level: 105 dB Exceeded: 0 times
 Peak-2 Exceedance Level: 100 dB Exceeded: 0 times
 Hysteresis: 2
 Overloaded: 0 time(s)
 Paused: 0 times for 00:00:00.0

File Translated: V:\Vista Env\2010\10022-Fresno Walmart\Noise Measurements\LD\15.slmdl
Model/Serial Number: 824 / A3176

Current Any Data

Start Time: 19-May-2011 07:05:53
Elapsed Time: 00:08:30.5

	A Weight	C Weight	Flat
Leq:	54.8 dBA	65.1 dBC	66.1 dBF
SEL:	81.9 dBA	92.2 dBC	93.2 dBF
Peak:	85.2 dBA	85.8 dBC	86.0 dBF
19-May-2011 07:09:58		19-May-2011 07:09:52	19-May-2011 07:09:52
Lmax (slow):	67.9 dBA	73.2 dBC	73.8 dBF
19-May-2011 07:09:50		19-May-2011 07:13:57	19-May-2011 07:13:57
Lmin (slow):	43.7 dBA	60.0 dBC	61.6 dBF
19-May-2011 07:11:17		19-May-2011 07:06:52	19-May-2011 07:06:51
Lmax (fast):	70.7 dBA	75.5 dBC	75.7 dBF
19-May-2011 07:09:58		19-May-2011 07:11:34	19-May-2011 07:11:34
Lmin (fast):	43.1 dBA	57.8 dBC	58.9 dBF
19-May-2011 07:11:17		19-May-2011 07:09:10	19-May-2011 07:09:10
Lmax (impulse):	72.1 dBA	76.8 dBC	77.1 dBF
19-May-2011 07:09:58		19-May-2011 07:11:34	19-May-2011 07:11:34
Lmin (impulse):	43.6 dBA	61.1 dBC	62.4 dBF
19-May-2011 07:11:17		19-May-2011 07:06:51	19-May-2011 07:09:10

Calibrated:	18-May-2011 13:09:02	Offset:	-48.2 dB
Checked:	19-May-2011 06:46:08	Level:	113.9 dB
Calibrator	not set	Level:	114.0 dB
Cal Records Count:	0		

Interval Records:	Disabled	Number Interval Records:	0
History Records:	Disabled	Number History Records:	0
Run/Stop Records:		Number Run/Stop Records:	2

File Translated: C:\Vista Env\2008\080201 - Santa Rosa Lowes\Noise Measurements\LD\7.slm1
 Model/Serial Number: 824 / A3176
 Firmware/Software Revs: 4.272 / 3.120
 Name: Vista Environmental
 Descr1: 1021 Didrikson Way
 Descr2: Laguna Beach, CA 92651
 Setup/Setup Descr: slm&rtta.ssa / SLM & Real-Time Analyzer
 Location: 10' north of McDonalds drive thru speaker
 Note1:
 Note2:

Overall Any Data

Start Time: 03-Jun-2008 17:55:14
 Elapsed Time: 00:12:12.1

	A Weight	C Weight	Flat
Leq:	61.2 dBA	76.1 dBC	77.6 dBF
SEL:	89.8 dBA	104.7 dBC	106.2 dBF
Peak:	94.9 dBA	100.5 dBC	102.0 dBF
03-Jun-2008 18:02:48	03-Jun-2008 18:02:48	03-Jun-2008 18:02:48	
Lmax (slow):	73.6 dBA	88.5 dBC	88.7 dBF
03-Jun-2008 18:03:31	03-Jun-2008 18:03:31	03-Jun-2008 18:03:31	
Lmin (slow):	55.0 dBA	69.3 dBC	70.9 dBF
03-Jun-2008 17:59:22	03-Jun-2008 17:58:39	03-Jun-2008 18:00:37	
Lmax (fast):	76.1 dBA	91.4 dBC	91.6 dBF
03-Jun-2008 18:03:31	03-Jun-2008 18:03:31	03-Jun-2008 18:03:31	
Lmin (fast):	54.3 dBA	67.7 dBC	69.0 dBF
03-Jun-2008 17:59:22	03-Jun-2008 18:00:37	03-Jun-2008 18:00:37	
Lmax (impulse):	79.2 dBA	92.1 dBC	93.8 dBF
03-Jun-2008 18:02:48	03-Jun-2008 18:03:31	03-Jun-2008 18:02:48	
Lmin (impulse):	54.9 dBA	70.2 dBC	71.5 dBF
03-Jun-2008 17:59:21	03-Jun-2008 17:58:39	03-Jun-2008 18:00:36	

Spectra

Date Time Run Time
 03-Jun-2008 17:55:14 00:12:12.1

Hz	Leq1/3	Leq1/1	Max1/3	Max1/1	Min1/3	Min1/1	Hz	Leq1/3	Leq1/1	Max1/3	Max1/1	Min1/3	Min1/1
12.5	65.1		68.7		49.5		630	51.6		56.8		45.8	
16.0	65.1	69.5	65.9	71.8	53.1	57.1	800	51.2		55.0		45.4	
20.0	64.0		66.0		53.3		1000	50.9	55.5	54.4	59.4	45.6	50.1
25.0	68.9		65.4		57.8		1250	50.1		54.6		44.9	
31.5	68.1	73.5	65.6	70.5	57.7	62.3	1600	49.1		52.3		42.5	
40.0	69.1		66.2		57.1		2000	47.3	52.3	51.2	55.9	39.5	45.0
50.0	66.1		71.7		58.2		2500	45.6		49.5		37.0	
63.0	68.4	72.6	70.8	81.6	57.8	62.7	3150	44.1		48.7		34.1	
80.0	68.6		80.7		57.7		4000	42.1	47.3	46.5	51.4	32.6	37.4
100	66.7		73.7		56.0		5000	40.8		43.1		30.2	
125	66.6	70.3	86.6	87.8	53.1	58.6	6300	37.4		39.4		26.7	
160	61.7		81.0		50.6		8000	35.5	40.3	37.7	42.4	23.7	29.1
200	56.8		68.2		47.8		10000	32.2		34.6		20.7	
250	56.1	60.4	66.2	71.2	46.0	51.4	12500	29.5		31.3		13.3	
315	53.4		63.8		45.8		16000	26.1	31.9	28.1	33.5	12.7	18.9
400	52.2		62.6		45.9		20000	23.7		23.5		15.8	
500	52.1	56.7	56.8	64.4	46.2	50.7							

Ln Start Level: 15 dBA
 L1.00 0.0 dBA L50.00 0.0 dBA L95.00 0.0 dBA
 L5.00 0.0 dBA L90.00 0.0 dBA L99.00 0.0 dBA

Detector: Slow
 Weighting: A
 SPL Exceedance Level 1: 85.0 dB Exceeded: 0 times
 SPL Exceedance level 2: 120 dB Exceeded: 0 times
 Peak-1 Exceedance Level: 105 dB Exceeded: 0 times
 Peak-2 Exceedance Level: 100 dB Exceeded: 0 times
 Hysteresis: 2
 Overloaded: 0 time(s)
 Paused: 0 times for 00:00:00.0

File Translated: C:\Vista Env\2008\080201 - Santa Rosa Lowes\Noise Measurements\LD\7.slmdl
Model/Serial Number: 824 / A3176

Current Any Data

Start Time: 03-Jun-2008 17:55:14
Elapsed Time: 00:12:12.1

	A Weight	C Weight	Flat
Leq:	61.2 dBA	76.1 dBC	77.6 dBF
SEL:	89.8 dBA	104.7 dBC	106.2 dBF
Peak:	94.9 dBA	100.5 dBC	102.0 dBF
03-Jun-2008 18:02:48	03-Jun-2008 18:02:48	03-Jun-2008 18:02:48	
Lmax (slow):	73.6 dBA	88.5 dBC	88.7 dBF
03-Jun-2008 18:03:31	03-Jun-2008 18:03:31	03-Jun-2008 18:03:31	
Lmin (slow):	55.0 dBA	69.3 dBC	70.9 dBF
03-Jun-2008 17:59:22	03-Jun-2008 17:58:39	03-Jun-2008 18:00:37	
Lmax (fast):	76.1 dBA	91.4 dBC	91.6 dBF
03-Jun-2008 18:03:31	03-Jun-2008 18:03:31	03-Jun-2008 18:03:31	
Lmin (fast):	54.3 dBA	67.7 dBC	69.0 dBF
03-Jun-2008 17:59:22	03-Jun-2008 18:00:37	03-Jun-2008 18:00:37	
Lmax (impulse):	79.2 dBA	92.1 dBC	93.8 dBF
03-Jun-2008 18:02:48	03-Jun-2008 18:03:31	03-Jun-2008 18:02:48	
Lmin (impulse):	54.9 dBA	70.2 dBC	71.5 dBF
03-Jun-2008 17:59:21	03-Jun-2008 17:58:39	03-Jun-2008 18:00:36	

Calibrated:	03-Jun-2008 15:40:24	Offset:	-47.5 dB
Checked:	03-Jun-2008 15:40:24	Level:	94.0 dB
Calibrator	not set	Level:	94.0 dB
Cal Records Count:	0		

Interval Records:	Disabled	Number Interval Records:	0
History Records:	Disabled	Number History Records:	0
Run/Stop Records:		Number Run/Stop Records:	2

SLM & RTA Summary

Translated: 17-Aug-2010 14:31:20

File Translated: V:\Vi sta Env\2010\10021-Atascadero Wal mart\Noi se

Measurements\1. sl mdl

Model Number: 824

Serial Number: A3176

Firmware Rev: 4.283

Software Version: 3.120

Name:

Descr1: 1021 Di dri kson Way

Descr2: Laguna Beach, CA 92651

Setup: SLM&RTA. ssa

Setup Descr: SLM & Real -Ti me Analyzer

Location: Southern edge of gas station property

Note 1: 100' west of El Camino Real CL and 150' south of Del Ri o Rd CL

Note 2: 78 F 28.97 HG 32% Humi d. 2 MPH wi nd and cl ear sky

Overall Any Data

Start Time: 14-Aug-2010 12:03:04

El apsed Time: 00:15:00.6

	A Wei ght	C Wei ght	Fl at
Leq:	61.7 dBA	74.5 dBC	75.3 dBF
SEL:	91.2 dBA	104.0 dBC	104.8 dBF
Peak:	105.2 dBA	108.2 dBC	110.1 dBF
	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24
Lmax (sl ow):	73.4 dBA	88.4 dBC	90.8 dBF
	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24
Lmi n (sl ow):	49.4 dBA	63.1 dBC	64.6 dBF
	14-Aug-2010 12:04:03	14-Aug-2010 12:04:03	14-Aug-2010 12:04:03
Lmax (fast):	81.1 dBA	96.0 dBC	98.4 dBF
	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24
Lmi n (fast):	48.5 dBA	61.4 dBC	62.8 dBF
	14-Aug-2010 12:04:02	14-Aug-2010 12:04:02	14-Aug-2010 12:04:02
Lmax (i mpul se):	84.8 dBA	99.1 dBC	101.5 dBF
	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24
Lmi n (i mpul se):	48.7 dBA	63.7 dBC	65.4 dBF
	14-Aug-2010 12:04:02	14-Aug-2010 12:04:03	14-Aug-2010 12:04:03

Spectra

Start Time:	14-Aug-2010 12:03:04	Run Time:	00:15:00.6			
Freq	Leq 1/3	Leq 1/1	Max 1/3	Max 1/1	Mi n 1/3	Mi n 1/1
12.5 Hz	55.3		72.2		36.3	
16.0 Hz	57.4	63.9	79.4	90.6	38.4	43.4
20.0 Hz	62.0		90.2		40.3	
25.0 Hz	65.1		93.7		43.9	
31.5 Hz	64.2	69.1	89.6	95.4	44.9	49.1
40.0 Hz	63.7		83.4		44.1	
50.0 Hz	67.7		88.2		46.6	
63.0 Hz	65.9	71.2	84.2	90.1	45.9	51.5
80.0 Hz	65.3		79.8		47.5	
100 Hz	65.0		76.4		46.3	
125 Hz	66.0	70.0	76.5	80.7	45.4	50.7
160 Hz	64.4		74.6		46.1	
200 Hz	59.6		70.5		41.9	
250 Hz	58.7	63.0	66.2	76.1	43.2	46.8
315 Hz	55.6		74.0		40.8	
400 Hz	53.6		75.8		39.0	
500 Hz	52.9	57.7	75.4	79.0	38.5	43.8
630 Hz	52.1		67.7		39.4	
800 Hz	52.5		68.9		40.2	
1000 Hz	51.8	56.3	69.8	73.4	39.2	43.6
1250 Hz	49.9		66.4		36.4	
1600 Hz	48.1		63.6		34.8	

			1				
2000 Hz	46.5	51.5	64.3	68.5	30.1	36.6	
2500 Hz	45.1		63.2		27.3		
3150 Hz	44.3		62.5		25.2		
4000 Hz	42.5	47.6	58.5	64.6	22.9	28.2	
5000 Hz	40.9		56.1		21.5		
6300 Hz	38.5		52.4		20.1		
8000 Hz	36.0	41.0	51.0	55.9	18.9	23.9	
10000 Hz	31.8		49.3		18.3		
12500 Hz	27.9		46.0		18.0		
16000 Hz	24.5	30.9	36.7	46.6	19.1	24.2	
20000 Hz	25.3		31.5		20.7		

Ln Start Level: 15 dB

L (1.00) 0.0
 L (5.00) 0.0
 L (50.00) 0.0
 L (90.00) 0.0
 L (95.00) 0.0
 L (99.00) 0.0

Detector: Slow
 Weighting: A
 SPL Exceedance Level 1: 85.0 dB Exceeded: 0 times
 SPL Exceedance Level 2: 120.0 dB Exceeded: 0 times
 Peak-1 Exceedance Level: 105.0 dB Exceeded: 1 times
 Peak-2 Exceedance Level: 100.0 dB Exceeded: 1 times
 Hysteresis: 2
 Overloaded: 0 time(s)
 Paused: 0 times for 00:00:00.0

Current Any Data

Start Time: 14-Aug-2010 12:03:04
 Elapsed Time: 00:15:00.6

	A Weight	C Weight	Flat
Leq:	61.7 dBA	74.5 dBC	75.3 dBF
SEL:	91.2 dBA	104.0 dBC	104.8 dBF
Peak:	105.2 dBA	108.2 dBC	110.1 dBF
	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24
Lmax (slow):	73.4 dBA	88.4 dBC	90.8 dBF
	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24
Lmin (slow):	49.4 dBA	63.1 dBC	64.6 dBF
	14-Aug-2010 12:04:03	14-Aug-2010 12:04:03	14-Aug-2010 12:04:03
Lmax (fast):	81.1 dBA	96.0 dBC	98.4 dBF
	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24
Lmin (fast):	48.5 dBA	61.4 dBC	62.8 dBF
	14-Aug-2010 12:04:02	14-Aug-2010 12:04:02	14-Aug-2010 12:04:02
Lmax (impulse):	84.8 dBA	99.1 dBC	101.5 dBF
	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24	14-Aug-2010 12:09:24
Lmin (impulse):	48.7 dBA	63.7 dBC	65.4 dBF
	14-Aug-2010 12:04:02	14-Aug-2010 12:04:03	14-Aug-2010 12:04:03
Calibrated:	14-Aug-2010 12:02:00	Offset:	-47.3 dB
Checked:	14-Aug-2010 12:02:00	Level:	93.3 dB
Calibrator	not set	Level:	114.0 dB
Cal Records Count:	0		
Interval Records:	Disabled	Number Interval Records:	0
Time History:	Disabled	Number History Records:	0
Run/Stop Records:		Number Run/Stop Records:	2

Stationary Noise Calculation - Mobile Homes to North

Stationary Noise Sources	Reference Distance		Reference Home Adjacent to Project Site		1 (Line Source: hard=0, soft=.5; Point Source: hard=1, soft=1.5) (eq. N-2141.2 of TeNS)
	Distance	Leq	Distance	Leq	
Rooftop HVAC	10	66.6	210	40	
Parking Lot	5	63.1	125	35	
Semi Truck	50	67.4	125	59	
Drive Thru Speaker	10	61.2	450	28	
Gas Station	25	61.7	280	41	

Stationary Noise Sources	Distance from Receptor to Wall	Distance from source to Wall	Height of Wall (feet)	without		Source Height (feet)	Exterior Observer Height (feet)	Source Frequency (hz)	barrier to receiver - b (all)	source to receiver -		path difference y =a+b-c (auto)	line of sight (slope)	fresnel	Barrier Atten
				Wall Noise Level at Residence	with wall Noise Level at Residence					barrier - a	receiver - c				
Rooftop HVAC	10	210	6	40	35	24	5	800	10.0499	210.77	220.8189	0.0010	-1	-0.00274	-4.9
Parking Lot	10	125	6	35	28	3	5	800	10.0499	125.036	135.0148	0.0711	1	0.202116	-6.8
Semi Truck	10	125	6	59	53	5	5	800	10.0499	125.004	135	0.0539	1	0.153246	-6.4
Drive Thru Speaker	10	450	6	28	22	3	5	800	10.0499	450.01	460.0043	0.0555	1	0.157945	-6.4

Stationary Noise Calculation - Homes to Northeast

Stationary Noise Sources	Reference Home Adjacent to Project Site				1 (Line Source: hard=0, soft=.5; Point Source: hard=1, soft=1.5) (eq. N-2141.2 of TeNS)
	Distance	Leq	Distance	Leq	
Rooftop HVAC	10	66.6	500	33	
Parking Lot	5	63.1	160	33	
Semi Truck	50	67.4	160	57	
Drive Thru Speaker	10	61.2	650	25	
Gas Station	25	61.7	600	34	

Stationary Noise Sources	Distance from Receptor to Wall	Distance from source to Wall	Height of Wall (feet)	Without Wall Noise		Source Height (feet)	Exterior Observer Height (feet)	Source Frequency (hz)	barrier to receiver - b (all)	source to receiver -		path difference y =a+b-c (auto)	line of sight (slope)	fresnel	Barrier Atten
				Level at Residence	Noise Level at Residence					barrier - a	receiver - c				
Rooftop HVAC	10	500	6	33	28	24	5	800	10.0499	500.3239	510.3538	0.0200	-1	-0.05681	-4.2
Parking Lot	10	160	6	33	26	3	5	800	10.0499	160.0281	170.0118	0.0662	1	0.188399	-6.64
Semi Truck	10	160	6	57	51	5	5	800	10.0499	160.0031	170	0.0530	1	0.150757	-6.4
Drive Thru Speaker	10	650	6	25	19	3	5	800	10.0499	650.0069	660.003	0.0538	1	0.152941	-6.4

Stationary Noise Calculation - Homes to Southwest

Stationary Noise Sources	Reference Home Adjacent to Project Site				1 (Line Source: hard=0, soft=.5; Point Source: hard=1, soft=1.5) (eq. N-2141.2 of TeNS)
	Distance	Leq	Distance	Leq	
Rooftop HVAC	10	66.6	400	35	
Parking Lot	5	63.1	220	30	
Semi Truck	50	67.4	400	49	
Drive Thru Speaker	10	61.2	380	30	
Gas Station	25	61.7	700	33	

Stationary Noise Sources	Distance from Receptor to Wall	Distance from source to Wall	Height of Wall (feet)	Without Wall Noise		Source Height (feet)	Exterior Observer Height (feet)	Source Frequency (hz)	barrier to receiver - b (all)	source to receiver -		path difference y =a+b-c (auto)	line of sight (slope)	fresnel	Barrier Atten
				Level at Residence	Noise Level at Residence					barrier - a	receiver - c				
Rooftop HVAC	10	400	6	35	30	24	5	800	10.0499	400.4048	410.44	0.0147	-1	-0.04171	-4.4
Parking Lot	10	220	6	30	24	3	5	800	10.0499	220.0205	230.0087	0.0616	1	0.175314	-6.56
Semi Truck	10	400	6	49	43	5	5	800	10.0499	400.0012	410	0.0511	1	0.145424	-6.32
Drive Thru Speaker	10	380	6	30	23	3	5	800	10.0499	380.0118	390.0051	0.0566	1	0.160965	-6.48