

Noise Study Report Addendum

Florida Department of Transportation

District Two

SR 5 (US 17) Main Street

from S. of New Berlin Road to Max Leggett Parkway

Duval County, Florida

Design FM No.: 209411-8; 209411-9

September 2023

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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 USC § 327 and a Memorandum of Understanding dated May 26, 2022, and executed by the Federal Highway Administration and FDOT.

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1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) District Two is planning improvements to SR 5 (US 17) Main Street in Duval County. The improvements include widening SR 5 (US 17) from two to four lanes, operational enhancements at existing intersections, access management controls, accommodations for bicycles and pedestrians, and enhanced stormwater management.

1.1 BACKGROUND

The project's Project Development and Environment (PD&E) Study [FM 209411-3] culminated in a Type 2 Categorical Exclusion (Type 2 CE). The PD&E project limits spanned from New Berlin Road to the North of Pecan Park Road. The Federal Highway Administration (FHWA) approved the Type 2 CE in November 2008. The approval date is also called the "Date of Public Knowledge." A component of the PD&E study focused on evaluating the potential noise impacts related to the PD&E Study's proposed improvements. It culminated in a final Noise Study Report (NSR) dated October 2006 (revision/addendum December 10, 2006).

This Noise Study Report Addendum (NSRA) is the first reevaluation since the Type 2 CE was approved in 2008 and focuses on the design changes to the southern section of the original study limits, specifically the changes relative to design segments FM 209411-8 [New Berlin Road to Airport Center Drive] and FM 209411-9 [Airport Center Drive to Max Leggett Parkway]. The project's location and current noise reevaluation limits are illustrated in [Figure 1](#).

1.2 DESIGN CHANGES

The PD&E preferred alternative typical section, as described in the Type 2 CE and illustrated in [Appendix A](#), consisted of a four-lane urban divided typical section within a 170-foot minimum right-of-way (ROW), with the following features:

- Two twelve-foot travel lanes in each direction;
- One four-foot bike lane in each direction;
- One six-foot sidewalk on the east side (northbound direction);
- Forty-six-foot grassed median.

The current design maintains four twelve-foot travel lanes but reduces the ROW requirements and incorporates the following changes:

- Removes the four-foot bike lanes in each direction;
- Modifies the sidewalk: width now varies from six feet to twelve feet wide depending on location;

- Reduces median width; varies depending on location, median condition, and type of traffic separator.

In contrast to the PD&E alternative, the more compact typical section under design effectively moves the northbound travel lanes to the west, away from noise-sensitive sites. The southbound side continues to share a property line with the CSX railroad. The current typical sections are illustrated in [Appendix A](#).

2.0 METHODOLOGY

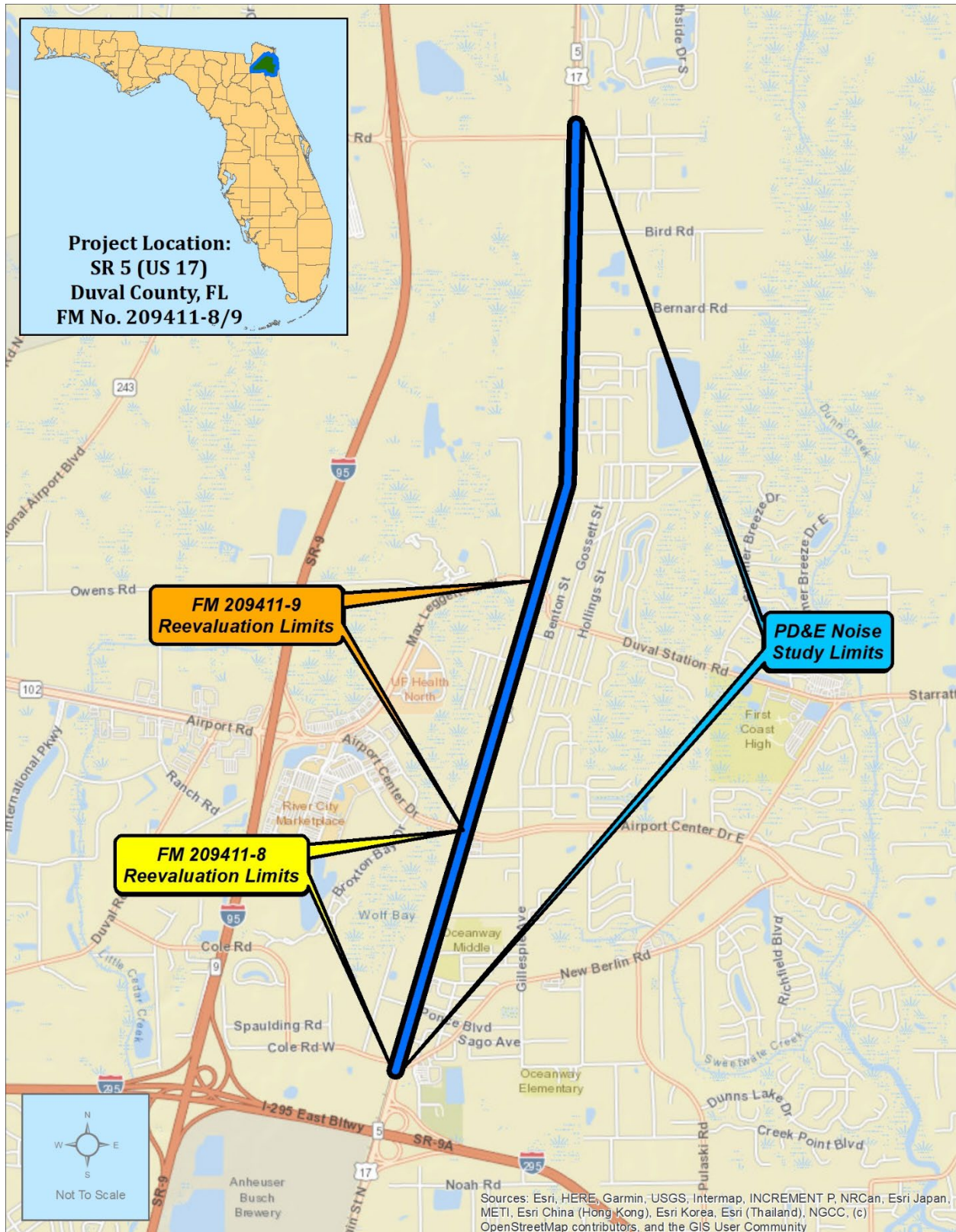
The PD&E noise analysis was conducted under the regulations, guidelines, and statutes of that time, as referenced in the 2006 NSR, to include:

- *Measurement of Highway-Related Noise*, Report No. PD-96-046, Federal Highway Administration, May 1996
- *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, 23 CFR Part 772, July 8, 1982 and August 5, 1982
- *Project Development and Environment Manual*: Part II, Chapter 17, Florida Department of Transportation, Revised October 6, 2003

Since the PD&E, many changes have occurred to the federal and state regulatory requirements pertaining to traffic noise analysis. Thus, this project's current traffic noise reevaluation was conducted in accordance with the current Title 23, *Code of Federal Regulations* (CFR), § 772¹; Part II, Chapter 18 of the FDOT *Project Development and Environment Manual*²; Chapter 335, Section 335.17, *Florida Statutes*³; FHWA's *Highway Traffic Noise: Analysis and Abatement Guidance*⁴; and the FDOT *Traffic Noise Modeling and Analysis Practitioners Handbook*⁵. Predicted noise levels were produced using the FHWA Traffic Noise Model (TNM), version 2.5.

The MicroStation design files, georeferenced to the FDOT ortho-rectified State Plane East coordinate system, were used to determine the design alternative's location for input into TNM. Elevation data for noise receptors and existing roadways were obtained from Digital Elevation Model (DEM) imaging.

Figure 1: Project Noise Reevaluation Limits



2.1 NOISE METRICS

Noise levels developed for this analysis are expressed in decibels (dB) using an "A"-scale weighting expressed as dB(A). This scale most closely approximates the response characteristics of the human ear. All noise levels are reported as hourly equivalent noise levels [$L_{eq(h)}$]. The $L_{eq(h)}$ is defined as the equivalent steady-state sound level that, in an hourly period, contains the same acoustic energy as the time-varying sound level for the same hourly period.

2.2 TRAFFIC DATA

Traffic noise is heavily dependent on traffic speed and volume, with the amount of noise generated by traffic increasing as the vehicle speed and number of vehicles increase. The traffic conditions that result in the highest noise levels for roadways are the hourly traffic volumes representing Level of Service (LOS) C traffic conditions because they represent maximized traffic volumes that continue to travel at free-flow speed. However, if the traffic analysis indicates the roadway will operate below LOS C, the project's Demand peak-hour directional traffic volumes are used per Chapter 18 of the PD&E Manual.

The current traffic projections show that a LOS C operating condition is not predicted in the 2050 design year. Therefore, demand peak-hour directional volumes derived from projected AADT were used to conduct the noise reevaluation. The updated traffic data are included in [Appendix B](#).

A summary of the PD&E and reevaluation traffic projections are provided in Table 1. As detailed, the current traffic projections are substantially lower than those predicted for the PD&E. Additional information regarding these traffic projections can be found in the Project Traffic Analysis Report (PTAR).

Table 1: Traffic Data - Historical Comparison

US 17 Roadway Segment	PD&E Projected AADT	Reevaluation Projected AADT
New Berlin Rd to Airport Center Dr	52,000	20,100
Airport Center Dr to Max Leggett Pkwy	30,800	20,100

2.3 NOISE ABATEMENT CRITERIA

Land use plays an important role in traffic noise analyses. To determine which land uses are "noise-sensitive," this noise impact analysis used the FHWA Noise Abatement Criteria (NAC) shown in [Table 2](#). The FDOT has established noise levels for each activity category at which noise abatement must be considered. In Florida, noise levels that meet or exceed 66.0 dB(A) at NAC B and C land uses require noise abatement consideration. A 71.0 dB(A) noise level is required for an NAC E land use to be considered impacted by traffic noise. One additional criterion for determining project impacts that warrant abatement consideration occurs when project noise levels are below the NAC but show a substantial increase (15.0 dB(A) or more) over existing levels. 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., a new alignment project).

Table 2: Noise Abatement Criteria

Hourly A-Weighted Sound Level-decibels (dB(A))				Description of Activity Category
Activity Category	Activity Leq(h) ¹		Evaluation Location	
	FHWA	FDOT		
A	57.0	56.0	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	67.0	66.0	Exterior	Residential.
C ²	67.0	66.0	Exterior	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, golf courses, places of worship, playgrounds, public meeting rooms, public/nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52.0	51.0	Interior	Auditoriums, daycare centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public/nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E ²	72.0	71.0	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.				
<i>Note:</i> 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.				

For comparison purposes, typical noise levels for common indoor and outdoor activities are provided in [Figure 2](#).

Figure 2: Typical Noise Levels

Common Outdoor Activities	Noise Level dB(A)	Common Indoor Activities
Jet Fly-Over 1000 ft.	---110---	Rock Band
Gas Lawn Mower at 3 ft.	---100---	
Diesel Truck at 50 ft., at 50 mph	---90---	Food Blender at 3 ft.
Noise Urban Area (Daytime)	---80---	Garbage Disposal at 3 ft.
Gas Lawn Mower at 100 ft.	---70---	Vacuum Cleaner at 10 ft.
Commercial Area	---60---	Normal Speech at 3 ft.
Heavy Traffic at 300 ft.	---50---	Large Business Office
Quiet Urban Daytime	---40---	Dishwasher Next Room
Quiet Urban Nighttime	---30---	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	---20---	Library
Quiet Rural Nighttime	---10---	Bedroom at Night, Concert Hall (Background)
Lowest Threshold of Human Hearing	---0---	Lowest Threshold of Human Hearing
Source: California Dept. of Transportation; Technical Noise Supplement; Oct 1998; Page 18.		

2.4 NOISE ABATEMENT MEASURES

When traffic noise impacts are identified as part of the traffic noise analysis, noise abatement must be considered. The potential abatement alternatives considered during the 2006 PD&E study included traffic management, alternative roadway alignments, buffer zones, and noise barriers.

2.4.1 PD&E Noise Barrier Analysis

The PD&E noise analysis evaluated a noise barrier for the Receptor 7 – Forest Christian Church (now referred to as Sovereign Grace Family Church). The exterior use area was assumed to be immediately outside the front entryway. The noise level associated with the PD&E alternative was predicted to be 70.4 dB(A), a 6.7 dB(A) increase over the 2006 existing condition. The barrier was determined not to meet cost reasonableness criteria and consequently not moved forward for further consideration.

3.0 TRAFFIC NOISE ANALYSIS AND ABATEMENT ASSESSMENT

3.1 NOISE SENSITIVE RECEPTORS

Within the project limits, TNM receptor points representing residences are located in accordance with the FDOT PD&E Manual as follows:

- Residential receptor points are located in areas of frequent outdoor use or the corner of the residential building closest to the major traffic noise source.
- Where residences are clustered, single receptor points are analyzed to represent a group of residences with similar characteristics.
- Ground floor receptor points are assumed to be 5 feet above the ground elevation, and all receptors are assumed to be at ground level unless otherwise noted.
- Higher floor receptors are assumed to increase in elevation in 10-foot increments above the ground floor receptor.
- Non-residential (special-use) receptor points are located at the edge of the outdoor use area closest to the major traffic noise source.

Using [Table 2](#) as a guide, most noise-sensitive land uses within the reevaluation limits fall under Activity Category B – Residential. The special land use (SLU) sites include NAC C land uses associated with the Oceanway Middle School ballfield, Bold City Church HQ ballcourt, and the Sovereign Grace Family Church entryway. The sole special-use NAC E land use is the outdoor dining area associated with the Choppers Bar & Grill.

No land uses within the reevaluation limits warrant an NAC A, D, or F analysis. A search of building permits for NAC G (undeveloped) lands did not identify any active permits for future sites considered noise-sensitive.

3.2 PREDICTED NOISE LEVELS AND ABATEMENT ANALYSIS

For this reevaluation, noise levels were predicted at 29 receptors representing 68 residences (NAC B), three SLU NAC C receptors, and one SLU NAC E receptor. Due to the number of receptors, the analysis divided the study corridor into Noise Study Areas (NSA). The reporting of project noise levels was further simplified by using receptors representing similar adjacent noise-sensitive sites. The grouping within a representative receptor is called a Common Noise Environment (CNE), commonly referred to as a receptor group.

The alphanumeric identification for each receptor point associated with a noise-sensitive receptor is formulated as follows:

- Receptor points are labeled according to the NSA within which they are located. NSAs are named as follows:
 - The first two letters (i.e., SB, NB) describe on which side of the roadway the NSA is located (e.g., "NB" indicates the receptor is located in an NSA on the northbound side of US 17, and "SB" indicates the receptor is located in an NSA on the southbound side of US 17).
 - The number following the first two letters is a numeric sequencing number (e.g., NSA NB2 is the 2nd NSA on the northbound side of the roadway).
 - The next two characters are the individual receptor numbers separated from the first string of characters with a dash (e.g., NB2-01 is the 1st receptor in the 2nd NSA on the northbound side of the roadway).
 - The final character, if applicable, is the sub-receptor number for a site that is part of a larger noise-sensitive site (e.g., apartment buildings) and is separated from the string of characters with a decimal point (e.g., NB2-01.1 is the 1st sub-receptor).
 - Where there are multi-family residential apartment complexes in the study corridor. The letter "a" represents ground-floor units, "b" represents 2nd-floor units, and "c" represents 3rd-floor units, etc. (e.g., SB3-02a)
 - Special-use sites are labeled "SLU" after the dash, followed by the sequential receptor number (e.g., NB2-SLU1).

When discussing noise level increases/decreases, the general rule that applies to perception is:

- A 3 dB(A) increase/decrease is barely perceptible to most people.
- A 5 dB(A) increase/decrease is noticeable to most people.
- A 10 dB(A) increase is perceived as twice as loud and is considered a doubling of noise.

One analyzed receptor currently experiences noise levels that meet or exceed the FDOT NAC. By comparison, predicted noise levels for the Build Alternative meet or exceed the NAC at the same one receptor. The overall project average increase in noise over the existing condition is 0.9 dB(A). The

highest increase, 2.7 dB(A), occurs at the receptor SB4-SLU4-4, an NAC C SLU site. This increase is not considered substantial (15 dB(A) or higher).

The Existing and 2050 Build noise levels discussed in this section are also summarized in [Appendix C](#). A set of project aeriels illustrating the NSAs, receptor groups, representative receptors, and analyzed sites is included in [Appendix D](#).

3.2.1 [Noise Study Area SB1](#)

NSA SB1 is located west of US 17 and spans the project limits for FM 209411-8 (New Berlin Road/Cole Road to Airport Center Drive). A single-track railroad, owned and operated by CSX, is between US 17 and the SB1 receptors. The 2022 U.S. DOT Inventory Crossing Form, illustrated in [Appendix E](#), was reviewed to determine the level of rail line usage and if the rail line should be factored into the noise analysis. With only eight trains per week and 20 mph maximum speeds over the crossing, it was determined that the type and frequency of usage would not be great enough to skew the predicted noise levels for US 17, which is deemed the dominant noise source.

All receptors within this NSA are single-family residential. Sixteen NAC B receptor sites, represented by receptor SB1-01, were evaluated for traffic noise impacts. Currently, the average noise level is 56.5 dB(A). The reevaluation Build Alternative's average noise level of 57.2 dB(A) is an increase of 0.7 dB(A) over existing conditions. This increase is not considered substantial. The project noise levels are not predicted to meet or exceed the NAC; thus, abatement consideration is not required.

3.2.2 [Noise Study Area SB2](#)

NSA SB2 is located west of US 17 and spans the project limits for FM 209411-9 (Airport Center Drive to Max Leggett Parkway). As with SB1, the CSX railroad, with aforementioned usage statistics, is located between US 17 and the SB2 receptors.

All receptors within this NSA are single-family residential. Thirteen NAC B receptor sites, represented by receptor SB2-01, were evaluated for traffic noise impacts. Currently, the average noise level is 57.4 dB(A). The reevaluation Build Alternative's average noise level of 59.5 dB(A) is an increase of 2.1 dB(A) over existing conditions. This increase is not considered substantial. The project noise levels are not predicted to meet or exceed the NAC; thus, abatement consideration is not required.

3.2.3 [Noise Study Area NB1](#)

NSA NB1 is east of US 17, across from NSA SB1. Noise-sensitive land uses in this NSA consist of NAC B, one SLU NAC C, and one SLU NAC E land use. Five NAC B receptor points, identified as NB1-01 through NB1-05, representing five residences, were evaluated for traffic noise impacts. The Oceanway Middle

School ballfield [NAC C] and Choppers Bar & Grill [NAC E] are represented by receptors NB1-SLU1-1 and NB1-SLU1-2, respectively.

Currently, the average noise level is 58.8 dB(A) with one residence, a 2nd-floor balcony represented by receptor NB1-04b, exceeding the 66.0 dB(A) FDOT NAC. The Build Alternative's average noise level of 60.2 dB(A) is an increase of 1.4 dB(A) over existing conditions, with the greatest increase being 2.1 dB(A) at receptor NB1-04b. While the project noise increases are not considered substantial, the predicted noise level at NB1-04b (68.1 dB(A)) exceeds the NAC and requires abatement consideration. No other receptors are predicted to meet or exceed NAC.

Receptor NB1-04b is considered isolated from the standpoint of barrier consideration. Per FDOT/FHWA policy, as outlined in the PD&E Manual – Chapter 18, a noise barrier must achieve at least a 5.0 dB(A) reduction for a minimum of two impacted receptors to be considered acoustically feasible. Because receptor NB1-04b is the sole impacted receptor in NSA NB1, a noise barrier cannot inherently meet minimum feasibility requirements for this location. Thus, a barrier was not analyzed.

3.2.4 Noise Study Area NB2

NSA NB2 is east of US 17, across from NSA SB2. Noise-sensitive land uses in this NSA consist of NAC B and two SLU NAC C land uses. Eighteen NAC B receptor points, identified as NB2-01 through NB2-03, representing 34 residences, were evaluated for traffic noise impacts. The majority of the residential receptors are part of a new multi-story apartment complex (The Sagefield). The Bold City Church HQ and Sovereign Grace Family Church, both NAC C land uses, are represented by receptors NB2-SLU2-1 and NB2-SLU1-2, respectively.

Currently, the average noise level is 61.1 dB(A), with no receptors exceeding the 66.0 dB(A) FDOT NAC. The Build Alternative's average noise level of 61.7 dB(A) is an increase of 0.6 dB(A) over existing conditions, with the greatest increase being 2.7 dB(A) at receptor NB2-SLU2-2. This increase is not considered substantial. The project noise levels are not predicted to meet or exceed the NAC; thus, abatement consideration is not required.

Receptor NB2-SLU2-2, Sovereign Grace Family Church [referred to in the PD&E study as Receptor 7 – Forest Christian Church], was considered impacted during the PD&E, and a noise barrier was evaluated. The noise barrier was unable to meet cost-reasonableness criteria. This reevaluation has determined that the site is no longer considered impacted. The reevaluation's lower predicted noise level at this receptor is attributed to 1) the northbound travel lanes being farther away than previously planned and 2) the traffic projections being substantially lower.

4.0 CONCLUSIONS

Noise levels associated with the proposed project are not predicted to meet or exceed the 66.0 dB(A) NAC at 67 residential, three NAC C, and one NAC E site. One NAC B site, receptor NB1-04b, predicted to be impacted under the Build condition, is considered an isolated residence that inherently cannot meet the minimum noise reduction requirement of 5.0 dB(A) at a *minimum of two* impacted receptors.

5.0 CONSTRUCTION NOISE AND VIBRATION

Based on the existing land use within the limits of this project, the construction of the proposed roadway improvements will have temporary noise and vibration impacts. Construction noise-sensitive sites include all sites detailed in Section 3.0 of this report. Additional impacts could result if noise-sensitive land uses develop adjacent to the roadway before construction. It is anticipated that applying the *FDOT Standard Specifications for Road and Bridge Construction*⁹ will minimize or eliminate most of the potential construction noise and vibration impacts. However, should unanticipated noise or vibration issues arise during the construction process, the Project Manager, in concert with the District Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.

6.0 PUBLIC COORDINATION

The Florida Department of Transportation is committed to working with local governments, developers, and residents by providing them access to this Noise Study Report Addendum. A subsequent public hearing will be held. Any comments germane to noise will be incorporated into this report.

7.0 REFERENCES

1. 23 CFR Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise Federal Register, Vol. 75, No. 133, July 2010.
2. *Project Development and Environment Manual*; FDOT. July 1, 2023.
3. Section 335.17, *Florida Statutes. State Highway Construction; Means Of Noise Abatement*. 2012.
4. *Highway Traffic Noise: Analysis and Abatement Guidance, FHWA-HEP-10-025*; FHWA. December 2011.
5. *Traffic Noise Modeling and Analysis Practitioners Handbook*; FDOT. January 2016.
6. *A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special-Use Locations*; FDOT. 2009.
7. *Measurement of Highway-Related Noise*; FHWA. September 2017.
8. *Standard Specifications for Road and Bridge Construction*; FDOT. 2023.

APPENDIX A: PROJECT TYPICAL SECTIONS

APPENDIX B: PROJECT TRAFFIC DATA

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TRAFFIC DATA FOR NOISE STUDIES

Instructions:

1. Data sheets are to be filled out for every segment having a change in traffic parameters such as volumes, posted speeds, typical section, etc.
2. For facilities operating below LOS C, use the Peak Hour Directional Volume obtained from the most recent FDOT Quality/Level of Service Handbook.

Project Description: US 17 from New Berlin Rd to Max Leggett Pkwy (Reevaluation)
Work Program Item Segment Number(s): 209411-8 & 209411-9
Federal Aid Number(s): _____
Segment Description: US 17

SEGMENT	New Berlin Rd to Airport Center Dr 209411-8		Airport Center Dr to Max Leggett Pkwy 209411-9	
	Existing Condition	Build (Design Year)	Existing Condition	Build (Design Year)
Year	2022	2050	2022	2050
Number of Lanes	2	4	2	4
AADT	14,100 ^{*1}	20,100 ^{*3}	14,100 ^{*1}	20,100 ^{*3}
^{*2} LOS C Peak Hour Directional Volume	760	1,520	760	1,520
Demand Peak Hour Directional Volume	689	982	689	982
Demand OFF-Peak Hour Directional Volume	580	827	580	827
Posted Speed	45	45	50	45
^{**1} D%	54.3	54.3	54.3	54.3
^{**1} T24%	4.83	4.83	4.83	4.83
^{**1} Tpeak (DHV%)	2.48	2.48	2.48	2.48
^{**1} MT (DHV%)	0.705	0.705	0.71	0.705
^{**1} HT (DHV%)	1.77	1.77	1.77	1.77
^{**1} Buses (DHV%)	0.15	0.15	0.15	0.15
^{**1} Motorcycles (DHV%)	0.27	0.27	0.27	0.27

Source Notes:

- *1 = FDOT Annual Vehicle Classification Report - Report Type: All Count Year 2022 - Site #720561
*2 = FDOT 2023 Multimodal Quality Level of Service Handbook
*3 = FDOT Project Traffic Memorandum December 2021 (*Traffic_Memo_2030_2050_with_AADT.pdf*)

Prepared By: Jason Cornell - Sr. Planner Date: 7/21/2023
PRINT NAME

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

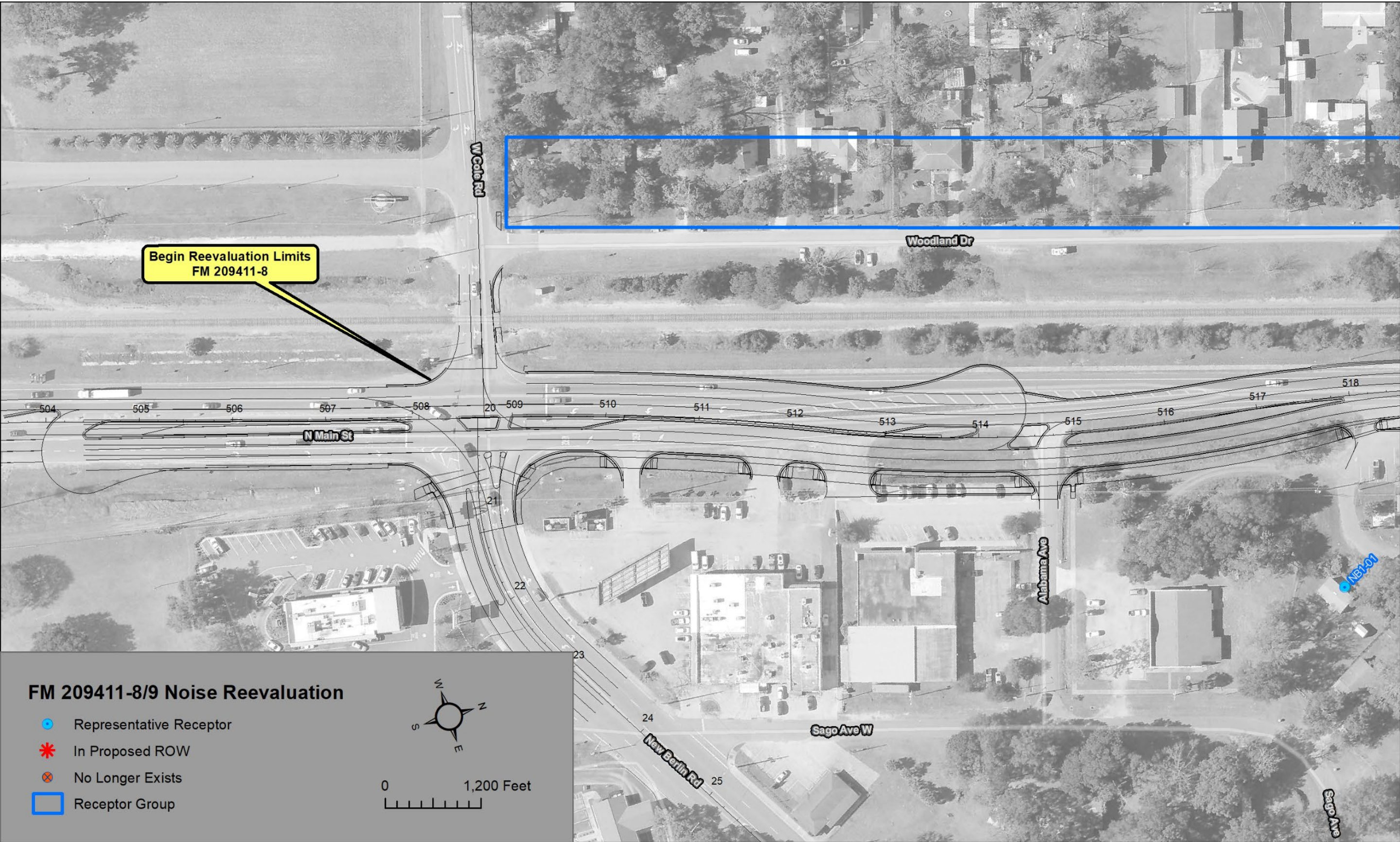
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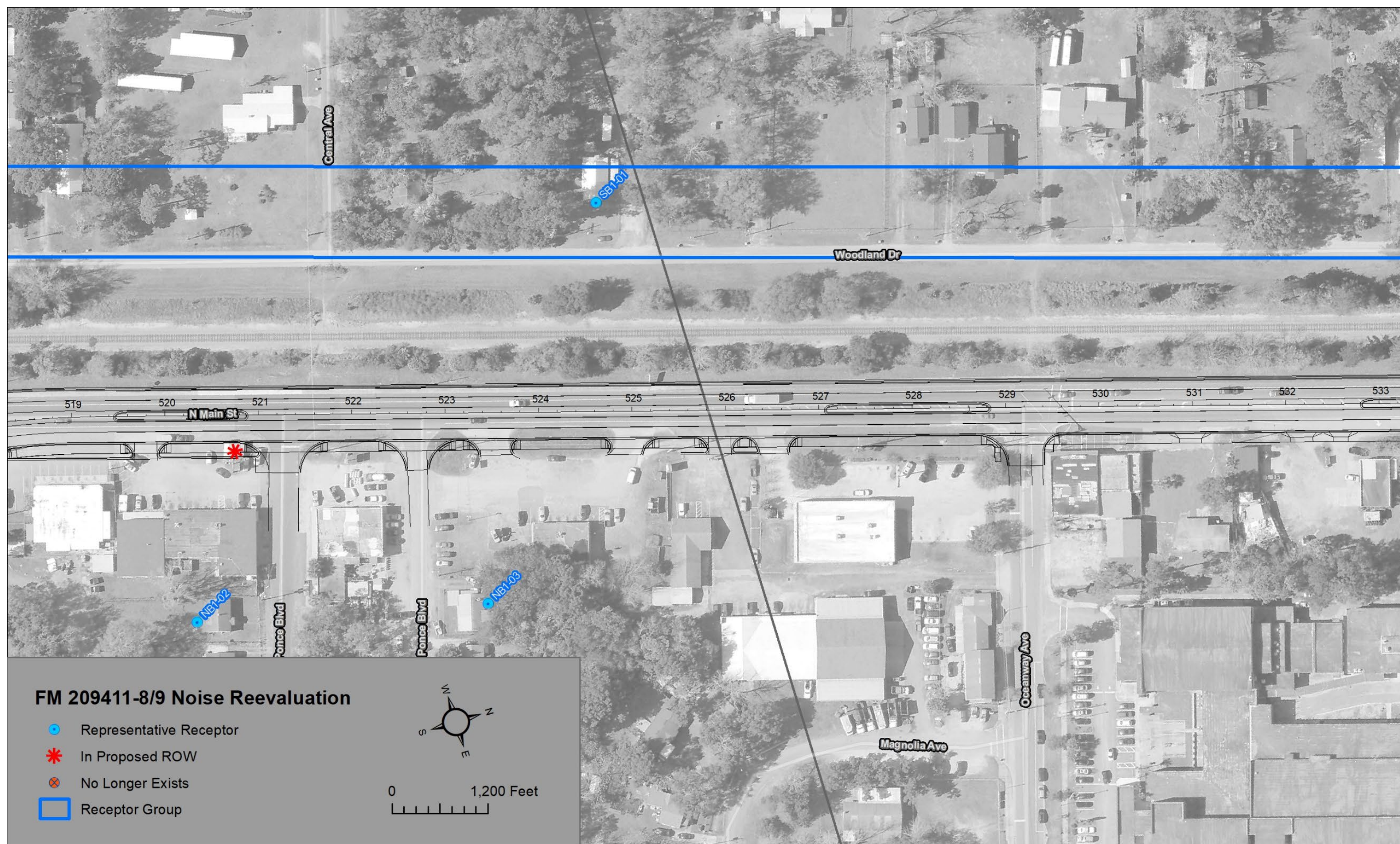
APPENDIX C: PREDICTED TRAFFIC NOISE LEVELS

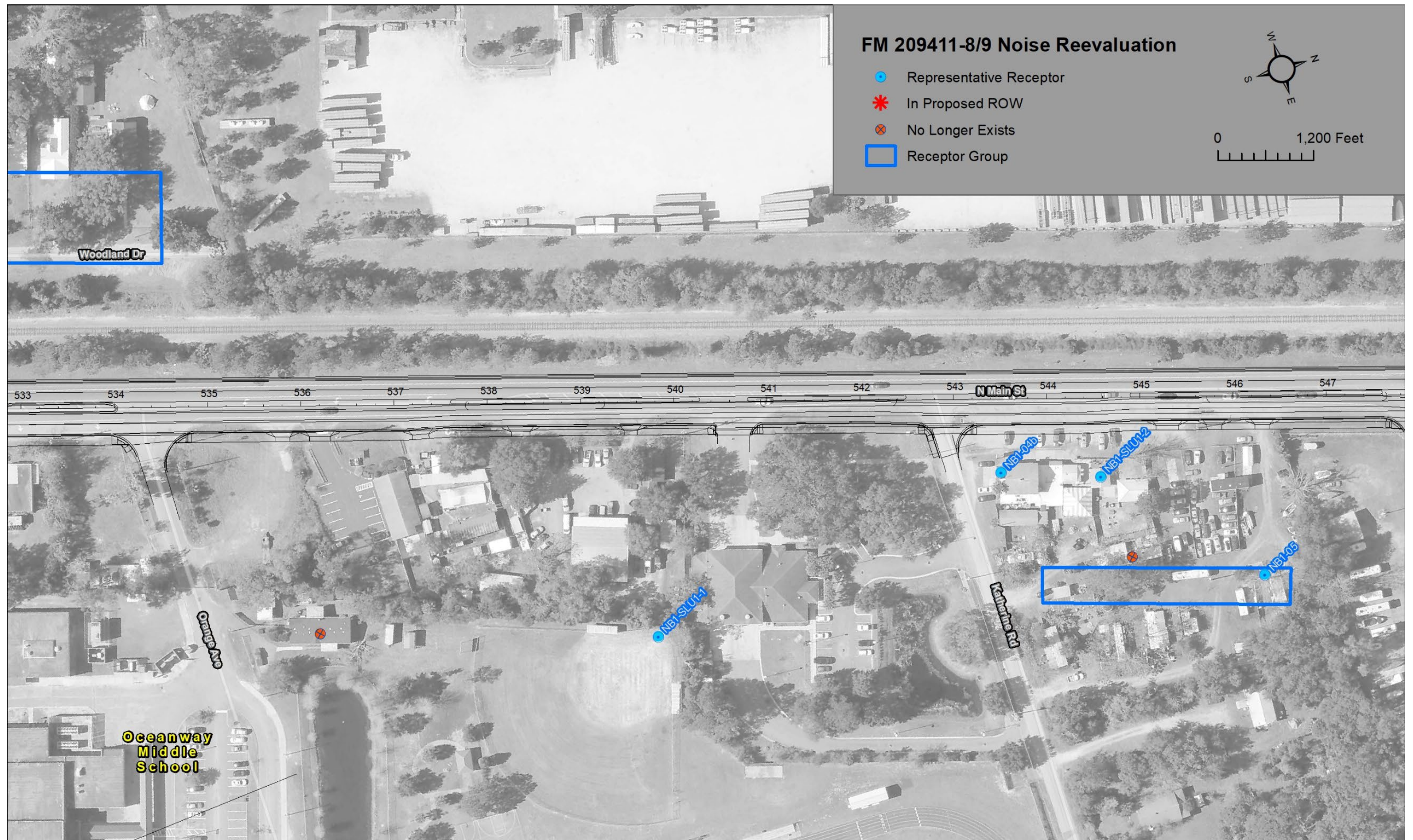
Noise Impact Comparison Matrix						
Noise Sensitive Sites			Predicted Noise Levels (dB(A)) <i>Red = Noise Level above NAC</i>			
Receptor ID	# Sites Represented	Impact Criterion (dB(A))	2022 Existing	2050 Build Alternative	Change From Existing	Consider Abatement
NSA SB1: West of SR 5 (US 17) from New Berlin Rd. to Airport Center Dr. - Pages D1 through D4 - Appendix C						
SB1-01	16	66.0	56.5	57.2	0.7	-
NSA Summary	16		56.5	57.2	0.7	
NSA SB2: West of SR 5 (US 17) from Airport Center Dr. to Max Leggett Pkwy. - Pages D5 through D9 - Appendix C						
SB2-01	13	66.0	57.4	59.5	2.1	-
NSA Summary	13		57.4	59.5	2.1	
NSA NB1: East of SR 5 (US 17) from New Berlin Rd. to Airport Center Dr. - Pages D1 through D4 - Appendix C						
NB1-01	1	66.0	55.8	57.8	2.0	-
NB1-02	1	66.0	55.7	57.3	1.6	-
NB1-03	1	66.0	57.3	57.8	0.5	-
NB1-04b	1	66.0	66.0	68.1	2.1	Yes
NB1-05	1	66.0	57.6	58.3	0.7	-
NB1-SLU1-1 NAC C	1	66.0	55.2	56.5	1.3	-
NB1-SLU1-2 NAC E	1	71.0	64.0	65.8	1.8	-
NSA Summary	7		58.8	60.2	1.4	
NSA NB2: East of SR 5 (US 17) from Airport Center Dr. to Max Leggett Pkwy. - Pages D5 through D9 - Appendix C						
NB2-01.1a	1	66.0	62.0	61.2	-0.8	-
NB2-01.1b	1	66.0	64.3	64.9	0.6	-
NB2-01.1c	1	66.0	64.7	65.1	0.4	-
NB2-01.1d	1	66.0	64.6	65.0	0.4	-

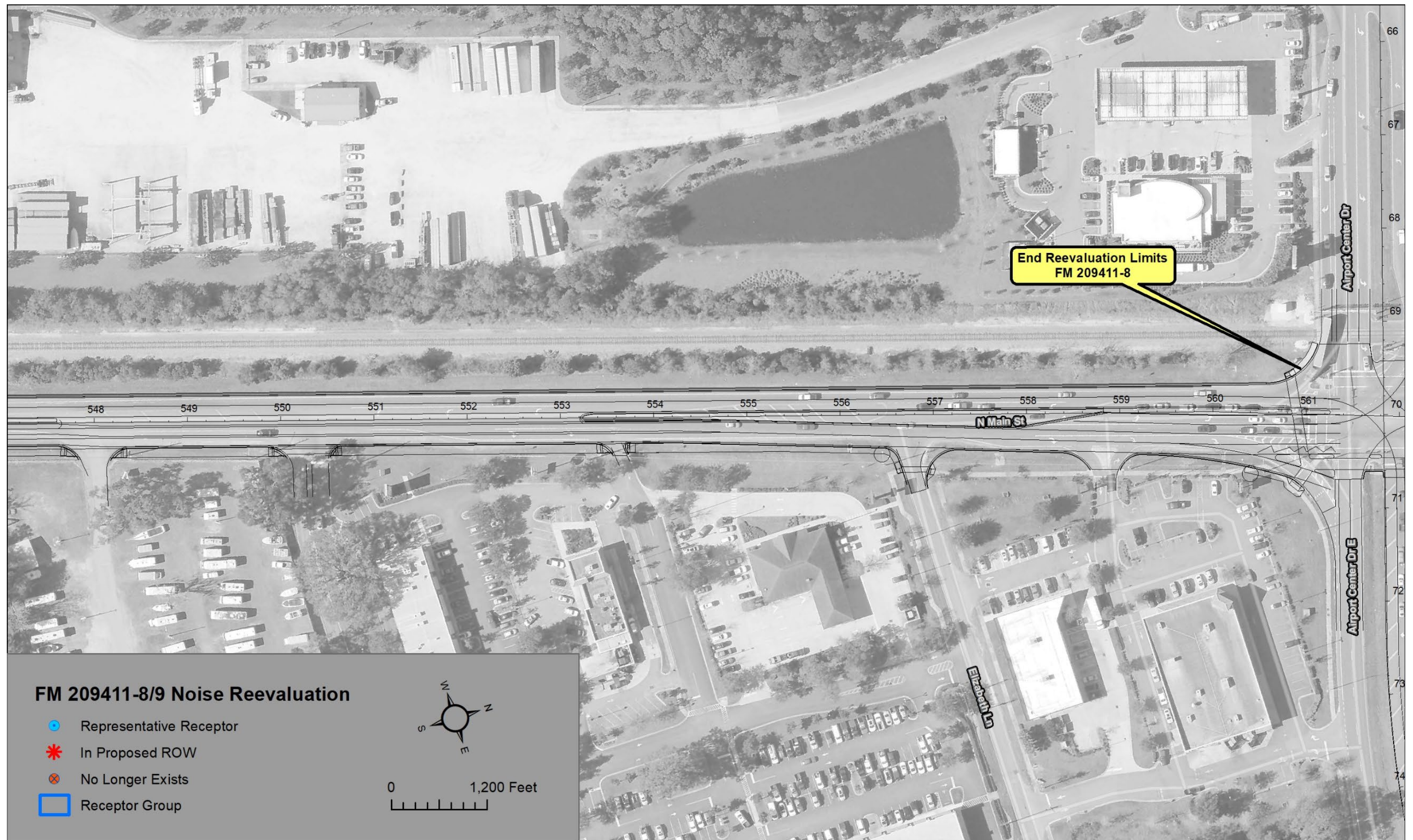
Noise Impact Comparison Matrix						
Noise Sensitive Sites			Predicted Noise Levels (dB(A)) <i>Red = Noise Level above NAC</i>			
Receptor ID	# Sites Represented	Impact Criterion (dB(A))	2022 Existing	2050 Build Alternative	Change From Existing	Consider Abatement
NB2-01.2a	3	66.0	60.1	59.9	-0.2	-
NB2-01.2b	3	66.0	62.9	63.7	0.8	-
NB2-01.2c	3	66.0	63.9	64.4	0.5	-
NB2-01.2d	3	66.0	64.0	64.4	0.4	-
NB2-01.3a	3	66.0	58.5	58.5	0.0	-
NB2-01.3b	3	66.0	61.5	62.1	0.6	-
NB2-01.3c	3	66.0	63.1	63.5	0.4	-
NB2-01.3d	3	66.0	63.1	63.6	0.5	-
NB2-01.4a	1	66.0	57.4	57.7	0.3	-
NB2-01.4b	1	66.0	60.6	61.1	0.5	-
NB2-01.4c	1	66.0	62.5	62.9	0.4	-
NB2-01.4d	1	66.0	62.6	63.0	0.4	-
NB2-02	1	66.0	57.8	59.3	1.5	-
NB2-03	1	66.0	52.7	54.9	2.2	-
NB2-SLU2-1 NAC C	1	66.0	54.5	55.7	1.2	-
NB2-SLU2-2 NAC C	1	66.0	60.6	63.3	2.7	-
NSA Summary	36		61.1	61.7	0.6	

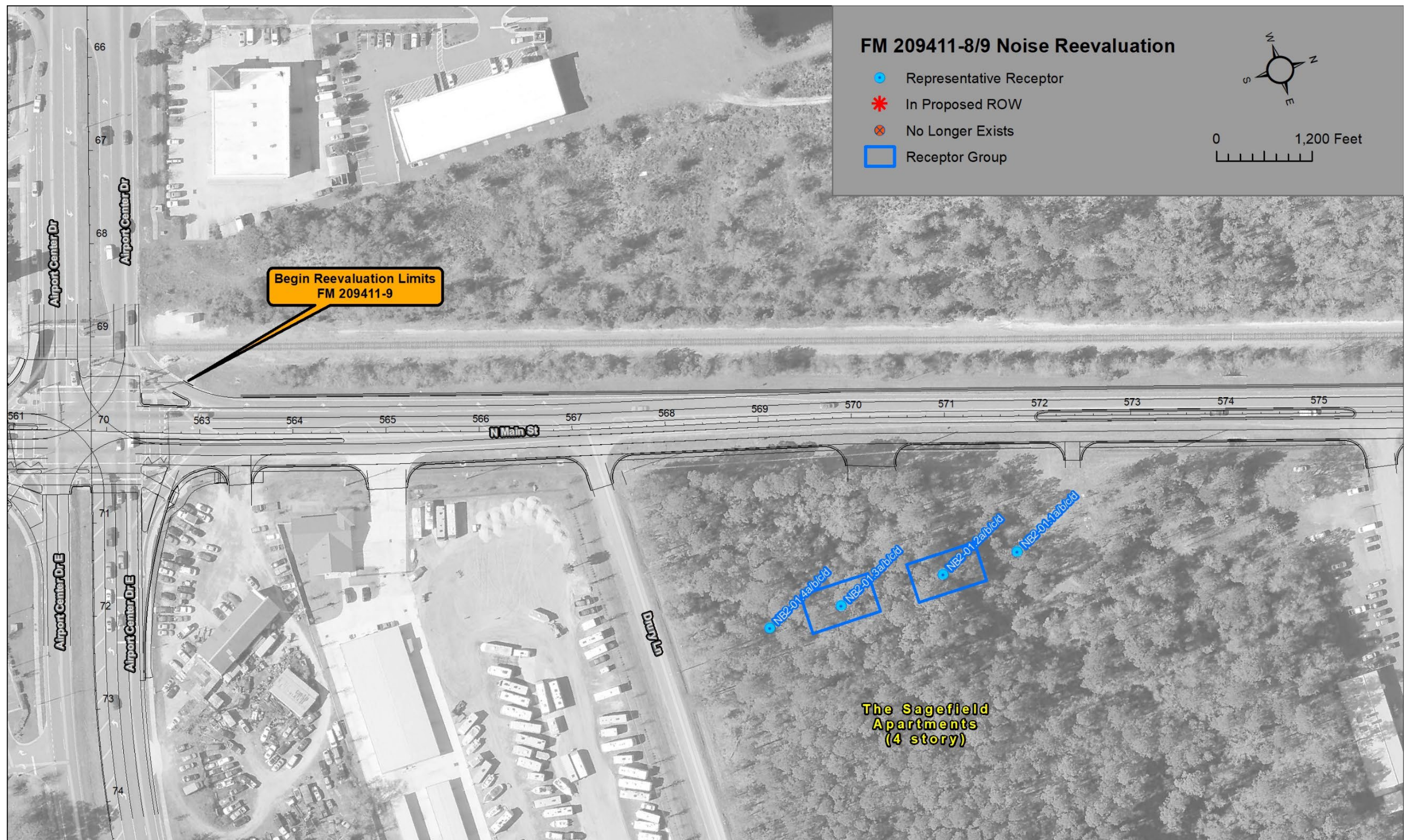
APPENDIX D: PROJECT AERIALS







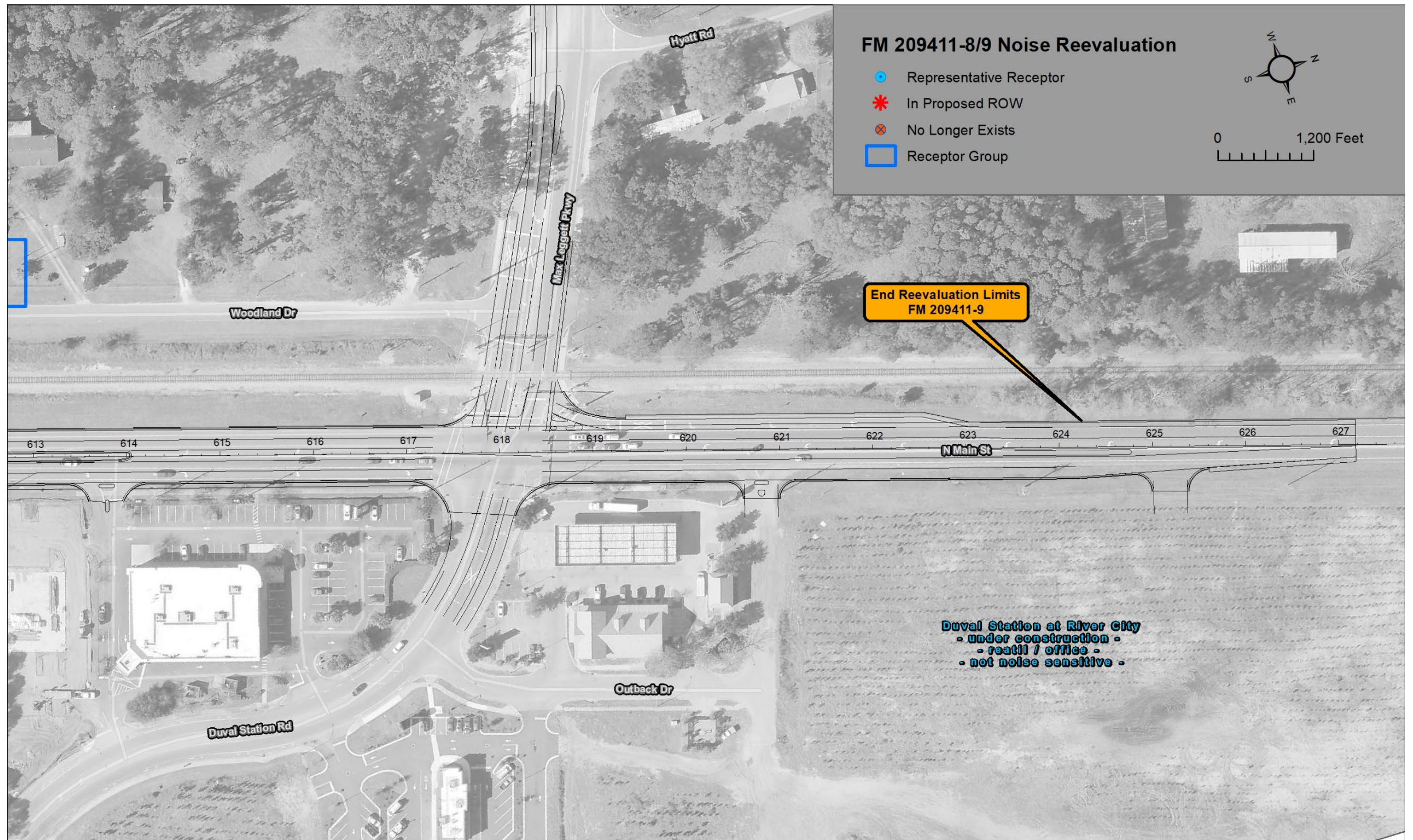












APPENDIX E: U.S. DOT CROSSING INVENTORY

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.						
A. Revision Date (MM/DD/YYYY) 04 / 19 / 2022		B. Reporting Agency ☒ Railroad ☐ Transit ☐ State ☐ Other		C. Reason for Update (Select only one) ☒ Change in Data ☐ New Crossing ☐ Re-Open ☐ Closed ☐ Date Change Only ☐ No Train Traffic ☐ Quiet Zone Update ☐ Admin. Correction		D. DOT Crossing Inventory Number 620831W
Part I: Location and Classification Information						
1. Primary Operating Railroad CSX Transportation [CSX]			2. State FLORIDA		3. County DUVAL	
4. City / Municipality ☒ In JACKSONVILLE ☐ Near		5. Street/Road Name & Block Number W COLE ROAD 3 (Street/Road Name) * (Block Number)		6. Highway Type & No. NA		
7. Do Other Railroads Operate a Separate Track at Crossing? ☐ Yes ☒ No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? ☐ Yes ☒ No If Yes, Specify RR			
9. Railroad Division or Region ☐ None FLORIDA		10. Railroad Subdivision or District ☐ None KINGSLAND		11. Branch or Line Name ☐ None EXPORT LEAD		12. RR Milepost S 0624.200 (prefix) (nnnn.nnn) (suffix)
13. Line Segment * 904790		14. Nearest RR Timetable Station *		15. Parent RR (if applicable) ☒ N/A		16. Crossing Owner (if applicable) ☒ N/A
17. Crossing Type ☒ Public ☐ Private		18. Crossing Purpose ☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.		19. Crossing Position ☒ At Grade ☐ RR Under ☐ RR Over		20. Public Access (if Private Crossing) ☐ Yes ☐ No
21. Type of Land Use ☐ Open Space ☐ Farm ☐ Residential ☒ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard		22. Average Passenger Train Count Per Day ☐ Less Than One Per Day ☐ Number Per Day 0				
23. Is there an Adjacent Crossing with a Separate Number? ☐ Yes ☒ No If Yes, Provide Crossing Number			24. Quiet Zone (FRA provided) ☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established			
25. HSR Corridor ID ☒ N/A		26. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 30.4616410		27. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -81.6348330		28. Lat/Long Source ☒ Actual ☐ Estimated
30.A. Railroad Use *			31.A. State Use *			
30.B. Railroad Use *			31.B. State Use *			
30.C. Railroad Use *			31.C. State Use *			
30.D. Railroad Use *			31.D. State Use *			
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *			
33. Emergency Notification Telephone No. (posted) 800-232-0144			34. Railroad Contact (Telephone No.) 904-366-3051		35. State Contact (Telephone No.) 850-414-4907	
Part II: Railroad Information						
1. Estimated Number of Daily Train Movements						
1.A. Total Day Thru Trains (6 AM to 6 PM) 0		1.B. Total Night Thru Trains (6 PM to 6 AM) 0		1.C. Total Switching Trains 0		1.D. Total Transit Trains 0
2. Year of Train Count Data (YYYY) 2022		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 20 3.B. Typical Speed Range Over Crossing (mph) From 20 to 20				
4. Type and Count of Tracks Main 1 Siding 0 Yard 0 Transit 0 Industry 0						
5. Train Detection (Main Track only) ☒ Constant Warning Time ☐ Motion Detection ☐ AFO ☐ PTC ☐ DC ☐ Other ☐ None						
6. Is Track Signaled? ☒ Yes ☐ No			7.A. Event Recorder ☒ Yes ☐ No		7.B. Remote Health Monitoring ☒ Yes ☐ No	

FORM FRA F 6180.71 (Rev. 08/03/2016)

OMB approval expires 11/30/2022

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