DRAFT NOISE STUDY REPORT

Florida Department of Transportation

District One

S.R. 70 PD&E Study

Limits of Project: From C.R. 721 S to C.R. 599/128th Avenue

Highlands and Okeechobee Counties, Florida

Financial Management Number: 450334-1-22-01

ETDM Number: 14491

Date: November 2025

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022 and executed by the Federal Highway Administration and FDOT.

EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study to evaluate improvements to State Road (S.R.) 70 from County Road (C.R.) 721 South in Highlands County to C.R. 599/128th Avenue in Okeechobee County. The proposed project will improve S.R. 70 to a four-lane divided arterial roadway within the project limits.

The traffic noise study was prepared in accordance with Title 23 Code of Federal Regulations (CFR) Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise" and the FDOT Traffic Noise Policy documented in the "Highway Traffic Noise" chapter of the PD&E Manual. Additional guidance was obtained from the FDOT document "Traffic Noise Modeling and Analysis Practitioners Handbook".

The prediction of existing and future traffic noise levels, with and without the roadway improvements, was performed using Version 2.5 of the Federal Highway Administration's (FHWA's) computer model for highway traffic noise prediction and analysis – the Traffic Noise Model (TNM). The predicted noise levels presented in this report are expressed in decibels (dB) on the A-weighted scale dB(A) and are reported as hourly equivalent level values, which is the equivalent steady-state sound level for a one-hour period that contains the same acoustic energy as the time-varying sound level during the same time period.

Within the project limits, 105 receptors were modeled with the TNM to evaluate traffic noise levels at 121 noise sensitive land uses consisting of 120 residences and one picnic table. The residences were evaluated as Activity Category B of the FHWA Noise Abatement Criteria (NAC), and the picnic table as Activity Category C. Exterior traffic noise levels were evaluated at all locations.

Under existing conditions (2024), exterior traffic noise levels are predicted to range from 42.0 to 66.4 dB(A), and from 46.4 to 70.9 dB(A) with the future no-build condition. In the design year (2052) with the preferred alternative, traffic noise levels are predicted to range from 47.2 to 68.7 dB(A). Traffic noise levels are predicted to approach, meet, or exceed the NAC for Activity Category B at four residential receptors.

When compared to existing conditions, the largest increase in traffic noise is predicted to be 12.7 dB(A), a level that does not constitute a substantial increase. Some noise sensitive land uses are predicted to experience a decrease in traffic noise as a result of the proposed southward shift in the S.R. 70 roadway alignment.

Noise abatement measures including traffic management and alternative roadway alignments were determined to not be feasible and/or reasonable abatement measures for the impacted residences. Noise contours are used to establish noise buffer zones and provide appropriate setback distances for noise sensitive development. These contours have been prepared for the future improved roadway facility and are discussed in this report.

A noise barrier was evaluated as a potential abatement measure for two of the impacted residential receptors located in Kissimmee River Fishing Resort. The results of the analysis indicate the barrier could not meet minimum noise reduction requirements at a reasonable cost. Noise barriers were not evaluated at the remaining two impacted residential receptors as they are considered "isolated impacts" where there is only one impacted receptor to potentially benefit, and as such, would not meet minimum feasibility requirements.

Based on the noise analyses performed to date, there are no feasible and reasonable solutions available to mitigate the predicted traffic noise impacts at the residential receptors. Therefore, noise barriers are not recommended for further evaluation as part of the project at this time. Should changes be made to the preferred alternative, additional analysis may be warranted.

Residences within the project limits are identified in the FDOT listing of sites sensitive to construction noise and vibration. Construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact, and it is anticipated that the application of the FDOT "Standard Specifications for Road and Bridge Construction" will minimize or eliminate potential construction noise and vibration impacts.

Both in-person and live online alternatives public workshops were held in June 2024 to give interested persons the opportunity to learn more about the project alternatives being considered and ask questions of the project team and the FDOT. Traffic noise concerns were received during the in-person meeting from residents of the Kissimmee River Estates community.

TABLE OF CONTENTS

Tables

Figures

Appendices

SECTION 1.0
Introduction

1.1 Project Description

The Florida Department of Transportation (FDOT) District One is currently conducting a Project Development and Environment (PD&E) Study to evaluate options for improvements to State Road (S.R.) 70 from County Road (C.R.) 721 South in Highlands County to C.R. 599/128th Avenue in Okeechobee County (**Figure 1-1**). The proposed project would upgrade S.R. 70 from the existing two-lane undivided roadway to a four-lane divided arterial roadway with two travel lanes in each direction. Existing and proposed typical sections are provided in **Appendix A**.

The objectives of this Noise Study Report (NSR) are to identify noise sensitive land uses within the project limits that would be impacted by the preferred alternative, to evaluate abatement measures at impacted noise sensitive sites, and determine where noise abatement (i.e., noise barriers) should be included with the project and re-evaluated during the design phase.

Additional objectives include the consideration of construction noise and vibration impacts and the development of noise contours that can be used in the future by local municipal and county government agencies to identify compatible land uses adjacent to project roadways.

Project Limits

HIGHLANDS
OKEECHOBEE
GLADES
MARTIN

721

NW NEW PINE RIDGE RD

Kissimmee
River
Estates

Kissimmee River
Fishing Resort

River Bluff RV&
Fishing Resort

End
Project

70

LEWIS
FARM RD

SW RUCKS DAIRY RD

SW 144TH
PKWY

OKEECHOBEE
HIGHLANDS

WEST GRADE

FULMAR TER

HIGHLANDS
GLADES

196TH TER

Begin Project

U:\GIS\GIS\Projects\2022\xxID2022009907_00_SR70_PDE_CR721_to_CR599\03_Project\SR70_PDE_CR721_to_CR599\03_Noise\SR70_PDE_CR721_to_CR599\03_Noise.aprx

FDOT

All data within this map are supplied as is, without warranty. This product has not been prepared for legal, engineering, or survey purposes. Users of this information should review or consult the primary data sources to ascertain the usability of the information.

Figure 1-1 Project Location

FPID #: 450334-1-22-01
State Road (S.R.) 70 PD&E Study from County Road (C.R.) 721 South to C.R. 599/128th Avenue
Highlands and Okeechobee Counties, Florida

Miles
0 0.5 1

Data Source: ESA, ESRI

NORTH

SECTION 2.0
Methodology

This traffic noise study was prepared in accordance with Title 23 Code of Federal Regulations (CFR) Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise."[1] The evaluation uses methodology established by the FDOT traffic noise policy documented in the "Highway Traffic Noise" chapter of the PD&E Manual.[2] Additional guidance was obtained from the FDOT document "Traffic Noise Modeling and Analysis Practitioners Handbook".[3]

Since the proposed project will provide additional through lane capacity to S.R. 70 and also include a significant horizontal shift in the roadway alignment, it qualifies as a "Type I" project for which a traffic noise study is required per 23 CFR Part 772 and the FDOT traffic noise policy.

The prediction of existing and future traffic noise levels, with and without the roadway improvements, was performed using Version 2.5 of the Federal Highway Administration's (FHWA's) computer model for highway traffic noise prediction and analysis – the Traffic Noise Model (TNM). The TNM predicts sound energy, in one-third octave bands, between highways and nearby receptors taking the intervening ground's acoustical characteristics, topography, and rows of buildings into account.

2.1 Noise Metrics

The predicted noise levels presented in this report are expressed in decibels (dB) on the A-weighted scale dB(A). This scale most closely approximates the response characteristics of the human ear to traffic noise. All noise levels are reported as hourly equivalent level Leq(h) values, which is the equivalent steady-state sound level for a one-hour period that contains the same acoustic energy as the time-varying sound level during the same time period. The use of the Leq metric and dB(A) as the unit of measurement is specified by 23 CFR Part 772.

2.2 Traffic Data

The traffic data approved for use in the analysis is provided in **Appendix B**. Demand volumes were used in the modeling and analysis of existing (2024) and future build (2052) traffic noise levels, as they are predicted to be lower than Level of Service (LOS) C volumes, while LOS C volumes were used for the future no-build condition. The year 2052 is the design year for the project. The lesser of the two volumes is used since traffic noise is a combination of volume and speed, not necessarily one or the other. If the traffic analysis shows that demand volumes exceed roadway capacity (i.e., LOS C volumes), there would be a decrease in speed and as a result, a decrease in predicted traffic noise levels. Conversely, if demand traffic volumes are predicted to be less than LOS C/roadway capacity, it's determined that maximum capacity volumes would not be achieved, and the demand volumes are appropriate for use. This approach ensures that the worst-case traffic noise levels are predicted at noise sensitive land uses. Vehicle speeds are

based on the posted speed limit for the existing and future no-build conditions [60 miles per hour (mph)], and the proposed posted speed limit of 65 mph for the future build condition with the preferred alternative.

2.3 Noise Abatement Criteria

To evaluate traffic noise, the FHWA has established Noise Abatement Criteria (NAC), provided in **Table 2-1**. As shown, the criteria vary according to a property's activity category. As a means of comparison, typical sound levels are provided in **Table 2-2**.

TABLE 2-1

FHWA NOISE ABATEMENT CRITERIA

Activity Category	Activity Leq(h)[1]		Evaluation Location	Description of Activity Category
	FHWA	FDOT		
A	57	56	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B[2]	67	66	Exterior	Residential
C[2]	67	66	Exterior	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	51	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E[2]	72	71	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	-	-	-	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	-	-	-	Undeveloped lands that are not permitted.

SOURCE: Table 1, 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.

TABLE 2-2

TYPICAL SOUND LEVELS

COMMON OUTDOOR ACTIVITIES	NOISE LEVEL dB(A)	COMMON INDOOR ACTIVITIES
	---110---	Rock Band
Jet Fly-over at 1000 ft.		
	---100---	
Gas Lawn Mower at 3 ft.		
	---90---	
Diesel Truck at 50 ft., at 50 mph		
	---80---	Food Blender at 1 m (3 ft.)
Noise Urban Area (Daytime)		Garbage Disposal at 1 m (3 ft.)
Gas Lawn Mower at 100 ft.	---70---	
Commercial Area		Vacuum Cleaner at 10 ft.
Heavy Traffic at 300 ft.	---60---	Normal Speech at 3 ft.
		Large Business Office
Quiet Urban Daytime	---50---	Dishwasher Next Room
Quiet Urban Nighttime	---40---	
Quiet Suburban Nighttime		Theater, Large Conference Room (Background)
	---30---	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (Background)
	---20---	
	---10---	
Lowest Threshold of Human Hearing	---0---	Lowest Threshold of Human Hearing

Source: California Dept. of Transportation Technical Noise Supplement, September 2013.

2.4 Noise Abatement Measures

As stipulated by 23 CFR Part 772, there are two conditions when the FDOT requires the consideration of noise abatement measures: when predicted traffic noise levels "approach" or exceed the NAC with the future build condition, or when predicted future noise levels increase substantially from existing levels. The word "approach" is defined by the FDOT to mean within one dB(A) of the NAC (i.e., one dB(A) less than the NAC value) and states that a substantial increase will occur if future traffic noise levels are predicted to increase 15 dB(A) or more when compared to existing traffic noise levels as a direct result of a transportation improvement project.

2.4.1 Traffic Management

Traffic management techniques can be used to abate traffic noise. For example, the timing of traffic lights could be altered to eliminate frequent stopping, heavy trucks could be limited to certain hours of the day on specific roads, and speed limits could be reduced. S.R. 70 serves as an east/west route for the movement of freight. Limiting heavy truck operations would affect the movement of materials and goods over an extensive area. Therefore, prohibiting or limiting heavy truck traffic on S.R. 70 is not considered a

reasonable abatement measure for this project. A substantial speed reduction on S.R. 70 would lower traffic noise levels. However, the capacity of the roadway to service traffic would also be reduced with a reduction of speed. Therefore, speed reduction is not a reasonable abatement measure for this project.

2.4.2 Alignment Modifications

Modifying the horizontal alignment and/or vertical profile of a roadway can influence highway traffic noise levels and can therefore be an effective abatement measure. With the exception of the proposed alignment shift at the beginning of the project at C.R. 721 South as well as near Kissimmee River Estates, the existing alignment of S.R. 70 has already established the proposed horizontal and vertical alignment. Project costs and detrimental effects on land use are minimized by making use of the existing corridor. The cost of acquiring additional property for the sole purpose of abating highway traffic noise would likely exceed the cost reasonable limit of $64,000 per benefited receptor (defined as a noise sensitive site receiving at least a 5 dB(A) noise reduction from the abatement measure). Therefore, roadway alignment modifications are not considered a feasible or reasonable abatement measure.

2.4.3 Buffer Zones

Providing a buffer zone (i.e., an area of undeveloped land) between a highway and future noise sensitive development can minimize or eliminate traffic noise impacts.

Buffer zones can be implemented through local land use planning. The distances between the proposed highway and noise sensitive sites (where predicted traffic noise levels approach, meet or exceed the NAC for Activity Categories A, B, C, D, and E) are determined to facilitate future land use planning that is compatible with the traffic noise environment. For the proposed preferred alternative conceptual design, the distance between the nearest edge of the nearest travel lane for S.R. 70 and the location where traffic noise levels would approach a particular NAC is provided in **Section 6.0** of this report. Local officials can use the information in **Table 6-1 and Figures 6-1 and 6-2** to establish buffer zones for future projects, thereby minimizing or avoiding noise impacts at sensitive land uses. The distances do not account for any reduction in noise levels that may be provided by berms, privacy walls or intervening structures in the noise propagation path and also do not account for any increase in noise resulting from increased highway elevation (e.g., overpasses) or elevated noise sensitive sites (e.g., second floor patios).

2.4.4 Noise Barriers

Noise barriers reduce noise levels by altering the sound propagation path between the noise source (roadway) and the noise sensitive land use. To effectively reduce traffic noise, a noise barrier must be relatively long, continuous (without intermittent openings), and of sufficient height to provide a discernable reduction in traffic noise levels. Consistent with FDOT's traffic noise policy, the minimum requirements for a noise barrier to be considered acoustically feasible and reasonable, and economically reasonable are:

- A noise barrier must provide at least a five dB(A) reduction in traffic noise for at least two impacted noise sensitive receptors to be considered an acoustically feasible abatement measure. A receptor that meets the minimum five dB(A) noise reduction requirement is considered "benefited",

- To be considered acoustically reasonable, a noise barrier must provide at least a seven dB(A) reduction (i.e., the FDOT's noise reduction design goal) for at least one benefited receptor and,

- A noise barrier should not cost more than $64,000 per benefited noise sensitive receptor. The current statewide cost estimate for noise barrier construction, including materials and labor, is $40 per square foot ($ft^2$).

After considering the amount of reduction that may be provided and the cost effectiveness, additional factors must also be considered when evaluating a noise barrier as a potential abatement measure. Additional feasibility factors include items related to design and construction (i.e., site-specific constructability), safety, access to and from adjacent properties, Right-of-Way (ROW) requirements, maintenance, and impacts on utilities and drainage. While a cursory review of these items can be performed during a project's PD&E phase, a more detailed review is performed during the design phase. In addition to the cost and noise reduction design goal requirement, the other reasonableness factor considered is the viewpoint of the benefited property owners and residents, if applicable, who may, or may not, desire a noise barrier as an abatement measure. Property owner/resident viewpoints are typically solicited in a future phase as the project nears construction.

2.5 Model Validation

The TNM is used in the prediction of existing and future traffic noise levels for the project. To ensure accurate predictions, the computer model was validated using sound levels measured at a location adjacent to the project limits. Traffic data including motor vehicle volumes, fleet mix, and meteorological conditions were observed and recorded during each measurement period. The model validation was conducted in accordance with 23 CFR Part 772 and the FDOT's traffic noise policy.

The field measurements for this project were conducted in accordance with the FHWA's "Noise Measurement Handbook".[4] Each field measurement was obtained using a Larson Davis Model 720 Sound Level Meter (SLM). The SLM was calibrated before and after each monitoring period with a Larson Davis Model CAL150 Sound-Level Calibrator. Vehicle speeds were obtained using a Bushnell Speedster III radar gun. Measurements were conducted at three locations within the project limits and are shown on the figures in **Appendix C**.

The vehicle data (volumes, fleet mix, and speeds) observed and recorded during each monitoring period were used as input for the TNM to determine if, along with the existing roadway geometry and area site conditions, the computer model could "re-create" the sound levels measured in the field. Consistent with the FDOT's traffic noise policy, a traffic noise prediction model is considered within the accepted level of accuracy if the measured and predicted noise levels are within a tolerance standard of plus or minus three dB(A).

At each measurement location, three 10-minute periods were performed. Observed traffic data for each measurement period was multiplied by six to determine hourly volumes for input to the TNM. Vehicle speeds were averaged for each of the five vehicle types (autos, medium trucks, heavy trucks, buses, and motorcycles) recorded during each measurement period.

Table 2-3 presents the field measurements and the validation results for the project. As shown, the ability of the model to predict noise levels within the acceptable range of plus or minus three dB(A) for the project was confirmed. For periods where the measured levels are higher than those predicted by TNM, the difference can be attributed to various sounds that occurred that cannot be accounted for in the TNM,

including insects and general aviation (GA) aircraft overflights. Documentation in support of the validation measurements is provided in **Appendix D** of this report.

TABLE 2-3

MODEL VALIDATION RESULTS

Measurement Site ID / Location	Measurement Period (Time)	Leq(h) – dB(A)		
		Measured	Modeled	Difference
1 / South of S.R. 70 at west side of C-41A Canal	1: (9:13am – 9:23am)	65.9	64.5	1.4
	2: (9:26am – 9:36am)	66.8	66.5	0.3
	3: (9:39am – 9:49am)	64.3	64.9	-0.6
2 / NE Corner of S.R. 70 & Jordan Terrace Intersection	1: (10:15am – 10:25am)	64.0	66.0	-2.0
	2: (10:27am – 10:37am)	66.0	67.4	-1.4
	3: (10:39am – 10:49am)	62.8	65.0	-2.2
3 / North of S.R. 70, west of NW Riverside Road, west of Kissimmee River Fishing Resort	1: (11:12am – 11:22am)	64.8	64.4	0.4
	2: (11:24am – 11:34am)	64.8	65.3	-0.5
	3: (11:36am – 11:46am)	65.5	65.5	0.0

[1] Measurements were obtained on August 20, 2025. Measurement locations are provided on the Figures in Appendix C.
[2] A negative "Difference" value indicates computer modeled noise levels are higher than those measured in the field.

2.6 Noise Sensitive Land Uses

Within the project limits, 105 TNM receptors (i.e., a discrete or representative location of a noise sensitive area(s)) representing the various noise sensitive sites were modeled to represent 120 residences and a picnic table. The 120 residences were evaluated as Activity Category B of the NAC and are composed of isolated residences throughout the project corridor, residences located within Kissimmee River Estates, Kissimmee River Fishing Resort, and River Bluff RV & Fishing Resort. The picnic table is located at Kissimmee River Fishing Resort and was evaluated as Activity Category C. Exterior traffic noise levels were predicted at all evaluated locations. All receptor heights were assumed to be five feet above ground level (AGL).

The modeled receptor locations are provided on the figures in **Appendix C**. Noise sensitive land uses were based on desktop reviews of property records available online from the Highlands and Okeechobee County Property Appraisers and verified during a field review of the project area conducted in August 2025.

Receptor ID 67 represents two residences that are proposed to be acquired to accommodate the ROW necessary for the preferred alternative. Since the residences would not exist with the preferred alternative, only existing and future no-build traffic noise levels were evaluated at this location.

SECTION 3.0
Traffic Noise Analysis Results

Table 3-1 provides a summary of the predicted traffic noise levels for the project; a full list of predicted traffic noise levels for all receptors is provided in **Appendix E**. The TNM files in support of the analysis have been provided electronically as **Appendix F.**

Existing traffic noise levels at the residential receptors are predicted to range from 42.0 to 66.4 dB(A), and an existing level of 59.8 dB(A) was predicted for the picnic table. With the future no-build condition, traffic noise levels are predicted to range from 46.4 to 70.9 dB(A) at the residences, while a level of 64.3 was predicted for the picnic table.

In the future with the preferred alternative, traffic noise levels at the residences are predicted to range from 47.2 to 68.7 dB(A), and are predicted to approach, meet, or exceed the NAC for Activity Category B at four residential receptors. A future traffic noise level of 64.4 dB(A) was predicted for the picnic table at Kissimmee River Fishing Resort, a level that does not approach, meet, or exceed the NAC for Activity Category C.

When compared to the existing condition, the largest increase in traffic noise with the preferred alternative is predicted to be 12.7 dB(A), a level that does not constitute a substantial increase of 15 dB(A) or more. Some noise sensitive land uses may experience a decrease in traffic noise of up to 8.0 dB(A) as a result of the proposed southward shift in the S.R. 70 roadway alignment.

The four impacted residences are represented by Receptor IDs 72 and 76, located in the Kissimmee River Fishing Resort, Receptor 101 and Receptor 103. The predicted traffic noise impacts at Receptor IDs 101 and 103 (located on the south side of S.R. 70 east of the Kissimmee River) are considered “isolated impacts” where there is only one impacted receptor to potentially benefit from a noise abatement measure and as such, would not meet the minimum feasibility requirement of providing a benefit to a minimum of two impacted receptors. Noise abatement measures were not evaluated for the predicted impacts at Receptors 101 and 103. The results of the noise barrier analysis for Receptors 72 and 76 are presented in the following section.

TABLE 3-1
SUMMARY OF PREDICTED TRAFFIC NOISE LEVELS[1]

Receptor ID's[2]	Description / Location	NAC Activity Category	Predicted Traffic Noise Levels – Leq(h) - (dB(A))				Number of Impacted Receptors with Future Build, Preferred Alternative	Barrier Number[3]
			Existing (2024)	Future No-Build (2052)	Future Build, Preferred Alternative (2052)	Change from Existing to Future Build		
1-5	Isolated residences from C.R. 721 South to New Pine Ridge Road / Lewis Farm Road	B	47.4 – 58.8	51.8 – 63.5	56.5 – 63.9	5.1 – 12.7	0	-
6	Isolated residence south of S.R. 70, west of SW Rucks Dairy Road	B	43.9	48.4	53.5	9.6	0	-
7-62	Residences in Kissimmee River Estates	B	51.1 – 66.4	55.7 – 70.9	53.3 – 58.6	-8.0 – 2.2	0	-
63	Isolated residence south of S.R. 70, east of SW Rucks Dairy Road	B	57.1	61.8	65.3	8.2	0	-
64-67	Residences south of S.R. 70, west of Kissimmee River	B	47.4 – 59.9	51.9 – 64.3	54.5 – 65.2	6.9 – 8.3	0	-
68-96	Residences in Kissimmee River Fishing Resort	B	53.1 – 64.5	57.7 – 68.9	57.7 – 68.7	4.1 – 4.6	2	1
97	Picnic table at Kissimmee River Fishing Resort	C	59.8	64.3	64.4	4.6	0	-
98-99	River Bluff RV & Fishing Resort	B	42.0 – 42.2	46.4 – 46.6	47.2 – 47.4	5.2	0	-
100-101	Isolated residences east of Kissimmee River	B	50.4 – 61.7	54.8 – 66.1	55.8 – 67.1	5.4	1	N/A[4]
102-105	Isolated residences east of NW/SW 128th Avenue	B	53.4 – 60.7	57.8 – 65.1	59.5 – 67.4	6.1 – 6.7	1	N/A[4]

[1] A full list of predicted traffic noise levels for all receptors is provided in Appendix E.

[2] Please refer to the figures in Appendix C.

[3] Please refer to Section 4.0

[4] Isolated impact, abatement not evaluated. Please see Section 3.0 for additional information.

SECTION 4.0
Noise Barrier Analysis

Using the TNM, a noise barrier was evaluated as a potential abatement measure for impacted residential Receptors 72 and 76. The noise barrier was evaluated approximately 12 feet inside the proposed S.R. 70 ROW and in two segments due to the intersection of S.R. 70 and NW Riverside Road. Noise barrier lengths were optimized at each height evaluated (up to a maximum of 22 feet) to maintain minimum noise reduction requirements when possible while minimizing excess barrier length at the endpoints (thereby reducing cost).

The results of the noise barrier analysis are provided in **Table 4-1**. As shown, the noise reduction design goal of seven dB(A) could not be achieved until a barrier height of 12 feet, and both impacted receptors could not achieve a minimum reduction of at least five dB(A) until a barrier height of 14 feet. At heights ranging from 14 to 22 feet and their respective lengths, the cost per benefited receptor ranges from $117,600 to $160,600, costs that exceed the cost reasonableness criteria of $64,000 per benefited receptor. As such, noise barrier 1 is not a cost reasonable abatement measure for the impacted receptors at Kissimmee River Fishing Resort. There do not appear to be any other methods of reducing the predicted traffic noise impacts at these two residential receptors.

TABLE 4-1

NOISE BARRIER 1: KISSIMMEE RIVER FISHING RESORT

Barrier Height / Length (ft.)	Impacted Receptors With Insertion Loss of (dB(A))			Number of Benefited Receptors			Avg[2]	Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable?
	5-5.9	6-6.9	> 7	Impacted	Other[1]	Total				
8/564	0	0	0	0	0	0	-	N/A[3]		
10/564	1	0	0	1	0	1	5.3	N/A[3]		
12/564	0	0	1	1	0	1	8.1	$270,720	$270,720	No
14/420	1	0	1	2	0	2	6.2	$235,200	$117,600	No
16/392	1	0	1	2	0	2	6.4	$250,880	$125,440	No
18/365	1	0	1	2	0	2	6.5	$262,800	$131,400	No
20/365	1	0	1	2	0	2	6.6	$292,000	$146,000	No
22/365	1	0	1	2	0	2	6.7	$321,200	$160,600	No

[1] Other = Receptors determined to not be impacted by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.

[2] Avg = Average noise reduction applies only to "impacted" receptors that would receive at least a five dB(A) benefit from the noise barrier

[3] Cost reasonableness not evaluated since minimum noise reduction requirements cannot be achieved at this noise barrier height/length combination.

4.1 Statement of Likelihood

Based on the noise analyses performed to date, there are no feasible and reasonable solutions available to mitigate the predicted traffic noise impacts at the residential receptors identified in Section 3.0. Therefore, noise barriers are not recommended for further evaluation as part of this project at this time. Should changes be made to the preferred alternative, additional traffic noise analysis may be warranted.

SECTION 5.0
Construction Noise and Vibration

Land uses within the project limits are identified in the FDOT listing of noise and vibration-sensitive sites (e.g., residences). Construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact. If additional sensitive land uses are developed adjacent to the roadway prior to construction, increased potential for noise or vibration impacts could result. It is anticipated that the application of the FDOT "Standard Specifications for Road and Bridge Construction"[5] will minimize or eliminate potential construction noise and vibration impacts. However, should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the Contractor and FDOT, will investigate additional methods of controlling these impacts.

SECTION 6.0
Community Coordination

Public involvement and community coordination have been a vital component of the PD&E Study to ensure residents and stakeholders can provide input to the project development process. Coordination with local agencies, officials and the general public will continue throughout the life of the project.

An in-person Alternatives Public Workshop was held on Tuesday June 11, 2024, from 5:00 pm to 7:00 pm at Indian River State College (Dixon Hendry Campus), 2229 NW 9th Avenue, Okeechobee, FL 34972. Display boards were available showing the two build alternatives under consideration at the time. A video presentation was also played on a continuous loop throughout the duration of the meeting. Members of the FDOT and project consultant team were available to answer questions and address concerns from meeting attendees. Several traffic noise concerns were raised during the meeting from residents of Kissimmee River Estates. No additional traffic noise-related concerns were received during the comment period that followed. All materials presented at the meeting are available at the project website linked below.

A Live Online Alternatives Public Workshop was held online on Tuesday June 18, 2024, from 6:00 pm to 7:00 pm. The online meeting consisted of a presentation with various project information that was also available via display boards provided at the in-person meeting the prior week. The virtual meeting concluded with a question-and-answer session. No traffic noise concerns were received during the virtual meeting, and the materials used in the meeting were posted to the project website located at: 450334-1 S.R. 70 from C.R. 721 S to C.R. 599/128th Avenue.

The public hearing for the project is tentatively scheduled for December 2025.

A copy of the final NSR will be circulated to the appropriate local planning/zoning officials for their use upon approval of the Environmental Document. Planning/zoning officials should reference **Table 6-1** and **Figures 6-1 and 6-2** to plan appropriate noise buffer zones.

TABLE 6-1

NOISE CONTOURS

S.R. 70 Roadway Segment	Activity Category (NAC)	Distance to Approach (within 1 dB(A)) of NAC for Activity Category (feet)[1]
C.R. 721 South to SW 144th Parkway (Figure 6-1)	A (57 dB(A))	350
	B/C (67 dB(A))	105
	D[2] (52 dB(A))	Inside Right-of-Way
	E (72 dB(A))	Inside Right-of-Way
SW 144th Parkway to 128th Avenue (Figure 6-2)	A (57 dB(A))	400
	B/C (67 dB(A))	115
	D[2] (52 dB(A))	Inside Right-of-Way
	E (72 dB(A))	Inside Right-of-Way

[1] Distances are measured from the outside edge of the nearest travel lane for the improved roadway, do not account for any reduction in noise levels that may occur from shielding and/or terrain, and should be used for planning purposes only.

[2] The distance to the interior impact criteria for Activity Category D is based on a conservative reduction factor of 20 dB(A) due to the building envelope that is applied to the predicted exterior traffic noise level.

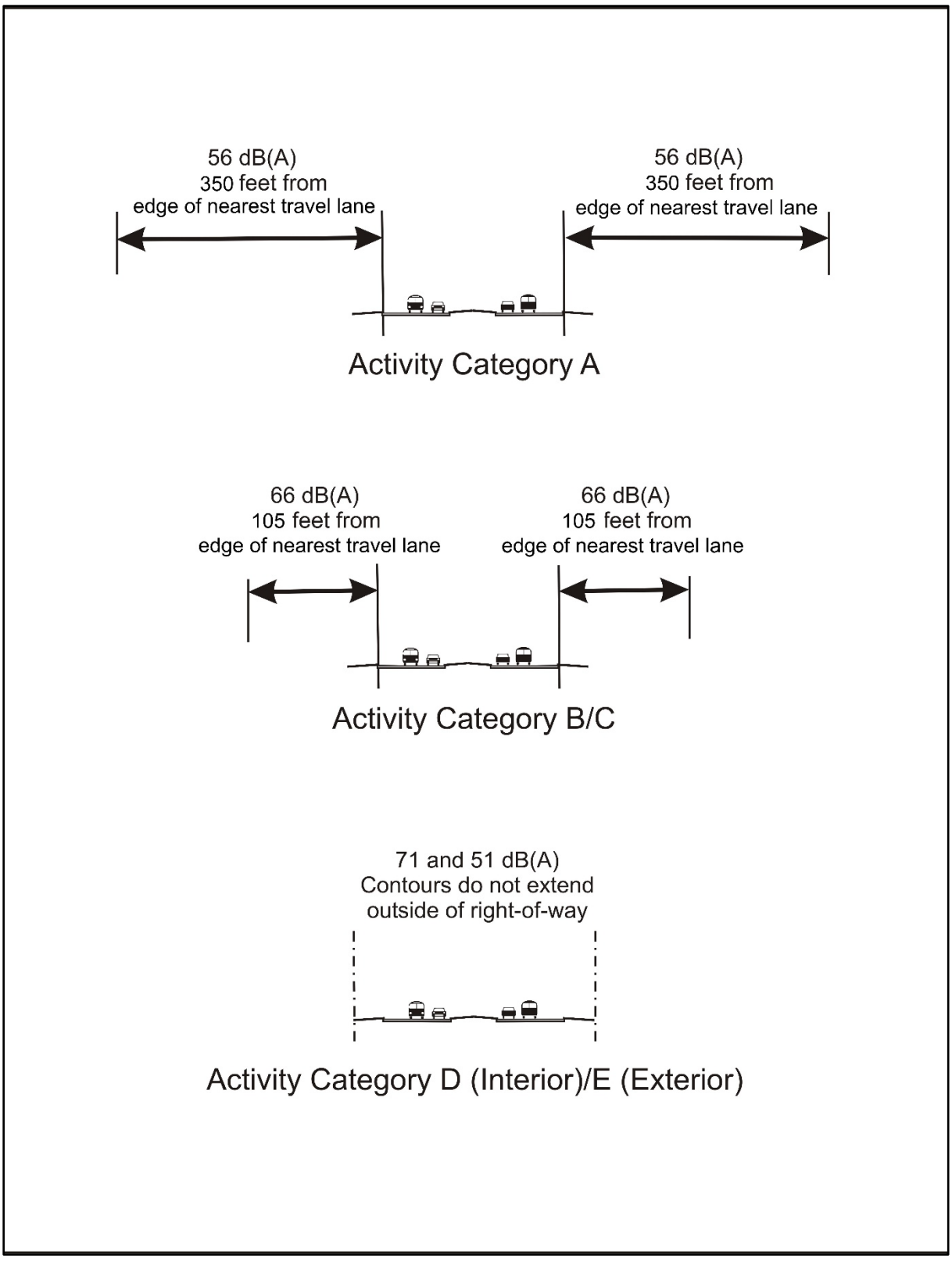


Figure 6-1: Noise Contours – C.R. 721 South to SW 144th Parkway

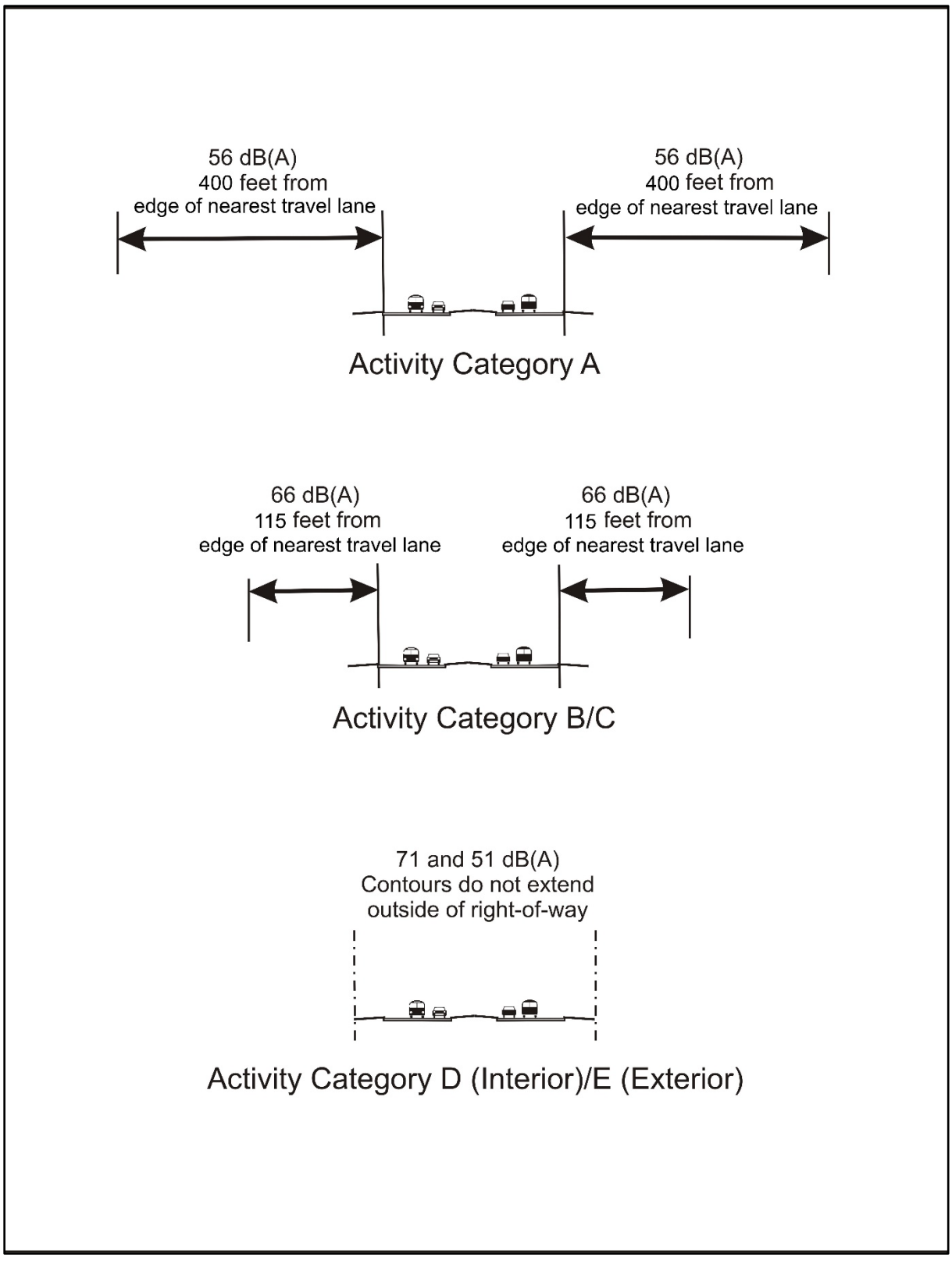


Figure 6-2: Noise Contours – SW 144th Parkway to 128th Avenue

SECTION 7.0
References

1. 23 Code of Federal Regulations, Part 772: "Procedures for Abatement of Highway Traffic Noise and Construction Noise." Federal Highway Administration; July 13, 2010.

2. Project Development and Environment Manual, Part 2, Chapter 18. Florida Department of Transportation. July 31, 2024.

3. Traffic Noise Modeling and Analysis Practitioners Handbook. Florida Department of Transportation. September 2025.

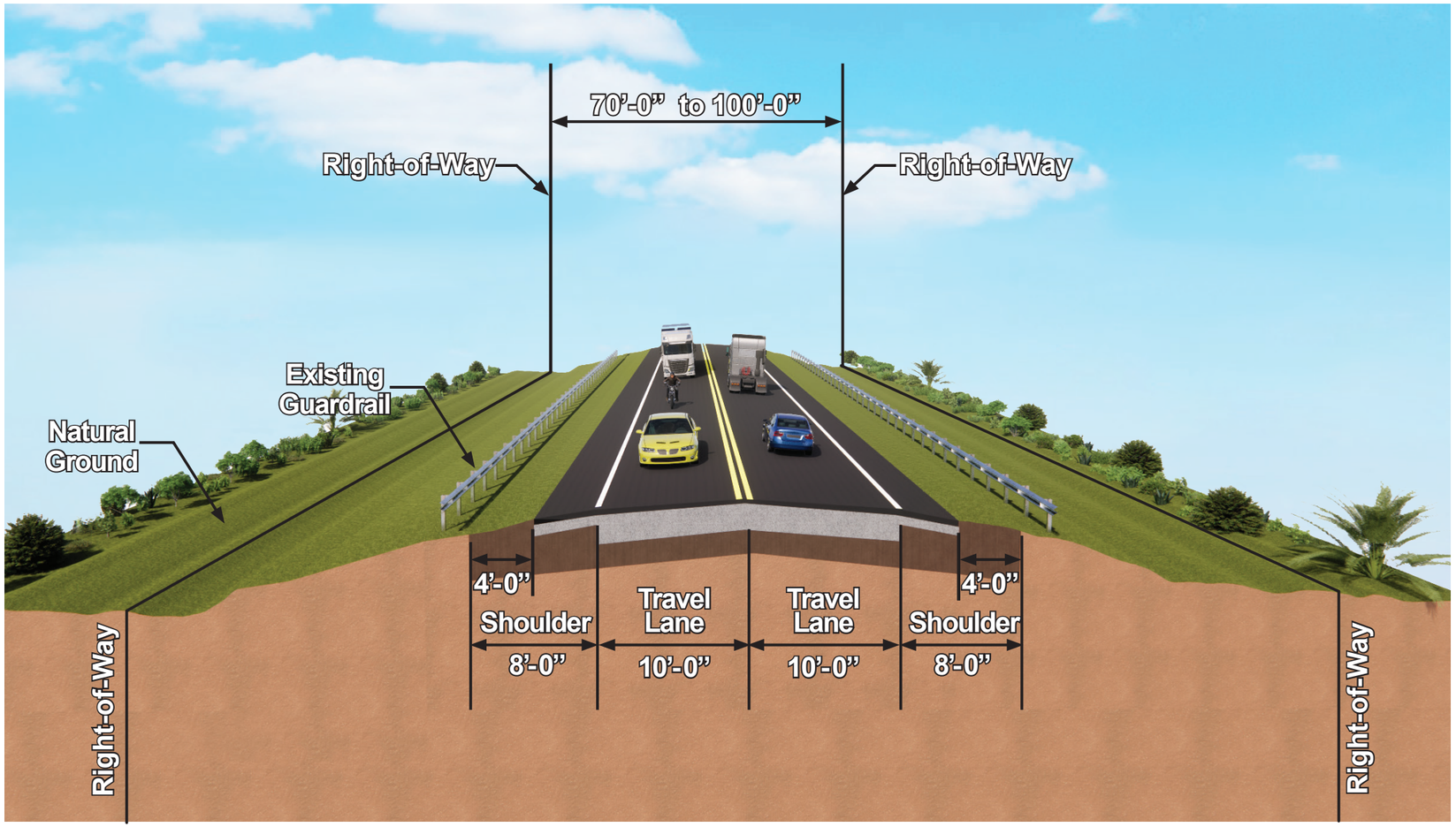
4. Noise Measurement Handbook. Federal Highway Administration. FHWA- HEP-18-065. June 2018.

5. Florida Department of Transportation Standard Specifications for Road and Bridge Construction. January 2025.

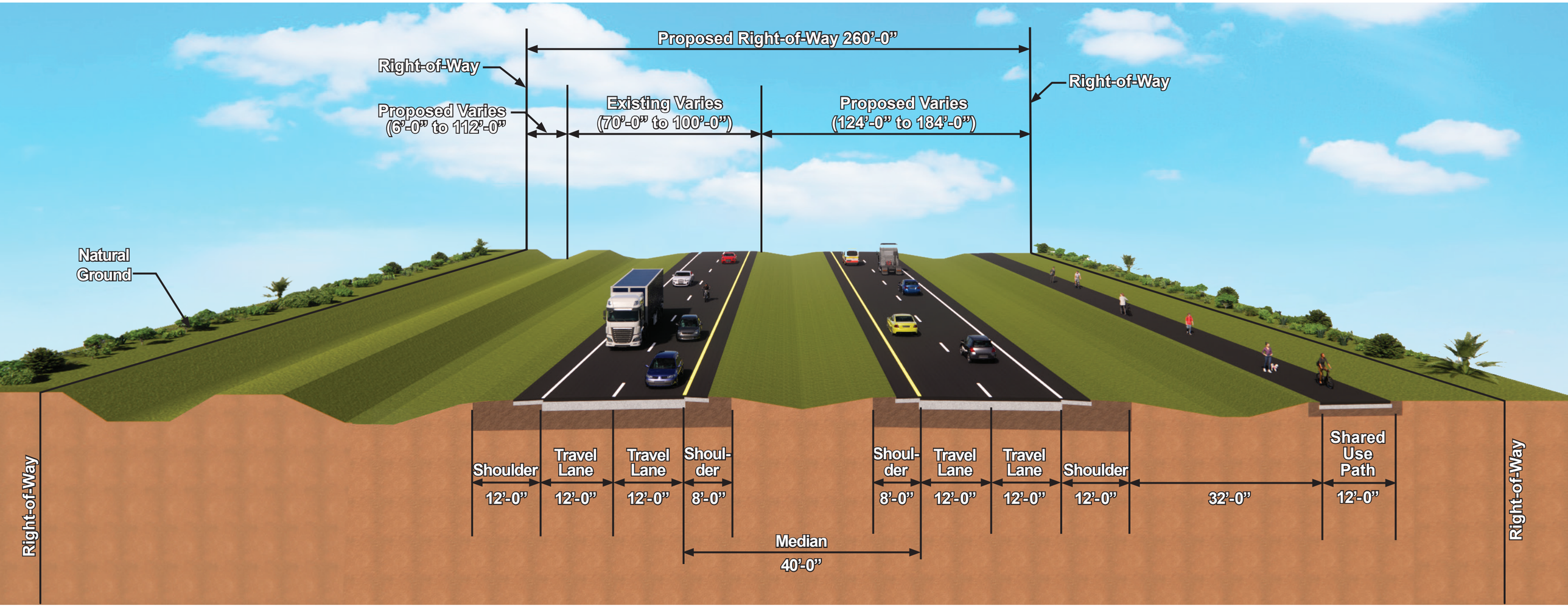
APPENDIX A

Typical Sections

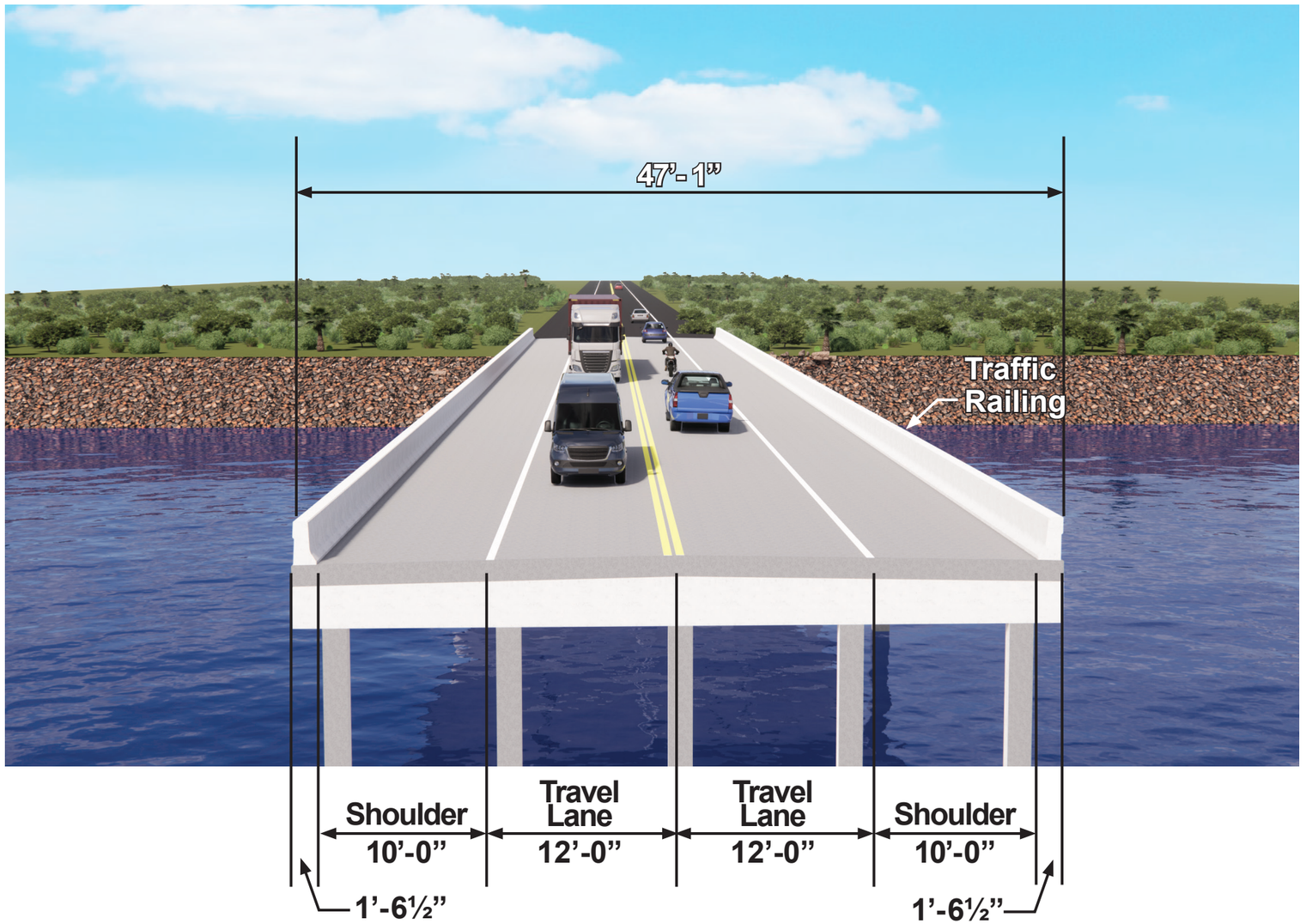
Existing SR 70



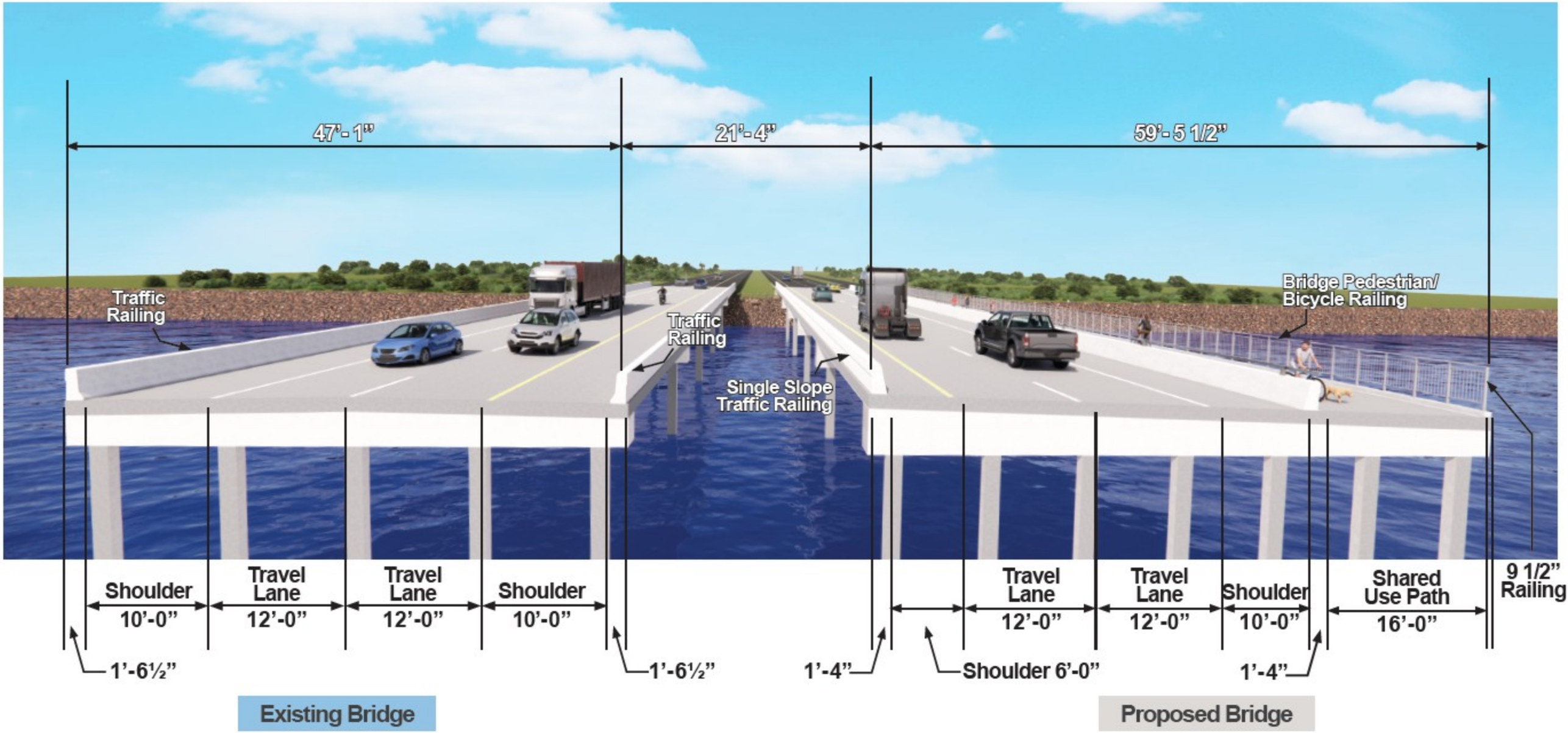
Proposed SR 70



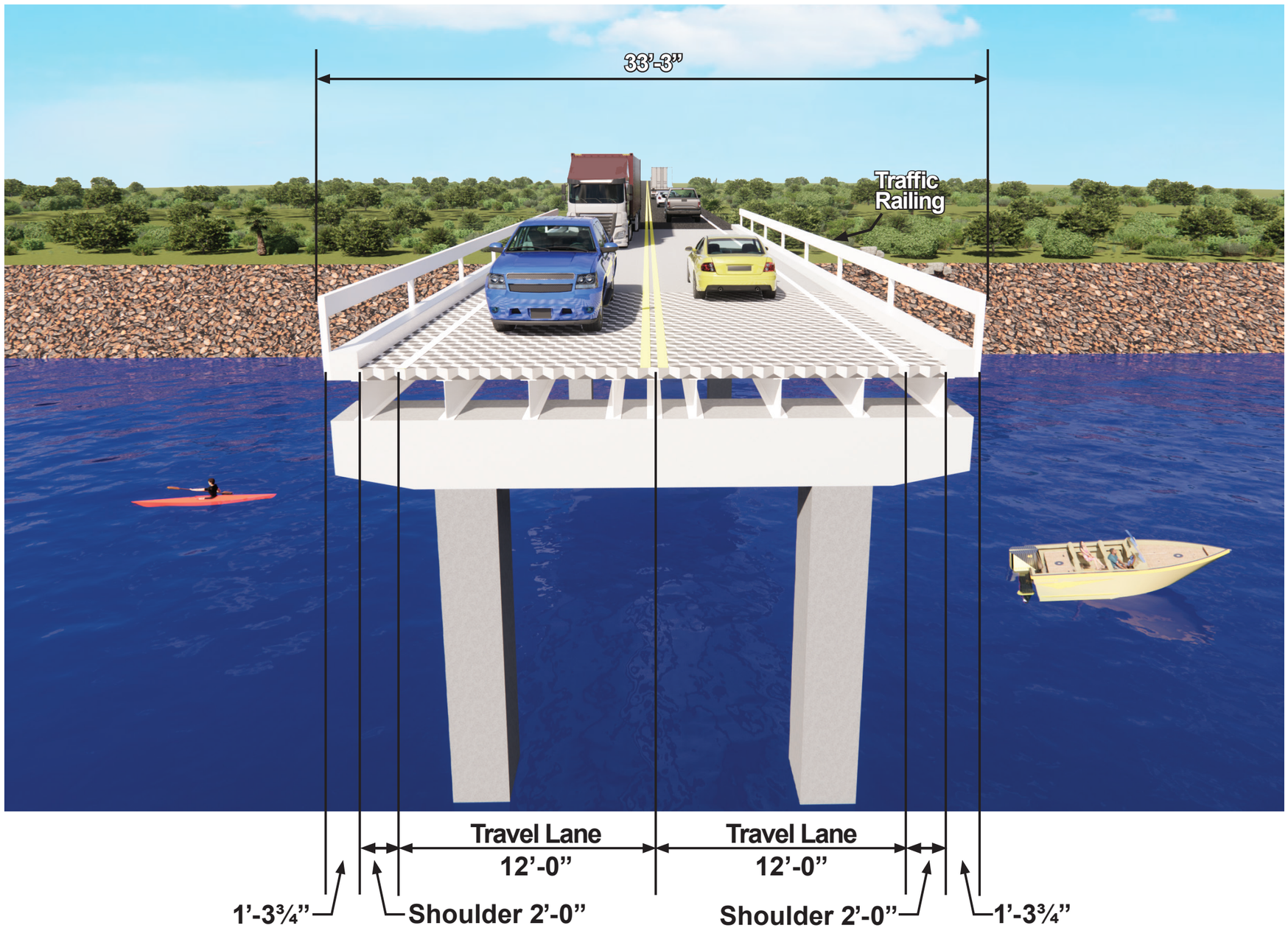
Existing SR 70 Over Slough Ditch (C-41A Canal)



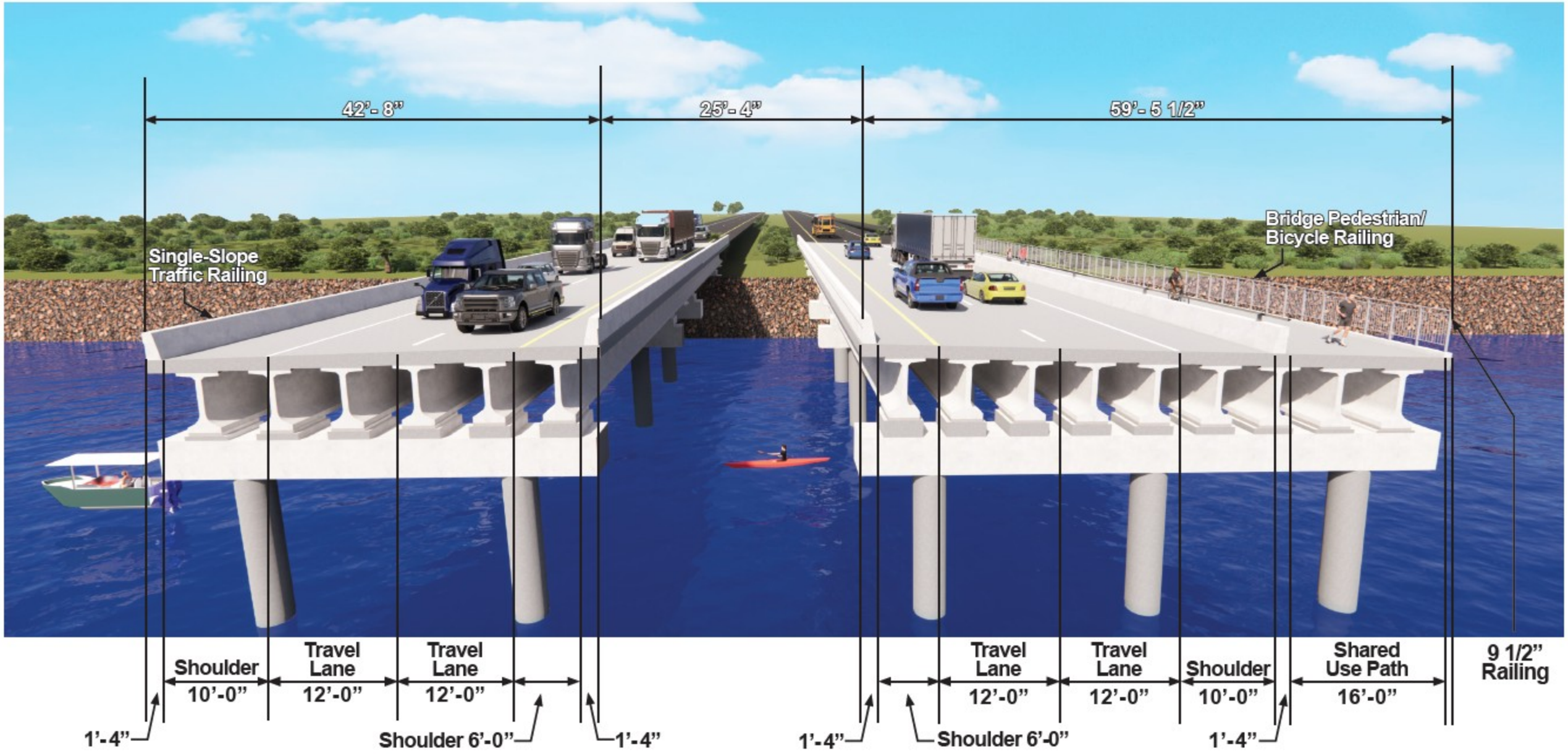
Proposed SR 70 Over Slough Ditch (C-41A Canal)



Existing SR 70 Over Kissimmee River



Proposed SR 70 Over Kissimmee River



APPENDIX B

Noise Study Traffic Data

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	NA
FPID Number(s):	450334-1-22-01
State/Federal Route No.:	SR 70
Road Name:	NA
Project Description:	SR 70 PD&E Study
Segment Description:	Between CR 721 South to CR 721 North
Section Number:	9060000
Mile Post To/From:	29.216 to 31.980

Existing Facility:		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2024**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**298**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

No Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**579**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**2390**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**689**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**65**	MC =	**0.30%**	% of Design Hour Volume

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

Prepared By: Michael Dorweiler (Print Name) Michael J. Dorweiler (Signature) Date: 6/7/2024

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

FDOT Reviewer: Brittany Nichols (Print Name) DocuSigned by: Brittany Nichols 3491A225DF874FE... Date: 06/11/2024 | 5:53 PM EDT

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	NA
FPID Number(s):	450334-1-22-01
State/Federal Route No.:	SR 70
Road Name:	NA
Project Description:	SR 70 PD&E Study
Segment Description:	Between CR 721 North to Boney Lane/Fulmer Terrace
Section Number:	9060000
Mile Post To/From:	31.980 to 33.493

Existing Facility:		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2024**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**298**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

No Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**579**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**2390**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**689**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**65**	MC =	**0.30%**	% of Design Hour Volume

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

Prepared By: Michael Dorweiler (Print Name) Michael J. Dorweiler (Signature) Date: 6/7/2024

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

FDOT Reviewer: Brittany Nichols (Print Name) DocuSigned by: Brittany Nichols 3491A225DF874FE... Date: 06/11/2024 | 5:53 PM EDT

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	NA
FPID Number(s):	450334-1-22-01
State/Federal Route No.:	SR 70
Road Name:	NA
Project Description:	SR 70 PD&E Study
Segment Description:	Between Boney Lane/Fulmer Terrace to Pine Ridge Road
Section Number:	9060000
Mile Post To/From:	33.493 to 34.005

Existing Facility:		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2024**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**298**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

No Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**579**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**2390**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**689**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**65**	MC =	**0.30%**	% of Design Hour Volume

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

Prepared By: Michael Dorweiler (Print Name) Michael J. Dorweiler (Signature) Date: 6/7/2024

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

FDOT Reviewer: Brittany Nichols (Print Name) DocuSigned by: Brittany Nichols 3491A225DF874FE... Date: 06/11/2024 | 5:53 PM EDT

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	NA
FPID Number(s):	450334-1-22-01
State/Federal Route No.:	SR 70
Road Name:	NA
Project Description:	SR 70 PD&E Study
Segment Description:	Between New Pine Ridge Road to NW 175th Terrace
Section Number:	9060000
Mile Post To/From:	34.005 to 34.632

Existing Facility:		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2024**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**298**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

No Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**579**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**2390**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**689**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**65**	MC =	**0.30%**	% of Design Hour Volume

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

Prepared By: Michael Dorweiler (Print Name) — Michael J. Dorweiler (Signature) — Date: 6/7/2024

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

FDOT Reviewer: Brittany Nichols (Print Name) — DocuSigned by: Brittany Nichols 3491A225DF874FE... — Date: 06/11/2024 | 5:53 PM EDT

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	NA
FPID Number(s):	450334-1-22-01
State/Federal Route No.:	SR 70
Road Name:	NA
Project Description:	SR 70 PD&E Study
Segment Description:	Between NW 175th Ter to Jordan Ter/SW Rucks Dairy Rd
Section Number:	9060000
Mile Post To/From:	34.632 to 35.010

Existing Facility:		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2024**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**298**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

No Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**579**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**2390**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**689**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**65**	MC =	**0.30%**	% of Design Hour Volume

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

Prepared By: Michael Dorweiler (Print Name) Michael J. Dorweiler (Signature) Date: 6/7/2024

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

FDOT Reviewer: Brittany Nichols (Print Name) DocuSigned by: Brittany Nichols 3491A225DF874FE... Date: 06/11/2024 | 5:53 PM EDT

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	NA
FPID Number(s):	450334-1-22-01
State/Federal Route No.:	SR 70
Road Name:	NA
Project Description:	SR 70 PD&E Study
Segment Description:	Between Jordan Ter/SW Rucks Dairy Rd to NW Riverside Rd
Section Number:	9060000
Mile Post To/From:	35.010 to 35.878

Existing Facility:		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2024**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**298**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

No Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**579**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**2390**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**689**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**65**	MC =	**0.30%**	% of Design Hour Volume

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

Prepared By: Michael Dorweiler (Print Name) Michael J. Dorweiler (Signature) Date: 6/7/2024

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

FDOT Reviewer: Brittany Nichols (Print Name) DocuSigned by: Brittany Nichols 3491A225DF874FE... Date: 06/11/2024 | 5:53 PM EDT

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	NA
FPID Number(s):	450334-1-22-01
State/Federal Route No.:	SR 70
Road Name:	NA
Project Description:	SR 70 PD&E Study
Segment Description:	Between NW RIverside Road to Shellcracker Loop
Section Number:	9060000
Mile Post To/From:	35.878 to 35.951

Existing Facility:		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2024**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**298**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

No Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**579**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**2390**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**689**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**65**	MC =	**0.30%**	% of Design Hour Volume

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

Prepared By: Michael Dorweiler (Print Name) Michael J. Dorweiler (Signature) Date: 6/7/2024

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

FDOT Reviewer: Brittany Nichols (Print Name) DocuSigned by: Brittany Nichols 3491A225DF874FE... Date: 06/11/2024 | 5:53 PM EDT

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	NA
FPID Number(s):	450334-1-22-01
State/Federal Route No.:	SR 70
Road Name:	NA
Project Description:	SR 70 PD&E Study
Segment Description:	Between Shellcracker Loop to Bream Curve
Section Number:	9060000
Mile Post To/From:	35.951 to 35.981

Existing Facility:		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2024**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**298**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

No Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**579**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**2390**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**689**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**65**	MC =	**0.30%**	% of Design Hour Volume

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

Prepared By: Michael Dorweiler (Print Name) Michael J. Dorweiler (Signature) Date: 6/7/2024

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

FDOT Reviewer: Brittany Nichols (Print Name) DocuSigned by: Brittany Nichols 3491A225DF874FE... Date: 06/11/2024 | 5:53 PM EDT

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	NA
FPID Number(s):	450334-1-22-01
State/Federal Route No.:	SR 70
Road Name:	NA
Project Description:	SR 70 PD&E Study
Segment Description:	Between Bream Curve to SW 144th Parkway
Section Number:	91070000
Mile Post To/From:	0.000 to 0.341

Existing Facility:		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2024**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**298**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

No Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**579**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**2390**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**689**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**65**	MC =	**0.30%**	% of Design Hour Volume

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

Prepared By: Michael Dorweiler (Print Name) Michael J. Dorweiler (Signature) Date: 6/7/2024

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

FDOT Reviewer: Brittany Nichols (Print Name) DocuSigned by: Brittany Nichols 3491A225DF874FE... Date: 06/11/2024 | 5:53 PM EDT

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	NA
FPID Number(s):	450334-1-22-01
State/Federal Route No.:	SR 70
Road Name:	NA
Project Description:	SR 70 PD&E Study
Segment Description:	Between SW 144th Parkway to NW 141st Avenue
Section Number:	91070000
Mile Post To/From:	0.341 to 0.528

Existing Facility:		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2024**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**336**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

No Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**634**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**2390**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**799**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**65**	MC =	**0.30%**	% of Design Hour Volume

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

Prepared By: Michael Dorweiler (Print Name) Michael J. Dorweiler (Signature) Date: 6/7/2024

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

FDOT Reviewer: Brittany Nichols (Print Name) DocuSigned by: Brittany Nichols 3491A225DF874FE... Date: 06/11/2024 | 5:53 PM EDT

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	NA
FPID Number(s):	450334-1-22-01
State/Federal Route No.:	SR 70
Road Name:	NA
Project Description:	SR 70 PD&E Study
Segment Description:	Between NW 141st Avenue to CR 599/NW 128th Avenue
Section Number:	91070000
Mile Post To/From:	0.528 to 1.423

Existing Facility:		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2024**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**336**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

No Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**430**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**634**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**60**	MC =	**0.30%**	% of Design Hour Volume

Build Alternative (Design Year):		D =	**58.00%**	%
		T24 =	**25.00%**	% of 24 Hour Volume
Year:	**2052**	Tpeak =	**12.50%**	% of Design Hour Volume
		MT =	**1.50%**	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	**2390**	HT =	**10.50%**	% of Design Hour Volume
Demand Peak Hour Volume:	**799**	B =	**0.50%**	% of Design Hour Volume
Posted Speed:	**65**	MC =	**0.30%**	% of Design Hour Volume

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

Prepared By: Michael Dorweiler (Print Name) Michael J. Dorweiler (Signature) Date: 6/7/2024

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

FDOT Reviewer: Brittany Nichols (Print Name) DocuSigned by: Brittany Nichols 3491A225DF874FE... Date: 06/11/2024 | 5:53 PM EDT

APPENDIX C

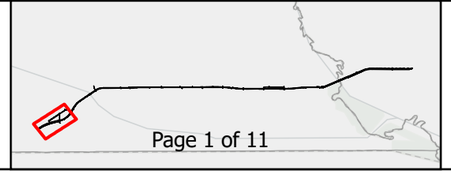
Project Aerials

Evaluated Receptor, Not Impacted
Evaluated and Impacted Receptor
Validation Monitoring Site
Preferred Alternative 1
Proposed ROW
Existing ROW
Preferred Pond Location

BACKWATER AVE
BASELINE ST
W KISSIMMEE ST
BANK ST
70
721
1
Begin Project

U:\GIS\GIS\Projects\2022\xx\D20220909\07_00_SR70_PDE_CR721_to_CR599\03_Project\SR70_PDE_CR721_to_CR599\03_Noise\SR70_PDE_CR721_to_CR599\03_Noise.aprx

All data within this map are supplied as is, without warranty. This product has not been prepared for legal, engineering, or survey purposes. Users of this information should review or consult the primary data sources to ascertain the usability of the information.



Appendix C - Project Aerials

FPID #: 450334-1-22-01
State Road (S.R.) 70 PD&E Study from County Road (C.R.) 721 South to C.R. 599/128th Avenue
Highlands and Okeechobee Counties, Florida

Miles
0 0.5 1

Data Source: ESA, ESRI

NORTH

Evaluated Receptor, Not Impacted
Evaluated and Impacted Receptor
Validation Monitoring Site
Preferred Alternative 1
Proposed ROW
Existing ROW
Preferred Pond Location

70

1

C-41A Canal

U:\GIS\GIS\Projects\2022\xxx\D20220909\07_00_SR70_PDE_CR721_to_CR599\03_Project\SR70_PDE_CR721_to_CR59903_Notes\SR70_PDE_CR721_to_CR59903_Noise.aprx

All data within this map are supplied as is, without warranty. This product has not been prepared for legal, engineering, or survey purposes. Users of this information should review or consult the primary data sources to ascertain the usability of the information.

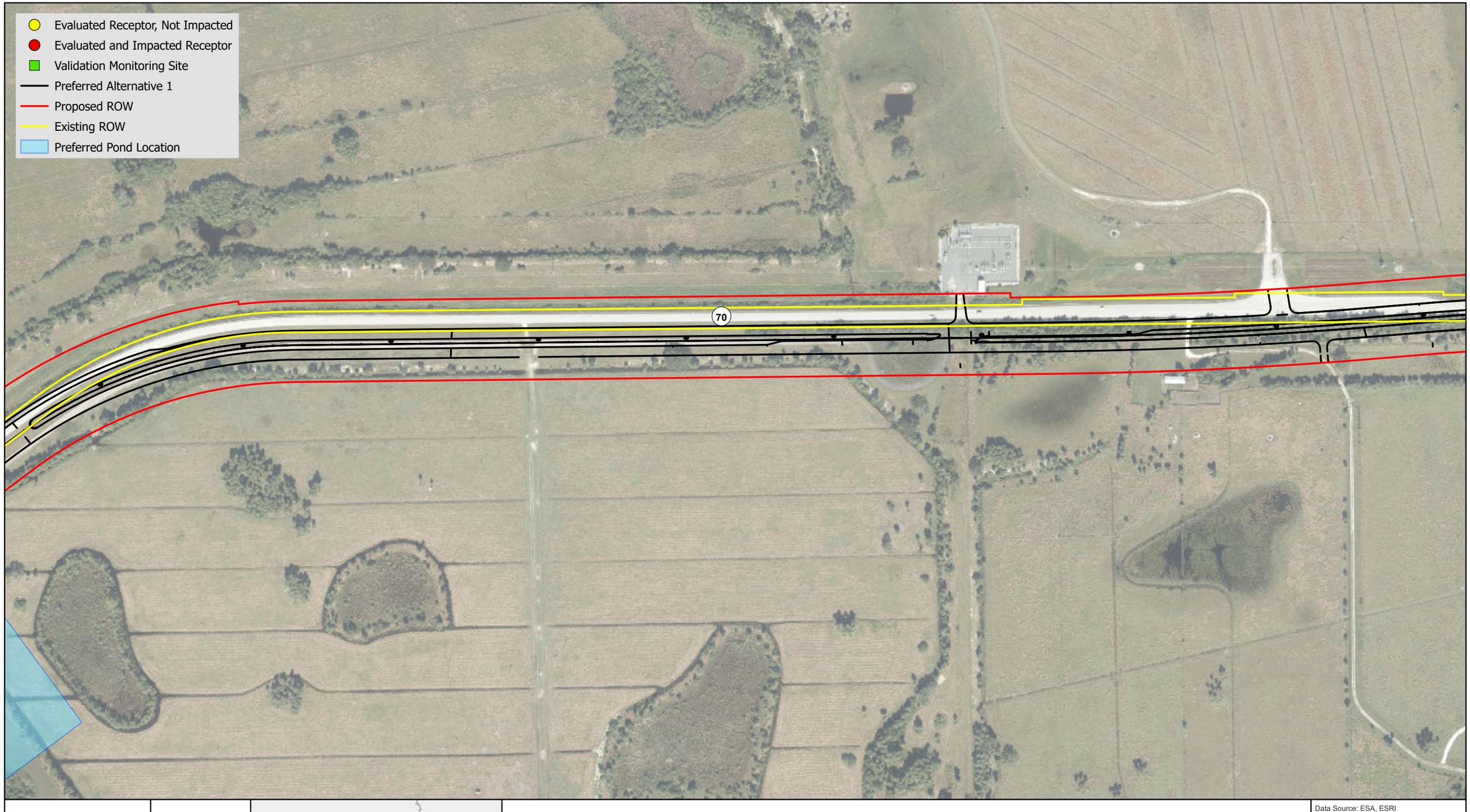
Appendix C - Project Aerials

FPID #: 450334-1-22-01
State Road (S.R.) 70 PD&E Study from County Road (C.R.) 721 South to C.R. 599/128th Avenue
Highlands and Okeechobee Counties, Florida

Miles
0 0.5 1

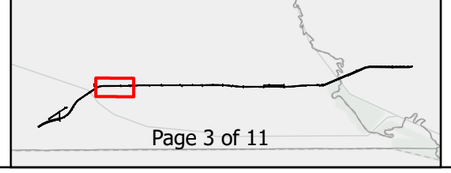
Data Source: ESA, ESRI

NORTH



U:\GIS\GIS\Projects\2022\xxx\0202209907_00_SR70_PDE_CR721_to_CR59903_Project\SR70_PDE_CR721_to_CR59903_Notes\SR70_PDE_CR721_to_CR59903_Noise.aprx

All data within this map are supplied as is, without warranty. This product has not been prepared for legal, engineering, or survey purposes. Users of this information should review or consult the primary data sources to ascertain the usability of the information.



Appendix C - Project Aerials

FPID #: 450334-1-22-01
State Road (S.R.) 70 PD&E Study from County Road (C.R.) 721 South to C.R. 599/128th Avenue
Highlands and Okeechobee Counties, Florida

Miles
0 0.5 1

Data Source: ESA, ESRI

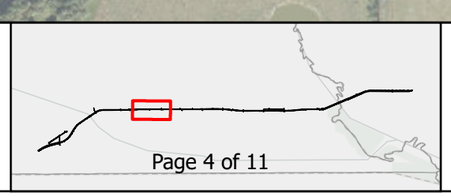
NORTH

Evaluated Receptor, Not Impacted
Evaluated and Impacted Receptor
Validation Monitoring Site
Preferred Alternative 1
Proposed ROW
Existing ROW
Preferred Pond Location

70
721
2

U:\GIS\GIS\Projects\2022\ext\20220209\07_00_SR70_PDE_CR721_to_CR599\03_Project\SR70_PDE_CR721_to_CR599\03_Noise\SR70_PDE_CR721_to_CR599_Noise.aprx

All data within this map are supplied as is, without warranty. This product has not been prepared for legal, engineering, or survey purposes. Users of this information should review or consult the primary data sources to ascertain the usability of the information.



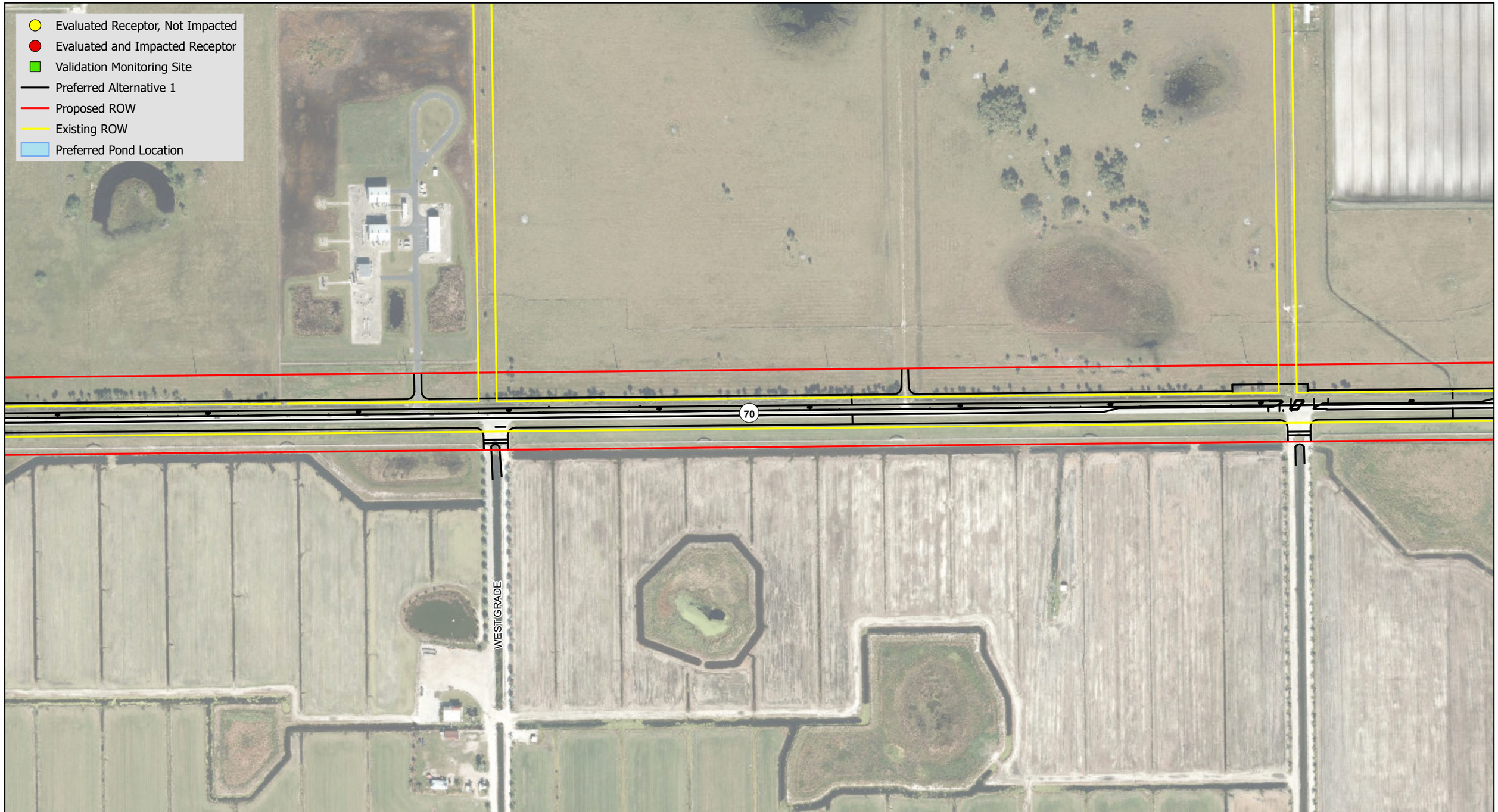
Appendix C - Project Aerials

FPID #: 450334-1-22-01
State Road (S.R.) 70 PD&E Study from County Road (C.R.) 721 South to C.R. 599/128th Avenue
Highlands and Okeechobee Counties, Florida

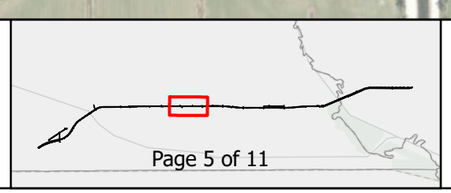
Miles
0 0.5 1

Data Source: ESA, ESRI

NORTH



U:\GIS\GIS\Projects\2022\xx\D2022200907_00_SR70_PDE_CR721_to_CR59903_Project\SR70_PDE_CR721_to_CR59903_Noise\SR70_PDE_CR721_to_CR59903_Noise.aprx



Appendix C - Project Aerials

FPID #: 450334-1-22-01
State Road (S.R.) 70 PD&E Study from County Road (C.R.) 721 South to C.R. 599/128th Avenue
Highlands and Okeechobee Counties, Florida

Miles
0 0.5 1

Data Source: ESA, ESRI

NORTH

Evaluated Receptor, Not Impacted
Evaluated and Impacted Receptor
Validation Monitoring Site
Preferred Alternative 1
Proposed ROW
Existing ROW
Preferred Pond Location

NW BONEY LN
NW NEW PINE RIDGE RD
FULMAR TER
70
5
3
4

U:\GIS\GIS\Projects\2022\wo\D20220907_00_SR70_PDE_CR721_to_CR599\03_Project\SR70_PDE_CR721_to_CR59903_Noise\SR70_PDE_CR721_to_CR59903_Noise.aprx

Appendix C - Project Aerials

FPID #: 450334-1-22-01
State Road (S.R.) 70 PD&E Study from County Road (C.R.) 721 South to C.R. 599/128th Avenue
Highlands and Okeechobee Counties, Florida

Miles
0 0.5 1

Data Source: ESA, ESRI

NORTH

Evaluated Receptor, Not Impacted
Evaluated and Impacted Receptor
Validation Monitoring Site
Preferred Alternative 1
Proposed ROW
Existing ROW
Preferred Pond Location

Kissimmee River Estates
BROADLAND LN
KERSH TER
KEMPER TER
KELTON TER
JULIUS TER
BRINKERHOFF LN
BRIDLEWOOD DR
70

Appendix C - Project Aerials

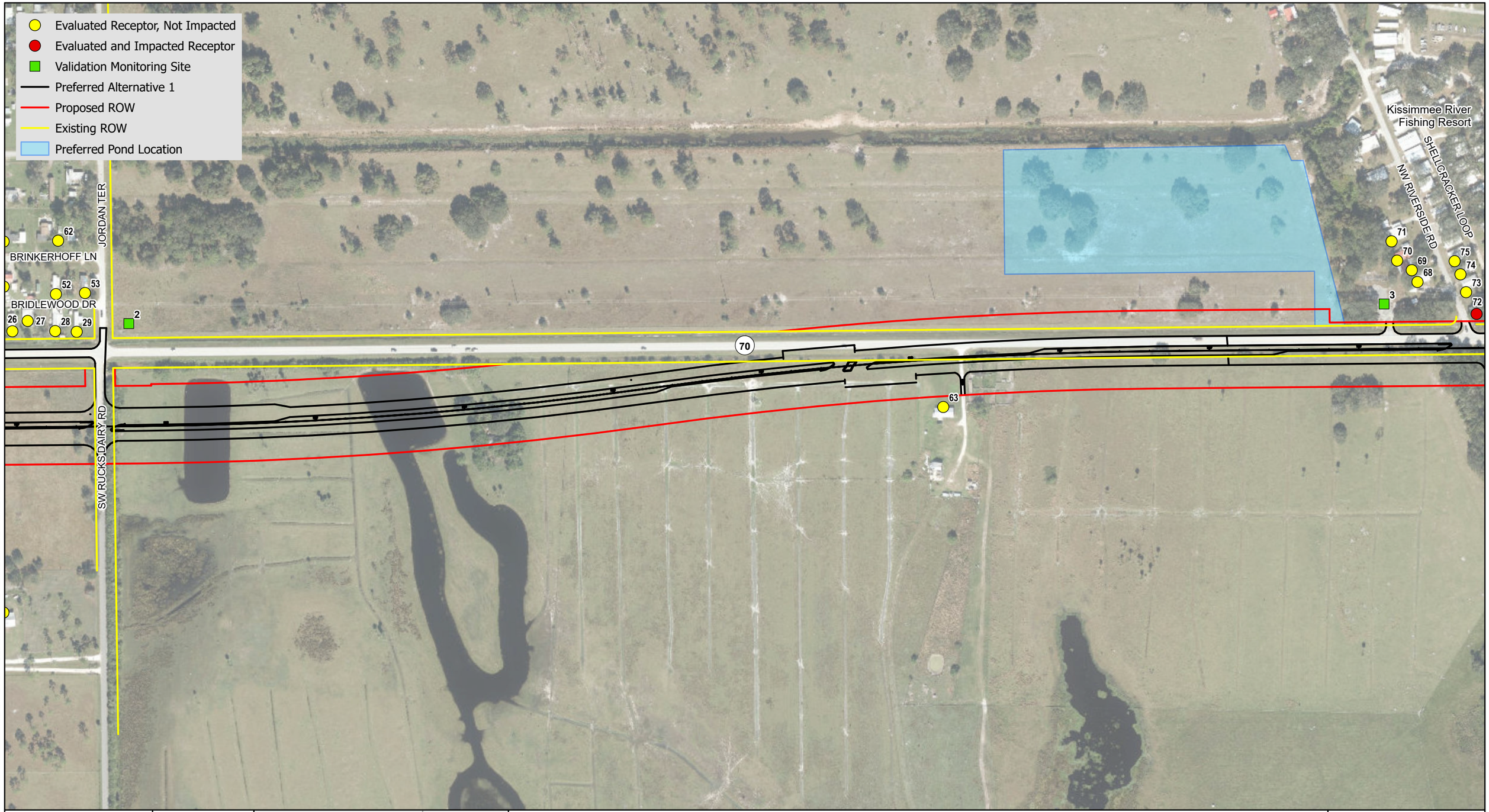
FPID #: 450334-1-22-01
State Road (S.R.) 70 PD&E Study from County Road (C.R.) 721 South to C.R. 599/128th Avenue
Highlands and Okeechobee Counties, Florida

Miles
0 0.5 1

Data Source: ESA, ESRI

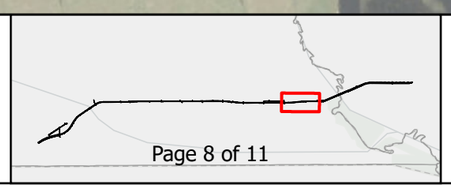
NORTH

U:\GIS\GIS\Projects\2022\xxx\D2022020907_00_SR70_PDE_CR721_to_CR59903_Project\SR70_PDE_CR721_to_CR59903_Noise\SR70_PDE_CR721_to_CR59903_Noise.aprx



U:\GIS\GIS\Projects\2022\xx\D2022200907_00_SR70_PDE_CR721 to_CR59903_Project\SR70_PDE_CR721 to_CR59903_Noise\SR70_PDE_CR721 to_CR59903_Noise.aprx

All data within this map are supplied as is, without warranty. This product has not been prepared for legal, engineering, or survey purposes. Users of this information should review or consult the primary data sources to ascertain the usability of the information.



Appendix C - Project Aerials

FPID #: 450334-1-22-01
State Road (S.R.) 70 PD&E Study from County Road (C.R.) 721 South to C.R. 599/128th Avenue
Highlands and Okeechobee Counties, Florida

Miles
0 0.5 1

Data Source: ESA, ESRI

NORTH

Evaluated Receptor, Not Impacted
Evaluated and Impacted Receptor
Validation Monitoring Site
Preferred Alternative 1
Proposed ROW
Existing ROW
Preferred Pond Location

Kissimmee River Fishing Resort
River Bluff RV& Fishing Resort
NW RIVERSIDE RD
SHELL
SHELL CRACKER TRL
CRANK BAIT AVE
LARGEMOUTH AVE
SW 144TH PKWY
Kissimmee River
70

64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99

U:\GIS\GISProjects\2022xx\D2022009907_00_SR70_PDE_CR721 to_CR599\03_Project\SR70_PDE_CR721 to_CR59903_Noise\SR70_PDE_CR721 to_CR59903_Noise.aprx

All data within this map are supplied as is, without warranty. This product has not been prepared for legal, engineering, or survey purposes. Users of this information should review or consult the primary data sources to ascertain the usability of the information.

Appendix C - Project Aerials

FPID #: 450334-1-22-01
State Road (S.R.) 70 PD&E Study from County Road (C.R.) 721 South to C.R. 599/128th Avenue
Highlands and Okeechobee Counties, Florida

Miles
0 0.5 1

Data Source: ESA, ESRI

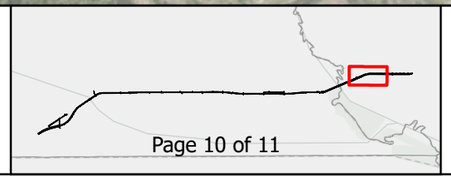
NORTH

Evaluated Receptor, Not Impacted
Evaluated and Impacted Receptor
Validation Monitoring Site
Preferred Alternative 1
Proposed ROW
Existing ROW
Preferred Pond Location

100
101
70
NW 141ST AVE
SW 144TH PKWY

U:\GIS\GIS\Projects\2022\xxx\D2022090907_00_SR70_PDE_CR721_to_CR599\03_Project\SR70_PDE_CR721_to_CR59903_Noise\SR70_PDE_CR721_to_CR59903_Noise.aprx

All data within this map are supplied as is, without warranty. This product has not been prepared for legal, engineering, or survey purposes. Users of this information should review or consult the primary data sources to ascertain the usability of the information.



Appendix C - Project Aerials

FPID #: 450334-1-22-01
State Road (S.R.) 70 PD&E Study from County Road (C.R.) 721 South to C.R. 599/128th Avenue
Highlands and Okeechobee Counties, Florida

Miles
0 0.5 1

Data Source: ESA, ESRI

NORTH

Evaluated Receptor, Not Impacted
Evaluated and Impacted Receptor
Validation Monitoring Site
Preferred Alternative 1
Proposed ROW
Existing ROW
Preferred Pond Location

599

T

70

SR 70 W

SW 128TH AVE

End Project

102

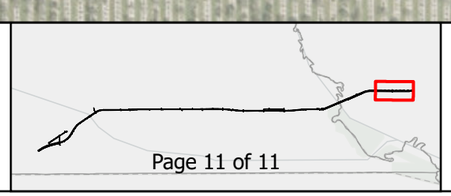
103

104

105

U:\GIS\GIS\Projects\2022\ex\D20220907_00_SR70_PDE_CR721_to_CR599\03_Project\SR70_PDE_CR721_to_CR69903_Noise\SR70_PDE_CR721_to_CR69903_Noise.aprx

All data within this map are supplied as is, without warranty. This product has not been prepared for legal, engineering, or survey purposes. Users of this information should review or consult the primary data sources to ascertain the usability of the information.



Appendix C - Project Aerials

FPID #: 450334-1-22-01
State Road (S.R.) 70 PD&E Study from County Road (C.R.) 721 South to C.R. 599/128th Avenue
Highlands and Okeechobee Counties, Florida

0 0.5 1 Miles

Data Source: ESA, ESRI

NORTH

APPENDIX D

Validation Measurement Documentation

Noise Measurement Data Sheet

Date: August 20, 2025 **Measurement Taken By:** MSM

Project: 450334-1: SR 70 PD&E from CR 721 to 128th Avenue, Highlands & Okeechobee Counties

Site ID: 1 - South side of SR 70, west of C-41A Canal

Weather Conditions

Cloud Cover: Clear **Temperature:** **Start:** 82 **End:** 85 **(°F)**

Wind Direction: **Start:** North West **End:** North West

Wind Speed (Start): Min: 3 **Max:** 5 **Average:** 2 **(mph)**

Wind Speed (End): Min: 3 **Max:** 8 **Average:** 3 **(mph)**

Humidity: **Start:** 70 **End:** 60

Equipment Data

Sound Level Meter: Larson Davis 720 SLM **Serial Number:** 410

Date of Last Traceable Calibration: 12/16/2024

Calibration: **Start:** 114.0 **End:** 114.0

Battery: **Start:** 73 **End:** 71

Weighting Scale: A **Response:** Slow

Calibrator: Larson Davis CAL 150 **Serial Number:** 2282

Results in dB(A)

Leq (Run 1 / Run 2 / Run 3): 65.9 / 66.8 / 64.3

Major Noise Sources: SR 70 traffic

Background Noise Sources: Insects, GA overflight at 9:48

Other Notes/Observations:

Observed Traffic Data: Site 1

Run 1 9:13-9:23am

	Eastbound SR 70		Westbound SR 70	
Vehicle Types	**Volume**	**Speed (mph)**	**Volume**	**Speed (mph)**
Auto	25	62	18	62
Medium Truck	4	59	0	-
Heavy Truck	5	57	5	57
Bus	0	-	0	-
Motorcycle	0	-	0	-

Run 2 9:26-9:36am

	Eastbound SR 70		Westbound SR 70	
Vehicle Types	**Volume**	**Speed (mph)**	**Volume**	**Speed (mph)**
Auto	18	64	20	64
Medium Truck	6	60	1	60
Heavy Truck	8	61	8	61
Bus	0	-	0	-
Motorcycle	0	-	0	-

Run 3 9:39-9:49am

	Eastbound SR 70		Westbound SR 70	
Vehicle Types	**Volume**	**Speed (mph)**	**Volume**	**Speed (mph)**
Auto	22	61	13	61
Medium Truck	4	59	1	59
Heavy Truck	3	59	7	59
Bus	0	-	0	-
Motorcycle	0	-	1	60

Site 1 Photos

Noise Measurement Data Sheet

Date: August 20, 2025 **Measurement Taken By:** MSM

Project: 450334-1: SR 70 PD&E from CR 721 to 128th Avenue, Highlands & Okeechobee Counties

Site ID: 2 - NE Corner of SR 70/Jordan Terrace Intersection

Weather Conditions

Cloud Cover: Partly Cloudy **Temperature:** **Start:** 85 **End:** 86 **(°F)**

Wind Direction: **Start:** North West **End:** North West

Wind Speed (Start): Min: 2 **Max:** 7 **Average:** 3 **(mph)**

Wind Speed (End): Min: 1 **Max:** 8 **Average:** 3 **(mph)**

Humidity: **Start:** 63 **End:** 59

Equipment Data

Sound Level Meter: Larson Davis 720 SLM **Serial Number:** 410

Date of Last Traceable Calibration: 12/16/2024

Calibration: **Start:** 114.0 **End:** 114.0

Battery: **Start:** 72 **End:** 70

Weighting Scale: A **Response:** Slow

Calibrator: Larson Davis CAL 150 **Serial Number:** 2282

Results in dB(A)

Leq (Run 1 / Run 2 / Run 3): 64.0 / 66.0 / 62.8

Major Noise Sources: SR 70 traffic

Background Noise Sources: Insects, GA overflight at 10:23, loud trailer brakes at 10:30

Other Notes/Observations:

Observed Traffic Data: Site 2

Run 1 10:15-10:25am

	Eastbound SR 70		Westbound SR 70	
Vehicle Types	**Volume**	**Speed (mph)**	**Volume**	**Speed (mph)**
Auto	30	63	23	63
Medium Truck	2	65	2	65
Heavy Truck	4	64	2	64
Bus	0	-	0	-
Motorcycle	0	-	1	56

Run 2 10:27-10:37am

	Eastbound SR 70		Westbound SR 70	
Vehicle Types	**Volume**	**Speed (mph)**	**Volume**	**Speed (mph)**
Auto	19	62	25	62
Medium Truck	2	65	4	65
Heavy Truck	7	60	10	60
Bus	0	-	0	-
Motorcycle	0	-	0	-

Run 3 10:39-10:49am

	Eastbound SR 70		Westbound SR 70	
Vehicle Types	**Volume**	**Speed (mph)**	**Volume**	**Speed (mph)**
Auto	24	64	15	64
Medium Truck	1	63	1	63
Heavy Truck	4	63	2	63
Bus	0	-	0	-
Motorcycle	0	-	0	-

Site 2 Photos

Noise Measurement Data Sheet

Date: August 20, 2025 **Measurement Taken By:** MSM

Project: 450334-1: SR 70 PD&E from CR 721 to 128th Avenue, Highlands & Okeechobee Counties

Site ID: 3 - North side of SR 70, West of Kissimmee River Fishing Resort

Weather Conditions

Cloud Cover: Partly Cloudy **Temperature:** **Start:** 86 **End:** 88 **(°F)**

Wind Direction: **Start:** North West **End:** North West

Wind Speed (Start): Min: 1 **Max:** 3 **Average:** 2 **(mph)**

Wind Speed (End): Min: 1 **Max:** 5 **Average:** 3 **(mph)**

Humidity: **Start:** 57 **End:** 53

Equipment Data

Sound Level Meter: Larson Davis 720 SLM **Serial Number:** 410

Date of Last Traceable Calibration: 12/16/2024

Calibration: **Start:** 114.0 **End:** 114.0

Battery: **Start:** 73 **End:** 69

Weighting Scale: A **Response:** Slow

Calibrator: Larson Davis CAL 150 **Serial Number:** 2282

Results in dB(A)

Leq (Run 1 / Run 2 / Run 3): 64.8 / 64.8 / 65.5

Major Noise Sources: SR 70 traffic

Background Noise Sources: Insects, GA overflights at 11:19, 11:31

Other Notes/Observations:

Observed Traffic Data: Site 3

Run 1 11:12-11:22am

	Eastbound SR 70		Westbound SR 70	
Vehicle Types	**Volume**	**Speed (mph)**	**Volume**	**Speed (mph)**
Auto	13	62	31	62
Medium Truck	6	61	6	61
Heavy Truck	4	58	5	58
Bus	0	-	0	-
Motorcycle	0	-	0	-

Run 2 11:24-11:34am

	Eastbound SR 70		Westbound SR 70	
Vehicle Types	**Volume**	**Speed (mph)**	**Volume**	**Speed (mph)**
Auto	23	58	25	58
Medium Truck	4	63	6	63
Heavy Truck	9	57	5	57
Bus	0	-	1	59
Motorcycle	0	-	0	-

Run 3 11:36-11:46am

	Eastbound SR 70		Westbound SR 70	
Vehicle Types	**Volume**	**Speed (mph)**	**Volume**	**Speed (mph)**
Auto	17	56	15	56
Medium Truck	4	61	4	61
Heavy Truck	9	56	11	56
Bus	0	-	0	-
Motorcycle	0	-	0	-

Site 3 Photos

APPENDIX E

Predicted Traffic Noise Levels

S.R. 70 PD&E Study from C.R. 721 to 128th Avenue
Highlands & Okeechobee Counties
450334-1

Appendix E: Predicted Traffic Noise Levels

ROW acquisition with Preferred Alternative, future build traffic noise levels not evaluated.

Site ID	# of Units	Land Use / Activity	NAC Activity Category	Leq(h), dB(A)				Does Future Build Approach, Meet, or Exceed the NAC?
				Existing (2024)	Future No-Build (2052)	Future Build, Preferred Alternative (2052)	Change from Existing to Future Build	
Isolated Residences from CR 721 to New Pine Ridge Road / Lewis Farm Road								
1	1	Residence	B	47.4	51.8	60.1	12.7	No
2	1	Residence	B	58.8	63.5	63.9	5.1	No
3	1	Residence	B	50.6	55.2	56.5	5.9	No
4	1	Residence	B	48.5	53.0	56.5	8.0	No
5	1	Residence	B	51.3	55.9	56.7	5.4	No
Isolated Residence South of SR 70, west of SW Rucks Dairy Road								
6	1	Residence	B	43.9	48.4	53.5	9.6	No
Kissimmee River Estates								
7	1	Residence	B	65.0	69.6	58.1	-6.9	No
8	1	Residence	B	66.2	70.7	58.6	-7.6	No
9	1	Residence	B	64.1	68.7	57.6	-6.5	No
10	1	Residence	B	64.2	68.8	57.7	-6.5	No
11	1	Residence	B	66.0	70.5	58.1	-7.9	No
12	1	Residence	B	65.9	70.4	58.2	-7.7	No
13	1	Residence	B	65.9	70.4	58.2	-7.7	No
14	1	Residence	B	64.5	69.1	57.9	-6.6	No
15	1	Residence	B	63.7	68.3	57.7	-6.0	No
16	1	Residence	B	65.6	70.1	58.3	-7.3	No
17	1	Residence	B	64.8	69.3	58.2	-6.6	No
18	1	Residence	B	65.6	70.2	58.4	-7.2	No
19	1	Residence	B	66.4	70.9	58.4	-8.0	No
20	1	Residence	B	65.3	69.8	58.4	-6.9	No
21	1	Residence	B	65.7	70.2	58.0	-7.7	No
22	1	Residence	B	64.9	69.5	57.8	-7.1	No
23	1	Residence	B	65.1	69.6	58.4	-6.7	No
24	1	Residence	B	63.9	68.6	57.6	-6.3	No
25	1	Residence	B	63.9	68.5	57.8	-6.1	No
26	1	Residence	B	65.8	70.3	58.2	-7.6	No
27	1	Residence	B	63.1	67.7	57.5	-5.6	No
28	1	Residence	B	65.7	70.3	58.2	-7.5	No
29	1	Residence	B	66.0	70.5	58.2	-7.8	No
30	1	Residence	B	58.3	63.0	56.0	-2.3	No
31	1	Residence	B	58.0	62.7	55.9	-2.1	No
32	1	Residence	B	57.9	62.6	55.8	-2.1	No
33	3	Residence	B	57.8	62.5	55.8	-2.0	No
34	1	Residence	B	58.6	63.3	56.0	-2.6	No
35	1	Residence	B	58.2	62.9	55.9	-2.3	No
36	1	Residence	B	57.6	62.3	55.6	-2.0	No
37	1	Residence	B	58.5	63.2	56.0	-2.5	No
38	1	Residence	B	58.4	63.2	55.9	-2.5	No
39	1	Residence	B	57.8	62.5	55.7	-2.1	No
40	1	Residence	B	57.4	62.1	55.6	-1.8	No
41	1	Residence	B	58.4	63.1	55.9	-2.5	No
42	1	Residence	B	57.6	62.3	55.6	-2.0	No
43	1	Residence	B	57.6	62.3	55.7	-1.9	No

S.R. 70 PD&E Study from C.R. 721 to 128th Avenue
Highlands & Okeechobee Counties
450334-1

Appendix E: Predicted Traffic Noise Levels

ROW acquisition with Preferred Alternative, future build traffic noise levels not evaluated.

Site ID	# of Units	Land Use / Activity	NAC Activity Category	Leq(h), dB(A)				Does Future Build Approach, Meet, or Exceed the NAC?
				Existing (2024)	Future No-Build (2052)	Future Build, Preferred Alternative (2052)	Change from Existing to Future Build	
44	1	Residence	B	58.4	63.1	55.9	-2.5	No
45	1	Residence	B	59.2	63.9	56.1	-3.1	No
46	1	Residence	B	57.1	61.8	55.6	-1.5	No
47	1	Residence	B	57.3	62.0	55.6	-1.7	No
48	1	Residence	B	58.2	62.9	55.8	-2.4	No
49	1	Residence	B	58.2	62.9	56.0	-2.2	No
50	1	Residence	B	58.8	63.5	56.2	-2.6	No
51	1	Residence	B	56.9	61.5	55.4	-1.5	No
52	1	Residence	B	58.0	62.7	56.0	-2.0	No
53	1	Residence	B	57.9	62.6	55.9	-2.0	No
54	1	Residence	B	51.1	55.7	53.3	2.2	No
55	3	Residence	B	51.4	56.0	53.5	2.1	No
56	5	Residence	B	51.7	56.3	53.5	1.8	No
57	2	Residence	B	51.9	56.5	53.6	1.7	No
58	1	Residence	B	51.7	56.3	53.5	1.8	No
59	4	Residence	B	51.9	56.5	53.6	1.7	No
60	1	Residence	B	51.7	56.2	53.5	1.8	No
61	2	Residence	B	51.9	56.5	53.6	1.7	No
62	2	Residence	B	51.9	56.4	53.7	1.8	No
Isolated Residence South of SR 70, East of SW Rucks Dairy Road								
63	1	Residence	B	57.1	61.8	65.3	8.2	No
Residences South of SR 70, West of Kissimmee River								
64	1	Residence	B	47.4	51.9	54.5	7.1	No
65	1	Residence	B	49.1	53.6	56.0	6.9	No
66	1	Residence	B	56.9	61.4	65.2	8.3	No
67	2	Residence	B	59.9	64.3			
Kissimmee River Fishing Resort								
68	1	Residence	B	58.2	62.9	62.6	4.4	No
69	1	Residence	B	56.4	61.0	60.8	4.4	No
70	1	Residence	B	55.1	59.8	59.6	4.5	No
71	1	Residence	B	53.1	57.7	57.7	4.6	No
72	1	Residence	B	64.1	68.6	68.4	4.3	**Yes**
73	1	Residence	B	59.9	64.7	64.3	4.4	No
74	1	Residence	B	57.0	61.7	61.4	4.4	No
75	1	Residence	B	55.3	59.9	59.7	4.4	No
76	1	Residence	B	64.5	68.9	68.7	4.2	**Yes**
77	1	Residence	B	58.6	63.3	62.8	4.2	No
78	1	Residence	B	55.9	60.5	60.2	4.3	No
79	1	Residence	B	58.2	62.9	62.5	4.3	No
80	1	Residence	B	55.8	60.4	60.1	4.3	No
81	1	Residence	B	54.8	59.4	59.1	4.3	No
82	1	Residence	B	58.7	63.4	63.0	4.3	No
83	1	Residence	B	56.4	61.1	60.6	4.2	No
84	1	Residence	B	55.5	60.1	59.8	4.3	No
85	1	Residence	B	55.9	60.6	60.1	4.2	No
86	1	Residence	B	55.1	59.7	59.4	4.3	No

S.R. 70 PD&E Study from C.R. 721 to 128th Avenue
Highlands & Okeechobee Counties
450334-1

Appendix E: Predicted Traffic Noise Levels

ROW acquisition with Preferred Alternative, future build traffic noise levels not evaluated.

Site ID	# of Units	Land Use / Activity	NAC Activity Category	Leq(h), dB(A)				Does Future Build Approach, Meet, or Exceed the NAC?
				Existing (2024)	Future No-Build (2052)	Future Build, Preferred Alternative (2052)	Change from Existing to Future Build	
87	1	Residence	B	56.2	60.9	60.4	4.2	No
88	1	Residence	B	55.7	60.4	59.9	4.2	No
89	1	Residence	B	55.1	59.7	59.3	4.2	No
90	1	Residence	B	59.7	64.4	64.3	4.6	No
91	1	Residence	B	58.0	62.7	62.2	4.2	No
92	1	Residence	B	56.1	60.8	60.2	4.1	No
93	1	Residence	B	60.2	64.8	64.8	4.6	No
94	1	Residence	B	58.9	63.6	63.5	4.6	No
95	1	Residence	B	56.8	61.5	61.2	4.4	No
96	1	Residence	B	55.1	59.7	59.2	4.1	No
Picnic Table - Kissimmee River Fishing Resort								
97	1	Picnic Table	C	59.8	64.3	64.4	4.6	No
River Bluff RV & Fishing Resort								
98	1	Residence	B	42.0	46.4	47.2	5.2	No
99	2	Residence	B	42.2	46.6	47.4	5.2	No
Isolated Residences East of Kissimmee River								
100	1	Residence	B	50.4	54.8	55.8	5.4	No
101	1	Residence	B	61.7	66.1	67.1	5.4	**Yes**
Isolated Residences East of NW/SW 128th Avenue								
102	1	Residence	B	54.9	59.3	61.1	6.2	No
103	1	Residence	B	60.7	65.1	67.4	6.7	**Yes**
104	1	Residence	B	56.7	61.2	62.9	6.2	No
105	1	Residence	B	53.4	57.8	59.5	6.1	No

APPENDIX F

TNM Files (Provided Electronically)