



HENDERSON INTERCHANGE DRAFT TRAFFIC NOISE REPORT

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Environmental Division

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2. Executive Summary

The purpose of this report is to assess future traffic noise levels, evaluate the performance of the existing soundwalls, and recommend traffic noise abatement measures at impacted sensitive receivers along I-11, between Horizon Drive and the Henderson spaghetti bowl, I-215, from Valle Verde Drive to the Henderson spaghetti bowl, I-515/US95/US93, between Galleria Drive and the Henderson spaghetti bowl, and SR564 (Lake Mead Parkway) between Van Wagenen Street and the Henderson spaghetti bowl. This traffic noise study considers No-Build and Build alternatives. Certain areas of the project include existing soundwalls. These were re-evaluated to verify that they would still adequately reduce the projected traffic noise level.

Current traffic noise sources within the project area primarily consist of traffic on I-11, I-215, I-515, SR564 and local roadways. The noise contributions from interstate sections are dominant in residential areas along the corridor. There are many existing property walls and soundwalls alongside the highway that reduce noise level impacts in the adjacent community areas. In contrast, areas without property walls or soundwalls typically experience higher traffic noise levels. The results of these measurements combined with estimate noise levels in other areas along the project indicate that existing peak-hour equivalent noise levels (Leq) vary between 52 and 72 dBA.

The predicted future traffic noise levels for the design year are expected to exceed the Noise Abatement Criteria (NAC) at many of the noise sensitive receivers along the project. In areas where soundwalls are recommended, they meet the feasibility and reasonableness requirements for traffic noise reduction at impacted areas and can be proposed for construction.

Soundwalls could not be recommended in areas that would not meet these criteria.

3. Introduction

3.1.1 Purpose of the Analysis

The purpose of this Traffic Noise Study Report (NSR) is to evaluate traffic noise impacts and abatement under the requirements of Title 23, Part 772 of the Code of Federal Regulations (23 CFR 772) “Procedures for Abatement of Highway Traffic Noise.” 23 CFR 772 provides procedures for preparing operational and construction noise studies and evaluating noise abatement considered for federal and Federal-aid highway projects. According to 23 CFR 772.3, all highway projects that are developed in conformance with this regulation are deemed to be in conformance with Federal Highway Administration (FHWA) noise standards. Compliance with 23 CFR 772 provides compliance with the noise impact assessment requirements of the National Environmental Policy Act (NEPA).

The Nevada Department of Transportation (NDOT), in consultation with the Federal Highway Administration (FHWA), is studying alternatives for addressing transportation deficiencies along I-11, I-215, I-515, and State Route 564 (SR564)/Lake Mead Parkway in Clark County near and at the intersection known as the Henderson spaghetti bowl. The project area is in the southeastern part of the valley and the main freeway and access point for those living in the area. The northern termini is Galleria Drive, the eastern termini is Van Wagenen Street, the southern termini is Horizon Drive, and the western termini is Valle Verde Drive. (**Exhibit 1**).

This report describes the results of a noise study conducted for the I-11, I-215, I-515, and SR564. The traffic noise analysis was conducted according to the NDOT’s Traffic and Construction Noise Abatement Policy. The purpose of the analysis was to assess potential traffic noise impacts at noise sensitive locations, or receivers, by evaluating worst case hourly traffic noise levels and evaluating traffic noise abatement at locations predicted to experience future traffic noise impacts using both the 2040 Build and No-Build alternatives.

3.1.2 Purpose of the Analysis

The existing system interchange between I-215 and I-515 was constructed between 2004 and 2006 when the population of the Las Vegas Valley was approximately 1.5 million people. The population has since increased by about 50 percent and is projected to continue to increase. Traffic volumes at the interchange exceed the original design year forecasts. Additionally, a service interchange was constructed at I-215/Gibson Road close to the system interchange creating eastbound (EB) weaving conflicts between vehicles entering at Gibson Road bound for Lake Mead Parkway and vehicles transitioning to the system interchange ramps.

A combination of the following critical needs demonstrates why improvements must be considered for the Henderson Interchange:

- Roadway deficiencies will continue to contribute to congestion and travel delays.

- Existing congestion will worsen with projected increases in passenger vehicles, trucks, and public transit vehicles along the I-515, I-215, and I-11.
- Surrounding roadways connectivity needs to be restored to increase safety.
- Traffic safety will further degrade as higher crash rates are experienced in and around the Henderson Interchange.

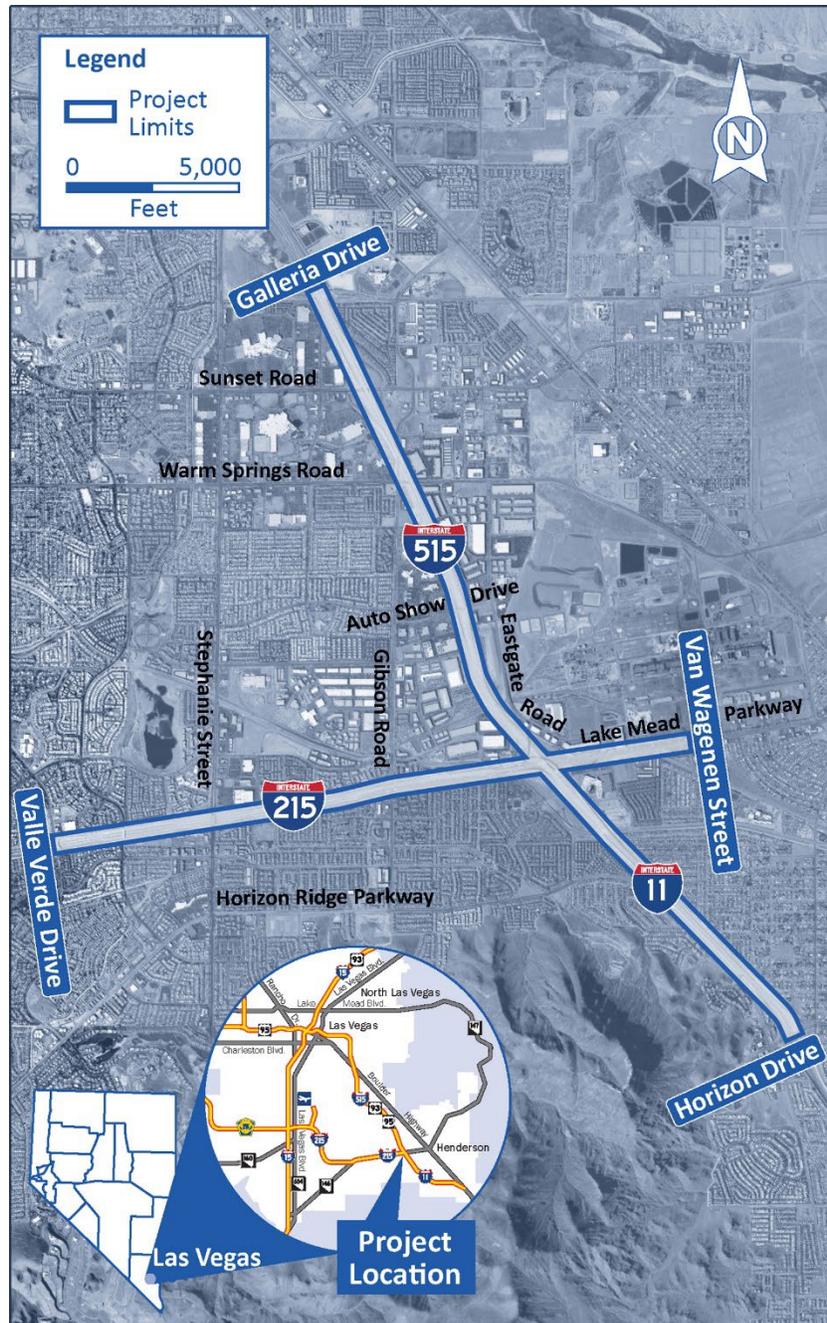


Figure 1. Henderson Interchange Project Limits

The purpose of the proposed project is to:

- Resolve existing roadway deficiencies in the Henderson Interchange and surrounding roadways.
- Provide transportation improvements to serve existing and future growth areas.
- Restore local traffic connectivity.

- Accommodate regional and local plans.

3.1.3 Project Description

Under the build alternative, operational improvements would be made along each leg of the project, including braided ramps and additional auxiliary lanes. The intersection of SR 564 Lake Mead Parkway/Eastgate/Fiesta Henderson would be modified to accommodate additional traffic while improving the traffic flow, and not reducing the LOS.

3.1.4 No-Build Alternative

The No Build Alternative would take no action to address the existing deficiencies and safety concerns within the project limits. The No Build Alternative provides a baseline for evaluating future conditions and for evaluating impacts of the Build Alternative. The No Build Alternative assumes regular maintenance and other planned/permitted transportation improvements proposed by others in proximity to the project area would be constructed.

3.1.5 Build Alternative

The Build Alternative is a crossover-style interchange with the east-west highway directions crossing each other at special grade separation structures east and west of the central interchange. By crossing the traffic similar to the diverging diamond interchange on Horizon Drive at I-11, motorists would be positioned to freely enter and exit on the side that is in the direction they are intending to travel, thus eliminating the need for most of the large ‘flyover’ bridge structures commonly associated with a directional interchange.

The Build Alternative includes the following major components:

- Crossover-style interchange for the east-west highway directions
- Reconnection of travel from Lake Mead Parkway to Gibson Road using braided ramps,
- Travel between I-215 and Auto Show Drive using braided ramps,
- Re-use of 22 out of the 27 existing bridges in the project area,
- Built-in capacity to add a future lane in each direction between I-215 and I-515, either as general purpose or HOV lanes,
- Auxiliary lanes on I-11 between Horizon Drive and the system interchange, and
- Arterial street improvements on Lake Mead Parkway east of the system interchange to Van Wagenen.

4. Noise Environment

4.1 Regulatory Criteria

The criteria for evaluating noise impacts used in this report are contained in Title 23 of the Code of Federal Regulations (CFR), Part 772—Procedures for Abatement of Highway Traffic Noise and Construction Noise (23 CFR 772, 1992) and NDOT’s Traffic and Construction Noise Abatement Policy. The traffic noise analysis was conducted to evaluate the change in noise conditions that could result from expanding the capacity of I-11, I-215, I-515, and State Route 564 (SR564)/Lake Mead Parkway. NDOT’s noise guidelines are consistent with those of FHWA (23 Code of Federal Regulations 772). FHWA has approved them for use on federal-aid projects in Nevada. FHWA guidelines state that traffic noise abatement must be considered when a traffic noise impact occurs at a particular land use or activity category. FHWA traffic noise abatement criteria (NAC) under Activity Categories B and C of 67 A-weighted sound level decibels (dBA) apply to residences, churches, schools, recreation areas, and similar land use activities (Table 1). Other developed lands (e.g., hotels/motels or other business areas) are included in Activity Category E, with an NAC of 72 dBA. NDOT determines a traffic noise impact to occur when predicted future traffic noise levels approach or exceed the established FHWA NAC for a given Activity Category. NDOT defines approach as within 1 dBA of the NAC [66 dBA for Activity Categories B and C or 71 dBA for Category E].

4.2 Criteria for increase in traffic noise levels

In addition to the criterion sound levels described in Table 1, FHWA and NDOT consider a traffic noise impact to occur if sound levels in the design year substantially exceed existing noise levels. FHWA gives state highway agencies the flexibility to establish their own definition of a substantial increase. The NDOT guidance states that a design year traffic noise level of 12 dBA or more over existing noise levels constitutes a substantial increase in noise level for a new highway project.

4.3 Methodology

Traffic noise levels were evaluated using FHWA’s Traffic Noise Model (TNM) version 2.5. TNM 2.5 is the latest analytical method developed for highway traffic noise prediction. The model is described in detail in the TNM User’s Guide and Technical Manual. In short, TNM is based upon reference energy emission levels for automobiles, medium trucks (two axles), and heavy trucks (three or more axles), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, terrain features, atmospheric conditions, and the acoustical characteristics of the site. TNM 2.5 was developed to predict hourly Leq values for free-flowing and interrupted-flow traffic conditions and is considered accurate within ± 3 decibels. TNM was developed to predict noise levels for both constant-flow and interrupted-flow traffic conditions. The model enables the user to account for the effects over/through rows of buildings and dense vegetation. TNM enables the user to input terrain elevation lines to account for shielding effects of natural terrain. Noise levels are determined under worst-case traffic noise conditions. Primary consideration is given to exterior areas of frequent human use. Unless otherwise stated, all sound levels reported are energy equivalent levels (Leq), A-weighted, and measured in decibels (dBA).

For the traffic noise study, traffic noise levels calculated by TNM were validated using onsite traffic noise level measurement data and peak time traffic counts. Measurements were taken at representative locations for 15 minutes to obtain an Leq value. To model the roadways, receptor locations and intervening topography within the project area, terrain information and roadway geometry data were obtained from the available design plans. Appendix A contains the measurement data for the validation points.

Traffic data used for the assessment of existing and projected future noise exposure were obtained from the project team. Appendix A lists the traffic data used as inputs to the TNM. The traffic analysis included the following:

- Existing condition (2017) traffic data were obtained from CA Group's traffic division and approved by NDOT Traffic Information and Traffic Operations. Vehicle speed was based on posted speed limits. Speed limits varied from 45 to 65 miles per hour. All on/off ramps and cross streets were given a 45-mph speed. Vehicle mix was based off TRINA count station information and vehicle classification report and approved by NDOT Traffic Information.

Table 1: Noise Level Criteria by Land Use Category

Activity Category	Leq (decibel)	Activity Description
A	57 (exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (exterior)	Residential (single and multi-family units)
C	67 (exterior)	Active sport areas, amphitheatres, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (interior)	Auditoriums, daycare centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (exterior)	Hotels, motels, offices, restaurants, bars, and other developed lands, properties, or activities not included in A–D or F. Includes undeveloped land permitted for these activities.
F	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	---	Undeveloped lands that are not permitted.

Source: FHWA, 23 CFR, Part 772

4.4 Traffic Noise Impact Analysis

4.3.1 Noise Setting

The noise setting is different on each leg of the project. Noise sensitive areas exist throughout all legs of the project to differing degrees. Vehicular traffic is the dominant noise source within all parts of the study area.

The eastern leg is surrounded by industrial (Activity Category F) and commercial land uses (Activity Category E) with a community trail between them and Lake Mead Parkway (Activity Category C). With the current commercial construction, this section will be fully built out. The speed limit on this leg is 45-mph and there are traffic signals to break up the traffic flow.

The southern leg of the project is along I-11 and is interstate. Land use along this leg is primarily residential (Activity Category B), and over 90% built out adjacent to the highway. There is also a large community park in the SW quadrant of the interchange (Activity Category C).

The western leg of the project is primarily built in a cut section with soundwalls on both sides protecting the vast number of residential properties (Activity Category B). This section is completely built out. There is also a new elementary school (Activity Category C). Some commercial development exists near the interchanges (Activity Category E).

The northern leg of the project still has many vacant parcels. The section south of Sahara is primarily commercial and industrial zoning (Activity Category E & F) with sporadic vacant land (zoned commercial, government, or residential). North of Sahara the land use is commercial/industrial on the west side. The east side is completely filled in between Sahara Ave and Galleria Drive with residential (Activity Category B).

Noise sensitive receptors were located in all thirteen (13) areas (Exhibit 2). Short term field monitoring was conducted at locations along each leg of the project for model validation. These areas are described below, from west/east to south/north.

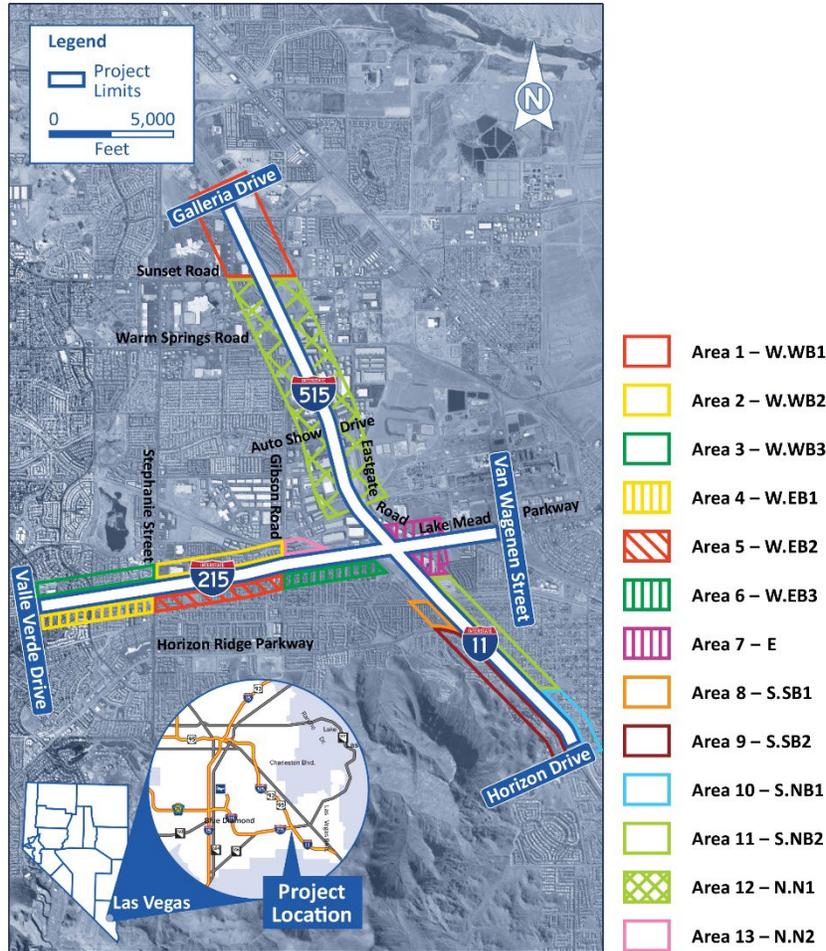


Figure 2. Henderson Interchange Noise Sensitive Areas

4.3.1.1 Area 1- W.WB1 (West Leg, Westbound, Section 1)

This area is north of I-215, bordered to the east by the industrial facility and I-515, and to the west by Gibson Road.

This area has a large multi-family dwelling complex, (#Spur Apartments) which has ground elevations well below the adjacent highway grade.

The existing condition does not have a soundwall here.

4.3.1.2 Area 2- W.WB2 (West Leg, Westbound, Section 2)

This area is north of I-215, bordered to the east by Gibson Road and to the west by a large commercial development adjacent to Stephanie Street.

This area has several multi-family dwelling complexes.

There is an existing soundwall (SW5) on a berm between the highway and the sunken multi-family dwellings along mainline which runs from approximately 300-feet west of the Gibson onramp and starts down the WB Stephanie offramp. It ends at the commercial property frontage. This soundwall will remain in the build condition.

4.3.1.3 Area 3- W.WB3 (West Leg, Westbound, Section 3)

This area is north of I-215, border to the east by Stephanie Street and to the west by Valle Verde Drive. Arroyo Grand Blvd is a grade separated road that cuts through this section. This is the western end of the project limits on the northern side of I-215. Validation Point V11 is in this section.

The area between Stephanie Street and Arroyo Grande Blvd has several multi-family dwelling complexes.

This area is protected by an existing soundwall (SW6). It starts approximately 200-feet up the WB Stephanie Rd onramp and is on a berm between the highway and the sunken multi-family dwellings along mainline to Arroyo Grande Blvd. This soundwall will remain in the build condition.

The area between Arroyo Grande Blvd and Valle Verde has single family homes at a higher elevation than the existing I-215. It has a large commercial development adjacent to Valle Verde Drive. This area is protected by an existing soundwall (SW7). It starts at Arroyo Grande Blvd and runs on a berm westerly between the NSAs and I-215, down the WB Valle Verde Drive ramp and ends at the commercial property frontage.

4.3.1.4 Area 4- W.EB1 (West Leg, Eastbound, Section 1)

This area is south of I-215, bordered on the west by Valle Verde Drive and the east by Stephanie Street. Arroyo Grand Blvd is a grade separated road that cuts through this section. This is the western end of the project limits on the northern side of I-215. Validation Point V12 is in this section.

The section from Valle Verde Drive to Arroyo Grande Blvd is comprised of multi-family dwellings which are at a higher elevation than I-215. This area is protected by an existing soundwall (SW1) which runs from near the beginning of the EB Valle Verde onramp and along the shared use path to Arroyo Grande Blvd. This soundwall will remain in the build condition.

The section from Arroyo Grande Blvd to Stephanie Street is comprised of both single family and multi-family dwellings as well as a storage facility. A utility station and a storage facility are immediately adjacent to the highway frontage moving east from Arroyo Grande Blvd. A new multi-family dwelling is adjacent to them and the remainder of the frontage to Stephanie Street is comprised of a large commercial development. There is no existing soundwall in this section from Arroyo Grande Blvd to Stephanie Street.

4.3.1.5 Area 5- W.EB2 (West Leg, Eastbound, Section 2)

This section is south of I-215, bordered on the west by Stephanie Street and east by Gibson Road.

The NSAs in the area include single-family dwellings as well as Hannah Marie Brown Elementary School.

There is an existing soundwall (SW2) on the top hinge, between the highway and a shared use path and single-family dwellings, along mainline which starts near the top of the EB Stephanie onramp and runs parallel till the start of the existing EB Gibson offramp. It then cuts down to grade level and runs adjacent to the offramp. It ends at the commercial property frontage. The soundwall (SW2) along the hinge will remain in the build condition. There is also an existing soundwall (SW3) along mainline between the Gibson ramps.

4.3.1.6 Area 6- W.EB3 (West Leg, Eastbound, Section 3)

This section is south of I-215, bordered on the west by Gibson Road and east by I-11.

The NSAs in the area include single-family and multi-family dwellings as well as Acacia Park which are both well below the highway grade.

This section is currently protected by two soundwalls. First is an existing soundwall (SW3) along mainline between the Gibson ramps. The second soundwall in this section, SW4, runs from halfway down the EB Gibson onramp to the UPRR structure.

4.3.1.7 Area 7- E (East Leg, Section 1)

This area is to the east of the bowl along Lake Mead Parkway (SR 564). It is completely built out and consists of industrial and commercial activities with a shared use path between them and SR564. Validation points V5 and V6 are in this area.

4.3.1.8 Area 8- - S.SB1 (South Leg, Southbound, Section 1)

This area is to the west of I-11, south of Acacia Park. The northern border is the UPRR tracks, and the southern border of this section is W Horizon Ridge Parkway.

This area consists of multi-family dwelling NSAs which are well below the highway grade.

There is an existing soundwall protecting this area (SW8). It runs from the trailing edge of the UPRR structure to the end of this group of NSAs.

4.3.1.9 Area 9- S.SB2 (South Leg, Southbound, Section 2)

This area is to the west of I-11 and W. Horizon Ridge Parkway, it is bound to the north by the curve in W. Horizon Ridge Parkway and runs south of Horizon Drive to the southern project limits. Validation Points V7 and V17 are in this section.

This area consists of vacant land (AC G) as well as single-family and multi-family NSAs which are below grade at the northern end but come to highway grade as we move south.

The existing condition does not have a soundwall here.

4.3.1.10 Area 10- S.NB1 (South Leg, Northbound, Section 1)

This area starts at the southern project limits on the east side of I-11 and goes north to just south of the homes addressed on Kimberly Drive. Validation Points V9 is in this section.

This area consists of vacant land (AC G) as well as a daycare and single-family dwelling NSAs which are above grade at the southern end but come to highway grade as we move north.

The existing condition does not have a soundwall here south of Horizon Drive. The existing condition north of Horizon Drive is protected by soundwalls. Soundwall 9 (SW9) begins at the start of the NB Horizon onramp and runs near the R/W to the approximate end of Area 9. Soundwall 10 (SW10) starts approximately 300-feet south of the end of Area 9 and runs north atop the I-11 outside barrier rail. SW9 will remain in the build condition.

4.3.1.11 Area 11-S.NB2 (South Leg, Northbound, Section 2)

This area is west of I-11 and begins with homes addressed on Kimberly Drive and runs north to southern limits of the Fiesta Henderson Casino.

This area consists of single-family dwellings from Kimberly Drive north to the UPRR. From the UPRR north to the Fiesta Henderson is a multi-family dwelling development. These become more below I-1 grade as the project moves north.

The existing condition does have a soundwall protecting part of the area. Soundwall 10 (SW10) begins just south of Kimberly Drive and runs atop the I-11 outside barrier rail to the UPRR structure. There is currently no soundwall between the UPRR and Fiesta Henderson Casino.

4.3.1.12 Area 12- N.N1 (North Leg, Section 1)

This area is north of I-215/SR564 and the spaghetti bowl. It covers both sides of I-515. This area runs from just south of the UPRR E/W tracks to Sunset Road. Validation points V2 and V3 are in this section, one on each side of I-515.

This area consists of vacant parcels (AC G) industrial and commercial developments. The only NSA in this area is the playground at the Coral Academy of Sciences.

There are currently no soundwalls in this area.

4.3.1.13 Area 13- N.N2 (North Leg, Section 2)

This area is along both sides of I-515, from Sunset Road to the northern project limits, north of W Galleria Drive. Validation point V1 is in this section.

This section is fully built out. The western side of I-515 is all commercial properties. The eastern side of I-515 consists of single-family NSAs and a storage facility at the far north (NB Galleria offramp and Galleria Drive).

This section is protected by an existing soundwall that runs along atop the NB Galleria offramp outside barrier rail. This will remain in the build condition.

4.3.2 Measured Traffic Noise Levels

Short-term noise level measurements (15 minutes in duration) were collected in the project area on February 22, 2021, to determine traffic noise levels and to verify the accuracy of the TNM model in predicting noise levels in the area. Measurement equipment consisted of a Larson Davis Soundtrack LxT1 sound level meters. The instrument complies with the requirements of the American National Standards Institute and International Electrotechnical Commission for Type I (precision) sound-level

equipment. This equipment satisfies FHWA requirements (ANSI S1.4-1983, TYPE II or better). For the measurement period, it was last calibrated September 16, 2020.

Traffic noise level measurements were conducted and validated at multiple points along each leg of the project. A total of ten (10) locations passed the validation process. Some reasons why initial readings may not have passed the validation process include external noise sources during the reading (i.e., mechanical equipment, dogs barking) or incomplete video data collection of live traffic to input into model.

The monitoring locations were chosen where a clear video recording of the live highway traffic could be obtained, as well as being near representative sensitive receptors adjacent to I-11, I-215, I-515, and SR564. The noise monitoring locations are shown on the figures contained in Appendix B. The purpose of data collection is primarily to validate the model.

Noise levels measured adjacent to I-11, I-215, I-515, and SR564 varied from a Leq of 52 to 72 dBA. Extraordinary noise contributors were noted at locations where they occurred. This included yard machines (lawn mowers and weed whackers at work), planes and helicopters overhead, barking dogs, large vehicles warming up, and local intersection traffic noise.

4.3.3 Traffic Noise Model Validation

The TNM input files for existing conditions were developed using the existing roadway geometry, building zones, and existing privacy and soundwalls. Measured traffic noise levels, and existing peak traffic numbers were used to evaluate the accuracy of the TNM in estimating traffic noise exposure within the project area. Table 2 summarizes of noise levels obtained during the traffic noise measurements and compares them to levels predicted by TNM.

From the data in Table 2, it is apparent that noise levels predicted by TNM are comparable to measured levels. The differences between measured and predicted noise levels are generally within 3 dBA. Therefore, no adjustments to the model are needed to estimate existing and future peak-hour traffic noise levels.

Table 2: Validation: Comparison of Measured & Predicted Traffic Noise Levels

Area	#	Description	Location	Measured Leq (dBA)	Predicted Leq (dBA)	Δ (dBA)
13	V1	Costco parking lot (low point of freeway)	N: 26732095.3 E: 817901.7 Elev: 1706.62	65.4	63.8	1.6
12	V2	Back parking lot of 7585 Commercial Way business	N: 26726137.2 E: 821307.2 Elev: 1741.15	71.3	71.0	0.3
12	V3	landscape strip between Auto Show Drive and 515 across from entrance Value Truck Center 335 Auto Mall Dr	N: 26725865.6 E: 821021.1 Elev: 1750.13	68.8	71.4	-2.6
7	V5	Lake Mead Trail between I-11 and Fiesta Henderson Road	N: 26719390.6 E: 825911.7 Elev: 1864.16	64.3	67.1	-2.8
7	V7	Fiesta Casino parking lot	N: 26719174.2 E: 825914.5 Elev: 1870.78	67.8	66.8	1.0
9	V9	Horizon Ridge Pkwy, north of Horizon northern entrance Black Mountain Condos	N: 26712465.7 E830531.2 Elev: 2163.23	70.2	70.4	-0.2
10	V10	Near R/W fence Pacific Ave and Grandview Drive	N: 26710686.7 E: 832420.9 Elev: 2232.36	61.9	63.1	-1.2
3	V11	Arroyo Grande Blvd, north of 215, eastern sidewalk on box	N: 26717238.9 E: 812255.3 Elev: 2005.63	69.9	71.7	-1.8
4	V12	Arroyo Grande Blvd, south of 215, 1st manhole on eastern trail	N: 26716883.6 E: 812246.7 Elev: 2010.82	72.6	74.6	-2.0
9	V17	Between buildings, on manhole, across from V9	N: 26710464.0 E: 831736.4 Elev: 2251.52	64.8	66.1	-1.3

4.3.4 Calculated Peak-Hour Noise Exposure

All noise sensitive areas within the project surface mapping area were recorded for noise exposure in the existing, no-build, and build modeling under both the AM peak and PM peak traffic volumes. Due to traffic flow differences between the AM & PM peak hours, both values were modeled under all conditions to ensure the full noise environment was documented.

Appendix A summarizes the traffic data. The figures in **Appendix B** show the noise modeling locations.

Per NDOT Traffic Noise Policy, NDOT's approach criterion for reaching the Noise Abatement Criteria (NAC) is a rounded 66 decibels (66 dBA).

4.3.4.1.1 Existing Noise Levels

Existing conditions include the current configuration of I-11, I-215, I-515, and SR564 (Lake Mead Parkway). Traffic volumes for existing conditions assume 2017 AM & PM peak traffic volumes. The first two columns of all **Table 3** summarizes existing peak-hour traffic noise levels for the receiver locations.

Noise sensitive areas that are not predicted to reach the NAC do not qualify for new traffic noise mitigation. Any existing mitigation in place will not be removed if it is not in the path of the widening. This scenario exists in Areas 1, 2, 3, 4, 8, and 13.

New traffic noise mitigation is not proposed in Areas 7 and 12 due to the current land use, limited noise sensitive areas. Commercial enterprises adjacent to the highway generally do not want their highway frontage blocked.

New mitigation will be proposed in Areas, 5, 6, 9, 10, 11.

4.3.4.1.2 Modeled Peak-Hour Noise Levels No-Build Scenario (2040)

No-build conditions include the current configuration of I-11, I-215, I-515, and SR564 (Lake Mead Parkway). Traffic volumes for existing conditions assume 2040 AM & PM peak traffic volumes. Columns 3 & 4 of **Table 3** summarizes no-build peak-hour traffic noise levels for the receiver locations.

Under the predicted no-build conditions, no receivers evaluated met or exceeded the NDOT noise level criteria in Areas 1, 2, 3, 4, 8, 10, 11, 12, and 13. Noise sensitive areas that are not predicted to reach the NAC do not qualify for new traffic noise mitigation. Any mitigation in place will not be removed in the no-build alternative.

New traffic noise mitigation is not proposed in Areas 7 due to the current land use zoning and limited noise sensitive areas. Commercial enterprises adjacent to the highway generally do not want their highway frontage blocked.

Under predicted no-build conditions, twenty-two (22) first row, and twenty-two (22) total receivers in Area 5 are predicted to meet or exceed the NAC without mitigation.

Under predicted no-build conditions, seven (7) first row, and seven (7) total receivers in Area 6 are predicted to meet or exceed the NAC without mitigation.

Under predicted no-build conditions, four (4) first row, and four (4) total receivers in Area 7 are predicted to meet or exceed the NAC without mitigation. Due to the land use zoning in this area, no mitigation is proposed.

Under predicted no-build conditions, nine (9) first row, and sixteen (16) total receivers in Area 9 are predicted to meet or exceed the NAC without mitigation.

4.3.4.1.3 Modeled Peak-Hour Noise Levels Build Scenario (2040)

The preferred alternative includes the roadway features described in Section 2.1.5. Future conditions were modeled using the roadway conditions and traffic volumes for the preferred alternative for the year 2040. **Appendix A** presents the future peak-hour traffic data used in the noise analysis. Columns 5 & 6 of **Table 3** summarizes the 2040 AM and PM traffic noise levels at all receiver locations. The figures in **Appendix B** show the noise modeling locations. The majority of commercial or residential receivers under the proposed action condition are predicted to meet or exceed the NDOT noise level criteria along the western and southern legs without new mitigation.

The majority of predicted noise increases do not constitute substantial increase in noise level for a new highway project (12 dBA). Those that do, are concentrated on the west leg, south of I-215 near the park. Consequently, traffic noise impacts are expected, the consideration of traffic noise abatement is necessary.

The resulting noise levels with mitigation are in the last two columns of Table 3 for areas with new soundwalls. For areas without new soundwalls, the noise levels in columns 5 & 6 (2040 Build AM & 2040 Build PM) will be the results.

Under predicted build conditions, no receivers evaluated met or exceeded the NDOT noise level criteria in Areas 1, 2, 3, 4, 10, and 13.

Under predicted build conditions, seven (7) first row and eight (8) total receivers in Area 5 are predicted to meet or exceed the NAC without mitigation.

Under predicted build conditions, twenty-three (23) first row and forty-seven (47) total receivers in Area 6 are predicted to meet or exceed the NAC without mitigation.

Under predicted build conditions, two (2) first row and two (2) total receivers in Area 7 are predicted to meet or exceed the NAC without mitigation.

Under predicted build conditions, fourteen (14) first row and fourteen (14) total receivers in Area 8 are predicted to meet or exceed the NAC without mitigation.

Under predicted build conditions, nine (9) first row and ten (10) total receivers in Area 9 are predicted to meet or exceed the NAC without mitigation.

Under predicted build conditions, forty-six (46) first row and eighty-two (82) total receivers in Area 11 are predicted to meet or exceed the NAC without mitigation.

Under predicted build conditions, two (2) first row and two (2) total receivers in Area 12 are predicted to meet or exceed the NAC without mitigation.

4.5 Conclusions and Recommendations (Impacts and Mitigation)

4.4.1 Impacts

Sensitive receptors associated with this project constitute NAC Category B or C activities. Category B and C land use activity criteria apply to residences, churches, schools, recreation areas, and similar uses consist of an hourly sound level that approaches or exceeds 66 dBA (L_{eq}). The majority of the existing or predicted future noise levels for the project area approach or exceed the NAC. Consequently, traffic noise impacts are expected.

4.4.2 Mitigation

A barrier analysis must be conducted for receptors that would experience a traffic noise impact. To be recommended for further consideration, a barrier must be both feasible and reasonable. Because traffic noise impacts are expected for this project, various mitigation options were evaluated. Barrier analysis was performed on all areas of the project to find out what the maximum benefit of a soundwall could be. That was then measured against the feasible and reasonableness criteria. This included evaluating if existing soundwalls that wouldn't be damaged in the roadway expansion could remain, if they still met the minimum abatement criteria, or if they would need to be modified. It was determined the multiple existing soundwalls would still provide adequate shielding. These include: northern leg, NB Galleria Drive offramp outside barrier rail that turns to soundwall between Sahara Avenue and Galleria Drive, along the western leg, SW1 along EB215 from Valle Verde Drive to Arroyo Grande grade separation, SW2 along EB215 from Stephanie Street to Gibson Road, SW5 along WB215 between the Gibson Road and Stephanie Street interchanges, SW6 along WB215 between Stephanie Street and Arroyo Grande grade separation, SW7 along WB215 between the Arroyo Grande grade separation and Valle Verde interchange, and on the southern leg, SW9 along NB I-11 from the NB Horizon onramp to I-11 mainline.

All other previously existing soundwalls within the project limits will be removed as part of the build alternative. Three new soundwalls are proposed to replace the soundwalls to be removed.

Replacement dimensions and determinations on dimensions is below. These are summarized in **Table 4**.

The first new soundwall will be located in Area 6. It will run atop the new outside barrier rail of the "ES" ramp from where it breaks off from I-215 EB to the N/S UPRR structure. This end point is where the current soundwall ends. It will vary in height from 11.5-feet to 13.5-feet. The soundwall will begin 11.5-feet while on structure for almost 1500-feet, then go up to 13.5-feet once on fill. This soundwall will provide a minimum 5-decibel reduction for 20 of 37 first row receivers, or 54%. This meets the feasibility requirements. This proposed soundwall is cost effective.

The second new soundwall is proposed along I-11 Southbound in Areas 8 & 9.. It will run atop the new outside barrier rail of I-11 from the trailing edge of the E/W UPRR structure to the start of the

Southbound Horizon Drive offramp. It will be 11.5-feet in height. This soundwall will provide a minimum 5-decibel reduction for 48 of 90 first row receivers, or 53%. This meets the feasibility requirements. This proposed soundwall is cost effective.

The third new soundwall is proposed along I-11 Northbound in Area 11. It will run atop the new outside barrier rail of I-11 approximately from the junction of the Northbound Horizon Drive onramp to the E/W UPRR structure. This end point is where the current soundwall ends. This soundwall will be 15.5-feet in height. This soundwall will provide a minimum 5-decibel reduction for 62 of 75 first row receivers, or 83%. This meets the feasibility requirements. This proposed soundwall is cost effective.

Table 3.X: Results for Existing, No-Build, & Build Scenarios-all noise sensitive areas (AM & PM)

Table 3.1 Peak Hour Noise in Area 1, 2, & 3

Table 3.1 Peak Hour Noise in Areas 1, 2, 3

All Noise Sensitive Areas												
Areas 1, 2, 3 (W.WB1, W.WB2, W.WB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No BuildAM (dBA)	2040 No Build PM (dBA)	2040 BuildAM (dBA)	2040 BuildPM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
1	R24/W-R1	985 Wigwam Pkwy	63.4	63.8	65.0	64.7	60.6	60.9	NO			
1	R25/W-R2	985 Wigwam Pkwy	63.0	63.2	64.4	64.5	63.2	63.4	NO			
2	R26/W-R3	1005 Wigwam Pkwy	64.7	65.1	66.2	66.3	64.2	64.0	YES			
2	R27/W-R4	1005 Wigwam Pkwy	54.2	54.7	55.6	55.9	55.4	55.6	NO			
2	R28/W-R5	1131 Wigwam Pkwy	46.9	47.6	48.5	48.8	48.9	49.3	NO	EX		
2	R29/W-R6	45 Maleena Mesa St	44.0	44.6	45.5	45.8	47.2	47.7	NO	SW5		
3	R30/W-R7	1545 Wigwam Pkwy	46.6	47.3	47.7	48.6	47.1	48.6	NO			
3	R31/W-R8	1st apt, end of Spiced Wine Ave	53.1	53.8	54.5	54.9	52.7	53.2	NO	EX SW6		
3	R32/W-R15	10 Palazzo Terrace	56.3	57.2	58.0	58.4	58.4	58.8	NO			
3	R33/W-R58	15 Desert Dawn Ln	57.6	58.6	59.2	59.7	58.2	58.7	NO	EX		
3	R34/W-R69	55 N Valle Verde Dr	58.2	59.2	59.7	60.3	59.9	60.4	NO			
3	W-R9	1525 Spiced Wine Ave	51.4	52.1	52.8	53.2	47.9	48.5	NO	EX SW6		
3	W-R10	1 Palazzo Terrace	54.9	55.8	56.5	57.0	56.5	56.9	NO			
3	W-R11	3 Palazzo Terrace	55.4	56.2	57.0	57.4	57.0	57.4	NO			
3	W-R12	5 Palazzo Terrace	55.3	56.2	56.9	57.3	56.8	57.3	NO			
3	W-R13	6 Palazzo Terrace	60.9	61.8	62.6	63.0	63.0	63.5	NO			
3	W-R14	8 Palazzo Terrace	57.1	58.0	58.7	59.1	58.6	59.1	NO			
3	W-R16	11 Palazzo Terrace	54.1	54.9	55.7	56.1	55.5	55.9	NO			
3	W-R17	12 Palazzo Terrace	54.4	55.2	56.0	56.4	55.7	56.2	NO			
3	W-R18	13 Palazzo Terrace	53.0	53.8	54.5	55.0	54.2	54.7	NO			
3	W-R19	14 Palazzo Terrace	54.2	55.1	55.8	56.2	55.5	56.0	NO			
3	W-R20	15 Palazzo Terrace	52.5	53.4	54.1	54.5	53.6	54.0	NO			
3	W-R21	16 Palazzo Terrace	53.2	54.1	54.8	55.3	54.4	54.9	NO			
3	W-R22	18 Palazzo Terrace	52.1	53.0	53.7	54.1	53.2	53.7	NO			
3	W-R23	19 Palazzo Terrace	51.7	52.5	53.3	53.7	52.7	53.1	NO			
3	W-R24	20 Palazzo Terrace	53.2	54.0	54.7	55.2	52.2	52.7	NO			

Table 3.1 Peak Hour Noise in Areas 1, 2, 3

All Noise Sensitive Areas												
Areas 1, 2, 3 (W.WB1, W.WB2, W.WB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No BuildAM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 BuildPM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
3	W-R25	11 Charmartin St	57.7	58.7	59.4	59.8	56.4	56.9	NO	EX SW7		
3	W-R26	13 Charmartin St	54.4	55.3	56.1	56.5	55.9	56.3	NO			
3	W-R27	15 Charmartin St	54.4	55.3	56.1	56.5	56.0	56.5	NO			
3	W-R28	16 Charmartin St	54.6	55.4	56.2	56.6	56.1	56.6	NO			
3	W-R29	17 Charmartin St	53.8	54.7	55.4	55.9	55.1	55.6	NO			
3	W-R30	18 Charmartin St	53.7	54.6	55.3	55.8	55.1	55.6	NO			
3	W-R31	19 Charmartin St	53.2	54.1	54.9	55.3	54.3	54.7	NO			
3	W-R32	20 Charmartin St	52.8	53.6	54.3	54.8	54.0	54.5	NO			
3	W-R33	21 Charmartin St	52.4	53.2	54.0	54.4	53.3	53.8	NO			
3	W-R34	22 Charmartin St	51.9	52.8	53.5	54.0	52.8	53.3	NO			
3	W-R35	23 Charmartin St	51.7	52.6	53.3	53.7	52.5	53.0	NO			
3	W-R36	26 Charmartin St	51.4	52.3	53.0	53.4	52.2	52.7	NO			
3	W-R37	24 Birkdale Dr	54.7	55.6	56.3	56.7	56.1	56.5	NO			
3	W-R38	26 Birkdale Dr	54.7	55.6	56.3	56.8	56.3	56.7	NO			
3	W-R39	28 Birkdale Dr	54.5	55.4	56.1	56.5	55.8	56.3	NO			
3	W-R40	29 Birkdale Dr	53.2	54.1	54.8	55.3	54.1	54.6	NO			
3	W-R41	30 Birkdale Dr	54.1	55.0	55.7	56.2	55.1	55.6	NO			
3	W-R42	31 Birkdale Dr	52.5	53.4	54.1	54.5	53.3	53.8	NO			
3	W-R43	32 Birkdale Dr	53.1	54.0	54.7	55.1	53.9	54.4	NO			
3	W-R44	33 Birkdale Dr	51.5	52.4	53.1	53.5	52.2	52.7	NO			
3	W-R45	34 Birkdale Dr	52.1	52.9	53.6	54.1	52.9	53.4	NO			
3	W-R46	36 Birkdale Dr	51.5	52.4	53.1	53.5	52.2	52.7	NO			
3	W-R47	1 Desert Dawn Ln	58.8	59.7	60.5	60.9	59.8	60.2	NO			
3	W-R48	3 Desert Dawn Ln	58.2	59.2	59.9	60.3	55.1	55.5	NO			
3	W-R49	4 Desert Dawn Ln	54.1	55.0	55.7	56.1	55.2	55.7	NO			
3	W-R50	5 Desert Dawn Ln	58.0	58.9	59.6	60.1	56.1	56.5	NO			
3	W-R51	6 Desert Dawn Ln	54.1	55.0	55.7	56.2	55.1	55.6	NO			

Table 3.1 Peak Hour Noise in Areas 1, 2, 3

All Noise Sensitive Areas												
Areas 1, 2, 3 (W.WB1, W.WB2, W.WB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No BuildAM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 BuildPM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
3	W-R52	7 Desert Dawn Ln	57.7	58.7	59.4	59.8	56.9	57.3	NO	EX SW7		
3	W-R53	8 Desert Dawn Ln	54.0	54.9	55.6	56.1	54.9	55.4	NO			
3	W-R54	9 Desert Dawn Ln	57.5	58.4	59.1	59.6	57.5	57.9	NO			
3	W-R55	11 Desert Dawn Ln	57.9	58.8	59.5	60.0	59.2	59.6	NO			
3	W-R56	12 Desert Dawn Ln	54.0	55.0	55.7	56.1	54.7	55.2	NO			
3	W-R57	13 Desert Dawn Ln	58.0	58.9	59.6	60.1	59.0	59.4	NO			
3	W-R59	16 Desert Dawn Ln	53.3	54.2	54.9	55.3	54.1	54.6	NO			
3	W-R60	17 Desert Dawn Ln	55.7	56.7	57.4	57.8	55.9	56.5	NO			
3	W-R61	18 Desert Dawn Ln	52.7	53.6	54.3	54.7	53.4	53.9	NO			
3	W-R62	19 Desert Dawn Ln	54.4	55.3	55.9	56.5	54.5	55.1	NO			
3	W-R63	21 Desert Dawn Ln	52.5	53.4	54.0	54.6	52.8	53.4	NO			
3	W-R64	23 Desert Dawn Ln	51.6	52.5	53.1	53.6	52.1	52.7	NO			
3	W-R65	25 Desert Dawn Ln	50.9	51.8	52.5	53.0	51.6	52.1	NO			
3	W-R66	26 Desert Dawn Ln	52.8	53.7	54.4	54.8	53.4	53.9	NO			
3	W-R67	28 Desert Dawn Ln	52.2	53.1	53.8	54.2	52.8	53.3	NO			
3	W-R68	30 Desert Dawn Ln	51.5	52.4	53.1	53.5	52.1	52.6	NO			
2	W-R455	1005 Wigwam Pkwy	63.3	63.7	64.8	64.9	55.3	55.3	NO			

Table 3.2 Peak Hour Noise in Area 4, 5, & 6

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
6	R3/W-R454	Acacia Demonstration Gardens	59.0	60.0	60.5	60.5	57.2	58.2	NO		56.7	57.8
4	R35/W-R78	1775 Tanner Cir	51.4	52.3	60.5	60.9	55.9	56.4	NO	EX SW1		
4	R36/W-R103	1714/1716 Franklin Chase Terr	51.8	53.1	59.5	59.9	56.5	57.0	NO			
4	R37/W-R150	1582 Bozeman Dr	53.0	53.8	54.5	55.0	50.4	50.9	NO			
5	R38/W-R188	1326 Crystal Hill Ln	63.1	63.8	65.0	65.4	64.8	65.2	NO			
5	R39/W-R278	1136 Blitzen Dr	61.0	61.7	66.0	66.4	61.9	62.3	YES	EX SW2		
5	R40/W-R240	12 Woodcarver St	54.1	54.8	58.1	58.6	55.6	55.9	NO			
5	R41/W-R306	2 Split Hoove Ct	57.2	57.7	64.4	65.0	62.1	62.8	NO	EX SW2 & ES ramp	60.2	60.7
6	R42/W-R348	80 S Gibbon Rd	53.9	49.3	55.4	55.9	61.0	61.8	NO		58.5	58.9
6	R43/W-R449	860 Viento Del Montagna Ave	54.5	55.1	61.2	61.6	64.2	65.0	NO	ES ramp	62.3	62.8
6	R44/W-R414	31 Casa Del Fuego St	56.5	57.3	60.8	61.3	61.8	62.8	NO		57.3	58.1
6	W-R457	Acacia Demonstration Gardens	62.2	54.3	65.0	65.6	66.2	67.1	YES		64.1	65.0
4	W-R70	1752/1754 Tanner Cir	51.3	52.2	52.1	52.5	52.6	53.0	NO	EX SW1		
4	W-R71	1753/1755 Tanner Cir	50.5	51.4	51.8	52.3	52.1	52.6	NO			
4	W-R72	1756/1758 Tanner Cir	52.7	53.6	53.4	53.8	54.0	54.4	NO			
4	W-R73	1757/1759 Tanner Cir	51.8	52.7	53.2	53.7	53.0	53.5	NO			
4	W-R74	1760/1762 Tanner Cir	52.9	53.8	54.3	54.7	55.6	56.0	NO			
4	W-R75	1761/1763 Tanner Cir	54.1	55.0	56.0	56.5	55.2	55.6	NO			
4	W-R76	1765/1767 Tanner Cir	57.1	57.8	60.2	60.7	58.4	58.8	NO			
4	W-R77	1769/1771 Tanner Cir	52.4	53.2	60.2	60.6	55.8	56.2	NO			
4	W-R79	1779/1781 Tanner Cir	51.3	52.1	55.2	55.6	53.1	53.6	NO			
4	W-R80	1780/1782 Tanner Cir	52.3	53.2	54.3	54.7	53.2	53.6	NO			

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas																
Area	Receiver ID	Physical Address	Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)				Existing AM (dBA)	Existing PM (dBA)	2040		2040		Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
			Existing AM (dBA)	Existing PM (dBA)	No Build AM (dBA)	No Build PM (dBA)			2040 Build AM (dBA)	2040 Build PM (dBA)						
4	W-R81	1783/1785 Tanner Cir	53.1	54.0	53.8	54.2	52.8	53.2	NO							
4	W-R82	1784/1786 Tanner Cir	51.8	52.8	52.8	53.2	52.1	52.6	NO							
4	W-R83	1787/1789 Tanner Cir	52.1	53.1	52.7	53.1	52.2	52.7	NO							
4	W-R84	1788/1790 Tanner Cir	50.8	51.8	51.5	51.9	51.4	51.9	NO							
4	W-R85	1791/1793 Tanner Cir	50.9	51.8	51.5	51.9	51.4	51.9	NO							
4	W-R86	3/5 Alyson Pond Cir	52.6	53.6	53.6	54.0	52.6	53.0	NO							
4	W-R87	7/9 Alyson Pond Cir	52.5	53.4	54.6	55.0	52.7	53.2	NO							
4	W-R88	10/12 Alyson Pond Cir	50.0	50.9	58.6	59.1	53.3	53.7	NO							
4	W-R89	13/15 Alyson Pond Cir	51.8	52.7	54.1	54.5	52.2	52.7	NO							
4	W-R90	14/16 Alyson Pond Cir	49.7	50.5	59.0	59.4	53.3	53.8	NO							
4	W-R91	18/20 Alyson Pond Cir	50.0	50.9	59.1	59.6	54.1	54.5	NO							
4	W-R92	22/24 Alyson Pond Cir	50.9	51.7	54.3	54.7	53.2	53.6	NO							
4	W-R93	25/27 Alyson Pond Cir	53.4	54.3	54.3	54.7	53.4	53.8	NO							
4	W-R94	26/28 Alyson Pond Cir	52.5	53.4	53.0	53.4	51.7	52.2	NO							
4	W-R95	29/31 Alyson Pond Cir	52.4	53.4	53.3	53.7	52.7	53.2	NO							
4	W-R96	30/32 Alyson Pond Cir	51.4	52.4	52.0	52.4	51.9	52.3	NO							
4	W-R97	28 Arborfield Ct	50.1	51.3	51.6	52.0	51.6	52.1	NO							
4	W-R98	24/26 Arborfield Ct	50.7	52.4	52.1	52.5	53.2	53.7	NO							
4	W-R99	22 Arborfield Ct/1702 Franklin Chase Terrace	51.5	53.2	52.9	53.3	54.2	54.6	NO							
4	W-R100	1704/1706 Franklin Chase Terrace	52.7	59.3	54.4	54.8	55.6	56.1	NO							
4	W-R101	1708/1710 Franklin Chase Terrace	57.9	59.3	60.7	61.1	60.8	61.3	NO							
4	W-R102	1712 Franklin Chase Terrace	52.6	54.0	60.0	60.4	60.5	61.0	NO							
4	W-R104	1718/17206 Franklin Chase Terrace	53.9	54.9	55.5	55.9	57.6	58.1	NO							

EX SW1

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
4	W-R105	1709/1711 Franklin Chase Terrace	49.0	50.0	50.7	51.1	51.0	51.4	NO	EX SW1		
4	W-R106	1713/1715 Franklin Chase Terrace	50.0	51.0	50.8	51.2	51.7	52.1	NO			
4	W-R107	1717/1719 Franklin Chase Terrace	49.7	50.6	50.4	50.8	51.3	51.7	NO			
4	W-R108	1721 Franklin Chase Terrace	58.9	50.0	50.5	50.9	50.6	51.0	NO			
4	W-R109	1722/1724 Franklin Chase Terrace	54.8	55.8	56.7	57.0	58.8	59.3	NO			
4	W-R110	1726 Franklin Chase Terrace	59.4	60.4	64.3	64.7	58.8	59.3	NO			
4	W-R111	1728 Franklin Chase Terrace	55.2	56.1	62.2	62.6	56.8	57.2	NO			
4	W-R112	1730/1732 Franklin Chase Terrace	54.1	55.1	55.9	56.3	57.2	57.7	NO			
4	W-R113	1723/1725 Franklin Chase Terrace	53.7	54.6	54.4	54.8	55.8	56.2	NO			
4	W-R114	1727/1729 Franklin Chase Terrace	50.3	51.1	50.7	51.1	51.7	52.2	NO			
4	W-R115	1731/1733 Franklin Chase Terrace	50.1	50.9	50.5	50.9	51.7	52.1	NO			
4	W-R116	1735/1737 Franklin Chase Terrace	49.3	50.2	50.9	51.3	51.1	51.5	NO			
4	W-R117	1734/1736 Franklin Chase Terrace	54.8	55.8	56.0	56.4	58.5	58.9	NO			
4	W-R118	1738 Franklin Chase Terrace	54.0	54.9	61.4	61.8	57.3	57.7	NO			
4	W-R119	1740 Franklin Chase Terrace	52.4	53.2	60.4	60.8	55.9	56.4	NO			
4	W-R120	1742/1744 Franklin Chase Terrace	54.0	55.0	55.8	56.1	56.8	57.3	NO			

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas														
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)														
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	2040 Build PM (dBA)	Approach/Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls	
4	W-R121	1739 Franklin Chase Terrace	49.4	50.4	51.0	51.4	51.2	51.6	51.6	NO	EX SW1			
4	W-R122	1741/1743 Franklin Chase Terrace	50.1	50.9	50.4	50.7	51.3	51.8	51.8	NO				
4	W-R123	1745/1747 Franklin Chase Terrace	50.0	50.8	50.2	50.6	51.1	51.5	51.5	NO				
4	W-R124	1749/1751 Franklin Chase Terrace	49.5	50.4	50.9	51.3	50.9	51.3	51.3	NO				
4	W-R125	1746 Franklin Chase Terrace	55.0	55.9	55.8	56.1	57.7	58.2	58.2	NO				
4	W-R126	1748/1750 Franklin Chase Terrace	53.1	54.0	61.2	61.6	58.0	58.4	58.4	NO				
4	W-R127	1752/1754 Franklin Chase Terrace	53.3	54.2	61.2	61.6	57.9	58.4	58.4	NO				
4	W-R128	1756 Franklin Chase Terrace	54.2	55.2	56.0	56.4	57.9	58.4	58.4	NO				
4	W-R129	1753/1755 Franklin Chase Terrace	51.2	52.1	52.1	52.4	52.4	52.8	52.8	NO				
4	W-R130	1757/1759 Franklin Chase Terrace	51.1	52.1	51.5	51.9	52.0	52.5	52.5	NO				
4	W-R131	1765/1767 Franklin Chase Terrace	49.6	50.5	50.5	50.9	50.1	50.5	50.5	NO		EX SW1		
4	W-R132	1769/1771 Franklin Chase Terrace	49.9	50.9	50.8	51.2	50.4	50.8	50.8	NO				
4	W-R133	1764/1766 Franklin Chase Terrace	54.3	55.2	56.1	56.5	56.3	56.8	56.8	NO				
4	W-R134	1758 Franklin Chase Terrace	60.5	61.4	65.9	66.3	64.1	64.5	64.5	YES				
4	W-R135	1760/1762 Franklin Chase Terrace	59.7	60.7	65.1	65.5	64.0	64.4	64.4	YES				

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas													
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)													
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls	
4	W-R136	1772/1774 Franklin Chase Terrace	56.5	57.4	63.0	63.4	60.0	60.4	NO	EX SW1			
4	W-R137	1768/1770 Franklin Chase Terrace	56.0	56.9	57.2	57.6	56.6	57.0	NO				
4	W-R138	1780/1782 Franklin Chase Terrace	55.3	56.2	56.3	56.7	54.3	54.8	NO				
4	W-R139	1776/1778 Franklin Chase Terrace	55.1	56.0	63.3	63.7	58.4	58.9	NO				
4	W-R140	1784/1786 Franklin Chase Terrace	52.7	53.7	53.6	54.0	53.4	53.9	NO				
4	W-R141	1597 Bozeman Drive	50.3	50.8	52.0	52.5	50.6	51.0	NO				
4	W-R142	1598 Bozeman Drive	51.7	53.4	53.5	53.9	53.5	54.0	NO				
4	W-R143	1596 Bozeman Drive	53.1	55.1	54.6	55.0	55.2	55.7	NO				
4	W-R144	1594 Bozeman Drive	52.7	54.2	54.2	54.6	54.0	54.5	NO				
4	W-R145	1592 Bozeman Drive	52.8	54.3	54.3	54.7	53.8	54.3	NO				
4	W-R146	1590 Bozeman Drive	53.1	54.4	54.5	54.9	53.3	53.8	NO				
4	W-R147	1588 Bozeman Drive	53.0	53.8	54.4	54.8	51.7	52.2	NO				
4	W-R148	1586 Bozeman Drive	53.1	53.8	54.6	55.0	51.0	51.5	NO				
4	W-R149	1584 Bozeman Drive	52.9	53.7	54.4	54.8	50.7	51.2	NO				
4	W-R151	1580 Bozeman Drive	52.6	53.2	54.1	54.5	49.1	49.5	NO				
4	W-R152	1578 Bozeman Drive	52.4	53.1	54.0	54.4	49.1	49.5	NO				
4	W-R153	1576 Bozeman Drive	52.2	53.0	53.7	54.1	49.5	49.9	NO				
4	W-R154	1574 Bozeman Drive	52.2	53.0	53.8	54.1	48.5	49.0	NO				
4	W-R155	1572 Bozeman Drive	52.0	53.0	53.5	53.9	48.9	49.3	NO				
4	W-R156	1570 Bozeman Drive	52.4	53.1	54.0	54.4	48.0	48.5	NO				
4	W-R157	1568 Bozeman Drive	51.8	52.5	53.4	53.8	46.4	46.9	NO				
4	W-R158	1566 Bozeman Drive	51.8	52.6	53.3	53.7	47.4	47.8	NO				

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas													
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)													
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls	
4	W-R159	1480 Paseo Verde Pkwy	51.9	52.8	53.3	53.7	49.2	49.6	NO				
5	W-R160	16 Hudson Canyon St	56.9	57.5	64.0	64.4	59.4	59.7	NO				
5	W-R161	19 Hudson Canyon St	53.8	54.3	56.3	56.7	55.3	55.7	NO				
5	W-R162	20 Hudson Canyon St	56.1	56.6	62.5	62.9	58.6	58.9	NO				
5	W-R163	23 Hudson Canyon St	56.4	54.0	56.2	56.6	54.9	55.2	NO				
5	W-R164	24 Hudson Canyon St	52.5	53.1	57.5	57.8	54.6	54.9	NO				
5	W-R165	27 Hudson Canyon St	52.7	53.3	55.7	56.0	54.2	54.5	NO				
5	W-R166	31 Hudson Canyon St	52.6	53.1	55.6	55.9	53.9	54.2	NO				
5	W-R167	20 Red Oak Caynon St	54.9	55.5	59.1	59.5	56.6	56.9	NO				
5	W-R168	21 Red Oak Caynon St	53.6	54.2	56.3	56.7	55.2	55.6	NO				
5	W-R169	24 Red Oak Caynon St	54.5	55.0	58.6	59.0	55.9	56.2	NO				
5	W-R170	25 Red Oak Caynon St	52.9	53.6	55.6	56.0	54.5	54.8	NO				
5	W-R171	28 Red Oak Caynon St	53.8	54.4	57.8	58.2	55.4	55.7	NO				
5	W-R172	29 Red Oak Caynon St	52.5	53.0	54.9	55.3	53.7	54.0	NO				
5	W-R173	32 Red Oak Caynon St	53.0	53.6	56.6	56.9	54.6	54.9	NO				
5	W-R174	22 Lone Cove Ln	53.2	53.8	56.1	56.5	54.8	55.1	NO				
5	W-R175	25 Lone Cove Ln	52.2	52.9	54.6	55.1	53.4	53.8	NO				
5	W-R176	26 Lone Cove Ln	52.6	53.1	55.4	55.8	54.0	54.3	NO				
5	W-R177	1334 Grass Creek Ave	52.6	53.2	55.7	56.0	53.7	54.0	NO				
5	W-R178	1340 Grass Creek Ave	52.6	53.2	55.7	56.1	53.8	54.2	NO				
5	W-R179	1350 Grass Creek Ave	52.6	53.2	55.3	55.7	53.5	53.9	NO				
5	W-R180	1354 Grass Creek Ave	53.0	53.7	55.6	56.0	53.8	54.2	NO				
5	W-R181	1358 Grass Creek Ave	53.0	53.7	55.4	55.8	53.7	54.1	NO				
5	W-R182	1362 Grass Creek Ave	53.2	53.8	55.5	55.9	53.9	54.3	NO				
5	W-R183	1306 Crystal Hill Ln	61.4	61.9	66.5	66.9	65.1	65.4	YES				
5	W-R184	1310 Crystal Hill Ln	62.4	62.9	66.4	66.9	65.4	65.8	YES				
5	W-R185	1314 Crystal Hill Ln	64.9	65.4	68.2	68.6	67.5	67.9	YES				

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas													
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)													
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls	
5	W-R186	1318 Crystal Hill Ln	64.6	65.2	67.4	67.9	67.1	67.5	YES	EX SW2			
5	W-R187	1322 Crystal Hill Ln	64.7	65.3	66.9	67.3	66.7	67.2	YES				
5	W-R189	1330 Crystal Hill Ln	63.1	63.7	64.9	65.4	64.7	65.1	NO				
5	W-R190	1338 Crystal Hill Ln	60.9	61.5	64.0	64.5	63.7	64.1	NO				
5	W-R191	1342 Crystal Hill Ln	58.6	59.4	62.6	63.1	62.2	62.6	NO				
5	W-R192	1346 Crystal Hill Ln	56.6	57.3	62.2	62.7	61.0	61.4	NO				
5	W-R193	1350 Crystal Hill Ln	57.5	58.2	63.2	63.7	61.6	61.9	NO				
5	W-R194	1353 Crystal Hill Ln	52.4	53.2	55.1	55.5	53.6	54.0	NO				
5	W-R195	1354 Crystal Hill Ln	57.1	57.9	62.5	63.0	60.0	60.4	NO				
5	W-R196	1358 Crystal Hill Ln	57.8	58.9	62.0	62.5	60.2	60.8	NO				
5	W-R197	1362 Crystal Hill Ln	59.0	59.6	60.8	61.3	61.1	61.7	NO				
5	W-R198	1366 Crystal Hill Ln	59.3	59.8	60.6	61.1	61.8	62.4	NO				
5	W-R199	1370 Crystal Hill Ln	57.9	58.2	59.1	59.4	60.7	61.0	NO				
5	W-R200	formerly Reunion Trails Park, Hanna Brown Elementary School	60.1	60.8	71.0	71.4	63.8	64.3	YES				
5	W-R201	formerly Reunion Trails Park, Hanna Brown Elementary School	59.6	60.2	70.1	70.5	62.2	62.6	YES				
5	W-R202	20 Drawback Street	55.5	56.1	59.2	59.7	56.4	56.7	NO		EX SW2		
5	W-R203	22 Drawback Street	56.2	56.8	60.7	61.0	57.7	58.0	NO				
5	W-R204	24 Drawback Street	55.7	56.3	60.3	60.6	57.3	57.6	NO				
5	W-R205	26 Drawback Street	55.2	55.8	59.6	59.9	56.6	56.9	NO				
5	W-R206	20 Desert Gallery St	55.4	56.0	58.9	59.3	57.1	57.4	NO				
5	W-R207	21 Desert Gallery St	54.4	55.0	57.9	58.3	55.4	55.8	NO				
5	W-R208	22 Desert Gallery St	55.9	56.5	58.9	59.3	57.3	57.6	NO				
5	W-R209	23 Desert Gallery St	55.6	56.2	59.3	59.6	56.8	57.1	NO				

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
5	W-R210	24 Desert Gallery St	56.1	56.7	58.7	59.1	57.5	57.8	NO	EX SW2		
5	W-R211	25 Desert Gallery St	56.1	56.8	59.8	60.0	57.0	57.3	NO			
5	W-R212	26 Desert Gallery St	55.5	56.1	58.4	58.7	56.9	57.2	NO			
5	W-R213	27 Desert Gallery St	55.1	55.7	59.0	59.2	56.4	56.7	NO			
5	W-R214	17 Painted View St	54.1	54.8	57.7	58.2	55.6	56.0	NO			
5	W-R215	18 Painted View St	55.1	55.7	58.5	58.9	56.7	57.0	NO			
5	W-R216	19 Painted View St	54.7	55.4	57.8	58.2	56.2	56.5	NO			
5	W-R217	20 Painted View St	56.6	57.2	59.3	59.7	58.0	58.3	NO			
5	W-R218	21 Painted View St	55.4	56.0	57.9	58.3	56.7	57.0	NO			
5	W-R219	22 Painted View St	56.1	56.7	59.2	59.6	58.0	58.3	NO			
5	W-R220	23 Painted View St	55.1	55.7	57.6	58.0	56.3	56.6	NO			
5	W-R221	24 Painted View St	55.2	55.8	58.9	59.3	57.0	57.3	NO			
5	W-R222	16 Blue Cavern St	56.4	57.1	59.9	60.3	58.3	58.6	NO			
5	W-R223	17 Blue Cavern St	54.9	55.5	58.4	58.8	56.3	56.7	NO			
5	W-R224	18 Blue Cavern St	56.9	57.5	61.4	61.8	59.4	59.7	NO			
5	W-R225	19 Blue Cavern St	56.0	56.6	58.8	59.3	57.6	57.9	NO			
5	W-R226	20 Blue Cavern St	56.2	56.9	60.6	61.0	58.4	58.7	NO			
5	W-R227	21 Blue Cavern St	56.1	56.7	59.2	59.6	58.1	58.4	NO			
5	W-R228	22 Blue Cavern St	55.4	56.0	59.7	60.1	57.5	57.8	NO			
5	W-R229	23 Blue Cavern St	55.2	55.8	58.5	58.9	56.9	57.2	NO			
5	W-R230	24 Blue Cavern St	54.9	55.5	59.3	59.7	57.0	57.3	NO			
5	W-R231	14 Amber Rock St	55.2	55.9	59.9	60.4	56.9	57.2	NO	EX SW2		
5	W-R232	15 Amber Rock St	54.3	55.0	57.3	57.8	54.3	54.6	NO			
5	W-R233	16 Amber Rock St	56.7	57.4	60.5	60.9	58.0	58.3	NO			
5	W-R234	17 Amber Rock St	56.0	56.7	58.9	59.3	57.0	57.4	NO			
5	W-R235	18 Amber Rock St	56.1	56.7	60.3	60.7	58.1	58.5	NO			
5	W-R236	19 Amber Rock St	55.5	56.1	59.1	59.5	57.2	57.6	NO			

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
5	W-R237	20 Amber Rock St	55.5	56.1	60.4	60.8	57.7	58.0	NO	EX SW2		
5	W-R238	21 Amber Rock St	54.8	55.4	58.8	59.2	56.8	57.1	NO			
5	W-R239	22 Amber Rock St	55.2	55.9	60.3	60.7	57.5	57.8	NO			
5	W-R241	13 Woodcarver St	53.6	54.4	59.7	60.2	54.8	55.1	NO			
5	W-R242	14 Woodcarver St	54.8	55.5	58.0	58.4	55.5	55.8	NO			
5	W-R243	15 Woodcarver St	54.1	54.8	57.0	57.4	54.4	54.7	NO			
5	W-R244	16 Woodcarver St	55.7	56.3	58.5	58.9	56.5	56.8	NO			
5	W-R245	17 Woodcarver St	54.7	55.3	56.9	57.3	54.7	55.1	NO			
5	W-R246	18 Woodcarver St	54.9	55.5	57.9	58.3	56.2	56.5	NO			
5	W-R247	19 Woodcarver St	54.9	55.5	58.1	58.5	56.3	56.7	NO			
5	W-R248	20 Woodcarver St	54.6	55.3	58.2	58.6	56.2	56.5	NO			
5	W-R249	21 Woodcarver St	54.0	54.7	57.1	57.5	55.5	55.8	NO			
5	W-R250	8 Hatten Bay St	57.9	58.7	62.6	63.0	60.4	60.8	NO			
5	W-R251	10 Hatten Bay St	55.9	56.7	60.8	61.2	58.3	58.7	NO			
5	W-R252	11 Hatten Bay St	53.5	54.2	57.4	57.8	55.2	55.6	NO			
5	W-R253	12 Hatten Bay St	55.1	55.9	59.6	60.0	57.3	57.6	NO			
5	W-R254	13 Hatten Bay St	53.7	54.4	57.4	57.8	55.2	55.5	NO			
5	W-R255	15 Hatten Bay St	54.1	54.7	57.1	57.5	55.0	55.4	NO			
5	W-R256	Hatten Bay/Las Palmas Entrada Ave	54.7	55.4	58.4	58.8	56.0	56.3	NO			
5	W-R257	1094 Blitzen Drive	59.4	60.2	64.5	65.0	60.8	61.3	NO			
5	W-R258	1096 Blitzen Drive	53.6	54.3	63.0	63.5	57.0	57.4	NO			
5	W-R259	1098 Blitzen Drive	55.0	55.7	64.7	65.2	57.7	58.1	NO			
5	W-R260	1100 Blitzen Drive	54.4	55.1	64.2	64.7	57.2	57.7	NO			
5	W-R261	1102 Blitzen Drive	54.4	55.1	64.2	64.7	57.3	57.7	NO			
5	W-R262	1104 Blitzen Drive	56.2	56.9	64.1	64.6	57.3	57.8	NO			
5	W-R263	1106 Blitzen Drive	54.5	55.2	63.8	64.3	57.4	57.8	NO			
										EX SW2		

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas													
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)													
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls	
5	W-R264	1108 Blitzen Drive	56.5	57.2	64.2	64.8	57.8	58.2	NO	EX SW2			
5	W-R265	1110 Blitzen Drive	54.2	55.0	63.9	64.5	57.4	57.8	NO				
5	W-R266	1112 Blitzen Drive	55.8	56.5	64.2	64.7	57.9	58.3	NO				
5	W-R267	1114 Blitzen Drive	54.6	55.3	63.8	64.3	57.6	57.9	NO				
5	W-R268	1116 Blitzen Drive	55.7	56.4	64.3	64.8	58.1	58.5	NO				
5	W-R269	1118 Blitzen Drive	56.7	57.4	65.3	65.9	59.0	59.4	YES				
5	W-R270	1120 Blitzen Drive	55.5	56.2	64.5	65.0	58.3	58.6	NO				
5	W-R271	1122 Blitzen Drive	57.2	57.8	64.8	65.3	58.6	58.9	NO				
5	W-R272	1124 Blitzen Drive	56.0	56.7	65.4	65.9	58.9	59.3	YES				
5	W-R273	1126 Blitzen Drive	55.6	56.2	64.4	65.0	58.2	58.6	NO				
5	W-R274	1128 Blitzen Drive	56.0	56.6	65.0	65.5	58.7	59.0	YES				
5	W-R275	1130 Blitzen Drive	58.8	59.5	64.5	65.0	58.2	58.6	NO				
5	W-R276	1132 Blitzen Drive	60.3	61.0	65.3	65.8	61.9	62.3	YES				
5	W-R277	1134 Blitzen Drive	60.9	61.6	66.0	66.6	63.4	63.9	YES				
5	W-R279	1138 Blitzen Drive	60.8	61.4	65.5	66.0	61.7	62.1	YES				
5	W-R280	1140 Blitzen Drive	61.1	61.7	65.8	66.2	62.8	63.3	YES				
5	W-R281	1142 Blitzen Drive	58.2	58.9	64.6	65.1	59.5	59.8	NO				
5	W-R282	1144 Blitzen Drive	58.8	59.5	65.5	66.0	60.6	61.0	YES				
5	W-R283	1146 Blitzen Drive	57.8	58.4	65.9	66.3	60.6	60.9	YES				
5	W-R284	1066 Las Palmas Entrada Ave	55.6	56.2	62.9	63.4	60.6	61.1	NO	EX SW2	58.4	58.9	
5	W-R285	1068 Las Palmas Entrada Ave	55.9	56.5	63.2	63.6	60.6	61.1	NO			58.6	59.1
5	W-R286	1070 Las Palmas Entrada Ave	56.1	56.7	63.2	63.6	60.6	61.1	NO			58.9	59.4
5	W-R287	1072 Las Palmas Entrada Ave	56.3	56.8	63.5	63.9	60.7	61.3	NO			59.3	59.9
5	W-R288	1074 Las Palmas Entrada Ave	56.2	56.8	63.2	63.7	60.1	60.7	NO			58.8	59.3
5	W-R289	1078 Las Palmas Entrada Ave	56.7	57.3	63.5	63.9	60.0	60.5	NO			58.9	59.3
5	W-R290	1080 Las Palmas Entrada Ave	62.1	62.6	74.6	75.2	65.3	65.8	YES			65.3	65.8
5	W-R291	1082 Las Palmas Entrada Ave	56.6	57.2	62.7	63.1	59.4	59.8	NO			58.4	58.8

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
5	W-R292	1084 Las Palmas Entrada Ave	56.9	57.5	63.1	63.5	59.5	60.0	NO		58.7	59.1
5	W-R293	1086 Las Palmas Entrada Ave	56.5	57.1	62.4	62.8	59.0	59.4	NO		58.2	58.6
5	W-R294	1088 Las Palmas Entrada Ave	56.5	57.0	62.5	62.9	58.9	59.3	NO		58.2	58.6
5	W-R295	1090 Las Palmas Entrada Ave	54.7	55.5	59.2	59.6	56.8	57.2	NO		56.8	57.1
5	W-R296	1092 Las Palmas Entrada Ave	55.1	55.8	59.1	59.5	57.0	57.4	NO	EX SW2	57.0	57.3
5	W-R297	8 Book Wagon St	54.3	54.9	62.5	63.0	61.2	61.9	NO		58.7	59.3
5	W-R298	9 Book Wagon St	53.1	53.7	57.4	57.9	55.2	55.8	NO		54.8	55.3
5	W-R299	10 Book Wagon St	55.2	55.7	62.4	62.9	60.8	61.5	NO		58.5	59.1
5	W-R300	11 Book Wagon St	54.1	54.7	60.8	61.3	58.6	59.2	NO		56.6	57.1
5	W-R301	12 Book Wagon St	55.5	56.0	63.0	63.5	61.3	62.0	NO		58.6	59.1
5	W-R302	13 Book Wagon St	54.4	54.9	61.6	62.1	59.5	60.1	NO		56.9	57.4
5	W-R303	14 Book Wagon St	55.3	55.8	63.1	63.6	61.3	61.9	NO		58.2	58.7
5	W-R304	15 Book Wagon St	54.4	54.9	61.5	62.0	59.4	60.0	NO		56.7	57.2
5	W-R305	16 Book Wagon St	55.0	55.5	62.8	63.3	61.0	61.6	NO		58.0	58.5
5	W-R307	4 Split Hoove Ct	53.4	54.0	63.7	64.5	61.8	62.5	NO	EX SW2 & ES ramp	57.9	58.5

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
5	W-R308	6 Split Hoove Ct	54.6	55.1	62.1	62.7	60.9	61.6	NO	EX SW2 & ES ramp	57.6	58.1
5	W-R309	8 Split Hoove Ct	54.5	55.0	62.0	62.6	61.0	61.7	NO		57.7	58.3
5	W-R310	10 Split Hoove Ct	55.4	55.8	63.4	64.0	61.9	62.5	NO		58.1	58.7
5	W-R311	11 Split Hoove Ct	55.0	55.5	62.1	62.7	60.5	61.1	NO		57.4	57.9
5	W-R312	12 Split Hoove Ct	55.4	55.9	64.0	64.5	62.4	63.0	NO		58.3	58.8
5	W-R313	1052 Bootspur Drive	55.9	56.5	64.1	64.7	62.4	63.1	NO		60.2	60.8
5	W-R314	1053 Bootspur Drive	54.1	54.6	61.4	62.0	60.3	61.0	NO		57.3	57.9
5	W-R315	1054 Bootspur Drive	58.8	59.4	65.4	66.0	63.9	64.6	YES		61.9	62.5
5	W-R316	1055 Bootspur Drive	54.0	54.5	61.3	61.9	60.4	61.1	NO		57.7	58.3
5	W-R317	1056 Bootspur Drive	56.1	56.8	64.3	64.8	63.0	63.7	NO		60.9	61.5
5	W-R318	1057 Bootspur Drive	54.5	55.0	61.3	61.8	60.0	60.7	NO		57.5	58.0
5	W-R319	1058 Bootspur Drive	55.8	56.4	64.7	65.2	63.4	64.2	NO		61.0	61.6
5	W-R320	1060 Bootspur Drive	58.7	59.4	66.0	66.5	64.8	65.5	YES	62.5	63.1	

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
5	W-R321	1062 Bootspur Drive	59.4	60.1	65.5	66.2	65.1	65.9	YES	EXSW2 & ES ramp	63.0	63.7
5	W-R322	1064 Bootspur Drive	59.4	60.0	65.9	66.5	65.6	66.3	YES		63.7	64.4
5	W-R323	1066 Bootspur Drive	57.6	58.2	63.2	63.7	61.9	62.6	NO		60.9	61.5
5	W-R324	1068 Bootspur Drive	58.9	59.6	64.1	64.6	62.6	63.3	NO		62.0	62.6
5	W-R325	1069 Bootspur Drive	54.4	55.0	61.4	61.9	58.9	59.5	NO		57.3	57.9
5	W-R326	1070 Bootspur Drive	59.1	59.7	64.2	64.8	62.4	63.0	NO		61.3	61.9
5	W-R327	1071 Bootspur Drive	54.6	55.2	61.3	61.8	58.4	59.0	NO		56.9	57.4
5	W-R328	1072 Bootspur Drive	59.0	59.7	63.6	64.1	61.1	61.7	NO		60.6	61.2
5	W-R329	1073 Bootspur Drive	54.4	55.0	61.3	61.8	58.1	58.6	NO		56.6	57.1
5	W-R330	1074 Bootspur Drive	59.2	59.7	63.9	64.5	61.2	61.8	NO		60.7	61.2
5	W-R331	1075 Bootspur Drive	54.4	55.0	61.3	61.7	57.6	58.1	NO		56.3	56.8
5	W-R332	1076 Bootspur Drive	59.2	59.7	64.3	64.8	60.5	61.1	NO		60.2	60.8
5	W-R333	1077 Bootspur Drive	54.3	54.9	61.1	61.5	57.5	58.0	NO		56.1	56.5

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
5	W-R334	1078 Bootspur Drive	59.0	59.5	64.5	65.0	60.4	61.0	NO	EX SW2 & ES ramp	60.3	60.8
5	W-R335	1080 Bootspur Drive	59.2	59.5	65.7	66.2	61.2	61.8	YES		61.0	61.5
5	W-R336	1082 Bootspur Drive	57.7	58.0	64.2	64.8	58.9	59.4	NO		58.7	59.2
5	W-R337	1083 Bootspur Drive	54.5	55.1	61.6	62.0	57.5	57.9	NO		56.1	56.5
5	W-R338	1084 Bootspur Drive	57.0	57.2	64.4	65.0	58.5	59.0	NO		58.3	58.7
5	W-R339	1085 Bootspur Drive	54.9	55.5	62.1	62.6	57.8	58.2	NO		56.4	56.8
5	W-R340	1086 Bootspur Drive	57.3	57.6	64.7	65.2	58.7	59.2	NO		58.5	58.9
5	W-R341	1087 Bootspur Drive	55.2	55.8	62.0	62.4	58.0	58.5	NO		56.8	57.2
5	W-R342	1088 Bootspur Drive	55.0	55.7	64.2	64.7	58.0	58.4	NO		58.0	58.4
5	W-R343	1089 Bootspur Drive	55.3	55.8	61.5	61.9	57.9	58.4	NO		56.9	57.3
5	W-R344	1090 Bootspur Drive	55.8	56.5	64.8	65.3	58.2	58.6	NO		58.1	58.5
5	W-R345	1091 Bootspur Drive	55.1	55.6	61.1	61.5	57.4	57.9	NO		56.5	56.8
5	W-R346	1092 Bootspur Drive	59.3	59.9	64.0	64.5	59.8	60.3	NO		59.7	60.2

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
5	W-R347	1093 Bootspur Drive	55.1	55.7	60.3	60.7	57.3	57.7	NO	EX SW2 & ES ramp	56.8	57.2
6	W-R349	45 Cabana Blanca St	56.0	56.4	64.8	65.2	65.5	66.0	YES	ES ramp	63.2	63.5
6	W-R350	48 Cabana Blanca St	53.5	53.9	61.0	61.4	63.8	64.3	NO		61.2	61.5
6	W-R351	49 Cabana Blanca St	54.8	55.2	63.3	63.7	65.5	66.0	YES		63.5	63.8
6	W-R352	52 Cabana Blanca St	53.9	54.4	61.1	61.5	64.8	65.2	NO		62.3	62.6
6	W-R353	53 Cabana Blanca St	53.4	53.9	61.1	61.5	64.8	65.2	NO		62.4	62.7
6	W-R354	56 Cabana Blanca St	53.6	54.1	60.7	61.0	64.5	64.9	NO		62.2	62.4
6	W-R355	57 Cabana Blanca St	53.0	53.5	60.1	60.5	64.0	64.3	NO		61.3	61.6
6	W-R356	60 Cabana Blanca St	53.6	54.1	60.2	60.5	64.0	64.3	NO		61.5	61.8
6	W-R357	48 El Rio Ct	51.6	52.2	57.9	58.2	61.6	62.2	NO		59.3	59.7
6	W-R358	49 El Rio Ct	52.7	53.2	58.1	58.6	60.9	61.5	NO		58.7	59.1
6	W-R359	52 El Rio Ct	53.0	53.5	59.1	59.4	64.5	64.9	NO		61.2	61.5
6	W-R360	53 El Rio Ct	52.6	53.1	59.6	60.0	64.2	64.6	NO		61.2	61.5
6	W-R361	56 El Rio Ct	53.4	54.0	60.2	60.5	64.6	65.0	NO		61.7	62.0
6	W-R362	57 El Rio Ct	53.3	53.8	60.2	60.5	64.3	64.7	NO		61.8	62.1
6	W-R363	60 El Rio Ct	53.2	53.8	59.7	60.0	64.1	64.4	NO		61.3	61.6
6	W-R364	61 El Rio Ct	53.1	53.6	60.0	60.3	63.9	64.3	NO		61.4	61.7
6	W-R365	44 La Fiesta St	51.9	52.5	58.5	58.8	62.5	63.1	NO		59.8	60.2
6	W-R366	47 La Fiesta St	51.6	52.2	57.8	58.1	61.3	61.9	NO		58.8	59.1
6	W-R367	48 La Fiesta St	52.7	53.3	59.3	59.5	64.2	64.6	NO	61.1	61.4	
6	W-R368	51 La Fiesta St	52.8	53.4	58.8	59.1	63.9	64.3	NO	61.0	61.4	
6	W-R369	52 La Fiesta St	52.6	53.2	59.4	59.7	64.5	64.9	NO	60.9	61.2	
6	W-R370	55 La Fiesta St	53.0	53.5	59.9	60.1	64.6	65.0	NO	61.3	61.6	
6	W-R371	56 La Fiesta St	52.9	53.5	59.7	59.9	64.5	64.9	NO	60.9	61.2	
6	W-R372	59 La Fiesta St	53.5	54.0	59.9	60.2	64.3	64.6	NO	61.4	61.7	
6	W-R373	44 Mesa Rivera St	53.2	53.8	60.5	60.7	64.8	65.3	NO	61.3	61.7	

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
6	W-R374	45 Mesa Rivera St	52.1	52.7	58.7	59.0	62.3	62.9	NO	ES ramp	59.3	59.7
6	W-R375	48 Mesa Rivera St	53.2	53.8	61.1	61.3	64.7	65.2	NO		61.2	61.5
6	W-R376	49 Mesa Rivera St	52.9	53.5	59.7	60.0	64.2	64.7	NO		61.4	61.7
6	W-R377	52 Mesa Rivera St	53.3	53.9	60.8	61.0	65.2	65.7	YES		61.1	61.4
6	W-R378	53 Mesa Rivera St	53.4	53.9	60.0	60.2	64.9	65.3	NO		61.2	61.5
6	W-R379	56 Mesa Rivera St	53.6	54.2	60.9	61.0	64.9	65.4	NO		61.0	61.3
6	W-R380	57 Mesa Rivera St	53.0	53.6	59.8	60.0	64.6	65.0	NO		60.8	61.1
6	W-R381	39 La Laguna St	52.6	53.2	59.2	59.5	62.8	63.5	NO		59.2	59.7
6	W-R382	40 La Laguna St	54.1	54.7	61.7	61.9	65.0	65.6	YES		60.6	61.0
6	W-R383	43 La Laguna St	53.1	53.8	61.1	61.3	64.5	65.1	NO		60.9	61.3
6	W-R384	44 La Laguna St	54.3	55.0	63.4	63.6	65.4	66.1	YES		60.8	61.3
6	W-R385	47 La Laguna St	53.1	53.7	61.0	61.2	64.3	64.9	NO		60.9	61.3
6	W-R386	48 La Laguna St	54.2	54.8	63.4	63.5	65.0	65.7	YES		60.8	61.2
6	W-R387	51 La Laguna St	53.4	54.0	61.1	61.2	65.0	65.5	YES		61.0	61.3
6	W-R388	52 La Laguna St	54.1	54.7	62.7	62.7	64.8	65.4	NO		60.8	61.2
6	W-R389	36 Vista Del Mar St	54.0	54.6	60.6	61.0	61.9	62.9	NO		57.4	58.0
6	W-R390	39 Vista Del Mar St	53.4	54.0	59.9	60.3	61.7	62.7	NO		57.4	57.9
6	W-R391	40 Vista Del Mar St	55.3	55.9	64.4	64.5	65.8	66.7	YES		59.8	60.3
6	W-R392	43 Vista Del Mar St	54.3	55.0	62.9	63.1	65.0	65.8	YES		60.5	60.9
6	W-R393	44 Vista Del Mar St	55.1	55.8	64.2	64.4	65.4	66.3	YES		60.0	60.5
6	W-R394	47 Vista Del Mar St	54.2	54.8	63.3	63.4	65.1	65.8	YES	60.5	60.9	
6	W-R395	48 Vista Del Mar St	55.2	55.9	63.8	63.9	64.9	65.7	YES	59.9	60.3	
6	W-R396	51 Vista Del Mar St	54.1	54.7	62.6	62.7	64.6	65.3	NO	60.5	60.9	
6	W-R397	35 Vallejo Verde St	54.2	54.8	60.6	61.1	61.9	62.9	NO	57.5	58.1	
6	W-R398	36 Vallejo Verde St	55.6	56.3	61.7	62.2	64.3	65.1	NO	59.8	60.4	
6	W-R399	39 Vallejo Verde St	55.1	55.8	62.9	63.2	64.8	65.6	YES	59.5	60.0	
6	W-R400	40 Vallejo Verde St	56.3	57.1	64.6	64.9	65.3	66.3	YES	59.6	60.2	

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
6	W-R401	43 Vallejo Verde St	55.1	55.8	64.0	64.1	65.2	66.1	YES	ES ramp	59.8	60.2
6	W-R402	44 Vallejo Verde St	56.5	57.3	64.2	64.4	65.5	66.4	YES		59.9	60.3
6	W-R403	47 Vallejo Verde St	55.2	55.8	63.3	63.5	64.7	65.5	YES		59.5	60.0
6	W-R404	48 Vallejo Verde St	56.4	57.1	63.8	64.0	65.0	65.8	YES		59.7	60.1
6	W-R405	32 Montagna Mirage St	56.5	57.2	61.1	61.6	62.4	63.4	NO		58.3	59.0
6	W-R406	35 Montagna Mirage St	55.3	55.9	61.0	61.5	62.5	63.5	NO		58.4	59.1
6	W-R407	36 Montagna Mirage St	58.6	59.4	64.2	64.6	65.4	66.3	YES		59.9	60.6
6	W-R408	39 Montagna Mirage St	56.8	57.6	64.2	64.5	65.2	66.1	YES		59.6	60.2
6	W-R409	40 Montagna Mirage St	58.6	59.3	64.2	64.5	65.2	66.1	YES		60.1	60.7
6	W-R410	43 Montagna Mirage St	56.5	57.3	64.0	64.2	65.0	65.9	YES		59.6	60.1
6	W-R411	44 Montagna Mirage St	58.1	58.8	63.5	63.7	64.6	65.4	NO		59.9	60.4
6	W-R412	47 Montagna Mirage St	56.5	57.2	63.4	63.6	64.6	65.3	NO		59.5	59.9
6	W-R413	48 Montagna Mirage St	57.6	58.2	63.2	63.3	64.4	65.1	NO		59.7	60.2
6	W-R415	35 Casa Del Fuego St	58.9	59.7	64.2	64.7	65.4	66.4	YES		60.5	61.3
6	W-R416	39 Casa Del Fuego St	59.0	59.8	64.0	64.3	64.9	65.8	YES		60.3	61.0
6	W-R417	43 Casa Del Fuego St	58.5	59.2	63.4	63.7	64.4	65.2	NO		60.0	60.6
6	W-R418	47 Casa Del Fuego St	57.5	58.2	62.5	62.8	63.6	64.3	NO		59.5	60.0
6	W-R419	740 Viento Del Montagna Ave	59.9	60.7	65.2	66.2	68.2	69.8	YES		57.9	59.0
6	W-R420	744 Viento Del Montagna Ave	59.3	60.1	66.0	67.0	68.8	70.3	YES		58.7	60.0
6	W-R421	748 Viento Del Montagna Ave	55.5	56.3	60.6	61.4	64.9	66.5	YES		57.7	59.2
6	W-R422	752 Viento Del Montagna Ave	58.0	58.7	66.0	67.1	69.0	70.5	YES		58.8	60.1
6	W-R423	756 Viento Del Montagna Ave	56.6	57.4	62.6	63.6	68.9	70.5	YES		58.3	59.7

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
6	W-R424	760 Viento Del Montagna Ave	56.7	57.4	63.1	64.0	69.1	70.6	YES	ES Ramp	58.4	59.8
6	W-R425	764 Viento Del Montagna Ave	57.1	57.8	64.7	65.6	69.5	71.0	YES		58.8	60.0
6	W-R426	768 Viento Del Montagna Ave	56.6	57.3	63.4	63.8	69.0	70.5	YES		59.1	60.5
6	W-R427	772 Viento Del Montagna Ave	56.5	57.2	65.0	65.5	69.2	70.7	YES		59.8	60.8
6	W-R428	776 Viento Del Montagna Ave	56.6	57.3	65.3	65.8	69.1	70.6	YES		60.8	61.7
6	W-R429	780 Viento Del Montagna Ave	56.3	57.0	64.2	64.7	68.3	69.7	YES		59.9	60.9
6	W-R430	784 Viento Del Montagna Ave	55.5	56.2	63.5	64.0	67.7	69.0	YES		60.2	61.2
6	W-R431	788 Viento Del Montagna Ave	55.1	55.8	63.1	63.6	67.6	68.9	YES		60.5	61.4
6	W-R432	792 Viento Del Montagna Ave	55.0	55.7	63.2	63.6	67.7	69.0	YES		60.8	61.8
6	W-R433	796 Viento Del Montagna Ave	53.1	53.8	61.0	61.4	64.4	65.8	YES		58.2	59.4
6	W-R434	800 Viento Del Montagna Ave	55.0	55.7	63.2	63.6	67.3	68.4	YES		62.1	62.8
6	W-R435	804 Viento Del Montagna Ave	53.9	54.6	61.9	62.3	65.6	66.8	YES		59.8	60.6
6	W-R436	808 Viento Del Montagna Ave	54.1	54.7	62.0	62.4	66.2	67.2	YES		61.9	62.5

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
6	W-R437	812 Viento Del Montagna Ave	54.8	55.4	62.2	62.6	65.7	66.7	YES	ES ramp	61.9	62.5
6	W-R438	816 Viento Del Montagna Ave	53.5	54.1	60.0	60.4	63.4	64.5	NO		60.7	61.3
6	W-R439	820 Viento Del Montagna Ave	53.2	53.8	59.6	60.0	63.2	64.3	NO		60.7	61.3
6	W-R440	824 Viento Del Montagna Ave	53.5	54.1	60.0	60.3	63.5	64.5	NO		60.7	61.3
6	W-R441	828 Viento Del Montagna Ave	53.8	54.4	60.5	60.9	64.0	64.9	NO		60.6	61.1
6	W-R442	832 Viento Del Montagna Ave	53.9	54.5	60.5	60.9	64.3	65.2	NO		59.9	60.4
6	W-R443	836 Viento Del Montagna Ave	54.2	54.8	60.9	61.3	64.8	65.7	YES		60.1	60.6
6	W-R444	840 Viento Del Montagna Ave	54.6	55.2	61.1	61.5	65.2	66.0	YES		61.6	62.0
6	W-R445	844 Viento Del Montagna Ave	53.5	54.0	60.2	60.5	63.9	64.8	NO		60.5	61.1
6	W-R446	848 Viento Del Montagna Ave	54.0	54.6	60.8	61.1	64.1	65.0	NO		61.4	61.9
6	W-R447	852 Viento Del Montagna Ave	54.7	55.3	61.5	61.9	65.5	66.1	YES		63.3	63.7
6	W-R448	856 Viento Del Montagna Ave	59.7	55.1	61.7	61.6	64.4	65.1	NO		62.6	63.0
6	W-R450	864 Viento Del Montagna Ave	54.2	54.8	60.6	61.0	63.5	64.4	NO		61.6	62.1

Table 3.2 Peak Hour Noise in Areas 4, 5, 6

All Noise Sensitive Areas												
Areas 4, 5, 6 (W.EB1, W.EB2, W.EB3)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
6	W-R451	868 Viento Del Montagna Ave	55.4	56.0	61.9	62.3	64.2	64.9	NO	ES ramp	62.7	63.1
6	W-R452	872 Viento Del Montagna Ave	55.7	56.3	62.2	62.6	64.3	65.1	NO		62.6	63.1
6	W-R453	876 Viento Del Montagna Ave	54.5	55.1	61.2	61.7	63.9	64.9	NO		61.9	62.4
4	W-R456	1490 Paseo Verde	60.4	61.0	61.9	62.2	61.9	62.2	NO			

Table 3.3 Peak Hour Noise in Area 7, 12, & 13

Table 3.3 Peak Hour Noise in Areas 7, 12, 13

All Noise Sensitive Areas												
Areas 7, 12, 13 (E, N.N1, N.N2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed proposed walls	2040 Build PM (dBA) proposed proposed walls
7	V5/ E-R2	Lake Mead Trail between I-11 and Fiesta Henderson Road	68.8	68.7	70.5	70.5	61.6	61.0	YES			
7	R1/ E-R3	east of Eastgate Rd	69.8	70.0	71.6	71.3	70.5	70.3	YES			
7	R2/ E-R5	~50' from EOO Lake Mead Pkwy	71.0	72.4	73.5	73.2	73.0	72.8	YES			
7	R16/ E-R1	west of Eastgate Rd	71.4	71.6	73.5	73.5	59.1	58.1	YES			
12	R17	parcel 17814501002 (Eastgate between UPRR and Auto Show Dr 180' from EOO)	57.3	57.5	58.9	59.4	57.7	57.5	NO			
12	R18/ N-R1	7777 Eastgate Rd	59.6	59.8	61.2	60.9	62.2	62.1	NO			
12	R19	parcel 17803702006 (Sunset/ Old Gibson Rd 230' from EOO)	63.1	63.3	64.7	64.5	60.1	60.0	NO			
12	R20/ N-R4	609 Tailput Palm Place	56.7	58.0	58.6	58.5	55.7	55.2	NO	EX NB Galleria OSBR/SW		
12	R21/ N-R6	739 Tailput Palm Place	54.3	54.7	56.1	55.8	55.8	55.5	NO			
12	R22	1051 W Sunset Rd	55.4	56.1	57.6	57.7	65.7	66.1	YES			
12	R23	360 N Gibson Rd (bend of Auto Mall Drive 160' from EOO) parcel 17811110005	70.9	71.3	72.6	72.4	73.3	73.2	YES			
7	E-R6	~250' from EOO Lake Mead Pkwy	62.5	68.9	64.8	64.6	64.1	63.7	YES			
7	E-R7/ S-R1	777 W Lake Mead Pkwy	60.3	63.6	62.0	61.9	62.4	61.3	NO			

Table 3.3 Peak Hour Noise in Areas 7, 12, 13

All Noise Sensitive Areas												
Areas 7, 12, 13 (E, N.N1, N.N2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
13	N-R2	601 Tailput Palm Place	57.4	59.8	59.9	59.8	62.1	61.1	NO	EX NBGalleria OSBR/SW		
13	N-R3	603 Tailput Palm Place	57.4	58.9	59.4	59.3	60.5	59.9	NO			
13	N-R5	607 Tailput Palm Place	57.6	58.4	59.5	59.2	56.3	55.9	NO			
13	N-R6	605 Tailput Palm Place	55.5	56.7	57.5	57.3	55.8	55.4	NO			
13	N-R7	611 Tailput Palm Place	56.2	57.1	58.1	57.8	56.7	56.2	NO			
13	N-R8	613 Tailput Palm Place	54.2	55.0	56.1	55.8	59.0	58.4	NO			
13	N-R9	615 Tailput Palm Place	55.6	56.4	57.5	57.2	60.0	59.5	NO			
13	N-R10	617 Tailput Palm Place	54.9	55.7	56.8	56.5	56.2	55.8	NO			
13	N-R11	619 Tailput Palm Place	54.6	55.5	56.5	56.2	55.9	55.5	NO			
13	N-R12	621 Tailput Palm Place	55.0	55.9	57.0	56.7	54.9	54.5	NO			
13	N-R13	623 Tailput Palm Place	54.1	55.0	56.1	55.8	54.2	53.8	NO			
13	N-R14	625 Tailput Palm Place	52.1	53.1	54.1	53.8	56.2	55.8	NO			
13	N-R15	629 Tailput Palm Place	52.7	53.5	54.6	54.3	55.7	55.3	NO			
13	N-R16	631 Tailput Palm Place	53.4	54.2	55.4	55.0	57.3	56.9	NO			
13	N-R17	633 Tailput Palm Place	54.2	55.1	56.2	55.8	54.6	54.2	NO			
13	N-R18	635 Tailput Palm Place	54.4	55.3	56.4	56.1	53.9	53.4	NO			
13	N-R19	637 Tailput Palm Place	52.0	52.9	54.0	53.6	55.5	55.0	NO			
13	N-R20	639 Tailput Palm Place	53.2	54.0	55.2	54.8	56.1	55.6	NO			
13	N-R21	641 Tailput Palm Place	53.8	54.6	55.8	55.4	56.8	56.4	NO			
13	N-R22	643 Tailput Palm Place	51.5	52.4	53.5	53.1	55.6	55.2	NO			
13	N-R23	645 Tailput Palm Place	54.0	54.8	56.0	55.6	54.8	54.4	NO			
13	N-R24	647 Tailput Palm Place	53.7	54.5	55.7	55.3	55.1	54.7	NO			
13	N-R25	649 Tailput Palm Place	51.8	52.6	53.8	53.4	57.5	57.1	NO			
13	N-R26	651 Tailput Palm Place	53.1	53.9	55.0	54.7	57.5	57.1	NO			

Table 3.3 Peak Hour Noise in Areas 7, 12, 13

All Noise Sensitive Areas												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040		2040		Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
					AM (dBA)	PM (dBA)	No Build AM (dBA)	No Build PM (dBA)				
13	N-R27	653 Tailput Palm Place	53.5	54.3	55.5	55.1	58.0	57.6	NO	EX NBGalleria OSBR/SW		
13	N-R28	655 Tailput Palm Place	52.1	53.0	54.1	53.8	57.5	57.1	NO			
13	N-R29	657 Tailput Palm Place	54.0	54.8	56.0	55.6	55.4	55.0	NO			
13	N-R30	659 Tailput Palm Place	53.9	54.7	55.9	55.5	55.5	55.1	NO			
13	N-R31	661 Tailput Palm Place	52.8	53.6	54.8	54.4	58.0	57.6	NO			
13	N-R32	663 Tailput Palm Place	53.6	54.4	55.5	55.2	57.9	57.5	NO			
13	N-R33	665 Tailput Palm Place	53.9	54.7	55.8	55.5	58.3	57.9	NO			
13	N-R34	667 Tailput Palm Place	52.8	53.6	54.8	54.4	58.0	57.6	NO			
13	N-R35	669 Tailput Palm Place	53.9	54.7	55.9	55.5	55.5	55.1	NO			
13	N-R36	671 Tailput Palm Place	54.2	54.9	56.1	55.8	56.1	55.8	NO			
13	N-R37	673 Tailput Palm Place	53.4	54.2	55.4	55.0	58.7	58.3	NO			
13	N-R38	675 Tailput Palm Place	53.8	54.6	55.8	55.4	58.3	58.0	NO			
13	N-R39	677 Tailput Palm Place	54.2	55.0	56.1	55.8	58.5	58.2	NO			
13	N-R40	679 Tailput Palm Place	53.1	53.8	55.0	54.6	58.5	58.2	NO			
13	N-R41	681 Tailput Palm Place	55.1	55.9	57.0	56.7	57.0	56.8	NO			
13	N-R42	683 Tailput Palm Place	54.9	55.6	56.8	56.5	56.8	56.6	NO			
13	N-R43	685 Tailput Palm Place	53.9	54.5	55.7	55.4	59.3	59.0	NO			
13	N-R44	689 Tailput Palm Place	54.6	55.3	56.5	56.2	58.8	58.4	NO			
13	N-R45	701 Tailput Palm Place	54.5	55.2	56.4	56.1	58.9	58.6	NO			
13	N-R46	703 Tailput Palm Place	53.9	54.5	55.8	55.4	59.4	59.0	NO			
13	N-R47	705 Tailput Palm Place	54.8	55.5	56.7	56.4	56.8	56.7	NO			
13	N-R48	707 Tailput Palm Place	55.6	56.2	57.4	57.1	57.6	57.5	NO			
13	N-R49	709 Tailput Palm Place	53.8	54.4	55.7	55.3	58.9	58.6	NO			
13	N-R50	711 Tailput Palm Place	55.8	55.3	56.5	56.2	58.7	58.4	NO			
13	N-R51	713 Tailput Palm Place	54.8	55.4	56.6	56.3	58.6	58.3	NO			
13	N-R52	715 Tailput Palm Place	53.7	54.2	55.5	55.1	58.9	58.6	NO			
13	N-R53	717 Tailput Palm Place	55.9	56.6	57.8	57.4	58.0	57.8	NO			

Table 3.3 Peak Hour Noise in Areas 7, 12, 13

All Noise Sensitive Areas													
Area	Receiver ID	Physical Address	Areas 7, 12, 13 (E, N.N1, N.N2)				2040 Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)
			Existing AM (dBA)	Existing PM (dBA)	No Build AM (dBA)	No Build PM (dBA)							
13	N-R54	721 Tailput Palm Place	55.2	55.8	57.1	56.7	57.4	57.2					
13	N-R55	723 Tailput Palm Place	53.2	53.7	55.0	54.6	57.4	57.2					
13	N-R56	725 Tailput Palm Place	54.0	54.5	55.8	55.5	57.3	57.0					
13	N-R57	727 Tailput Palm Place	53.2	53.6	55.0	54.6	57.3	57.1					
13	N-R58	729 Tailput Palm Place	54.8	55.4	56.7	56.4	56.9	56.8					
13	N-R59	731 Tailput Palm Place	54.3	54.8	56.1	55.8	55.9	55.8					
13	N-R60	733 Tailput Palm Place	52.9	53.4	54.7	54.4	56.3	56.2					
13	N-R61	735 Tailput Palm Place	52.5	53.0	54.3	53.9	56.0	55.8					
13	N-R62	737 Tailput Palm Place	54.1	54.5	55.8	55.5	55.6	55.4					
13	N-R64	741 Tailput Palm Place	53.5	53.9	55.3	54.9	56.0	55.8					
13	N-R65	trail east of Tailput Palm Pl	55.9	56.6	57.8	57.4	57.4	57.1					
13	N-R66	trail east of Tailput Palm Pl	55.1	55.7	57.0	56.6	56.8	56.5					
13	N-R67	trail east of Tailput Palm Pl	54.4	54.9	56.2	55.8	56.1	55.8					
13	N-R68	trail east of Tailput Palm Pl	54.5	54.9	56.3	55.9	56.0	55.7					
13	N-R69	683 Calamus Palm Place	55.2	55.7	57.0	56.6	51.7	51.2					
13	N-R70	693 Calamus Palm Place	55.2	55.7	57.0	56.6	53.9	53.5					
13	N-R71	695 Calamus Palm Place	54.9	55.4	56.7	56.3	51.6	51.3					
13	N-R72	697 Calamus Palm Place	50.8	51.3	52.6	52.2	54.8	54.5					
13	N-R73	711 Calamus Palm Place	51.6	52.0	53.3	52.9	53.2	52.8					
13	N-R74	713 Calamus Palm Place	51.0	51.4	52.7	52.4	54.2	53.8					
13	N-R75	715 Calamus Palm Place	55.1	55.5	56.9	56.5	53.6	53.2					
13	N-R76	717 Calamus Palm Place	54.8	55.2	56.5	56.1	52.3	51.9					
13	N-R77	719 Calamus Palm Place	50.9	51.3	52.6	52.3	55.1	54.8					
13	N-R78	721 Calamus Palm Place	51.6	52.0	53.4	53.0	55.3	55.0					
13	N-R79	723 Calamus Palm Place	52.7	53.1	54.4	54.0	56.6	56.2					
13	N-R80	725 Calamus Palm Place	51.4	51.8	53.2	52.8	56.1	55.8					
13	N-R81	727 Calamus Palm Place	54.9	55.3	56.7	56.3	55.3	54.9					

Wall Protected by
EX NBGalleria OSBR/SW

Table 3.3 Peak Hour Noise in Areas 7, 12, 13

All Noise Sensitive Areas												
Area	Receiver ID	Physical Address	Existing		2040 No Build		2040 Build		Approach/ Exceed Criterion?	Wall Protected by	2040 Build	
			AM (dBA)	PM (dBA)	AM (dBA)	PM (dBA)	AM (dBA)	PM (dBA)			AM (dBA)	PM (dBA)
13	N-R82	729 Calamus Palm Place	55.0	55.4	56.8	56.4	51.1	50.7	NO	EX NB Galleria OSBR/SW		
13	N-R83	731 Calamus Palm Place	52.0	52.3	53.7	53.3	53.9	53.6	NO			
13	N-R84	733 Calamus Palm Place	53.3	53.6	55.0	54.6	54.4	54.1	NO			
13	N-R85	735 Calamus Palm Place	53.1	53.5	54.9	54.4	55.2	54.7	NO			
13	N-R86	737 Calamus Palm Place	52.4	52.8	54.2	53.8	55.6	55.1	NO			
13	N-R87	739 Calamus Palm Place	55.4	55.8	57.2	56.8	54.6	54.1	NO			
13	N-R88	741 Calamus Palm Place	56.2	56.5	58.0	57.5	57.8	57.4	NO			
13	N-R89	743 Calamus Palm Place	53.3	53.7	55.1	54.7	57.6	57.1	NO			
13	N-R90	745 Calamus Palm Place	54.0	54.4	55.8	55.4	57.1	56.6	NO			
13	N-R91	747 Calamus Palm Place	53.6	53.9	55.3	54.9	57.0	56.5	NO			
13	N-R92	749 Calamus Palm Place	53.2	53.5	54.9	54.5	57.3	56.8	NO			
13	N-R93	751 Calamus Palm Place	55.9	56.2	57.6	57.2	56.6	56.2	NO			
13	N-R94	736 Calamus Palm Place	54.0	54.3	55.7	55.3	56.3	55.8	NO			
13	N-R95	738 Calamus Palm Place	53.7	54.0	55.4	55.0	55.9	55.5	NO			
13	N-R96	742 Calamus Palm Place	54.3	54.7	56.1	55.6	56.4	56.0	NO			
13	N-R97	744 Calamus Palm Place	54.2	54.6	56.0	55.5	56.5	56.1	NO			
13	N-R98	746 Calamus Palm Place	54.0	54.4	55.8	55.4	56.3	55.8	NO			
13	N-R99	748 Calamus Palm Place	53.9	54.3	55.6	55.2	56.1	55.6	NO			
13	N-R100	756 Calamus Palm Place	54.8	55.1	56.5	56.1	56.9	56.4	NO			
13	N-R101	768 Calamus Palm Place	55.0	55.3	56.8	56.3	57.2	56.8	NO			
13	N-R102	770 Calamus Palm Place	54.7	55.0	56.4	56.0	56.8	56.3	NO			
13	N-R103	774 Calamus Palm Place	54.7	55.1	56.4	56.0	56.4	55.9	NO			
13	N-R104	776 Calamus Palm Place	54.8	55.1	56.5	56.1	56.7	56.2	NO			
13	N-R105	780 Calamus Palm Place	54.3	54.7	56.1	55.7	56.4	55.9	NO			
13	N-R106	782 Calamus Palm Place	54.3	54.7	56.1	55.7	56.0	55.5	NO			
13	N-R107	786 Calamus Palm Place	54.1	54.5	55.8	55.5	55.1	54.7	NO			
13	N-R108	788 Calamus Palm Place	54.0	54.3	55.7	55.3	55.4	54.9	NO			

Table 3.3 Peak Hour Noise in Areas 7, 12, 13

All Noise Sensitive Areas														
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040		2040		2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
					No Build AM (dBA)	No Build PM (dBA)	No Build AM (dBA)	No Build PM (dBA)						
13	N-R109	753 Calamus Palm Place	57.0	57.3	58.8	58.3	58.5	58.0	58.0	NO	EX NBGalleria OSBR/SW			
13	N-R110	755 Calamus Palm Place	54.1	54.4	55.8	55.4	58.2	57.8	57.8	NO				
13	N-R111	757 Calamus Palm Place	54.5	54.9	56.3	55.8	58.0	57.6	57.6	NO				
13	N-R112	759 Calamus Palm Place	54.1	54.4	55.8	55.4	57.8	57.3	57.3	NO				
13	N-R113	761 Calamus Palm Place	54.0	54.3	55.7	55.3	58.1	57.6	57.6	NO				
13	N-R114	763 Calamus Palm Place	56.7	57.0	58.5	58.0	58.2	57.8	57.8	NO				
13	N-R115	765 Calamus Palm Place	58.3	58.5	60.0	59.5	59.5	59.0	59.0	NO				
13	N-R116	767 Calamus Palm Place	54.4	54.7	56.1	55.6	59.1	58.6	58.6	NO				
13	N-R117	769 Calamus Palm Place	54.5	54.8	56.2	55.8	58.8	58.3	58.3	NO				
13	N-R118	771 Calamus Palm Place	58.3	58.6	60.0	59.5	58.1	57.6	57.6	NO				
13	N-R119	773 Calamus Palm Place	57.8	58.1	59.6	59.1	57.5	57.0	57.0	NO				
13	N-R120	775 Calamus Palm Place	54.5	54.8	56.2	55.8	57.7	57.3	57.3	NO				
13	N-R121	777 Calamus Palm Place	54.3	54.7	56.1	55.7	57.4	56.9	56.9	NO				
13	N-R122	779 Calamus Palm Place	54.0	54.4	55.8	55.3	56.9	56.4	56.4	NO				
13	N-R123	781 Calamus Palm Place	54.0	54.3	55.7	55.3	56.7	56.2	56.2	NO				
13	N-R124	783 Calamus Palm Place	57.1	57.3	58.8	58.3	55.7	55.3	55.3	NO				
13	N-R125	785 Calamus Palm Place	56.9	57.2	58.6	58.2	55.2	54.8	54.8	NO				
13	N-R126	787 Calamus Palm Place	54.0	54.3	55.7	55.3	55.7	55.2	55.2	NO				
13	N-R127	789 Calamus Palm Place	53.7	54.0	55.4	55.0	55.9	55.4	55.4	NO				
13	N-R128	1073 Valley Light Ave	54.1	54.4	55.8	55.4	55.0	54.6	54.6	NO				
13	N-R129	1074 Valley Light Ave	52.9	53.3	54.7	54.3	54.5	54.1	54.1	NO				
13	N-R130	1075 Valley Light Ave	52.8	53.2	54.5	54.1	54.6	54.2	54.2	NO				
13	N-R131	1078 Valley Light Ave	55.6	56.0	57.3	57.0	54.0	53.6	53.6	NO				
13	N-R132	1079 Valley Light Ave	55.1	55.5	56.9	56.4	53.5	53.1	53.1	NO				
13	N-R133	1069 Valley Light Ave	53.5	53.9	55.3	54.9	55.4	55.0	55.0	NO				
13	N-R134	1067 Valley Light Ave	53.6	54.0	55.3	55.0	54.8	54.4	54.4	NO				
13	N-R135	1068 Valley Light Ave	53.3	53.7	55.1	54.7	54.2	53.8	53.8	NO				

Table 3.3 Peak Hour Noise in Areas 7, 12, 13

All Noise Sensitive Areas												
Areas 7, 12, 13 (E, N.1, N.12)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
13	N-R136	1066 Valley Light Ave	53.5	53.9	55.3	54.9	54.0	53.6	NO	EX NB Galleria OSBR/SW		
13	N-R137	1064 Valley Light Ave	53.3	53.6	55.0	54.6	53.8	53.4	NO			
13	N-R138	1062 Valley Light Ave	53.2	53.6	54.9	54.5	53.7	53.3	NO			
13	N-R139	1060 Valley Light Ave	53.1	53.5	54.9	54.5	53.6	53.2	NO			
13	N-R140	1058 Valley Light Ave	53.3	53.6	55.0	54.6	53.4	53.0	NO			
13	N-R141	1056 Valley Light Ave	53.2	53.6	55.0	54.5	53.3	52.9	NO			
13	N-R142	793 Crest Valley Place	54.0	54.4	55.7	55.3	54.7	54.2	NO			
13	N-R143	791 Crest Valley Place	54.2	54.6	55.9	55.5	55.0	54.5	NO			
13	N-R144	789 Crest Valley Place	54.4	54.8	56.1	55.7	55.3	54.8	NO			
13	N-R145	787 Crest Valley Place	54.5	54.8	56.2	55.8	55.5	55.0	NO			
13	N-R146	785 Crest Valley Place	54.7	55.1	56.4	56.0	55.9	55.4	NO			
13	N-R147	783 Crest Valley Place	55.8	56.0	57.5	57.0	56.2	55.8	NO			
13	N-R148	781 Crest Valley Place	54.6	55.0	56.4	55.9	56.5	56.1	NO			
13	N-R149	779 Crest Valley Place	54.3	54.6	56.0	55.6	56.4	55.9	NO			
13	N-R150	775 Crest Valley Place	54.7	55.0	56.4	56.0	55.9	55.5	NO			
13	N-R151	773 Crest Valley Place	53.6	54.0	55.4	55.0	55.7	55.3	NO			
13	N-R152	771 Crest Valley Place	53.7	54.0	55.4	55.0	55.8	55.4	NO			
13	N-R153	park at curve of Tailput Palm	55.5	57.3	57.3	58.8	56.9	56.6	NO			
13	N-R154	park at curve of Tailput Palm	56.1	60.2	57.9	61.4	57.6	57.2	NO			

Table 3.4 Peak Hour Noise in Area 8 & 9

Table 3.4 Peak Hour Noise in Areas 8, 9

All Noise Sensitive Areas												
Areas 8, 9 (S.SB1, S.SB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
8	R4/S-R7	122 Cam Capri	51.1	52.5	52.5	51.0	51.5	NO			50.3	50.8
8	R5/S-R65	540 W Horizon Ridge Pkwy	59.0	60.2	60.3	60.9	63.7	NO			59.1	60.1
9	R6/S-R77	448 Palegold St	57.5	58.2	58.9	59.4	60.4	NO			56.6	56.5
9	R7/S-R116	406 Palegold St	66.7	67.7	68.3	68.3	68.3	YES			63.7	64.6
9	R8/S-R150	314 Island Reef Ave	60.6	61.4	62.0	62.4	62.4	NO			57.2	57.6
9	R9/S-R168	213 W Horizon Ridge Pkwy	64.0	64.8	65.5	65.8	65.6	YES			64.2	64.7
8	S-R2	100 Cam Capri	53.2	54.4	54.5	54.5	53.6	NO			52.9	53.4
8	S-R3	104 Cam Capri	51.8	53.0	53.2	53.2	52.0	NO			51.4	51.9
8	S-R4	108 Cam Capri	52.1	53.3	53.5	53.5	52.2	NO			51.7	52.1
8	S-R5	112 Cam Capri	50.6	51.7	51.9	51.9	50.3	NO			50.0	50.4
8	S-R6	118 Cam Capri	51.9	53.1	53.3	53.3	51.8	NO			51.4	51.8
8	S-R8	126 Cam Capri	52.0	53.3	53.4	53.4	52.0	NO			51.3	51.8
8	S-R9	130 Cam Capri	52.3	53.7	53.7	53.8	52.5	NO			51.8	52.3
8	S-R10	134 Cam Capri	51.0	52.4	52.4	52.4	51.0	NO			50.2	50.7
8	S-R11	138 Cam Capri	52.0	53.4	53.4	53.5	52.2	NO			51.5	51.9
8	S-R12	142 Cam Capri	51.2	52.6	52.6	52.6	51.5	NO			50.6	51.1
8	S-R13	146 Cam Capri	52.2	53.8	53.6	53.7	52.7	NO			51.8	52.2
8	S-R14	152 Cam Capri	48.3	49.8	49.8	49.9	49.4	NO			48.7	49.0
8	S-R15	156 Cam Capri	51.2	52.6	52.6	52.7	51.9	NO			51.2	51.6
8	S-R16	160 Cam Capri	51.5	52.8	52.9	52.9	51.7	NO			51.0	51.4
8	S-R17	540 W Horizon Ridge Pkwy Building 23	57.4	58.8	58.7	58.7	60.4	61.1	NO	NEW SB 1-11 Soundwall 11.5' tall	57.2	57.9
8	S-R18	540 W Horizon Ridge Pkwy Building 24	57.5	59.0	58.9	59.0	61.2	62.0	NO		57.7	58.3
8	S-R19	540 W Horizon Ridge Pkwy Building 25	54.1	55.3	55.5	55.7	58.4	59.2	NO		54.3	54.9

Table 3.4 Peak Hour Noise in Areas 8, 9

All Noise Sensitive Areas												
Areas 8, 9 (S.SB1, S.SB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
8	S-R20	540 W Horizon Ridge Pkwy Building 32	57.9	59.5	59.3	59.5	61.9	62.7	NO	NEW SB I-11 Soundwall 11.5' tall	58.3	59.0
8	S-R21	540 W Horizon Ridge Pkwy Building 31	54.6	55.8	56.0	56.3	59.5	60.3	NO		54.9	55.5
8	S-R22	540 W Horizon Ridge Pkwy Building 30	55.6	56.9	57.0	57.2	60.8	61.6	NO		56.0	56.6
8	S-R23	540 W Horizon Ridge Pkwy Building 33	58.4	59.9	59.7	60.0	62.8	63.7	NO		58.8	59.5
8	S-R24	540 W Horizon Ridge Pkwy Building 34	54.8	56.0	56.2	56.5	60.5	61.3	NO		55.3	55.9
8	S-R25	540 W Horizon Ridge Pkwy Building 35	55.7	56.8	57.0	57.3	61.5	62.4	NO		56.0	56.6
8	S-R26	540 W Horizon Ridge Pkwy Building 36	54.5	55.7	55.9	56.2	59.7	60.5	NO		55.0	55.6
8	S-R27	540 W Horizon Ridge Pkwy Building 37	58.6	60.0	60.0	60.3	63.6	64.6	NO		59.0	59.8
8	S-R28	540 W Horizon Ridge Pkwy Building 38	56.7	58.0	58.1	58.3	62.9	63.8	NO		56.7	57.4
8	S-R29	540 W Horizon Ridge Pkwy Building 39	55.5	56.7	56.9	57.2	60.5	61.4	NO		55.6	56.3
8	S-R30	540 W Horizon Ridge Pkwy Building 40	58.1	59.2	59.5	59.8	64.6	65.6	YES		58.4	59.2
8	S-R31	540 W Horizon Ridge Pkwy Building 41	56.7	57.8	58.1	58.3	62.5	63.4	NO		56.8	57.5
8	S-R32	540 W Horizon Ridge Pkwy Building 42	54.8	55.8	56.2	56.5	59.8	60.7	NO	54.7	55.4	

Table 3.4 Peak Hour Noise in Areas 8, 9

All Noise Sensitive Areas Areas 8, 9 (S.SB1, S.SB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
8	S-R33	540 W Horizon Ridge Pkwy Building 43	58.3	59.2	59.6	60.0	65.1	66.1	YES	NEW SB F-11 Soundwall 11.5' tall	58.4	59.2
8	S-R34	540 W Horizon Ridge Pkwy Building 44	56.4	57.4	57.8	58.0	62.4	63.3	NO		56.4	57.0
8	S-R35	540 W Horizon Ridge Pkwy Building 45	55.3	56.4	56.7	57.0	60.5	61.3	NO		55.2	55.8
8	S-R36	540 W Horizon Ridge Pkwy Building 46	58.2	59.1	59.6	59.9	65.2	66.3	YES		58.3	59.1
8	S-R37	540 W Horizon Ridge Pkwy Building 47	54.6	55.5	56.1	56.3	60.1	60.9	NO		56.3	57.1
8	S-R38	540 W Horizon Ridge Pkwy Building 48	58.5	59.3	59.9	60.2	65.5	66.6	YES		59.7	60.5
8	S-R39	540 W Horizon Ridge Pkwy Building 49	55.3	56.3	56.8	57.0	60.4	61.2	NO		55.0	55.7
8	S-R40	540 W Horizon Ridge Pkwy Building 50	58.5	59.2	59.9	60.2	65.5	66.5	YES		58.6	59.4
8	S-R41	540 W Horizon Ridge Pkwy Building 52	55.8	56.6	57.2	57.4	62.4	63.3	NO		55.8	56.4
8	S-R42	540 W Horizon Ridge Pkwy Building 53	56.6	57.4	58.0	58.2	62.4	63.3	NO		56.5	57.2
8	S-R43	540 W Horizon Ridge Pkwy Building 54	55.6	56.4	57.0	57.2	60.6	61.4	NO		55.3	55.9
8	S-R44	540 W Horizon Ridge Pkwy Building 55	58.5	59.2	59.9	60.2	65.4	66.4	YES		58.7	59.5
8	S-R45	540 W Horizon Ridge Pkwy Building 56	55.4	56.2	56.8	57.0	62.0	62.8	NO		55.3	55.9

Table 3.4 Peak Hour Noise in Areas 8, 9

All Noise Sensitive Areas												
Areas 8, 9 (S.SB1, S.SB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
8	S-R46	540 W Horizon Ridge Pkwy Building 57	56.1	56.8	57.5	57.7	62.9	63.7	NO	NEW SB I-11 Soundwall 11.5' tall	56.0	56.6
8	S-R47	540 W Horizon Ridge Pkwy Building 58	56.6	57.3	58.1	58.3	62.2	63.1	NO		56.3	56.9
8	S-R48	540 W Horizon Ridge Pkwy Building 59	55.2	56.0	56.7	56.9	60.2	61.0	NO		55.1	55.7
8	S-R49	540 W Horizon Ridge Pkwy Building 60	58.8	59.5	60.2	60.5	65.4	66.4	YES		59.0	59.7
8	S-R50	540 W Horizon Ridge Pkwy Building 61	55.8	56.5	57.2	57.4	62.2	63.0	NO		55.8	56.3
8	S-R51	540 W Horizon Ridge Pkwy Building 62	56.4	57.1	57.9	58.0	61.8	62.7	NO		56.1	56.7
8	S-R52	540 W Horizon Ridge Pkwy Building 63	55.7	56.4	57.1	57.3	60.7	61.5	NO		55.5	56.1
8	S-R53	540 W Horizon Ridge Pkwy Building 64	58.8	59.5	60.3	60.5	65.3	66.2	YES		59.0	59.7
8	S-R54	540 W Horizon Ridge Pkwy Building 65	56.1	56.9	57.6	57.9	61.0	61.8	NO		56.5	57.0
8	S-R55	540 W Horizon Ridge Pkwy Building 66	54.9	55.6	56.4	56.6	59.7	60.4	NO		55.4	56.0
8	S-R56	540 W Horizon Ridge Pkwy Building 67	59.0	59.6	60.4	60.7	65.0	65.9	YES		59.1	59.8
8	S-R57	540 W Horizon Ridge Pkwy Building 68	55.4	56.1	56.9	57.2	60.8	61.6	NO		55.6	56.2
8	S-R58	540 W Horizon Ridge Pkwy Building 69	55.6	56.3	57.1	57.4	61.4	62.2	NO		55.8	56.3

Table 3.4 Peak Hour Noise in Areas 8, 9

All Noise Sensitive Areas												
Areas 8, 9 (S.SB1, S.SB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
8	S-R59	540 W Horizon Ridge Pkwy Building 70	59.4	60.0	60.9	61.1	65.5	66.3	YES	NEW SB I-11 Soundwall 11.5' tall	59.5	60.1
8	S-R60	540 W Horizon Ridge Pkwy Building 71	59.6	60.2	61.0	61.3	65.5	66.3	YES		59.6	60.2
8	S-R61	540 W Horizon Ridge Pkwy Building 72	60.1	60.7	61.6	61.9	65.8	66.5	YES		59.7	60.3
8	S-R62	540 W Horizon Ridge Pkwy Building 73	60.7	61.4	62.1	62.5	66.7	67.5	YES		60.1	60.7
8	S-R63	540 W Horizon Ridge Pkwy Building 74	62.6	63.6	64.1	64.7	67.6	68.3	YES		60.5	61.0
8	S-R64	540 W Horizon Ridge Pkwy	56.6	57.6	58.0	58.3	63.4	64.3	NO		57.2	58.0
9	S-R66	464 Palegold Street	58.1	58.7	59.5	59.8	61.0	61.9	NO		58.0	58.6
9	S-R67	464 Palegold Street	57.7	58.4	59.2	59.5	60.7	61.6	NO		57.7	58.3
9	S-R68	462 Palegold Street	59.5	60.1	60.9	61.2	64.0	65.0	NO		58.9	59.5
9	S-R69	456 Palegold Street	55.8	56.6	57.3	57.7	59.0	59.7	NO		55.7	55.9
9	S-R70	455 Palegold Street	54.5	55.3	56.0	56.3	57.2	58.1	NO		54.5	54.9
9	S-R71	454 Palegold Street	56.6	57.4	58.1	58.5	59.4	60.2	NO		56.2	56.5
9	S-R72	453 Palegold Street	57.6	58.3	59.1	59.4	60.0	60.8	NO		57.7	58.1
9	S-R73	452 Palegold Street	58.2	58.9	59.7	60.1	61.0	61.9	NO		57.3	57.6
9	S-R74	451 Palegold Street	58.5	59.2	60.0	60.3	60.9	61.7	NO		58.3	58.5
9	S-R75	450 Palegold Street	56.9	57.7	58.4	58.8	59.3	60.1	NO		56.4	56.5
9	S-R76	449 Palegold Street	59.6	60.3	61.1	61.4	61.8	62.6	NO		59.1	59.1
9	S-R78	447 Palegold Street	59.7	60.4	61.1	61.5	61.6	62.4	NO		59.1	58.9
9	S-R79	446 Palegold Street	59.5	60.3	61.0	61.4	61.6	62.5	NO	58.2	58.2	
9	S-R80	444 Palegold Street	59.4	60.2	60.9	61.3	61.5	62.4	NO	58.2	57.9	
9	S-R81	443 Palegold Street	59.9	60.6	61.4	61.7	61.6	62.4	NO	59.0	58.9	
9	S-R82	442 Palegold Street	59.3	60.0	60.7	61.2	61.0	61.9	NO	58.0	57.5	

Table 3.4 Peak Hour Noise in Areas 8, 9

All Noise Sensitive Areas Areas 8, 9 (S.SB1, S.SB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
9	S-R83	441 Palegold Street	58.6	59.3	60.1	60.4	59.9	60.7	NO	NEW SB I-11 Soundwall 11.5' tall	58.0	58.1
9	S-R84	440 Palegold Street	59.9	60.7	61.4	61.8	61.3	62.3	NO		58.6	58.5
9	S-R85	439 Palegold Street	61.0	61.7	62.4	62.8	62.4	63.2	NO		60.1	59.5
9	S-R86	438 Palegold Street	58.7	59.5	60.1	60.6	60.1	61.1	NO		57.6	56.6
9	S-R87	437 Palegold Street	59.6	60.4	61.1	61.4	60.7	61.5	NO		58.7	58.7
9	S-R88	436 Palegold Street	59.3	60.1	60.8	61.2	60.6	61.5	NO		57.9	56.8
9	S-R89	435 Palegold Street	61.3	62.0	62.8	63.1	62.4	63.2	NO		59.7	59.1
9	S-R90	434 Palegold Street	60.3	61.1	61.8	62.2	61.3	62.2	NO		58.4	57.5
9	S-R91	433 Palegold Street	60.4	61.2	61.9	62.3	61.6	62.4	NO		59.0	58.5
9	S-R92	432 Palegold Street	60.6	61.4	62.1	62.5	61.6	62.5	NO		58.5	57.3
9	S-R93	430 Palegold Street	60.8	61.6	62.3	62.7	61.7	62.7	NO		58.4	57.2
9	S-R94	428 Palegold Street	61.2	62.0	62.7	63.1	62.1	63.1	NO		58.5	57.4
9	S-R95	427 Palegold Street	61.0	61.8	62.5	62.9	62.1	62.7	NO		59.2	58.5
9	S-R96	426 Palegold Street	61.3	62.1	62.8	63.2	62.1	63.1	NO		58.5	57.4
9	S-R97	425 Palegold Street	59.8	60.7	61.4	61.8	61.2	62.2	NO		57.4	57.2
9	S-R98	424 Palegold Street	60.5	61.4	62.0	62.4	61.2	62.1	NO		58.8	58.5
9	S-R99	423 Palegold Street	60.0	61.0	61.6	62.0	61.0	61.9	NO		58.6	58.9
9	S-R100	422 Palegold Street	61.6	62.5	63.2	63.6	62.7	63.7	NO		59.3	59.5
9	S-R101	421 Palegold Street	61.3	62.2	62.9	63.3	62.6	63.3	NO		59.5	59.5
9	S-R102	420 Palegold Street	61.1	62.0	62.7	63.0	61.4	62.3	NO	57.3	56.8	
9	S-R103	419 Palegold Street	60.0	61.0	61.6	62.1	61.1	62.2	NO	55.8	55.5	
9	S-R104	418 Palegold Street	61.0	62.0	62.7	63.0	61.9	62.9	NO	57.5	57.2	
9	S-R105	417 Palegold Street	59.9	60.8	61.5	61.9	61.3	62.2	NO	56.0	56.1	
9	S-R106	416 Palegold Street	61.6	62.6	63.3	63.7	62.5	63.5	NO	57.7	57.6	
9	S-R107	415 Palegold Street	61.7	62.6	63.3	63.6	62.9	63.7	NO	58.7	58.8	
9	S-R108	414 Palegold Street	62.6	63.6	64.3	64.7	63.3	64.3	NO	57.9	57.9	
9	S-R109	413 Palegold Street	60.8	61.8	62.4	62.9	61.8	62.7	NO	57.1	57.4	

Table 3.4 Peak Hour Noise in Areas 8, 9

All Noise Sensitive Areas												
Areas 8, 9 (S.SB1, S.SB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
9	S-R110	412 Palegold Street	63.2	64.3	64.9	65.4	63.9	65.0	NO	NEW SB I-11 Soundwall 11.5' tall	59.9	60.5
9	S-R111	411 Palegold Street	60.5	61.3	62.0	62.4	61.8	62.7	NO		57.5	57.7
9	S-R112	410 Palegold Street	64.7	65.8	66.4	66.9	65.0	65.9	YES		60.3	60.7
9	S-R113	409 Palegold Street	60.8	61.8	62.4	62.9	62.2	63.2	NO		57.6	58.1
9	S-R114	408 Palegold Street	66.4	67.4	68.0	68.5	68.1	69.2	YES		61.0	61.1
9	S-R115	407 Palegold Street	61.0	61.9	6.5	62.9	62.6	63.5	NO		59.1	59.7
9	S-R117	405 Palegold Street	63.2	64.0	64.7	65.1	64.9	65.9	YES		58.7	59.0
9	S-R118	404 Palegold Street	67.5	68.5	69.0	69.5	68.6	69.7	YES		61.4	61.8
9	S-R119	402 Palegold Street	68.4	69.3	69.9	70.3	69.0	70.0	YES		62.0	62.4
9	S-R120	400 Palegold Street	67.6	68.4	69.0	69.5	68.6	69.6	YES		61.0	61.5
9	S-R121	171 Lemongold St	62.0	62.7	63.4	63.8	61.1	61.9	NO		56.4	56.8
9	S-R122	173 Lemongold St	62.2	62.9	63.6	64.0	61.1	62.0	NO		56.2	56.7
9	S-R123	175 Lemongold St	62.4	63.2	63.8	64.2	61.9	62.9	NO		56.6	57.2
9	S-R124	177 Lemongold St	62.5	63.2	63.9	64.3	62.7	63.6	NO		56.8	57.4
9	S-R125	179 Lemongold St	63.0	63.6	64.4	64.6	62.9	63.9	NO		56.9	57.5
9	S-R126	181 Lemongold St	62.6	63.3	64.0	64.4	63.3	64.3	NO		57.4	57.9
9	S-R127	346 Island Reef Ave	63.9	64.6	65.3	65.7	60.3	61.0	YES		56.9	57.2
9	S-R128	344 Island Reef Ave	64.6	65.3	66.0	66.4	60.9	61.8	YES	57.3	57.6	
9	S-R129	342 Island Reef Ave	64.8	65.5	66.2	66.6	62.4	63.2	YES	58.4	58.7	
9	S-R130	340 Island Reef Ave	65.5	66.2	66.9	67.3	63.0	63.9	YES	59.0	59.3	
9	S-R131	338 Island Reef Ave	65.7	66.5	67.1	67.6	62.5	63.3	YES	58.3	58.7	
9	S-R132	336 Island Reef Ave	66.1	66.8	67.5	67.9	63.4	64.3	YES	58.6	59.2	
9	S-R133	334 Island Reef Ave	63.8	64.5	65.2	65.6	64.2	65.1	YES	59.1	59.7	
9	S-R134	200 Tug Boat Ct	61.4	62.0	62.7	63.0	61.0	61.9	NO	56.9	57.4	
9	S-R135	335 Island Reef Ave	60.2	60.9	61.6	61.9	59.7	60.4	NO	55.5	56.2	
9	S-R136	330 Island Reef Ave	61.9	62.6	63.3	63.6	62.1	63.0	NO	57.1	57.5	
9	S-R137	329 Island Reef Ave	59.9	60.6	61.2	61.6	59.8	60.5	NO	55.6	56.3	

Table 3.4 Peak Hour Noise in Areas 8, 9

All Noise Sensitive Areas												
Areas 8, 9 (S.SB1, S.SB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
9	S-R138	328 Island Reef Ave	61.3	61.9	62.7	63.0	61.6	62.5	NO	NEW SB I-11 Soundwall 11.5' tall	56.9	57.4
9	S-R139	326 Island Reef Ave	61.1	61.8	62.5	62.8	61.5	62.4	NO		56.9	57.3
9	S-R140	325 Island Reef Ave	59.6	60.3	60.9	61.4	59.6	60.4	NO		55.4	56.0
9	S-R141	324 Island Reef Ave	60.5	61.1	61.8	62.1	60.8	61.7	NO		56.5	56.9
9	S-R142	323 Island Reef Ave	59.9	60.5	61.2	61.6	60.2	61.0	NO		56.0	56.7
9	S-R143	322 Island Reef Ave	61.6	62.2	62.9	63.3	62.0	63.0	NO		57.1	57.6
9	S-R144	321 Island Reef Ave	59.5	60.2	60.8	61.2	60.0	60.7	NO		56.1	56.8
9	S-R145	320 Island Reef Ave	63.8	64.5	65.1	65.6	64.7	65.6	YES		59.8	60.5
9	S-R146	319 Island Reef Ave	61.0	61.6	62.4	62.7	61.2	62.0	NO		57.2	57.8
9	S-R147	317 Island Reef Ave	61.3	62.0	62.6	63.0	62.1	62.9	NO		57.8	58.4
9	S-R148	316 Island Reef Ave	60.9	61.5	62.2	62.6	61.5	62.4	NO		56.9	57.3
9	S-R149	315 Island Reef Ave	60.7	61.3	62.0	62.4	61.5	62.2	NO		57.5	58.1
9	S-R151	313 Island Reef Ave	59.6	60.3	60.9	61.4	60.4	61.1	NO		57.0	57.7
9	S-R152	312 Island Reef Ave	61.1	61.9	62.5	63.0	62.0	62.9	NO		57.3	57.8
9	S-R153	311 Island Reef Ave	59.9	60.6	61.2	61.7	60.6	61.2	NO		57.0	57.7
9	S-R154	310 Island Reef Ave	59.6	60.3	61.0	61.4	60.4	61.3	NO		56.5	57.0
9	S-R155	309 Island Reef Ave	58.8	59.5	60.1	60.6	59.5	60.2	NO	56.6	57.3	
9	S-R156	308 Island Reef Ave	60.1	60.9	61.5	62.0	61.2	62.0	NO	56.9	57.4	
9	S-R157	306 Island Reef Ave	58.9	59.7	60.3	60.8	59.7	60.6	NO	56.1	56.5	
9	S-R158	305 Island Reef Ave	59.0	59.7	60.3	60.8	59.5	60.2	NO	56.4	57.1	
9	S-R159	304 Island Reef Ave	58.7	59.5	60.0	60.5	59.7	60.5	NO	56.1	56.5	
9	S-R160	303 Island Reef Ave	58.1	58.9	59.5	59.9	58.6	59.3	NO	55.6	56.3	
9	S-R161	302 Island Reef Ave	58.6	59.4	59.9	60.5	59.6	60.4	NO	56.1	56.5	
9	S-R162	301 Island Reef Ave	57.7	58.5	59.0	59.6	58.3	59.1	NO	55.4	56.0	
9	S-R163	300 Island Reef Ave	59.0	59.8	60.4	6.9	59.8	60.6	NO	55.5	56.0	
9	S-R164	Quail Ridge-Under Development	59.8	60.5	61.2	61.5	60.4	61.2	NO	58.0	58.3	

Table 3.4 Peak Hour Noise in Areas 8, 9

All Noise Sensitive Areas												
Areas 8, 9 (S.SB1, S.SB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed Criterion?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
9	S-R165	Quail Ridge-Under Development	60.0	60.7	61.4	61.7	60.5	61.2	NO	NEW SB 11 Soundwall 11.5' tall	58.1	58.3
9	S-R166	Quail Ridge-Under Development	58.7	59.5	60.1	60.5	59.7	60.4	NO		58.4	58.6
9	S-R167	231 W Horizon Ridge Pkwy	64.1	65.0	65.7	66.0	66.0	66.7	YES		63.1	63.5
9	S-R169	231 W Horizon Ridge Pkwy	60.4	61.1	61.8	62.2	61.8	62.2	NO		61.5	61.9
9	S-R170	231 W Horizon Ridge Pkwy	60.3	61.0	61.8	62.1	58.8	59.4	NO		56.9	57.2
9	S-R171	231 W Horizon Ridge Pkwy	55.4	56.1	56.8	57.2	55.8	56.3	NO		55.5	55.6
9	S-R172	231 W Horizon Ridge Pkwy	54.6	55.3	56.0	56.4	55.4	55.9	NO		55.1	55.5
9	S-R173	231 W Horizon Ridge Pkwy	53.5	54.2	54.9	55.3	54.3	54.8	NO		54.0	54.4
9	S-R174	231 W Horizon Ridge Pkwy	52.4	53.1	53.8	54.2	53.3	53.8	NO		53.0	53.5
9	S-R175	231 W Horizon Ridge Pkwy	54.1	54.8	55.5	55.9	54.5	55.0	NO		54.1	54.6
9	S-R176	72 W Horizon Ridge Pkwy	63.3	63.7	64.6	64.7	64.5	64.7	NO		64.5	64.7

Table 3.5 Peak Hour Noise in Area 10 & 11

Table 3.5 Peak Hour Noise in Areas 10, 11

All Noise Sensitive Areas												
Areas 10, 11 (S.NB1, S.NB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed NAC?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
10	R10/S-R177	101 Grandview Dr	55.9	56.6	57.3	57.8	58.3	58.5	NO			
10	R11/S-R193	140 W Chaparral Dr	54.0	54.4	55.3	55.5	55.1	55.2	NO	EX SW9		
11	R12/S-R224	301 Oak Canyon Rd	60.3	61.0	61.7	62.0	67.0	66.6	YES	EX SW9	60.5	60.7
11	R13/S-R412	482 Wright Way	51.9	52.6	53.4	53.6	60.1	60.0	NO	NEW NB1-	53.4	53.5
11	R14/S-R433	477 Opal Way	53.1	53.7	54.8	54.8	65.3	64.9	NO	11 SW	60.3	60.1
11	R15/S-R463	785 Piazza Tasso	62.4	63.0	63.9	63.7	65.2	65.5	YES		62.3	62.8
10	S-R178	103 Grandview Dr	54.7	55.3	56.1	56.6	56.1	56.3	NO			
10	S-R179	105 Grandview Dr	53.5	54.2	54.9	55.4	55.5	55.8	NO			
10	S-R180	107 Grandview Dr	52.9	53.5	54.3	54.8	54.8	55.1	NO			
10	S-R181	100 Glen Oak Dr	53.9	54.7	55.4	56.0	56.5	56.9	NO			
10	S-R182	101 Glen Oak Dr	56.3	56.8	57.7	58.0	59.4	59.8	NO			
10	S-R183	102 Glen Oak Dr	52.4	53.0	53.8	54.3	53.4	53.6	NO			
10	S-R184	103 Glen Oak Dr	54.9	55.4	56.4	56.7	56.7	57.2	NO			
10	S-R185	104 Glen Oak Dr	52.4	53.0	53.8	54.4	53.8	54.2	NO			
10	S-R186	105 Glen Oak Dr	53.5	54.1	55.0	55.3	54.9	55.4	NO			
10	S-R187	106 Glen Oak Dr	51.9	52.6	53.4	54.0	53.5	53.9	NO			
10	S-R188	600 Sunny Slope Cir	52.9	53.5	54.5	54.7	53.8	53.7	NO			
10	S-R189	600 Sunny Slope Cir	52.1	52.7	53.7	54.0	51.5	52.0	NO			
10	S-R191	141 W Chaparral Dr	55.4	55.6	56.8	56.6	56.0	55.8	NO			
10	S-R192	101 W Chaparral Dr	56.0	56.3	57.6	57.4	55.0	55.0	NO			
10	S-R194	120 W Chaparral Dr	52.9	53.4	54.3	54.6	54.1	54.3	NO			
10	S-R195	570 Ridgeway Rd	55.9	56.3	57.1	57.3	56.7	56.7	NO	EX SW9		
10	S-R196	211 W Desert Rose Dr	55.4	55.8	56.7	56.8	56.3	56.4	NO	EX SW9		
10	S-R197	564 Ridgeway Rd	54.3	54.7	55.6	55.8	55.2	55.3	NO	EX SW9		
10	S-R198	230 W Desert Rose Dr	56.9	57.4	58.2	58.4	57.9	58.0	NO	EX SW9		

Table 3.5 Peak Hour Noise in Areas 10, 11

All Noise Sensitive Areas												
Areas 10, 11 (S.NB1, S.NB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed NAC?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
10	S-R199	220 W Desert Rose Dr	54.1	54.7	55.4	55.7	55.5	55.7	NO	EX SW9		
10	S-R200	210 W Desert Rose Dr	53.6	54.1	54.9	55.2	54.1	54.3	NO	EX SW9		
10	S-R201	221 W Delamar Dr	52.3	52.8	53.6	53.8	54.3	54.4	NO	EX SW9		
10	S-R202	230 W Delamar Dr	52.4	53.1	53.8	54.2	54.7	54.8	NO	EX SW9		
10	S-R203	231 W Delamar Dr	52.9	53.4	54.2	54.4	55.6	55.7	NO	EX SW9		
10	S-R204	240 W Delamar Dr	52.2	52.9	53.6	53.9	54.6	54.7	NO	EX SW9		
10	S-R205	241 W Delamar Dr	55.7	56.2	57.0	57.2	57.0	57.1	NO	EX SW9		
10	S-R206	250 W Delamar Dr	56.4	57.1	57.8	58.1	60.9	60.7	NO	EX SW9		
10	S-R207	260 W Delamar Dr	60.1	60.7	61.5	61.8	64.7	64.5	NO	EX SW9		
11	S-R208	241 W Kimberly Dr	51.7	52.4	53.1	53.5	54.2	54.4	NO	NEW NB I-11 Soundwall 15.5'	51.5	51.9
11	S-R209	250 W Kimberly Dr	53.9	54.7	55.5	55.8	58.1	58.0	NO		53.0	53.5
11	S-R210	260 W Kimberly Dr	54.1	54.9	55.6	56.0	59.2	59.0	NO		53.6	54.1
11	S-R211	261 W Kimberly Dr	55.7	56.4	57.1	57.5	56.8	56.9	NO		53.9	54.3
11	S-R212	270 W Kimberly Dr	56.1	57.0	57.7	58.1	62.0	61.8	NO		55.4	55.8
11	S-R213	534 Crestway Rd	60.9	61.7	62.4	62.7	67.9	67.4	YES		57.3	57.6
11	S-R214	261 W Longacres Dr	53.0	53.8	54.5	54.9	57.9	57.8	NO		52.6	53.0
11	S-R215	271 W Longacres Dr	53.9	54.8	55.4	55.8	59.4	59.3	NO		53.4	53.9
11	S-R216	281 W Longacres Dr	55.8	56.6	57.3	57.7	61.9	61.6	NO		54.9	55.4
11	S-R217	530 Crestway Rd	57.8	58.5	59.2	59.6	66.3	65.9	YES		57.0	57.3
11	S-R218	526 Crestway Rd	57.1	57.7	58.5	58.8	64.9	64.6	NO		56.5	56.9
11	S-R219	523 Crestway Rd	53.5	54.3	54.9	55.3	59.3	59.2	NO		53.5	53.9
11	S-R220	522 Crestway Rd	56.4	57.0	57.7	58.1	63.9	63.5	NO		55.9	56.3
11	S-R221	519 Crestway Rd	53.1	53.8	54.5	54.9	59.1	59.0	NO	53.1	53.5	
11	S-R222	518 Crestway Rd	55.2	55.9	56.6	56.9	62.4	62.1	NO	54.8	55.3	
11	S-R223	514 Crestway Rd	53.9	54.6	55.3	55.7	61.0	60.7	NO	53.6	54.1	

Table 3.5 Peak Hour Noise in Areas 10, 11

All Noise Sensitive Areas Areas 10, 11 (S.NB1, S.NB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed NAC?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
11	S-R225	303 Oak Canyon Rd	57.3	58.0	58.7	59.0	66.1	65.8	YES	NEW NB-11 Soundwall 15.5'	60.2	60.4
11	S-R226	305 Oak Canyon Rd	54.9	55.6	56.3	56.6	64.5	64.2	NO		57.8	57.9
11	S-R227	307 Oak Canyon Rd	53.4	54.0	54.8	55.1	63.3	63.0	NO		56.2	56.4
11	S-R228	308 Oak Canyon Rd	56.9	57.5	58.3	58.6	64.7	64.4	NO		56.0	56.4
11	S-R229	309 Oak Canyon Rd	55.5	56.1	56.9	57.2	65.8	65.4	YES		60.0	60.2
11	S-R230	311 Oak Canyon Rd	59.9	60.5	61.3	61.5	68.4	68.0	YES		59.4	59.6
11	S-R231	312 Oak Canyon Rd	54.9	55.6	56.3	56.7	62.0	61.8	NO		54.6	55.0
11	S-R232	313 Oak Canyon Rd	58.7	59.3	60.0	60.3	66.4	66.1	YES		58.2	58.5
11	S-R233	314 Oak Canyon Rd	54.5	55.2	55.9	56.3	61.5	61.3	NO		54.1	54.5
11	S-R234	315 Oak Canyon Rd	58.0	58.6	59.3	59.6	65.7	65.3	YES		57.7	58.0
11	S-R235	316 Oak Canyon Rd	53.7	54.4	55.1	55.4	60.5	60.3	NO		53.4	53.8
11	S-R236	317 Oak Canyon Rd	57.1	57.7	58.5	58.8	64.2	63.9	NO		56.6	57.0
11	S-R237	319 Oak Canyon Rd	56.2	56.8	57.5	57.9	62.8	62.6	NO		55.8	56.2
11	S-R238	320 Oak Canyon Rd	53.1	53.9	54.5	54.9	59.6	59.4	NO		52.8	53.2
11	S-R239	321 Oak Canyon Rd	55.6	56.3	57.0	57.3	62.1	61.8	NO		55.2	55.6
11	S-R240	322 Oak Canyon Rd	52.7	53.4	54.1	54.4	58.9	58.8	NO		52.3	52.7
11	S-R241	330 Oak Canyon Rd	54.1	54.8	55.5	55.8	60.9	60.7	NO		53.9	54.3
11	S-R242	331 Oak Canyon Rd	56.1	56.7	57.5	57.8	62.7	62.5	NO		55.8	56.2
11	S-R243	332 Oak Canyon Rd	54.7	55.4	56.1	56.4	61.6	61.3	NO		54.4	54.9
11	S-R244	333 Oak Canyon Rd	56.9	57.5	58.2	58.5	63.5	63.2	NO		56.6	57.0
11	S-R245	334 Oak Canyon Rd	55.5	56.2	56.9	57.2	62.6	62.3	NO		55.1	55.6
11	S-R246	335 Oak Canyon Rd	57.7	58.3	59.0	59.3	64.6	64.3	NO	57.4	57.7	
11	S-R247	336 Oak Canyon Rd	56.6	57.2	58.0	58.3	63.7	63.4	NO	56.2	56.6	
11	S-R248	340 Oak Canyon Rd	57.8	58.1	59.1	59.4	65.4	65.0	NO	59.3	59.3	
11	S-R249	341 Oak Canyon Rd	57.6	58.1	59.0	59.1	66.8	66.3	YES	60.2	60.3	
11	S-R250	342 Oak Canyon Rd	59.5	60.1	60.9	61.2	68.5	68.0	YES	58.8	59.2	
11	S-R251	343 Oak Canyon Rd	61.6	62.1	63.0	63.1	72.9	72.3	YES	61.2	61.3	

Table 3.5 Peak Hour Noise in Areas 10, 11

All Noise Sensitive Areas												
Areas 10, 11 (S.NB1, S.NB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed NAC?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
11	S-R252	344 Oak Canyon Rd	60.8	61.4	62.2	62.4	71.1	70.6	YES	NEW NB I-11 Soundwall 15.5'	60.1	60.4
11	S-R253	515 Escalante Dr	60.7	61.2	62.1	62.2	67.8	67.4	YES		60.4	60.5
11	S-R254	517 Escalante Dr	60.9	61.4	62.3	62.4	69.2	68.8	YES		60.5	60.6
11	S-R255	519 Escalante Dr	56.0	56.5	57.4	57.5	67.4	66.9	YES		60.3	60.4
11	S-R256	520 Escalante Dr	57.6	58.3	59.0	59.3	64.9	64.6	NO		57.2	57.6
11	S-R257	521 Escalante Dr	54.9	55.5	56.3	56.5	66.0	65.6	YES		61.1	60.8
11	S-R258	522 Escalante Dr	58.1	58.7	59.4	59.7	65.3	65.0	NO		59.0	59.1
11	S-R259	523 Escalante Dr	58.8	59.4	60.2	60.4	66.1	65.7	YES		58.5	58.7
11	S-R260	325 W Country Club Dr	53.8	54.4	55.1	55.5	59.8	59.6	NO		53.5	54.0
11	S-R261	331 W Country Club Dr	55.0	55.6	56.3	56.7	61.2	61.0	NO		54.7	55.1
11	S-R262	339 W Country Club Dr	56.7	57.3	58.1	58.4	63.3	63.0	NO		56.5	56.9
11	S-R263	345 W Country Club Dr	57.7	58.3	59.1	59.4	64.8	64.5	NO		57.3	57.7
11	S-R264	350 W Country Club Dr	55.9	56.5	57.3	57.5	62.3	62.0	NO		55.5	55.9
11	S-R265	351 W Country Club Dr	58.4	59.0	59.7	60.0	65.5	65.2	YES		58.0	58.3
11	S-R266	357 W Country Club Dr	60.0	60.5	61.4	61.6	66.4	65.9	YES		59.6	59.8
11	S-R267	363 W Country Club Dr	58.0	58.5	59.4	59.5	65.4	65.0	NO		60.4	60.5
11	S-R268	369 W Country Club Dr	61.6	62.1	62.9	63.1	70.5	70.2	YES		61.1	61.2
11	S-R269	375 W Country Club Dr	62.0	62.5	63.4	63.5	73.1	72.6	YES		61.5	61.6
11	S-R270	484 Cumberland Way	55.9	56.6	57.3	57.6	63.2	63.0	NO	56.1	56.5	
11	S-R271	485 Cumberland Way	53.6	54.3	55.0	55.4	59.6	59.5	NO	53.6	54.1	
11	S-R272	486 Cumberland Way	56.9	57.5	58.2	58.5	65.1	64.8	NO	57.0	57.4	
11	S-R273	487 Cumberland Way	54.7	55.4	56.1	56.4	61.0	60.8	NO	54.7	55.1	
11	S-R274	488 Cumberland Way	57.8	58.4	59.2	59.5	67.7	67.2	YES	57.5	57.8	
11	S-R275	489 Cumberland Way	55.7	56.3	57.0	57.4	62.3	62.1	NO	55.5	55.9	
11	S-R276	490 Cumberland Way	58.3	58.9	59.6	59.9	68.5	68.0	YES	57.7	58.0	
11	S-R277	491 Cumberland Way	56.1	56.8	57.5	57.8	62.8	62.6	NO	55.8	56.2	
11	S-R278	363 Chesapeake Way	54.6	55.2	55.9	56.3	61.2	61.0	NO	54.7	55.1	

Table 3.5 Peak Hour Noise in Areas 10, 11

All Noise Sensitive Areas												
Areas 10, 11 (S.NB1, S.NB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed NAC?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
11	S-R279	367 Chesapeake Way	55.1	55.8	56.5	56.9	62.0	61.8	NO	NEW NB-11 Soundwall 15.5'	54.9	55.4
11	S-R280	472 Potomac St	55.2	55.9	56.6	56.9	62.1	61.8	NO		55.2	55.6
11	S-R281	474 Potomac St	55.5	56.2	56.9	57.2	62.6	62.4	NO		55.5	56.0
11	S-R282	476 Potomac St	55.7	56.4	57.1	57.4	63.0	62.8	NO		55.8	56.3
11	S-R283	478 Potomac St	55.9	56.5	57.2	57.6	63.3	63.1	NO		55.7	56.1
11	S-R284	452 Tiger Lily Way	55.0	55.8	56.5	56.8	61.4	61.2	NO		55.1	55.6
11	S-R285	454 Tiger Lily Way	55.5	56.2	56.9	57.2	61.8	61.6	NO		55.5	56.0
11	S-R286	468 Tiger Lily Way	56.7	57.4	58.1	58.5	63.4	63.2	NO		56.7	57.1
11	S-R287	469 Tiger Lily Way	53.8	54.5	55.2	55.5	60.2	60.0	NO		54.0	54.4
11	S-R288	470 Tiger Lily Way	57.4	58.1	58.8	59.1	64.3	64.1	NO		57.2	57.7
11	S-R289	471 Tiger Lily Way	54.3	55.0	55.7	56.1	60.9	60.7	NO		54.3	54.8
11	S-R290	472 Tiger Lily Way	58.2	58.9	59.6	59.9	65.6	65.3	YES		58.0	58.4
11	S-R291	473 Tiger Lily Way	54.9	55.6	56.3	56.7	61.9	61.7	NO		54.9	55.3
11	S-R292	474 Tiger Lily Way	58.7	59.4	60.1	60.4	66.4	66.1	YES		58.4	58.7
11	S-R293	475 Tiger Lily Way	55.3	56.0	56.7	57.0	62.4	62.2	NO		55.2	55.6
11	S-R294	476 Tiger Lily Way	59.5	60.2	60.9	61.2	67.5	67.2	YES		59.1	59.5
11	S-R295	477 Tiger Lily Way	55.8	56.4	57.2	57.5	63.2	62.9	NO		55.5	55.9
11	S-R296	478 Tiger Lily Way	60.4	61.0	61.8	62.0	68.8	68.4	YES		59.9	60.2
11	S-R297	479 Tiger Lily Way	56.3	57.0	57.7	58.0	63.9	63.7	NO		56.1	56.4
11	S-R298	480 Tiger Lily Way	60.8	61.4	62.2	62.4	69.2	68.9	YES		60.4	60.6
11	S-R299	481 Tiger Lily Way	57.6	58.2	58.9	59.2	65.9	65.6	YES		57.1	57.5
11	S-R300	482 Tiger Lily Way	61.5	62.0	62.9	63.0	68.5	68.0	YES		61.2	61.3
11	S-R301	483 Tiger Lily Way	56.9	57.5	58.2	58.5	65.0	64.7	NO		56.7	57.1
11	S-R302	484 Tiger Lily Way	57.5	58.0	58.9	59.0	65.5	65.1	YES		61.0	61.1
11	S-R303	485 Tiger Lily Way	56.6	57.2	57.9	58.3	64.2	64.0	NO		56.4	56.7
11	S-R304	486 Tiger Lily Way	58.0	58.5	59.4	59.5	66.4	66.0	YES		61.8	61.7
11	S-R305	487 Tiger Lily Way	57.3	57.9	58.6	58.9	65.3	65.0	NO		58.0	58.1

Table 3.5 Peak Hour Noise in Areas 10, 11

All Noise Sensitive Areas Areas 10, 11 (S.NB1, S.NB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 BuildPM (dBA)	Approach/ Exceed NAC?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
11	S-R306	488 Tiger Lily Way	61.8	62.3	63.2	63.3	69.1	68.6	YES	NEW NB I-11 Soundwall 15:5'	61.4	61.5
11	S-R307	442 Leighann Rd	55.6	56.4	57.1	57.4	63.3	62.9	NO		55.6	56.0
11	S-R308	444 Leighann Rd	55.8	56.7	57.4	57.7	63.5	63.2	NO		55.8	56.3
11	S-R309	449 Leighann Rd	54.5	55.3	56.0	56.3	60.7	60.5	NO		54.6	55.1
11	S-R310	451 Leighann Rd	54.9	55.6	56.4	56.7	61.1	60.9	NO		55.0	55.4
11	S-R311	452 Leighann Rd	57.8	58.6	59.3	59.6	65.4	65.1	NO		57.8	58.1
11	S-R312	453 Leighann Rd	55.2	56.0	56.7	57.0	61.5	61.3	NO		55.3	55.8
11	S-R313	454 Leighann Rd	58.4	59.1	59.9	60.2	66.1	65.8	YES		58.3	58.7
11	S-R314	456 Leighann Rd	59.6	60.3	61.1	61.4	67.8	67.4	YES		59.4	59.7
11	S-R315	457 Leighann Rd	56.3	57.0	57.7	58.0	62.5	62.3	NO		56.3	56.7
11	S-R316	458 Leighann Rd	59.9	60.5	61.3	61.6	67.9	67.5	YES		59.6	59.9
11	S-R317	459 Leighann Rd	57.7	58.2	59.1	59.2	63.1	62.9	NO		57.0	57.4
11	S-R318	460 Leighann Rd	59.0	59.5	60.4	60.5	66.6	66.2	YES		60.7	60.8
11	S-R319	461 Leighann Rd	58.2	58.7	59.5	59.7	63.5	63.2	NO		58.8	59.0
11	S-R320	462 Leighann Rd	54.9	55.4	56.3	56.4	62.4	62.2	NO		55.1	55.3
11	S-R321	401 Cross St	56.3	57.1	57.8	58.1	63.3	63.0	NO		56.5	56.8
11	S-R322	403 Cross St	57.0	57.7	58.5	58.8	64.3	64.0	NO		57.1	57.4
11	S-R323	404 Cross St	56.2	57.1	57.8	58.1	64.2	63.9	NO		56.1	56.5
11	S-R324	405 Cross St	56.4	57.2	57.9	58.2	63.1	62.8	NO		56.9	57.3
11	S-R325	406 Cross St	57.4	58.2	58.9	59.2	66.3	65.9	YES		57.1	57.5
11	S-R326	407 Cross St	52.2	52.9	53.7	53.9	61.2	61.0	NO		57.4	57.6
11	S-R327	403 Breeze Way	55.6	56.5	57.2	57.5	63.7	63.4	NO		55.4	55.8
11	S-R328	405 Breeze Way	56.1	56.9	57.6	57.9	64.2	63.8	NO		55.9	56.3
11	S-R329	407 Breeze Way	56.6	57.4	58.2	58.5	65.0	64.6	NO		56.5	56.9
11	S-R330	408 Breeze Way	56.1	56.9	57.6	57.9	64.2	63.9	NO		56.7	56.9
11	S-R331	409 Breeze Way	57.4	58.1	58.9	59.2	65.6	65.2	YES		57.2	57.5
11	S-R332	410 Breeze Way	56.5	57.3	58.1	58.4	65.0	64.6	NO		58.7	58.6

Table 3.5 Peak Hour Noise in Areas 10, 11

All Noise Sensitive Areas												
Areas 10, 11 (S.NB1, S.NB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 BuildPM (dBA)	Approach/ Exceed NAC?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
11	S-R333	412 Breeze Way	57.0	57.8	58.5	58.8	65.6	65.2	YES	NEW NB-11 Soundwall 15.5'	58.3	58.5
11	S-R334	414 Breeze Way	57.7	58.4	59.2	59.5	66.6	66.2	YES		57.5	57.9
11	S-R335	415 Breeze Way	55.6	56.5	57.3	57.5	65.2	64.9	NO		56.5	56.7
11	S-R336	411 Rocky Rd	55.3	56.1	56.8	57.1	62.7	62.4	NO		56.4	56.7
11	S-R337	413 Rocky Rd	56.2	56.9	57.7	57.9	63.3	63.0	NO		57.7	57.7
11	S-R338	414 Rocky Rd	55.9	56.5	57.3	57.5	63.3	63.0	NO		55.3	55.7
11	S-R339	415 Rocky Rd	56.0	56.8	57.6	57.9	63.2	62.9	NO		56.0	56.3
11	S-R340	416 Rocky Rd	56.0	56.7	57.5	57.7	63.7	63.4	NO		55.5	55.9
11	S-R341	417 Rocky Rd	56.6	57.3	58.1	58.4	63.9	63.6	NO		56.3	56.7
11	S-R342	419 Rocky Rd	56.0	56.7	57.5	57.8	64.6	64.3	NO		56.3	56.6
11	S-R343	420 Rocky Rd	57.0	57.7	58.5	58.8	65.3	64.8	NO		56.6	56.9
11	S-R344	421 Rocky Rd	54.1	54.9	55.7	56.0	64.9	64.6	NO		56.2	56.5
11	S-R345	422 Rocky Rd	58.0	58.7	59.5	59.7	66.7	66.2	YES		57.6	57.9
11	S-R346	424 Janice Dr	56.2	56.9	57.7	58.0	63.8	63.4	NO		56.7	56.9
11	S-R347	426 Janice Dr	56.8	57.5	58.3	58.5	64.8	64.4	NO		56.4	56.7
11	S-R348	440 Daylin	56.5	57.2	58.0	58.2	64.1	63.8	NO		56.1	56.5
11	S-R349	441 Daylin	56.1	56.8	57.5	57.8	63.4	63.0	NO		57.5	57.5
11	S-R350	442 Daylin	57.5	58.2	59.0	59.2	65.6	65.2	YES		57.1	57.4
11	S-R351	443 Daylin	56.0	56.6	57.4	57.7	63.6	63.3	NO		56.8	57.1
11	S-R352	444 Daylin	58.5	59.1	59.9	60.2	67.0	66.6	YES	58.1	58.4	
11	S-R353	433 Nancy Dr	54.9	55.6	56.4	56.7	61.0	60.9	NO	54.8	55.2	
11	S-R354	435 Nancy Dr	55.0	55.7	56.5	56.7	61.7	61.4	NO	55.3	55.6	
11	S-R355	437 Nancy Dr	55.3	56.0	56.8	57.0	62.2	62.0	NO	55.7	56.0	
11	S-R356	438 Nancy Dr	56.0	56.6	57.4	57.7	63.3	63.0	NO	56.4	56.7	
11	S-R357	439 Nancy Dr	55.6	56.2	57.0	57.3	62.8	62.6	NO	55.9	56.2	
11	S-R358	440 Nancy Dr	56.4	57.0	57.8	58.0	63.9	63.5	NO	56.8	57.0	
11	S-R359	441 Nancy Dr	56.6	57.2	58.0	58.3	64.5	64.2	NO	56.6	56.8	

Table 3.5 Peak Hour Noise in Areas 10, 11

All Noise Sensitive Areas												
Areas 10, 11 (S.NB1, S.NB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PPM (dBA)	Approach/ Exceed NAC?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
11	S-R360	442 Nancy Dr	57.0	57.6	58.4	58.7	64.5	64.2	NO	NEW NB-11 Soundwall 15.5'	56.8	57.1
11	S-R361	444 Nancy Dr	57.5	58.1	58.9	59.2	65.6	65.2	YES		59.0	59.0
11	S-R362	446 Nancy Dr	58.2	58.8	59.7	59.9	66.7	66.2	YES		58.3	58.5
11	S-R363	420 Wright Way	55.2	55.7	56.7	56.7	67.6	67.3	YES		60.1	60.2
11	S-R364	422 Wright Way	54.5	55.0	56.0	56.1	66.8	66.5	YES		60.2	60.2
11	S-R365	424 Wright Way	54.0	54.5	55.5	55.6	65.5	65.2	YES		60.3	60.4
11	S-R366	425 Wright Way	57.8	58.4	59.3	59.5	66.8	66.4	YES		58.1	58.3
11	S-R367	426 Wright Way	53.9	54.5	55.5	55.6	65.9	65.5	YES		60.2	60.3
11	S-R368	427 Wright Way	57.6	58.2	59.0	59.2	66.2	65.9	YES		57.7	57.9
11	S-R369	428 Wright Way	54.0	54.5	55.5	55.7	65.9	65.5	YES		60.2	60.3
11	S-R370	429 Wright Way	57.4	58.0	58.9	59.1	65.8	65.5	YES		57.2	57.5
11	S-R371	430 Wright Way	53.6	54.2	55.2	55.3	64.5	64.1	NO		60.0	60.1
11	S-R372	432 Wright Way	53.8	54.4	55.4	55.5	65.3	64.9	NO		60.0	60.1
11	S-R373	433 Wright Way	57.6	58.2	59.1	59.3	66.5	66.1	YES		57.7	58.0
11	S-R374	434 Wright Way	53.2	53.7	54.7	54.9	63.5	63.3	NO		57.8	57.9
11	S-R375	435 Wright Way	57.6	58.2	59.0	59.2	66.2	65.9	YES		57.6	57.8
11	S-R376	436 Wright Way	53.5	54.1	55.0	55.2	64.5	64.2	NO		59.9	60.0
11	S-R377	437 Wright Way	57.6	58.2	59.1	59.3	66.3	65.9	YES		57.7	58.0
11	S-R378	438 Wright Way	53.7	54.2	55.2	55.3	65.0	64.7	NO	60.0	60.1	
11	S-R379	439 Wright Way	57.4	58.0	58.8	59.0	65.7	65.4	YES	57.2	57.5	
11	S-R380	440 Wright Way	53.3	53.8	54.8	54.9	64.0	63.7	NO	59.9	60.0	
11	S-R381	441 Wright Way	57.1	57.7	58.6	58.8	65.4	65.1	NO	56.8	57.1	
11	S-R382	442 Wright Way	53.2	53.7	54.7	54.9	63.8	63.5	NO	59.9	60.0	
11	S-R383	444 Wright Way	53.1	53.7	54.6	54.8	63.5	63.2	NO	55.9	56.1	
11	S-R384	445 Wright Way	57.2	57.8	58.7	58.9	65.7	65.3	YES	57.2	57.5	
11	S-R385	446 Wright Way	53.2	53.8	54.7	54.9	63.9	63.7	NO	59.9	60.0	
11	S-R386	447 Wright Way	57.2	57.8	58.7	58.9	65.9	65.5	YES	57.7	57.9	

Table 3.5 Peak Hour Noise in Areas 10, 11

All Noise Sensitive Areas												
Areas 10, 11 (S.NB1, S.NB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed NAC?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
11	S-R387	448 Wright Way	53.5	54.0	55.0	55.1	65.3	64.9	NO	NEW NB-11 Soundwall 15'5"	59.9	60.0
11	S-R388	449 Wright Way	57.3	57.9	58.8	58.9	66.5	66.1	YES		59.3	59.2
11	S-R389	450 Wright Way	53.2	53.8	54.8	54.9	64.7	64.4	NO		59.7	59.8
11	S-R390	451 Wright Way	56.9	57.5	58.3	58.6	65.5	65.2	YES		57.0	57.3
11	S-R391	452 Wright Way	53.6	54.2	55.1	55.2	66.1	65.7	YES		59.8	59.9
11	S-R392	454 Wright Way	53.5	54.1	55.0	55.2	66.1	65.6	YES		59.7	59.8
11	S-R393	456 Wright Way	53.1	53.7	54.6	54.8	64.1	63.9	NO		59.6	59.7
11	S-R394	458 Wright Way	53.3	53.9	54.8	55.0	65.1	64.8	NO		59.7	59.8
11	S-R395	460 Wright Way	53.2	53.8	54.7	54.9	65.1	64.7	NO		59.6	59.7
11	S-R396	462 Wright Way	53.1	53.7	54.6	54.8	64.3	64.1	NO		59.5	59.6
11	S-R397	463 Wright Way	56.8	57.6	58.4	58.6	65.7	65.4	YES		57.2	57.5
11	S-R398	464 Wright Way	53.1	53.8	54.7	54.8	64.9	64.6	NO		59.4	59.5
11	S-R399	465 Wright Way	56.7	57.5	58.2	58.5	65.2	64.9	NO		57.4	57.6
11	S-R400	466 Wright Way	53.2	53.8	54.7	54.8	65.2	64.9	NO		60.7	60.5
11	S-R401	467 Wright Way	56.3	57.1	57.9	58.1	64.9	64.6	NO	58.5	58.7	
11	S-R402	468 Wright Way	53.2	53.9	54.8	54.9	65.2	64.8	NO	59.5	59.5	
11	S-R403	470 Wright Way	53.3	53.9	54.8	54.9	65.0	64.6	NO	59.4	59.5	
11	S-R404	472 Wright Way	53.1	53.8	54.7	54.8	63.8	63.5	NO	59.2	59.3	
11	S-R405	474 Wright Way	53.1	53.7	54.6	54.8	63.0	62.8	NO	59.0	59.1	
11	S-R406	475 Wright Way	56.9	57.7	58.5	58.7	64.9	64.6	NO	57.2	57.5	
11	S-R407	476 Wright Way	52.6	53.2	54.1	54.2	61.6	61.4	NO	54.8	55.1	
11	S-R408	477 Wright Way	57.0	57.8	58.6	58.8	64.9	64.6	NO	57.1	57.4	
11	S-R409	478 Wright Way	52.9	53.6	54.4	54.6	62.2	62.0	NO	57.2	57.3	
11	S-R410	479 Wright Way	56.4	57.2	58.0	58.2	64.7	64.4	NO	57.1	57.4	
11	S-R411	480 Wright Way	52.0	52.7	53.5	53.7	60.2	60.1	NO	53.0	53.2	
11	S-R413	447 Opal Dr	55.6	56.2	57.0	57.2	61.9	61.7	NO	55.6	55.9	
11	S-R414	449 Opal Dr	56.1	56.7	57.5	57.7	62.6	62.4	NO	56.9	57.1	

Table 3.5 Peak Hour Noise in Areas 10, 11

All Noise Sensitive Areas Areas 10, 11 (S.NB1, S.NB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed NAC?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
11	S-R415	451 Opal Dr	56.9	57.5	58.4	58.6	63.7	63.4	NO	NEW NB I-11 Soundwall 15.5'	56.7	56.9
11	S-R416	453 Opal Dr	56.8	57.4	58.2	58.4	64.3	64.0	NO		57.1	57.3
11	S-R417	454 Opal Dr	56.5	57.1	57.9	58.1	63.9	63.6	NO		56.7	56.9
11	S-R418	455 Opal Dr	56.9	57.6	58.4	58.6	65.0	64.6	NO		57.5	57.7
11	S-R419	456 Opal Dr	56.8	57.4	58.2	58.4	64.5	64.2	NO		57.2	57.4
11	S-R420	457 Opal Dr	56.0	56.6	57.5	57.6	65.0	64.7	NO		56.9	57.1
11	S-R421	458 Opal Dr	57.2	57.9	58.7	58.8	65.3	64.9	NO		57.7	57.9
11	S-R422	459 Opal Dr	55.8	56.4	57.2	57.4	65.2	64.9	NO		57.1	57.2
11	S-R423	460 Opal Dr	57.6	58.2	59.1	59.2	65.9	65.5	YES		58.3	58.5
11	S-R424	462 Opal Dr	58.0	58.7	59.5	59.7	66.8	66.3	YES		58.7	58.9
11	S-R425	463 Opal Dr	54.0	54.5	55.6	55.7	66.3	66.0	YES		60.1	60.2
11	S-R426	464 Opal Dr	58.4	59.0	59.8	60.0	67.2	66.8	YES		59.6	59.7
11	S-R427	465 Opal Dr	54.4	55.0	56.0	56.1	67.2	66.8	YES		61.4	61.4
11	S-R428	467 Opal Dr	54.5	55.0	56.1	56.1	67.5	67.0	YES		60.3	60.3
11	S-R429	469 Opal Dr	53.9	54.4	55.5	55.5	66.8	66.3	YES		60.2	60.2
11	S-R430	471 Opal Dr	54.1	54.7	55.7	55.8	67.3	66.8	YES		60.3	60.2
11	S-R431	473 Opal Dr	53.5	54.1	55.1	55.2	66.3	65.8	YES		60.2	60.1
11	S-R432	475 Opal Dr	54.2	54.8	55.8	55.8	67.3	66.7	YES		60.2	60.1
11	S-R434	479 Opal Dr	54.7	55.2	56.2	56.2	67.4	66.8	YES		60.2	60.1
11	S-R435	481 Opal Dr	57.7	58.2	59.2	59.2	67.4	67.0	YES		60.2	60.1
11	S-R436	483 Opal Dr	58.7	59.2	60.2	60.1	67.5	67.1	YES	60.3	60.2	
11	S-R437	485 Opal Dr	58.8	59.3	60.2	60.1	66.6	66.4	YES	60.5	60.4	
11	S-R438	431 Viewmont Dr	55.3	56.0	56.7	56.9	61.7	61.5	NO	55.9	56.1	
11	S-R439	433 Viewmont Dr	55.4	56.0	56.8	57.0	61.9	61.8	NO	56.1	56.3	
11	S-R440	435 Viewmont Dr	55.8	56.5	57.3	57.4	62.7	62.5	NO	56.7	56.9	
11	S-R441	436 Viewmont Dr	56.0	56.7	57.4	57.6	62.8	62.6	NO	56.8	57.0	
11	S-R442	437 Viewmont Dr	55.7	56.4	57.2	57.3	63.0	62.9	NO	56.6	56.8	

Table 3.5 Peak Hour Noise in Areas 10, 11

All Noise Sensitive Areas												
Areas 10, 11 (S.NB1, S.NB2)												
Area	Receiver ID	Physical Address	Existing AM (dBA)	Existing PM (dBA)	2040 No Build AM (dBA)	2040 No Build PM (dBA)	2040 Build AM (dBA)	2040 Build PM (dBA)	Approach/ Exceed NAC?	Wall Protected by	2040 Build AM (dBA) proposed walls	2040 Build PM (dBA) proposed walls
11	S-R443	438 Viewmont Dr	56.3	57.0	57.7	57.9	63.3	63.1	NO	NEW NB 1-11 Soundwall 15.5'	57.3	57.4
11	S-R444	439 Viewmont Dr	55.6	56.2	57.1	57.2	63.9	63.8	NO		57.0	57.0
11	S-R445	440 Viewmont Dr	56.6	57.2	58.0	58.2	63.6	63.4	NO		57.6	57.7
11	S-R446	441 Viewmont Dr	55.6	56.2	57.0	57.2	64.1	63.9	NO		56.9	57.0
11	S-R447	442 Viewmont Dr	57.0	57.6	58.4	58.5	64.1	63.9	NO		58.1	58.2
11	S-R448	443 Viewmont Dr	55.8	56.4	57.3	57.4	63.2	63.0	NO		57.3	57.4
11	S-R449	444 Viewmont Dr	57.4	58.0	58.8	58.9	64.8	64.6	NO		58.7	58.8
11	S-R450	446 Viewmont Dr	57.2	57.8	58.6	58.7	65.1	64.9	NO		59.0	59.0
11	S-R451	448 Viewmont Dr	57.4	57.9	58.8	58.8	66.2	65.9	YES		59.5	59.4
11	S-R452	509 Waterwheel Falls Dr	55.8	56.5	57.2	57.3	62.4	62.2	NO		56.9	57.0
11	S-R453	513 Waterwheel Falls Dr	55.9	56.5	57.3	57.4	62.8	62.7	NO		57.3	57.4
11	S-R455	517 Waterwheel Falls Dr	55.7	56.3	57.1	57.2	63.2	63.1	NO		57.2	57.2
11	S-R456	521 Waterwheel Falls Dr	55.8	56.4	57.2	57.3	64.1	63.8	NO		57.4	57.4
11	S-R457	525 Waterwheel Falls Dr	55.9	56.5	57.4	57.4	64.7	64.5	NO		59.7	59.5
11	S-R458	528 Waterwheel Falls Dr	58.4	58.9	59.8	59.6	65.5	65.4	YES		60.2	60.2
11	S-R459	1 Fiesta Henderson	58.0	58.5	59.4	59.3	65.1	64.9	NO		59.6	59.6
11	S-R460	UNDER DEVELOPMENT	61.7	62.1	63.0	62.7	64.5	64.5	NO	62.0	62.0	
11	S-R461	UNDER DEVELOPMENT	58.6	59.3	59.9	59.7	62.5	62.7	NO	60.3	60.4	
11	S-R462	UNDER DEVELOPMENT	61.6	62.2	63.3	63.4	63.5	63.9	NO	61.8	62.2	

Table 4: New Soundwall Feasibility, Reasonableness, and Cost



Table 4: New Soundwall Feasibility, Reasonableness, and Cost

Area	Benefited Receiver Location	Total 1st Row Receivers	Total Receivers	1st Row Receiver above NAC	1st Row Impacted# Receivers	Benefited* 1st row Receiver	Total Impacted# Receivers	Total Benefited* Receivers	Insertion Loss (dBA)	Met Feasibility Criteria?	Cost Allowance?	Barrier Dimensions (ft)			Estimated Cost	Cost Effective?
												Height	Length	SQFT		
6	Viento Del Montagna Ave/ Montagna Mirage St/ Casa Del Fuego St/ Vallejo Verde St/ Vista Del Mar St/ La Laguna St	37	108	23	35	20	107	49	6.5	YES 20 of 37	\$2,450,000	11.5 & 13.5	1,492 & 3,057	584,275	\$2,044,963	YES
8 & 9	UPRR structure trailing edge south to I-11 SB Horizon Dr offramp	90	176	23	17	48	42	82	5.8	YES 48 of 90	\$4,100,000	11.5	6240	71,760	\$2,511,600	YES
11	I-11 NB from Horizon onramp to UPRR structure	75	251	44	73	62	238	234	6.7	YES 62 of 75	\$11,700,000	15.5	6324	98,022	\$3,430,770	YES

*Benefited defined as a rounded 5 dBA noise reduction or greater from 2040 Build no wall condition

#Impact defined as a rounded 5 dBA noise increase from existing condition

\$ cost averaging allowed per NDOT policy

5. Construction Noise

Construction noise would be temporary, intermittent, and the intensity would vary for different areas of the project and the construction activity. Construction operations will adhere to local construction noise ordinances. Mitigation measures for stationary and mobile equipment shall be addressed in the contract documents; as needed, and could address placement, hours of operation, noise level limits, or proper maintenance of equipment.

6. Information for Local Officials

NDOT will evaluate future changes in traffic noise impacts, if necessary, per NDOT policy. Local officials and municipalities must evaluate compatibility of development in proximate to traffic noise sources. Noise sensitive land developments should not occur near a road or highway that would cause a related traffic noise impact. If incompatible development is allowed, it will be incumbent on local entities to provide any consequential traffic noise abatement measure needed outside of right-of-way.

7. References

Code of Federal Regulations [CFR]. 2010. Title 23 CFR Part 772—Procedures for Abatement of Highway Traffic Noise and Construction Noise.

https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/

Federal Highway Administration. 1998. Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. Washington DC. February.

Federal Highway Administration. 2006. Roadway Construction Noise Model User Guide.

https://www.fhwa.dot.gov/ENVIRONMENT/noise/construction_noise/rcnm/rcnm01.cfm

Federal Highway Administration. 2011. Highway Traffic Noise: Analysis and Abatement Guidance, Document Number FHWA-HEP-10-025.

https://www.fhwa.dot.gov/Environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/polguide02.cfm

Nevada Department of Transportation. 2018. NDOT Traffic and Construction Noise Analysis and Abatement Policy. <https://www.dot.nv.gov/Home/ShowDocument?id=14255>

8. Appendix A: Traffic Data

Existing Peak Hour Traffic Volumes

Peak Hour Traffic Volumes and Speeds								
Existing 2017-Eastbound I-215 & SR564								
I-215 between Valle Verde ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	4821	6189	100	128	50	64	4970	6380
I-215 between Valle Verde to Stephanie	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	5268	6567	109	136	55	68	5430	6770
I-215 between Stephanie ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	4744	5355	98	111	49	56	4890	5520
I-215 between Stephanie to Gibson	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	3997	6034	83	125	42	63	4120	6220
I-215 between Gibson ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	3997	5219	83	108	42	54	4120	5380
I-215 Gibson ramp to SR564 connection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	4462	5617	92	116	46	58	4600	5790
I-215 becomes SR564 Lake Mead Parkway	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1164	1776	24	37	12	19	1200	1830
SR564 all EB ramps merged	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1882	2891	39	60	20	30	1940	2980
SR564 Eastgate Intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1727	2600	36	54	18	27	1780	2680
SR564 Eastgate Intersection to eastern limits	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1727	2872	36	60	18	30	1780	2960

Peak Hour Traffic Volumes and Speeds								
Existing 2017-Westbound I-215 & SR564								
east of SR564 Eastgate intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	3066	2785	64	59	32	30	3160	2870
SR564 Eastgate intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	3357	2600	70	54	35	27	3460	2680
SR564 Eastgate intersection to EB2NB ramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	2639	2600	55	54	28	27	2720	2680
SR564 EB2NB to EB to SB ramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	2571	2309	53	48	27	24	2650	2380
SR564 EB2SB to WB 215	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	2571	2183	53	45	27	23	2650	2250
WB 215 to WB Gibson offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	5229	5229	108	108	54	54	5390	5390
WB215 between Gibson ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	4656	4686	96	97	48	49	4800	4830
WB215 WB Gibson onramp to Stephanie offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	4656	5588	96	116	48	58	4800	5760
WB215 between Stephanie ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	4656	4850	96	100	48	50	4800	5000
WB215WB Stephanie onramp to Valle Verde offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	5355	6170	111	128	56	64	5520	6360
WB215 WB Valle Verde offramp to end of project	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	4511	5520	93	114	47	57	4650	5690

Peak Hour Traffic Volumes and Speeds								
Existing 2017-Valle Verde EB onramp								
Valle Verde EB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	447	379	10	8	5	4	460	390
Existing 2017-Valle Verde WB offramp								
Valle Verde WB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	427	650	9	14	5	7	440	670
Existing 2017-Stephanie EB offramp								
Stephanie EB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1194	1213	25	25	13	13	1230	1250
Existing 2017-Stephanie EB onramp								
Stephanie EB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	679	689	14	15	7	8	700	710
Existing 2017-Stephanie WB offramp								
Stephanie WB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	844	738	18	16	9	8	870	760
Existing 2017-Stephanie WB onramp								
Stephanie WB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	1252	1320	26	28	13	14	1290	1360

Peak Hour Traffic Volumes and Speeds								
Existing 2017-Stephanie Road								
Stephanie Road southern limits to EB ramp intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	990	1340	21	28	11	15	1020	1380
Peak Hour Estimate (SB)	1261	1446	26	30	13	15	1300	1490
Stephanie Road EB ramp intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	990	806	21	17	11	9	1020	830
Peak Hour Estimate (SB)	912	1009	19	21	10	11	940	1040
Stephanie Road EB ramp intersection to WB ramps intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1834	1970	38	41	19	21	1890	2030
Peak Hour Estimate (SB)	1077	1165	23	23	12	13	1110	1200
Stephanie Road WB ramps intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1252	1591	26	33	13	17	1290	1640
Peak Hour Estimate (SB)	291	466	6	10	3	5	300	480
Stephanie Road WB ramps intersection to northern limits	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1310	1252	27	26	14	13	1350	1290
Peak Hour Estimate (SB)	961	1417	20	30	10	15	990	1460
Existing 2017 Gibson EB offramp								
Gibson EB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	757	815	16	17	8	9	780	840
Existing 2017-Gibson EB onramp								
Gibson EB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	466	398	10	9	5	5	480	410

Peak Hour Traffic Volumes and Speeds								
Existing 2017-Gibson WB offramp								
Gibson WB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	573	544	12	12	6	6	590	560
Existing 2017-Gibson WB onramp								
Gibson WB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	291	194	6	4	3	2	300	200
Existing 2017 Gibson Road								
Gibson Road southern limits to EB ramp intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1000	670	21	14	11	7	1030	690
Peak Hour Estimate (SB)	495	1349	11	28	6	14	510	1390
Gibson Road EB ramp intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	718	624	15	11	8	6	740	540
Peak Hour Estimate (SB)	398	883	9	19	5	10	410	910
Gibson Road EB ramp intersection to WB ramps intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1378	883	29	19	15	10	1420	910
Peak Hour Estimate (SB)	583	1136	13	25	7	13	600	1170
Gibson Road WB ramps intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1087	689	23	15	12	8	1120	710
Peak Hour Estimate (SB)	447	893	10	19	5	10	460	920
Gibson Road WB ramps intersection to northern limits	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1514	990	32	21	16	11	1560	1020
Peak Hour Estimate (SB)	864	2310	18	37	9	25	890	2380

Peak Hour Traffic Volumes and Speeds								
Existing 2017 NB I-11 & I-515								
I-11 southern limits to Horizon interchange	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	2036	2218	22	24	64	70	2120	2310
I-11 between Horizon ramps	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	2036	2218	22	24	64	70	2120	2310
I-11 Horizon ramps to ramps split SR564 & I-215	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	3629	3351	38	35	114	105	3780	3490
I-515 SR564/I215 split to NB SR564 onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	2612	2189	28	23	82	69	2720	2280
I-515 NB SR564 onramp to NB Auto Show offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	3322	2823	35	30	104	89	3460	2940
I-515 NB Auto Show offramp to EB215 onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	3053	2564	32	27	96	81	3180	2670
I-515 NB EB215 onramp NB Auto Show onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	4772	4436	50	47	150	139	4970	4620
I-515 NB Auto Show onramp to NB Sunset offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	5060	5002	53	53	159	157	5270	5210
I-515 NB Sunset offramp to NB Galleria offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	4436	4234	47	45	139	133	4620	4410
I-515 NB Galleria offramp to NB Sunset onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	4196	3773	44	40	132	118	4370	3930
I-515 NB Sunset onramp to northern project limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	4733	4608	50	48	148	144	4930	4800

Peak Hour Traffic Volumes and Speeds								
Existing 2017 SB I-515 & I-11								
I-515 SB northern project limit to SB Sunset offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	4253	4810	45	51	133	151	4430	5010
I-515 SB Sunset offramp to SB Galleria onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	3581	4071	38	43	112	128	3730	4240
I-515 SB SB Galleria onramp to SB Sunset onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	3908	4532	41	48	123	142	4070	4720
I-515 SB Sunset onramp to SB Auto Show off	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	4272	5338	45	56	134	167	4450	5560
I-515 SB Auto Show off to EB SR564 & WB215 split	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	3639	3850	38	41	114	121	3790	4010
I-515 SB EB SR564 & WB215 split to SB Auto Show onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	1316	1863	14	20	42	59	1370	1940
I-515 SB Auto Show onramp to I-11 WB2SB ramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	1556	2295	17	24	49	72	1620	2390
I-11 SB WB2SB ramp to EB2SB ramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	1623	4224	17	44	51	132	1690	4400
I-11 SB EB2SB ramp to SB Horizon offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	3168	4359	33	46	99	137	3300	4540
I-11 SB SB Horizon offramp to southern limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	2352	2544	25	27	74	80	2450	2650

Peak Hour Traffic Volumes and Speeds								
Existing 2017 NB Horizon offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	192	192	2	2	6	6	200	200
Existing 2017 NB Horizon onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	490	1133	6	12	16	36	510	1180
Existing 2017 SB Horizon offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	816	1815	9	19	26	57	850	1890
Existing 2017 SB Horizon onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	144	250	2	3	5	8	150	260
Existing 2017 Horizon Road								
Horizon Road western limits to SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	797	894	9	10	25	29	830	930
Peak Hour Estimate (WB)	58	1019	1	11	2	33	60	1060
Horizon Road SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	730	730	8	8	23	23	760	760
Peak Hour Estimate (WB)	-	-	-	-	-	-	-	-
Horizon Road SB ramp intersection to NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1344	1949	14	21	42	61	1400	2030
Peak Hour Estimate (WB)	384	663	4	7	12	21	400	690
Horizon Road NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	-	-	-	-	-	-	-	-
Peak Hour Estimate (WB)	308	509	4	6	10	16	320	530
Horizon Road NB ramps intersection to eastern project limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	970	1709	11	18	31	54	1010	1780
Peak Hour Estimate (WB)	308	509	4	6	10	16	320	530

Peak Hour Traffic Volumes and Speeds								
Existing 2017 NB Sunset offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	624	768	7	8	20	24	650	800
Existing 2017 NB Sunset onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	168	836	2	9	6	27	175	870
Existing 2017 SB Sunset offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	672	740	7	8	21	24	700	770
Existing 2017 SB Sunset onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	365	807	4	9	12	26	380	840
Existing 2017 Sunset Road								
Sunset Road western limits to SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	664	1009	7	9	23	33	690	1050
Peak Hour Estimate (WB)	1133	1095	12	12	36	35	1180	1140
Sunset Road SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	404	999	4	9	14	32	420	1040
Peak Hour Estimate (WB)	749	759	8	8	24	24	780	790
Sunset Road SB ramp intersection to NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	692	1009	8	12	23	32	720	1050
Peak Hour Estimate (WB)	865	1172	10	13	28	37	900	1220
Sunset Road NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	528	893	6	10	17	28	550	930
Peak Hour Estimate (WB)	528	1277	6	14	17	40	550	1330
Sunset Road NB ramps intersection to eastern project limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	826	1335	9	14	26	42	860	1390
Peak Hour Estimate (WB)	893	1556	10	17	29	49	930	1620

Peak Hour Traffic Volumes and Speeds								
Existing 2017 NB Galleria offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	240	461	3	5	8	15	250	480
Existing 2017 SB Galleria onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	327	461	4	5	11	15	340	480
Existing 2017 SB515 to EB564 ramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	586	980	13	21	13	21	610	1020
Existing 2017 SB515 to WB215 ramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	1738	1988	37	42	37	42	1810	2070
Existing 2017 EB215 to SB I-11								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	3264	3802	68	80	68	80	3400	3960
Existing 2017 EB215 to NB 515 (from I-11 split)								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	1719	1872	36	39	36	39	1790	1950
Existing 2017 NB I-11 to EB SR 564								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	125	135	3	3	3	3	130	140
Existing 2017 NB I-11 to WB 215								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	1018	1162	22	25	22	25	1060	1210
Existing 2017 WB SR 564 to NB I-515								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	711	634	15	14	15	14	740	660
Existing 2017 WB SR 564 to SB I-11								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	68	135	2	3	2	3	70	140

2040 No Build Peak Hour Traffic Volumes

Peak Hour Traffic Volumes and Speeds									
2040 No Build Eastbound I-215 & SR564									
I-215 between Valle Verde ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	Peak Hour Estimate (EB)	6470	7654	134	158	67	79	6670	7890
I-215 between Valle Verde to Stephanie	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	Peak Hour Estimate (EB)	7081	8372	146	173	73	87	7300	8630
I-215 between Stephanie ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	Peak Hour Estimate (EB)	5656	6984	117	144	59	72	5830	7200
I-215 between Stephanie to Gibson	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	Peak Hour Estimate (EB)	6538	8313	135	172	68	86	6740	8570
I-215 between Gibson ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	Peak Hour Estimate (EB)	5578	7178	115	148	58	74	5750	7400
I-215 Gibson ramp to SR564 connection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	Peak Hour Estimate (EB)	6354	7625	131	158	66	79	6550	7860
I-215 becomes SR564 Lake Mead Parkway	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	Peak Hour Estimate (EB)	1911	1300	40	27	20	14	1970	1340
SR564 all EB ramps merged	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	Peak Hour Estimate (EB)	3415	2551	71	74	36	37	3520	3660
SR564 Eastgate Intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	Peak Hour Estimate (EB)	3260	2920	68	61	34	31	3360	3010
SR564 Eastgate Intersection to eastern limits	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	Peak Hour Estimate (EB)	3425	3260	71	68	36	34	3530	3360

Peak Hour Traffic Volumes and Speeds								
2040 No Build Westbound I-215 & SR564								
east of SR564 Eastgate intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
	4288	4114	89	87	45	44	4420	4240
SR564 Eastgate intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
	4123	3851	85	80	43	40	4250	3970
SR564 Eastgate intersection to EB2NB ramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
	4589	4530	95	94	48	47	4730	4670
SR564 EB2NB to EB to SB ramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
	3143	3143	65	65	33	33	3240	3240
SR564 EB2SB to WB 215	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
	3027	2891	63	60	32	30	3120	2980
WB 215 to WB Gibson offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
	7208	6878	149	142	75	71	7430	7090
WB215 between Gibson ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
	6422	6044	133	125	67	63	6620	6230
WB215 WB Gibson onramp to Stephanie offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
	7586	7081	157	146	79	73	7820	7300
WB215 between Stephanie ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
	6587	6286	136	130	68	65	6790	6480
WB215WB Stephanie onramp to Valle Verde offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
	7838	8265	162	171	81	86	8080	8520
WB215 WB Valle Verde offramp to end of project	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
	7402	7537	153	156	77	78	7630	7770

Peak Hour Traffic Volumes and Speeds								
2040 No Build Valle Verde EB onramp								
Valle Verde EB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	612	718	13	15	7	8	630	740
2040 No Build Valle Verde WB offramp								
Valle Verde WB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	437	718	9	15	5	8	450	740
2040 No Build Stephanie EB offramp								
Stephanie EB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1426	1388	30	29	15	15	1470	1430
2040 No Build Stephanie EB onramp								
Stephanie EB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	883	1329	19	28	10	14	910	1370
2040 No Build Stephanie WB offramp								
Stephanie WB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	1009	806	21	17	11	9	1040	830
2040 No Build Stephanie WB onramp								
Stephanie WB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	1261	1979	26	41	13	21	1300	2040

Peak Hour Traffic Volumes and Speeds								
2040 No Build Stephanie Road								
Stephanie Road southern limits to EB ramp intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1864	2173	40	45	20	23	1920	2240
Peak Hour Estimate (SB)	1300	1960	27	41	14	21	1340	2020
Stephanie Road EB ramp intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1126	1009	24	21	12	11	1160	1040
Peak Hour Estimate (SB)	835	1407	18	29	9	15	860	1450
Stephanie Road EB ramp intersection to WB ramps intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	2086	1844	43	39	22	20	2150	1900
Peak Hour Estimate (SB)	980	1572	21	33	11	17	1010	1620
Stephanie Road WB ramps intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1446	1446	30	30	15	15	1490	1490
Peak Hour Estimate (SB)	262	825	6	17	3	9	270	850
Stephanie Road WB ramps intersection to northern limits	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1737	1494	36	31	18	16	1790	1540
Peak Hour Estimate (SB)	874	2407	19	50	10	26	900	2480
2040 No Build Gibson EB offramp								
Gibson EB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	961	1145	20	24	10	12	990	1180
2040 No Build Gibson EB onramp								
Gibson EB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	776	447	16	10	8	5	800	460

Peak Hour Traffic Volumes and Speeds								
2040 No Build Gibson WB offramp								
Gibson WB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	786	835	17	18	9	9	810	860
2040 No Build Gibson WB onramp								
Gibson WB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	1164	1038	24	22	12	11	1200	1070
2040 No Build Gibson Road								
Gibson Road southern limits to EB ramp intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1494	980	31	21	16	11	1540	1010
Peak Hour Estimate (SB)	612	1776	13	37	7	19	630	1830
Gibson Road EB ramp intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	951	825	20	17	10	9	980	850
Peak Hour Estimate (SB)	466	1145	10	24	5	12	480	1180
Gibson Road EB ramp intersection to WB ramps intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1757	1340	37	29	19	15	1810	1380
Peak Hour Estimate (SB)	699	1436	15	30	8	15	720	1480
Gibson Road WB ramps intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1281	1029	27	22	14	11	1320	1060
Peak Hour Estimate (SB)	524	883	11	19	6	10	540	910
Gibson Road WB ramps intersection to northern limits	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1892	1310	39	27	20	14	1950	1350
Peak Hour Estimate (SB)	1213	1611	25	34	13	17	1250	1660

Peak Hour Traffic Volumes and Speeds								
2040 No Build NB I-11 & I-515								
I-11 southern limits to Horizon interchange	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	2928	2823	31	30	92	89	3050	2940
I-11 between Horizon ramps	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	2928	2823	31	30	92	89	3050	2940
I-11 Horizon ramps to ramps split SR564 & I-215	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	4925	3994	52	42	154	125	5130	4160
I-515 SR564/I215 split to NB SR564 onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	3140	1786	33	19	99	56	3270	1860
I-515 NB SR564 onramp to NB Auto Show offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	4580	3149	48	33	144	99	4770	3280
I-515 NB Auto Show offramp to EB215 onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	4205	2612	44	28	132	82	4380	2720
I-515 NB EB215 onramp NB Auto Show onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	6740	5943	71	62	211	186	7020	6190
I-515 NB Auto Show onramp to NB Sahara offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	7258	6720	76	70	227	210	7560	7000
I-515 NB Sahara offramp to NB Galleria offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	6298	5597	66	59	197	175	6560	5830
I-515 NB Galleria offramp to NB Sunset onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	5943	4848	62	51	186	152	6190	5050
I-515 NB Sunset onramp to northern project limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	6951	5722	73	60	218	179	7240	5960

Peak Hour Traffic Volumes and Speeds								
2040 No Build SB I-515 & I-11								
I-515 SB northern project limit to SB Sunset offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	6538	5885	69	62	205	184	6810	6130
I-515 SB Sunset offramp to SB Galleria onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	5607	5021	59	53	176	157	5840	5230
I-515 SB SB Galleria onramp to SB Sunset onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	5981	5501	63	58	187	172	6230	5730
I-515 SB Sunset onramp to SB Auto Show off	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	6605	6615	69	69	207	207	6880	6890
I-515 SB Auto Show off to EB SR564 & WB215 split	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	5808	6058	61	64	182	190	6050	6310
I-515 SB EB SR564 & WB215 split to SB Auto Show onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	1968	2074	21	22	62	65	2050	2160
I-515 SB Auto Show onramp to I-11 WB2SB ramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	2362	2602	25	28	74	82	2460	2710
I-11 SB WB2SB ramp to EB2SB ramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	2477	2861	26	30	78	90	2580	2980
I-11 SB EB2SB ramp to SB Horizon offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	4340	5789	46	61	136	181	4520	6030
I-11 SB SB Horizon offramp to southern limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	2640	3149	28	33	83	99	2750	3280

Peak Hour Traffic Volumes and Speeds								
2040 No Build NB Horizon offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	346	413	4	5	11	13	360	430
2040 No Build NB Horizon onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	2007	1172	21	13	63	37	2090	1220
2040 No Build SB Horizon offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	1700	2640	18	28	54	83	1770	2750
2040 No Build SB Horizon onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	231	423	3	5	8	14	240	440
2040 No Build Horizon Road								
Horizon Road western limits to SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	826	864	9	9	26	27	860	900
Peak Hour Estimate (WB)	1536	2536	16	28	48	80	1600	2640
Horizon Road SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	768	644	8	7	24	21	800	670
Peak Hour Estimate (WB)	-	-	-	-	-	-	-	-
Horizon Road SB ramp intersection to NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1796	2122	19	23	57	67	1870	2210
Peak Hour Estimate (WB)	1248	1565	13	17	39	49	1300	1630
Horizon Road NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	-	-	-	-	-	-	-	-
Peak Hour Estimate (WB)	845	1316	9	14	27	42	880	1370
Horizon Road NB ramps intersection to eastern project limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1402	1988	15	21	44	63	1460	2070
Peak Hour Estimate (WB)	845	1316	9	14	27	42	880	1370

Peak Hour Traffic Volumes and Speeds								
2040 No Build NB Auto Show offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	375	548	4	6	12	18	390	570
2040 No Build NB Auto Show onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	519	778	6	9	17	25	540	810
2040 No Build SB Auto Show offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	797	567	9	6	25	18	830	590
2040 No Build SB Auto Show onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	394	528	5	6	13	17	410	550
2040 No Build Auto Show Drive								
Auto Show Drive western limits to SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	788	950	9	11	25	31	820	1020
Peak Hour Estimate (WB)	980	999	11	11	31	32	1020	1040
Auto Show Drive SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	634	778	7	9	20	25	660	810
Peak Hour Estimate (WB)	298	509	4	6	10	16	310	530
Auto Show Drive SB ramp intersection to NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	740	856	9	10	24	28	770	890
Peak Hour Estimate (WB)	538	845	7	10	18	27	560	880
Auto Show Drive NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	298	260	4	3	10	9	310	270
Peak Hour Estimate (WB)	298	500	4	6	10	16	310	520
Auto Show Drive NB ramps intersection to eastern project limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	298	461	4	5	10	15	310	480
Peak Hour Estimate (WB)	413	692	5	8	13	22	430	720

Peak Hour Traffic Volumes and Speeds								
2040 No Build NB Sunset offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	960	1133	10	12	30	36	1000	1180
2040 No Build NB Sunset onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1008	874	11	10	32	28	1050	910
2040 No Build SB Sunset offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	932	864	10	9	30	27	970	900
2040 No Build SB Sunset onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	615	1124	7	12	20	36	640	1170
2040 No Build Sunset Road								
Sunset Road western limits to SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1450	1566	16	18	46	50	1510	1630
Peak Hour Estimate (WB)	1421	1642	15	18	45	52	1480	1710
Sunset Road SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	653	596	7	7	21	19	680	620
Peak Hour Estimate (WB)	797	1162	9	13	25	37	830	1210
Sunset Road SB ramp intersection to NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1153	1422	13	16	37	45	1200	1480
Peak Hour Estimate (WB)	1009	1316	12	15	32	42	1050	1370
Sunset Road NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	989	980	11	11	31	31	1030	1020
Peak Hour Estimate (WB)	500	634	6	7	16	20	520	660
Sunset Road NB ramps intersection to eastern project limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1412	1575	15	17	45	50	1470	1640
Peak Hour Estimate (WB)	952	1220	6	14	31	39	990	1270

Peak Hour Traffic Volumes and Speeds								
2040 No Build NB Galleria offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	356	749	4	8	12	24	370	780
2040 No Build SB Galleria onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	384	471	4	5	12	15	400	490
2040 No Build SB515 to EB564 ramp								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	3831	1968	80	41	80	41	3990	2050
2040 No Build SB515 to WB215 ramp								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	2583	2016	54	42	54	42	2690	2100
2040 No Build EB215 to SB I-11								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	4397	6260	92	131	92	131	4580	6520
2040 No Build EB215 to NB 515 (from I-11 split)								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	2535	3332	53	70	53	70	2640	3470
2040 No Build NB I-11 to EB SR 564								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	240	269	5	6	5	6	250	280
2040 No Build NB I-11 to WB 215								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	1786	1940	38	41	38	41	1860	2020
2040 No Build WB SR 564 to NB I-515								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	1440	1373	30	29	30	29	1500	1430
2040 No Build WB SR 564 to SB I-11								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	116	260	3	6	3	6	120	270

2040 Build Peak Hour Traffic Volumes

Peak Hour Traffic Volumes and Speeds								
2040 Build Eastbound I-215 & SR564								
I-215 between Valle Verde ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	6470	7654	134	158	67	79	6670	7890
I-215 between Valle Verde to Stephanie	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	7081	8372	146	173	73	87	7300	8630
I-215 between Stephanie ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	5656	6984	117	144	59	72	5830	7200
I-215 between Stephanie to EB Gibson offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	6538	8313	135	172	68	86	6740	8570
I-215 EB Gibson offramp to ES ramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	5617	7178	116	148	58	74	5790	7400
I-215 ES ramp to EB Gibson onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	3774	4346	78	90	39	45	3890	4480
I-215 EB Gibson onramp to EB564	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	4511	4783	93	99	47	50	4650	4930
I-215 becomes SR564 Lake Mead Parkway	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1911	1339	40	28	20	14	1970	1380
SR564 SE ramp to NE ramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	3405	3328	71	69	36	35	3510	3430
SR564 NE ramp to Eastgate	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	3648	3589	76	74	38	37	3760	3700
SR564 Eastgate Intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	3425	3260	71	68	36	34	3530	3360
SR564 Eastgate Intersection to eastern limits	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	3425	3260	71	68	36	34	3530	3360

Peak Hour Traffic Volumes and Speeds								
2040 Bulid Westbound I-215 & SR564								
east of SR564 Eastgate intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	4288	4104	89	86	44	43	4420	4230
SR564 Eastgate intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	4123	3851	85	80	43	40	4250	3970
SR564 Eastgate intersection to WN ramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	4627	4550	96	94	48	47	4470	4690
SR564 WN ramp to WS ramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	3231	3357	67	70	34	35	3330	3460
SR564 WS ramp to NW-WB215 connection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	3114	3095	65	64	33	32	3210	3190
NW-WB215 connection -WB Gibson offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	4598	4928	95	102	48	51	4740	5080
WB 215 Gibson offramp to SB2WB	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	4385	4618	91	96	46	48	4520	4760
WB215 SB2WB to WB Gibson onramp(MASTER WB215)	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	6422	6044	133	125	67	63	6620	6230
WB215 WB Gibson onramp to Stephanie offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	7586	7081	157	146	79	73	7820	7300
WB215 between Stephanie ramps	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	6587	6286	136	130	68	65	6790	6480
Peak Hour Estimate (EB)								
WB215WB Stephanie onramp to Valle Verde offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	7838	8265	162	171	81	86	8080	8520
WB215 WB Valle Verde offramp to end of project	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	7402	7537	153	156	77	78	7630	7770

Peak Hour Traffic Volumes and Speeds								
2040 Bulid Valle Verde EB onramp								
Valle Verde EB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	612	718	13	15	7	8	630	740
2040 Bulid Valle Verde WB offramp								
Valle Verde WB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	437	718	9	15	5	8	450	740
2040 Bulid Stephanie EB offramp								
Stephanie EB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1426	1388	30	29	15	15	1470	1430
2040 Bulid Stephanie EB onramp								
Stephanie EB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	883	1329	19	28	10	14	910	1370
2040 Bulid Stephanie WB offramp								
Stephanie WB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	1009	806	21	17	11	9	1040	830
2040 Bulid Stephanie WB onramp								
Stephanie WB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	1261	1979	26	41	13	21	1300	2040

Peak Hour Traffic Volumes and Speeds								
2040 Bulid Stephanie Road								
Stephanie Road southern limits to EB ramp intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1864	2173	40	45	20	23	1920	2240
Peak Hour Estimate (SB)	1300	1960	27	41	14	21	1340	2020
Stephanie Road EB ramp intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1126	1009	24	21	12	11	1160	1040
Peak Hour Estimate (SB)	835	1407	18	29	9	15	860	1450
Stephanie Road EB ramp intersection to WB ramps intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	2086	1843	43	38	22	19	2150	1900
Peak Hour Estimate (SB)	980	1572	21	33	11	17	1010	1620
Stephanie Road WB ramps intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1446	1436	30	30	15	15	1490	1480
Peak Hour Estimate (SB)	262	825	6	17	3	9	270	850
Stephanie Road WB ramps intersection to northern limits	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1737	1494	36	31	18	16	1790	1540
Peak Hour Estimate (SB)	874	2407	19	50	10	26	900	2480
2040 Bulid Gibson EB offramp								
Gibson EB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	961	1145	20	24	10	12	990	1180
2040 Bulid Gibson EB onramp to SR564								
Gibson EB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	738	427	16	9	8	5	760	440
2040 Bulid Gibson EB onramp to ES ramp								
Gibson EB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	49	136	1	3	1	2	50	140

Peak Hour Traffic Volumes and Speeds								
2040 Bulid Gibson WB offramp								
Gibson WB offramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	214	311	5	7	3	4	220	320
2040 Bulid SW slip ramp to WB Gibson offramp								
Gibson WB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	582	650	12	14	6	7	600	670
2040 Bulid Gibson WB onramp								
Gibson WB onramp	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (WB)	1164	1038	24	22	12	11	1200	1070
2040 Bulid Gibson Road								
Gibson Road southern limits to EB ramp intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1494	980	31	21	16	11	1540	1010
Peak Hour Estimate (SB)	612	1776	13	37	7	19	630	1830
Gibson Road EB ramp intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	951	825	20	17	10	9	980	850
Peak Hour Estimate (SB)	456	1145	10	24	5	12	470	1180
Gibson Road EB ramp intersection to WB ramps intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1757	1340	37	29	19	15	1320	1380
Peak Hour Estimate (SB)	699	1553	15	33	8	17	720	1600
Gibson Road WB ramps intersection	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1281	1029	27	22	14	11	1320	1060
Peak Hour Estimate (SB)	524	883	11	19	6	10	540	910
Gibson Road WB ramps intersection to northern limits	Autos 97%		Medium Trucks 2%		Heavy Trucks 1%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1892	1310	39	27	20	14	1950	1350
Peak Hour Estimate (SB)	1213	1611	25	34	13	17	1250	1660

Peak Hour Traffic Volumes and Speeds								
2040 Build NB I-11 & I-515								
NB I-11 southern limits to Horizon interchange	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	2928	2823	31	30	92	89	3050	2940
NB I-11 between Horizon ramps	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	2928	2823	31	30	92	89	3050	2940
NB I-11 Horizon ramps to NE/NW ramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	4858	3975	51	42	152	125	5060	4140
NB I-11 NE/NW ramp to I-515	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	3129	1892	33	20	99	60	3290	1970
NB I-515 EB2NB ramp to Auto Show Drive offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	5722	5309	60	56	179	166	5960	5530
NB I-515 Auto Show Drive offramp to WN	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	5348	4724	56	50	168	148	5570	4920
NB I-515WN to NB Auto Show onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	6740	5904	71	62	211	185	7020	6150
NB I-515 NB Auto Show onramp to NB Sunset offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	7258	6672	76	70	227	209	7560	6950
NB I-515 Sunset offramp to NB Galleria offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	6298	5597	66	59	197	175	6560	5830
NB I-515 Galleria offramp to NB Sunset onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	5943	4858	62	51	186	152	6190	5060
I-515 NB Sunset onramp to northern project limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	6951	5722	73	60	218	179	7240	5960

Peak Hour Traffic Volumes and Speeds									
2040 Bulid SB I-515 & I-11									
I-515 SB northern project limit to SB Sunset offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	6538	5885	69	62	205	184	6810	6130	
I-515 SB Sunset offramp to SB Galleria onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	5607	5021	59	53	176	157	5840	5230	
I-515 SB SB Galleria onramp to SB Sunset onramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	5981	5501	63	58	187	172	6230	5730	
I-515 SB Sunset onramp to SB Auto Show off	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	6605	6567	69	69	207	206	6880	6840	
I-515 SB Auto Show off to SE ramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	5808	6048	61	63	182	189	6050	6300	
SB I-515 SE ramp to SW ramp (& becomes LSB alignment)	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	4320	4080	45	43	135	128	4500	4250	
SB I-11 alignment to SB Horizon offramp	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	1988	2074	21	22	63	65	2070	2160	
SB I-11 alignment (WS & ES join)	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	4071	5751	43	60	128	180	4240	5990	
I-11 SB SB Horizon offramp to southern limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
	2640	3149	28	33	83	99	2750	3280	

Peak Hour Traffic Volumes and Speeds								
2040 Bulid SB Horizon offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	1431	2602	15	28	45	82	1490	2710
2040 Bulid SB Horizon onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	231	423	3	5	8	14	240	440
2040 Bulid NB Horizon offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	346	413	4	5	11	13	360	430
2040 Bulid NB Horizon onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	1930	1152	21	12	61	36	2010	1200
2040 Bulid Horizon Road								
Horizon Road western limits to SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	826	864	9	9	26	27	860	900
Peak Hour Estimate (WB)	1537	2536	17	28	49	80	1600	2640
Horizon Road SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	768	644	8	7	24	21	800	670
Peak Hour Estimate (WB)	-	-	-	-	-	-	-	-
Horizon Road SB ramp intersection to NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1834	2084	20	22	58	66	1910	2170
Peak Hour Estimate (WB)	1037	1565	11	17	33	49	1080	1630
Horizon Road NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	-	-	-	-	-	-	-	-
Peak Hour Estimate (WB)	845	1316	9	14	27	42	880	1370
Horizon Road NB ramps intersection to eastern project limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	1172	1949	13	21	37	61	1220	2030
Peak Hour Estimate (WB)	845	1316	9	14	27	42	880	1370

Peak Hour Traffic Volumes and Speeds								
2040 Bulid NB Auto Show offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	375	586	4	7	12	19	390	610
2040 Bulid NB Auto Show onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	519	768	6	8	17	24	540	800
2040 Bulid SB Auto Show offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	797	528	9	6	25	17	830	550
2040 Bulid SB Auto Show onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	394	538	5	6	13	17	410	560
2040 Bulid SW ramp (from SB Auto Show to WB Gibson off)								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	260	48	3	1	9	2	270	50
2040 Bulid Auto Show Drive								
Auto Show Drive western limits to SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	788	970	9	11	25	31	820	1010
Peak Hour Estimate (WB)	980	999	11	11	31	32	1020	1040
Auto Show Drive SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	634	778	7	9	20	25	660	810
Peak Hour Estimate (WB)	288	548	3	6	9	18	300	570
Auto Show Drive SB ramp intersection to NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	740	846	9	10	24	27	770	880
Peak Hour Estimate (WB)	528	509	6	6	17	17	550	530
Auto Show Drive NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	298	250	4	3	10	8	310	260
Peak Hour Estimate (WB)	288	173	3	2	9	6	300	180
Auto Show Drive NB ramps intersection to eastern project limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (EB)	471	461	5	5	15	15	490	480
Peak Hour Estimate (WB)	413	692	5	8	13	22	430	720

Peak Hour Traffic Volumes and Speeds									
2040 Bulid NB Sunset offramp									
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
Peak Hour Estimate (NB)	960	1085	10	12	30	34	1000	1130	
2040 Bulid NB Sunset onramp									
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
Peak Hour Estimate (NB)	1008	874	11	10	32	28	1050	910	
2040 Bulid SB Sunset offramp									
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
Peak Hour Estimate (SB)	932	864	10	9	30	27	970	900	
2040 Bulid SB Sunset onramp									
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
Peak Hour Estimate (SB)	615	1076	7	12	20	34	640	1120	
2040 Bulid Sunset Road									
Sunset Road western limits to SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
Peak Hour Estimate (EB)	952	1787	11	21	31	57	990	2090	
Peak Hour Estimate (WB)	1412	1642	15	18	45	52	1470	1710	
Sunset Road SB ramp intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
Peak Hour Estimate (EB)	500	817	6	10	16	26	520	1080	
Peak Hour Estimate (WB)	989	1152	11	12	31	36	1030	1200	
Sunset Road SB ramp intersection to NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
Peak Hour Estimate (EB)	1633	1422	18	16	52	45	1700	1480	
Peak Hour Estimate (WB)	1153	1258	13	14	37	40	1200	1310	
Sunset Road NB ramps intersection	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
Peak Hour Estimate (EB)	1421	980	15	11	45	31	1480	1020	
Peak Hour Estimate (WB)	816	788	9	9	26	25	850	820	
Sunset Road NB ramps intersection to eastern project limits	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total		
	AM	PM	AM	PM	AM	PM	AM	PM	
Peak Hour Estimate (EB)	1421	1575	15	17	45	50	1480	1640	
Peak Hour Estimate (WB)	1613	1220	18	14	51	39	1680	1270	

2040 Bulid NB Galleria offramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (NB)	356	749	4	8	12	24	370	780
2040 Bulid SB Galleria onramp								
	Autos 96%		Medium Trucks 1%		Heavy Trucks 3%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate (SB)	384	471	4	5	12	15	400	490
2040 Bulid WN ramp								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	1392	1181	29	25	29	25	1450	1230
2040 Bulid WS ramp								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	116	260	3	6	3	6	120	270
2040 Bulid ES ramp								
from I-215 to Gibson onramp	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	1786	2794	38	59	38	59	1860	2910
Gibson onramp to I-11	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	1834	2928	39	61	39	61	1910	3050
2040 Bulid EN ramp (EB215 to NB 515) (MC alignment)								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	2573	3408	54	71	54	71	2680	3550
2040 Bulid SE ramp								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	1488	1968	16	21	47	62	1550	2050
2040 Bulid SW ramp (South 515 to W215 on MC Alignment)								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	2333	2007	49	42	49	42	2430	2090

Peak Hour Traffic Volumes and Speeds								
2040 Build NE ramp								
NE & NW shared roadbed to NW split	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	1709	2074	36	44	36	44	1780	2160
NE only	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	240	269	5	6	5	6	250	280
2040 Build NW from NE/NW shared roadbed								
	Autos 96%		Medium Trucks 2%		Heavy Trucks 2%		Total	
	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour Estimate	1469	1815	31	38	31	38	1530	1890

Files too large to add to document. In NDOT Projectwise as:

2017 AM Peak Hour Static Assigned Volumes: [2017 AM Peak Hour Static Assigned Volumes.pdf](#)

2017 PM Peak Hour Static Assigned Volumes: [2017 PM Peak Hour Static Assigned Volumes.pdf](#)

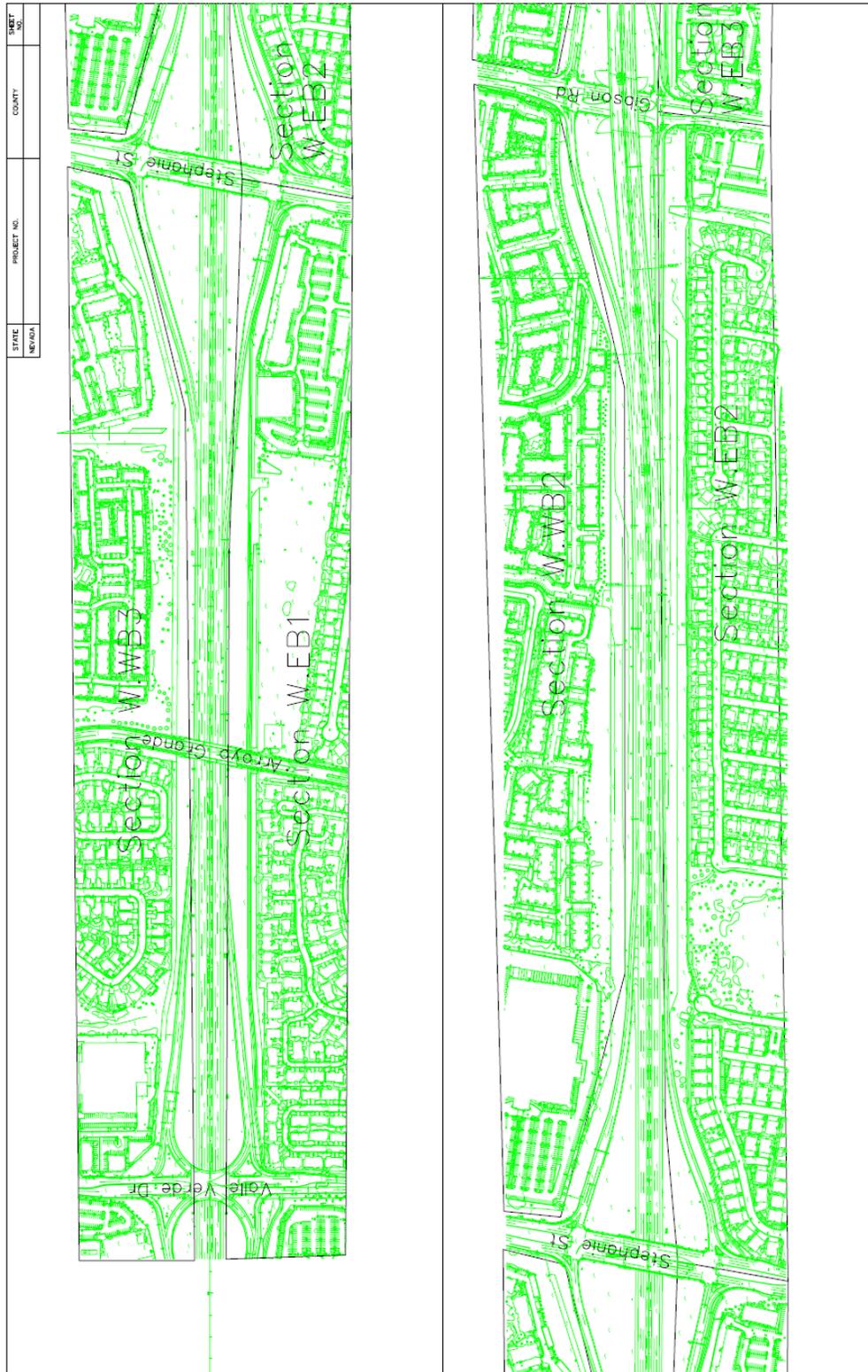
2040 AM No-Action Peak Hour Static Assigned Volumes: [2040 No-Action AM Peak Hour Static Assigned Volumes.pdf](#)

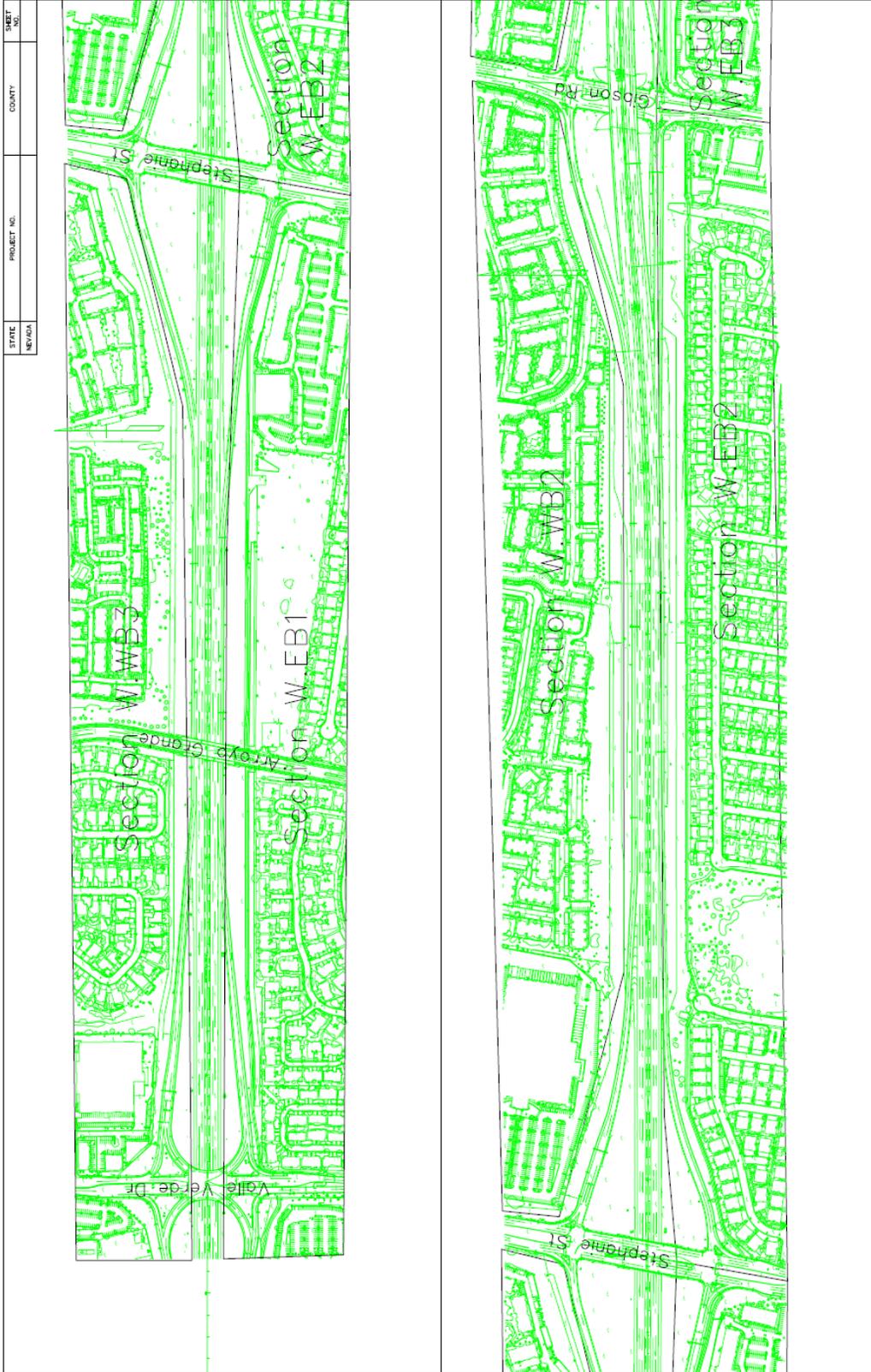
2040 PM No-Action Peak Hour Static Assigned Volumes: [2040 No-Action PM Peak Hour Static Assigned Volumes.pdf](#)

2040 AM Build 2A Peak Hour Static Assigned Volumes: [2040 Build 2A - AM Peak Hour Static Assigned Volumes.pdf](#)

2040 PM Build 2A Peak Hour Static Assigned Volumes: [2040 Build 2A - PM Peak Hour Static Assigned Volumes.pdf](#)

9. Appendix B: Noise Study Area Detailed Maps









10. Appendix C: Preparer's Certifications and Qualifications





STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

TRAFFIC AND CONSTRUCTION NOISE
ANALYSIS AND ABATEMENT POLICY

Effective May 15, 2018

INTRODUCTION

This document presents the State of Nevada, Department of Transportation (NDOT) *Traffic and Construction Noise Analysis and Abatement Policy* (Policy) for highway traffic and construction noise. The Policy defines NDOT's application of the FHWA Noise Standard as contained in 23 Code of Federal Regulations (CFR) Part 772 and current *Highway Traffic Noise: Analysis and Abatement Guidance* (FHWA Traffic Noise Guidance).

The 23 CFR Part 772 and FHWA Traffic Noise Guidance are key to directing a traffic noise study. These are incorporated by reference to the Policy and provide the foundation for a traffic noise study. They can be accessed on the FHWA Highway Traffic Noise website: http://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/.

Refer to these for additional information on definitions, applicability, traffic noise prediction, analysis of traffic noise impacts, analysis of traffic noise abatement, federal participation, information for local officials, and construction noise. The 23 CFR Part 772, FHWA Traffic Noise Guidance, and this Policy shall be used to conduct the appropriate study.

Consultants conducting traffic noise analysis for NDOT or Federal and Federal aid projects shall work closely with the NDOT Environmental Services Division as early as practical in the project process. Additional information on completing a traffic noise study is in the referenced 23 CFR Part 772 and the FHWA Traffic Noise Guidance.

PURPOSE

The Policy presents NDOT's program to define and implement 23 CFR Part 772. The standards include requirements for highway traffic noise analysis, impact assessment, and abatement evaluation, noise abatement criteria, and requirement for providing information to local officials. This policy describes NDOT's approach implementing those areas where FHWA has given state highway agencies flexibility.

APPLICABILITY

The Policy uniformly applies to all Type I Federal and Federal-aid highway projects as outlined in 23 CFR Part 772.7 and the FHWA Traffic Noise Guidance. This includes Federal and Federal-aid projects that are administered by Local Public Agencies (LPAs). For assistance in evaluating the applicability of the Policy, consult the NDOT Environmental Services Division.

PROJECT TYPES

As defined in 23 CFR Part 772, the Policy applies to all Type I Federal or Federal-aid projects. Type II projects are a proposed Federal or Federal-aid project for traffic noise abatement on an existing roadway where there is no improvement to the roadway itself that increases the vehicle-carrying capacity. Type II programs are voluntary and at the discretion of the state highway agency. Nevada does not have a Type II program or policy. Any Federal-aid project that does not currently fit into a Type I or Type II project, is a Type III project.

DEFINITIONS

Definitions are presented in 23 CFR 772.5, the FHWA Traffic Noise Guidance and this Policy and shall be used. Additional NDOT-defined terminology includes:

Approach level: 1 dB(A)- $L_{eq}(h)$ less than the Noise Abatement Criteria (NAC) for Activity Categories A to E when determining a traffic noise impact

Noise reduction design goal: 8 dB(A)- $L_{eq}(h)$. This shall be the level of traffic noise reduction achieved, if all criteria are satisfied. Each project shall be evaluated for achieving this goal, or as close to this goal that can be attained. The acoustical feasibility is a minimum requirement that will allow constructing a traffic noise abatement measure (TNAM) but may not be the final design.

Substantial noise increase: 12 dB(A)- $L_{eq}(h)$ over existing noise levels.

TRAFFIC NOISE PREDICTION

The traffic noise prediction is described in 23 CFR 772.9 and the FHWA Traffic Noise Guidance. The FHWA Traffic Noise Model, TNM 2.5, or the most current version of TNM, will be used to predict traffic noise. If other models are found acceptable to FHWA and pursuant to 23 CFR 772.9, they may be proposed and will be evaluated on a case-by-case basis. FHWA-approved traffic noise screening tools and processes shall be used when applicable. NDOT does not allow the use of noise contour lines. The posted speed limit shall be used to predict highway traffic noise levels.

ANALYSIS OF TRAFFIC NOISE IMPACTS

The traffic noise impact analysis is described in 23 CFR 772.11 and the FHWA Traffic Noise Guidance. NDOT has established the “approach level” to be 1 dB(A) less than the NAC for Activity Categories A to E when determining a traffic noise impact. NDOT has defined the “substantial noise increase” to be 12 dB(A)- $L_{eq}(h)$ over existing noise levels. The “substantial noise increase” is independent of the absolute noise level. The noise analysis will determine all traffic noise impacts from the project.

Receptor locations for highway traffic noise analysis shall typically be at ground level, or first-floor; and, at an exterior area where frequent human activity occurs, between the right-of-way line and building. Impacted receptors shall be identified or grouped by unique identification numbers. Activity Category B, multi-family dwelling units, shall be analyzed by identifying exterior areas of frequent human use and ascertaining the number of dwelling units.

NDOT shall evaluate eligible Activity Categories C and D areas by utilizing the “equivalent number of residences” method. This shall be completed in the manner of the example below taken from the FHWA Traffic Noise Guidance.

This approach involves identifying the representative lot size of residential development and dividing the land area of portion of the park that is within the study area by the area of the representative lot size. For example, the typical lot size in a community is 60'x120' or 7,200 square feet (SF). Noise modeling predicts noise impacts from the project to a distance of 350 feet. A park in the community is adjacent to the project and has 1000' of frontage. The total impacted area of the park is 350,000 (SF). Dividing this by the typical lot size of 7,200 SF for an equivalent number of receivers, results in 48.6. Therefore, the park is representative of 49 receivers.

Activity Category E shall be analyzed in the manner applied to Activity Category B, multi-family residences.

In addition, Activity Categories C, D, and E shall be evaluated considering a use factor, as available. This will examine the actual amount of time used, the time of day used, and seasonal use at the Activity Category. Determining subsequent traffic noise impacts and any resulting TNAM shall be weighted accordingly.

ANALYSIS OF TRAFFIC NOISE ABATEMENT

Analysis of traffic noise abatement is described in 23 CFR 772.13 and the FHWA Traffic Noise Guidance. NDOT will primarily consider noise barriers, typically concrete, for traffic noise abatement. Absorptive treatments will not be considered. NDOT will utilize cost averaging as allowed in 23 CFR 772.13(k). NDOT does not participate in the FHWA Quieter Pavement Program. Pavement type cannot be considered in analysis nor used as a TNAM.

FEASIBILITY

The feasibility of traffic noise abatement is described in 23 CFR 772.13(d)(1) and the FHWA Traffic Noise Guidance. NDOT considers a TNAM that achieves at least a 5 dB(A) reduction for 50% of the first, or front, row of impacted receptors as acoustically feasible. This is the minimum requirement and does not preclude achieving the noise reduction design goal. The noise reduction design goal shall be achieved if criteria can be satisfied.

Engineering feasibility affecting the final design and placement of sound barriers may be controlled by numerous factors including: topography, barrier height, structural capabilities, access requirements, existing roadways, utilities, drainage, maintenance, other noise sources, safety considerations, or other project specific factors. Engineering feasibility will be evaluated according to the current edition of the American Association of State Highway Transportation Officials (AASHTO) publication "A Policy on Geometric Design of Highways and Streets", (a.k.a. AASHTO Green Book). Sound barrier design requirements are also addressed in project contract documents and per the NDOT Structure Division's *Structures Manual*, 2008. Contact the NDOT Structural Design Division at 1-775-888-7540.

REASONABLENESS

Reasonableness is described in 23 CFR 772.13(d)(2) and the FHWA Traffic Noise Guidance. Three of the criteria used to evaluate the reasonableness of eligible mitigation under consideration are: the points-of-view of the benefitted property owners and residents, the cost effectiveness of the TNAM, and the noise reduction design goal. NDOT has defined the traffic noise reduction design goal as 8 dB(A).

The TNAM (e.g., noise barriers) will be constructed as modeled and designed unless enough benefitted receptors are opposed to their construction, as described below. The viewpoints of the benefitted receptors will be solicited during the NEPA public involvement process and before the date of public knowledge. After the date of public knowledge, benefitted receptors cannot petition to alter the proposed TNAM. The proposed TNAM will be constructed as refined during project final design. Non-benefitted receptors cannot participate and cannot alter a proposed TNAM. Benefitted receptors of one TNAM cannot participate and cannot alter other proposed TNAMs from which they do not receive a qualifying benefit.

To be considered, responses from benefitted receptors shall be submitted in writing or documented in the record during a public hearing and/or meeting. The respondent's status with the property shall be clearly identified and their standing validated to allow participation. In the case of rental properties, views of both the owner and the legal resident(s) will be considered in the decision-making process. However, if opposing views over the TNAM develop between the property owner of a benefitted property and its legal occupant(s), the preference of the property owner will take precedence.

To alter a proposed TNAM, two criteria must be met. First, to initiate reconsideration of the proposed TNAM, a qualifying response from a majority (50%, plus one [1]) of all the valid identified benefitted receptors of that TNAM must be received prior to the date of public knowledge.

On meeting the first criteria, a ballot will then be sent via U.S. certified mail to the benefitted receptors for that TNAM. It will request their vote on retaining or removing the proposed TNAM. A TNAM must retain all other criteria necessary to allow it to be funded. If a ballot is not received from a benefitted receptor after 30 calendar days from mailing, a second ballot will be sent under the same conditions. If no response is received or the U.S. Postal Service could not deliver a ballot and it is returned, it will be noted in the administrative record and further attempts will not be made.

The following scoring system will be used for returned, valid ballots and the tallied results must support any change to the proposed TNAM. The area of the removed TNAM will not be eligible for future consideration of a TNAM. If a valid change is enacted and the proposed TNAM is altered, the final voting results will be sent to all the identified benefitted receptors for that TNAM.

The preferences of benefitted receptors will be evaluated and tallied as follows per returned ballot:

- Those receiving a 7 or greater dB(A) reduction in projected traffic noise levels shall receive three points.
- Those receiving a 6 dB(A) reduction in projected traffic noise levels shall receive two points.
- Those receiving a 5 dB(A) reduction in projected traffic noise levels shall receive one point.
- Those receiving less than a 5 dB(A) reduction in projected traffic noise levels are not a benefitted receptor and shall not participate.

A cost-benefit analysis will be prepared to evaluate the TNAM. A maximum construction cost of \$50,000 (2018 U.S. dollars [USD]) is allotted per benefitted receptor (i.e., dwelling, equivalent unit) that satisfies criteria. This allowance will be evaluated at least every five years.

The range of cost-to-construct values are dependent on type of TNAM (e.g., precast concrete versus cast-in-place concrete noise barrier). Proposed noise barrier type shall meet prescribed specifications of reducing traffic noise. Precast concrete barriers, i.e., post and panel, are the most commonly used TNAM. To satisfy the cost effectiveness for a precast

concrete noise barrier, \$35 per square foot (SF) (2018 USD) is used in the cost reasonable calculation. The cost effectiveness is evaluated only on factors to construct (e.g., materials and labor). It does not require considering other costs, such as engineering/design, acquiring right-of-way, drainage, traffic control, or utility relocation. Deviations from this will be evaluated on a case-by-case situation as allowed per regulation, guidance, policy, and practice. The cost-to-construct value will be reevaluated at least every five years.

As provided in 23 CFR 772.13(k) on Type I projects, FHWA delegates to the highway agency the option to cost average traffic noise abatement among benefitted receptors within common noise environments. NDOT allows the cost averaging option as outlined in the CFR.

FEDERAL PARTICIPATION

Federal participation is described in 23 CFR 772.15 and the FHWA Traffic Noise Guidance.

INFORMATION FOR LOCAL OFFICIALS

Information for local officials is described in 23 CFR 772.17 and the FHWA Traffic Noise Guidance. Local officials will be informed of potential traffic noise impacts to land adjacent to a proposed highway project to protect future noise sensitive land development from becoming incompatible with traffic noise levels. This will be performed during the NEPA process and available on NDOT's website.

Traffic noise abatement for development adjacent to the highway occurring after the date of public knowledge is the responsibility of local municipalities. Provision for such noise abatement becomes the responsibility of local communities and private developers. After the date of public knowledge, NDOT will be available for analyzing changes in traffic noise impacts, when appropriate and deemed necessary.

CONSTRUCTION NOISE

Construction noise is described in 23 CFR 772.19. Procedures to minimize construction noise impacts, while considering traffic impacts, will be addressed on a project-by-project basis. When reasonable and feasible, project TNAM will be constructed as early in the project as possible to provide mitigation from construction noise.

QUALIFICATIONS TO PERFORM TRAFFIC NOISE ANALYSIS

Only personnel qualified in the field of highway traffic noise analysis shall be responsible for the highway traffic noise analysis on FHWA/NDOT transportation improvement projects or within NDOT right-of-way. If junior personnel don't have this experience, they must be working under more senior personnel who have all required training and experience.

Personnel shall have demonstrated experience in conducting traffic noise analyses for transportation improvement projects and must have exhibited a working knowledge of the procedures and policies outlined in:

- The Federal regulation (23 CFR 772) and its accompanying noise guidance material developed by FHWA (current version);

- The NDOT Traffic and Construction Noise Analysis and Abatement Policy (current version);
- Report Number FHWA-PD-96-046, "Measurements of Highway-Related Noise," <http://www.fhwa.dot.gov/environment/noise/measurement/measure.cfm>; and,
- Any subsequent regulation, procedure, guidance or policy issued.

The qualified individual must have successfully completed, been involved in the development and/or instruction of and demonstrate equivalent and proficient experience with the following:

- Highway traffic noise analysis training provided by FHWA and/or the National Highway Institute (NHI); and,
- Training on the most currently approved FHWA traffic noise analysis computer model(s), through a qualified provider.

Refresher and additional training may be necessary because of advanced highway traffic noise modeling technology or changes in highway traffic noise policy and/or procedure. A copy of the certificate of training and documentation of equivalent experience shall be included in their employer's prequalification packet and with submitted analysis and reports.

POLICY REVISIONS

The Policy was originally issued April 18, 2011 and approved for use beginning July 13, 2011. It was revised as follows.

- August 1, 2012: added qualifications necessary to perform traffic noise analysis as an appendix;
- September 26, 2012: removed appendices containing 23 CFR 772 and the FHWA Noise Guidance and replaced with a weblink;
- June 1, 2016: added statement in *Analysis of Traffic Noise Abatement* section allowing cost averaging per 23 CFR 772.13(k);
- March 1, 2017: moved from appendix and incorporated qualifications to perform noise analysis and cost averaging into body of policy;
- December 1, 2017: clarified language and updated values under *Traffic Noise Prediction, Analysis of Traffic Noise Abatement* and *Reasonableness* sections; and,
- May 15, 2018: added clarifying language.

The latest revised Policy shall apply to projects requiring a traffic noise study that were initiated after the effective revision date. It may also apply to other studies not yet completed before the effective revision date and will be evaluated for applicability, satisfying criteria, and enhancements to proposed TNAM for those ongoing studies.