

DESIGN NOISE STUDY REPORT

**Widening Florida's Turnpike (SR 91)
from US 27 to CR 470**

Lake County, Florida

Financial Project ID Number: 435787-1/2



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

March 2026

Executive Summary

Florida's Turnpike Enterprise, part of the Florida Department of Transportation (FDOT), is planning to widen Florida's Turnpike Mainline/SR 91 from US 27 (Milepost 289.3) to the CR 470 interchange (Milepost 297.3) from a four-lane divided expressway to an eight-lane divided expressway. This project will provide additional capacity to meet future traffic demand, improve emergency evacuation times, and improve safety within the corridor.

Within the project limits, noise levels were predicted at 39 Noise Abatement Criteria (NAC) B receptors, representing 185 residences. Noise levels are predicted to approach or exceed the NAC under the 2040 Build condition at 39 residences (13 receptors). These locations are therefore considered impacted.

Analyses were performed for all the impacted locations to determine if noise abatement was potentially feasible and reasonable under FDOT policy. The noise barrier analysis performed to date, as summarized in Table 4-1, indicates that noise barriers could potentially provide reasonable and feasible noise abatement for all 39 impacted residences, as well as provide a 5 dB(A) noise reduction benefit to 17 non-impacted residences. The results of the noise barrier evaluations where noise abatement was determined to be potentially feasible and reasonable are summarized by noise sensitive area in Table 4-1.

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	METHODOLOGY.....	2
2.1	Noise Metrics.....	3
2.2	Traffic Data	3
2.3	Noise Abatement Criteria and Considerations.....	3
3.0	TRAFFIC NOISE ANALYSIS AND ABATEMENT ASSESSMENT	6
3.1	Noise Sensitive Sites and Impact Analysis	6
3.1.1	Receptor Naming System	6
3.2	Noise Abatement Analysis	6
3.3	Land Use Review Along Florida’s Turnpike (SR 91)	7
3.4	Common Noise Environments on Northbound Side of Florida’s Turnpike	7
3.4.1	Plantation at Leesburg – Nottoway Village (CNE NB 01).....	7
3.4.2	Plantation at Leesburg – Arbordale and Glendale Village (CNE NB01)	7
3.4.3	The Villages of West Lake North of CR 470 East of Turnpike (CNE NB02).....	8
4.0	CONCLUSIONS	8
5.0	CONSTRUCTION NOISE AND VIBRATION	9
6.0	PUBLIC INVOLVEMENT.....	9
7.0	REFERENCES	9

LIST OF TABLES

Table 2-1 – FHWA & FDOT Noise Abatement Criteria	4
Table 3-1 – Plantation at Leesburg (CNE NB01)	8
Table 4-1 – Noise Barrier Evaluation Summary	8

LIST OF FIGURES

Figure 1 – Project Location Map	2
Figure 2 – Typical Noise Levels.....	5

APPENDICES

- Appendix A - Traffic Data
- Appendix B - Predicted Noise Levels
- Appendix C - Project Aerials

1.0 INTRODUCTION

The Enterprise, part of the Florida Department of Transportation (FDOT), is planning to widen Florida's Turnpike Mainline/SR 91 from US 27 (Milepost 289.3) to the CR 470 interchange (Milepost 297.3) from a four-lane divided expressway to an eight-lane divided expressway. This project will provide additional capacity to meet future traffic demand, improve emergency evacuation times, and improve safety within the corridor.

This project is currently in the Design phase, the third phase of the FDOT project development process. Construction plans, specifications, and final estimates to build a project are developed during this phase. The design and construction will provide eight (8), 12-foot travel lanes (four in each direction) with 12-foot shoulders and a 26-foot median with a barrier wall.

The improvements for the project include:

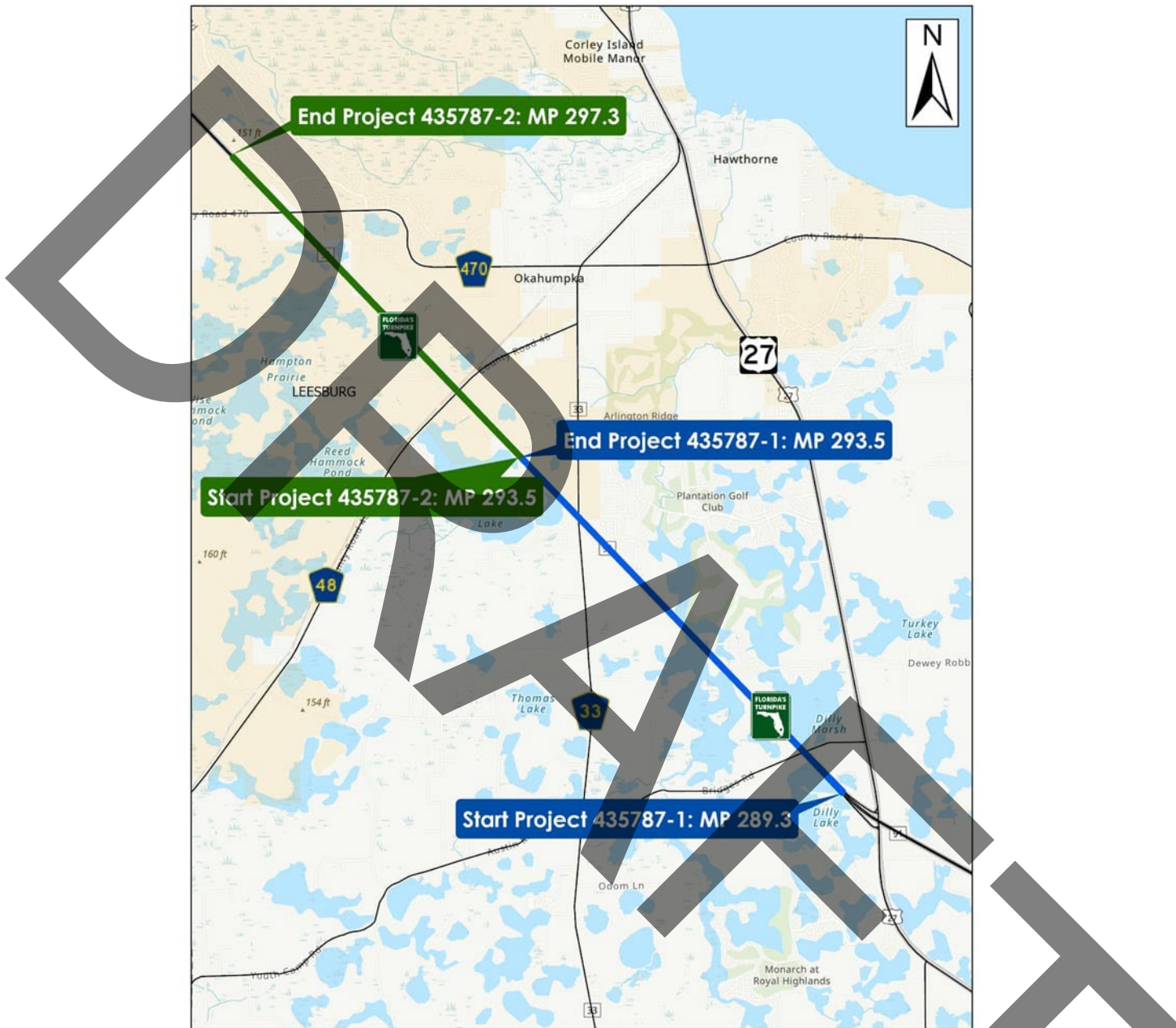
- Widening and reconstruction of the existing Turnpike Mainline roadway to eight (8) lanes between US 27 and the CR 470 Interchange
- Resurfacing of the CR 470 interchange ramps
- Replacing Turnpike Mainline bridges over Palatka River and CR 48
- Realignment of Bridges Road and replacement of the bridge over Turnpike Mainline
- Realignment of CR 33 and replacement of the bridge over the Turnpike Mainline

Other improvements include drainage culvert extensions, Intelligent Traffic Systems (ITS), retaining walls, drainage, signing and pavement marking, and lighting.

The existing maintained right of way varies but is generally 300 feet wide and expands at the CR 470 interchange to accommodate ramps. Right of way acquisition is anticipated for stormwater facilities, the Bridges Road overpass bridge, and the CR 33 overpass bridge.

Noise Studies are performed in both the Project Development and Environment (PD&E) Study phase and the Design phase, and reevaluated if there is a major change in design to the roadway.

Figure 1 – Project Location Map



2.0 METHODOLOGY

The traffic noise study was conducted in accordance with Title 23, Part 772 of the Code of Federal Regulations (23 CFR Part 772) *Procedures for Abatement of Highway Traffic Noise and Construction Noise*¹. The methodology follows guidelines established by FDOT in the *PD&E Manual*, Part 2, Chapter 18², and the *Traffic Noise Modeling and Analysis Practitioners Handbook*³. Predicted noise levels were generated using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM), version 2.5.

2.1 Noise Metrics

Noise levels for this analysis are expressed in decibels (dB) using an A-weighted scale [dB(A)], which closely approximates the human ear's response. All reported noise levels represent the 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."*². Use of the dB(A) and Leq(h) metrics to evaluate traffic noise is consistent with 23 CFR 772¹.

2.2 Traffic Data

Traffic noise is primarily influenced by traffic speed and volume, with noise levels increasing as both vehicle speed and traffic density rise. The highest roadway noise levels typically occur under Level of Service (LOS) C conditions, where traffic volumes are maximized while maintaining free-flow speeds.

For this analysis, traffic volumes and vehicle mix (e.g., cars, medium trucks, heavy trucks, motorcycles, and buses) were projected for the 2040 Build Condition. LOS C hourly traffic volumes were compared with predicted design-year demand hourly volumes and used the lower of the two in the model, per Section 18.2.1.5 of the FDOT *PD&E Manual*². Traffic volumes and speeds used in the analysis are provided in Appendix A.

2.3 Noise Abatement Criteria and Considerations

A noise-sensitive site is any property where frequent exterior or interior human use occurs and where a reduction in noise would be beneficial. FHWA has established Noise Abatement Criteria (NAC) for various types of noise-sensitive sites. These criteria, adopted by FDOT for traffic noise evaluation, are shown in Table 2-1.

Noise abatement measures are considered when predicted noise levels approach or exceed the NAC. FDOT defines "approach" as being within one dB(A) of the applicable FHWA criterion. Figure 2 provides a comparison of typical noise levels for common indoor and outdoor activities. Predicted traffic noise levels, NAC classification, and impact criteria for all residential receptors are documented in Appendix B.

Noise abatement must also be considered if a transportation project results in a substantial increase in traffic noise. According to the FDOT *PD&E Manual*², a substantial increase is defined as an increase of 15 dB(A) or more above existing conditions. A substantial increase typically occurs in areas where traffic noise is currently a minor component of the existing noise environment but would become a dominant factor after project completion (e.g., a new alignment project). Because this project follows the existing alignment of the Florida's Turnpike, the PD&E noise analysis determined that a substantial increase in traffic noise will not occur.

Table 2-1 – FHWA & FDOT Noise Abatement Criteria

NOISE ABATEMENT CRITERIA (NAC) [Hourly A-Weighted Sound Level-decibels (dB(A))]				
Activity Category	Activity Leq(h) ¹		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 ²	67	66	Exterior	Residential
C ²	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 ²	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)
¹ The Leq(h) Activity Criteria values are for impact determination only and are not design standards for noise abatement measures.
² Includes undeveloped lands permitted for this activity category.

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

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		Normal Speech at 3 ft.
Heavy Traffic at 300 ft.	---60---	Large Business Office
Quiet Urban Daytime	---50---	Dishwasher Next Room
Quiet Urban Nighttime	---40---	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		Library
Quiet Rural Nighttime	---30---	Bedroom at Night, Concert Hall (Background)
	---20---	
	---10---	
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 Impact Analysis

Within the project limits, residential and non-residential sites were evaluated. Receptors representing noise-sensitive sites were digitized in the noise model following the FDOT *PD&E Manual*² as follows:

- **Residential receptors:** Placed in areas of frequent exterior use (e.g., patio or lanai) or at the corner of the residential building closest to the primary traffic noise source.
- **Representative receptor:** For clusters of residences, a single representative receptor is analyzed for a group of similar sites.
- **Ground floor receptors:** Assumed to be 5 feet above ground elevation.

The locations of the receptors are shown on project aerials in Appendix C.

3.1.1 Receptor Naming System

Each receptor is identified by a unique code:

- **First Letter:** "B" for residential receptors.
- **Next Two Letters:** indicate the roadway side (e.g., "NB" for northbound).
- **Next Two-Digit Number:** Represents the Common Noise Environment (CNE) identifier.
- **Final Three-Digit Number:** Separated by a dash, this denotes the specific receptor (e.g., BNB01-008 is the 8th residential receptor in the 1st CNE on the northbound side).

Within the project limits, noise levels were predicted at 39 NAC B receptors, representing 185 residences. Noise levels are predicted to approach or exceed the NAC under the 2040 Build condition at 39 residences (13 receptors). These locations are therefore considered impacted.

Predicted noise levels for the design year (2040) Build condition are included in Appendix B while receptor locations are illustrated in Appendix C.

3.2 Noise Abatement Analysis

Receptors were grouped into CNEs to evaluate the feasibility and reasonableness of noise abatement measures. Noise barriers mitigate traffic noise by blocking the sound path between the roadway and noise-sensitive sites. Effective noise barriers are sufficiently long, continuous (without gaps), and of adequate height. For a noise barrier to be considered for construction, it must meet feasibility and reasonableness criteria:

Feasibility Criteria:

- Must provide at least a 5 dB(A) reduction in traffic noise to at least two impacted receptors.
- Must consider design, construction, safety, access, ROW constraints, maintenance, drainage, and utility factors.

Reasonableness Criteria:

- Must meet FDOT's Noise Reduction Design Goal (NRDG), reducing noise at least 7 dB(A) for at least one benefited receptor.
- Must satisfy FDOT's cost threshold of \$64,000 per benefited receptor (defined as a receptor receiving at least a 5 dB(A) reduction). The current unit cost used to evaluate cost reasonableness is \$40 per square foot, covering materials and labor.
- Must incorporate community feedback from affected property owners and residents.

3.3 Land Use Review Along Florida's Turnpike (SR 91)

A land use review was conducted to identify any new noise-sensitive sites along the Turnpike that may have been constructed or permitted between the completion of the PD&E noise analysis in April 2016 and the Date of Public Knowledge (DPK) of July 7, 2016. This review confirmed that the only new development within the project limits was Villages of West Lake located just north of CR 470. However, this area did not meet the eligibility criteria for noise analysis because residences did not have building permits prior to the DPK. Therefore, no additional receptor points were modeled during the design phase of this project.

3.4 Common Noise Environments on Northbound Side of Florida's Turnpike

3.4.1 Plantation at Leesburg – Nottoway Village (CNE NB 01)

Plantation at Leesburg – Nottoway Village is located on the northbound side of Florida's Turnpike to the south of County Road 33. This area is shown on sheet 5 of the project aerials located in Appendix C. There were no impacts predicted for the Nottoway Village receptors during the PD&E study because of the distance of the roadway to the nearest receptors, so the noise model was not updated for this area. Furthermore, because no additional noise sensitive sites were constructed between the PD&E noise study and the DPK, no additional analysis was required for this area.

3.4.2 Plantation at Leesburg – Arbordale and Glendale Village (CNE NB01)

Plantation at Leesburg – Arbordale and Glendale Village are located on the northbound side of Florida's Turnpike to the south of County Road 33. This area is shown on sheets 6-7 of the project aerials located in Appendix C. The noise model includes 39 NAC B receptor points, representing 185 residential sites. Noise levels at 39 NAC B residences are expected to approach or exceed the NAC under the 2040 Build. The predicted noise levels are shown in Appendix B.

Noise barriers were evaluated for the residences at Plantation at Leesburg Arbordale and Glendale Village to mitigate traffic related noise. Based on this evaluation, a potential noise barrier system located along the northbound ROW could provide a 7dB(A) reduction at one or more receptors and a 5 dB(A) at two or more impacted receptors. The noise barrier will not exceed the cost threshold of \$64,000 per benefited residence, and therefore, noise barriers are a cost reasonable method to abate traffic related noise impacts for the residences in CNE NB01. Portions of the Plantation Golf Course will also receive incidental benefits. Table 3-1 summarizes the barrier configurations evaluated for CNE NB01.

Table 3-1 – Plantation at Leesburg Arbordale and Glendale Village (CNE NB01)

Height (feet)	Length ¹ (feet)	Location	No. of Impacts	Noise Reduction at Impacted Residences			Number of Benefited Residences				Impacted Res. Not Benefited ⁴	Total Estimated Cost ⁵	Cost per Benefited Residence
				5-5.9 dB(A)	6.0-6.9 dB(A)	> 7 dB(A)	Impacted ²	Not Impacted ³	Total	Average Reduction dB(A)			
22	3200	ROW ⁶	39	5	6	28	39	17	56	7.7	0	\$2,816,000	\$50,286

¹ 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.

² Benefited residences with predicted noise levels that approach or exceed the NAC.

³ Benefited residences with predicted noise levels that do not approach the NAC.

⁴ Impacted residences that do not receive a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft²

⁶ ROW – Right of Way noise barrier on Florida's Turnpike.

3.4.3 The Villages of West Lake (CNE NB02)

The Villages of West Lake neighborhood is located on the northbound side of Florida's Turnpike just north of CR 470. This area is shown on sheet 13 of the project aerials located in Appendix C. As described in detail above in Section 3.3, Villages of West Lake did not have building permits for residences prior to July 7, 2016 and therefore did not meet the DPK requirement. Therefore, this community was not analyzed for noise abatement in this study.

4.0 CONCLUSIONS

Within the project limits, noise levels were predicted at 39 NAC B receptors representing 185 residences at the Arbordale and Glendale Village communities in the Plantation at Leesburg. In this area, 39 residences (13 receptors) are predicted to approach or exceed the NAC under the 2040 Build condition and are therefore considered impacted.

Noise barriers were evaluated for the impacted noise sensitive sites. The results of the noise barrier evaluation conclude that noise barriers (see Table 4-1 for more detail on the noise barriers) are a feasible and reasonable method to abate traffic related noise impacts for one noise sensitive area and will provide at least a 5 dB(A) benefit to all 39 impacted residences.

Table 4-1 – Noise Barrier Evaluation Summary

Noise Barrier System	Number of Impacted Residences	Noise Barrier Approx. Begin Station	Noise Barrier Approx. End Station	Noise Barrier Height (ft.)	Noise Barrier Length (ft.) ¹	Noise Barrier Location	Total Preliminary Barrier Cost ²	Number of Residences Potentially Benefited by a Noise Barrier		Total Noise Barrier System Cost Per Benefited Residence
								Impacted	Total ³	
Plantation at Leesburg Arbordale/Glendale Village (NB01)	39	1677+00	1709+00	22	3200	ROW ⁴	\$2,816,000	39	56	\$50,286

¹ 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.

² Unit cost of \$40/ft² for all noise barriers

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

⁴ ROW - Right of Way noise barrier on Florida's Turnpike.

5.0 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*⁶.

Using the listing of sensitive sites found in FDOT's *PD&E Manual*², residences 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.

6.0 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.

A public hearing is scheduled to be held virtually on March 24, 2026 and in-person on March 25, 2026 at the Venetian Center, 1 Dozier Circle in Leesburg, FL.

This section will be updated when all public involvement efforts have been concluded.

7.0 REFERENCES

1. **Federal Highway Administration.** *Procedures for Abatement of Highway Traffic Noise and Construction Noise*. Title 23, Code of Federal Regulations, Part 772 (23 CFR Part 772). Washington, D.C.: FHWA, Oct. 18, 2024.
2. **Florida Department of Transportation.** *Project Development and Environment (PD&E) Manual – Part 2, Chapter 18*. Tallahassee, FL: FDOT, Jul. 31, 2024.
3. **Florida Department of Transportation.** *Traffic Noise Modeling and Analysis Practitioners Handbook*. Tallahassee, FL: FDOT, Dec. 2018.
4. **Federal Highway Administration.** *Noise Measurement Handbook*. Washington, D.C.: FHWA, Jun. 2018.
5. **Florida Department of Transportation.** *Methodology to Evaluate Highway Traffic Noise at Special Land Uses*. Tallahassee, FL: FDOT, Dec. 2024.
6. **Florida Department of Transportation.** *Standard Specifications for Road and Bridge Construction*. Tallahassee, FL: FDOT, Jul. 2023.

DRIFT

Appendix A

Traffic Data

Highway Traffic Noise: Traffic Data

Project Name	Turnpike Mainline (SR 91) Widening from US 27 to north of SR 33 (MP 289-294)
Project Number	435787-1
Condition	Build
Year	2050

Roadway Details					Traffic Details											
Roadway Name	From	To	Roadway Type	Number of Lanes (in 1 direction)	Two-Way LOS C AADT (if applicable)	LOS C Peak Hour Peak Direction (PHPD)	Demand Two-Way AADT (if applicable)	Demand Hourly Volumes (DHV) Peak Hour Peak Direction (PHPD)	% Automobiles	% Medium Trucks	% Heavy Trucks	% Buses	% Motorcycles	Standard K-factor (if applicable)	D-factor (if applicable)	Posted Speed (mph)
Turnpike Mainline (SR 91)	Between US 27 (MP 289) and CR 470 (MP 296)		Mainline	4	123,000	6,290	122,400	6,259	88%	1.71%	9.64%	0.09%	0.10%	9.5%	53.8%	70
SR 33	Near Turnpike Mainline (SR 91)		Arterial	1	9,400	450	10,600	512	94%	4.65%	1.18%	0.00%	0.01%	9.0%	53.7%	55

Notes:

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

Prepared By:

Ma'en Al-Omari

Date: 2/10/2026

Signature

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

FDOT Reviewer:

Signature

Date: _____

DRAFT

Appendix B

Predicted Noise Levels

Appendix B Predicted Noise Levels

Noise Sensitive Area (NSA)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2045 Build LAeq1h (dBA)	NAC Approach or Exceeded	Description
XX.X	Impacted Receptor							
NB01	BNB01-001	2	B	67	66	70.8	Yes	Plantation at Leesburg – Arbordale Village
NB01	BNB01-002	2	B	67	66	67.9	Yes	Plantation at Leesburg – Arbordale Village
NB01	BNB01-003	2	B	67	66	70.5	Yes	Plantation at Leesburg – Glendale Village
NB01	BNB01-004	2	B	67	66	71.8	Yes	Plantation at Leesburg – Glendale Village
NB01	BNB01-005	7	B	67	66	62.8	No	Plantation at Leesburg – Arbordale Village
NB01	BNB01-006	2	B	67	66	72.7	Yes	Plantation at Leesburg – Glendale Village
NB01	BNB01-007	5	B	67	66	66.7	Yes	Plantation at Leesburg – Glendale Village
NB01	BNB01-008	6	B	67	66	62.1	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-009	6	B	67	66	60.1	No	Plantation at Leesburg – Arbordale Village
NB01	BNB01-010	6	B	67	66	56.9	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-011	2	B	67	66	67.4	Yes	Plantation at Leesburg – Glendale Village
NB01	BNB01-012	5	B	67	66	64.4	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-013	8	B	67	66	58.5	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-014	4	B	67	66	58.3	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-015	6	B	67	66	51.3	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-016	7	B	67	66	66.6	Yes	Plantation at Leesburg – Glendale Village
NB01	BNB01-017	5	B	67	66	57.7	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-018	5	B	67	66	60.5	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-019	5	B	67	66	69.7	Yes	Plantation at Leesburg – Glendale Village
NB01	BNB01-020	7	B	67	66	54.5	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-021	4	B	67	66	70.4	Yes	Plantation at Leesburg – Glendale Village
NB01	BNB01-022	6	B	67	66	59.5	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-023	6	B	67	66	54.5	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-024	4	B	67	66	52.3	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-025	3	B	67	66	54.4	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-026	5	B	67	66	56.0	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-027	3	B	67	66	67.6	Yes	Plantation at Leesburg – Glendale Village
NB01	BNB01-028	9	B	67	66	53.0	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-029	8	B	67	66	58.8	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-030	4	B	67	66	63.5	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-031	2	B	67	66	72.9	Yes	Plantation at Leesburg – Glendale Village
NB01	BNB01-032	6	B	67	66	53.1	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-033	1	B	67	66	71.1	Yes	Plantation at Leesburg – Glendale Village
NB01	BNB01-034	8	B	67	66	53.8	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-035	4	B	67	66	61.0	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-036	9	B	67	66	50.2	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-037	5	B	67	66	59.9	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-038	2	B	67	66	58.4	No	Plantation at Leesburg – Glendale Village
NB01	BNB01-039	2	B	67	66	58.6	No	Plantation at Leesburg – Glendale Village

DRAPER

**Appendix C
Project Aerials**



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

- Proposed ROW Barrier
- Common Noise Environment
- Design Lines

Some receivers fall outside the map figures.

NOISE SPECIALIST

Jeff Jones, GISP
 Ardurra
 3452 Lake Lynda Dr.
 Orlando, Florida 32817
 P 407.971.8850

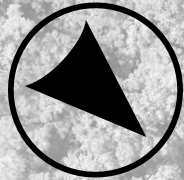
STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION

ROAD	COUNTY	FINANCIAL PROJECT ID
91	LAKE	435787-1/2

NOISE STUDY REPORT
 PROJECT AERIALS
*Florida's Turnpike (SR 91)
 from US 27 to CR 470*

Sheet No.

1



0 75 150 300 Feet



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

- ▬ Proposed ROW Barrier
- ▬ Common Noise Environment
- ▬ Design Lines

Some receivers fall outside the map figures.

NOISE SPECIALIST

Jeff Jones, GISP
Ardurra
3452 Lake Lynda Dr.
Orlando, Florida 32817
P 407.971.8850

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD	COUNTY	FINANCIAL PROJECT ID
91	LAKE	435787-1/2

NOISE STUDY REPORT
PROJECT AERIALS
*Florida's Turnpike (SR 91)
from US 27 to CR 470*

Sheet No.

2



0 75 150 300 Feet



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

- ▬ Proposed ROW Barrier
- ▬ Common Noise Environment
- ▬ Design Lines

Some receivers fall outside the map figures.

NOISE SPECIALIST

Jeff Jones, GISP
Ardurra
3452 Lake Lynda Dr.
Orlando, Florida 32817
P 407.971.8850

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD	COUNTY	FINANCIAL PROJECT ID
91	LAKE	435787-1/2

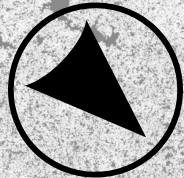
NOISE STUDY REPORT
PROJECT AERIALS
*Florida's Turnpike (SR 91)
from US 27 to CR 470*

Sheet No.

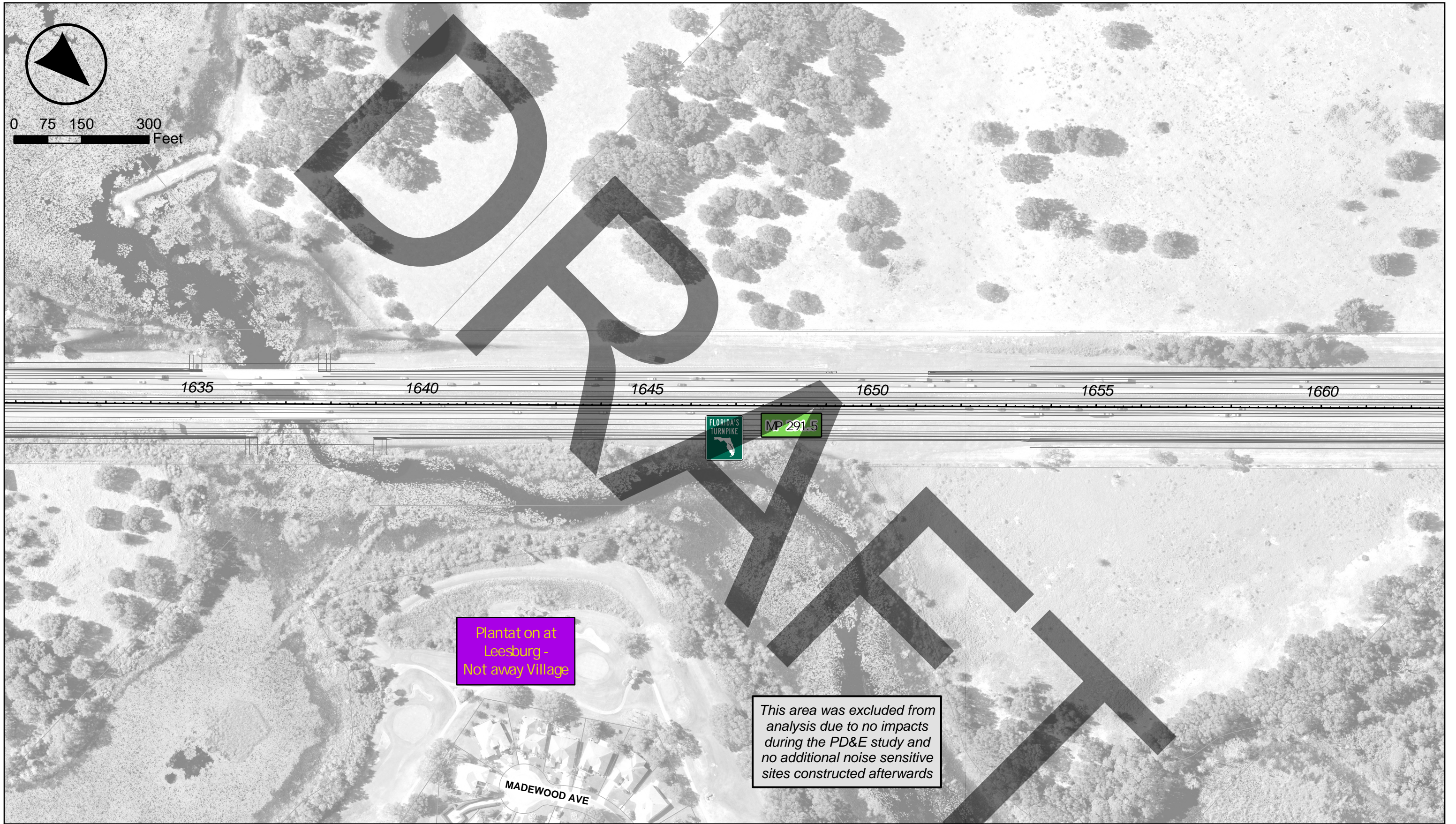
3



<ul style="list-style-type: none"> ○ Impacted - Benefited ○ Not Impacted - Benefited ○ Not Impacted - Not Benefited 	<ul style="list-style-type: none"> Proposed ROW Barrier Common Noise Environment — Design Lines 	<p>Some receivers fall outside the map figures.</p>	NOISE SPECIALIST			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION	NOISE STUDY REPORT PROJECT AERIALS Florida's Turnpike (SR 91) from US 27 to CR 470	Sheet No. 4		
			Jeff Jones, GISP Ardurra 3452 Lake Lynda Dr. Orlando, Florida 32817 P 407.971.8850	<table border="1"> <thead> <tr> <th>ROAD</th> <th>COUNTY</th> <th>FINANCIAL PROJECT ID</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">91</td> <td style="text-align: center;">LAKE</td> <td style="text-align: center;">435787-1/2</td> </tr> </tbody> </table>	ROAD				COUNTY	FINANCIAL PROJECT ID
ROAD	COUNTY	FINANCIAL PROJECT ID								
91	LAKE	435787-1/2								



0 75 150 300
Feet



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

- ▬ Proposed ROW Barrier
- ▬ Common Noise Environment
- Design Lines

Some receivers fall outside the map figures.

NOISE SPECIALIST

Jeff Jones, GISP
Ardurra
3452 Lake Lynda Dr.
Orlando, Florida 32817
P 407.971.8850

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD	COUNTY	FINANCIAL PROJECT ID
91	LAKE	435787-1/2

NOISE STUDY REPORT
PROJECT AERIALS
*Florida's Turnpike (SR 91)
from US 27 to CR 470*

Sheet No.

5



0 75 150 300 Feet



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

- - - Proposed ROW Barrier
- ■ Common Noise Environment
- Design Lines

Some receivers fall outside the map figures.

NOISE SPECIALIST
 Jeff Jones, GISP
 Ardurra
 3452 Lake Lynda Dr.
 Orlando, Florida 32817
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD	COUNTY	FINANCIAL PROJECT ID
91	LAKE	435787-1/2

**NOISE STUDY REPORT
PROJECT AERIALS**
 Florida's Turnpike (SR 91)
 from US 27 to CR 470

Sheet No.
6



0 75 150 300 Feet



1695 1700 1705 1710 1715 1720 1725

MP 292.5

22' TALL - 3200' LONG ROW BARRIER

Plantation at Leesburg - Glendale Village

NB01

- BNB01-019
- BNB01-021
- BNB01-027
- BNB01-030
- BNB01-031
- BNB01-033
- BNB01-022
- BNB01-026
- BNB01-029
- BNB01-035
- BNB01-023
- BNB01-025
- BNB01-032
- BNB01-034
- BNB01-037
- BNB01-038
- BNB01-039

- Impacted - Benefited
 - Not Impacted - Benefited
 - Not Impacted - Not Benefited
 - Proposed ROW Barrier
 - Common Noise Environment
 - Design Lines
- Some receivers fall outside the map figures.

NOISE SPECIALIST

Jeff Jones, GISP
Ardurra
3452 Lake Lynda Dr.
Orlando, Florida 32817
P 407.971.8850

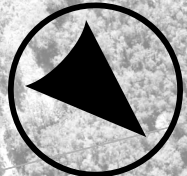
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD	COUNTY	FINANCIAL PROJECT ID
91	LAKE	435787-1/2

NOISE STUDY REPORT
PROJECT AERIALS
Florida's Turnpike (SR 91)
from US 27 to CR 470

Sheet No.

7



0 75 150 300 Feet



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

- Proposed ROW Barrier
- Common Noise Environment
- Design Lines

Some receivers fall outside the map figures.

NOISE SPECIALIST
 Jeff Jones, GISP
 Ardurra
 3452 Lake Lynda Dr.
 Orlando, Florida 32817
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD	COUNTY	FINANCIAL PROJECT ID
91	LAKE	435787-1/2

**NOISE STUDY REPORT
 PROJECT AERIALS
 Florida's Turnpike (SR 91)
 from US 27 to CR 470**

**Sheet
 No.
 8**



<ul style="list-style-type: none"> ○ Impacted - Benefited ○ Not Impacted - Benefited Not Impacted - Not Benefited 	<ul style="list-style-type: none"> Proposed ROW Barrier Common Noise Environment Design Lines 	<p style="text-align: center;">Some receivers fall outside the map figures.</p>	NOISE SPECIALIST			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			NOISE STUDY REPORT PROJECT AERIALS Florida's Turnpike (SR 91) from US 27 to CR 470	Sheet No.
			<p>Jeff Jones, GISP Ardurra 3452 Lake Lynda Dr. Orlando, Florida 32817 P 407.971.8850</p>	ROAD	COUNTY	FINANCIAL PROJECT ID	91	LAKE		435787-1/2



0 75 150 300 Feet



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

- ▬ Proposed ROW Barrier
- ▬ Common Noise Environment
- Design Lines

Some receivers fall outside the map figures.

NOISE SPECIALIST

Jeff Jones, GISP
Ardurra
3452 Lake Lynda Dr.
Orlando, Florida 32817
P 407.971.8850

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD	COUNTY	FINANCIAL PROJECT ID
91	LAKE	435787-1/2

NOISE STUDY REPORT
PROJECT AERIALS
*Florida's Turnpike (SR 91)
from US 27 to CR 470*

Sheet No.

10



0 75 150 300 Feet



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

- Proposed ROW Barrier
- Common Noise Environment
- Design Lines

Some receivers fall outside the map figures.

NOISE SPECIALIST

Jeff Jones, GISP
Ardurra
3452 Lake Lynda Dr.
Orlando, Florida 32817
P 407.971.8850

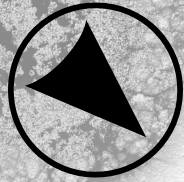
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD	COUNTY	FINANCIAL PROJECT ID
91	LAKE	435787-1/2

NOISE STUDY REPORT
PROJECT AERIALS
*Florida's Turnpike (SR 91)
from US 27 to CR 470*

Sheet No.

11



0 75 150 300
Feet



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

- ▬ Proposed ROW Barrier
- ▬ Common Noise Environment
- Design Lines

Some receivers fall outside the map figures.

NOISE SPECIALIST

Jeff Jones, GISP
Ardurra
3452 Lake Lynda Dr.
Orlando, Florida 32817
P 407.971.8850

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD	COUNTY	FINANCIAL PROJECT ID
91	LAKE	435787-1/2

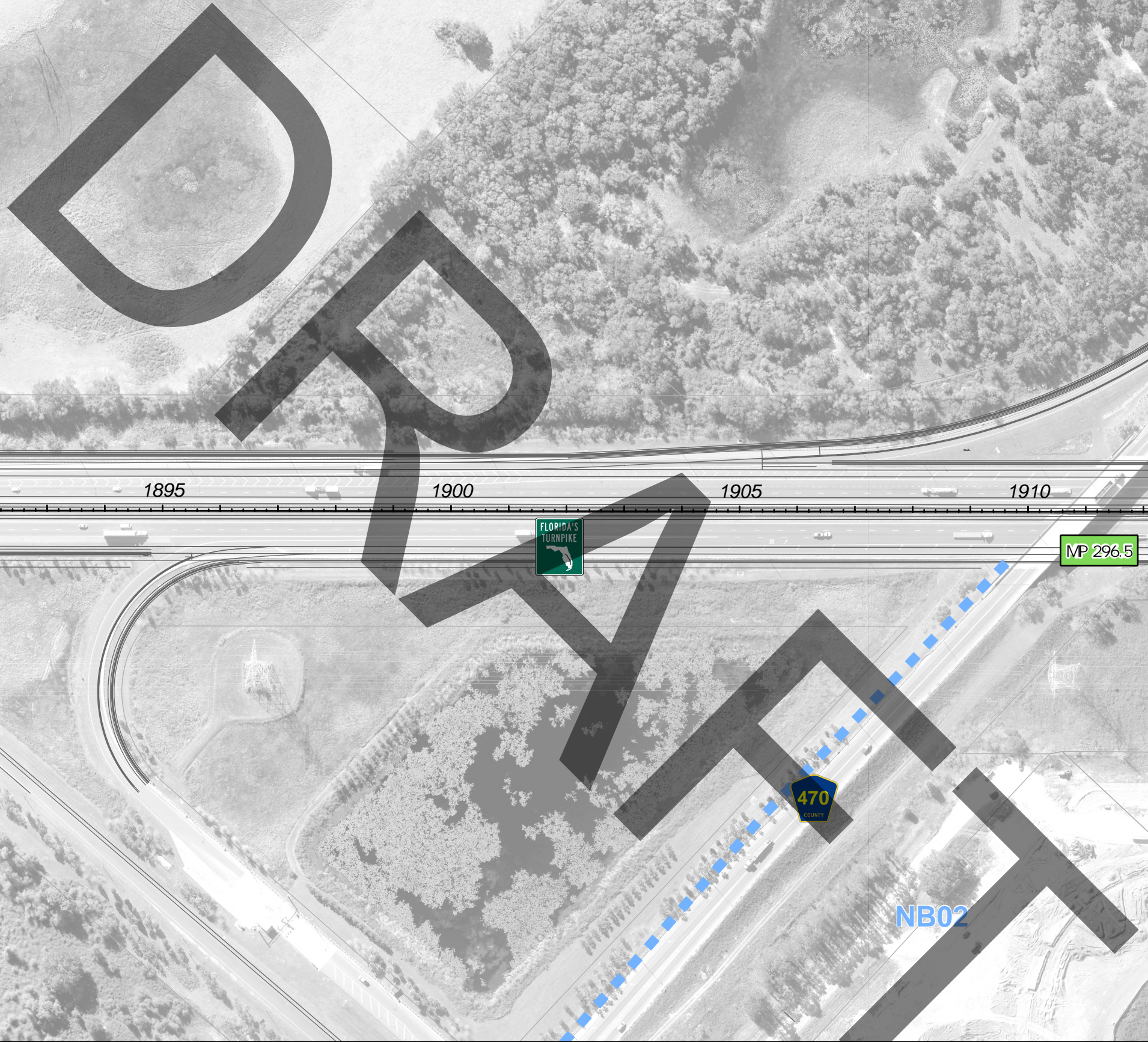
NOISE STUDY REPORT
PROJECT AERIALS
*Florida's Turnpike (SR 91)
from US 27 to CR 470*

Sheet No.

12



0 75 150 300 Feet



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

- ▬ Proposed ROW Barrier
- ▬ Common Noise Environment
- Design Lines

Some receivers fall outside the map figures.

NOISE SPECIALIST
 Jeff Jones, GISP
 Ardurra
 3452 Lake Lynda Dr.
 Orlando, Florida 32817
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD	COUNTY	FINANCIAL PROJECT ID
91	LAKE	435787-1/2

**NOISE STUDY REPORT
PROJECT AERIALS**
*Florida's Turnpike (SR 91)
from US 27 to CR 470*

Sheet No.
13