

PROJECT DEVELOPMENT & ENVIRONMENT NOISE STUDY REPORT

Turnpike (SR 91) Widening from SR 70 to SR 60

**St. Lucie, Indian River, Okeechobee and Osceola Counties,
Florida**

Financial Project ID Number: 423374-2



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

June 2025

EXECUTIVE SUMMARY

Florida's Turnpike Enterprise (FTE) is conducting a Project Development and Environment (PD&E) study to evaluate capacity improvements to the existing Florida's Turnpike (State Road (SR) 91) corridor in St. Lucie, Indian River, Okeechobee, and Osceola Counties. The project limits extend from north of SR 70 (Fort Pierce/Okeechobee Road) at Milepost (MP) 152 to SR 60 (Yeehaw Junction) at MP 193, a distance of approximately 41 miles.

Within the project limits noise levels were predicted at 218 noise receptor locations, representing 673 residences and seven non-residential sites. Of these sites, noise levels at 67 residences are predicted to approach or exceed the NAC in the design year (2050) for the Build condition. Noise levels are not predicted to approach or exceed the NAC at any of the non-residential receptors.

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 one noise sensitive area and will provide at least a 5 dB(A) benefit to 46 impacted residences.

Table of Contents

EXECUTIVE SUMMARY	ii
1.0 INTRODUCTION	1
1.1 Project Description	1
1.2 Description of the Preferred Alternative	2
2.0 METHODOLOGY	2
2.1 Noise Metrics	2
2.2 Traffic Data	2
2.3 Noise Abatement Criteria and Considerations.....	3
3.0 TRAFFIC NOISE ANALYSIS AND ABATEMENT ASSESSMENT	6
3.1 Model Verification	6
3.2 Noise Sensitive Sites and Impact Analysis	7
3.3 Noise Abatement Analysis	8
3.4 Special Use Site Analysis.....	9
3.5 Common Noise Environments on Northbound Side of Florida’s Turnpike	9
3.5.1 Multiple Single-Family Residences (CNEs NB01).....	9
3.5.2 UF Minton Hall Outdoor Seating (CNE NB01)	10
3.5.3 Multiple Single-Family Residences (CNE NB02)	10
3.5.4 Morningside Palm Breezes and Single-Family Residences (CNE NB03)	11
3.5.5 Avon Manor, Golden Ponds MHP, and Single-Family Residences (CNE NB04).....	12
3.5.1 Central Acres (CNE NB05)	12
3.6 Common Noise Environments on Southbound Side of Florida’s Turnpike.....	13
3.6.1 Hidden Pines Estates, Crouchville Acres, and Single-Family Residences (CNE SB01)	13
3.6.2 West Fort Pierce Estates and Single-Family Residence (CNE SB02).....	13
3.6.3 Jones Estates and Single-Family Residences (CNE SB03 and SB04)	14
3.6.4 St. Lucie Farm Preserve (CNE SB04)	14
3.6.5 Lake Montaza Estates, Sun & Country Ranches, and Single-Family Residences (CNE SB05)	15
3.6.6 Single-Family Residences (CNE SB06)	15
3.6.7 RaceTrac Outdoor Seating (CNE SB06).....	15
3.6.8 Krispy Krunchy Chicken Outdoor Seating (SB07)	15
4.0 CONCLUSIONS	16
4.1 Statement of Likelihood	16
5.0 CONSTRUCTION NOISE AND VIBRATION	17
6.0 PUBLIC INVOLVEMENT	17
7.0 REFERENCES	17

List of Figures

Figure 1 – Project Location Map.....	1
Figure 2 – Preferred Typical Section Alternative	2
Figure 3 – Typical Noise Levels.....	5

List of Tables

Table 2-1 – FHWA Noise Abatement Criteria	4
Table 3-1 – TNM Validation Results Summary	6
Table 3-2 – Single Family Residences (CNE NB01)	10
Table 3-3 – Single Family Residences (CNE NB02)	11
Table 3-4 – Morningside Palm Breezes and Single-Family Residences (CNE NB03).....	11
Table 3-5 – Central Acres (CNE NB05)	12
Table 3-6 – Hidden Pines Estates, Crouchville Acres, and Single-Family Residences (CNE SB01).....	13
Table 3-7 – Jones Estates and Single-Family Residences (CNE SB03 and SB04).....	14
Table 4-1 – Noise Barrier Evaluation Summary	16

Appendices

Appendix A.....	Traffic Data
Appendix B.....	Predicted Noise Levels
Appendix C.....	Noise Contours
Appendix D	Project Aerials

1.2 Description of the Preferred Alternative

The Preferred Alternative is Typical Section Alternative 3 which consists of widening the Turnpike mainline from four to six lanes to the outside, widening the inside shoulder to 12 feet and maintaining the existing 40-foot median with a guardrail. The preferred alternative is shown on **Figure 2**.

The Preferred Alternative has a design speed of 70-miles per hour (mph) and consists of three (3) 12-foot travel lanes in each direction separated by a 40-foot median with a guardrail and 12-foot inside and outside shoulders. The Preferred Alternative will be constructed within the existing right-of-way (ROW) width of 300-feet to 400-feet.



Figure 1: Preferred Typical Section Alternative

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*¹ using methodology established by the Florida Department of Transportation (FDOT) in the *Project Development and Environment Manual, Part 2, Chapter 18 (FDOT, July 31, 2024)*² and FDOT's *Traffic Noise Modeling and Analysis Practitioners Handbook*³. 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"². 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 (2050) 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 3**.

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 Manual² 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) 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, amphitheatres, 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 3 – Typical Noise Levels

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

To verify the accuracy of the TNM 2.5 noise model, field measurements were taken within the project limits following procedures documented in FHWA’s Noise Measurement Field Guide⁵ (FHWA, June 2018). Noise monitoring was performed on December 19, 2024, using Larson Davis LxT noise monitors. All monitoring events were 10 minutes in duration, which is consistent with methodology documented in the FDOT PD&E Manual². The noise monitors were calibrated using a CAL200 calibrator before and after each event. Typical vehicle speeds were established by sampling with a Decatur Scout handheld radar gun. Vehicles generally traveled within 5 miles per hour (mph) of the 70-mph posted speed limit on Florida’s Turnpike. Traffic volumes by vehicle classification were recorded for each monitoring event and then extrapolated to one-hour equivalent volumes for input within the TNM.

Three locations were used to validate the ability of the TNM to accurately predict traffic noise for this project. The locations of the validation sites are shown on the project aerials in **Appendix D** as receptor points VS-01, VS-02, and VS-03. Measurements were taken for three validation events at each validation site. Receptor point VS-01 is located near Crouchville Acres on the southbound side of Florida’s Turnpike off Coolidge Road at approximately Station 1997+00. Receptor point VS-02 is located near Jones Estates on the southbound side of Florida’s Turnpike off N Ffa Road at approximately Station 2144+80. Receptor point VS-03 is located within the ROW on the northbound side of Florida’s Turnpike south of State Road 60 at approximately Station 4048+00.

The results of the monitoring events are summarized in **Table 3-1**. As shown in **Table 3-1**, the variance between the measured and predicted noise levels were 3.0 dB or less for all validation events. Therefore, the noise model is predicting traffic related noise for this project within the level of accuracy specified in the FDOT PD&E Manual².

Table 3-1 – TNM Validation Results Summary

Location	Validation Event	TNM Predicted (dB(A))	Field Measured (dB(A))	Variance (dB(A))
VS-01 ¹ (Location 1)	VS-01-R1	65.5	65.1	0.4
	VS-01-R2	65.1	63.8	1.3
	VS-01-R3	66.6	64.7	1.9
VS-02 ¹ (Location 2)	VS-02-R1	68.7	66.3	2.4
	VS-02-R2	69.5	66.6	2.9
	VS-02-R3	69.0	66.1	2.9
VS-03 ¹ (Location 3)	VS-03-R1	76.6	74.2	2.4
	VS-03-R2	75.7	73.9	1.8
	VS-03-R3	75.9	73.8	2.1

¹ Measurements Taken 12/19/2024.

3.2 Noise Sensitive Sites and Impact 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** and **Appendix B-2**, and the locations of the receptor points are depicted on the project aerials found in **Appendix D**. 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 NB02 is the 2nd 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., RNB02-012 is the 12th receptor, of Residential “type”, in the 2nd CNE on the northbound side of the roadway).
- The project aerials in **Appendix D** show the locations of all impacted and/or benefited receptors.

For the proposed design, 218 receptor points were utilized to represent 673 residences and seven non-residential sites. Noise levels at 67 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 (2050) 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 outdoor use areas at a variety of locations including parks, playgrounds, and schools, and an interior use at a church. Noise levels are not predicted to approach or exceed the NAC for and of the non-residential receptors. Predicted noise levels for the design year (2050) 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 D**.

3.3 Noise Abatement Analysis

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 benefited property owners and residents.
- The cost of the noise barrier must not exceed \$64,000 per benefited receptors for residences. A benefited 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 \$40 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 benefited 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 benefited because of the proximity to an impacted receptor, these sites are included when determining the cost reasonableness of the barrier based on cost per benefited receptor. This methodology is consistent with FHWA policy and guidance.

3.4 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)⁴. Because none of these locations were found to be impacted, no special land use sites were analyzed for noise abatement on this project.

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

3.5.1 Multiple Single-Family Residences (CNEs NB01)

Multiple single-family residences are located on the northbound side of Florida's Turnpike between SR 70 and Picos Road. This area is shown on sheets one through four of the project aerials located in **Appendix D**. In this area, 11 NAC B receptor points, representing 11 residences, were added to the model. Of these receptors, four NAC B receptor points, representing four residences are expected to approach or exceed the NAC for the Build Condition in the design year (2050). The predicted noise levels for residential sites are shown in **Appendix B-1**.

Noise barriers were evaluated for these residential sites to abate traffic related noise. Based on this evaluation, none of the potential noise barrier systems analyzed could meet the cost threshold of \$64,000 per benefited residence. For this reason, noise barriers are not a reasonable and feasible option for providing noise abatement these residential sites. **Table 3-2** summarizes the barrier configuration evaluated for CNE NB01.

Table 3-2 – Single Family Residences (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)			
18	1600	ROW ⁶	4	3	0	1	4	0	4	6.2	0	\$1,152,000	\$288,000
18	1500	ROW ⁶	4	1	0	1	2	0	2	7.4	2	\$1,080,000	\$540,000
16	1600	ROW ⁶	4	0	0	1	1	0	1	9.0	3	\$1,024,000	\$1,024,000
18	500	ROW ⁶	4	1	0	1	2	0	2	6.7	2	\$360,000	\$180,000
18	400	ROW ⁶	4	0	0	0	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷
16	500	ROW ⁶	4	0	0	1	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷

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 received a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft² for all barriers.

⁶ ROW –Noise barrier located on the Right of Way (ROW) of the Florida’s Turnpike.

⁷ Noise barrier system did not benefit a minimum of 2 impacted residences, so no further analysis was conducted.

3.5.2 UF Minton Hall Outdoor Seating (CNE NB01)

UF Minton Hall Outdoor Seating is located on the northbound side of Florida’s Turnpike between SR 70 and Picos Road. This area is located outside of the map area of sheet three of the project aerials located in **Appendix D**. In this area, one NAC C receptor point, representing one outdoor use site, was added to the model. This isolated one NAC C receptor point, representing the outdoor use site at Minton Hall is not expected to approach or exceed the NAC for the Build Condition in the design year (2050). Therefore, no noise barriers were evaluated to abate traffic related noise. The predicted noise levels for the non-residential sites are shown in **Appendix B-2**.

3.5.3 Multiple Single-Family Residences (CNE NB02)

Multiple Single-Family Residences are located on the northbound side of Florida’s Turnpike between Picos Road and Orange Avenue. This area is shown on sheets five and six of the project aerials located in **Appendix D**. In this area, 27 NAC B receptor points, representing 41 residences, were added to the model. Of these 27 total receptors, 2 NAC B receptor points, representing two residences are expected to approach or exceed the NAC for the Build Condition in the design year (2050). The predicted noise levels for residential sites are shown in **Appendix B-1**.

Noise barriers were evaluated for these residential sites to abate traffic related noise. Based on this evaluation, none of the potential noise barrier systems analyzed could meet the cost threshold of \$64,000 per benefited residence. For this reason, noise barriers are not a reasonable and feasible option for providing noise abatement these residential sites. **Table 3-3** summarizes the barrier configuration evaluated for CNE NB02.

Table 3-3 – Single Family Residences (CNE NB02)

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)			
20	800	ROW ⁶	2	1	0	1	2	0	2	6.1	0	\$640,000	\$320,000
20	700	ROW ⁶	2	0	0	1	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷
18	800	ROW ⁶	2	0	0	1	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷

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 received a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft² for all barriers.

⁶ ROW –Noise barrier located on the Right of Way (ROW) of the Florida’s Turnpike.

⁷ Noise barrier system did not benefit a minimum of 2 impacted residences, so no further analysis was conducted.

3.5.4 Morningside Palm Breezes and Single-Family Residences (CNE NB03)

Morningside Palm Breezes and single-family residences are located on the northbound side of Florida’s Turnpike north of Orange Ave. This area is shown on sheets six and seven of the project aerials located in **Appendix D**. In this area, 34 NAC B receptor points, representing 315 residences, and three NAC C receptor points, representing three areas of outdoor use at Morningside Palm Breezes were added to the model. Of these receptors, eight NAC B receptor points, representing 46 residences are expected to approach or exceed the NAC for the Build Condition in the design year (2050). The predicted noise levels for residential sites are shown in **Appendix B-1**, and the predicted noise levels for the non-residential sites are shown in **Appendix B-2**.

Noise barriers were evaluated for the residences at Morningside Palm Breezes to abate traffic related noise. Based on this evaluation, a potential noise barrier system located along the right-of-way 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 will not exceed the allowable \$64,000 per benefited receptor and therefore, noise barriers are a cost reasonable method to abate traffic related noise impacts for the residences in CNE NB03. The noise barriers analyzed in this area are the maximum height and length that were determined to be constructable. **Table 3-4** summarizes the barrier configuration evaluated for CNE NB03.

Table 3-4 – Morningside Palm Breezes and Single-Family Residences (CNE NB03)

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	1600	ROW ⁶	46	4	13	29	46	0	46	9.6	0	\$1,408,000	\$30,609

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 received a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft²

⁶ ROW –Noise barrier located on the Right of Way (ROW) of the Florida’s Turnpike.

3.5.5 Avon Manor, Golden Ponds MHP, and Single-Family Residences (CNE NB04)

Avon Manor, Golden Ponds MHP, and single-family residences are located on the northbound side of Florida’s Turnpike south of Angle Road. This area is shown on sheets eight and nine of the project aerials located in **Appendix D**. In this area, 32 NAC B receptor points, representing 164 residences, were added to the model. Noise levels are expected to approach or exceed the NAC for the Build Condition in the design year (2050) at one isolated residence in this CNE. Because a minimum of two impacted noise sensitive locations must be benefited for noise abatement to be feasible, noise abatement was not considered for this CNE. The predicted noise levels for residential sites are shown in **Appendix B-1**.

3.5.1 Central Acres (CNE NB05)

Central Acres is located on the northbound side of Florida’s Turnpike north of State Road 60. This area is shown on sheet 68 of the project aerials located in **Appendix D**. In this area, 12 NAC B receptor points, representing 12 residences, were added to the model. Of these 12 total receptors, two NAC B receptor points, representing two residences are expected to approach or exceed the NAC for the Build Condition in the design year (2050). The predicted noise levels for residential sites are shown in **Appendix B-1**.

Noise barriers were evaluated for these residential sites to abate traffic related noise. Based on this evaluation, none of the potential noise barrier systems analyzed could meet the cost threshold of \$64,000 per benefited residence. For this reason, noise barriers are not a reasonable and feasible option for providing noise abatement these residential sites. **Table 3-5** summarizes the barrier configuration evaluated for CNE NB05.

Table 3-5 – Central Acres (CNE NB05)

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)			
14	800	ROW ⁶	2	1	0	1	2	0	2	6.8	0	\$448,000	\$224,000
14	700	ROW ⁶	2	0	1	0	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷
12	800	ROW ⁶	2	0	0	1	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸	n/a ⁸

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 received a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft²

⁶ ROW –Noise barrier located on the Right of Way (ROW) of the Florida’s Turnpike.

⁷ Noise barrier system did not benefit a minimum of 2 impacted residences, so no further analysis was conducted.

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

3.6 Common Noise Environments on Southbound Side of Florida’s Turnpike

3.6.1 Hidden Pines Estates, Crouchville Acres, and Single-Family Residences (CNE SB01)

Hidden Pines Estates, Crouchville Acres, and single-family residences are located on the southbound side of Florida’s Turnpike between SR 70 and Picos Road. This area is shown on sheets one through four of the project aerials located in **Appendix D**. In this area, 46 NAC B receptor points, representing 71 residences, were added to the model. Of these 71 total receptors, eight NAC B receptor points, representing eight residences are expected to approach or exceed the NAC for the Build Condition in the design year (2050). The predicted noise levels for residential sites are shown in **Appendix B-1**.

Noise barriers were evaluated for these residential sites to abate traffic related noise. Based on this evaluation, none of the potential noise barrier systems analyzed could meet the cost threshold of \$64,000 per benefited residence. For this reason, noise barriers are not a reasonable and feasible option for providing noise abatement these residential sites. **Table 3-6** summarizes the barrier configuration evaluated for CNE SB01.

Table 3-6 – Hidden Pines Estates, Crouchville Acres, and Single-Family Residences (CNE SB01)

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	4100	ROW ⁶	8	1	3	4	8	0	8	7.4	0	\$3,608,000	\$451,000
22	4000	ROW ⁶	8	1	3	3	7	0	7	7.3	1	\$3,520,000	\$502,857
20	4100	ROW ⁶	8	3	0	4	7	0	7	7.4	1	\$3,280,000	\$468,571
20	2000	ROW ⁶	8	2	1	1	4	0	4	6.5	4	\$1,600,000	\$400,000
20	1900	ROW ⁶	8	1	1	1	3	0	3	6.5	5	\$1,520,000	\$506,667
18	2000	ROW ⁶	8	0	1	1	2	0	2	7.2	6	\$1,440,000	\$720,000
16	1200	ROW ⁶	8	0	2	1	3	0	3	6.7	5	\$768,000	\$256,000
16	1100	ROW ⁶	8	0	1	1	2	0	2	6.7	6	\$704,000	\$352,000
14	1200	ROW ⁶	8	1	2	0	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷

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 received a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft²

⁶ ROW –Noise barrier located on the Right of Way (ROW) of the Florida’s Turnpike.

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

3.6.2 West Fort Pierce Estates and Single-Family Residence (CNE SB02)

West Fort Pierce Estates and a single-family residence are located on the southbound side of Florida’s Turnpike south of Orange Avenue. This area is shown on sheet six of the project aerials located in **Appendix D**, although the West Fort Pierce Estates are beyond the limits of the mapping. In this area, 11 NAC B receptor points, representing 20 residences, were added to the model. Of these receptors, no NAC B receptor points are expected to approach or exceed the NAC for the Build Condition in the design

year (2050). Therefore, noise barriers were not evaluated to abate traffic related noise. The predicted noise levels for residential sites are shown in **Appendix B-1**.

3.6.3 Jones Estates and Single-Family Residences (CNE SB03 and SB04)

Jones Estates and single-family residences are located on the northbound side of Florida’s Turnpike between Orange Avenue and Relief Canal Road. This area is shown on sheets six and seven of the project aerials located in **Appendix D**. In this area, 21 NAC B receptor points, representing 22 residences, were added to the model. Noise levels at four residences are expected to approach or exceed the NAC for the Build Condition in the design year (2050). The predicted noise levels for residential sites are shown in **Appendix B-1**.

One impacted residential property near Orange Avenue is isolated. Because a minimum of two impacted noise sensitive locations must be benefited for noise abatement to be feasible, noise abatement was not considered for this residence.

Noise barriers were evaluated for the other three impacted residential sites near Relief Canal Road to abate traffic related noise. Based on this evaluation, none of the potential noise barrier systems analyzed could meet the cost threshold of \$64,000 per benefited residence. For this reason, noise barriers are not a reasonable and feasible option for providing noise abatement these residential sites.

Table 3-7 summarizes the barrier configuration evaluated for CNE SB03 and SB04.

Table 3-7 – Jones Estates (CNE SB03 and SB04)

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	1000	ROW ⁶	4	1	1	1	3	0	3	6.6	1	\$880,000	\$293,333
22	900	ROW ⁶	4	1	2	0	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷
20	1000	ROW ⁶	4	1	2	0	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷	n/a ⁷

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 received a minimum 5 dB(A) reduction from proposed noise barrier.

⁵ Unit cost of \$40/ft²

⁶ ROW –Noise barrier located on the Right of Way (ROW) of the Florida’s Turnpike.

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

3.6.4 St. Lucie Farm Preserve (CNE SB04)

St. Lucie Farm Preserve is located on the southbound side of Florida’s Turnpike west of Minute Maid Road. This area is shown on sheet 22 of the project aerials in **Appendix D**. In this area, one NAC C receptor was added to the model representing an outdoor use area at St. Lucie Farm Preserve. Because the site is intermittently used for special events, concerts, and other varied uses, the receptor location selected represents the closest possible outdoor use area within the larger property. Noise levels are not expected to approach or exceed the NAC for the Build Condition in the design year (2050).

Therefore, no noise barriers were evaluated to abate traffic-related noise. The predicted noise level for this SLU site is shown in **Appendix B-2**

3.6.5 Lake Montaza Estates, Sun & Country Ranches, and Single-Family Residences (CNE SB05)

Lake Montaza Estates, Sun & Country Ranches, and single-family residences are located on the southbound side of Florida's Turnpike between NE 342nd Trail and Osowou Road. This area is shown on sheets 51-53 of the project aerials located in **Appendix D**. In this area, 15 NAC B receptor points, representing 15 residences, were added to the model. Of these receptors, no NAC B receptor points are expected to approach or exceed the NAC for the Build Condition in the design year (2050). Therefore, no noise barriers were evaluated to abate traffic related noise. The predicted noise levels for residential sites are shown in **Appendix B-1**.

3.6.6 Single-Family Residences (CNE SB06)

Single-family residences are located on the southbound side of Florida's Turnpike south of Padgett Branch. This area is located outside the map area on sheet 60 of the project aerials located in **Appendix D**. In this area, two NAC B receptor points, representing two residences, were added to the model. Of these receptors, no NAC B receptor points are expected to approach or exceed the NAC for the Build Condition in the design year (2050). Therefore, no noise barriers were evaluated to abate traffic related noise. The predicted noise levels for residential sites are shown in **Appendix B-1**.

3.6.7 RaceTrac Outdoor Seating (CNE SB06)

RaceTrac is located on the southbound side of Florida's Turnpike south of State Road 60. This area is shown on sheet 69 of the project aerials located in **Appendix D**. In this area, one NAC E receptor point, representing one outdoor use site, was added to the model. This one NAC E receptor point, representing the outdoor seating at RaceTrac is not expected to approach or exceed the NAC for the Build Condition in the design year (2050). Therefore, no noise barriers were evaluated to abate traffic related noise. The predicted noise levels for the non-residential sites are shown in **Appendix B-2**.

3.6.8 Krispy Krunchy Chicken Outdoor Seating (SB07)

Krispy Krunchy Chicken is located on the southbound side of Florida's Turnpike north of State Road 60. This area is shown on sheet 69 of the project aerials located in **Appendix D**. In this area, one NAC E receptor point, representing one outdoor use site, was added to the model. This one NAC E receptor point, representing the outdoor seating at Krispy Krunchy Chicken is not expected to approach or exceed the NAC for the Build Condition in the design year (2050). Therefore, no noise barriers were evaluated to abate traffic related noise. The predicted noise levels for the non-residential sites are shown in **Appendix B-2**.

4.0 CONCLUSIONS

Within the project limits noise levels were predicted at 218 noise receptor locations, representing 673 residences and seven non-residential sites. Of these sites, noise levels at 67 residences are predicted to approach or exceed the NAC in the design year (2050) for the Build condition. Noise levels are not predicted to approach or exceed the NAC at any of the non-residential receptors.

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 one noise sensitive area and will provide at least a 5 dB(A) benefit to 46 impacted residences.

4.1 Statement of Likelihood

FTE is committed to the construction of feasible and reasonable noise abatement measures. One potentially feasible and reasonable noise barrier system has been identified for this project (see **Table 4-1** for more detail on the noise barrier) contingent upon the following conditions:

- Final recommendations on the construction of abatement measures are determined during the project’s final design and through the public involvement process;
- Detailed noise analyses during the final design process support the need, feasibility, and reasonableness of providing abatement;
- Cost analysis indicates that the cost of the noise barrier(s) will not exceed the cost reasonable criterion;
- Community input supporting types, heights, and locations of the noise barrier(s) is provided to FTE ; and
- Safety and engineering aspects have been reviewed and any conflicts or issues resolved.

A land use review will be performed during the design phase to identify all noise sensitive sites that may have received a building permit subsequent to the noise study but prior to the project’s Date of Public Knowledge. The date that the State Environmental Impact Report is approved by FTE will be the Date of Public Knowledge. If the review identifies noise sensitive sites that have been permitted prior to the Date of Public Knowledge, then those sensitive sites will be evaluated during the design phase for traffic noise impacts and abatement considerations.

Table 4-1 – 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.) ¹	Preliminary Noise Barrier Location	Preliminary Noise Barrier Cost ²	Residences Benefited by Noise Barrier ³		Cost Per Benefited Residence
								Impacted	Total	
Morningside Palm Breezes and SFRs ³ (CNE NB03)	46	2126+80	2142+80	22	1600	ROW ⁴	\$1,408,000	46	46	\$30,609

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 non-shoulder noise barriers.

³ Single Family Residence (SFR)U

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 Construction⁴.

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.

6.0 PUBLIC INVOLVEMENT

To promote compatibility between land use 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 C**. These estimates provide the general distance at which the noise approaches or exceeds the NAC for each activity type.

A virtual and in-person public hearing was held on February 18 and February 20, 2025 (respectively). The in-person meeting was held at 1590 9th Street SW, Vero Beach, Florida. Elected officials, interested parties, and property owners in the affected area were invited. The virtual meeting had 15 members of the public attend, while the in-person meeting had 16 attendees, including one elected official. A total of 15 comments were given during the public hearing comment period mostly pertaining to the noise, guide sign placement and environmental impacts. One comment was made during the virtual meeting regarding noise at the Hidden Pines Estate Neighborhood. Four comments were made during the in-person meeting, addressing concerns related to noise impacts at the Saint Lucie Farm Preserve, potential effects on lands held by the Seminole nation and other property owners, and environmental concerns including impacts on wildlife, local waterways and the natural surrounding natural habitat.

7.0 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 1, 2023.
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

These columns below should be provided in the Noise Study Report as an Appendix.
If additional rows are needed for additional traffic segments, **Traffic Segment Numbers** (Column A) should be provided for each roadway segment.

Highway Traffic Noise: Traffic Data

Project Name	Turnpike Widening PD&E Study from SR 70 to SR 60
Project Number	423374-2
Condition	Existing
Year	2022

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 70	SR 60	Mainline	2	48,400	2,720	36,700	2,070	84%	4.09%	10.92%	0.45%	0.12%	10.5%	53.6%	70
Turnpike Mainline	North of SR 60	-	Mainline	2	48,400	2,720	35,400	1,990	84%	4.09%	10.92%	0.45%	0.12%	10.5%	53.6%	70
SR 60 NB-Off	-	-	Ramp	1	12400 *	1,300	2800 *	290	74%	6.90%	18.44%	0.76%	0.20%	10.5%	100.0%	25
SR 60 NB-On	-	-	Ramp	1	12400 *	1,300	2200 *	230	74%	6.90%	18.44%	0.76%	0.20%	10.5%	100.0%	25
SR 60 SB-Off	-	-	Ramp	1	12400 *	1,300	2200 *	230	74%	6.90%	18.44%	0.76%	0.20%	10.5%	100.0%	25
SR 60 SB-On	-	-	Ramp	1	12400 *	1,300	2800 *	290	74%	6.90%	18.44%	0.76%	0.20%	10.5%	100.0%	25
SR 70	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	2	47,400	2,410	10,000	510	81%	7.92%	9.68%	0.45%	0.48%	9.5%	53.5%	55
Picos Rd	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	1	8,000	410	800	40	80%	8.11%	11.69%	0.24%	0.31%	9.5%	53.5%	35
Orange Ave	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	1	8,200	410	2,950	150	78%	8.67%	12.50%	0.26%	0.33%	9.5%	53.1%	45
W Angle Rd	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	1	7,800	400	1,950	100	74%	10.22%	14.73%	0.31%	0.39%	9.5%	53.5%	35
SR 60	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	2	43,400	2,190	8,200	410	71%	9.15%	17.74%	1.48%	0.85%	9.5%	53.2%	45
US 441	-	South of SR 60	Arterial	1	7,000	380	3,800	210	63%	11.72%	22.71%	1.89%	1.09%	9.5%	57.8%	45
US 441	North of SR 60	-	Arterial	1	7,000	380	1,400	80	64%	11.16%	21.62%	1.80%	1.03%	9.5%	57.8%	50

Notes:
* Ramp AADT is One-way.

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

Prepared By: _____
Ma'en Al-Omari
Signature Date: 7/29/2024

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

FDOT Reviewer: _____
Doug Zang
Signature Date: 7/29/2024

These columns below should be provided in the Noise Study Report as an Appendix.
If additional rows are needed for additional traffic segments, **Traffic Segment Numbers** (Column A) should be provided for each roadway segment.

Highway Traffic Noise: Traffic Data

Project Name	Turnpike Widening PD&E Study from SR 70 to SR 60
Project Number	423374-2
Condition	No-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 70	SR 60	Mainline	2	47,800	2,690	69,200	3,890	82%	4.63%	12.37%	0.51%	0.14%	10.5%	53.6%	70
Turnpike Mainline	North of SR 60	-	Mainline	2	47,800	2,690	67,600	3,800	82%	4.63%	12.37%	0.51%	0.14%	10.5%	53.6%	70
SR 60 NB-Off	-	-	Ramp	1	12200 *	1,290	5100 *	540	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 60 NB-On	-	-	Ramp	1	12200 *	1,290	4300 *	450	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 60 SB-Off	-	-	Ramp	1	12200 *	1,290	4300 *	450	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 60 SB-On	-	-	Ramp	1	12200 *	1,290	5100 *	540	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 70	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	2	46,600	2,370	26,400	1,340	78%	9.48%	11.60%	0.54%	0.57%	9.5%	53.5%	55
Picos Rd	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	1	7,600	390	5,400	270	68%	12.68%	18.27%	0.38%	0.48%	9.5%	53.5%	35
Orange Ave	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	1	8,000	400	5,800	290	72%	11.17%	16.10%	0.33%	0.43%	9.5%	53.1%	45
W Angle Rd	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	1	7,600	390	8,200	420	70%	11.90%	17.14%	0.36%	0.45%	9.5%	53.5%	35
SR 60	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	2	42,200	2,130	15,000	760	64%	11.21%	21.72%	1.81%	1.04%	9.5%	53.2%	45
US 441	-	South of SR 60	Arterial	1	7,000	380	9,000	490	61%	12.27%	23.78%	1.98%	1.14%	9.5%	57.8%	45
US 441	North of SR 60	-	Arterial	1	7,000	380	3,800	210	62%	12.02%	23.30%	1.94%	1.11%	9.5%	57.8%	50

Notes:
* Ramp AADT is One-way.

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

Prepared By: _____
Ma'en Al-Omari
Signature Date: 7/29/2024

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

FDOT Reviewer: _____
Doug Zang
Signature Date: 7/29/2024

These columns below should be provided in the Noise Study Report as an Appendix.
If additional rows are needed for additional traffic segments, **Traffic Segment Numbers** (Column A) should be provided for each roadway segment.

Highway Traffic Noise: Traffic Data

Project Name	Turnpike Widening PD&E Study from SR 70 to SR 60
Project Number	423374-2
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 70	SR 60	Mainline	3	69,000	3,880	69,200	3,890	82%	4.63%	12.37%	0.51%	0.14%	10.5%	53.6%	70
Turnpike Mainline	North of SR 60	-	Mainline	3	69,000	3,880	67,600	3,800	82%	4.63%	12.37%	0.51%	0.14%	10.5%	53.6%	70
SR 60 NB-Off	-	-	Ramp	1	12200 *	1,290	5100 *	540	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 60 NB-On	-	-	Ramp	1	12200 *	1,290	4300 *	450	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 60 SB-Off	-	-	Ramp	1	12200 *	1,290	4300 *	450	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 60 SB-On	-	-	Ramp	1	12200 *	1,290	5100 *	540	70%	7.76%	20.73%	0.86%	0.23%	10.5%	100.0%	25
SR 70	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	2	46,600	2,370	26,400	1,340	78%	9.48%	11.60%	0.54%	0.57%	9.5%	53.5%	55
Picos Rd	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	1	7,600	390	5,400	270	68%	12.68%	18.27%	0.38%	0.48%	9.5%	53.5%	35
Orange Ave	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	1	8,000	400	4,800	240	72%	11.17%	16.10%	0.33%	0.43%	9.5%	53.1%	45
W Angle Rd	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	1	7,600	390	8,200	420	70%	11.90%	17.14%	0.36%	0.45%	9.5%	53.5%	35
SR 60	East of Turnpike Mainline	West of Turnpike Mainline	Arterial	2	42,200	2,130	15,000	760	64%	11.21%	21.72%	1.81%	1.04%	9.5%	53.2%	45
US 441	-	South of SR 60	Arterial	1	7,000	380	9,000	490	61%	12.27%	23.78%	1.98%	1.14%	9.5%	57.8%	45
US 441	North of SR 60	-	Arterial	1	7,000	380	3,800	210	62%	12.02%	23.30%	1.94%	1.11%	9.5%	57.8%	50

Notes:
* Ramp AADT is One-way.

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

Prepared By: _____
Ma'en Al-Omari
Signature
Date: 7/29/2024

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

FDOT Reviewer: _____
Doug Zang
Signature
Date: 7/29/2024

Appendix B-1 – Residential Properties
Predicted Noise Levels

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	Subst. Increase (>15dB(A))	Description
XX.X	Impacted Receptor								
NB01	RNB01-001	1	B	67	66	68.0	Yes	No	Single Family Residence
NB01	RNB01-002	1	B	67	66	66.2	Yes	No	Single Family Residence
NB01	RNB01-003	1	B	67	66	71.7	Yes	No	Single Family Residence
NB01	RNB01-004	1	B	67	66	68.1	Yes	No	Single Family Residence
NB01	RNB01-005	1	B	67	66	62.1	No	No	Single Family Residence
NB01	RNB01-006	1	B	67	66	60.5	No	No	Single Family Residence
NB01	RNB01-007	1	B	67	66	63.9	No	No	Single Family Residence
NB01	RNB01-008	1	B	67	66	57.5	No	No	Single Family Residence
NB01	RNB01-009	1	B	67	66	53.4	No	No	Single Family Residence
NB01	RNB01-010	1	B	67	66	56.7	No	No	Single Family Residence
NB01	RNB01-011	1	B	67	66	51.9	No	No	Single Family Residence
NB02	RNB02-001	1	B	67	66	64.7	No	No	Single Family Residence
NB02	RNB02-002	1	B	67	66	51.6	No	No	Single Family Residence
NB02	RNB02-003	1	B	67	66	49.8	No	No	Single Family Residence
NB02	RNB02-004	1	B	67	66	52.8	No	No	Single Family Residence
NB02	RNB02-005	2	B	67	66	55.8	No	No	Single Family Residence
NB02	RNB02-006	2	B	67	66	52.5	No	No	Single Family Residence
NB02	RNB02-007	2	B	67	66	54.6	No	No	Single Family Residence
NB02	RNB02-008	1	B	67	66	62.7	No	No	Single Family Residence
NB02	RNB02-009	1	B	67	66	53.6	No	No	Single Family Residence
NB02	RNB02-010	2	B	67	66	55.0	No	No	Single Family Residence
NB02	RNB02-011	1	B	67	66	52.0	No	No	Single Family Residence
NB02	RNB02-012	2	B	67	66	50.5	No	No	Single Family Residence
NB02	RNB02-013	1	B	67	66	67.6	Yes	No	Single Family Residence
NB02	RNB02-014	3	B	67	66	50.1	No	No	Single Family Residence
NB02	RNB02-015	1	B	67	66	58.2	No	No	Single Family Residence
NB02	RNB02-016	2	B	67	66	50.7	No	No	Single Family Residence
NB02	RNB02-017	2	B	67	66	53.2	No	No	Single Family Residence
NB02	RNB02-018	1	B	67	66	60.4	No	No	Single Family Residence
NB02	RNB02-019	2	B	67	66	54.2	No	No	Single Family Residence
NB02	RNB02-020	1	B	67	66	70.7	Yes	No	Single Family Residence
NB02	RNB02-021	2	B	67	66	52.4	No	No	Single Family Residence
NB02	RNB02-022	1	B	67	66	65.6	No	No	Single Family Residence
NB02	RNB02-023	1	B	67	66	51.0	No	No	Single Family Residence
NB02	RNB02-024	2	B	67	66	55.5	No	No	Single Family Residence
NB02	RNB02-025	1	B	67	66	55.5	No	No	Single Family Residence
NB02	RNB02-026	2	B	67	66	52.2	No	No	Single Family Residence
NB02	RNB02-027	2	B	67	66	53.5	No	No	Single Family Residence
NB03	RNB03-001	1	B	67	66	63.6	No	No	Single Family Residence
NB03	RNB03-002	1	B	67	66	61.5	No	No	Single Family Residence
NB03	RNB03-003	12	B	67	66	52.0	No	No	Morningside
NB03	RNB03-004	3	B	67	66	54.6	No	No	Morningside
NB03	RNB03-005	13	B	67	66	49.0	No	No	Morningside
NB03	RNB03-006	13	B	67	66	52.5	No	No	Morningside
NB03	RNB03-007	13	B	67	66	50.9	No	No	Morningside
NB03	RNB03-008	10	B	67	66	55.1	No	No	Morningside
NB03	RNB03-009	13	B	67	66	48.8	No	No	Morningside
NB03	RNB03-010	13	B	67	66	49.6	No	No	Morningside
NB03	RNB03-011	13	B	67	66	53.8	No	No	Morningside
NB03	RNB03-012	13	B	67	66	48.1	No	No	Morningside
NB03	RNB03-015	15	B	67	66	46.0	No	No	Morningside
NB03	RNB03-017	1	B	67	66	67.2	Yes	No	Morningside
NB03	RNB03-018	20	B	67	66	47.5	No	No	Morningside
NB03	RNB03-019	8	B	67	66	65.2	No	No	Morningside
NB03	RNB03-020	12	B	67	66	51.9	No	No	Morningside
NB03	RNB03-021	6	B	67	66	49.6	No	No	Morningside
NB03	RNB03-022	12	B	67	66	58.7	No	No	Morningside
NB03	RNB03-023	13	B	67	66	52.7	No	No	Morningside
NB03	RNB03-024	5	B	67	66	57.5	No	No	Morningside
NB03	RNB03-025	7	B	67	66	62.7	No	No	Morningside
NB03	RNB03-026	9	B	67	66	58.7	No	No	Morningside
NB03	RNB03-027	16	B	67	66	70.7	Yes	No	Morningside
NB03	RNB03-028	7	B	67	66	72.8	Yes	No	Morningside
NB03	RNB03-029	10	B	67	66	50.2	No	No	Morningside

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	Subst. Increase (>15dB(A))	Description
XX.X	Impacted Receptor								
NB03	RNB03-030	6	B	67	66	62.8	No	No	Morningside
NB03	RNB03-031	13	B	67	66	68.0	Yes	No	Morningside
NB03	RNB03-032	3	B	67	66	73.1	Yes	No	Morningside
NB03	RNB03-033	14	B	67	66	53.4	No	No	Morningside
NB03	RNB03-034	2	B	67	66	73.2	Yes	No	Morningside
NB03	RNB03-035	3	B	67	66	68.4	Yes	No	Morningside
NB03	RNB03-036	1	B	67	66	73.3	Yes	No	Morningside
NB03	RNB03-037	14	B	67	66	54.9	No	No	Morningside
NB04	RNB04-001	6	B	67	66	51.0	No	No	Golden Ponds
NB04	RNB04-002	6	B	67	66	51.7	No	No	Golden Ponds
NB04	RNB04-003	2	B	67	66	53.2	No	No	Golden Ponds
NB04	RNB04-004	4	B	67	66	55.5	No	No	Golden Ponds
NB04	RNB04-005	3	B	67	66	53.6	No	No	Golden Ponds
NB04	RNB04-006	4	B	67	66	53.9	No	No	Golden Ponds
NB04	RNB04-007	1	B	67	66	58.8	No	No	Single Family Residence
NB04	RNB04-008	3	B	67	66	55.1	No	No	Golden Ponds
NB04	RNB04-009	9	B	67	66	50.3	No	No	Golden Ponds
NB04	RNB04-010	7	B	67	66	52.9	No	No	Golden Ponds
NB04	RNB04-011	7	B	67	66	52.7	No	No	Golden Ponds
NB04	RNB04-012	8	B	67	66	52.3	No	No	Golden Ponds
NB04	RNB04-013	2	B	67	66	54.4	No	No	Golden Ponds
NB04	RNB04-014	11	B	67	66	50.7	No	No	Golden Ponds
NB04	RNB04-015	1	B	67	66	56.6	No	No	Golden Ponds
NB04	RNB04-016	8	B	67	66	50.1	No	No	Golden Ponds
NB04	RNB04-017	5	B	67	66	53.7	No	No	Golden Ponds
NB04	RNB04-018	6	B	67	66	51.8	No	No	Golden Ponds
NB04	RNB04-019	1	B	67	66	53.2	No	No	Golden Ponds
NB04	RNB04-020	8	B	67	66	50.0	No	No	Golden Ponds
NB04	RNB04-021	8	B	67	66	50.3	No	No	Golden Ponds
NB04	RNB04-022	1	B	67	66	71.1	Yes	No	Single Family Residence
NB04	RNB04-023	4	B	67	66	52.8	No	No	Golden Ponds
NB04	RNB04-024	5	B	67	66	50.9	No	No	Golden Ponds
NB04	RNB04-025	7	B	67	66	53.6	No	No	Golden Ponds
NB04	RNB04-026	4	B	67	66	54.0	No	No	Golden Ponds
NB04	RNB04-027	7	B	67	66	52.2	No	No	Golden Ponds
NB04	RNB04-028	5	B	67	66	50.8	No	No	Golden Ponds
NB04	RNB04-029	4	B	67	66	53.2	No	No	Golden Ponds
NB04	RNB04-030	7	B	67	66	50.2	No	No	Golden Ponds
NB04	RNB04-031	5	B	67	66	52.5	No	No	Golden Ponds
NB04	RNB04-032	5	B	67	66	52.0	No	No	Golden Ponds
NB05	RNB05-001	1	B	67	66	58.8	No	No	Single Family Residence
NB05	RNB05-002	1	B	67	66	62.6	No	No	Single Family Residence
NB05	RNB05-003	1	B	67	66	59.7	No	No	Single Family Residence
NB05	RNB05-004	1	B	67	66	58.2	No	No	Single Family Residence
NB05	RNB05-005	1	B	67	66	63.7	No	No	Single Family Residence
NB05	RNB05-006	1	B	67	66	57.1	No	No	Single Family Residence
NB05	RNB05-007	1	B	67	66	63.2	No	No	Single Family Residence
NB05	RNB05-008	1	B	67	66	59.2	No	No	Single Family Residence
NB05	RNB05-009	1	B	67	66	62.7	No	No	Single Family Residence
NB05	RNB05-010	1	B	67	66	67.3	Yes	No	Single Family Residence
NB05	RNB05-011	1	B	67	66	72.9	Yes	No	Single Family Residence
NB05	RNB05-012	1	B	67	66	64.4	No	No	Single Family Residence
SB01	RSB01-001	1	B	67	66	53.6	No	No	Single Family Residence
SB01	RSB01-002	1	B	67	66	56.0	No	No	Single Family Residence
SB01	RSB01-003	1	B	67	66	55.9	No	No	Single Family Residence
SB01	RSB01-004	1	B	67	66	54.7	No	No	Single Family Residence
SB01	RSB01-005	1	B	67	66	56.2	No	No	Single Family Residence
SB01	RSB01-006	1	B	67	66	55.0	No	No	Single Family Residence
SB01	RSB01-007	1	B	67	66	63.8	No	No	Single Family Residence
SB01	RSB01-008	3	B	67	66	53.0	No	No	Single Family Residence
SB01	RSB01-009	3	B	67	66	50.2	No	No	Single Family Residence
SB01	RSB01-010	1	B	67	66	58.3	No	No	Single Family Residence
SB01	RSB01-011	1	B	67	66	70.5	Yes	No	Single Family Residence
SB01	RSB01-012	1	B	67	66	54.5	No	No	Single Family Residence

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	Subst. Increase (>15dB(A))	Description
XX.X	Impacted Receptor								
SB01	RSB01-013	2	B	67	66	53.6	No	No	Single Family Residence
SB01	RSB01-014	3	B	67	66	50.4	No	No	Single Family Residence
SB01	RSB01-015	1	B	67	66	63.9	No	No	Single Family Residence
SB01	RSB01-016	2	B	67	66	57.2	No	No	Single Family Residence
SB01	RSB01-017	2	B	67	66	52.5	No	No	Single Family Residence
SB01	RSB01-018	1	B	67	66	55.8	No	No	Single Family Residence
SB01	RSB01-019	2	B	67	66	51.1	No	No	Single Family Residence
SB01	RSB01-020	3	B	67	66	52.0	No	No	Single Family Residence
SB01	RSB01-021	1	B	67	66	66.2	Yes	No	Single Family Residence
SB01	RSB01-022	2	B	67	66	62.0	No	No	Single Family Residence
SB01	RSB01-023	2	B	67	66	58.2	No	No	Single Family Residence
SB01	RSB01-024	3	B	67	66	53.0	No	No	Single Family Residence
SB01	RSB01-025	3	B	67	66	52.5	No	No	Single Family Residence
SB01	RSB01-026	1	B	67	66	50.6	No	No	Single Family Residence
SB01	RSB01-027	3	B	67	66	55.0	No	No	Single Family Residence
SB01	RSB01-028	2	B	67	66	57.2	No	No	Single Family Residence
SB01	RSB01-029	2	B	67	66	60.0	No	No	Single Family Residence
SB01	RSB01-030	1	B	67	66	66.3	Yes	No	Single Family Residence
SB01	RSB01-031	2	B	67	66	51.2	No	No	Single Family Residence
SB01	RSB01-032	1	B	67	66	71.2	Yes	No	Single Family Residence
SB01	RSB01-033	3	B	67	66	58.1	No	No	Single Family Residence
SB01	RSB01-034	1	B	67	66	68.2	Yes	No	Single Family Residence
SB01	RSB01-035	1	B	67	66	52.7	No	No	Single Family Residence
SB01	RSB01-036	1	B	67	66	62.4	No	No	Single Family Residence
SB01	RSB01-037	1	B	67	66	56.4	No	No	Single Family Residence
SB01	RSB01-038	1	B	67	66	54.1	No	No	Single Family Residence
SB01	RSB01-039	1	B	67	66	54.7	No	No	Single Family Residence
SB01	RSB01-040	1	B	67	66	54.7	No	No	Single Family Residence
SB01	RSB01-041	1	B	67	66	69.6	Yes	No	Single Family Residence
SB01	RSB01-042	1	B	67	66	71.0	Yes	No	Single Family Residence
SB01	RSB01-043	1	B	67	66	56.4	No	No	Single Family Residence
SB01	RSB01-044	1	B	67	66	59.4	No	No	Single Family Residence
SB01	RSB01-045	1	B	67	66	71.1	Yes	No	Single Family Residence
SB01	RSB01-046	1	B	67	66	59.1	No	No	Single Family Residence
SB02	RSB02-001	2	B	67	66	51.3	No	No	Single Family Residence
SB02	RSB02-002	1	B	67	66	50.7	No	No	Single Family Residence
SB02	RSB02-003	2	B	67	66	52.4	No	No	Single Family Residence
SB02	RSB02-004	1	B	67	66	51.1	No	No	Single Family Residence
SB02	RSB02-005	1	B	67	66	52.5	No	No	Single Family Residence
SB02	RSB02-006	1	B	67	66	50.9	No	No	Single Family Residence
SB02	RSB02-007	3	B	67	66	52.9	No	No	Single Family Residence
SB02	RSB02-008	3	B	67	66	50.8	No	No	Single Family Residence
SB02	RSB02-009	2	B	67	66	53.5	No	No	Single Family Residence
SB02	RSB02-010	3	B	67	66	52.3	No	No	Single Family Residence
SB02	RSB02-011	1	B	67	66	60.8	No	No	Single Family Residence
SB03	RSB03-001	1	B	67	66	56.5	No	No	Single Family Residence
SB03	RSB03-002	1	B	67	66	56.1	No	No	Single Family Residence
SB03	RSB03-003	1	B	67	66	53.3	No	No	Single Family Residence
SB03	RSB03-004	1	B	67	66	52.0	No	No	Single Family Residence
SB03	RSB03-005	1	B	67	66	68.6	Yes	No	Single Family Residence
SB03	RSB03-006	1	B	67	66	54.0	No	No	Single Family Residence
SB03	RSB03-007	1	B	67	66	58.8	No	No	Single Family Residence
SB03	RSB03-008	1	B	67	66	59.0	No	No	Single Family Residence
SB03	RSB03-009	1	B	67	66	60.6	No	No	Single Family Residence
SB03	RSB03-010	1	B	67	66	61.7	No	No	Single Family Residence
SB03	RSB03-011	1	B	67	66	62.6	No	No	Single Family Residence
SB03	RSB03-012	2	B	67	66	65.0	No	No	Single Family Residence
SB03	RSB03-013	1	B	67	66	65.8	No	No	Single Family Residence
SB03	RSB03-014	1	B	67	66	68.3	Yes	No	Single Family Residence
SB03	RSB03-015	1	B	67	66	69.0	Yes	No	Single Family Residence
SB03	RSB03-016	1	B	67	66	50.5	No	No	Single Family Residence
SB04	RSB04-001	1	B	67	66	68.3	Yes	No	Single Family Residence
SB04	RSB04-002	1	B	67	66	63.8	No	No	Single Family Residence
SB04	RSB04-003	1	B	67	66	51.6	No	No	Single Family Residence

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	Subst. Increase (>15dB(A))	Description
XX.X	Impacted Receptor								
SB04	RSB04-004	1	B	67	66	56.2	No	No	Single Family Residence
SB04	RSB04-005	1	B	67	66	50.3	No	No	Single Family Residence
SB05	RSB05-001	1	B	67	66	52.6	No	No	Lake Montaza Estates
SB05	RSB05-002	1	B	67	66	53.6	No	No	Lake Montaza Estates
SB05	RSB05-003	1	B	67	66	51.9	No	No	Lake Montaza Estates
SB05	RSB05-004	1	B	67	66	51.9	No	No	Lake Montaza Estates
SB05	RSB05-005	1	B	67	66	57.8	No	No	Lake Montaza Estates
SB05	RSB05-006	1	B	67	66	55.1	No	No	Lake Montaza Estates
SB05	RSB05-007	1	B	67	66	52.2	No	No	Lake Montaza Estates
SB05	RSB05-008	1	B	67	66	54.8	No	No	Lake Montaza Estates
SB05	RSB05-009	1	B	67	66	58.6	No	No	Lake Montaza Estates
SB05	RSB05-010	1	B	67	66	55.1	No	No	Sun & Country Ranches
SB05	RSB05-011	1	B	67	66	51.1	No	No	Sun & Country Ranches
SB05	RSB05-012	1	B	67	66	55.5	No	No	Single Family Residence
SB05	RSB05-013	1	B	67	66	52.9	No	No	Sun & Country Ranches
SB05	RSB05-014	1	B	67	66	54.6	No	No	Sun & Country Ranches
SB05	RSB05-015	1	B	67	66	63.1	No	No	Single Family Residence
SB06	RSB06-001	1	B	67	66	50.0	No	No	Single Family Residence
SB06	RSB06-002	1	B	67	66	50.9	No	No	Single Family Residence

Appendix B-2 – Special Land Use Sites

Predicted Noise Levels

Predicted Noise Levels

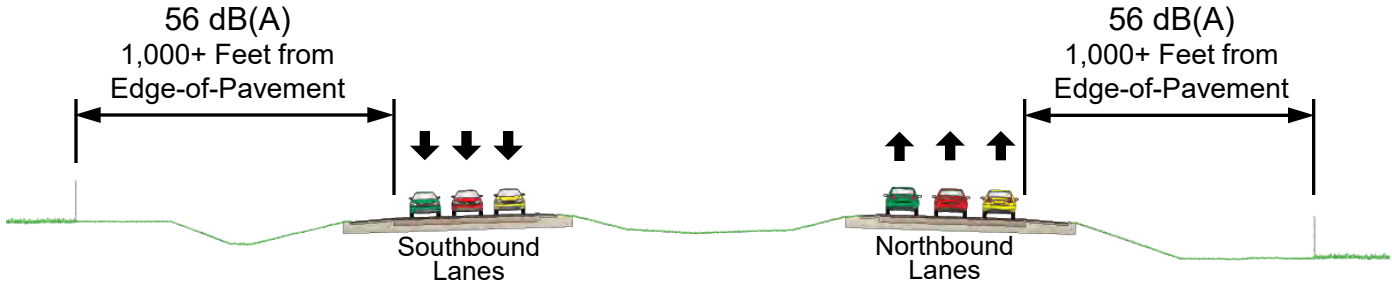
Noise Sensitive Area (NSA)	Rec. Point	No. of Units	NAC	NAC Criteria (dBA)	FDOT Criteria (dBA)	2042 Build LAeq1h (dBA)	NAC Approach or Exceeded	Subst. Increase (>15dB(A))	Description
XX.X	Impacted Receptor								
NB01	NNB01-012	1	C	67	66	55.9	No	No	UF Minton Hall Outdoor Seating
NB03	NNB03-013	1	C	67	66	51.0	No	No	Morningside Pool
NB03	NNB03-014	1	C	67	66	51.6	No	No	Morningside Basketball Court
NB03	NNB03-016	1	C	67	66	50.1	No	No	Morningside Playground
SB04	NSB04-006	1	C	67	66	57.1	No	No	St. Lucie Farm Preserve
SB06	NSB06-003	1	C	67	66	51.9	No	No	Racetrac Outdoor Seating
SB07	NSB07-001	1	C	67	66	55.9	No	No	Krispy Krunch Chicken Outdoor Seating

Appendix C

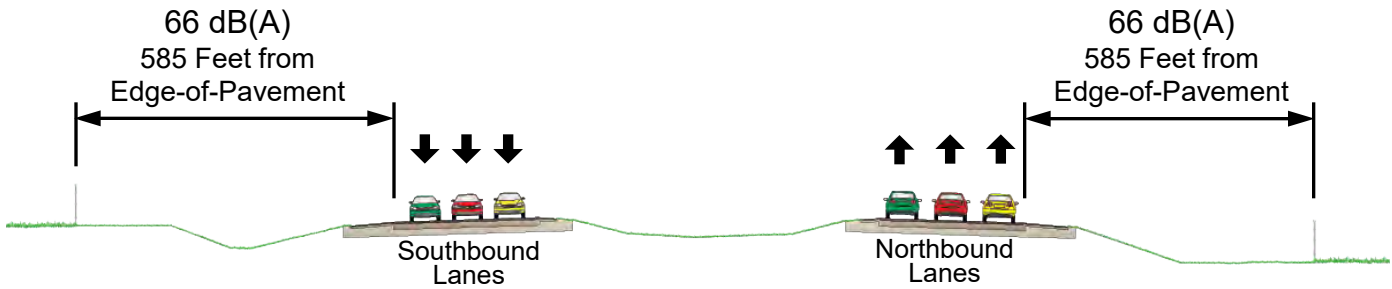
Project Noise Contours

Noise Contours

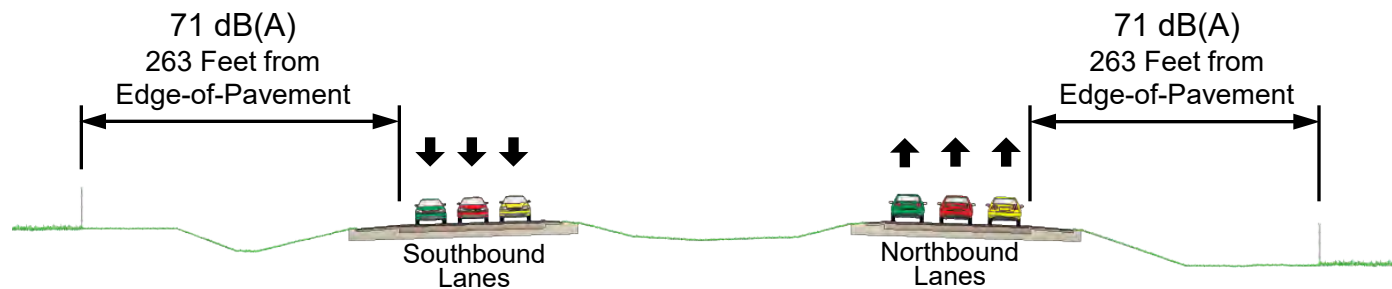
for Florida's Turnpike (SR 91) from SR 70 to SR 60



Activity Category A

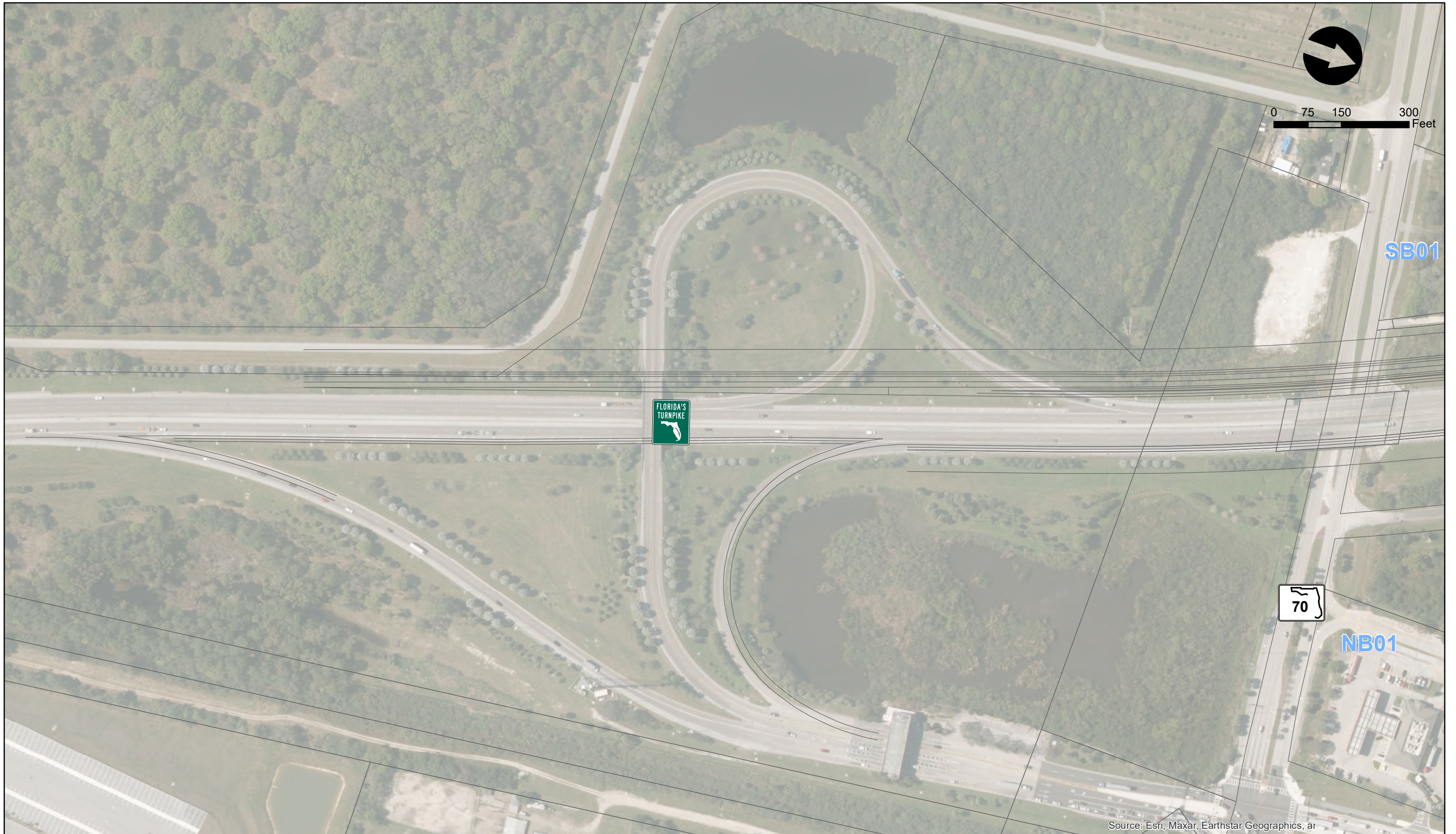


Activity Category B/C



Activity Category E

Appendix D
Project Aerials



Source: Esri, Maxar, Earthstar Geographics, ar

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
1

70



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Co

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

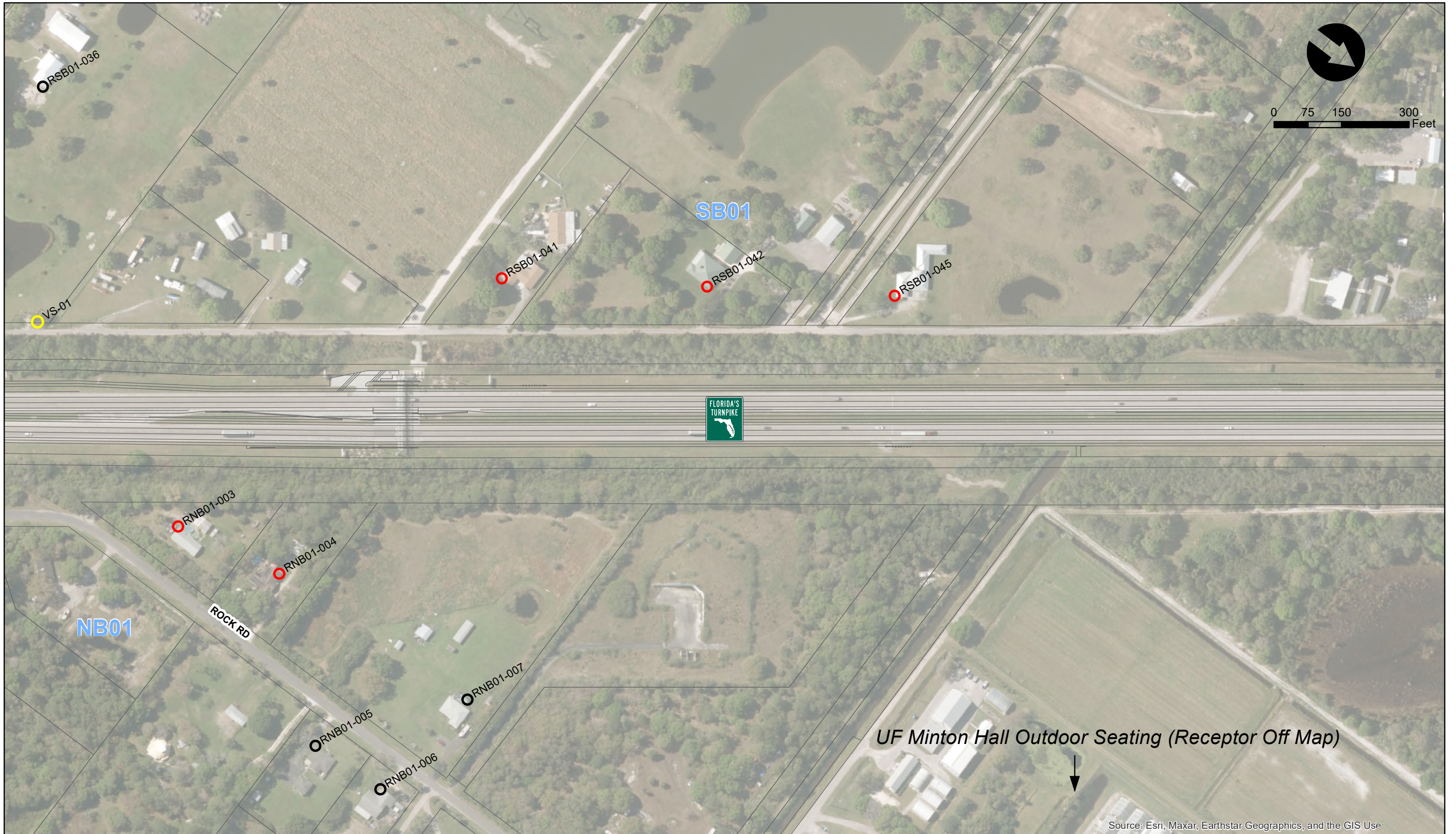
- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
2



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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
3

Source: Esri, Maxar, Earthstar Geographics, and the GIS User



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the GIS User

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

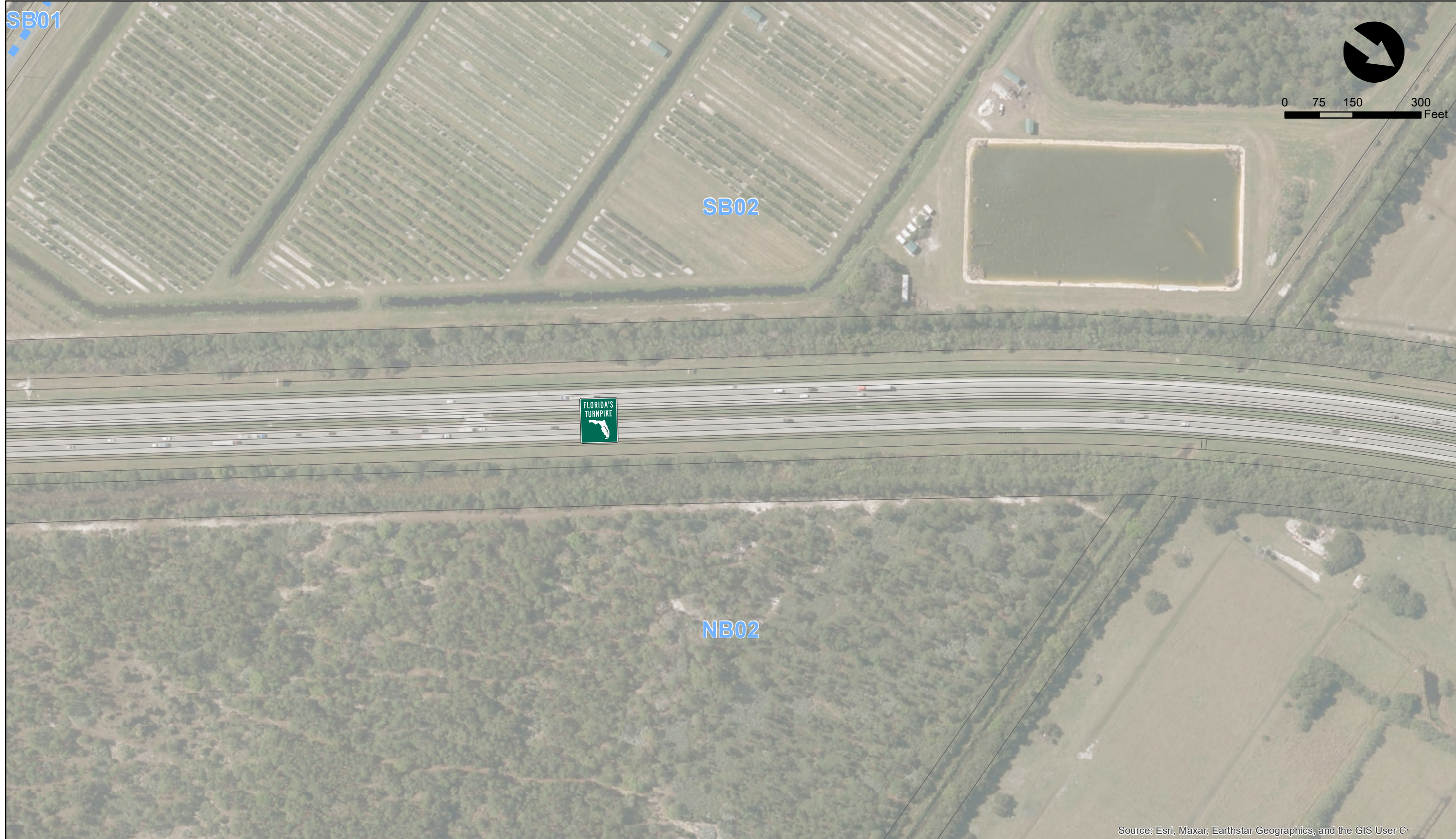
- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- ▬ Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
4



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Cr

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

- ▬ Potential Noise Barrier
- ▬ Design Lines
- Validation Sites
- Common Noise Environment

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
5



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographi

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

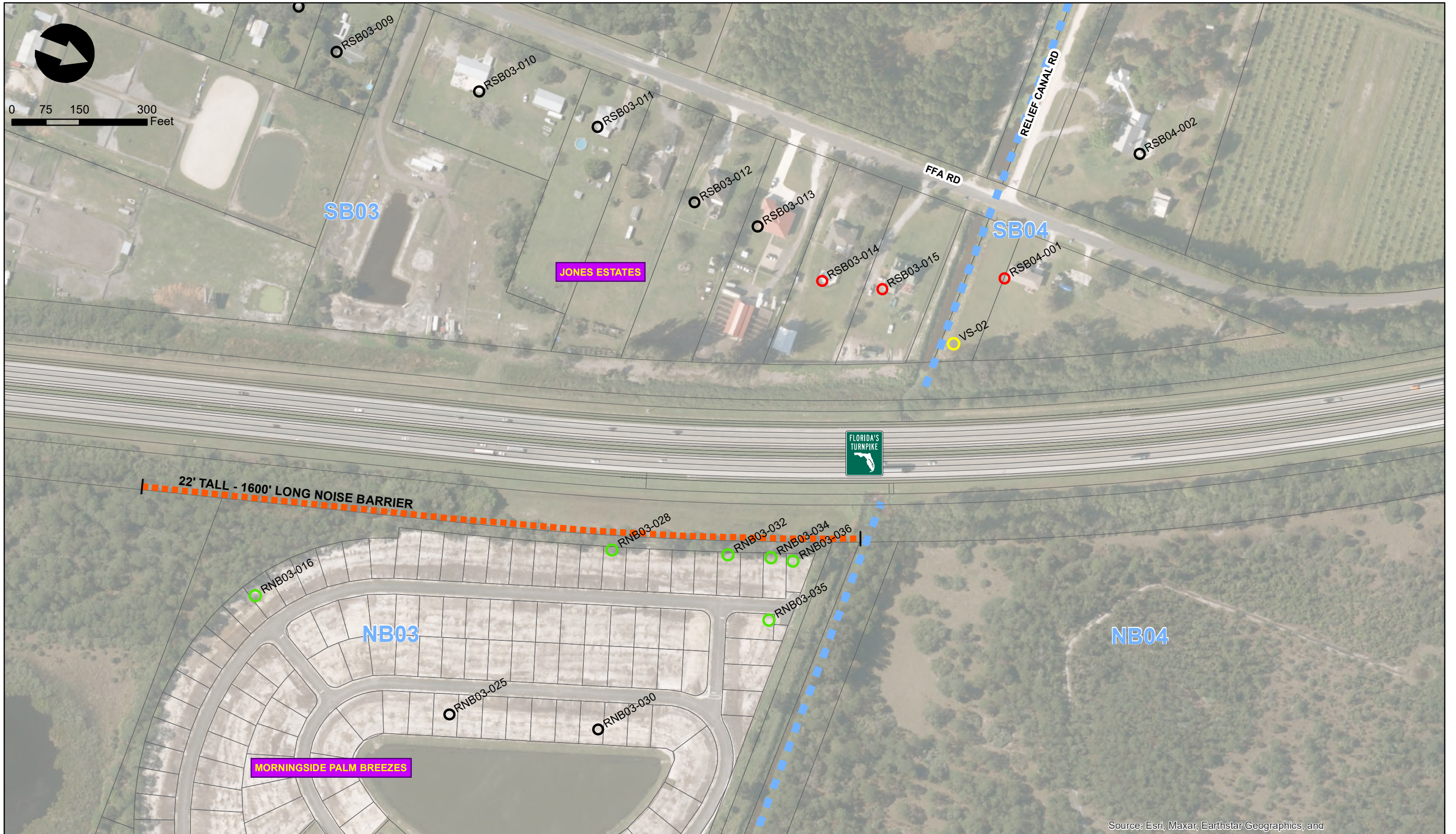
- Potential Noise Barrier
- Design Lines
- Validation Sites
- Common Noise Environment

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
6



Source: Esri, Maxar, Earthstar Geographics, and

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
7



0 75 150 300 Feet

SB04

FFA RD



NB04

ORNB04-007

ORNB04-015

Source: Esri, Maxar, Earthstar Geographics, and the GIS I''

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

- Potential Noise Barrier
- Design Lines
- Validation Sites
- Common Noise Environment

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
8



0 75 150 300 Feet

SB04

FFA RD



RNB04-022

NB04

ANGLE RD

Source: Esri, Maxar, Earthstar Geographics, and the C

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
Florida's Turnpike PD&E Study from
SR 70 to SR 60

Sheet No.
9

SB04



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

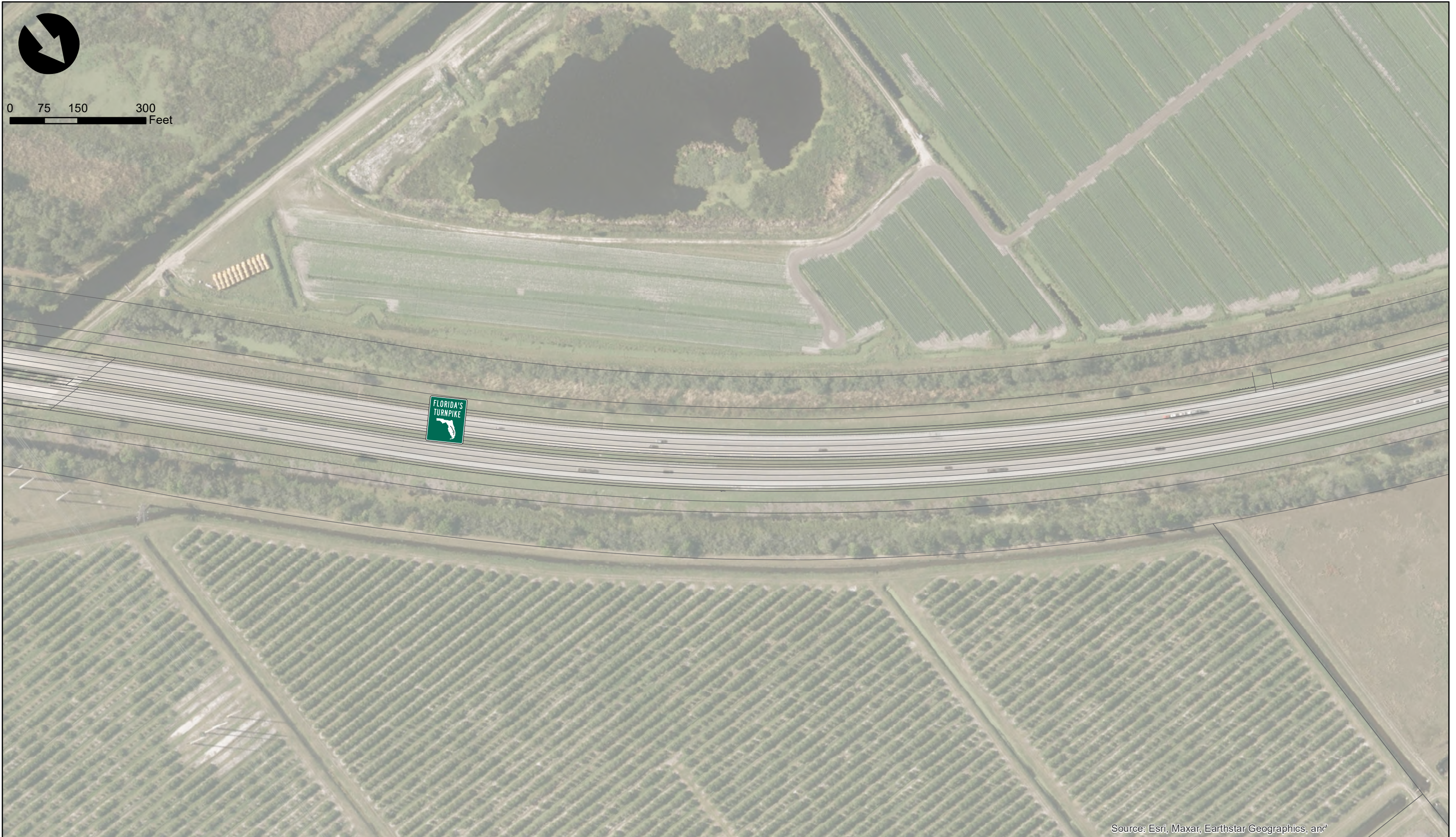
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
10



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
11



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the GIS User

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
12



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

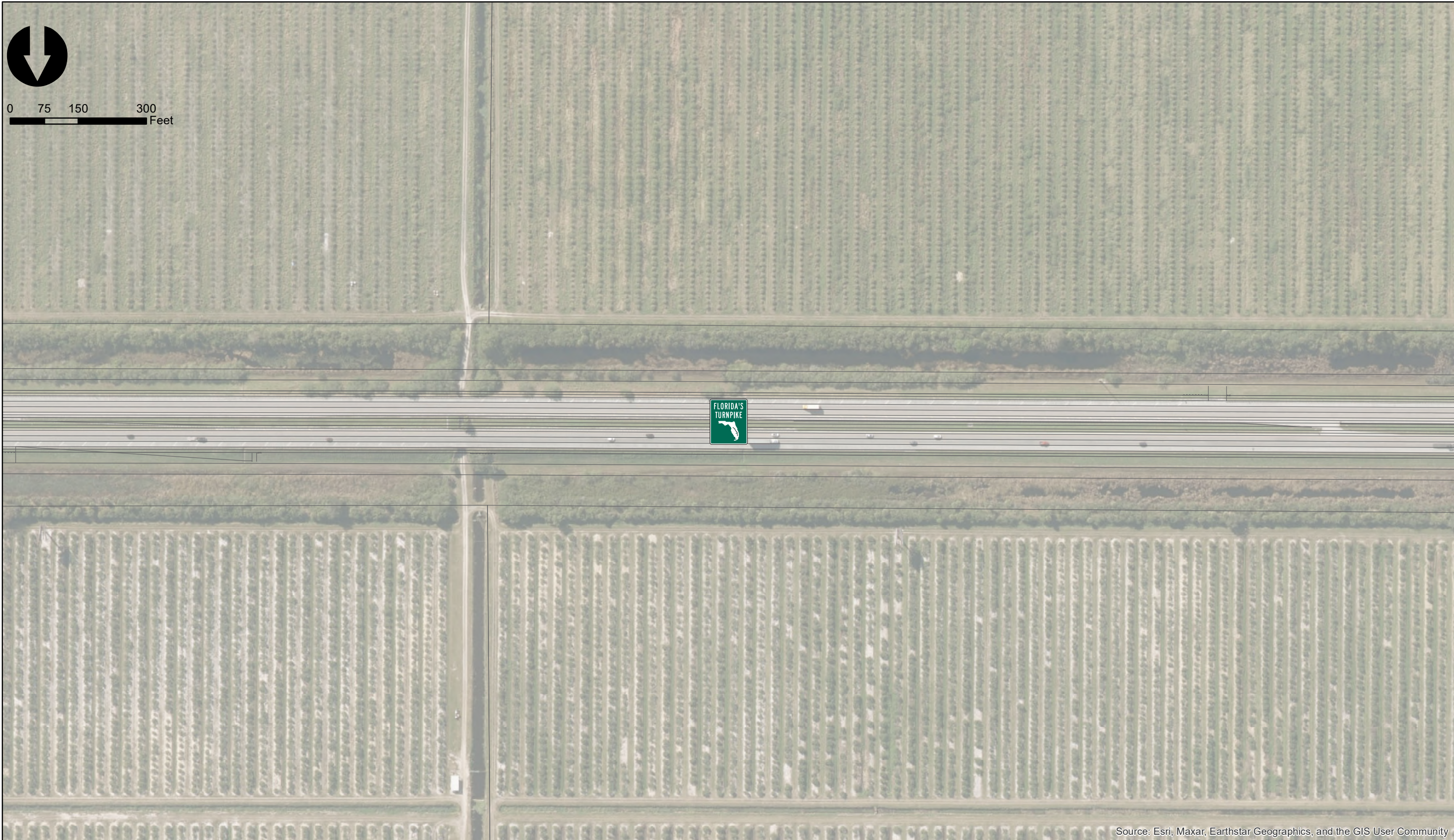
Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

**Sheet
 No.
 13**



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- ▬ Potential Noise Barrier
- Design Lines
- Validation Sites

■ Common Noise Environment

NOISE SPECIALIST

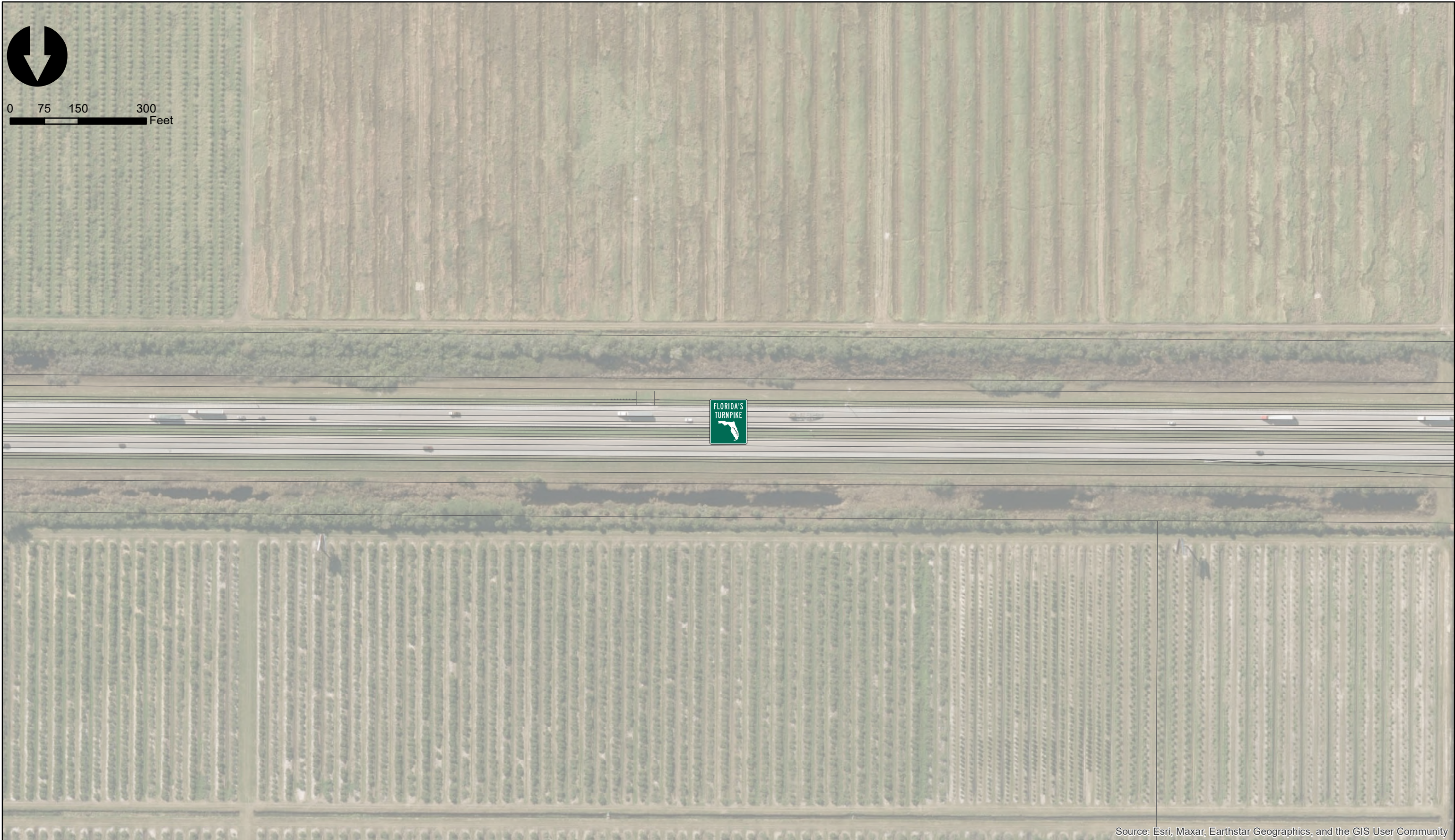
Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

**Sheet
 No.
 14**



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
15



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

**Sheet
 No.
 16**



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

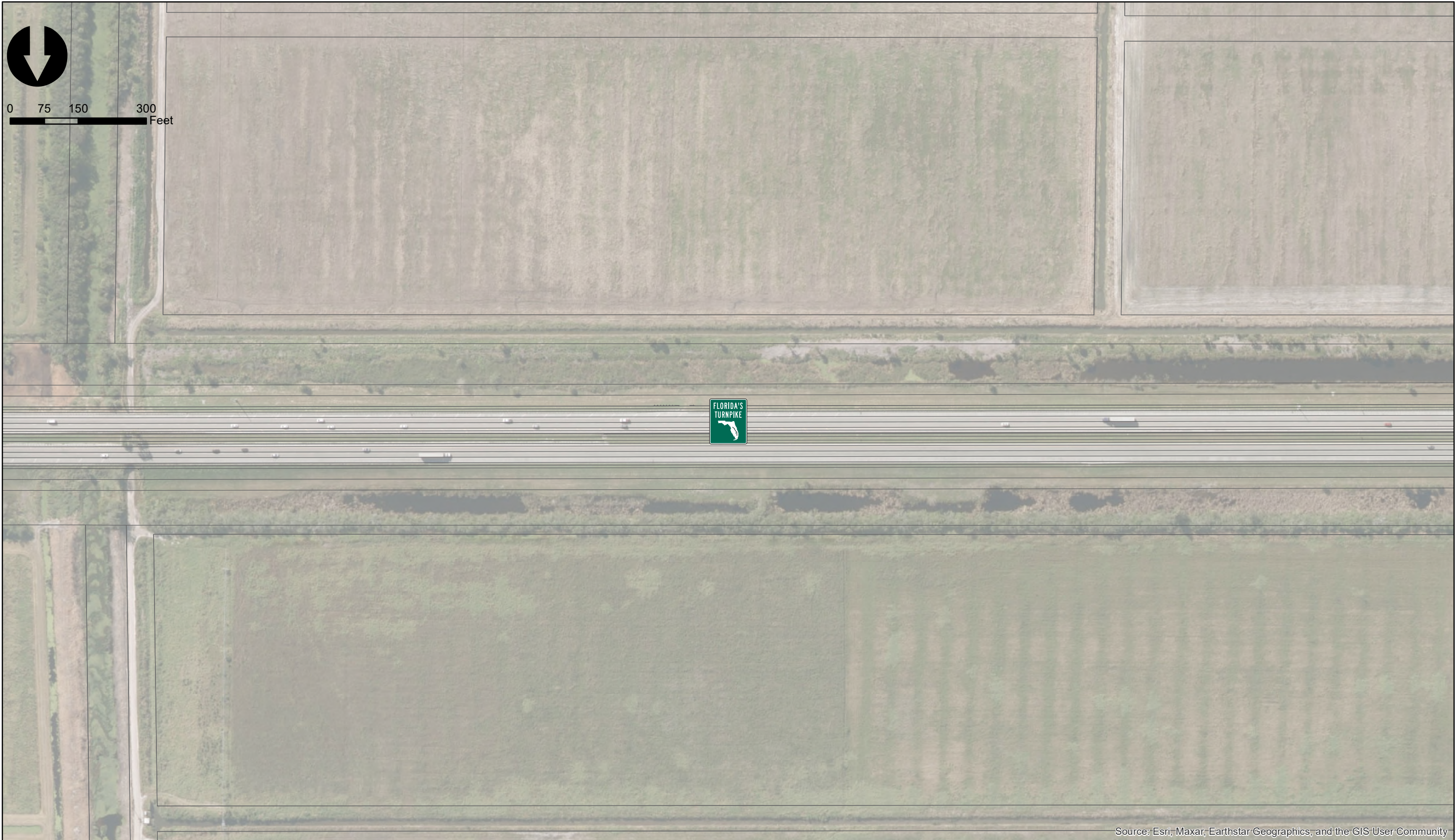
- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
17



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

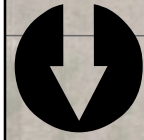
- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
18



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
19**



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- ▬ Potential Noise Barrier
- ▬ Design Lines
- Validation Sites

- Common Noise Environment

NOISE SPECIALIST

Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

**Sheet
 No.
 20**



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

**Sheet
 No.
 21**



0 75 150 300 Feet

SB04

St Lucie Farm Preserve

ONSB04-006



Source: Esri, Maxar, Earthstar Geographics, and the GIS User

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

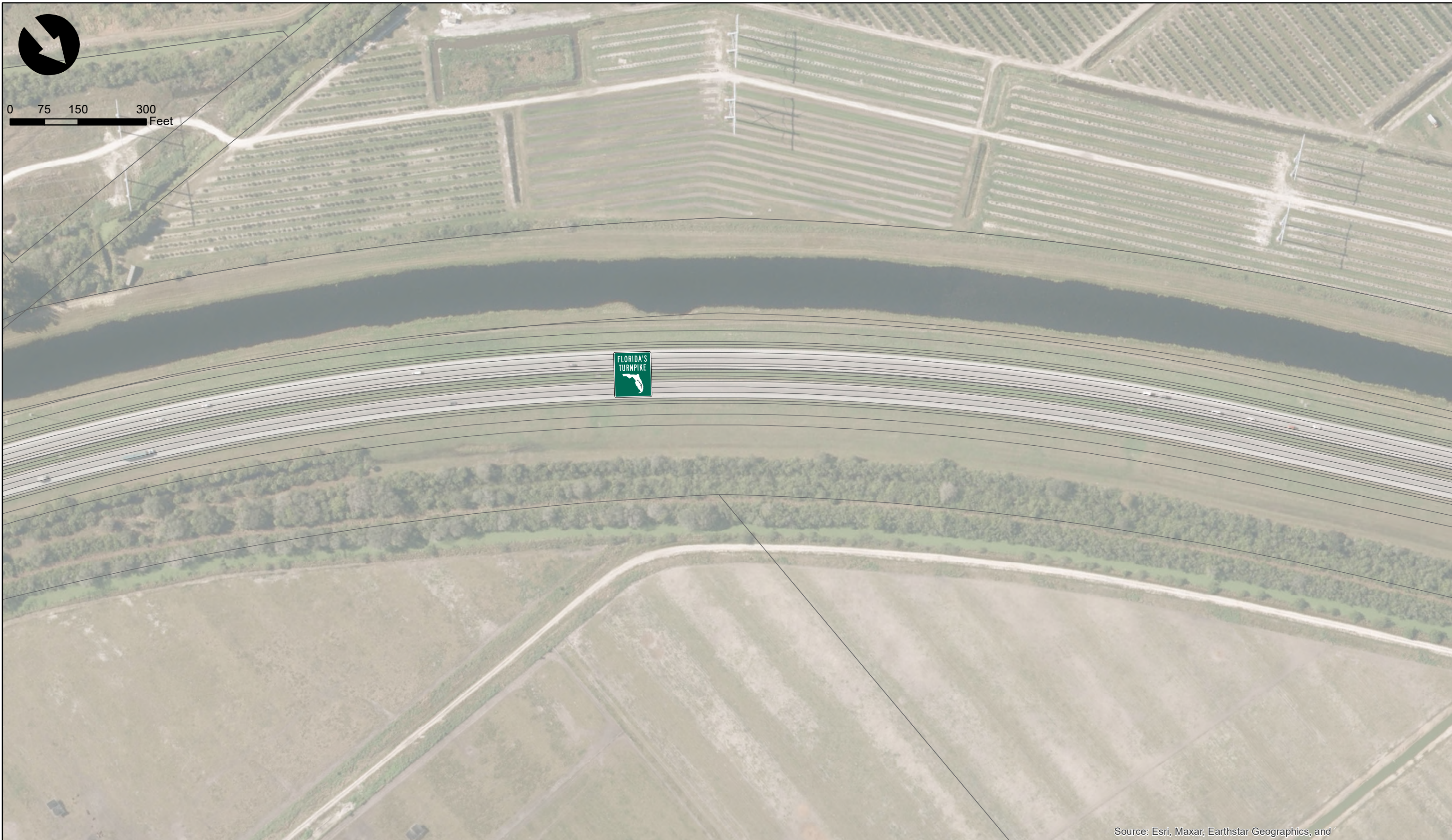
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
Florida's Turnpike PD&E Study from
SR 70 to SR 60

**Sheet
No.
22**



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- ▬ Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

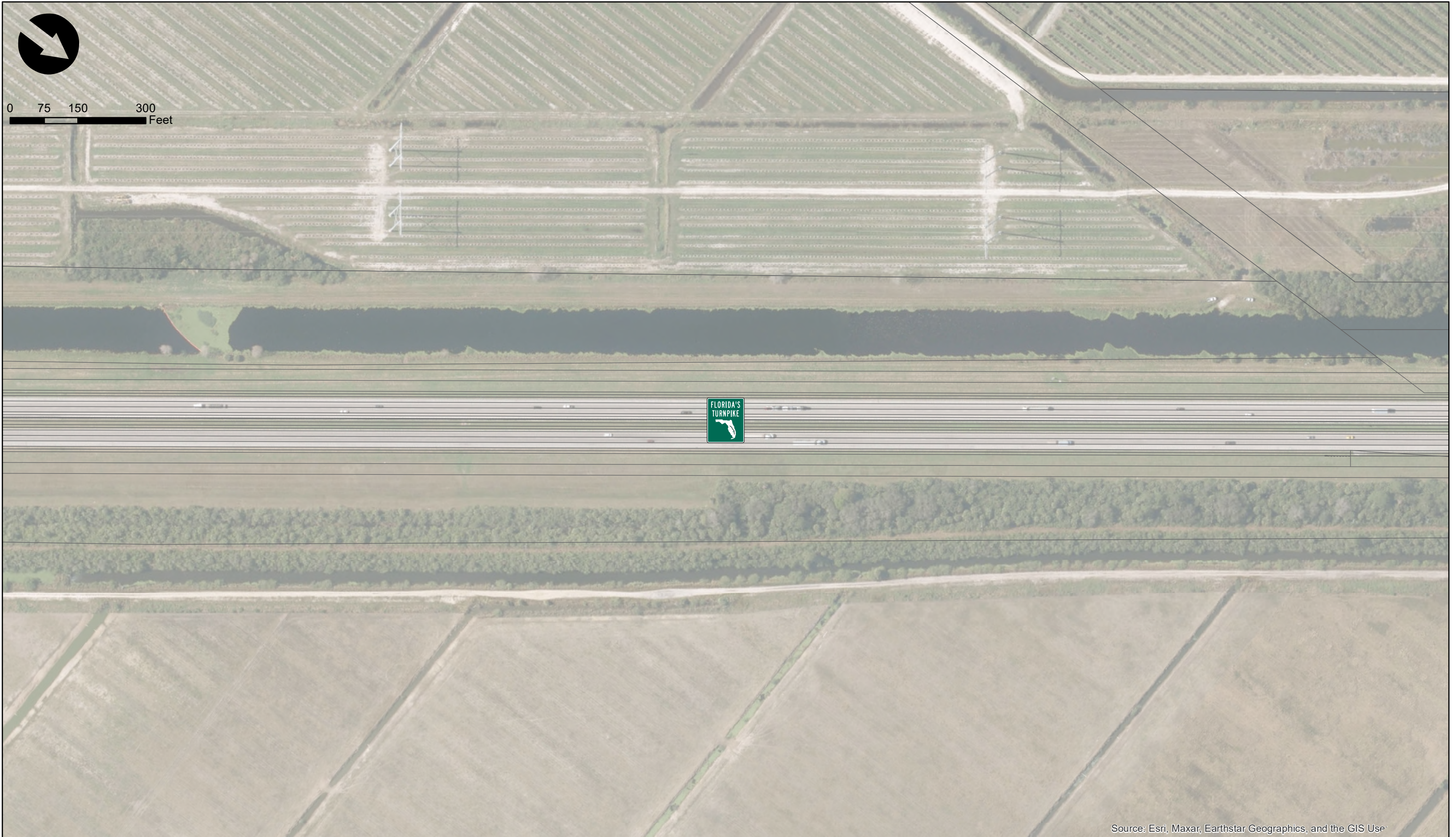
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
23



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the GIS User

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
24**



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the GIS User

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
25**



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the GIS User

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

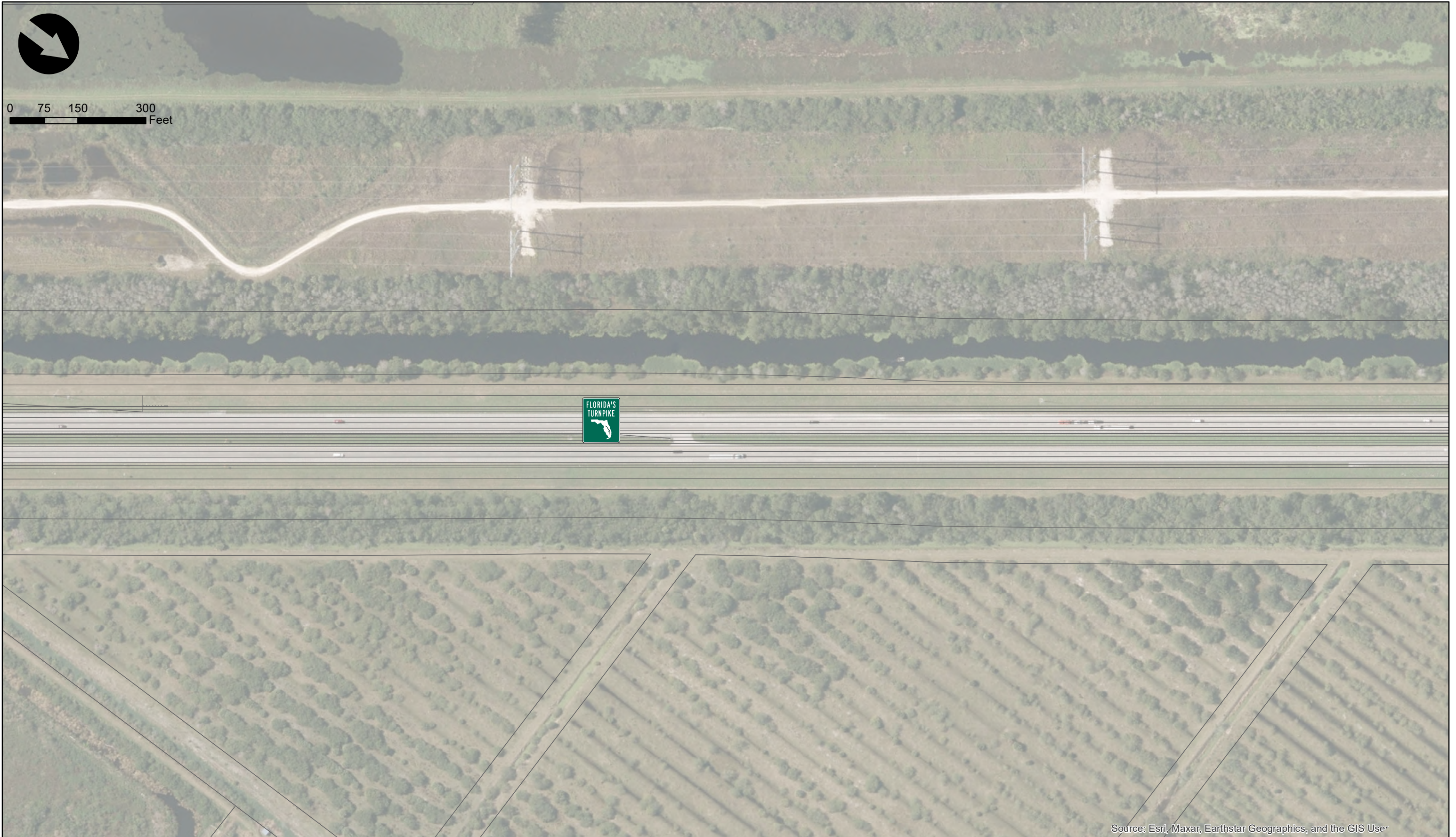
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
26**



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the GIS User

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

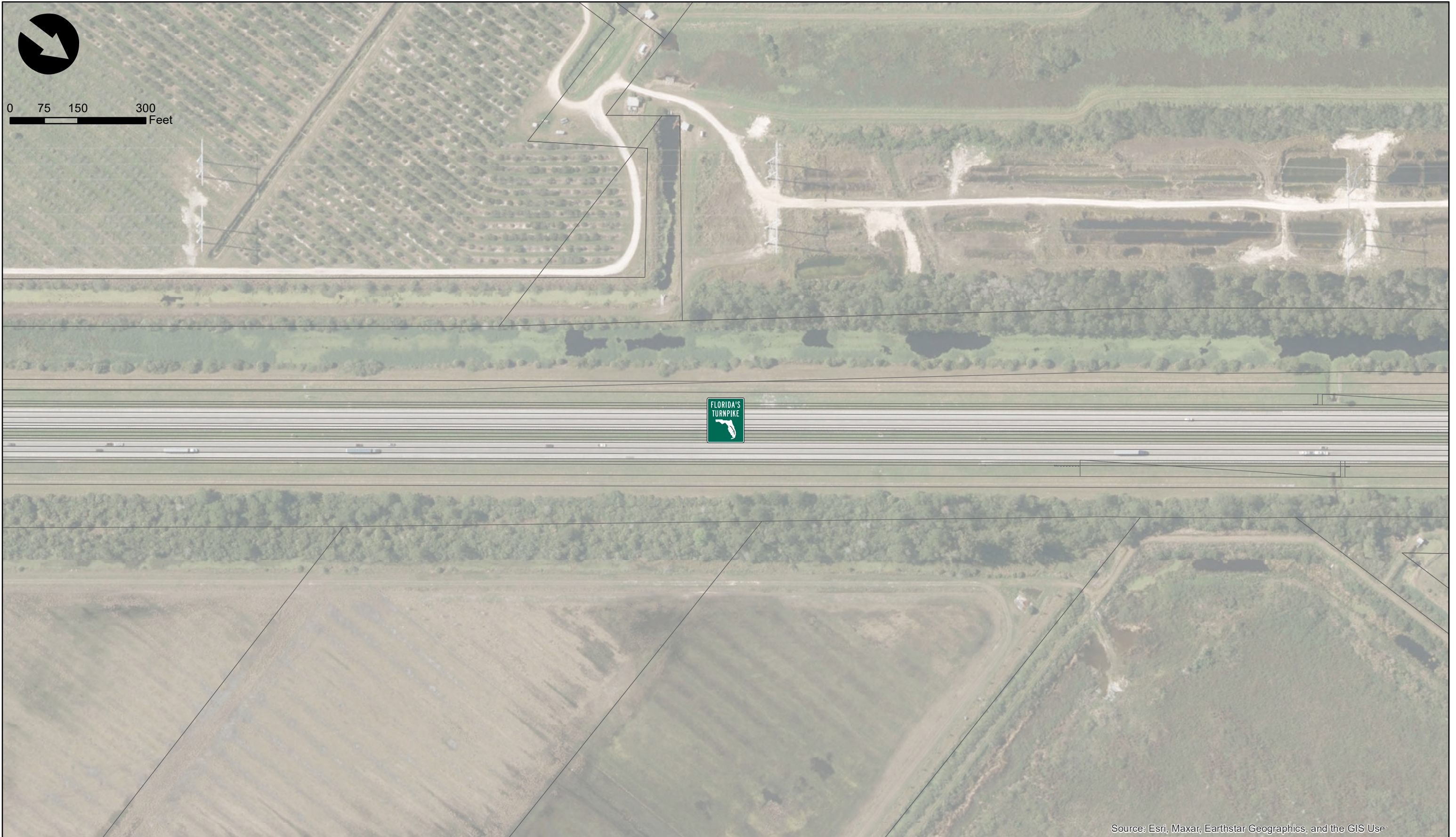
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.**
27



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the GIS User

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
27**



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
29**



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
30**



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
31



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
32**



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

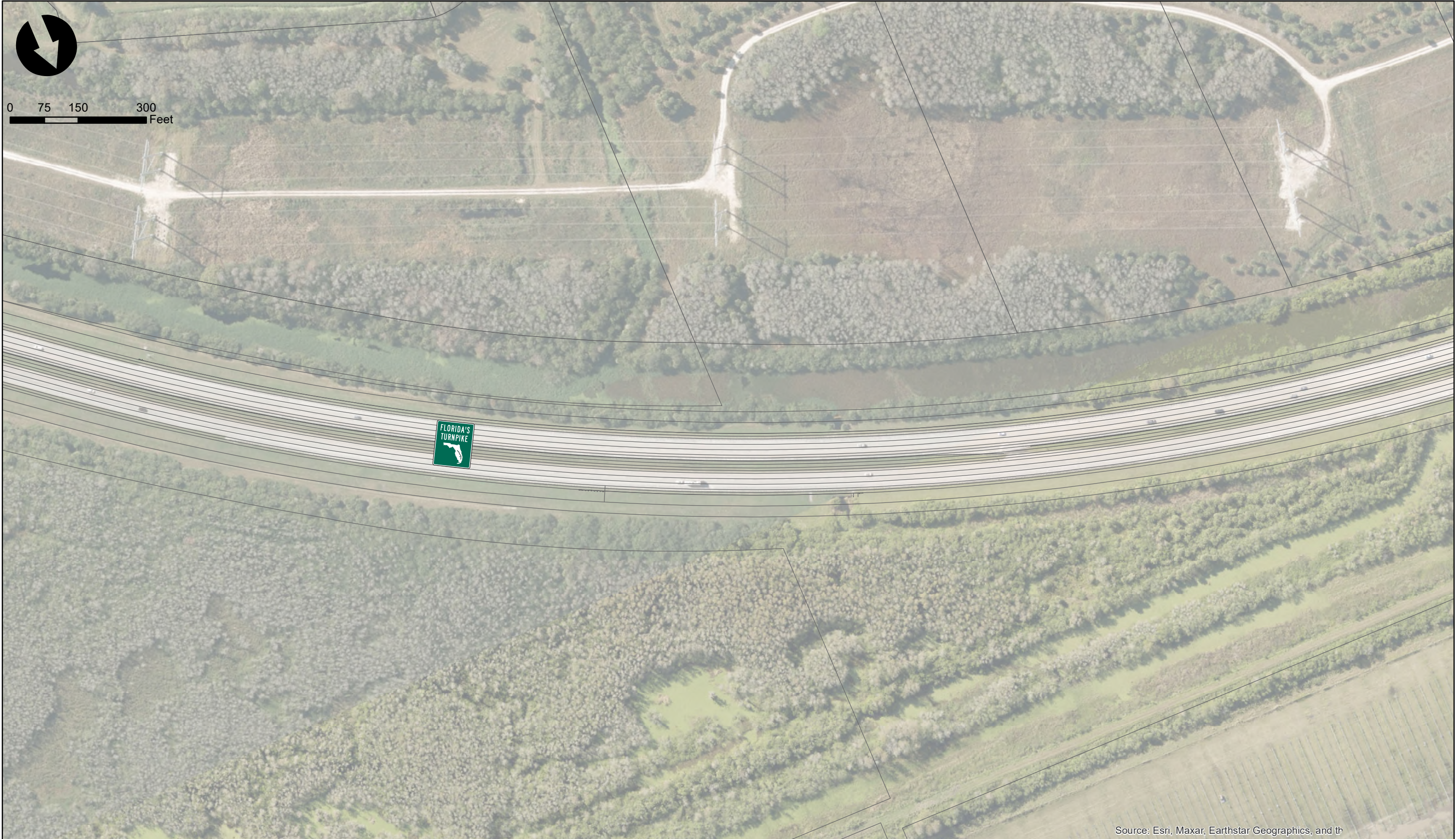
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
33



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and th

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
34



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
35



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

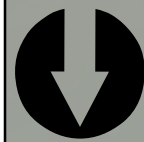
Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

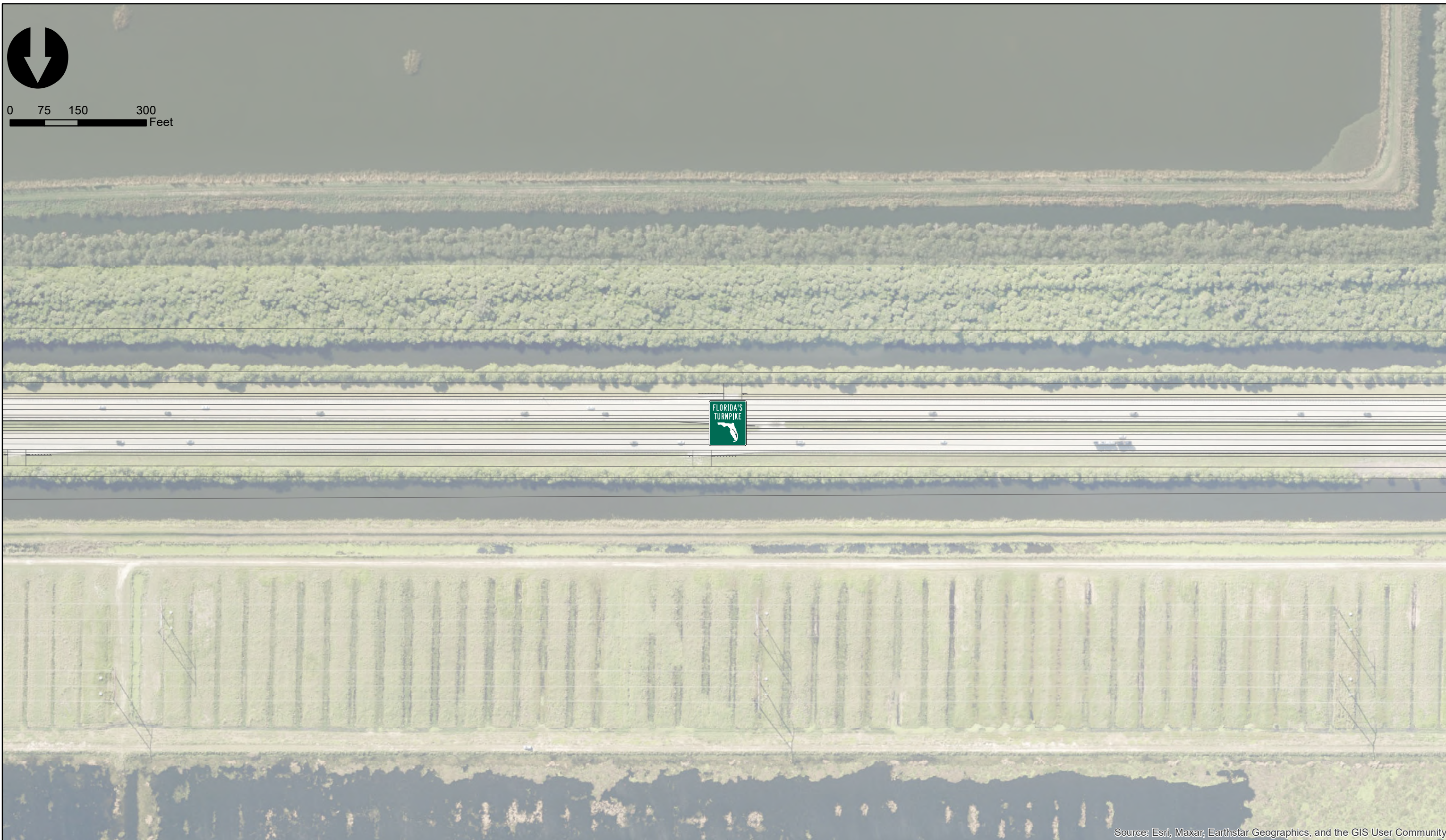
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

**Sheet
 No.
 36**



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

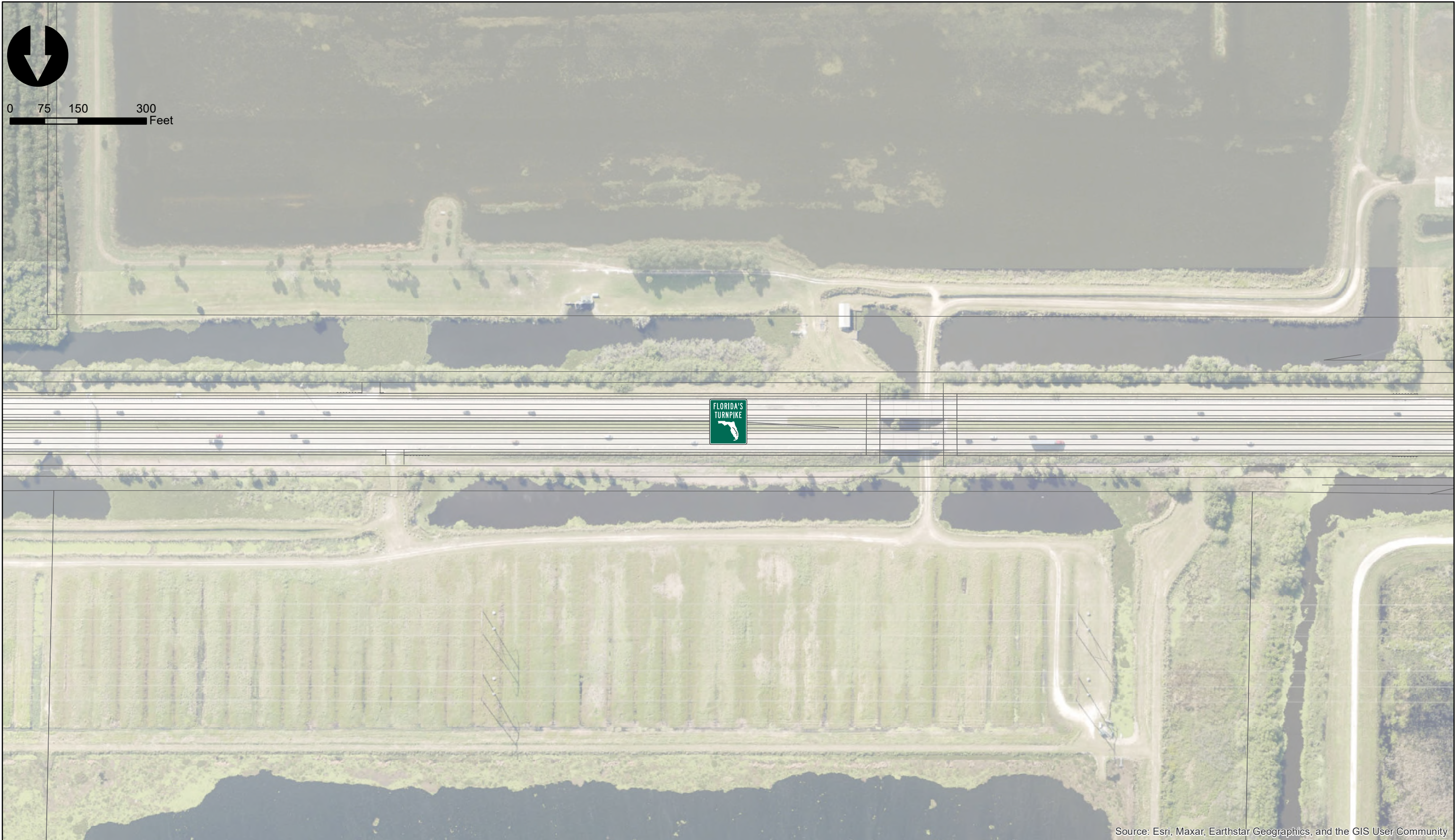
- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
37



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

**Sheet
 No.
 38**



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

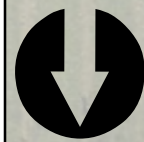
- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

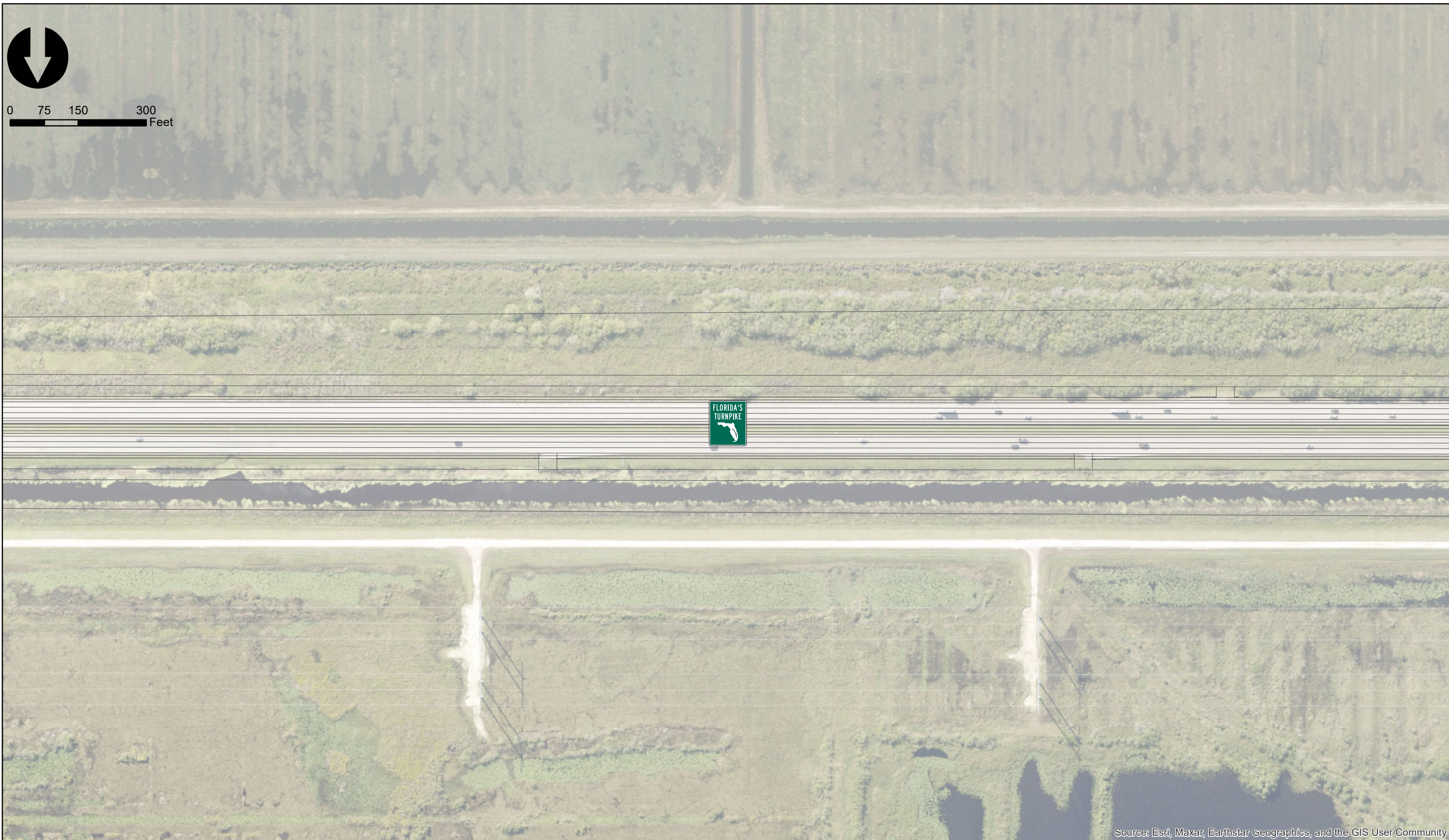
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
39



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

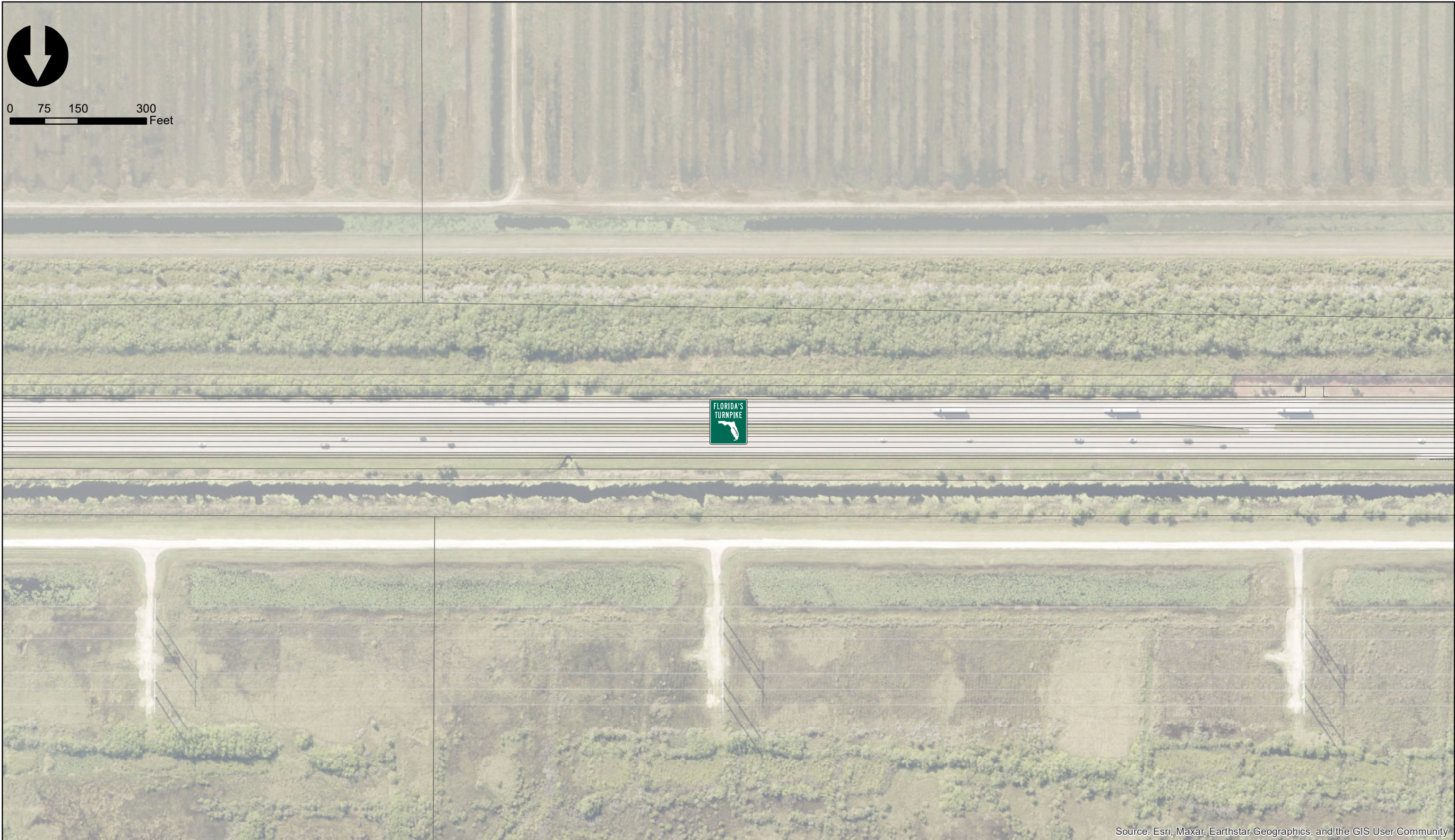
- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
40



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

**Sheet
 No.
 41**



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
42



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

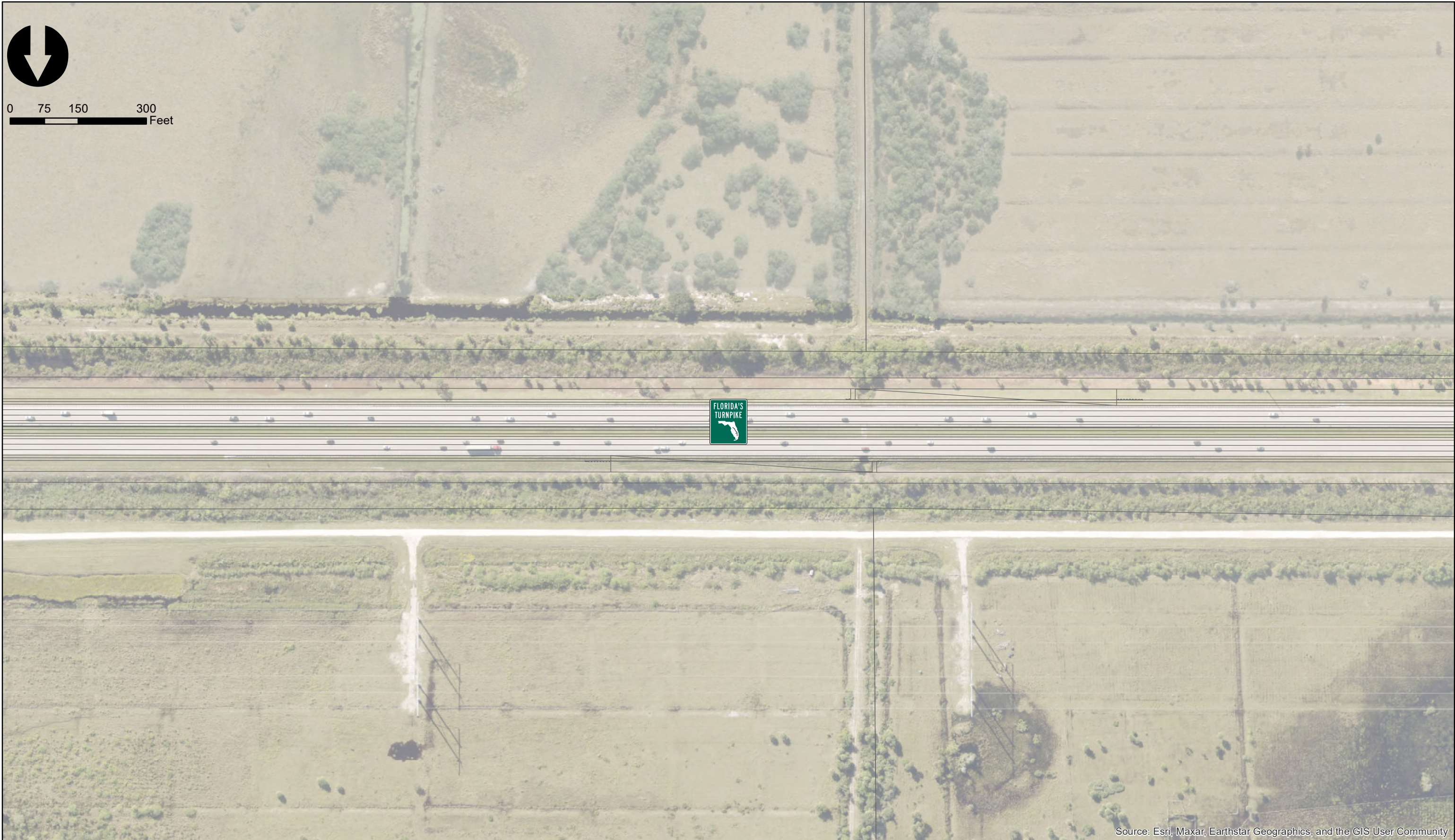
- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

**Sheet
 No.
 43**



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

**Sheet
 No.
 44**



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA		
DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

**Sheet
 No.
 45**



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
46



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the G

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
47



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and the C

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
48



0 75 150 300 Feet



Source: Esri, Maxar, Earthstar Geographics, and th

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
49



0 75 150 300 Feet

SB05



Source: Esri, Maxar, Earthstar Geographics, and th

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
50**



0 75 150 300 Feet

RSB05-005

SB05



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Comr

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

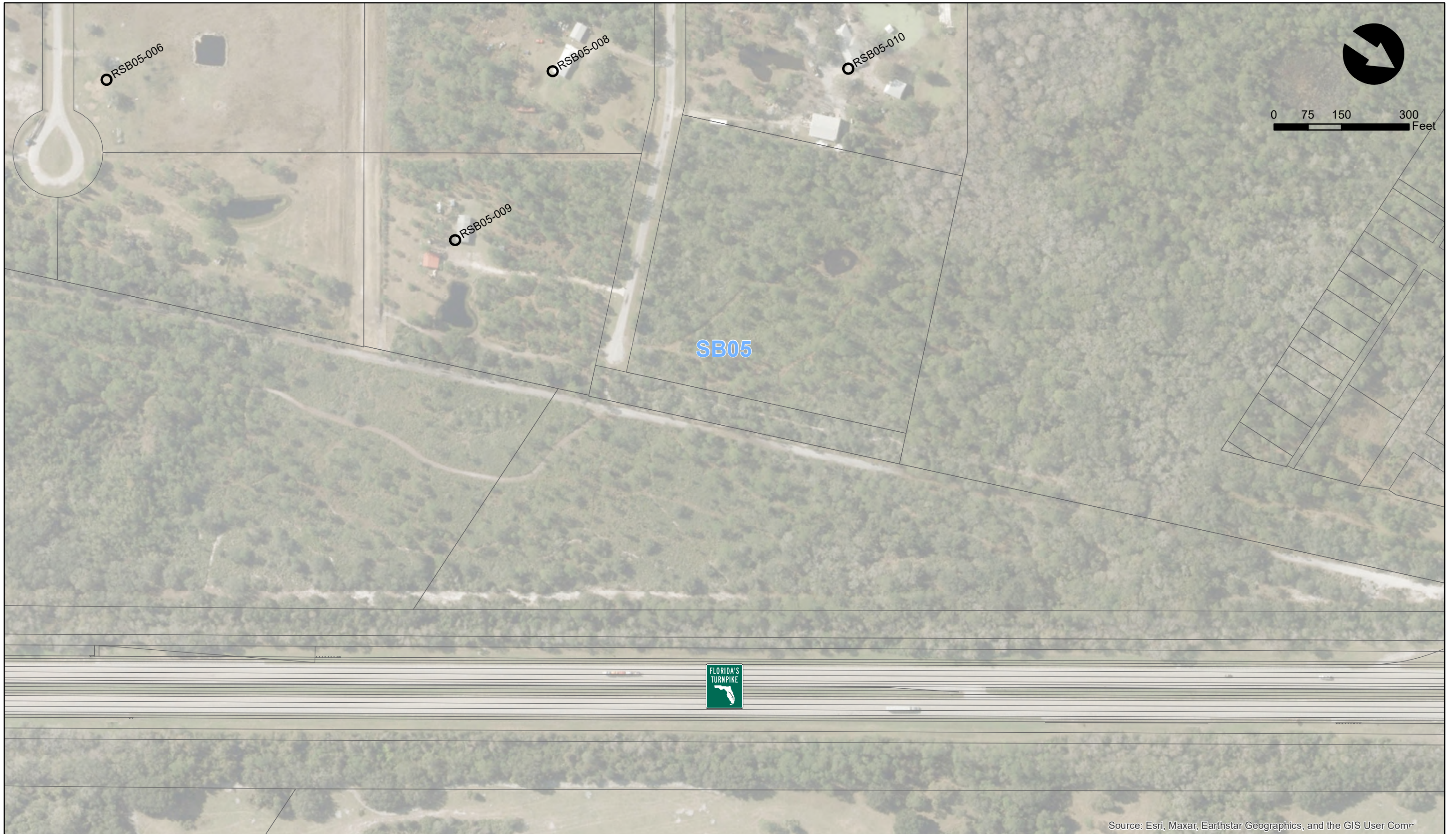
- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
51



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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
52

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Comr



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Comr

- Impacted - Benefited
- Impacted - Not Benefited
- Not Impacted - Benefited
- Not Impacted - Not Benefited
- Potential Noise Barrier
- Design Lines
- Validation Sites
- Common Noise Environment

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA		
DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
53



0 75 150 300 Feet

SB05



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Comm

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
Florida's Turnpike PD&E Study from
SR 70 to SR 60

Sheet No.
54



0 75 150 300 Feet

SB05



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Comm

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
55**



0 75 150 300 Feet

SB05



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Comm

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
56**



0 75 150 300 Feet

SB05



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Comm

- Impacted - Benefited
- Impacted - Not Benefited
- Not Impacted - Benefited
- Not Impacted - Not Benefited
- Potential Noise Barrier
- Design Lines
- Validation Sites
- Common Noise Environment

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
57**



0 75 150 300 Feet

SB05



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Comr

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
58**



0 75 150 300 Feet

SB05



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Comr

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

- ▬ Potential Noise Barrier
- ▬ Design Lines
- Validation Sites
- Common Noise Environment

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
Florida's Turnpike PD&E Study from
SR 70 to SR 60

**Sheet
No.
59**



0 75 150 300 Feet

SB05

SB06



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Comm

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
Florida's Turnpike PD&E Study from
SR 70 to SR 60

Sheet No.
60



0 75 150 300 Feet

SB06



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Comm

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

- ▬ Potential Noise Barrier
- ▬ Design Lines
- Validation Sites
- Common Noise Environment

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
Florida's Turnpike PD&E Study from
SR 70 to SR 60

**Sheet
No.
61**



0 75 150 300 Feet

SB06



Source: Esri, Maxar, Earthstar Geographics, and the

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
Florida's Turnpike PD&E Study from
SR 70 to SR 60

Sheet No.
62



0 75 150 300 Feet

SB06



Source: Esri, Maxar, Earthstar Geographics, and th

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

- ▬ Potential Noise Barrier
- ▬ Design Lines
- Validation Sites
- Common Noise Environment

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
Florida's Turnpike PD&E Study from
SR 70 to SR 60

**Sheet
No.
63**



0 75 150 300 Feet

SB06



Source: Esri, Maxar, Earthstar Geographics, and th

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

- Potential Noise Barrier
- Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
*Florida's Turnpike PD&E Study from
SR 70 to SR 60*

**Sheet
No.
64**



0 75 150 300 Feet

SB06



Source: Esri, Maxar, Earthstar Geographics, and t

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

- ▬ Potential Noise Barrier
- ▬ Design Lines
- Validation Sites
- Common Noise Environment

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
Florida's Turnpike PD&E Study from
SR 70 to SR 60

**Sheet
No.
65**

441



0 75 150 300 Feet

SB06



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

	Impacted - Benefited		Potential Noise Barrier		Common Noise Environment
	Impacted - Not Benefited		Design Lines		
	Not Impacted - Benefited		Validation Sites		
	Not Impacted - Not Benefited				

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
66



0 75 150 300 Feet

SB06

SB07

VS-03



60

NB05

Source: Es

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST

Jeff Jones, GISP
Inwood Consulting Engineers, Inc.
3000 Dovera Drive, Suite 200
Oviedo, Florida 32765
P 407.971.8850

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
Florida's Turnpike PD&E Study from
SR 70 to SR 60

**Sheet
No.
67**



○	Impacted - Benefited		Potential Noise Barrier	■	Common Noise Environment
○	Impacted - Not Benefited		Design Lines	○	Validation Sites
○	Not Impacted - Benefited				
○	Not Impacted - Not Benefited				

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

Sheet No.
68

Source: Es



Source: Esri, Maxar, Earthstar Geographics, and th

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

- ▬ Potential Noise Barrier
- ▬ Common Noise Environment
- Design Lines
- Validation Sites

NOISE SPECIALIST
 Jeff Jones, GISP
 Inwood Consulting Engineers, Inc.
 3000 Dovera Drive, Suite 200
 Oviedo, Florida 32765
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTIES	FINANCIAL PROJECT ID
91	OSCEOLA, OKEECHOBEE, INDIAN RIVER, ST LUCIE	423374-2

PROJECT AERIALS
 Florida's Turnpike PD&E Study from
 SR 70 to SR 60

**Sheet
No.
69**