

# **NOISE STUDY REPORT Design Addendum**

**WIDENING FLORIDA'S TURNPIKE (SR 91)  
FROM US 192 TO OSCEOLA PARKWAY  
Osceola County, Florida**

Financial Project ID Number: 436194-1-52-01 & 436194-3-52-01



**Prepared For:  
FLORIDA'S TURNPIKE ENTERPRISE**

**March 2023**

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# 1.0 INTRODUCTION

## 1.1 Purpose and Need for FPID# 436194-1-52-01

The project consists of reconstruction of the Turnpike (SR 91) from four to eight travel lanes beginning just north of Partin Settlement Road to just north of Osceola Parkway. The project ranges from M.P. 243.572 to M.P. 248.844 in Osceola and Orange Counties, Florida for a total length of 5.27 miles. This project involves shifting the Turnpike mainline approximately 53' to the east to avoid impacting an existing 30" FGT gas transmission line. Included is the reconstruction of two interchanges including widening and construction of the existing side streets. Replacing all existing ramp tolling features with Electronic Toll Collection (ETC). Six medium-span replacement bridges over the Turnpike Mainline, and one mainline short-span bridge over Bass Slough.

Additional improvements will include culvert and bridge-culvert extensions, noise barrier walls, drainage, signing, and pavement marking, signalization, lighting and intelligent transportation systems (ITS).

## 1.2 Purpose and Need for FPID# 436194-3-52-01

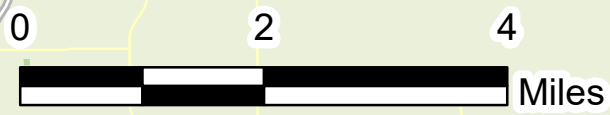
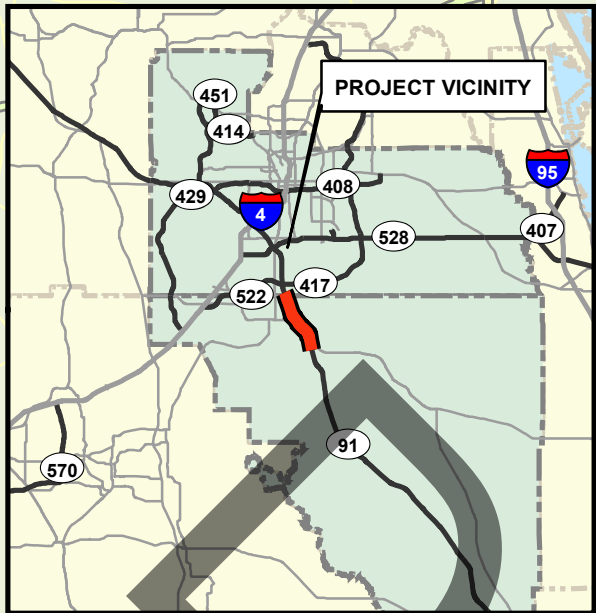
The project consists of reconstruction of the Turnpike (SR 91) from four to eight travel lanes beginning just south of Neptune Road to just north of Partin Settlement Road. The project ranges from M.P. 242.072 to M.P. 243.572 in Osceola County, Florida for a total length of 1.5 miles. This project involves shifting the Turnpike mainline approximately 53' to the east to avoid impacting an existing 30" FGT gas transmission line. Included is the reconstruction of one interchange including widening and construction of a portion of US 192. Constructing two new ramp tolling features with Electronic Toll Collection (ETC). Two mainline medium-span replacement bridges over US 192.

Additional improvements will include culvert and bridge-culvert extensions, noise barrier walls, drainage, signing, and pavement marking, signalization, lighting, and intelligent transportation systems (ITS).

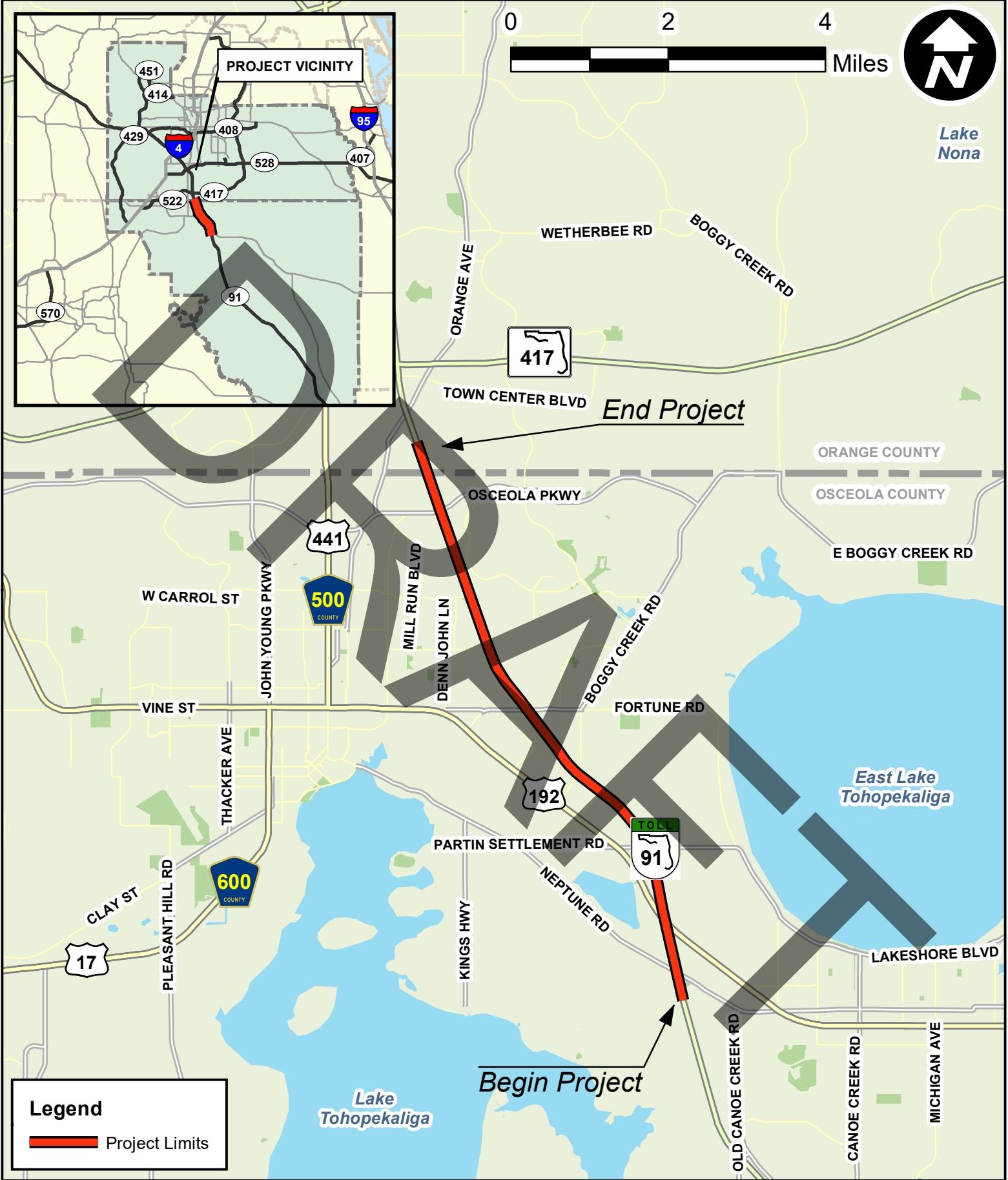
Florida's Turnpike Enterprise (FTE) evaluated improvements for the portion of Florida's Turnpike (SR 91) from the SR 50 (Clermont Interchange) to Interstate 75 (I-75) as part of a Project Development and Environment (PD&E) Study completed in 2016 (FPID 423375-1). The State Environmental Impact Report (SEIR) for the PD&E Study was approved July 7, 2016. The improvements included widening Florida's Turnpike from four lanes to eight lanes. As part of the PD&E Study, a Noise Study Report was prepared to evaluate potential impacts associated with traffic related noise. A project location map is included as **Figure 1** of this report.

## 1.3 Previous PD&E Study

Florida's Turnpike Enterprise (FTE) evaluated improvements for the portion of Florida's Turnpike (SR 91) from US 192 (Exit 242) to SR 50 (Clermont Exit 272) as part of a Project Development and Environment (PD&E) Study completed in 2003 (FPID 411488-1). The State Environmental Impact Report (SEIR) for the PD&E Study was approved December 18, 2003. The improvements included widening Florida's Turnpike from four lanes to six lanes from US 192 to Osceola Parkway and eight lanes from Osceola Parkway to SR 50 in Clermont. As part of the PD&E Study, a Noise Study Report was prepared to evaluate potential impacts associated with traffic related noise. A project location map for the design segment covered in this Design Noise Study is included as **Figure 1** of this report.

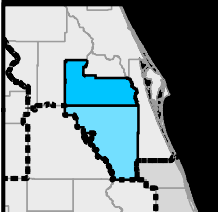


Lake Nona



**Legend**

 Project Limits



*Turnpike (SR 91) Widening - US 192 to Osceola Parkway*  
**PD&E Noise Study Report**  
 From US 192 to Osceola Parkway  
 Orange & Osceola Counties, Florida  
 Financial Project ID: 436194-1/3

**PROJECT LOCATION MAP**

*Figure*  
**1**

## 2.0 METHODOLOGY

The traffic noise study was performed in accordance with *Code of Federal Regulations, Title 23, Part 772 (23 CFR 772) Procedures for Abatement of Highway Traffic Noise and Construction Noise*<sup>1</sup> using methodology established by the Florida Department of Transportation (FDOT) in the *Project Development and Environment Manual, Part 2, Chapter 18 (FDOT, July 1, 2020)*<sup>2</sup> and FDOT's *Traffic Noise Modeling and Analysis Practitioners Handbook*<sup>3</sup>. Predicted noise levels were produced using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM), version 2.5.

### 2.1 Noise Metrics

Noise levels developed for this analysis are expressed in decibels (dB) using an "A"-scale [dB(A)] weighting. This scale most closely approximates the response characteristics of the human ear. All noise levels are reported as hourly equivalent noise levels [Leq(h)]. The Leq is defined as "the 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, with Leq(h) being the hourly value of Leq"<sup>2</sup>. Use of the dB(A) and Leq(h) metrics to evaluate traffic noise is consistent with 23 CFR 772.

### 2.2 Traffic Data

Traffic noise is heavily dependent on both traffic speed and traffic volume with the amount of noise generated by traffic increasing as the vehicle speed and number of vehicles increases. The traffic conditions that result in the highest noise levels for roadways are the hourly traffic volumes that represent Level of Service (LOS) C traffic conditions because they represent maximized traffic volumes that continue to travel at free flow speed.

Traffic volumes and vehicle mix (e.g. cars, medium trucks, heavy trucks, motorcycles, and buses) were predicted for the design year (2045) under the Build condition. For Florida's Turnpike roadway segments, LOS C hourly traffic volumes were compared to predicted design year demand hourly volumes and the lower of the two was used in the model, consistent with Section 18.2.1.5 of the FDOT PD&E Manual. For ramps, hourly traffic demand volumes were utilized. Traffic volumes and speeds used in the analysis are provided in **Appendix A**.

### 2.3 Noise Abatement Criteria and Considerations

Noise sensitive sites are any property where frequent exterior and/or interior human use occurs and where a lowered noise level would provide a benefit. FHWA has established noise levels at which noise abatement must be considered for various types of noise sensitive sites. These levels, which are used by the FTE for the purpose of evaluating traffic noise, are referred to as the Noise Abatement Criteria (NAC). As shown in **Table 2-1**, the NAC vary by activity category. Noise abatement measures are considered when predicted traffic noise levels approach or exceed the NAC. FDOT defines "approach" as within one dB(A) of the applicable FHWA criterion. For comparison purposes, typical noise levels for common indoor and outdoor activities are provided in **Figure 2**.

Noise abatement measures must also be considered when a substantial increase in traffic noise will occur as a direct result of the transportation project. The FDOT PD&E Manual<sup>2</sup> defines a substantial increase as 15 or more dB(A) above existing conditions. A substantial increase typically occurs in areas where traffic noise is a minor component of the existing noise environment but would become a major component after the project is constructed (e.g., new alignment project). The proposed concept design for this project follows the existing alignment of Florida's Turnpike and the results from the PD&E noise analysis indicated that a substantial increase in traffic noise will not occur.

**Table 2-1 – FHWA Noise Abatement Criteria**

NOISE ABATEMENT CRITERIA (NAC) [Hourly A-Weighted Sound Level-decibels (dB(A))]				
Activity Category	Activity Leq(h) <sup>1</sup>		Evaluation location	Description of activity category
	FHWA	FDOT		
A	57	56	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B <sup>2</sup>	67	66	Exterior	Residential
C <sup>2</sup>	67	66	Exterior	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of 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.
D	52	51	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E <sup>2</sup>	72	71	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	–	–	–	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	–	–	–	Undeveloped lands that are not permitted.

*(Based on Table 1 of 23 CFR Part 772)*

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

<sup>2</sup> 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.

**Figure 2 – Typical Noise Levels**

Common Outdoor Activities	Noise Level dB(A)	Common Indoor Activities
Jet Fly-Over 1000 ft.	---110---	Rock Band
Gas Lawn Mower at 3 ft.	---100---	
Diesel Truck at 50 ft., at 50 mph	---90---	Food Blender at 3 ft.
Noise Urban Area (Daytime)	---80---	Garbage Disposal at 3 ft.
Gas Lawn Mower at 100 ft.	---70---	Vacuum Cleaner at 10 ft.
Commercial Area	---60---	Normal Speech at 3 ft.
Heavy Traffic at 300 ft.	---50---	Large Business Office
Quiet Urban Daytime	---40---	Dishwasher Next Room
Quiet Urban Nighttime	---30---	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	---20---	Library
Quiet Rural Nighttime	---10---	Bedroom at Night, Concert Hall (Background)
Lowest Threshold of Human Hearing	---0---	Lowest Threshold of Human Hearing

Source: California Dept. of Transportation; Technical Noise Supplement; Oct 1998; Page 18.



## 3.0 TRAFFIC NOISE ANALYSIS AND ABATEMENT ASSESSMENT

### 3.1 Noise Sensitive Sites and Abatement Analysis

Within the project limits, residential and non-residential land-uses were evaluated. Receptor points representing the noise sensitive sites are located in accordance with the FDOT PD&E Manual, Part 2, Chapter 18 as follows:

- Residential receptor points are located at an area of frequent exterior use (i.e. patio or lanai) or the corner of a residential building closest to the major traffic noise source.
- Where residences are clustered together, single receptor points are analyzed as representative of a group of sites with similar characteristics.
- Ground floor receptor points are assumed to be 5 feet above the ground elevation.
- Non-residential receptors are located in areas of the non-residential site with frequent outdoor human use. For large areas, such as parks, receptors are placed in an array/grid pattern.
- Predicted traffic noise levels, NAC classification, and impact criteria for all noise sensitive sites in this project are documented in **Appendix B-1 & Appendix B-2**, and the locations of the receptor points are depicted on the project aerials found in **Appendix C**. The alphanumeric identification for each receptor point associated with a noise sensitive site is formulated as follows:
  - All receptor point names begin with a single letter code indicating the receptor “type” that point represents.
    - “R” for Residences
    - “N” for Non-Residential Sites (NRS)
  - Following the “type” code, receptors are assigned a common noise environment (CNE) identifier which labels receptors according to the CNE within which they are located.
    - The first two letters (i.e., NB, SB) describe on which side of the roadway the CNE is located (e.g., “NB” indicates the receptor is located in a CNE on the northbound side of the travel lanes).
    - The number following the first two letters is a numeric sequencing number (e.g., CNE NB03 is the 3<sup>rd</sup> CNE on the northbound side of the roadway).
  - The number following the CNE identifier is the receptor number and is separated from the first string of characters with a dash (e.g., RNB03-004 is the 4<sup>th</sup> receptor, of Residential “type”, in the 2<sup>nd</sup> CNE on the northbound side of the roadway).
- The project aerials in **Appendix C** show the locations of all impacted and/or benefited receptors.

For the proposed design, 1,111 receptor points were utilized to represent 2,637 residences and 146 non-residential sites. Noise levels at 1,005 residences are predicted to approach or exceed the Noise Abatement Criteria (NAC) [i.e., 66 dB(A) for Activity Category B] established by FHWA for the design year (2045) Build condition. The impacted residences are located primarily in the first and second building rows within the neighborhoods adjacent to Florida’s Turnpike.

In addition to residences, Title 23 Code of Federal Regulations Part 772 specifies other Activity Categories addressing non-residential noise sensitive sites. Within the project limits, non-residential noise sensitive sites include numerous outdoor use areas at several qualifying special use locations including schools, playgrounds, restaurants, neighborhood recreations areas, as well as interior use at one church.

Of the non-residential noise sensitive sites within the project limits, noise impacts are predicted to occur at seventy receptors. Predicted noise levels for the design year (2045) Build condition are included in **Appendix B-1**

for residential receptors and **Appendix B-2** for non-residential receptors. The receptors are shown on the project aerials located in **Appendix C**.

Impacted residences are grouped into CNEs to evaluate the feasibility and cost reasonableness of providing noise barriers to reduce traffic noise. Noise barriers reduce traffic noise by blocking the sound path between a highway and noise sensitive site. To effectively reduce traffic noise, a noise barrier must be relatively long, continuous (with no intermittent openings), and of sufficient height. For a noise barrier to be considered feasible and cost reasonable (i.e. qualify for construction), the following conditions must be met.

To be considered feasible it must:

- Demonstrate that it will benefit at least two impacted receptors by providing a reduction in traffic related noise of at least 5 dB(A).
- Take into consideration a number of additional feasibility factors including: design and construction, safety, access, right of way (ROW), maintenance, drainage, and utility factors.

To be considered reasonable it must:

- Take into consideration the viewpoints of the benefitted property owners and residents.
- The cost of the noise barrier must not exceed \$42,000 per benefitted receptors for residences. A benefitted receptor is defined as a receptor that would experience at least a 5 dB(A) reduction in noise levels as a result of providing a noise barrier. The current unit cost used to evaluate cost reasonableness is \$30 per square foot for all noise barriers. This cost covers barrier materials and labor.
- Satisfy the FDOT's Noise Reduction Design Goal of 7 dB(A). Therefore, a noise barrier must provide a noise reduction of at least 7 dB(A) for at least one benefitted receptor.

Within the project limits, noise barrier locations were evaluated as follows:

- Non-shoulder noise barriers located outside the clear recovery zone but within the right-of-way (ROW) are initially considered at heights ranging from 8 feet to 22 feet in 2-foot increments.
- If a non-shoulder noise barrier cannot provide feasible and reasonable abatement to an impacted receptor, then a shoulder barrier is evaluated. When on structure (e.g., bridge, retaining wall), a shoulder barrier is limited to a maximum height of 8 feet. If on embankment or ground mounted, a shoulder barrier is limited to a maximum height of 14 feet.

Using the evaluation process, noise barriers for each CNE are evaluated to determine an optimal barrier design. The noise barriers were evaluated to determine the maximum number of impacted receptors that could potentially be provided at least a 5 dB(A) reduction in traffic-related noise. These noise barriers are often constrained by specific conditions, such as overhead utilities. As a result of the site-specific conditions, noise barriers may not provide a 5 dB(A) reduction in traffic related noise to all impacted receptors.

At some locations, noise barriers will benefit receptors to a predicted noise level that does not approach the NAC. Since abatement consideration at these receptors is not required, noise barrier lengths or heights are not increased to benefit these sites. However, if benefitted because of the proximity to an impacted receptor, these sites are included when determining the cost reasonableness of the barrier based on cost per benefitted receptor. This methodology is consistent with FHWA policy and guidance.

## 3.2 Special Use Site Analysis

The methodology used to evaluate noise barrier systems for special use sites is different than the one used for residential locations. The standard procedure for determining the reasonableness and feasibility of a noise

barrier for a special use site is documented in *A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special Use Locations* (FDOT 2009)<sup>3</sup>. This special use site analysis procedure starts with the established cost threshold for residential locations and generalizes it to a person-hours of use criteria that can be applied to non-residential sites using this equation from the above referenced document.

**“abatement cost factor” =**

$$\frac{\$42k}{\text{residence}} * \frac{\text{residence}}{2.46\text{persons}} * \frac{\text{useage}}{24\text{hours}} * (14\text{ft} * 100\text{ft}) = \mathbf{\$995,935 /\text{person-hr}/\text{ft}^2} \quad (2)$$

A noise barrier for a special use site is considered cost reasonable if the calculated “abatement cost factor” is below the \$995,935/person-hr/ft<sup>2</sup> threshold established in the above calculation.

### 3.3 Residences on Northbound Side of Florida’s Turnpike

#### 3.3.1 Partin Triangle Park (CNE NB01)

Partin Triangle Park is located on the northbound side of Florida’s Turnpike between the St Cloud Canal and Neptune Road. In this area, 18 NAC C receptor points, representing outdoor recreation areas were added to the model. Noise levels are expected to approach or exceed the NAC for the Build Condition in the design year (2040) at 12 of these non-residential locations. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in NB01 is 6.0 dB(A)), therefore no NB01 receptors are impacted by a substantial increase.

Noise barriers were evaluated following the FDOT Special Land Use procedures outlined in Section 3.2 of this report. Based on this evaluation, a potential noise barrier located along the northbound ROW could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction for the entire impacted area. However, for a 14-foot-tall Shoulder noise barrier to be cost reasonable, an average of 591 people would need to use the impacted portion (approximately 40% of the total park area) of the park for one hour per day, or 1,478 using the full park. That would mean that at least 123 people would have to be using the park every hour, 12 hours a day, 365 days a year. Because the park has fewer than 40 parking spaces, it does not seem possible for this park to generate the person hours that would be required to make a noise barrier cost reasonable. For this reason, noise barriers are not a potentially feasible and reasonable method to abate traffic related noise for the special use sites at the Partin Triangle Park. Table 3-1 summarizes the various noise barrier configurations that were evaluated for Partin Triangle Park.

**Table 3-1 – Partin Triangle Park**

Height (feet)	Length <sup>1</sup> (feet)	Location	Total Cost <sup>2</sup>	Benefited Acreage within impact area	Percentage of Impacted Area Benefited	Does the barrier satisfy the Noise Reduction Design Goal (-7dB(A))	Required Person-Hours of Daily Use Within Benefited Area	Possible for Person-Hours of Daily Use Within Entire Facility to be met?
22	900	ROW <sup>3</sup>	\$594,000	3.25 ac	100%	Yes	836	No
20	1,000	ROW <sup>3</sup>	\$600,000	2.97 ac	92%	Yes	844	No
18	1,000	ROW <sup>3</sup>	\$540,000	2.71 ac	83%	Yes	760	No
16	1,000	ROW <sup>3</sup>	\$480,000	2.16 ac	67%	Yes	676	No
14	1,000	ROW <sup>3</sup>	\$420,000	1.35 ac	42%	Yes	591	No
12	1,000	ROW <sup>3</sup>	\$360,000	1.08 ac	33%	Yes	877	No
10	1,000	ROW <sup>3</sup>	\$300,000	1.08 ac	33%	Yes	676	No
8	1,000	ROW <sup>3</sup>	n/a	n/a	n/a	No	n/a	n/a
14	1,250	SH <sup>4</sup>	n/a	n/a	n/a	No	n/a	n/a

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Unit cost of \$30/ft<sup>2</sup>

<sup>3</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>4</sup> SH - Shoulder noise barrier on Florida's Turnpike

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown in aerial sheet 1 located in **Appendix C**.

### 3.3.2 City of Life Church and 192 Animal Clinic (CNE NB02)

City of Life Church and the 192 Animal Clinic are located on the northbound side of Florida's Turnpike between Neptune Road and Ames Haven Road. In this area, 12 NAC C receptor points, representing outdoor play areas at the City of Life Church and one NAC E receptor for outdoor use area at the 192 Animal Clinic (receptor is just outside the aerials limits on sheet 2). Noise levels are not expected to approach or exceed the NAC for the Build Condition in the design year (2040) for any of the NAC C receptors in CNE NB02. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in NB02 is 4.6 dB(A)), therefore no NB02 receptors are impacted by a substantial increase. Because no receptors are predicted to be impacted by traffic related noise, noise abatement was not considered for CNE NB02.

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown in aerial sheet 2 located in **Appendix C**.

### 3.3.3 Mickey Johnson Court (CNE NB03)

Mickey Johnson Court is located on the northbound side of Florida's Turnpike between Ames Haven Road and US 192. In this area, four NAC B receptor points, representing four residential receptors were added to the model. Noise levels are expected to approach or exceed the NAC for the Build Condition at one residence in the design year (2040). Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in NB03 is 4.1 dB(A)), therefore no NB03 receptors are impacted by a substantial increase.

Because a minimum of two impacted residences must be benefitted for noise abatement to be feasible, noise abatement was not considered for the isolated impacted single-family residence in NB03.

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in the project aerials located in **Appendix C**.

### 3.3.4 Outback Steakhouse (CNE NB04)

Outback Steakhouse is located on the northbound side of Florida's Turnpike just north of US 192. In this area, one NAC E receptor point, representing outdoor seating at the restaurant was added to the model. Noise levels are not expected to approach or exceed the NAC for the Build Condition in the design year (2040). Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in NB04 is 1.1 dB(A)), therefore no NB04 receptors are impacted by a substantial increase. Because no receptors are predicted to be impacted by traffic related noise, noise abatement was not considered for CNE NB04.

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown aerial sheet 3 located in **Appendix C**.

### 3.3.5 Simmons Trace (CNE NB05)

The Simmons Trace neighborhood is located on the northbound side of Florida's Turnpike between Partin Settlement Road and the St Cloud North ramps. This neighborhood was in the early stages of construction at the time this noise study report was conducted. Only residences with a valid building permit as of the time this noise study was conducted were included in the noise analysis. In this area building permits were verified for 114 residences, so 62 NAC B receptor points, representing the 114 residences, and one NAC C receptor representing outdoor use at a playground were added to the model. Of these sites, 4 residences are expected to approach or exceed the NAC for the Build Condition in the design year (2040). Noise levels at the playground are not expected to meet or exceed the NAC. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in NB03 is 5.6 dB(A)), therefore no NB05 receptors are impacted by a substantial increase.

Noise barriers were evaluated for the residences in Simmons Trace to abate traffic related noise. Based on this evaluation, neither a potential noise barrier system located along the eastbound ROW or Shoulder could provide a 7 dB(A) reduction at one or more receptors. The barriers were likely not able to achieve the noise reduction design goal due to the residences being set back about 300 feet from the ROW line, reducing the effectiveness of noise barriers at the ROW. In addition, the turnpike through lanes are elevated for the overpass at US 192, making it more challenging for the barrier to block the elevated sections of the roadway on the overpass. Therefore, noise barriers are not a reasonable and feasible method to abate traffic related noise impacts for the residences in CNE NB05. **Table 3-2** summarizes the various barrier configurations that were evaluated for CNE NB05.

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in aerial sheet 3 located in **Appendix C**.

**Table 3-2 – Simmons Trace**

Height (feet)	Length <sup>1</sup> (feet)	Location	No. of Impacts	Noise Reduction at Impacted Residences			Number of Benefited Residences				Impacted Res. Not Benefited <sup>4</sup>	Total Estimated Cost <sup>5</sup>	Cost per Benefited Residence
				5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted <sup>2</sup>	Not Impacted <sup>3</sup>	Total	Average Reduction dB(A)			
14	1400	SH <sup>7</sup>	4	0	4	0	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>
14	1800	SH <sup>7</sup>		0	0	0	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft<sup>2</sup> for all barriers.

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

<sup>8</sup> Noise barrier system did not meet the noise reduction design goal of a 7 dB(A) reduction at any receptor, so no cost analysis was conducted.

### 3.3.6 Christian Life Church (CNE NB05)

Christian Life Church outdoor seating is located on the northbound side of Florida’s Turnpike between Sharp Road and Partin Settlement Road. In this area two NAC C receptor points, representing outdoor seating areas at Christian Life Church, were added to the model. Noise levels are not expected to approach or exceed the NAC for the Build Condition in the design year (2040) at the receptors in CNE NB05. Noise levels are expected to increase, but not by 15 dB(A) (the maximum predicted increase in NB05 is 5.6 dB(A)), therefore no NB05 special use receptors are impacted by a substantial increase. Because no receptors are predicted to be impacted by traffic related noise, noise abatement was not considered for CNE NB05.

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown in aerial sheet 5 located in **Appendix C**.

### 3.3.7 Remington (CNE NB06)

The Remington neighborhood is located on the northbound side of Florida’s Turnpike between Partin Settlement Road and the St Cloud North ramps. In this area, 52 NAC B receptor points, representing 113 residential receptors, were added to the model. Noise level at 39 of these residences are expected to approach or exceed the NAC for the Build Condition in the design year (2040). Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in NB03 is 6.9 dB(A)), therefore no NB06 receptors are impacted by a substantial increase.

Noise barriers were evaluated for the residences in Remington to abate traffic related noise. Based on this evaluation, a noise barrier system located along the eastbound shoulder and ROW could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction at two or more impacted receptors. The most cost-effective barrier evaluated will not exceed the allowable \$42,000 per benefited receptor and therefore, noise barriers are a cost reasonable method to abate traffic related noise impacts for the residences in CNE NB06.

**Table 3-3** summarizes the various barrier configurations that were evaluated for CNE NB06.

**Table 3-3 – Remington**

Height (feet)	Length <sup>1</sup> (feet)	Location	No. of Impacts	Noise Reduction at Impacted Residences			Number of Benefited Residences				Impacted Res. Not Benefited <sup>4</sup>	Total Estimated Cost <sup>5</sup>	Cost per Benefited Residence
				5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted <sup>2</sup>	Not Impacted <sup>3</sup>	Total	Average Reduction dB(A)			
22	2080	ROW <sup>6</sup>	39	2	2	35	39	39	78	10.0	0	\$1,767,600	\$22,662
14	940	SH <sup>7</sup>											
22	1880	ROW <sup>6</sup>	39	0	3	32	35	35	70	10.2	4	\$1,659,600	\$23,709
14	840	SH <sup>7</sup>											
20	2080	ROW <sup>6</sup>	39	2	4	33	39	33	72	9.4	0	\$1,586,400	\$22,033
12	940	SH <sup>7</sup>											
14	2400	SH <sup>7</sup>	39	4	4	31	39	33	72	7.9	0	\$1,008,000	\$14,000
14	2200	SH <sup>7</sup>	39	4	14	16	34	29	63	7.6	5	\$924,000	\$14,667
12	2400	SH <sup>7</sup>	39	0	20	15	35	24	59	7.2	4	\$864,000	\$14,644

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft<sup>2</sup> for all barriers.

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

<sup>8</sup> Noise barrier system did not meet the noise reduction design goal of a 7 dB(A) reduction at any receptor, so no cost analysis was not conducted.

<sup>9</sup> Noise barrier system did not meet the feasibility requirement of a 5 dB(A) reduction at two or more receptors, so no cost analysis was conducted.

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in aerial sheets 4 and 5 located in **Appendix C**.

### 3.3.8 The Osceola County Jail, Kissimmee Juvenile Correctional Facility, & Challenger Learning Center (CNE NB07)

The Osceola County Jail, Kissimmee Juvenile Correctional Facility, and Challenger Learning Center are located on the northbound side of Florida's Turnpike between the St Cloud North ramps and New Beginnings Road. In this area, 19 NAC C receptor points, representing outdoor use recreation facilities, were added to the model. Noise levels are expected to approach or exceed the NAC for the Build Condition in the design year (2040) at 11 of these receptors, representing approximately 45% of the total outdoor use area at the Osceola County Jail facility. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in NB07 is 6.9 dB(A)), therefore no NB07 receptors are impacted by a substantial increase.

Noise barriers were evaluated following the FDOT Special Land Use procedures outlined in Section 3.2 of this report. Based on this evaluation, a 16-foot-tall, 1,100-foot-long noise barrier located along the northbound ROW could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction for the entire impacted area. However, for this noise barrier to be cost reasonable, an average of 659 people would need to use the benefitted area for one hour per day. Based on the assumption of 100% capacity at the 800-person facility, and that each inmate at the jail receives one hour of outside time per jail, 590 person hours is the maximum number of outdoor use hours per day that would be expected at this facility. That is also assuming the facility is at 100% capacity, as of the last check on the Osceola County Jails website this facility was only at approximately 80% capacity. For this reason, the person hours necessary to make a noise barrier cost reasonable in this location cannot be met and noise barriers are not a potentially feasible and reasonable method to abate traffic related

noise for the special use sites at the Osceola County Jail. **Table 3-4** summarizes the various noise barrier configurations that were evaluated for CNE NB07.

**Table 3-4 – Osceola County Jail**

Height (feet)	Length <sup>1</sup> (feet)	Location	Total Cost	Benefited Acreage within impact area	Percentage of Impacted Area Benefited	Does the barrier satisfy the Noise Reduction Design Goal (-7dB(A))	Required Person-Hours of Daily Use Within Benefited Area	Possible for Person-Hours of Daily Use Within Entire Facility to be met?
22	1,100	ROW <sup>6</sup>	\$726,000	0.62 ac	100%	Yes	1,022	No
20	1,100	ROW <sup>6</sup>	\$660,000	0.62 ac	100%	Yes	929	No
18	1,100	ROW <sup>6</sup>	\$594,000	0.62 ac	100%	Yes	836	No
16	1,100	ROW <sup>6</sup>	\$528,000	0.62 ac	100%	Yes	743	No
14	1,200	SH <sup>7</sup>	\$546,000	0.62 ac	100%	Yes	769	No
12	1,200	SH <sup>7</sup>	\$468,000	0.56 ac	90%	Yes	659	No
10	1,200	SH <sup>7</sup>	n/a	n/a	n/a	No	n/a	n/a

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft2

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown in aerial sheets 6 and 7 located in **Appendix C**.

### 3.3.9 Country Crossing & Breezewood Village Apartments (CNE NB08)

Country Crossing and Breezewood Village Apartments are located on the northbound side of Florida's Turnpike between New Beginnings Road and Fortune Road. In this area, 32 NAC B receptor points, representing 127 residential receptors, and one NAC C receptor point, representing the Breezewood Village Apartment Playground, were added to the model. Noise levels are expected to approach or exceed the NAC for the Build Condition in the design year (2040) at 57 residences in this area. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in NB08 is 7.9 dB(A)), therefore no NB08 receptors are impacted by a substantial increase.

Noise barriers were evaluated for the residences in Country Crossing and Breezewood Village Apartments to abate traffic related noise. Based on this evaluation, a potential noise barrier system located along the eastbound shoulder and ROW could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction at two or more impacted receptors. This noise barrier system does not exceed the allowable \$42,000 per benefited receptor and therefore, noise barriers are a cost reasonable method to abate traffic related noise impacts for the residences in CNE NB08. Other noise barrier systems were considered, including a noise barrier only at the ROW, however these noise barrier systems had drainage and space constraints that would have prevented them from being constructed. The recommended noise barrier system was designed to accommodate these constructability issues. **Table 3-5** summarizes the various barrier configurations that were evaluated for CNE NB08.



**Table 3-5 – Country Crossing and Breezewood Village Apartments**

Height (feet)	Length <sup>1</sup> (feet)	Location	No. of Impacts	Noise Reduction at Impacted Residences			Number of Benefited Residences				Impacted Res. Not Benefited <sup>4</sup>	Total Estimated Cost <sup>5</sup>	Cost per Benefited Residence
				5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted <sup>2</sup>	Not Impacted <sup>3</sup>	Total	Average Reduction dB(A)			
8	3,200	SH <sup>7</sup>	57	15	9	14	38	1	39	5.9	19	\$768,000	\$19,692
22	2,100	ROW <sup>6</sup>	57	11	1	44	56	32	88	8.0	1	\$1,386,000	\$15,573
<b>8</b>	<b>1,020</b>	<b>SH<sup>7</sup></b>	<b>57</b>	<b>2</b>	<b>10</b>	<b>44</b>	<b>56</b>	<b>33</b>	<b>89</b>	<b>9.4</b>	<b>1</b>	<b>\$1,274,400</b>	<b>\$14,319</b>
<b>22</b>	<b>1,560</b>	<b>ROW<sup>6</sup></b>											
14	500	SH <sup>7</sup>	57	1	1	42	44	33	77	9.8	13	\$1,081,200	\$14,042
22	1,600	ROW <sup>6</sup>											
12	600	SH <sup>7</sup>	57	10	1	43	54	33	87	8.9	3	\$1,107,600	\$12,731
20	1,700	ROW <sup>6</sup>											

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft<sup>2</sup>

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

<sup>8</sup> Noise barrier system did not meet the noise reduction design goal of a 7 dB(A) reduction at any receptor, so no cost analysis was conducted.

<sup>9</sup> Noise barrier system exceeded cost reasonableness criteria of \$42,000/benefitted residence.

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown in aerial sheet 7 located in **Appendix C**.

### 3.3.10 Fortune Road Residence (CNE NB08)

One isolated single-family residence is located on the northbound side of Florida's Turnpike on the south side of Fortune Road. One NAC B receptor was added to the model for this residence. Noise levels are expected to approach or exceed the NAC for the Build Condition in the design year (2040) at this residence. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the predicted increase at this residence is 4.1 dB(A)), therefore this residence is not impacted by a substantial increase. Because a noise barrier must benefit two impacted residences, noise barriers were not considered for this isolated impact.

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown in aerial sheet 8 located in **Appendix C**.

### 3.3.11 Grande Court Apartments at Boggy Creek (CNE NB09)

Grande Court Apartments at Boggy Creek is located on the northbound side of Florida's Turnpike between Fortune Road and Mallard Creek Circle. In this area, 78 NAC B receptor points, representing 312 apartments, and nine NAC C receptor points, representing outdoor use areas at a playground, soccer field, and pool area, were added to the model. Noise levels are expected to approach or exceed the NAC for the Build Condition in the design year (2040) at 204 apartments in this area. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in NB08 is 8.5 dB(A)), therefore no NB08 receptors are impacted by a substantial increase.

Noise barriers were evaluated for the residences in Grande Court Apartments at Boggy Creek to abate traffic related noise. Based on this evaluation, a potential noise barrier system located along the northbound ROW could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction at two or more impacted

receptors. This noise barrier system does not exceed the allowable \$42,000 per benefited receptor and therefore, noise barriers are a cost reasonable method to abate traffic related noise impacts for the residences in CNE NB09. **Table 3-6** summarizes the various barrier configurations that were evaluated for CNE NB09.

**Table 3-6 – Grande Court Apartments at Boggy Creek**

Height (feet)	Length <sup>1</sup> (feet)	Location	No. of Impacts	Noise Reduction at Impacted Residences			Number of Benefited Residences				Impacted Res. Not Benefited <sup>4</sup>	Total Estimated Cost <sup>5</sup>	Cost per Benefited Residence
				5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted <sup>2</sup>	Not Impacted <sup>3</sup>	Total	Average Reduction dB(A)			
14	1,700	SH <sup>7</sup>	204	16	12	132	160	8	168	8.1	44	\$714,000	\$4,250
22	1,900	ROW <sup>6</sup>	204	8	16	180	204	12	216	10.1	0	\$1,254,000	\$5,806
22	1,800	ROW <sup>6</sup>	204	16	8	176	200	12	212	10.0	4	\$1,188,000	\$5,604
20	1,900	ROW <sup>6</sup>	204	12	24	168	204	12	216	9.3	4	\$1,140,000	\$5,278
18	1,800	ROW <sup>6</sup>	204	20	4	160	184	12	196	8.7	20	\$1,026,000	\$5,235

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft2

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

<sup>8</sup> Noise barrier system did not meet the noise reduction design goal of a 7 dB(A) reduction at any receptor, so no cost analysis was conducted.

<sup>9</sup> Noise barrier system exceeded cost reasonableness criteria of \$42,000/benefitted residence.

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown in aerial sheets 8 and 9 located in **Appendix C**.

### 3.3.12 Emerald Pointe (CNE NB10)

Emerald Pointe is located on the northbound side of Florida's Turnpike approximately ½ mile north of Fortune Road. In this area, 99 NAC B receptor points, representing 146 residential receptors were added to the model. Noise levels are expected to approach or exceed the NAC for the Build Condition in the design year (2040) at 71 of these residences. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in NB10 is 8.1 dB(A)), therefore no NB10 receptors are impacted by a substantial increase.

Noise barriers were evaluated for the residences in Emerald Points to abate traffic related noise. Based on this evaluation, a potential noise barrier system located along the northbound ROW and shoulder could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction at two or more impacted receptors. This noise barrier system will not exceed the allowable \$42,000 per benefited receptor and therefore, noise barriers are a cost reasonable method to abate traffic related noise impacts for the residences in Emerald Pointe. Other noise barrier systems were considered, including a noise barrier only at the ROW, however these noise barrier systems had drainage and space constraints that would have prevented them from being constructed. The recommended noise barrier system was designed to accommodate these constructability issues. **Table 3-7** summarizes the various barrier configurations that were evaluated for CNE NB10.

**Table 3-7 – Emerald Pointe**

Height (feet)	Length <sup>1</sup> (feet)	Location	No. of Impacts	Noise Reduction at Impacted Residences			Number of Benefited Residences				Impacted Res. Not Benefited <sup>4</sup>	Total Estimated Cost <sup>5</sup>	Cost per Benefited Residence
				5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted <sup>2</sup>	Not Impacted <sup>3</sup>	Total	Average Reduction dB(A)			
22	3,300	ROW <sup>6</sup>	71	3	5	63	71	41	112	9.7	0	\$2,178,000	\$19,446
8	4,400	SH <sup>7</sup>	71	45	10	0	55	0	55	5.6	0	n/a <sup>8</sup>	n/a <sup>8</sup>
<b>22</b>	<b>3,000</b>	<b>ROW<sup>6</sup></b>	<b>71</b>	<b>3</b>	<b>6</b>	<b>62</b>	<b>71</b>	<b>41</b>	<b>112</b>	<b>9.6</b>	<b>0</b>	<b>\$2,208,000</b>	<b>\$19,714</b>
<b>8</b>	<b>950</b>	<b>SH<sup>7</sup></b>											
22	2,800	ROW <sup>6</sup>	71	7	1	59	67	38	105	9.5	4	\$2,028,000	\$19,314
8	750	SH <sup>7</sup>											
20	3,000	ROW <sup>6</sup>	71	2	9	59	70	31	101	9.2	1	\$1,971,000	\$19,515
8	950	SH <sup>7</sup>											

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft<sup>2</sup>

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

<sup>8</sup> Noise barrier system did not meet the noise reduction design goal of a 7 dB(A) reduction at any receptor, so no cost analysis was conducted.

<sup>9</sup> Noise barrier system exceeded cost reasonableness criteria of \$42,000/benefitted residence.

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown in aerial sheets 9 and 10 located in **Appendix C**.

### 3.3.13 Buena Ventura Lakes (CNE NB11)

Buena Ventura Lakes is located on the northbound side of Florida's Turnpike starting approximately 1 mile south of Osceola Parkway and continuing north to Osceola Parkway. In this area, 117 NAC B receptor points, representing 209 residences, were added to the model. Noise levels are expected to approach or exceed the NAC for the Build Condition in the design year (2040) at 71 of these residences. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in NB11 is 7.1 dB(A)), therefore no NB11 receptors are impacted by a substantial increase.

Noise barriers were evaluated for the residences in Buena Ventura Lakes to abate traffic related noise. Based on this evaluation, a potential noise barrier system consisting of two separate groupings of walls located along the northbound ROW and shoulder could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction at two or more impacted receptors. The most cost-effective combination of barrier systems evaluated will not exceed the allowable \$42,000 per benefited receptor and therefore, noise barriers are a cost reasonable method to abate traffic related noise impacts for the residences in Buena Ventura Lakes. Other noise barrier systems were considered, including noise barriers placed exclusively at the ROW, however these noise barrier systems had drainage and space constraints that would have prevented them from being constructed. The recommended noise barrier system was designed to accommodate these constructability issues. **Table 3-8** summarizes the various barrier configurations that were evaluated for CNE NB11.

**Table 3-8 – Buena Ventura Lakes**

Height (feet)	Length <sup>1</sup> (feet)	Location	No. of Impacts	Noise Reduction at Impacted Residences			Number of Benefited Residences				Impacted Res. Not Benefited <sup>4</sup>	Total Estimated Cost <sup>5</sup>	Cost per Benefited Residence
				5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted <sup>2</sup>	Not Impacted <sup>3</sup>	Total	Average Reduction dB(A)			
22	2,200	ROW <sup>6</sup>	70	5	10	53	68	24	92	10.6	2	\$2,586,000	\$28,109
22	2,700	ROW <sup>6</sup>											
14	2,400	SH <sup>7</sup>	70	12	9	39	60	30	90	8.2	10	\$2,100,000	\$23,333
14	2,200	SH <sup>7</sup>											
8	700	SH <sup>7</sup>											
8	880	SH <sup>7</sup>	70	11	8	48	67	28	95	10.2	3	\$2,961,600	\$31,175
22	2,500	ROW <sup>6</sup>											
22	1,420	ROW <sup>6</sup>											
8	680	SH <sup>7</sup>											
8	780	SH <sup>7</sup>	70	12	4	48	64	22	86	10.3	6	\$2,781,600	\$32,344
22	2,400	ROW <sup>6</sup>											
22	1,320	ROW <sup>6</sup>											
8	580	SH <sup>7</sup>	70	13	5	48	66	22	88	9.9	4	\$2,632,800	\$29,918
6	880	SH <sup>7</sup>											
20	2,500	ROW <sup>6</sup>											
20	1,420	ROW <sup>6</sup>											
6	680	SH <sup>7</sup>											

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft<sup>2</sup>

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

<sup>8</sup> Noise barrier system did not meet the noise reduction design goal of a 7 dB(A) reduction at any receptor, so no cost analysis was conducted.

<sup>9</sup> Noise barrier system exceeded cost reasonableness criteria of \$42,000/benefitted residence.

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in aerial sheets 11, 12, and 13 located in **Appendix C**.

### 3.3.14 Coral Wood (CNE NB12)

Coral Wood is located on the northbound side of Florida's Turnpike between Osceola Parkway and the end of the project extents. In this area, 37 NAC B receptor points, representing 104 residential receptors, were added to the model. Newly constructed noise barriers along the northbound turnpike shoulder and ROW are effective in keeping noise levels at all the homes adjacent to the turnpike in Coral Wood below the 66 dB(A) impact threshold. In addition, noise barriers along Osceola Parkway are effective for most of the homes along the north side of Osceola Parkway. Noise levels are expected to approach or exceed the NAC for the Build Condition in the design year (2040) for one isolated impacted residence at the corner of Coralwood Circle and Osceola Parkway. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in NB12 is 4.2 dB(A)), therefore no NB12 receptors are impacted by a substantial increase. Because a minimum of two impacted noise sensitive locations must be benefitted for noise abatement to be feasible, noise abatement was not considered for the isolated impacted residence in CNE NB12.

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in aerial sheet 13 located in **Appendix C**.

### 3.4 Residences on Southbound Side of Florida's Turnpike

#### 3.4.1 Tohoqua Reserve (CNE SB01)

Tohoqua Reserve is located on the southbound side of Florida's Turnpike between the Saint Cloud Canal and Neptune Road. This neighborhood was in the early stages of construction at the time this noise study was conducted. Only residences with a valid building permit as of the time this noise study was conducted were included in the noise analysis. In this area, building permits were verified for 76 residences, so 27 NAC B receptor points, representing 76 residential receptors, were added to the model (The majority of the permitted homes in this area are 1,000+ feet away from the turnpike and fall outside of the limits of the aerials. See aerials sheet 1 for the receptors that are visible in the project aerials). Of these 76 residential receptors, 27 NAC B receptors, none are expected to approach or exceed the NAC for the Build Condition in the design year (2040). Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in SB01 is 5.8 dB(A)), therefore no SB01 receptors are impacted by a substantial increase.

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in aerial sheet 1 located in **Appendix C**.

#### 3.4.2 Neptune Middle School (CNE SB02)

Neptune Middle School is located on the southbound side of Florida's Turnpike between Neptune Road and Ames Haven Road. In this area, 20 NAC C receptor points, representing basketball courts, soccer fields, and playground equipment, were added to the model. Of these 20 total receptors, 10 NAC C receptors are expected to approach or exceed the NAC for the Build Condition in the design year (2040). Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in SB02 is 8.7 dB(A)), therefore no SB02 receptors are impacted by a substantial increase.

Noise barriers were evaluated following the FDOT Special Land Use procedures outlined in Section 2.4.4.1. Based on this evaluation, a potential noise barrier located along the southbound ROW or shoulder could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction for the entire impacted area. However, for a 14-foot-tall 1,400-foot-long shoulder noise barrier to be cost reasonable, an average of 709 people would need to use the benefited outdoor use area at the school for one hour per day, 365 days per year. Given that the impacted area is only about 25% of the total outdoor use area at the school, and the school enrollment is approximately 2,000 students, it is not possible for there to be enough usage in the impacted and benefited area to meet the minimum required person-hours per day to make a noise barrier cost reasonable. For this reason, noise barriers are not a potentially feasible and reasonable method to abate traffic related noise for the special use sites at the Neptune Middle School. **Table 3-9** summarizes the various noise barrier configurations that were evaluated for CNE SB02.

**Table 3-9 – Neptune Middle School**

Height (feet)	Length <sup>1</sup> (feet)	Location	Total Cost	Benefited Acreage within impact area	Percentage of Impacted Area Benefited	Does the barrier satisfy the Noise Reduction Design Goal (-7dB(A))	Required Person-Hours of Daily Use Within Benefited Area	Possible for Person-Hours of Daily Use Within Entire Facility to be met?
22	1,200	ROW <sup>6</sup>	\$792,000	6.26	100%	Yes	1,114	No
20	1,200	ROW <sup>6</sup>	\$720,000	6.26	100%	Yes	1,013	No
18	1,200	ROW <sup>6</sup>	\$648,000	6.26	100%	Yes	912	No
16	1,200	ROW <sup>6</sup>	\$576,000	6.26	100%	Yes	811	No
14	1,400	SH	\$588,000	6.26	100%	Yes	828	No
12	1,400	SH	\$504,000	4.69	75%	Yes	709	No
10	n/a	SH	n/a	n/a	n/a	No	n/a	n/a

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft2

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown in aerial sheet 2 located in **Appendix C**.

### 3.4.3 Emerald Lake & Villas of Emerald Lake (CNE SB03)

Emerald Lake and Villas of Emerald Lake are located on the southbound side of Florida's Turnpike between Neptune Middle School and US 192. In this area, 39 NAC B receptor points, representing 162 residential receptors, and one NAC C receptor representing the Emerald Lake tennis court were added to the model. Noise levels are expected to approach or exceed the NAC for the Build Condition in the design year (2040) at eight of these residences. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in SB03 is 7.8 dB(A)), therefore no SB03 receptors are impacted by a substantial increase.

Noise barriers were evaluated for the residences in Emerald Lake and Villas of Emerald Lake to abate traffic related noise. Based on this evaluation, a potential noise barrier system located along the southbound shoulder could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction at two or more impacted receptors. However, the most cost-effective barrier evaluated will exceed the allowable \$42,000 per benefited receptor and therefore, noise barriers are not a cost reasonable method to abate traffic related noise impacts for the residences in CNE SB03. A noise barrier in this area cannot meet the cost criteria for this CNE for several reasons; the homes are all a good distance away from the turnpike resulting in few impacts in the area, the homes that are impacted are widely spaced out and required a lot a barrier for only a small number of benefited homes, and the overpass elevates the turnpike lanes making noise barriers less effective at reducing traffic noise even at their maximum heights. **Table 3-9** summarizes the various barrier configurations that were evaluated for CNE SB03.

**Table 3-9 – Emerald Lake & Villas of Emerald Lake**

Height (feet)	Length <sup>1</sup> (feet)	Location	No. of Impacts	Noise Reduction at Impacted Residences			Number of Benefited Residences				Impacted Res. Not Benefited <sup>4</sup>	Total Estimated Cost <sup>5</sup>	Cost per Benefited Residence
				5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted <sup>2</sup>	Not Impacted <sup>3</sup>	Total	Average Reduction dB(A)			
22	2,400	ROW <sup>6</sup>	8	8	0	0	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>
14	1,600	SH <sup>7</sup>	8	3	0	1	4	2	6	6.2	4	\$672,000	\$112,000
12	1,600	SH <sup>7</sup>	8	0	1	0	N/A <sup>9</sup>	N/A <sup>9</sup>	N/A <sup>9</sup>	N/A <sup>9</sup>	N/A <sup>9</sup>	N/A <sup>9</sup>	N/A <sup>9</sup>
14	1,400	SH <sup>7</sup>	8	0	1	0	N/A <sup>9</sup>	N/A <sup>9</sup>	N/A <sup>9</sup>	N/A <sup>9</sup>	N/A <sup>9</sup>	N/A <sup>9</sup>	N/A <sup>9</sup>

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft<sup>2</sup> for all barriers.

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

<sup>8</sup> Noise barrier system did not meet the noise reduction design goal of a 7 dB(A) reduction at any receptor, so no cost analysis was conducted.

<sup>9</sup> Noise barrier system did not meet the feasibility requirement of a 5 dB(A) reduction at two or more receptors, so no cost analysis was conducted.

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in aerial sheets 2 and 3 located in **Appendix C**.

### 3.4.4 Osceola County Sheriff's Office (SB04)

Osceola County Sheriff's Office is located on the southbound side of Florida's Turnpike between US 192 and Partin Settlement Road. In this area, one NAC C receptor point, representing one non-residential location was added to the model. The one NAC C receptor, representing one non-residential location, is not expected to approach or exceed the NAC for the Build Condition in the design year (2040). Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in SB04 is 5.6 dB(A)), therefore the SB04 receptor is not impacted by a substantial increase. Because the receptor is not predicted to be impacted by traffic related noise, noise abatement was not considered for CNE SB04.

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown in aerial sheet 4 located in **Appendix C**.

### 3.4.5 Gateway Baptist Church (SB05)

Gateway Baptist Church is located on the southbound side of Florida's Turnpike Partin Settlement Road. In this area, two NAC D receptor points were added to the model representing interior uses at Gateway Baptist Church. A site visit to Gateway Baptist confirmed there were no areas of frequent outdoor use on site and that the windows were closed so a noise reduction factor of -20 dB(A) was applied to modeled noise levels for all predicted noise levels at the church. Noise levels are not expected to approach or exceed the NAC for the Build Condition in the design year (2040). Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in SB05 is 6.4 dB(A)), therefore no SB05 receptors are impacted by a substantial increase. Because no receptors are predicted to be impacted by traffic related noise, noise abatement was not considered for CNE SB05.

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown in aerial sheet 4 located in **Appendix C**.

### 3.4.6 Amber Pointe Apartments (SB06) and Academy Park Apartments (SB07)

Amber Pointe Apartments and Academy Park Apartments are located on the southbound side of Florida’s Turnpike between Partin Settlement Road and the ramp system to and from US 192. In this area 221 NAC B receptors, representing 730 residences, and one NAC C receptor point, representing an outdoor pool area, were added to the model. Noise levels are expected to approach or exceed the NAC for the Build Condition in the design year (2040) at 83 NAC B receptor points, representing 211 residences. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in SB06 and SB07 is 9.7 dB(A)), therefore no receptors in this area are impacted by a substantial increase.

Noise barriers were evaluated for the residences in Amber Pointe Apartments and Academy Park Apartments to abate traffic related noise. Based on this evaluation, a potential noise barrier system located along the southbound shoulder and ROW could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction at two or more impacted receptors. This noise barrier system does not exceed the allowable \$42,000 per benefited receptor and therefore, noise barriers are a cost reasonable method to abate traffic related noise impacts for the residences in CNE SB06 and CNE SB07. Other noise barrier systems were considered, including a noise barrier located only at the ROW, however these noise barrier systems had drainage and space constraints that would have prevented them from being constructed. The recommended noise barrier system was designed to accommodate these constructability issues. **Table 3-10** summarizes the various barrier configurations that were evaluated for CNE SB06.

**Table 3-10 – Amber Pointe Apartments and Academy Park Apartments**

Height (feet)	Length <sup>1</sup> (feet)	Location	No. of Impacts	Noise Reduction at Impacted Residences			Number of Benefited Residences				Impacted Res. Not Benefited <sup>4</sup>	Total Estimated Cost <sup>5</sup>	Cost per Benefited Residence
				5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted <sup>2</sup>	Not Impacted <sup>3</sup>	Total	Average Reduction dB(A)			
22	4,800	ROW <sup>6</sup>	211	12	16	175	203	186	389	8.6	8	\$3,168,000	\$8,144 <sup>8</sup>
8	5,000	SH <sup>7</sup>	211	27	37	77	141	147	288	7.0	70	\$1,512,000	\$5,250 <sup>8</sup>
22	1,180	ROW <sup>6</sup>	211	13	49	127	189	184	373	7.9	22	\$2,698,800	\$7,235
22	1,140	ROW <sup>6</sup>											
14	2,780	SH <sup>7</sup>											
20	1,180	ROW <sup>6</sup>	211	60	42	62	164	54	218	6.8	47	\$2,392,800	\$10,976
20	1,140	ROW <sup>6</sup>											
12	2,780	SH <sup>7</sup>											
22	1,080	ROW <sup>6</sup>	211	23	70	74	167	124	291	6.9	44	\$2,482,800	\$8,532
22	1,040	ROW <sup>6</sup>											
14	2,580	SH <sup>7</sup>											

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier’s terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft<sup>2</sup>

<sup>6</sup> ROW – Right of Way noise barrier on Florida’s Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida’s Turnpike

<sup>8</sup> Noise barrier system not constructable due to drainage and space constraints.

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in aerial sheet 4, 5, and 6 located in **Appendix C**.



### 3.4.7 Travelodge by Wyndham (SB08)

Travelodge by Wyndham is located on the southbound side of Florida's Turnpike at the intersection of the Kissimmee Toll Plaza ramps and US 192 (see aerial sheet 16 for receptor location). In this area, one NAC C receptor point, representing one non-residential receptor was added to the model. The one NAC C non-residential receptor, representing one non-residential location is expected to approach or exceed the NAC for the Build Condition in the design year (2040). Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in SB08 is 0.2 dB(A)), therefore no SB08 receptors are impacted by a substantial increase.

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in aerial sheet 16 located in **Appendix C**.

### 3.4.8 Flamingo Waterpark (SB09)

Flamingo Waterpark is located on the southbound side of Florida's Turnpike along the ramp system to and from US 192 (see aerial sheet 16 for receptor location). In this area, two NAC C receptor points, representing two non-residential receptors were added to the model. Of the two total receptors, neither of the NAC C non-residential receptors, representing two non-residential locations are expected to approach or exceed the NAC for the Build Condition in the design year (2040). Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in SB09 is 8.4 dB(A)), therefore no SB09 receptors are impacted by a substantial increase.

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in aerial sheet 16 located in **Appendix C**.

### 3.4.9 Simpson Ridge Apartments (SB10)

Simpson Ridge Apartments are located on the southbound side of Florida's Turnpike between the ramp system to and from US 192 and Simpson Road. In this area, 46 NAC B receptor points, representing 154 residential receptors, were added to the model. Of these 46 total receptors, 20 NAC B receptor points, representing 60 residences, are expected to approach or exceed the NAC for the Build Condition in the design year (2040). Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in SB10 is 9.1 dB(A)), therefore no SB10 receptors are impacted by a substantial increase.

Noise barriers were evaluated for the residences in Simpson Ridge Apartments to abate traffic related noise. Based on this evaluation, a potential noise barrier system located along the southbound ROW could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction at two or more impacted receptors. This noise barrier system does not exceed the allowable \$42,000 per benefited receptor and therefore, noise barriers are a cost reasonable method to abate traffic related noise impacts for the residences in CNE SB10. Four impacted residential receptors could not receive a benefit because of their distance from the noise barrier or proximity to Simpson Road. **Table 3-11** summarizes the various barrier configurations that were evaluated for CNE SB10.

**Table 3-11 – Simpson Ridge Apartments**

Height (feet)	Length <sup>1</sup> (feet)	Location	No. of Impacts	Noise Reduction at Impacted Residences			Number of Benefited Residences				Impacted Res. Not Benefited <sup>4</sup>	Total Estimated Cost <sup>5</sup>	Cost per Benefited Residence
				5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted <sup>2</sup>	Not Impacted <sup>3</sup>	Total	Average Reduction dB(A)			
14	1,200	SH <sup>7</sup>	60	9	18	3	30	0	30	6.1	30	\$504,000	\$16,800
12	1,200	SH <sup>7</sup>	60	15	9	0	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>
14	1,000	SH <sup>7</sup>	60	9	9	0	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>	N/A <sup>8</sup>
<b>22</b>	<b>1220</b>	<b>ROW<sup>6</sup></b>	<b>60</b>	<b>6</b>	<b>15</b>	<b>27</b>	<b>48</b>	<b>0</b>	<b>48</b>	<b>8.4</b>	<b>12</b>	<b>\$805,200</b>	<b>\$16,775</b>
20	1220	ROW <sup>6</sup>	60	9	9	27	45	0	45	8.2	15	\$732,000	\$16,267
22	1000	ROW <sup>6</sup>	60	3	6	21	30	0	30	8.9	30	\$660,000	\$22,000

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft<sup>2</sup>

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

<sup>8</sup> Noise barrier system did not meet the noise reduction design goal of a 7 dB(A) reduction at any receptor, so no cost analysis was conducted.

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in aerial sheet 6 located in **Appendix C**.

### 3.4.10 Johnson University of Florida, Gateway Highschool, and Osceola County School District (SB11)

Johnson University Florida, Gateway High School, and Osceola County School District offices are located on the southbound side of Florida's Turnpike between Simpson Road and Fortune Road. In this area, 42 NAC C receptor points, representing 42 non-residential receptors were added to the model. Of the 42 total receptors, noise levels are expected to approach or exceed the NAC for the Build Condition in the design year (2040) at 18 of the receptors at Johnson University Florida. Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in SB11 is 4.4 dB(A)), therefore no SB11 receptors are impacted by a substantial increase.

Noise barriers were evaluated following the FDOT Special Land Use procedures outlined in Section 2.4.4.1. Based on this evaluation, a potential noise barrier located along the southbound ROW could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction for the entire impacted area. However, for a 12-foot tall, 1,300-foot-long ROW noise barrier to be cost reasonable, an average of 659 people would need to use the benefited portion of the outdoor use areas for at least one hour per day. That would be over twice the total enrollment of this college. For this reason, the person hours necessary to make a noise barrier cost reasonable in this location cannot be met and noise barriers are not a potentially feasible and reasonable method to abate traffic related noise for the special use sites at the Johnson University of Florida. **Table 3-12** summarizes the various noise barrier configurations that were evaluated for CNE SB11.

**Table 3-12 – Johnson University of Florida**

Height (feet)	Length <sup>1</sup> (feet)	Location	Total Cost	Benefited Acreage within impact area	Percentage of Impacted Area Benefited	Does the barrier satisfy the Noise Reduction Design Goal (-7dB(A))	Required Person-Hours of Daily Use Within Benefited Area	Possible for Person-Hours of Daily Use Within Entire Facility to be met?
22	1,300	ROW <sup>6</sup>	\$858,000	3.4 ac	78%	Yes	1,207	No
20	1,300	ROW <sup>6</sup>	\$780,000	3.4 ac	78%	Yes	1,097	No
18	1,300	ROW <sup>6</sup>	\$702,000	3.4 ac	78%	Yes	988	No
16	1,300	ROW <sup>6</sup>	\$624,000	3.1 ac	72%	Yes	878	No
14	1,300	ROW <sup>6</sup>	\$546,000	2.2 ac	56%	Yes	769	No
12	1,300	ROW <sup>6</sup>	\$468,000	1.7 ac	39%	Yes	659	No
10	1,300	ROW <sup>6</sup>	n/a	n/a	n/a	No	n/a	n/a
14	1,800	SH <sup>7</sup>	\$756,000	2.2 ac	56%	Yes	1,064	No
12	n/a	SH <sup>7</sup>	n/a	n/a	n/a	No	n/a	n/a

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft<sup>2</sup>

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

The predicted noise levels are shown in **Appendix B-2** and the receptor locations are shown in aerial sheets 7 and 8 located in **Appendix C**.

### 3.4.11 Ponderosa RV Park (SB12)

Ponderosa RV Park is located on the southbound side of Florida's Turnpike between Fortune Road and Station 4887+00.00. A site visit to this location was conducted and the office manager confirmed that more than 50% of their sites were occupied year-round, so this RV park meets the criteria to be considered an NAC B residential area. In this area, 43 NAC B receptor points, representing 205 residential receptors, and five NAC C receptor points, representing five non-residential locations were added to the model. Of these 48 total receptors, 39 NAC B receptor points, representing 168 residences are expected to approach or exceed the NAC for the Build Condition in the design year (2040). None of the NAC C receptors are expected to approach or exceed the NAC for the Build Condition in the design year (2040). Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in SB12 is 9.8 dB(A)), therefore no SB12 receptors are impacted by a substantial increase.

Noise barriers were evaluated for the residences in Ponderosa RV Park to abate traffic related noise. Based on this evaluation, a potential noise barrier system located along the southbound ROW could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction at two or more impacted receptors. This noise barrier system does not exceed the allowable \$42,000 per benefited receptor and therefore, noise barriers are a cost reasonable method to abate traffic related noise impacts for the residences in CNE SB12. **Table 3-13** summarizes the various barrier configurations that were evaluated for CNE SB11.

**Table 3-13 – Ponderosa RV Park**

Height (feet)	Length <sup>1</sup> (feet)	Location	No. of Impacts	Noise Reduction at Impacted Residences			Number of Benefited Residences				Impacted Res. Not Benefited <sup>4</sup>	Total Estimated Cost <sup>5</sup>	Cost per Benefited Residence
				5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted <sup>2</sup>	Not Impacted <sup>3</sup>	Total	Average Reduction dB(A)			
14	2,300	SH <sup>7</sup>	171	25	56	66	147	0	147	7.0	24	\$966,000	\$6,571
12	2,300	SH <sup>7</sup>	171	44	26	42	112	0	112	6.4	59	\$828,000	\$7,393
14	2,100	SH <sup>7</sup>	171	35	31	64	130	0	130	7.0	41	\$882,000	\$6,785
<b>22</b>	<b>1,940</b>	<b>ROW<sup>6</sup></b>	<b>171</b>	<b>20</b>	<b>14</b>	<b>128</b>	<b>162</b>	<b>0</b>	<b>162</b>	<b>9.4</b>	<b>9</b>	<b>\$1,280,000</b>	<b>\$7,904</b>
20	1,940	ROW <sup>6</sup>	171	5	29	113	147	0	147	9.3	24	\$1,164,000	\$7,918
22	1,740	ROW <sup>6</sup>	171	3	29	110	142	0	142	9.8	29	\$1,148,400	\$8,087

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft<sup>2</sup>

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in aerial sheets 8 and 9 located in **Appendix C**.

### 3.4.12 Quail Hollow, Oak Run, Kissimmee Charter Elementary (SB13)

Quail Hollow, Oak Run, and Kissimmee Charter Elementary, are located on the southbound side of Florida's Turnpike between station 1917+00.00 and Osceola Parkway. In this area, 107 NAC B receptor points, representing 180 residential receptors, and eight NAC C receptor points, representing eight non-residential locations were added to the model. Of these 115 total receptors, 46 NAC B receptor points, representing 51 residences are expected to approach or exceed the NAC for the Build Condition in the design year (2040). None of the NAC C receptors are expected to approach or exceed the NAC for the Build Condition in the design year (2040). Noise levels are expected to increase, but not by 15 dB(A) at any receptor (the maximum predicted increase in SB13 is 8.4 dB(A)), therefore no SB13 receptors are impacted by a substantial increase.

Noise barriers were evaluated for the residences in Quail Hollow and Oak Run to abate traffic related noise. Based on this evaluation, a potential noise barrier system located along the southbound ROW could provide a 7 dB(A) reduction at one or more receptors and a 5 dB(A) reduction at two or more impacted receptors. This noise barrier system does not exceed the allowable \$42,000 per benefited receptor and therefore, noise barriers are a cost reasonable method to abate traffic related noise impacts for the residences in CNE SB13. **Table 3-14** summarizes the various barrier configurations that were evaluated for CNE SB13.

**Table 3-14 – Quail Hollow & Oak Run**

Height (feet)	Length <sup>1</sup> (feet)	Location	No. of Impacts	Noise Reduction at Impacted Residences			Number of Benefited Residences				Impacted Res. Not Benefited <sup>4</sup>	Total Estimated Cost <sup>5</sup>	Cost per Benefited Residence
				5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted <sup>2</sup>	Not Impacted <sup>3</sup>	Total	Average Reduction dB(A)			
14	5,300	SH <sup>7</sup>	51	3	5	43	51	79	130	7.9	0	\$2,226,000	\$17,123
12	5,300	SH <sup>7</sup>	51	3	22	23	48	63	111	7.1	3	\$1,908,000	\$17,189
14	5,100	SH <sup>7</sup>	51	2	4	42	48	79	127	7.9	3	\$2,142,000	\$16,866
<b>22</b>	<b>5,300</b>	<b>ROW<sup>6</sup></b>	<b>51</b>	<b>4</b>	<b>3</b>	<b>42</b>	<b>49</b>	<b>56</b>	<b>105</b>	<b>8.3</b>	<b>2</b>	<b>\$3,498,000</b>	<b>\$33,314</b>
20	5,300	ROW <sup>6</sup>	51	2	9	36	47	44	91	7.9	4	\$3,180,000	\$34,945
22	5,100	ROW <sup>6</sup>	51	1	4	41	46	46	56	8.4	5	\$3,366,000	\$33,000

<sup>1</sup> Full height is for the length indicated. If a shoulder noise barrier location is indicated, the length of vertical height tapers at the shoulder barrier's terminus (See FDOT Standard Plans) would be in addition to the length indicated.

<sup>2</sup> Benefited residences with predicted noise levels that approach or exceed the NAC.

<sup>3</sup> Benefited residences with predicted noise levels that do not approach the NAC.

<sup>4</sup> Impacted residences that do not received a minimum 5 dB(A) reduction from proposed noise barrier.

<sup>5</sup> Unit cost of \$30/ft<sup>2</sup>

<sup>6</sup> ROW – Right of Way noise barrier on Florida's Turnpike

<sup>7</sup> SH - Shoulder noise barrier on Florida's Turnpike

The predicted noise levels are shown in **Appendix B-1** and the receptor locations are shown in aerial sheets 10, 11, and 12 located in **Appendix C**.

## 4.0 OUTDOOR ADVERTISING

Within the project limits, 16 potential outdoor advertising sign locations were identified. The majority of these location are not located near potential noise barrier systems. Of the outdoor advertising sign locations that are potentially impacted by noise barriers only three appear to be permitted and conforming signs, as well as one non- conforming sign. Right of way staff are currently reviewing the identified locations and an appropriate response will be formulated once they have completed their review. The results of the outdoor advertising sign impact review process will be documented in a subsequent memo once that process in complete.

## 5.0 CONCLUSIONS

Within the project limits noise levels were predicted at 1,111 noise receptor locations, representing 2,637 residences and 146 non-residential sites. Of these sites, noise levels at 1,005 residences and 72 special use receptor sites are predicted to approach or exceed the NAC in the design year (2045) for the Build condition for each type of receptor location.

Noise sensitive sites were also evaluated to see if a substantial increase of 15 dB(A) or more in traffic noise compared to existing conditions would occur. The differences between the existing and future traffic noise levels ranged from an increase of 0.2 dB(A) to an increase of 9.8 dB(A). Therefore, no noise sensitive sites are expected to experience a substantial increase of 15 dB(A) in traffic noise compared to existing conditions.

Noise barriers were evaluated for the impacted noise sensitive sites. The results of the noise barrier evaluation conclude that noise barriers are a feasible and/or reasonable method to abate traffic related noise impacts for 9 noise sensitive areas.

**Table 4-1 – Feasible and Reasonable Noise Barrier Evaluation Summary**

Noise Sensitive Area	Number of Impacted Residences	Noise Barrier Approx. Begin Station	Noise Barrier Approx. End Station	Preliminary Noise Barrier Height (ft.)	Preliminary Noise Barrier Length (ft.) <sup>1</sup>	Preliminary Noise Barrier Location	Preliminary Noise Barrier Cost <sup>2</sup>	Number of Residences Potentially Benefited by a Noise Barrier <sup>3</sup>		Cost Per Benefited Residence
								Impacted	Total	
<b>NOISE BARRIERS NORTHBOUND SIDE OF TURNPIKE</b>										
Remington (CNE NB06)	39	1743+50	1764+00	22	2080	ROW	\$1,767,600	39	78	\$22,662
		1760+20	1769+60	14	940	SH				
Country Crossing & Breezewood Village Apartments (CNE NB08)	57	1824+10	1834+30	8	1020	SH	\$1,274,400	56	82	\$14,319
		1832+40	1847+80	22	1540	ROW				
Grande Court Apartments at Boggy Creek (CNE NB09)	204	1866+00	1883+00	22	1900	ROW	\$1,254,000	204	216	\$5,806
Emerald Pointe (CNE NB10)	71	1893+00	1923+00	22	3000	ROW	\$2,208,000	71	112	\$19,714
		1920+60	1930+10	8	950	SH				
Buena Ventura Lakes (CNE NB11)	71	1950+00	1958+80	8	880	SH	\$2,961,600	67	95	\$31,175
		1955+60	1980+60	22	2500	ROW				
		1991+80	2006+00	22	1420	ROW				
		2004+10	2010+90	8	680	SH				
<b>NOISE BARRIERS SOUTHBOUND SIDE OF TURNPIKE</b>										
Amber Pointe Apartments & Academy Park Apartments (SB06 & SB07)	211	1752+00	1764+00	22	1180	ROW	\$2,698,800	189	373	\$7,235
		1760+00	1787+60	14	2780	SH				
		1785+00	1793+00	22	1140	ROW				
Simpson Ridge Apartments (SB10)	60	1798+90	1811+10	22	1220	ROW	\$805,200	48	48	\$16,775
Ponderosa RV Park (SB12)	171	1869+80	1889+20	22	1940	ROW	\$1,280,000	162	162	\$7,904
Quail Hollow & Oak Run (SB13)	51	1925+00	1978+00	22	5300	ROW	\$3,498,000	49	105	\$33,314

<sup>1</sup> Full height is for length indicated. The length for any required taper in height at a shoulder noise barrier termination would be in addition to the length indicated.

<sup>2</sup> Unit cost of \$30/ft<sup>2</sup> for all non-shoulder noise barriers.

<sup>3</sup> Total includes impacted/benefited residences and residences with a predicted noise level that does not approach or exceed 67 dBA, but are incidentally benefited.

## 6.0 CONSTRUCTION NOISE AND VIBRATION

During the construction phase of the proposed project, short-term noise may be generated by stationary and mobile construction equipment. The construction noise will be temporary at any location and will be controlled by adherence to the most recent edition of FDOT's Standard Specifications for Road and Bridge Construction<sup>4</sup>.

Using the listing of sensitive sites found in FDOT's Project Development and Environment Manual, residents were identified as the only land use potentially sensitive to vibration that could occur during construction. If during final design it is determined that measures to control vibration are necessary, the project's construction provisions can be modified as needed.

## 7.0 PUBLIC INVOLVEMENT

Coordination with the public and local agencies and officials has been accomplished during the development of this project. In addition, local and community officials have had the opportunity to comment on the proposed project at the public meetings. To promote compatibility between land development planning and Florida's Turnpike, the distance between the edge of Florida's Turnpike outside travel lane and the point where the roadway related noise is predicted to reach the NAC for each activity category was estimated. These estimates are referred to as noise contours and are shown in Appendix D. These estimates provide the general distance at which the noise approaches or exceeds the NAC for each activity type.

A Design Public Information Meeting was conducted for the proposed improvements to Florida's Turnpike (SR 91) from US 192/US 441 to North of Osceola Parkway in Osceola County, Florida. The meeting was held on Tuesday, August 22, 2017 at Osceola Heritage Park, Exhibition Building, St. Cloud Room B, 1901 Chief Osceola Trail, Kissimmee, FL 34744. The meeting was conducted as an informal open house from 5:30 to 7:30 PM during which time the public was able to review maps, drawings, and other pertinent information developed by FDOT.

A public information meeting for the project was held virtually on September 12, 2022 and in person at the St. Cloud Community Center on September 13, 2022. Members of the public were afforded the opportunity to talk with staff at the in-person meeting. Questions raised by the public about noise abatement generally focused on requests for noise walls.

A Virtual Public Hearing for this project will be held on March 27, 2023 and an in-person hearing will be held on March 29, 2023 at the St. Cloud Community Center. Public comments will be documented in the final version of this report after the hearing is held.

## 8.0 REFERENCES

1. *23 CFR Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise*; Federal Highway Administration; Tallahassee, Florida; July 2010.
2. *Project Development and Environment Manual; Part 2, Chapter 18*, Florida Department of Transportation; Tallahassee, Florida; July 2020.
3. *Traffic Noise Modeling and Analysis Practitioners Handbook*; Florida Department of Transportation; Tallahassee, Florida; December 2018.
4. *Standard Specifications for Road and Bridge Construction*; Florida Department of Transportation; Tallahassee, Florida; July 2017.

**Appendix A**  
**Traffic Data**



## Noise Analysis Traffic Data - Turnpike (U.S. 192 to Osceola Parkway) Build (2040) Conditions

Turnpike Mainline													
Mainline Traffic Segment	Number of Lanes	AADT	LOS C AADT	Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	Standard K-factor	D-factor	Posted Speed (mph)
North of Osceola Parkway	8	120,500	109,100	7,430	5,920	4.51%	1.05%	3.29%	0.18%	0.07%	9.5%	57.1%	70
Osceola Parkway to U.S. 192 (North)	8	106,300	106,200	6,170	5,760	4.51%	1.05%	3.29%	0.18%	0.07%	9.5%	57.1%	70
U.S. 192 (North) to U.S. 192 (South)	8	98,100	96,100	5,700	5,760	4.51%	1.05%	3.29%	0.18%	0.07%	10.5%	57.1%	70
South of U.S. 192 (South)	8	78,500	96,100	4,230	5,760	4.51%	1.05%	3.29%	0.18%	0.07%	10.5%	57.1%	70

Ramps													
Ramp	Number of Lanes	One-Way AADT	One-Way LOS C AADT	Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	K-factor	D-factor	Operational Speed (mph)
<b>Osceola Parkway (MP 249)</b>													
Osceola Parkway - Southbound off	2	16,550	21,800	2,310	2,840	4.51%	1.05%	3.29%	0.18%	0.07%	10.3%	63.4%	45
Osceola Parkway - Northbound on	2	16,550	21,800	2,310	2,840	4.51%	1.05%	3.29%	0.18%	0.07%	10.3%	63.4%	45
Osceola Parkway - Southbound on	1	9,450	10,900	1,050	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	10.3%	63.4%	45
Osceola Parkway - Northbound off	1	9,450	10,900	1,050	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	10.3%	63.4%	45
<b>U.S. 192/Kissimmee-St. Cloud North (MP 244)</b>													
U.S. 192 - Southbound off	1	6,400	11,200	770	1,430	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	45
U.S. 192 - Northbound on	1	6,400	11,100	770	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	25
U.S. 192 - Southbound on	1	4,600	11,200	410	1,430	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	45
<b>U.S. 192/Kissimmee-St. Cloud South (MP 242)</b>													
U.S. 192 - Southbound off	1	12,100	11,200	1,470	1,430	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	45
U.S. 192 - Northbound on	1	12,100	11,200	1,470	1,430	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	45
U.S. 192 - Northbound off	1	4,600	11,200	410	1,430	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	45

Arterials													
Arterial Traffic Segment	Number of Lanes	AADT	LOS C AADT	Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	Standard K-factor	D-factor	Posted Speed (mph)
<b>Osceola Parkway</b>													
Osceola Parkway - East of Turnpike	6	56,000	58,700	2,660	2,790	3.14%	0.57%	2.33%	0.26%	0.32%	9.0%	52.8%	40
Osceola Parkway - West of Turnpike	6	93,100	58,700	4,420	2,790	3.14%	0.57%	2.33%	0.26%	0.32%	9.0%	52.8%	45
<b>U.S. 192/Kissimmee-St. Cloud North</b>													
U.S. 192 - East of Turnpike ramps/Shady Lane	6	51,900	61,900	2,470	2,940	2.73%	0.72%	1.68%	0.34%	0.10%	9.0%	52.8%	50
U.S. 192 - West of Turnpike ramps/Shady Lane	6	50,400	61,900	2,400	2,940	2.73%	0.72%	1.68%	0.34%	0.10%	9.0%	52.8%	50
<b>U.S. 192/Kissimmee-St. Cloud South</b>													
U.S. 192 - East of Turnpike	6	50,100	61,900	2,380	2,940	2.72%	0.58%	1.89%	0.26%	0.02%	9.0%	52.8%	50
U.S. 192 - West of Turnpike	6	48,900	61,900	2,320	2,940	2.72%	0.58%	1.89%	0.26%	0.02%	9.0%	52.8%	50

- (1) Posted speed data are obtained by field observation.
- (2) Daily and design hour ramp volumes are provided directionally (i.e. does not incorporate return movements on the corresponding ramp). Likewise, the daily and design hour LOS C maximum service volumes are listed directionally for each ramp.
- (3) Freeway mainline and ramp LOS C thresholds are based on the FDOT Systems Planning Office *Estimation of Capacities on Florida Freeways Report*, dated September 2014, and adjusted for local conditions.
- (4) Arterial design hour LOS C maximum service volumes are obtained from *FDOT 2012 Generalized Service Volume Tables*.
- (5) Mainline, ramp and arterial K and D factors are those used in the ESAL calculations (May 5, 2016).
- (6) LOS C AADTs are estimated using K and D factors and the design hour peak direction LOS C maximum service volumes.
- (7) Turnpike mainline and ramp overall design hour truck percentage are based on Site 97-0429 from the 2015 Florida Traffic Information DVD. The medium vehicle classifications listed here make a distinction between medium trucks and buses.
- (8) The design hour truck percentage for arterials are based on Site 92-0007, 92-0010, and 92-0032 from the 2015 Florida Traffic Information DVD. The medium vehicle classifications listed here make a distinction between medium trucks and buses.
- (9) Number of lanes are obtained by field observation.
- (10) Mainline and ramp AADTs and DDHVs from the Lane Requirement analysis for Build (2040) conditions.

**Noise Analysis Traffic Data - Turnpike (U.S. 192 to Osceola Parkway)  
No Build (2040) Conditions**

Turnpike Mainline													
Mainline Traffic Segment	Number of Lanes	AADT	LOS C AADT	Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	Standard K-factor	D-factor	Posted Speed (mph)
North of Osceola Parkway	4	115,500	54,600	7,120	2,960	4.51%	1.05%	3.29%	0.18%	0.07%	9.5%	57.1%	70
Osceola Parkway to U.S. 192 (North)	4	103,100	53,100	6,010	2,880	4.51%	1.05%	3.29%	0.18%	0.07%	9.5%	57.1%	70
U.S. 192 (North) to U.S. 192 (South)	4	75,100	48,000	4,170	2,880	4.51%	1.05%	3.29%	0.18%	0.07%	10.5%	57.1%	70
South of U.S. 192 (South)	4	79,700	48,000	4,170	2,880	4.51%	1.05%	3.29%	0.18%	0.07%	10.5%	57.1%	70

Ramps													
Ramp	Number of Lanes	One-Way AADT	One-Way LOS C AADT	Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	K-factor	D-factor	Operational Speed (mph)
<b>Osceola Parkway (MP 249)</b>													
Osceola Parkway - Southbound off	1	15,650	10,900	2,130	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	10.3%	63.4%	45
Osceola Parkway - Northbound on	1	15,650	10,900	2,130	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	10.3%	63.4%	45
Osceola Parkway - Southbound on	1	9,450	10,900	1,020	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	10.3%	63.4%	45
Osceola Parkway - Northbound off	1	9,450	10,900	1,020	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	10.3%	63.4%	45
<b>U.S. 192/Kissimmee-St. Cloud North (MP 244)</b>													
U.S. 192 - Southbound off	1	16,300	11,200	2,110	1,430	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	45
U.S. 192 - Northbound on	1	16,300	11,100	2,110	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	25
U.S. 192 - Southbound on	1	4,600	11,200	410	1,430	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	45
<b>U.S. 192/Kissimmee-St. Cloud South (MP 242)</b>													
U.S. 192 - Northbound off	1	4,600	11,200	410	1,430	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	45

Arterials													
Arterial Traffic Segment	Number of Lanes	AADT	LOS C AADT	Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	Standard K-factor	D-factor	Posted Speed (mph)
<b>Osceola Parkway</b>													
Osceola Parkway - East of Turnpike	6	56,000	58,700	2,660	2,790	3.14%	0.57%	2.33%	0.26%	0.32%	9.0%	52.8%	40
Osceola Parkway - West of Turnpike	6	93,100	58,700	4,420	2,790	3.14%	0.57%	2.33%	0.26%	0.32%	9.0%	52.8%	45
<b>U.S. 192/Kissimmee-St. Cloud North</b>													
U.S. 192 - East of Turnpike ramps/Shady Lane	6	51,900	61,900	2,470	2,940	2.73%	0.72%	1.68%	0.34%	0.10%	9.0%	52.8%	50
U.S. 192 - West of Turnpike ramps/Shady Lane	6	50,400	61,900	2,400	2,940	2.73%	0.72%	1.68%	0.34%	0.10%	9.0%	52.8%	50
<b>U.S. 192/Kissimmee-St. Cloud South</b>													
U.S. 192 - East of Turnpike	6	50,100	61,900	2,380	2,940	2.72%	0.58%	1.89%	0.26%	0.02%	9.0%	52.8%	50
U.S. 192 - West of Turnpike	6	48,900	61,900	2,320	2,940	2.72%	0.58%	1.89%	0.26%	0.02%	9.0%	52.8%	50

- (1) Posted speed data are obtained by field observation.
- (2) Daily and design hour ramp volumes are provided directionally (i.e. does not incorporate return movements on the corresponding ramp). Likewise, the daily and design hour LOS C maximum service volumes are listed directionally for each ramp.
- (3) Freeway mainline and ramp LOS C thresholds are based on the FDOT Systems Planning Office *Estimation of Capacities on Florida Freeways Report*, dated September 2014, and adjusted for local conditions.
- (4) Arterial design hour LOS C maximum service volumes are obtained from *FDOT 2012 Generalized Service Volume Tables*.
- (5) Mainline, ramp and arterial K and D factors are those used in the ESAL calculations (May 5, 2016).
- (6) LOS C AADTs are estimated using K and D factors and the design hour peak direction LOS C maximum service volumes.
- (7) Turnpike mainline and ramp overall design hour truck percentage are based on Site 97-0429 from the 2015 Florida Traffic Information DVD. The medium vehicle classifications listed here make a distinction between medium trucks and buses.
- (8) The design hour truck percentage for arterials are based on Site 92-0007, 92-0010, and 92-0032 from the 2015 Florida Traffic Information DVD. The medium vehicle classifications listed here make a distinction between medium trucks and buses.
- (9) Number of lanes are obtained by field observation.
- (10) Mainline and ramp AADTs and DDHVs from the Lane Requirement analysis for No Build (2040) conditions.

**Noise Analysis Traffic Data - Turnpike (U.S. 192 to Osceola Parkway)  
Existing (2016) Conditions**

Turnpike Mainline													
Mainline Traffic Segment	Number of Lanes	AADT	LOS C AADT	Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	Standard K-factor	D-factor	Posted Speed (mph)
North of Osceola Parkway	4	71,600	54,600	4,338	2,960	4.51%	1.05%	3.29%	0.18%	0.07%	9.5%	57.1%	70
Osceola Parkway to U.S. 192 (North)	4	60,400	53,100	3,431	2,880	4.51%	1.05%	3.29%	0.18%	0.07%	9.5%	57.1%	70
U.S. 192 (North) to U.S. 192 (South)	4	41,600	48,000	2,224	2,880	4.51%	1.05%	3.29%	0.18%	0.07%	10.5%	57.1%	70
South of U.S. 192 (South)	4	43,000	48,000	2,224	2,880	4.51%	1.05%	3.29%	0.18%	0.07%	10.5%	57.1%	70

Ramps													
Ramp	Number of Lanes	One-Way AADT	One-Way LOS C AADT	Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	K-factor	D-factor	Operational Speed (mph)
<b>Osceola Parkway (MP 249)</b>													
Osceola Parkway - Southbound off	1	11,700	10,900	1,548	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	10.3%	63.4%	45
Osceola Parkway - Northbound on	1	11,700	10,900	1,604	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	10.3%	63.4%	45
Osceola Parkway - Southbound on	1	6,100	10,900	641	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	10.3%	63.4%	45
Osceola Parkway - Northbound off	1	6,100	10,900	535	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	10.3%	63.4%	45
<b>U.S. 192/Kissimmee-St. Cloud North (MP 244)</b>													
U.S. 192 - Southbound off	1	10,100	11,200	1,297	1,430	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	45
U.S. 192 - Northbound on	1	10,100	11,100	1,327	1,420	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	25
U.S. 192 - Southbound on	1	1,400	11,200	94	1,430	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	45
<b>U.S. 192/Kissimmee-St. Cloud South (MP 242)</b>													
U.S. 192 - Northbound off	1	1,400	11,200	139	1,430	4.51%	1.05%	3.29%	0.18%	0.07%	9.8%	64.8%	45

Arterials													
Arterial Traffic Segment	Number of Lanes	AADT	LOS C AADT	Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	Standard K-factor	D-factor	Posted Speed (mph)
<b>Osceola Parkway</b>													
Osceola Parkway - East of Turnpike	6	37,500	58,700	1,780	2,790	3.14%	0.57%	2.33%	0.26%	0.32%	9.0%	52.8%	40
Osceola Parkway - West of Turnpike	6	56,000	58,700	2,660	2,790	3.14%	0.57%	2.33%	0.26%	0.32%	9.0%	52.8%	45
<b>U.S. 192/Kissimmee-St. Cloud North</b>													
U.S. 192 - East of Turnpike ramps/Shady Lane	4	35,300	40,200	1,680	1,910	2.73%	0.72%	1.68%	0.34%	0.10%	9.0%	52.8%	50
U.S. 192 - West of Turnpike ramps/Shady Lane	6	34,000	61,900	1,620	2,940	2.73%	0.72%	1.68%	0.34%	0.10%	9.0%	52.8%	50
<b>U.S. 192/Kissimmee-St. Cloud South</b>													
U.S. 192 - East of Turnpike	4	36,500	40,200	1,730	1,910	2.72%	0.58%	1.89%	0.26%	0.02%	9.0%	52.8%	50
U.S. 192 - West of Turnpike	4	35,300	40,200	1,680	1,910	2.72%	0.58%	1.89%	0.26%	0.02%	9.0%	52.8%	50

- (1) Posted speed data are obtained by field observation.
- (2) Daily and design hour ramp volumes are provided directionally (i.e. does not incorporate return movements on the corresponding ramp). Likewise, the daily and design hour LOS C maximum service volumes are listed directionally for each ramp.
- (3) Freeway mainline and ramp LOS C thresholds are based on the FDOT Systems Planning Office *Estimation of Capacities on Florida Freeways Report*, dated September 2014, and adjusted for local conditions.
- (4) Arterial design hour LOS C maximum service volumes are obtained from *FDOT 2012 Generalized Service Volume Tables*.
- (5) Mainline, ramp and arterial K and D factors are those used in the ESAL calculations (May 5, 2016).
- (6) LOS C AADTs are estimated using K and D factors and the design hour peak direction LOS C maximum service volumes.
- (7) Turnpike mainline and ramp overall design hour truck percentage are based on Site 97-0429 from the 2015 Florida Traffic Information DVD. The medium vehicle classifications listed here make a distinction between medium trucks and buses.
- (8) The design hour truck percentage for arterials are based on Site 92-0007, 92-0010, and 92-0032 from the 2015 Florida Traffic Information DVD. The medium vehicle classifications listed here make a distinction between medium trucks and buses.
- (9) Number of lanes are obtained by field observation.
- (10) Mainline and ramp AADTs and DDHVs are obtained from the Turnpike's annual count data and available toll data.



**Appendix B-1 – Residential Properties  
Predicted Noise Levels**

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
NB03	RNB03-001	1	B	67	66	58.5	62.6	No	No	Mickey Johnson Court
NB03	RNB03-002	1	B	67	66	65.0	<b>66.4</b>	Yes	No	Mickey Johnson Court
NB03	RNB03-003	1	B	67	66	61.6	64.1	No	No	Mickey Johnson Court
NB03	RNB03-004	1	B	67	66	59.3	63.2	No	No	Mickey Johnson Court
NB05	RNB05-001	1	B	67	66	61.4	64.7	No	No	Simmons Trace
NB05	RNB05-002	1	B	67	66	61.5	65.0	No	No	Simmons Trace
NB05	RNB05-003	1	B	67	66	61.6	65.3	No	No	Simmons Trace
NB05	RNB05-004	1	B	67	66	61.7	65.4	No	No	Simmons Trace
NB05	RNB05-005	1	B	67	66	61.7	65.4	No	No	Simmons Trace
NB05	RNB05-006	1	B	67	66	61.8	65.4	No	No	Simmons Trace
NB05	RNB05-007	1	B	67	66	61.7	65.4	No	No	Simmons Trace
NB05	RNB05-008	1	B	67	66	61.8	65.4	No	No	Simmons Trace
NB05	RNB05-009	1	B	67	66	61.8	65.4	No	No	Simmons Trace
NB05	RNB05-010	1	B	67	66	61.6	65.4	No	No	Simmons Trace
NB05	RNB05-011	2	B	67	66	61.5	65.4	No	No	Simmons Trace
NB05	RNB05-012	2	B	67	66	61.4	65.6	No	No	Simmons Trace
NB05	RNB05-013	2	B	67	66	61.4	65.4	No	No	Simmons Trace
NB05	RNB05-014	1	B	67	66	60.3	64.7	No	No	Simmons Trace
NB05	RNB05-015	2	B	67	66	61.2	65.2	No	No	Simmons Trace
NB05	RNB05-016	2	B	67	66	60.9	64.9	No	No	Simmons Trace
NB05	RNB05-017	1	B	67	66	62.4	<b>66.6</b>	Yes	No	Simmons Trace
NB05	RNB05-018	1	B	67	66	61.9	<b>66.3</b>	Yes	No	Simmons Trace
NB05	RNB05-019	1	B	67	66	61.8	<b>66.2</b>	Yes	No	Simmons Trace
NB05	RNB05-020	1	B	67	66	61.7	<b>66.0</b>	Yes	No	Simmons Trace
NB05	RNB05-021	1	B	67	66	61.6	65.9	No	No	Simmons Trace
NB05	RNB05-022	2	B	67	66	61.5	65.7	No	No	Simmons Trace
NB05	RNB05-023	2	B	67	66	61.2	65.3	No	No	Simmons Trace
NB05	RNB05-024	3	B	67	66	53.4	58.9	No	No	Simmons Trace
NB05	RNB05-025	2	B	67	66	57.7	62.3	No	No	Simmons Trace
NB05	RNB05-026	2	B	67	66	55.7	61.1	No	No	Simmons Trace
NB05	RNB05-027	2	B	67	66	54.9	60.3	No	No	Simmons Trace
NB05	RNB05-028	3	B	67	66	54.8	60.0	No	No	Simmons Trace
NB05	RNB05-029	1	B	67	66	53.4	57.9	No	No	Simmons Road
NB05	RNB05-030	2	B	67	66	55.2	60.0	No	No	Simmons Trace
NB05	RNB05-031	2	B	67	66	56.5	61.2	No	No	Simmons Trace
NB05	RNB05-032	2	B	67	66	57.8	62.5	No	No	Simmons Trace
NB05	RNB05-033	2	B	67	66	59.0	64.1	No	No	Simmons Trace
NB05	RNB05-034	2	B	67	66	59.3	63.8	No	No	Simmons Trace
NB05	RNB05-035	2	B	67	66	57.6	62.9	No	No	Simmons Trace
NB05	RNB05-036	2	B	67	66	55.6	61.2	No	No	Simmons Trace
NB05	RNB05-037	4	B	67	66	54.0	56.2	No	No	Simmons Trace
NB05	RNB05-039	3	B	67	66	53.3	58.1	No	No	Simmons Trace
NB05	RNB05-040	2	B	67	66	57.8	61.7	No	No	Simmons Trace
NB05	RNB05-041	3	B	67	66	55.9	59.9	No	No	Simmons Trace
NB05	RNB05-042	2	B	67	66	58.9	57.3	No	No	Simmons Trace
NB05	RNB05-043	2	B	67	66	58.2	55.2	No	No	Simmons Trace
NB05	RNB05-044	2	B	67	66	57.4	55.1	No	No	Simmons Trace
NB05	RNB05-045	2	B	67	66	57.6	54.8	No	No	Simmons Trace
NB05	RNB05-046	2	B	67	66	58.4	56.5	No	No	Simmons Trace
NB05	RNB05-047	2	B	67	66	59.1	57.4	No	No	Simmons Trace
NB05	RNB05-048	3	B	67	66	56.8	54.4	No	No	Simmons Trace
NB05	RNB05-049	3	B	67	66	57.0	54.2	No	No	Simmons Trace
NB05	RNB05-050	2	B	67	66	59.4	56.6	No	No	Simmons Trace
NB05	RNB05-051	2	B	67	66	58.5	55.0	No	No	Simmons Trace
NB05	RNB05-052	2	B	67	66	57.8	54.8	No	No	Simmons Trace
NB05	RNB05-053	3	B	67	66	57.2	54.0	No	No	Simmons Trace
NB05	RNB05-054	2	B	67	66	56.0	54.8	No	No	Simmons Road
NB05	RNB05-055	2	B	67	66	54.9	52.5	No	No	Simmons Trace
NB05	RNB05-056	2	B	67	66	54.8	49.2	No	No	Simmons Trace
NB05	RNB05-057	2	B	67	66	54.8	49.5	No	No	Simmons Trace
NB05	RNB05-058	2	B	67	66	54.7	49.9	No	No	Simmons Trace
NB05	RNB05-059	2	B	67	66	54.5	48.4	No	No	Simmons Trace
NB05	RNB05-060	2	B	67	66	54.4	48.1	No	No	Simmons Trace
NB05	RNB05-061	2	B	67	66	54.3	49.8	No	No	Simmons Trace
NB05	RNB05-062	1	B	67	66	52.6	57.6	No	No	Single Family Residence
NB05	RNB05-063	1	B	67	66	51.9	56.3	No	No	Single Family Residence
NB06	RNB06-001	4	B	67	66	56.5	63.3	No	No	Remington
NB06	RNB06-002	2	B	67	66	58.5	64.3	No	No	Remington
NB06	RNB06-003	2	B	67	66	60.0	63.8	No	No	Remington
NB06	RNB06-004	4	B	67	66	59.8	62.1	No	No	Remington
NB06	RNB06-005	2	B	67	66	61.4	<b>66.9</b>	Yes	No	Remington

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
NB06	RNB06-006	1	B	67	66	65.4	71.0	Yes	No	Remington
NB06	RNB06-007	1	B	67	66	66.4	71.7	Yes	No	Remington
NB06	RNB06-008	4	B	67	66	59.4	63.8	No	No	Remington
NB06	RNB06-009	4	B	67	66	57.7	59.1	No	No	Remington
NB06	RNB06-010	1	B	67	66	65.6	71.2	Yes	No	Remington
NB06	RNB06-011	2	B	67	66	62.2	68.4	Yes	No	Remington
NB06	RNB06-012	4	B	67	66	56.8	62.6	No	No	Remington
NB06	RNB06-013	1	B	67	66	57.5	64.2	No	No	Remington
NB06	RNB06-014	2	B	67	66	54.9	59.8	No	No	Remington
NB06	RNB06-015	1	B	67	66	59.6	66.0	Yes	No	Remington
NB06	RNB06-016	1	B	67	66	58.9	65.8	No	No	Remington
NB06	RNB06-017	2	B	67	66	60.6	67.1	Yes	No	Remington
NB06	RNB06-018	3	B	67	66	55.1	60.6	No	No	Remington
NB06	RNB06-019	2	B	67	66	54.6	59.4	No	No	Remington
NB06	RNB06-020	4	B	67	66	61.1	67.3	Yes	No	Remington
NB06	RNB06-021	3	B	67	66	55.0	60.0	No	No	Remington
NB06	RNB06-022	3	B	67	66	56.0	61.1	No	No	Remington
NB06	RNB06-023	3	B	67	66	61.5	67.1	Yes	No	Remington
NB06	RNB06-024	1	B	67	66	61.0	66.4	Yes	No	Remington
NB06	RNB06-025	2	B	67	66	55.4	59.8	No	No	Remington
NB06	RNB06-026	1	B	67	66	56.7	61.7	No	No	Remington
NB06	RNB06-027	1	B	67	66	63.7	69.6	Yes	No	Remington
NB06	RNB06-028	1	B	67	66	66.4	72.0	Yes	No	Remington
NB06	RNB06-029	1	B	67	66	56.0	60.5	No	No	Remington
NB06	RNB06-030	1	B	67	66	61.9	67.6	Yes	No	Remington
NB06	RNB06-031	1	B	67	66	55.6	59.8	No	No	Remington
NB06	RNB06-032	2	B	67	66	67.7	73.0	Yes	No	Remington
NB06	RNB06-033	1	B	67	66	55.5	59.7	No	No	Remington
NB06	RNB06-034	2	B	67	66	59.5	64.6	No	No	Remington
NB06	RNB06-035	2	B	67	66	57.2	61.3	No	No	Remington
NB06	RNB06-036	5	B	67	66	68.2	73.4	Yes	No	Remington
NB06	RNB06-037	2	B	67	66	59.8	65.3	No	No	Remington
NB06	RNB06-038	2	B	67	66	58.5	63.1	No	No	Remington
NB06	RNB06-039	2	B	67	66	68.1	73.2	Yes	No	Remington
NB06	RNB06-040	7	B	67	66	59.6	64.7	No	No	Remington
NB06	RNB06-041	5	B	67	66	59.3	64.1	No	No	Remington
NB06	RNB06-042	2	B	67	66	68.6	73.7	Yes	No	Remington
NB06	RNB06-043	1	B	67	66	68.7	73.7	Yes	No	Remington
NB06	RNB06-044	2	B	67	66	61.4	67.0	Yes	No	Remington
NB06	RNB06-045	2	B	67	66	59.9	64.8	No	No	Remington
NB06	RNB06-046	2	B	67	66	59.1	63.2	No	No	Remington
NB06	RNB06-047	1	B	67	66	68.4	73.5	Yes	No	Remington
NB06	RNB06-048	1	B	67	66	65.2	70.4	Yes	No	Remington
NB06	RNB06-049	2	B	67	66	61.9	66.7	Yes	No	Remington
NB06	RNB06-050	2	B	67	66	59.9	64.1	No	No	Remington
NB06	RNB06-051	2	B	67	66	59.6	63.4	No	No	Remington
NB06	RNB06-052	1	B	67	66	54.6	57.4	No	No	Remington
NB08	RNB08-001	2	B	67	66	60.9	67.7	Yes	No	Country Crossing
NB08	RNB08-002	3	B	67	66	58.9	65.1	No	No	Country Crossing
NB08	RNB08-003	1	B	67	66	62.1	69.1	Yes	No	Country Crossing
NB08	RNB08-004	3	B	67	66	56.7	62.0	No	No	Country Crossing
NB08	RNB08-005	1	B	67	66	62.9	70.2	Yes	No	Country Crossing
NB08	RNB08-006	1	B	67	66	63.1	70.4	Yes	No	Country Crossing
NB08	RNB08-007	1	B	67	66	63.0	70.4	Yes	No	Country Crossing
NB08	RNB08-008	3	B	67	66	55.1	60.2	No	No	Country Crossing
NB08	RNB08-009	1	B	67	66	62.1	69.3	Yes	No	Country Crossing
NB08	RNB08-010	3	B	67	66	55.9	61.8	No	No	Country Crossing
NB08	RNB08-011	3	B	67	66	61.5	68.3	Yes	No	Country Crossing
NB08	RNB08-012	3	B	67	66	53.8	59.2	No	No	Country Crossing
NB08	RNB08-013	1	B	67	66	60.3	66.8	Yes	No	Country Crossing
NB08	RNB08-014	2	B	67	66	55.0	60.6	No	No	Country Crossing
NB08	RNB08-015	1	B	67	66	58.4	64.7	No	No	Country Crossing
NB08	RNB08-016	8	B	67	66	61.3	68.3	Yes	No	Breezewood Village Apartments
NB08	RNB08-017	6	B	67	66	63.6	71.4	Yes	No	Breezewood Village Apartments
NB08	RNB08-018	4	B	67	66	68.0	75.8	Yes	No	Breezewood Village Apartments
NB08	RNB08-019	6	B	67	66	59.2	65.7	No	No	Breezewood Village Apartments
NB08	RNB08-020	6	B	67	66	54.4	59.2	No	No	Breezewood Village Apartments
NB08	RNB08-021	8	B	67	66	68.8	76.1	Yes	No	Breezewood Village Apartments
NB08	RNB08-022	6	B	67	66	52.3	58.0	No	No	Breezewood Village Apartments
NB08	RNB08-023	4	B	67	66	58.0	63.9	No	No	Breezewood Village Apartments
NB08	RNB08-024	6	B	67	66	55.0	61.0	No	No	Breezewood Village Apartments

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
NB08	RNB08-025	6	B	67	66	68.2	75.8	Yes	No	Breezewood Village Apartments
NB08	RNB08-027	6	B	67	66	52.1	56.9	No	No	Breezewood Village Apartments
NB08	RNB08-028	6	B	67	66	57.9	63.6	No	No	Breezewood Village Apartments
NB08	RNB08-029	5	B	67	66	65.4	72.8	Yes	No	Breezewood Village Apartments
NB08	RNB08-030	6	B	67	66	52.2	57.6	No	No	Breezewood Village Apartments
NB08	RNB08-031	8	B	67	66	61.0	68.9	Yes	No	Breezewood Village Apartments
NB08	RNB08-032	6	B	67	66	54.6	61.3	No	No	Breezewood Village Apartments
NB08	RNB08-033	1	B	67	66	67.6	71.7	Yes	No	Fortune Road Residence
NB09	RNB09-001A	4	B	67	66	62.2	66.5	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-001B	4	B	67	66	65.5	69.9	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-001C	4	B	67	66	67.7	71.1	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-002A	4	B	67	66	62.7	67.7	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-002B	4	B	67	66	66.2	70.8	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-002C	4	B	67	66	68.6	72.0	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-003A	4	B	67	66	64.4	70.8	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-003B	4	B	67	66	68.6	73.4	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-003C	4	B	67	66	70.8	74.8	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-004A	4	B	67	66	66.5	73.7	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-004B	4	B	67	66	71.3	75.6	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-004C	4	B	67	66	72.7	76.8	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-005A	4	B	67	66	56.1	61.5	No	No	Grande Court at Boggy Creek
NB09	RNB09-005B	4	B	67	66	59.7	65.3	No	No	Grande Court at Boggy Creek
NB09	RNB09-005C	4	B	67	66	62.2	66.1	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-006A	4	B	67	66	57.1	63.3	No	No	Grande Court at Boggy Creek
NB09	RNB09-006B	4	B	67	66	61.5	66.6	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-006C	4	B	67	66	64.3	67.4	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-007A	4	B	67	66	62.2	69.6	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-007B	4	B	67	66	67.3	72.1	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-007C	4	B	67	66	69.9	73.0	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-008A	4	B	67	66	63.3	70.9	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-008B	4	B	67	66	68.4	73.2	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-008C	4	B	67	66	70.9	74.1	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-009A	4	B	67	66	62.7	70.3	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-009B	4	B	67	66	67.8	72.7	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-009C	4	B	67	66	70.5	73.6	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-010A	4	B	67	66	62.3	69.8	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-010B	4	B	67	66	67.3	72.3	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-010C	4	B	67	66	70.0	72.9	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-011A	4	B	67	66	61.4	68.6	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-011B	4	B	67	66	66.3	71.4	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-011C	4	B	67	66	68.9	72.0	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-012A	4	B	67	66	60.4	67.2	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-012B	4	B	67	66	65.0	70.3	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-012C	4	B	67	66	67.6	70.9	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-013A	4	B	67	66	60.6	67.6	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-013B	4	B	67	66	65.2	70.5	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-013C	4	B	67	66	67.9	71.1	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-014A	4	B	67	66	61.3	68.4	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-014B	4	B	67	66	66.0	71.1	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-014C	4	B	67	66	68.7	71.7	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-015A	4	B	67	66	62.5	69.8	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-015B	4	B	67	66	67.3	72.0	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-015C	4	B	67	66	69.9	72.6	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-016A	4	B	67	66	63.0	70.2	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-016B	4	B	67	66	67.9	72.3	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-016C	4	B	67	66	70.2	73.3	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-017A	4	B	67	66	60.9	68.7	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-017B	4	B	67	66	66.6	71.1	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-017C	4	B	67	66	69.0	72.2	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-018A	4	B	67	66	63.7	71.7	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-018B	4	B	67	66	69.5	73.4	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-018C	4	B	67	66	71.0	74.6	Yes	No	Grande Court at Boggy Creek
NB09	RNB09-019A	4	B	67	66	57.9	59.4	No	No	Grande Court at Boggy Creek
NB09	RNB09-019B	4	B	67	66	59.2	62.4	No	No	Grande Court at Boggy Creek
NB09	RNB09-019C	4	B	67	66	60.5	64.0	No	No	Grande Court at Boggy Creek
NB09	RNB09-020A	4	B	67	66	56.4	58.4	No	No	Grande Court at Boggy Creek
NB09	RNB09-020B	4	B	67	66	58.1	61.4	No	No	Grande Court at Boggy Creek
NB09	RNB09-020C	4	B	67	66	59.3	63.0	No	No	Grande Court at Boggy Creek
NB09	RNB09-021A	4	B	67	66	54.5	55.9	No	No	Grande Court at Boggy Creek
NB09	RNB09-021B	4	B	67	66	56.0	59.1	No	No	Grande Court at Boggy Creek
NB09	RNB09-021C	4	B	67	66	57.3	60.9	No	No	Grande Court at Boggy Creek

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
NB09	RNB09-022A	4	B	67	66	53.8	55.0	No	No	Grande Court at Boggy Creek
NB09	RNB09-022B	4	B	67	66	55.3	58.5	No	No	Grande Court at Boggy Creek
NB09	RNB09-022C	4	B	67	66	56.7	60.5	No	No	Grande Court at Boggy Creek
NB09	RNB09-023A	4	B	67	66	53.1	54.6	No	No	Grande Court at Boggy Creek
NB09	RNB09-023B	4	B	67	66	54.7	58.0	No	No	Grande Court at Boggy Creek
NB09	RNB09-023C	4	B	67	66	56.1	60.0	No	No	Grande Court at Boggy Creek
NB09	RNB09-024A	4	B	67	66	52.9	54.6	No	No	Grande Court at Boggy Creek
NB09	RNB09-024B	4	B	67	66	54.7	58.1	No	No	Grande Court at Boggy Creek
NB09	RNB09-024C	4	B	67	66	56.1	60.0	No	No	Grande Court at Boggy Creek
NB09	RNB09-025A	4	B	67	66	52.3	54.3	No	No	Grande Court at Boggy Creek
NB09	RNB09-025B	4	B	67	66	54.1	57.9	No	No	Grande Court at Boggy Creek
NB09	RNB09-025C	4	B	67	66	55.5	59.9	No	No	Grande Court at Boggy Creek
NB09	RNB09-026A	4	B	67	66	51.9	53.8	No	No	Grande Court at Boggy Creek
NB09	RNB09-026B	4	B	67	66	53.7	57.5	No	No	Grande Court at Boggy Creek
NB09	RNB09-026C	4	B	67	66	55.1	59.5	No	No	Grande Court at Boggy Creek
NB10	RNB10-001	1	B	67	66	66.7	74.8	Yes	No	Emerald Pointe
NB10	RNB10-002	1	B	67	66	64.3	72.3	Yes	No	Emerald Pointe
NB10	RNB10-003	1	B	67	66	63.1	71.0	Yes	No	Emerald Pointe
NB10	RNB10-004	1	B	67	66	61.8	69.3	Yes	No	Emerald Pointe
NB10	RNB10-005	1	B	67	66	68.1	75.2	Yes	No	Emerald Pointe
NB10	RNB10-006	1	B	67	66	61.0	68.8	Yes	No	Emerald Pointe
NB10	RNB10-007	1	B	67	66	60.5	67.4	Yes	No	Emerald Pointe
NB10	RNB10-008	1	B	67	66	59.8	67.2	Yes	No	Emerald Pointe
NB10	RNB10-009	1	B	67	66	59.7	65.8	No	No	Emerald Pointe
NB10	RNB10-010	1	B	67	66	58.8	65.7	No	No	Emerald Pointe
NB10	RNB10-011	1	B	67	66	58.9	64.8	No	No	Emerald Pointe
NB10	RNB10-012	3	B	67	66	55.7	60.6	No	No	Emerald Pointe
NB10	RNB10-013	1	B	67	66	67.5	75.1	Yes	No	Emerald Pointe
NB10	RNB10-014	1	B	67	66	57.9	63.4	No	No	Emerald Pointe
NB10	RNB10-015	1	B	67	66	63.7	71.3	Yes	No	Emerald Pointe
NB10	RNB10-016	1	B	67	66	61.0	67.6	Yes	No	Emerald Pointe
NB10	RNB10-017	1	B	67	66	63.1	70.7	Yes	No	Emerald Pointe
NB10	RNB10-018	1	B	67	66	61.0	67.8	Yes	No	Emerald Pointe
NB10	RNB10-019	1	B	67	66	60.9	68.2	Yes	No	Emerald Pointe
NB10	RNB10-020	3	B	67	66	55.5	60.4	No	No	Emerald Pointe
NB10	RNB10-021	4	B	67	66	57.6	62.8	No	No	Emerald Pointe
NB10	RNB10-022	1	B	67	66	68.0	75.0	Yes	No	Emerald Pointe
NB10	RNB10-023	1	B	67	66	62.2	69.9	Yes	No	Emerald Pointe
NB10	RNB10-024	1	B	67	66	60.7	67.7	Yes	No	Emerald Pointe
NB10	RNB10-025	1	B	67	66	66.3	74.3	Yes	No	Emerald Pointe
NB10	RNB10-026	3	B	67	66	59.2	64.9	No	No	Emerald Pointe
NB10	RNB10-027	1	B	67	66	62.2	69.9	Yes	No	Emerald Pointe
NB10	RNB10-028	1	B	67	66	60.9	67.8	Yes	No	Emerald Pointe
NB10	RNB10-029	1	B	67	66	60.5	68.0	Yes	No	Emerald Pointe
NB10	RNB10-030	1	B	67	66	67.0	74.8	Yes	No	Emerald Pointe
NB10	RNB10-031	1	B	67	66	60.9	68.1	Yes	No	Emerald Pointe
NB10	RNB10-032	1	B	67	66	60.0	66.6	Yes	No	Emerald Pointe
NB10	RNB10-033	1	B	67	66	61.9	69.3	Yes	No	Emerald Pointe
NB10	RNB10-034	1	B	67	66	61.5	69.0	Yes	No	Emerald Pointe
NB10	RNB10-035	1	B	67	66	59.0	65.2	No	No	Emerald Pointe
NB10	RNB10-036	4	B	67	66	57.3	62.5	No	No	Emerald Pointe
NB10	RNB10-037	1	B	67	66	67.3	74.7	Yes	No	Emerald Pointe
NB10	RNB10-038	2	B	67	66	59.6	65.7	No	No	Emerald Pointe
NB10	RNB10-039	2	B	67	66	62.5	70.0	Yes	No	Emerald Pointe
NB10	RNB10-040	2	B	67	66	59.8	66.7	Yes	No	Emerald Pointe
NB10	RNB10-041	3	B	67	66	55.9	61.0	No	No	Emerald Pointe
NB10	RNB10-042	2	B	67	66	61.5	68.8	Yes	No	Emerald Pointe
NB10	RNB10-043	1	B	67	66	62.7	70.2	Yes	No	Emerald Pointe
NB10	RNB10-044	2	B	67	66	59.6	65.8	No	No	Emerald Pointe
NB10	RNB10-045	1	B	67	66	63.5	71.0	Yes	No	Emerald Pointe
NB10	RNB10-046	2	B	67	66	58.0	63.4	No	No	Emerald Pointe
NB10	RNB10-047	1	B	67	66	66.8	74.4	Yes	No	Emerald Pointe
NB10	RNB10-048	3	B	67	66	53.6	58.1	No	No	Emerald Pointe
NB10	RNB10-049	6	B	67	66	55.6	60.5	No	No	Emerald Pointe
NB10	RNB10-050	1	B	67	66	64.2	71.7	Yes	No	Emerald Pointe
NB10	RNB10-051	1	B	67	66	60.6	67.6	Yes	No	Emerald Pointe
NB10	RNB10-052	2	B	67	66	58.5	64.2	No	No	Emerald Pointe
NB10	RNB10-053	1	B	67	66	65.1	72.6	Yes	No	Emerald Pointe
NB10	RNB10-054	1	B	67	66	65.7	73.2	Yes	No	Emerald Pointe
NB10	RNB10-055	4	B	67	66	53.5	58.3	No	No	Emerald Pointe
NB10	RNB10-056	2	B	67	66	60.9	67.9	Yes	No	Emerald Pointe



## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
NB10	RNB10-057	2	B	67	66	57.5	63.1	No	No	Emerald Pointe
NB10	RNB10-058	1	B	67	66	66.0	73.4	Yes	No	Emerald Pointe
NB10	RNB10-059	4	B	67	66	53.1	57.9	No	No	Emerald Pointe
NB10	RNB10-060	1	B	67	66	60.9	67.6	Yes	No	Emerald Pointe
NB10	RNB10-061	1	B	67	66	66.0	73.3	Yes	No	Emerald Pointe
NB10	RNB10-062	1	B	67	66	65.9	73.2	Yes	No	Emerald Pointe
NB10	RNB10-063	1	B	67	66	61.0	67.6	Yes	No	Emerald Pointe
NB10	RNB10-064	1	B	67	66	61.0	67.6	Yes	No	Emerald Pointe
NB10	RNB10-065	1	B	67	66	65.8	73.1	Yes	No	Emerald Pointe
NB10	RNB10-066	1	B	67	66	65.7	72.9	Yes	No	Emerald Pointe
NB10	RNB10-067	1	B	67	66	60.9	67.6	Yes	No	Emerald Pointe
NB10	RNB10-068	1	B	67	66	57.5	62.9	No	No	Emerald Pointe
NB10	RNB10-069	1	B	67	66	61.7	68.6	Yes	No	Emerald Pointe
NB10	RNB10-070	1	B	67	66	61.1	67.8	Yes	No	Emerald Pointe
NB10	RNB10-071	1	B	67	66	65.7	73.1	Yes	No	Emerald Pointe
NB10	RNB10-072	1	B	67	66	65.9	73.2	Yes	No	Emerald Pointe
NB10	RNB10-073	2	B	67	66	58.5	64.4	No	No	Emerald Pointe
NB10	RNB10-074	1	B	67	66	65.4	72.8	Yes	No	Emerald Pointe
NB10	RNB10-075	2	B	67	66	56.5	61.3	No	No	Emerald Pointe
NB10	RNB10-076	1	B	67	66	66.7	74.0	Yes	No	Emerald Pointe
NB10	RNB10-077	3	B	67	66	53.0	57.3	No	No	Emerald Pointe
NB10	RNB10-078	2	B	67	66	56.9	62.3	No	No	Emerald Pointe
NB10	RNB10-079	1	B	67	66	56.8	62.8	No	No	Emerald Pointe
NB10	RNB10-080	2	B	67	66	55.8	60.6	No	No	Emerald Pointe
NB10	RNB10-081	1	B	67	66	65.7	73.1	Yes	No	Emerald Pointe
NB10	RNB10-082	1	B	67	66	61.2	68.0	Yes	No	Emerald Pointe
NB10	RNB10-083	1	B	67	66	62.0	69.0	Yes	No	Emerald Pointe
NB10	RNB10-084	1	B	67	66	61.2	68.0	Yes	No	Emerald Pointe
NB10	RNB10-085	1	B	67	66	65.9	73.2	Yes	No	Emerald Pointe
NB10	RNB10-086	2	B	67	66	58.6	64.1	No	No	Emerald Pointe
NB10	RNB10-087	1	B	67	66	66.9	73.9	Yes	No	Emerald Pointe
NB10	RNB10-088	3	B	67	66	54.5	59.0	No	No	Emerald Pointe
NB10	RNB10-089	1	B	67	66	61.2	67.7	Yes	No	Emerald Pointe
NB10	RNB10-090	2	B	67	66	56.2	60.8	No	No	Emerald Pointe
NB10	RNB10-091	1	B	67	66	62.9	69.5	Yes	No	Emerald Pointe
NB10	RNB10-092	1	B	67	66	67.6	74.1	Yes	No	Emerald Pointe
NB10	RNB10-093	2	B	67	66	58.4	63.2	No	No	Emerald Pointe
NB10	RNB10-094	1	B	67	66	59.6	65.0	No	No	Emerald Pointe
NB10	RNB10-095	1	B	67	66	66.8	73.4	Yes	No	Emerald Pointe
NB10	RNB10-096	1	B	67	66	60.2	66.0	Yes	No	Emerald Pointe
NB10	RNB10-097	1	B	67	66	60.8	67.2	Yes	No	Emerald Pointe
NB10	RNB10-098	1	B	67	66	64.8	71.3	Yes	No	Emerald Pointe
NB10	RNB10-099	1	B	67	66	60.7	67.1	Yes	No	Emerald Pointe
NB11	RNB11-001	1	B	67	66	67.1	73.8	Yes	No	Buena Ventura Lakes
NB11	RNB11-002	1	B	67	66	61.5	68.6	Yes	No	Buena Ventura Lakes
NB11	RNB11-003	1	B	67	66	68.9	75.7	Yes	No	Buena Ventura Lakes
NB11	RNB11-004	1	B	67	66	61.6	68.2	Yes	No	Buena Ventura Lakes
NB11	RNB11-005	1	B	67	66	67.1	74.2	Yes	No	Buena Ventura Lakes
NB11	RNB11-006	3	B	67	66	58.9	64.1	No	No	Buena Ventura Lakes
NB11	RNB11-007	1	B	67	66	68.3	75.2	Yes	No	Buena Ventura Lakes
NB11	RNB11-008	3	B	67	66	57.9	63.3	No	No	Buena Ventura Lakes
NB11	RNB11-009	1	B	67	66	68.0	74.9	Yes	No	Buena Ventura Lakes
NB11	RNB11-010	3	B	67	66	59.5	65.6	No	No	Buena Ventura Lakes
NB11	RNB11-011	1	B	67	66	69.2	75.7	Yes	No	Buena Ventura Lakes
NB11	RNB11-012	3	B	67	66	62.5	69.4	Yes	No	Buena Ventura Lakes
NB11	RNB11-013	1	B	67	66	68.0	74.8	Yes	No	Buena Ventura Lakes
NB11	RNB11-014	1	B	67	66	67.3	74.2	Yes	No	Buena Ventura Lakes
NB11	RNB11-015	1	B	67	66	69.0	75.7	Yes	No	Buena Ventura Lakes
NB11	RNB11-016	3	B	67	66	62.3	69.1	Yes	No	Buena Ventura Lakes
NB11	RNB11-017	1	B	67	66	68.9	75.5	Yes	No	Buena Ventura Lakes
NB11	RNB11-018	3	B	67	66	59.3	65.3	No	No	Buena Ventura Lakes
NB11	RNB11-019	3	B	67	66	56.5	61.0	No	No	Buena Ventura Lakes
NB11	RNB11-020	1	B	67	66	67.2	74.0	Yes	No	Buena Ventura Lakes
NB11	RNB11-021	1	B	67	66	68.8	75.4	Yes	No	Buena Ventura Lakes
NB11	RNB11-022	2	B	67	66	62.5	69.3	Yes	No	Buena Ventura Lakes
NB11	RNB11-023	1	B	67	66	68.9	75.5	Yes	No	Buena Ventura Lakes
NB11	RNB11-024	1	B	67	66	67.2	74.1	Yes	No	Buena Ventura Lakes
NB11	RNB11-025	4	B	67	66	58.1	62.9	No	No	Buena Ventura Lakes
NB11	RNB11-026	1	B	67	66	68.6	75.3	Yes	No	Buena Ventura Lakes
NB11	RNB11-027	3	B	67	66	62.5	69.2	Yes	No	Buena Ventura Lakes
NB11	RNB11-028	1	B	67	66	67.8	74.6	Yes	No	Buena Ventura Lakes

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
NB11	RNB11-029	1	B	67	66	66.4	<b>73.3</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-030	1	B	67	66	60.9	<b>66.5</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-031	1	B	67	66	61.3	<b>67.8</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-032	1	B	67	66	63.9	<b>70.8</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-033	2	B	67	66	59.8	65.7	No	No	Buena Ventura Lakes
NB11	RNB11-034	1	B	67	66	64.4	<b>71.4</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-035	1	B	67	66	61.9	<b>68.5</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-036	3	B	67	66	60.1	65.3	No	No	Buena Ventura Lakes
NB11	RNB11-037	2	B	67	66	60.3	65.4	No	No	Buena Ventura Lakes
NB11	RNB11-038	2	B	67	66	59.9	64.8	No	No	Buena Ventura Lakes
NB11	RNB11-039	2	B	67	66	59.3	64.0	No	No	Buena Ventura Lakes
NB11	RNB11-040	2	B	67	66	58.4	63.2	No	No	Buena Ventura Lakes
NB11	RNB11-041	2	B	67	66	58.4	63.4	No	No	Buena Ventura Lakes
NB11	RNB11-042	3	B	67	66	58.4	63.9	No	No	Buena Ventura Lakes
NB11	RNB11-043	3	B	67	66	58.2	63.4	No	No	Buena Ventura Lakes
NB11	RNB11-044	3	B	67	66	57.7	62.4	No	No	Buena Ventura Lakes
NB11	RNB11-045	3	B	67	66	56.7	61.0	No	No	Buena Ventura Lakes
NB11	RNB11-046	1	B	67	66	66.1	<b>72.7</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-047	1	B	67	66	61.9	<b>67.6</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-048	1	B	67	66	65.9	<b>72.3</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-049	1	B	67	66	61.3	<b>66.7</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-050	3	B	67	66	56.1	60.2	No	No	Buena Ventura Lakes
NB11	RNB11-051	1	B	67	66	66.8	<b>72.8</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-052	1	B	67	66	61.4	<b>66.9</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-053	1	B	67	66	67.0	<b>73.0</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-054	2	B	67	66	62.3	<b>67.7</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-055	1	B	67	66	68.0	<b>73.5</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-056	3	B	67	66	55.5	59.7	No	No	Buena Ventura Lakes
NB11	RNB11-057	1	B	67	66	66.8	<b>72.4</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-058	2	B	67	66	61.7	<b>66.4</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-059	3	B	67	66	56.5	60.0	No	No	Buena Ventura Lakes
NB11	RNB11-060	1	B	67	66	64.6	<b>70.0</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-061	2	B	67	66	55.1	59.3	No	No	Buena Ventura Lakes
NB11	RNB11-062	1	B	67	66	66.7	<b>71.8</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-063	2	B	67	66	54.7	58.8	No	No	Buena Ventura Lakes
NB11	RNB11-064	3	B	67	66	56.7	60.6	No	No	Buena Ventura Lakes
NB11	RNB11-065	2	B	67	66	54.5	58.7	No	No	Buena Ventura Lakes
NB11	RNB11-066	3	B	67	66	60.5	64.3	No	No	Buena Ventura Lakes
NB11	RNB11-067	1	B	67	66	67.5	<b>72.3</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-068	3	B	67	66	58.3	61.5	No	No	Buena Ventura Lakes
NB11	RNB11-069	1	B	67	66	67.5	<b>72.3</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-070	3	B	67	66	62.8	<b>66.8</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-071	3	B	67	66	59.5	63.1	No	No	Buena Ventura Lakes
NB11	RNB11-072	1	B	67	66	67.4	<b>72.2</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-073	1	B	67	66	67.8	<b>72.5</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-074	1	B	67	66	67.9	<b>72.5</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-075	3	B	67	66	62.3	<b>66.5</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-076	1	B	67	66	67.7	<b>72.3</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-077	3	B	67	66	57.6	60.3	No	No	Buena Ventura Lakes
NB11	RNB11-078	3	B	67	66	61.5	65.6	No	No	Buena Ventura Lakes
NB11	RNB11-079	1	B	67	66	66.5	<b>71.1</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-080	1	B	67	66	67.8	<b>72.3</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-081	3	B	67	66	56.4	59.5	No	No	Buena Ventura Lakes
NB11	RNB11-082	1	B	67	66	67.3	<b>71.7</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-083	2	B	67	66	62.4	<b>66.8</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-084	1	B	67	66	66.5	<b>70.7</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-085	3	B	67	66	57.8	61.1	No	No	Buena Ventura Lakes
NB11	RNB11-086	1	B	67	66	64.4	<b>68.2</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-087	3	B	67	66	56.7	60.5	No	No	Buena Ventura Lakes
NB11	RNB11-088	1	B	67	66	60.2	64.5	No	No	Buena Ventura Lakes
NB11	RNB11-089	1	B	67	66	58.2	61.9	No	No	Buena Ventura Lakes
NB11	RNB11-090	1	B	67	66	58.9	63.2	No	No	Buena Ventura Lakes
NB11	RNB11-091	1	B	67	66	57.0	60.5	No	No	Buena Ventura Lakes
NB11	RNB11-092	1	B	67	66	55.8	59.2	No	No	Buena Ventura Lakes
NB11	RNB11-093	1	B	67	66	60.3	64.3	No	No	Buena Ventura Lakes
NB11	RNB11-094	1	B	67	66	60.6	64.6	No	No	Buena Ventura Lakes
NB11	RNB11-095	2	B	67	66	55.7	59.7	No	No	Buena Ventura Lakes
NB11	RNB11-096	1	B	67	66	60.7	64.7	No	No	Buena Ventura Lakes
NB11	RNB11-097	4	B	67	66	57.6	61.6	No	No	Buena Ventura Lakes
NB11	RNB11-098	1	B	67	66	60.8	64.6	No	No	Buena Ventura Lakes
NB11	RNB11-099	4	B	67	66	55.0	58.8	No	No	Buena Ventura Lakes

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
NB11	RNB11-100	1	B	67	66	62.7	<b>66.1</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-101	3	B	67	66	58.9	62.9	No	No	Buena Ventura Lakes
NB11	RNB11-102	1	B	67	66	63.9	<b>67.6</b>	Yes	No	Buena Ventura Lakes
NB11	RNB11-103	2	B	67	66	56.8	60.3	No	No	Buena Ventura Lakes
NB11	RNB11-104	1	B	67	66	60.6	64.2	No	No	Buena Ventura Lakes
NB11	RNB11-105	3	B	67	66	55.4	59.2	No	No	Buena Ventura Lakes
NB11	RNB11-106	1	B	67	66	60.4	64.0	No	No	Buena Ventura Lakes
NB11	RNB11-107	1	B	67	66	60.6	64.1	No	No	Buena Ventura Lakes
NB11	RNB11-108	2	B	67	66	57.5	61.0	No	No	Buena Ventura Lakes
NB11	RNB11-109	1	B	67	66	60.8	63.9	No	No	Buena Ventura Lakes
NB11	RNB11-110	1	B	67	66	60.7	63.8	No	No	Buena Ventura Lakes
NB11	RNB11-111	1	B	67	66	60.8	63.9	No	No	Buena Ventura Lakes
NB11	RNB11-112	1	B	67	66	60.4	63.6	No	No	Buena Ventura Lakes
NB11	RNB11-113	3	B	67	66	56.9	60.7	No	No	Buena Ventura Lakes
NB11	RNB11-114	3	B	67	66	58.0	61.5	No	No	Buena Ventura Lakes
NB11	RNB11-115	3	B	67	66	58.5	62.0	No	No	Buena Ventura Lakes
NB11	RNB11-116	3	B	67	66	57.8	61.6	No	No	Buena Ventura Lakes
NB11	RNB11-117	2	B	67	66	55.9	60.0	No	No	Buena Ventura Lakes
NB12	RNB12-001	3	B	67	66	59.9	62.9	No	No	Coral Wood
NB12	RNB12-002	1	B	67	66	62.7	<b>66.3</b>	Yes	No	Coral Wood
NB12	RNB12-003	3	B	67	66	61.4	64.9	No	No	Coral Wood
NB12	RNB12-004	3	B	67	66	55.8	59.9	No	No	Coral Wood
NB12	RNB12-005	3	B	67	66	61.2	64.7	No	No	Coral Wood
NB12	RNB12-006	3	B	67	66	57.6	60.5	No	No	Coral Wood
NB12	RNB12-007	3	B	67	66	62.5	65.9	No	No	Coral Wood
NB12	RNB12-008	4	B	67	66	58.6	62.4	No	No	Coral Wood
NB12	RNB12-009	4	B	67	66	62.2	65.2	No	No	Coral Wood
NB12	RNB12-010	3	B	67	66	62.5	65.8	No	No	Coral Wood
NB12	RNB12-011	3	B	67	66	58.1	61.1	No	No	Coral Wood
NB12	RNB12-012	3	B	67	66	54.9	59.0	No	No	Coral Wood
NB12	RNB12-013	2	B	67	66	56.0	59.6	No	No	Coral Wood
NB12	RNB12-014	8	B	67	66	55.0	58.7	No	No	Coral Wood
NB12	RNB12-015	3	B	67	66	57.8	60.9	No	No	Coral Wood
NB12	RNB12-016	2	B	67	66	61.0	64.0	No	No	Coral Wood
NB12	RNB12-017	3	B	67	66	59.6	62.7	No	No	Coral Wood
NB12	RNB12-018	1	B	67	66	62.8	65.6	No	No	Coral Wood
NB12	RNB12-019	2	B	67	66	60.9	64.1	No	No	Coral Wood
NB12	RNB12-020	3	B	67	66	59.2	62.5	No	No	Coral Wood
NB12	RNB12-021	3	B	67	66	58.0	61.0	No	No	Coral Wood
NB12	RNB12-022	1	B	67	66	61.2	64.2	No	No	Coral Wood
NB12	RNB12-023	2	B	67	66	59.9	64.0	No	No	Coral Wood
NB12	RNB12-024	8	B	67	66	54.2	57.8	No	No	Coral Wood
NB12	RNB12-025	1	B	67	66	59.8	62.7	No	No	Coral Wood
NB12	RNB12-026	3	B	67	66	57.8	60.8	No	No	Coral Wood
NB12	RNB12-027	3	B	67	66	55.9	59.2	No	No	Coral Wood
NB12	RNB12-028	5	B	67	66	54.9	58.5	No	No	Coral Wood
NB12	RNB12-029	1	B	67	66	58.9	62.4	No	No	Coral Wood
NB12	RNB12-030	1	B	67	66	58.5	61.6	No	No	Coral Wood
NB12	RNB12-031	1	B	67	66	58.3	61.3	No	No	Coral Wood
NB12	RNB12-032	1	B	67	66	57.9	61.0	No	No	Coral Wood
NB12	RNB12-033	2	B	67	66	56.3	59.5	No	No	Coral Wood
NB12	RNB12-034	3	B	67	66	52.3	56.5	No	No	Coral Wood
NB12	RNB12-035	3	B	67	66	55.0	58.5	No	No	Coral Wood
NB12	RNB12-036	3	B	67	66	53.3	57.3	No	No	Coral Wood
NB12	RNB12-037	3	B	67	66	52.4	56.4	No	No	Coral Wood
SB01	RSB01-001	1	B	67	66	59.2	62.4	No	No	Tohoqua
SB01	RSB01-002	1	B	67	66	59.0	62.1	No	No	Tohoqua
SB01	RSB01-003	1	B	67	66	58.8	61.8	No	No	Tohoqua
SB01	RSB01-004	1	B	67	66	58.5	61.6	No	No	Tohoqua
SB01	RSB01-005	1	B	67	66	58.4	61.3	No	No	Tohoqua
SB01	RSB01-006	2	B	67	66	58.2	61.1	No	No	Tohoqua
SB01	RSB01-007	4	B	67	66	56.6	60.7	No	No	Tohoqua
SB01	RSB01-008	3	B	67	66	53.9	59.7	No	No	Tohoqua
SB01	RSB01-009	2	B	67	66	52.8	58.5	No	No	Tohoqua
SB01	RSB01-010	3	B	67	66	52.4	58.2	No	No	Tohoqua
SB01	RSB01-011	4	B	67	66	52.1	57.8	No	No	Tohoqua
SB01	RSB01-012	7	B	67	66	51.7	57.2	No	No	Tohoqua
SB01	RSB01-013	4	B	67	66	54.7	59.7	No	No	Tohoqua
SB01	RSB01-014	4	B	67	66	57.7	60.5	No	No	Tohoqua
SB01	RSB01-015	2	B	67	66	58.2	61.1	No	No	Tohoqua
SB01	RSB01-016	1	B	67	66	58.4	61.3	No	No	Tohoqua

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
SB01	RSB01-017	1	B	67	66	58.7	61.7	No	No	Tohoqua
SB01	RSB01-018	5	B	67	66	54.8	59.3	No	No	Tohoqua
SB01	RSB01-019	4	B	67	66	57.8	60.2	No	No	Tohoqua
SB01	RSB01-020	3	B	67	66	58.1	61.0	No	No	Tohoqua
SB01	RSB01-021	4	B	67	66	54.5	58.3	No	No	Tohoqua
SB01	RSB01-022	4	B	67	66	57.0	59.2	No	No	Tohoqua
SB01	RSB01-023	4	B	67	66	57.6	59.9	No	No	Tohoqua
SB01	RSB01-024	3	B	67	66	56.1	58.1	No	No	Tohoqua
SB01	RSB01-025	3	B	67	66	56.8	58.9	No	No	Tohoqua
SB01	RSB01-026	2	B	67	66	55.3	56.5	No	No	Tohoqua
SB01	RSB01-027	2	B	67	66	55.5	57.0	No	No	Tohoqua
SB03	RSB03-001	1	B	67	66	61.9	69.7	Yes	No	Emerald Lake
SB03	RSB03-002	1	B	67	66	58.8	64.7	No	No	Emerald Lake
SB03	RSB03-003	1	B	67	66	56.7	62.9	No	No	Emerald Lake
SB03	RSB03-004	1	B	67	66	58.7	64.4	No	No	Emerald Lake
SB03	RSB03-005	1	B	67	66	59.6	65.3	No	No	Emerald Lake
SB03	RSB03-006	3	B	67	66	61.4	66.3	Yes	No	Emerald Lake
SB03	RSB03-007	4	B	67	66	59.4	64.3	No	No	Emerald Lake
SB03	RSB03-008	1	B	67	66	61.6	65.7	No	No	Emerald Lake
SB03	RSB03-009	4	B	67	66	59.9	64.1	No	No	Emerald Lake
SB03	RSB03-010	6	B	67	66	60.5	64.3	No	No	Emerald Lake
SB03	RSB03-011	1	B	67	66	60.9	64.6	No	No	Emerald Lake
SB03	RSB03-012	1	B	67	66	61.4	64.7	No	No	Emerald Lake
SB03	RSB03-013	2	B	67	66	62.1	65.0	No	No	Emerald Lake
SB03	RSB03-014	4	B	67	66	64.2	66.2	Yes	No	Emerald Lake
SB03	RSB03-015	6	B	67	66	61.4	65.2	No	No	Villas of Emerald Lake
SB03	RSB03-017	2	B	67	66	62.2	65.8	No	No	Emerald Lake Colony
SB03	RSB03-018	4	B	67	66	53.7	58.9	No	No	Emerald Lake
SB03	RSB03-019	4	B	67	66	52.7	58.0	No	No	Emerald Lake
SB03	RSB03-020	5	B	67	66	55.7	60.9	No	No	Emerald Lake
SB03	RSB03-021	5	B	67	66	53.5	58.4	No	No	Emerald Lake
SB03	RSB03-022	4	B	67	66	56.9	62.0	No	No	Emerald Lake
SB03	RSB03-023	5	B	67	66	54.9	59.4	No	No	Emerald Lake
SB03	RSB03-024	7	B	67	66	56.9	61.5	No	No	Emerald Lake
SB03	RSB03-025	7	B	67	66	56.0	60.2	No	No	Emerald Lake
SB03	RSB03-026	4	B	67	66	57.6	62.3	No	No	Emerald Lake
SB03	RSB03-027	5	B	67	66	57.3	61.1	No	No	Emerald Lake
SB03	RSB03-028	3	B	67	66	60.5	63.9	No	No	Emerald Lake
SB03	RSB03-029	5	B	67	66	57.1	60.7	No	No	Emerald Lake
SB03	RSB03-030	6	B	67	66	62.1	65.7	No	No	Emerald Lake
SB03	RSB03-031	6	B	67	66	60.9	64.7	No	No	Emerald Lake
SB03	RSB03-032	6	B	67	66	61.2	64.7	No	No	Emerald Lake
SB03	RSB03-033	6	B	67	66	59.2	62.9	No	No	Emerald Lake
SB03	RSB03-034	6	B	67	66	59.6	63.4	No	No	Emerald Lake
SB03	RSB03-035	6	B	67	66	58.6	62.8	No	No	Emerald Lake
SB03	RSB03-036	6	B	67	66	59.3	62.9	No	No	Emerald Lake
SB03	RSB03-037	4	B	67	66	59.7	64.0	No	No	Emerald Lake
SB03	RSB03-038	5	B	67	66	57.6	61.1	No	No	Emerald Lake
SB03	RSB03-039	5	B	67	66	57.9	62.5	No	No	Emerald Lake
SB03	RSB03-040	9	B	67	66	57.9	62.5	No	No	Emerald Lake
SB06	RSB06-001	4	B	67	66	62.2	68.0	Yes	No	Amber Pointe Apartments
SB06	RSB06-002	1	B	67	66	66.5	72.4	Yes	No	Amber Pointe Apartments
SB06	RSB06-003	6	B	67	66	60.2	65.1	No	No	Amber Pointe Apartments
SB06	RSB06-004	1	B	67	66	66.4	72.3	Yes	No	Amber Pointe Apartments
SB06	RSB06-005	2	B	67	66	66.7	72.4	Yes	No	Amber Pointe Apartments
SB06	RSB06-006	2	B	67	66	66.7	72.5	Yes	No	Amber Pointe Apartments
SB06	RSB06-007	6	B	67	66	66.4	72.3	Yes	No	Amber Pointe Apartments
SB06	RSB06-008	6	B	67	66	59.1	64.9	No	No	Amber Pointe Apartments
SB06	RSB06-009	12	B	67	66	57.3	62.0	No	No	Amber Pointe Apartments
SB06	RSB06-010	8	B	67	66	62.3	67.7	Yes	No	Amber Pointe Apartments
SB06	RSB06-011	6	B	67	66	66.6	72.4	Yes	No	Amber Pointe Apartments
SB06	RSB06-012	8	B	67	66	58.8	64.5	No	No	Amber Pointe Apartments
SB06	RSB06-013	6	B	67	66	62.5	67.9	Yes	No	Amber Pointe Apartments
SB06	RSB06-014	12	B	67	66	57.1	61.3	No	No	Amber Pointe Apartments
SB06	RSB06-015	6	B	67	66	66.8	72.4	Yes	No	Amber Pointe Apartments
SB06	RSB06-016	8	B	67	66	59.1	63.7	No	No	Amber Pointe Apartments
SB06	RSB06-017	4	B	67	66	62.5	67.8	Yes	No	Amber Pointe Apartments
SB06	RSB06-018	4	B	67	66	56.9	61.2	No	No	Amber Pointe Apartments
SB06	RSB06-019	6	B	67	66	66.6	72.2	Yes	No	Amber Pointe Apartments
SB06	RSB06-020	2	B	67	66	60.7	66.0	Yes	No	Amber Pointe Apartments
SB06	RSB06-021	2	B	67	66	61.6	67.0	Yes	No	Amber Pointe Apartments

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
SB06	RSB06-022	12	B	67	66	56.4	61.0	No	No	Amber Pointe Apartments
SB06	RSB06-023	4	B	67	66	66.3	<b>71.9</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-024	4	B	67	66	59.2	64.4	No	No	Amber Pointe Apartments
SB06	RSB06-025	2	B	67	66	60.7	<b>66.2</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-026	2	B	67	66	62.1	<b>67.8</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-027	6	B	67	66	66.3	<b>71.8</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-028	2	B	67	66	60.1	<b>66.4</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-029	8	B	67	66	57.9	63.3	No	No	Amber Pointe Apartments
SB06	RSB06-030	2	B	67	66	62.2	<b>67.9</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-031	10	B	67	66	56.2	60.6	No	No	Amber Pointe Apartments
SB06	RSB06-032	2	B	67	66	66.3	<b>71.8</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-033	6	B	67	66	60.1	65.3	No	No	Amber Pointe Apartments
SB06	RSB06-034	2	B	67	66	66.4	<b>71.8</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-035	1	B	67	66	61.6	<b>68.1</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-036	1	B	67	66	62.7	<b>69.0</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-037	1	B	67	66	64.0	<b>69.6</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-038	6	B	67	66	58.1	62.8	No	No	Amber Pointe Apartments
SB06	RSB06-039	6	B	67	66	62.3	<b>68.3</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-040	4	B	67	66	59.7	65.0	No	No	Amber Pointe Apartments
SB06	RSB06-042	8	B	67	66	57.3	62.2	No	No	Amber Pointe Apartments
SB06	RSB06-043	6	B	67	66	58.6	63.8	No	No	Amber Pointe Apartments
SB06	RSB06-044	6	B	67	66	60.0	65.3	No	No	Amber Pointe Apartments
SB06	RSB06-045	1	B	67	66	56.3	60.8	No	No	Amber Pointe Apartments
SB06	RSB06-046	3	B	67	66	58.5	<b>68.2</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-047	3	B	67	66	59.3	<b>68.7</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-048	8	B	67	66	60.1	65.9	No	No	Amber Pointe Apartments
SB06	RSB06-049	8	B	67	66	61.8	<b>67.3</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-050	10	B	67	66	59.1	64.1	No	No	Amber Pointe Apartments
SB06	RSB06-051	3	B	67	66	64.5	<b>69.9</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-052	2	B	67	66	65.5	<b>70.6</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-053	1	B	67	66	66.0	<b>71.0</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-054	4	B	67	66	62.6	<b>67.9</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-055	3	B	67	66	64.1	<b>69.3</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-056	1	B	67	66	66.5	<b>71.0</b>	Yes	No	Amber Pointe Apartments
SB06	RSB06-057	2	B	67	66	65.7	<b>70.5</b>	Yes	No	Amber Pointe Apartments
SB07	RSB07-001A	2	B	67	66	56.6	59.0	No	No	Academy Park Apartments
SB07	RSB07-001B	2	B	67	66	60.0	63.9	No	No	Academy Park Apartments
SB07	RSB07-001C	2	B	67	66	62.6	65.3	No	No	Academy Park Apartments
SB07	RSB07-002A	2	B	67	66	52.1	54.8	No	No	Academy Park Apartments
SB07	RSB07-002B	2	B	67	66	54.7	58.2	No	No	Academy Park Apartments
SB07	RSB07-002C	2	B	67	66	57.3	60.1	No	No	Academy Park Apartments
SB07	RSB07-003A	2	B	67	66	57.8	60.4	No	No	Academy Park Apartments
SB07	RSB07-003B	2	B	67	66	61.5	65.0	No	No	Academy Park Apartments
SB07	RSB07-003C	2	B	67	66	64.0	<b>66.3</b>	Yes	No	Academy Park Apartments
SB07	RSB07-004A	2	B	67	66	52.4	55.2	No	No	Academy Park Apartments
SB07	RSB07-004B	2	B	67	66	55.8	58.6	No	No	Academy Park Apartments
SB07	RSB07-004C	2	B	67	66	58.1	60.1	No	No	Academy Park Apartments
SB07	RSB07-005A	2	B	67	66	59.1	62.0	No	No	Academy Park Apartments
SB07	RSB07-005B	2	B	67	66	63.2	<b>66.3</b>	Yes	No	Academy Park Apartments
SB07	RSB07-005C	2	B	67	66	65.5	<b>67.6</b>	Yes	No	Academy Park Apartments
SB07	RSB07-006A	2	B	67	66	57.7	60.7	No	No	Academy Park Apartments
SB07	RSB07-006B	2	B	67	66	61.6	64.9	No	No	Academy Park Apartments
SB07	RSB07-006C	2	B	67	66	64.1	<b>66.4</b>	Yes	No	Academy Park Apartments
SB07	RSB07-007A	2	B	67	66	60.7	63.8	No	No	Academy Park Apartments
SB07	RSB07-007B	2	B	67	66	65.2	<b>68.0</b>	Yes	No	Academy Park Apartments
SB07	RSB07-007C	2	B	67	66	67.4	<b>69.2</b>	Yes	No	Academy Park Apartments
SB07	RSB07-008A	2	B	67	66	52.7	54.8	No	No	Academy Park Apartments
SB07	RSB07-008B	2	B	67	66	56.3	59.1	No	No	Academy Park Apartments
SB07	RSB07-008C	2	B	67	66	58.4	60.7	No	No	Academy Park Apartments
SB07	RSB07-009A	2	B	67	66	61.2	64.3	No	No	Academy Park Apartments
SB07	RSB07-009B	2	B	67	66	65.8	<b>68.5</b>	Yes	No	Academy Park Apartments
SB07	RSB07-009C	2	B	67	66	67.9	<b>69.6</b>	Yes	No	Academy Park Apartments
SB07	RSB07-010A	2	B	67	66	55.1	57.0	No	No	Academy Park Apartments
SB07	RSB07-010B	2	B	67	66	58.6	61.6	No	No	Academy Park Apartments
SB07	RSB07-010C	2	B	67	66	60.8	62.9	No	No	Academy Park Apartments
SB07	RSB07-011A	2	B	67	66	61.5	64.9	No	No	Academy Park Apartments
SB07	RSB07-011B	2	B	67	66	66.4	<b>69.0</b>	Yes	No	Academy Park Apartments
SB07	RSB07-011C	2	B	67	66	68.5	<b>70.2</b>	Yes	No	Academy Park Apartments
SB07	RSB07-012A	2	B	67	66	60.8	63.7	No	No	Academy Park Apartments
SB07	RSB07-012B	2	B	67	66	65.3	<b>67.8</b>	Yes	No	Academy Park Apartments
SB07	RSB07-012C	2	B	67	66	67.3	<b>69.0</b>	Yes	No	Academy Park Apartments

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
SB07	RSB07-013A	2	B	67	66	60.5	63.7	No	No	Academy Park Apartments
SB07	RSB07-013B	2	B	67	66	65.3	67.7	Yes	No	Academy Park Apartments
SB07	RSB07-013C	2	B	67	66	67.3	68.8	Yes	No	Academy Park Apartments
SB07	RSB07-014A	2	B	67	66	61.7	65.1	No	No	Academy Park Apartments
SB07	RSB07-014B	2	B	67	66	66.7	69.2	Yes	No	Academy Park Apartments
SB07	RSB07-014C	2	B	67	66	68.7	70.4	Yes	No	Academy Park Apartments
SB07	RSB07-015A	2	B	67	66	52.4	55.7	No	No	Academy Park Apartments
SB07	RSB07-015B	2	B	67	66	56.3	59.8	No	No	Academy Park Apartments
SB07	RSB07-015C	2	B	67	66	59.0	61.3	No	No	Academy Park Apartments
SB07	RSB07-016A	2	B	67	66	61.3	64.2	No	No	Academy Park Apartments
SB07	RSB07-016B	2	B	67	66	65.8	68.3	Yes	No	Academy Park Apartments
SB07	RSB07-016C	2	B	67	66	67.8	69.6	Yes	No	Academy Park Apartments
SB07	RSB07-017A	2	B	67	66	51.0	54.1	No	No	Academy Park Apartments
SB07	RSB07-017B	2	B	67	66	54.4	57.9	No	No	Academy Park Apartments
SB07	RSB07-017C	2	B	67	66	57.4	59.7	No	No	Academy Park Apartments
SB07	RSB07-018A	2	B	67	66	61.1	63.5	No	No	Academy Park Apartments
SB07	RSB07-018B	2	B	67	66	65.1	67.9	Yes	No	Academy Park Apartments
SB07	RSB07-018C	2	B	67	66	67.2	69.1	Yes	No	Academy Park Apartments
SB07	RSB07-019A	2	B	67	66	61.0	63.2	No	No	Academy Park Apartments
SB07	RSB07-019B	2	B	67	66	64.9	67.7	Yes	No	Academy Park Apartments
SB07	RSB07-019C	2	B	67	66	67.0	68.9	Yes	No	Academy Park Apartments
SB07	RSB07-020A	2	B	67	66	47.7	50.7	No	No	Academy Park Apartments
SB07	RSB07-020B	2	B	67	66	50.0	53.1	No	No	Academy Park Apartments
SB07	RSB07-020C	2	B	67	66	53.4	57.0	No	No	Academy Park Apartments
SB07	RSB07-021A	2	B	67	66	61.4	64.0	No	No	Academy Park Apartments
SB07	RSB07-021B	2	B	67	66	65.7	68.5	Yes	No	Academy Park Apartments
SB07	RSB07-021C	2	B	67	66	67.8	69.6	Yes	No	Academy Park Apartments
SB07	RSB07-022A	2	B	67	66	60.0	62.0	No	No	Academy Park Apartments
SB07	RSB07-022B	2	B	67	66	63.9	66.4	Yes	No	Academy Park Apartments
SB07	RSB07-022C	2	B	67	66	65.9	67.6	Yes	No	Academy Park Apartments
SB07	RSB07-023A	2	B	67	66	62.4	65.9	No	No	Academy Park Apartments
SB07	RSB07-023B	2	B	67	66	66.9	69.7	Yes	No	Academy Park Apartments
SB07	RSB07-023C	2	B	67	66	69.1	70.7	Yes	No	Academy Park Apartments
SB07	RSB07-024A	2	B	67	66	48.8	51.7	No	No	Academy Park Apartments
SB07	RSB07-024B	2	B	67	66	51.3	55.1	No	No	Academy Park Apartments
SB07	RSB07-024C	2	B	67	66	54.2	57.2	No	No	Academy Park Apartments
SB07	RSB07-025A	2	B	67	66	62.1	65.2	No	No	Academy Park Apartments
SB07	RSB07-025B	2	B	67	66	66.6	69.4	Yes	No	Academy Park Apartments
SB07	RSB07-025C	2	B	67	66	68.8	70.5	Yes	No	Academy Park Apartments
SB07	RSB07-026A	2	B	67	66	59.1	61.8	No	No	Academy Park Apartments
SB07	RSB07-026B	2	B	67	66	62.6	66.4	Yes	No	Academy Park Apartments
SB07	RSB07-026C	2	B	67	66	65.2	67.8	Yes	No	Academy Park Apartments
SB07	RSB07-027A	2	B	67	66	61.5	64.4	No	No	Academy Park Apartments
SB07	RSB07-027B	2	B	67	66	65.7	68.8	Yes	No	Academy Park Apartments
SB07	RSB07-027C	2	B	67	66	68.0	70.1	Yes	No	Academy Park Apartments
SB07	RSB07-028A	2	B	67	66	60.6	62.8	No	No	Academy Park Apartments
SB07	RSB07-028B	2	B	67	66	64.5	67.5	Yes	No	Academy Park Apartments
SB07	RSB07-028C	2	B	67	66	66.6	68.5	Yes	No	Academy Park Apartments
SB07	RSB07-029A	2	B	67	66	60.9	64.0	No	No	Academy Park Apartments
SB07	RSB07-029B	2	B	67	66	64.8	68.2	Yes	No	Academy Park Apartments
SB07	RSB07-029C	2	B	67	66	67.3	69.5	Yes	No	Academy Park Apartments
SB07	RSB07-030A	2	B	67	66	50.2	53.1	No	No	Academy Park Apartments
SB07	RSB07-030B	2	B	67	66	53.9	57.0	No	No	Academy Park Apartments
SB07	RSB07-030C	2	B	67	66	56.3	58.7	No	No	Academy Park Apartments
SB07	RSB07-031A	2	B	67	66	61.2	64.2	No	No	Academy Park Apartments
SB07	RSB07-031B	2	B	67	66	64.3	67.9	Yes	No	Academy Park Apartments
SB07	RSB07-031C	2	B	67	66	66.8	69.2	Yes	No	Academy Park Apartments
SB07	RSB07-032A	2	B	67	66	49.3	51.9	No	No	Academy Park Apartments
SB07	RSB07-032B	2	B	67	66	52.6	55.8	No	No	Academy Park Apartments
SB07	RSB07-032C	2	B	67	66	55.2	57.8	No	No	Academy Park Apartments
SB07	RSB07-033A	2	B	67	66	60.7	63.2	No	No	Academy Park Apartments
SB07	RSB07-033B	2	B	67	66	63.3	67.1	Yes	No	Academy Park Apartments
SB07	RSB07-033C	2	B	67	66	65.8	68.5	Yes	No	Academy Park Apartments
SB07	RSB07-034A	2	B	67	66	59.0	61.6	No	No	Academy Park Apartments
SB07	RSB07-034B	2	B	67	66	61.1	65.4	No	No	Academy Park Apartments
SB07	RSB07-034C	2	B	67	66	63.7	66.9	Yes	No	Academy Park Apartments
SB07	RSB07-035A	2	B	67	66	60.3	62.6	No	No	Academy Park Apartments
SB07	RSB07-035B	2	B	67	66	62.6	66.4	Yes	No	Academy Park Apartments
SB07	RSB07-035C	2	B	67	66	65.1	67.8	Yes	No	Academy Park Apartments
SB07	RSB07-036A	2	B	67	66	48.1	50.6	No	No	Academy Park Apartments
SB07	RSB07-036B	2	B	67	66	50.5	54.0	No	No	Academy Park Apartments

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
XX.X	Impacted Receptor									
XX.X	Values adjusted to interior levels (-20dB)									
SB07	RSB07-036C	2	B	67	66	53.2	56.1	No	No	Academy Park Apartments
SB07	RSB07-037A	2	B	67	66	59.6	60.9	No	No	Academy Park Apartments
SB07	RSB07-037B	2	B	67	66	61.4	64.6	No	No	Academy Park Apartments
SB07	RSB07-037C	2	B	67	66	63.6	66.3	Yes	No	Academy Park Apartments
SB07	RSB07-038A	2	B	67	66	60.3	62.2	No	No	Academy Park Apartments
SB07	RSB07-038B	2	B	67	66	62.6	65.8	No	No	Academy Park Apartments
SB07	RSB07-038C	2	B	67	66	64.7	67.5	Yes	No	Academy Park Apartments
SB07	RSB07-039A	2	B	67	66	55.7	55.3	No	No	Academy Park Apartments
SB07	RSB07-039B	2	B	67	66	54.9	59.5	No	No	Academy Park Apartments
SB07	RSB07-039C	2	B	67	66	57.6	61.2	No	No	Academy Park Apartments
SB07	RSB07-040A	2	B	67	66	57.9	60.2	No	No	Academy Park Apartments
SB07	RSB07-040B	2	B	67	66	60.7	63.5	No	No	Academy Park Apartments
SB07	RSB07-040C	2	B	67	66	62.5	65.4	No	No	Academy Park Apartments
SB07	RSB07-041A	2	B	67	66	54.1	54.1	No	No	Academy Park Apartments
SB07	RSB07-041B	2	B	67	66	53.9	58.1	No	No	Academy Park Apartments
SB07	RSB07-041C	2	B	67	66	56.4	59.9	No	No	Academy Park Apartments
SB07	RSB07-042A	2	B	67	66	57.6	60.0	No	No	Academy Park Apartments
SB07	RSB07-042B	2	B	67	66	60.1	63.3	No	No	Academy Park Apartments
SB07	RSB07-042C	2	B	67	66	61.8	65.2	No	No	Academy Park Apartments
SB07	RSB07-043A	2	B	67	66	55.7	59.5	No	No	Academy Park Apartments
SB07	RSB07-043B	2	B	67	66	58.6	62.7	No	No	Academy Park Apartments
SB07	RSB07-043C	2	B	67	66	60.4	64.8	No	No	Academy Park Apartments
SB07	RSB07-044A	2	B	67	66	55.8	58.5	No	No	Academy Park Apartments
SB07	RSB07-044B	2	B	67	66	57.4	61.4	No	No	Academy Park Apartments
SB07	RSB07-044C	2	B	67	66	59.7	63.5	No	No	Academy Park Apartments
SB07	RSB07-045A	2	B	67	66	49.7	56.6	No	No	Academy Park Apartments
SB07	RSB07-045B	2	B	67	66	52.2	58.9	No	No	Academy Park Apartments
SB07	RSB07-045C	2	B	67	66	54.8	61.0	No	No	Academy Park Apartments
SB07	RSB07-046A	2	B	67	66	52.0	54.6	No	No	Academy Park Apartments
SB07	RSB07-046B	2	B	67	66	55.3	57.8	No	No	Academy Park Apartments
SB07	RSB07-046C	2	B	67	66	56.7	59.9	No	No	Academy Park Apartments
SB07	RSB07-047A	4	B	67	66	53.3	55.2	No	No	Academy Park Apartments
SB07	RSB07-047B	4	B	67	66	55.8	59.2	No	No	Academy Park Apartments
SB07	RSB07-047C	4	B	67	66	57.6	61.0	No	No	Academy Park Apartments
SB07	RSB07-048A	4	B	67	66	53.2	56.4	No	No	Academy Park Apartments
SB07	RSB07-048B	4	B	67	66	55.7	60.1	No	No	Academy Park Apartments
SB07	RSB07-048C	4	B	67	66	58.3	62.0	No	No	Academy Park Apartments
SB07	RSB07-049A	6	B	67	66	52.8	56.1	No	No	Academy Park Apartments
SB07	RSB07-049B	6	B	67	66	55.5	59.9	No	No	Academy Park Apartments
SB07	RSB07-049C	6	B	67	66	58.2	62.0	No	No	Academy Park Apartments
SB07	RSB07-050A	6	B	67	66	53.1	56.2	No	No	Academy Park Apartments
SB07	RSB07-050B	6	B	67	66	55.9	60.0	No	No	Academy Park Apartments
SB07	RSB07-050C	6	B	67	66	58.6	62.1	No	No	Academy Park Apartments
SB07	RSB07-051A	12	B	67	66	54.3	57.0	No	No	Academy Park Apartments
SB07	RSB07-051B	12	B	67	66	57.3	61.0	No	No	Academy Park Apartments
SB07	RSB07-051C	12	B	67	66	59.3	62.8	No	No	Academy Park Apartments
SB07	RSB07-052A	8	B	67	66	50.4	53.6	No	No	Academy Park Apartments
SB07	RSB07-052B	8	B	67	66	53.0	57.5	No	No	Academy Park Apartments
SB07	RSB07-052C	8	B	67	66	55.4	59.6	No	No	Academy Park Apartments
SB07	RSB07-053A	8	B	67	66	47.8	52.6	No	No	Academy Park Apartments
SB07	RSB07-053B	8	B	67	66	51.1	55.6	No	No	Academy Park Apartments
SB07	RSB07-053C	8	B	67	66	53.2	57.3	No	No	Academy Park Apartments
SB07	RSB07-054A	8	B	67	66	50.9	55.5	No	No	Academy Park Apartments
SB07	RSB07-054B	8	B	67	66	53.4	58.0	No	No	Academy Park Apartments
SB07	RSB07-054C	8	B	67	66	54.6	59.9	No	No	Academy Park Apartments
SB07	RSB07-055A	8	B	67	66	49.8	55.3	No	No	Academy Park Apartments
SB07	RSB07-055B	8	B	67	66	53.0	57.8	No	No	Academy Park Apartments
SB07	RSB07-055C	8	B	67	66	54.1	59.6	No	No	Academy Park Apartments
SB10	RSB10-001	5	B	67	66	55.1	59.5	No	No	Simpson Ridge Apartments
SB10	RSB10-002	3	B	67	66	56.7	61.0	No	No	Simpson Ridge Apartments
SB10	RSB10-003	5	B	67	66	57.0	61.4	No	No	Simpson Ridge Apartments
SB10	RSB10-004	3	B	67	66	54.5	59.2	No	No	Simpson Ridge Apartments
SB10	RSB10-005	5	B	67	66	56.2	60.8	No	No	Simpson Ridge Apartments
SB10	RSB10-006	3	B	67	66	59.5	63.9	No	No	Simpson Ridge Apartments
SB10	RSB10-007	3	B	67	66	54.2	59.2	No	No	Simpson Ridge Apartments
SB10	RSB10-008	5	B	67	66	56.1	60.9	No	No	Simpson Ridge Apartments
SB10	RSB10-009	3	B	67	66	61.3	65.3	No	No	Simpson Ridge Apartments
SB10	RSB10-010	3	B	67	66	55.7	60.6	No	No	Simpson Ridge Apartments
SB10	RSB10-011	3	B	67	66	54.6	59.8	No	No	Simpson Ridge Apartments
SB10	RSB10-012	3	B	67	66	53.9	59.4	No	No	Simpson Ridge Apartments
SB10	RSB10-013	3	B	67	66	57.2	62.0	No	No	Simpson Ridge Apartments

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
SB10	RSB10-014	5	B	67	66	53.8	59.6	No	No	Simpson Ridge Apartments
SB10	RSB10-015	3	B	67	66	57.2	62.2	No	No	Simpson Ridge Apartments
SB10	RSB10-016	3	B	67	66	64.5	68.1	Yes	No	Simpson Ridge Apartments
SB10	RSB10-017	3	B	67	66	61.6	66.3	Yes	No	Simpson Ridge Apartments
SB10	RSB10-018	3	B	67	66	58.0	65.4	No	No	Simpson Ridge Apartments
SB10	RSB10-019	5	B	67	66	56.9	62.7	No	No	Simpson Ridge Apartments
SB10	RSB10-020	3	B	67	66	55.6	61.3	No	No	Simpson Ridge Apartments
SB10	RSB10-021	3	B	67	66	63.4	68.0	Yes	No	Simpson Ridge Apartments
SB10	RSB10-022	3	B	67	66	54.0	63.1	No	No	Simpson Ridge Apartments
SB10	RSB10-023	3	B	67	66	55.4	61.6	No	No	Simpson Ridge Apartments
SB10	RSB10-024	3	B	67	66	58.8	65.1	No	No	Simpson Ridge Apartments
SB10	RSB10-025	5	B	67	66	57.2	63.0	No	No	Simpson Ridge Apartments
SB10	RSB10-026	3	B	67	66	66.5	70.2	Yes	No	Simpson Ridge Apartments
SB10	RSB10-027	3	B	67	66	59.9	66.5	Yes	No	Simpson Ridge Apartments
SB10	RSB10-028	3	B	67	66	69.3	71.7	Yes	No	Simpson Ridge Apartments
SB10	RSB10-029	3	B	67	66	62.7	67.8	Yes	No	Simpson Ridge Apartments
SB10	RSB10-030	3	B	67	66	56.5	63.1	No	No	Simpson Ridge Apartments
SB10	RSB10-031	5	B	67	66	57.9	63.8	No	No	Simpson Ridge Apartments
SB10	RSB10-032	3	B	67	66	60.0	66.6	Yes	No	Simpson Ridge Apartments
SB10	RSB10-033	3	B	67	66	56.8	64.3	No	No	Simpson Ridge Apartments
SB10	RSB10-034	3	B	67	66	62.1	67.8	Yes	No	Simpson Ridge Apartments
SB10	RSB10-035	3	B	67	66	69.1	72.2	Yes	No	Simpson Ridge Apartments
SB10	RSB10-036	3	B	67	66	64.8	70.3	Yes	No	Simpson Ridge Apartments
SB10	RSB10-037	3	B	67	66	58.4	64.5	No	No	Simpson Ridge Apartments
SB10	RSB10-038	3	B	67	66	64.6	69.8	Yes	No	Simpson Ridge Apartments
SB10	RSB10-039	3	B	67	66	68.6	72.2	Yes	No	Simpson Ridge Apartments
SB10	RSB10-040	3	B	67	66	62.1	67.5	Yes	No	Simpson Ridge Apartments
SB10	RSB10-041	3	B	67	66	58.7	66.1	Yes	No	Simpson Ridge Apartments
SB10	RSB10-042	3	B	67	66	68.0	71.8	Yes	No	Simpson Ridge Apartments
SB10	RSB10-043	3	B	67	66	62.2	67.4	Yes	No	Simpson Ridge Apartments
SB10	RSB10-044	3	B	67	66	66.6	70.8	Yes	No	Simpson Ridge Apartments
SB10	RSB10-045	3	B	67	66	63.4	68.9	Yes	No	Simpson Ridge Apartments
SB10	RSB10-046	3	B	67	66	67.2	71.0	Yes	No	Simpson Ridge Apartments
SB12	RSB12-001	1	B	67	66	70.2	71.2	Yes	No	Ponderosa RV Park
SB12	RSB12-002	1	B	67	66	69.9	71.8	Yes	No	Ponderosa RV Park
SB12	RSB12-003	3	B	67	66	69.3	72.9	Yes	No	Ponderosa RV Park
SB12	RSB12-004	1	B	67	66	68.3	73.2	Yes	No	Ponderosa RV Park
SB12	RSB12-005	2	B	67	66	68.4	72.6	Yes	No	Ponderosa RV Park
SB12	RSB12-006	1	B	67	66	68.0	69.0	Yes	No	Ponderosa RV Park
SB12	RSB12-007	1	B	67	66	69.8	72.9	Yes	No	Ponderosa RV Park
SB12	RSB12-008	2	B	67	66	65.5	70.4	Yes	No	Ponderosa RV Park
SB12	RSB12-009	2	B	67	66	69.6	72.6	Yes	No	Ponderosa RV Park
SB12	RSB12-010	3	B	67	66	69.5	72.3	Yes	No	Ponderosa RV Park
SB12	RSB12-011	8	B	67	66	62.6	69.4	Yes	No	Ponderosa RV Park
SB12	RSB12-012	11	B	67	66	63.1	67.3	Yes	No	Ponderosa RV Park
SB12	RSB12-013	8	B	67	66	62.6	65.9	No	No	Ponderosa RV Park
SB12	RSB12-014	4	B	67	66	69.8	71.9	Yes	No	Ponderosa RV Park
SB12	RSB12-015	1	B	67	66	62.6	68.5	Yes	No	Ponderosa RV Park
SB12	RSB12-016	1	B	67	66	62.7	67.3	Yes	No	Ponderosa RV Park
SB12	RSB12-017	12	B	67	66	64.3	69.6	Yes	No	Ponderosa RV Park
SB12	RSB12-018	5	B	67	66	69.8	72.4	Yes	No	Ponderosa RV Park
SB12	RSB12-022	5	B	67	66	63.0	67.7	Yes	No	Ponderosa RV Park
SB12	RSB12-023	7	B	67	66	68.8	72.0	Yes	No	Ponderosa RV Park
SB12	RSB12-024	2	B	67	66	64.1	69.5	Yes	No	Ponderosa RV Park
SB12	RSB12-025	3	B	67	66	64.4	68.6	Yes	No	Ponderosa RV Park
SB12	RSB12-026	5	B	67	66	63.8	69.8	Yes	No	Ponderosa RV Park
SB12	RSB12-027	14	B	67	66	59.7	63.5	No	No	Ponderosa RV Park
SB12	RSB12-028	12	B	67	66	61.2	66.5	Yes	No	Ponderosa RV Park
SB12	RSB12-029	2	B	67	66	63.7	69.5	Yes	No	Ponderosa RV Park
SB12	RSB12-030	1	B	67	66	60.5	68.8	Yes	No	Ponderosa RV Park
SB12	RSB12-031	8	B	67	66	68.6	72.0	Yes	No	Ponderosa RV Park
SB12	RSB12-032	12	B	67	66	58.9	62.9	No	No	Ponderosa RV Park
SB12	RSB12-035	14	B	67	66	64.4	70.2	Yes	No	Ponderosa RV Park
SB12	RSB12-036	15	B	67	66	59.7	69.1	Yes	No	Ponderosa RV Park
SB12	RSB12-037	7	B	67	66	68.5	71.9	Yes	No	Ponderosa RV Park
SB12	RSB12-038	4	B	67	66	69.1	72.0	Yes	No	Ponderosa RV Park
SB12	RSB12-039	3	B	67	66	69.2	72.2	Yes	No	Ponderosa RV Park
SB12	RSB12-040	3	B	67	66	64.6	70.6	Yes	No	Ponderosa RV Park
SB12	RSB12-041	4	B	67	66	59.1	68.9	Yes	No	Ponderosa RV Park
SB12	RSB12-042	4	B	67	66	61.9	66.1	Yes	No	Ponderosa RV Park
SB12	RSB12-043	3	B	67	66	58.9	67.7	Yes	No	Ponderosa RV Park




## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
SB12	RSB12-044	2	B	67	66	69.1	72.2	Yes	No	Ponderosa RV Park
SB12	RSB12-045	1	B	67	66	69.1	72.4	Yes	No	Ponderosa RV Park
SB12	RSB12-046	2	B	67	66	68.5	72.1	Yes	No	Ponderosa RV Park
SB12	RSB12-047	2	B	67	66	62.2	66.7	Yes	No	Ponderosa RV Park
SB12	RSB12-048	3	B	67	66	65.5	70.1	Yes	No	Ponderosa RV Park
SB13	RSB13-002	2	B	67	66	55.1	59.5	No	No	Quail Hollow
SB13	RSB13-003	1	B	67	66	56.5	60.6	No	No	Quail Hollow
SB13	RSB13-004	1	B	67	66	57.9	61.8	No	No	Quail Hollow
SB13	RSB13-005	2	B	67	66	54.3	58.3	No	No	Quail Hollow
SB13	RSB13-006	1	B	67	66	58.6	62.5	No	No	Quail Hollow
SB13	RSB13-007	2	B	67	66	56.0	59.8	No	No	Quail Hollow
SB13	RSB13-008	2	B	67	66	58.5	62.3	No	No	Quail Hollow
SB13	RSB13-009	3	B	67	66	57.9	61.7	No	No	Quail Hollow
SB13	RSB13-011	3	B	67	66	56.7	60.7	No	No	Quail Hollow
SB13	RSB13-013	3	B	67	66	56.1	60.3	No	No	Quail Hollow
SB13	RSB13-014	2	B	67	66	58.1	62.7	No	No	Quail Hollow
SB13	RSB13-015	2	B	67	66	59.5	65.4	No	No	Quail Hollow
SB13	RSB13-016	1	B	67	66	61.3	67.0	Yes	No	Quail Hollow
SB13	RSB13-017	4	B	67	66	55.2	60.2	No	No	Quail Hollow
SB13	RSB13-018	3	B	67	66	58.0	63.0	No	No	Quail Hollow
SB13	RSB13-019	1	B	67	66	63.0	68.7	Yes	No	Quail Hollow
SB13	RSB13-020	1	B	67	66	63.6	69.1	Yes	No	Quail Hollow
SB13	RSB13-021	1	B	67	66	60.6	65.1	No	No	Quail Hollow
SB13	RSB13-022	1	B	67	66	65.5	70.8	Yes	No	Quail Hollow
SB13	RSB13-023	4	B	67	66	55.7	60.8	No	No	Quail Hollow
SB13	RSB13-024	2	B	67	66	60.6	65.2	No	No	Quail Hollow
SB13	RSB13-025	1	B	67	66	65.5	70.8	Yes	No	Quail Hollow
SB13	RSB13-026	1	B	67	66	65.0	70.3	Yes	No	Quail Hollow
SB13	RSB13-027	2	B	67	66	60.7	65.5	No	No	Quail Hollow
SB13	RSB13-028	1	B	67	66	64.1	69.5	Yes	No	Quail Hollow
SB13	RSB13-029	1	B	67	66	64.0	69.4	Yes	No	Quail Hollow
SB13	RSB13-030	2	B	67	66	60.6	65.6	No	No	Quail Hollow
SB13	RSB13-031	1	B	67	66	64.4	69.8	Yes	No	Quail Hollow
SB13	RSB13-032	1	B	67	66	64.2	69.6	Yes	No	Quail Hollow
SB13	RSB13-033	1	B	67	66	64.9	70.2	Yes	No	Quail Hollow
SB13	RSB13-034	4	B	67	66	56.7	62.2	No	No	Quail Hollow
SB13	RSB13-035	2	B	67	66	60.9	66.0	Yes	No	Quail Hollow
SB13	RSB13-036	1	B	67	66	64.9	70.3	Yes	No	Quail Hollow
SB13	RSB13-037	2	B	67	66	60.5	65.7	No	No	Quail Hollow
SB13	RSB13-038	1	B	67	66	65.4	70.7	Yes	No	Quail Hollow
SB13	RSB13-039	3	B	67	66	58.1	63.4	No	No	Quail Hollow
SB13	RSB13-040	4	B	67	66	56.2	61.0	No	No	Quail Hollow
SB13	RSB13-041	2	B	67	66	60.1	65.7	No	No	Quail Hollow
SB13	RSB13-042	4	B	67	66	59.0	64.3	No	No	Quail Hollow
SB13	RSB13-043	3	B	67	66	57.1	61.9	No	No	Quail Hollow
SB13	RSB13-044	2	B	67	66	58.4	65.8	No	No	Quail Hollow
SB13	RSB13-045	1	B	67	66	60.6	67.2	Yes	No	Quail Hollow
SB13	RSB13-046	1	B	67	66	65.7	71.0	Yes	No	Quail Hollow
SB13	RSB13-047	1	B	67	66	65.0	70.4	Yes	No	Quail Hollow
SB13	RSB13-048	1	B	67	66	58.9	65.6	No	No	Quail Hollow
SB13	RSB13-049	3	B	67	66	58.4	63.1	No	No	Quail Hollow
SB13	RSB13-050	1	B	67	66	60.7	67.2	Yes	No	Quail Hollow
SB13	RSB13-051	1	B	67	66	63.5	69.2	Yes	No	Quail Hollow
SB13	RSB13-052	1	B	67	66	59.0	66.1	Yes	No	Quail Hollow
SB13	RSB13-053	1	B	67	66	62.2	68.3	Yes	No	Quail Hollow
SB13	RSB13-054	1	B	67	66	65.5	70.8	Yes	No	Quail Hollow
SB13	RSB13-055	3	B	67	66	53.2	59.0	No	No	Quail Hollow
SB13	RSB13-056	3	B	67	66	59.1	64.0	No	No	Quail Hollow
SB13	RSB13-057	1	B	67	66	65.1	70.5	Yes	No	Quail Hollow
SB13	RSB13-058	1	B	67	66	61.7	68.0	Yes	No	Quail Hollow
SB13	RSB13-059	1	B	67	66	64.6	70.1	Yes	No	Quail Hollow
SB13	RSB13-060	3	B	67	66	60.1	65.4	No	No	Quail Hollow
SB13	RSB13-061	1	B	67	66	64.2	69.8	Yes	No	Quail Hollow
SB13	RSB13-062	3	B	67	66	55.1	60.5	No	No	Quail Hollow
SB13	RSB13-063	1	B	67	66	65.3	70.7	Yes	No	Quail Hollow
SB13	RSB13-064	3	B	67	66	55.4	60.6	No	No	Quail Hollow
SB13	RSB13-065	1	B	67	66	60.7	67.0	Yes	No	Quail Hollow
SB13	RSB13-066	1	B	67	66	59.6	64.4	No	No	Quail Hollow
SB13	RSB13-067	1	B	67	66	61.6	68.5	Yes	No	Quail Hollow
SB13	RSB13-068	1	B	67	66	65.5	70.8	Yes	No	Quail Hollow
SB13	RSB13-069	1	B	67	66	59.7	64.6	No	No	Quail Hollow

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels (-20dB)									
SB13	RSB13-070	1	B	67	66	60.5	65.6	No	No	Quail Hollow
SB13	RSB13-072	1	B	67	66	56.9	64.1	No	No	Quail Hollow
SB13	RSB13-073	1	B	67	66	57.2	63.1	No	No	Quail Hollow
SB13	RSB13-074	1	B	67	66	56.0	62.7	No	No	Quail Hollow
SB13	RSB13-076	1	B	67	66	55.5	62.0	No	No	Quail Hollow
SB13	RSB13-079	1	B	67	66	58.9	64.8	No	No	Oak Run
SB13	RSB13-080	1	B	67	66	61.0	66.8	Yes	No	Oak Run
SB13	RSB13-081	2	B	67	66	57.5	63.3	No	No	Oak Run
SB13	RSB13-082	1	B	67	66	60.8	67.1	Yes	No	Oak Run
SB13	RSB13-083	2	B	67	66	55.2	62.7	No	No	Oak Run
SB13	RSB13-084	2	B	67	66	59.3	66.0	Yes	No	Oak Run
SB13	RSB13-085	1	B	67	66	61.0	67.8	Yes	No	Oak Run
SB13	RSB13-086	1	B	67	66	59.0	65.7	No	No	Oak Run
SB13	RSB13-087	2	B	67	66	55.4	63.8	No	No	Oak Run
SB13	RSB13-088	1	B	67	66	60.9	67.6	Yes	No	Oak Run
SB13	RSB13-089	1	B	67	66	60.9	67.7	Yes	No	Oak Run
SB13	RSB13-090	2	B	67	66	56.1	63.2	No	No	Oak Run
SB13	RSB13-091	1	B	67	66	57.8	64.5	No	No	Oak Run
SB13	RSB13-092	1	B	67	66	60.6	67.0	Yes	No	Oak Run
SB13	RSB13-093	2	B	67	66	55.0	62.8	No	No	Oak Run
SB13	RSB13-094	1	B	67	66	56.9	64.3	No	No	Oak Run
SB13	RSB13-095	1	B	67	66	60.0	66.2	Yes	No	Oak Run
SB13	RSB13-096	1	B	67	66	60.8	67.4	Yes	No	Oak Run
SB13	RSB13-097	1	B	67	66	60.9	67.0	Yes	No	Oak Run
SB13	RSB13-098	2	B	67	66	58.5	64.5	No	No	Oak Run
SB13	RSB13-099	2	B	67	66	56.0	61.8	No	No	Oak Run
SB13	RSB13-100	1	B	67	66	61.1	67.2	Yes	No	Oak Run
SB13	RSB13-101	2	B	67	66	57.3	64.1	No	No	Oak Run
SB13	RSB13-102	1	B	67	66	58.3	65.2	No	No	Oak Run
SB13	RSB13-103	2	B	67	66	54.3	61.6	No	No	Oak Run
SB13	RSB13-104	1	B	67	66	63.7	69.3	Yes	No	Oak Run
SB13	RSB13-105	2	B	67	66	57.0	61.2	No	No	Oak Run
SB13	RSB13-106	3	B	67	66	60.3	64.6	No	No	Oak Run
SB13	RSB13-107	2	B	67	66	57.5	61.5	No	No	Oak Run
SB13	RSB13-108	3	B	67	66	63.6	69.2	Yes	No	Oak Run
SB13	RSB13-109	3	B	67	66	61.1	65.3	No	No	Oak Run
SB13	RSB13-110	1	B	67	66	64.0	69.6	Yes	No	Oak Run
SB13	RSB13-111	3	B	67	66	58.0	63.1	No	No	Oak Run
SB13	RSB13-112	1	B	67	66	62.6	68.3	Yes	No	Oak Run
SB13	RSB13-113	2	B	67	66	60.7	66.5	Yes	No	Oak Run
SB13	RSB13-117	1	B	67	66	59.6	64.1	No	No	Oak Run



**Appendix B-2 – Special Land Uses  
Predicted Noise Levels**

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels									
NB01	NNB01-001	1	C	67	66	62.9	65.9	No	No	Partin Triangle Park
NB01	NNB01-002	1	C	67	66	63.3	<b>66.9</b>	Yes	No	Partin Triangle Park
NB01	NNB01-003	1	C	67	66	61.8	64.5	No	No	Partin Triangle Park
NB01	NNB01-004	1	C	67	66	66.1	<b>71.6</b>	Yes	No	Partin Triangle Park
NB01	NNB01-005	1	C	67	66	66.7	<b>72.7</b>	Yes	No	Partin Triangle Park
NB01	NNB01-006	1	C	67	66	62.8	65.7	No	No	Partin Triangle Park
NB01	NNB01-007	1	C	67	66	61.1	63.5	No	No	Partin Triangle Park
NB01	NNB01-008	1	C	67	66	66.2	<b>71.9</b>	Yes	No	Partin Triangle Park
NB01	NNB01-009	1	C	67	66	62.9	<b>66.0</b>	Yes	No	Partin Triangle Park
NB01	NNB01-010	1	C	67	66	62.0	64.3	No	No	Partin Triangle Park
NB01	NNB01-011	1	C	67	66	66.8	<b>72.6</b>	Yes	No	Partin Triangle Park
NB01	NNB01-012	1	C	67	66	63.3	<b>67.3</b>	Yes	No	Partin Triangle Park
NB01	NNB01-013	1	C	67	66	62.6	65.6	No	No	Partin Triangle Park
NB01	NNB01-014	1	C	67	66	63.6	<b>67.9</b>	Yes	No	Partin Triangle Park
NB01	NNB01-015	1	C	67	66	62.9	<b>66.1</b>	Yes	No	Partin Triangle Park
NB01	NNB01-016	1	C	67	66	62.7	<b>66.2</b>	Yes	No	Partin Triangle Park
NB01	NNB01-017	1	C	67	66	62.9	<b>66.7</b>	Yes	No	Partin Triangle Park
NB01	NNB01-018	1	C	67	66	64.4	<b>69.0</b>	Yes	No	Partin Triangle Park
NB02	NNB02-001	1	C	67	66	58.0	60.3	No	No	City of Life Church Athletic Fields
NB02	NNB02-002	1	C	67	66	56.6	61.2	No	No	City of Life Church Athletic Fields
NB02	NNB02-003	1	C	67	66	57.6	62.2	No	No	City of Life Church Athletic Fields
NB02	NNB02-004	1	C	67	66	58.6	63.2	No	No	City of Life Church Athletic Fields
NB02	NNB02-005	1	C	67	66	59.9	64.2	No	No	City of Life Church Athletic Fields
NB02	NNB02-006	1	C	67	66	59.2	63.4	No	No	City of Life Church Baseball Field
NB02	NNB02-007	1	C	67	66	58.3	62.6	No	No	City of Life Church Baseball Field
NB02	NNB02-008	1	C	67	66	58.7	62.9	No	No	City of Life Church Baseball Field
NB02	NNB02-009	1	C	67	66	58.1	62.2	No	No	City of Life Church Basketball Court
NB02	NNB02-010	1	C	67	66	59.4	63.6	No	No	City of Life Church Basketball Court
NB02	NNB02-011	1	C	67	66	56.8	60.8	No	No	City of Life Church Playground
NB02	NNB02-012	1	C	67	66	55.1	58.9	No	No	City of Life Church Outdoor Stage
NB02	NNB02-013	1	E	72	71	58.7	61.4	No	No	Animal Clinic Picnic Table
NB04	NNB04-006	1	E	72	71	68.3	69.4	No	No	Outback Steakhouse Outdoor Seating
NB05	NNB05-038	1	C	67	66	53.8	58.3	No	No	Simmons Trace Playground
NB05	NNB05-064	1	C	67	66	56.1	60.1	No	No	Christian Life Church Entrance Outdoor Seating
NB05	NNB05-065	1	C	67	66	52.9	57.7	No	No	Christian Life Church Entrance Outdoor Seating
NB07	NNB07-001	1	C	67	66	56.3	61.5	No	No	Kissimmee Juvenile Correctional Facility Outdoor Recreation
NB07	NNB07-002	1	C	67	66	55.8	61.2	No	No	Kissimmee Juvenile Correctional Facility Outdoor Recreation
NB07	NNB07-003	1	C	67	66	56.8	63.0	No	No	Challenger Learning Center Basketball Court
NB07	NNB07-004	1	C	67	66	58.6	65.1	No	No	Challenger Learning Center Basketball Court
NB07	NNB07-005	1	C	67	66	63.7	<b>72.7</b>	Yes	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-006	1	C	67	66	63.8	<b>72.9</b>	Yes	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-007	1	C	67	66	62.9	<b>71.9</b>	Yes	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-008	1	C	67	66	51.8	58.6	No	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-009	1	C	67	66	64.0	<b>73.1</b>	Yes	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-010	1	C	67	66	64.0	<b>73.1</b>	Yes	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-011	1	C	67	66	63.0	<b>72.0</b>	Yes	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-012	1	C	67	66	51.8	59.3	No	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-013	1	C	67	66	64.7	<b>74.0</b>	Yes	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-014	1	C	67	66	65.7	<b>75.0</b>	Yes	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-015	1	C	67	66	65.1	<b>74.2</b>	Yes	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-016	1	C	67	66	64.0	<b>73.2</b>	Yes	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-017	1	C	67	66	59.7	<b>67.9</b>	Yes	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-018	1	C	67	66	57.4	65.3	No	No	Osceola County Jail Outdoor Recreation
NB07	NNB07-019	1	C	67	66	55.7	63.2	No	No	Osceola County Jail Outdoor Recreation
NB08	NNB08-026	1	C	67	66	58.4	64.1	No	No	Breezewood Village Apartments Playground
NB09	NNB09-027	1	C	67	66	55.6	60.6	No	No	Grande Court at Boggy Creek Playground
NB09	NNB09-028	1	C	67	66	54.0	59.5	No	No	Grande Court at Boggy Creek Pool
NB09	NNB09-029	1	C	67	66	66.7	<b>75.2</b>	Yes	No	Grande Court at Boggy Creek Playground
NB09	NNB09-030	1	C	67	66	67.3	<b>75.6</b>	Yes	No	Grande Court at Boggy Creek Athletic Field
NB09	NNB09-031	1	C	67	66	65.5	<b>73.9</b>	Yes	No	Grande Court at Boggy Creek
NB09	NNB09-032	1	C	67	66	67.3	<b>75.6</b>	Yes	No	Grande Court at Boggy Creek
NB09	NNB09-033	1	C	67	66	65.5	<b>73.9</b>	Yes	No	Grande Court at Boggy Creek
NB09	NNB09-034	1	C	67	66	67.0	<b>75.5</b>	Yes	No	Grande Court at Boggy Creek
NB09	NNB09-035	1	C	67	66	65.6	<b>74.0</b>	Yes	No	Grande Court at Boggy Creek
SB02	NSB02-001	1	C	67	66	61.4	<b>69.1</b>	Yes	No	Neptune Middle School Play Area
SB02	NSB02-002	1	C	67	66	66.0	<b>74.7</b>	Yes	No	Neptune Middle School Play Area
SB02	NSB02-003	1	C	67	66	63.3	<b>71.7</b>	Yes	No	Neptune Middle School Play Area
SB02	NSB02-004	1	C	67	66	61.7	<b>70.0</b>	Yes	No	Neptune Middle School Basketball Courts
SB02	NSB02-005	1	C	67	66	65.2	<b>73.6</b>	Yes	No	Neptune Middle School Basketball Courts
SB02	NSB02-009	1	C	67	66	59.8	<b>66.9</b>	Yes	No	Neptune Middle School Athletic Field
SB02	NSB02-010	1	C	67	66	51.6	56.8	No	No	Neptune Middle School Baseball Field

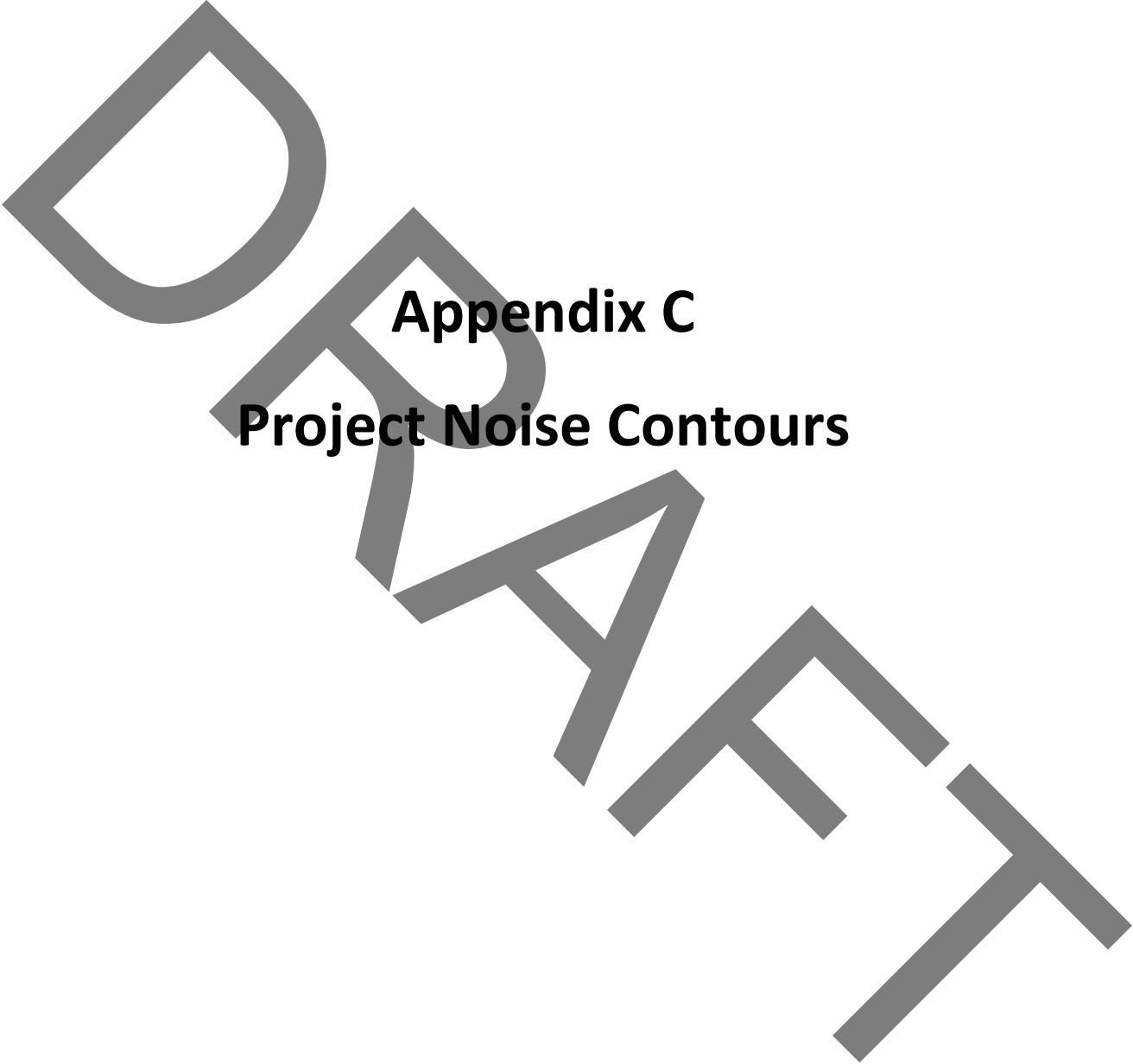
## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels									
SB02	NSB02-012	1	C	67	66	55.4	60.8	No	No	Neptune Middle School Athletic Field
SB02	NSB02-013	1	C	67	66	57.6	63.3	No	No	Neptune Middle School Athletic Field
SB02	NSB02-020	1	C	67	66	58.0	63.7	No	No	Neptune Middle School Athletic Field
SB02	NSB02-021	1	C	67	66	60.6	<b>68.4</b>	Yes	No	Neptune Middle School Athletic Field
SB02	NSB02-022	1	C	67	66	50.8	55.7	No	No	Neptune Middle School Baseball Field
SB02	NSB02-023	1	C	67	66	55.7	61.1	No	No	Neptune Middle School Athletic Field
SB02	NSB02-026	1	C	67	66	62.5	<b>70.8</b>	Yes	No	Neptune Middle School Basketball Courts
SB02	NSB02-030	1	C	67	66	60.8	<b>68.6</b>	Yes	No	Neptune Middle School Athletic Field
SB02	NSB02-031	1	C	67	66	58.1	64.1	No	No	Neptune Middle School Athletic Field
SB02	NSB02-032	1	C	67	66	56.1	61.6	No	No	Neptune Middle School Athletic Field
SB02	NSB02-033	1	C	67	66	66.7	<b>74.6</b>	Yes	No	Neptune Middle School Basketball Courts
SB02	NSB02-034	1	C	67	66	51.3	56.5	No	No	Neptune Middle School Baseball Field
SB02	NSB02-035	1	C	67	66	52.2	57.8	No	No	Neptune Middle School Baseball Field
SB03	NSB03-016	1	C	67	66	63.4	<b>66.0</b>	Yes	No	Villas of Emerald Lake Tennis Court
SB04	NSB04-001	1	E	72	71	61.1	66.7	No	No	Osceola County Sheriff's Office Outdoor Seating
SB05	NSB05-001	1	D	52	51	<b>42.3</b>	<b>48.7</b>	No	No	Gateway Baptist Church Sanctuary Interior Use
SB05	NSB05-002	1	D	52	51	<b>40.9</b>	<b>46.8</b>	No	No	Gateway Baptist Church Fellowship Hall Interior Use
SB06	NSB06-041	1	C	72	71	62.8	68.6	No	No	Amber Pointe Apartment Pool
SB08	RSB08-001	1	E	72	71	48.9	49.1	No	No	Travelodge by Wyndham Pool
SB09	NSB09-001	1	E	72	71	52.3	57.6	No	No	Flamingo Waterpark Resort Recreation Facilities
SB09	NSB09-002	1	E	67	66	54.2	62.6	No	No	Flamingo Waterpark Resort Playground
SB11	NSB11-001	1	C	67	66	51.5	55.3	No	No	Gateway High School Baseball Field
SB11	NSB11-002	1	C	67	66	54.4	58.4	No	No	Gateway High School Shot Put Area
SB11	NSB11-003	1	C	67	66	55.4	59.8	No	No	Gateway High School Athletic Fields
SB11	NSB11-004	1	C	67	66	57.1	61.2	No	No	Gateway High School Athletic Fields
SB11	NSB11-005	1	C	67	66	55.7	59.5	No	No	Gateway High School Bleachers
SB11	NSB11-006	1	C	67	66	53.5	56.7	No	No	Osceola County School District Picnic Table
SB11	NSB11-007	1	C	67	66	56.4	59.6	No	No	Osceola County School District Screen Patio
SB11	NSB11-008	1	C	67	66	61.0	64.8	No	No	Osceola County School District Second Floor Screen Patio
SB11	NSB11-009	1	E	72	71	55.9	58.8	No	No	Pats Place Eatery and Catering Outdoor Seating
SB11	NSB11-010	1	E	72	71	57.0	59.6	No	No	Osceola County School District Picnic Table
SB11	NSB11-011	1	E	72	71	59.3	63.0	No	No	Osceola County School District Outdoor Seating
SB11	NSB11-012	1	E	72	71	60.3	64.2	No	No	Osceola County School District Outdoor Seating
SB11	NSB11-013	1	C	67	66	58.6	62.0	No	No	Johnson University of Florida Picnic Area
SB11	NSB11-014	1	C	67	66	57.5	61.6	No	No	Johnson University of Florida Playground
SB11	NSB11-015	1	C	67	66	60.6	64.9	No	No	Johnson University of Florida Picnic Area
SB11	NSB11-016	1	C	67	66	58.8	62.8	No	No	Johnson University of Florida Student Housing
SB11	NSB11-017	1	C	67	66	58.9	62.8	No	No	Johnson University of Florida Student Housing
SB11	NSB11-018	1	C	67	66	65.3	<b>68.8</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-019	1	C	67	66	60.7	65.0	No	No	Johnson University of Florida Student Housing
SB11	NSB11-020	1	C	67	66	65.9	<b>68.8</b>	Yes	No	Johnson University of Florida Student Housing
SB11	NSB11-021	1	C	67	66	64.4	<b>68.2</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-022	1	C	67	66	67.0	<b>69.8</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-023	1	C	67	66	62.0	<b>66.3</b>	Yes	No	Johnson University of Florida Student Housing
SB11	NSB11-024	1	C	67	66	67.4	<b>70.0</b>	Yes	No	Johnson University of Florida Student Housing
SB11	NSB11-025	1	C	67	66	64.5	<b>68.3</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-026	1	C	67	66	60.9	65.0	No	No	Johnson University of Florida Volleyball Court
SB11	NSB11-027	1	C	67	66	67.2	<b>70.0</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-028	1	C	67	66	62.3	<b>66.4</b>	Yes	No	Johnson University of Florida Pool
SB11	NSB11-029	1	C	67	66	64.4	<b>68.0</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-030	1	C	67	66	67.2	<b>70.2</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-031	1	C	67	66	60.2	62.5	No	No	Johnson University of Florida Picnic Table
SB11	NSB11-032	1	C	67	66	60.9	63.0	No	No	Johnson University of Florida Athletic Fields
SB11	NSB11-033	1	C	67	66	65.0	<b>68.3</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-034	1	C	67	66	62.4	65.3	No	No	Johnson University of Florida Athletic Fields
SB11	NSB11-035	1	C	67	66	67.5	<b>70.3</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-036	1	C	67	66	63.7	65.5	No	No	Johnson University of Florida Athletic Fields
SB11	NSB11-037	1	C	67	66	63.1	64.1	No	No	Johnson University of Florida Athletic Fields
SB11	NSB11-038	1	C	67	66	65.9	<b>68.1</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-039	1	C	67	66	68.5	<b>70.3</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-040	1	C	67	66	67.9	<b>69.2</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-041	1	C	67	66	67.7	<b>68.1</b>	Yes	No	Johnson University of Florida Athletic Fields
SB11	NSB11-042	1	C	67	66	68.7	<b>69.0</b>	Yes	No	Johnson University of Florida Athletic Fields
SB12	NSB12-019	1	C	67	66	61.8	<b>68.9</b>	Yes	No	Ponderosa RV Park Pool
SB12	NSB12-020	1	C	67	66	62.3	<b>68.1</b>	Yes	No	Ponderosa RV Park Shuffleboard
SB12	NSB12-021	1	C	67	66	60.9	<b>68.8</b>	Yes	No	Ponderosa RV Park Outdoor Seating
SB12	NSB12-033	1	C	67	66	61.3	<b>67.1</b>	Yes	No	Ponderosa RV Park Rec Hall
SB12	NSB12-034	1	C	67	66	61.2	<b>67.3</b>	Yes	No	Ponderosa RV Park Playground
SB13	NSB13-012	1	C	67	66	63.3	<b>68.9</b>	Yes	No	Abandoned Playground
SB13	NSB13-071	1	C	67	66	63.6	<b>69.2</b>	Yes	No	Quail Hollow Park Athletic Field
SB13	NSB13-075	1	C	67	66	61.7	<b>67.2</b>	Yes	No	Quail Hollow Park Playground

## Appendix B Predicted Noise Levels

Common Noise Environment (CNE)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2019 Existing LAeq1h (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
<b>XX.X</b>	Impacted Receptor									
<b>XX.X</b>	Values adjusted to interior levels									
SB13	NSB13-077	1	C	67	66	63.4	<b>69.1</b>	Yes	No	Quail Hollow Park Volleyball Court
SB13	NSB13-078	1	C	67	66	61.9	<b>67.4</b>	Yes	No	Quail Hollow Park Basketball Court
SB13	NSB13-114	1	C	67	66	59.0	63.1	No	No	Kissimmee Charter Elementary Playground
SB13	NSB13-115	1	C	67	66	60.8	64.8	No	No	Kissimmee Charter Elementary Picnic Table
SB13	NSB13-116	1	C	67	66	59.3	63.9	No	No	Kissimmee Charter Elementary Picnic Table

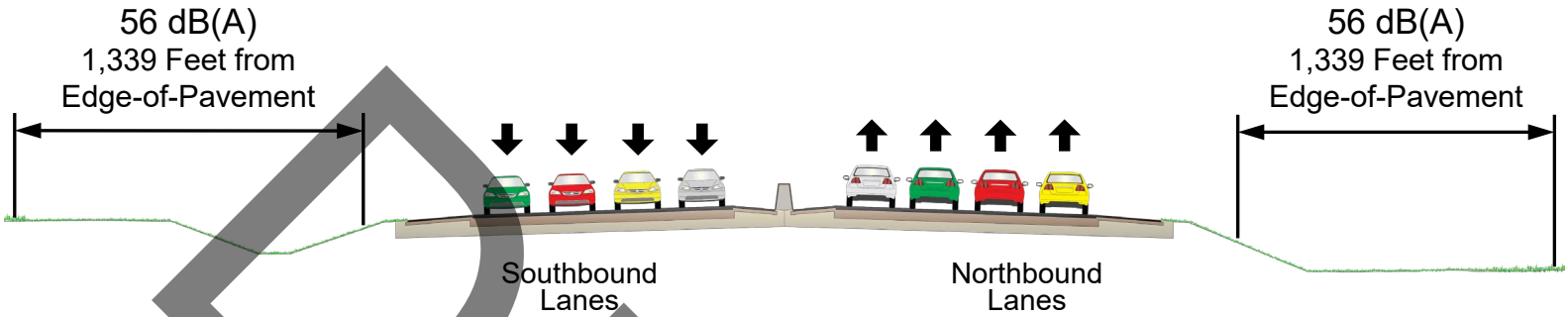
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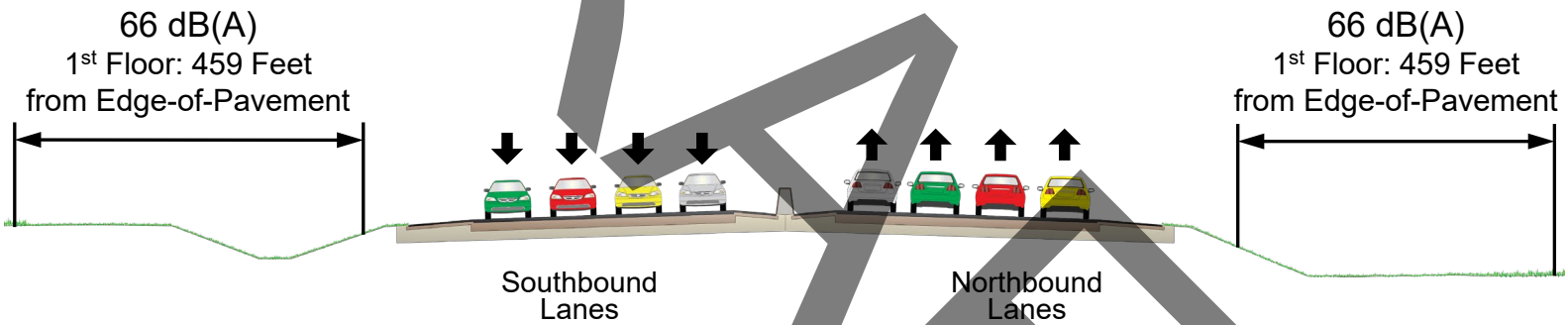
**Appendix C**  
**Project Noise Contours**

# Florida's Turnpike Noise Contours (South)

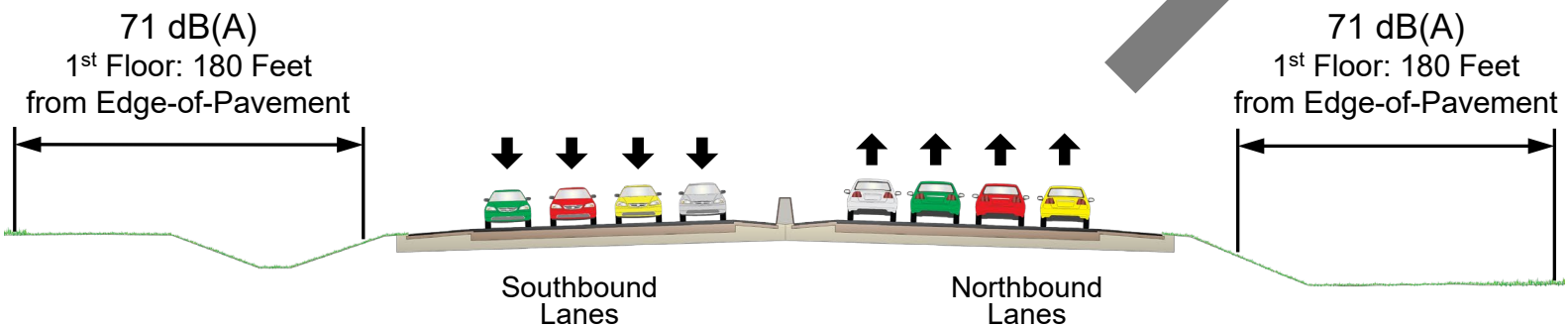
From south of US 192  
to US 192



Activity Category A



Activity Category B/C

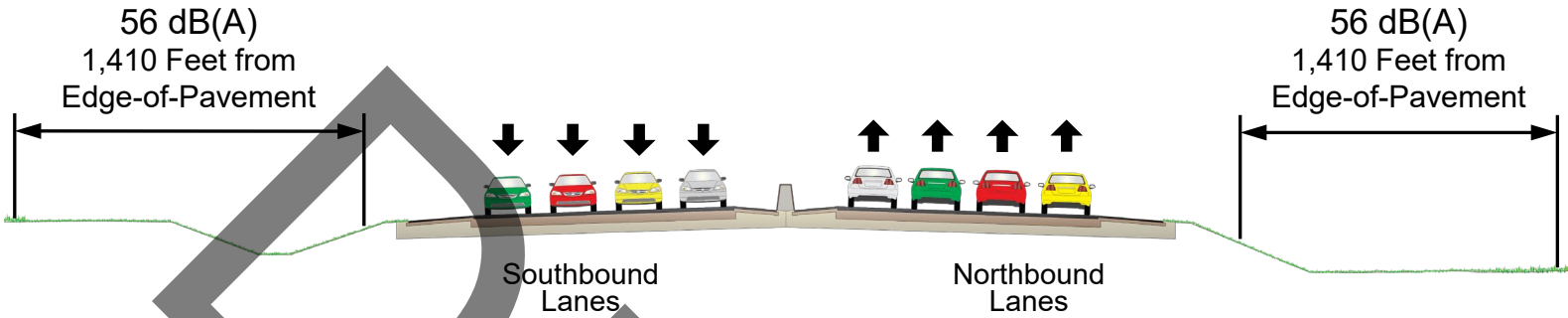


Activity Category E

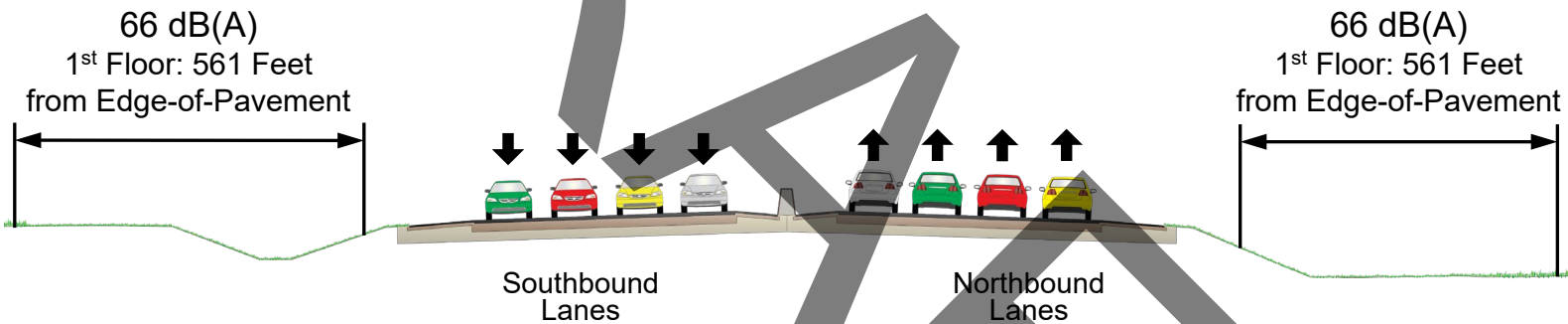


# Florida's Turnpike Noise Contours (Central)

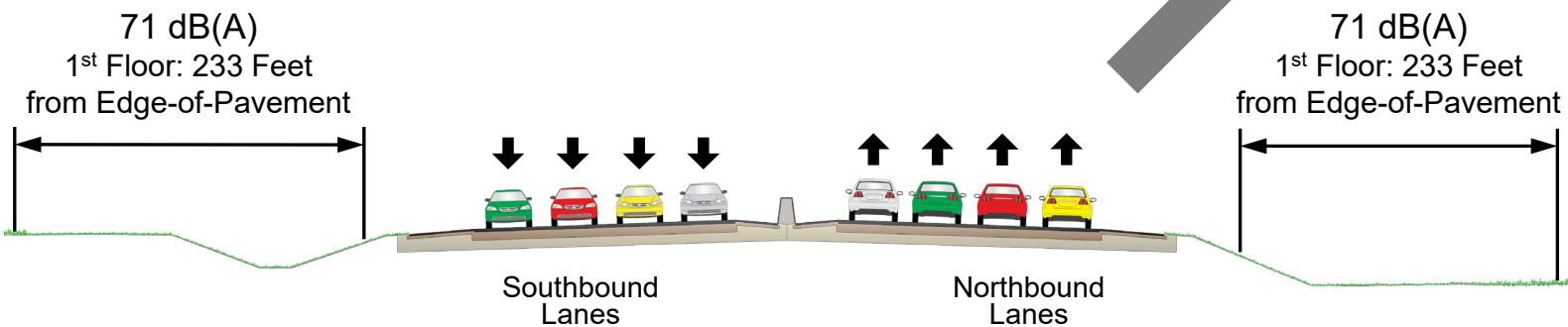
From US 192  
to Osceola Parkway



Activity Category A



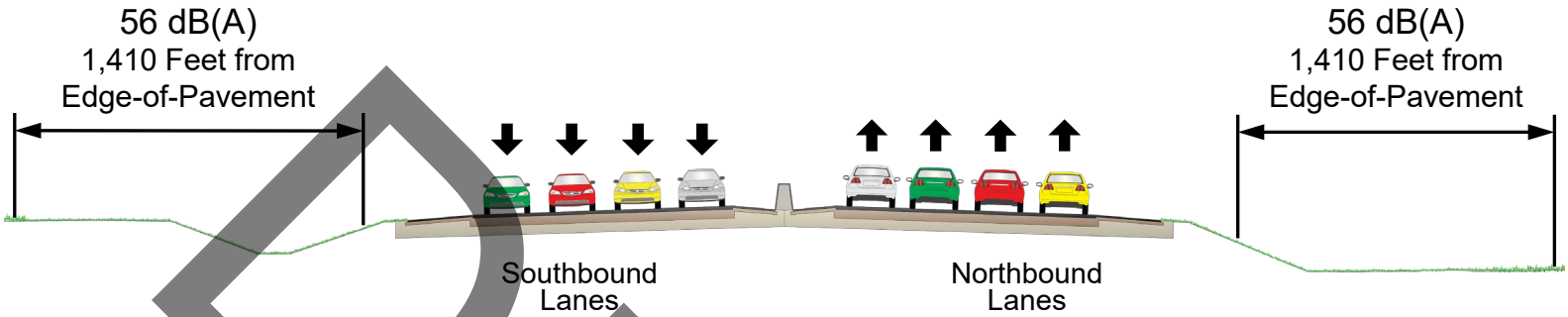
Activity Category B/C



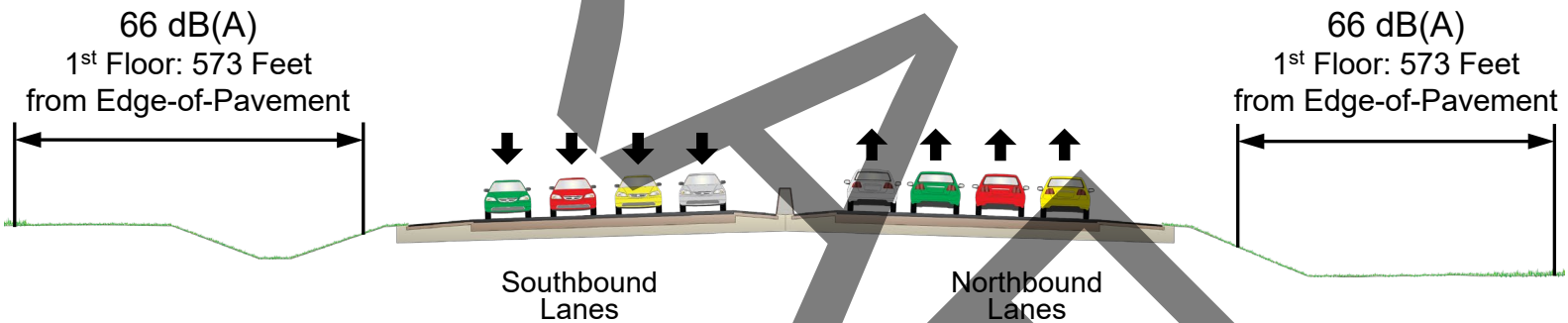
Activity Category E

# Florida's Turnpike Noise Contours (North)

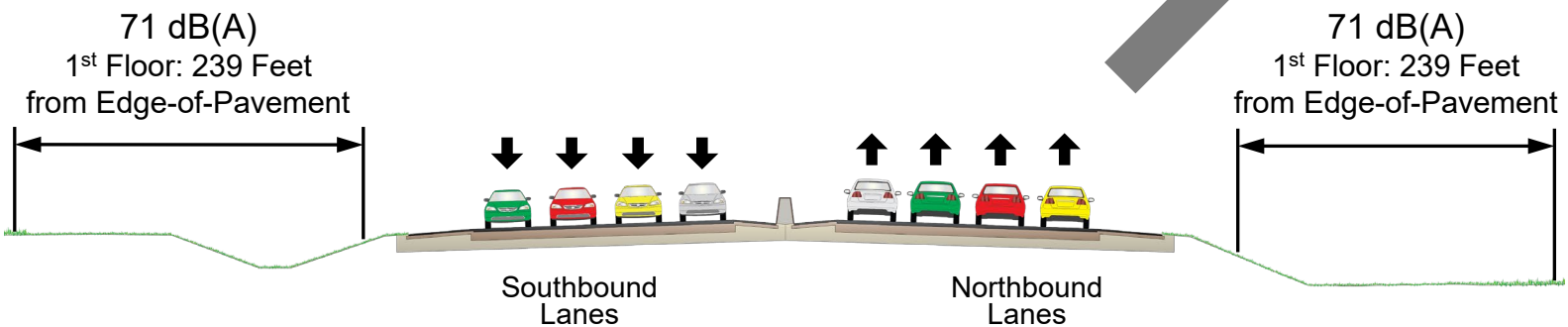
From Osceola Parkway  
to north of Osceola Parkway



Activity Category A

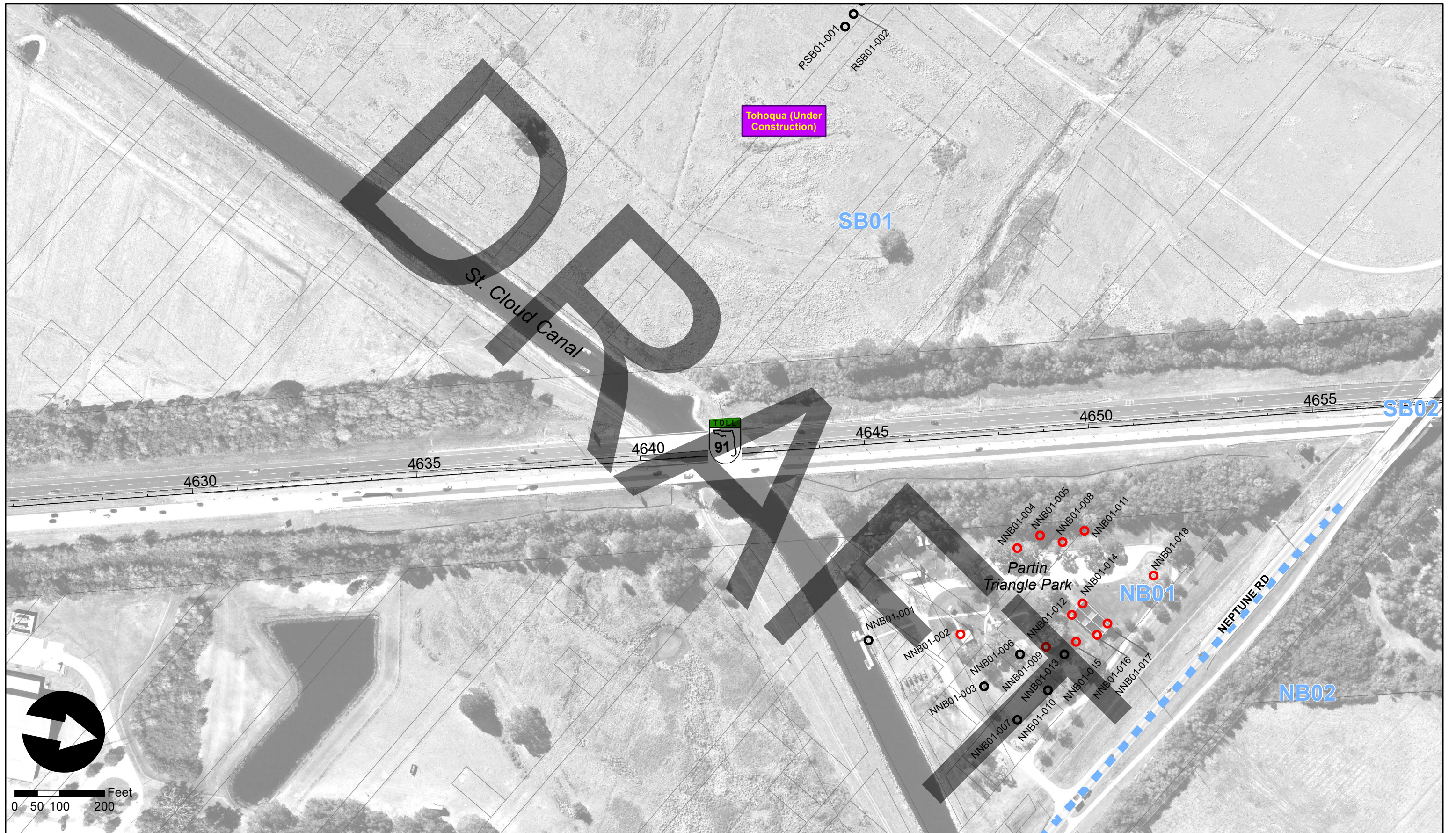


Activity Category B/C



Activity Category E

**Appendix D**  
**Project Aerials**



○ Impacted - Benefited      Existing Barrier      CAD Design Lines  
○ Impacted - Not Benefited      ROW Noise Barrier      Common Noise Environment  
○ Not Impacted - Benefited      Shoulder Noise Barrier  
○ Not Impacted - Not Benefited

NOTE: Some not impacted receptors fall outside the display area of the map figures.

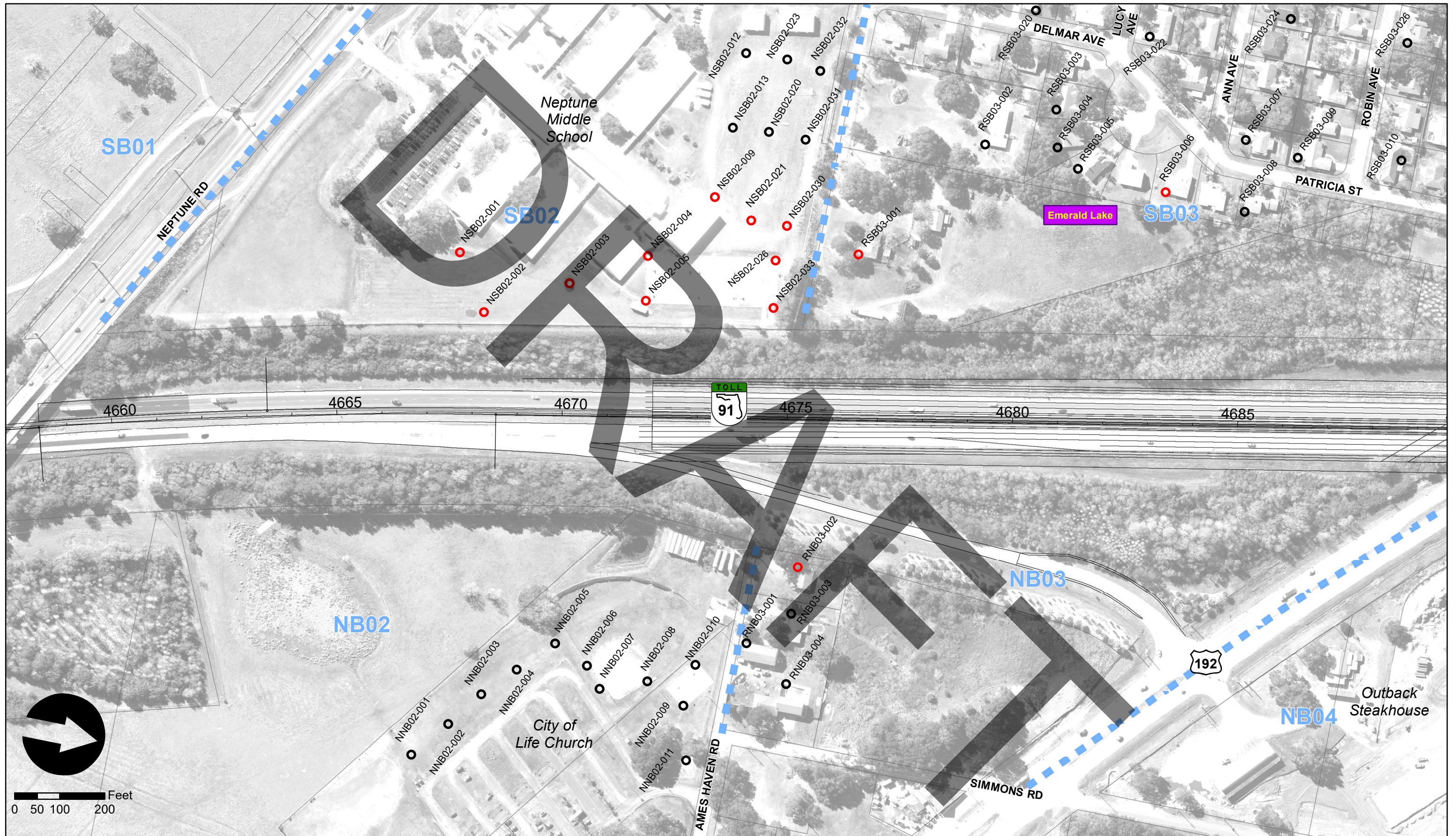
**Widening of SR 91**  
**from US192 to Osceola Parkway**

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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ORANGE OSCEOLA	436194-1/3

**NOISE STUDY REPORT**  
**PROJECT AERIALS**

**Sheet No.**  
**1**



	Impacted - Benefited		Existing Barrier		CAD Design Lines
	Impacted - Not Benefited		ROW Noise Barrier		Common Noise Environment
	Not Impacted - Benefited		Shoulder Noise Barrier		
	Not Impacted - Not Benefited				

NOTE: Some not impacted receptors fall outside the display area of the map figures.

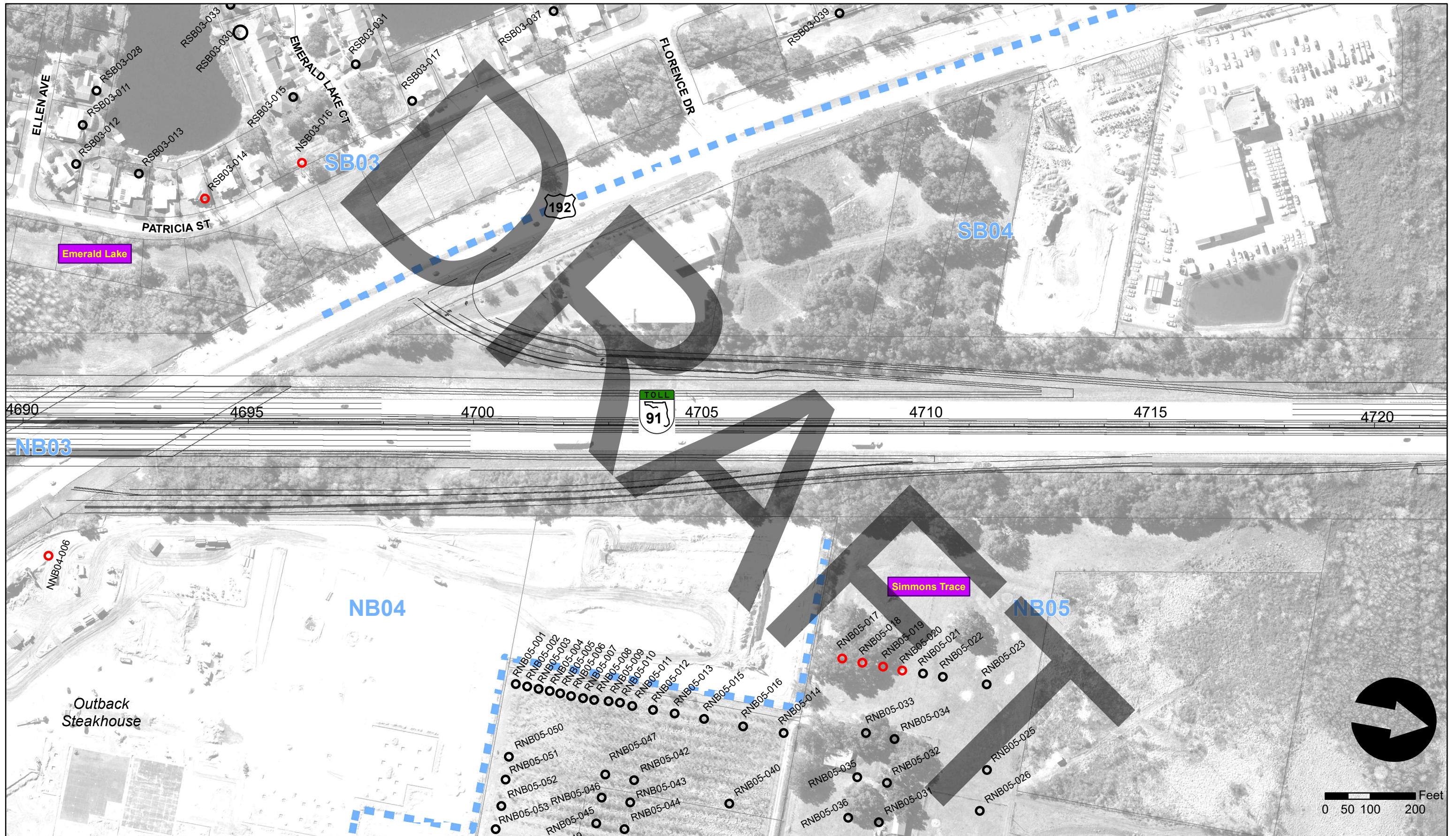
**Widening of SR 91  
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ORANGE OSCEOLA	436194-1/3

**NOISE STUDY REPORT  
PROJECT AERIALS**

**Sheet  
No.  
2**



○ Impacted - Benefited  
○ Impacted - Not Benefited  
○ Not Impacted - Benefited  
○ Not Impacted - Not Benefited

Existing Barrier  
 ROW Noise Barrier  
 Shoulder Noise Barrier

CAD Design Lines  
 Common Noise Environment

NOTE: Some not impacted receptors fall outside the display area of the map figures.

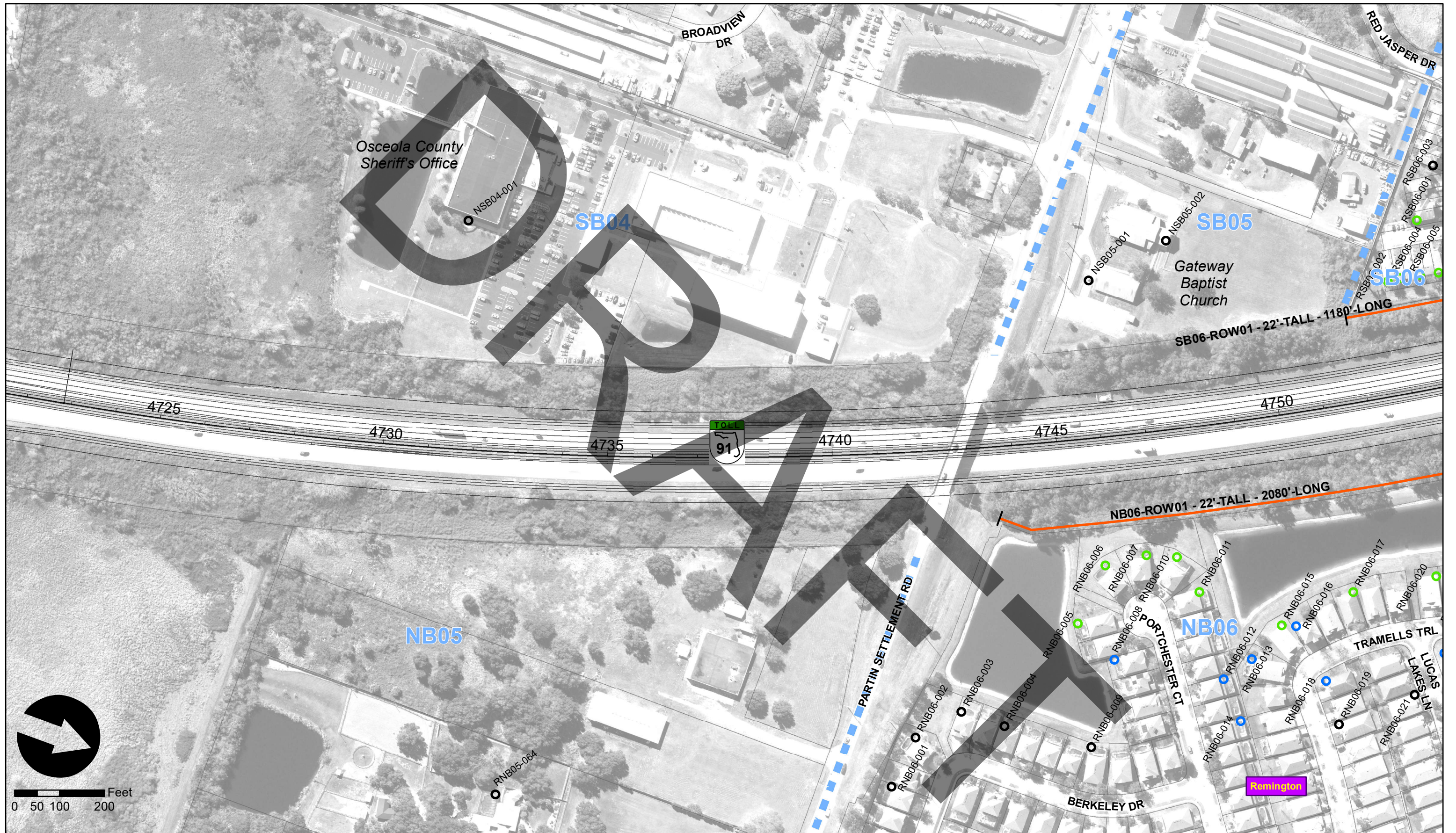
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ROAD NO. 91	COUNTY ORANGE OSCEOLA	FINANCIAL PROJECT ID 436194-1/3

**NOISE STUDY REPORT  
 PROJECT AERIALS**

**Sheet  
 No.  
 3**



● Impacted - Benefited  
● Impacted - Not Benefited  
● Not Impacted - Benefited  
● Not Impacted - Not Benefited

Existing Barrier  
 ROW Noise Barrier  
 Shoulder Noise Barrier

CAD Design Lines  
 Common Noise Environment

NOTE: Some not impacted receptors fall outside the display area of the map figures.

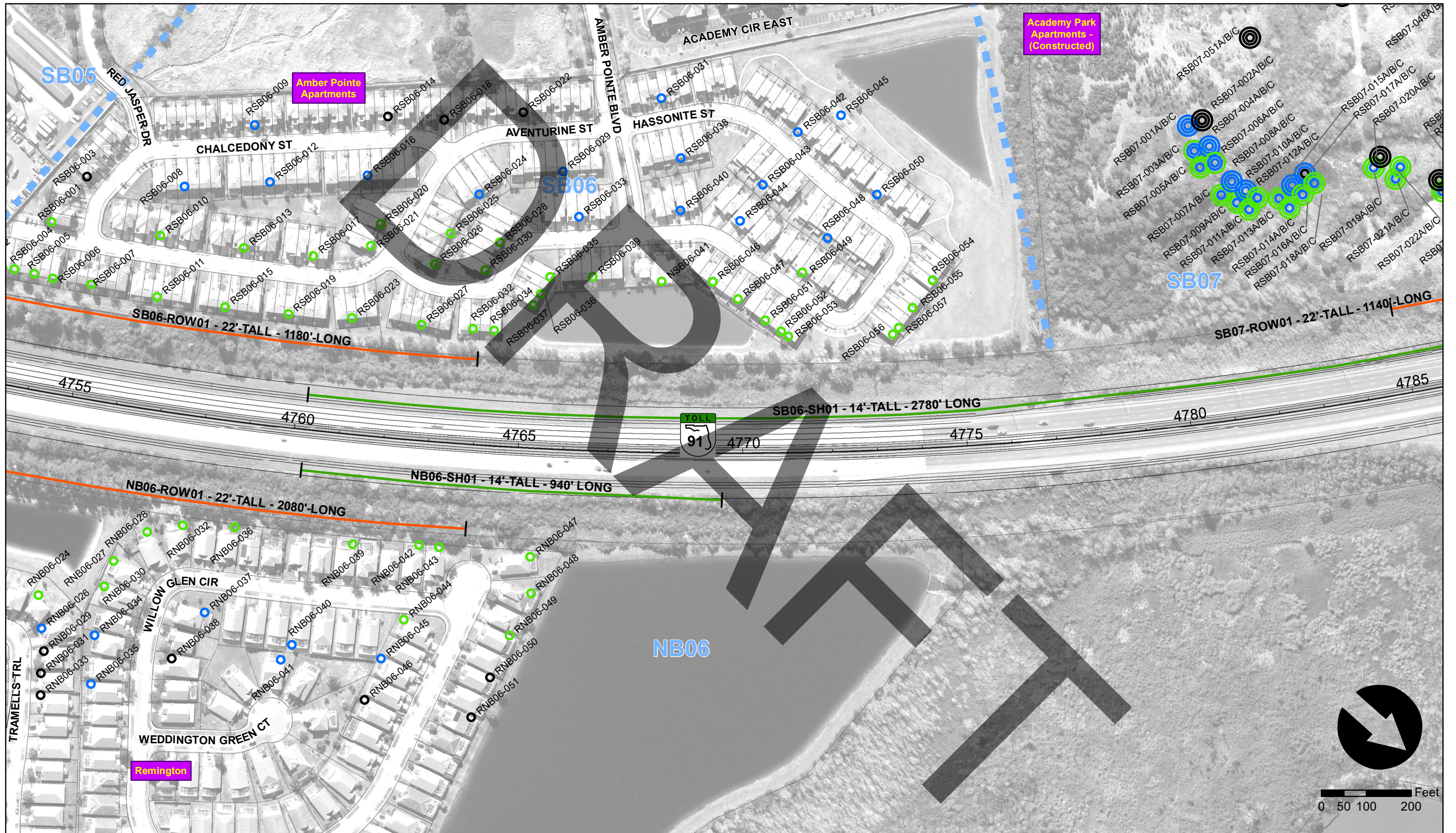
**Widening of SR 91**  
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ORANGE OSCEOLA	436194-1/3

**NOISE STUDY REPORT**  
**PROJECT AERIALS**

**Sheet**  
**No.**  
**4**



	Impacted - Benefited		Existing Barrier		CAD Design Lines
	Impacted - Not Benefited		ROW Noise Barrier		Common Noise Environment
	Not Impacted - Benefited		Shoulder Noise Barrier		
	Not Impacted - Not Benefited				

NOTE: Some not impacted receptors fall outside the display area of the map figures.

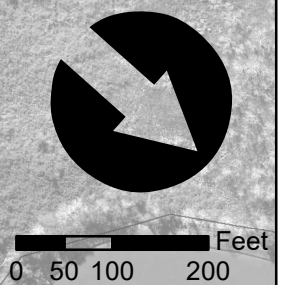
**Widening of SR 91  
from US192 to Osceola Parkway**

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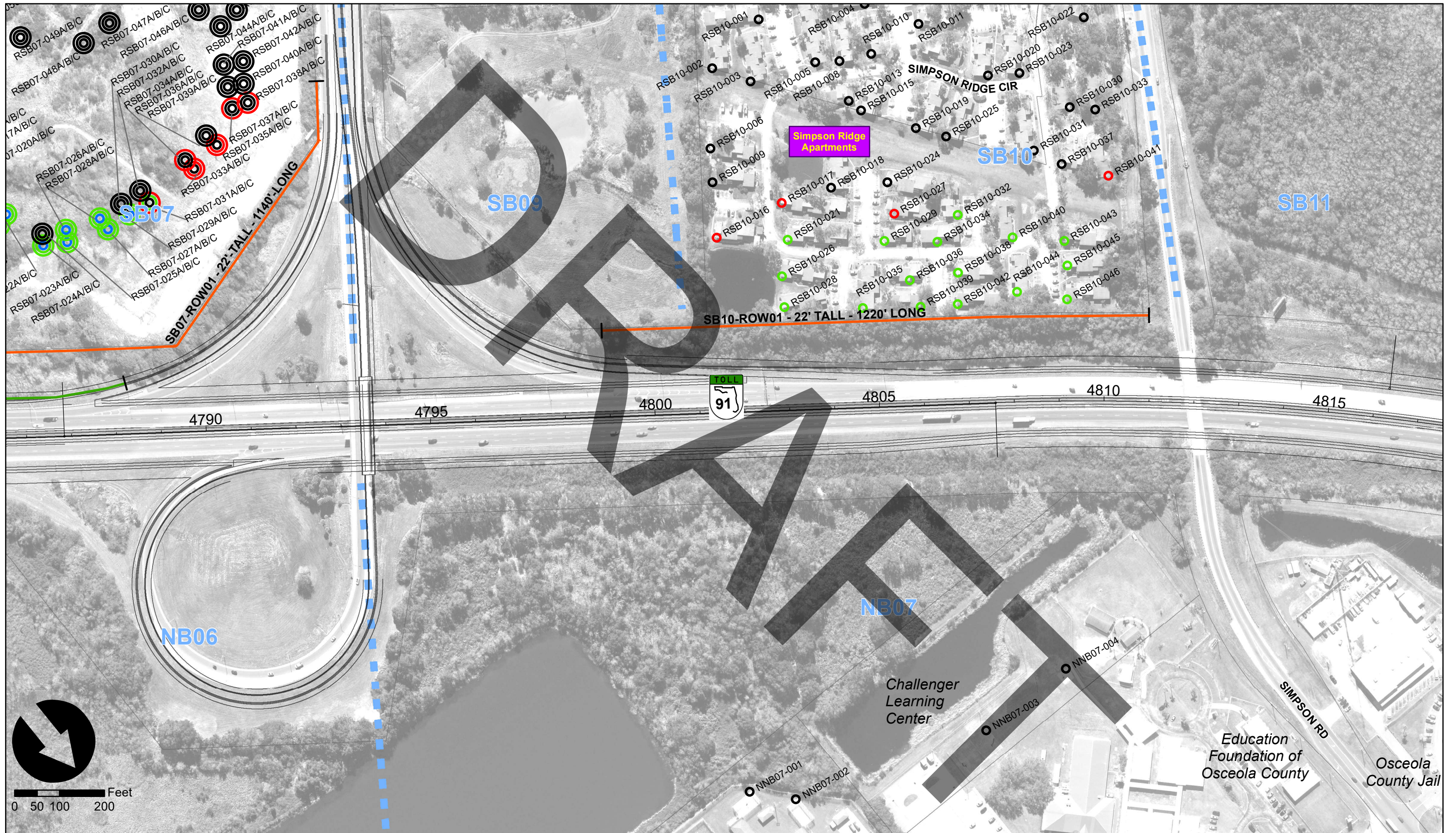
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ORANGE OSCEOLA	436194-1/3

**NOISE STUDY REPORT  
PROJECT AERIALS**

**Sheet  
No.  
5**







● Impacted - Benefited  
● Impacted - Not Benefited  
● Not Impacted - Benefited  
● Not Impacted - Not Benefited

Existing Barrier  
 ROW Noise Barrier  
 Shoulder Noise Barrier

CAD Design Lines  
 Common Noise Environment

NOTE: Some not impacted receptors fall outside the display area of the map figures.

**Widening of SR 91**  
**from US192 to Osceola Parkway**

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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ORANGE OSCEOLA	436194-1/3

**NOISE STUDY REPORT**  
**PROJECT AERIALS**

**Sheet**  
**No.**  
**6**



	Impacted - Benefited		Existing Barrier		CAD Design Lines
	Impacted - Not Benefited		ROW Noise Barrier		Common Noise Environment
	Not Impacted - Benefited		Shoulder Noise Barrier		
	Not Impacted - Not Benefited				

NOTE: Some not impacted receptors fall outside the display area of the map figures.

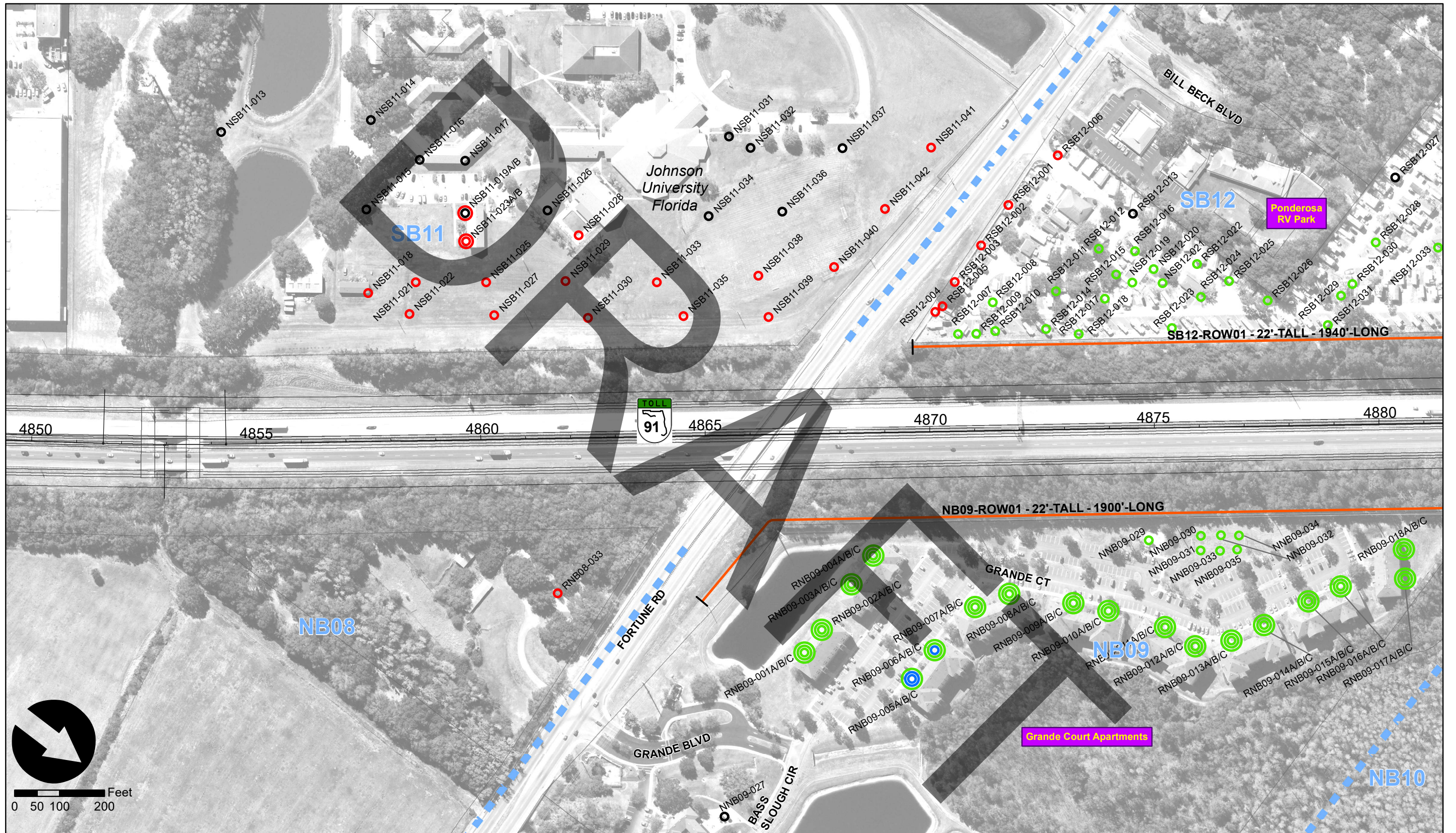
**Widening of SR 91  
from US192 to Osceola Parkway**

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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ORANGE OSCEOLA	436194-1/3

**NOISE STUDY REPORT  
PROJECT AERIALS**

**Sheet  
No.  
7**



● Impacted - Benefited  
● Impacted - Not Benefited  
● Not Impacted - Benefited  
● Not Impacted - Not Benefited

Existing Barrier  
 ROW Noise Barrier  
 Shoulder Noise Barrier

CAD Design Lines  
 Common Noise Environment

NOTE: Some not impacted receptors fall outside the display area of the map figures.

**Widening of SR 91**  
**from US192 to Osceola Parkway**

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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ORANGE OSCEOLA	436194-1/3

**NOISE STUDY REPORT**  
**PROJECT AERIALS**

**Sheet No.**  
**8**



	Impacted - Benefited		Existing Barrier		CAD Design Lines
	Impacted - Not Benefited		ROW Noise Barrier		Common Noise Environment
	Not Impacted - Benefited		Shoulder Noise Barrier		
	Not Impacted - Not Benefited				

NOTE: Some not impacted receptors fall outside the display area of the map figures.

**Widening of SR 91  
from US192 to Osceola Parkway**

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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ORANGE OSCEOLA	436194-1/3

**NOISE STUDY REPORT  
PROJECT AERIALS**

**Sheet  
No.  
9**



● Impacted - Benefited  
● Impacted - Not Benefited  
● Not Impacted - Benefited  
● Not Impacted - Not Benefited

Existing Barrier  
 ROW Noise Barrier  
 Shoulder Noise Barrier

CAD Design Lines  
 Common Noise Environment

NOTE: Some not impacted receptors fall outside the display area of the map figures.

**Widening of SR 91**  
**from US192 to Osceola Parkway**

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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ORANGE OSCEOLA	436194-1/3

**NOISE STUDY REPORT**  
**PROJECT AERIALS**

**Sheet No.**  
**10**



● Impacted - Benefited  
● Impacted - Not Benefited  
● Not Impacted - Benefited  
● Not Impacted - Not Benefited

Existing Barrier  
 ROW Noise Barrier  
 Shoulder Noise Barrier

CAD Design Lines  
 Common Noise Environment

NOTE: Some not impacted receptors fall outside the display area of the map figures.

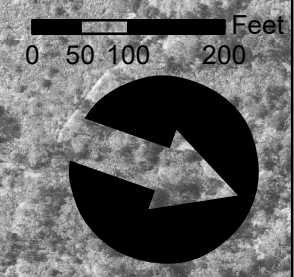
**Widening of SR 91**  
**from US192 to Osceola Parkway**

**NOISE SPECIALIST**  
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	ORANGE OSCEOLA	436194-1/3

**NOISE STUDY REPORT**  
**PROJECT AERIALS**

**Sheet**  
**No.**  
**11**



● Impacted - Benefited  
● Impacted - Not Benefited  
● Not Impacted - Benefited  
● Not Impacted - Not Benefited

Existing Barrier  
 ROW Noise Barrier  
 Shoulder Noise Barrier

CAD Design Lines  
 Common Noise Environment

NOTE: Some not impacted receptors fall outside the display area of the map figures.

**Widening of SR 91**  
**from US192 to Osceola Parkway**

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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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**NOISE STUDY REPORT**  
**PROJECT AERIALS**

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**No.**  
**12**



	Impacted - Benefited		Existing Barrier		CAD Design Lines
	Impacted - Not Benefited		ROW Noise Barrier		Common Noise Environment
	Not Impacted - Benefited		Shoulder Noise Barrier		
	Not Impacted - Not Benefited				

NOTE: Some not impacted receptors fall outside the display area of the map figures.

**Widening of SR 91  
from US192 to Osceola Parkway**

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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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**NOISE STUDY REPORT  
PROJECT AERIALS**

**Sheet  
No.  
13**





○ Impacted - Benefited  
○ Impacted - Not Benefited  
○ Not Impacted - Benefited  
○ Not Impacted - Not Benefited

Existing Barrier  
 ROW Noise Barrier  
 Shoulder Noise Barrier

CAD Design Lines  
 Common Noise Environment

NOTE: Some not impacted receptors fall outside the display area of the map figures.

**Widening of SR 91**  
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**NOISE STUDY REPORT**  
**PROJECT AERIALS**

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**No.**  
**14**



Windrose at Southmeadow

	Impacted - Benefitted		Existing Barrier		CAD Design Lines
	Impacted - Not Benefitted		ROW Noise Barrier		Common Noise Environment
	Not Impacted - Benefitted		Shoulder Noise Barrier		
	Not Impacted - Not Benefitted				

NOTE: Some not impacted receptors fall outside the display area of the map figures.

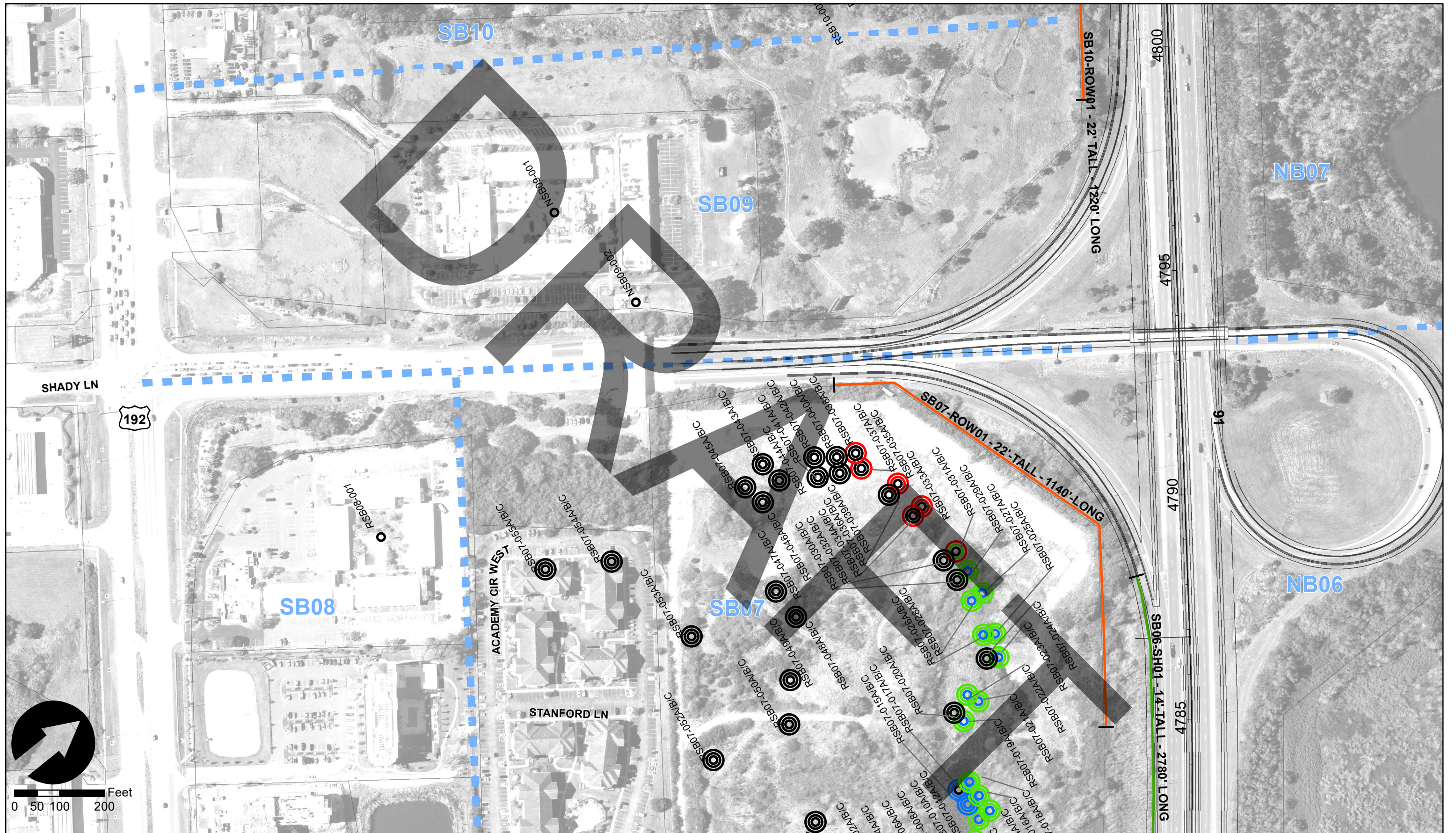
**Widening of SR 91  
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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**NOISE STUDY REPORT  
PROJECT AERIALS**

**Sheet  
No.  
15**



● Impacted - Benefited  
● Impacted - Not Benefited  
● Not Impacted - Benefited  
● Not Impacted - Not Benefited

Existing Barrier  
 ROW Noise Barrier  
 Shoulder Noise Barrier

CAD Design Lines  
 Common Noise Environment

NOTE: Some not impacted receptors fall outside the display area of the map figures.

**Widening of SR 91**  
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STATE OF FLORIDA		
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**NOISE STUDY REPORT**  
**PROJECT AERIALS**