

# **DRAFT DESIGN NOISE REPORT**

Florida Department of Transportation  
District Five

U.S. 301(S.R. 35) From South of C.R. 470 East to Florida's Turnpike  
Sumter County, Florida

Financial Management Numbers: 430132-1& 430132-2

**July 2024**

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.

# Design Noise Report

Florida Department of Transportation  
District Five

U.S. 301(S.R. 35) From South of C.R. 470 East to Florida's Turnpike  
Sumter County, Florida

Financial Management Numbers: 430132-1& 430132-2

**July 2024**

*Draft*



Prepared By:  
Environmental Transportation Planning, LLC  
Ponte Vedra Beach, FL

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) plans to widen approximately 7.1 miles of U.S. 301 (State Road (S.R.) 35) from County Road (C.R.) 470 East to Florida's Turnpike in Sumter County. The limits of the project are shown in **Figure 1-1**.

The purpose of this project is to help accommodate traffic growth and alleviate congestion. Proposed improvements include widening U.S. 301 within the project limits to provide two lanes in each direction separated by a raised median. Safer accommodations for both bicycles and pedestrians will be included by adding a 12-foot-wide shared-use path on both sides of U.S. 301. Additionally, a portion of U.S. 301 will be realigned to avoid impacts within the City of Coleman. The project also includes coordination with a planned Turnpike project to build a new interchange. The project has funding for right-of-way (ROW) acquisition and construction.

As part of the project's Project Development and Environmental (PD&E) study phase, a Noise Study Report (NSR) was prepared in August 2017. The limits of the PD&E study extended from C.R. 470 East to S.R. 44. The results of the PD&E NSR concluded that project noise levels would meet or exceed the FDOT Noise Abatement Criteria (NAC) at 49 noise receptor sites, with an additional site having a substantial noise increase (15 dB(A) or greater). However, none of the analyzed noise barriers met the FDOT feasibility and reasonableness requirements.

In the PD&E phase, the FDOT committed to conducting a land use review to identify noise sensitive sites that may have received a building permit after the August 2017 NSR but before the project's Date of Public Knowledge (DOPK). The project's DOPK is May 16, 2019, when the environmental document was approved, and Location Design Concept Acceptance (LDCA) was granted. This Design Noise Report (DNR) fulfills the commitments made by FDOT.

In conjunction with the project's Final Design Phase, the FDOT is re-evaluating the traffic noise impacts associated with changes to the PD&E design concept. The re-evaluation conducted for this project is consistent with Title 23, *Code of Federal Regulations* (C.F.R.), § 772, Part II, Chapter 18 of the FDOT *Project Development and Environment Manual*, and Chapter 335, Section 335.17, *Florida Statutes*. This assessment also adheres to current Federal Highway Administration (FHWA) traffic noise analysis guidelines contained in *FHWA-HEP-10-025*. The FHWA Traffic Noise Model (TNM) - version 2.5 was used to predict traffic noise levels for this project following guidelines set forth in the FDOT *Traffic Noise Modeling and Analysis Practitioners Handbook*.

The noise abatement re-evaluation results differ from the PD&E noise analysis conclusions due to a project limit reduction, design changes, and a reduction in the posted speed limit. With the



proposed design changes and reduced speed, project noise levels are not predicted to meet or exceed the NAC at any of the 68 re-evaluated noise sensitive sites. Consequently, noise abatement consideration is not required.

Based on the noise re-evaluation, there appear to be no impacted areas within the project that require abatement consideration. This Design Noise Report satisfies the commitments made in the PD&E phase of project development.



CONTENTS

EXECUTIVE SUMMARY ..... i
1.0 INTRODUCTION ..... 1
1.1 Project Description ..... 1
1.2 Project Development and Environmental Results and Commitments ..... 1
1.3 Design Changes Since PD&E ..... 3
2.0 METHODOLOGY ..... 3
2.1 Noise Metrics ..... 4
2.2 Traffic Data ..... 4
2.3 Noise Abatement Criteria ..... 4
2.4 Noise Abatement Measures ..... 6
2.4.1 Changes to FDOT Noise Policy ..... 6
2.4.2 Noise Barrier Feasibility Criteria ..... 6
2.4.3 Noise Barrier Reasonableness Criteria ..... 7
2.4.4 Non-Residential Barrier Analysis ..... 8
3.0 TRAFFIC NOISE ANALYSIS AND ABATEMENT EVALUATION ..... 8
3.1 Changes in Noise Sensitive Sites ..... 8
3.2 Predicted Noise Levels and Abatement Analysis ..... 9
3.2.1 Noise Study Area NB1 ..... 10
3.2.2 Noise Study Area NB2 ..... 10
3.2.3 Noise Study Area NB3 ..... 10
3.2.4 Noise Study Area NB4 ..... 11
3.2.5 Noise Study Area NB5 ..... 11
3.2.6 Noise Study Area NB6 ..... 12
3.2.7 Noise Study Area NB7 ..... 12
3.2.8 Noise Study Area NB8 ..... 12
3.2.9 Noise Study Area NB9 ..... 13
3.2.10 Noise Study Area NB10 ..... 13
3.2.11 Noise Study Area SB1 ..... 13
3.2.12 Noise Study Area SB2 ..... 14
3.2.13 Noise Study Area SB3 ..... 14
3.2.14 Noise Study Area SB4 ..... 14
3.2.15 Noise Study Area SB5 ..... 15



3.2.16 Noise Study Area SB6..... 15

3.2.17 Noise Study Area SB7..... 15

3.2.18 Noise Study Area SB8..... 15

3.2.19 Noise Study Area SB9..... 16

3.2.20 Noise Study Area SB10 ..... 16

4.0 CONCLUSIONS..... 16

5.0 CONSTRUCTION NOISE AND VIBRATION ..... 16

6.0 COMMUNITY COORDINATION ..... 17

7.0 REFERENCES..... 18

- Appendix A Design Concept Typical Sections
- Appendix B Project Noise Traffic Data
- Appendix C Predicted Noise Levels
- Appendix D Project Aerials
- Appendix E TNM Modeling Files

**FIGURES**

Figure 1-1 | Project Location Map..... 2

**TABLES**

Table 2-1 | Noise Abatement Criteria..... 5

## 1.0 INTRODUCTION

### 1.1 Project Description

The Florida Department of Transportation (FDOT) plans to widen approximately 7.1 miles of U.S. 301 (State Road (S.R.) 35) from County Road (C.R.) 470 East to Florida's Turnpike in Sumter County. The limits of the project are shown in **Figure 1-1**.

The purpose of this project is to help accommodate traffic growth and alleviate congestion. Proposed improvements include widening U.S. 301 within the project limits to provide two lanes in each direction separated by a raised median. Safer accommodations for both bicycles and pedestrians will be included by adding a 12-foot-wide shared-use path on both sides of U.S. 301. Additionally, a portion of U.S. 301 will be realigned to avoid impacts within the City of Coleman. The project also includes coordination with a planned Turnpike project to build a new interchange. The project has funding for right-of-way (ROW) acquisition and construction.

### 1.2 Project Development and Environmental Results and Commitments

As part of the project's Project Development and Environmental (PD&E) study phase, a Noise Study Report (NSR) was prepared in August 2017. The limits of the PD&E study extended from C.R. 470 East to S.R. 44. The results of the PD&E NSR concluded that project noise levels would meet or exceed the FDOT Noise Abatement Criteria (NAC) at 49 noise receptor sites, with an additional site having a substantial noise increase (15 dB(A) or greater). However, none of the analyzed noise barriers met the FDOT feasibility and reasonableness requirements.

In the PD&E phase, the FDOT committed to conducting a land use review to identify noise sensitive sites that may have received a building permit after the August 2017 NSR but before the project's Date of Public Knowledge (DOPK). The project's DOPK is May 16, 2019, when the environmental document was approved, and Location Design Concept Acceptance (LDCA) was granted. This Design Noise Report (DNR) fulfills the commitments made by FDOT.



Figure 1-1 | Project Location Map



### 1.3 Design Changes Since PD&E

Revisions to the original project concept are being proposed. Below is a summary of the changes since LDCA was received on May 16, 2019.

- The design speed was reduced from 55 miles per hour (mph) to 40 mph throughout the project limits.
- The horizontal alignment was modified to avoid construction impacts to Trinity Baptist Church, transmission poles, and the B&S Auto Salvage Yard.
- Additional alternative pond sites were evaluated due to some of the PD&E sites being developed in the interim and no longer vacant land.
- The typical section recommended in the PD&E was a suburban section with two 12-foot lanes and a 7-foot paved shoulder separated by a 22-foot raised median with 5-foot sidewalks on both sides of the road. The current typical section has a 12-foot outside lane and an 11-foot inside lane in each direction, separated by a 22-foot to 28-foot raised median. There are also 12-foot shared-use paths on both sides of the current typical section.
- After completing the Intersection Control Evaluation (ICE), the proposed roundabouts at C.R. 525E and Warm Springs Avenue were not the preferred option. These intersections will be signalized with this design change.
- The proposed new interchange at Florida's Turnpike and improvements to U.S. 301 between the interchange and S.R. 44 have been deferred, and those limits removed from the re-evaluation study area.

The design concept typical sections are referenced in **Appendix A**, and the project aerials are provided in **Appendix D**.

## 2.0 METHODOLOGY

The traffic noise re-evaluation conducted for this project is consistent with Title 23, *Code of Federal Regulations* (C.F.R.), § 772, Part II, Chapter 18 of the FDOT *Project Development and Environment Manual*, and Chapter 335, Section 335.17, *Florida Statutes*. This assessment also adheres to current Federal Highway Administration (FHWA) traffic noise analysis guidelines contained in *FHWA-HEP-10-025*. The FHWA Traffic Noise Model (TNM) - version 2.5 was used to predict traffic noise levels for this project following guidelines set forth in the FDOT *Traffic Noise Modeling and Analysis Practitioners Handbook*.

Noise receptor coordinates used in the TNM correlate to exterior areas where frequent human use may occur, usually at the edge of the residential structure closest to the project roadways, unless the analyst's professional judgment determines otherwise.

The project design files (State Plane West) were used to determine the location of the Build Alternative for input into TNM. Vertical elevations for the project roadways used the design profile data where available and the United States Geological Survey digital elevation models in areas where the profile was not provided.

## 2.1 Noise Metrics

Sound levels for the re-evaluation 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 to typical traffic sound levels. All reported sound levels are hourly equivalent noise levels [ $L_{eq}$ ]. The  $L_{eq}$  is defined as the equivalent steady-state sound level that, in a given 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 volume and speed, with the amount of noise generated by traffic increasing as the vehicle speed and number of vehicles increase. Characteristics contributing to the highest traffic noise levels were used to predict project noise levels. Worst-case noise conditions occur with the maximum traffic traveling at the posted speed and represent a LOS C operating condition. 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 FDOT PD&E Manual. The updated traffic volumes and speeds used in the re-evaluation are included in **Appendix B**.

## 2.3 Noise Abatement Criteria

Consistent with the PD&E noise analysis, this re-evaluation uses the FHWA Noise Abatement Criteria (NAC) shown in **Table 2-1**. The FDOT has established noise levels for each land use activity category at which noise abatement must be considered. In Florida, noise levels that meet or exceed 66.0 dB(A) at Activity Category B and C land uses require noise abatement consideration. A 71.0 dB(A) noise level is required for an Activity Category E land use to be considered impacted by traffic noise.



Table 2-1 | Noise Abatement Criteria

Hourly A-Weighted Sound Level- decibels (dB(A))				Description of Activity Category
Activity Category	Activity Leq(h) <sup>1</sup>		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 <sup>2</sup>	67.0	66.0	Exterior	Residential.
C <sup>2</sup>	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 <sup>2</sup>	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)

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

<sup>2</sup> Includes undeveloped lands permitted for this activity category.

The project corridor is mixed land uses, with most noise sensitive land uses being Activity Category B - Residential. However, there are three Activity Category C land uses in proximity to the project: the Shady Brook Park rest area, Shady Brook Freewill Baptist Church, and Trinity Baptist Church. There are no Activity Category A or E land uses.

Another criterion for determining when project impacts 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 corridor).

## 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 PD&E noise analysis included traffic management, alternative roadway alignments, buffer zones, and noise barriers. The analysis determined that noise barriers are the only measure possible for this project due to the limited right-of-way (ROW) and proposed typical sections.

### 2.4.1 Changes to FDOT Noise Policy

Since the 2017 PD&E noise study, FDOT has revised the statewide noise policy contained in Chapter 18 of the PD&E Manual. The publication date for the revised Chapter 18 will be July 2024, and the following changes have been incorporated into this re-evaluation.

#### 2.4.1.1 Cost Effectiveness Criteria - Residential Noise Barrier Evaluation

The PD&E noise analysis used \$30.00 per square foot to determine the cost of a noise barrier, with a reasonable cost of \$42,000 per benefited receptor as the upper limit. The policy has been updated to a \$40.00 per square foot cost calculation, with a reasonable cost of \$64,000 per benefited receptor as the upper limit.

#### 2.4.1.2 Methodology to Evaluate Special Land Uses

FDOT updated the process used to identify traffic noise levels and impacts, and to evaluate noise abatement for special land uses (SLU). SLUs are non-residential noise sensitive sites (NAC Activity Categories C and E). This updated methodology consists of seven steps and is discussed further in **Section 2.4.4**.

### 2.4.2 Noise Barrier Feasibility Criteria

The updated FDOT PD&E Manual, expected release date of July 2024, stipulates that a noise barrier must meet acoustic and engineering criteria to be considered feasible, as summarized below:

- Acoustic feasibility: The barrier must provide a minimum of 5.0 dB(A) reduction in traffic noise for at least two impacted receptors. Consequently, noise barriers are not evaluated for isolated and single impacted receptors.
- Engineering feasibility: The engineering review identifies whether other factors must be evaluated for the barrier to be considered feasible.
- Safety: If a noise barrier and safety conflict exist, primary consideration must be given to safety. An example of such a conflict would be the loss of a safe sight distance (line of sight) at an intersection or driveway resulting from a noise barrier placement.
- Accessibility to adjacent properties: The noise barrier placement cannot block ingress and egress on non-limited access roadways. Other access issues to be considered include access to a local sidewalk or normal travel routes. Neither applies to noise barriers on limited-access roadways.
- Right-of-way needs: Does the noise barrier require additional land, access rights, or easements for construction and maintenance?
- Maintenance: Maintenance crews must have reasonable access to both sides of the barrier for personnel and equipment using standard practices.
- Drainage: Does the barrier impact existing or planned drainage?
- Utilities: Does the barrier impact existing utilities?

### 2.4.3 Noise Barrier Reasonableness Criteria

If a noise barrier meets the feasibility criteria, the following reasonableness factors must collectively be achieved for the noise abatement measure to be deemed reasonable.

- Acoustic reasonableness: The barrier must attain the FDOT noise reduction design goal (NRDG) of 7.0 dB(A) for at least one benefited receptor. (Note: to be considered "benefited," the receptor must receive a minimum of 5.0 dB(A) in traffic noise reduction from the barrier.) Failure to achieve the NRDG results in the noise abatement measure being deemed not reasonable.
- Cost effectiveness: Using the updated \$40.00 per square foot statewide average, a cost of \$64,000 per benefited receptor is the upper limit for a cost reasonable noise barrier.
- Benefited property owner and resident viewpoints: During project development, FDOT solicits the opinion of benefited owners and residents regarding noise abatement. Affected owners and residents are given the opportunity to provide input regarding their desires to have the proposed noise abatement measure constructed. This process aims to obtain a response for or against the noise barrier from a majority of respondents to the survey. The noise barrier is not deemed reasonable if a majority consensus is not obtained in favor of the barrier.

#### 2.4.4 Non-Residential Barrier Analysis

The methodology used to evaluate noise barrier systems for non-residential sites differs from those used for residential locations. The standard procedure for determining the feasibility and reasonableness of a noise barrier for an SLU site is documented in *Methodology to Evaluate Traffic Noise at Special Land Uses* (FDOT 2023). This SLU evaluation is a multi-step process.

- If an impacted SLU receptor is not adjacent to impacted residences or other impacted SLUs such that a single noise barrier would not be a practical form of abatement for all impacted properties, it is considered isolated. It must go through a Preliminary Screening analysis to determine if it has enough person-hour usage to equate to at least two residences to be found feasible for noise abatement. To meet the feasibility requirement, the isolated SLU must have at least 45,026 person-hours of use per year in the benefited area for a noise barrier to be found as a feasible form of noise abatement.
- A noise barrier is evaluated if the Preliminary Screening results indicate that a full analysis is warranted or if the impacted SLU is adjacent to other impacted SLUs or residences.
- Once it is determined that impacted SLUs are benefited from the analyzed noise barrier, the FDOT SLU Worksheet is utilized to assess whether a noise barrier is a reasonable and feasible form of abatement. The SLU Worksheet (and therefore cost reasonable calculation) includes all residences and SLUs that would receive a benefit from the noise barrier. This methodology allows the combined evaluation of NAC categories B, A, C, D, and E for a single noise barrier system that would potentially benefit all land use types evaluated.

### 3.0 TRAFFIC NOISE ANALYSIS AND ABATEMENT EVALUATION

Due to the number of receptors being evaluated, the re-evaluation noise analysis divided the study corridor into sixteen Noise Study Areas (NSA), with ten NSAs along northbound (NB) U.S. 301 (S.R. 35) and ten NSAs along southbound (SB) U.S. 301 (S.R. 35). Each analyzed residential receptor is identified by NSA number and then sequential numbering, i.e., NB2-01 refers to northbound NSA 2, receptor #1. The Activity Category C receptors are considered special land uses for purposes of the noise analysis and are identified by NSA number, SLU, and then sequential numbering, i.e., NB4-SLU1.

#### 3.1 Changes in Noise Sensitive Sites

The limits of the PD&E study extended north of Florida’s Turnpike to S.R. 44. This area and its nineteen PD&E receptors have been removed from the re-evaluation. Refer to **Section 1.3** for further information.

The following PD&E receptors no longer exist within the re-evaluation corridor, or their usage has changed.

- The Shady Brook Golf Course is no longer operating and, therefore, is not noise-sensitive.
- Shady Oaks Gather All Nursery property no longer operates as a nursery and is not noise-sensitive.
- Due to the design changes, several receptors identified in the PD&E study as being in the proposed ROW are no longer in the proposed ROW and have been added to the re-evaluation analysis.

In the PD&E phase, the FDOT committed to conducting a land use review to identify noise sensitive sites that may have received a building permit after the August 2017 NSR but before the project's May 16, 2019, DOPK. FDOT made a Public Records request on April 17, 2024 (Sumter County Record request #24-7863), requesting digital copies of approved building permits for 57 parcels in the Village of Fenney and Village of DeLuna neighborhoods. The County replied that all subject properties were built between 2021 and 2022, with no permits issued before 2021. Consequently, these homes were permitted after DOPK, and FDOT is not required to include them in the re-evaluation.

### 3.2 Predicted Noise Levels and Abatement Analysis

Within the noise re-evaluation limits, the PD&E noise study predicted project noise impacts to 30 noise sensitive sites with an additional site predicted to have a substantial noise increase exceeding 15 dB(A) over existing conditions. Six noise barriers were analyzed to abate these impacts; however, the PD&E analysis concluded that none met the criteria to be considered feasible and reasonable.

With the proposed design changes, project noise levels are not predicted to meet or exceed the NAC at any of the 68 re-evaluated noise sensitive sites. Consequently, noise abatement consideration is not required. The primary reason for this change in noise levels is the reduction of the proposed posted speed from 55 mph to 40 mph.

The following sections discuss each NSA and the predicted project noise levels. The re-evaluation results discussed in this section are also summarized in **Appendix C's** predicted noise level comparison matrix. When discussing noise level increases, the general rule that applies to perception is:

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

### 3.2.1 Noise Study Area NB1

NSA NB1, shown on pages **D1 through D5** in **Appendix D**, is located east of U.S. 301 (S.R. 35) from the project's beginning limits south of C.R. 470 to Northeast (NE) 19<sup>th</sup> Way. Seventeen residential receptors, identified as NB1-01 through NB1-17, were included in the re-evaluation. Also included are two SLU receptors. Receptors NB1-SLU1.1 through 1.6 represent the Shady Brook Park rest area picnic areas. Receptor NB1-SLU2 represents the front entrance to the Shady Brook Freewill Baptist Church. A permit search conducted on April 3, 2024, for the vacant property in this NSA did not identify active building permits for additional noise sensitive sites.

The PD&E noise study predicted project noise level impacts within NSA NB1 to four residential receptors and Shady Brook Park. With the re-evaluation's lower speed limit, the average predicted noise level in NSA NB1 is 58.9 dB(A), with no receptor predicted to meet or exceed the 66.0 dB(A) NAC. The greatest traffic noise increase over existing conditions is predicted at receptor NB1-01 (4.9 dB(A)). This increase is not considered substantial. Consequently, the project noise levels will not impact NSA NB1, and abatement consideration is not required.

### 3.2.2 Noise Study Area NB2

NSA NB2, shown on pages **D5** and **D6** in **Appendix D**, is located east of U.S. 301 (S.R. 35) from NE 19<sup>th</sup> Way to C.R. 525/U.S. 301 new alignment. Four residential receptors, identified as NB2-01 through NB2-04, were included in the re-evaluation.

The PD&E noise study predicted two project residential noise level impacts within NSA NB2. With the re-evaluation's lower speed limit, the average predicted noise level in NSA NB2 is 64.1 dB(A), with no receptor predicted to meet or exceed the 66.0 dB(A) NAC. The greatest traffic noise increase, 0.1 dB(A), is predicted at receptor NB2-01. This increase is not considered substantial. Consequently, the project noise levels will not impact NSA NB2, and abatement consideration is not required.

### 3.2.3 Noise Study Area NB3

NSA NB3, shown on pages **D6 through D8** in **Appendix D**, is located east of the U.S. 301 (S.R. 35) new alignment from the C.R. 525/U.S. 301 intersection to C.R. 523. This area is currently undergoing development as Coleman Ridge. A permit search conducted on April 3, 2024, identified no active building permits for noise sensitive sites in this area.



### 3.2.4 Noise Study Area NB4

NSA NB4, shown on pages **D8** and **D9** in **Appendix D**, is located east of the U.S. 301 (S.R. 35) new alignment from C.R. 523 to C.R. 468 (Warm Springs Avenue). One residential receptor and the Trinity Baptist Church, identified as NB4-01 and NB4-SLU1, respectively, were included in the re-evaluation.

The church was located within the proposed PD&E ROW, and the noise study did not predict noise impacts to the residential receptor. The church is no longer within the proposed ROW, but the re-evaluation analysis did not predict project noise levels at either receptor that meet or exceed the 66.0 dB(A) NAC. With the re-evaluation's lower speed limit, the average predicted noise level in NSA NB4 is 54.5 dB(A), with the greatest traffic noise increase, 6.0 dB(A), occurring at receptor NB4-01. This increase is not considered substantial. Consequently, the project noise levels will not impact NSA NB4, and abatement consideration is not required.

The Village of Fenney is also located in NSA NB4. This development did not exist when the PD&E noise analysis was conducted. To determine if this neighborhood should be included in this noise re-evaluation, a Public Records request was made on April 17, 2024, requesting digital copies of approved building permits for parcels in the Village of Fenney neighborhood closest to the proposed new alignment. The County replied that all subject properties were built between 2021 and 2022, with no permits issued before 2021. Consequently, these homes were permitted after the project's May 16, 2019, DOPK. Therefore, FDOT is not required to include the Village of Fenney in this re-evaluation.

### 3.2.5 Noise Study Area NB5

NSA NB5, shown on pages **D9** and **D10** in **Appendix D**, is located east of U.S. 301 (S.R. 35) from C.R. 468 (Warm Springs Avenue) to NE 34<sup>th</sup> Avenue. One residential receptor, identified as NB5-01, was included in the re-evaluation. A permit search conducted on April 3, 2024, for the vacant property in this NSA did not identify active building permits for additional noise sensitive sites.

The PD&E noise study predicted project noise level impacts to this receptor. However, with the re-evaluation's lower speed limit, the predicted noise level in NSA NB5 is 62.6 dB(A), which is below the 66.0 dB(A) NAC. The 4.6 dB(A) traffic noise increase is not considered substantial. Consequently, the project noise levels will not impact NSA NB5, and abatement consideration is not required.

### 3.2.6 Noise Study Area NB6

NSA NB6, shown on pages **D10** and **D11** in **Appendix D**, is located east of U.S. 301 (S.R. 35) from NE 34<sup>th</sup> Avenue to south of NE 37<sup>th</sup> Place. Two residential receptors, identified as NB6-01 and NB6-02, were included in the re-evaluation.

The PD&E noise study predicted project noise level impacts to receptor NB6-02. However, with the re-evaluation's lower speed limit, the average predicted noise level in NSA NB6 is 58.1 dB(A), with the greatest traffic noise increase, 2.5 dB(A), occurring at receptor NB6-01. This increase is not considered substantial. Consequently, the project noise levels will not impact NSA NB6, and abatement consideration is not required.

### 3.2.7 Noise Study Area NB7

NSA NB7, shown on pages **D11** and **D12** in **Appendix D**, is located east of U.S. 301 (S.R. 35) from NE 37<sup>th</sup> Place to NE 41<sup>st</sup> Lane. Six residential receptors, identified as NB7-01 through NB7-06, were included in the re-evaluation.

The PD&E noise study predicted project noise level impacts to five receptors in NSA NB7. However, with the re-evaluation's lower speed limit, the average predicted noise level in NSA NB7 is 60.9 dB(A), with the greatest traffic noise increase, 2.7 dB(A), occurring at receptor NB7-04. This increase is not considered substantial. Consequently, the project noise levels will not impact NSA NB7, and abatement consideration is not required.

### 3.2.8 Noise Study Area NB8

NSA NB8, shown on pages **D11** and **D12** in **Appendix D**, is located east of U.S. 301 (S.R. 35) from NE 41<sup>st</sup> Lane to Marsh Bend Trail. Two residential receptors, identified as NB8-01 and NB8-02, were included in the re-evaluation.

The PD&E noise study predicted project noise level impacts to both receptors in NSA NB8. However, with the re-evaluation's lower speed limit, the average predicted noise level in NSA NB8 is 62.7 dB(A), with the greatest traffic noise increase, 1.8 dB(A), occurring at receptor NB8-01. This increase is not considered substantial. Consequently, the project noise levels will not impact NSA NB8, and abatement consideration is not required.

The Village of DeLuna is also located in NSA NB8. This development did not exist when the PD&E noise analysis was conducted. To determine if this neighborhood should be included in this noise re-evaluation, a Public Records request was made on April 17, 2024, requesting digital copies of approved building permits for parcels in the Village of DeLuna neighborhood closest to U.S. 301 (S.R. 35). The County replied that all subject properties were built between 2021 and 2022, with no permits issued before 2021. Consequently, these homes were

permitted after the project's May 16, 2019, DOPK. Therefore, FDOT is not required to include the Village of DeLuna in this re-evaluation.

### 3.2.9 Noise Study Area NB9

NSA NB9, shown on page **D12** in **Appendix D**, is located east of U.S. 301 (S.R. 35) from Marsh Bend Trail to the overhead power transmission corridor. A section of the Village of DeLuna is located in this NSA, but it did not exist when the PD&E noise analysis was conducted. To determine if this neighborhood should be included in this noise re-evaluation, a Public Records request was made on April 17, 2024, requesting digital copies of approved building permits for parcels in the Village of DeLuna neighborhood closest to U.S. 301 (S.R. 35). The County replied that all subject properties were built between 2021 and 2022, with no permits issued before 2021. Consequently, these homes were permitted after the project's May 16, 2019, DOPK. Therefore, FDOT is not required to include the Village of DeLuna in this re-evaluation.

### 3.2.10 Noise Study Area NB10

NSA NB10, shown on pages **D13** and **D14** in **Appendix D**, is located east of U.S. 301 (S.R. 35) from the overhead power transmission corridor to Florida's Turnpike. A section of the Village of DeLuna is located in this NSA, but it did not exist when the PD&E noise analysis was conducted. To determine if this neighborhood should be included in this noise re-evaluation, a Public Records request was made on April 17, 2024, requesting digital copies of approved building permits for parcels in the Village of DeLuna neighborhood closest to U.S. 301 (S.R. 35). The County replied that all subject properties were built between 2021 and 2022, with no permits issued before 2021. Consequently, these homes were permitted after the project's May 16, 2019, DOPK. Therefore, FDOT is not required to include the Village of DeLuna in this re-evaluation.

### 3.2.11 Noise Study Area SB1

NSA SB1, shown on pages **D1 through D4** in **Appendix D**, is located west of U.S. 301 (S.R. 35) from the project's beginning limits south of C.R. 470 to NE 13<sup>th</sup> Avenue. One residential receptor, SB1-01, was included in the re-evaluation. The PD&E noise study predicted project noise level impacts to this receptor and to the Shady Brook Golf Course. The golf course is now closed; thus, it is no longer a noise receptor. A permit search conducted on April 3, 2024, for the vacant property in this NSA did not identify active building permits for additional noise sensitive sites.

With the re-evaluation's lower speed limit, the predicted noise level at receptor SB1-01 is 65.1 dB(A), which is below the 66.0 dB(A) NAC. The 3.3 dB(A) traffic noise increase over existing conditions is not considered substantial. Consequently, the project noise levels will not impact NSA SB1, and abatement consideration is not required.

### 3.2.12 Noise Study Area SB2

NSA SB2, shown on page **D4** in **Appendix D**, is located west of U.S. 301 (S.R. 35) from NE 13<sup>th</sup> Avenue to NE 16<sup>th</sup> Avenue. Four residential receptors, identified as SB2-01 through SB2-04, were included in the re-evaluation. A permit search conducted on April 3, 2024, for the vacant property in this NSA did not identify active building permits for additional noise sensitive sites.

The PD&E noise study predicted project noise level impacts to all four receptors. However, with the re-evaluation's lower speed limit, the average predicted noise level in NSA SB2 is 60.2 dB(A), with no receptor predicted to meet or exceed the 66.0 dB(A) NAC. The greatest traffic noise increase, 3.0 dB(A), is predicted at receptor SB2-04. This increase is not considered substantial. Consequently, the project noise levels will not impact NSA SB2, and abatement consideration is not required.

### 3.2.13 Noise Study Area SB3

NSA SB3, shown on pages **D4 through D6** in **Appendix D**, is located west of U.S. 301 (S.R. 35) from NE 16<sup>th</sup> Avenue to the C.R. 525/U.S. 301 intersection. Two residential receptors, SB3-01 and SB3-02, were included in the re-evaluation. A permit search conducted on April 3, 2024, for the vacant property in this NSA did not identify active building permits for additional noise sensitive sites.

Receptor SB3-02 was located within the proposed PD&E ROW, and the PD&E noise study did not predict noise impacts to the residential receptor. No impacts were predicted for receptor SB3-01.

Receptor SB3-02 is no longer within the proposed ROW, but the re-evaluation analysis did not predict project noise levels at either receptor that meet or exceed the 66.0 dB(A) NAC. With the re-evaluation's lower speed limit, the average predicted noise level in NSA SB3 is 60.6 dB(A), with the greatest traffic noise increase, 5.3 dB(A), occurring at receptor SB3-01. This increase is not considered substantial. Consequently, the project noise levels will not impact NSA SB3, and abatement consideration is not required.

### 3.2.14 Noise Study Area SB4

NSA SB4, shown on pages **D6 through D8** in **Appendix D**, is located west of the U.S. 301 (S.R. 35) new alignment from the C.R. 525/U.S. 301 intersection to C.R. 523. This area is currently undergoing development as Coleman Ridge. A permit search conducted on April 3, 2024, identified no active building permits for noise sensitive sites in this area.

### 3.2.15 Noise Study Area SB5

NSA SB5, shown on pages **D8** and **D9** in **Appendix D**, is located west of U.S. 301 (S.R. 35) from C.R. 523 to the new connection to Warm Springs Avenue West. Six residential receptors, identified as SB5-01 through SB5-06, were included in the re-evaluation.

The PD&E noise study predicted project noise impacts to receptors SB5-01 and SB5-02 in the form of substantial noise increases (at or above 15 dB(A) increase over existing conditions). However, with the re-evaluation's lower speed limit, the average predicted noise level in NSA SB5 is 58.6 dB(A), with the greatest traffic noise increase, 14.6 dB(A), occurring at receptor SB5-01. This increase is not considered substantial. Consequently, the project noise levels will not impact NSA SB5, and abatement consideration is not required.

### 3.2.16 Noise Study Area SB6

NSA SB6, shown on page **D9** in **Appendix D**, is located west of U.S. 301 (S.R. 35) from the new connection to Warm Springs Avenue West NE 34<sup>th</sup> Avenue to C.R. 468 (Warm Springs Avenue). Six residential receptors, identified as SB6-01 through SB6-06, were included in the re-evaluation. A permit search conducted on April 3, 2024, for the vacant property in this NSA did not identify active building permits for additional noise sensitive sites.

The PD&E noise study did not predict project noise level impacts in this NSA. The re-evaluation concurs with this finding. The average predicted noise level in NSA SB6 is 58.3 dB(A), with the greatest traffic noise increase, 5.0 dB(A), occurring at receptor SB6-06. This increase is not considered substantial. Consequently, the project noise levels will not impact NSA NB6, and abatement consideration is not required.

### 3.2.17 Noise Study Area SB7

NSA SB7, shown on pages **D9** and **D10** in **Appendix D**, is located west of U.S. 301 (S.R. 35) from C.R. 468 (Warm Springs Avenue) to C.R. 521. Seven residential receptors, identified as SB7-01 through SB7-07, were included in the re-evaluation.

The PD&E noise study predicted project noise level impacts to four receptors in NSA SB7. However, with the re-evaluation's lower speed limit, the average predicted noise level in NSA SB7 is 61.7 dB(A), with the greatest traffic noise increase, 5.6 dB(A), occurring at receptor SB7-01. This increase is not considered substantial. Consequently, the project noise levels will not impact NSA SB7, and abatement consideration is not required.

### 3.2.18 Noise Study Area SB8

NSA SB8, shown on pages **D10** and **D11** in **Appendix D**, is located west of U.S. 301 (S.R. 35) from C.R. 521 to NE 37<sup>th</sup> Place. One residential receptor, identified as SB8-01, was included in the re-

evaluation. A permit search conducted on April 3, 2024, for the vacant property in this NSA did not identify active building permits for additional noise sensitive sites.

The PD&E noise study did not predict project noise level impacts in this NSA. The re-evaluation concurs with this finding. The predicted noise level in NSA SB8 is 59.8 dB(A), an increase of 0.5 dB(A) over existing noise conditions. This increase is not considered substantial. Consequently, the project noise levels will not impact NSA SB8, and abatement consideration is not required.

### 3.2.19 Noise Study Area SB9

NSA SB9, shown on pages **D11** and **D12** in **Appendix D**, is located west of U.S. 301 (S.R. 35) from NE 37<sup>th</sup> Place to Marsh Bend Trail. There are no existing noise-sensitive receptors in this NSA. A permit search conducted on April 3, 2024, for the vacant property in this NSA did not identify active building permits for additional noise sensitive sites.

### 3.2.20 Noise Study Area SB10

NSA SB10, shown on pages **D12 through D14** in **Appendix D**, is located west of U.S. 301 (S.R. 35) from Marsh Bend Trail to Florida's Turnpike. There are no existing noise-sensitive receptors in this NSA. A permit search conducted on April 3, 2024, for the vacant property in this NSA did not identify active building permits for additional noise sensitive sites.

## 4.0 CONCLUSIONS

The noise abatement re-evaluation results differ from the PD&E noise analysis conclusions due to a project limit reduction, design changes, and a reduction in the posted speed limit. With the proposed design changes, project noise levels are not predicted to meet or exceed the NAC at any of the 68 re-evaluated noise sensitive sites. Consequently, noise abatement consideration is not required.

Based on the noise re-evaluation, there appear to be no impacted areas within the project that require abatement consideration. This Design Noise Report satisfies the commitments made in the PD&E phase of project development.

## 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. If noise sensitive land uses develop adjacent to the roadway prior to construction, additional impacts could result. It is anticipated that the application of the *FDOT Standard Specifications for Road and Bridge Construction* will minimize or eliminate most potential construction noise and vibration impacts. However, should unanticipated noise or vibration issues arise during the construction



process, the Project Engineer, in concert with the District Five Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.

## **6.0 COMMUNITY COORDINATION**

Coordination with the public and local agencies and officials was accomplished during the PD&E study. Local and community officials were offered the opportunity to comment on the proposed project at the planned public meetings.

## 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. December 2018.
6. *Methodology to Evaluate Highway Traffic Noise at Special Land Uses*; FDOT. December 2023.
7. *Standard Specifications for Road and Bridge Construction*; FDOT. 2023.





**Appendix A    Design Concept Typical Sections**

Refer to the project's 30% Design Plans



**Appendix B    Project Noise Traffic Data**



**Noise Analysis Traffic Data  
SR 35 (US 301) PD&E Widening from CR 470E to SR 44  
Build (2042) Conditions**

US 301															
Mainline Traffic Segment	Number of Lanes	AADT	LOS C AADT	Peak Hour Peak Direction	Off Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	Standard K-factor	D-factor	Target Speed (mph)	
C-470 to C-525	4	30,000	21,800	1,590	1,336	1,140	8.00%	4.60%	3.40%	1.40%	0.00%	9.5%	53.5%	40	
C-468 to Florida's Turnpike	4	23,000	21,800	1,704	1,246	1,140	6.00%	3.10%	2.90%	1.00%	0.20%	9.5%	53.5%	40	
Florida's Turnpike to SR 44	4	31,000	24,400	1,800	1,300	1,210	7.00%	4.60%	2.40%	1.90%	0.00%	9.0%	53.5%	40	
Intersecting Roadways															
Arterial Traffic Segment	Number of Lanes	AADT	LOS C AADT	Peak Hour Peak Direction	Off Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	K-factor	D-factor	Posted Speed (mph)	
<b>C-470</b>															
East of US 301	4	32,000	21,800	1,553	1,228	1,140	9.80%	5.30%	4.50%	0.70%	0.10%	9.5%	55.0%	45	
<b>C-468 / Warm Springs Ave</b>															
East of US 301	4	19,000	21,800	1,291	879	1,140	14.30%	4.30%	10.00%	1.10%	1.00%	9.0%	55.0%	45	
West of US 301	2	8,700	13,800	658	645	720	14.30%	4.30%	10.00%	1.10%	1.00%	9.5%	53.5%	55	
<b>SR 44</b>															
East of US 301	4	49,000	24,400	2,067	1,764	1,210	7.10%	4.00%	3.10%	1.00%	0.10%	9.0%	55.0%	45	
Interchange Ramps															
Interchange Ramp Traffic Segment	Number of Lanes	AADT	LOS C AADT	Peak Hour Peak Direction	Off Peak Hour Peak Direction	LOS C Peak Hour Peak Direction	Design Hr. % T	Design Hr. % MT	Design Hr. % HT	Design Hr. % Buses	Design Hr. % Motorcycles	K-factor	D-factor	Posted Speed (mph)	
<b>US 301 at Florida's Turnpike</b>															
On-Ramp from US 301 to NB Florida's Turnpike	1	2,400	N/A	350	190	N/A	15.90%	2.50%	13.30%	0.00%	0.20%	9.0%	100.0%	-	
Off-Ramp from NB Florida's Turnpike to US 301	1	4,700	N/A	550	510	N/A	4.80%	1.20%	3.50%	0.20%	0.10%	9.0%	100.0%	-	
On-Ramp from US 301 to SB Florida's Turnpike	1	5,050	N/A	550	510	N/A	15.90%	2.50%	13.30%	0.00%	0.20%	9.0%	100.0%	-	
Off-Ramp from SB Florida's Turnpike to US 301	1	5,050	N/A	350	190	N/A	4.80%	1.20%	3.50%	0.20%	0.10%	9.0%	100.0%	-	

Notes

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

Prepared By: Satya Kolluru Date: \_\_\_\_\_  
Print Name Signature

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

FDOT Reviewer: Steven C Buck Date: 6/28/2024  
Print Name Signature

Signing for target speed change only *SCB*



Appendix C Predicted Noise Levels



PREDICTED NOISE LEVELS

Noise Study Area (NSA)	Receptor Name	No. of Units	NAC	FHWA NAC Criterion (dB(A))	FDOT NAC Criterion (dB(A))	2014 Existing LAeq1h * = Ambient Field Measurement (dB(A))	PD&E Study 2042 Build LAeq1h (dB(A))	Final Design 2042 Build LAeq1h (dB(A))	NAC Met or Exceeded	Noise Level Change from Existing	Substantial Increase	Description
<b>XX.X</b>	<b>Project Impacts</b>											
NB1	NB1-01	1	B	67.0	66.0	51.7	60.6	56.6	No	4.9	No	Residence
NB1	NB1-02	1	B	67.0	66.0	57.8	<b>66.0</b>	61.5	No	3.7	No	Residence
NB1	NB1-03	1	B	67.0	66.0	54.2	<b>66.0</b>	58.5	No	4.3	No	Residence
NB1	NB1-04	1	B	67.0	66.0	53.6	<b>66.0</b>	58.1	No	4.5	No	Residence
NB1	NB1-05	1	B	67.0	66.0	53.6	<b>66.0</b>	57.8	No	4.2	No	Residence
NB1	NB1-06	1	B	67.0	66.0	56.6	<b>66.6</b>	59.5	No	2.9	No	Residence
NB1	NB1-07	1	B	67.0	66.0	53.4	n/a	56.9	No	3.5	No	Residence
NB1	NB1-08	1	B	67.0	66.0	52.9	63.8	56.3	No	3.4	No	Residence
NB1	NB1-09	1	B	67.0	66.0	55.8	63.8	57.7	No	1.9	No	Residence
NB1	NB1-10	1	B	67.0	66.0	62.5	65.0	62.2	No	-0.3	No	Residence
NB1	NB1-11	1	B	67.0	66.0	58.2	65.0	58.5	No	0.3	No	Residence
NB1	NB1-12	1	B	67.0	66.0	53.1	63.8	55.9	No	2.8	No	Residence
NB1	NB1-13	1	B	67.0	66.0	58.1	65.0	58.6	No	0.5	No	Residence
NB1	NB1-14	1	B	67.0	66.0	62.4	<b>70.2</b>	63.3	No	0.9	No	Residence
NB1	NB1-15	1	B	67.0	66.0	53.5	64.6	56.2	No	2.7	No	Residence
NB1	NB1-16	1	B	67.0	66.0	55.5	64.6	57.3	No	1.8	No	Residence
NB1	NB1-17	1	B	67.0	66.0	56.6	64.6	57.9	No	1.3	No	Residence
NB1	NB1-SLU1.1	1	C	67.0	66.0	62.9	<b>70.2</b>	63.6	No	0.7	No	Shady Brook Park Rest Area
NB1	NB1-SLU1.2	1	C	67.0	66.0	58.4	65.9	59.7	No	1.3	No	Shady Brook Park Rest Area
NB1	NB1-SLU 1.3	1	C	67.0	66.0	57.3	65.9	58.9	No	1.6	No	Shady Brook Park Rest Area
NB1	NB1-SLU 1.4	1	C	67.0	66.0	55.1	62.0	57.7	No	2.6	No	Shady Brook Park Rest Area
NB1	NB1-SLU 1.5	1	C	67.0	66.0	54.7	62.0	57.5	No	2.8	No	Shady Brook Park Rest Area
NB1	NB1-SLU 1.6	1	C	67.0	66.0	60.0	<b>67.3</b>	61.3	No	1.3	No	Shady Brook Park Rest Area
NB1	NB1-SLU2	1	C	67.0	66.0	61.2	64.6	61.1	No	-0.1	No	Shady Brook Freewill Baptist Church
NB2	NB2-01	1	B	67.0	66.0	62.8	<b>73.1</b>	62.9	No	0.1	No	Residence
NB2	NB2-02	1	B	67.0	66.0	<b>66.6</b>	<b>73.1</b>	65.3	No	-1.3	No	Residence
NB2	NB2-03	1	B	67.0	66.0	<b>67.3</b>	<b>73.1</b>	65.7	No	-1.6	No	Residence
NB2	NB2-04	1	B	67.0	66.0	63.0	<b>73.1</b>	62.3	No	-0.7	No	Residence
NB4	NB4-01	1	B	67.0	66.0	44.5 *	56.5	50.5	No	6.0	No	Residence
NB4	NB4-SLU1	1	C	67.0	66.0	53.1	In ROW	58.4	No	5.3	No	Trinity Baptist Church
NB5	NB5-01	1	B	67.0	66.0	58.0	<b>71.1</b>	62.6	No	4.6	No	Residence
NB6	NB6-01	1	B	67.0	66.0	54.0	63.6	56.5	No	2.5	No	Residence
NB6	NB6-02	1	B	67.0	66.0	58.2	<b>73.9</b>	59.6	No	1.4	No	Residence
NB7	NB7-01	1	B	67.0	66.0	55.7	64.4	58.1	No	2.4	No	Residence

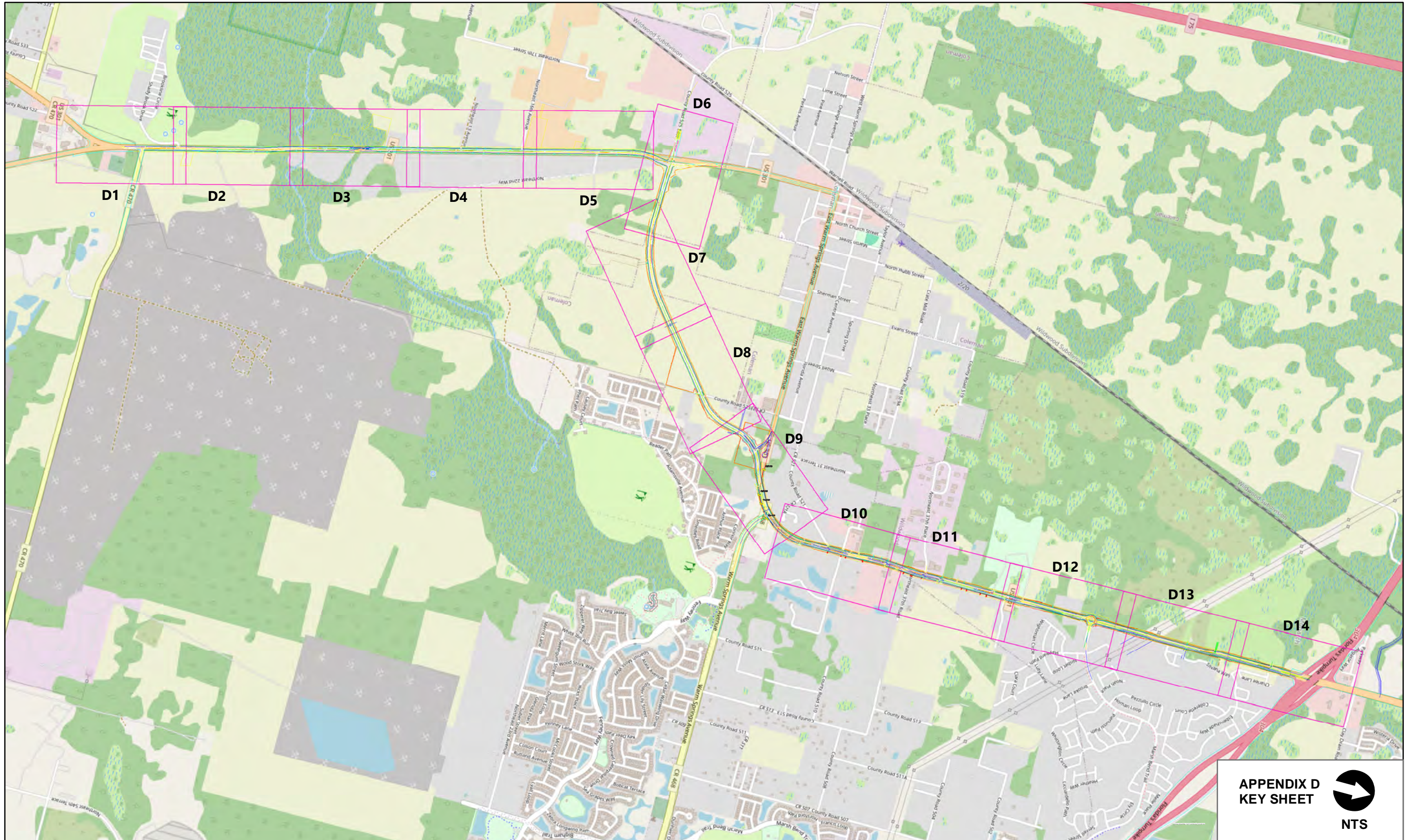


PREDICTED NOISE LEVELS

Noise Study Area (NSA)	Receptor Name	No. of Units	NAC	FHWA NAC Criterion (dB(A))	FDOT NAC Criterion (dB(A))	2014 Existing LAeq1h * = Ambient Field Measurement (dB(A))	PD&E Study 2042 Build LAeq1h (dB(A))	Final Design 2042 Build LAeq1h (dB(A))	NAC Met or Exceeded	Noise Level Change from Existing	Substantial Increase	Description
NB7	NB7-02	1	B	67.0	66.0	59.9	73.9	61.6	No	1.7	No	Residence
NB7	NB7-03	1	B	67.0	66.0	59.2	73.9	61.3	No	2.1	No	Residence
NB7	NB7-04	1	B	67.0	66.0	55.9	73.9	58.6	No	2.7	No	Residence
NB7	NB7-05	1	B	67.0	66.0	60.4	73.9	62.7	No	2.3	No	Residence
NB7	NB7-06	1	B	67.0	66.0	60.9	73.9	63.0	No	2.1	No	Residence
NB8	NB8-01	1	B	67.0	66.0	60.8	73.9	62.6	No	1.8	No	Residence
NB8	NB8-02	1	B	67.0	66.0	61.1	71.1	62.7	No	1.6	No	Residence
SB1	SB1-01	1	B	67.0	66.0	61.8	72.0	65.1	No	3.3	No	Residence
SB2	SB2-01	1	B	67.0	66.0	57.1	71.9	59.5	No	2.4	No	Residence
SB2	SB2-02	1	B	67.0	66.0	56.4	71.9	59.2	No	2.8	No	Residence
SB2	SB2-03	1	B	67.0	66.0	58.1	71.9	60.9	No	2.8	No	Residence
SB2	SB2-04	1	B	67.0	66.0	58.3	71.9	61.3	No	3.0	No	Residence
SB3	SB3-01	1	B	67.0	66.0	52.1	62.1	57.4	No	5.3	No	Residence
SB3	SB3-02	1	B	67.0	66.0	69.1	In ROW	63.8	No	-5.3	No	Residence
SB5	SB5-01	1	B	67.0	66.0	44.5 *	61.0	59.1	No	14.6	No	Residence
SB5	SB5-02	1	B	67.0	66.0	44.5 *	56.5	57.5	No	13.0	No	Residence
SB5	SB5-03	1	B	67.0	66.0	45.3	56.5	56.3	No	11.0	No	Residence
SB5	SB5-04	1	B	67.0	66.0	48.3	n/a	57.0	No	8.7	No	Residence
SB5	SB5-05	1	B	67.0	66.0	52.7	n/a	58.5	No	5.8	No	Residence
SB5	SB5-06	1	B	67.0	66.0	58.5	n/a	63.1	No	4.6	No	Residence
SB6	SB6-01	1	B	67.0	66.0	61.1	n/a	62.2	No	1.1	No	Residence
SB6	SB6-02	1	B	67.0	66.0	62.0	n/a	61.1	No	-0.9	No	Residence
SB6	SB6-03	1	B	67.0	66.0	52.4	n/a	56.3	No	3.9	No	Residence
SB6	SB6-04	1	B	67.0	66.0	50.4	n/a	55.0	No	4.6	No	Residence
SB6	SB6-05	1	B	67.0	66.0	57.2	60.5	59.6	No	2.4	No	Residence
SB6	SB6-06	1	B	67.0	66.0	50.6	57.4	55.6	No	5.0	No	Residence
SB7	SB7-01	1	B	67.0	66.0	59.9	67.9	65.5	No	5.6	No	Residence
SB7	SB7-02	1	B	67.0	66.0	57.2	67.9	62.5	No	5.3	No	Residence
SB7	SB7-03	1	B	67.0	66.0	58.7	67.9	64.0	No	5.3	No	Residence
SB7	SB7-04	1	B	67.0	66.0	58.7	67.9	62.9	No	4.2	No	Residence
SB7	SB7-05	1	B	67.0	66.0	54.2	n/a	59.4	No	5.2	No	Residence
SB7	SB7-06	1	B	67.0	66.0	52.7	n/a	57.9	No	5.2	No	Residence
SB7	SB7-07	1	B	67.0	66.0	55.7	63.8	59.7	No	4.0	No	Residence
SB8	SB8-01	1	B	67.0	66.0	59.3	n/a	59.8	No	0.5	No	Residence

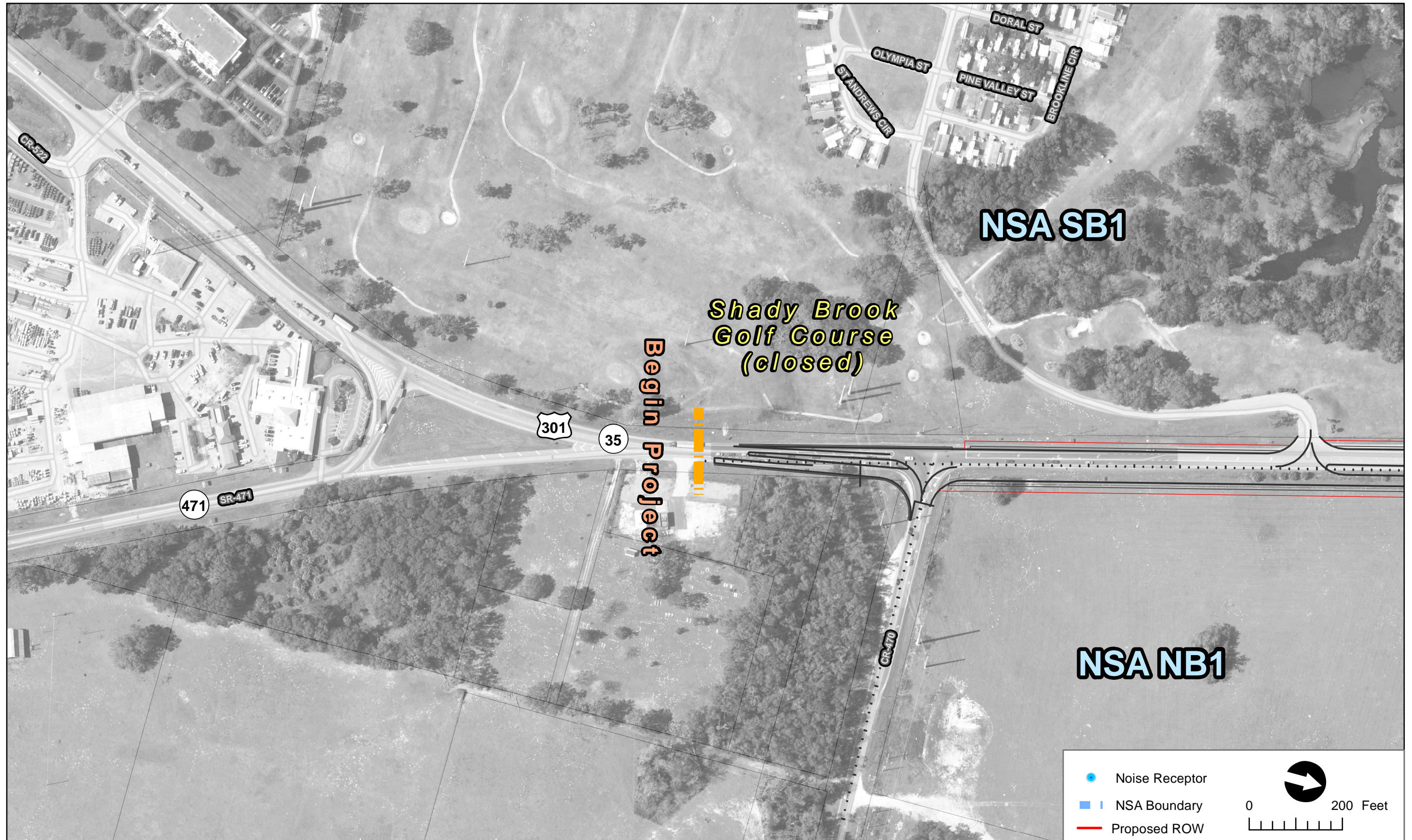


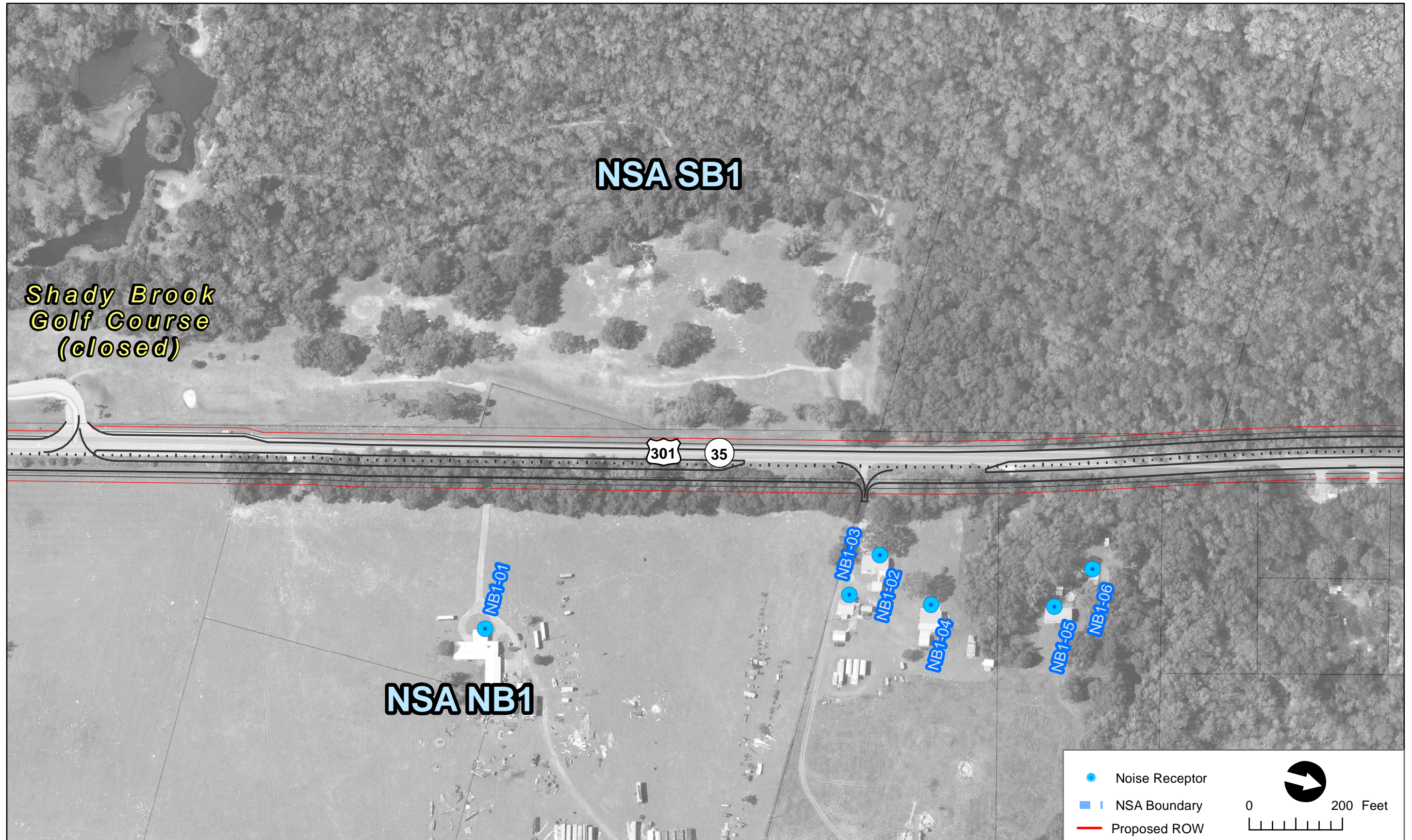
Appendix D Project Aerials

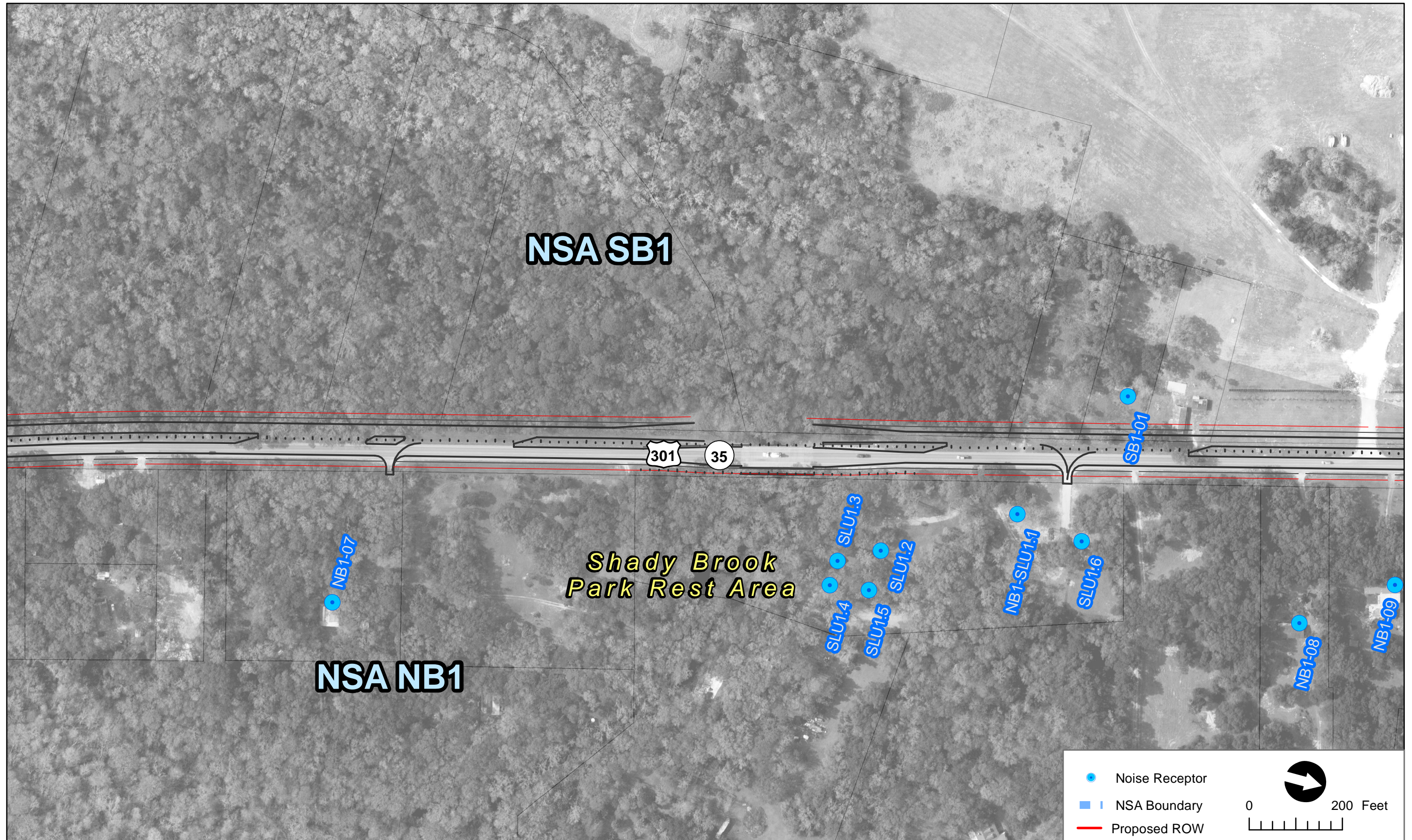


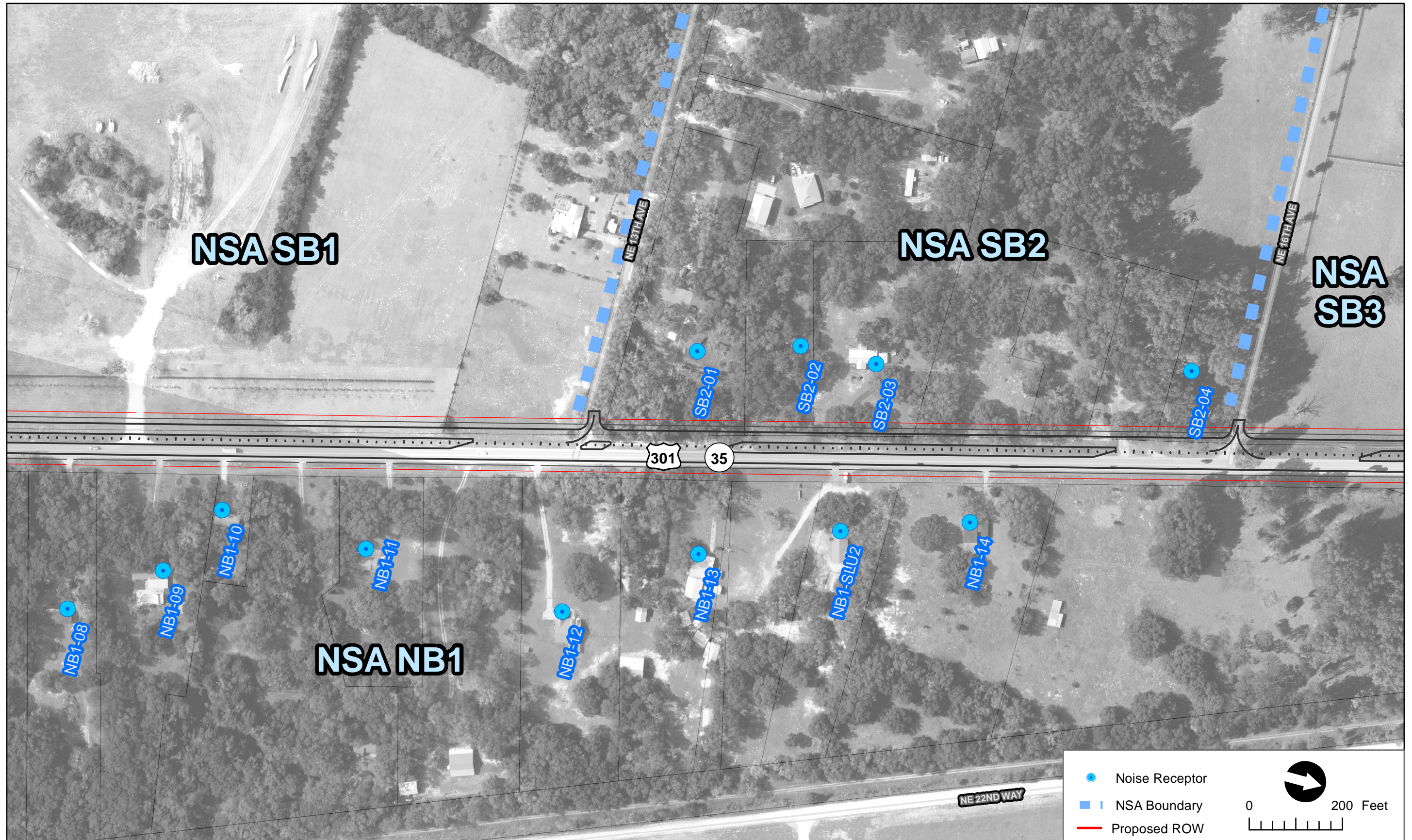
**U.S. 301 (S.R. 35) fr. S. of C.R. 470 E to Florida's Turnpike  
FPID: 430132-1 &430132-2**

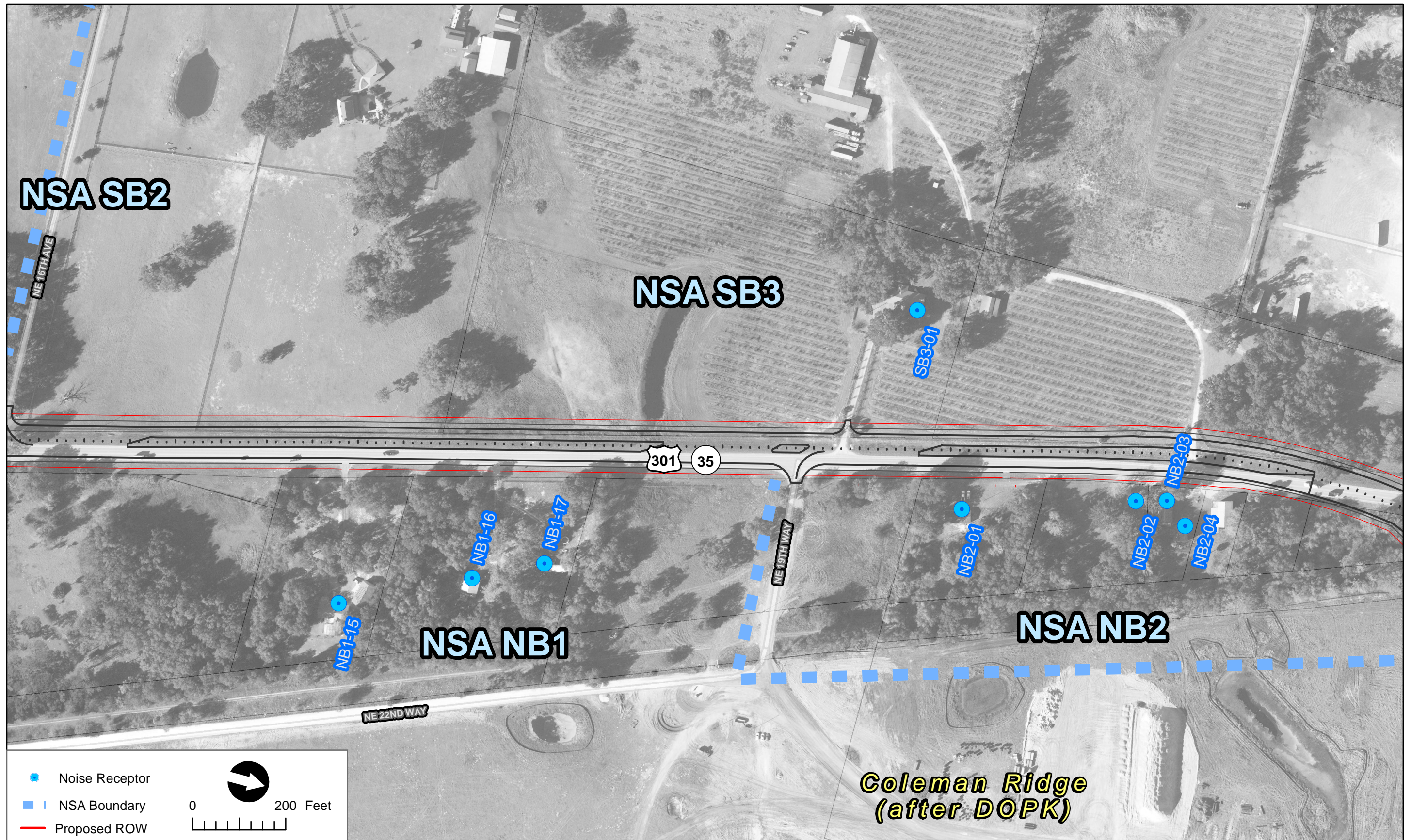


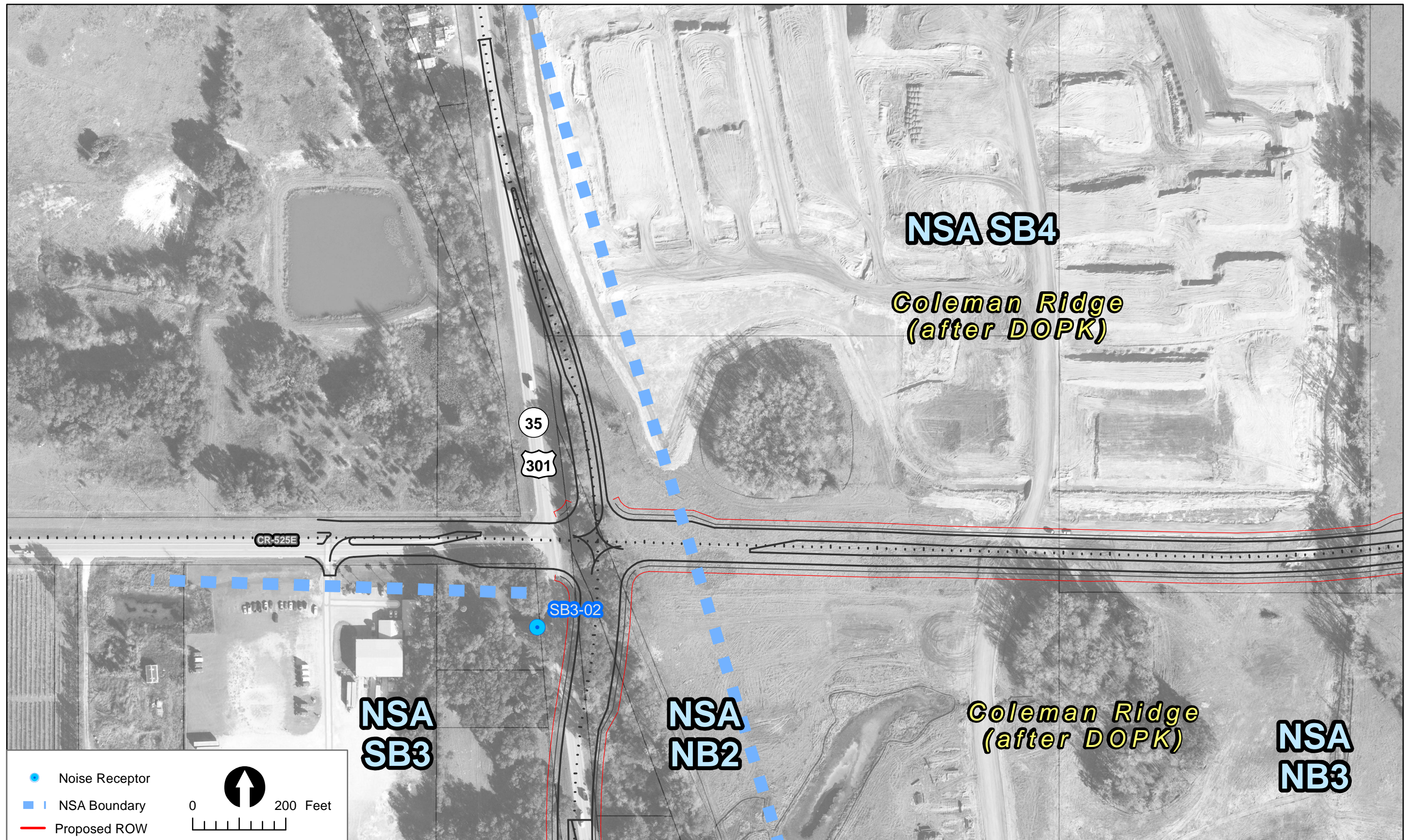


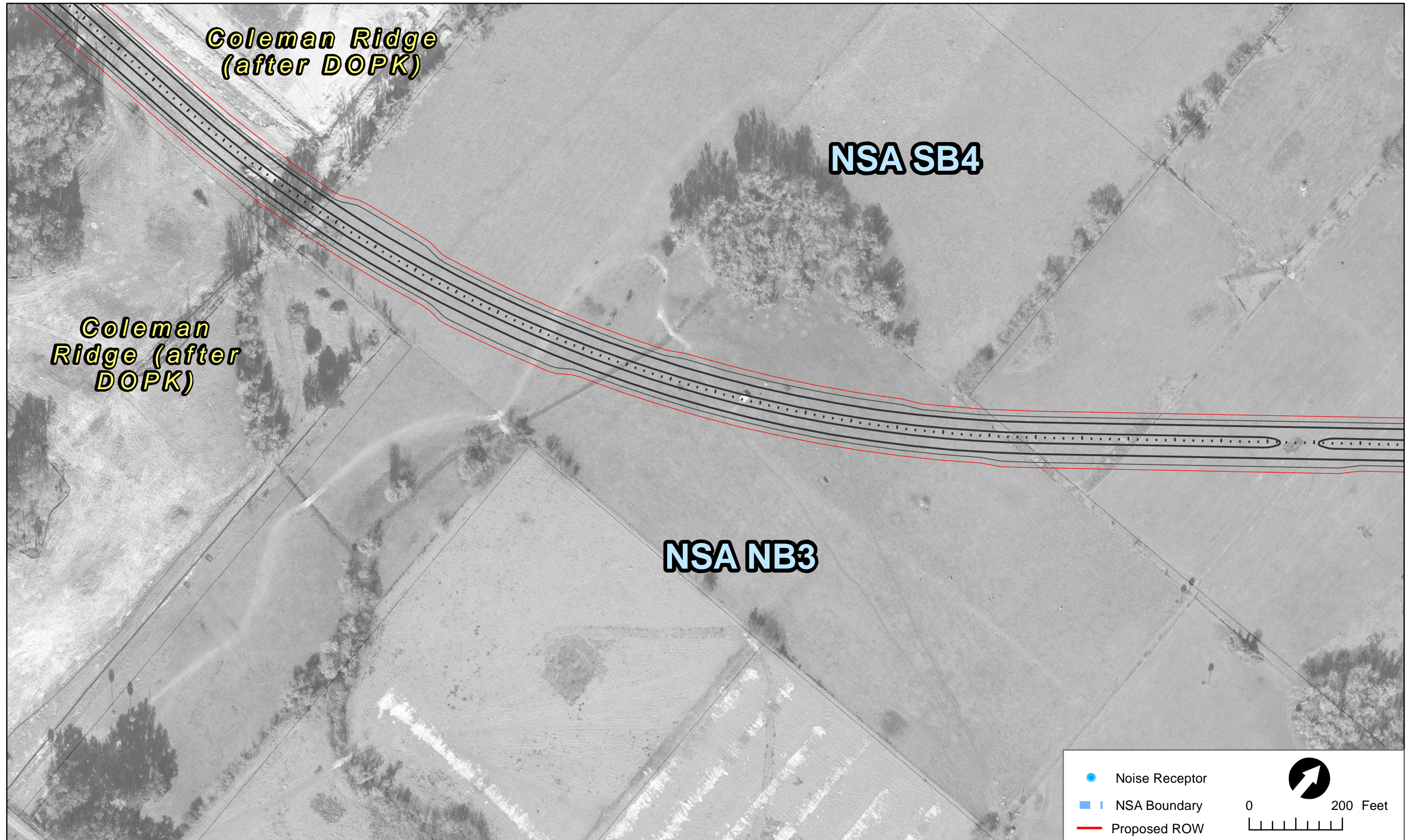






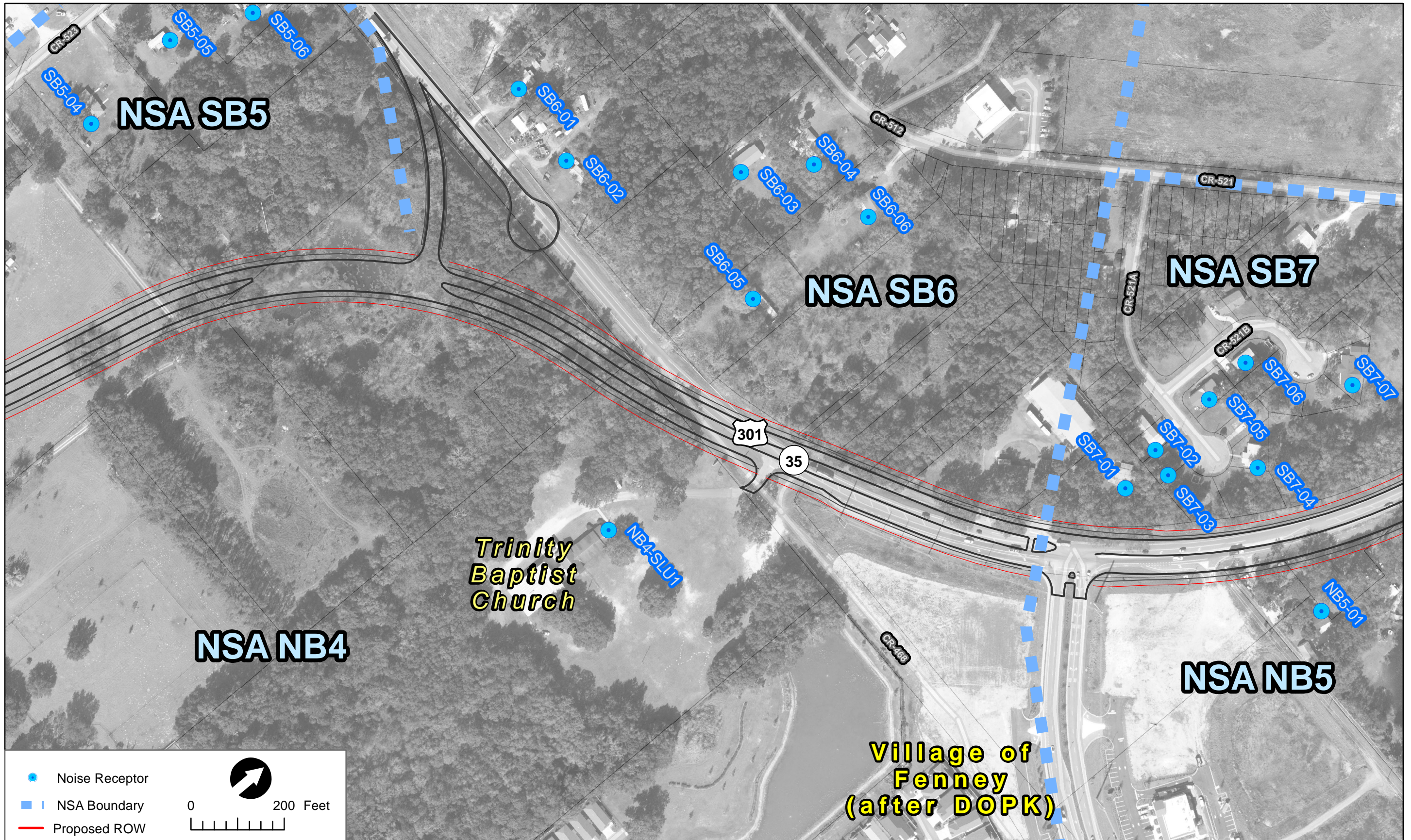


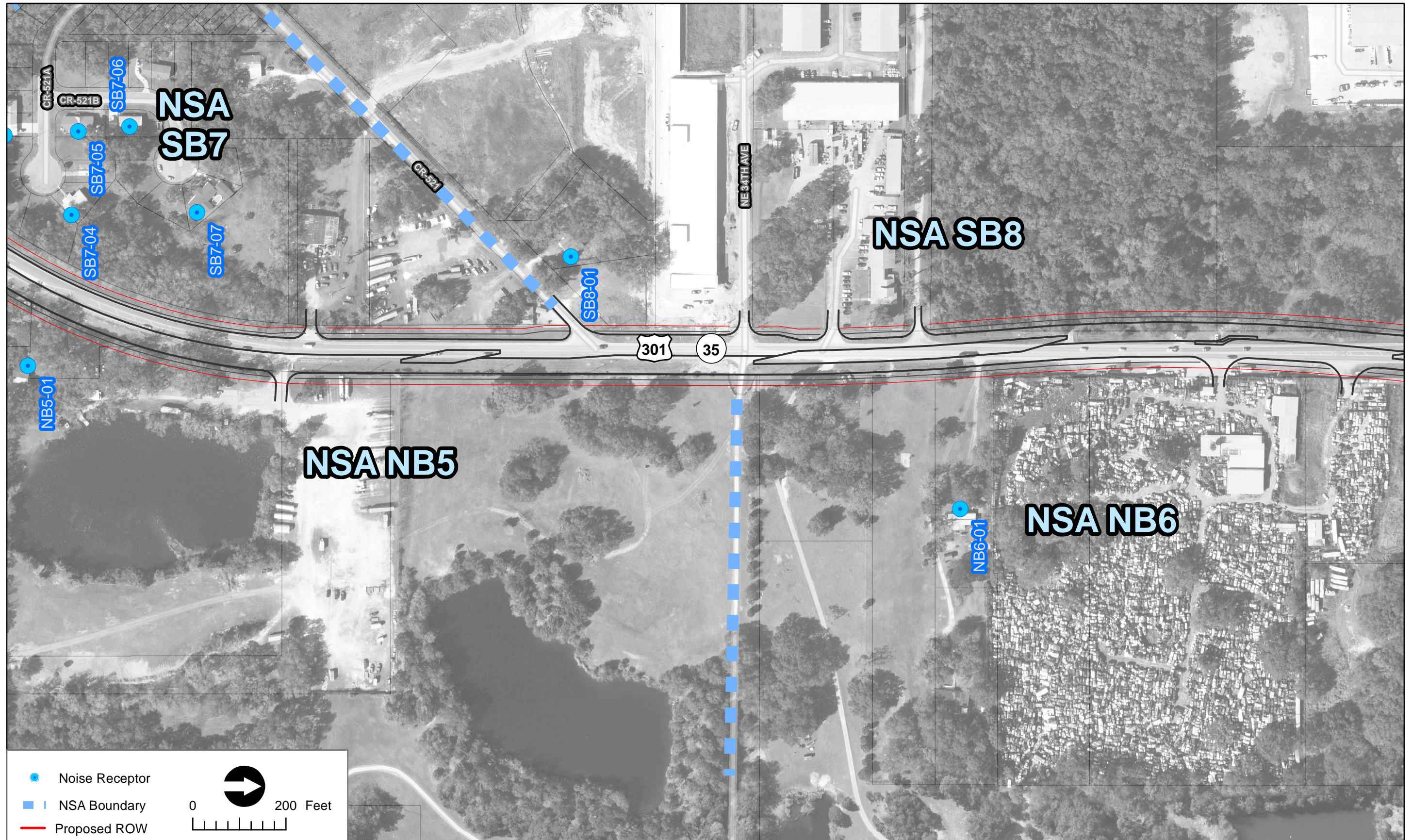


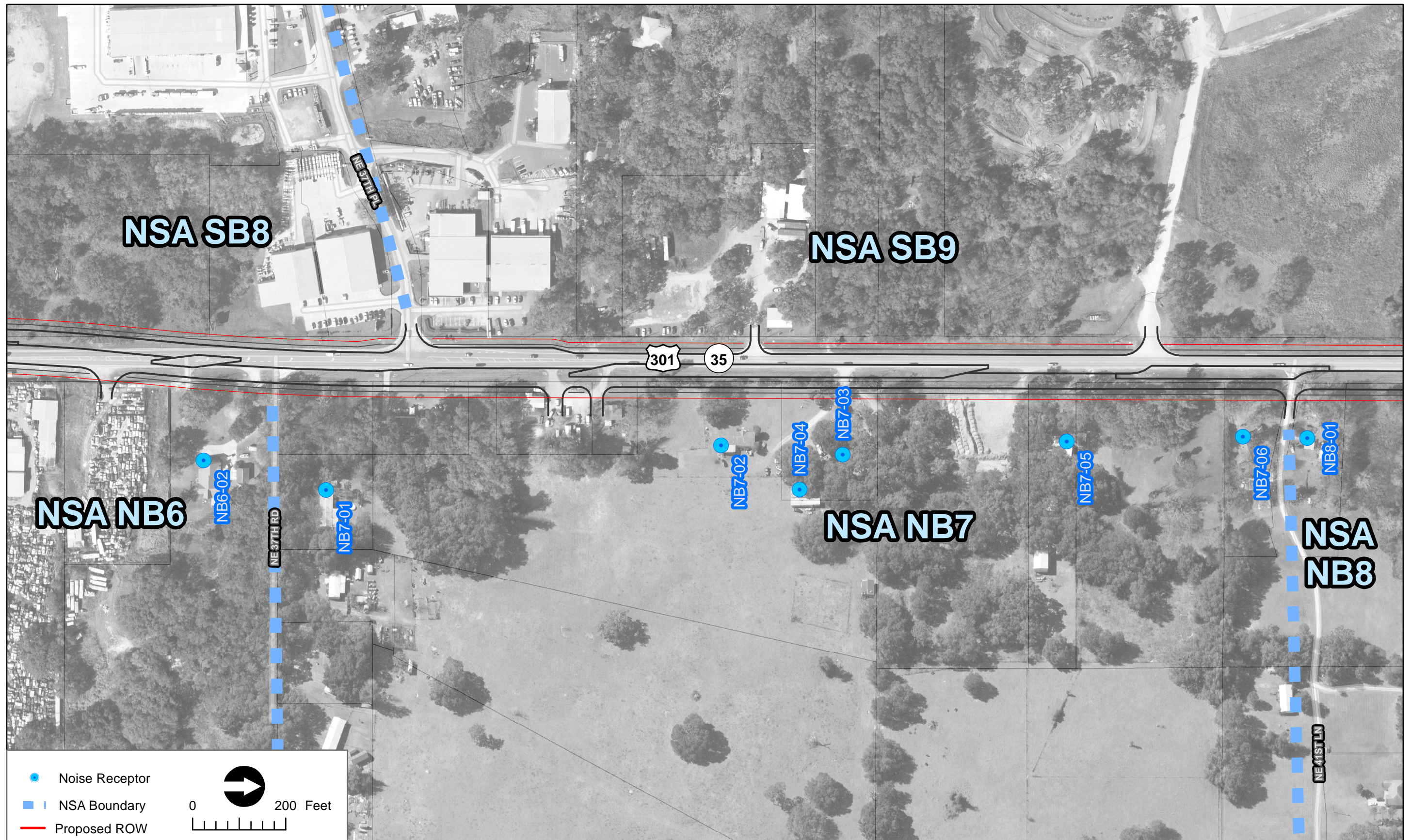






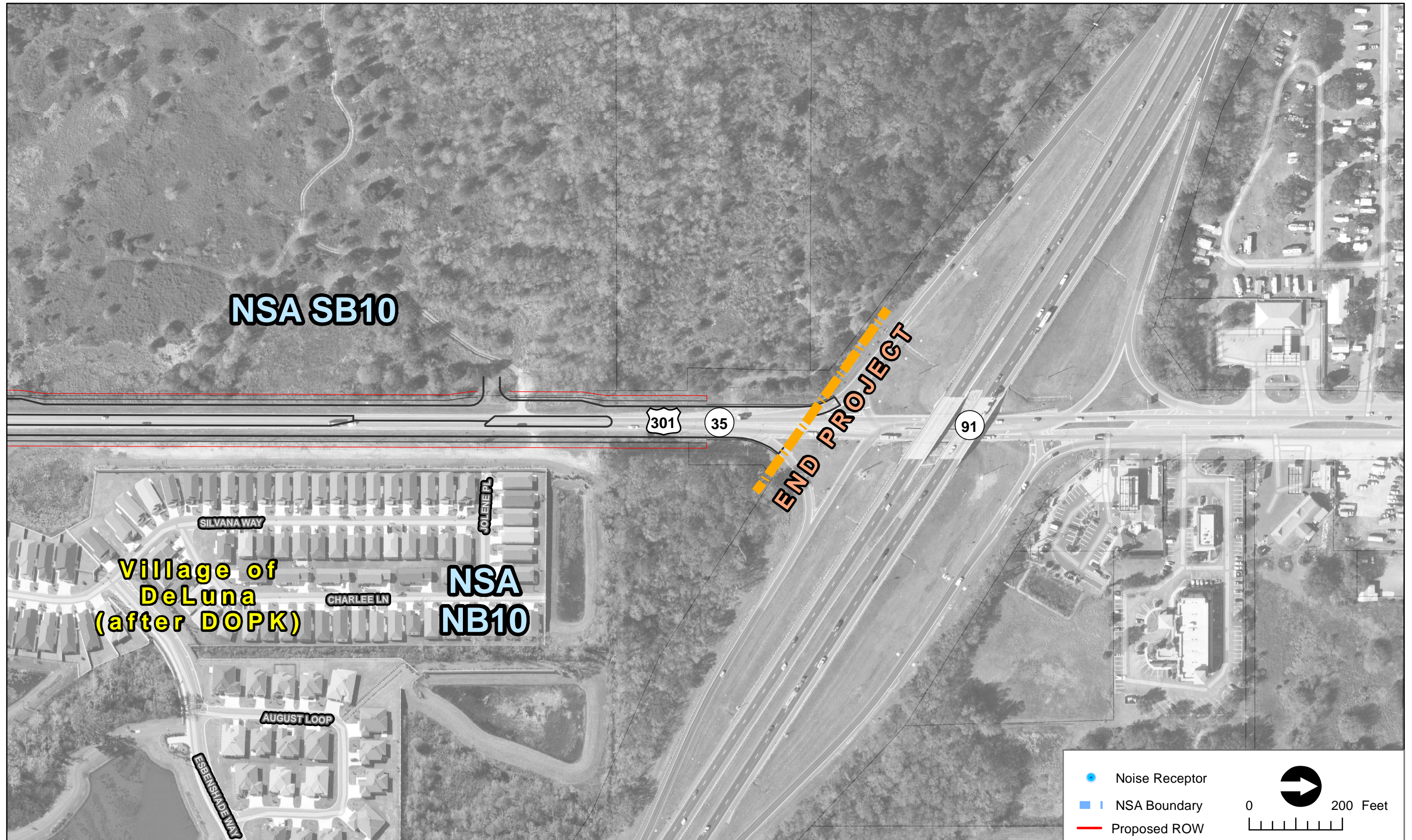














**Appendix E    TNM Modeling Files**

To be transmitted under separate cover.