Design Noise Study Report (NSR) Addendum

Florida Department of Transportation District One

I-75 (SR 93) at SR 72 (Clark Rd)

Sarasota County, Florida

Financial Project ID No. 201277-3-52-01

February 2019

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. §327 and a Memorandum of Understanding (MOU) dated December 14, 2016 and executed by the Federal Highway Administration and FDOT.

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Financial Project ID No. 201277-3-52-01

Prepared for:



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Executive Summary

A design traffic noise update analysis has been performed for the Interstate 75 (I-75) improvements at the State Road (SR) 72 (Clark Road) interchange. An update was performed to the Traffic Noise Model (TNM) that was prepared as part of the original Project Development and Environment (PD&E) study and approved under the Type 2 Categorical Exclusion on December 8, 2011 (Date of Public Knowledge), by the Federal Highway Administration (FHWA).

This update utilized the Phase II design plans for the I-75/Clark Road interchange improvement project. The concept plans from the PD&E were compared to the Phase II design plans to determine what changes may have occurred during the design phase. This re-analysis was completed to incorporate the current design, to determine if additional noise-sensitive receptors were permitted between the time of the original noise study and Date of Public Knowledge, determine if the noise barriers considered cost reasonable and feasible during the original PD&E study were still cost reasonable and feasible, and incorporate the updated requirements of the Code of Federal Regulations Title 23 Part 772 (23 CFR 772): *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (effective July 13, 2011) and the Florida Department of Transportation (FDOT) *PD&E Manual, Part 2, Chapter 18: Highway Traffic Noise* (updated June 2017).

The prediction of future traffic noise levels with the roadway improvement was performed using the FHWA latest computer model for highway traffic noise prediction and analysis, TNM – Version 2.5. The TNM propagates sound energy, in one-third octave bands, between highways and nearby receptors taking into account the intervening ground's acoustical characteristics and topography, and intervening structures (i.e., buildings).

A total of 387 noise receptors were modeled in the TNM, representing 461 residences within the Camelot Lakes, Camelot Lakes East, Windward Isle, Grove Pointe, Foxfire West, Lakewood, Orange Acres and Sunrise Golf Club communities, the pool at Orange Acres and two hotels with outdoor pools. This includes 22 new receptors incorporated in the noise model which represent the Days Inn pool, Quality Inn pool, and residences east of the Camelot Lakes East entrance (Receptor IDs N1 – N20).

Noise levels at 216 residences are predicted to approach, meet or exceed the FHWA noise abatement criteria (NAC) for the 2040 Build condition. Impacts occurred within Camelot Lakes, Windward Isle, Grove Pointe, Camelot Lakes East, Foxfire West and Lakewood communities. Three barriers were evaluated for the impacted receptors to determine if noise barriers would provide the minimum required insertion loss (or more) at a cost within the cost reasonable limit for the receptors predicted to be affected by traffic noise with the proposed improvements. Barrier 1 was evaluated for the 137 impacted receptors within Camelot Lakes and Grove Pointe communities. Barrier 2 was evaluated for the 67 impacted receptors within Camelot Lakes East and Foxfire West communities. Barrier 3 was evaluated for the 12 impacted receptors within the Lakewood community. The construction of two noise barriers (Barrier 1 and Barrier 2) were determined to be a feasible and reasonable means to reducing predicted traffic noise levels for all 204 impacted receptors within Camelot Lakes, Windward Isle, Grove Pointe, Camelot Lakes East and Foxfire West communities. Barrier 3 was determined to not

be a reasonable means to reducing traffic noise levels for the 12 impacted receptors within the Lakewood community.

Noise Barrier Engineering Feasibility Reviews were conducted for these barriers to determine if construction is feasible and reasonable for the analyzed noise barriers, and it was determined there were no issues that would preclude noise barrier construction. It was determined that Barrier 1 and Barrier 2 are feasible and reasonable means to reduce traffic noise levels and are recommended for the proposed project.

No outdoor advertising signs were identified within the project area; therefore, no impacts to outdoor signs are anticipated.

The FDOT coordinated with the benefited property owners and residents to determine their desire for the proposed barriers. Coordination included mailed survey packages and a noise barrier workshop held on August 15, 2017. Based on the coordination and responses, the benefited property owners and residents were in favor of constructing Barrier 1 and Barrier 2. The results of the surveys indicated that Ashlar Stone is the preferred texture and Light Beige the preferred color of the property owners and residents. Based on the results, the FDOT District 1 plans to move forward with the design of Barrier 1 and Barrier 2, and they will be included with future project construction.

The FDOT will coordinate with Sarasota County prior to construction to determine the County's preference on the color and texture of reasonable and feasible noise barriers for the roadway side of the noise barriers.

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SECTION 1 INTRODUCTION

1.1 Project Description

The purpose of this project is to provide improvements for the interchange of Interstate 75 (I-75) at State Road (SR) 72 (Clark Road) in the form of a Diverging Diamond Interchange (DDI). Clark Road, in Sarasota County, is currently a 6-lane urban facility and is classified as an Urban Minor Arterial. The proposed improvements include reconstructing Clark Road to an 8-lane divided urban facility from Gantt Road (M.P. 4.204) to east of Queensbury Boulevard (M.P. 5.282). The total length of the proposed project limits along Clark Road is approximately 1.1 miles. The proposed project limits along I-75 are from approximately 1.1 miles south of Clark Road to just north of Proctor road, a length of approximately 2.1 miles. A project location map is provided below (**Figure 1-1**).

The proposed improvements for I-75 include widening to provide auxiliary lanes for each on- and offramp south of the Clark Road interchange, widening for a 12-foot auxiliary lane north of the Clark Road interchange in each direction, milling and resurfacing the existing mainline pavement, and reconstruction of all of the ramps at the Clark Road interchange. The southbound and northbound offramps will consist of two exit lanes off of I-75; one exit only lane and one decision lane. The northbound and southbound on-ramps will consist of two lanes; ultimately the two lanes will merge as one lane along I-75 and become the new auxiliary lanes.

The proposed improvements along Clark Road include providing an eight-lane divided DDI with 11-foot travel lanes and a 7-foot wide buffered bike lane in each direction of travel. Clark Road will utilize an urban typical from Gantt Road to east of the I-75 interchange with curb and gutter to the inside and outside. Clark Road will utilize a rural typical from east of the I-75 interchange to east of Queensbury Boulevard with 10-foot outside shoulders (7-foot paved) and 8-foot unpaved median shoulders.

The purpose of this report is to reevaluate the traffic noise study conducted during the Project Development and Environment (PD&E) study. This noise study update utilized the Phase II plans (**Appendix A** – on CD) to update the traffic noise analysis. This re-analysis was completed to incorporate the current design, incorporate additional noise-sensitive receptors permitted between the time of the original noise study and Date of Public Knowledge, determine if the noise barriers considered cost reasonable and feasible during the original PD&E study were still cost reasonable and feasible, and incorporate the updated requirements of the Code of Federal Regulations Title 23 Part 772 (23 CFR 772): *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (effective July 13, 2011) and the Florida Department of Transportation (FDOT) *PD&E Manual, Part 2, Chapter 18: Highway Traffic Noise* (updated June 2017).



1.2 Summary of PD&E Results

The PD&E study limits were from SR 681 to University Parkway. The PD&E Study Noise Study Report (NSR) was completed in June 2012. The NSR was originally completed earlier, but was later revised after the Date of Public Knowledge to comply with federal policy/regulation changes and update to the PD&E manual. The NSR determined that with the proposed improvements at the I-75/Clark Road interchange, 252 noise-sensitive receptors were predicted to experience traffic noise levels that approach, meet, or exceed the noise abatement criteria (NAC). This included residences within Camelot Lakes, Camelot Lakes East, Windward Isle, Grove Pointe, Lakewood and Orange Acres communities. Based on the results of the analysis, the construction of two noise barriers along I-75 and portions of Clark Road were determined to be a potentially feasible and cost reasonable method of reducing traffic noise at 235 impacted residences. Those noise-sensitive receptors include residences in the Camelot Lakes, Camelot Lakes East, Windward Isle and Grove Pointe communities. A summary of the barrier analyses conducted during the PD&E for the I-75/Clark Road interchange are provided below.

Barrier 2

Barrier 2 was evaluated for the pool located within the Orange Acres community, located south of Clark Road, to the west of I-75, which is predicted to be impacted by the proposed I-75 improvements. The predicted maximum traffic noise level in the area of frequent use that is impacted is 68.7 decibels on the A-weighted scale [dB(A)] – a level that exceeds the NAC. The impacted frequent use area includes the pool and the surrounding deck area. For non-residential properties such as this, the FDOT's *A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special Use Locations* procedures were used to determine if a noise barrier could be considered a potential abatement measure.

The results of both the right of way (ROW) and shoulder barrier evaluations indicate that the barriers could not provide any portion of the affected area with a reduction in traffic noise levels of at least five dB(A). As such, neither a ROW or shoulder barrier is considered a feasible noise abatement measure for the affected special use area. An opening required in the barrier to maintain access via Catamaran Drive did not allow for a barrier of sufficient continuous length to be evaluated for the special use area.

Barrier 3 (Design Barrier 1)

Barrier 3 was evaluated during the PD&E for the 161 impacted residences in the Windward Isle, Camelot Lakes Mobile Home Park and Grove Pointe communities. The impacted receptors were predicted to experience future traffic noise levels ranging from 66.1 to 77.5 dB(A) with the proposed improvements to I-75. The barrier could provide at least a 5 dB(A) reduction for 63 to 156 of the impacted receptors at heights ranging from 10 to 22 feet. Five impacted receptors could not achieve the minimum 5 dB(A) reduction. The noise reduction design goal of 7 dB(A)could be achieved for 23 to 120 of the impacted receptors at barrier heights ranging from 10 to 22 feet. At those heights, the total estimated cost to construct the barrier ranged from \$1,410,000 to \$4,046,460. The cost per benefited receptor ranged from \$18,477 to \$22,381 – costs that are below the FDOT cost reasonable guideline. A noise barrier was determined to be a potentially feasible and cost reasonable abatement measure for the residences in the Windward Isle, Camelot Lakes and Grove Pointe communities.

Barrier 7 (Design Barrier 3)

Barrier 7 was evaluated during the PD&E for the 11 impacted residences in the Lakewood community. The impacted receptors were predicted to experience future traffic noise levels ranging from 66.2 to 70.7 dB(A) with the proposed improvements to I-75. Two barriers were evaluated at this location, a ROW barrier located five feet inside the FDOT ROW and a shoulder barrier located along the outside shoulder of I-75 as well as the off-ramp from northbound I-75 to Clark Road.

The ROW barrier could provide at least a 5 dB(A) reduction for one to 11 of the impacted receptors at heights ranging from 8 to 22 feet. The noise reduction design goal of 7 dB(A)could be achieved for two to seven of the impacted receptors at barrier heights ranging from 14 to 22 feet. At those heights, the total estimated cost to construct the barrier ranged from \$1,178,940 to \$1,878,000. The cost per benefited receptor ranged from \$128,417 to \$170,727, costs that exceed the FDOT cost reasonable guideline. Even though Barrier 7 located along the ROW was predicted to provide all 11 of the impacted residences with a reduction in traffic noise of at least 5 dB(A) and meet the noise reduction design goal for at least one additional residence, the cost per benefited residence exceeds the cost reasonable criteria; therefore this barrier was not considered a reasonable noise abatement measure. Because of the low density of residential development, the barrier could not provide a minimum 5 dB(A) reduction to enough residences to meet the cost reasonable criteria.

The results of the shoulder barrier evaluation indicated that the shoulder barrier system could not provide any of the impacted residences with the noise reduction design goal of at least 7 dB(A) or more. As such, a shoulder barrier was not considered a reasonable abatement measure for the impacted residences within the Lakewood community. The limitations placed on the height of the shoulder barriers due to their location did not allow for a barrier of sufficient height to be evaluated for the impacted residences.

Barrier 8 (Design Barrier 2)

Barrier 8 during the PD&E was evaluated for the 79 impacted residences in the Camelot Lakes East and Foxfire West communities. The impacted receptors were predicted to experience future traffic noise levels ranging from 66.0 to 74.9 dB(A) with the proposed improvements to I-75. The barrier could provide at least a 5 dB(A) reduction for three to 79 of the impacted receptors at heights ranging from 10 to 22 feet. The noise reduction design goal of 7 dB(A) could be achieved for eight to 57 of the impacted receptors at barrier heights ranging from 14 to 22 feet. At those heights, the total estimated cost to construct the barrier ranged from \$2,348,220 to \$3,658,380. The cost per benefited receptor ranged from \$34,190 to \$60,211, with costs that were below the FDOT cost reasonable guideline at barrier heights of 16, 20 and 22 feet. A noise barrier was determined to be a potentially feasible and cost reasonable abatement measure for the residences in the Camelot Lakes East and Foxfire West communities.

1.3 Design Improvements

A traffic noise update analysis has been performed for the I-75 improvements at the Clark Road interchange. An update was performed to the Traffic Noise Model (TNM) that was prepared as part of the original PD&E study and approved under the Type 2 Categorical Exclusion on December 8, 2011 (Date of Public Knowledge), by the Federal Highway Administration (FHWA).

The concept plans from the PD&E were compared to the Phase II design plans to determine what changes may have occurred during the design phase. The Phase II design plans can be found in **Appendix A** (provided on CD). This re-analysis was completed to incorporate the current design, incorporate additional noise-sensitive receptors permitted between the time of the original noise study and Date of Public Knowledge, determine if the noise barriers considered cost reasonable and feasible during the original PD&E study were still cost reasonable and feasible, and incorporate the updated requirements of the Code of Federal Regulations Title 23 Part 772 (23 CFR 772): *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (effective July 13, 2011) and the FDOT *PD&E Manual, Part 2, Chapter 18: Highway Traffic Noise* (updated June 2017). The following bullets describe the updates that were incorporated into the TNM model:

- No substantial design changes are proposed from the conceptual design plans during the PD&E. Widening will be completed in the median. The proposed typical sections can be found on **Figure 1-2**. The ramps were designed for the ultimate configuration;
- The original noise study for this project was evaluated based on 23 CFR 772 and the FDOT PD&E Manual, Part 2, Chapter 17, dated May 24, 2011. This noise re-analysis incorporated the requirements of 23 CFR 772: *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (effective July 13, 2011) and the FDOT *PD&E Manual, Part 2, Chapter 18: Highway Traffic Noise* (updated June 2017);
- The Date of Public Knowledge will remain December 8, 2011;
- This noise re-analysis, as well as the original noise study, was evaluated using the latest version of TNM (TNM Version 2.5);
- A land use field review and review of building permits was conducted to include all sites permitted between the date of the initial noise model validation data collection (October 5, 2006) and the Date of Public Knowledge (December 8, 2011). New receptors incorporated in the noise model include the Days Inn pool, Quality Inn pool, and residences east of the Camelot Lakes East entrance (N1 N20). These receptors were added due to additional work along Clark Road not included in the original noise study. The receptor IDs from the PD&E study NSR were used in this design re-analysis, where applicable;
- All residences were modeled as Activity Category B with the abatement criterion set at 67 dB(A);
- The pool at Orange Acres was modeled as Activity Category C with the abatement criterion set at 67 dB(A);
- Days Inn and Quality Inn pools were modeled as Activity Category E with the abatement criterion set at 72 dB(A);
- All receptor heights were set at five feet above ground;

- All bridge sections were modeled as "on structure";
- Ground zones were added for the large ponds north of Clark Road on the east side of I-75 to account for the acoustical effects of water;
- The PD&E NSR included one existing privacy wall at the Grove Pointe subdivision (ranging from approximately 4 feet to 8.5 feet in height). This privacy wall was modeled in the current noise analysis at an approximate height of 6 feet;
- Series of buildings/homes were modeled as building rows in the TNM. The heights and building percentages were the same as those used in the PD&E noise analysis; and
- Speed limits in the model were assumed at the posted speed limits within the project corridor as follows:
 - o I-75: 70 mph
 - o I-75 off-ramps: 55 mph down to 35 mph near Clark Road
 - I-75 onramps: 35 mph (onramp flow control used with max speeds at 65 mph near the interstate merge)
 - Clark Road (SR 72): 35 mph (45 mph west of Gantt Road and east of Hummingbird Avenue)



SECTION 2 METHODOLOGY

The I-75 traffic noise update analysis was performed in accordance with 23 CFR 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (effective July 13, 2011), using methodology established by the FDOT in the *PD&E Manual, Part 2, Chapter 18: Highway Traffic Noise* (updated June 2017).

2.1 Noise Metrics

The prediction of future traffic noise levels with the roadway improvement was performed using the FHWA latest computer model for highway traffic noise prediction and analysis, TNM – Version 2.5. The TNM propagates sound energy, in one-third octave bands, between highways and nearby receptors taking into account the intervening ground's acoustical characteristics and topography, and intervening structures (i.e., buildings). The noise levels presented in this report are expressed in decibels (dB) on the A-weighted scale [dB(A)]. This scale most closely approximates the response characteristics of the human ear to traffic noise and is defined as the level equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as the time-varying sound level during the same time period. All noise levels are reported as equivalent level [Leq(h)] values which theoretically contain the same amount of acoustic energy as an actual time-varying A-weighted sound level over a period of one hour.

2.2 Traffic Data

The traffic data for the future forecast year 2040 that was used in TNM for this project are presented in **Appendix B**. All traffic data came from the *Design Traffic Technical Memorandum* completed for this project, December 2014, and agreed upon by FDOT District 1 in the *Traffic Data for Noise Studies* data sheets that were signed January 2016. For traffic inputs into the model, the lesser of the project demand volumes or LOS "C" volumes were utilized and varied along the corridor. This methodology produces the worst-case traffic noise conditions. Volumes greater than LOS "C" generally operate at lower speeds and produce lower noise levels. Demand volumes were used for all ramps.

2.3 Noise-Sensitive Receptors and Noise Abatement Criteria

Noise-sensitive receptors are defined as discrete or representative locations where frequent human use occurs. To evaluate traffic noise, the FHWA established NAC. As shown in **Table 2-1**, the NAC vary according to a property's activity category. When predicted noise levels approach, meet or exceed the NAC or, when predicted noise levels increase substantially, the FHWA requires that noise abatement measures be considered. The FDOT defines approach to mean within 1.0 dB(A) of the FHWA NAC and considers that a substantial increase will occur if traffic noise levels are predicted to increase by 15.0 or more dB(A) over the existing noise levels as a direct result of a transportation improvement project.

Activity Category	Abatement Level in Leq(h) ¹	Description of Activity Category	
		Lands on which serenity and quiet are of extraordinary	
•	F7 (Extorior)	significance and serve an important public need and where	
A	57 (Exterior)	the preservation of those qualities is essential if the area is	
		to continue to serve its intended purpose.	
B ²	67 (Exterior)	Residential	
		Active sports areas, amphitheaters, auditoriums,	
		campgrounds, cemeteries, day care centers, hospitals,	
		libraries, medical facilities, parks, picnic areas, places of	
C ²	67 (Exterior)	worship, playgrounds, public meeting rooms, public or	
		nonprofit institutional structures, radio studios, recording	
		studios, recreational areas, Section 4(f) sites, schools,	
		television studios, trails, and trail crossings.	
		Auditoriums, day care centers, hospitals, libraries, medical	
D	52 (Interior)	facilities, places of worship, public meeting rooms, public or	
		nonprofit institutional structures, radio studios, recording	
		studios, schools, and television studios.	
		Hotels, motels, offices, restaurants/bars, and other	
E ²	72 (Exterior)	developed lands, properties or activities not included in A-D	
		or F.	
		Agriculture, airports, bus yards, emergency services,	
E		industrial, logging, maintenance facilities, manufacturing,	
I	_	mining, rail yards, retail facilities, shipyards, utilities (water	
		resources, water treatment, electrical), and warehousing.	
G	_	Undeveloped lands that are not permitted.	

Table 2-1 FHWA Abatement Criteria

(Based on Table 1 of 23 CFR Part 772)

¹ The Leq(h) Activity Criteria values are for impact determination only, and are not design standards for noise abatement measures.

² Includes undeveloped lands permitted for this activity category.

Note: FDOT defines that a substantial noise increase occurs when the existing noise level is predicted to be exceeded by 15 decibels or more as a result of the transportation improvement project. When this occurs, the requirement for abatement consideration will be followed.

A total of 387 noise receptors were modeled in the TNM, representing 461 residences within the Camelot Lakes, Camelot Lakes East, Windward Isle, Grove Pointe, Foxfire West, Lakewood, Orange Acres and Sunrise Golf Club communities, the pool at Orange acres and two hotels with outdoor pools. This includes 22 new receptors incorporated in the noise model which represent the Days Inn pool, Quality

Inn pool, and residences east of the Camelot Lakes East entrance (N1 – N20). The location of each of the noise-sensitive receptors is shown in **Appendix C**. The residences modeled include single-family residences. The 461 residences were modeled as Activity Category B, the pool at Orange Acres was modeled as Activity Category C and the hotels were modeled as Activity Category E. Noise abatement measures were considered if the predicted traffic noise level is 66.0 dB(A) or more for Activity Categories B and C, and 71 dB(A) or more for Activity Category E, or if a substantial increase occurs.

Various factors affect the transmittal of sound from a source to a receptor. The factors include vegetation, intervening structures, elevation of the source and/or the receptor, surrounding topography and the type of ground surface between the source and the receptor. The attenuation (reduction) of sound levels due to intervening structures occurs when a receptor's view (line-of-sight) is obstructed or partially obstructed by dense objects (e.g. rows of buildings or other barriers). The attenuation provided by a row of buildings depends on the actual length and density of the row occupied by the buildings.

2.4 Noise Abatement Measures

While other noise abatement measures were considered during the PD&E, noise barriers were determined to be the only viable abatement measure to reduce traffic noise at existing noise-sensitive receptors. For a noise barrier to be considered feasible and cost reasonable under the procedures within the FDOT *PD&E Manual, Part 2, Chapter 18: Highway Traffic Noise* (updated June 2017), the following conditions should be met:

- The barrier must provide at least a 7.0 dB(A) reduction for at least one benefited receptor;
- The barrier must reduce traffic noise levels a minimum of 5 dB(A) for at least two impacted receptors;
- The barrier should not cost more than \$42,000 per benefited receptor (a benefited receptor is a site that receives at least a 5.0 dB(A) reduction in noise from the barrier). A noise barrier cost of \$30.00 per square foot was used to calculate the cost per benefited receptor; and
- Special land uses should utilize the FDOT's research publication, A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special Use Locations, dated July 2009, to determine if a noise barrier could be considered a potential abatement measure.

Other factors considered when evaluating noise barriers as a potential noise abatement measure address both the feasibility of the barriers (given site-specific details, can a barrier actually be constructed) and the reasonableness of the barriers. Feasibility factors that relate to noise barriers include driver/pedestrian sight distance (safety), ingress and egress requirements to and from affected properties, ROW requirements including access rights and easements for construction and/or maintenance, impacts on existing/planned utilities, and drainage.

The TNM accounts for the shielding effect of a noise barrier, the diffraction of sound over a noise barrier, and the effects of the ground between a barrier and a receptor (i.e. sound absorption). The net effect of the barrier shielding is referred to as insertion loss. In other words, insertion loss is the difference in sound level before and after the installation of the barrier.

SECTION 3 TRAFFIC NOISE ANALYSIS

3.1 Model Validation

As previously stated, future noise levels with the proposed improvements were modeled using the TNM Version 2.5. To ensure that these predictions were as accurate as possible, the computer model was validated using measured noise levels at locations adjacent to the project corridor. Traffic and meteorological data, including traffic volumes, traffic mix vehicle speeds, background noise and atmospheric conditions, were recorded during each measurement period.

The field measurements for the I-75/Clark Road interchange noise evaluation were conducted in accordance with the FHWA's *Measurement of Highway Related Noise*. Each field measurement was obtained using a Larson Davis SoundTrack LXT2 Type 2 Sound Level Meter. The meter was calibrated before and after each monitoring period with a Larson Davis CAL 150 Type 2 Sound Level Calibrator.

The measured field data were used as input for the TNM to determine if, given the topography and actual site conditions of the area, the computer model could re-create the measured noise levels with the existing roadway. Following FDOT guidelines, a noise prediction model is considered valid for the use of predicting traffic noise levels if the measured and predicted noise levels are within a tolerance standard of 3 dB(A). Field measurements were taken on January 29, 2016, at two stations within the project limits. Station 1 field measurements were taken along northbound I-75 near approximate station 1944+00. The sound level meter was placed approximately 35 feet from the edge of pavement at a height of five feet above ground. Station 2 field measurements were taken along eastbound Clark Road near approximate station 301+20. The sound level meter was placed approximately 35 feet from the edge of pavement at a height of five feet above ground.

The locations at which the measurements were taken can be seen in **Appendix C**. Three sets of 10minute measurements were taken for both directions of traffic. Data collected in the field and information that supports the model validation can be found in **Appendix D**.

Table 3-1 presents the field measurements and the computer validation results for the I-75/Clark Road interchange project. As shown, the computer model predicted noise levels within 3 dB(A) of the field measured noise levels in all instances. The ability of the model to accurately predict noise levels for the project was confirmed with the three measurement periods taken at each station. The slightly higher noise levels measured during the field reviews are due to loud exhaust of certain vehicles, planes overhead, rumble strips along Clark Road, and other external noise factors not considered in the model. Documentation in support of the validation is provided in **Appendix D** of this report.

Location	Measurement Period	Modeled dB(A)	Measured dB(A)	Difference (Modeled - Measured) dB(A)
Station 1	10:59 – 11:09	78.4	78.8	-0.4
NB I-75 near approximate	11:16 – 11:26	78.8	79.0	-0.2
station 1944+00	11:32 – 11:42	78.7	79.0	-0.3
Station 2	12:08 – 12:18	65.7	67.2	-1.5
EB Clark Road near	12:24 – 12:34	65.7	66.0	-0.3
301+20	12:38 - 12:48	67.9	69.7	-1.8

Table 3-1Validation Data

3.2 Predicted Noise Levels

As shown in **Table 3-2**, noise levels at 216 residences are predicted to approach, meet or exceed the NAC for the 2040 Build condition. The locations of the modeled receptors, as well as which receptors were impacted, are shown in **Appendix C**. Impacts occurred within Camelot Lakes, Camelot Lakes East, Foxfire West, Grove Pointe and Lakewood communities. No impacts were predicted from the TNM for the pool at Orange Acres, Quality Inn pool and Days Inn pool. The receptor IDs from the PD&E study NSR were used for this re-analysis, with the addition of 22 new receptors not included in the PD&E study NSR (N1 – N20, Quality Inn Pool and Days Inn Pool). The results of the noise analysis are reflective of the results from the PD&E study with some minor differences likely due to detailed design plans and topographic information, as well as current traffic data. The TNM files and results of the analyses can be found in **Appendix E** (provided on CD).

Abatement measures must also be considered when a substantial increase in traffic noise would occur as a direct result of the transportation project. Following FDOT procedure, a substantial increase is defined as 15 dB(A), or more, above existing conditions. A substantial increase typically occurs in areas where traffic noise is a minor component of the existing noise environment but could become a major component after the project is constructed. Traffic noise from I-75 and Clark Road is a notable noise source at noise-sensitive receptors adjacent to the existing road. The current design is similar to the conceptual design analyzed during the PD&E study NSR and is located within the existing I-75 and Clark Road ROWs. The PD&E traffic noise study, as well as the current design re-analysis, demonstrated that the project would not cause a substantial increase in noise levels compared to the existing conditions.

Decenter ID	# of Units per	2040 Build Noise	Approaches, Meets
Receptor ID	Receptor	Levels dB(A)	or Exceeds NAC?
101	1	57.7	No
102	1	58.9	No
103	1	67.2	Yes
104	1	67.4	Yes
105	1	67.8	Yes
106	1	67.5	Yes
107	1	67.5	Yes
108	1	67.7	Yes
109	1	68.2	Yes
110	1	68.3	Yes
111	1	68.5	Yes
112	1	68.2	Yes
113	1	68.1	Yes
114	1	68.0	Yes
115	1	65.0	No
116	1	65.7	No
117	1	66.0	Yes
118	1	66.1	Yes
119	1	66.3	Yes
120	1	66.2	Yes
121	1	66.2	Yes
122	1	66.0	Yes
123	1	66.0	Yes
124	1	66.0	Yes
125	1	65.0	No
126	2	65.5	No
127	2	65.0	No
128	2	64.8	No
129	2	64.6	No
130	2	65.7	No
131	2	65.7	No
132	1	65.7	No
133	1	69.7	Yes
134	1	69.1	Yes
135	1	67.5	Yes
136	1	69.2	Yes
137	1	71.2	Yes
138	1	70.6	Yes
139	1	67.5	Yes
140	1	67.7	Yes
141	1	68.9	Yes
142	2	65.1	No
143	1	67.6	Yes
144	1	68.2	Yes
145	1	69.6	Yes
146	1	72.4	Yes
147	1	72.5	Yes
148	1	69.6	Yes
149	1	68.0	Yes

Table 3-2Traffic Noise Levels

December ID	# of Units per	2040 Build Noise	Approaches, Meets
Receptor ID	Receptor	Levels dB(A)	or Exceeds NAC?
150	1	66.9	Yes
151	1	66.5	Yes
152	1	68.1	Yes
153	1	69.6	Yes
154	1	72.1	Yes
155	1	72.9	Yes
156	1	72.2	Yes
157	1	69.4	Yes
158	1	68.0	Yes
159	1	66.3	Yes
160	1	66.2	Yes
161	1	67.6	Yes
162	1	69.4	Yes
163	1	70.9	Yes
164	1	74.6	Yes
165	1	74.5	Yes
166	1	71.5	Yes
167	1	69.4	Yes
168	1	67.6	Yes
169	1	66.6	Yes
170	1	66.6	Yes
171	1	67.8	Yes
172	1	69.1	Yes
173	1	71.6	Yes
175	1	74.8	Yes
176	1	75.7	Yes
177	1	71.4	Yes
178	1	69.5	Yes
179	1	67.7	Yes
180	1	66.8	Yes
174	1	63.3	No
181	1	64.6	No
182	1	66.4	Yes
183	1	67.5	Yes
184	1	69.1	Yes
185	1	72.0	Yes
186	1	74.9	Yes
187	1	75.4	Yes
188	1	75.3	Yes
189	1	75.1	Yes
190	1	75.1	Yes
191	1	74.9	Yes
192	1	75.5	Yes
193	1	75.2	Yes
194	1	75.5	Yes
195	1	75.5	Yes
196	1	75.2	Yes
197	1	75.2	Yes
198	1	75.0	Yes
199	1	75.1	Yes

December ID	# of Units per	2040 Build Noise	Approaches, Meets
Receptor ID	Receptor	Levels dB(A)	or Exceeds NAC?
200	1	74.2	Yes
201	1	70.0	Yes
202	1	67.9	Yes
203	1	66.2	Yes
204	1	64.6	No
205	1	63.2	No
206	1	70.7	Yes
207	1	71.0	Yes
208	1	70.6	Yes
209	1	70.7	Yes
210	1	70.7	Yes
211	1	70.6	Yes
212	1	70.5	Yes
222	1	70.6	Yes
223	1	70.4	Yes
224	1	70.3	Yes
225	1	70.3	Yes
226	1	70.2	Yes
227	1	70.1	Yes
213	2	67.5	Yes
214	3	67.5	Yes
215	2	67.3	Yes
216	2	64.9	No
217	3	64.1	No
218	2	63.9	No
219	2	63.8	No
220	3	63.2	No
221	2	62.8	No
228	1	67.3	Yes
229	1	64.7	No
230	1	63.8	No
231	1	62.9	No
232	2	66.9	Yes
233	2	66.6	Yes
234	1	64.0	No
235	2	62.8	No
236	2	63.3	No
237	1	63.0	No
238	1	64.6	No
239	1	66.6	Yes
240	1	68.8	Yes
241	1	69.9	Yes
242	1	69.8	Yes
243	1	69.4	Yes
244	1	70.2	Yes
245	1	70.3	Yes
246	1	69.8	Yes
247	1	69.6	Yes
248	1	69.6	Yes
249	1	69.5	Yes

December ID	# of Units per	2040 Build Noise	Approaches, Meets
Receptor ID	Receptor	Levels dB(A)	or Exceeds NAC?
250	1	69.7	Yes
251	1	69.7	Yes
252	1	69.9	Yes
253	1	69.7	Yes
254	1	69.6	Yes
255	1	69.7	Yes
256	1	69.5	Yes
257	1	69.6	Yes
258	1	69.9	Yes
259	1	69.5	Yes
260	1	69.6	Yes
261	1	69.7	Yes
262	1	68.6	Yes
263	1	65.7	No
264	1	63.8	No
265	1	61.8	No
266	1	60.2	No
268	1	62.6	No
269	1	63.7	No
270	1	63.0	No
271	1	62.8	No
272	1	62.4	No
273	2	62.1	No
274	2	62.1	No
275	2	62.0	No
276	2	61.8	No
277	2	61.7	No
278	2	61.5	No
279	1	61.8	No
280	1	62.7	No
281	1	62.1	No
282	1	60.5	No
283	2	60.8	No
284	1	60.1	No
285	1	60.1	No
631	1	61.7	No
632	1	63.3	No
633	1	64.3	No
634	2	64.2	No
635	2	63.9	No
636	2	63.7	No
637	2	64.3	No
638	2	64.4	No
639	1	64.6	No
640	2	65.1	No
641	2	65.1	No
642	2	65.8	No
643	1	61.1	No
644	4	61.4	No
645	6	61.9	No

December 1D	# of Units per	2040 Build Noise	Approaches, Meets
Receptor ID	Receptor	Levels dB(A)	or Exceeds NAC?
646	4	62.3	No
647	1	63.4	No
648	2	62.8	No
267	1	61.6	No
617	1	63.9	No
618	1	59.8	No
619	1	59.6	No
620	1	61.5	No
621	1	61.6	No
622	1	60.6	No
623	1	60.5	No
624	1	59.7	No
625	2	59.3	No
626	2	59.8	No
627	1	60.4	No
628	1	60.4	No
629	1	61.0	No
630	1	61.3	No
QualityInnPool	1	57.4	No
DavsInnPool	1	56.9	No
385	1	66.8	Yes
395	1	64.9	No
402	1	62.7	No
376	1	68.9	Yes
384	1	66.1	Yes
394	1	64.2	No
400	1	62.4	No
401	1	61 7	No
375	1	69.8	Yes
383	1	66.5	Yes
393	1	64.2	No
398	1	62.4	No
399	1	61.2	No
374	1	69.4	Yes
381	1	67.0	Yes
382	1	65.4	No
397	1	61 3	No
373	1	68.5	Yes
380	1	65.0	No
391	1	63.2	No
392	1	62.3	No
396	1	60.6	No
372	1	68.5	Vec
379	1	64.7	No
390	1	67.7	No
371	1	62.2	νος
372	1	64 5	No
389	1	67 1	No
370	1	68.2	Voc
277	1	6/ 0	No
5//		04.8	INO

December ID	# of Units per	2040 Build Noise	Approaches, Meets
Receptor ID	Receptor	Levels dB(A)	or Exceeds NAC?
388	1	61.9	No
387	1	61.9	No
369	1	68.3	Yes
386	1	62.0	No
403	1	65.1	No
404	1	65.1	No
405	1	65.3	No
406	1	65.5	No
407	1	65.8	No
408	1	65.7	No
409	1	66.0	Yes
410	1	66.3	Yes
411	1	67.1	Yes
412	1	67.4	Yes
413	1	67.7	Yes
414	1	68.1	Yes
415	1	68.3	Yes
416	1	68.5	Yes
417	1	69.0	Yes
418	1	69.2	Yes
419	1	69.1	Yes
420	1	69.0	Yes
421	1	69.1	Yes
422	1	69.4	Yes
423	1	69.1	Yes
424	1	69.1	Yes
425	1	69.5	Yes
426	1	63.1	No
427	1	63.6	No
428	1	64.1	No
429	1	64.9	No
430	1	64.9	No
431	1	65.1	No
432	1	65.3	No
433	1	65.6	No
434	1	66.0	Yes
435	1	66.4	Yes
436	1	66.6	Yes
437	1	66.8	Yes
438	1	67.1	Yes
439	1	67.1	Yes
440	1	67.2	Yes
441	1	67.3	Yes
442	1	67.5	Yes
443	1	67.3	Yes
444	2	63.5	No
445	2	63.8	No
446	2	64.3	No
447	2	65.1	No
448	1	65.6	No
L			-

Descriter	# of Units per	2040 Build Noise	Approaches, Meets
Receptor ID	Receptor	Levels dB(A)	or Exceeds NAC?
449	1	63.3	No
450	2	63.8	No
451	2	64.2	No
452	1	64.6	No
453	1	64.6	No
454	2	63.2	No
455	2	63.1	No
456	1	63.3	No
457	1	63.8	No
458	2	62.4	No
459	2	62.8	No
460	2	63.2	No
461	2	63.5	No
462	2	63.0	No
471	1	71.1	Yes
472	1	68.9	Yes
473	1	67.2	Yes
474	1	65.9	No
475	1	64.7	No
476	1	63.4	No
463	1	73.9	Yes
464	1	73.7	Yes
465	1	73.8	Yes
466	1	73.7	Yes
467	1	73.8	Yes
468	1	74.1	Yes
469	1	74.0	Yes
470	1	74.1	Yes
477	1	69.4	Yes
478	1	69.6	Yes
479	1	69.7	Yes
480	1	70.2	Yes
481	1	70.2	Yes
482	1	70.3	Yes
483	1	70.5	Yes
486	1	67.0	Yes
487	1	67.1	Yes
488	2	67.2	Yes
489	2	67.6	Yes
490	1	68.0	Yes
491	1	64.3	No
492	2	64.0	No
493	2	64.2	No
494	2	64.8	No
499	2	63.2	No
500	3	63.0	No
501	2	63.3	No
484	1	71.8	Yes
485	1	69.6	Yes
495	1	68.1	Yes
L	1		

Descriter	# of Units per	2040 Build Noise	Approaches, Meets		
Receptor ID	Receptor	Levels dB(A)	or Exceeds NAC?		
496	1	66.6	Yes		
497	1	65.0	No		
498	1	63.9	No		
502	1	67.1	Yes		
503	1	67.5	Yes		
504	1	69.7	Yes		
505	1	69.1	Yes		
506	1	68.8	Yes		
507	1	68.1	Yes		
508	1	67.3	Yes		
509	1	68.4	Yes		
510	1	68.8	Yes		
511	1	72.0	Yes		
512	1	66.9	Yes		
513	1	61.6	No		
514	1	59.6	No		
515	1	61.0	No		
516	1	59.0	No		
N1	1	61.4	No		
N2	1	61.7	No		
N3	1	61.1	No		
N4	1	60.9	No		
N5	1	60.9	No		
N6	1	60.7	No		
N7	1	60.3	No		
N8	1	59.9	No		
N9	1	58.7	No		
N10	1	59.3	No		
N11	1	58.7	No		
N12	1	58.1	No		
N13	1	57.6	No		
N14	1	57.1	No		
N15	1	56.7	No		
N16	1	56.5	No		
N17	2	58.1	No		
N18	2	57.6	No		
N19	2	56.5	No		
N20	1	55.8	No		

3.3 Noise Barrier Analysis

Noise abatement measures including traffic management, alignment modifications, property acquisition, land use controls, and noise barriers were evaluated in the PD&E phase noise analysis. Noise barriers were determined to be the only viable abatement measure to reduce traffic noise at existing noise-sensitive receptors. The different noise abatement measures as well as reasonableness and feasibility criterion/evaluation factors are provided in **Section 2**.

As previously stated, in year 2040 with the proposed improvements to I-75 and Clark Road, noise levels are predicted to approach, meet, or exceed the NAC at 216 residences. The following presents the results of the noise barrier analysis performed to determine if noise barriers would provide at least the minimum required insertion loss at a cost within the cost reasonable limit for the receptors predicted to be affected by traffic noise with the proposed I-75 and Clark Road improvements. A barrier analysis was not performed for the pool at Orange Acres, as conducted during the PD&E and determined to not be a reasonable noise abatement measure, since no impacts were anticipated with the proposed design. Documentation in support of the noise barrier analyses, including the TNM files, is provided in **Appendix F** (provided on CD).

Design Barrier 1 (Barrier 3 PD&E) – Windward Isle, Camelot Lakes and Grove Pointe

Barrier 1 was evaluated for the 137 impacted receptors within Camelot Lakes and Grove Pointe communities (receptor IDs 103-114, 117-124, 134-141, 144-173, 175-180, 182-203, 207-215, 223-228, 232-233 and 239-262). The impacted receptors consist of single-family residences. The impacted receptors are anticipated to experience traffic noise levels between 66.1 and 76.1 dB(A) with the proposed improvements. This noise-sensitive area was evaluated using a barrier located five feet inside the existing ROW along Clark Road and the southbound I-75 off-ramp (Ramp D) [Segment 1] and a barrier 12 feet inside the ROW along southbound I-75 [segment 2]. The first barrier segment was evaluated along the north side of Clark Road from approximate Sta. 67+40 and continued north along the I-75 off-ramp to approximate Sta. 1928+40. The second barrier segment was evaluated along the southbound I-75 ROW from approximate Sta. 1927+00 to approximate Sta. 130+40 (PC Station Equation: Sta. 1954+84.60 = Sta. 127+73.76). Overlap was provided between the evaluated barrier segments that was a minimum of four times the width of the gap between the barrier segments. The gap and overlap of barriers was provided to allow maintenance access. The overall evaluated barrier length was 6,256 feet. The barrier location is provided in Appendix C. The height of the barrier was evaluated in two-foot increments from 8 to 22 feet. In 2018, it was determined that five feet of additional right of way is needed for maintenance behind the proposed noise barrier along the I-75 southbound off-ramp from STA. 910+35.86 to STA. 912+48.10, a distance of 208.7 feet (totaling 1,045 square feet/0.02 acres). The estimated cost of the additional ROW is \$30,900 and was included in the evaluation for the cost for benefited receptor shown in Table 3-3. The additional ROW is shown in Figure 3-1. In addition, a gap was added to the barrier along Ramp D to improve access for maintenance.



The results of the evaluation are provided in **Table 3-3**. The barrier was evaluated at the full length for all heights in 2-ft increments as described above. The noise levels could be reduced by 7 dB(A) for at least one noise-sensitive receptor at all barrier heights. The barrier could provide a minimum 5 dB(A) reduction to all 137 impacted residences at barrier heights of 20 feet and greater. Further, at heights of 10 feet and greater, the barrier could provide a minimum 5 dB(A) reduction to residences that were not impacted by the improvements. The barrier was further evaluated to determine the highest number of benefited receptors that could achieve the design reduction goal of 7 dB(A) or greater. At a height of 22 feet, the barrier could provide a 7 dB(A) reduction or greater at 135 out of 208 benefited receptors. The optimum barrier length for Barrier 1 was 6,176 feet at a height of 22 feet. The second barrier segment was reduced to approximate Sta. 1927+80 to 130+40, which provides an overlap of approximately 60 feet. At this length and height, the barrier could provide a benefit to all of the 137 impacted residences as well as 71 additional residences not impacted by the proposed improvements. The total estimated cost to construct a barrier is between approximately \$1,907,709 and \$4,159,878. The cost-per-benefited residence was cost reasonable at barrier heights from 12 to 22 feet. The total cost of the barrier at the optimum length and height is \$4,159,878 and a cost of \$19,745 per benefited receptor. These costs include \$30,900 for the additional ROW needed for maintenance behind the barrier. Barrier 1 has been determined to be a feasible and reasonable noise abatement method. A feasibility review was conducted for this barrier and determined to be a feasible means to reduce traffic noise levels. Coordination was conducted to determine the impacted and benefited property owners' and residents' desire for the proposed barrier. This coordination is provided below in **Section 6**.

		Number	Noise Reduction at Impacted Receptors Number dB(A)				Benefited Red	ceptors	Average Reduction for		
Barrier Height (feet)	Barrier Length (feet)	of Impacted Receptors	5 -5.9 dB(A)	6 - 6.9 dB(A)	<u>≥</u> 7 dB(A)	Impacted	Not Impacted	Total	Benefited Receptors dB(A)	Total Estimated Cost	Cost per Benefited Receptor
8	6,256		0	0	0	0	0	0	N/A	N/A	N/A
10	6,256		11	8	7	26	2	28	6.2	\$1,907,709	\$68,132
12	6,256		25	7	21	53	6	59	6.7	\$2,283,070	\$38,696
14	6,256	137	31	20	41	91	11	102	7.0	\$2,658,432	\$26,063
16	6,256		26	31	68	125	11	136	7.6	\$3,033,794	\$22,307
18	6,256		11	26	99	136	29	165	8.1	\$3,409,156	\$20,662
20	6,256		0	13	124	137	60	197	8.5	\$3,784,517	\$19,114
22	6,176		0	2	135	137	71	208	9.0	\$4,106,976	\$19,745

Table 3-3	Barrier 1 Analysis
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Design Barrier 2 (Barrier 8 PD&E) – Camelot Lakes East and Foxfire West

Barrier 2 was evaluated for the 67 impacted receptors within Camelot Lakes East and Foxfire West communities (receptor IDs 409-425, 434-443, 463-473, 477-490, 495-496 and 502-512. The impacted receptors consist of single-family residences. The impacted receptors are anticipated to experience traffic noise levels between 66.0 and 74.1 dB(A) with the proposed improvements. This noise-sensitive area was evaluated using a single barrier along Clark Road, continuing along the northbound I-75 on-ramp and northbound I-75, located 12 feet inside the existing ROW. The barrier was evaluated along

the north side of Clark Road from approximate Sta. 95+80 and continued north along I-75 to approximate Sta. 130+20, a length of 5,682 feet. The barrier location is provided in **Appendix C**. The height of the barrier was evaluated in two-foot increments from 8 to 22 feet.

The results of the evaluation are provided in **Table 3-4**. The barrier was evaluated at the full length for all heights in 2-ft increments as described above. The noise levels could be reduced by 7 dB(A) for at least one noise-sensitive receptor at barrier heights from 12 to 22 feet. The barrier could provide a minimum 5 dB(A) reduction to all impacted residences at barrier heights of 16 feet and greater. Further, at heights of 14 feet and greater, the barrier could provide a minimum 5 dB(A) reduction to residences that were not impacted by the improvements. The barrier was further evaluated to determine the highest number of benefited receptors that could achieve the design reduction goal of 7 dB(A) or greater. At a height of 22 feet, the barrier could provide a 7 dB(A) reduction or greater at 66 of the 120 benefited receptors. The optimum barrier length for Barrier 2 was 5,682 feet at a height of 22 feet. At this length and height, the barrier could provide a benefit to all impacted receptors as well as 53 additional receptors not impacted by the proposed improvements. The total estimated cost to construct a barrier is between approximately \$1,704,714 and \$3,750,369. The cost-per-benefited receptor was cost reasonable at barrier heights from 16 to 22 feet. The total cost of the barrier at the optimum length and height is \$3,750,369 and a cost of \$31,253 per benefited receptor. Barrier 2 has been determined to be a feasible and reasonable noise abatement method. A feasibility review was conducted for this barrier and determined to be a feasible means to reduce traffic noise levels. Coordination was conducted to determine the impacted and benefited property owners' and residents' desire for the proposed barrier. This coordination is provided below in Section 6.

		Number	Noise Reduction at Impacted Receptors dB(A)			Number of	Benefited Red	ceptors	Average Reduction for		
Barrier Height	Barrier Length	of Impacted	5 -5.9	6 - 6.9	<u>></u> 7		Not		Benefited Receptors	Total Estimated	Cost per Benefited
(feet)	(feet)	Receptors	dB(A)	dB(A)	dB(A)	Impacted	Impacted	Total	dB(A)	Cost	Receptor
8	5,682		0	0	0	0	0	0	N/A	N/A	N/A
10	5,682		9	0	0	9	0	9	5.4	\$1,704,714	\$189,413
12	5,682		18	3	8	29	0	29	6.1	\$2,045,656	\$70,533
14	5,682	67	16	16	17	49	1	50	6.7	\$2,386,600	\$47,732
16	5,682	67	19	15	33	67	14	81	6.9	\$2,727,541	\$33,673
18	5,682		1	20	46	67	22	89	7.6	\$3,068,484	\$34,477
20	5,682]	0	2	65	67	42	109	8.0	\$3,409,427	\$31,279
22	5,682		0	1	66	67	53	120	8.4	\$3,750,369	\$31,253

Table 3-4Barrier 2 Analysis

Design Barrier 3 (Barrier 7 PD&E) – Lakewood

Barrier 3 was evaluated for the 12 impacted receptors within the Lakewood community (receptor IDs 369-376, 381 and 383-385). The impacted receptors consist of single-family residences. The impacted residences are anticipated to experience traffic noise levels between 66.1 and 69.8 dB(A) with the proposed improvements. This noise-sensitive area was evaluated using a series of three barriers including twelve feet inside the ROW along northbound I-75, the northbound I-75 exit ramp shoulder and twelve feet inside the ROW for portions of the I-75 northbound off-ramp near Clark Road. The first

barrier segment was evaluated twelve feet inside ROW along the northbound I-75 from approximate Sta. 1877+00 and continued north along I-75 off-ramp to approximate Sta. 1883+60. The second barrier segment was evaluated along the I-75 northbound off-ramp shoulder starting at approximate Sta. 1882+00 and ending at approximate Sta. 1899+00. The third barrier segment was evaluated 12 feet inside the existing ROW along the I-75 northbound off-ramp from approximate Sta. 1896+60 to approximate Sta. 1904+50. Overlap was provided between the evaluated barrier segments that was a minimum of four times the width of the gap between the barrier segments. The overall evaluated barrier length was 3,332 feet. The barrier location is provided in Appendix C. The height of the barrier was evaluated in two-foot increments from 8 to 22 feet for the segments located near the ROW. The maximum height evaluated for the shoulder barrier was 14 feet; however, much of the off-ramp shoulder will be located on retaining wall (approximate Sta. 1886+80 to 1894+70), and the barrier height for these areas is restricted to eight feet in height. To simplify the analysis, the barrier heights discussed in this section refer to the two segments (segments 1 and 3 identified above) located near the ROW. For the 8-ft, 10-ft and 12-ft barrier analyses, the shoulder barrier (segment 2) was held at 8 feet since there is approximately 3-5 feet difference in ground elevation near the ROW to the proposed elevation of the shoulder where the shoulder barrier will be constructed. This was done to provide a uniform effective height of the barrier, to the extent practicable. For the 14-ft, 16-ft and 18-ft barrier analysis, the shoulder barrier (segment 2) height was increased in 2-ft increments for each analysis. The 20-ft and 22ft barrier analyses held the shoulder barrier (segment 2) at 14 feet, since this is the maximum height for a barrier constructed on the shoulder of a roadway. As previously stated, the portion of the shoulder barrier (segment 2) located on retaining wall was held at eight feet for all analyses.

The results of the evaluation are provided in **Table 3-5**. The barrier was initially evaluated at the full length for all heights in 2-ft increments as described above. The length of the barrier was reduced at each evaluated height in an effort to reduce costs, while maintaining the same number of impacted receptors that benefited from the full length barrier. The noise levels could be reduced by 7 dB(A) for at least one noise-sensitive receptor and a minimum 5 dB(A) reduction for at least two noise-sensitive receptors at barrier heights from 10 to 22 feet. The barrier could provide a minimum 5 dB(A) reduction to 9 of 12 impacted residences at barrier heights of 16 feet and greater. At barrier heights ranging from 10 to 22 feet and the lengths shown in **Table 3-5** below, the total estimated cost to construct a barrier ranged from \$489,372 to \$1,288,834. The costs per benefited receptor ranged from \$117,866 to \$182,956, costs that exceed the cost reasonable guideline. Since the cost per benefited residence exceeds the cost reasonable guideline. Since the cost per benefited residence exceeds the cost reasonable criteria, the barrier is not considered a feasible and reasonable noise abatement measure and will not be included in the design plans.

		Number	Noise Reduction at Impacted Receptors dB(A)			Number of	Benefited Red	ceptors	Average Reduction for		
Barrier Height (feet)	Barrier Length (feet)	of Impacted Receptors	5 -5.9 dB(A)	6 - 6.9 dB(A)	<u>≥</u> 7 dB(A)	Impacted	Not Impacted	Total	Benefited Receptors dB(A)	Total Estimated Cost	Cost per Benefited Receptor
8	2,039		0	0	1	1	0	1	7.0	\$489,372	\$489,372
10	2,052		1	1	1	3	0	3	6.6	\$548 <i>,</i> 868	\$182,956
12	2,172		2	0	2	4	0	4	6.7	\$619,651	\$154,913
14	1,285	12	2	0	2	4	0	4	6.9	\$471,463	\$117,866
16	2,952		6	1	2	9	0	9	6.5	\$1,130,650	\$125,628
18	2,912]	4	2	3	9	0	9	7.1	\$1,232,634	\$136,959
20	2,772]	4	3	2	9	0	9	7.0	\$1,262,532	\$140,281
22	2,652		4	2	3	9	0	9	7.1	\$1,288,834	\$143,204

Table 3-5Barrier 3 Analysis

3.4 Engineering Feasibility Review

The Noise Barrier Engineering Feasibility Review was held on May 8, 2017, and May 24, 2017. It was determined that noise barriers are feasible at the proposed locations for Barrier 1 and Barrier 2, which includes the communities of Windward Isle, Camelot Lakes, Grove Pointe, Camelot Lakes East and Foxfire West.

SECTION 4 OUTDOOR ADVERTISING

Desktop and field reviews were conducted to determine if there are any outdoor advertising signs located within the project area that may be affected by the proposed noise barriers. No outdoor advertising signs were identified within the project area; therefore, there are no impacts to outdoor advertising signs are anticipated with the proposed noise barriers.

SECTION 5 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the noise analysis, noise levels at 216 residences are predicted to approach, meet or exceed the NAC for the 2040 Build condition. The construction of two noise barriers (Barriers 1 and 2) along Clark Road and I-75 are a cost reasonable and feasible means to reducing predicted traffic noise levels for most of the impacted noise-sensitive receptors.

Barrier 1 was evaluated for the 137 impacted receptors within Windward Isle, Camelot Lakes and Grove Pointe communities. The barrier could provide a minimum 5 dB(A) reduction to all of the 137 impacted residences at barrier heights of 20 feet and greater. At a height of 22 feet, the barrier could provide a 7 dB(A) reduction or greater at 135 out of the 208 benefited receptors. The optimum barrier length for Barrier 1 was 6,176 feet at a height of 22 feet. At this length and height, the barrier could provide a benefit to all of the 137 impacted residences as well as 71 additional residences not impacted by the proposed improvements. The total cost of the barrier at the optimum length and height is \$4,106,976 and a cost of \$19,745 per benefited residence. In 2018, it was determined that five feet of additional right of way is needed for maintenance behind the proposed noise barrier along the I-75 southbound off-ramp from STA. 910+35.86 to STA. 912+48.10, a distance of 208.7 feet. The ROW cost was included in the costs for the barrier and cost per benefited receptor. The additional ROW is shown in **Figure 2**. In addition, a gap was added to the barrier along Ramp D to improve access for maintenance. Barrier 1 has been determined to be a feasible and reasonable noise abatement method. A barrier detail summary is provided in **Table 5-1**.

Barrier 2 was evaluated for the 67 impacted receptors within Camelot Lakes East and Foxfire West communities. The barrier could provide a minimum 5 dB(A) reduction to all impacted residences at barrier heights of 16 feet and greater. At a height of 22 feet, the barrier could provide a 7 dB(A) reduction or greater at 66 of the 67 impacted residences. The optimum barrier length for Barrier 2 was 5,682 feet at a height of 22 feet. At this length and height, the barrier could provide a benefit to all impacted residences as well as 53 additional residences not impacted by the proposed improvements. The total cost of the barrier at the optimum length and height is \$3,750,369 and a cost of \$31,253 per benefited residence. Barrier 2 has been determined to be a feasible and reasonable noise abatement method. A barrier detail summary is provided in **Table 5-1**.

Barrier 3 was evaluated for the 12 impacted receptors within the Lakewood community. The barrier could provide a minimum 5 dB(A) reduction to 9 of 12 impacted residences at barrier heights of 16 feet and greater. The total estimated cost to construct a barrier ranged from \$489,372 to \$1,288,834. The costs per benefited receptor ranged from \$117,866 to \$182,956, costs that exceed the cost reasonable guideline. Since the cost per benefited residence exceeds the cost reasonable criteria, the barrier is not considered a reasonable noise abatement measure and will not be included in the design plans.

Noise Barrier Engineering Feasibility Reviews were held on May 8, 2017, and May 24, 2017. It was determined that noise barriers are feasible and reasonable at the proposed locations for Barrier 1 and Barrier 2, which includes the communities of Windward Isle, Camelot Lakes, Grove Pointe, Camelot Lakes East and Foxfire West.

No outdoor advertising signs were identified within the project area; therefore, no impacts to outdoor signs are anticipated.

Table 5-1	Barrier Detail Summary
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Barrier ID	Height (ft)	Length (ft)	Approx. Begin Station	Approx. End Station	Location	ROW Offset
Barrier 1	22	6,176	67+40 (Clark Rd)	130+40 (SB I-75)	Clark Rd and west side of I-75	5' along Clark Rd and Ramp D; 12' along I-75
Barrier 2	22	5,682	95+80 (Clark Rd)	130+20 (NB I-75)	Clark Rd and east side of I-75	12'

Table 5-1 (Cont'd)

Barrier ID	Benefited Receptors (Impacted)	Benefited Receptors (non- impacted)	Average Noise Reduction	Selected Color	Selected Texture	Total Barrier Cost	Cost per Benefited Receptor
Barrier 1	137	71	9.0	Light Beige	Ashlar Stone	\$4,106,976	\$19,745
Barrier 2	67	53	8.4	Light Beige	Ashlar Stone	\$3,750,369	\$31,253

SECTION 6 CONSTRUCTION NOISE AND VIBRATION

Based on the existing land use within the limits of this project, construction of the proposed roadway improvements may have noise or vibration impact. If noise-sensitive land uses develop adjacent to the roadway prior to construction, additional impacts could result. It is anticipated that the application of the FDOT Standard Specifications for Road and Bridge Construction will minimize or eliminate most of the potential construction noise and vibration impacts. However, should unanticipated noise or vibration issues arise during the construction process, the Project Manager, in concert with the District Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts. The following sites were identified that have potential for construction noise and vibration impacts:

- Shroeter Dental
- Clark Road Animal Clinic
- All Children's Specialty Care
- Pediatric Pulmonary Associates
- Days Inn Hotel
- Quality Inn Hotel
- Holiday Inn Express & Suites

SECTION 7 COMMUNITY COORDINATION

The FDOT coordinated with benefited property owners and residents to determine their desire for the proposed barriers. Coordination included mailed survey packages and a noise barrier workshop. Notification letters were sent to benefited property owners and residents (benefited receptors) in July 2017 to notify the public of the proposed project and noise barriers, as well as notify them about the August 15, 2017, public workshop to discuss the proposed noise barriers. Display boards, a brief presentation and question and answer session were provided at the public workshop. Property owners and residents were also given the opportunity to talk directly with FDOT staff regarding the proposed noise barriers. Surveys were mailed to the benefited property owners and residents in late July/early August 2017. The surveys were provided to get feedback regarding the desires for noise barriers, and if in favor of the barriers, provide input about preferences for color and texture.

Barrier 1

A total of 59 surveys were received for Barrier 1, including one survey from the Camelot Lakes property owner, 45 surveys from residents within Camelot Lakes, one survey from the Windward Isle property owner/HOA, and 12 surveys from property owners within Grove Pointe. Of the 59 surveys received, all were in favor of construction of Barrier 1. The one survey that was received was from Camelot Communities MHP, LLC is the land owner of Camelot Lakes that represents approximately 75 percent of the benefited receptors for Barrier 1. An additional 45 surveys were received from residents within Camelot Lakes. The Windward Isle Homeowners, Inc. (property owner/HOA) represents the 22 benefited receptors within the Windward Isle community. The portion of Barrier 1 located along Camelot Lakes and Windward Isle accounts for approximately 70 percent of the total length of Barrier 1. Surveys were received from 12 of 29 (approximately 41 percent) of the benefited receptors within Grove Pointe. Based on the surveys received, the preferred color was light beige and the preferred texture was ashlar stone.

Barrier 2

A total of 59 surveys were received for Barrier 2, including one survey from the Camelot Lakes East property owner, 49 surveys from residents within Camelot Lakes East and nine surveys from property owners within Foxfire West. Of the surveys received, 57 of 59 were in favor of construction of Barrier 2 and two were opposed to the construction of Barrier 2. The survey that was received from Camelot Communities MHP, LLC (Camelot Lakes East), which is the land owner that represents approximately 90 percent of the benefited receptors for Barrier 2, was in favor of the proposed Barrier 2. Of the 49 surveys that were received from residents within Camelot Lakes East, 47 were in favor of construction of Barrier 2 and two were opposed to the construction of Barrier 2. The portion of Barrier 2 located along Camelot Lakes East accounts for approximately 65 percent of the total length of Barrier 2. Surveys were received from 9 of 14 (approximately 64 percent) of the benefited receptors within Foxfire West and all were in favor of Barrier 2. Based on the surveys received, the preferred color was light beige and the preferred texture was ashlar stone.

<u>Summary</u>

Based on the coordination and responses, the benefited property owners and residents were in favor of constructing Barrier 1 and Barrier 2. The results of the surveys indicated that ashlar stone is the preferred texture and light beige the preferred color of the property owners and residents for both barriers. Based on the results, the FDOT District 1 plans to move forward with the design of Barrier 1 and Barrier 2, and they will be included with future project construction.

The FDOT will coordinate with Sarasota County prior to construction to determine the County's preference on the color and texture of reasonable and feasible noise barriers for the residential face of the noise barriers.

SECTION 8 REFERENCES

Federal Highway Administration. U.S. Department of Transportation. July 13, 2010. Title 23 CFR, Part 772. *Procedures for Abatement of Highway Traffic Noise and Construction Noise*.

Federal Highway Administration. February 2004. Traffic Noise Model, Version 2.5.

Federal Highway Administration. December 2011. *Highway Traffic Noise: Analysis and Abatement Guidance*.

Federal Highway Administration. May 1996. *Measurement of Highway-Related Noise*. FHWA-PD-96-046.

Florida Department of Transportation. January 1, 2016. *Traffic Noise Modeling and Analysis Practitioner's Handbook*.

Florida Department of Transportation. June 14, 2017. *Project Development and Environment Manual, Chapter 18 – Highway Traffic Noise*.

Florida Department of Transportation. July 2017. *Standard Specifications for Road and Bridge Construction*.

Florida Department of Transportation. 2017. *Plans Preparation Manual*, Volume 1, Chapter 32 – Noise Walls and Perimeter Walls.

Florida Department of Transportation. December 2014. *Design Traffic Technical Memorandum, Interstate 75 and State Road 72 (Clark Road) Interchange*, prepared by American Consulting Engineers of FL, LLC.

Florida Department of Transportation. June 2012. *Noise Study Report, Project Development and Environment Study Interstate 75 - SR 681 to University Parkway,* prepared by Environmental Science Associates, Inc.

Florida Department of Transportation, A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special Use Locations, FL-ER-65-97, July 22, 2009.
Appendix A

Phase II Design Plans

(To be Included on CD in Final Submittal)

Appendix B Noise Model Traffic Data

Federal Ald Number(s):	0	
FPID Number(s):	201277-3-32-01	·
State/Federal Route No.:	0	
Road Name:	I-75	
Project Description:	I-75 at SR 72 (Clark Road)	
Segment Description:	1-75 north of SR 72	
Section Number:	0	
Mile Post To/From:	0	
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Existing Facility:		D =	55.00% %
		T24 =	11.00% % of 24 Hour Volume
Year:	2014	Tpeak =	6.00% % of Design Hour Volume
		MT =	1.87% % of Design Hour Volume
LOS C Peak Hour Directional Volume:	4580	HT=	2.96% % of Design Hour Volume
Demand Peak Hour Volume:	4802	B =	0.12% % of Design Hour Volume
Posted Speed:	70	MC=	0.06% % of Design Hour Volume

No Bulid Alternative (Design Year):		D =	55.00% %
		T24 =	11.00% % of 24 Hour Volume
Year:	2040	Tpeak =	6.00% % of Design Hour Volume
		MT =	1.87% % of Design Hour Volume
LOS C Peak Hour Directional Volume:	4580	HT =	2.96% % of Design Hour Volume
Demand Peak Hour Volume:	6351	B =	0.12% % of Design Hour Volume
Posted Speed:	70	MC=	0.06% % of Design Hour Volume

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Date: 128/16

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FPID Number(s):	201277-3-32-01		
State/Federal Route No.:	0		
Road Name:	I-75		_
Project Description:	I-75 at SR 72 (Clark Road)		_
Segment Description:	I-75 Between Ramps	·	
Section Number:	0		
Mile Post To/From:	0		
Existing Facility:		D =	55.00% %
		T24 =	11.00% % of 24 Hour Volume
Tear:	2014	Tpeak ≃	6.00% % of Design Hour Volume
		MT =	1.50% % of Design Hour Volume
LOS C Peak Hour Directional Volume:	4580	HT =	3.02% % of Design Hour Volume
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No Build Alternative (Design Year):		D=	55.00% %
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I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Akram Hu Print Name

Prepared By:

1/28/16 1/28/16. Date:

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

USSEN M

lane FDOT Reviewer: Print Name Signature

Date; /

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Seten/Froderial Routes No.:	Section Number: 0 Mile Post Ta/Economic	
Read Name: I-75 Project: Description: I-75 at \$17.72 (Clerk Read) Segment: Description: I-75 at \$17.72 (Clerk Read) Segment: Description: I-75 at \$17.72 (Clerk Read) Mode: Description: Mode: These Mode: Description: Mode: These Segment: Description: Mode: These Segment: Description: Mode: These Sec Columns to Right: P for Which Valumes: Vents: Description: Mode: These Sec Columns to Right: P for Which Valumes: Unrobust: of Vents: Description: Mode: These Sec Columns to Right: P for Which Valumes: Unrobust: Description: Mode: These Sec Columns to Right: P for Which Valumes: Unrobust: Description: Mode: These Sec Columns to Right: P for Which Valumes: Unrobust: Description: Mode: These Sec Columns to Right: P for P for Which Valumes: Unrobust:<		
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Total 4580	ACB/	

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Federal Aid Number(s):	0		
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State/Federal Route No.:	Ő		_
Road Name:	I-75		-
Project Description:	⊢75 at SR 72 (Clark Road)		-
Segment Description:	I-75 NB off ramp to SR 72		
Section Number:	0		-
Mile Post To/From:	0		-
Existing Facility:		D =	100.00% %
Moore		T24 ≃	8.40% % of 24 Hour Volume
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rcar:	2040	Tpeak =	4.00% % of Design Hour Volume
OC C Develo Harry Direction of the state		MT =	1.50% % of Design Hour Volume
OS C Peak Hour Directional Volume:	444	HT =	3.02% % of Design Hour Volume
emand Peak Hour Volume:	1440	B =	0.16% % of Design Hour Volume
astea speea:	35	MC =	0.23% % of Design Hour Volume
uild Alternativa (Design Year):		0 c	[100 004]
uild:Alternative (Design Year):		0.*	100 DON
uildiAlternative (Design Year): Nari	2040	D= E4=	100.00%
uild:Alternative (Design Year): Nari	2040	D = T24 = Tprak =	100.00% 8,40% Li of 24 Hour Volume 4,00% Nof Design Hour Volume
uild:Alternative (Design Year): Ran DS C Peak Hour Directional Volume	2040	D= 124= Tpeak= MT=	100.00% 8,40% 4,00% 1,50% 1,50% 1,50% 1,50% 1,50% 1,50% 1,50% 1,50% 1,50% 1,50% 1,50% 1,50% 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,
uild:Alternative (Design Year): ear OS C Peak-Hour Directional Volume emand Peak Hour Volume	2040 875 3600	D= 124= 1peck= MT= HT=	100.00% 8.40% 4.00% 1.50% % of Design Hour Volume 3.02% % of Design Hour Volume 3.02% % of Design Hour Volume
uild:Alternative (Design Year): ear OS C Peak-Hour Directional Volume emand Peak Hour Volume: osted Speed.	2040 875 3440	D.= 124.= Tprok.= MT.= HT.= B.=	100.00% 8.40% is at 24 Hour Volume 4.00% % of Design Hour Volume 1.50% % of Design Hour Volume 3.02% % of Design Hour Volume 0.13% % of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Cram HUSSein a Date: Print Name Signature

1/28/16 1/28/16 FDOT Reviewer: Date: Print Name gnature

		FDOT TRAFFIC DATA R	OR NOISE STUDIE	5+ DETAILED OUTPUT	
Prepared	ja j	Date			
Federal Aid Mumber	(8)				Date:
FPID Number	(8);	201277-3-32-01			I
State/Federal Route I	lo.:	a			1
Road Nai		-75			
Project Descript	Ĩ	I-75 at SR 72 (Clark Road)			
Segment Descripti	June 1	L75 NB off ramp to SR 72			
	Note: Data sheets are to be o	ompleted for each segment heving a c	dunge in traffic para	- Wettrs (i.e., volume posted meed, twicel continuit	
		Entating		No Beild (Design Year)	Build (Decisor Years)
d Paak Peak or Off-Peak LOS C Direction	Vehicle Type	Posted Spred:	2014	Year: 2040	Year: 2040
		Number of Travel Lanes:	1	Number of Travel Lanes:	Posted Speed: 35 Number of Travel Lense: 35
Columns to Right > for Which Vol		Number of Vebicit	ş	Number of Vehicles	Number of Validates
	Autos	USE LUS C		Use LOS C	Use LOS C
	Med Trucks	11		13/0	1370
Peak Diraction	Heavy Tructs	22		43	27
	Mathematical	7-4 P		2	~~~
tek Hour	Total	072		3	e
	Autos	ά,		E-	1440
	Med Tradis	1		I	- F
Off-Peak Direction	Process Review			1	
	Motorcycles	• ••			1
	Total	1			74
	Autos	422		422	
	Med Trucks	7		7	634
Peak Direction	Heavy Trucks	£1		£1	
	Maharradas			1	
	TetoT	7		1	2
	Autoa	207		44	876
	Med Trucks	2		422	834
Off-Peak Direction	Heavy Thucks	13		13	13
	Buses	Ħ		1	97
	Motorcycles	74		1	
				4	•

Federal Aid Number(s):	0		_
State/Federal Route No ·	2012/7-3-32-01		_
Road Name:	0		_
Project Description:	L75 at \$P 73 (Clark Boad)		_
Segment Description:			_
Section Number:	175 58 bit failip from 5K 72		_
Mile Post To/From:	0		-
			_
Enjethen Fratting		· · · ·	
carsting Facility:		D =	100.00% %
Vest	2014	T24 =	8.40% % of 24 Hour Volume
real.	2014	Tpeak =	4.00% % of Design Hour Volume
OS C Bask Hourt Directional Velume	444	MT =	1.50% % of Design Hour Volume
Demand Beak Hour Volume:	444	HT =	3.02% % of Design Hour Volume
Postad Speed	25	B =	0.16% % of Design Hour Volume
Present Present		MC =	0.23% % of Design Hour Volume
No Build Alternative (Design Year):		D =	100.00% %
Year:	2040	124 = Toeak =	8.40% % of 24 Hour Volume
		MT =	1.50% % of Design Hour Volume
LOS C Peak Hour Directional Volume:	444	HT =	3 02% % of Design Hour Volume
Demand Peak Hour Volume:	1440	B =	0.16% % of Design Hour Volume
Posted Speed:	35	MC =	0.23% % of Design Hour Volume
Company of the second s			
Suild Alternative (Design Year)		D+	100.00%
		724 -	8.40% to at 24 Mour Volume
Year/	2040	Tprake	4.00% Sof Design Hour Valume
have a second		Add a	1.50% % of Design Hoer Volume
LOS C Peak Hour Directional Volumer	876	HTH	3.02% 16 of Design Hour Volume
Demand Peak Hour Volume	1440	8=	0.16% So of Design Hode Votume
Posted Speed:	35	htt: >	0 23% It at Discuss Means Malinese
	Contract Participantian Contraction		

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

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Print Name

Prepared By:

<u>|| 28/16</u> <u>||28/16</u> Date:

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

SSEIN

eana FDOT Reviewer: Date: **Print Name** Signature

Prime Pip Description				FULL HARTIC VALA FUR NUSESI	UDIES - DETAILED OUTPUT	
Hold Multicly Other Multicly Other Multicly Destination Pred Multicly 327753637 32775637 32775637 Pred Multicly 32775637 32775637 32775637 Pred Multicly 32775637 32775637 32775637 Pred Multicly 32775637 3275637 3275637 Multicly 3275637 3275637 3276637 3276637 Multicly Multicly 327637 327647 3276637 3276637 Multicly Multicly 3276476337 3276476337 3276476337 327647637637 3276637637 3276637637 3276637637637 3276637637637 3276637637677 327663766377677 327667676377677 $327667676377677677677677677677677 32766776776776776776776776776776776776776$		Prepared By:		Date:	Approved for Use By:	2
Ten benefor Juniticity Landing Landing <thlanding< th=""> Landing Landing</thlanding<>		Federal Ald Number(s):	0		Saction Number:	
$\label{eq:constraints} \mbox{Televal} Telev$		FPID Number(s):		201277-3-92-01	Mile Past Ta/From: 0	
Institute 1.5 1.5 Final Team		State/Federal Route No.:		0		
Metric Interview Jake 15 / 3 (Gen / Fee) Metric Interview - 1/5 (Gen / Fee) Remet Parkin - 1/5 (Gen / Fee) Americ Parkin - 1/5 (Gen / Fee) Remet Parkin - 1/5 (Gen / Fee) Americ Parkin - 1/5 (Gen / Fee) Remet Parkin Name of Markin Press Remet Parkin Name of Markin Press Developed Name of Markin Metric Parkin Name of Markin Marking Parkin Name of Markin Marking Parkin Marking Parkin Marking Parkin Name of Markin Name of Markin Name of Markin Marking Parkin Marking Parkin Name of Markin Name of Markin Name of Markin Name of Markin Marking Parkin Marking Parkin Name of Markin Name of Markin Name of Markin Marking Parkin Marking Parkin Name of Marking Name of Marking Name of Marking Marking Parkin <tht< th=""><th></th><th>Road Name:</th><th></th><th>1-75</th><th>ł</th><th></th></tht<>		Road Name:		1-75	ł	
Feature Learning Image: I		Project Description:		1-75 at SR 72 (Clark Road)		
Mote that is the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed for each segret truth (random proved in the completed in the comp		Segmeat Description:		L-75 SB on ramp from SR 72		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Note: Data sheets are to be c	completed for each segment having a change in traffic	c parameters (i.e., volume posted speed, typical section)	
Omenand feat Feat of Neal Vent 200 Vent 200 Vent 200 Headrin Involution Involution <t< th=""><th></th><th></th><th></th><th>Enlating</th><th>No build (Design Year)</th><th>Raffe (Darters Vers)</th></t<>				Enlating	No build (Design Year)	Raffe (Darters Vers)
Homen/Loc Devoted fames: 3 Proted fames: 3 Proted fames: 3 Sectorms to Right's For Works/Neimers To Uncord Monitor of Total Locs: Monitor Dot Monitor of Total Locs: Monitor Dot Monitor of Total Locs: Monitor Dot Monitor Dot Monitor Dot Monitor Dot Monitor Dot Monitor Dot Monitor D	Demand Peak	Peak or Off-Peak		Year: 2014	Veal: 2040	Year: 2040
See Control to Negle's For Which Volumes (or LCS) Member of Volubids Immber of Volubids Immober of Volubids Immber of V	Hoer/LOS C	Direction	Vehicle Type	Posted Speed: 35 Number of Travel Lanse: 7	Potted Speed: 35	Posted Speed: 35
See Coloring to Right's For Which, Yohmes To Unit Constant Use LOSC USE LOSC <thuse losc<="" th=""> USE LOSC <t< th=""><th></th><th></th><th></th><th>Number of Vehicles</th><th></th><th>Number of Travel Lanes; I</th></t<></thuse>				Number of Vehicles		Number of Travel Lanes; I
$ \ \ \ \ \ \ \ \ \ \ \ \ \ $	See Columns	to Right > for Which Volum	nes To Use (Demand or LOS C)	Use LOS C		Number of Vehicles
Feak Direction Interfracted 12 22 23 33 Demand feak Note Easter 3 3 3 3 3 Demand feak Note Easter 3 3 3 3 3 3 Demand feak Note Easter 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 <			Autos	684	1220	Use LOS C
Preak Introlicion Heave Tracked Bears 22 43 43 Preak Introlicion Networpckie 2 2 2 2 Networpckie 7 7 2 3 3 3 3 Off-Peak Introlicion Networpckie 2 3 3 3 3 3 3 Off-Peak Introlicion Networpckie 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			Red Tracks	11	72	13/0
Pertain fraction fraction Tested 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 <th2< th=""> 2 <th2< th=""> 2</th2<></th2<>		Peak Direction	Heavy Trucks	22	43	3 9
eq:houthouthouthouthouthouthouthouthouthout			Buses	1	2	÷.
$\bernant Park Nou \\ \bernant Diversion \\ \bernant Div$			Motorcycles	2	6	7
Off-Paris Uncodent	Demand Peak Hour		Total	720	1440	1440
Off-Peat Drection Ned Trucks 1 1 1 1 Byte Drection Byte Drection Byte Drection 1 1 1 1 1 Peat Drection Byte Drection Byte Drection 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Autos	£	£-	~~~
Off-Peak Direction New Tracks 1 1 Devel Direction Notorycles 1 1 1 Peak Direction Notorycles 1 1 1 1 Peak Direction Notorycles 1 1 1 1 1 Peak Direction Networycles 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Med Trucks	1	1	
Peak Direction 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <th1< th=""> 1 1 <</th1<>		Off-Peak Direction	Heavy Tracks	1		4
$\bert{linearized} \bert{linearized} line$			Bures.	1	1	Ţ
Peril Incention Attention			MOROTCYCRES	1	1	1
Real Direction 422 422 423 634 Real Direction Herry Trucks 1 1 1 13 Real Direction Every Trucks 1 1 1 26 Metrocycles 1 1 1 26 26 26 Metrocycles 1 44 87 87 26 26 26 Metrocycles 1 1 1 2 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26				7	1	1
Peril Direction 1 7 13 Peril Direction Herry Trutki 13 13 26 Metroryckie 1 1 26 26 Metroryckie 1 1 2 26 Metroryckie 1 1 2 26 Metroryckie 1 1 2 26 Metroryckie 1 44 44 876 Metroryckie 13 27 834 376 Off-Peak Direction Metroryckie 1 3 36 Metroryckie 13 3 33 36 Off-Peak Direction 1 1 3 36 Metroryckie 1 1 3 36 Metroryckie 1 1 1 3 36 Metroryckie 1 1 1 3 36 Metroryckie 1 1 1 3 36			Lind Trucks	77	422	834
Peak Direction Total 13 26 Motorcycles 1 1 2 Motorcycles 1 1 1 Motorcycles 44 44 97 Motorcycles 42 42 83 Off-Peak Direction Motorcycles 1 1 Motorcycles 13 25 83 Off-Peak Direction Motorcycles 1 1 13 Motorcycles 1 1 1 15 13 Off-Peak Direction 1 1 1 1 13 13 Motorcycles 1 1 1 1 1 1 1 Motorcycles 1 1 1 1 1 1 1 1 1 1 Motorcycles 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <th></th> <td></td> <th>Manual Annual Annual</th> <td>÷</td> <td>7</td> <td>13</td>			Manual Annual Annual	÷	7	13
IDS C Metrorogide i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i i		Peek Direction		67	13	26
IDSC Total 1 1 2 Med Tradis 444 444 876 876 Annos 422 876 876 876 Med Tradis 7 422 834 13 Off-Peak Direction Meavy Trucks 13 13 13 Meavy Trucks 1 1 1 13 15 Monorprint 1 1 1 26 1 Total 1 1 1 26 1 1 Total 1 1 1 26 26 26 26			COMPO		1	1
IOS C Autresise 444 876 876 Autresise 422 876 876 876 Meed Treades 7 422 834 13 Off-Peakin Direction Meed Treades 1 7 13 13 Meed Treades 1 1 1 26 26 26 Motorocycles 1 1 1 26 26 26 Total 1 1 1 26 26 26 26 Total 1 1 1 1 26 26 26					1	2
Off-Peak Direction Med Tendle 4.2 4.22 834 Med Tendle 7 7 834 Med Viscon 13 13 13 Off-Peak Direction Neavy Tendle 13 13 Metric 1 1 26 Motorcyclus 1 1 26 Total 1 1 26 Total 44 44 876	losc			500 ·····	444	876
Off-Peak Direction Hereway means 7 13 13 Meeting 13 13 13 26 1 Methods 1 1 1 26 1 26 Methods 1 1 1 1 26 1 26 Methods 1 1 1 1 26 26 26 Total 1 1 1 1 2 26 26				422	422	834
Off-Peak Direction Towny mana 13 26 Motomyrdas 1 1 1 26 Total 144 444 876					7	13
Motorcycles 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <th1< th=""> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <th1< th=""> 1 <th1< th=""> <th1< <="" td=""><th></th><td>Off-Peak Direction</td><th>Statist Version</th><td>2.</td><td>13</td><td>26</td></th1<></th1<></th1<></th1<>		Off-Peak Direction	Statist Version	2.	13	26
Total 144 2				~~ ~	1	1
			STREET, COLORADA		1	2
				444	444	876

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Federal Ald Number(s):	0	
FPID Number(s):	201277-3-32-01	
State/Federal Route No.:	0	
Road Name:	I-75	
Project Description:	I-75 at SR 72 (Clark Road)	
Segment Description:	I-75 NB on ramp from SR 72	
Section Number:	0	
Mile Post To/From:	0	

Existing Facility: Year: LOS C Peak Hour Directional Volume: Demand Peak Hour Volume:	2014 876 1350	D =100.00%%T24 =8.40%% of 24 Hour VolumeTpeak =4.00%% of Design Hour VolumeMT =1.87%% of Design Hour VolumeHT =2.96%% of Design Hour VolumeB =0.12%% of Design Hour Volume
Posted Speed: No Build Alternative (Design Year):	35	MC = 0.06% %

T24 =	8.40%	% of 24 Hour Volume
Tpeak =	4.00%	% of Design Hour Volume
MT=	1.87%	% of Design Hour Volume
H'î =	2.96%	% of Design Hour Volume
B≖	0.12%	% of Design Hour Volume
MC=	0.06%	% of Design Hour Volume

Build Alternative (Design Year)		G =	100.00%	8
		724 =	8.40%	% of 24 Hour Volume
fear:	2040	TORAKE	9.007	to of Design Hour Volume
		MTE	1.87%	15 of Design Hour Volume
05 C Peak Hour Directional Volume:	876	HT =	2.96%	16 of Design Hour Volume
Ismand Peak Roor Voluma:	2014	E.e.	0.12%	1. of Design Hour Volume
losted Speed	35	MC =	0.06%	16 of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

2040

876

2034

35

Year:

Posted Speed:

LOS C Peak Hour Directional Volume:

Demand Peak Hour Volume:

HKram Hussein Prepared By: Print Name Signature

Date: 1/28/16

FDOT Reviewer: "dals oeL 0 Print Name Signature

		EDOT TRAFFIC DA	ITA FOR NOISE STU	JDIES - DETAILED (очтрит	
Prepared By	Ľ	Dethe		Armental fre		
ni Aid Number(s)	0			An and the state of the state o	ida sen	Otter
FPID Number(s)	2	201277-3-32-01				
/Federal Route No.		0				
Road Name	2	1:75				
Project Description		1-75 at SR 72 [Clark Road]		I		
gment Description.		1-75 NB on ramp from 5R 72				
	Note: Data sheets are to be	completed for each segment her	while a change in triaffic	ann. Dàramhters (1.a., volum	testas junitar providenti de la constante de la	
		: Ethat	2		No Build (Design Yaar)	Build (Datien Year)
sk or Off-Peak Direction	Vehicle Type	Postad Speed:	35	Year: Posted Speed:	2040 3.c	Year: 2040
		Number of Travel Lanes:	2	Number of Travel	Lanes: 2	Pressou operation 35 Number of Travel Lanes: 3
> for Which Volum	nes To Use (Demand or LOS C)	Number of Life IC	Vehicles		Number of Vehicles	Number of Vehicles
	Aubos	128:				Use LOS C
	Med Trucks	25			1007	1933
eak Direction	Heavy Trucks	40			80	88 5
	Burber	2			2	8 ^
		1			ź	
		135	0		2034	2034
		, ů			6	ņ
	Harry Triate				Т	
-reak Direction	Pusker				Fq	Ĩ
	Motororden					I
	Total					**
	Aurton	128			7	1
	Med Thoda	91			032	832
Dark Riverian	Heavy Trucks	26				16
	Buses				07	26
	Motorcycles	1				
	Total	876			27	4
	Autos	832			223	8/10
	Med Trads	16			632 16	832
Peak Direction	Heavy Truchs	26				16
	Bunes	1			97	26
	Motorcycles	T			-	1

0		
201277-3-32-01		
0		
I-75	· · · ·	
I-75 at SR 72 (Clark Road)		_
I-75 SB off ramp to SR 72		
0		
0		
	D =	100.00% %
	T24 =	8.40% % of 24 Hour Volume
2014	Tpeak =	4.00% % of Design Hour Volume
	MT=	1.87% % of Design Hour Volume
444	HT =	2.96% % of Design Hour Volume
1350	8 =	0.12% % of Design Hour Volume
35	MC=	0.06% % of Design Hour Volume
	D =	100.00% %
	T24 =	8.40% % of 24 Hour Volume
2040	Tpeak =	4.00% % of Design Hour Volume
	MT=	1.87% % of Design Hour Volume
444	HT =	2.96% % of Design Hour Volume
2034	B =	0.12% % of Design Hour Volume
35	MC=	0.06% % of Design Hour Volume
A CONTRACTOR OF THE OWNER	_	
	D ie:	100.00%
	T24 =	8.40% % of 24 Hour Volume
2040	Thank	4 002
	1 MERCEN	
	MT -	1.87% Tof Design Hour Volume
876	MT -	2.87% and Design Hour Volume
876 2034	MT - HT - 8 -	2.97% To f Using Hour Volume 2.36% 's of Design Hour Volume 0.12% 's of Design Hour Volume
	0 I-75 I-75 at SR 72 (Clark Road) I-75 SB off ramp to SR 72 0 0 0 2014 444 1350 35 2040 444 2034 35	0 I-75 I-75 at SR 72 (Clark Road) I-75 SB off ramp to SR 72 0 0 0 0 0 0 0 0 0 0 0 0 0

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

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Print Name

Prepared By:

Date:

I have reviewed and concur that the above information is appropriate for use with the traffic/noise analysis.

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FDOT Reviewer: Date: Print Name Signature

1/28/16

Federal Aid Number(s):	0	
FPID Number(s):	201277-3-32-01	
State/Federal Route No.:	0	
Road Name:	SR 72	
Project Description:	I-75 at SR 72 (Clark Road)	
Segment Description:	SR 72 East of I-75	
Section Number:	0	
Mile Post To/From:	0	

Existing Facility:		D =	58.00%	*
		T24 =	7.70%	% of 24 Hour Volume
Year:	2014	Tpeak =	4.00%	% of Design Hour Volume
		MT=	2.91%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2006	HT =	1.68%	% of Design Hour Volume
Demand Peak Hour Volume:	887	B =	0.25%	% of Design Hour Volume
Posted Speed:	45	MC =	0.20%	% of Design Hour Volume
				-

No Build Alternative (Design Year): D = 58.00% 1% 724 = 7.70% % of 24 Hour Volume Year: 2040 4.00% Tpeak = % of Design Hour Volume MT= 2.91% % of Design Hour Volume LOS C Peak Hour Directional Volume: 2006 HT = 1.68% % of Design Hour Volume Demand Peak Hour Volume: 1253 B = 0.25% % of Design Hour Volume Posted Speed: 45 MC= 0.20% % of Design Hour Volume

Build Alternative (Design Year)		(A =	58.00%	10
		T2A =	7.70%	% of 24 Hour Velame
fear	2040	Tpeak -	4.00%	14 of Dissign Hour Volume
		M7 =	2.91%	of Design Nour Voluma
OS C Peak Hour Directional Volume	767	HTe	1.69%	N of Design Hour Volume
Demand Peak Hour Volume	1253	34	9.25%	of Design Hour Velume
ostad Speed:	35	MC=	0.20%	of Design Hour Volum-

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

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Print Name

Cram

Prepared By:

<u>||28|16</u> ||<u>28|16</u> Date:

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

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FDOT Reviewer: Date: Print Name Signature

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	Preparad By:		Dette:	Attentioned fare (Jean Ibre		
	Federal Ald Number(s):	0			Date:	-
	FPID Number(s):		201277-3-32-01			
	State/Federal Route No.:		0			
	Rond Name:		SR 72	1		
	Project Description:		1-75 at SR 72 (Clark Road)	1		
	Segment Description:		SR 72 East of 1-75	1		
		Note: Data sheets are to be o	completed for each segment having a change in traffic par			
			Editing	No Bulk (Deskin Year)	(Baster Variation)	-
Demand Peak	Peak or Off-Peak		Year: 2014	Years 2040	Yaar Vasga rear	
Hour/LOS C	Direction	Vehicle Type	Postad Speed: 45 Number of Travel Lanes: 4	Posted Speed: 45	Posted Speed: 35	
			Manual and Manual and Manual and		Number of Travel Lanes: 4	
See Columns	to Right > for Which Volum	46 To lite (Demand at 105 C)		Number of Vehicles	Number of Vehides	_
				Use Demand Volumes	Use LOS C	
		SOUNY	842	1190	1190	
		Med Trucks	26	36	74	
	Peak Direction	Heavy Trucks	15	21	24	
		Builees	2	ŝ		
		Motorcycles	2	£	, "	
Demand Peak Hour		Total	887	1253		
		Autos	610	258	1400 100	
		Med Trucks	19	26	700	
	Off-Peak Direction	Heavy Trucks	11	15	45	
		Bunes	2	2		
		Motorcycles	1	2		
		Total	643	907	2	
		Autos	1905	1905	10C	
		Med Trucks	58	55	97/	
	Peak Direction	Heavy Tracks	34	34		
		Bustes	Ś			
		Motorcycles	4		2	
IDEC		Total	2006		2	
		Autos	1975	9002	767	
		Med Thicks	50	2061	728	
		Memory Trucks		58	22	
	Off-Peak Direction	Transit Annual	25	34	13	
		sesna ·	5	5	6	
		Matorcycles	4	4		
		Total	2006	2005		
					/9/	

Federal Aid Number(s):	0						
FPID Number(s):	201277-3-32-01						
State/Federal Route No.:	0						
Road Name:	SR 72						
Project Description:	I-75 at SR 72 (Clark Road))					
Segment Description:	SR 72 East of Camelot East Ent.						
Section Number:	0						
Mile Post To/From:	0						

Existing Facility:		D =	58.00% %
Year:	2014	T24 = Tpeak =	7.70% % of 24 Hour Volume 4.00% % of Design Hour Volume
LOS C Peak Hour Directional Volume: Demand Peak Hour Volume: Posted Speed:	2006 783 45	MT= HT = B = MC =	2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 0.25% % of Design Hour Volume 0.20% % of Design Hour Volume

No Build Alternative (Design Year):		D =	58.00%	%
		T24 =	7.70%	% of 24 Hour Volume
Year:	2040	Tpeak =	4.00%	% of Design Hour Volume
		MT=	2.91%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2006	HT =	1.68%	% of Design Hour Volume
Demand Peak Hour Volume;	1096	ß =	0.25%	% of Design Hour Volume
Posted Speed:	45	MC=	0.20%	% of Design Hour Volume

Balld Alternative (Design Year):		D.*	58.00% 14
	P and an and a second se	T24 =	7.70% Hi of 24 Hour Volume
Year.	2040	Tpeak=	4.00% 1 of Dasige Hour Volume
	and the Rest of State	MT .	2.91% N of Onsign Hour Volume
LOS C Peak Hour Directional Volume	767	(MTGP	1.68% N of Design Hour Volume
Demand Peak Hour Volume:	1096	8=	0.25% * of Design Hour Volume
Ported Speed	35	MC =	0.20% 16 of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Hussein Prepared By: Kram Print Name Signature

28 16 |28/16. Date:

aez FDOT Reviewer: na ø Date: Print Name ignature

			PDOT TRAFFIC DATA FOR NOISE STUD	IES - DETAILED OUTPUT		
	Prepared By:		Date:	Approved for Use By:		
	Federal Ald Number(s):			Cardian threation	nate:	
	FPID Number(s);		201277-3-32-01	Mile Post Tafferen		
	State/Federal Route No.:		0			
	Road Name:		SR 72	3		
	Project Description:		I-75 at SR 72 (Clark Road)	1		
	Segment Description:		SR 72 East of Camelot East Ent.	1		
		Note: Data sheets are to be c	completed for each segment having a change in traffic pa	rameters (i.e., volume posted speed, typical section)		
			Exterting	No Burld (Deskin Yaar)	Build Product View	
Demand Peak	Peak or Off-Peak		Year: 2014	Year: 2040	Year Cuing (Juliagn Year)	
Hour/LOS C	Direction	Vehicle Type	Postad Speed: 45	Posted Speed: 45	Posted Spread: 35	_
				Number of Travel Lanes: 4	Number of Travel Langes	
Sea Columna	to Right > fee White Value		Number of Vahides	Nember of Vahicles	Number of Validates	
		NES 10 USE (UNRING OF LOS C)	Use Demand Volumes	Use Demand Volumes		_
		Autos	84/	1041	1041	_
-			23	32	27	_
	Peak Direction	Heavy Trucks	13	18	50	_
		Buses	2		10	_
		Motorcycles	2	2	2	_
Demand Peak Hour		lota	68/	1096	1006	_
		MUTON ALL ALL ALL ALL ALL ALL ALL ALL ALL AL	539	754	754	
			16	23	23	
	Off-Peak Direction		07	13	13	_
_			7	2		_
_			1	2		_
		00	<i>/95</i>	794	701	
_		Autos	1905	1905	738	
		Med Trucks	28	58	22	_
	Peak Direction	Heavy Tracks	34	۶E	13	_
		Busies .	5	5		
		Motorcycles	4	4	× •	
LOSC		Total	2006	2006	200	
		Antos	1905	1905	/0/	
		Med Trucks	58	28	87/ 50	
	Off-Peak Direction	Heevy Trucks	26	34	52	
		Busas	ŀΩ	5		
		Matorcycles	4	*		
		Total	2006	2006	7	
		Ĩ			/0/	

rederal Ald Number(\$):	0		
FPID Number(s):	201277-3-32-01		_
State/Federal Route No.:	0		
Road Name:	SR 72		
Project Description:	I-75 at SR 72 (Clark Road)		
Segment Description:	SR 72 East of Hummingbird Ave		_
Section Number:	0		
Mile Post To/From:	0		
Existing Facility:		D =	58.00% %
		T24 =	7.70% % of 24 Hour Volume
Year:	2014	Tpeak =	4.00% % of Design Hour Volume
		MT=	2.91% % of Design Hour Volume
LOS C Peak Hour Directional Volume:	664	HT =	1.68% % of Design Hour Volume
Demand Peak Hour Volume:	731	8 =	0.25% % of Design Hour Volume
Posted Speed:	45	MC =	0.20% % of Design Hour Volume
No Build Alternative (Design Year):		D =	58.00% %
No Bulid Alternative (Design Year): Year:	2040	D = T24 = Tpeak = MT =	58.00% % 7.70% % of 24 Hour Volume 4.00% % of Design Hour Volume 2.91% % of Design Hour Volume
No Bulid Alternative (Design Year); /ear: .OS C Peak Hour Directional Volume:	2040 664	D = T24 = Tpeak = MT ≂ HT =	58.00%%7.70%% of 24 Hour Volume4.00%% of Design Hour Volume2.91%% of Design Hour Volume1.68%% of Design Hour Volume
No Bulid Alternative (Design Year); Year: LOS C Peak Hour Directional Volume: Demand Peak Hour Volume;	2040 664 992	D = T24 = Tpeak = MT = HT = B =	58.00%%7.70%% of 24 Hour Volume4.00%% of Design Hour Volume2.91%% of Design Hour Volume1.68%% of Design Hour Volume0.25%% of Design Hour Volume
No Build Alternative (Design Year); /ear: .OS C Peak Hour Directional Volume: Demand Peak Hour Volume: Posted Speed:	2040 664 992 45	D = T24 = Tpeak = MT = HT = B = MC =	58.00%%7.70%% of 24 Hour Volume4.00%% of Design Hour Volume2.91%% of Design Hour Volume1.68%% of Design Hour Volume0.25%% of Design Hour Volume0.20%% of Design Hour Volume
No Build Alternative (Design Year); /ear: .OS C Peak Hour Directional Volume: Demand Peak Hour Volume: Posted Speed:	2040 664 992 45	D = T24 = Tpeak = MT = HT = B = MC =	58.00% % 7.70% % of 24 Hour Volume 4.00% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 0.25% % of Design Hour Volume % of Design Hour Volume % of Design Hour Volume
No Build Alternative (Design Year); /ear: OS C Peak Hour Directional Volume: Demand Peak Hour Volume; Posted Speed: Posted Speed:	2040 664 992 45	D = T24 = Tpeak = MT = HT = B = MC =	58.00% % 7.70% % of 24 Hour Volume 4.00% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 0.25% % of Design Hour Volume 0.20% % of Design Hour Volume 58.00% % of Design Hour Volume
No Build Alternative (Design Year); 'ear: OS C Peak Hour Directional Volume: Permand Peak Hour Volume; Posted Speed: uild Alternative (Design Year);	2040 664 992 45	D = T24 = Tpeak = MT = HT = B = MC =	58.00% % 7.70% % of 24 Hour Volume 4.00% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 0.25% % of Design Hour Volume 0.20% % of Design Hour Volume 58.00% % of Design Hour Volume 58.00% % of Design Hour Volume
No Build Alternative (Design Year); 'ear: OS C Peak Hour Directional Volume: bernand Peak Hour Volume; osted Speed: uild Alternative (Design Year); ear	2040 664 992 45 2040	D = T24 = Tpeak = MT = HT = B = MC = G = T24 = T24 = Tpeak =	58.00% % 7.70% % of 24 Hour Volume 4.00% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 0.25% % of Design Hour Volume 0.20% % of Design Hour Volume 58.00% % of Design Hour Volume
No Build Alternative (Design Year); /ear: OS C Peak Hour Directional Volume: Demand Peak Hour Volume: Posted Speed: uild Alternative (Dasign Year) ear	2040 664 992 45 2040	D = T24 = Tpeak = MT = HT = B = MC = 0 = T24 = Tpeak = MT =	58.00% % 7.70% % of 24 Hour Volume 4.00% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 0.25% % of Design Hour Volume 0.20% % of Design Hour Volume 58.00% % of Design Hour Volume 58.00% % of Design Hour Volume 1.68% % of Design Hour Volume 0.20% % of Design Hour Volume 0.20% % of Design Hour Volume 1.68% % of Design Hour Volume 1.68% % of Design Hour Volume
No Bulid Alternative (Design Year); Year: LOS C Peak Hour Directional Volume: Demand Peak Hour Volume: Posted Speed: Build Alternative (Dasign Year) Year OS C Peak Hour Directional Volume Permand Peak Roar Volume	2040 664 992 45 2040 664 992	D = T24 = Tpeak = MT = HT = B = MC = G = T24 = T24 = Tpm#k = MT = HT =	58.00% % 7.70% % of 24 Hour Volume 4.00% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 0.25% % of Design Hour Volume 0.20% % of Design Hour Volume 58.00% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 2.91% % of Design Hour Volume 4 Design Hour Volume % of Design Hour Volume 1.68% % of Design Hour Volume
No Build Alternative (Design Year); Year: LOS C Peak Hour Directional Volume: Demand Peak Hour Volume: Posted Speed: Muld Alternative (Dasign Year) Year OS C Peak Hour Directional Volume Permand Peak Rese Volume outed Speed.	2040 664 992 45 2040 664 992 45	D = T24 = Tpeak = MT = HT = B = MC = G = T24 = Tpm#k = MT = HT = K =	58.00% % 7.70% % of 24 Hour Volume 4.00% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 0.25% % of Design Hour Volume 0.20% % of Design Hour Volume 58.00% % of Design Hour Volume 0.20% % of Design Hour Volume 1.68% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume 2.91% % of Design Hour Volume 1.68% % of Design Hour Volume

Prepared By:

Akram Hussein 17 **Print Name** Signature

Date:

FDOT Reviewer: Date: **Print Name** Signature

28/16

	Derte:							Bulk (particular version		Putted Speed: 45	Number of Travel Lanes: 2	Number of Vehicles	Ure LOS C	942	R	۲. ۲.	. ~	992	682	21	12	2	1	453	10		6			129	19	H	2	1	664
S - DETAILED OUTPUT	Approved for Use By:	Section Number: 0					neters (i.e., volume posted speed, typical section)	No Build (Design Year)	Year: 2040	Posted Speed: 45	rumber of Frvei Lines. 2	Mumber of Vendes	MMR LUCS C	342	11	2	2	266	682	77			718	631	57	11	2	1	664	631	19	11	2	1	664
FDOT TRAFFIC DATA FOR NOISE STUDIE	Dates	201277-3-32-01	o	SR 72	I-75 at SR 72 (Clark Road)	SR 72 East of Hummingbird Ave	omplated for each segment having a change in traffic paran	Edisting	Year 2014	Posted Spacet: 45 Number of Travel Lance: 2	Bumber of Vahirles	Use LOS C	695	21	12	2	-	15/	SUC 21	9		7	529	631	19	11	2	1	664	631	19	II		-	800
							vote: Data sheets are to be		Mathematica Street	vertice type		s To Use (Demand or LOS C)	Autos	Med Trucks	Heavy Trucks	Buster	Motorcycles		Mad Trucks	Heavy Trucks	Buses	Motorcycles	Total	Autos	Med Trucks	Heavy Trucks	Detter	Motorcycles	Tothe	Autos	Med Trucks	HOWNING	All of the second secon	Treat	
	Propared Byr Federal Ald Numbertet	FPID Number(s):	State/Federal Route No.:	Road Name:	Project Description:	Segmant Description:	-		Peak or Off-Peak	Direction		to Right > for Which Volume.			Peak Direction	1				Callent Number				[_1	Peak Direction	_1			1	-	Off-Peak Direction	1	4	
									Demand Pask	Hour/LOS C		See Colomns (Demand Peak Hour											LOSC						

	0			
FPID Number(s):	201277-3-32-01			
State/Federal Route No.:	0			
Road Name:	SR 72			
Project Description:	i-75 at SR 72 (Clark Road)			
Segment Description:	SR 72 between I-75 Ramps			
Section Number:	0			
Mile Post To/From:	0			
Existing Facility:		D=	59.00%	
		T24 =	7.70%	% of 24 Hour Volume
Year:	2014	Toeak =	4.00%	% of Decise Hour Volume
		MT=	1.56%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	3087	HT =	1 2594	% of Decign Hour Volume
Demand Peak Hour Volume:	2036	Ba	0 50%	% of Design Hour Volume
Posted Speed:	45	MC=	0.40%	% of Design Hour Volume
No Build Alternative (Design Year):		D =	58.00%	7%
No Build Alternative (Design Year):		D = T24 =	58.00% 7.70%	% % of 24 Hour Volume
No Build Alternative (Design Year): Year:	2040	D = T24 = Tpeak =	58.00% 7.70% 4.00%	% % of 24 Hour Volume % of Design Hour Volume
No Build Alternative (Design Year): fear:	2040	D = T24 = Tpeak = MT =	58.00% 7.70% 4.00% 1.56%	% % of 24 Hour Volume % of Design Hour Volume % of Design Hour Volume
No Build Alternative (Design Year): Year: LOS C Peak Hour Directional Volume:	2040	D = T24 = Tpeak = MT = HT =	58.00% 7.70% 4.00% 1.56% 1.25%	% % of 24 Hour Volume % of Design Hour Volume % of Design Hour Volume % of Design Hour Volume
No Build Alternative (Design Year): Year: LOS C Peak Hour Directional Volume: Demand Peak Hour Volume;	2040 3087 2819	D = T24 = Tpeak = MT = HT = B =	58.00% 7.70% 4.00% 1.56% 1.25% 0.50%	% % of 24 Hour Volume % of Design Hour Volume % of Design Hour Volume % of Design Hour Volume % of Design Hour Volume
No Build Alternative (Design Year): Year: .OS C Peak Hour Directional Volume: Demand Peak Hour Volume: Posted Speed:	2040 3087 2819 45	D = T24 = Tpeak = MT = HT = B = MC =	58.00% 7.70% 4.00% 1.56% 1.25% 0.50% 0.40%	% % of 24 Hour Volume % of Design Hour Volume
No Build Alternative (Design Year): fear: .OS C Peak Hour Directional Volume: Demand Peak Hour Volume: Yosted Speed:	2040 3087 2819 45	D = T24 = Tpeak = MT = HT = B = MC =	58.00% 7.70% 4.00% 1.56% 1.25% 0.50% 0.40%	% % of 24 Hour Volume % of Design Hour Volume
No Build Alternative (Design Year): (ear: .OS C Peak Hour Directional Volume: Demand Peak Hour Volume: Posted Speed:	2040 3087 2819 45	D = T24 = Tpeak = MT = HT = B = MC =	58.00% 7.70% 4.00% 1.56% 1.25% 0.50% 0.40%	% % of 24 Hour Volume % of Design Hour Volume % of Design Hour Volume % of Design Hour Volume % of Design Hour Volume
No Build Alternative (Design Year): /ear: OS C Peak Hour Directional Volume: Demand Peak Hour Volume: Posted Speed:	2040 3087 2819 45	D = T24 = Tpeak = MT = HT = B = MC =	58.00% 7.70% 4.00% 1.56% 1.25% 0.50% 0.40%	% % of 24 Hour Volume % of Design Hour Volume % of Design Hour Volume % of Design Hour Volume % of Design Hour Volume
Vo Build Alternative (Design Year): /ear: OS C Peak Hour Directional Volume: Demand Peak Hour Volume; Posted Speed: Wild Alternative (Design Year);	2040 3087 2819 45	D = T24 = Tpeak = MT = HT = B = MC =	58.00% 7.70% 4.00% 1.56% 1.25% 0.50% 0.40% 58.00% 7.70%	% % of 24 Hour Volume % of Design Hour Volume % of Design Hour Volume % of Design Hour Volume % of Design Hour Volume
No Build Alternative (Design Year): 'ear: OS C Peak Hour Directional Volume: Demand Peak Hour Volume; Posted Speed: Dild Alternative (Design Year); ear:	2040 3087 2819 45 7040	D = T24 = Tpeak = MT = HT = B = MC = C = T24 = Tpeak =	58.00% 7.70% 4.00% 1.56% 1.25% 0.50% 0.40% 58.00% 7.70% 4.00%	% % of 24 Hour Volume % of Design Hour Volume % of Design Hour Volume % of Design Hour Volume % of Design Hour Volume
Vo Build Alternative (Design Year): /ear: OS C Peak Hour Directional Volume: Demand Peak Hour Volume; Posted Speed: Dild Alternative (Design Year); ear:	2040 3087 2819 45 7040	D = T24 = Tpeak = MT = HT = B = MC = C = T24 = Tpeak = MT =	58.00% 7.70% 4.00% 1.56% 1.25% 0.50% 0.40% 58.00% 7.70% 4.00% 1.56%	% % of 24 Hour Volume % of Design Hour Volume
No Build Alternative (Design Year): Year: LOS C Peak Hour Directional Volume: Demand Peak Hour Volume: Posted Speed: Suild Alternative (Design Year): Year: OS C Peak Hour Directional Volume	2040 3087 2819 45 8040 1591	D = T24 = Tpeak = MT = HT = B = MC = C = T24 = T24 = T24 = T24 =	58.00% 7.70% 4.00% 1.56% 1.25% 0.50% 0.40% 58.00% 7.70% 4.00% 1.56% 1.25%	% % of 24 Hour Volume % of Design Hour Volume v of Design Hour Volume % of Design Hour Volume % of Design Hour Volume
No Build Alternative (Design Year): Year: LOS C Peak Hour Directional Volume: Demand Peak Hour Volume: Posted Speed: Wild Alternative (Design Year); Year: OS C Peak Hour Directional Volume Demand Peak Hour Volume	2040 3087 2819 45 8040 1591 2819	D = T24 = Tpeak = MT = HT = B = MC = C = T24 = Tpeak = MT = HT = B =	58.00% 7.70% 4.00% 1.56% 1.25% 0.50% 0.40% 58.00% 7.70% 4.00% 1.36% 1.25% 0.50%	% % of 24 Hour Volume % of Design Hour Volume v of Design Hour Volume s of Design Hour Volume s of Design Hour Volume s of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

e: 1/28/14 Date: HUSSEN Prepared By: Cram Cr. Print Name Signature

a FDOT Reviewer: Date: Print Name Signature

			TUUI INAFIICIAIA FOR NUME IUU	ES - DETAILED OUTPUT	
	Prepared By:		Date:	Approved for Use By:	Dartes
	Federal Ald Number(s):	•		Section Number: 0	
	FPID Number(s):		201277-9-32-01	Mille Post Te/From: 0	
	State/Federel Route No.:		0		
	Road Nume:		SR 72		
	Project Description:		I-75 at SR 72 (Clark Road)	1	
	Segment Description:		SR 72 between (-75 Ramps	1	
		Note: Data sheets are to be o	completed for each segment having a change in traffic par		
			Existing	No Bulld (Design Year)	Build (Design Year)
Demand Peek	Peak or Off-Peak		Year: 2014	Year; 2040	Year: 2040
Hour/LOS C	Oirection	Vehicle Type	Posted Speed: Number of Travel (sneec	Posted Speed: 45	Posted Speed:
			Number of Vehicles		Number of Travel Lanes: 8
See Columns	to Right > for Which Volum	ves To Use (Demand or LOS C)	Use Dennerd Volument	Mumber of Venices	Number of Vehicles
		Author	1061		Use LOS C
		Mad Trucks		977	2715
		Banev Truche	10	\$	44
	Pask Direction			35	35
			2	14	14
			00	77	II
Demond Peak Hour			9602	2819	2819
		Sound Land	1420	1965	1965
			23	32	32
	Off-Peak Direction		76	26	26
		SRGMO		10	10
		warding	0	80	8
]4/4	2041	2041
		AULTON	5/67	2973	1629
		Med Jrucks	48	48	26
_	Peak Direction	Heavy Trucks	96 6	66	21
		Buses	15	15	8
		Matercycles	77	12	~ ~
LOSC		Total	3067	3087	1691
		Author	E262	2973	1629
		Med Trucks	48	48	26
	Off-Peak Direction	Herry Trucks	<u>6</u> E	<i>6</i> E	12
		Bues	15	15	20
		Motorcycles	12	12	2
		Total	3087	3087	1691

Federal Aid Number(s):	0	
FPID Number(s):	201277-3-32-01	
State/Federal Route No.:	0	
Road Name:	SR 72	
Project Description:	I-75 at SR 72 (Clark Road)	
Segment Description:	SR 72 West of I-75	
Section Number:	0	
Mile Post To/From:	0	

Year: 2014 Tpeal	7.70% % of 24 Hour Volume 4.00% % of Design Hour Volume
LOS C Peak Hour Directional Volume: 3087 HT = Demand Peak Hour Volume: 2297 B = Posted Speed: 45 MC =	1.25% % of Design Hour Volume 1.25% % of Design Hour Volume 0.50% % of Design Hour Volume 0.40% % of Design Hour Volume

No Build Alternative (Design Year):		D =	58.00%	%
		. T24 =	7.70%	% of 24 Hour Volume
Year:	2040	Tpeak =	4.00%	% of Design Hour Volume
		MT=	1.56%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:		HT =	1.25%	% of Design Hour Volume
Demand Peak Hour Volume:	3184	B =	0.50%	% of Design Hour Volume
Posted Speed:	45	MC =	0.40%	% of Design Hour Volumo

Build Alternative (Design Year):		0=	58 00%	14
	and a statement of the statement	724 =	7.70%	H of 24 Hour Volume
'étar	2040	Toeak =	4.00%	% of Design Hour Volume
		607 +	1.56%	% of Design Hour Volume
DS C Peak hour Orectional Volume:	1691	HT=	1.25%	% of Design Hour Volume
emand Peak Hour Volume.	3184	B.+.	D.50%	14 of Design Hour Volume
forted Speed?	35	MC =	0.40%	16 of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Print Name

Prepared By: 28 mam JSCE Date: **Print Name** Signature have reviewed and concur that the above information is appropriate for use with the traffic noise analysis. FDOT Reviewer: Rue au wa Date:

			FDOT TRAFFIC DATA FOR NOISE STUDI	ES - DETAILED OUTPUT	
	Prepared By:		Dates		
	Federal Ald Number(s);	0			Dates
	FPID Number(s):		201277-8-32-01		
	State/Federal Route No.:			Mile Post 10/Home 0	
	Road Name:		58.72		
	Project Description:		i-75 at SR 72 (Clark Road)		
	Segment Description:		SR 72 West of i-75		
		Note: Dete sheets are to be o	ompleted for each segment having a change in traffic pare	- imeters (i.e., voleme posted speed, twitcal section)	
			Extering	No Build (Design Year)	
Demand Peak	Peak or Off-Peak		Year: 2014	Year: 2040	Build (Design Year)
Hour/LOS C	Direction	Vehicle Type	Postad Speed: 45	Posted Speed: 45	Posted Speed: 2040
			Number of Travel Lanes; 6	Number of Travel Lanes: 6	Number of Transl Lease.
Con Colorina	the Black to See with the Verland		Number of Vehicles	Number of Vehicles	
			Use Demand Volumes	Una LOS C	
		Auttos	2212	3065	
		Med Tracks	36	05	2000
	Peak Direction	Hellvy Trucks	ହ	0\$	24
		Bunes	11	16	₽.
		Motoroydes	51	22	9 r
Demend Peak Hour		Total	2297	19852	<u> </u>
		Autos	1601	VECC	3184
		Med Trudus	26	26	2220
	Off. Bank Ninertice	Heavy Tradis	17	ĐC	36
		Duttes	80	02	57
		Motorcycles	7		17
		Total	1663	202C	7
		Autos	2973	3073	7306
		Med Trucks	48	D/	1629
	Pank Direction	Heavy Trucks	39	97	26
		Buses	15		77
		Matercycles	17	Ĵ.	8
		1.44	2005	77	7
TIME			7000	3087	1691
		Patron Tenador	24/3	E267	1629
		Hanne Truche	8	48	26
	Off-Peak Direction		<u>86</u>	39	21
			2	15	00
		Insurant protection	77	12	
			3087	3087	1601

Federal Aid Number(s):	0
FPID Number(s):	201277-3-32-01
State/Federal Route No.:	0
Road Name:	SR 72
Project Description:	I-75 at SR 72 (Clark Road)
Segment Description:	SR 72 West of Catamaran Dr.
Section Number:	0
Mile Post To/From:	0

Existing Facility:		D ≈	58.00% %	
		T24 =	7.70% % of 24 Hour	Volume
Year:	2014	Tpeak =	4.00% % of Design H	our Volume
		MT =	1.56% % of Design H	our Volume
LOS C Peak Hour Directional Volume:	3087	HT =	1.25% % of Design H	our Volume
Demand Peak Hour Volume:	2349	B =	0.50% % of Design H	iour Volume
Posted Speed:	45	MC =	0.40% % of Design H	our Volume

No Build Alternative (Design Year):		D =	58.00% %
		T24 =	7.70% % of 24 Hour Volume
Year:	2040	Tpeak =	4.00% % of Design Hour Volume
		MT=	1.56% % of Design Hour Volume
LOS C Peak Hour Directional Volume:	3087	HT =	1.25% % of Design Hour Volume
Demand Peak Hour Volume:	3289	B =	0.50% % of Design Hour Volume
Posted Speed:	45	MC =	0.40% % of Design Hour Volume

Build Alternative (Design Year).		D =	58.00%	8
		174 =	7.70%	% of 24 Hour Volume
(bar:	2040	Tpank -	4.00%	IL of Design Hour Volume
		MT	1.56%	Is of Dasign Hour Volume
OS C Peak Hour Directional Volume:	1691	HEN	1.25%	1 of Design Hour Velume
Pemand Peak Hour Volume:	3289	8 E	0.50%	1 of Design Hour Volume
losted Speed	35	MC+	0.40%	a of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

HCran HUSSein Print Name Prepared By: Date: Signature

28/16 28/16-FDOT Reviewer: Date: Print Name Signature

			FDOT TRAFFIC DATA FOR NOISE STUDI	ES - DETAILEN OLITERIT	
	Prepared By:		Derhe:	Attenued for fine for	
	Federal Aid Number(s):	0			Deter
	FPID Number(s);		201277-3-32-01		
	State/Federal Route No.:		0		
	Road Name:		SR 72		
	Project Description:		I-75 at SR 72 (Clark Roed)	1	
	Segment Description:		SR 72 West of Catamaran Dr.		
		Note: Osta sheets are to be o	omplehed for each segment having a change in traffic part	— ameters (i.e., volume postad speed. (voical section)	
			Existing	No Build (Deskry Year)	
Demand Peek	Peak or Off-Paak		Year: 2014	Yealtr 2040	ver- ver-
Hour/LOS C	Dhection	Vanice Type	Posted Speed: Number of Travel Lanes: 6	Postral Speed: 45	Posted Speed: 35
			Number of Vehicles		Number of Travel Lanes: 8
See Columns 1	to Right > for Which Volum	Hes To Use (Demand or LOS C)	Use Demand Volumes	rumoer of Venices	Number of Vahicles
		Autos	2262	UNB LUDS C	Uter LOS C
		Med Trucks	37	90FC	3168
	Peak Direction	Heavy Trucks	হ	75	51
		Buses	12	16	41
		Matarcycles	6	40	16
Demand Pask Hour		Total	2349	2750	13
		Autos	1637	2002	3289
		Med Trucks	27	22	7292
	Off-Peak Direction	Heavy Trucks	21	8	3/
		Buryas	9	12	96
		Motorcycles	7	01	77
		Total	1701	2381	50CL
		Autos	2973	2973	7007
		Med Trucks	48	48	579T
	Peak Direction	Heavy Truchs	39	56	07
		Buses	15	15	77
		Motorcycles	12	12	20
LOSC		Totaf	3087	3/87	~
		Autos	2973	2073	IBI
		Med Trucks	48	48	10/29
	Off-Paak Direction	Herry Trucks	39		79
		Bupas	15	24	77
		Motorcycles	12		50 ¹
		Tiotad	3087	3/167	
					1691

Federal Aid Number(s):	0		
FPID Number(s):	201277-3-32-01		
State/Federal Route No.:	0		
Road Name:	SR 72		
Project Description:	I-75 at SR 72 (Clark Road)		
Segment Description:	SR 72 West of Gantt Rd/Approach Rd		
Section Number:	0	_	-
Mile Post To/From:	0		
			_
Existing Facility:		D-	50 000 by
		T34 -	7 70% % of 14 Hour Volume
Year:	2014	Toeak =	4.00% % of Design Hour Volume
		MT =	1.56% % of Design Hour Volume
OS C Peak Hour Directional Volume:	3087	HT=	1.25% % of Design Hour Volume
Demand Peak Hour Volume:	2558	B =	0.50% % of Design Hour Volume
Posted Speed:	45	MC =	0.40% % of Design Hour Volume
Year: OS C Peak Hour Directional Volume: Demand Peak Hour Volume: Posted Speed:	2040 3087 3550 45	T24 = Tpeak = MT = HT = B = MC ≃	7.70%% of 24 Hour Volume4.00%% of Design Hour Volume1.56%% of Design Hour Volume1.25%% of Design Hour Volume0.50%% of Design Hour Volume0.40%% of Design Hour Volume
ulif Alternative (Design Year):		D.	58.00%
		126	7.70% A of 24 Hour Valume
	2040	Tpeak=	4.00% % of Design Hour Volume
	and the second se	MT.	1.56% I's of Design Hour Velama
IS C Peak Hour Directional Volume:	3067	HTE	1.25% 1% of Design Hour Valume
omand Peak Hour Volume	3550	18 H	0.50% % of Design Mour Volume
ostao speedi	45	MCa	0.40% 14 of Design Hour Volume

Date: 128/16 Signature Prepared By: HUSS HKram Print Name I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis. Ľ FDOT Reviewer: Bag

Print Name

Signature /

			FDOT TRAFFIC DATA FOR NOISE STUD	HES - DETAILED OUTPUT	
	Prepared By:	_	Dethe:	Approved for Use Br.	Rada
	Federal Aid Number(s):	0		Section Number:	
	FPID Number(s):		201277-3-32-01	Mile Port To/Friem:	6
	State/Federal Route No.:		0		1
	Road Name:		<u>я</u> , 2	1	
	Project Description:		i-75 at SR 72 (Clark Road)	ł	
	Segment Description:	5	t 72 West of Gantt Rd/Approach Rd	1	
		Note: Date sheets are to be	completed for each segment having a change in traffic per		
			Existing	No Build (Design Year)	Right (Dation Year)
Demand Peek	Peak or Off-Peak		Year: 2014	Year: 2040	Verit 2040
Hour/LOS C	Direction	venkie type	Posted Speed: Number of Travel Lanes: 6	Posted Speed: 45 Number of Travel Lance 6	Postbed Speed: 45
			Number of Vehides	Number of Vehicles	Internet of Interest Lands: 6
See Columns	to Right > for Which Volum	nes To Use (Demand or LOS C	Use Demand Volumes	Use LOS C	
		Auto	2463	3419	0110
		Med Truck	40	55	25
	Pask Direction	Heavy Truck:	32	44	1
		Buse	13	18	18
		Motorcycle	10	34	14
Demand Peak Hour		Tota	2558	3550	3550
		Auto	1784	2475	2475
		Med Truck	۶Į	40	40
	Off-Peak Direction	Heiny Truck	23	32	32
			6	13	13
		MOCOLOGIC	/	10	10
			2481	2570	2570
			5/27	2973	2973
			8	48	48
	Peak Direction			39	39
			15	15	15
		Motorcycles	12	12	12
LOS C		Tota	3087	3087	3087
		Adhuk	£262	2973	2973
			48	48	48
	Off-Peak Direction		39	30	39
			5	15	15
		Motorcycles	12	12	12
		LOUN	3087	3087	3087

Appendix C

Noise Receptors and Barriers















cted/Benefited	[Meets 7	dB(A)	Design	Goal


cted/Benefited	[Meets 7	7 dB(A)	Design	Goa



Appendix D

Noise Model Validation Data



Location (Address and County)/Site Identification	Station Number	Survey No.
I-75 NB		

Date	Calibration Begin	Calibration End	Time Begin	Time End	Measured dB(A)
1/29/16	113.99	1/3.95	10:59	11:09	78.8

 Weather Data

 Temperature
 Cloud/Sun Cover
 Precipitation/ Humidity
 Wind Speed Direction

 61°F
 Sunny
 50%
 10-/5 mph
 NW

Traffic Classification NB SB WB EB

Cars	Motorcycles	Buses	Med. Trucks	Heavy Trucks
622	1	\bigcirc	[]	41

Traffic Classifications - NB(SB)WB EB

Cars	Motorcycles	Buses	Med. Trucks	Heavy Trucks
513	3	1	27	26

Measurements Taken By:

Other Comments:

Location (Address and County)/Site Identification	Station Number	Survey No.
I-75 Northbound Near Exit 207 Morker	1	1

Cars	Cars	Cars	Cars	H. Trucks	H. Trucks	M. Trucks	M. Trucks	Buses	M. Cycles
53	80	66		5		41			· · · · ·
47	66	75		61		56			
51	67			68		63			
67	64			70		80			
68	70			73		68			
71	75			69					
73	73			62					
69	67			5					
67	66			64					e
69	65			67					
71	66			59					
81	69								

Speed Counts (NB) SB WB EB

Speed Counts - NB SB WB EB

Cars	Cars	Cars	Cars	H. Trucks	H. Trucks	M. Trucks	M. Trucks	Buses	M. Cycles
70	81	17		62		70			71
71	71	60		5		65			
72	70	70		67		66			
71	75	71		69	1	72			
70	76	66		69		68			
72	67					60			
71	62			< 1		77			
68	76					64			
69	71					63			
69	76								
-10	8								
77	72								

8

Location (Address and County)/Site Identification	Station Number	Survey No.
I-75 NB	1	2

Date	Calibration Begin	Calibration End	Time Begin	Time End	Measured dB(A)
1/29/16	113.95	114.00	11:16	11:26	79.0

 Weather Data

 Temperature
 Cloud/Sun Cover
 Precipitation/ Humidity
 Wind Speed Direction

 61°F
 Sunny
 50%
 10-15 mph
 NW

Traffic Classification (NB)SB WB EB

Cars	Motorcycles	Buses	Med. Trucks	Heavy Trucks
580	6	2	22	39

Traffic Classifications - NB(SB)WB EB

Cars	Motorcycles	Motorcycles Buses		Heavy Trucks
607	O	6	21	39

Measurements Taken By:

Other Comments:

Location (Address and County)/Site Identification	Station Number	Survey No.
I-75 Northbound near Exit 201 Maker	1	2

							0		
Cars	Cars	Cars	Cars	H. Trucks	H! Trucks	M. Trucks	M. Trucks	Buses	M. Cycles
69	68	67		68		65			
71	27	70		62		66			
75	65	68		67		68			
12	72	66		69		66			
7B	70	63		62		64			
71	73	72		66		60			
66	78	72		62		68			
64	72	68		62		69			
66	72			69		*			
69	65			65					
71	65								
69	74								

Speed Counts - NB SB WB EB

Speed Counts - NB B WB EB

Cars	Cars	Cars	Cars	H. Trucks	H. Trucks	M. Trucks	M. Trucks	Buses	M. Cycles
15	68	68		68		69			
71	70	69		67		66			
81	79	71		60		66			
72	76	72		60		66			
73	73	68	1	TZ		62		· · ·	
74	76	75		60		70			
71	79	76		66		62			
67	83	75		52		68			
70	75	71		56					
80	73	73		69					
70	68			64					
13	70			59					

Location (Address and County)/Site Identification	Station Number	Survey No.
I-75 NB	1	3

Date	Calibration Begin	Calibration End	Time Begin	Time End	Measured dB(A)
1/29/16	114.00	113.97	1:32	11:42	79.0

Weather Data									
Temperature	Cloud/Sun Cover	Precipitation/ Humidity	Wind Speed Direction						
61° F	Sunny	50%	10-15mph NW						

Traffic Classification (NB)SB WB EB

Cars	Motorcycles	Buses	Med. Trucks	Heavy Trucks	
664	Ó	Ц	18	32	

Traffic Classifications - NB SB WB EB

Cars	Cars Motorcycles		Med. Trucks	Heavy Trucks	
573	0	2	20	27	

Measurements Taken By:

Other Comments:

Location (Address and	Station Number	Survey No.	
I-75 Northbourd	Near Excit 207 Mal	e 1	3

	Speed Counts - (NB SB WB EB								
Cars	Cars	Cars	Cars	H. Trucks	H. Trucks	M. Trucks	M. Trucks	Buses	M. Cycles
68	70	71			61	62		55	
69	78	65			57	60		71	
65	72	72			60	69		63	
72	73	75			61	67			
63	72	72			59	66			
67	72	72			69				
69	73	70			55				
75	68	75			62				
67	71	68			70				
73	66	70			62				
70	69				70				
70	71				69				

Speed Counts (NB SB WB EB

Speed Counts - NB SB WB EB

Cars	Cars	Cars	Cars	H. Trucks	H. Trucks	M. Trucks	M. Trucks	Buses	M. Cycles
69	76	69		70		74		50	
67	71	65		72		69			
64	71	71		67		7(
73	63	74		61		69			
72	67	71		53		67			
74	69	72		59					
75	61	73		64					
17	76	69		63					
69	67	67		62					
61	65	70							
70	75	73							
70	72	69							

1

Location (Address and County)/Site Identification	Station Number	Survey No.
Clark Rd EB - East of Camelot	2	1

Date	Calibration Begin	Calibration End	Time Begin	Time End	Measured dB(A)
1/29/16	114.05	113.99	12:08	12:18	67.2

	Weatl	ner Data	
Temperature	Cloud/Sun Cover	Precipitation/ Humidity	Wind Speed Direction
62° F	Sunny	50%	10-15 pp NW

Traffic Classification - NB SB WB EB

Cars	Motorcycles	Buses	Med. Trucks	Heavy Trucks
81	6	0		

Traffic Classifications - NB SB WB EB

Cars	Motorcycles	Buses	Med. Trucks	Heavy Trucks
98	6	0	5	2

Measurements Taken By:

Other Comments:

Rumble strips

	Lo	ocation (Add	dress and C	County)/Site	e Identificat	tion		Station Number	Survey No.
Ea	stor	Que	entre	~~ 0	n Clo	Je Rd		2	1
	l)	Spe	eed Counts	- NB SB	/B EB			
Cars	Cars	Cars	Cars	H. Trucks	H. Trucks	M. Trucks	M. Trucks	Buses	M. Cycles
44	4S	46		44		44			44
48	38	47		39		LAD			48
45	44	49							51
496	40	45							LPLA
47	52	49							
43	49	43							
42	52								
42	50								
31	5								
46	52								
43	53								
44	48								

Speed Counts - NB SB WBEB

Cars	Cars	Cars	Cars	H. Trucks	H. Trucks	M. Trucks	M. Trucks	Buses	M. Cycles
45	48	52		54		43			
5	47	4b				48			
48	48	42							
58	49	45							
54	50	54							
51	49	5							
49	48	50							
50	42	43							
48	43								
44	50								
47	49								
48	49								

Location (Address and County)/Site Identification	Station Number	Survey No.
Clark Rd EB - East of Currelot	Z	Z

Date	Calibration Begin	Calibration End	Time Begin	Time End	Measured dB(A)
1/29/16	113.99	(13.99	12:24	12:34	66.0

	Weat	ner Data	
Temperature	Cloud/Sun Cover	Precipitation/ Humidity	Wind Speed Direction
62°F	Sunny	50%	10-15 mph NW

Traffic Classification - NB SB WB EB

Cars	Motorcycles	Buses	Med. Trucks	Heavy Trucks
91	0	0	3	Õ

Traffic Classifications - NB SB B EB

Cars	Motorcycles	Buses	Med. Trucks	Heavy Trucks
99	Ó	0	5	0

Other Comments:	Plupe	Greekal	e. 14	. Ja	Du A	rumble	ctrips
		and the	mil	1.0			311.05

	Location (Address and County)/Site Identification											
Ea	East of Queenbury on Clark Rd											
Speed Counts - NB_SB_WB_EB												
Cars	Cars	Cars	Cars	H. Trucks	H. Trucks	M. Trucks	M. Trucks	Buses	M. Cycles			
48	SD	50	43			57						
49	45	LO	50			-			-			
43	47	58										
51	49	44										
48	45	426										
47	52	42										
42	48	44										
43	46	49										
43	LER	41										
LAG	46	51										
44	46	49										
49	47	62										

Speed Counts - NB SB WBEB

Cars	Cars	Cars	Cars	H. Trucks	H. Trucks	M. Trucks	M. Trucks	Buses	M. Cycles
41	53	53				35			
40	51	51				45			
41	53	129				LPS		5	
39	207	51				54			
31	45	5				• • •			
91	50	48							
52	H(50					-		· · · · · ·
52	47	52							
51	43	54							
4B	5	51			·····				
53	52	45							
52	46								

Location (Address and County)/Site Identification	Station Number	Survey No.
Clark Rd ED- East of Camelot	2	M

Date	Calibration Begin	Calibration End	Time Begin	Time End	Measured dB(A)
1/29/16	113.99	113.89	12:38	12:48	69.7

Weather Data											
Temperature	Cloud/Sun Cover	Precipitation/ Humidity	Wind Speed Direction								
62°F	Sunny	50%	10-15mph NW								

Traffic Classification - NB SB WBEB

Cars	Motorcycles	Buses	Med. Trucks	Heavy Trucks		
113	l	0	M	5		

Traffic Classifications - NB SB WB EB

Cars	Motorcycles	Buses	Med. Trucks	Heavy Trucks		
88	0	0	3	0		

Measurements Taken By:		
Other Comments:	Rudsle strips (w/ heavy frucks)	

	Location (Address and County)/Site Identification											
Ear.	it oz	Que	entr	in d	n Clo	& Rd	-	2	3			
r	2											
Cars	Cars	Cars	Cars	H. Trucks	H. Trucks	M. Trucks	M. Trucks	Buses	M. Cycles			
47	47	55				49						
53	44	56				49						
55	US	53										
45	59	54										
55	41	4b										
46	47	5										
LPB	46	50							······			
45	54	46										
54	Š3	47										
51	54	59										
52	53											
60	54											

Speed Counts - NB SB WB EB

Cars	Cars	Cars	Cars	H. Trucks	H. Trucks	M. Trucks	M. Trucks	Buses	M. Cycles
51	50	45		46		42			HH
49	5	45		50		50			
52	AS	45		46		43			
42	49	46		45					
51	54	39		44					
51	56	53							
60	52	51							
50	44	54							
169	49	50							
51	46	48							
45	42	47							
LPP	50								

RESULTS: SOUND LEVELS	í.			Ú.			I-75 at Cla	rk Road In	terchange	1	1	
American Consulting							12 Februa	ary 2016				
C. Salicco							TNM 2.5					
							Calculate	d with TNN	VI 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		I-75 at	Clark Road	I Interchange	•							
RUN:		Validat	tion - Loc1I	Run1								
BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement typ	e shall be us	ed unles	S
								a State h	ighway agenc	y substantiat	es the u	ise
ATMOSPHERICS:		68 deg	g F, 50% RH	1			1	of a diffe	rent type with	approval of I	FHWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
		LAeq1h		LAeq1h		Increase ov	ver existing	Туре	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Loc1		1	1 0.0) 78.4	4	66 78	8.4 15	5 Snd Lvl	78.4	4 0.0	C	5 -5.0
Dwelling Units		# DUs	Noise Re	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected			1 0.0) 0.0	0	0.0						
All Impacted			1 0.0	0.0	0	0.0						
All that meet NR Goal		(0.0) 0.0	0	0.0						

RESULTS: SOUND LEVELS	í.						I-75 at Cla	rk Road In	terchange	<u>(</u>	1	
American Consulting							12 Februa	ry 2016				
C. Salicco							TNM 2.5					
							Calculate	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		I-75 at	Clark Road	Interchange								
RUN:		Validat	ion - Loc1F	Run2								
BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement type	e shall be use	ed unles	s
								a State hi	ghway agenc	y substantiat	es the u	ISe
ATMOSPHERICS:		68 deg	F, 50% RH	1			l	of a differ	rent type with	approval of I	FHWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
		LAeq1h		LAeq1h		Increase ove	existing	Туре	Calculated	Noise Redu	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Loc1		1	1 0.0	78.8	3	66 78.	8 15	Snd Lvl	78.8	3 0.0	C	5 -5.0
Dwelling Units		# DUs	Noise Re	duction	-							
			Min	Avg	Max							
			dB	dB	dB							
All Selected			1 0.0) 0.0	0	0.0						
All Impacted			0.0	0.0	D	0.0						
All that meet NR Goal		(0.0	0.0	כ	0.0						

RESULTS: SOUND LEVELS		I-75 at Cla	rk Road In	terchange	1	1							
American Consulting							12 Februa	ary 2016					
C. Salicco							TNM 2.5						
							Calculate	d with TNN	A 2.5				
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		I-75 at	Clark Road	Interchange	!								
RUN:		Validat	ion - Loc1F	Run3									
BARRIER DESIGN:		INPUT	HEIGHTS				Average pavement type shall be used unless						
								a State h	ighway agenc	y substantiat	es the u	ise	
ATMOSPHERICS:		68 deg	F, 50% RH	1			1	of a diffe	rent type with	approval of I	FHWA.		
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h		Increase ov	ver existing	Туре	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
	İ						Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Loc1		1 1	1 0.0	78.	7	66 7	8.7 15	5 Snd Lvl	78.7	7 0.0	C	5 -5.0	
Dwelling Units		# DUs	Noise Re	duction									
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0) 0.0	C	0.0							
All Impacted		1	0.0) 0.0	C	0.0							
All that meet NR Goal		(0.0	0.0	C	0.0							

RESULTS: SOUND LEVELS	1		I-75 at Clark Road Interchange										
American Consulting							12 Februa	ary 2016					
C. Salicco							TNM 2.5						
							Calculate	d with TN	M 2.5				
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		I-75 at	Clark Road	I Interchange	•								
RUN:		Validat	tion - Loc2l	Run1									
BARRIER DESIGN:		INPUT	HEIGHTS				Average pavement type shall be used unless						
								a State h	nighway agenc	y substantiat	tes the u	se	
ATMOSPHERICS:		68 deg	g F, 50% RH	4				of a diffe	erent type with	approval of	FHWA.		
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h		Increase o	ver existing	Туре	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	l Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Loc2		1 1	1 0.0	65.	7	66 6	65.7 10)	65.7	7 0.0	0	8 -8.0	
Dwelling Units		# DUs	Noise Re	duction									
			Min	Avg	Max								
			dB	dB	dB								
All Selected			1 0.0) 0.	0	0.0							
All Impacted		(0.0	0.0	0	0.0							
All that meet NR Goal		(0.0	0.0	0	0.0		1					

RESULTS: SOUND LEVELS		I-75 at Clark Road Interchange											
American Consulting							12 Februa	ry 2016					
C. Salicco							TNM 2.5						
							Calculate	d with TN	M 2.5				
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		I-75 at	Clark Road	Interchange									
RUN:		Validat	ion - Loc2F	Run2									
BARRIER DESIGN:		INPUT	HEIGHTS				Average pavement type shall be used unless						
								a State h	ighway agenc	y substantiat	es the u	se	
ATMOSPHERICS:		68 deg	F, 50% RH	1				of a diffe	erent type with	approval of I	FHWA.		
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h		Increase over	r existing	Туре	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Loc2		1 1	0.0	65.7	7	66 65.	7 10)	65.7	0.0	C	8 -8.0	
Dwelling Units		# DUs	Noise Re	duction									
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	1 0.0) 0.0) (0.0							
All Impacted		0	0.0	0.0) (0.0							
All that meet NR Goal		(0.0	0.0) (0.0							

RESULTS: SOUND LEVELS		I-75 at Clar	rk Road In	terchange		1							
American Consulting							12 Februa	ry 2016					
C. Salicco							TNM 2.5						
							Calculated	d with TNN	1 2.5				
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		I-75 at	Clark Road	Interchange									
RUN:		Validat	ion - Loc2F	Run3									
BARRIER DESIGN:		INPUT	HEIGHTS				Average pavement type shall be used unless						
								a State hi	ghway agenc	y substantiat	es the u	se	
ATMOSPHERICS:		68 deg	F, 50% RH	1				of a differ	rent type with	approval of I	HWA.		
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h		Increase over	r existing	Туре	Calculated Noise		ction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Loc2		1 1	0.0	67.9	9	66 67.9	9 10	Snd Lvl	67.9	0.0)	8 -8.0	
Dwelling Units		# DUs	Noise Re	duction									
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0.0) 0.0) (0.0							
All Impacted		1	0.0	0.0) (0.0							
All that meet NR Goal		(0.0	0.0) (0.0							

Appendix E

TNM Input/Output

(To be Included on CD in Final Submittal)

Appendix F

Barrier Analyses TNM Input/output (To be Included on CD in Final Submittal)