



Draft Traffic Noise Study Report

ArDOT JOB NO. CA0602

I-30 (From I-530/I-440 to I-40) and

I-40 (From Hwy. 365/MacArthur Dr. to Hwy. 67)

Pulaski County, Arkansas

February 2018



U.S. Department
of Transportation
**Federal Highway
Administration**



This page is intentionally left blank

TABLE OF CONTENTS

EXECUTIVE SUMMARY	iii
1.0 Introduction.....	1
1.1 Existing Facility	1
1.2 Proposed Alternatives	1
1.2.1 No-Action Alternative	1
1.2.2 Action Alternatives	1
1.3 Land Use	4
2.0 Noise Analysis Overview.....	5
2.1 Basic Noise Information.....	5
2.2 Noise Model and Analysis	6
2.3 Noise Barrier Evaluation Requirements	9
3.0 Identification of Noise Study Areas and Receivers.....	10
3.1 Noise Study Areas (NSA)	10
4.0 Noise Measurements.....	11
4.1 Model Validation	13
5.0 Determination of Existing and Future One-Hour Equivalent Sound Levels	16
6.0 Impact Determination Analysis	16
6.1 Summary of Impacts.....	16
6.2 Noise Study Area 1.....	25
6.3 Noise Study Area 2.....	27
6.4 Noise Study Area 3.....	28
6.5 Noise Study Area 4.....	30
6.6 Noise Study Area 5.....	31
6.7 Noise Study Area 6.....	33
6.8 Noise Study Area 7.....	35
6.9 Noise Study Area 8.....	36
6.10 Noise Study Area 9.....	38
6.11 Noise Study Area 10.....	40
6.12 Noise Study Area 11.....	42
6.13 Noise Study Area 12.....	42
6.14 Noise Study Area 13.....	43
6.15 Noise Study Area 14.....	43
7.0 Noise Abatement Evaluation	45
7.1 Statement of Likelihood of Abatement.....	45
7.2 View of Benefitted Property Owners and Residents.....	50
8.0 Mitigation of Construction Noise	50
9.0 Coordination with Local Officials	52

FIGURE

Figure 1: Project Location Map	3
--------------------------------------	---

TABLES

Table 2-1: Noise Abatement Criteria Hourly A-Weighted Sound Level-Decibels (dB(A)) .	8
Table 3-1: Noise Study Area Descriptions.....	10
Table 4-1: Measured Existing Noise Levels (dB(A)).....	12
Table 4-2: Model Validation Results.....	14
Table 6-1: Summary of Noise Impacts for the 8 LN GP with SPUI (Year 2041).....	18
Table 6-2: Summary of Noise Impacts for the 8 LN GP with SDI (Year 2041)	20
Table 6-3: Summary of Noise Impacts for the 6 LN with C/D with SPUI (Year 2041) ...	22
Table 6-4: Summary of Noise Impacts for the 6 LN with C/D with SDI (Year 2041)	24
Table 7-1: 8 LN GP with SPUI Noise Barriers Analyzed	46
Table 7-2: 8 LN GP with SDI Noise Barriers Analyzed.....	47
Table 7-3: 6 LN with C/D Lanes with SPUI Noise Barriers Analyzed	48
Table 7-4: 6 LN with C/D Lanes with SDI Noise Barriers Analyzed.....	49
Table 8-1: Construction Equipment Sound Levels	51
Table 9-1: Design Year (2041) Predicted One-Hour Equivalent Sound Levels Setback Distances for Undeveloped Areas	52

ATTACHMENTS

Attachment A: Overall Noise Study Areas
Attachment B: Noise Measurement Sites Map, Existing Noise Levels, Field Data Sheets, Site Photographs, Sound Level Calibration Certificates
Attachment C: Sound Level Results and Impacts Tables
Attachment D: Noise Receiver Location Maps
Attachment E: Traffic Noise Barriers

EXECUTIVE SUMMARY

This report evaluates the potential noise impacts of the proposed improvements within the Interstate (I) 30 (I-30) alternatives in conformance with corresponding Federal regulations and guidance, and the National Environmental Policy Act (NEPA). The noise analysis presents the existing and future acoustical environment at various receptors located along I-30 and I-40.

The determination of noise abatement measures and locations follows the Federal Highway Administration's (FHWA) Procedures for Abatement of Highway Traffic Noise and Construction Noise as presented in the Code of Federal Regulations (CFR), Title 23 Part 772 (23 CFR 772) and the Arkansas State Highway and Transportation Department, now referred to as Arkansas Department of Transportation (ArDOT), "Policy on Highway Traffic Noise Abatement".

Existing noise level measurements were conducted between May 24, 2016 and May 26, 2016 at 18 representative sites in the project corridor. Short-term (ST) or 15-minute measurements were taken at 15 sites. The measurements were made in accordance with FHWA and ArDOT guidelines using an integrating sound level analyzer meeting American National Standards Institute and IEC Type 1 specifications. Traffic counts were taken concurrently with the noise measurements.

Long-term (LT) measurements were taken at three locations in the project corridor to determine the worst hour of the day for traffic noise. These measurements were started at approximately 10 am on May 24, 2016 and data was collected until 12 pm on May 26, 2016.

The latest version of the FHWA's Traffic Noise Model, TNM[®]2.5¹, was used to model existing (2014) and design year (2041) worst hourly traffic noise levels within the I-30 study area for the No-Build and four Action Alternatives. A total of 1,022 noise receivers representing 1,612 receptors, as shown in **Attachment D**, were modeled.² These receivers were selected to model representative noise impacts at areas consisting of residential uses, offices, places of worship, cemeteries, schools/childcares, hospitals, hotels, active sports areas, and various recreational areas.

Existing peak hour (2014) noise levels range from 38 to 74 decibels [dB(A)]. Future No-Build (2041) noise levels range from 38 to 72 dB(A). In general, the Future No-Build noise levels are lower than or equal to the Action Alternatives predicted noise levels.

Predicted future design year (2041) noise levels along the 8-Lane General Purpose (GP) with Single Point Urban Interchange (SPUI) Action Alternative (Alternative 1A) would approach or exceed the noise abatement criteria (NAC) at 147 receiver locations representing 201 receptors with noise levels ranging from 66 to 75 dB(A). Predicted future design year (2041) noise levels along the 8-Lane GP with Split Diamond Interchange (SDI) Action Alternative (Alternative 1B) would approach, equal or exceed

¹ M.C. Lau, C.S.Y. Lee, J.L. Rochat, E.R. Boeker, and G.C. Fleming. FHWA Traffic Noise Model[®] Users Guide (Version 2.5 Addendum). Federal Highway Administration, April 2004.

² Receivers may represent more than one "receptor." Refer to the tables in Attachment C for number of receptors represented by each receiver.

1 the NAC at 146 receiver locations representing 187 receptors with noise levels ranging
2 from 66 to 75 dB(A). Predicted future design year (2041) noise levels along the 6-Lane
3 with Collector/Distributor (C/D) with SPUI Action Alternative (Alternative 2A) would
4 approach, equal or exceed the NAC at 200 receiver locations representing 256 receptors
5 with noise levels ranging from 66 to 76 dB(A). Predicted future design year (2041) noise
6 levels along the 6-Lane with C/D with SDI Action Alternative (Alternative 2B) would
7 approach, equal or exceed the NAC at 183 receiver locations representing 224 receptors
8 with noise levels ranging from 66 to 76 dB(A). All Action Alternatives would result in traffic
9 noise impacts.

10
11 Over 15 noise barrier locations, with multiple acoustical designs, were analyzed for all
12 Action Alternatives. The noise barrier designs ranged in length from approximately 300
13 to 4,000 ft and in height from 10-25 ft for which estimated construction costs ranged from
14 approximately \$486,000 to \$3,200,000 with the cost per benefitted residence ranging
15 from \$23,000 to \$338,000.

16
17 Based on the traffic noise analysis and noise abatement evaluation conducted for the
18 proposed 30 Crossing study corridor the noise barriers that are identified in **Tables 7-1**
19 through **Table 7-4** as meeting ArDOT 's definition of feasibility and reasonableness would
20 be carried into final design.

21
22 For design-build projects, design of design-build noise abatement measures is based on
23 the preliminary noise abatement design developed during the noise analysis, and
24 reevaluated during the project's final design. Noise abatement measures are considered,
25 developed, and constructed in accordance with this standard and in conformance with the
26 provisions of 40 CFR 1506.5(c) and 23 CFR 636.109.

1.0 Introduction

Approved by Arkansas voters, the Arkansas Department of Transportation (ArDOT) is implementing an accelerated State Highway Construction and Improvement Program named the Connecting Arkansas Program (CAP).

A major component of the CAP is to implement a project to improve a portion of Interstate 30 (I-30) from Interstate 530 (I-530) and Interstate 440 (I-440) to Interstate 40 (I-40), including the Arkansas River Bridge, and a portion of I-40 from Highway (Hwy.) 365 (MacArthur Drive [Dr.]) to Hwy. 67. This project is CA0602: I-530 - Hwy. 67 (Widening & Reconstruction) (I-30 & I-40), commonly known as the 30 Crossing project. **Figure 1** illustrates the proposed 7.3-mile project limits.

1.1 Existing Facility

I-30 is one of the critical links of the Central Arkansas Freeway System. It connects communities within the Central Arkansas Region and serves local, regional and national travelers with varied destinations and trip purposes.

The I-30 corridor generally consists of three main lanes in each direction with parallel one-way discontinuous frontage roads on each side of the interstate. In the northern portion of the project limits, the I-40 corridor consists of three to four main lanes in each direction with parallel one-way frontage roads on each side of the interstate between the I-30/I-40 interchange and North Hills Boulevard (Blvd.). Within the 7.3-mile corridor, four system interchanges are located:

- I-30 with I-530 and I-440
- I-30 with I-630
- I-30 with I-40
- I-40 with Highways 67/167

1.2 Proposed Alternatives

1.2.1 No-Action Alternative

The No-Action Alternative represents the case in which the proposed project is not constructed, but could include future projects identified through the long-range planning process for maintaining a state of good repair as funding becomes available.

1.2.2 Action Alternatives

Two different main lane configurations are under consideration. Both would include the replacement of the Arkansas River Bridge.

- Eight-Lane General Purpose (GP) Alternative would provide four main lanes in each direction with no Collector Distributor (C/D) lanes.

- Six-Lane with C/D Lanes Alternative would reconstruct the existing six-lane (three in each direction) roadway while adding two decision lanes on each side that ultimately feed into a C/D system located at the Arkansas River Bridge.

The current Hwy. 10 (Cantrell Road [Rd.]) interchange provides direct access to the downtown business district of Little Rock. Its proximity to the Arkansas River Bridge and the I-30 interchange with I-630 creates a unique level of complexity. In order to balance various project goals, two interchange concepts are being considered for replacement of this interchange:

- An elevated Single Point Urban Interchange (SPUI) constructed in the same location as the current interchange;
- A Split Diamond Interchange (SDI) constructed south of the existing interchange at 4th and 9th Streets.

Combining the two main lane configurations with the two Hwy. 10 (Cantrell Rd.) interchange concepts results in the four Action Alternatives as follows:

- Alternative 1A: 8-Lane GP with SPUI Alternative
- Alternative 1B: 8-Lane GP with SDI Alternative
- Alternative 2A: 6-Lane with C/D Lanes with SPUI Alternative
- Alternative 2B: 6-Lane with C/D Lanes with SDI Alternative

For detailed information on the Action Alternatives, refer to the **30 Crossing Environmental Assessment (EA)** for the proposed project.

1

Figure 1: Project Location Map



2

1.3 Land Use

The proposed project is located along a predominantly commercial and residential area surrounded by rolling hills, dense vegetation, and a variety of wetlands within an urban setting. Undeveloped wetland areas are located in the southern and northern portions of the project area. Some of the prominent community features in the project area are the Verizon Arena, William J. Clinton Presidential Center and Park, Heifer International, and Little Rock River Market. Parks adjacent to the project include the William J. Clinton Presidential Center and Park (Clinton Center), and Julius Breckling Riverfront Park (Riverfront Park), located on the south bank of the Arkansas River. North Shore Riverwalk (Riverwalk Park) lies on the north side of the River on both sides of I-30. An RV park is located just east of Riverwalk Park. The Union Pacific Railroad (UPRR) crosses the project area at two locations.

Little Rock is home to some of the oldest buildings in the State of Arkansas. Some of the oldest and most architecturally significant buildings in the State of Arkansas are located within the MacArthur Park Historic District. Other historic resources in the project are Marshall Square Historic District, the Oakland-Fraternal Cemeteries, the Little Rock National Cemetery, the Reichardt House, and the Hanger Hill Historic District. Cultural resources within the project area include multiple historic districts and properties, as well as cemeteries and other archaeological sites.

Residential, commercial (restaurants, gas stations, hotels, retail, etc.), recreational, industrial, educational, and undeveloped land are located adjacent to the proposed project. The west side of I-30 is primarily residential with commercial developments making up downtown Little Rock between the Arkansas River and Capitol Avenue (Ave.). Poplar Middle School and North Little Rock High School are immediately adjacent to the I-30/I-40 Interchange. The University of Arkansas Little Rock William H. Bowen School of Law and Rockefeller Early Childhood School are also located on the west side of I-30, at the I-30/I-630 Interchange. Verizon Arena is immediately adjacent to the corridor between Broadway Street (St.) and Washington Ave. MacArthur Park is located adjacent to I-30 between 9th St. and I-630.

The east side of I-30 is primarily light industrial and commercial, with some residential neighborhoods adjacent to I-30. Dark Hollow Basin is an undeveloped natural area at the I-30/I-40 Interchange. Pine Elementary School and Shorter College are both educational facilities in North Little Rock adjacent to I-30. Booker Arts Magnet Elementary and Mann Magnet Middle School are also on the east side of I-30, south of I-630. The William J. Clinton Presidential Library and Park and William E. "Bill" Clark Presidential wetlands are located between the Arkansas River and Third St. The Oakland-Fraternal Cemetery and Little Rock National Cemetery are located on the east side of I-30, south of the I-30/I-630 Interchange. The land uses at the northern project limits, along I-40, are primarily commercial on the south side and residential along the north side. The First Pentecostal Church of Jesus Christ property is located on the north side of the corridor. Other places of worship properties are found throughout the project area. The southern project limit at the I-30/I-530/I-440 Interchange is surrounded by Fourche Creek, a natural area comprised of wetlands and streams that is a popular recreation area.

2.0 Noise Analysis Overview

This report evaluates the potential noise impacts of the proposed improvements within the I-30 Action Alternatives in conformance with corresponding Federal regulations and guidance, and the National Environmental Policy Act (NEPA). The noise analysis presents the existing and future acoustical environment at various receptors located along the project limits.

The determination of noise abatement measures and locations follows the Federal Highway Administration's (FHWA) Procedures for Abatement of Highway Traffic Noise and Construction Noise as presented in the Code of Federal Regulations, Title 23 Part 772 (23 CFR 772) and the 2015 "Arkansas State Highway and Transportation Department Policy on Highway Traffic Noise Abatement" (ArDOT's Noise Policy).

2.1 Basic Noise Information

Traffic noise levels are expressed in terms of the hourly, A-weighted equivalent sound level in decibels [dB(A)]. A sound level represents the level of the rapid air pressure fluctuations caused by sources such as traffic that are heard as noise. A decibel is a unit that relates the sound pressure of a noise to the faintest sound the young human ear can hear. The A-weighting refers to the amplification or attenuation of the different frequencies of the sound (subjectively, the pitch) to correspond to the way the human ear "hears" these frequencies.

Generally, when the sound level exceeds the mid-60 dB(A) range, outdoor conversation in normal tones at a distance of 3 ft becomes difficult. A 9-10 dB(A) increase in sound level is typically judged by the listener to be twice as loud as the original sound while a 9-10 dB(A) reduction is judged to be half as loud. Doubling the number of sources (i.e., vehicles) will increase the hourly equivalent sound level by approximately 3 dB(A), which is usually the smallest change in hourly equivalent A-weighted traffic noise levels that people can detect without specifically listening for the change.³

Because most environmental noise fluctuates from moment to moment, it is standard practice to condense data into a single level called the equivalent sound level (Leq). The Leq is a steady sound level that would contain the same amount of sound energy as the actual time-varying sound evaluated over the same time period. The Leq averages the louder and quieter moments, but gives much more weight to the louder moments in the averaging. For traffic noise assessment purposes, Leq is typically evaluated over the worst one-hour period and is written as Leq(h).

The term insertion loss (IL) is generally used to describe the reduction in Leq(h) at a location after a noise barrier is constructed. For example, if the Leq(h) at a residence before a barrier is constructed is 75 dB(A) and the Leq(h) after a barrier constructed is 65 dB(A), then the insertion loss would be 10 dB(A).

³ "Policy on Highway Traffic Noise Abatement", Arkansas State Highway and Transportation Department, 2015, page 22 of 36.

Highway noise sources have been divided into five types of vehicles; automobiles (A), medium trucks (MT), heavy trucks (HT), Buses (B) and Motorcycles (MC). Each vehicle type is defined as follows⁴:

- Automobiles – all vehicles with two axles and four tires, includes passenger vehicles and light trucks, less than 10,000 pounds.
- Medium trucks – all vehicles having two axles and six tires, vehicle weight between 10,000 and 26,000 pounds.
- Heavy trucks – all vehicles having three or more axles, vehicle weight greater than 26,000 pounds.
- Buses – all vehicles designed to carry more than nine passengers.
- Motorcycles – all vehicles with two or three tires and an open-air driver/passenger compartment.

Noise levels produced by highway vehicles can be attributed to three major categories:

- Running gear and accessories (tires, drive train, fan and other auxiliary equipment)
- Engine (intake and exhaust noise, radiation from engine casing)
- Aerodynamic and body noise

Tire sound levels increase with vehicle speed but also depend upon road surface, vehicle weight, tread design and wear. Change in any of these can vary noise levels. At lower speeds, especially in trucks and buses, the dominant noise source is the engine and related accessories.

2.2 Noise Model and Analysis

The FHWA's Procedures for Abatement of Highway Traffic Noise and Construction Noise is presented in the 23 CFR 772. This regulation, plus other guidance documents written to explain the regulation, sets forth the process for performing a traffic noise analysis.

Traffic noise modeling was performed for 1. Existing conditions, 2. No-Build Alternative, 3. the 6-Lane with C/D Action Alternative (SPUI and SDI options), 4. 8-Lane GP Action Alternative (SPUI and SDI options) and 5. Future No-Build Alternative. The traffic noise analysis included the following steps:

1. Identification of noise-sensitive areas and associated receptors [discrete or representative locations in a noise study area (NSA) for the land uses listed in 23 CFR 772 (**Table 2-1**)], within 500 ft of the project;
2. Determination of existing noise levels at selected receptors to characterize the existing noise environment in the project area;
3. Determination of future “build” and “no-build” noise levels at representative receivers⁵;
4. Determination of traffic noise impacts;
5. Evaluation of noise abatement for impacted areas;

⁴ G.S. Anderson, C.S.Y. Lee, G.G. Fleming and C. Menge, “FHWA Traffic Noise Model®, Version 1.0 User’s Guide”, Federal Highway Administration, January 1998, p.60.

⁵ Receivers may represent more than one “receptor.” Refer to the tables in Attachment C for number of receptors represented by each receiver.

6. Discussion of construction noise; and
7. Coordination with local officials, including modeling of distance-based future “build” noise levels out to 66 and 71 dB(A) for undeveloped activity category G lands.

The process included the following:

- Identification of existing and proposed land uses in the study area;
- Determination of existing noise levels either:
 - through modeling, or
 - noise measurements with concurrent classification counts of vehicles passing the noise monitoring site;
- Validation of predicted noise levels through comparison between measured and predicted levels;
- Modeling of future design year traffic noise levels which will yield the worst hourly traffic noise on a regular basis (design hour noise levels);
- Identification of locations that would be exposed to a noise impact based upon the noise abatement criteria (NAC) as presented in **Table 2-1**;
- Modeling of noise abatement measures to mitigate the predicted design year traffic noise impacts; and
- Modeling with FHWA’s most recent version of the Traffic Noise Model® (TNM).

The following parameters were used in the model to calculate an hourly L_{eq} at a specific receiver location:

- Distance between roadway and receiver;
- Relative elevations of roadway and receiver;
- Hourly traffic volume in light-duty (two axles, four tires), medium-duty (two axles, six tires), and heavy-duty (three or more axles) vehicles;
- Vehicle speed;
- Ground absorption; and
- Topographic features, including retaining walls and berms.

ArDOT’s Noise Policy is the state’s tool for implementing 23 CFR 772. The NAC, which is presented in 23 CFR 772 (**Table 2-1**), establishes the criteria for various land uses. The criteria stated in **Table 2-1** was used to determine whether the proposed project would result in a traffic noise impact.

1 **Table 2-1: Noise Abatement Criteria Hourly A-Weighted Sound Level-Decibels (dB(A))**

Activity Category	Activity Criteria ¹ Leq(h), dB(A)	Evaluation Location	Activity Description
A	57	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.
B²	67	Exterior	Residential.
C²	67	Exterior	Active sport 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, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	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.
E²	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F.
F	--	--	Agricultural, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G³	--	--	Undeveloped lands that are not permitted.

1 The Leq(h) Activity Criteria values are for impact determination only, and are not design standards for noise abatement.

2 Includes undeveloped lands that have been permitted for this Activity Category.

3 Indicates no building permits on or before the date of public knowledge.

4 Section 4(f) property means publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance, as initially defined in Section 4(f) of the Department of Transportation Act of 1966 and addressed in 23 CFR 774, Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites (Section 4(f)).

2 Source: ArDOT Policy on Highway Traffic Noise Abatement (Oct. 15, 2015).

3
4 Traffic noise impacts may occur when either the predicted noise level at a receiver
5 approaches, equals, or exceeds the NAC (absolute criterion) or when there is a substantial
6 increase in noise (relative criterion) as a result of the project. Approach is defined by ArDOT
7 to be the one-hour equivalent sound levels [Leq(h)] that are 1 dB(A) or less below the NAC.
8 Substantial increase is defined by ArDOT criteria for determining the severity of a noise
9 level increase over existing noise levels. A 10 dB(A) or greater increase in highway traffic
10 noise is considered a substantial increase and results in identification of noise impacts. In
11 accordance with criteria in the ArDOT noise policy, traffic noise abatement measures are
12 to be considered when traffic noise impacts have been identified under either the absolute
13 or relative criterion.

2.3 Noise Barrier Evaluation Requirements

Abatement needs to be studied first for “feasibility” and, if feasible, for “reasonableness.” Noise barriers must be both feasible and reasonable to be deemed likely for construction.

Feasibility applies primarily with the acoustical and engineering considerations of the project that determine whether a noise barrier would provide “substantial” noise reduction [at least a 5 dB(A) reduction] in the one-hour equivalent sound level for at least one impacted receiver. If a barrier cannot meet this criterion, abatement is considered to not be acoustically feasible. Additionally, the noise barrier should be feasible from an engineering perspective. Engineering feasibility takes into account topography, drainage, safety, barrier height, utilities and access and maintenance needs (which may include right-of-way considerations). If a barrier poses engineering problems, it may be judged as not feasible even if it meets the acoustical feasibility criterion, and it would not be recommended for construction. Acoustically, the best location for barriers are usually either close to the receiver, or close to the noise source, depending on the terrain.

If feasible, then the barriers are assessed for reasonableness. The reasonableness evaluation involves an examination of costs, public support, and whether a certain amount of noise reduction can be achieved. In accordance with the criteria in ArDOT’s noise policy, the following three reasonableness factors must be met for a noise abatement measure to be considered reasonable:

1. For those barriers found to be reasonable by the Cost-Effectiveness and Design Goal criteria below, viewpoints from property owners and residents of the benefitted receivers will be obtained. Two attempts (meetings, mail surveys, or other method) would be made to establish a consensus (greater than 50 percent) of support for or against the proposed noise barriers. If a consensus is reached before the second attempt, the efforts to collect viewpoints is discontinued. If a consensus is not obtained after the second attempt, ArDOT will determine the appropriate abatement measure.
2. Cost-Effectiveness: If the estimated cost of constructing a noise barrier (including installation and additional necessary construction such as foundations or barrier walls) divided by the number of benefitted receivers [those who would receive a reduction of at least 5 dB(A)] is \$36,000 or less per benefitted receiver, a barrier is considered to be cost-effective. For initial considerations, a unit cost of \$35 per square foot for reflective barriers, \$40 for absorptive barriers and \$50 for barriers on structures is used in this cost-effectiveness calculation.
3. Design Goal for Noise Abatement: Traffic noise abatement must achieve at least an 8 dB(A) reduction for at least one benefitted receiver.

If any of the above-mentioned criterion is not met, noise abatement measures would not be constructed.

3.0 Identification of Noise Study Areas and Receivers

3.1 Noise Study Areas (NSA)

A total of 14 NSAs with potential for noise impacts were identified based on review of aerial photography and field reconnaissance. **Attachment A** includes the NSAs defined for the project. **Table 3-1** lists by activity category, the relevant associated land uses in each NSA that are within 500 ft on either side of I-30.

Table 3-1: Noise Study Area Descriptions

NSA No.	Description
1	NSA 1 is located north of the I-530 interchange, along the east side of the corridor, to the I-630 entrance/exit ramp at E. 15 th St. Between the interchange and the railroad corridor are undeveloped land with trees and waterbodies. North of the railroad corridor, the area is predominately retail with small areas of residential surrounding two schools; Mann Magnet Middle School and the Booker Arts Magnet Elementary School. Booker Arts Magnet School have playgrounds and active sports areas located along the I-30 frontage road. Mann Magnet Middle School is situated two blocks from the interstate and does not have any public spaces on the west side of the building. The schools and residences are located in the northern portion of the NSA between Roosevelt Rd. and 15 th St.
2	NSA 2 follows the western side of the I-30 corridor between the I-530 interchange, Roosevelt Rd. and Cumberland St. The NSA is bisected by a railroad corridor that divides the NSA in sections of developed and undeveloped land. North of the railroad corridor is a residential area with interspersed retail.
3	NSA 3 is largely residential and is located on the west side of I-30 between Roosevelt Rd. and the south side I-630 Interchange to Cumberland St. In the south west quadrant of the I-630 interchange is the Rockefeller Early Childhood school. Multiple playgrounds are located between the school and a local street (Bragg St.) which faces the interchange.
4	NSA 4 follows the east side of I-30 from the I-630 entrance/exit ramp at 15th St. north to the Arkansas River. The area between the I-630 interchange and 9th St. is largely residential. North of 9th St. the NSA becomes retail and industrial uses associated with the downtown area. Along the river, a park provides recreational areas and trails that surround a library and museum, including the William J. Clinton Library and Museum and the Clinton School of Public Service.
5	NSA 5 is located on the west of I-30 between the I-630 interchange north to the Arkansas River. This NSA encompasses Downtown Little Rock. Just northwest of the I-630 interchange, MacArthur Park includes recreation areas and museums, such as the Arkansas Arts Center, the MacArthur Museum of Arkansas Military History, and the MacArthur Park Historic District. Surrounding the park are residential areas that reach as far north as Capitol Ave. and west to Cumberland St. Just south of the highway spur to Cumberland St. there are several multi-story residential towers with balconies, including 300 Third Tower and River Market Tower. Along the Arkansas River, the public recreation areas continue with First Security Amphitheater, The Witt Stephens Jr. Central Arkansas Nature Center and Arkansas River trails.
6	NSA 6 is primarily retail/industrial uses north of the Arkansas River. The NSA is located on the east side of I-30 to Vine St. and continues north one block to 19th St. Shorter College is located on Locust St. between 6th St. and Bishop Lindsey Ave. There are two residential areas in the NSA. The first is between Bishop Lindsey Ave. and the railroad corridor, east of Locust St. The other residential area is the Eastgate Terrace Housing Project located between 17th and 19th St. just east of Locust St. A daycare facility is located on the Eastgate property and is directly adjacent to I-30 along Locust St. Just north of the Eastgate Terrace Project is a previously used school building that used to house the Pine Elementary School and is now a family development center for the area. The school building is located on 19th St. and the frontage road.
7	NSA 7 follows the west side of I-30 north from the Arkansas River to one block north of 22nd St. at the I-30/I-40 interchange. The western limit is Magnolia St. The NSA is a mix of retail and residential. The retail lines Cypress St. along the I-30 corridor. The Metropolitan is a large multi-family residential apartment building with balconies on Washington Ave. and Olive St. Also found in the NSA is the Verizon Arena off Broadway St. and Cypress S. which is located just north of the river. Poplar Middle School can be found just off of Poplar and 22nd St.
8	NSA 8 extends along the south side of I-40 from the Percy Machin Dr. to one block north of 22nd St. The NSA is comprised of retail and industrial uses. There are multiple hotels in the NSA including a Motel 6, Red

NSA No.	Description
	Roof Inn, Super Stay hotels that have exterior balconies and pool areas that are visible from the interstate. There are two civic uses within the NSA including the William F. Laman Public Library and North Little Rock High School.
9	NSA 9 is a residential area located along the northern side of the I-40 interstate. The area is bounded by 33rd St. on the west, Main St. on the east and WA Ave. and Cherry Hill Dr. to the north. There is one hotel, America's Best Value Inn, located on Main St. and JFK Blvd. with exterior balconies.
10	NSA 10 is bounded by Main St. and continues along the northern side of I-40 to North Hills Blvd. The area is predominantly residential on the northern bluffs with the exception of one church, First Pentecostal Church of Jesus Christ, along the I-40 frontage road. Two multi-family unit developments, Woodland Terrace Apartments and multiple buildings along Belmont Dr., are located along North Hills Blvd. Both developments have residential balconies that are exposed to the Interstate.
11	NSA 11 is located between North Hills Blvd. and the Hwy. 67/167 Interchange on the northern side of I-40. The NSA is undeveloped.
12	NSA 12 is located along the western side of the Hwy. 67/167 north of I-40 and continues to Jacksonville Blvd. The NSA contains an area of multi-family residential development in two areas, both called Foothill Apartments. Both developments have exterior balconies and patios that are exposed to traffic along the Hwy. 167 corridor. The northern portion of the NSA consist of retail development, the Northeast High School, and the North Little Rock Middle School complex.
13	NSA 13 begins on the east side of the I-30/I-40 interchange, one block north of 19th St. and continues to Hwy. 67/167 Interchange on the southern side of I-40. The NSA is undeveloped.
14	NSA 14 is located along the east side of I-40/Hwy. 67/167 interchange. It continues to approximately 1,000 ft north of Landers Rd. The only development in this NSA is retail located north of Landers Rd. and Hwy. 67/167 Interchange. The remaining part of the NSA is heavily wooded and is undeveloped.

Source: Project Team, May 2016.

1 4.0 Noise Measurements

2 Existing noise level measurements were conducted on May 24, 2016 and May 25, 2016 at
3 18 representative sites in the project corridor. Fifteen-minute measurements were taken at
4 short-term (ST) sites. The measurements were made in accordance with FHWA and
5 ArDOT guidelines using an integrating sound level analyzer meeting ANSI and IEC Type 1
6 specifications. Traffic classification counts were taken concurrently with the noise
7 measurements. The data collected at the ST sites is presented in **Table 4-1**. During the
8 field measurements, the skies were partly to mostly cloudy, the temperature was 85
9 degrees F and the winds were from the southwest. The noise measurement sites, ST-1
10 through ST-15, along with the three long term sites, LT-1, LT-2, and LT-3 are shown in
11 **Attachment B: Noise Measurements Sites** map. The measured existing noise levels,
12 field data sheets, site photographs, and the sound level analyzer laboratory calibration
13 certificates are included in **Attachment B** of this report.

1

Table 4-1: Measured Existing Noise Levels (dB(A))

Field Site	NSA	Site Description	Date	Start Time	Noise Level, dB(A) $L_{eq}(1h)$
ST-1	1	Residence, edge of pavement south of E 15 th St. and approximately 200 ft east of Welch St.	5/24/16	10:30 am	59.7
				10:55 am	59.4
				11:15 am	59.3
ST-2	5	MacArthur Park, approximately 177 ft north of Pulaski County Ln. and approximately 610 ft east of Commerce St.	5/24/16	10:30 am	63.3
				10:55 am	62.4
				11:15 am	62.1
ST-3	4	Residence, approximately 10 ft south of E 10 th St. and approximately 2 ft east of Barber St.	5/24/16	10:30 am	66.4
				10:55 am	66.4
				11:15 am	66.4
ST-4	4	Residence, approximately 13 ft south of E 12 th St. and approximately 12 ft east of Welch St.	5/24/16	12:50 pm	60.0
				1:14 pm	61.3
				1:31 pm	60.4
ST-5	3	Residence, approximately 3 ft west of McAlmont St. and approximately 101 ft south of E 17 th St.	5/24/16	12:50 pm	68.9
				1:14 pm	68.8
				1:31 pm	69.1
ST-6	5	Residence, approximately 43 ft south of E Capitol Ave. and approximately 15 ft west of Sherman St.	5/24/16	2:30 pm	61.4
				2:47 pm	59.6
ST-7	5	Residence, approximately 13 ft north of E 6 th St. and approximately 3 ft west of Sherman St.	5/24/16	2:30 pm	63.0
				2:47 pm	61.8
				3:04 pm	66.3
ST-8	4	William E. "Bill" Clark Presidential Park Wetlands, approximately 473 ft east of I-30 and approximately 273 ft north of E Markham St.	5/24/16	3:40 pm	58.6
				3:56 pm	58.0
				4:13 pm	56.3
ST-9	5	First Security Amphitheatre, approximately 658 ft west of I-30 and approximately 433 ft north of E Markham St.	5/24/16	3:40 pm	56.1
				3:56 pm	57.2
				4:13 pm	57.2
ST-10	3	Vacant land, approximately 9 ft west of McAlmont St and approximately 287 ft north of E 21 st St.	5/24/16	7:18 pm	68.1
			5/25/16	5:57 am	68.8
				5:09 pm	66.8
ST-11	6	Residence, approximately 14 ft east of N. Locust St. and approximately 101 ft north of E 17 th St.	5/26/16	9:17 am	69.3
			5/24/16	7:24 pm	65.0
				6:24 am	65.3
ST-12	10	Residence, 1334 Starfield Rd. on deck, approximately 92 ft south of Starfield Rd. and approximately 353 ft north of Calvary Rd.	5/25/16	4:36 pm	65.6
				9:47 am	67.9
				11:01 am	71.3
ST-13	10	Residence, 1334 Starfield Rd. front yard, approximately 6 ft south of Starfield Rd. and approximately 388 ft north of Calvary Rd.	5/25/16	11:18 am	71.4
				11:35 am	71.6
				11:01 am	69.1
ST-13	10	Residence, 1334 Starfield Rd. front yard, approximately 6 ft south of Starfield Rd. and approximately 388 ft north of Calvary Rd.	5/25/16	11:18 am	69.3
				11:35 am	69.1
				11:35 am	69.1

Field Site	NSA	Site Description	Date	Start Time	Noise Level, dB(A) $L_{eq}(1h)$
ST-14	10	Residence, approximately 137 ft south of Skyline Dr. and approximately 440 ft east of J.F.K. Blvd.	5/25/16	12:14 pm	63.5
				12:30 pm	63.7
				12:46 pm	63.3
ST-15	10	Residence, approximately 7 ft south of Skyline Dr. and approximately 400 ft east of J.F.K. Blvd.	5/25/16	12:14 pm	56.5
				12:31 pm	56.0
				12:47 pm	55.8

1 Source: Project Team, May 2016.

2 4.1 Model Validation

3 ArDOT policy requires validation of TNM. Validation involves taking noise measurements
 4 at selected points near the existing roadway while making simultaneous vehicle
 5 classification counts of the traffic and estimating travel speed. The traffic collected along
 6 with the speeds, are then entered into a TNM model of the existing road configuration.
 7 The modeled (predicted) levels are compared to the measured levels, and if the predicted
 8 levels are within 3 dB(A) of the measured levels, the model is determined to be validated.⁶

9
 10 TNM 2.5 was used to validate the predicted noise levels through comparison of the
 11 measured and modeled noise levels. Traffic was counted and classified concurrently
 12 during the noise measurement by vehicle type: cars, medium trucks, heavy trucks, and
 13 buses. Traffic classification counts were taken concurrently with the noise measurements.
 14 The locations of the measurement sites are shown in **Attachment B**.

15
 16 The traffic data collected during the field measurements sites were used in the existing
 17 roadway TNM model. The noise measurements and modeled (predicted) levels are listed
 18 in **Table 4-2**. As shown in **Table 4-2**, all predicted levels were within 0 to 3 dB of the
 19 measured levels. Therefore, the model is considered to be validated.

⁶ "Policy on Highway Traffic Noise Abatement", Arkansas State Highway and Transportation Department, 2015, page 20 of 36.

1
2**Table 4-2: Model Validation Results**

Site No.	Noise Level, dB(A) $L_{eq}(1h)$		Difference in Noise Levels, dB(A) $L_{eq}(1h)$ (Predicted Minus Measured)
	Measured	Predicted	
ST-1	59.7	57.8	-1.9
	59.4	57.9	-1.5
	59.3	58.8	-0.5
ST-2	63.3	60.4	-2.9
	62.4	60.1	-2.3
	62.1	60.2	-1.9
ST-3	66.4	63.8	-2.6
	66.4	63.9	-2.5
	66.4	64.2	-2.2
ST-4	60.0	58.7	-1.3
	61.3	58.8	-2.5
	60.4	59.3	-1.1
ST-5	68.9	65.9	-3.0
	68.8	66.0	-2.8
	69.1	66.4	-2.7
ST-6	61.4	62.2	0.8
	59.6	62.2	2.6
	62.3	62.6	0.3
ST-7	63.0	65.5	2.5
	61.8	64.6	2.8
	66.3	65.3	-1.0
ST-8	58.6	56.0	-2.6
	58.0	57.8	-0.2
	56.3	56.8	0.5
ST-9	56.1	57.1	1.0
	57.2	58.7	1.5
	57.2	58.2	1.0
ST-10	68.1	69.2	1.1
	68.8	70.2	1.4
	66.8	69.6	2.8
	69.3	71.8	2.5
ST-11	65.0	64.1	-0.9
	65.3	63.7	-1.6
	65.6	65.9	0.3
	67.9	66.2	-1.7

Site No.	Noise Level, dB(A) $L_{eq}(1h)$		Difference in Noise Levels, dB(A) $L_{eq}(1h)$ (Predicted Minus Measured)
	Measured	Predicted	
ST-12	71.3	68.8	-2.5
	71.4	69.0	-2.4
	71.6	69.3	-2.3
ST-13	69.1	69.5	0.4
	69.3	69.7	0.4
	69.1	70.0	0.9
ST-14	63.5	60.8	-2.7
	63.7	61.3	-2.4
	63.3	61.1	-2.2
ST-15	56.5	55.1	-1.4
	56.0	55.5	-0.5
	55.8	55.5	-0.3

Source: Project Team, May 2016.

5.0 Determination of Existing and Future One-Hour Equivalent Sound Levels

The latest version of the FHWA's Traffic Noise Model, TNM[®]2.5, was used to model existing (2014) and design year (2041) worst hourly traffic noise levels at receivers within the I-30 study area. These receivers included the measurement locations as well as numerous other locations representative of each land use and varying distances from I-30 and I-40.

Traffic data were developed for ArDOT in the I-30 Planning and Environmental Linkages (PEL) Study and refined in the 30 Crossing Environmental Assessment for use in the noise modeling. Morning and afternoon traffic data, including truck percentages, were developed for the Existing, Future No-Build, and Action Alternatives. The Action Alternatives that were modeled in the noise analysis consisted of:

- Alternative 1A: 8-Lane GP with SPUI Alternative (8 LN GP with SPUI)
- Alternative 1B: 8-Lane GP with SDI Alternative (8 LN GP with SDI)
- Alternative 2A: 6-Lane with C/D Lanes with SPUI Alternative (6 LN with C/D with SPUI)
- Alternative 2B: 6-Lane with C/D Lanes with SDI Alternative (6 LN with C/D with SDI)

For multiple-lane roadways, each travel lane was modeled as a separate TNM "roadway," with the traffic divided evenly across all lanes in the same direction. The modeled speeds varied for Existing, Future No-Build, and Action Alternatives.

Receivers were located at frequently-used human activity areas. For single-family residences, that area could be the front or back yard. For apartments and condominiums, that area could be a patio or balcony or a common use area. For the parks, hotels, picnic areas, and outdoor restaurant dining, receivers were modeled at the common use areas. A TNM receiver could represent more than one receptor, such as several adjacent single-family residences or condominium balconies, or the common use area for an apartment building.

Large buildings were modeled as noise barriers to properly account for the shielding of the traffic noise that they provide to the receptor. Single-family houses were modeled as either individual noise barriers or as rows of buildings to account for the shielding that they would provide. In addition, the solid concrete parapets along certain roadway sections were modeled as barriers. Significant terrain features were also modeled. The default ground surface of lawn grass was used, with any large areas of paved ground specifically modeled as pavement.

6.0 Impact Determination Analysis

6.1 Summary of Impacts

An impact assessment was completed for each Action Alternative for each NSA. As mentioned previously, impacts to receivers are determined based on two criteria:

- 1 1. The predicted noise level at a receiver approaches, equals, or exceeds the NAC
2 (absolute criterion). Approach is defined by ArDOT to be the one-hour equivalent
3 sound levels [Leq(h)] that are 1 dB(A) or less below the NAC.
- 4 2. There is a substantial increase in noise (relative criterion) as a result of the project.
5 Substantial increase is defined by ArDOT as a 10 dB(A) or greater increase in
6 highway traffic noise.

7
8 Typically, increased capacity projects (i.e., widening of an interstate) show that increases
9 over existing levels are well below the ArDOT criterion of a substantial increase of 10 or
10 more dB(A) because noise is already high in the existing condition. Therefore, none of
11 the receivers were anticipated to be impacted by a substantial increase in noise level.

12
13 **Tables 6-1** through **Table 6-4** summarize the predicted impacts in each NSA for the
14 Action Alternatives. The impacts are then described in detail in the sections that follow.

1 **Table 6-1: Summary of Noise Impacts for the 8 LN GP with SPUI (Year 2041)**

NSA	Design Year Noise levels, Leq(h) dB(A)	Increase over Existing Sound Levels, dB(A)	Impacts Based on NAC? Yes/No	Impacts Based on Substantial Increase? Yes/No	Number and Type of Impacted Receptors
1	NAC B, C: 58-70	0-3	Yes	No	13 residences and 1 school playground (2 receptors).
2	NAC B, D, E: 40-70	0-4	Yes	No	23 residences
3	NAC B, C, D, E: 40-73	0-6	Yes	No	44 residences and 1 homeless shelter.
4	NAC B, C, D, E: 40-70	0-4	Yes	No	No impacted receptors.
5	NAC B, C, D, E: 42-71	0-8	Yes	No	35 residences, 1 park (3 receptors) 1 museum.
6	NAC B, C, D, E: 40-69	0-7	Yes	No	12 residences and 1 daycare.
7	NAC B, C, D, E: 42-65	0-3	No	No	No impacted receptors.
8	NAC C, E: 54-75	0-4	Yes	No	1 school administration building.
9	NAC B, C, E: 49-73	0-2	Yes	No	16 residences.
10	NAC B, D: 39-71	0-2	Yes	No	48 residences
11	N/A				
12	NAC B, C: 43-66	0-3	Yes	No	1 apartment pool.
13	N/A				
14	NAC D, E: 46-67	0	No	No	No impacted receptors.
Action Alternative 1A Traffic Noise Impacts (Year 2041)					201 Total Impacted Receptors

2Source: Project Team, February 2018.

3N/A: there are no receivers in these NSAs.

4

5 Between the 14 NSAs shown above in **Table 6-1**, there would be a total of 201 impacted

6 receptors for the 8 LN GP with SPUI Alternative. Regarding the Activity Categories of

7 these 201 impacted receptors, there would be a total of 191 impacted Activity Category

8 B receptors (residential) and 10 impacted Activity Category C receptors (school,

9 playground, pool, river trail, shelter, museum). A large percentage of receptors are

10 located within NSA 5, which would contain 35 residential impacts, 1 park, and 1 museum.

11 NSA 1 would contain 13 residential impacts and 1 school playground with 2 receptors.

12 NSA 2 would contain a total of 23 residential impacts; NSA 3 would contain 44 residential

13 impacts and 1 homeless shelter. NSA 4 would result in no impacted receptors. NSA 6

1 would contain 12 residential impacts and 1 daycare. NSA 7 would contain no impacted
2 receptors. Within NSA 8 there would be 1 impact, a school administration building; NSA
3 9 would contain 16 impacts, all residential. NSA 10 would contain 48 residential impacts;
4 NSA 12 would only contain 1 impact: 1 apartment pool; NSA 14 would result in no
5 impacts. NSAs 11 and 13 would contain no receivers or receptors.

6
7 The modeling results tables and location of individual receivers within each NSA for each
8 Action Alternative are included in **Attachments C** and **D**, respectively.
9

1 **Table 6-2: Summary of Noise Impacts for the 8 LN GP with SDI (Year 2041)**

NSA	Design Year Noise levels, Leq(h) dB(A)	Increase over Existing Sound Levels, dB(A)	Impacts Based on NAC? Yes/No	Impacts Based on Substantial Increase? Yes/No	Number and Type of Impacted Receptors
1	NAC B, C: 58-70	0-3	Yes	No	16 residences and 1 school playground (2 receptors).
2	NAC B, D, E: 40-69	0-4	Yes	No	18 residences
3	NAC B, C, D, E: 40-73	0-5	Yes	No	41 residences and 1 homeless shelter.
4	NAC B, C, D, E: 40-69	0-5	No	No	No impacted receptors.
5	NAC B, C, D, E: 46-72	0-9	Yes	No	10 residences, 1 park (2 receptors), 1 restaurant, and 1 museum (3 receptors).
6	NAC B, C, D, E: 40-69	0-8	Yes	No	13 residences and 1 daycare.
7	NAC B, C, D, E: 43-66	0-3	Yes	No	4 residences.
8	NAC C, E: 54-75	0-4	Yes	No	1 school administration building and 1 restaurant.
9	NAC B, C, E: 49-74	0-2	Yes	No	18 residences.
10	NAC B, D: 39-71	0-2	Yes	No	54 residences
11	N/A				
12	NAC B, C: 43-68	0-3	Yes	No	1 apartment pool.
13	N/A				
14	NAC D, E: 46-68	0	No	No	No impacted receptors.
Action Alternative 1B Year 2041 Traffic Noise Impacts					187 Total Impacted Receptors

2 Source: Project Team, February 2018.

3 N/A: there are no receivers in these NSAs.

4
 5 Between the 14 NSAs shown above in **Table 6-2**, there would be a total of 187 impacted
 6 receptors for the 8 LN GP with SDI Alternative. Regarding the Activity Categories of these
 7 187 impacted receptors, there would be a total of 174 impacted Activity Category B sites
 8 (residential), 11 impacted Activity Category C sites (school, playground, pool, daycare,

1 museum) and 2 impacted Activity Category E sites (restaurants). NSA 1 would contain
2 16 residential impacts and one school playground with 2 receptors. NSA 2 would contain
3 18 residential impacts. NSA 3 would contain 41 residential impacts and 1 shelter; NSA 4
4 would contain no impacted receptors. NSA 5 would contain 16 impacts: 10 residential, 1
5 park with 2 receptors, 1 restaurant, and 1 museum (with 3 receptors); NSA 6 would
6 contain 14 impacts, 13 being residential and 1 daycare. NSA 7 would contain 4 residential
7 impacts. Within NSA 8 there would be 2 impacts: 1 school administration building and 1
8 restaurant; NSA 9 would contain 18 impacts, all residential; NSA 10 would contain 54
9 residential impacts; NSA 12 would only contain 1 impact: 1 apartment pool; NSA 14 would
10 contain no impacted receptors. NSAs 11 and 13 would contain no receivers or receptors.

11
12 The modeling results tables and location of individual receivers within each NSA for each
13 Action Alternative are included in **Attachments C** and **D**, respectively.
14

1 Table 6-3: Summary of Noise Impacts for the 6 LN with C/D with SPUI (Year 2041)

NSA	Design Year Noise levels, Leq(h) dB(A)	Increase over Existing Sound Levels, dB(A)	Impacts Based on NAC? Yes/No	Impacts Based on Substantial Increase? Yes/No	Number and Type of Impacted Receptors
1	NAC B and C: 59-75	0-4	Yes	No	25 residences, 1 school playground (2 receptors), and 1 active sports area receptors.
2	NAC B, D, E: 40-69	0-4	Yes	No	21 residences.
3	NAC B, C, D, E: 40-73	0-6	Yes	No	47 residences and 1 homeless shelter (3 receptors)
4	NAC B, C, D, E: 40-70	0-3	Yes	No	2 residences.
5	NAC B, C, D, E: 42-72	0-9	Yes	No	30 residences, 1 park (3 receptors), and 1 museum.
6	NAC B, C, D, E: 40-71	0-9	Yes	No	23 residences, 1 daycare and 1 playground
7	NAC B, C, D, E: 42-68	0-4	Yes	No	11 residences.
8	NAC C, E: 55-76	0-5	Yes	No	1 hotel, 1 school admin. building and 1 restaurant.
9	NAC B, C, E: 48-75	0-2	Yes	No	21 residences.
10	NAC B, D: 39-72	0-2	Yes	No	58 residences.
11	N/A				
12	NAC B, C: 44-69	0-5	Yes	No	2 residences and 1 apartment pool
13	N/A				
14	NAC D, E: 46-67	0	No	No	No impacted receptors.
Action Alternative 2A Traffic Noise Impacts (Year 2041)					256 Total Impacted Receptors

2 Source: Project Team, February 2018.

3 N/A: there are no receivers in these NSAs.

4

Between the 14 NSAs shown above in **Table 6-3**, there would be a total of 256 impacted receptors for the 6 LN with C/D with SPUI Alternative. Regarding the Activity Categories of these 256 impacted receptors, there would be a total of 240 impacted Activity Category B receptors (residential), 14 impacted Activity Category C receptors (schools, shelters, parks, playgrounds, active sports area, pools, and museums) and 2 impacted Activity Category E receptors (hotel, restaurant). All of the impacts would be in terms of approaching or exceeding the NAC. The largest number of receptors are located within NSA 5, which would contain 30 residential impacts, 1 park with 3 receptors, and 1 museum. NSA 1 would contain 25 residential impacts, 1 school playground with 2 receptors, and 1 active sports area. NSA 2 would contain a total of 21 residential impacts; NSA 3 would contain 50 impacts, 47 being residential, and 1 homeless shelter with 3 receptors; NSA 4 would contain 2 residential impacts. NSA 6 would contain 25 impacts, 23 being residential, 1 daycare and 1 playground. NSA 7 would contain 11 residential impacts. Within NSA 8 there would be 3 impacts: 1 hotel, 1 school administration building, and 1 restaurant; NSA 9 would contain 21 residential impacts; NSA 10 would contain 58 residential impacts. NSA 12 would contain 2 residential impacts and 1 apartment pool while NSA 14 would contain no impacted receptors. NSAs 11 and 13 would contain no receivers or receptors.

The modeling results tables and location of individual receivers within each NSA for each Action Alternative are included in **Attachments C** and **D**, respectively.

1 **Table 6-4: Summary of Noise Impacts for the 6 LN with C/D with SDI (Year 2041)**

NSA	Design Year Noise levels, Leq(h) dB(A)	Increase over Existing Sound Levels, dB(A)	Impacts Based on NAC? Yes/No	Impacts Based on Substantial Increase? Yes/No	Number and Type of Impacted Receptors
1	NAC B, C: 59-75	0-4	Yes	No	25 residences, 1 school playground (2 receptors), and 1 active sports area.
2	NAC B, D, E: 40-69	0-4	Yes	No	17 residences
3	NAC B, C, D, E: 40-72	0-6	Yes	No	47 residences, 1 homeless shelter (1 receptor).
4	NAC B, C, D, E: 40-70	0-5	Yes	No	1 residence.
5	NAC B, C, D, E: 46-72	0-9	Yes	No	3 residences, 1 park (5 receptors), and 1 hotel.
6	NAC B, C, D, E: 40-71	0-9	Yes	No	23 residences, 1 daycare and 1 playground,
7	NAC B, C, D, E: 42-68	0-5	Yes	No	11 residences.
8	NAC C, E: 55-76	0-5	Yes	No	1 hotel, 1 school admin. building and 1 restaurant.
9	NAC B, C, E: 49-75	0-2	Yes	No	22 residences.
10	NAC B, D: 39-72	0-2	Yes	No	57 residences.
11	N/A				
12	NAC B, C: 44-72	0-3	Yes	No	2 residences and 1 apartment pool
13	N/A				
14	NAC D, E: 46-67	0	No	No	No impacted receptors.
Action Alternative 2B Traffic Noise Impacts (Year 2041)					224 Total Impacted Receptors

2 Source: Project Team, February 2018.

3 N/A: there are no receivers in these NSAs.

4

5 Between the 14 NSAs shown above in **Table 6-4**, there would be a total of 224 impacted

6 receptors for the 6 LN with C/D with SDI Alternative. Regarding the Activity Categories of

7 these 224 impacted receptors, there would be a total of 208 impacted Activity Category

8 B sites (residential), 13 impacted Activity Category C sites (schools, shelters, parks,

9 active sports areas, and playgrounds) and 3 impacted Activity Category E sites (hotel,

10 restaurant). NSA 1 would contain 25 residential impacts, 1 school playground with 2

11 receptors, and 1 active sports area; NSA 2 would contain a total of 17 residential impacts;

NSA 3 would contain 48 impacts, 47 being residential, and 1 homeless shelter. NSA 4 would contain 1 residential impact. NSA 5 would contain 3 residential impacts, 1 park with 5 receptors, and 1 hotel. NSA 6 would contain 23 residential impacts, 1 daycare, and 1 playground. NSA 7 would contain 11 residential impacts while NSA 8 would have 3 total impacts: 1 hotel, 1 school administration building, and 1 restaurant. NSA 9 would contain 22 residential impacts; NSA 10 would contain 57 residential impacts; NSA 12 would contain a total of 3 impacts, 2 being residential impacts and 1 apartment pool. NSA 14 would contain no impacted receptors. NSAs 11 and 13 would contain no receivers or receptors.

The modeling results tables and location of individual receivers within each NSA for each Action Alternative are included in **Attachments C** and **D**, respectively.

6.2 Noise Study Area 1

There is a total of 50 representative noise receivers within NSA 1 of which 41 receivers represent NAC B and 9 represent NAC C. The NAC B receivers within NSA 1 represent residential land uses; and NAC C receivers represent a cemetery, schools, a school playground, and a school's active sport area. Existing peak hour (2014) noise levels range from 56 to 71 dB(A). **Table C-1** in **Attachment C** contains the one-hour equivalent sound levels for the existing scenario and location of the TNM receivers within NSA 1.

8 LN GP with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SPUI Alternative would approach or exceed the NAC at 12 receiver locations representing 15 receptors consisting of 13 residences and 1 school playground with 2 receptors. The noise levels at impacted receptors would range from 66 to 70 dB(A).

The predicted sound levels in NSA 1 would range between 58 and 70 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-3 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C** and **D**.

Table C-1 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 1, for the 8 LN GP with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C** and **D**.

8 LN GP with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SDI Alternative would approach or exceed the NAC at 13 receiver locations representing 18 receptors consisting of 16 residences and 1 school playground with 2 receptors. The noise levels at impacted receptors would range from 66 to 70 dB(A).

The predicted sound levels in NSA 1 would range between 58-70 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound

level increases over the existing levels range between 0-3 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-1 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 1, for the 8 LN GP with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the 6 LN with C/D with SPUI Alternative would approach, equal, or exceed the NAC at 23 receiver locations representing 28 receptors consisting of 25 residences, 1 school playground with 2 receptors, and 1 active sports area. The noise levels at impacted receptors would range from 66 to 75 dB(A).

The predicted sound levels in NSA 1 would range between 59 and 75 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-4 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-1 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 1, for the 6 LN with C/D with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the 6 LN with C/D with SDI Alternative would approach, equal, or exceed the NAC at 23 receiver locations representing 28 receptors consisting of 25 residences, 1 school playground with 2 receptors, and 1 active sports area. The noise levels at impacted receptors would range from 66 to 75 dB(A).

The predicted sound levels in NSA 1 would range between 59 and 75 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-4 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-1 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 1 for the 6 LN with C/D with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6.3 Noise Study Area 2

There is a total of 30 representative noise receivers within NSA 2 of which 28 receivers represent NAC B, 1 represents NAC D, and 1 represents NAC E. The NAC B receivers within NSA 2 represent residential land uses; 1 NAC D receiver within NSA 2 represents a church; and NAC E receiver within NSA 2 represents a restaurant. Existing peak hour (2014) noise levels for receivers within NSA 2 range from 40 to 68 dB(A). **Table C-2 in Attachment C** contains the one-hour equivalent sound levels for the existing scenario and location of the TNM receivers within NSA 2.

8 LN GP with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SPUI Alternative would approach or exceed the NAC at 15 receiver locations representing 23 receptors consisting of 23 residences. The noise levels at impacted receptors would range from 66 to 70 dB(A).

The predicted sound levels in NSA 2 would range between 40 and 70 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-4 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-2 in Attachment C lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 2, for the 8 LN GP with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

8 LN GP with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SDI Alternative would approach, equal, or exceed the NAC at 12 receiver locations representing 18 receptors consisting of 18 residences. The noise levels at impacted receptors would range from 66 to 69 dB(A).

The predicted sound levels in NSA 2 would range between 40 and 69 dB(A). These sound levels approach, equal, or exceed the NAC for activity category. Future sound level increases over the existing levels range between 0-4 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-2 in Attachment C lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 2, for the 8 LN GP with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6LN with C/D with SPUI Alternative would approach, equal, or exceed the NAC at 13 receiver locations representing 21 receptors consisting of 21 residences. The noise levels at impacted receptors would range from 66 to 69 dB(A).

The predicted sound levels in NSA 2 would range between 40 and 69 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-4 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-2 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 2, for the 6 LN with C/D with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SDI Alternative would approach, equal, or exceed the NAC at 11 receiver locations representing 17 receptors consisting of 17 residences. The noise levels at impacted receptors would range from 66 to 69 dB(A).

The predicted sound levels in NSA 2 would range between 40 and 69 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-4 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-2 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 2, for the 6 LN with C/D with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6.4 Noise Study Area 3

There is a total of 100 representative noise receivers within NSA 3 of which 86 receivers represent NAC B, 9 represent NAC C, 3 represent NAC D and 2 represent NAC E. The NAC B receivers within NSA 3 represent residential land uses; NAC C receivers within NSA 3 represent a homeless shelter and a school; NAC D receivers within NSA 3 represent 3 churches; and NAC E receivers within NSA 3 represent a hotel and law office. Existing peak hour (2014) noise levels for receivers within NSA 3 range from 40 to 69 dB(A). **Table C-3** in **Attachment C** contains the one-hour equivalent sound levels for the existing scenario and location of the TNM receivers within NSA 3.

8 LN GP with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SPUI Alternative would approach or exceed the NAC at 31 receiver locations representing 45 receptors consisting of 44 residences and 1 homeless shelter. The noise levels at impacted receptors would range from 66 to 73 dB(A).

The predicted sound levels in NSA 3 would range between 40 and 73 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-6 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-3 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 3, for the 8 LN GP with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

8 LN GP with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SDI Alternative would approach or exceed the NAC at 30 receiver locations representing 42 receptors consisting of 41 residences and 1 shelter. The noise levels at impacted receptors would range from 66 to 73 dB(A).

The predicted sound levels in NSA 3 would range between 40 and 73 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-5 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-3 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 3, for the 8 LN GP with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SPUI Alternative would approach, equal, or exceed the NAC at 34 receiver locations representing 50 receptors consisting of 47 residences and 1 homeless shelter with 3 receptors. The noise levels at impacted receptors would range from 66 to 73 dB(A).

The predicted sound levels in NSA 3 would range between 40 and 73 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-6 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-3 in Attachment C lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 3, for the 6 LN with C/D with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SDI Alternative would approach, equal, or exceed the NAC at 32 receiver locations representing 48 receptors consisting of 47 residences and 1 homeless shelter. The noise levels at impacted receptors would range from 66 to 72 dB(A).

The predicted sound levels in NSA 3 would range between 40 and 72 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-6 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-3 in Attachment C lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 3, for the 6 LN with C/D with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6.5 Noise Study Area 4

There is a total of 43 representative noise receivers within NSA 4 of which 31 receivers represent NAC B, 6 represent NAC C, 1 represent NAC D and 4 represent NAC E. The NAC B receivers within NSA 4 represent residential land uses; NAC C receivers within NSA 4 represent recreational trails and museums; NAC D receiver within NSA 4 represent a church; and NAC E receivers within NSA 4 represents a hotel and office space. Existing peak hour (2014) noise levels for receivers within NSA 4 range from 40 to 70 dB(A). **Table C-4 in Attachment C** contains the one-hour equivalent sound levels for the existing scenario and location of the TNM receivers within NSA 4.

8 LN GP with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SPUI Alternative would not approach, equal, or exceed the NAC at any receiver. None of the receivers would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion.

8 LN GP with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SDI Alternative would not approach, equal, or exceed the NAC at any receiver. None of the receivers would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion.

6 LN with C/D with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SPUI Alternative would approach, equal, or exceed the NAC at two receiver locations representing 2 receptors consisting of 2 residence land use properties. The noise levels at impacted receptors would range from 66 to 67 dB(A).

The predicted sound levels in NSA 4 would range between 40 and 70 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-3 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-4 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 4, for the 6 LN with C/D with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D Lanes with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SDI Alternative would approach, equal, or exceed the NAC at one receiver location representing a single receptor consisting of 1 residential land use area. The noise levels at this single receptor would range from 66 to 66 dB(A).

The predicted sound levels in NSA 4 would range between 40 and 70 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-5 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-4 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 4, for the 6 LN with C/D with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6.6 Noise Study Area 5

There is a total of 213 representative noise receivers within NSA 5 of which 136 receivers represent NAC B, 52 represent NAC C, and 25 represent NAC E. The NAC B receivers within NSA 5 represent residential land uses; NAC C receivers within NSA 5 represent a school, pool, tourist center, museum, library, film production studio, Amphitheatre, government building, active sports areas, parks, and trails; and NAC E receivers within NSA 5 represent restaurants/office space, four hotels, and a post office. Existing peak hour (2014) noise levels for receivers within NSA 5 range from 43 to 71 dB(A). **Table C-5** in **Attachment C** contains the one-hour equivalent sound levels for the existing scenario and location of the TNM receivers within NSA 5.

8 LN GP with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SPUI Alternative would approach or exceed the NAC at 19 receiver locations representing 39 receptors consisting of 35 residences, 1 park with 3 receptors, and 1 museum. The noise levels at the impacted receptors would range from 66 to 71 dB(A).

The predicted sound levels in NSA 5 would range between 42 and 71 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-8 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-5 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 5, for the 8 LN GP with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

8 LN GP with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SDI Alternative would approach or exceed the NAC at 9 receiver locations representing 16 receptors consisting of 10 residences, 1 restaurant, 1 park with 2 receptors, and 1 museum with 3 receptors. The noise levels at the impacted receptors would range from 66 to 72 dB(A).

The predicted sound levels in NSA 5 would range between 46 and 72 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B, C, and E. Future sound level increases over the existing levels range between 0-9 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-5 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 5, for the 8 LN GP with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6-Lane with C/D with SPUI Alternative would approach, equal, or exceed the NAC at 19 receiver locations representing 34 receptors consisting of 30 residences, 1 museum, and 1 park with 3 receptors. The noise levels at the impacted receptors would range from 66 to 72 dB(A).

The predicted sound levels in NSA 5 would range between 42 and 72 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-9 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion.

The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-5 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 5, for the 6 LN with C/D with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D Lanes with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D Lanes with SDI Alternative would approach, equal, or exceed the NAC at 7 receiver locations representing 9 receptors consisting of 3 residence land use areas, 1 hotel, and 1 park with 5 receptors. The noise levels at the impacted receptors would range from 66 to 72 dB(A).

The predicted sound levels in NSA 5 would range between 46 and 72 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-9 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-5 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 5, for the 6 LN with C/D with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6.7 Noise Study Area 6

There is a total of 158 representative noise receivers within NSA 6 of which 135 receivers represent NAC B, 12 represent NAC C, 6 represent NAC D and 5 represent NAC E. The NAC B receivers within NSA 6 represent residential land uses; NAC C receivers within NSA 6 represent a park, college, library, playground, and schools/daycare; and NAC C receivers within NSA 6 represent churches; and NAC E receivers within NSA 6 represents a restaurant and office space. Existing peak hour (2014) noise levels for receivers within NSA 6 range from 40 to 68 dB(A). **Table C-6** in **Attachment C** contains the one-hour equivalent sound levels for the existing scenario and location of the TNM receivers within NSA 6.

8 LN GP with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SPUI Alternative would approach, equal, or exceed the NAC at 8 receiver locations representing 13 receptors consisting of 12 residences and 1 daycare. The noise levels at impacted receptors would range from 66 to 69 dB(A).

The predicted sound levels in NSA 6 would range between 40 and 69 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-7 dB(A). None of the receptors

would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-6 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 6, for the 8 LN GP with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

8 LN GP with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SDI Alternative would approach, equal, or exceed the NAC at 10 receiver locations representing 14 receptors consisting of 13 residences, 1 playground, and 1 daycare. The noise levels at impacted receptors would range from 66 to 69 dB(A).

The predicted sound levels in NSA 6 would range between 40 and 69 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-8 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-6 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 6, for the 8 LN GP with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D Lanes with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6-Lane with C/D Lane with SPUI Alternative would approach, equal, or exceed the NAC at 21 receiver locations representing 25 receptors consisting of 23 residences, 1 daycare, and 1 playground. The noise levels at impacted receptors would range from 66 to 71 dB(A).

The predicted sound levels in NSA 6 would range between 40 and 71 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-9 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-6 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 6, for the 6 LN with C/D with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SDI Alternative would approach, equal, or exceed the NAC at 21 receiver locations representing 25 receptors consisting of 23 residence land use areas, 1 playground, and 1 daycare. The noise levels at impacted receptors would range from 66 to 71 dB(A).

The predicted sound levels in NSA 6 would range between 40 and 71 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-9 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-6 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 6, for the 6 LN with C/D with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6.8 Noise Study Area 7

There is a total of 111 representative noise receivers within NSA 7 of which 99 receivers represent NAC B, 8 represent NAC C, 1 represent NAC D, and 3 represent NAC E. The NAC B receivers within NSA 7 represent residential land uses; NAC C receivers within NSA 7 represent an, arena, park, and schools/learning center; NAC D receiver within NSA 7 represent a church; and NAC E receivers within NSA 7 represents a restaurant and bank. Existing peak hour (2014) noise levels for receivers within NSA 7 range from 41 to 67 dB(A). **Table C-7** in **Attachment C** contains the one-hour equivalent sound levels for the existing scenario and location of the TNM receivers within NSA 7.

8 LN GP with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SPUI Alternative would not approach, equal, or exceed the NAC. None of the receivers would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion.

8 LN GP with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SDI Alternative would approach, equal, or exceed the NAC at 4 receiver locations representing 4 receptors consisting of 4 residences. The noise levels at impacted receptors would be 66 dB(A).

The predicted sound levels in NSA 7 would range between 43 and 66 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-3 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-7 in Attachment C lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 7, for the 8 LN GP with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SPUI Alternative would approach, equal, or exceed the NAC at 8 receiver locations representing 11 receptors consisting of 11 residences. The noise levels at impacted receptors would range from 66 to 68 dB(A).

The predicted sound levels in NSA 7 would range between 42 and 68 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-4 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-7 in Attachment C lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 7, for the 6 LN with C/D with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SDI Alternative would approach, equal, or exceed the NAC at 8 receiver locations representing 11 receptors consisting of 11 residence land use areas. The noise levels at impacted receptors would range from 66 to 68 dB(A).

The predicted sound levels in NSA 7 would range between 42 and 68 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-5 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-7 in Attachment C lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 7, for the 6 LN with C/D with SDI Action Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6.9 Noise Study Area 8

There is a total of 18 representative noise receivers within NSA 8 of which 6 represent NAC C and 12 represent NAC E. The NAC C receivers within NSA 8 represent school/public offices, a stadium, and a library; and NAC E receivers within NSA 8 represents three hotels, two hotel pools, a restaurant and offices. Existing peak hour (2014) noise levels range for receivers within NSA 8 range from 54 to 74 dB(A). **Table C-**

8 in **Attachment C** contains the one-hour equivalent sound levels for the existing scenario and location of the TNM receivers within NSA 8.

8 LN GP with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SPUI Alternative would approach, equal, or exceed the NAC at one receiver location representing one receptor, one school administration building. The noise levels at this one receptor would be 75 dB(A).

The predicted sound levels in NSA 8 would range between 54 and 75 dB(A). These sound levels approach, equal, or exceed the NAC for activity category C. Future sound level increases over the existing levels range between 0-4 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-8 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 8, for the 8 LN GP with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

8 LN GP with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SDI Alternative would approach, equal, or exceed the NAC at two receiver locations representing two receptors consisting of 1 school administration building and 1 restaurant. The noise levels at impacted receptors would range from 71 to 75 dB(A).

The predicted sound levels in NSA 8 would range between 54 and 75 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories C and E. Future sound level increases over the existing levels range between 0-4 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-8 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 8, for the 8 LN GP with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SPUI Alternative would approach, equal, or exceed the NAC at three receiver locations representing three receptors consisting of 1 hotel, 1 school administration building, and 1 restaurant. The noise levels at impacted receptors would range from 71 to 76 dB(A).

The predicted sound levels in NSA 8 would range between 55 to 76 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories C and E. Future sound

level increases over the existing levels range between 0-5 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-8 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 8, for the 6 LN with C/D with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SDI Alternative would approach, equal, or exceed the NAC at 3 receiver locations representing 3 receptors consisting of 1 hotel, 1 school administration building, and 1 restaurant. The noise levels at impacted receptors would range from 71 to 76 dB(A).

The predicted sound levels in NSA 8 would range between 55 and 76 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories C and E. Future sound level increases over the existing levels range between 0-5 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-8 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 8, for the 6 LN with C/D with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6.10 Noise Study Area 9

There is a total of 60 representative noise receivers within NSA 9 of which 53 represent NAC B, 4 represent NAC C, and 3 represent NAC E. The NAC B receivers within NSA 9 represent residential land use; NAC C receivers within NSA 9 represent a park; and NAC E receivers within NSA 8 represents a hotel, a hotel pool, and an office. Existing peak hour (2014) noise levels for receivers within NSA 9 range from 49 to 74 dB(A). **Table C-9** in **Attachment C** contains the one-hour equivalent sound levels for the existing scenario and location of the TNM receivers within NSA 9.

8 LN GP with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SPUI Alternative would approach, equal, or exceed the NAC at 15 receiver locations representing 16 receptors consisting of 16 residences. The noise levels at impacted receptors would range from 66 to 73 dB(A).

The predicted sound levels in NSA 9 would range between 49 to 73 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-2 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The

illustration of the noise impacts and location of individual receivers is included in **Attachments C and D.**

Table C-9 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 9, for the 8 LN GP with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D.**

8 LN GP with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SDI Alternative would approach, equal, or exceed the NAC at 17 receiver locations representing 18 receptors consisting of 18 residences. The noise levels at impacted receptors would range from 66 to 74 dB(A).

The predicted sound levels in NSA 9 would range between 49 and 74 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-2 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D.**

Table C-9 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 9, for the 8 LN GP with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D.**

6 LN with C/D with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D Lane with SPUI Alternative would approach, equal, or exceed the NAC at 20 receiver locations representing 21 receptors consisting of 21 residential land use areas. The noise levels at impacted receptors would range from 66 to 75 dB(A).

The predicted sound levels in NSA 9 would range between 48 to 75 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-2 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D.**

Table C-9 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 9, for the 6 LN with C/D with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D.**

6 LN with C/D with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SDI Alternative would approach, equal, or exceed the NAC at 21 receiver locations

representing 22 receptors consisting of 22 residential land use areas. The noise levels at impacted receptors would range from 66 to 75 dB(A).

The predicted sound levels in NSA 9 would range between 49 and 75 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-2 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-9 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 9, for the 6 LN with C/D with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6.11 Noise Study Area 10

There is a total of 116 representative noise receivers within NSA 10 of which 114 represent NAC B and 2 represent NAC D. The NAC B receivers within NSA 10 represent residential land use and NAC D receivers within NSA 10 represent a church and school. Existing peak hour (2014) noise levels for receivers within NSA 10 range from 38 to 71 dB(A). **Table C-10** in **Attachment C** contains the one-hour equivalent sound levels for the existing scenario and location of the TNM receivers within NSA 10.

8 LN GP with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SPUI Alternative would approach, equal, or exceed the NAC at 45 receiver locations representing 48 receptors consisting of 48 residences. The noise levels at impacted receptors would range from 66 to 71 dB(A).

The predicted sound levels in NSA 10 would range between 39 and 71 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels would range 0-2 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-10 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 10, for the 8 LN GP with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

8 LN GP with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SDI Alternative would approach, equal, or exceed the NAC at 48 receiver locations representing 54 receptors consisting of 54 residences. The noise levels at impacted receptors would range from 66 to 71 dB(A).

The predicted sound levels in NSA 10 would range between 38 and 71 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels would range 0-2 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-10 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 10, for the 8 LN GP with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SPUI Alternative would approach, equal, or exceed the NAC at 54 receiver locations representing 58 receptors consisting of 58 residential land use areas. The noise levels at impacted receptors would range from 66 to 72 dB(A).

The predicted sound levels in NSA 10 would range between 39 to 72 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-2 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-10 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 10, for the 6 LN with C/D with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SDI Alternative would approach, equal, or exceed the NAC at 53 receiver locations representing 57 receptors consisting of 57 residential land use areas. The noise levels at impacted receptors would range from 66 to 72 dB(A).

The predicted sound levels in NSA 10 would range between 39 and 72 dB(A). These sound levels approach, equal, or exceed the NAC for activity category B. Future sound level increases over the existing levels range between 0-2 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-10 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 10, for the 6 LN with C/D with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6.12 Noise Study Area 11

There are no representative noise receivers within NSA 11.

6.13 Noise Study Area 12

There is a total of 121 representative noise receivers within NSA 12 of which 112 represent NAC B and 9 represent NAC C. The NAC B receivers within NSA 12 represent residential land use; and NAC C receivers within NSA 12 represent a school, a school playground, a tennis court and two apartment pools. Existing peak hour (2014) noise levels range for receivers within NSA 12 range from 43 to 67 dB(A). **Table C-12** in **Attachment C** contains the one-hour equivalent sound levels for the existing scenario and location of the TNM receivers within NSA 12.

8 LN GP with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SPUI Alternative would approach, equal, or exceed the NAC at 1 receiver location representing 1 receptor consisting of 1 apartment pool. The noise level at this receptor would be 66 dB(A).

The predicted sound levels in NSA 12 would range between 43 and 66 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level decreases the existing levels by -1 dB(A) and increase level a maximum of 3 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C** and **D**.

Table C-12 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 12, for the 8 LN GP with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C** and **D**.

8 LN GP with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with SDI Alternative would approach, equal, or exceed the NAC at 1 receiver location representing 1 receptor consisting of 1 apartment pool. The noise level at this receptor would be 68 dB(A).

The predicted sound levels in NSA 12 would range between 43 and 68 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels range between 0-3 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C** and **D**.

Table C-12 in **Attachment C** lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 12, for the 8 LN GP with SDI

Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SPUI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SPUI Alternative would approach, equal, or exceed the NAC at 3 receiver locations representing 3 receptors consisting of 2 residential land use areas and 1 apartment pool. The noise levels at impacted receptors would range from 66 to 69 dB(A).

The predicted sound levels in NSA 12 would range between 44 to 69 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and Future sound level increases over the existing levels would range between 0-5 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-12 in Attachment C lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 12, for the 6 LN with C/D with SPUI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6 LN with C/D with SDI Alternative

Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D with SDI Alternative would approach, equal, or exceed the NAC at 3 receiver locations representing 3 receptors consisting of 2 residential land use areas and 1 apartment pool. The noise levels at impacted receptors would range from 66 to 69 dB(A).

The predicted sound levels in NSA 12 would range between 44 and 69 dB(A). These sound levels approach, equal, or exceed the NAC for activity categories B and C. Future sound level increases over the existing levels would range between 0-5 dB(A). None of the receptors would experience future sound level increases exceeding the 10 dB(A) ArDOT criterion. The illustration of the noise impacts and location of individual receivers is included in **Attachments C and D**.

Table C-12 in Attachment C lists the one-hour equivalent sound levels for the existing and year 2041 scenarios for the TNM receivers within NSA 12, for the 6 LN with C/D with SDI Alternative. The illustration of the impacts and location of individual receivers is included in **Attachments C and D**.

6.14 Noise Study Area 13

There are no representative noise receivers within Noise Study Area 13.

6.15 Noise Study Area 14

There is a total of two representative noise receivers within NSA 14 of which one represents NAC D and one represents NAC E. The NAC D receivers within NSA 14 represent a medical clinic; and NAC E receivers within NSA 14 represent a restaurant. Existing peak hour (2014) noise levels for receivers within NSA 14 range from 46 to 68

1 dB(A). **Table C-14** in **Attachment C** contains the one-hour equivalent sound levels for
2 the existing scenario and location of the TNM receivers within NSA 14.

3
4 *8 LN GP with SPUI Alternative*

5 Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with
6 SPUI Alternative would not approach, equal, or exceed the NAC at any receiver. None of
7 the receivers would experience future sound level increases exceeding the 10 dB(A)
8 ArDOT criterion.

9
10 **Table C-14** in **Attachment C** lists the one-hour equivalent sound levels for the existing
11 and year 2041 scenarios for the TNM receivers within NSA 14, for the 8 LN GP with SPUI
12 Alternative. The illustration of the impacts and location of individual receivers is included
13 in **Attachments C** and **D**.

14
15 *8 LN GP with SDI Alternative*

16 Predicted future design year (2041) noise levels adjacent to the proposed 8 LN GP with
17 SDI Alternative would not approach, equal, or exceed the NAC at any receiver. None of
18 the receivers would experience future sound level increases exceeding the 10 dB(A)
19 ArDOT criterion.

20
21 **Table C-14** in **Attachment C** lists the one-hour equivalent sound levels for the existing
22 and year 2041 scenarios for the TNM receivers within NSA 14 for the 8 LN GP with SDI
23 Alternative. The illustration of the impacts and location of individual receivers is included
24 in **Attachments C** and **D**.

25
26 *6 LN with C/D with SPUI Alternative*

27 Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D
28 with SPUI Alternative would not approach, equal, or exceed the NAC at any receiver.
29 None of the receivers would experience future sound level increases exceeding the 10
30 dB(A) ArDOT criterion.

31
32 **Table C-14** in **Attachment C** lists the one-hour equivalent sound levels for the existing
33 and year 2041 scenarios for the TNM receivers within NSA 14, for the 6 LN with C/D with
34 SPUI Alternative. The illustration of the impacts and location of individual receivers is
35 included in **Attachments C** and **D**.

36
37 *6 LN with C/D with SDI Alternative*

38 Predicted future design year (2041) noise levels adjacent to the proposed 6 LN with C/D
39 with SDI Alternative would not approach, equal, or exceed the NAC at any receiver. None
40 of the receivers would experience future sound level increases exceeding the 10 dB(A)
41 ArDOT criterion.

42
43 **Table C-14** in **Attachment C** lists the one-hour equivalent sound levels for the existing
44 and year 2041 scenarios for the TNM receivers within NSA 14, for the 6 LN with C/D with
45 SDI Alternative. The illustration of the impacts and location of individual receivers is
46 included in **Attachments C** and **D**.

7.0 Noise Abatement Evaluation

7.1 Statement of Likelihood of Abatement

Based on the studies completed to date, the ArDOT has determined that all Action Alternatives would result in traffic noise impacts. **Tables 7-1, 7-2, 7-3** and **7-4** list the noise barriers analyzed including those determined to be feasible and reasonable. The cost of the barriers was based on \$40.00/sqft for ground mounted absorptive noise barriers and \$50.00/sqft for absorptive noise barriers on retaining walls and bridges. The location of the noise barriers is illustrated in **Attachment E**. The costs for absorptive noise barriers were used in all areas to minimize reflected noise to receptors opposite to the proposed noise barriers.

This page is intentionally left blank

1

Table 7-1: 8 LN GP with SPUI Noise Barriers Analyzed

Barrier Number	NSA	Location	Feasible	Average Height of Barrier (ft)	Length of Barrier (ft)	Meets Design Goal of 8 dB(A)	Total Cost	Number of Benefitted Residences	Cost per Benefitted Receptor	Feasible and Reasonable
NB 1	1	East of I-30 from Roosevelt Rd. to 500 ft north of 21st St.	Yes	13-25	1,604	Yes	\$1,215,580	17	\$71,505	No
NB 2	2,3	West of I-30 from 21st St. to RR track	Yes	13-22	4,094	Yes	\$2,996,191	86	\$34,839	Yes
NB 3	3	West of I-30 between 17th St. and 21st St.	Yes	10-13	1,443	Yes	\$768,921	33	\$23,301	Yes
NB 5	5	West of I-30 between 9th St. and 11th St.	Yes	25	940	No	N/A	N/A	N/A	No
NB 6	6	East of I-30 from Bishop Lindsey Ave. to R.R. Track	Yes	22-25	1,848	Yes	\$2,049,796	13	\$157,677	No
NB 7	6	East of I-30 between 13th St. and 19th St.	Yes	25	2,075	Yes	\$2,290,674	87	\$26,330	Yes
NB 11	9	North of I-40 between J.F.K. Blvd. and 33rd St.	Yes	10-16	3,140	Yes	\$1,434,040	20	\$71,702	No
NB 12	10	North of I-40, from approximately 3,000 east of J.F.K. Blvd. to J.F.K. Blvd.	No	25	3,437	No	N/A	N/A	N/A	No
NB 13	10	North of I-40 from Belmont Dr. to Plateau St.	Yes	16-25	2,241	Yes	\$2,162,200	13	\$166,323	No
NB 14	10	West of Hills Blvd. between Waterside Dr. and Belmont Dr.	No	25	372	No	N/A	N/A	N/A	No
Total Number of Benefitted Receptors for Feasible and Reasonable Barriers NB2, NB3 and NB7:								206		

2 Source: Project Team, July 2017.

3

4

5

6

7

1

Table 7-2: 8 LN GP with SDI Noise Barriers Analyzed

Barrier Number	NSA	Location	Feasible	Average Height of Barrier (ft)	Length of Barrier (ft)	Meets Design Goal of 8 dB(A)	Total Cost	Number of Benefitted Residences	Cost per Benefitted Receptor	Feasible and Reasonable
NB 1	1	East of I-30 from Roosevelt Rd. to 500 ft north of 21st St.	Yes	10-25	1,600	Yes	\$1,196,877	17	\$70,405	No
NB 2	2,3	West of I-30 from 21st St. to R.R. Track	Yes	13-19	4,093	Yes	\$2,977,317	84	\$35,444	Yes
NB 3	3	West of I-30 between 17th St. and 21st St.	Yes	10-13	1,444	Yes	\$792,519	33	\$24,016	Yes
NB 5	5	West of I-30 between 9th St. and 11th St.	Yes	25	1,338	No	N/A	N/A	N/A	No
NB 6	6	East of I-30 from Bishop Lindsey Ave. to R.R. Track	Yes	16-25	1,895	Yes	\$1,889,747	23	\$82,163	No
NB 7	6	East of I-30 between 13th St. and 19th St.	Yes	25	1,974	Yes	\$2,165,070	94	\$23,033	Yes
NB 10	7	West of I-30 between Curtis Sykes Dr. and 13th St.	Yes	13-22	1,413	Yes	\$1,304,552	7	\$186,365	No
NB 11	9	North of I-40 between J.F.K. Blvd. and 33rd St.	Yes	10-16	3,140	Yes	\$1,416,680	20	\$70,834	No
NB 12	10	North of I-40, from approximately 3,000 east of J.F.K. Blvd. to J.F.K. Blvd.	No	25	3,437	No	N/A	N/A	N/A	No
NB 13	10	North of I-40 from Belmont Dr. to Plateau St.	Yes	16-25	787	Yes	\$640,810	11	\$58,255	No
NB 14	10	West of Hills Blvd. between Waterside Dr. and Belmont Dr.	No	25	372	No	N/A	N/A	N/A	No
Total of Benefitted Receptors for Feasible and Reasonable Barriers NB2, NB3 and NB7:								211		

2Source: Project Team, July 2017.

3

1

Table 7-3: 6 LN with C/D Lanes with SPUI Noise Barriers Analyzed

Barrier Number	NSA	Location	Feasible	Average Height of Barrier (ft)	Length of Barrier (ft)	Meets Design Goal of 8 dB(A)	Total Cost	Number of Benefitted Residences	Cost per Benefitted Receptor	Feasible and Reasonable
NB 1	1	East of I-30 from Roosevelt Rd. to 500 ft north of 21st St.	Yes	13-25	2,011	Yes	\$1,695,418	26	\$65,208	No
NB 2	2,3	West of I-30 from 21st St. to R.R. Track	Yes	10-22	4,049	Yes	\$3,001,901	84	\$35,737	Yes
NB 3	3	West of I-30 between 17th St. and 21st St.	Yes	10-19	1,375	Yes	\$875,953	33	\$26,544	Yes
NB 4	4	East of I-30 between 12th St. and 10th St.	Yes	25	1,216	No	N/A	N/A	N/A	No
NB 5	5	West of I-30 between 9th St. and 11th St.	Yes	25	891	No	N/A	N/A	N/A	No
NB 6	6	East of I-30 from Bishop Lindsey Ave to R.R. Track	Yes	25	1,616	Yes	\$1,911,463	23	\$83,107	No
NB 7	6	East of I-30 between 13th St. and 19th St.	Yes	25	2,756	Yes	\$3,216,058	139	\$23,137	Yes
NB 8	7	West of I-30 Broadway Ave. to 1000 ft south of Riverfront Dr.	Yes	16-19	1,987	Yes	\$1,731,424	28	\$61,837	No
NB 9	7	West of I-30 between Bishop Lindsey Ave. and Broadway Ave.	Yes	25	1,292	No	N/A	N/A	N/A	No
NB 10	7	West of I-30 between Curtis Sykes Dr. and 13th St.	Yes	13-25	654	Yes	\$663,637	7	\$94,805	No
NB 11	9	North of I-40 between J.F.K. Blvd. and 33rd St.	Yes	10-16	3,140	Yes	\$1,480,680	20	\$74,034	No
NB 12	10	North of I-40, from approximately 3,000 east of J.F.K. Blvd to J.F.K. Blvd.	No	25	3,437	No	N/A	N/A	N/A	No
NB 13	10	North of I-40 from Belmont Dr. to Plateau St.	Yes	25	2,444	Yes	\$2,443,560	12	\$203,630	No
NB 14	10	West of Hills Blvd. between Waterside Dr. and Belmont Dr.	No	25	372	No	N/A	N/A	N/A	No
NB 15	12	West of Hwy.167 and south of Lakeview Rd.	Yes	10-16	1,021	Yes	\$491,216	9	\$54,580	No
Total of Benefitted Receptors for Feasible and Reasonable Barriers NB2, NB3, and NB7:								256		

2Source: Project Team, July 2017.

1

Table 7-4: 6 LN with C/D Lanes with SDI Noise Barriers Analyzed

Barrier Number	NSA	Location	Feasible	Average Height of Barrier (ft)	Length of Barrier (ft)	Meets Design Goal of 8 dB(A)	Total Cost	Number of Benefitted Residences	Cost per Benefitted Receptor	Feasible and Reasonable
NB 1	1	East of I-30 from Roosevelt Rd. to 500 ft north of 21st St.	Yes	13-25	1,916	Yes	\$1,621,356	26	\$62,360	No
NB 2	2,3	West of I-30 from 21st St. to R.R. Track	Yes	13-19	4,043	Yes	\$3,034,281	85	\$35,697	Yes
NB 3	3	West of I-30 between 17th St. and 21st St.	Yes	13	1,362	Yes	\$745,152	30	\$24,838	Yes
NB 4	4	East of I-30 between 12th St. and 10th St.	Yes	10-25	749	Yes	\$677,730	2	\$338,865	No
NB 5	5	West of I-30 between 9th St. and 11th St.	Yes	25	1,318	No	N/A	N/A	N/A	No
NB 6	6	East of I-30 from Bishop Lindsey Ave. to R.R. Track	Yes	13-25	1,616	Yes	\$1,558,456	23	\$67,759	No
NB 7	6	East of I-30 between 13th St. and 19th St.	Yes	25	2,756	Yes	\$3,216,058	138	\$23,305	Yes
NB 8	7	West of I-30 Broadway Ave to 1000 ft south of Riverfront Dr.	Yes	19-25	2,035	Yes	\$2,213,697	28	\$79,061	No
NB 9	7	West of I-30 between Bishop Lindsey Ave. and Broadway Ave.	Yes	25	1,292	No	N/A	N/A	N/A	No
NB 10	7	West of I-30 between Curtis Sykes Dr. and 13th St.	Yes	13-25	654	Yes	\$663,637	7	\$94,805	No
NB 11	9	North of I-40 between J.F.K. Blvd. and 33rd St.	Yes	10-16	3,140	Yes	\$1,357,160	20	\$67,858	No
NB 12	10	North of I-40, from approximately 3,000 east of J.F.K. Blvd. to J.F.K. Blvd.	Yes	25	3,437	No	N/A	N/A	N/A	No
NB 13	10	North of I-40 from Belmont Dr. to Plateau St.	Yes	16-25	787	Yes	\$647,560	11	\$58,869	No
NB 14	10	West of Hills Blvd. between Waterside Dr. and Belmont Dr.	No	25	372	No	N/A	N/A	N/A	No
NB 15	12	West of Hwy. 167 and south of Lakeview Rd.	Yes	10-16	1,012	Yes	\$486,738	9	\$54,082	No
Total of Benefitted Receptors for Feasible and Reasonable Barriers NB2, NB3, and NB7:								253		

2Source: Project Team, July 2017.

This study provides details for all considered and proposed noise abatement measures for inclusion in the NEPA document. Design of design-build noise abatement measures shall be based on the preliminary noise abatement design developed during the noise analysis, and re-evaluated during the project's final design. Noise abatement measures are considered, developed, and constructed in accordance with this standard and in conformance with the provisions of 40 CFR 1506.5(c) and 23 CFR 636.109.

7.2 View of Benefitted Property Owners and Residents

The final step in determining reasonableness of any abatement system is the solicitation of the viewpoints of the benefitted property owners and residents. If the cost-effectiveness and noise reduction design reasonableness criteria are still met after additional design investigations, then the viewpoints of the benefitted residents and property owners would be sought and considered before final decisions are made.

8.0 Mitigation of Construction Noise

In addition to noise from traffic, construction activities themselves can produce increased noise of a temporary nature. ArDOT would be sensitive to local needs and may make adjustments to work practices in order to reduce inconvenience to the public.

The major construction elements of this project are expected to be demolition, hauling, grading, paving, and bridge construction. Construction of the proposed improvements would result in a temporary increase in the ambient noise level along I-30. General construction noise impacts for passerby and those individuals living or working near the project can be expected particularly from demolition, earth moving, pile driving, and paving operations. Equipment associated with construction generally includes backhoes, graders, pavers, concrete trucks, compressors, and other miscellaneous heavy equipment. **Table 8-1** lists some typical peak operating noise levels at a distance of 15 m (50 ft), grouping construction equipment according to mobility and operating characteristics. Motorized equipment shall be maintained with appropriate mufflers to minimize construction noise levels. During certain phases of construction (i.e., land clearing) and during certain seasons of the year, there will be areas along the project where no construction activity is taking place.

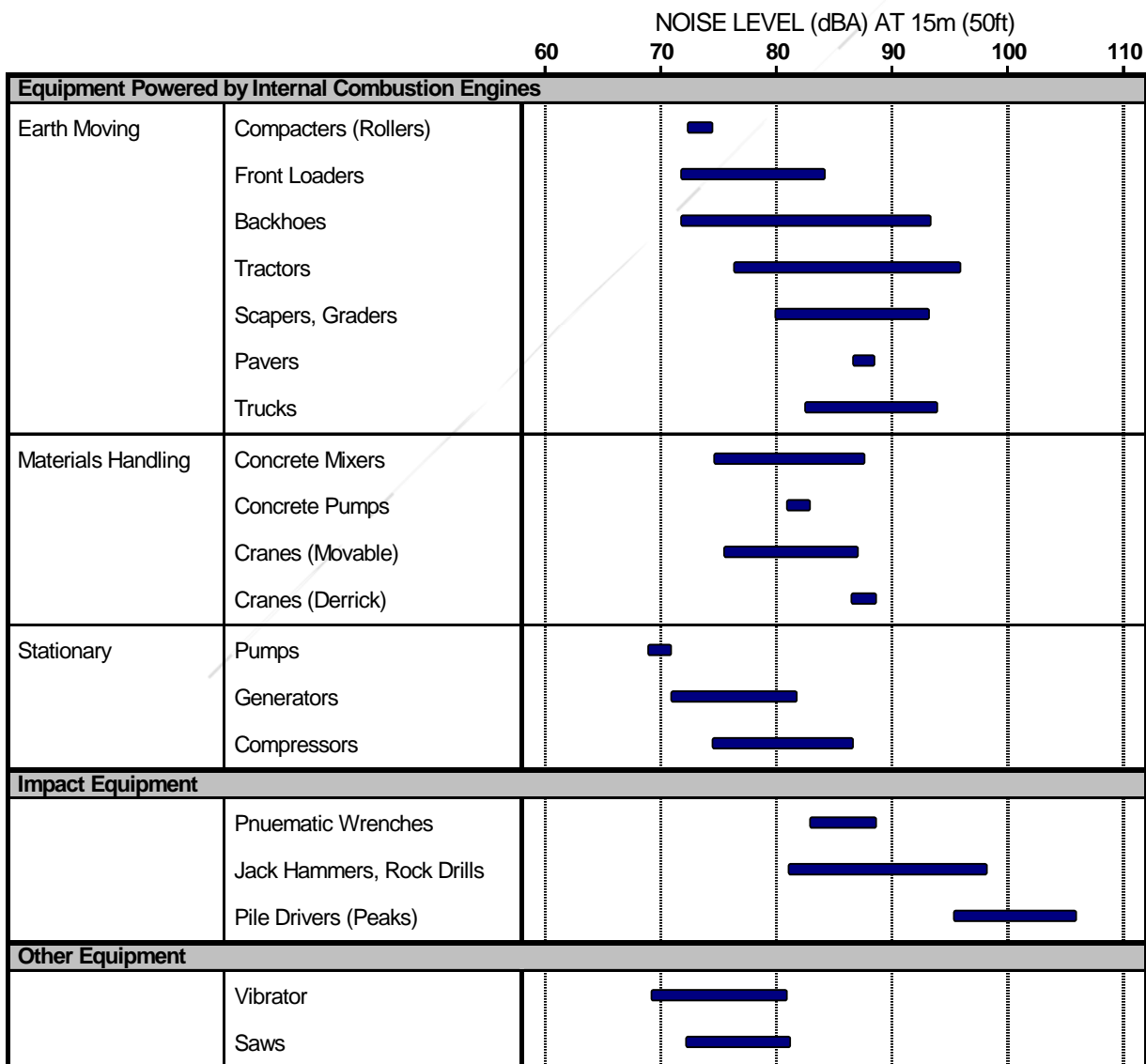
Local noise ordinances may prohibit construction activity between certain times of the day, or there may be other restrictions imposed on the contractor. Contractors are required to comply with all applicable regulations governing equipment source levels and noise resulting from construction site activities for Type I projects. Alternately, the contractor may seek a variance to operate outside the local noise ordinance. The following techniques can be used to reduce construction noise impacts:

1. Place stationary noise sources as far from sensitive receptors as possible.
2. Use portable noise barriers or take advantage of natural terrain features between the noise source and sensitive receptors to provide shielding.
3. Turn idling equipment off.
4. Drive equipment forward instead of backward whenever possible; lifting instead of dragging materials; and avoid scraping or banging activities by substituting quieter hand methods, if possible.

5. Confine work that does not have to be done at night to daylight hours. When work must be done at night, complete the noisiest work as early as possible.

Construction noise can be further reduced through the use of properly sized and maintained mufflers, engine intake silencers, less obtrusive backup alarms, engine enclosures, noise blankets, and rubber linings. Considering the relatively short-term nature of construction noise, impacts are not expected to be substantial. Yet, for brief periods of time, some construction noise impacts could be substantial (an increase in existing noise levels by 10 dB(A) or greater), even though exiting I-30 traffic noise levels are anticipated to remain high. These episodes usually occur during daytime work hours. As a result, these impacts will be minimized to adjacent residents. Additionally, nearby structures usually contribute to transmission loss and a resulting moderation of intrusive construction noise.

Table 8-1: Construction Equipment Sound Levels



SOURCE: U.S. Report to the President and Congress on Noise, February, 1972.

9.0 Coordination with Local Officials

Areas of undeveloped lands are scattered throughout the 30 Crossing corridor. These are Activity Category G lands which are undeveloped and at the time of this traffic noise analysis were not permitted for development. The proposed project includes travel lanes at grade, on-fill/structure and in cut along a rolling terrain. **Table 9-1** presents a range of distances from the nearest edge of travel lane to the design year noise levels of 71 and 66 dB(A). The 71 and 66 dB(A) values represent the approach noise levels for NAC E, C and B. Future developments within these setbacks would have noise levels that are greater than 71 or 66 dB(A). The setback distances were identified to assist local planning authorities in developing land use controls to prevent incompatible land use due to traffic noise. Given the alignment and topography of the 30 Crossing corridor, it is recommended that future developments proposed along the project corridor be modeled with accurate survey data to avoid creating incompatible land uses based on highway noise.

**Table 9-1: Design Year (2041) Predicted One-Hour Equivalent Sound Levels
Setback Distances for Undeveloped Areas**

	71 dB(A)	66 dB(A)
Distance from Nearest Edge of Travel Lane	75 ft – 265 ft	115 ft – 540 ft

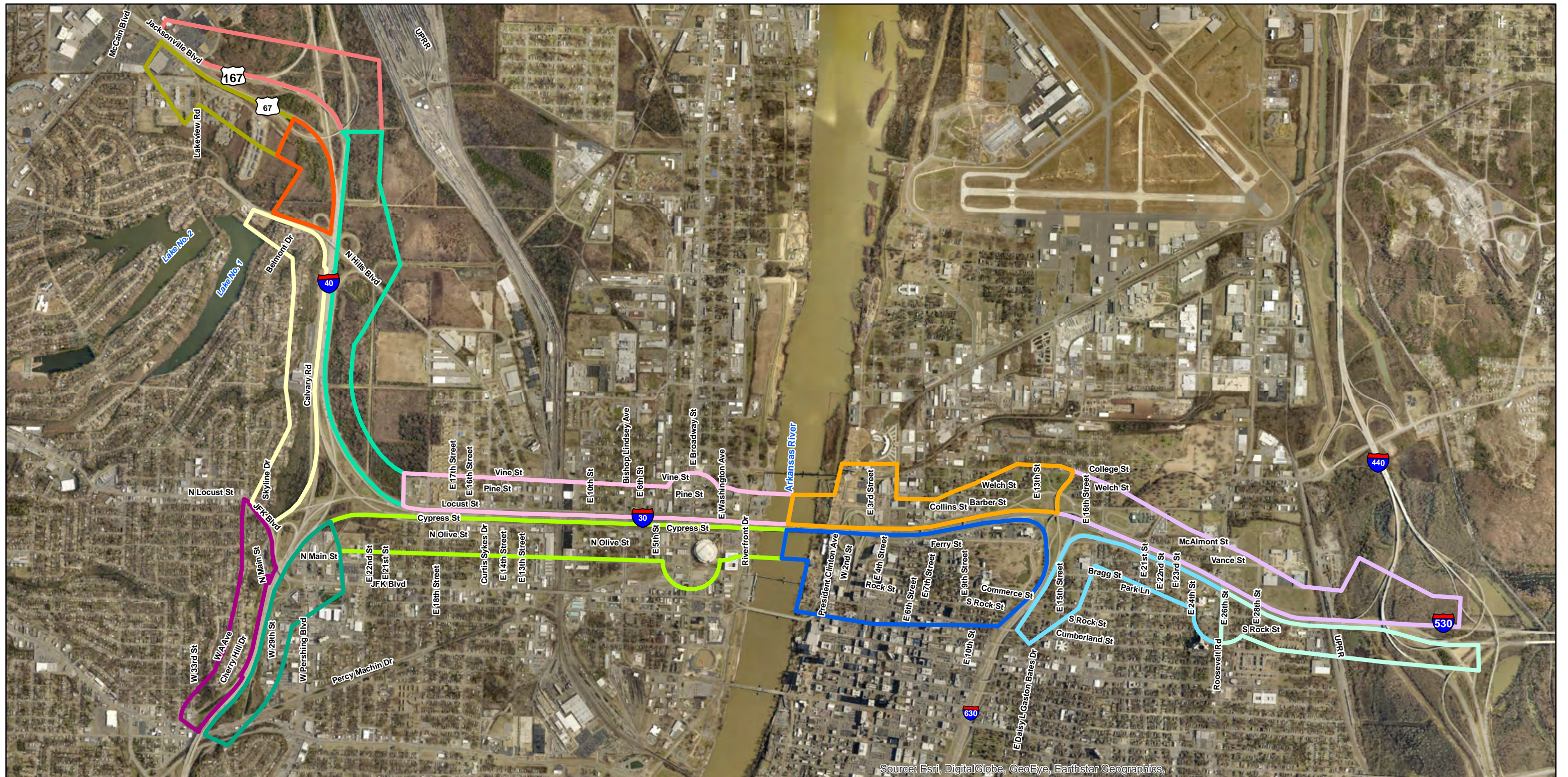
Source: Project Team, July 2017.

ArDOT encourages local communities and developers to practice noise compatibility planning in order to avoid future noise impacts. Two guidance documents on noise compatible land use planning are available from FHWA: “The Audible Landscape: A Manual for Highway Noise and Land Use” and “Entering the Quiet Zone: Noise Compatible Land Use Planning.”

This page is intentionally left blank

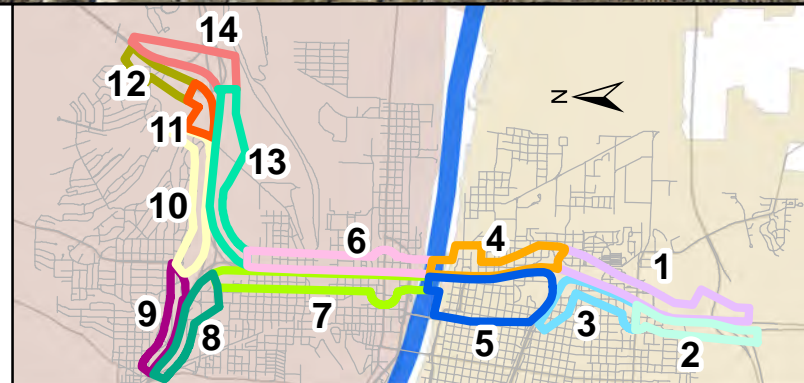
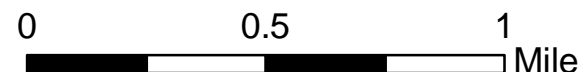
Attachment A: Overall Noise Study Areas

This page is intentionally left blank



Legend

NSA 1	NSA 6	NSA 11
NSA 2	NSA 7	NSA 12
NSA 3	NSA 8	NSA 13
NSA 4	NSA 9	NSA 14
NSA 5	NSA 10	



ATTACHMENT A: NOISE STUDY AREAS

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

This page is intentionally left blank

Attachment B: Noise Measurement Sites Map, Existing Noise Levels, Field Data Sheets, Site Photographs, and Sound Level Calibration Certificates

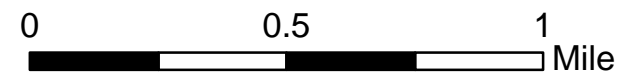
This page is intentionally left blank



Source: 2013 Aerial, Pulaski County.

Legend

- ▲ Field Sites
- Project Limits



ATTACHMENT B: NOISE MEASURING SITES

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Technical Report

Pulaski County, Arkansas

This page is intentionally left blank

Table B-1: Measured Existing Noise Levels (dB(A))

Field Site	Site Description	Date	Start Time	Duration	Roadway	Lane	Traffic ¹						Noise Level, dB(A) L _{eq} (1h)	
							A ^a	MT ^b	HT ^c	MC ^d	Buses ^e	Speed in mph		
ST-1	Residence, edge of pavement south of E 15 th St. and approximately 200 ft east of Welch St.	5/24/16	10:30 am	15:00	EB I-30	1	150	10	0	0	0	65	59.7	
						2	157	9	5	0	1			
						3	164	17	26	0	0			
						4	111	16	9	0	1			
					WB I-30	5	138	7	2	0	0	65		
						6	232	5	10	0	3			
						7	177	17	26	0	2			
						8	177	2	14	0	0			
			10:55 am	15:00	EB I-30	1	180	9	1	0	0	65	59.4	
						2	120	10	2	0	1			
						3	159	20	26	0	0			
						4	101	4	5	0	0			
					WB I-30	5	128	4	2	0	0	65		
						6	212	16	9	0	2			
						7	166	17	25	0	2			
						8	131	4	2	0	0			
			11:15 am	15:00	EB I-30	1	173	7	3	0	0	65	59.3	
						2	127	10	6	0	0			
						3	170	23	30	0	1			
						4	102	5	9	0	1			
					WB I-30	5	131	10	1	0	2	65		
						6	230	13	7	0	0			
						7	181	4	28	0	1			
						8	147	2	3	0	0			
ST-2	MacArthur Park, approximately 177 ft north of Pulaski County Ln and approximately 610 ft east of Commerce St.	5/24/16	10:30 am	15:00	EB I-630	1	202	13	2	0	0	57	63.3	
						2	265	7	5	0	2			
						3	167	1	2	0	0			
					WB I-630	4	89	4	0	0	1	56		
						5	251	7	0	0	1			
						6	208	7	1	0	0			
			10:55 am	15:00	EB I-630	7	120	0	0	0	1	57	62.4	
						1	205	12	1	0	0			
						2	298	7	2	0	1			
						3	166	2	0	0	1			

Field Site	Site Description	Date	Start Time	Duration	Roadway	Lane	Traffic ¹						Noise Level, dB(A) L _{eq} (1h)		
							A ^a	MT ^b	HT ^c	MC ^d	Buses ^e	Speed in mph			
					WB I-630	4 5 6 7	101 270 189 110	1 5 7 4	1 2 1 1	0 0 0 0	0 1 0 0	53			
					EB I-630	1 2 3	191 325 174	7 9 4	2 3 1	0 0 0	0 0 1	57			
			11:15 am	15:00	WB I-630	4 5 6 7	113 263 169 125	1 9 6 3	0 0 2 1	0 0 0 0	0 1 3 0	53	62.1		
ST-3	Residence, approximately 10 ft south of E 10 th St. and approximately 2 ft east of Barber St.	5/24/16	10:30 am	15:00	EB I-30	1 2 3	389 252 117	8 16 5	10 26 17	0 0 0	1 1 1	56	66.4		
					WB I-30	4 5 6 7	74 315 185 142	1 9 15 13	0 3 27 12	0 0 0 0	1 3 0 1	60			
					EB I-30	1 2 3	412 252 138	13 19 3	10 28 3	0 0 0	3 2 0	62		66.4	
					WB I-30	4 5 6 7	94 331 173 139	1 12 15 7	0 4 24 10	0 0 0 0	1 1 0 0	60			
					EB I-30	1 2 3	463 275 152	18 12 8	9 25 7	0 0 0	0 1 0	58			66.4
					WB I-30	4 5 6 7	99 307 189 146	1 12 20 9	0 7 29 10	0 0 0 0	0 3 1 0	68			
			11:15 am	15:00	EB I-30	1 2 3	419 258 161	11 17 4	7 20 7	0 0 0	1 1 0	64	60.0		

Field Site	Site Description	Date	Start Time	Duration	Roadway	Lane	Traffic ¹						Noise Level, dB(A) L _{eq} (1h)
							A ^a	MT ^b	HT ^c	MC ^d	Buses ^e	Speed in mph	
	Welch St.				WB I-30	4	96	1	0	0	1	66	
						5	372	10	4	0	4		
						6	209	14	31	0	0		
						7	186	9	13	0	0		
			1:14 pm	15:00	EB I-30	1	412	5	10	0	1	69	61.3
						2	295	20	21	0	0		
						3	150	6	0	0	0		
						WB I-30	4	78	1	0	0		
			5	340	12		8	0	2				
			6	215	17		28	0	1				
			7	177	16		18	0	0				
			1:31 pm	15:00	EB I-30	1	391	9	9	0	0	61	60.4
2	273	13				16	0	1					
3	185	2				8	0	0					
WB I-30	4	81				2	0	0	0	68			
	5	349	17	12	0	5							
	6	210	9	36	0	2							
	7	197	12	16	0	1							
ST-5	Residence, approximately 3 ft west of McAlmont St., and approximately 101 ft south of E 17 th St.	5/24/16	12:50 pm	15:00	EB I-30	1	215	4	0	0	3	64	68.9
						2	149	7	5	0	0		
						3	190	13	25	0	3		
						4	135	8	4	0	0		
			WB I-30	5	118	4	2	0	0	66			
				6	229	10	9	0	2				
				7	188	14	17	0	0				
				8	139	2	4	0	1				
			1:14 pm	15:00	EB I-30	1	199	4	5	0	2	64	68.8
						2	180	7	11	0	1		
						3	178	15	27	0	0		
						4	154	7	5	0	1		
			WB I-30	5	127	3	0	0	0	66			
				6	197	10	7	0	1				
				7	185	12	20	0	0				
				8	126	9	2	0	0				
1:31 pm	15:00	EB I-30	1	247	9	0	0	1	64	69.1			
			2	205	10	11	0	1					
			3	219	23	18	0	0					
			4	148	4	13	0	0					

Field Site	Site Description	Date	Start Time	Duration	Roadway	Lane	Traffic ¹						Noise Level, dB(A) L _{eq} (1h)
							A ^a	MT ^b	HT ^c	MC ^d	Buses ^e	Speed in mph	
					WB I-30	5 6 7 8	123 219 186 146	7 11 11 3	0 7 23 3	0 0 0 0	4 3 1 0	66	
ST-6	Residence, approximately 43 ft south of E Capitol Ave. and approximately 15 ft west of Sherman St.	5/24/16	2:30 pm	15:00	EB I-30	1 2 3	440 336 189	12 22 5	5 25 5	0 0 0	1 4 1	61	61.4
					WB I-30	4 5 6 7	79 330 222 193	1 8 14 13	1 3 28 10	0 0 0 0	0 2 0 0	61	
			2:47 pm	15:00	EB I-30	1 2 3	423 322 187	13 19 6	10 18 6	0 0 0	3 2 4	61	59.6
					WB I-30	4 5 6 7	86 314 232 230	1 15 17 6	0 6 28 15	0 0 0 0	0 7 1 1	61	
			3:04 pm	15:00	EB I-30	1 2 3	437 340 203	6 15 11	4 19 6	0 0 0	4 3 0	61	62.3
					WB I-30	4 5 6 7	91 357 255 262	1 7 16 14	1 9 29 18	0 0 0 0	0 6 3 1	61	
			2:30 pm	15:00	EB I-30	1 2 3	440 336 189	12 22 5	5 25 5	0 0 0	1 4 1	61	63.0
					WB I-30	4 5 6 7	79 330 222 193	1 8 14 13	1 3 28 10	0 0 0 0	0 2 0 0	61	
			2:47 pm	15:00	EB I-30	1 2 3	423 322 187	13 19 6	10 18 6	0 0 0	3 2 4	61	
ST-7	Residence, approximately 13 ft north of E 6 th St. and approximately 3 ft west of Sherman St.	5/24/16											

Field Site	Site Description	Date	Start Time	Duration	Roadway	Lane	Traffic ¹						Noise Level, dB(A) L _{eq} (1h)									
							A ^a	MT ^b	HT ^c	MC ^d	Buses ^e	Speed in mph										
						WB I-30	4 5 6 7	86 314 232 230	1 15 17 6	0 6 28 15	0 0 0 0	0 7 1 1		61								
			3:04 pm	15:00	EB I-30	1 2 3	437 340 203	6 15 11	4 19 6	0 0 0	4 3 0	61	66.3									
					WB I-30	4 5 6 7	91 357 255 262	1 7 16 14	1 9 29 18	0 0 0 0	0 6 3 1	61										
ST-8	William E. "Bill" Clark Presidential Park Wetlands, approximately 473 ft east of I-30 and approximately 273 ft north of E Markham St.	5/24/16	3:40 pm	15:00	EB I-30	1 2 3	339 285 305	7 7 5	8 4 6	0 0 0	1 1 0	27	58.6									
						WB I-30	4 5 6	384 335 324	11 14 6	6 18 7	0 0 0	2 2 0			53							
							EB I-30	1 2 3	349 283 327	10 5 5	7 17 8	0 0 0			1 2 1	10-27	58.0					
					WB I-30			4 5 6	385 342 310	8 12 3	6 23 8	0 0 0			2 1 1	59						
			4:13 pm	15:00		EB I-30	1 2 3	378 333 360	8 8 3	3 10 6	0 0 0	3 5 2	18-27	56.3								
					WB I-30		4 5 6	361 319 291	5 11 3	6 28 5	0 0 0	0 1 0	60									
							ST-9	First Security Amphitheatre, approximately 658 ft west of I-30 and approximately 433 ft north of E Markham St.	5/24/16	3:40 pm	15:00	EB I-30	1 2 3			339 285 305	7 7 5	8 4 6	0 0 0	1 1 0	27	56.1
						WB I-30							4 5 6			384 335 324	11 14 6	6 18 7	0 0 0	2 2 0	53	
			3:56 pm	15:00	EB I-30								1 2 3	349 283 327	10 5 5	7 17 8	0 0 0	1 2 1	10-27	57.2		

Field Site	Site Description	Date	Start Time	Duration	Roadway	Lane	Traffic ¹						Noise Level, dB(A) L _{eq} (1h)		
							A ^a	MT ^b	HT ^c	MC ^d	Buses ^e	Speed in mph			
					WB I-30	4 5 6	385 342 310	8 12 3	6 23 8	0 0 0	2 1 1	59			
		4:13 pm	15:00	EB I-30	1 2 3	378 333 360	8 8 3	3 10 6	0 0 0	3 5 2	18-27	57.2			
				WB I-30	4 5 6	361 319 291	5 11 3	6 28 5	0 0 0	0 1 0	60				
ST-10	Vacant land, approximately 9 ft west of McAlmont St and approximately 287 ft north of E 21 st St.	5/24/16	7:18 pm	15:00	EB I-30	1 2 3 4	136 125 166 98	2 2 3 3	0 5 21 5	0 0 0 0	0 1 0 1	65	68.1		
					WB I-30	5 6 7 8	30 154 157 103	0 2 2 1	0 2 14 4	0 0 0 0	0 0 0 0	65			
					EB I-30	1 2 3 4	86 104 125 105	2 4 8 0	1 5 17 3	0 0 0 0	2 2 1 0	65		68.8	
					WB I-30	5 6 7 8	117 184 155 117	3 4 8 0	1 6 22 4	0 0 0 0	2 4 0 0	65			
					EB I-30	1 2 3 4	214 396 351 301	1 6 6 2	0 3 17 6	0 0 0 0	0 1 1 1	65			66.8
					WB I-30	5 6 7 8	139 275 223 233	2 3 4 3	0 4 17 6	0 0 0 0	0 0 0 0	25-55			
		5/25/16	5:09 pm	15:00	EB I-30	1 2 3 4	181 148 160 129	6 9 12 4	0 11 22 10	0 0 0 0	1 2 0 0	65	69.3		

Field Site	Site Description	Date	Start Time	Duration	Roadway	Lane	Traffic ¹						Noise Level, dB(A) L _{eq} (1h)
							A ^a	MT ^b	HT ^c	MC ^d	Buses ^e	Speed in mph	
					WB I-30	5 6 7 8	148 239 191 143	5 17 10 1	2 12 29 6	0 0 0 0	0 3 1 2	65	
ST-11	Residence, approximately 14 ft east of N. Locust St. and approximately 101 ft north of E 17 th St.	5/24/16	7:24 pm	15:00	EB I-30	1 2 3	241 339 169	3 2 1	8 6 10	0 0 0	0 0 0	60	65.0
						4 5 6 7	43 188 197 181	0 2 3 1	0 5 20 4	0 0 0 0	0 0 0 0	60	
					WB I-30	1 2 3	156 210 130	4 10 5	5 7 6	0 0 0	3 0 2	60	
						4 5 6 7	68 427 385 436	1 2 6 5	1 9 7 3	0 0 0 0	1 1 1 0	60	
		5/25/16	6:24 am	15:00	EB I-30	1 2 3	356 443 249	9 14 8	8 14 10	0 0 0	2 3 1	60	65.3
						4 5 6 7	66 278 301 286	1 9 14 5	0 13 18 10	0 0 0 0	0 0 3 1	60	
					WB I-30	1 2 3	276 342 165	6 14 8	15 25 13	0 0 0	1 2 0	60	
						4 5 6 7	57 332 295 286	1 11 12 3	0 14 22 8	0 0 0 0	0 1 3 0	60	
		5/26/16	9:47 am	15:00	EB I-40	1 2 3 4	237 173 302 217	3 5 18 2	14 21 22 1	0 0 0 0	0 0 0 0	68	71.3
ST-12	Residence, 1334 Starfield Rd. on deck, approximately 92 ft south of Starfield Rd. and approximately 353 ft north of	5/25/16	11:01 am	15:00	EB I-40	1 2 3 4	237 173 302 217	3 5 18 2	14 21 22 1	0 0 0 0	0 0 0 0	68	71.3

Field Site	Site Description	Date	Start Time	Duration	Roadway	Lane	Traffic ¹						Noise Level, dB(A) L _{eq} (1h)
							A ^a	MT ^b	HT ^c	MC ^d	Buses ^e	Speed in mph	
	Calvary Rd.				WB I-40	5	198	6	8	0	0	64	
						6	151	3	36	0	0		
						7	292	10	21	0	1		
						8	238	3	9	0	0		
			11:18 am	15:00	EB I-40	1	232	8	12	0	1	68	71.4
						2	187	6	24	0	0		
						3	313	15	25	0	0		
						4	216	4	5	0	0		
					WB I-40	5	193	9	8	0	0	64	
						6	180	8	37	0	0		
						7	278	9	18	0	2		
						8	201	5	14	0	0		
11:35 am	15:00	EB I-40	1	249	6	13	0	1	68	71.6			
			2	198	7	24	0	1					
			3	330	11	26	0	0					
			4	248	4	7	0	1					
		WB I-40	5	216	6	10	0	0	64				
			6	198	9	38	0	0					
			7	282	15	23	0	1					
			8	253	3	12	0	0					
ST-13	Residence, 1334 Starfield Rd. front yard, approximately 6 ft south of Starfield Rd. and approximately 388 ft north of Calvary Rd.	5/25/16	11:01 am	15:00	EB I-40	1	237	3	14	0	0	68	69.1
						2	173	5	21	0	0		
						3	302	18	22	0	0		
						4	217	2	1	0	0		
			WB I-40	5	198	6	8	0	0	64			
				6	151	3	36	0	0				
				7	292	10	21	0	1				
				8	238	3	9	0	0				
			11:18 am	15:00	EB I-40	1	232	8	12	0	1	68	69.3
						2	187	6	24	0	0		
						3	313	15	25	0	0		
						4	216	4	5	0	0		
WB I-40	5	193	9	8	0	0	64						
	6	180	8	37	0	0							
	7	278	9	18	0	2							
	8	201	5	14	0	0							

Field Site	Site Description	Date	Start Time	Duration	Roadway	Lane	Traffic ¹						Noise Level, dB(A) L _{eq} (1h)
							A ^a	MT ^b	HT ^c	MC ^d	Buses ^e	Speed in mph	
			11:35 am	15:00	EB I-40	1	249	6	13	0	1	68	69.1
						2	198	7	24	0	1		
						3	330	11	26	0	0		
						4	248	4	7	0	1		
					WB I-40	5	216	6	10	0	0	64	
						6	198	9	38	0	0		
						7	282	15	23	0	1		
						8	253	3	12	0	0		
ST-14	Residence, approximately 137 ft south of Skyline Dr. and approximately 440 ft east of J.F.K. Blvd.	5/25/16	12:14 pm	15:00	EB I-40	1	120	0	1	0	0	67	63.5
						2	206	5	17	0	2		
						3	203	8	29	0	0		
						4	151	2	1	0	0		
					WB I-40	5	231	4	14	0	2	64	
						6	204	6	24	0	2		
						7	129	3	12	0	0		
						12:30 pm	15:00	EB I-40	1	126	2		
			2	222	4				12	0	2		
			3	220	6				35	0	1		
			4	156	4				9	0	1		
			WB I-40	5	224			5	10	0	1	67	
				6	181			10	32	0	0		
				7	118			2	5	0	0		
				12:46 pm	15:00			EB I-40	1	99	1		0
			2			205	5		10	0	2		
3	211	5	37			0	1						
4	172	3	4			0	1						
WB I-40	5	232	2			11	0	0	66				
	6	193	8			34	0	0					
	7	140	6			4	0	0					
	ST-15	Residence, approximately 7 ft south of Skyline Dr. and approximately 400 ft east of J.F.K. Blvd.	5/25/16			12:14 pm	15:00	EB I-40		1	120	0	1
2				206	5				17	0	2		
3				203	8				29	0	0		
4				151	2				1	0	0		
WB I-40				5	231			4	14	0	2	64	
				6	204			6	24	0	2		
				7	129			3	12	0	0		

Field Site	Site Description	Date	Start Time	Duration	Roadway	Lane	Traffic ¹						Noise Level, dB(A) L _{eq} (1h)
							A ^a	MT ^b	HT ^c	MC ^d	Buses ^e	Speed in mph	
			12:31 pm	15:00	EB I-40	1	124	2	0	0	0	70	56.0
						2	221	4	12	0	2		
						3	219	6	35	0	1		
						4	157	4	9	0	1		
					WB I-40	5	225	5	10	0	1	67	
						6	182	10	32	0	0		
						7	119	2	5	0	0		
			12:47 pm	15:00	EB I-40	1	100	1	0	0	0	65	55.8
						2	206	5	10	0	2		
						3	211	6	37	0	1		
						4	171	3	4	0	1		
WB I-40	5	231	2	12	0	0	66						
	6	193	8	35	0	0							
	7	140	5	5	0	0							

¹Vehicle counts classified as follows:

- a. Autos (A) defined as vehicles with 2-axles and 4-tires.
- b. Medium trucks (MT) defined as vehicles with 2-axles and 6-tires.
- c. Heavy trucks (HT) defined as vehicles with 3 or more axles.
- d. Motorcycle (MC) defined as vehicles with two or three-wheeled motorized vehicles.
- e. Buses defined as vehicles carrying more than 9 passengers.

Source: HNTB Corporation, May 2016.

NOISE MEASUREMENT DATA SHEET

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200

BY: April English

SITE: ST-1 DATE: 5/24/16

TIME: 10:30, 10:55, 11:25

CALIBRATION: 113.8 at 1k Hz dB.

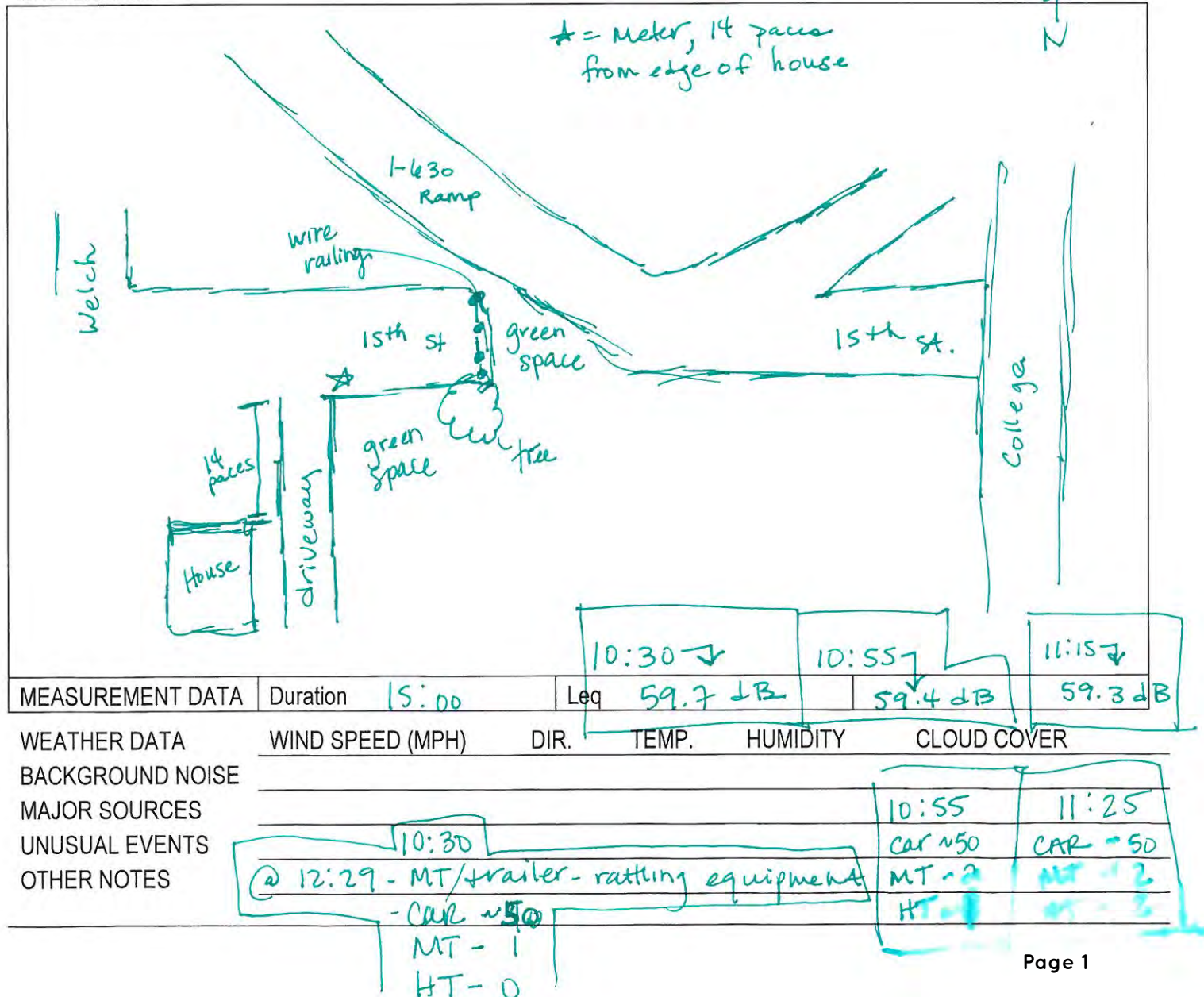
RESPONSE: FAST / SLOW

WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31483
PREAMPLIFIER - Type 1206	S / N 30522
MICROPHONE - Type 1225	S / N 52318
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH



10:55 → $L_{eq} = 59.4 \text{ dB}$

• Wind picked up @ 5 min

~ 7:26 → MT

~ 9:20 → MT

→ HT

11:15 → $L_{eq} = 59.3 \text{ dB}$

~ 52 sec → HT

siren @ ~ 1:28 to 1:35

~ 11:20 → MT

~ 11:59 → HT

~ 14:51 → MT

10:55 → $L_{eq} = 59.4 \text{ dB}$

Field Site ST-1

Residence, edge of pavement south of E 15th St.
and approximately 200 ft. east of Welch St.



Looking east.



Looking north.



Looking south



Looking west.

This page is intentionally left blank

NOISE MEASUREMENT DATA SHEET

PROJECT: CA0602 (I-30 LR, AR) JOB #: 59984-PL-003-200 BY: M. PEARSON
 SITE: ST-2 DATE: 5-24-16 TIME: 1030 to 1135
 CALIBRATION: 113.8 at 1k Hz dB.
 RESPONSE: FAST / SLOW WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Larson Davis
SLM MODEL	Soundtrack LxT1
SLM	S / N 003074
PREAMPLIFIER - PRMLxT1L	S / N 021485
MICROPHONE - 377B20	S / N LW131537
CALIBRATOR - CAL200	S / N 9235

SITE SKETCH

1010			
1030	Started 1st of 3 runs.	15 min.	63.3
1044	Lawnmower tractor shut off		
1048	Weed eaters in ditch on south side of roadway		
1049	Train horn in distance (South); loud truck on interstate		
1052	Airplane passing overhead		
1055	Start 2nd of 3 runs.	15 min	62.4
1058	One lawnmower tractor left site		
1103	Airplane passing overhead		
1111	Train horn in distance (South) 1113 Fed ex truck on park roadway		
1115	Start 3rd of 3 runs		
1117	Tractor started up & driver off site	15 min.	62.1
1125	Garbage truck emptying bins west of site		
1127	loud truck on interstate		
1130	loud truck on interstate		
1132	Stopped run		

MEASUREMENT DATA	Duration	Leg	
WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP. HUMIDITY
BACKGROUND NOISE			Cloudy / transitions to haze
MAJOR SOURCES			
UNUSUAL EVENTS	Lawnwork conducted in park during run times - including		
OTHER NOTES	small backhoes & tractors; leaf blowers		
	presence of fountain in pond south of pavilion		

Field Site ST-2

MacArthur Park, approximately 177 ft. north of Pulaski County Ln.
and approximately 610 ft. east of Commerce St.



Looking east.



Looking south.



Looking north.

NOISE MEASUREMENT DATA SHEET

BY: CH

TIME: 10:30 / 10:55 / 11:15

WEIGHTING: ☒ A / C / LIN.

RESPONSE: FAST / SLOW

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER – Type 1206	S / N 30396
MICROPHONE – Type 1225	S / N 48094
CALIBRATOR – Type 1251	S / N 30825

in front of the 5th House
@ corner of Barber and 10th

noise meter

STOP

10th ST.

grass

light pole

BARBER ST

SIDEWALK

MEASUREMENT DATA

MEASUREMENT DATA

Duration 15

Leq

66.4 / 66.4 / 66.4

WEATHER DATA

WIND SPEED (MPH)

DIR.

TEMP.

HUMIDITY

CLOUD COVER

BACKGROUND NOISE

Ambulance 7 mins / FedEx truck drove by at 7 mins (down Barber)

MAJOR SOURCES

Diesel truck drove by 14:30 (dunn Barber)

UNUSUAL EVENTS

2nd Supervisor talked at 13:40 for 30 secs.

OTHER NOTES

→ Ambulance on High - 1 min.

3rd

MC - 2:25 d

MT on barber - 5:00

HT - 13:20.

NOISE MEASUREMENT DATA SHEET

SHEET
2

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200 BY: C+1
 SITE: ST-3 DATE: 5/24/16 TIME: 10:55
 CALIBRATION: 113.8 at 1k Hz dB.
 RESPONSE: FAST / SLOW WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER - Type 1206	S / N 30396
MICROPHONE - Type 1225	S / N 48094
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH

SAME AS SHEET 1

MEASUREMENT DATA	Duration 15	Leq 66.4
------------------	-------------	----------

WEATHER DATA WIND SPEED (MPH) DIR. TEMP. HUMIDITY CLOUD COVER
 BACKGROUND NOISE Surveyor talked to me at 13:40 for about 30 secs
 MAJOR SOURCES
 UNUSUAL EVENTS
 OTHER NOTES

NOISE MEASUREMENT DATA SHEET

SHEET 3

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200 BY: CH
 SITE: ST-3 DATE: 5/24/16 TIME: 11:15
 CALIBRATION: 113.8 at 1k Hz dB.
 RESPONSE: FAST / SLOW WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER - Type 1206	S / N 30396
MICROPHONE - Type 1225	S / N 48094
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH

SAME AS SHEET 1

MEASUREMENT DATA	Duration <u>15</u>	Leq <u>66.4</u>	
WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP. HUMIDITY CLOUD COVER
BACKGROUND NOISE	<u>Ambulance on Hwy @ 1 min, loud ^(on hwy) ninja motorcycle @ 2:25</u>		
MAJOR SOURCES	<u>medium truck on Barber @ 5 mins, Truck drove past meter at</u>		
UNUSUAL EVENTS	<u>13:20 ish</u>		
OTHER NOTES			

Field Site ST-3

Residence, approximately 10 ft. south of E 10th St.
and approximately 2 ft. east of Barber St.



Looking east.



Looking north.



Looking south.

April English

TIME: 12:50, 13:14, 13:31

RESPONSE: FAST / SLOW

WEIGHTING: A / C / LIN.

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31483
PREAMPLIFIER – Type 1206	S / N 30522
MICROPHONE – Type 1225	S / N 52318
CALIBRATOR – Type 1251	S / N 30825

SITE SKETCH

1-30

grassy berm

light pole

1-30 FR

grassy area

stop sign

Welch

grassy area

sidewalk

13 paces

12th St

Reichert House

grass

grass area

meter set

12:50

13:14

13:31

WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP.	HUMIDITY	CLOUD COVER
BACKGROUND NOISE	12:50		13:14		13:31
MAJOR SOURCES	- car pulled up @ 2:45		- car started		- siren @ 9:20
UNUSUAL EVENTS	- sat @ corner of		near meter @		- wind picked up considerably
OTHER NOTES	watch @ 12th for approx 30 sec		30 sec.		
	12:50 → CAR = 5 MT = 0 HT = 0		13:14 → CAR = 5 MT = 0 HT = 0		13:31 → CAR = 5 MT = 0 HT = 0

Page 10

12:50 → 60.0 dB Leg

13:14 → 61.3 dB Leg

13:31 → 60.4 dB Leg

Field Site ST-4

Residence, approximately 13 ft. south of E 12th St.
and approximately 12 ft. east of Welch St.



Looking east.



Looking north.



Looking south.

This page is intentionally left blank

NOISE MEASUREMENT DATA SHEET

SHEET 1

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200

BY: CH
TIME: 12:50 / 13:14 / 13:31

SITE: ST-5 DATE: 5/24/16

CALIBRATION: 113.8 at 1k Hz dB.

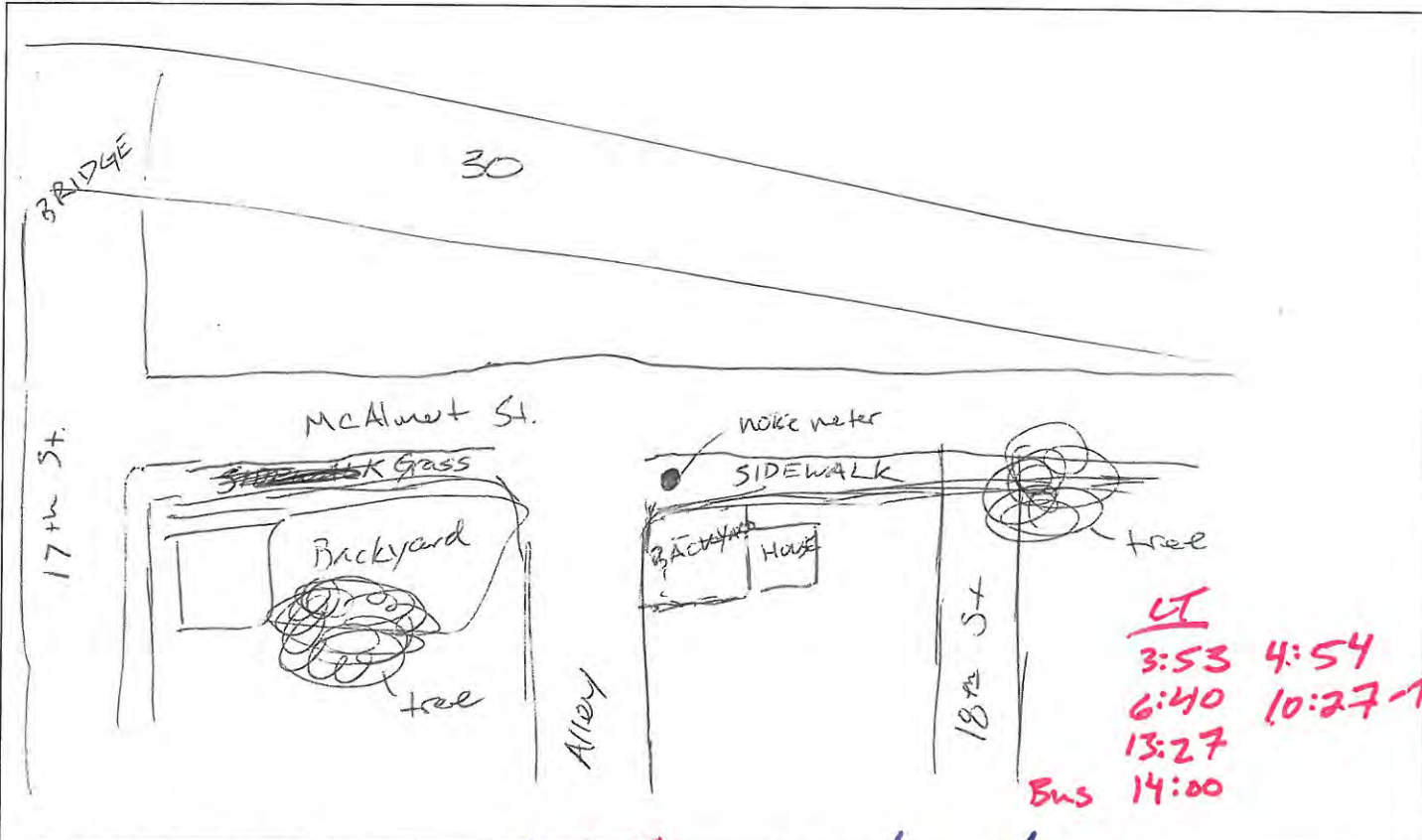
RESPONSE: FAST / SLOW

WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER - Type 1206	S / N 30396
MICROPHONE - Type 1225	S / N 48094
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH



MEASUREMENT DATA	Duration 15/15/15	Leq 68.9/68.8/69.1
------------------	-------------------	--------------------

WEATHER DATA	WIND SPEED (MPH)	DIR. SW	TEMP. 85	HUMIDITY 55%	CLOUD COVER Partly Cloudy
BACKGROUND NOISE	CAR DROVE BY AT 4:52 ON McAlmont St. Car turned into Alley @ 1:50				
MAJOR SOURCES	CAR DROVE BY @ 6:15 ON McAlmont St. Car on McAlmont street 3:20				
UNUSUAL EVENTS	" @ 9:05 ON McAlmont St. AT pull into alley 5:27				
OTHER NOTES	Ambulance on 30 @ 13:02 Ambulance 8:01 Car pulls out of alley 10:20				
	UPS on McAlmont @ 14:52 Truck work				

NOISE MEASUREMENT DATA SHEET

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200 BY: CH
 SHEET 2 SITE: ST-5 DATE: 5/24/16 TIME: ~~13:14~~ 13:14
 CALIBRATION: 113.8 at 1k Hz dB.
 RESPONSE: FAST / SLOW WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER - Type 1206	S / N 30396
MICROPHONE - Type 1225	S / N 48094
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH

SAME AS SHEET 1

MEASUREMENT DATA	Duration	Leq 108.8	
WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP 85 HUMIDITY 60% CLOUD COVER mostly cloudy
BACKGROUND NOISE	CAR turned into alley @ 1:50 ish		
MAJOR SOURCES	CAR off McAlmont and Stereo @ 3:20:		
UNUSUAL EVENTS	Med. truck pull into alley @ 5:27		
OTHER NOTES	Ambulance @ 9:01		
	CAR pulls out of alley @ 10:20		

NOISE MEASUREMENT DATA SHEET

SHEET
3

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200 BY: CH
 SITE: ST-5 DATE: 5/24/16 TIME: 13:31
 CALIBRATION: 113.8 at 1k Hz dB.
 RESPONSE: FAST / SLOW WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER - Type 1206	S / N 30396
MICROPHONE - Type 1225	S / N 48094
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH

SAME AS SHEET 1

MEASUREMENT DATA	Duration	Leq 69.1	
WEATHER DATA	WIND SPEED (MPH)	DIR. S	TEMP 65 HUMIDITY 55 CLOUD COVER Mostly cloudy
BACKGROUND NOISE	CAR ON McAlmont @ 3:50 CAR ON McAlmont @ 4:54		
MAJOR SOURCES	CAR ON McAlmont @ 6:40 TRUCK ON McAlmont @ 10:27		
UNUSUAL EVENTS	CAR ON McAlmont @ 13:27		
OTHER NOTES	School bus @ 14:00		

Field Site ST-5

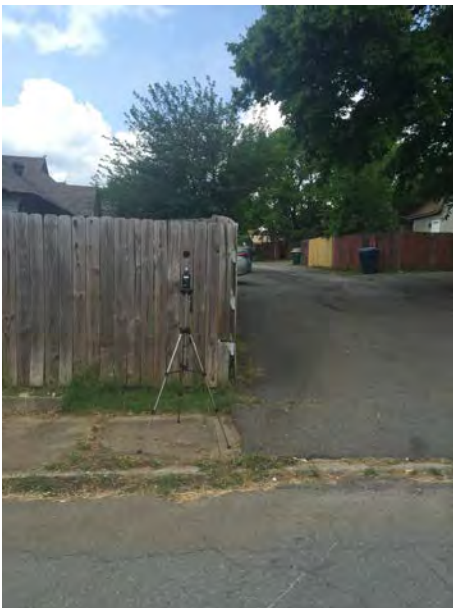
Residence, approximately 3 ft. west of McAlmont St.,
and approximately 101 ft. south of E 17th St.



Looking east.



Looking north.



Looking south.



Looking west.

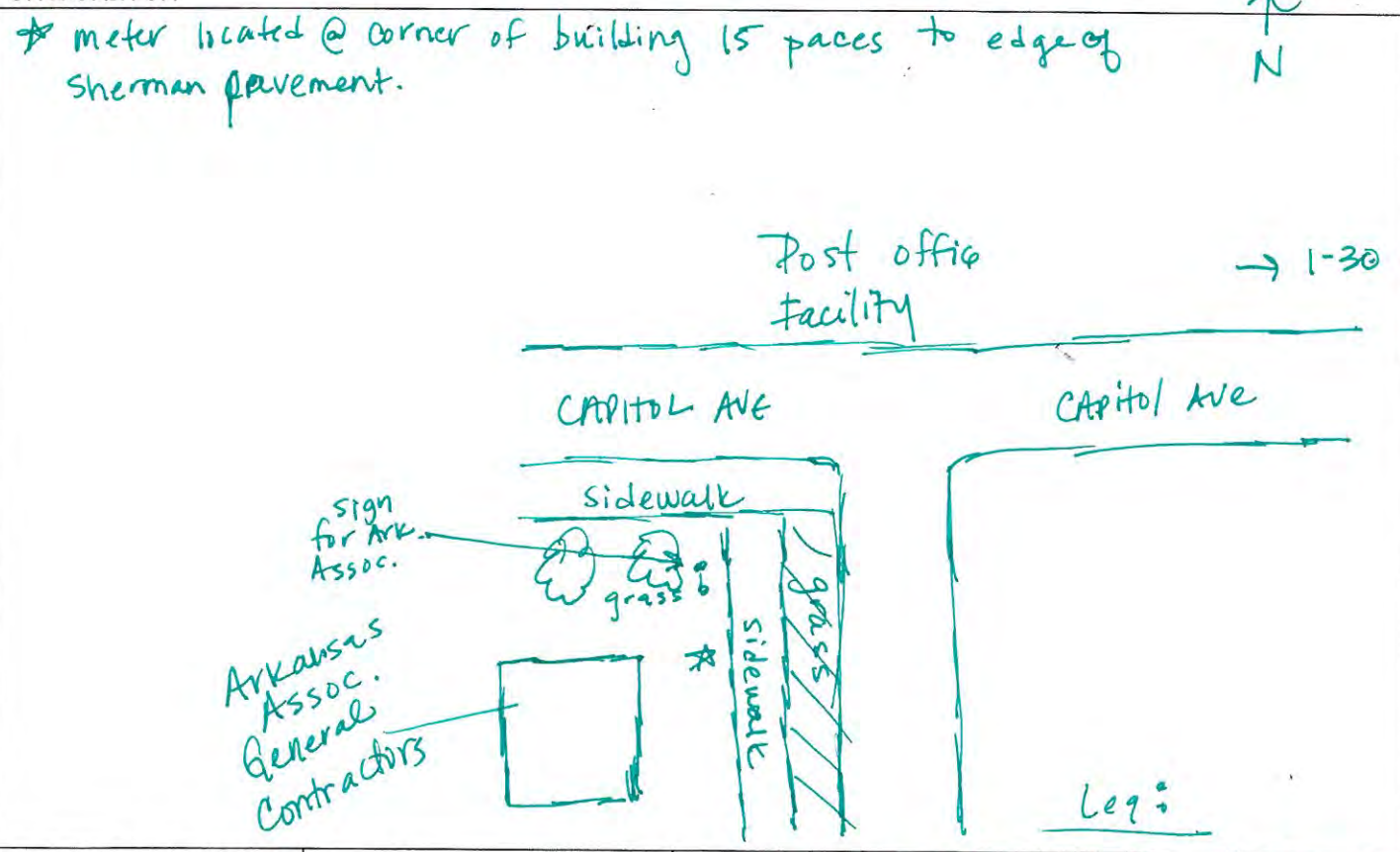
NOISE MEASUREMENT DATA SHEET

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200 BY: April English
 SITE: ST-6 DATE: 5/24/16 TIME: 14:30, 14:47, 15:04
 CALIBRATION: 113.8 at 1k Hz dB.
 RESPONSE: FAST / SLOW WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31483
PREAMPLIFIER - Type 1206	S / N 30522
MICROPHONE - Type 1225	S / N 52318
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH



MEASUREMENT DATA	Duration	Leq 14:30 = 61.4 dB	14:47 = ? dB	15:04 = 59.6 dB	
WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP.	HUMIDITY	CLOUD COVER 62.3 dB
BACKGROUND NOISE	14:30:	14:47:	15:04:		
MAJOR SOURCES	@ 8:30 = 70 dB -	CAR = 40	CAR = 64		
UNUSUAL EVENTS	car sped off on	MT = 2	MT = 1		
OTHER NOTES	capitol sherman	HT = 0	HT = 1		
	CAR = 30	CJW w/			
	MT = 2	ticker)			
	HT = 1				

Page 17

Field Site ST-6

Residence, approximately 43 ft. south of E Capitol Ave.
and approximately 15 ft. west of Sherman St.



Looking east.



Looking north.



Looking south.



Looking west.

NOISE MEASUREMENT DATA SHEET

PROJECT: CA0602 (I-30 LR, AR) JOB #: 59984-PL-003-200 BY: M. PEARSON
SITE: (ST-7) DATE: 5-27-16 TIME: 1430 until 1520
CALIBRATION: 113.8 at 1k Hz dB.
RESPONSE: FAST / SLOW WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Larson Davis
SLM MODEL	Soundtrack LxT1
SLM	S / N 003074
PREAMPLIFIER – PRMLxT1L	S / N 021485
MICROPHONE – 377B20	S / N LW131537
CALIBRATOR – CAL200	S / N 9235

SITE SKETCH

1430 Start 1st of 3 runs - passing vehicle
1431 passing vehicle
1432 passing vehicle (stop sign) motorcycle in distance
1432 passing vehicle (two)
1433 ↓ (11) one at stop sign; maintenance activity @
Camp David hotel) - using pressure washing equipment
1434 HHH
1437 vehicle @ stop sign / motorcycle in distance
1438 Two vehicles @ stop sign, 20 cars
1440 horse truck on Capitol 2 PIC
1442 Local traffic turning
1443 Vehicle @ stop sign
1444 Two vehicles @ stop sign
1447 Start 2 of 3 runs
1448 Truck @ stop sign 12 cars
1449 local traffic turning 1 Tr
1451 4 vehicles @ stop sign
1452 vehicle parked at curb just north of SLM
1454 vehicle @ stop sign
1455 ↓
1457 ↓
1459 ↓

1500 vehicle @ stop sign
1501 3 vehicles @ stop sign
1504 3rd of 3 runs
1505 2 vehicles @ stop sign
1506 3 vehicles @ stop sign
1509 4 vehicles @ stop sign
1511 local traffic turning
1511 1 vehicle @ stop sign
1513 1 vehicle @ stop sign
1514 2 vehicles @ stop sign
1515 3 vehicles
1517 2 vehicles

Apr 1985
Calm St. - Sherman

MEASUREMENT DATA	Duration	Leq	
WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP. HUMIDITY CLOUD COVER

BACKGROUND NOISE

MAJOR SOURCES

UNUSUAL EVENTS

OTHER NOTES

Vehicle @ stop sign indicate southbound Sherman traffic slowing / stopping in front of SCM

Field Site ST-7

Residence, approximately 13 ft. north of E 6th St.
and approximately 3 ft. west of Sherman St.



Looking east.



Looking south.



Looking north.



Looking west.

NOISE MEASUREMENT DATA SHEET

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200

BY: CH

SITE: ST-8

DATE: 5/24/16

TIME: 15:40 / 15:56 / 16:13

CALIBRATION: 113.8 at 1k Hz dB.

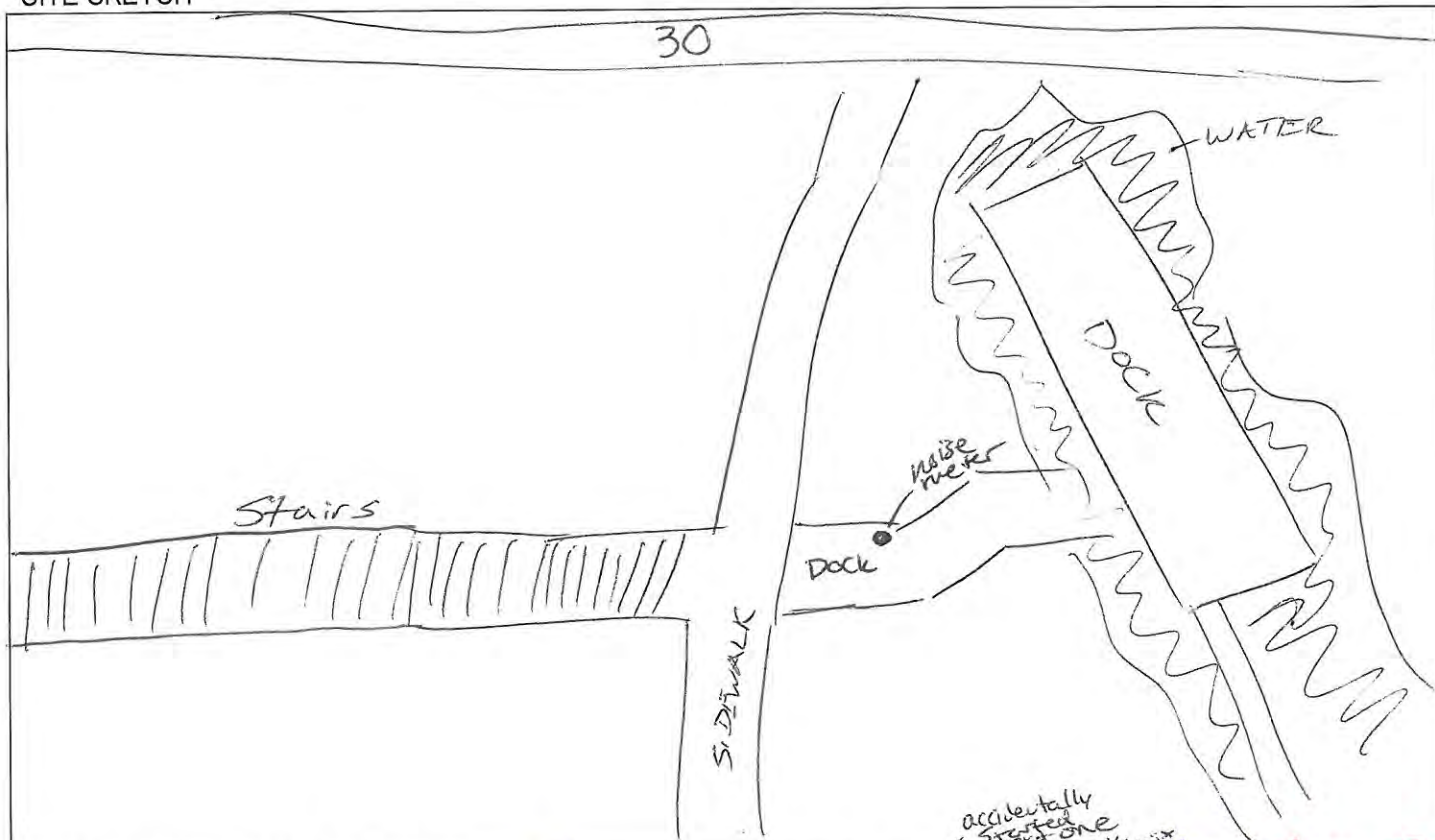
RESPONSE: FAST / SLOW

WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER - Type 1206	S / N 30396
MICROPHONE - Type 1225	S / N 48094
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH



MEASUREMENT DATA	Duration 15 / 15	Leq 58.6 ?	158.0 / 56.3
------------------	------------------	------------	--------------

WEATHER DATA WIND SPEED (MPH) DIR. SSW TEMP. 85 HUMIDITY 55 CLOUD COVER mostly cloudy

BACKGROUND NOISE People walking by talking @ 9:40

MAJOR SOURCES 2nd [People taking pictures @ 3:40

UNUSUAL EVENTS [Dropped phone @ 14:57

OTHER NOTES 3rd [Helicopter: 7:30
Ambulance: 11:40

NOISE MEASUREMENT DATA SHEET

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200 BY: C+1
 SITE: ST-8 DATE: 5/24/16 TIME: 1613
 CALIBRATION: 113.8 at 1k Hz dB.
 RESPONSE: FAST / SLOW WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER – Type 1206	S / N 30396
MICROPHONE – Type 1225	S / N 48094
CALIBRATOR – Type 1251	S / N 30825

SITE SKETCH

SAME AS SHEET 1

MEASUREMENT DATA	Duration 15	Leq 56.3	
------------------	-------------	----------	--

WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP.	HUMIDITY	CLOUD COVER
BACKGROUND NOISE	Helicopter @ 7:30				
MAJOR SOURCES	Ambulance @ 11:40				
UNUSUAL EVENTS					
OTHER NOTES					

NOISE MEASUREMENT DATA SHEET

SHEET 2
 PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200 BY: CH
 SITE: ST-8 DATE: 5/24/16 TIME: 15:56
 CALIBRATION: 113.8 at 1k Hz dB.
 RESPONSE: FAST / SLOW WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER - Type 1206	S / N 30396
MICROPHONE - Type 1225	S / N 48094
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH

SAME AS SHEET 1

MEASUREMENT DATA	Duration <u>15</u>	Leq <u>58.0</u>
------------------	--------------------	-----------------

WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP.	HUMIDITY	CLOUD COVER
BACKGROUND NOISE	<i>people taking pictures @ 3:40</i>				
MAJOR SOURCES	<i>Dropped phone @ 14:57</i>				
UNUSUAL EVENTS					
OTHER NOTES					

Field Site ST-8

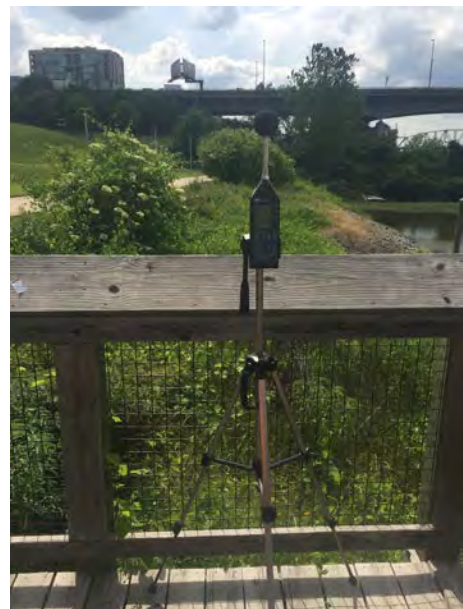
William E. “Bill” Clark Presidential Park Wetlands,
approximately 473 ft. east of I-30 and approximately 273 ft. north of E Markham St.



Looking south.



Looking north.



Looking west.

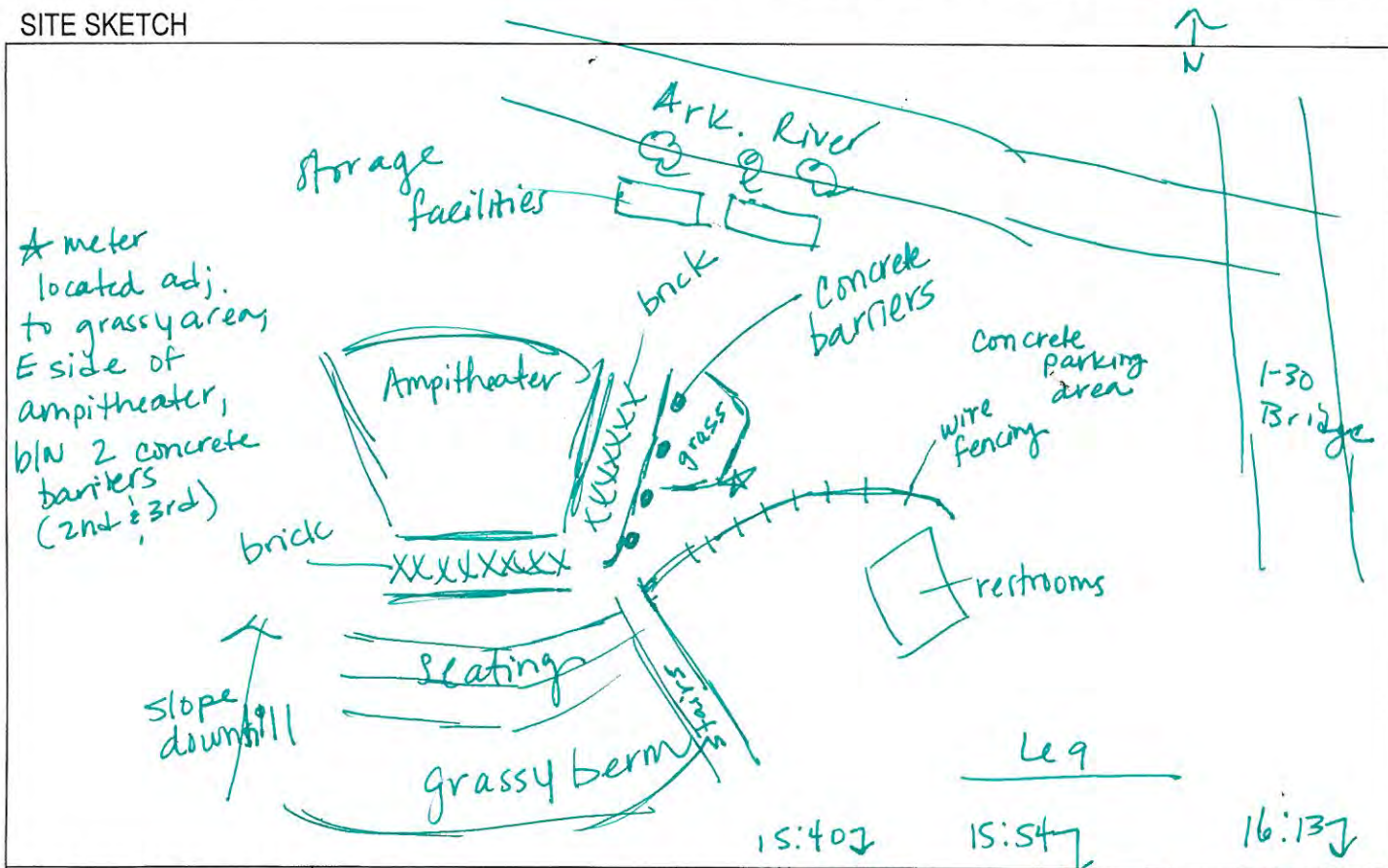
NOISE MEASUREMENT DATA SHEET

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200 BY: April English
 SITE: ST-9 DATE: 5/24/16 TIME: 15:40, 15:56, 16:13
 CALIBRATION: 113.8 at 1k Hz dB.
 RESPONSE: FAST / **SLOW** WEIGHTING: **A** / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31483
PREAMPLIFIER - Type 1206	S / N 30522
MICROPHONE - Type 1225	S / N 52318
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH



MEASUREMENT DATA	Duration	Leq	56.1 dB	57.2 dB	57.2 dB
------------------	----------	-----	---------	---------	---------

WEATHER DATA WIND SPEED (MPH) DIR. TEMP. HUMIDITY CLOUD COVER
 BACKGROUND NOISE 16:13: 55.0 dB
 MAJOR SOURCES ~ 5 min - kids playing
 UNUSUAL EVENTS @ 10:45 = 2 skateboarders
 OTHER NOTES near meter

Field Site ST-9

First Security Amphitheatre, approximately 658 ft. west of I-30
and approximately 433 ft. north of E Markham St.



Looking east.



Looking north.



Looking south.



Looking west.

NOISE MEASUREMENT DATA SHEET

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200

SITE: ST-10

DATE: 5/24/16

BY: April English / J.R.J./MFE

TIME: 19:18 / 5:57

CALIBRATION: 113.8 at 1k Hz dB.

RESPONSE: FAST / **SLOW**

WEIGHTING: A / C / LIN.

5/24 17:09

5/24 9:17

* 31961 instrument used.

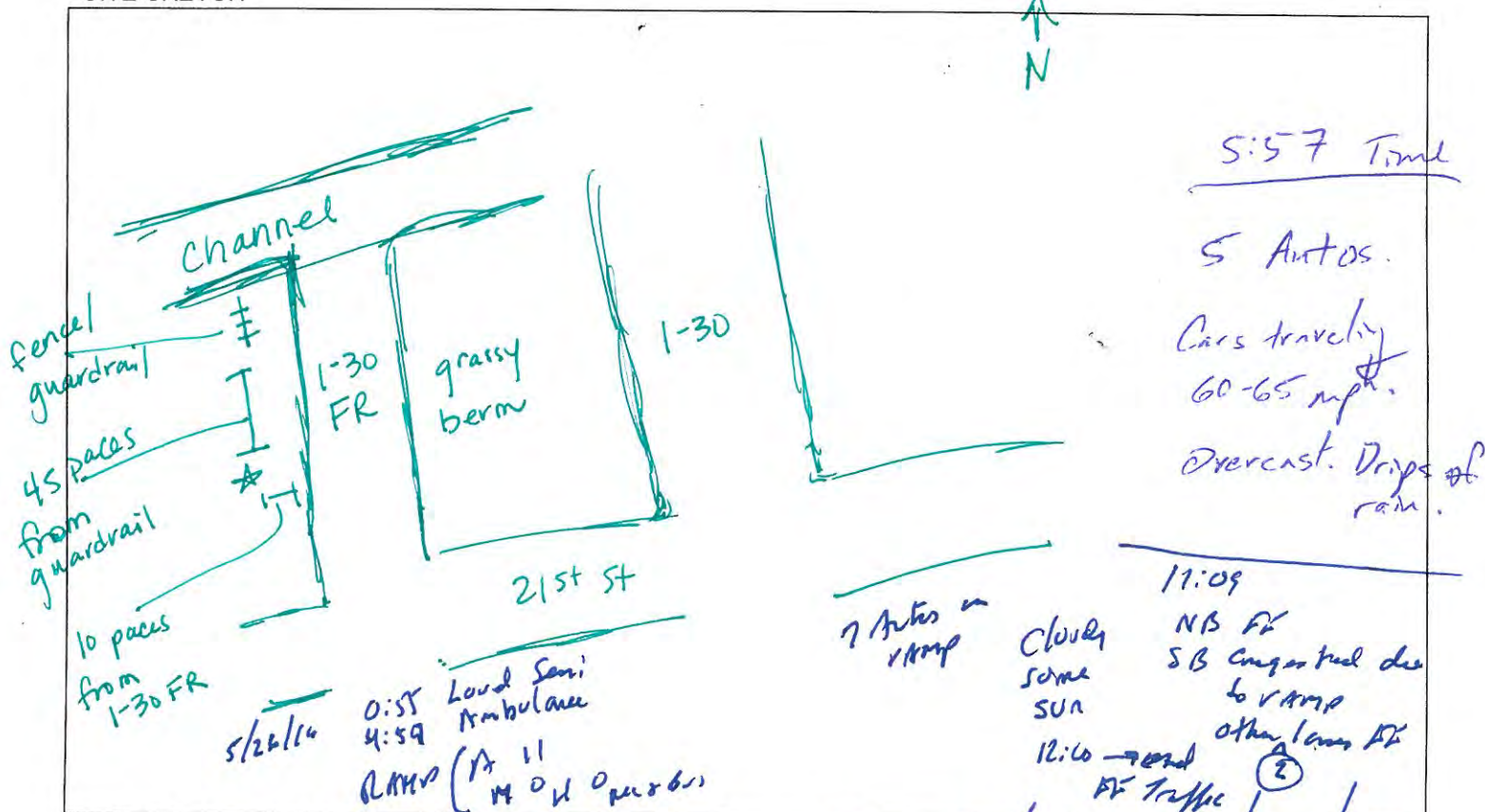
TRAFFIC DATA

ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT

INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31483
PREAMPLIFIER - Type 1206	S / N 30522
MICROPHONE - Type 1225	S / N 52318
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH



MEASUREMENT DATA

Duration

Leq

68.1 dB / 68.8 dB / 66.8 / 69.3

WEATHER DATA

WIND SPEED (MPH)

DIR.

TEMP.

HUMIDITY

CLOUD COVER

BACKGROUND NOISE

MAJOR SOURCES

CARS on I-30 FR = 6

UNUSUAL EVENTS

78.6 dB @ 2:00 siren

OTHER NOTES

on I-30 SB

Field Site ST-10

Vacant land, approximately 9 ft. west of McAlmont St
and approximately 287 ft. north of E 21st St.



Looking east.



Looking north.



Looking south.



Looking west.

WEIGHTING: A / C / LIN. 9:47:00

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER – Type 1206	S / N 30396
MICROPHONE – Type 1225	S / N 48094
CALIBRATOR – Type 1251	S / N 30825

Handwritten notes and sketch:

- Top right: 5/25/10 A 10 40mPL
M 1
B 1 side street
- Top center: 30
- Top right: 5/25/10 CAR down
10:30
L. 1' People 10:40 - 10:50
- Center: GRASS
- Center: N. Locust St - Frontage Road -
- Bottom left: E. 17th St.
- Bottom center: DAY CARE
- Bottom left: ARTS.
- Bottom right: ARTS.
- Bottom right: 5/25/10 2:10 Loud Scream
3:25 10 " SB
4:40 1 KAW down
4:46 Scream NB

WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP.	HUMIDITY	CLOUD COVER
BACKGROUND NOISE	BUS @ 6:54				
MAJOR SOURCES	ENGINE BRAKE 14:00				
UNUSUAL EVENTS					
OTHER NOTES					

Field Site ST-11

Residence, approximately 14 ft. east of N. Locust St.
and approximately 101 ft. north of E 17th St.



Looking east.



Looking north.



Looking south.



Looking west.

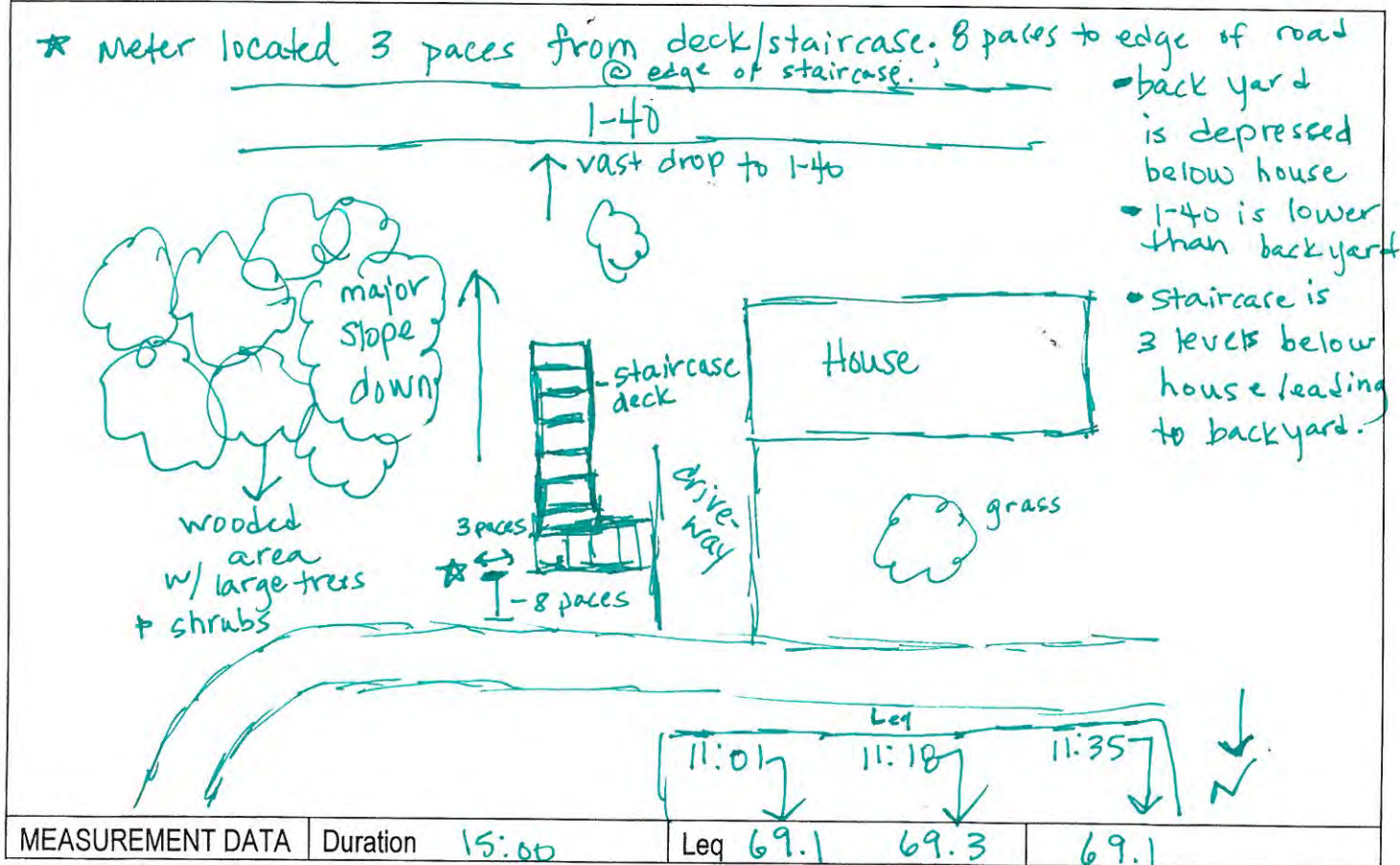
ST-8B

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200 BY: April English
 SITE: ST-12 DATE: 5/25/16 TIME: 11:01; 11:18; 11:35
 CALIBRATION: 113.8 at 1k Hz dB.
 RESPONSE: FAST / SLOW WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31483
PREAMPLIFIER - Type 1206	S / N 30522
MICROPHONE - Type 1225	S / N 52318
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH



MEASUREMENT DATA	Duration	Leq
	15:00	69.1 69.3 69.1

WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP.	HUMIDITY	CLOUD COVER
BACKGROUND NOISE					
MAJOR SOURCES	2nd Round:		3rd Round:		
UNUSUAL EVENTS	13:00 - bird chirping		Bird chirping		
OTHER NOTES	loudly chirped until ended @ 15:00.		from start til		

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200 BY: _____
 SITE: ST-12 DATE: 9/25/16 TIME: 11:35
 CALIBRATION: 113.8 at 1k Hz dB.
 RESPONSE: FAST / SLOW WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER – Type 1206	S / N 30396
MICROPHONE – Type 1225	S / N 48094
CALIBRATOR – Type 1251	S / N 30825

SITE SKETCH

SAME AS SHEET 1

MEASUREMENT DATA	Duration 15	Leq 71.6	
------------------	-------------	----------	--

WEATHER DATA WIND SPEED (MPH) DIR. TEMP. HUMIDITY CLOUD COVER
 BACKGROUND NOISE _____
 MAJOR SOURCES _____
 UNUSUAL EVENTS _____
 OTHER NOTES _____

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200 BY: CH
 SITE: ST-12 DATE: 5/25/16 TIME: 11:18
 CALIBRATION: 113.8 at 1k Hz dB.
 RESPONSE: FAST / SLOW WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER – Type 1206	S / N 30396
MICROPHONE – Type 1225	S / N 48094
CALIBRATOR – Type 1251	S / N 30825

SITE SKETCH

SAME AS SHEET 1

MEASUREMENT DATA	Duration <u>15</u>	Leq <u>71.4</u>	
WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP. HUMIDITY CLOUD COVER
BACKGROUND NOISE			
MAJOR SOURCES			
UNUSUAL EVENTS			
OTHER NOTES			

Field Site ST-12

Residence, 1334 Starfield Rd. on deck, approximately 92 ft. south of Starfield Rd. and approximately 353 ft. north of Calvary Rd.



Looking east.



Looking south.



Looking west

SHEET 1
5-8A

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200

BY:

SITE: ST-13

DATE: 5/25/16

TIME:

11:01 / 11:18 / 11:35 CH

CALIBRATION: 113.8 at 1k Hz dB.

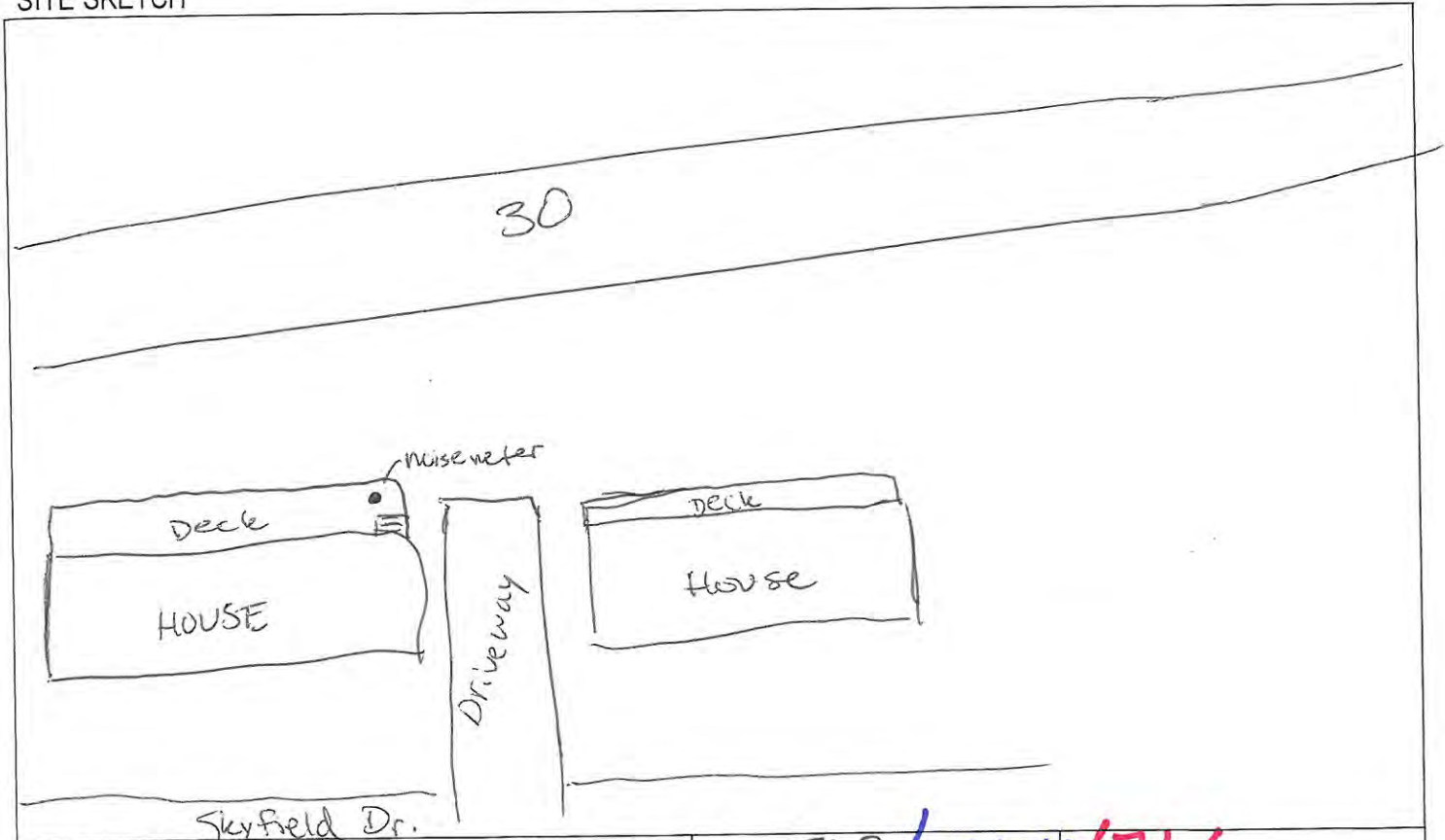
RESPONSE: FAST / SLOW

WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER - Type 1206	S / N 30396
MICROPHONE - Type 1225	S / N 48094
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH



MEASUREMENT DATA	Duration	15	Leq	71.3 / 71.4 / 71.6
------------------	----------	----	-----	--------------------

WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP.	HUMIDITY	CLOUD COVER
BACKGROUND NOISE					
MAJOR SOURCES					
UNUSUAL EVENTS					
OTHER NOTES					

Field Site ST-13

Residence, 1334 Starfield Rd. front yard, approximately 6 ft. south of Starfield Rd. and approximately 388 ft. north of Calvary Rd.



Looking east.



Looking north.



Looking south.



Looking west.

NOISE MEASUREMENT DATA SHEET

ST-7A

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200

SITE: ST-14

DATE: 5/25/16

BY: MF2

TIME: 12:14:30 / 12:30:00 / 12:46:00

CALIBRATION: 113.8 at 1k Hz dB.

RESPONSE: FAST / SLOW

WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31483
PREAMPLIFIER - Type 1206	S / N 30522
MICROPHONE - Type 1225	S / N 52318
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH



MEASUREMENT DATA	Duration 15/15/15	Leq 63.5/63.7/63.3
------------------	-------------------	--------------------

WEATHER DATA	WIND SPEED (MPH)	DIR.	TEMP.	HUMIDITY	CLOUD COVER
BACKGROUND NOISE	Brk				Cloudy
MAJOR SOURCES	I-40				
UNUSUAL EVENTS	Background sporadic drilling, Music				
OTHER NOTES	Tree covers line of sight to road,				

Field Site ST-14

Residence, approximately 137 ft. south of Skyline Dr. and approximately 440 ft. east of J.F.K. Blvd.



Looking east.



Looking south.



Looking west.

PROJECT: I-30 (Little Rock, AR) JOB #: 59984-PL-003-200

BY: JRJ

SITE: ST-15

DATE: 5-25-18

TIME: 12:14:50

CALIBRATION: 113.8 at 1k Hz dB.

12:31:00

12:47:00

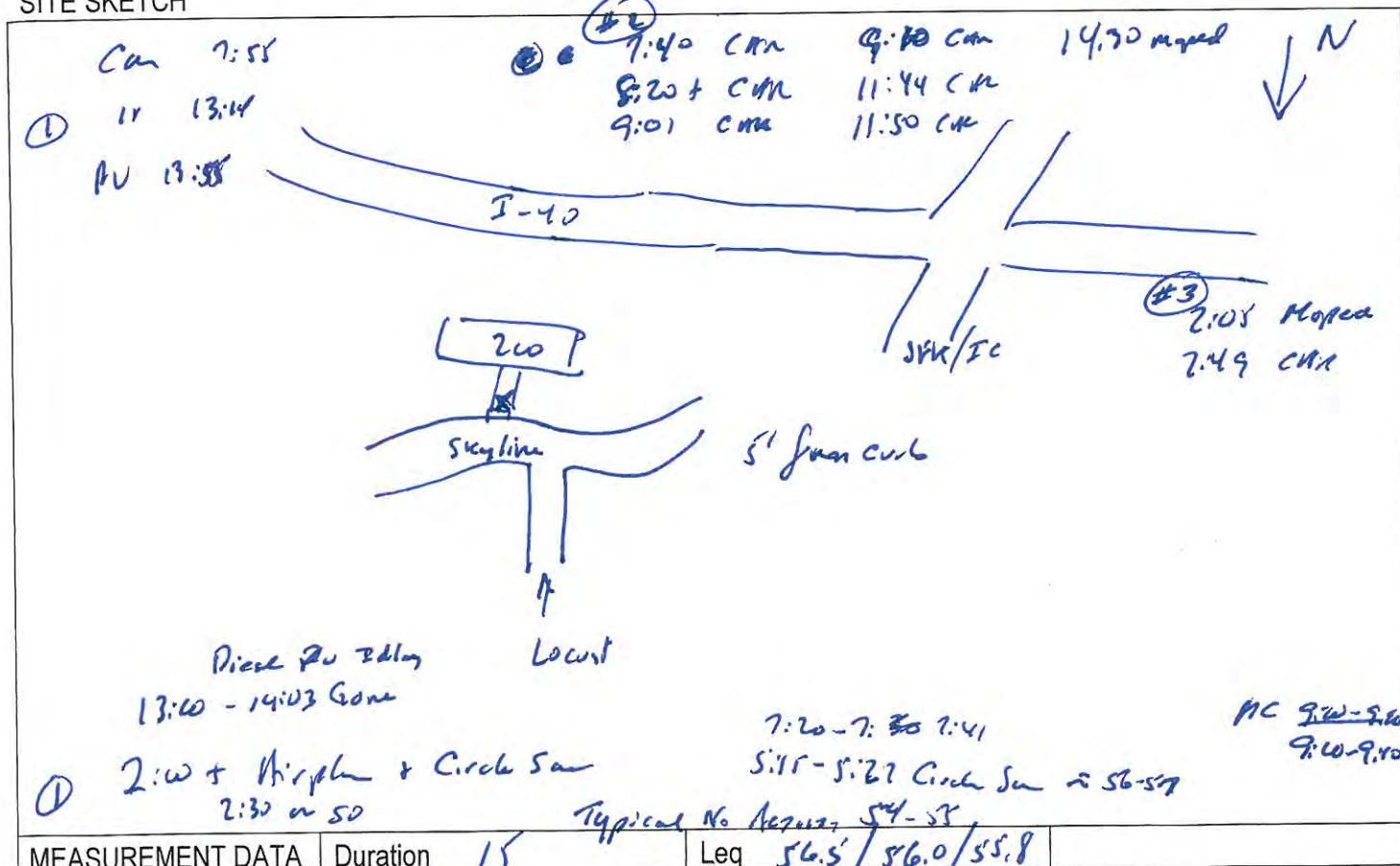
RESPONSE: FAST / SLOW

WEIGHTING: A / C / LIN.

TRAFFIC DATA		
ROAD (Name/Dir)		
AUTOS		
MED TRKS		
HVY TRKS		
BUS		
MOTORCYCLE		
SPEED		

EQUIPMENT	
INSTRUMENT	
SLM MANUFACTURER	Norsonic
SLM MODEL	Type 118
SLM	S / N 31361
PREAMPLIFIER - Type 1206	S / N 30396
MICROPHONE - Type 1225	S / N 48094
CALIBRATOR - Type 1251	S / N 30825

SITE SKETCH



MEASUREMENT DATA	Duration 15	Leq 56.5 / 56.0 / 55.8
------------------	-------------	------------------------

WEATHER DATA	WIND SPEED (MPH) Cal DIR.	TEMP.	HUMIDITY	CLOUD COVER 100%
BACKGROUND NOISE	I-40, birds, music stereo system = 1 hour east west			
MAJOR SOURCES				
UNUSUAL EVENTS				
OTHER NOTES				

Field Site ST-15

Residence, approximately 7 ft. south of Skyline Dr. and approximately 400 ft. east of J.F.K. Blvd.



Looking east.



Looking north.



Looking south.



Looking west.

Scantek, Inc.

CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1

ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP[®]

NVLAP Lab Code: 200625-0

Calibration Certificate No.35788

Instrument: Sound Level Meter
Model: 118
Manufacturer: Norsonic
Serial number: 31483
Tested with: Microphone 1225 s/n 52318
Preamplifier 1206 s/n 30522
Type (class): 1
Customer: HNTB Corporation
Tel/Fax: 414-359-2300 / 414-359-2314

Date Calibrated: 3/14/2016 **Cal Due:**
Status:

Received	Sent
X	X

In tolerance:
Out of tolerance:
See comments:
Contains non-accredited tests: ___ Yes X No
Calibration service: ___ Basic X Standard
Address: 11414 West Park Place, Suite 300,
Milwaukee, WI 53224

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/26/2015
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence	Cal. Due
				Cal. Lab / Accreditation	
483B-Norsonic	SME Cal Unit	31052	Oct 23, 2015	Scantek, Inc./ NVLAP	Oct 23, 2016
DS-360-SRS	Function Generator	33584	Oct 20, 2015	ACR Env./ A2LA	Oct 20, 2017
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 6, 2015	ACR Env./ A2LA	Oct 6, 2016
HM30-Thommen	Meteo Station	1040170/39633	Oct 23, 2015	ACR Env./ A2LA	Oct 23, 2016
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1251-Norsonic	Calibrator	30878	Nov 10, 2015	Scantek, Inc./ NVLAP	Nov 10, 2016

Jul 24, 2016

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
24.1	99.86	39.2

Calibrated by:	Lydon Dawkins	Authorized signatory:	Valentin Buzduga
Signature	<i>Lydon Dawkins</i>	Signature	<i>Valentin Buzduga</i>
Date	3/14/2016	Date	3/14/2016

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.
This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Document stored Z:\Calibration Lab\SLM 2016\NOR118_31483_M1.doc

Page 1 of 2

Results summary: Device complies with following clauses of mentioned specifications:

CLAUSES ¹ FROM IEC/ANSI STANDARDS REFERENCED IN PROCEDURES:	RESULT ^{2,3}	EXPANDED UNCERTAINTY (coverage factor 2) [dB]
INDICATION AT THE CALIBRATION CHECK FREQUENCY - IEC61672-3 ED.2 CLAUSE 10	Passed	0.15
SELF-GENERATED NOISE - IEC 61672-3 ED.2 CLAUSE 11	Passed	0.30
FREQUENCY WEIGHTINGS: A NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY WEIGHTINGS: C NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY WEIGHTINGS: Z NETWORK - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	0.20
FREQUENCY AND TIME WEIGHTINGS AT 1 KHZ IEC 61672-3 ED.2.0 CLAUSE 14	Passed	0.20
LEVEL LINEARITY ON THE REFERENCE LEVEL RANGE - IEC 61672-3 ED.2 CLAUSE 16	Passed	0.25
TONEBURST RESPONSE - IEC 61672-3 ED.2.0 CLAUSE 18	Passed	0.30
PEAK C SOUND LEVEL - IEC 61672-3 ED.2.0 CLAUSE 19	Passed	0.35
OVERLOAD INDICATION - IEC 61672-3 ED.2.0 CLAUSE 20	Passed	0.25
HIGH LEVEL STABILITY TEST - IEC 61672-3 ED.2.0 CLAUSE 21	Passed	0.10
LONG TERM STABILITY TEST - IEC 61672-3 ED.2.0 CLAUSE 15	Passed	0.10
FILTER TEST 1/1OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
FILTER TEST 1/3OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
COMBINED ELECTRICAL AND ACOUSTICAL TEST - IEC 61672-3 ED.2.0 CLAUSE 13	Passed	See test report

¹ The results of this calibration apply only to the instrument type with serial number identified in this report.

² Parameters are certified at actual environmental conditions.

³ The tests marked with (*) are not covered by the current NVLAP accreditation.

Comments: The sound level meter submitted for testing has successfully completed the class 1 periodic tests of IEC 61672-3, for the environmental conditions under which the tests were performed. As public evidence was available, from an independent testing organization responsible for approving the results of pattern evaluation tests performed in accordance with IEC 61672-2, to demonstrate that the model of sound level meter fully conforms to the requirements in the IEC 61672-2, the sound level meter submitted for testing conforms to the class 1 requirements of IEC 61672-1.

Note: The instrument was tested for the parameters listed in the table above, using the test methods described in the listed standards. All tests were performed around the reference conditions. The test results were compared with the manufacturer's or with the standard's specifications, whichever are larger. Compliance with any standard cannot be claimed based solely on the periodic tests.

Tests made with the following attachments to the instrument:

Microphone: Norsonic 1225 s/n 52318 for acoustical test
Preamplifier: Norsonic 1206 s/n 30522 for all tests
Other: line adaptor ADP005 (18pF) for electrical tests
Accompanying acoustical calibrator: none
Windscreen: Norsonic Nor1451 (Ø 60mm)

Measured Data: in Test Report # 35788 of 9 + 1 pages.

Place of Calibration: Scantek, Inc.

6430 Dobbin Road, Suite C
Columbia, MD 21045 USA

Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory. This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Document stored Z:\Calibration Lab\SLM 2016\NOR118_31483_M1.doc

Page 2 of 2

Scantek, Inc.

CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NC SL Z540:1994 Part 1

ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP[®]

NVLAP Lab Code: 200625-0

Calibration Certificate No.35789

Instrument: Microphone**Model:** 1225**Manufacturer:** Norsonic**Serial number:** 52318**Composed of:****Date Calibrated:** 3/14/2016 **Cal Due:****Status:**

Received	Sent
X	X

In tolerance:**Out of tolerance:****See comments:****Contains non-accredited tests:** Yes ☐ No ☒**Customer:** HNTB Corporation**Tel/Fax:** 414-359-2300/414-359-2314**Address:** 11414 West Park Place, Suite 300,

Milwaukee, WI 53224

Tested in accordance with the following procedures and standards:

Calibration of Measurement Microphones, Scantek, Inc., Rev. 2/25/2015

Instrumentation used for calibration: N-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence	Cal. Due
				Cal. Lab / Accreditation	
483B-Norsonic	SME Cal Unit	31052	Oct 23, 2015	Scantek, Inc./ NVLAP	Oct 23, 2016
DS-360-SRS	Function Generator	33584	Oct 20, 2015	ACR Env./ A2LA	Oct 20, 2017
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 6, 2015	ACR Env. / A2LA	Oct 6, 2016
HM30-Thommen	Meteo Station	1040170/39633	Oct 23, 2015	ACR Env./ A2LA	Oct 23, 2016
PC Program 1017 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1253-Norsonic	Calibrator	28326	Nov 10, 2015	Scantek, Inc./ NVLAP	Nov 10, 2016
1203-Norsonic	Preamplifier	14052	Aug 24, 2015	Scantek, Inc./ NVLAP	Aug 24, 2016
4180-Brüel&Kjær	Microphone	2246115	Oct 26, 2015	NPL-UK / UKAS	Oct 26, 2017

Instrumentation and test results are traceable to SI - BIPM through standards maintained by NPL (UK) and NIST (USA)

Calibrated by:	Lydon Dawkins	Authorized signatory:	Valentin Buzduga
Signature	<i>Lydon Dawkins</i>	Signature	<i>Valentin Buzduga</i>
Date	3/14/2016	Date	3/14/2016

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.

This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Document stored as: Z:\Calibration Lab\Mic 2016\NOR1225_52318_M1.doc

Page 1 of 2

Results summary: Device was tested and complies with following clauses of mentioned specifications:

CLAUSES / METHODS ¹ FROM PROCEDURES		MET ^{2,3}	NOT MET	NOT TESTED	MEASUREMENT EXPANDED UNCERTAINTY (coverage factor 2)
Open circuit sensitivity (insert voltage method, 250 Hz)		X			See below
Frequency response	Actuator response	X			63 – 200Hz: 0.3 dB 200 – 8000 Hz: 0.2 dB 8 – 10 kHz: 0.5 dB 10 – 20 kHz: 0.7 dB 20 – 50 kHz: 0.9 dB 50 – 100 kHz: 1.2 dB
	FF/Diffuse field responses	X			63 – 200Hz: 0.3 dB 200 – 4000 Hz: 0.2 dB 4 – 10 kHz: 0.6 dB 10 – 20 kHz: 0.9 dB 20 – 50 kHz: 2.2 dB 50 – 100 kHz: 4.4 dB
	Scantek, Inc. acoustical method			X	31.5 – 125 Hz: 0.16 dB 250, 1000 Hz: 0.12 dB 2 – 8 kHz: 0.8 dB 12.5 – 16 kHz: 2.4 dB

¹ The results of this calibration apply only to the instrument type with serial number identified in this report.

² Results are normalized to the reference conditions.

³ The tests marked with (*) are not covered by the current NVLAP accreditation.

Note: The free field/diffuse field characteristics were calculated based on the measured actuator response and adjustment coefficients as provided by the manufacturer. The uncertainties reported for these characteristics may include assumed uncertainty components for the adjustment coefficients.

Comments: The instrument was tested and met all specifications found in the referenced procedures.

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
23.9 ± 1.1	99.88 ± 0.025	37.8 ± 2.1

Main measured parameters:

Tone frequency (Hz)	Measured ⁴ /Nominal Open circuit sensitivity (dB re 1V/Pa)	Sensitivity (mV/Pa)
250	-26.24 ± 0.12/ -26.0	48.73

⁴ The reported expanded uncertainty is calculated with a coverage factor k=2.00

Tests made with following attachments to instrument and auxiliary devices:

Protection grid mounted for sensitivity measurements
Actuator type: G.R.A.S. RA0014

Measured Data: Found on Microphone Test Report # 35789 of one page.

Place of Calibration: Scantek, Inc.

6430 Dobbin Road, Suite C
Columbia, MD 21045 USA

Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.
This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Document stored as: Z:\Calibration Lab\Mic 2016\NOR1225_52318_M1.doc

Page 2 of 2

Calibration Certificate No.32440

Instrument: Sound Level Meter
Model: 118
Manufacturer: Norsonic
Serial number: 31361
Tested with: Microphone 1225 s/n 48094
Preamplifier 1206 s/n 30396
Type (class): 1
Customer: HNTB Corporation
Tel/Fax: 414-359-2300/414-410-6836 / 414-359-2314

Date Calibrated: 10/6/2014 **Cal Due:**
Status:

Received	Sent
X	X

In tolerance:
Out of tolerance:
See comments:
Contains non-accredited tests: ___ Yes X No
Calibration service: ___ Basic X Standard
Address: 11414 West Park Place Suite 300
Milwaukee, WI 53224

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/22/2012
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence	Cal. Due
				Cal. Lab / Accreditation	
483B-Norsonic	SME Cal Unit	31052	Oct 7, 2013	Scantek, Inc./ NVLAP	Oct 7, 2014
DS-360-SRS	Function Generator	33584	Sep 30, 2013	ACR Env./ A2LA	Sep 30, 2015
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 1, 2014	ACR Env. / A2LA	Oct 1, 2015
DPI141-Druck	Pressure Indicator	790/00-04	Nov 21, 2012	ACR Env./ A2LA	Nov 21, 2014
HMP233-Vaisala Oyj	Humidity & Temp. Transmitter	V3820001	Mar 17, 2014	ACR Env./ A2LA	Sep 17, 2015
PC Program 1019 Norsonic	Calibration software	v.5.2	Validated Mar 2011	Scantek, Inc.	-
1251-Norsonic	Calibrator	30878	Nov 8, 2013	Scantek, Inc./ NVLAP	Nov 8, 2014

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
23.1 °C	100.300 kPa	41.7 %RH

Calibrated by:	Lydon Dawkins	Authorized signatory:	Mariana Buzduga
Signature	<i>Lydon Dawkins</i>	Signature	<i>Mariana Buzduga</i>
Date	10/06/2014	Date	10/7/2014

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.
This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.
Document stored Z:\Calibration Lab\SLM 2014\NOR118_31361_M1.doc

Results summary: Device complies with following clauses of mentioned specifications:

¹ CLAUSES FROM IEC/ANSI STANDARDS REFERENCED IN PROCEDURES:	RESULT ^{2,3}	EXPANDED UNCERTAINTY (coverage factor 2) [dB]
INDICATION AT THE CALIBRATION CHECK FREQUENCY - ANSI S1.4 CLAUSE 3.2	Passed	0.2
LEVEL LINEARITY TEST - ANSI S1.4-1983, CLAUSE 6.9 & 6.10	Passed	0.25
WEIGHTING NETWORK TEST: A NETWORK - ANSI S1.4-1983 CLAUSE 8.2.1	Passed	0.25
WEIGHTING NETWORK TEST: C NETWORK - ANSI S1.4-1983 CLAUSE 8.2.1	Passed	0.25
WEIGHTING NETWORK TEST: LINEAR NETWORK - ANSI S1.4-1983 CLAUSE 8.2.1	Passed	0.25
OVERLOAD DETECTOR TEST: A-NETWORK - ANSI S1.4-1983 CLAUSE 8.3.1	Passed	0.25
F/S//PEAK TEST: STEADY STATE RESPONSE - ANSI S1.4 1983 CLAUSE 6.4	Passed	0.25
FAST-SLOW TEST: OVERSHOOT TEST - ANSI S1.4 1983 CLAUSE 8.4.1	Passed	0.25
FAST-SLOW TEST: SINGLE SINE WAVE BURST - ANSI S1.4 1983 CLAUSE 8.4.1 & 8.4.3	Passed	0.25
IMPULSE TEST: CONTINUOUS SINE WAVE BURST - ANSI S1.4 1983 CLAUSE 8.4.3	Passed	0.25
IMPULSE TEST: SINGLE SINE WAVE BURST - ANSI S1.4 1983 CLAUSE 8.4.1 & 8.4.3	Passed	0.25
PEAK DETECTOR TEST, SINGLE SQUARE WAVE BURST - ANSI S1.4 1983 CLAUSE 8.4.4	Passed	0.25
RMS DETECTOR TEST: CREST FACTOR TEST - ANSI S1.4-1983 CLAUSE 8.4.2	Passed	0.25
RMS DETECTOR TEST: CONTINUOUS SINE WAVE BURST - ANSI S1.4-1983 CLAUSE 8.4.2	Passed	0.25
TIME AVERAGING TEST: AVERAGING FUNCTIONS - ANSI S1.43 CLAUSE 9.3.2	Passed	0.25
LINEARITY TEST - ANSI S1.43 CLAUSE 9.3.3	Passed	0.15
FILTER TEST 1/OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
FILTER TEST 1/3OCTAVE: RELATIVE ATTENUATION - IEC 61260, CLAUSE 4.4 & #5.3	Passed	0.25
SUMMATION OF ACOUSTIC TESTS - ANSI S1.4 CLAUSE 5 USING ACTUATOR	Passed	0.2-0.5

¹ The results of this calibration apply only to the instrument type with serial number identified in this report.

² Parameters are certified at actual environmental conditions.

³ The tests marked with (*) are not covered by the current NVLAP accreditation.

Comments: The instrument was tested and met all specifications found in the referenced procedures.

Note: The instrument was tested for the parameters listed in the table above, using the test methods described in the listed standards. All tests were performed around the reference conditions. The test results were compared with the manufacturer's or with the standard's specifications, whichever are larger.
Compliance with any standard cannot be claimed based solely on the periodic tests.

Tests made with the following attachments to the instrument:

Microphone: Norsonic 1225 s/n 48094 for acoustical test
Preamplifier: Norsonic 1206 s/n 30396 for all tests
Other: line adaptor ADP005 (18pF) for electrical tests
Accompanying acoustical calibrator: none
Windscreen: Norsonic Nor1469 (ø 60mm)

Measured Data: in Test Report # 32440 of 12 + 1 pages.

Place of Calibration: Scantek, Inc.
6430 Dobbin Road, Suite C
Columbia, MD 21045 USA

Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.
This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.
Document stored Z:\Calibration Lab\SLM 2014\NOR118_31361_M1.doc

Page 2 of 2

Scantek, Inc.

CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1

ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP[®]

NVLAP Lab Code: 200625-0

Calibration Certificate No.32441

Instrument: Microphone**Model:** 1225**Manufacturer:** Norsonic**Serial number:** 48094**Composed of:****Customer:** HNTB Corporation**414-359-2300/414-410-6836/414-****Tel/Fax:** 359-2314**Date Calibrated:** 10/6/2014 **Cal Due:****Status:****Received****Sent****In tolerance:** X X**Out of tolerance:****See comments:****Contains non-accredited tests:** Yes X No**Address:** 11414 West Park Place Suite 300

Milwaukee, WI 53224

Tested in accordance with the following procedures and standards:

Calibration of Measurement Microphones, Scantek, Inc., Rev. 11/30/2010

Instrumentation used for calibration: N-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence	Cal. Due
				Cal. Lab / Accreditation	
483B-Norsonic	SME Cal Unit	31052	Oct 7, 2013	Scantek, Inc./ NVLAP	Oct 7, 2014
DS-360-SRS	Function Generator	33584	Sep 30, 2013	ACR Env./ A2LA	Sep 30, 2015
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 1, 2014	ACR Env./ A2LA	Oct 1, 2015
DPI141-Druck	Pressure Indicator	790/00-04	Nov 21, 2012	ACR Env./ A2LA	Nov 21, 2014
HMP233-Vaisala Oyj	Humidity & Temp. Transmitter	V3820001	Mar 17, 2014	ACR Env./ A2LA	Sep 17, 2015
PC Program 1017 Norsonic	Calibration software	v.6.1m	Validated July 2014	Scantek, Inc.	-
1253-Norsonic	Calibrator	28326	Nov 8, 2013	Scantek, Inc./ NVLAP	Nov 8, 2014
1203-Norsonic	Preamplifier	14051	Oct 24, 2013	Scantek, Inc./ NVLAP	Oct 24, 2014
4180-Brüel&Kjær	Microphone	2246115	Oct 15, 2013	NPL-UK / UKAS	Oct 15, 2015

Instrumentation and test results are traceable to SI - BIPM through standards maintained by NPL (UK) and NIST (USA)

Calibrated by:	Lydon Dawkins	Authorized signatory:	Mariana Buzduga
Signature	<i>Lydon Dawkins</i>	Signature	<i>Mariana Buzduga</i>
Date	10/06/2014	Date	10/7/2014

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.
This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.
Document stored as: Z:\Calibration Lab\Mic 2014\NOR1225_48094_M1.doc

Page 1 of 2

Results summary: Device was tested and complies with following clauses of mentioned specifications:

CLAUSES / METHODS ¹ FROM PROCEDURES		MET ^{2,3}	NOT MET	NOT TESTED	MEASUREMENT EXPANDED UNCERTAINTY (coverage factor 2)
Open circuit sensitivity (insert voltage method, 250 Hz)		X			See below
Frequency response	Actuator response	X			63 – 200Hz: 0.3 dB 200 – 8000 Hz: 0.2 dB 8 – 10 kHz: 0.5 dB 10 – 20 kHz: 0.7 dB 20 – 50 kHz: 0.9 dB 50 – 100 kHz: 1.2 dB
	FF/Diffuse field responses	X			63 – 200Hz: 0.3 dB 200 – 4000 Hz: 0.2 dB 4 – 10 kHz: 0.6 dB 10 – 20 kHz: 0.9 dB 20 – 50 kHz: 2.2 dB 50 – 100 kHz: 4.4 dB
	Scantek, Inc. acoustical method			X	31.5 – 125 Hz: 0.16 dB 250, 1000 Hz: 0.12 dB 2 – 8 kHz: 0.8 dB 12.5 – 16 kHz: 2.4 dB

¹ The results of this calibration apply only to the instrument type with serial number identified in this report.

² Results are normalized to the reference conditions.

³ The tests marked with (*) are not covered by the current NVLAP accreditation.

Note: The free field/diffuse field characteristics were calculated based on the measured actuator response and adjustment coefficients as provided by the manufacturer. The uncertainties reported for these characteristics may include assumed uncertainty components for the adjustment coefficients.

Comments: The instrument was tested and met all specifications found in the referenced procedures.

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
23.7 ± 1.0	100.30 ± 0.010	40.3 ± 2.0

Main measured parameters:

Tone frequency (Hz)	Measured ⁴ /Nominal Open circuit sensitivity (dB re 1V/Pa)	Sensitivity (mV/Pa)
250	-25.69 ± 0.13/ -26.0	51.96

⁴ The reported expanded uncertainty is calculated with a coverage factor k=2.00

Tests made with following attachments to instrument and auxiliary devices:

Protection grid mounted for sensitivity measurements
Actuator type: G.R.A.S. RA0014

Measured Data: Found on Microphone Test Report # 32441 of one page.

Place of Calibration: Scantek, Inc.

6430 Dobbin Road, Suite C
Columbia, MD 21045 USA

Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.
This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Document stored as: Z:\Calibration Lab\Mic 2014\NOR1225_48094_M1.doc

Page 2 of 2

Calibration Certificate No.34247

Instrument: Acoustical Calibrator
Model: 1251
Manufacturer: Norsonic
Serial number: 30825
Class (IEC 60942): 1
Barometer type:
Barometer s/n:

Date Calibrated: 7/9/2015 **Cal Due:**
Status:

Received	Sent
X	X

In tolerance:
Out of tolerance:
See comments:
Contains non-accredited tests: Yes X No

Customer: HNTB Corporation
Tel/Fax: 414-359-2300 / -2314

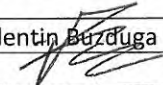
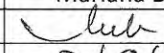
Address: 11414 West Park Place, Suite 300
Milwaukee, WI 53224

Tested in accordance with the following procedures and standards:
Calibration of Acoustical Calibrators, Scantek Inc., Rev. 1/16/2015

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence	Cal. Due
				Cal. Lab / Accreditation	
483B-Norsonic	SME Cal Unit	25747	Jul 2, 2015	Scantek, Inc./ NVLAP	Jul 2, 2016
DS-360-SRS	Function Generator	61646	Nov 11, 2014	ACR Env./ A2LA	Nov11, 2016
34401A-Agilent Technologies	Digital Voltmeter	MY41022043	Nov 11, 2014	ACR Env. / A2LA	Nov 11, 2015
DPI 141-Druck	Pressure Indicator	790/00-04	Nov 18, 2014	ACR Env./ A2LA	Nov 18, 2016
HMP233-Vaisala Oyj	Humidity & Temp. Transmitter	V3820001	Mar 17, 2014	ACR Env./ A2LA	Sep 17, 2015
8903A-HP	Audio Analyzer	2514A05691	Dec 12, 2013	ACR Env./ A2LA	Dec 12, 2016
PC Program 1018 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
4134-Brüel&Kjær	Microphone	906763	Oct 15, 2013	NPL-UK / UKAS	Oct 15, 2015
1203-Norsonic	Preamplifier	14059	Jan 5, 2015	Scantek, Inc./ NVLAP	Jan 5, 2016

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK)

Calibrated by:	Valentin Buzduga	Authorized signatory:	Mariana Buzduga
Signature		Signature	
Date	7/09/2015	Date	7/9/2015

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.
This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.
Document stored as: Z:\Calibration Lab\Cal 2015\NOR1251_30825_M1.doc

Page 1 of 2

Results summary: Device was tested and complies with following clauses of mentioned specifications:

CLAUSES ¹ FROM STANDARDS REFERENCED IN PROCEDURES:	.MET ²	NOT MET	COMMENTS
Manufacturer specifications			
Manufacturer specifications: Sound pressure level	X		
Manufacturer specifications: Frequency	X		
Manufacturer specifications: Total harmonic distortion	X		
Current standards			
ANSI S1.40:2006 B.3 / IEC 60942: 2003 B.2 - Preliminary inspection	X		
ANSI S1.40:2006 B.4.4 / IEC 60942: 2003 B.3.4 - Sound pressure level	X		
ANSI S1.40:2006 A.5.4 / IEC 60942: 2003 A.4.4 - Sound pressure level stability	-	-	
ANSI S1.40:2006 B.4.5 / IEC 60942: 2003 B.3.5 - Frequency	X		
ANSI S1.40:2006 B.4.6 / IEC 60942: 2003 B.3.6 - Total harmonic distortion	X		

¹ The results of this calibration apply only to the instrument type with serial number identified in this report.

² The tests marked with (*) are not covered by the current NVLAP accreditation.

Main measured parameters³:

Measured ⁴ /Acceptable ⁵ Tone frequency (Hz):	Measured ⁴ /Acceptable ⁵ Total Harmonic Distortion (%):	Measured ⁴ /Acceptable Level ⁵ (dB):
1000.61 ± 1.0/1000.0 ± 10.0	0.23 ± 0.10/ < 3	114.13 ± 0.12/114.0 ± 0.4

³ The stated level is valid at reference conditions.

⁴ The above expanded uncertainties for frequency and distortion are calculated with a coverage factor k=2; for level k=2.00

⁵ Acceptable parameters values are from the current standards

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
23.3 ± 1.0	100.13 ± 0.003	41.6 ± 2.2

Tests made with following attachments to instrument:

Calibrator ½" Adaptor Type: 1443
Other:

Adjustments: Unit was not adjusted.

Comments: The instrument was tested and met all specifications found in the referenced procedures.

Note: The instrument was tested for the parameters listed in the table above, using the test methods described in the listed standards. All tests were performed around the reference conditions. The test results were compared with the manufacturer's or with the standard's specifications, whichever are larger.

Compliance with any standard cannot be claimed based solely on the periodic tests.

Measured Data: in Acoustical Calibrator Test Report # 34247 of one page.

Place of Calibration: Scantek, Inc.

6430 Dobbin Road, Suite C
Columbia, MD 21045 USA

Ph/Fax: 410-290-7726/ -9167
callab@scantekinc.com

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.
This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Document stored as: Z:\Calibration Lab\Cal 2015\NOR1251_30825_M1.doc

Page 2 of 2

Calibration Certificate

Certificate Number 2015011713

Customer:

Arkansas State Highway
10324 Interstate 30
Little Rock, AR 72209, United States

Model Number CAL200
Serial Number 9235
Test Results Pass
Initial Condition AS RECEIVED same as shipped
Description Larson Davis CAL200 Acoustic Calibrator

Procedure Number D0001.8386
Technician Scott Montgomery
Calibration Date 7 Dec 2015
Calibration Due 7 Dec 2016
Temperature 24 °C ± 0.3 °C
Humidity 33 %RH ± 3 %RH
Static Pressure 101.3 kPa ± 1 kPa

Evaluation Method The data is acquired by the insert voltage calibration method using the reference microphone's open circuit sensitivity. Data reported in dB re 20 µPa.

Compliance Standards Compliant to Manufacturer Specifications per D0001.8190 and the following standards:
IEC 60942:2003 ANSI S1.40-2006

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005.

Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the organization issuing this report.

Standards Used

Description	Cal Date	Cal Due	Cal Standard
Agilent 34401A DMM	09/04/2015	09/04/2016	001021
Sound Level Meter / Real Time Analyzer	04/07/2015	04/07/2016	001051
Microphone Calibration System	08/20/2015	08/20/2016	005446
1/2" Preamplifier	10/09/2015	10/09/2016	006506
Larson Davis 1/2" Preamplifier 7-pin LEMO	08/20/2015	08/20/2016	006507
1/2 inch Microphone - RI - 200V	02/26/2015	02/26/2016	006510
Pressure Transducer	05/07/2015	05/07/2016	007310

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



Output Level

Nominal Level [dB]	Pressure [kPa]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
114	101.1	114.00	113.80	114.20	0.13	Pass
94	101.3	94.02	93.80	94.20	0.14	Pass

-- End of measurement results--

Frequency

Nominal Level [dB]	Pressure [kPa]	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Expanded Uncertainty [Hz]	Result
114	101.1	1,000.30	990.00	1,010.00	0.20	Pass
94	101.3	1,000.32	990.00	1,010.00	0.20	Pass

-- End of measurement results--

Total Harmonic Distortion + Noise (THD+N)

Nominal Level [dB]	Pressure [kPa]	Test Result [%]	Lower limit [%]	Upper limit [%]	Expanded Uncertainty [%]	Result
94	101.3	0.60	0.00	2.00	0.25	Pass
114	101.1	0.40	0.00	2.00	0.25	Pass

-- End of measurement results--

Level Change Over Pressure

Tested at: 114 dB, 24 °C, 32 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
101.3	101.0	0.00	-0.30	0.30	0.04	Pass
108.0	107.7	-0.04	-0.30	0.30	0.04	Pass
92.0	91.9	0.03	-0.30	0.30	0.04	Pass
83.0	83.2	0.03	-0.30	0.30	0.04	Pass
74.0	74.0	-0.02	-0.30	0.30	0.04	Pass
65.0	65.3	-0.15	-0.30	0.30	0.04	Pass

-- End of measurement results--

Frequency Change Over Pressure

Tested at: 114 dB, 24 °C, 32 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Expanded Uncertainty [Hz]	Result
108.0	107.7	0.00	-10.00	10.00	0.20	Pass
101.3	101.0	0.00	-10.00	10.00	0.20	Pass
92.0	91.9	0.00	-10.00	10.00	0.20	Pass
83.0	83.2	0.00	-10.00	10.00	0.20	Pass
74.0	74.0	0.00	-10.00	10.00	0.20	Pass
65.0	65.3	-0.01	-10.00	10.00	0.20	Pass

-- End of measurement results--

Total Harmonic Distortion + Noise (THD+N) Over Pressure

Tested at: 114 dB, 24 °C, 32 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [%]	Lower limit [%]	Upper limit [%]	Expanded Uncertainty [%]	Result
101.3	101.0	0.40	0.00	2.00	0.25	Pass
108.0	107.7	0.39	0.00	2.00	0.25	Pass
92.0	91.9	0.41	0.00	2.00	0.25	Pass
83.0	83.2	0.43	0.00	2.00	0.25	Pass
74.0	74.0	0.45	0.00	2.00	0.25	Pass
65.0	65.3	0.49	0.00	2.00	0.25	Pass

-- End of measurement results--

Signatory: Scott Montgomery

Larson Davis, a division of PCB Piezotronics, Inc
 1681 West 820 North
 Provo, UT 84601, United States
 716-684-0001



LARSON DAVIS
 A PCB PIEZOTRONICS DIV.

This page is intentionally left blank

Calibration Certificate

Certificate Number 2015011608

Customer:

Arkansas State Highway

10324 Interstate 30

Little Rock, AR 72209, United States

Model Number LxT1
Serial Number 0003074
Test Results **Pass**

Initial Condition AS RECEIVED same as shipped

Description SoundTrack LxT Class 1

Procedure Number D0001.8378
Technician Ron Harris
Calibration Date 3 Dec 2015
Calibration Due 3 Dec 2016
Temperature 23.21 °C ± 0.01 °C
Humidity 49.4 %RH ± 0.5 %RH
Static Pressure 87.02 kPa ± 0.03 kPa

Evaluation Method Tested electrically using PRMLxT1L S/N 021485 and a 12.0 pF capacitor to simulate microphone capacitance. Data reported in dB re 20 µPa assuming a microphone sensitivity of 23.6 mV/Pa.

Compliance Standards Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8384:

IEC 60651:2001 Type 1	ANSI S1.4-2014 Class 1
IEC 60804:2000 Type 1	ANSI S1.4 (R2006) Type 1
IEC 61252:2002	ANSI S1.11 (R2009) Class 1
IEC 61260:2001 Class 1	ANSI S1.25 (R2007)
IEC 61672:2013 Class 1	ANSI S1.43 (R2007) Type 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005.

Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the organization issuing this report.

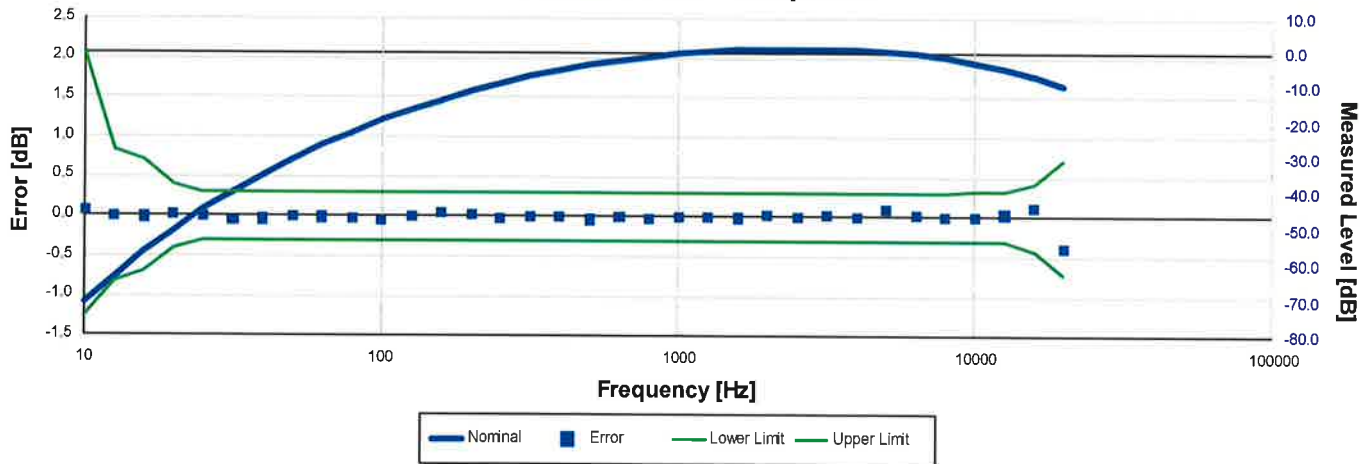
Standards Used			
Description	Cal Date	Cal Due	Cal Standard
Hart Scientific 2626-H Temperature Probe	06/17/2015	06/17/2016	006798
SRS DS360 Ultra Low Distortion Generator	07/07/2015	07/07/2016	007118

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



LARSON DAVIS
A PCB PIEZOTRONICS DIV.

A-weight Filter Response



Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

Frequency [Hz]	Test Result [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
10.00	-70.34	0.06	-1.25	2.05	0.09	Pass
12.59	-63.40	0.00	-0.82	0.82	0.09	Pass
15.85	-56.72	-0.02	-0.70	0.70	0.09	Pass
19.95	-50.47	0.03	-0.40	0.40	0.09	Pass
25.12	-44.72	-0.02	-0.30	0.30	0.09	Pass
31.62	-39.46	-0.06	-0.30	0.30	0.09	Pass
39.81	-34.64	-0.04	-0.30	0.30	0.09	Pass
50.12	-30.20	0.00	-0.30	0.30	0.09	Pass
63.10	-26.22	-0.02	-0.30	0.30	0.09	Pass
79.43	-22.53	-0.03	-0.30	0.30	0.09	Pass
100.00	-19.16	-0.06	-0.30	0.30	0.09	Pass
125.89	-16.11	-0.01	-0.30	0.30	0.09	Pass
158.49	-13.36	0.04	-0.30	0.30	0.09	Pass
199.53	-10.88	0.02	-0.30	0.30	0.09	Pass
251.19	-8.63	-0.03	-0.30	0.30	0.09	Pass
316.23	-6.61	-0.01	-0.30	0.30	0.09	Pass
398.11	-4.81	-0.01	-0.30	0.30	0.09	Pass
501.19	-3.24	-0.04	-0.30	0.30	0.09	Pass
630.96	-1.91	-0.01	-0.30	0.30	0.09	Pass
794.33	-0.83	-0.03	-0.30	0.30	0.09	Pass
1,000.00	0.00	0.00	-0.30	0.30	0.09	Pass
1,258.93	0.59	-0.01	-0.30	0.30	0.09	Pass
1,584.89	0.98	-0.02	-0.30	0.30	0.09	Pass
1,995.26	1.21	0.01	-0.30	0.30	0.09	Pass
2,511.89	1.29	-0.01	-0.30	0.30	0.09	Pass
3,162.28	1.23	0.03	-0.30	0.30	0.09	Pass
3,981.07	1.00	0.00	-0.30	0.30	0.09	Pass
5,011.87	0.58	0.08	-0.30	0.30	0.09	Pass
6,309.57	-0.09	0.01	-0.30	0.30	0.09	Pass
7,943.28	-1.10	0.00	-0.30	0.30	0.09	Pass
10,000.00	-2.50	0.00	-0.32	0.32	0.09	Pass
12,589.25	-4.27	0.03	-0.32	0.32	0.09	Pass
15,848.93	-6.50	0.10	-0.42	0.42	0.09	Pass
19,952.62	-9.69	-0.39	-0.71	0.71	0.09	Pass

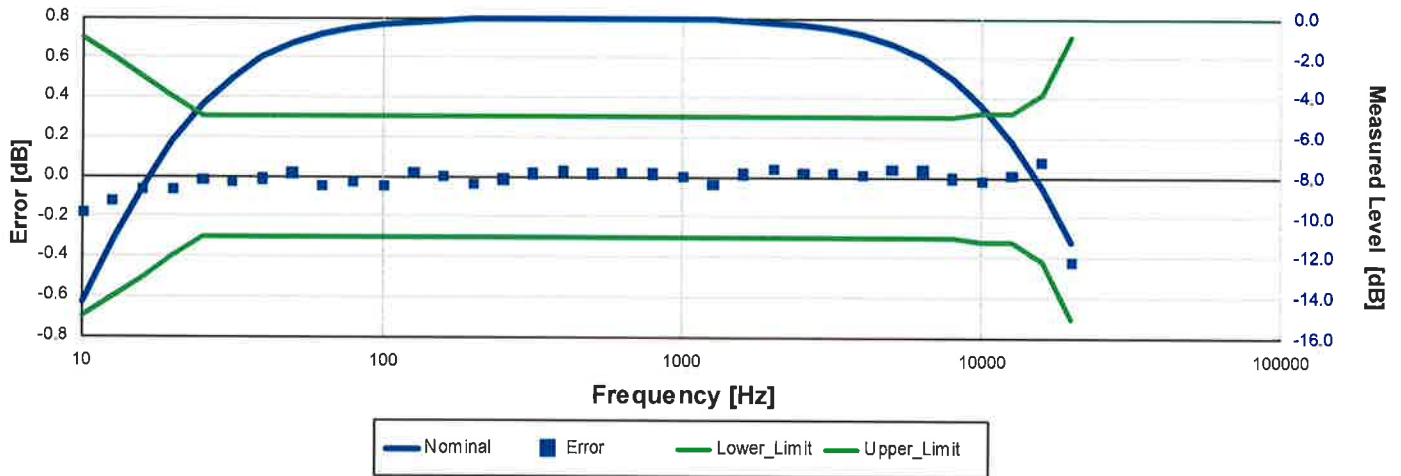
-- End of measurement results--

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



LARSON DAVIS
A PCB PIEZOTRONICS DIV.

C-weight Filter Response



Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

Frequency [Hz]	Test Result [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
10.00	-14.48	-0.18	-0.70	0.70	0.09	Pass
12.59	-11.32	-0.12	-0.60	0.60	0.09	Pass
15.85	-8.57	-0.07	-0.50	0.50	0.09	Pass
19.95	-6.26	-0.06	-0.40	0.40	0.09	Pass
25.12	-4.42	-0.02	-0.30	0.30	0.09	Pass
31.62	-3.03	-0.03	-0.30	0.30	0.09	Pass
39.81	-2.01	-0.01	-0.30	0.30	0.09	Pass
50.12	-1.28	0.02	-0.30	0.30	0.09	Pass
63.10	-0.85	-0.05	-0.30	0.30	0.09	Pass
79.43	-0.53	-0.03	-0.30	0.30	0.09	Pass
100.00	-0.35	-0.05	-0.30	0.30	0.09	Pass
125.89	-0.18	0.02	-0.30	0.30	0.09	Pass
158.49	-0.10	0.00	-0.30	0.30	0.09	Pass
199.53	-0.04	-0.04	-0.30	0.30	0.09	Pass
251.19	-0.01	-0.01	-0.30	0.30	0.09	Pass
316.23	0.01	0.01	-0.30	0.30	0.09	Pass
398.11	0.03	0.03	-0.30	0.30	0.09	Pass
501.19	0.02	0.02	-0.30	0.30	0.09	Pass
630.96	0.02	0.02	-0.30	0.30	0.09	Pass
794.33	0.02	0.02	-0.30	0.30	0.09	Pass
1,000.00	0.00	0.00	-0.30	0.30	0.09	Pass
1,258.93	-0.04	-0.04	-0.30	0.30	0.09	Pass
1,584.89	-0.08	0.02	-0.30	0.30	0.09	Pass
1,995.26	-0.16	0.04	-0.30	0.30	0.09	Pass
2,511.89	-0.28	0.02	-0.30	0.30	0.09	Pass
3,162.28	-0.48	0.02	-0.30	0.30	0.09	Pass
3,981.07	-0.79	0.01	-0.30	0.30	0.09	Pass
5,011.87	-1.26	0.04	-0.30	0.30	0.09	Pass
6,309.57	-1.97	0.03	-0.30	0.30	0.09	Pass
7,943.28	-3.00	0.00	-0.30	0.30	0.09	Pass
10,000.00	-4.42	-0.02	-0.32	0.32	0.09	Pass
12,589.25	-6.19	0.01	-0.32	0.32	0.09	Pass
15,848.93	-8.42	0.08	-0.42	0.42	0.09	Pass
19,952.62	-11.62	-0.42	-0.71	0.71	0.09	Pass

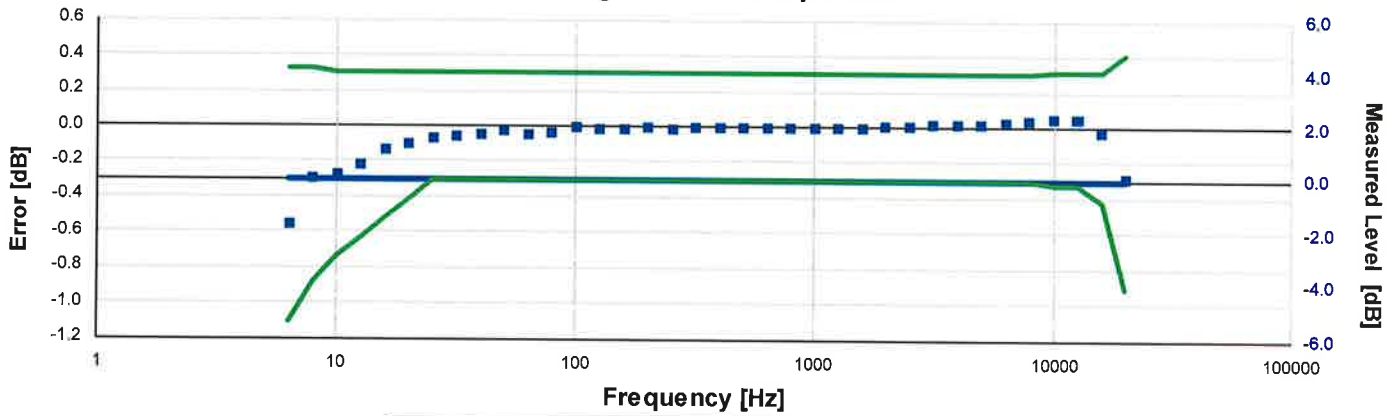
-- End of measurement results--

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



LARSON DAVIS
A PCB PIEZOTRONICS DIV.

Z-weight Filter Response



Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

Frequency [Hz]	Test Result [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
6.31	-0.56	-0.56	-1.11	0.33	0.10	Pass
7.94	-0.30	-0.30	-0.88	0.33	0.09	Pass
10.00	-0.27	-0.27	-0.74	0.30	0.09	Pass
12.59	-0.22	-0.22	-0.63	0.30	0.09	Pass
15.85	-0.14	-0.14	-0.52	0.30	0.09	Pass
19.95	-0.10	-0.10	-0.41	0.30	0.09	Pass
25.12	-0.07	-0.07	-0.30	0.30	0.09	Pass
31.62	-0.06	-0.06	-0.30	0.30	0.09	Pass
39.81	-0.04	-0.04	-0.30	0.30	0.09	Pass
50.12	-0.02	-0.02	-0.30	0.30	0.09	Pass
63.10	-0.04	-0.04	-0.30	0.30	0.09	Pass
79.43	-0.04	-0.04	-0.30	0.30	0.09	Pass
100.00	-0.01	-0.01	-0.30	0.30	0.09	Pass
125.89	-0.01	-0.01	-0.30	0.30	0.09	Pass
158.49	-0.01	-0.01	-0.30	0.30	0.09	Pass
199.53	0.00	0.00	-0.30	0.30	0.09	Pass
251.19	-0.02	-0.02	-0.30	0.30	0.09	Pass
316.23	0.00	0.00	-0.30	0.30	0.09	Pass
398.11	0.00	0.00	-0.30	0.30	0.09	Pass
501.19	-0.01	-0.01	-0.30	0.30	0.09	Pass
630.96	-0.01	-0.01	-0.30	0.30	0.09	Pass
794.33	0.00	0.00	-0.30	0.30	0.09	Pass
1,000.00	0.00	0.00	-0.30	0.30	0.09	Pass
1,258.93	-0.01	-0.01	-0.30	0.30	0.09	Pass
1,584.89	0.00	0.00	-0.30	0.30	0.09	Pass
1,995.26	0.00	0.00	-0.30	0.30	0.09	Pass
2,511.89	0.01	0.01	-0.30	0.30	0.09	Pass
3,162.28	0.01	0.01	-0.30	0.30	0.09	Pass
3,981.07	0.01	0.01	-0.30	0.30	0.09	Pass
5,011.87	0.02	0.02	-0.30	0.30	0.09	Pass
6,309.57	0.03	0.03	-0.30	0.30	0.09	Pass
7,943.28	0.04	0.04	-0.30	0.30	0.09	Pass
10,000.00	0.05	0.05	-0.32	0.32	0.09	Pass
12,589.25	0.05	0.05	-0.32	0.32	0.09	Pass
15,848.93	-0.03	-0.03	-0.42	0.32	0.09	Pass
19,952.62	-0.29	-0.29	-0.91	0.41	0.09	Pass

Larson Davis, a division of PCB Piezotronics, Inc
 1681 West 820 North
 Provo, UT 84601, United States
 716-684-0001



-- End of measurement results--

High Level Stability

Electrical signal test of high level stability performed according to IEC 61672-3:2013 21 and ANSI S1.4-2014 Part 3: 21 for compliance to IEC 61672-1:2013 5.15 and ANSI S1.4-2014 Part 1: 5.15

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
High Level Stability	115.20	115.10	115.30	0.09	Pass

-- End of measurement results--

Long-Term Stability

Electrical signal test of long term stability performed according to IEC 61672-3:2013 15 and ANSI S1.4-2014 Part 3: 15 for compliance to IEC 61672-1:2013 5.14 and ANSI S1.4-2014 Part 1: 5.14

Test Duration [min]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
37	94.04	93.94	94.14	0.09	Pass

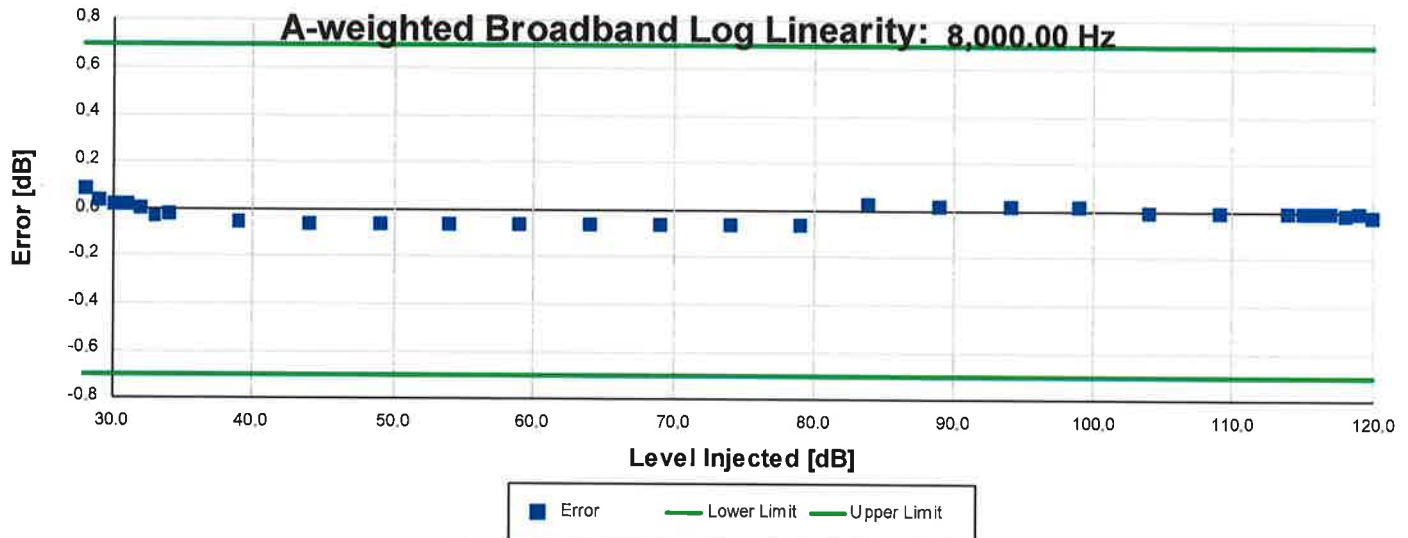
-- End of measurement results--

1 kHz Reference Levels

Frequency weightings and time weightings at 1 kHz performed according to IEC 61672-3:2013 14 and ANSI S1.4-2014 Part 3: 14 for compliance to IEC 61672-1:2013 5.5.9 and 5.8.3 and ANSI S1.4-2014 Part 1: 5.5.9 and 5.8.3

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
slow	94.04	93.94	94.14	0.09	Pass
impulse	94.04	93.94	94.14	0.09	Pass
C weight	94.04	93.84	94.24	0.09	Pass
Z weight	94.04	93.84	94.24	0.09	Pass

-- End of measurement results--



Broadband level linearity performed according to IEC 61672-3:2013 16 and ANSI S1.4-2014 Part 3: 16 for compliance to IEC 61672-1:2013 5.6, IEC 60804:2000 6.2, IEC 61252:2002 8, ANSI S1.4 (R2006) 6.9, ANSI S1.4-2014 Part 1: 5.6, ANSI S1.43 (R2007) 6.2

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
28.00	0.09	-0.70	0.70	0.10	Pass
29.00	0.04	-0.70	0.70	0.09	Pass
30.00	0.02	-0.70	0.70	0.32	Pass
31.00	0.02	-0.70	0.70	0.09	Pass
32.00	0.00	-0.70	0.70	0.09	Pass
33.00	-0.03	-0.70	0.70	0.09	Pass
34.00	-0.02	-0.70	0.70	0.09	Pass
39.00	-0.05	-0.70	0.70	0.09	Pass
44.00	-0.06	-0.70	0.70	0.09	Pass
49.00	-0.06	-0.70	0.70	0.09	Pass
54.00	-0.06	-0.70	0.70	0.09	Pass
59.00	-0.06	-0.70	0.70	0.09	Pass
64.00	-0.06	-0.70	0.70	0.09	Pass
69.00	-0.06	-0.70	0.70	0.09	Pass
74.00	-0.06	-0.70	0.70	0.09	Pass
79.00	-0.06	-0.70	0.70	0.09	Pass
84.00	0.03	-0.70	0.70	0.09	Pass
89.00	0.02	-0.70	0.70	0.09	Pass
94.00	0.02	-0.70	0.70	0.09	Pass
99.00	0.02	-0.70	0.70	0.09	Pass
104.00	0.00	-0.70	0.70	0.09	Pass
109.00	0.00	-0.70	0.70	0.09	Pass
114.00	0.00	-0.70	0.70	0.09	Pass
115.00	0.00	-0.70	0.70	0.09	Pass
116.00	0.00	-0.70	0.70	0.09	Pass
117.00	0.00	-0.70	0.70	0.09	Pass
118.00	-0.01	-0.70	0.70	0.09	Pass
119.00	-0.01	-0.70	0.70	0.09	Pass
120.00	-0.02	-0.70	0.70	0.09	Pass

-- End of measurement results--

Slow Detector

Toneburst response performed according to IEC 61672-3:2013 18 and ANSI S1.4-2014 Part 3: 18 for compliance to IEC 61672-1:2013 5.9, IEC 60651:2001 9.4.2, ANSI S1.4:1983 (R2006) 8.4.2 and ANSI S1.4-2014 Part 1: 5.9

Amplitude [dB]	Duration [ms]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
113.15	1,000	-2.07	-2.49	-1.49	0.09	Pass
	500	-4.16	-4.55	-3.55	0.09	Pass
	200	-7.56	-7.92	-6.92	0.09	Pass
	100	-10.34	-11.22	-9.22	0.09	Pass
	50	-13.26	-14.12	-12.12	0.09	Pass
	20	-17.18	-18.53	-16.03	0.09	Pass
	10	-20.18	-22.02	-19.02	0.09	Pass
	5	-23.17	-25.52	-22.02	0.09	Pass
	2	-27.16	-29.99	-25.99	0.09	Pass

-- End of measurement results--

Fast Detector

Toneburst response performed according to IEC 61672-3:2013 18 and ANSI S1.4-2014 Part 3: 18 for compliance to IEC 61672-1:2013 5.9, IEC 60651:2001 9.4.2, ANSI S1.4:1983 (R2006) 8.4.2 and ANSI S1.4-2014 Part 1: 5.9

Amplitude [dB]	Duration [ms]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
113.15	1,000.00	-0.02	-0.50	0.50	0.09	Pass
	500.00	-0.11	-0.58	0.42	0.09	Pass
	200.00	-1.04	-1.48	-0.48	0.23	Pass
	100.00	-2.78	-3.59	-1.59	0.55	Pass
	50.00	-5.07	-5.82	-3.82	0.98	Pass
	20.00	-8.39	-9.30	-7.30	0.09	Pass
	10.00	-11.47	-12.14	-10.14	0.09	Pass
	5.00	-14.31	-15.07	-13.07	0.09	Pass
	2.00	-18.20	-19.49	-16.99	0.09	Pass
	1.00	-21.23	-22.99	-19.99	0.09	Pass
	0.50	-24.27	-26.49	-22.99	0.09	Pass
	0.25	-27.22	-29.99	-25.99	0.09	Pass

-- End of measurement results--

Peak C-weight

C-weighted peak sound level performed according to IEC 61672-3:2013 19 and ANSI S1.4-2014 Part 3: 19 for compliance to IEC 61672-1:2013 5.13 and ANSI S1.4-2014 Part 1: 5.13

Level [dB]	Frequency [Hz]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
111.15	31.50	3.24	0.50	4.50	0.09	Pass
111.15	500.00	3.57	2.50	4.50	0.09	Pass
111.15	8,000.00	2.69	1.40	5.40	0.10	Pass
111.15, Negative	500.00	2.17	1.40	3.40	0.09	Pass
111.15, Positive	500.00	2.15	1.40	3.40	0.09	Pass

-- End of measurement results--

Peak Z-weight

Z-weighted peak sound level performed according to IEC 60651:2001 9.4.4 and ANSI S1.4:1983 (R2006) 8.4.4

Amplitude [dB]	Duration[μs]		Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
112.15	100	Negative Pulse	112.45	110.11	114.11	0.09	Pass
	100	Positive Pulse	112.45	110.10	114.10	0.09	Pass
102.15	100	Negative Pulse	102.45	100.10	104.10	0.09	Pass
	100	Positive Pulse	102.45	100.10	104.10	0.09	Pass
92.15	100	Negative Pulse	92.45	90.11	94.11	0.09	Pass
	100	Positive Pulse	92.46	90.11	94.11	0.09	Pass
82.15	100	Negative Pulse	82.46	80.12	84.12	0.09	Pass
	100	Positive Pulse	82.48	80.13	84.13	0.09	Pass

-- End of measurement results--

Overload Detector

Overload indication performed according to IEC 61672-3:2013 20 and ANSI S1.4-2014 Part 3: 20 for compliance to IEC 61672-1:2013 5.13, IEC 60804:2000 9.3.5, IEC 61252:2002 11, ANSI S1.4 (R2006) 5.8, and ANSI S1.4-2014 Part 1: 5.13, ANSI S1.25 (R2007) 7.6, ANSI S1.43 (R2007) 7

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
Positive	118.95	118.00	120.00	0.09	Pass
Negative	118.95	118.00	120.00	0.09	Pass
Comparison	118.95	117.45	120.45	0.09	Pass

-- End of measurement results--

Rise Time

Peak rise time performed according to IEC 60651:2001 9.4.4 and ANSI S1.4:1983 (R2006) 8.4.4

Amplitude [dB]	Duration [μs]		Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
113.15	40	Negative Pulse	112.61	111.11	113.11	0.09	Pass
		Positive Pulse	112.60	111.10	113.10	0.09	Pass
	30	Negative Pulse	111.68	111.11	113.11	0.09	Pass
		Positive Pulse	111.68	111.10	113.10	0.09	Pass

-- End of measurement results--

Positive Pulse Crest Factor**200 μ s pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit**

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
114.15	3	OVLD	± 0.50	0.09	Pass
	5	OVLD	± 1.00	0.09	Pass
	10	OVLD	± 1.50	0.09	Pass
104.15	3	-0.14	± 0.50	0.09	Pass
	5	-0.16	± 1.00	0.11	Pass
	10	OVLD	± 1.50	0.09	Pass
94.15	3	-0.11	± 0.50	0.09	Pass
	5	-0.10	± 1.00	0.09	Pass
	10	-0.09	± 1.50	0.09	Pass
84.15	3	-0.13	± 0.50	0.09	Pass
	5	-0.14	± 1.00	0.09	Pass
	10	-0.16	± 1.50	0.09	Pass

-- End of measurement results--

Negative Pulse Crest Factor**200 μ s pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit**

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
114.15	3	OVLD	± 0.50	0.09	Pass
	5	OVLD	± 1.00	0.09	Pass
	10	OVLD	± 1.50	0.09	Pass
104.15	3	-0.13	± 0.50	0.09	Pass
	5	-0.12	± 1.00	0.09	Pass
	10	OVLD	± 1.50	0.09	Pass
94.15	3	-0.12	± 0.50	0.09	Pass
	5	-0.11	± 1.00	0.09	Pass
	10	-0.06	± 1.50	0.09	Pass
84.15	3	-0.14	± 0.50	0.09	Pass
	5	-0.12	± 1.00	0.09	Pass
	10	-0.16	± 1.50	0.09	Pass

-- End of measurement results--

Tone Burst**2kHz tone burst tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit**

Tone burst response measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
114.15	3	OVLD	± 0.50	0.09	Pass
	5	OVLD	± 1.00	0.09	Pass
104.15	3	-0.06	± 0.50	0.09	Pass
	5	0.00	± 1.00	0.09	Pass
94.15	3	-0.05	± 0.50	0.09	Pass
	5	-0.06	± 1.00	0.09	Pass
84.15	3	-0.06	± 0.50	0.09	Pass
	5	-0.03	± 1.00	0.09	Pass

-- End of measurement results--

Impulse Detector - Repeat

Impulse Detector measured according to IEC 60651:2001 9.4.3 and ANSI S1.4:1983 (R2006) 8.4.3

Amplitude [dB]	Repetition Rate [Hz]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
116	100.00	-2.87	-3.71	-1.71	0.09	Pass
	20.00	-7.69	-9.57	-5.57	0.16	Pass
	2.00	-8.98	-10.76	-6.76	0.09	Pass
111	2.00	103.23	102.19	104.19	0.09	Pass

-- End of measurement results--

Impulse Detector - Single

Impulse Detector measured according to IEC 60651:2001 9.4.3 and ANSI S1.4:1983 (R2006) 8.4.3

Amplitude [dB]	Duration [ms]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
116	20.00	-3.72	-5.11	-2.11	0.09	Pass
	5.00	-8.80	-10.76	-6.76	0.10	Pass
	2.00	-12.66	-14.55	-10.55	0.11	Pass
106	2.00	94.48	93.52	95.52	0.11	Pass

-- End of measurement results--

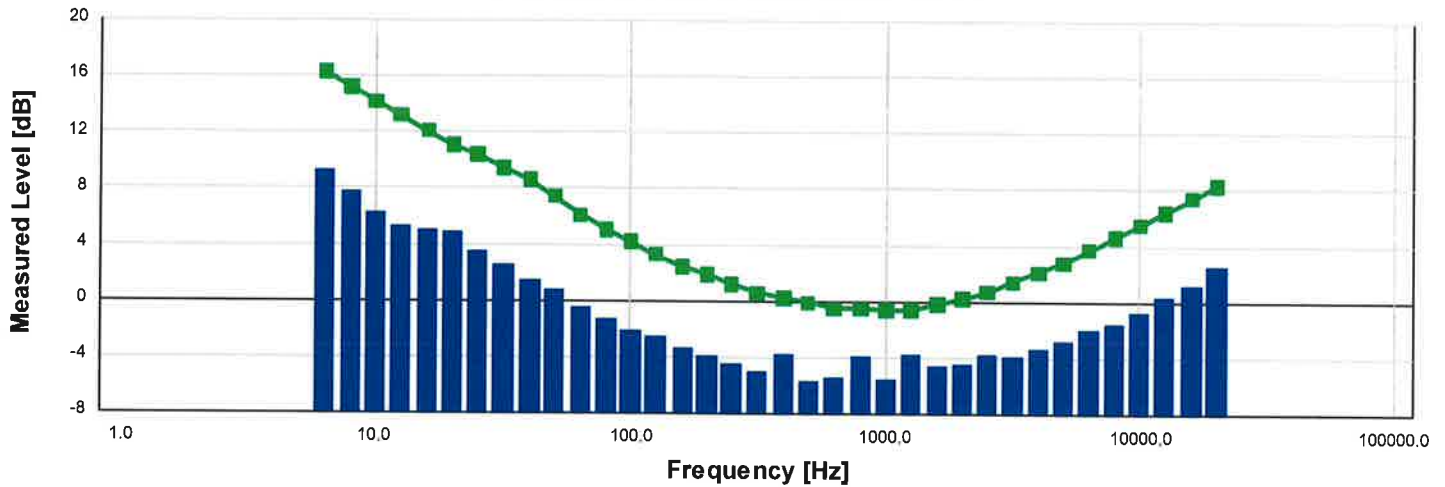
Gain

Gain measured according to IEC 61672-3:2013 17.3 and 17.4 and ANSI S1.4-2014 Part 3: 17.3 and 17.4

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
Low Range	84.04	83.94	84.14	0.09	Pass
Normal Range	84.04	83.20	84.80	0.09	Pass

-- End of measurement results--

1/3-Octave Self-Generated Noise



The SLM is set to low range. 1/3-Octave self-generated noise measured according to IEC 61672-3:2013 11.2 and ANSI S1.4-2014 Part 3: 11.2

Frequency [Hz]	Test Result [dB]	Upper limit [dB]	Result
6.30	9.29	16.30	Pass
8.00	7.82	15.20	Pass
10.00	6.33	14.20	Pass
12.50	5.27	13.20	Pass
16.00	5.01	12.10	Pass
20.00	4.95	11.10	Pass
25.00	3.57	10.40	Pass
31.50	2.52	9.40	Pass
40.00	1.45	8.60	Pass
50.00	0.71	7.40	Pass
63.00	-0.50	6.10	Pass
80.00	-1.30	5.00	Pass
100.00	-2.07	4.20	Pass
125.00	-2.55	3.30	Pass
160.00	-3.33	2.40	Pass
200.00	-3.88	1.90	Pass
250.00	-4.47	1.20	Pass
315.00	-5.00	0.60	Pass
400.00	-3.75	0.20	Pass
500.00	-5.75	-0.10	Pass
630.00	-5.47	-0.50	Pass
800.00	-3.90	-0.50	Pass
1,000.00	-5.52	-0.60	Pass
1,250.00	-3.81	-0.60	Pass
1,600.00	-4.61	-0.20	Pass
2,000.00	-4.45	0.20	Pass
2,500.00	-3.83	0.70	Pass
3,150.00	-3.88	1.40	Pass
4,000.00	-3.37	2.10	Pass
5,000.00	-2.80	2.80	Pass
6,300.00	-1.96	3.70	Pass
8,000.00	-1.52	4.60	Pass
10,000.00	-0.69	5.50	Pass
12,500.00	0.43	6.40	Pass
16,000.00	1.12	7.40	Pass

Larson Davis, a division of PCB Piezotronics, Inc
 1681 West 820 North
 Provo, UT 84601, United States
 716-684-0001



LARSON DAVIS
 A PCB PIEZOTRONICS DIV.

Frequency [Hz]	Test Result [dB]	Upper limit [dB]	Result
20,000.00	2.61	8.30	Pass

-- End of measurement results--

Broadband Noise Floor

Self-generated noise measured according to IEC 61672-3:2013 11.2 and ANSI S1.4-2014 Part 3: 11.2

Measurement	Test Result [dB]	Upper limit [dB]	Result
A-weight Noise Floor	8.71	16.00	Pass
C-weight Noise Floor	11.84	18.00	Pass
Z-weight Noise Floor	19.34	25.00	Pass

-- End of measurement results--

Total Harmonic Distortion

Measured using 1/3-Octave filters

Measurement	Test Result [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
10 Hz Signal	113.07	112.35	113.95	0.09	Pass
THD	-59.24		-50.00	0.01	Pass
THD+N	-57.20		-50.00	0.01	Pass

-- End of measurement results--

-- End of Report--

Signatory: Ron Harris

Larson Davis, a division of PCB Piezotronics, Inc
 1681 West 820 North
 Provo, UT 84601, United States
 716-684-0001



Calibration Certificate

Certificate Number 2015011610

Customer:

Arkansas State Highway
10324 Interstate 30
Little Rock, AR 72209, United States

Model Number LxT1
Serial Number 0003074
Test Results Pass
Initial Condition AS RECEIVED same as shipped
Description SoundTrack LxT Class 1

Procedure Number D0001.8384
Technician Ron Harris
Calibration Date 3 Dec 2015
Calibration Due 3 Dec 2016
Temperature 23.19 °C ± 0.01 °C
Humidity 50 %RH ± 0.5 %RH
Static Pressure 87 kPa ± 0.03 kPa

Evaluation Method

Tested with:

PRMLxT1L. S/N 021485
377B20. S/N LW131537

Data reported in dB re 20 µPa.

Compliance Standards

Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8378:

IEC 60651:2001 Type 1	ANSI S1.4-2014 Class 1
IEC 60804:2000 Type 1	ANSI S1.4 (R2006) Type 1
IEC 61252:2002	ANSI S1.11 (R2009) Class 1
IEC 61260:2001 Class 1	ANSI S1.25 (R2007)
IEC 61672:2013 Class 1	ANSI S1.43 (R2007) Type 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005.

Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the organization issuing this report.

Standards Used

Description	Cal Date	Cal Due	Cal Standard
SRS DS360 Ultra Low Distortion Generator	06/24/2015	06/24/2016	006311
Hart Scientific 2626-H Temperature Probe	06/17/2015	06/17/2016	006798
Larson Davis CAL200 Acoustic Calibrator	08/12/2015	08/12/2016	007027
Larson Davis Model 831	03/05/2015	03/05/2016	007182
1/2 inch Microphone - P - 0V	03/11/2015	03/11/2016	007185
Larson Davis CAL291 Residual Intensity Calibrator	09/24/2015	09/24/2016	007287

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



Acoustic Calibration

Measured according to IEC 61672-3:2013 10 and ANSI S1.4-2014 Part 3: 10

Measurement	Test Result [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
-------------	------------------	------------------	------------------	---------------------------	--------

1000 Hz

As Received Level: 114.25

Adjusted Level: 114.01

-- End of measurement results--

Acoustic Signal Tests, C-weighting

Measured according to IEC 61672-3:2013 12 and ANSI S1.4-2014 Part 3: 12 using a comparison coupler with Unit Under Test (UUT) and reference SLM using S-time-weighted sound level

Frequency [Hz]	Test Result [dB]	Expected [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
125	-0.16	-0.20	-1.20	0.80	0.21	Pass
1000	0.02	0.00	-0.70	0.70	0.21	Pass
8000	-2.54	-3.00	-5.50	-1.50	0.21	Pass

-- End of measurement results--

Self-generated Noise

Measured according to IEC 61672-3:2013 11.1 and ANSI S1.4-2014 Part 3: 11.1

Measurement	Test Result [dB]
-------------	------------------

Low Range, 20 dB gain

63.97

-- End of measurement results--

-- End of Report--

Signatory: Ron Harris

Larson Davis, a division of PCB Piezotronics, Inc
 1681 West 820 North
 Provo, UT 84601, United States
 716-684-0001

12/3/2015 12:16:00PM



Calibration Certificate

Certificate Number 2015011607

Customer:

Arkansas State Highway
10324 Interstate 30
Little Rock, AR 72209, United States

Model Number	PRMLxT1L	Procedure Number	D0001.8383
Serial Number	021485	Technician	Ron Harris
Test Results	Pass	Calibration Date	3 Dec 2015
Initial Condition	AS RECEIVED same as shipped	Calibration Due	3 Dec 2016
Description	Larson Davis 1/2" Preamplifier for LxT Class 1 -1 dB	Temperature	22.72 °C ± 0.01 °C
		Humidity	51.3 %RH ± 0.5 %RH
		Static Pressure	87.02 kPa ± 0.03 kPa

Evaluation Method Tested electrically using a 12.0 pF capacitor to simulate microphone capacitance.
Data reported in dB re 20 µPa assuming a microphone sensitivity of 50.0 mV/Pa.

Compliance Standards Compliant to Manufacturer Specifications

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

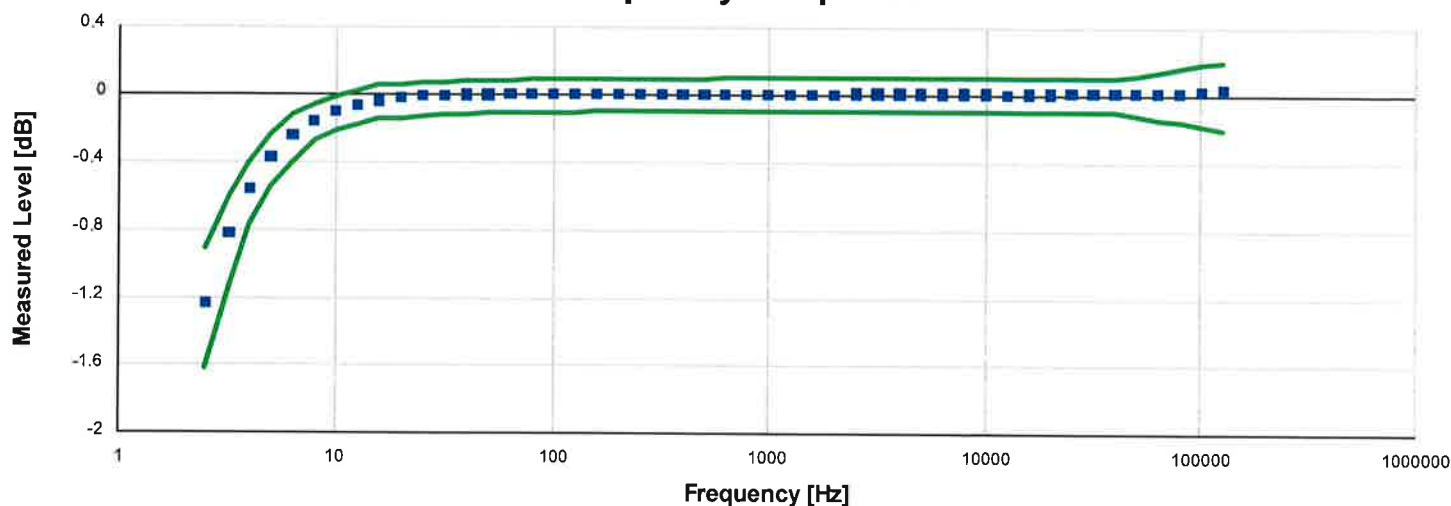
The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the organization issuing this report.

Standards Used

Description	Cal Date	Cal Due	Cal Standard
Sound Level Meter / Real Time Analyzer	11/05/2015	11/05/2016	001150
Hart Scientific 2626-H Temperature Probe	06/17/2015	06/17/2016	006798
Agilent 34401A DMM	06/25/2015	06/25/2016	007165
SRS DS360 Ultra Low Distortion Generator	11/10/2015	11/10/2016	007167

Frequency Response

Frequency response electrically tested at 120.0 dB μ V

Frequency [Hz]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
2.50	-1.24	-1.62	-0.91	0.07	Pass
3.20	-0.83	-1.14	-0.60	0.08	Pass
4.00	-0.56	-0.77	-0.40	0.08	Pass
5.00	-0.38	-0.54	-0.24	0.07	Pass
6.30	-0.24	-0.40	-0.12	0.07	Pass
7.90	-0.16	-0.28	-0.06	0.07	Pass
10.00	-0.10	-0.22	-0.01	0.07	Pass
12.60	-0.07	-0.18	0.02	0.07	Pass
15.80	-0.04	-0.15	0.05	0.07	Pass
20.00	-0.02	-0.14	0.06	0.07	Pass
25.10	-0.01	-0.13	0.07	0.07	Pass
31.60	-0.01	-0.12	0.07	0.07	Pass
39.80	0.00	-0.12	0.08	0.07	Pass
50.10	0.00	-0.11	0.08	0.07	Pass
63.10	0.00	-0.11	0.08	0.07	Pass
79.40	0.00	-0.11	0.09	0.07	Pass
100.00	0.00	-0.11	0.09	0.07	Pass
125.90	0.00	-0.11	0.09	0.07	Pass
158.50	0.00	-0.10	0.09	0.07	Pass
199.50	0.01	-0.10	0.09	0.07	Pass
251.20	0.00	-0.10	0.09	0.07	Pass
316.20	0.00	-0.10	0.09	0.07	Pass
398.10	0.01	-0.10	0.09	0.07	Pass
501.20	0.00	-0.10	0.09	0.07	Pass
631.00	0.01	-0.10	0.10	0.07	Pass
794.30	0.01	-0.10	0.10	0.07	Pass
1,000.00	0.01	-0.10	0.10	0.07	Pass
1,258.90	0.00	-0.10	0.10	0.07	Pass
1,584.90	0.01	-0.10	0.10	0.07	Pass
1,995.30	0.01	-0.10	0.10	0.07	Pass
2,511.90	0.01	-0.10	0.10	0.07	Pass
3,162.30	0.01	-0.10	0.10	0.07	Pass

Larson Davis, a division of PCB Piezotronics, Inc
 1681 West 820 North
 Provo, UT 84601, United States
 716-684-0001



LARSON DAVIS
 A PCB PIEZOTRONICS DIV.

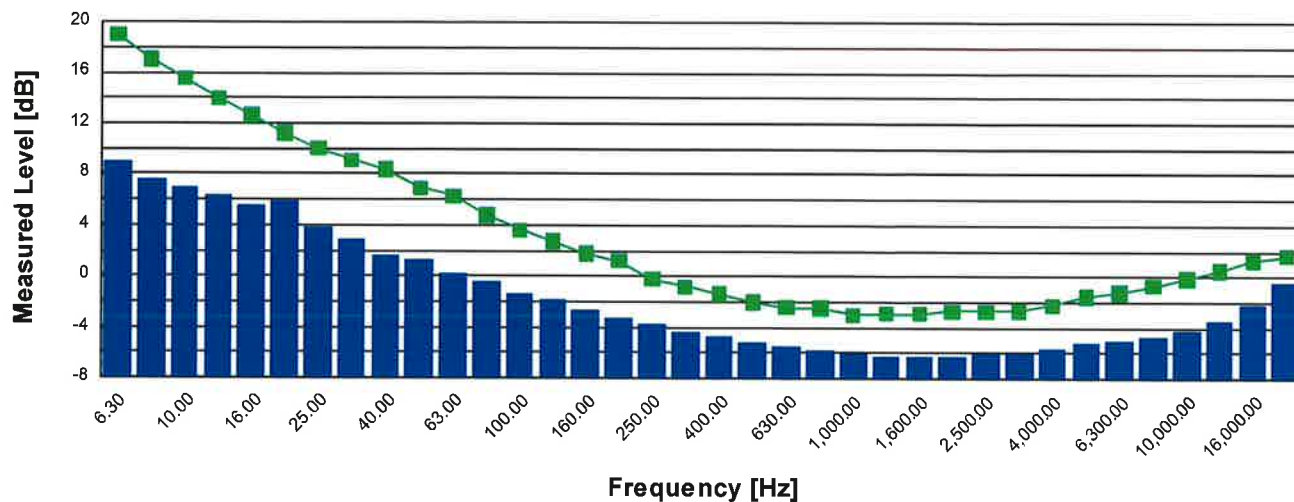
Frequency [Hz]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
3,981.10	0.01	-0.10	0.10	0.07	Pass
5,011.90	0.01	-0.10	0.10	0.07	Pass
6,309.60	0.01	-0.10	0.10	0.07	Pass
7,943.30	0.01	-0.10	0.10	0.07	Pass
10,000.00	0.01	-0.10	0.10	0.07	Pass
12,589.30	0.01	-0.10	0.10	0.07	Pass
15,848.90	0.01	-0.10	0.10	0.07	Pass
19,952.60	0.01	-0.10	0.10	0.07	Pass
25,118.90	0.01	-0.10	0.10	0.07	Pass
31,622.80	0.01	-0.10	0.10	0.07	Pass
39,810.70	0.01	-0.10	0.10	0.07	Pass
50,118.70	0.01	-0.12	0.12	0.08	Pass
63,095.70	0.01	-0.14	0.14	0.08	Pass
79,432.80	0.02	-0.16	0.16	0.08	Pass
100,000.00	0.02	-0.18	0.18	0.08	Pass
125,892.50	0.04	-0.20	0.20	0.22	Pass

DC Bias and 1kHz Reference Measurements

Measurement	Test Result [V]	Lower limit [V]	Upper limit [V]	Expanded Uncertainty	Result
DC Voltage	3.01	2.90	3.80	0.05	Pass
1000 Hz Reference	0.90	0.84	1.01	0.03	Pass

-- End of measurement results--

1/3-Octave Self-Generated Noise



Frequency [Hz]	Test Result [dB]	Upper limit [dB]	Result
6.30	9.00	19.00	Pass
8.00	7.60	17.00	Pass
10.00	6.90	15.50	Pass
12.50	6.40	14.00	Pass
16.00	5.60	12.60	Pass
20.00	5.90	11.20	Pass
25.00	3.90	10.00	Pass
31.50	2.90	9.10	Pass
40.00	1.70	8.40	Pass
50.00	1.30	6.90	Pass
63.00	0.20	6.30	Pass
80.00	-0.40	4.80	Pass
100.00	-1.40	3.60	Pass
125.00	-1.90	2.70	Pass
160.00	-2.60	1.80	Pass
200.00	-3.20	1.20	Pass
250.00	-3.80	-0.20	Pass
315.00	-4.40	-0.80	Pass
400.00	-4.70	-1.40	Pass
500.00	-5.20	-2.00	Pass
630.00	-5.40	-2.40	Pass
800.00	-5.80	-2.50	Pass
1,000.00	-6.00	-3.00	Pass
1,250.00	-6.20	-2.90	Pass
1,600.00	-6.20	-2.90	Pass
2,000.00	-6.20	-2.70	Pass
2,500.00	-6.00	-2.70	Pass
3,150.00	-5.90	-2.60	Pass
4,000.00	-5.60	-2.20	Pass
5,000.00	-5.20	-1.50	Pass
6,300.00	-5.00	-1.20	Pass
8,000.00	-4.60	-0.70	Pass
10,000.00	-4.20	-0.10	Pass
12,500.00	-3.40	0.50	Pass
16,000.00	-2.20	1.30	Pass
20,000.00	-0.50	1.70	Pass

Self-generated Noise

Bandwidth	Test Result [dB]	Upper limit [dB]	Result
A-weighted	6.60	8.00	Pass
Broadband	12.70	14.00	Pass
-- End of measurement results--			

Signatory: Ron Harris

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



 **LARSON DAVIS**
A PCB PIEZOTRONICS DIV.

This page is intentionally left blank

Calibration Certificate

Certificate Number 2015012031

Customer:

Sanchez Industrial Design

Suite 3

4319 Twin Valley Road

Middleton, WI 53562, United States

Model Number 377B02

Serial Number 120625

Test Results Pass

Initial Condition AS RECEIVED same as shipped

Description 1/2 inch Microphone - FF - 0V

Procedure Number D0001.8387

Technician Abraham Ortega

Calibration Date 17 Dec 2015

Calibration Due 17 Dec 2017

Temperature 23.4 °C ± 0.01 °C

Humidity 34.5 %RH ± 0.5 %RH

Static Pressure 101.67 kPa ± 0.03 kPa

Evaluation Method Tested electrically using an electrostatic actuator.

Compliance Standards Compliant to Manufacturer Specifications.

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005.

Test points marked with a ‡ do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the organization issuing this report.

Standards Used

Description	Cal Date	Cal Due	Cal Standard
Larson Davis Model 2900 Real Time Analyzer	07/17/2015	07/17/2016	001230
Microphone Calibration System	09/03/2015	09/03/2016	001233
1/2" Preamplifier	12/15/2015	12/15/2016	001274
Agilent 34401A DMM	12/04/2015	12/04/2016	001329
Larson Davis CAL250 Acoustic Calibrator	01/05/2015	01/05/2016	003030
1/2" Preamplifier	12/15/2015	12/15/2016	006506
Larson Davis 1/2" Preamplifier 7-pin LEMO	09/11/2015	09/11/2016	006507
1/2 inch Microphone - RI - 200V	02/26/2015	02/26/2016	006510
1/2 inch Microphone - RI - 200V	08/12/2015	08/12/2016	006519
Larson Davis 1/2" Preamplifier 7-pin LEMO	09/11/2015	09/11/2016	006530
Larson Davis 1/2" Preamplifier 7-pin LEMO	08/14/2015	08/14/2016	006531

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



Sensitivity

Measurement	Test Result [mV/Pa]	Lower limit [mV/Pa]	Upper limit [mV/Pa]	Expanded Uncertainty [mV/Pa]	Result
Open Circuit Sensitivity	49.93	42.07	59.43	1.20	Pass

-- End of measurement results--

Capacitance

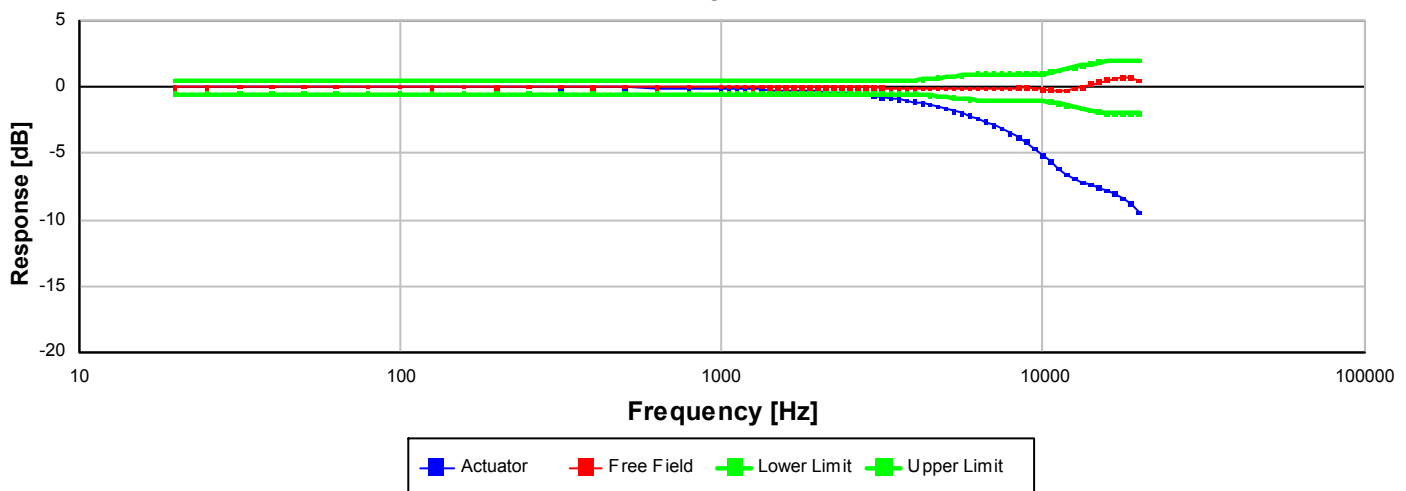
Measurement	Test Result [pF]	
Capacitance	12.00	‡

-- End of measurement results--

Lower Limiting Frequency

Measurement	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Result
-3 dB Frequency	1.38	1.00	2.40	Pass ‡

-- End of measurement results--

Frequency Response

Data is normalized for 0 dB @ 251.19 Hz.

Frequency [Hz]	Actuator [dB]	Free Field [dB]	Lower limit [dB]	Upper limit [dB]	Result
19.95	-0.01	-0.01	-0.50	0.50	Pass ‡
25.12	-0.03	-0.03	-0.50	0.50	Pass ‡
31.62	0.02	0.02	-0.50	0.50	Pass ‡
39.81	0.03	0.03	-0.50	0.50	Pass ‡
50.12	0.05	0.05	-0.50	0.50	Pass ‡
63.10	0.04	0.04	-0.50	0.50	Pass ‡
79.43	0.00	0.00	-0.50	0.50	Pass ‡
100.00	0.03	0.03	-0.50	0.50	Pass ‡
125.89	-0.01	-0.01	-0.50	0.50	Pass ‡
158.49	0.02	0.02	-0.50	0.50	Pass ‡
199.53	-0.02	-0.02	-0.50	0.50	Pass ‡

Certificate Number 2015012031

Frequency [Hz]	Actuator [dB]	Free Field [dB]	Lower limit [dB]	Upper limit [dB]	Result
251.19	0.00	0.00	-0.50	0.50	Pass ‡
316.23	-0.01	0.00	-0.50	0.50	Pass ‡
398.11	-0.04	-0.04	-0.50	0.50	Pass ‡
501.19	-0.03	0.01	-0.50	0.50	Pass ‡
630.96	-0.05	-0.01	-0.50	0.50	Pass ‡
794.33	-0.09	0.00	-0.50	0.50	Pass ‡
1,000.00	-0.09	0.03	-0.50	0.50	Pass ‡
1,059.25	-0.10	0.03	-0.50	0.50	Pass ‡
1,122.02	-0.12	0.02	-0.50	0.50	Pass ‡
1,188.50	-0.15	0.00	-0.50	0.50	Pass ‡
1,258.93	-0.17	-0.01	-0.50	0.50	Pass ‡
1,333.52	-0.18	0.00	-0.50	0.50	Pass ‡
1,412.54	-0.20	-0.01	-0.50	0.50	Pass ‡
1,496.24	-0.22	-0.02	-0.50	0.50	Pass ‡
1,584.89	-0.24	-0.03	-0.50	0.50	Pass ‡
1,678.80	-0.26	-0.03	-0.50	0.50	Pass ‡
1,778.28	-0.28	-0.03	-0.50	0.50	Pass ‡
1,883.65	-0.31	-0.03	-0.50	0.50	Pass ‡
1,995.26	-0.34	-0.03	-0.50	0.50	Pass ‡
2,113.49	-0.37	-0.03	-0.50	0.50	Pass ‡
2,238.72	-0.41	-0.04	-0.50	0.50	Pass ‡
2,371.37	-0.45	-0.04	-0.50	0.50	Pass ‡
2,511.89	-0.49	-0.03	-0.50	0.50	Pass ‡
2,660.73	-0.55	-0.04	-0.50	0.50	Pass ‡
2,818.38	-0.60	-0.04	-0.50	0.50	Pass ‡
2,985.38	-0.66	-0.04	-0.50	0.50	Pass ‡
3,162.28	-0.76	-0.08	-0.50	0.50	Pass ‡
3,349.65	-0.83	-0.09	-0.50	0.50	Pass ‡
3,548.13	-0.92	-0.10	-0.50	0.50	Pass ‡
3,758.37	-1.01	-0.11	-0.50	0.50	Pass ‡
3,981.07	-1.11	-0.11	-0.50	0.50	Pass ‡
4,216.97	-1.23	-0.12	-0.56	0.56	Pass ‡
4,466.84	-1.36	-0.13	-0.63	0.63	Pass ‡
4,731.51	-1.50	-0.13	-0.69	0.69	Pass ‡
5,011.87	-1.65	-0.12	-0.75	0.75	Pass ‡
5,308.84	-1.82	-0.12	-0.81	0.81	Pass ‡
5,623.41	-2.00	-0.12	-0.88	0.88	Pass ‡
5,956.62	-2.19	-0.12	-0.94	0.94	Pass ‡
6,309.57	-2.41	-0.12	-1.00	1.00	Pass ‡
6,683.44	-2.64	-0.12	-1.00	1.00	Pass ‡
7,079.46	-2.89	-0.11	-1.00	1.00	Pass ‡
7,498.94	-3.16	-0.09	-1.00	1.00	Pass ‡
7,943.28	-3.48	-0.09	-1.00	1.00	Pass ‡
8,413.95	-3.80	-0.07	-1.00	1.00	Pass ‡
8,912.51	-4.15	-0.04	-1.00	1.00	Pass ‡
9,440.61	-4.61	-0.09	-1.00	1.00	Pass ‡
10,000.00	-5.13	-0.18	-1.00	1.00	Pass ‡
10,592.54	-5.60	-0.20	-1.13	1.13	Pass ‡
11,220.19	-6.14	-0.28	-1.25	1.25	Pass ‡
11,885.02	-6.58	-0.26	-1.38	1.38	Pass ‡
12,589.25	-6.90	-0.13	-1.50	1.50	Pass ‡
13,335.21	-7.23	-0.04	-1.63	1.63	Pass ‡
14,125.38	-7.37	0.22	-1.75	1.75	Pass ‡

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



Frequency [Hz]	Actuator [dB]	Free Field [dB]	Lower limit [dB]	Upper limit [dB]	Result
14,962.36	-7.59	0.38	-1.88	1.88	Pass ‡
15,848.93	-7.80	0.55	-2.00	2.00	Pass ‡
16,788.04	-8.06	0.66	-2.00	2.00	Pass ‡
17,782.80	-8.40	0.71	-2.00	2.00	Pass ‡
18,836.49	-8.81	0.70	-2.00	2.00	Pass ‡
19,952.62	-9.47	0.46	-2.00	2.00	Pass ‡

-- End of measurement results--

Signatory: Abraham Ortega

Larson Davis, a division of PCB Piezotronics, Inc
 1681 West 820 North
 Provo, UT 84601, United States
 716-684-0001



Calibration Certificate

Certificate Number 2015012024

Customer:

Sanchez Industrial Design

Suite 3

4319 Twin Valley Road

Middleton, WI 53562, United States

Model Number 377B02

Serial Number 124044

Test Results Pass

Initial Condition AS RECEIVED same as shipped

Description 1/2 inch Microphone - FF - 0V

Procedure Number D0001.8387

Technician Abraham Ortega

Calibration Date 17 Dec 2015

Calibration Due 17 Dec 2017

Temperature 23.0 °C ± 0.01 °C

Humidity 37.8 %RH ± 0.5 %RH

Static Pressure 101.67 kPa ± 0.03 kPa

Evaluation Method Tested electrically using an electrostatic actuator.

Compliance Standards Compliant to Manufacturer Specifications.

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005.

Test points marked with a ‡ do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the organization issuing this report.

Standards Used

Description	Cal Date	Cal Due	Cal Standard
Larson Davis Model 2900 Real Time Analyzer	07/17/2015	07/17/2016	001230
Microphone Calibration System	09/03/2015	09/03/2016	001233
1/2" Preamplifier	12/15/2015	12/15/2016	001274
Agilent 34401A DMM	12/04/2015	12/04/2016	001329
Larson Davis CAL250 Acoustic Calibrator	01/05/2015	01/05/2016	003030
1/2" Preamplifier	12/15/2015	12/15/2016	006506
Larson Davis 1/2" Preamplifier 7-pin LEMO	09/11/2015	09/11/2016	006507
1/2 inch Microphone - RI - 200V	02/26/2015	02/26/2016	006510
1/2 inch Microphone - RI - 200V	08/12/2015	08/12/2016	006519
Larson Davis 1/2" Preamplifier 7-pin LEMO	09/11/2015	09/11/2016	006530
Larson Davis 1/2" Preamplifier 7-pin LEMO	08/14/2015	08/14/2016	006531

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



Sensitivity

Measurement	Test Result [mV/Pa]	Lower limit [mV/Pa]	Upper limit [mV/Pa]	Expanded Uncertainty [mV/Pa]	Result
Open Circuit Sensitivity	53.03	42.07	59.43	1.20	Pass

-- End of measurement results--

Capacitance

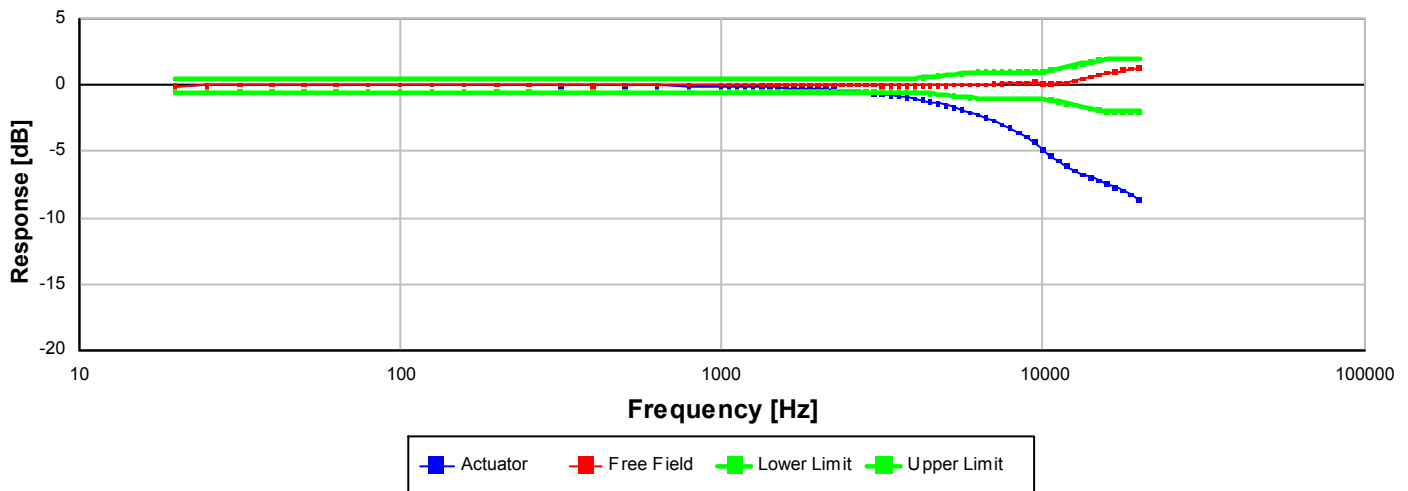
Measurement	Test Result [pF]	
Capacitance	13.00	‡

-- End of measurement results--

Lower Limiting Frequency

Measurement	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Result
-3 dB Frequency	1.71	1.00	2.40	Pass ‡

-- End of measurement results--

Frequency Response

Data is normalized for 0 dB @ 251.19 Hz.

Frequency [Hz]	Actuator [dB]	Free Field [dB]	Lower limit [dB]	Upper limit [dB]	Result
19.95	-0.05	-0.05	-0.50	0.50	Pass ‡
25.12	-0.01	-0.01	-0.50	0.50	Pass ‡
31.62	0.00	0.00	-0.50	0.50	Pass ‡
39.81	0.02	0.02	-0.50	0.50	Pass ‡
50.12	0.02	0.02	-0.50	0.50	Pass ‡
63.10	0.02	0.02	-0.50	0.50	Pass ‡
79.43	0.02	0.02	-0.50	0.50	Pass ‡
100.00	0.02	0.02	-0.50	0.50	Pass ‡
125.89	0.01	0.01	-0.50	0.50	Pass ‡
158.49	0.01	0.01	-0.50	0.50	Pass ‡
199.53	0.01	0.01	-0.50	0.50	Pass ‡

Certificate Number 2015012024

Frequency [Hz]	Actuator [dB]	Free Field [dB]	Lower limit [dB]	Upper limit [dB]	Result
251.19	0.00	0.00	-0.50	0.50	Pass ‡
316.23	-0.01	0.00	-0.50	0.50	Pass ‡
398.11	-0.01	-0.01	-0.50	0.50	Pass ‡
501.19	-0.03	0.01	-0.50	0.50	Pass ‡
630.96	-0.04	0.00	-0.50	0.50	Pass ‡
794.33	-0.06	0.03	-0.50	0.50	Pass ‡
1,000.00	-0.09	0.03	-0.50	0.50	Pass ‡
1,059.25	-0.10	0.03	-0.50	0.50	Pass ‡
1,122.02	-0.11	0.03	-0.50	0.50	Pass ‡
1,188.50	-0.12	0.03	-0.50	0.50	Pass ‡
1,258.93	-0.13	0.03	-0.50	0.50	Pass ‡
1,333.52	-0.14	0.04	-0.50	0.50	Pass ‡
1,412.54	-0.16	0.03	-0.50	0.50	Pass ‡
1,496.24	-0.18	0.02	-0.50	0.50	Pass ‡
1,584.89	-0.20	0.01	-0.50	0.50	Pass ‡
1,678.80	-0.22	0.01	-0.50	0.50	Pass ‡
1,778.28	-0.24	0.01	-0.50	0.50	Pass ‡
1,883.65	-0.27	0.01	-0.50	0.50	Pass ‡
1,995.26	-0.29	0.02	-0.50	0.50	Pass ‡
2,113.49	-0.32	0.02	-0.50	0.50	Pass ‡
2,238.72	-0.36	0.01	-0.50	0.50	Pass ‡
2,371.37	-0.39	0.02	-0.50	0.50	Pass ‡
2,511.89	-0.44	0.02	-0.50	0.50	Pass ‡
2,660.73	-0.48	0.03	-0.50	0.50	Pass ‡
2,818.38	-0.53	0.03	-0.50	0.50	Pass ‡
2,985.38	-0.61	0.01	-0.50	0.50	Pass ‡
3,162.28	-0.70	-0.02	-0.50	0.50	Pass ‡
3,349.65	-0.76	-0.02	-0.50	0.50	Pass ‡
3,548.13	-0.84	-0.02	-0.50	0.50	Pass ‡
3,758.37	-0.93	-0.03	-0.50	0.50	Pass ‡
3,981.07	-1.03	-0.03	-0.50	0.50	Pass ‡
4,216.97	-1.14	-0.03	-0.56	0.56	Pass ‡
4,466.84	-1.26	-0.03	-0.63	0.63	Pass ‡
4,731.51	-1.39	-0.02	-0.69	0.69	Pass ‡
5,011.87	-1.54	-0.01	-0.75	0.75	Pass ‡
5,308.84	-1.69	0.01	-0.81	0.81	Pass ‡
5,623.41	-1.87	0.01	-0.88	0.88	Pass ‡
5,956.62	-2.06	0.01	-0.94	0.94	Pass ‡
6,309.57	-2.26	0.03	-1.00	1.00	Pass ‡
6,683.44	-2.47	0.05	-1.00	1.00	Pass ‡
7,079.46	-2.71	0.07	-1.00	1.00	Pass ‡
7,498.94	-2.96	0.11	-1.00	1.00	Pass ‡
7,943.28	-3.24	0.15	-1.00	1.00	Pass ‡
8,413.95	-3.57	0.16	-1.00	1.00	Pass ‡
8,912.51	-3.90	0.21	-1.00	1.00	Pass ‡
9,440.61	-4.27	0.25	-1.00	1.00	Pass ‡
10,000.00	-4.83	0.12	-1.00	1.00	Pass ‡
10,592.54	-5.32	0.08	-1.13	1.13	Pass ‡
11,220.19	-5.69	0.17	-1.25	1.25	Pass ‡
11,885.02	-6.11	0.21	-1.38	1.38	Pass ‡
12,589.25	-6.45	0.32	-1.50	1.50	Pass ‡
13,335.21	-6.72	0.47	-1.63	1.63	Pass ‡
14,125.38	-6.97	0.62	-1.75	1.75	Pass ‡

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



Frequency [Hz]	Actuator [dB]	Free Field [dB]	Lower limit [dB]	Upper limit [dB]	Result
14,962.36	-7.18	0.79	-1.88	1.88	Pass ‡
15,848.93	-7.44	0.91	-2.00	2.00	Pass ‡
16,788.04	-7.72	1.00	-2.00	2.00	Pass ‡
17,782.80	-7.97	1.14	-2.00	2.00	Pass ‡
18,836.49	-8.25	1.26	-2.00	2.00	Pass ‡
19,952.62	-8.64	1.29	-2.00	2.00	Pass ‡

-- End of measurement results--

Signatory: Abraham Ortega

Larson Davis, a division of PCB Piezotronics, Inc
 1681 West 820 North
 Provo, UT 84601, United States
 716-684-0001



Calibration Certificate

Certificate Number 2015012030

Customer:

Sanchez Industrial Design

Suite 3

4319 Twin Valley Road

Middleton, WI 53562, United States

Model Number 377B02

Serial Number 124228

Test Results Pass

Initial Condition AS RECEIVED same as shipped

Description 1/2 inch Microphone - FF - 0V

Procedure Number D0001.8387

Technician Abraham Ortega

Calibration Date 17 Dec 2015

Calibration Due 17 Dec 2017

Temperature 23.3 °C ± 0.01 °C

Humidity 34.0 %RH ± 0.5 %RH

Static Pressure 101.48 kPa ± 0.03 kPa

Evaluation Method Tested electrically using an electrostatic actuator.

Compliance Standards Compliant to Manufacturer Specifications.

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005.

Test points marked with a ‡ do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the organization issuing this report.

Standards Used

Description	Cal Date	Cal Due	Cal Standard
Larson Davis Model 2900 Real Time Analyzer	07/17/2015	07/17/2016	001230
Microphone Calibration System	09/03/2015	09/03/2016	001233
1/2" Preamplifier	12/15/2015	12/15/2016	001274
Agilent 34401A DMM	12/04/2015	12/04/2016	001329
Larson Davis CAL250 Acoustic Calibrator	01/05/2015	01/05/2016	003030
1/2" Preamplifier	12/15/2015	12/15/2016	006506
Larson Davis 1/2" Preamplifier 7-pin LEMO	09/11/2015	09/11/2016	006507
1/2 inch Microphone - RI - 200V	02/26/2015	02/26/2016	006510
1/2 inch Microphone - RI - 200V	08/12/2015	08/12/2016	006519
Larson Davis 1/2" Preamplifier 7-pin LEMO	09/11/2015	09/11/2016	006530
Larson Davis 1/2" Preamplifier 7-pin LEMO	08/14/2015	08/14/2016	006531

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



Sensitivity

Measurement	Test Result [mV/Pa]	Lower limit [mV/Pa]	Upper limit [mV/Pa]	Expanded Uncertainty [mV/Pa]	Result
Open Circuit Sensitivity	48.34	42.07	59.43	1.10	Pass

-- End of measurement results--

Capacitance

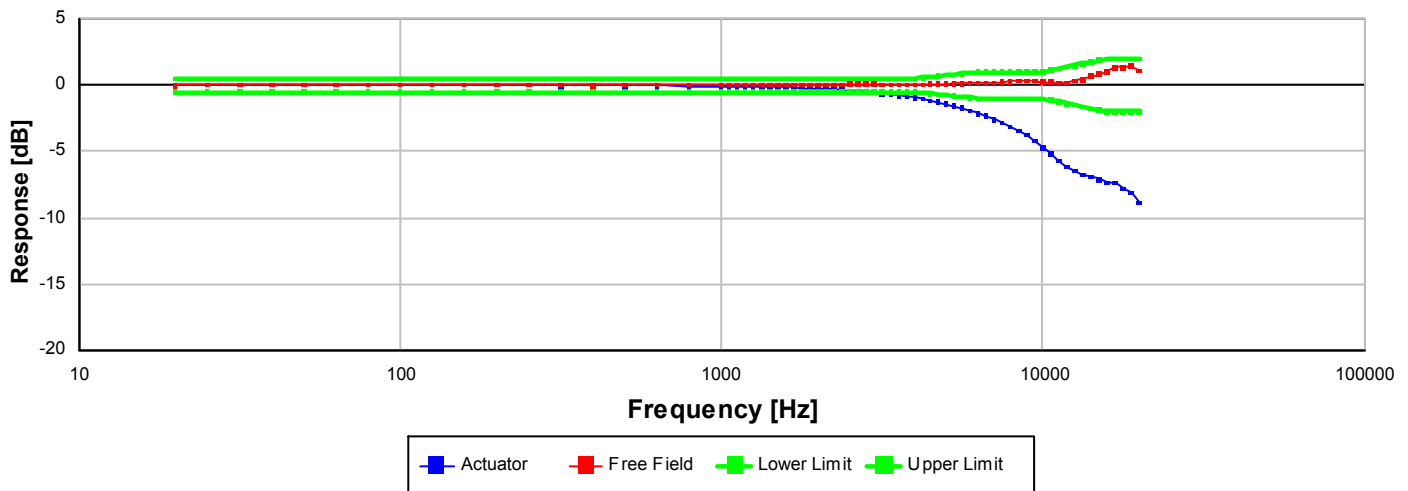
Measurement	Test Result [pF]	
Capacitance	12.00	‡

-- End of measurement results--

Lower Limiting Frequency

Measurement	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Result
-3 dB Frequency	1.41	1.00	2.40	Pass ‡

-- End of measurement results--

Frequency Response

Data is normalized for 0 dB @ 251.19 Hz.

Frequency [Hz]	Actuator [dB]	Free Field [dB]	Lower limit [dB]	Upper limit [dB]	Result
19.95	-0.03	-0.03	-0.50	0.50	Pass ‡
25.12	0.00	0.00	-0.50	0.50	Pass ‡
31.62	0.02	0.02	-0.50	0.50	Pass ‡
39.81	0.02	0.02	-0.50	0.50	Pass ‡
50.12	0.02	0.02	-0.50	0.50	Pass ‡
63.10	0.02	0.02	-0.50	0.50	Pass ‡
79.43	0.02	0.02	-0.50	0.50	Pass ‡
100.00	0.02	0.02	-0.50	0.50	Pass ‡
125.89	0.01	0.01	-0.50	0.50	Pass ‡
158.49	0.01	0.01	-0.50	0.50	Pass ‡
199.53	0.00	0.00	-0.50	0.50	Pass ‡

Certificate Number 2015012030

Frequency [Hz]	Actuator [dB]	Free Field [dB]	Lower limit [dB]	Upper limit [dB]	Result
251.19	0.00	0.00	-0.50	0.50	Pass ‡
316.23	-0.01	0.00	-0.50	0.50	Pass ‡
398.11	-0.01	-0.01	-0.50	0.50	Pass ‡
501.19	-0.02	0.02	-0.50	0.50	Pass ‡
630.96	-0.03	0.01	-0.50	0.50	Pass ‡
794.33	-0.05	0.04	-0.50	0.50	Pass ‡
1,000.00	-0.08	0.04	-0.50	0.50	Pass ‡
1,059.25	-0.08	0.05	-0.50	0.50	Pass ‡
1,122.02	-0.09	0.05	-0.50	0.50	Pass ‡
1,188.50	-0.10	0.05	-0.50	0.50	Pass ‡
1,258.93	-0.11	0.05	-0.50	0.50	Pass ‡
1,333.52	-0.13	0.05	-0.50	0.50	Pass ‡
1,412.54	-0.14	0.05	-0.50	0.50	Pass ‡
1,496.24	-0.16	0.04	-0.50	0.50	Pass ‡
1,584.89	-0.17	0.04	-0.50	0.50	Pass ‡
1,678.80	-0.19	0.04	-0.50	0.50	Pass ‡
1,778.28	-0.21	0.04	-0.50	0.50	Pass ‡
1,883.65	-0.24	0.04	-0.50	0.50	Pass ‡
1,995.26	-0.26	0.05	-0.50	0.50	Pass ‡
2,113.49	-0.29	0.05	-0.50	0.50	Pass ‡
2,238.72	-0.32	0.05	-0.50	0.50	Pass ‡
2,371.37	-0.35	0.06	-0.50	0.50	Pass ‡
2,511.89	-0.39	0.07	-0.50	0.50	Pass ‡
2,660.73	-0.44	0.07	-0.50	0.50	Pass ‡
2,818.38	-0.48	0.08	-0.50	0.50	Pass ‡
2,985.38	-0.53	0.09	-0.50	0.50	Pass ‡
3,162.28	-0.63	0.05	-0.50	0.50	Pass ‡
3,349.65	-0.69	0.05	-0.50	0.50	Pass ‡
3,548.13	-0.77	0.05	-0.50	0.50	Pass ‡
3,758.37	-0.85	0.05	-0.50	0.50	Pass ‡
3,981.07	-0.94	0.06	-0.50	0.50	Pass ‡
4,216.97	-1.05	0.06	-0.56	0.56	Pass ‡
4,466.84	-1.16	0.07	-0.63	0.63	Pass ‡
4,731.51	-1.29	0.08	-0.69	0.69	Pass ‡
5,011.87	-1.43	0.10	-0.75	0.75	Pass ‡
5,308.84	-1.58	0.12	-0.81	0.81	Pass ‡
5,623.41	-1.74	0.14	-0.88	0.88	Pass ‡
5,956.62	-1.92	0.15	-0.94	0.94	Pass ‡
6,309.57	-2.12	0.17	-1.00	1.00	Pass ‡
6,683.44	-2.34	0.18	-1.00	1.00	Pass ‡
7,079.46	-2.57	0.21	-1.00	1.00	Pass ‡
7,498.94	-2.82	0.25	-1.00	1.00	Pass ‡
7,943.28	-3.12	0.27	-1.00	1.00	Pass ‡
8,413.95	-3.42	0.31	-1.00	1.00	Pass ‡
8,912.51	-3.76	0.35	-1.00	1.00	Pass ‡
9,440.61	-4.20	0.32	-1.00	1.00	Pass ‡
10,000.00	-4.70	0.25	-1.00	1.00	Pass ‡
10,592.54	-5.16	0.24	-1.13	1.13	Pass ‡
11,220.19	-5.68	0.18	-1.25	1.25	Pass ‡
11,885.02	-6.12	0.20	-1.38	1.38	Pass ‡
12,589.25	-6.42	0.35	-1.50	1.50	Pass ‡
13,335.21	-6.76	0.43	-1.63	1.63	Pass ‡
14,125.38	-6.89	0.70	-1.75	1.75	Pass ‡

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



Frequency [Hz]	Actuator [dB]	Free Field [dB]	Lower limit [dB]	Upper limit [dB]	Result
14,962.36	-7.12	0.85	-1.88	1.88	Pass ‡
15,848.93	-7.32	1.03	-2.00	2.00	Pass ‡
16,788.04	-7.37	1.35	-2.00	2.00	Pass ‡
17,782.80	-7.77	1.34	-2.00	2.00	Pass ‡
18,836.49	-8.08	1.43	-2.00	2.00	Pass ‡
19,952.62	-8.86	1.07	-2.00	2.00	Pass ‡

-- End of measurement results--

Signatory: Abraham Ortega

Larson Davis, a division of PCB Piezotronics, Inc
 1681 West 820 North
 Provo, UT 84601, United States
 716-684-0001



Calibration Certificate

Certificate Number 2015011847

Customer:

Sanchez Industrial Design

Suite 3

4319 Twin Valley Road

Middleton, WI 53562, United States

Model Number CAL200

Serial Number 9214

Test Results Pass

Initial Condition AS RECEIVED same as shipped

Description Larson Davis CAL200 Acoustic Calibrator

Procedure Number D0001.8386

Technician Scott Montgomery

Calibration Date 11 Dec 2015

Calibration Due 11 Dec 2017

Temperature 24 °C ± 0.3 °C

Humidity 33 %RH ± 3 %RH

Static Pressure 100.9 kPa ± 1 kPa

Evaluation Method The data is acquired by the insert voltage calibration method using the reference microphone's open circuit sensitivity. Data reported in dB re 20 µPa.

Compliance Standards Compliant to Manufacturer Specifications per D0001.8190 and the following standards:
IEC 60942:2003 ANSI S1.40-2006

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005.

Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the organization issuing this report.

Standards Used

Description	Cal Date	Cal Due	Cal Standard
Agilent 34401A DMM	09/04/2015	09/04/2016	001021
Larson Davis Model 2900 Real Time Analyzer	04/07/2015	04/07/2016	001051
Microphone Calibration System	08/20/2015	08/20/2016	005446
1/2" Preamplifier	10/09/2015	10/09/2016	006506
Larson Davis 1/2" Preamplifier 7-pin LEMO	08/20/2015	08/20/2016	006507
1/2 inch Microphone - RI - 200V	02/26/2015	02/26/2016	006510
Pressure Transducer	05/07/2015	05/07/2016	007310

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



Output Level

Nominal Level [dB]	Pressure [kPa]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
94	100.9	94.00	93.80	94.20	0.14	Pass
114	101.0	114.00	113.80	114.20	0.13	Pass

-- End of measurement results--

Frequency

Nominal Level [dB]	Pressure [kPa]	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Expanded Uncertainty [Hz]	Result
94	100.9	1,000.13	990.00	1,010.00	0.20	Pass
114	101.0	1,000.13	990.00	1,010.00	0.20	Pass

-- End of measurement results--

Total Harmonic Distortion + Noise (THD+N)

Nominal Level [dB]	Pressure [kPa]	Test Result [%]	Lower limit [%]	Upper limit [%]	Expanded Uncertainty [%]	Result
94	100.9	0.45	0.00	2.00	0.25	Pass
114	101.0	0.38	0.00	2.00	0.25	Pass

-- End of measurement results--

Level Change Over Pressure

Tested at: 114 dB, 24 °C, 32 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
101.3	101.2	0.00	-0.30	0.30	0.04	Pass
108.0	108.1	-0.04	-0.30	0.30	0.04	Pass
92.0	91.9	0.03	-0.30	0.30	0.04	Pass
83.0	83.1	0.03	-0.30	0.30	0.04	Pass
74.0	74.0	-0.01	-0.30	0.30	0.04	Pass
65.0	65.2	-0.13	-0.30	0.30	0.04	Pass

-- End of measurement results--

Frequency Change Over Pressure

Tested at: 114 dB, 24 °C, 32 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Expanded Uncertainty [Hz]	Result
108.0	108.1	0.00	-10.00	10.00	0.20	Pass
101.3	101.2	0.00	-10.00	10.00	0.20	Pass
92.0	91.9	0.00	-10.00	10.00	0.20	Pass
83.0	83.1	0.00	-10.00	10.00	0.20	Pass
74.0	74.0	0.00	-10.00	10.00	0.20	Pass
65.0	65.2	-0.01	-10.00	10.00	0.20	Pass

-- End of measurement results--

Total Harmonic Distortion + Noise (THD+N) Over Pressure

Tested at: 114 dB, 24 °C, 32 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [%]	Lower limit [%]	Upper limit [%]	Expanded Uncertainty [%]	Result
108.0	108.1	0.37	0.00	2.00	0.25	Pass
101.3	101.2	0.38	0.00	2.00	0.25	Pass
92.0	91.9	0.39	0.00	2.00	0.25	Pass
83.0	83.1	0.41	0.00	2.00	0.25	Pass
74.0	74.0	0.43	0.00	2.00	0.25	Pass
65.0	65.2	0.46	0.00	2.00	0.25	Pass

-- End of measurement results--

Signatory: Scott Montgomery

Larson Davis, a division of PCB Piezotronics, Inc
 1681 West 820 North
 Provo, UT 84601, United States
 716-684-0001



This page is intentionally left blank



Certificate of Calibration and Conformance

Certificate Number 2015-202256

Instrument Model 820, Serial Number 1867, was calibrated on 16 Dec 2015. The instrument meets factory specifications per Procedure D0001.8160, ANSI S1.4 1983, IEC 651-Type 1 1979, and IEC 804-Type 1 1985.

Instrument found to be in calibration as received: NO

Date Calibrated: 16 Dec 2015

Calibration due: 16 Dec 2017

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	LDSigGn/2209	0445 / 0111	12 Months	13 Nov 2016	2015-201964

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 24 ° Centigrade

Relative Humidity: 27 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

See "AS RECEIVED" data.
Tested with PRM828-2884

Signed:

Technician: Eric Olson

Page 1 of 1

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2008 Certified



Certificate of Calibration and Conformance

Certificate Number 2015-202251

Instrument Model PRM828, Serial Number 2884, was calibrated on 16 Dec 2015. The instrument meets factory specifications per Procedure D0001.8135.

Instrument found to be in calibration as received: YES

Date Calibrated: 16 Dec 2015

Calibration due: 16 Dec 2017

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	2900 / 2239	0608 / 0110	12 Months	17 Dec 2015	2014-197145
Hewlett Packard	34401A	US36023299	12 Months	25 Jun 2016	2015006088

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 24 ° Centigrade

Relative Humidity: 27 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

"AS RECEIVED" data same as shipped data.

Signed:

Technician: Eric Olson

Page 1 of 1

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2008 Certified



Certificate of Calibration and Conformance

Certificate Number 2015-202257

Instrument Model 820, Serial Number 1869, was calibrated on 16 Dec 2015. The instrument meets factory specifications per Procedure D0001.8160, ANSI S1.4 1983, IEC 651-Type 1 1979, and IEC 804-Type 1 1985.

Instrument found to be in calibration as received: YES

Date Calibrated: 16 Dec 2015

Calibration due: 16 Dec 2017

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	LDSigGn/2209	0445 / 0111	12 Months	13 Nov 2016	2015-201964

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 24 ° Centigrade

Relative Humidity: 27 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

"AS RECEIVED" data same as shipped data.

Tested with PRM828-2887

Signed:

Technician: Eric Olson

Page 1 of 1

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2008 Certified



Certificate of Calibration and Conformance

Certificate Number 2015-202252

Instrument Model PRM828, Serial Number 2885, was calibrated on 16 Dec 2015. The instrument meets factory specifications per Procedure D0001.8135.

Instrument found to be in calibration as received: YES

Date Calibrated: 16 Dec 2015

Calibration due: 16 Dec 2017

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	2900 / 2239	0608 / 0110	12 Months	17 Dec 2015	2014-197145
Hewlett Packard	34401A	US36023299	12 Months	25 Jun 2016	2015006088

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 24 ° Centigrade

Relative Humidity: 27 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

"AS RECEIVED" data same as shipped data.

Signed:

Technician: Eric Olson

Page 1 of 1

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2008 Certified



Certificate of Calibration and Conformance

Certificate Number 2015-202258

Instrument Model 820, Serial Number 1871, was calibrated on 16 Dec 2015. The instrument meets factory specifications per Procedure D0001.8160, ANSI S1.4 1983, IEC 651-Type 1 1979, and IEC 804-Type 1 1985.

Instrument found to be in calibration as received: YES

Date Calibrated: 16 Dec 2015

Calibration due: 16 Dec 2017

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	LDSigGn/2239	0653 / 0101	12 Months	15 Apr 2016	2015-199829

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 24 ° Centigrade

Relative Humidity: 27 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

"AS RECEIVED" data same as shipped data.

Tested with PRM828-2885

Signed:

Technician: Eric Olson

Page 1 of 1

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2008 Certified



Certificate of Calibration and Conformance

Certificate Number 2015-202253

Instrument Model PRM828, Serial Number 2887, was calibrated on 16 Dec 2015. The instrument meets factory specifications per Procedure D0001.8135.

Instrument found to be in calibration as received: YES

Date Calibrated: 16 Dec 2015

Calibration due: 16 Dec 2017

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	2900 / 2239	0608 / 0110	12 Months	17 Dec 2015	2014-197145
Hewlett Packard	34401A	US36023299	12 Months	25 Jun 2016	2015006088

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 24 ° Centigrade

Relative Humidity: 27 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

"AS RECEIVED" data same as shipped data.

Signed:

Technician: Eric Olson

Page 1 of 1

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2008 Certified



Certificate of Calibration and Conformance

Certificate Number 2015-202252

Instrument Model PRM828, Serial Number 2885, was calibrated on 16 Dec 2015. The instrument meets factory specifications per Procedure D0001.8135.

Instrument found to be in calibration as received: YES

Date Calibrated: 16 Dec 2015

Calibration due: 16 Dec 2017

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	2900 / 2239	0608 / 0110	12 Months	17 Dec 2015	2014-197145
Hewlett Packard	34401A	US36023299	12 Months	25 Jun 2016	2015006088

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 24 ° Centigrade

Relative Humidity: 27 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

"AS RECEIVED" data same as shipped data.

Signed:

Technician: Eric Olson

Page 1 of 1

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2008 Certified

This page is intentionally left blank

Attachment C: Sound Level Results and Impacts Table

This page is intentionally left blank

Table C-1: Design Hour Noise Levels, dBA, Leq(1h), NSA 1

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]																		
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact				
N1	Horace Mann Middle School	C	67	1	59	63	+4	N	63	+4	N	60	+1	N	60	+1	N	60	N				
N2	Residential	B	67	1	65	68	+3	Y	68	+3	Y	63	-2	N	63	-2	N	66	Y				
N3	Residential	B	67	1	66	69	+3	Y	68	+2	Y	64	-2	N	64	-2	N	66	Y				
N4	Residential	B	67	1	67	69	+2	Y	69	+2	Y	65	-2	N	64	-3	N	67	Y				
N5	Residential	B	67	1	68	70	+2	Y	70	+2	Y	65	-3	N	65	-3	N	68	Y				
N6	Horace Mann Middle School	C	67	1	61	65	+4	N	65	+4	N	61	0	N	61	0	N	62	N				
N7	Residential	B	67	1	64	68	+4	Y	68	+4	Y	63	-1	N	63	-1	N	65	N				
N8	Residential	B	67	1	64	68	+4	Y	68	+4	Y	63	-1	N	63	-1	N	65	N				
N9	Residential	B	67	1	71	75	+4	Y	75	+4	Y	69	-2	Y	69	-2	Y	72	Y				
N10	Residential	B	67	1	69	72	+3	Y	72	+3	Y	70	+1	Y	70	+1	Y	70	Y				
N11	Residential	B	67	2	66	69	+3	Y	69	+3	Y	67	+1	Y	67	+1	Y	67	Y				
N12	Oakland Fraternal Cemetery	C	67	1	58	62	+4	N	62	+4	N	59	+1	N	59	+1	N	58	N				
N13	Residential	B	67	1	63	66	+3	Y	66	+3	Y	65	+2	N	65	+2	N	64	N				
N14	Residential	B	67	1	63	66	+3	Y	66	+3	Y	65	+2	N	65	+2	N	64	N				
N15	Residential	B	67	1	63	66	+3	Y	66	+3	Y	65	+2	N	65	+2	N	64	N				
N16	Residential	B	67	1	68	70	+2	Y	69	+1	Y	69	+1	Y	69	+1	Y	68	Y				
N17	Residential	B	67	3	64	67	+3	Y	66	+2	Y	65	+1	N	66	+2	Y	64	N				
N18	Residential	B	67	1	63	67	+4	Y	66	+3	Y	66	+3	Y	66	+3	Y	64	N				
N19	Residential	B	67	1	64	67	+3	Y	67	+3	Y	66	+2	Y	66	+2	Y	64	N				
N20	Residential	B	67	1	64	67	+3	Y	67	+3	Y	66	+2	Y	66	+2	Y	65	N				
N21	Residential	B	67	1	65	68	+3	Y	68	+3	Y	67	+2	Y	67	+2	Y	66	Y				
N22	Residential	B	67	1	66	69	+3	Y	69	+3	Y	68	+2	Y	68	+2	Y	67	Y				
N23	Residential	B	67	3	68	71	+3	Y	71	+3	Y	70	+2	Y	70	+2	Y	69	Y				
N24	Booker Arts Elementary School Playground	C	67	1	65	68	+3	Y	68	+3	Y	67	+2	Y	68	+3	Y	66	Y				
N25	Booker Arts Elementary School Playground	C	67	1	66	68	+2	Y	68	+2	Y	67	+1	Y	67	+1	Y	67	Y				
N26	Booker Arts Elementary	C	67	1	63	65	+2	N	64	+1	N	63	0	N	64	+1	N	63	N				
N27	Booker Arts Elementary School Active Sports Area	C	67	1	67	67	0	Y	67	0	Y	65	-2	N	65	-2	N	68	Y				
N28	Cemetery	C	67	1	61	63	+2	N	63	+2	N	62	+1	N	62	+1	N	61	N				
N29	Cemetery	C	67	1	56	59	+3	N	59	+3	N	58	+2	N	58	+2	N	57	N				
N30	Residential	B	67	1	61	63	+2	N	63	+2	N	61	0	N	62	+1	N	62	N				
N31	Residential	B	67	1	60	62	+2	N	62	+2	N	61	+1	N	61	+1	N	60	N				
N32	Residential	B	67	1	59	61	+2	N	61	+2	N	60	+1	N	61	+2	N	60	N				
N33	Residential	B	67	1	59	61	+2	N	61	+2	N	60	+1	N	60	+1	N	59	N				
N34	Residential	B	67	1	58	60	+2	N	60	+2	N	59	+1	N	59	+1	N	58	N				
N35	Residential	B	67	1	61	63	+2	N	63	+2	N	62	+1	N	62	+1	N	62	N				
N36	Residential	B	67	1	61	63	+2	N	63	+2	N	62	+1	N	62	+1	N	62	N				
N37	Residential	B	67	1	61	63	+2	N	63	+2	N	61	0	N	62	+1	N	62	N				
N38	Residential	B	67	1	61	62	+1	N	62	+1	N	61	0	N	62	+1	N	62	N				
N39	Residential	B	67	3	57	59	+2	N	59	+2	N	59	+2	N	59	+2	N	58	N				
N40	Residential	B	67	4	60	62	+2	N	62	+2	N	61	+1	N	61	+1	N	61	N				
N41	Residential	B	67	1	59	61	+2	N	61	+2	N	60	+1	N	61	+2	N	60	N				
N42	Residential	B	67	2	58	60	+2	N	60	+2	N	60	+2	N	60	+2	N	59	N				
N43	Residential	B	67	1	57	59	+2	N	59	+2	N	59	+2	N	59	+2	N	58	N				
N44	Residential	B	67	4	58	61	+3	N	61	+3	N	60	+2	N	60	+2	N	59	N				
N45	Residential	B	67	2	57	60	+3	N	60	+3	N	59	+2	N	59	+2	N	58	N				
N46	Residential	B	67	1	59	62	+3	N	62	+3	N	61	+2	N	61	+2	N	60	N				
N47	Residential	B	67	1	60	62	+2	N	62	+2	N	61	+1	N	62	+2	N	60	N				
N48	Residential	B	67	1	60	62	+2	N	63	+3	N	62	+2	N	63	+3	N	61	N				
N49	Residential	B	67	1	61	64	+3	N	64	+3	N	63	+2	N	64	+3	N	61	N				
N50	Residential	B	67	1	59	62	+3	N	62	+3	N	61	+2	N	62	+3	N	60	N				
	Summary	NAC B, C	Total Receptors	65	Min level, change, and num of "Y" impacts on Receivers	59	0	23	59	0	23	58	0	12	58	0	13						
	Total Number of Receivers	50			Max level, change, and num of "N" impacts on Receivers	75	+4	27	75	+4	27	70	+3	38	70	+3	37						
	NAC B Receivers	41			Number and Type of Impacted Receptors: Residences			25			25			13			16						
	NAC C Receivers	9			Number and Type of Impacted Receptor: School Playground and active sports area			3			3			2			2						
					Total Number of Impacted Receptors			28			28			15			18						
					Existing Noise Min.			56												Number of Impacted Receptors for FNB:			
					Existing Noise Max.			71															
					6LN SPUI Min. Impacted	66			6LN SDI Min. Impacted	66			8 LN SPUI Min. Impacted	66			8 LN SDI Min. Impacted	66					
					6LN SPUI Max. Impacted	75			6LN SDI Max. Impacted	75			8 LN SPUI Max. Impacted	70			8 LN SDI Max. Impacted	70					
																		FNB Min:	57				
																		FNB Max:	72				

Table C-2: Design Hour Noise Levels, dBA, Leq(1h), NSA 2

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N51	Residential	B	67	1	62	64	+2	N	64	+2	N	64	+2	N	64	+2	N	63	N
N52	Residential	B	67	1	63	64	+1	N	64	+1	N	65	+2	N	64	+1	N	64	N
N53	Residential	B	67	4	60	64	+4	N	64	+4	N	64	+4	N	64	+4	N	61	N
N54	Residential	B	67	1	63	64	+1	N	64	+1	N	65	+2	N	64	+1	N	64	N
N55	Residential	B	67	1	63	66	+3	Y	66	+3	Y	66	+3	Y	66	+3	Y	63	N
N56	Residential	B	67	1	62	66	+4	Y	66	+4	Y	66	+4	Y	66	+4	Y	63	N
N57	Residential	B	67	1	62	66	+4	Y	66	+4	Y	66	+4	Y	66	+4	Y	63	N
N58	Residential	B	67	1	62	66	+4	Y	66	+4	Y	66	+4	Y	66	+4	Y	63	N
N59	Residential	B	67	1	62	66	+4	Y	66	+4	Y	66	+4	Y	66	+4	Y	63	N
N60	Residential	B	67	1	64	67	+3	Y	67	+3	Y	67	+3	Y	67	+3	Y	64	N
N61	Residential	B	67	4	60	63	+3	N	63	+3	N	64	+4	N	64	+4	N	60	N
N62	Residential	B	67	2	61	65	+4	N	64	+3	N	65	+4	N	65	+4	N	62	N
N63	Residential	B	67	2	60	63	+3	N	63	+3	N	63	+3	N	63	+3	N	60	N
N64	Residential	B	67	2	62	65	+3	N	65	+3	N	65	+3	N	65	+3	N	63	N
N65	Residential	B	67	1	66	65	-1	N	65	-1	N	66	0	Y	66	0	Y	66	Y
N66	Residential	B	67	3	60	63	+3	N	63	+3	N	63	+3	N	63	+3	N	60	N
N67	Residential	B	67	1	65	65	0	N	65	0	N	66	+1	Y	65	0	N	65	N
N68	Residential	B	67	1	64	65	+1	N	65	+1	N	65	+1	N	65	+1	N	65	N
N69	Residential	B	67	3	64	66	+2	Y	65	+1	N	66	+2	Y	65	+1	N	64	N
N70	Residential	B	67	2	67	67	0	Y	67	0	Y	67	0	Y	67	0	Y	67	Y
N71	Residential	B	67	5	61	63	+2	N	63	+2	N	64	+3	N	63	+2	N	61	N
N72	Residential	B	67	1	63	66	+3	Y	65	+2	N	66	+3	Y	65	+2	N	64	N
N73	Residential	B	67	1	67	67	0	Y	67	0	Y	68	+1	Y	67	0	Y	67	Y
N74	Residential	B	67	2	61	64	+3	N	63	+2	N	64	+3	N	63	+2	N	61	N
N75	Residential	B	67	3	63	66	+3	Y	66	+3	Y	66	+3	Y	66	+3	Y	64	N
N76	Residential	B	67	1	66	67	+1	Y	67	+1	Y	68	+2	Y	67	+1	Y	66	Y
N77	Restaurant	E	72	1	68	69	+1	N	69	+1	N	70	+2	N	69	+1	N	69	N
N78	Residential	B	67	1	60	64	+4	N	63	+3	N	64	+4	N	63	+3	N	60	N
N79	St. Paul Baptist Church	D	52	1	40	40	0	N	40	0	N	40	0	N	40	0	N	40	N
N81	Residential	B	67	4	68	69	+1	Y	69	+1	Y	70	+2	Y	69	+1	Y	68	Y
	Summary	NAC B, D, E	Total Receptors	54	Min level, change, and num of "Y" impacts on Receivers	40	0	13	40	0	11	40	0	15	40	0	12		
	Total Number of Receivers	30			Max level, change, and num of "N" impacts on Receivers	69	+4	17	69	+4	19	70	+4	15	69	+4	18		
	NAC B Receivers	28			Number and Type of Impacted Receptors: Residences			21			17			23			18		
	NAC D Receivers	1			Total Number of Impacted Receptors			21			17			23			18		
	NAC E Receivers	1			Existing Noise Min.			40											
					Existing Noise Max.			68											
					6LN SPUI Min. Impacted	66			6LN SDI Min. Impacted	66			8 LN SPUI Min. Impacted	66			8 LN SDI Min. Impacted	66	Number of Impacted Receptors for FNB: FNB Min: FNB Max:
					6LN SPUI Max. Impacted	69			6LN SDI Max. Impacted	69			8 LN SPUI Max. Impacted	70			8 LN SDI Max. Impacted	69	

Table C-3: Design Hour Noise Levels, dBA, Leq(1h), NSA 3

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N82	Homeless Shelter	C	67	1	61	66	+5	Y	65	+4	N	65	+4	N	65	+4	N	62	N
N83	Homeless Shelter	C	67	1	58	63	+5	N	63	+5	N	63	+5	N	63	+5	N	59	N
N84	Homeless Shelter	C	67	1	61	66	+5	Y	65	+4	N	65	+4	N	65	+4	N	62	N
N85	Homeless Shelter	C	67	1	65	69	+4	Y	69	+4	Y	67	+2	Y	67	+2	Y	66	Y
N86	Greater Madedonia Baptist Church	D	52	1	40	43	+3	N	43	+3	N	41	+1	N	41	+1	N	40	N
N87	Residential	B	67	1	67	71	+4	Y	71	+4	Y	68	+1	Y	68	+1	Y	68	Y
N88	Residential	B	67	3	60	65	+5	N	64	+4	N	63	+3	N	63	+3	N	61	N
N89	Residential	B	67	4	59	64	+5	N	64	+5	N	63	+4	N	63	+4	N	60	N
N90	Residential	B	67	3	62	66	+4	Y	66	+4	Y	65	+3	N	65	+3	N	62	N
N91	Residential	B	67	6	66	71	+5	Y	70	+4	Y	69	+3	Y	69	+3	Y	67	Y
N92	Residential	B	67	1	69	73	+4	Y	72	+3	Y	73	+4	Y	73	+4	Y	69	Y
N93	Residential	B	67	1	68	72	+4	Y	72	+4	Y	72	+4	Y	72	+4	Y	68	Y
N94	Residential	B	67	1	66	70	+4	Y	70	+4	Y	70	+4	Y	70	+4	Y	67	Y
N95	Residential	B	67	1	65	69	+4	Y	68	+3	Y	68	+3	Y	68	+3	Y	65	N
N96	Residential	B	67	1	64	68	+4	Y	68	+4	Y	68	+4	Y	68	+4	Y	65	N
N97	Residential	B	67	5	58	62	+4	N	62	+4	N	62	+4	N	62	+4	N	59	N
N98	Residential	B	67	1	60	65	+5	N	64	+4	N	64	+4	N	64	+4	N	61	N
N99	Residential	B	67	1	62	66	+4	Y	66	+4	Y	66	+4	Y	66	+4	Y	63	N
N100	Residential	B	67	3	62	66	+4	Y	66	+4	Y	66	+4	Y	65	+3	N	62	N
N101	Residential	B	67	1	68	69	+1	Y	69	+1	Y	69	+1	Y	69	+1	Y	68	Y
N102	Residential	B	67	1	69	70	+1	Y	70	+1	Y	70	+1	Y	69	0	Y	69	Y
N103	Residential	B	67	6	58	62	+4	N	62	+4	N	62	+4	N	62	+4	N	58	N
N104	Living Word Church	D	52	1	40	40	0	N	40	0	N	40	0	N	40	0	N	40	N
N105	Residential	B	67	1	69	70	+1	Y	70	+1	Y	70	+1	Y	70	+1	Y	70	Y
N106	Residential	B	67	2	59	63	+4	N	63	+4	N	63	+4	N	63	+4	N	60	N
N107	Residential	B	67	1	61	65	+4	N	65	+4	N	65	+4	N	65	+4	N	62	N
N108	Hotel	E	71	1	63	67	+4	N	66	+3	N	67	+4	N	66	+3	N	64	N
N109	Residential	B	67	3	57	60	+3	N	60	+3	N	60	+3	N	60	+3	N	57	N
N110	Residential	B	67	3	56	60	+4	N	60	+4	N	60	+4	N	60	+4	N	57	N
N111	Residential	B	67	3	58	62	+4	N	62	+4	N	62	+4	N	62	+4	N	59	N
N112	Residential	B	67	1	62	66	+4	Y	66	+4	Y	66	+4	Y	66	+4	Y	63	N
N113	Residential	B	67	1	63	67	+4	Y	67	+4	Y	67	+4	Y	67	+4	Y	63	N
N114	Residential	B	67	1	63	67	+4	Y	67	+4	Y	67	+4	Y	67	+4	Y	63	N
N115	Residential	B	67	1	66	70	+4	Y	69	+3	Y	69	+3	Y	69	+3	Y	66	Y
N116	Residential	B	67	1	63	67	+4	Y	67	+4	Y	67	+4	Y	67	+4	Y	64	N
N117	Residential	B	67	2	53	57	+4	N	56	+3	N	56	+3	N	56	+3	N	53	N
N118	Residential	B	67	4	66	71	+5	Y	70	+4	Y	70	+4	Y	70	+4	Y	67	Y
N119	Residential	B	67	2	67	71	+4	Y	70	+3	Y	70	+3	Y	70	+3	Y	67	Y
N120	Residential	B	67	2	66	71	+5	Y	70	+4	Y	70	+4	Y	70	+4	Y	66	Y
N121	Residential	B	67	2	66	70	+4	Y	70	+4	Y	70	+4	Y	70	+4	Y	66	Y
N122	Residential	B	67	5	61	65	+4	N	65	+4	N	65	+4	N	65	+4	N	61	N
N123	Residential	B	67	1	66	70	+4	Y	70	+4	Y	70	+4	Y	70	+4	Y	66	Y
N124	Residential	B	67	1	61	65	+4	N	65	+4	N	65	+4	N	65	+4	N	61	N
N125	Residential	B	67	1	62	67	+5	Y	66	+4	Y	67	+5	Y	66	+4	Y	63	N
N126	Residential	B	67	1	63	67	+4	Y	67	+4	Y	67	+4	Y	67	+4	Y	63	N
N127	Residential	B	67	1	63	68	+5	Y	68	+5	Y	68	+5	Y	68	+5	Y	64	N
N128	Residential	B	67	2	64	69	+5	Y	69	+5	Y	69	+5	Y	68	+4	Y	65	N
N129	Residential	B	67	1	65	70	+5	Y	70	+5	Y	69	+4	Y	69	+4	Y	66	Y
N130	Residential	B	67	1	66	70	+4	Y	70	+4	Y	69	+3	Y	69	+3	Y	66	Y
N131	Residential	B	67	1	66	71	+5	Y	70	+4	Y	70	+4	Y	70	+4	Y	67	Y
N132	Residential	B	67	1	59	63	+4	N	63	+4	N	63	+4	N	63	+4	N	59	N
N133	Residential	B	67	1	59	62	+3	N	62	+3	N	62	+3	N	62	+3	N	59	N
N134	Residential	B	67	1	58	61	+3	N	61	+3	N	62	+4	N	61	+3	N	59	N
N135	Residential	B	67	1	57	60	+3	N	61	+4	N	60	+3	N	60	+3	N	57	N
N136	Residential	B	67	1	57	60	+3	N	61	+4	N	60	+3	N	60	+3	N	58	N
N137	Residential	B	67	1	57	61	+4	N	61	+4	N	61	+4	N	60	+3	N	58	N
N138	Residential	B	67	1	57	61	+4	N	61	+4	N	61	+4	N	61	+4	N	58	N
N139	Residential	B	67	1	58	61	+3	N	62	+4	N	61	+3	N	61	+3	N	59	N
N140	Residential	B	67	1	59	62	+3	N	62	+3	N	62	+3	N	62	+3	N	59	N
N141	Residential	B	67	1	60	63	+3	N	63	+3	N	63	+3	N	63	+3	N	60	N
N142	Residential	B	67	1	66	69	+3	Y	69	+3	Y	69	+3	Y	69	+3	Y	66	Y
N143	Rockefeller Magnet Elementary School	C	67	1	58	61	+3	N	62	+4	N	61	+3	N	61	+3	N	58	N
N144	Church of Christ Eastside	D	52	1	40	40	0	N	40	0	N	40	0	N	40	0	N	40	N
N145	Residential	B	67	5	57	60	+3	N	60	+3	N	60	+3	N	60	+3	N	58	N
N146	Rockefeller Magnet Elementary School	C	67	1	58	63	+5	N	62	+4	N	62	+4	N	62	+4	N	58	N
N147	Rockefeller Magnet Elementary School	C	67	1	59	64	+5	N	64	+5	N	64	+5	N	63	+4	N	60	N
N148	Residential	B	67	2	55	57	+2	N	57	+2	N	57	+2	N	57	+2	N	56	N
N149	Residential	B	67	2	57	60	+3	N	60	+3	N	60	+3	N	60	+3	N	58	N
N150	Residential	B	67	3	58	62	+4	N	62	+4	N	62	+4	N	62	+4	N	59	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]																
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact		
N151	Rockefeller Magnet Elementary School	C	67	1	59	64	+5	N	65	+6	N	64	+5	N	64	+5	N	60	N		
N152	Rockefeller Magnet Elementary School	C	67	1	57	63	+6	N	63	+6	N	63	+6	N	62	+5	N	57	N		
N153	Residential - Apts	B	67	20	54	55	+1	N	56	+2	N	55	+1	N	55	+1	N	56	N		
N154	Residential	B	67	5	54	56	+2	N	57	+3	N	56	+2	N	56	+2	N	56	N		
N155	Residential	B	67	4	57	60	+3	N	60	+3	N	59	+2	N	59	+2	N	59	N		
N156	Residential	B	67	2	58	60	+2	N	60	+2	N	60	+2	N	60	+2	N	59	N		
N157	Residential	B	67	1	58	60	+2	N	61	+3	N	60	+2	N	60	+2	N	59	N		
N158	Residential	B	67	1	58	61	+3	N	62	+4	N	61	+3	N	61	+3	N	60	N		
N159	Residential	B	67	1	59	62	+3	N	62	+3	N	62	+3	N	62	+3	N	60	N		
N160	Residential	B	67	1	59	62	+3	N	63	+4	N	62	+3	N	62	+3	N	60	N		
N161	Residential	B	67	1	59	63	+4	N	64	+5	N	63	+4	N	63	+4	N	61	N		
N162	Residential	B	67	1	60	64	+4	N	65	+5	N	64	+4	N	64	+4	N	61	N		
N163	Residential	B	67	1	58	60	+2	N	61	+3	N	60	+2	N	60	+2	N	60	N		
N164	Residential	B	67	1	54	55	+1	N	56	+2	N	55	+1	N	55	+1	N	56	N		
N165	Residential	B	67	7	58	59	+1	N	60	+2	N	59	+1	N	59	+1	N	60	N		
N166	Residential	B	67	1	59	61	+2	N	62	+3	N	61	+2	N	61	+2	N	62	N		
N167	Residential	B	67	1	61	63	+2	N	63	+2	N	63	+2	N	63	+2	N	64	N		
N168	Residential	B	67	2	54	56	+2	N	57	+3	N	56	+2	N	56	+2	N	57	N		
N169	Residential	B	67	1	60	62	+2	N	63	+3	N	62	+2	N	62	+2	N	64	N		
N170	Residential	B	67	1	55	56	+1	N	57	+2	N	56	+1	N	56	+1	N	58	N		
N171	Residential	B	67	1	62	64	+2	N	64	+2	N	64	+2	N	63	+1	N	65	N		
N172	Residential	B	67	1	55	57	+2	N	57	+2	N	56	+1	N	57	+2	N	59	N		
N173	Residential	B	67	2	56	58	+2	N	58	+2	N	57	+1	N	57	+1	N	60	N		
N174	Residential	B	67	1	56	57	+1	N	58	+2	N	57	+1	N	57	+1	N	59	N		
N175	Residential	B	67	3	56	58	+2	N	58	+2	N	57	+1	N	58	+2	N	59	N		
N176	Residential	B	67	1	57	58	+1	N	59	+2	N	58	+1	N	58	+1	N	60	N		
N177	Residential	B	67	1	57	59	+2	N	59	+2	N	59	+2	N	59	+2	N	60	N		
N178	Residential	B	67	1	58	59	+1	N	60	+2	N	59	+1	N	59	+1	N	60	N		
N179	Residential	B	67	1	60	61	+1	N	62	+2	N	61	+1	N	61	+1	N	63	N		
N180	Residential	B	67	1	60	61	+1	N	62	+2	N	61	+1	N	61	+1	N	62	N		
N181	Law Office	E	72	1	58	59	+1	N	60	+2	N	59	+1	N	59	+1	N	59	N		
	Summary	NAC B, C, D, E	Total Receptors	187	Min level, change, and num of "Y" impacts on Receivers	40	0	34	40	0	32	40	0	31	40	0	30				
	Total Number of Receivers	100		Max level, change, and num of "N" impacts on Receivers	73	+6	66	72	+6	68	73	+6	69	73	+5	70					
	NAC B Receivers	86		Number and Type of Impacted Receptors: Residences			47			47			44			41					
	NAC C Receivers	9		Number and Type of Impacted Receptors: Homeless Shelter			3			1			1			1					
	NAC D Receivers	3		Total Number of Impacted Receptors			50			48			45			42					
	NAC E Receivers	2		Existing Noise Min.			40									Number of Impacted Receptors for FNB:		30			
		Existing Noise Max.	69	FNB Min:			40														
			6LN SPUI Min. Impacted	66	6LN SDI Min. Impacted	66	8 LN SPUI Min. Impacted	66	8 LN SDI Min. Impacted	66	FNB Max:	70									
			6LN SPUI Max. Impacted	73	6LN SDI Max. Impacted	72	8 LN SPUI Max. Impacted	73	8 LN SDI Max. Impacted	73											

Table C-4: Design Hour Noise Levels, dBA, Leq(1h), NSA 4

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N182	Residential	B	67	3	62	62	0	N	62	0	N	61	-1	N	62	0	N	62	N
N183	Residential	B	67	1	62	62	0	N	62	0	N	61	-1	N	62	0	N	62	N
N184	Residential	B	67	1	61	61	0	N	61	0	N	60	-1	N	61	0	N	61	N
N185	Residential	B	67	1	61	61	0	N	61	0	N	61	0	N	62	+1	N	61	N
N186	Residential	B	67	1	60	60	0	N	60	0	N	60	0	N	61	+1	N	60	N
N187	Residential	B	67	1	60	60	0	N	60	0	N	60	0	N	61	+1	N	60	N
N188	Residential	B	67	1	60	60	0	N	60	0	N	60	0	N	61	+1	N	60	N
N189	Residential	B	67	1	59	60	+1	N	60	+1	N	59	0	N	60	+1	N	59	N
N190	Residential	B	67	1	56	58	+2	N	56	0	N	57	+1	N	57	+1	N	56	N
N191	Residential	B	67	2	59	60	+1	N	59	0	N	59	0	N	60	+1	N	59	N
N192	Residential	B	67	1	59	60	+1	N	60	+1	N	59	0	N	60	+1	N	59	N
N193	Residential	B	67	1	57	59	+2	N	55	-2	N	58	+1	N	55	-2	N	57	N
N194	Residential	B	67	1	58	58	0	N	58	0	N	58	0	N	58	0	N	58	N
N195	Residential	B	67	2	60	60	0	N	60	0	N	59	-1	N	60	0	N	60	N
N196	Residential	B	67	1	57	59	+2	N	55	-2	N	57	0	N	55	-2	N	57	N
N197	Immanuel Outreach Church Ministries	D	52	1	40	40	0	N	40	0	N	40	0	N	40	0	N	40	N
N198	Residential	B	67	2	56	57	+1	N	56	0	N	56	0	N	56	0	N	55	N
N199	Residential	B	67	2	53	55	+2	N	54	+1	N	53	0	N	54	+1	N	52	N
N200	Residential	B	67	2	59	61	+2	N	59	0	N	59	0	N	59	0	N	57	N
N201	Residential	B	67	2	59	61	+2	N	59	0	N	59	0	N	59	0	N	57	N
N202	Residential	B	67	5	55	57	+2	N	57	+2	N	55	0	N	57	+2	N	53	N
N203	Residential	B	67	1	64	67	+3	Y	66	+2	Y	65	+1	N	65	+1	N	62	N
N204	Residential	B	67	1	63	66	+3	Y	65	+2	N	63	0	N	64	+1	N	61	N
N205	Residential	B	67	1	59	61	+2	N	60	+1	N	58	-1	N	60	+1	N	57	N
N206	Residential	B	67	3	52	55	+3	N	55	+3	N	53	+1	N	54	+2	N	51	N
N207	Residential	B	67	3	62	64	+2	N	64	+2	N	61	-1	N	63	+1	N	59	N
N208	Residential	B	67	1	58	59	+1	N	59	+1	N	57	-1	N	58	0	N	56	N
N209	Residential	B	67	2	57	58	+1	N	58	+1	N	56	-1	N	58	+1	N	54	N
N210	Residential	B	67	5	54	56	+2	N	57	+3	N	55	+1	N	56	+2	N	52	N
N211	Residential	B	67	1	56	58	+2	N	59	+3	N	57	+1	N	58	+2	N	54	N
N212	Office	E	72	1	57	59	+2	N	60	+3	N	58	+1	N	59	+2	N	55	N
N213	Law Office	E	72	1	54	56	+2	N	56	+2	N	55	+1	N	56	+2	N	52	N
N214	Residential	B	67	2	54	57	+3	N	57	+3	N	55	+1	N	56	+2	N	52	N
N215	Residential	B	67	3	53	55	+2	N	56	+3	N	54	+1	N	55	+2	N	51	N
N216	Hotel	E	72	1	70	70	0	N	70	0	N	70	0	N	69	-1	N	64	N
N217	Office	E	72	1	54	57	+3	N	58	+4	N	57	+3	N	59	+5	N	51	N
N218	Museum	C	67	1	54	57	+3	N	59	+5	N	58	+4	N	59	+5	N	52	N
N219	Library & Museum	C	67	1	53	56	+3	N	58	+5	N	57	+4	N	57	+4	N	51	N
N220	River Trail	C	67	1	58	61	+3	N	62	+4	N	61	+3	N	62	+4	N	59	N
N222	River Trail	C	67	1	57	59	+2	N	60	+3	N	60	+3	N	60	+3	N	56	N
N223	River Trail	C	67	1	55	58	+3	N	59	+4	N	58	+3	N	58	+3	N	53	N
N224	River Trail	C	67	1	55	57	+2	N	58	+3	N	57	+2	N	58	+3	N	54	N
N225	River Trail	C	67	1	54	56	+2	N	57	+3	N	57	+3	N	57	+3	N	53	N
Summary	Summary	NAC B, C, D, E	Total Receptors	67	Min level, change, and num of "Y" impacts on Receivers	40	0	2	40	0	1	40	0	0	40	0	0		
	Total Number of Receivers	43			Max level, change, and num of "N" impacts on Receivers	70	+3	41	70	+5	42	70	+4	43	69	+5	43		
	NAC B Receivers	31			Number and Type of Impacted Receptors: Residences			2			1			0			0		
	NAC C Receivers	6			Total Number of Impacted Receptors			2			1			0			0		
	NAC D Receivers	1	Existing Noise Min. Existing Noise Max.	40															Number of Impacted Receptors for FNB:
	NAC E Receivers	4		70													0		
				6LN SPUI Min. Impacted	66			6LN SDI Min. Impacted	66			8 LN SPUI Min. Impacted	N/A			8 LN SDI Min. Impacted	N/A	FNB Min:	
				6LN SPUI Max. Impacted	67			6LN SDI Max. Impacted	66			8 LN SPUI Max. Impacted	N/A			8 LN SDI Max. Impacted	N/A	FNB Max:	64

This page is intentionally left blank

Table C-5: Design Hour Noise Levels, dBA, Leq(1h), NSA 5

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]															
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Existing Noise Level Impact	Future No Build Noise Impact
N226	Residential	B	67	1	60	61	+1	N	62	+2	N	62	+2	N	61	+1	N	60	N	N
N227	Residential	B	67	1	58	60	+2	N	60	+2	N	60	+2	N	59	+1	N	58	N	N
N229	MacArthur Park	C	67	1	59	61	+2	N	61	+2	N	61	+2	N	60	+1	N	58	N	N
N230	MacArthur Park	C	67	1	61	63	+2	N	64	+3	N	63	+2	N	63	+2	N	61	N	N
N231	MacArthur Park	C	67	1	61	63	+2	N	64	+3	N	63	+2	N	63	+2	N	61	N	N
N232	MacArthur Park	C	67	1	63	65	+2	N	66	+3	Y	65	+2	N	65	+2	N	63	N	N
N233	MacArthur Park	C	67	1	63	65	+2	N	66	+3	Y	65	+2	N	65	+2	N	63	N	N
N234	MacArthur Park	C	67	1	68	70	+2	Y	70	+2	Y	70	+2	Y	69	+1	Y	69	Y	Y
N235	MacArthur Park	C	67	1	64	64	0	N	65	+1	N	65	+1	N	64	0	N	64	N	N
N236	MacArthur Park	C	67	1	68	69	+1	Y	69	+1	Y	68	0	Y	68	0	Y	68	Y	Y
N237	MacArthur Park	C	67	1	65	66	+1	Y	66	+1	Y	66	+1	Y	64	-1	N	66	N	Y
N238	MacArthur Park	C	67	1	61	63	+2	N	63	+2	N	62	+1	N	62	+1	N	61	N	N
N239	MacArthur Park	C	67	1	60	61	+1	N	62	+2	N	61	+1	N	60	0	N	60	N	N
N240	MacArthur Park	C	67	1	61	62	+1	N	62	+1	N	62	+1	N	61	0	N	61	N	N
N241	UALR School of Law	C	67	1	60	62	+2	N	64	+4	N	61	+1	N	60	0	N	59	N	N
N242	MacArthur Park	C	67	1	59	60	+1	N	61	+2	N	60	+1	N	60	+1	N	59	N	N
N243	MacArthur Park	C	67	1	59	61	+2	N	61	+2	N	60	+1	N	60	+1	N	59	N	N
N244	MacArthur Park	C	67	1	58	60	+2	N	60	+2	N	59	+1	N	59	+1	N	58	N	N
N245	MacArthur Park	C	67	1	57	59	+2	N	59	+2	N	58	+1	N	58	+1	N	56	N	N
N246	MacArthur Park	C	67	1	58	60	+2	N	60	+2	N	59	+1	N	59	+1	N	57	N	N
N247	MacArthur Park	C	67	1	56	58	+2	N	59	+3	N	58	+2	N	59	+3	N	56	N	N
N248	MacArthur Park	C	67	1	57	59	+2	N	60	+3	N	58	+1	N	59	+2	N	56	N	N
N249	MacArthur Park	C	67	1	57	59	+2	N	60	+3	N	59	+2	N	59	+2	N	57	N	N
N250	MacArthur Park	C	67	1	56	58	+2	N	59	+3	N	58	+2	N	58	+2	N	56	N	N
N251	MacArthur Park	C	67	1	56	58	+2	N	59	+3	N	58	+2	N	58	+2	N	56	N	N
N252	MacArthur Park	C	67	1	55	57	+2	N	58	+3	N	57	+2	N	57	+2	N	55	N	N
N253	MacArthur Park	C	67	1	56	59	+3	N	60	+4	N	58	+2	N	59	+3	N	55	N	N
N254	MacArthur Park	C	67	1	56	58	+2	N	59	+3	N	57	+1	N	58	+2	N	54	N	N
N255	MacArthur Park	C	67	1	57	59	+2	N	60	+3	N	58	+1	N	59	+2	N	55	N	N
N256	MacArthur Park	C	67	1	53	55	+2	N	55	+2	N	59	+6	N	60	+7	N	52	N	N
N257	Bylites Film Production	C	67	1	58	60	+2	N	62	+4	N	63	+5	N	64	+6	N	57	N	N
N258	MacArthur Park	C	67	1	57	59	+2	N	60	+3	N	58	+1	N	60	+3	N	55	N	N
N259	Residential	B	67	1	51	60	+9	N	60	+9	N	52	+1	N	59	+8	N	48	N	N
N261	Residential	B	67	1	50	53	+3	N	54	+4	N	47	-3	N	47	-3	N	50	N	N
N262	Residential - Apts	B	67	6	62	63	+1	N	64	+2	N	66	+4	Y	66	+4	Y	59	N	N
N263	Residential - Apts	B	67	3	71	72	+1	Y	72	+1	Y	71	0	Y	72	+1	Y	66	Y	Y
N264	MacArthur Park	C	67	1	54	57	+3	N	58	+4	N	56	+2	N	57	+3	N	53	N	N
N265	Residential	B	67	1	53	55	+2	N	54	+1	N	53	0	N	53	0	N	51	N	N
N266	Residential	B	67	1	48	49	+1	N	50	+2	N	48	0	N	48	0	N	46	N	N
N267	Restaurant	E	71	1	68	69	+1	N	69	+1	N	69	+1	N	68	0	N	63	N	N
N268	MacArthur Park	C	67	1	56	59	+3	N	59	+3	N	58	+2	N	59	+3	N	54	N	N
N269	MacArthur Park	C	67	1	55	57	+2	N	58	+3	N	59	+4	N	60	+5	N	53	N	N
N270	Restaurant	E	71	1	68	70	+2	N	70	+2	N	70	+2	N	69	+1	N	64	N	N
N271	Residential	B	67	3	62	61	-1	N	62	0	N	64	+2	N	63	+1	N	61	N	N
N272	Residential	B	67	1	62	62	0	N	63	+1	N	65	+3	N	65	+3	N	62	N	N
N273	Residential	B	67	1	58	58	0	N	58	0	N	60	+2	N	60	+2	N	58	N	N
N274	Residential	B	67	1	61	60	-1	N	62	+1	N	64	+3	N	63	+2	N	60	N	N
N275	Residential	B	67	1	50	50	0	N	51	+1	N	54	+4	N	54	+4	N	50	N	N
N276	Residential	B	67	2	62	61	-1	N	63	+1	N	64	+2	N	64	+2	N	61	N	N
N277	Residential	B	67	1	59	59	0	N	59	0	N	60	+1	N	60	+1	N	58	N	N
N278	Residential	B	67	1	49	49	0	N	49	0	N	50	+1	N	50	+1	N	49	N	N
N279	Residential	B	67	4	61	61	0	N	62	+1	N	62	+1	N	62	+1	N	61	N	N
N280	Residential	B	67	2	61	61	0	N	61	0	N	62	+1	N	62	+1	N	60	N	N
N281	School	C	67	1	55	56	+1	N	57	+2	N	57	+2	N	59	+4	N	55	N	N
N282	Condominim Complex Pool	B	67	1	55	56	+1	N	57	+2	N	58	+3	N	59	+4	N	55	N	N
N283	Residential - Condos	B	67	66	57	59	+2	N	61	+4	N	58	+1	N	60	+3	N	56	N	N
N284	St. Edward Catholic School	C	67	1	49	52	+3	N	53	+4	N	57	+8	N	58	+9	N	48	N	N
N285	Residential - Apts	B	67	20	52	54	+2	N	56	+4	N	58	+6	N	59	+7	N	50	N	N
N286	Residential	B	67	1	54	55	+1	N	58	+4	N	59	+5	N	61	+7	N	51	N	N
N287	Residential - Apts	B	67	4	45	47	+2	N	47	+2	N	48	+3	N	49	+4	N	45	N	N
N288	Residential - Apts	B	67	4	48	42	-6	N	50	+2	N	42	-6	N	51	+3	N	46	N	N
N289	Residential	B	67	1	54	56	+2	N	58	+4	N	60	+6	N	61	+7	N	52	N	N
N290	Residential	B	67	2	55	57	+2	N	58	+3	N	60	+5	N	62	+7	N	52	N	N
N291	Residential	B	67	1	43	46	+3	N	46	+3	N	47	+4	N	46	+3	N	45	N	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]															
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Existing Noise Level Impact	Future No Build Noise Impact
N292	Residential	B	67	2	53	53	0	N	53	0	N	51	-2	N	51	-2	N	50	N	N
N293	Hotel	E	71	1	61	62	+1	N	66	+5	Y	62	+1	N	64	+3	N	58	N	N
N294	Office	E	67	1	54	56	+2	N	56	+2	N	58	+4	N	57	+3	N	55	N	N
N295	Residential	B	67	2	53	56	+3	N	56	+3	N	57	+4	N	56	+3	N	56	N	N
N296	Office	B	67	1	52	55	+3	N	55	+3	N	56	+4	N	55	+3	N	55	N	N
N297	Residential	B	67	1	54	57	+3	N	56	+2	N	58	+4	N	57	+3	N	55	N	N
N298	Residential	B	67	2	55	57	+2	N	57	+2	N	58	+3	N	57	+2	N	55	N	N
N299	Residential	B	67	2	54	58	+4	N	58	+4	N	60	+6	N	57	+3	N	57	N	N
N300	Residential	B	67	5	55	58	+3	N	59	+4	N	61	+6	N	58	+3	N	58	N	N
N301	Residential	B	67	1	48	52	+4	N	51	+3	N	53	+5	N	51	+3	N	51	N	N
N302	Residential	B	67	1	55	58	+3	N	59	+4	N	60	+5	N	58	+3	N	58	N	N
N303	Law Office	E	67	1	55	56	+1	N	56	+1	N	56	+1	N	55	0	N	55	N	N
N304	Residential	B	67	1	57	58	+1	N	58	+1	N	58	+1	N	56	-1	N	56	N	N
N305	Residential	B	67	1	62	65	+3	N	64	+2	N	64	+2	N	65	+3	N	58	N	N
N306	Tourist Information Center	C	67	2	51	54	+3	N	54	+3	N	53	+2	N	52	+1	N	50	N	N
N307	Tourist Information Center	C	67	1	58	61	+3	N	61	+3	N	60	+2	N	62	+4	N	54	N	N
N308	Tourist Information Center	C	67	1	61	64	+3	N	63	+2	N	63	+2	N	63	+2	N	56	N	N
N309	Residential	B	67	1	64	66	+2	Y	65	+1	N	65	+1	N	66	+2	Y	59	N	N
N310	Office	B	67	1	58	58	0	N	61	+3	N	56	-2	N	59	+1	N	58	N	N
N311	Residential	B	67	1	57	58	+1	N	60	+3	N	56	-1	N	59	+2	N	57	N	N
N312	Residential	B	67	1	56	58	+2	N	60	+4	N	56	0	N	59	+3	N	56	N	N
N313	Residential	B	67	1	47	50	+3	N	52	+5	N	51	+4	N	52	+5	N	47	N	N
N314	Residential	B	67	1	55	57	+2	N	58	+3	N	55	0	N	57	+2	N	53	N	N
N315	LRSD Student Registration Office	E	72	1	59	62	+3	N	62	+3	N	61	+2	N	62	+3	N	54	N	N
N316	Tourist Information Center	C	67	1	55	57	+2	N	59	+4	N	58	+3	N	59	+4	N	52	N	N
N317	Office	E	72	1	64	65	+1	N	65	+1	N	63	-1	N	65	+1	N	59	N	N
N318	Post Office	E	72	1	61	62	+1	N	64	+3	N	61	0	N	64	+3	N	56	N	N
N319	Hotel	E	72	1	57	59	+2	N	62	+5	N	61	+4	N	64	+7	N	56	N	N
N320	Residential - Apts.	B	67	27	56	55	-1	N	57	+1	N	58	+2	N	61	+5	N	57	N	N
N321-1	Residential	B	67	2	54	52	-2	N	54	0	N	55	+1	N	57	+3	N	54	N	N
N321-10	Residential	B	67	2	54	53	-1	N	53	-1	N	55	+1	N	57	+3	N	54	N	N
N321-11	Residential	B	67	2	53	52	-1	N	53	0	N	55	+2	N	57	+4	N	54	N	N
N321-12	Residential	B	67	2	53	52	-1	N	53	0	N	55	+2	N	57	+4	N	54	N	N
N321-13	Residential	B	67	2	53	52	-1	N	53	0	N	54	+1	N	57	+4	N	54	N	N
N321-14	Residential	B	67	2	54	53	-1	N	53	-1	N	55	+1	N	57	+3	N	54	N	N
N321-2	Residential	B	67	2	54	52	-2	N	54	0	N	55	+1	N	57	+3	N	54	N	N
N321-3	Residential	B	67	2	54	53	-1	N	54	0	N	55	+1	N	57	+3	N	54	N	N
N321-4	Residential	B	67	2	54	53	-1	N	54	0	N	55	+1	N	57	+3	N	54	N	N
N321-5	Residential	B	67	2	54	53	-1	N	53	-1	N	55	+1	N	57	+3	N	54	N	N
N321-6	Residential	B	67	2	54	53	-1	N	53	-1	N	55	+1	N	57	+3	N	54	N	N
N321-7	Residential	B	67	2	54	52	-2	N	53	-1	N	55	+1	N	57	+3	N	54	N	N
N321-8	Residential	B	67	2	54	53	-1	N	53	-1	N	55	+1	N	57	+3	N	54	N	N
N321-9	Residential	B	67	2	54	53	-1	N	53	-1	N	55	+1	N	57	+3	N	54	N	N
N322-1	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-10	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-11	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-12	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-13	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-14	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-2	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-3	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-4	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-5	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-6	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-7	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-8	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N322-9	Residential	B	67	2	55	54	-1	N	54	-1	N	56	+1	N	58	+3	N	55	N	N
N323-1	Residential	B	67	3	60	60	0	N	61	+1	N	62	+2	N	61	+1	N	60	N	N
N323-10	Residential	B	67	3	62	63	+1	N	63	+1	N	63	+1	N	64	+2	N	61	N	N
N323-11	Residential	B	67	3	62	63	+1	N	63	+1	N	64	+2	N	64	+2	N	61	N	N
N323-12	Residential	B	67	3	62	63	+1	N	64	+2	N	64	+2	N	64	+2	N	61	N	N
N323-13	Residential	B	67	3	62	63	+1	N	64	+2	N	64	+2	N	64	+2	N	61	N	N
N323-14	Residential	B	67	3	62	63	+1	N	64	+2	N	64	+2	N	64	+2	N	61	N	N
N323-2	Residential	B	67	3	60	60	0	N	61	+1	N	62	+2	N	62	+2	N	60	N	N
N323-3	Residential	B	67	3	60	61	+1	N	61	+1	N	62	+2	N	62	+2	N	60	N	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]															
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Existing Noise Level Impact	Future No Build Noise Impact
N323-4	Residential	B	67	3	60	61	+1	N	62	+2	N	62	+2	N	62	+2	N	61	N	N
N323-5	Residential	B	67	3	61	61	0	N	62	+1	N	62	+1	N	63	+2	N	61	N	N
N323-6	Residential	B	67	3	61	62	+1	N	63	+2	N	63	+2	N	63	+2	N	61	N	N
N323-7	Residential	B	67	3	61	62	+1	N	63	+2	N	63	+2	N	64	+3	N	61	N	N
N323-8	Residential	B	67	3	62	63	+1	N	63	+1	N	63	+1	N	64	+2	N	61	N	N
N323-9	Residential	B	67	3	62	63	+1	N	63	+1	N	63	+1	N	64	+2	N	61	N	N
N324-1	Residential	B	67	2	57	60	+3	N	60	+3	N	60	+3	N	60	+3	N	54	N	N
N324-10	Residential	B	67	2	60	64	+4	N	64	+4	N	63	+3	N	64	+4	N	57	N	N
N324-11	Residential	B	67	2	60	64	+4	N	64	+4	N	63	+3	N	64	+4	N	57	N	N
N324-12	Residential	B	67	2	60	64	+4	N	64	+4	N	63	+3	N	64	+4	N	57	N	N
N324-13	Residential	B	67	2	61	64	+3	N	64	+3	N	63	+2	N	64	+3	N	57	N	N
N324-14	Residential	B	67	2	61	64	+3	N	64	+3	N	63	+2	N	64	+3	N	57	N	N
N324-2	Residential	B	67	2	58	61	+3	N	61	+3	N	60	+2	N	61	+3	N	55	N	N
N324-3	Residential	B	67	2	58	61	+3	N	61	+3	N	60	+2	N	61	+3	N	55	N	N
N324-4	Residential	B	67	2	58	62	+4	N	62	+4	N	61	+3	N	62	+4	N	55	N	N
N324-5	Residential	B	67	2	59	63	+4	N	62	+3	N	61	+2	N	63	+4	N	56	N	N
N324-6	Residential	B	67	2	60	63	+3	N	63	+3	N	62	+2	N	63	+3	N	56	N	N
N324-7	Residential	B	67	2	60	63	+3	N	63	+3	N	62	+2	N	63	+3	N	56	N	N
N324-8	Residential	B	67	2	60	64	+4	N	63	+3	N	62	+2	N	64	+4	N	56	N	N
N324-9	Residential	B	67	2	60	64	+4	N	63	+3	N	63	+3	N	64	+4	N	57	N	N
N325-1	Residential	B	67	2	57	60	+3	N	60	+3	N	60	+3	N	60	+3	N	55	N	N
N325-10	Residential	B	67	2	61	64	+3	N	64	+3	N	63	+2	N	64	+3	N	58	N	N
N325-11	Residential	B	67	2	61	64	+3	N	64	+3	N	63	+2	N	64	+3	N	58	N	N
N325-12	Residential	B	67	2	61	64	+3	N	64	+3	N	63	+2	N	64	+3	N	58	N	N
N325-13	Residential	B	67	2	61	64	+3	N	64	+3	N	63	+2	N	64	+3	N	58	N	N
N325-14	Residential	B	67	2	61	64	+3	N	64	+3	N	64	+3	N	64	+3	N	58	N	N
N325-2	Residential	B	67	2	58	61	+3	N	60	+2	N	60	+2	N	60	+2	N	56	N	N
N325-3	Residential	B	67	2	58	61	+3	N	61	+3	N	60	+2	N	61	+3	N	56	N	N
N325-4	Residential	B	67	2	59	62	+3	N	62	+3	N	61	+2	N	62	+3	N	56	N	N
N325-5	Residential	B	67	2	60	63	+3	N	62	+2	N	62	+2	N	63	+3	N	57	N	N
N325-6	Residential	B	67	2	60	63	+3	N	63	+3	N	62	+2	N	63	+3	N	57	N	N
N325-7	Residential	B	67	2	60	63	+3	N	63	+3	N	62	+2	N	63	+3	N	58	N	N
N325-8	Residential	B	67	2	60	64	+4	N	63	+3	N	63	+3	N	64	+4	N	58	N	N
N325-9	Residential	B	67	2	61	64	+3	N	64	+3	N	63	+2	N	64	+3	N	58	N	N
N326	Dog Park	C	67	1	60	61	+1	N	62	+2	N	61	+1	N	62	+2	N	60	N	N
N327	Dog Park	C	67	1	61	62	+1	N	63	+2	N	62	+1	N	63	+2	N	61	N	N
N328	Active Sports Area	C	67	1	70	63	-7	N	64	-6	N	63	-7	N	65	-5	N	64	Y	N
N329	Historic Arkansas Museum	C	67	1	60	59	-1	N	61	+1	N	61	+1	N	64	+4	N	62	N	N
N330	Historic Arkansas Museum	C	67	1	61	59	-2	N	61	0	N	60	-1	N	67	+6	Y	61	N	N
N331	Residential- Condo Tower	B	67	1	65	63	-2	N	54	-11	N	63	-2	N	60	-5	N	65	Y	N
N332-1	Residential- Condo Tower	B	67	2	60	59	-1	N	55	-5	N	60	0	N	61	+1	N	60	N	N
N332-2	Residential- Condo Tower	B	67	2	60	59	-1	N	55	-5	N	60	0	N	61	+1	N	60	N	N
N333-1	Residential- Condo Tower	B	67	2	67	67	0	Y	57	-10	N	67	0	Y	59	-8	N	67	Y	Y
N333-10	Residential- Condo Tower	B	67	2	67	67	0	Y	60	-7	N	67	0	Y	61	-6	N	66	Y	Y
N333-11	Residential- Condo Tower	B	67	2	67	67	0	Y	60	-7	N	67	0	Y	61	-6	N	66	Y	Y
N333-12	Residential- Condo Tower	B	67	2	67	67	0	Y	60	-7	N	67	0	Y	62	-5	N	66	Y	Y
N333-13	Residential- Condo Tower	B	67	2	67	67	0	Y	60	-7	N	67	0	Y	62	-5	N	66	Y	Y
N333-2	Residential- Condo Tower	B	67	2	67	67	0	Y	58	-9	N	67	0	Y	60	-7	N	66	Y	Y
N333-3	Residential- Condo Tower	B	67	2	67	67	0	Y	58	-9	N	67	0	Y	60	-7	N	67	Y	Y
N333-4	Residential- Condo Tower	B	67	2	67	67	0	Y	59	-8	N	67	0	Y	60	-7	N	66	Y	Y
N333-5	Residential- Condo Tower	B	67	2	67	67	0	Y	59	-8	N	67	0	Y	61	-6	N	66	Y	Y
N333-6	Residential- Condo Tower	B	67	2	67	67	0	Y	59	-8	N	67	0	Y	61	-6	N	66	Y	Y
N333-7	Residential- Condo Tower	B	67	2	67	67	0	Y	59	-8	N	67	0	Y	61	-6	N	66	Y	Y
N333-8	Residential- Condo Tower	B	67	2	67	67	0	Y	60	-7	N	67	0	Y	61	-6	N	66	Y	Y
N333-9	Residential- Condo Tower	B	67	2	67	67	0	Y	60	-7	N	67	0	Y	61	-6	N	66	Y	Y
N334-1	Residential- Condo Tower	B	67	2	62	63	+1	N	61	-1	N	63	+1	N	61	-1	N	61	N	N
N334-2	Residential- Condo Tower	B	67	2	62	63	+1	N	61	-1	N	63	+1	N	61	-1	N	61	N	N
N335-1	Restaurant/Office	E	72	1	59	59	0	N	53	-6	N	59	0	N	55	-4	N	59	N	N
N336-1	Restaurant/Office	E	72	1	60	60	0	N	52	-8	N	61	+1	N	55	-5	N	60	N	N
N337-1	Restaurant/Office	E	72	1	65	64	-1	N	56	-9	N	65	0	N	57	-8	N	64	N	N
N337-2	Restaurant/Office	E	72	1	65	64	-1	N	57	-8	N	65	0	N	58	-7	N	65	N	N
N337-3	Restaurant/Office	E	72	1	65	64	-1	N	57	-8	N	65	0	N	58	-7	N	64	N	N
N337-4	Restaurant/Office	E	72	1	65	64	-1	N	59	-6	N	65	0	N	58	-7	N	64	N	N
N338-1	Restaurant/Office	E	72	1	64	64	0	N	57	-7	N	64	0	N	59	-5	N	64	N	N
N338-2	Restaurant/Office	E	72	1	65	64	-1	N	58	-7	N	64	-1	N	59	-6	N	64	N	N
N338-3	Restaurant/Office	E	72	1	65	64	-1	N	58	-7	N	64	-1	N	59	-6	N	64	N	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]																								
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Existing Noise Level Impact	Future No Build Noise Impact									
N338-4	Restaurant/Office	E	72	1	65	65	0	N	61	-4	N	65	0	N	61	-4	N	64	N	N									
N339-1	Restaurant/Office	E	72	1	61	63	+2	N	62	+1	N	62	+1	N	62	+1	N	59	N	N									
N340-1	Restaurant/Office	E	72	1	59	63	+4	N	62	+3	N	62	+3	N	63	+4	N	57	N	N									
N341	Hotel	E	72	1	58	59	+1	N	58	0	N	58	0	N	59	+1	N	57	N	N									
N342	Historic Arkansas Museum	C	67	1	64	65	+1	N	65	+1	N	65	+1	N	71	+7	Y	65	Y	N									
N343	Historic Arkansas Museum	C	67	1	63	66	+3	Y	62	-1	N	66	+3	Y	67	+4	Y	64	Y	N									
N344	Library	C	67	1	56	56	0	N	54	-2	N	57	+1	N	55	-1	N	56	N	N									
N345	Public Library	C	67	1	56	56	0	N	53	-3	N	57	+1	N	56	0	N	56	N	N									
N346	Restaurant	E	72	1	63	65	+2	N	64	+1	N	68	+5	N	71	+8	Y	65	N	N									
N347	Hotel	E	72	1	59	61	+2	N	60	+1	N	62	+3	N	63	+4	N	58	N	N									
N348	Chamber of Commerce	C	67	1	59	60	+1	N	60	+1	N	63	+4	N	65	+6	N	61	N	N									
N349	Office	E	72	1	61	61	0	N	60	-1	N	62	+1	N	63	+2	N	60	N	N									
N350	Ampitheatre	C	67	1	57	58	+1	N	58	+1	N	57	0	N	58	+1	N	53	N	N									
N351	River Trail	C	67	1	60	58	-2	N	58	-2	N	58	-2	N	59	-1	N	56	N	N									
N352	Museum	C	67	1	61	60	-1	N	60	-1	N	59	-2	N	60	-1	N	58	N	N									
N807	Residential	B	67	1	53	52	-1	N	54	+1	N	55	+2	N	56	+3	N	54	N	N									
N808	Residential	B	67	1	52	52	0	N	54	+2	N	55	+3	N	56	+4	N	53	N	N									
N809	Residential	B	67	1	53	53	0	N	53	0	N	56	+3	N	55	+2	N	54	N	N									
	Summary	NAC B, C, D, E	Total Receptors	454	Min level, change, and num of "Y" impacts on Receivers	42	0	19	46	0	7	42	0	19	46	0	9												
	Total Number of Receivers	213			Max level, change, and num of "N" impacts on Receivers	72	+9	194	72	+9	206	71	8	194	72	9	204												
	NAC B Receivers	136			Number and Type of Impacted Receptors: Residences			30			3			35			10												
	NAC C Receivers	52			Number and Type of Impacted Receptors: Museum			1			0			1			3												
	NAC E Receivers	25			Number and Type of Impacted Receptors: Restaurant			0			0			0			1												
					Number and Type of Impacted Receptors: Park			3			5			3			2												
					Number and Type of Impacted Receptors: Hotel			0			1			0			0												
					Total Number of Impacted Receptors			34			9			39			16												
	Existing Noise Min.				43																								
	Existing Noise Max.				71																								
					6LN SPUI Min. Impacted	66		6LN SDI Min. Impacted	66		8 LN SPUI Min. Impacted	66		8 LN SDI Min. Impacted	66		Number of Impacted Receptors for FNB:		32										
					6LN SPUI Max. Impacted	72		6LN SDI Max. Impacted	72		8 LN SPUI Max. Impacted	71		8 LN SDI Max. Impacted	72				FNB Min:	45									
																		FNB Max:	69										

Table C-6: Design Hour Noise Levels, dBA, Leq(1h), NSA 6

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N355	North River Landing Park	C	67	1	62	63	+1	N	61	-1	N	62	0	N	62	0	N	57	N
N356	North River Landing Park	C	67	1	60	61	+1	N	62	+2	N	61	+1	N	62	+2	N	59	N
N357	North River Landing Park	C	67	1	58	60	+2	N	61	+3	N	60	+2	N	61	+3	N	56	N
N358	North River Landing Park	C	67	1	57	59	+2	N	60	+3	N	59	+2	N	60	+3	N	55	N
N359	North River Landing Park	C	67	1	60	61	+1	N	62	+2	N	62	+2	N	62	+2	N	54	N
N360	Friendly Chapel	D	52	1	40	40	0	N	40	0	N	40	0	N	40	0	N	40	N
N361	Friendly Chapel Church of the Nazarene	D	52	1	40	40	0	N	40	0	N	40	0	N	40	0	N	40	N
N362	Residential	B	67	2	60	63	+3	N	64	+4	N	63	+3	N	63	+3	N	56	N
N363	Residential	B	67	2	58	62	+4	N	62	+4	N	61	+3	N	62	+4	N	55	N
N364	Restaurant	E	72	1	64	68	+4	N	68	+4	N	67	+3	N	67	+3	N	62	N
N365	Restaurant	E	72	1	61	66	+5	N	66	+5	N	64	+3	N	64	+3	N	59	N
N366	Restaurant	E	72	1	57	62	+5	N	62	+5	N	60	+3	N	61	+4	N	54	N
N367	Shorter College	C	67	1	65	65	0	N	65	0	N	65	0	N	65	0	N	63	N
N368	Student Center	C	67	1	58	62	+4	N	62	+4	N	61	+3	N	62	+4	N	56	N
N369	Child Development Center	C	67	1	62	65	+3	N	65	+3	N	64	+2	N	64	+2	N	59	N
N370	Shorter College Library	C	67	1	60	63	+3	N	63	+3	N	63	+3	N	63	+3	N	57	N
N371	Residential	B	67	5	62	65	+3	N	65	+3	N	64	+2	N	65	+3	N	59	N
N372	Residential	B	67	8	59	63	+4	N	63	+4	N	62	+3	N	63	+4	N	57	N
N373	Residential	B	67	1	67	68	+1	Y	68	+1	Y	67	0	Y	68	+1	Y	65	N
N374	Residential	B	67	1	66	68	+2	Y	68	+2	Y	67	+1	Y	68	+2	Y	65	N
N375	Independence Baptist Church	D	52	1	40	43	+3	N	43	+3	N	41	+1	N	42	+2	N	40	N
N376	Residential	B	67	1	64	67	+3	Y	67	+3	Y	65	+1	N	66	+2	Y	62	N
N377	Residential	B	67	5	61	65	+4	N	65	+4	N	63	+2	N	64	+3	N	59	N
N378	Residential	B	67	1	63	66	+3	Y	66	+3	Y	64	+1	N	65	+2	N	61	N
N379	Residential	B	67	1	63	66	+3	Y	66	+3	Y	64	+1	N	64	+1	N	61	N
N380	Residential	B	67	1	62	65	+3	N	65	+3	N	63	+1	N	64	+2	N	61	N
N381	Residential	B	67	1	62	64	+2	N	64	+2	N	63	+1	N	64	+2	N	60	N
N382	Residential	B	67	1	57	61	+4	N	61	+4	N	59	+2	N	60	+3	N	55	N
N383	Residential	B	67	1	60	63	+3	N	63	+3	N	61	+1	N	62	+2	N	58	N
N384	Residential	B	67	3	61	64	+3	N	64	+3	N	63	+2	N	64	+3	N	59	N
N385	King Solomon Baptist Church	D	52	1	40	44	+4	N	44	+4	N	42	+2	N	43	+3	N	40	N
N386	Residential	B	67	5	57	61	+4	N	61	+4	N	60	+3	N	61	+4	N	55	N
N387	Residential	B	67	1	61	66	+5	Y	66	+5	Y	64	+3	N	65	+4	N	60	N
N388	Office	E	72	1	59	64	+5	N	64	+5	N	62	+3	N	63	+4	N	58	N
N389	Residential	B	67	1	61	65	+4	N	65	+4	N	63	+2	N	64	+3	N	59	N
N390	Residential	B	67	3	58	63	+5	N	63	+5	N	62	+4	N	62	+4	N	57	N
N391	Residential	B	67	1	61	66	+5	Y	66	+5	Y	63	+2	N	64	+3	N	60	N
N392	Residential	B	67	1	59	64	+5	N	64	+5	N	62	+3	N	63	+4	N	58	N
N393	Residential	B	67	1	61	66	+5	Y	66	+5	Y	63	+2	N	64	+3	N	60	N
N403	United Church of God in Christ	D	52	1	40	43	+3	N	43	+3	N	42	+2	N	43	+3	N	40	N
N394	Residential	B	67	1	61	65	+4	N	65	+4	N	63	+2	N	64	+3	N	59	N
N404	Residential	B	67	1	58	63	+5	N	63	+5	N	61	+3	N	62	+4	N	57	N
N395	Residential	B	67	1	61	65	+4	N	65	+4	N	63	+2	N	64	+3	N	60	N
N396	Residential	B	67	1	62	66	+4	Y	66	+4	Y	64	+2	N	65	+3	N	61	N
N405	Residential	B	67	1	63	67	+4	Y	67	+4	Y	67	+4	Y	67	+4	Y	63	N
N397	Residential	B	67	2	58	63	+5	N	63	+5	N	62	+4	N	63	+5	N	57	N
N406	Residential	B	67	1	63	67	+4	Y	67	+4	Y	67	+4	Y	67	+4	Y	63	N
N407	Residential	B	67	2	60	64	+4	N	64	+4	N	63	+3	N	63	+3	N	58	N
N398	Residential	B	67	1	61	66	+5	Y	66	+5	Y	64	+3	N	65	+4	N	60	N
N399	Residential	B	67	2	60	65	+5	N	65	+5	N	63	+3	N	64	+4	N	59	N
N408	Residential	B	67	1	60	64	+4	N	64	+4	N	62	+2	N	63	+3	N	59	N
N400	Residential	B	67	2	61	65	+4	N	65	+4	N	63	+2	N	64	+3	N	59	N
N409	Residential	B	67	1	58	62	+4	N	62	+4	N	61	+3	N	62	+4	N	56	N
N401	Residential	B	67	2	58	63	+5	N	63	+5	N	62	+4	N	63	+5	N	57	N
N410	Residential	B	67	3	57	62	+5	N	62	+5	N	60	+3	N	61	+4	N	56	N
N402	McCabe United Methodist Church	D	52	1	40	40	0	N	40	0	N	40	0	N	40	0	N	40	N
N411	Residential	B	67	2	56	61	+5	N	61	+5	N	59	+3	N	60	+4	N	55	N
N412	Residential	B	67	2	61	65	+4	N	65	+4	N	63	+2	N	64	+3	N	60	N
N413	Residential	B	67	2	51	54	+3	N	54	+3	N	53	+2	N	54	+3	N	50	N
N414	Residential	B	67	1	56	61	+5	N	61	+5	N	60	+4	N	61	+5	N	55	N
N415	Residential	B	67	1	57	62	+5	N	62	+5	N	60	+3	N	61	+4	N	56	N
N416	Residential	B	67	1	45	49	+4	N	49	+4	N	48	+3	N	49	+4	N	44	N
N417	Daycare	C	67	1	62	67	+5	Y	67	+5	Y	65	+3	N	66	+4	Y	62	N
N418	Residential	B	67	1	56	60	+4	N	60	+4	N	58	+2	N	58	+2	N	55	N
N420	Residential	B	67	2	57	62	+5	N	62	+5	N	59	+2	N	60	+3	N	56	N
N421	Residential	B	67	2	45	48	+3	N	48	+3	N	47	+2	N	47	+2	N	44	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N422	Residential	B	67	2	56	60	+4	N	60	+4	N	59	+3	N	60	+4	N	54	N
N423	Residential	B	67	2	44	46	+2	N	46	+2	N	46	+2	N	46	+2	N	44	N
N424	Residential	B	67	2	52	56	+4	N	56	+4	N	55	+3	N	56	+4	N	51	N
N425	Residential	B	67	2	49	49	0	N	49	0	N	47	-2	N	48	-1	N	49	N
N426	Residential	B	67	2	57	61	+4	N	61	+4	N	59	+2	N	60	+3	N	56	N
N427	Residential	B	67	2	45	48	+3	N	48	+3	N	47	+2	N	48	+3	N	44	N
N428-1	Residential	B	67	1	51	54	+3	N	54	+3	N	53	+2	N	54	+3	N	50	N
N428-2	Residential	B	67	1	57	61	+4	N	61	+4	N	60	+3	N	60	+3	N	55	N
N429-1	Residential	B	67	1	46	43	-3	N	43	-3	N	43	-3	N	43	-3	N	45	N
N429-2	Residential	B	67	1	48	44	-4	N	44	-4	N	46	-2	N	47	-1	N	47	N
N430	Residential	B	67	1	61	65	+4	N	65	+4	N	63	+2	N	64	+3	N	60	N
N431	Residential	B	67	2	59	63	+4	N	63	+4	N	60	+1	N	61	+2	N	58	N
N432	Residential	B	67	1	58	62	+4	N	62	+4	N	60	+2	N	61	+3	N	57	N
N433	Residential	B	67	2	57	61	+4	N	61	+4	N	59	+2	N	60	+3	N	55	N
N434	Residential	B	67	2	45	47	+2	N	47	+2	N	46	+1	N	47	+2	N	44	N
N435-1	Residential	B	67	1	54	58	+4	N	58	+4	N	57	+3	N	58	+4	N	53	N
N435-2	Residential	B	67	1	59	63	+4	N	63	+4	N	62	+3	N	63	+4	N	58	N
N436-1	Residential	B	67	1	43	42	-1	N	42	-1	N	42	-1	N	42	-1	N	43	N
N436-2	Residential	B	67	1	46	46	0	N	46	0	N	46	0	N	47	+1	N	46	N
N437-1	Residential	B	67	1	50	54	+4	N	54	+4	N	53	+3	N	53	+3	N	49	N
N437-2	Residential	B	67	1	56	60	+4	N	60	+4	N	59	+3	N	60	+4	N	54	N
N438-1	Residential	B	67	1	46	40	-6	N	40	-6	N	42	-4	N	43	-3	N	45	N
N438-2	Residential	B	67	1	48	44	-4	N	44	-4	N	46	-2	N	47	-1	N	47	N
N439	Residential	B	67	1	60	64	+4	N	64	+4	N	62	+2	N	63	+3	N	59	N
N440	Residential	B	67	2	58	62	+4	N	62	+4	N	60	+2	N	61	+3	N	57	N
N441	Residential	B	67	1	56	61	+5	N	61	+5	N	59	+3	N	59	+3	N	55	N
N442	Residential	B	67	1	56	60	+4	N	60	+4	N	58	+2	N	59	+3	N	55	N
N443	Residential	B	67	1	43	46	+3	N	46	+3	N	45	+2	N	46	+3	N	43	N
N444-1	Residential	B	67	1	54	58	+4	N	58	+4	N	57	+3	N	57	+3	N	53	N
N444-2	Residential	B	67	1	59	63	+4	N	63	+4	N	62	+3	N	63	+4	N	58	N
N445-1	Residential	B	67	1	43	42	-1	N	42	-1	N	42	-1	N	43	0	N	43	N
N445-2	Residential	B	67	1	46	46	0	N	46	0	N	46	0	N	47	+1	N	46	N
N446-1	Residential	B	67	1	57	61	+4	N	61	+4	N	59	+2	N	60	+3	N	55	N
N446-2	Residential	B	67	1	62	66	+4	Y	66	+4	Y	63	+1	N	65	+3	N	61	N
N447-1	Residential	B	67	1	56	61	+5	N	61	+5	N	58	+2	N	59	+3	N	55	N
N447-2	Residential	B	67	1	62	65	+3	N	65	+3	N	63	+1	N	64	+2	N	60	N
N448-1	Residential	B	67	1	54	59	+5	N	59	+5	N	57	+3	N	58	+4	N	53	N
N448-2	Residential	B	67	1	60	63	+3	N	63	+3	N	62	+2	N	63	+3	N	58	N
N449-1	Residential	B	67	1	54	58	+4	N	58	+4	N	57	+3	N	58	+4	N	53	N
N449-2	Residential	B	67	1	60	63	+3	N	63	+3	N	62	+2	N	63	+3	N	58	N
N450	Residential	B	67	2	49	54	+5	N	54	+5	N	52	+3	N	53	+4	N	48	N
N451-1	Residential	B	67	1	49	53	+4	N	53	+4	N	51	+2	N	52	+3	N	48	N
N451-1	Residential	B	67	1	49	53	+4	N	53	+4	N	51	+2	N	52	+3	N	48	N
N452-1	Residential	B	67	1	50	52	+2	N	52	+2	N	52	+2	N	53	+3	N	49	N
N452-2	Residential	B	67	1	51	54	+3	N	55	+4	N	54	+3	N	54	+3	N	50	N
N453-1	Residential	B	67	1	50	53	+3	N	53	+3	N	51	+1	N	52	+2	N	49	N
N453-2	Residential	B	67	1	52	55	+3	N	55	+3	N	54	+2	N	54	+2	N	50	N
N454-1	Residential	B	67	1	49	53	+4	N	53	+4	N	51	+2	N	52	+3	N	48	N
N454-2	Residential	B	67	1	51	54	+3	N	54	+3	N	54	+3	N	54	+3	N	50	N
N455	Residential	B	67	2	50	59	+9	N	59	+9	N	57	+7	N	58	+8	N	49	N
N456	Residential	B	67	2	49	53	+4	N	53	+4	N	51	+2	N	52	+3	N	49	N
N457-1	Residential	B	67	2	65	68	+3	Y	68	+3	Y	66	+1	Y	67	+2	Y	64	N
N457-2	Residential	B	67	2	68	71	+3	Y	71	+3	Y	69	+1	Y	69	+1	Y	67	Y
N458-1	Residential	B	67	2	42	45	+3	N	45	+3	N	45	+3	N	45	+3	N	42	N
N458-2	Residential	B	67	2	46	49	+3	N	49	+3	N	48	+2	N	49	+3	N	45	N
N459	Residential	B	67	1	51	55	+4	N	55	+4	N	54	+3	N	54	+3	N	50	N
N460-1	Residential	B	67	1	51	54	+3	N	54	+3	N	54	+3	N	54	+3	N	50	N
N460-2	Residential	B	67	1	54	55	+1	N	55	+1	N	56	+2	N	56	+2	N	52	N
N461-1	Residential	B	67	1	45	41	-4	N	42	-3	N	46	+1	N	47	+2	N	44	N
N461-2	Residential	B	67	1	48	46	-2	N	46	-2	N	49	+1	N	50	+2	N	47	N
N462	Residential	B	67	2	51	51	0	N	51	0	N	52	+1	N	53	+2	N	50	N
N463-1	Residential	B	67	2	65	68	+3	Y	68	+3	Y	66	+1	Y	67	+2	Y	64	N
N463-2	Residential	B	67	2	68	71	+3	Y	71	+3	Y	69	+1	Y	69	+1	Y	67	Y
N464-1	Residential	B	67	2	42	46	+4	N	46	+4	N	45	+3	N	45	+3	N	41	N
N464-2	Residential	B	67	2	46	49	+3	N	49	+3	N	48	+2	N	49	+3	N	45	N
N465-1	Residential	B	67	1	56	59	+3	N	59	+3	N	58	+2	N	58	+2	N	54	N
N465-2	Residential	B	67	1	59	63	+4	N	63	+4	N	61	+2	N	61	+2	N	57	N
N466-1	Residential	B	67	1	55	58	+3	N	59	+4	N	57	+2	N	57	+2	N	53	N
N466-2	Residential	B	67	1	58	61	+3	N	61	+3	N	60	+2	N	60	+2	N	56	N
N467-1	Residential	B	67	1	52	56	+4	N	56	+4	N	54	+2	N	55	+3	N	50	N
N467-2	Residential	B	67	1	53	57	+4	N	57	+4	N	56	+3	N	56	+3	N	52	N
N468-1	Residential	B	67	1	51	56	+5	N	56	+5	N								

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]																						
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact								
N469-2	Residential	B	67	1	56	56	0	N	56	0	N	57	+1	N	57	+1	N	54	N								
N470-1	Residential	B	67	1	46	42	-4	N	42	-4	N	47	+1	N	47	+1	N	45	N								
N470-2	Residential	B	67	1	50	46	-4	N	46	-4	N	50	0	N	51	+1	N	48	N								
N471	Residential	B	67	2	56	57	+1	N	57	+1	N	56	0	N	57	+1	N	56	N								
N472	Residential	B	67	2	47	45	-2	N	45	-2	N	48	+1	N	48	+1	N	47	N								
N473	Residential	B	67	2	52	54	+2	N	54	+2	N	53	+1	N	53	+1	N	52	N								
N474	Residential	B	67	2	50	50	0	N	50	0	N	49	-1	N	50	0	N	50	N								
N475-1	Residential	B	67	1	62	64	+2	N	64	+2	N	63	+1	N	63	+1	N	61	N								
N475-2	Residential	B	67	1	64	66	+2	Y	66	+2	Y	65	+1	N	65	+1	N	63	N								
N476-1	Residential	B	67	1	62	63	+1	N	64	+2	N	62	0	N	63	+1	N	61	N								
N476-2	Residential	B	67	1	64	66	+2	Y	66	+2	Y	64	0	N	64	0	N	63	N								
N477-1	Residential	B	67	1	60	62	+2	N	62	+2	N	61	+1	N	61	+1	N	59	N								
N477-2	Residential	B	67	1	62	63	+1	N	63	+1	N	63	+1	N	63	+1	N	61	N								
N478-1	Residential	B	67	1	60	61	+1	N	61	+1	N	60	0	N	61	+1	N	59	N								
N478-2	Residential	B	67	1	62	63	+1	N	63	+1	N	62	0	N	62	0	N	61	N								
N479	Office	E	72	1	57	59	+2	N	59	+2	N	58	+1	N	59	+2	N	56	N								
N480	Family Development Center Playground	C	67	1	64	66	+2	Y	66	+2	Y	64	0	N	64	0	N	64	N								
N481	UAMS Ecco Pine Headstart Family Development Center	C	67	1	62	64	+2	N	64	+2	N	63	+1	N	63	+1	N	61	N								
	Summary	NAC B, C, D, E	Total Receptors	221	Min level, change, and num of "Y" impacts on Receptors	40	0	21	40	0	21	40	0	8	40	0	10										
	Total Number of Receivers	158			Max level, change, and num of "N" impacts on Receptors	71	+9	137	71	+9	137	69	+7	150	69	+8	148										
	NAC B Receivers	135			Number and Type of Impacted Receptors: Residences			23			23			12			13										
	NAC C Receivers	12			Number and Type of Impacted Receptors: Daycare			1			1			1			1										
	NAC D Receivers	6			Number and Type of Impacted Receptors: Playground			1			1			0			0										
	NAC E Receivers	5			Total Number of Impacted Receptors			25			25			13			14										
	Existing Noise Min.				40													Number of Impacted Receptors for FNB:	4								
	Existing Noise Max.				68																						
	6LN SPUI Min. Impacted				66															6LN SDI Min. Impacted	66	8 LN SPUI Min. Impacted	66	8 LN SDI Min. Impacted	66	FNB Min:	40
	6LN SPUI Max. Impacted				71															6LN SDI Max. Impacted	71	8 LN SPUI Max. Impacted	69	8 LN SDI Max. Impacted	69	FNB Max:	67

This page is intentionally left blank

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N482	North River Landing Park	C	67	1	60	60	0	N	61	+1	N	61	+1	N	61	+1	N	56	N
N483	North River Landing Park	C	67	1	63	62	-1	N	62	-1	N	62	-1	N	62	-1	N	58	N
N485-1	Residential - Apts	B	67	1	62	63	+1	N	63	+1	N	62	0	N	62	0	N	57	N
N485-2	Residential - Apts	B	67	1	63	64	+1	N	64	+1	N	63	0	N	64	+1	N	58	N
N485-3	Residential - Apts	B	67	1	63	65	+2	N	65	+2	N	64	+1	N	65	+2	N	59	N
N485-4	Residential - Apts	B	67	1	64	66	+2	Y	66	+2	Y	64	0	N	65	+1	N	59	N
N486-1	Residential - Apts	B	67	2	62	63	+1	N	63	+1	N	62	0	N	63	+1	N	57	N
N486-2	Residential - Apts	B	67	2	63	64	+1	N	64	+1	N	63	0	N	64	+1	N	58	N
N486-3	Residential - Apts	B	67	2	63	65	+2	N	65	+2	N	64	+1	N	65	+2	N	59	N
N486-4	Residential - Apts	B	67	2	64	66	+2	Y	66	+2	Y	64	0	N	65	+1	N	59	N
N487-1	Residential - Apts	B	67	3	62	63	+1	N	63	+1	N	62	0	N	63	+1	N	57	N
N487-2	Residential - Apts	B	67	3	63	64	+1	N	64	+1	N	63	0	N	64	+1	N	58	N
N487-3	Residential - Apts	B	67	3	63	65	+2	N	65	+2	N	64	+1	N	64	+1	N	59	N
N487-4	Residential - Apts	B	67	3	64	66	+2	Y	66	+2	Y	64	0	N	65	+1	N	59	N
N488-1	Residential - Apts	B	67	1	62	63	+1	N	63	+1	N	62	0	N	63	+1	N	58	N
N488-2	Residential - Apts	B	67	1	63	64	+1	N	64	+1	N	63	0	N	64	+1	N	58	N
N488-3	Residential - Apts	B	67	1	63	65	+2	N	65	+2	N	63	0	N	64	+1	N	59	N
N488-4	Residential - Apts	B	67	1	64	66	+2	Y	66	+2	Y	64	0	N	65	+1	N	59	N
N489	Arena	C	67	1	62	63	+1	N	64	+2	N	62	0	N	63	+1	N	58	N
N490	Arena	C	67	1	63	65	+2	N	65	+2	N	63	0	N	64	+1	N	60	N
N491	Arena	C	67	1	57	61	+4	N	62	+5	N	58	+1	N	59	+2	N	54	N
N492	Bank	E	72	1	54	56	+2	N	57	+3	N	54	0	N	55	+1	N	51	N
N493	Restaurant	E	72	1	62	64	+2	N	65	+3	N	62	0	N	63	+1	N	59	N
N494	Bank	E	72	1	65	66	+1	N	67	+2	N	64	-1	N	65	0	N	62	N
N495	The Innovation Hub Learning Center	C	67	1	51	54	+3	N	55	+4	N	54	+3	N	54	+3	N	48	N
N496	Residential	B	67	2	55	58	+3	N	58	+3	N	57	+2	N	58	+3	N	52	N
N497	Residential	B	67	1	63	64	+1	N	64	+1	N	63	0	N	63	0	N	60	N
N498	Residential	B	67	1	66	66	0	Y	66	0	Y	65	-1	N	66	0	Y	63	N
N499	Residential	B	67	1	60	62	+2	N	62	+2	N	61	+1	N	62	+2	N	57	N
N500	Residential	B	67	2	61	62	+1	N	62	+1	N	62	+1	N	62	+1	N	57	N
N501	Residential	B	67	4	60	62	+2	N	62	+2	N	61	+1	N	62	+2	N	56	N
N502	Residential	B	67	1	62	63	+1	N	63	+1	N	62	0	N	63	+1	N	58	N
N503	Residential	B	67	3	62	63	+1	N	63	+1	N	62	0	N	63	+1	N	58	N
N504	Residential	B	67	2	61	62	+1	N	62	+1	N	61	0	N	62	+1	N	58	N
N505	Residential	B	67	1	61	62	+1	N	62	+1	N	62	+1	N	62	+1	N	58	N
N506	Residential	B	67	3	60	61	+1	N	61	+1	N	61	+1	N	61	+1	N	56	N
N507	Residential	B	67	1	62	63	+1	N	63	+1	N	62	0	N	63	+1	N	59	N
N508	Residential	B	67	5	65	65	0	N	65	0	N	64	-1	N	65	0	N	61	N
N509	Residential	B	67	1	65	63	-2	N	63	-2	N	63	-2	N	64	-1	N	62	N
N510	Residential	B	67	1	64	62	-2	N	62	-2	N	63	-1	N	63	-1	N	62	N
N511	Residential	B	67	2	64	62	-2	N	63	-1	N	63	-1	N	63	-1	N	62	N
N512	Residential	B	67	1	63	63	0	N	63	0	N	62	-1	N	63	0	N	60	N
N513	Residential	B	67	1	58	60	+2	N	60	+2	N	59	+1	N	60	+2	N	55	N
N514	Residential	B	67	1	62	62	0	N	62	0	N	62	0	N	63	+1	N	58	N
N515	Residential	B	67	1	63	62	-1	N	62	-1	N	62	-1	N	63	0	N	60	N
N516	Residential	B	67	1	60	62	+2	N	62	+2	N	61	+1	N	62	+2	N	57	N
N517	Residential	B	67	1	60	63	+3	N	62	+2	N	62	+2	N	62	+2	N	58	N
N518	Residential	B	67	1	60	62	+2	N	62	+2	N	61	+1	N	62	+2	N	58	N
N519	Residential	B	67	1	59	62	+3	N	62	+3	N	60	+1	N	61	+2	N	57	N
N520	Residential	B	67	1	60	62	+2	N	62	+2	N	61	+1	N	62	+2	N	58	N
N521	Residential	B	67	1	59	62	+3	N	62	+3	N	60	+1	N	61	+2	N	57	N
N522	Residential	B	67	1	66	68	+2	Y	68	+2	Y	65	-1	N	66	0	Y	65	N
N523	Residential	B	67	1	66	68	+2	Y	68	+2	Y	65	-1	N	66	0	Y	65	N
N524	Residential	B	67	1	66	68	+2	Y	68	+2	Y	65	-1	N	66	0	Y	65	N
N525	Residential	B	67	4	63	64	+1	N	64	+1	N	63	0	N	63	0	N	61	N
N526	Residential	B	67	1	57	60	+3	N	60	+3	N	59	+2	N	60	+3	N	56	N
N527	Residential	B	67	1	58	61	+3	N	61	+3	N	59	+1	N	60	+2	N	56	N
N528	Residential	B	67	1	59	61	+2	N	61	+2	N	59	0	N	60	+1	N	57	N
N529	Residential	B	67	1	58	60	+2	N	60	+2	N	59	+1	N	60	+2	N	57	N
N530	Residential	B	67	1	57	59	+2	N	59	+2	N	57	0	N	57	0	N	55	N
N531	Residential	B	67	1	59	60	+1	N	60	+1	N	60	+1	N	60	+1	N	57	N
N532	Residential	B	67	4	60	61	+1	N	61	+1	N	61	+1	N	62	+2	N	59	N
N533	Residential	B	67	1	60	60	0	N	60	0	N	61	+1	N	61	+1	N	58	N
N534	Residential	B	67	1	61	62	+1	N	62	+1	N	62	+1	N	63	+2	N	59	N
N535	Residential	B	67	1	63	63	0	N	63	0	N	65	+2	N	65	+2	N	61	N
N536	Residential	B	67	5	62	63	+1	N	63	+1	N	64	+2	N	64	+2	N	61	N
N537	Residential	B	67	1	63	64	+1	N	64	+1	N	65	+2	N	65	+2	N	61	N
N538	Residential	B	67	1	61	63	+2	N	63	+2	N	63	+2	N	64	+3	N	60	N
N539	Residential	B	67	1	62	62	0	N	62	0	N	62	0	N	62	0	N	60	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N540	Great Deliverance Baptist Church	D	52	1	41	42	+1	N	42	+1	N	42	+1	N	43	+2	N	40	N
N541	Residential	B	67	3	59	61	+2	N	61	+2	N	61	+2	N	61	+2	N	58	N
N542	Residential	B	67	1	60	61	+1	N	62	+2	N	62	+2	N	62	+2	N	59	N
N543	Residential	B	67	1	60	62	+2	N	62	+2	N	61	+1	N	62	+2	N	59	N
N544	Residential	B	67	1	60	62	+2	N	62	+2	N	61	+1	N	62	+2	N	59	N
N545	Residential	B	67	1	60	62	+2	N	62	+2	N	61	+1	N	61	+1	N	59	N
N546	Residential	B	67	3	58	62	+4	N	62	+4	N	60	+2	N	60	+2	N	57	N
N547	Residential	B	67	1	60	63	+3	N	63	+3	N	61	+1	N	62	+2	N	59	N
N548	Residential	B	67	1	61	63	+2	N	63	+2	N	62	+1	N	62	+1	N	59	N
N549	Residential	B	67	2	57	61	+4	N	61	+4	N	59	+2	N	59	+2	N	56	N
N550	Residential	B	67	1	59	62	+3	N	62	+3	N	60	+1	N	60	+1	N	58	N
N551	Residential	B	67	1	62	64	+2	N	64	+2	N	62	0	N	62	0	N	60	N
N552	Residential	B	67	1	63	65	+2	N	65	+2	N	63	0	N	63	0	N	61	N
N553	Residential	B	67	1	62	64	+2	N	64	+2	N	63	+1	N	63	+1	N	61	N
N554	Residential	B	67	2	57	60	+3	N	60	+3	N	58	+1	N	58	+1	N	56	N
N555	Residential	B	67	2	59	61	+2	N	61	+2	N	59	0	N	60	+1	N	58	N
N556	Residential	B	67	1	63	64	+1	N	64	+1	N	63	0	N	63	0	N	62	N
N557	Residential	B	67	2	62	62	0	N	62	0	N	62	0	N	62	0	N	61	N
N558	Residential	B	67	2	64	64	0	N	64	0	N	63	-1	N	64	0	N	63	N
N559	Residential	B	67	1	66	65	-1	N	65	-1	N	65	-1	N	65	-1	N	65	N
N560	Residential	B	67	1	59	61	+2	N	61	+2	N	59	0	N	60	+1	N	58	N
N561	Residential	B	67	1	62	63	+1	N	62	0	N	62	0	N	62	0	N	61	N
N562	Residential	B	67	2	64	63	-1	N	63	-1	N	63	-1	N	63	-1	N	63	N
N563	Residential	B	67	2	67	64	-3	N	64	-3	N	64	-3	N	64	-3	N	66	Y
N564	Residential	B	67	1	58	60	+2	N	60	+2	N	59	+1	N	59	+1	N	57	N
N565	Residential	B	67	4	59	61	+2	N	61	+2	N	60	+1	N	60	+1	N	58	N
N566	Residential	B	67	1	62	63	+1	N	63	+1	N	62	0	N	62	0	N	61	N
N567	Residential	B	67	1	63	63	0	N	63	0	N	63	0	N	63	0	N	62	N
N568	Residential	B	67	1	64	63	-1	N	63	-1	N	63	-1	N	64	0	N	63	N
N569	Residential	B	67	1	65	64	-1	N	64	-1	N	64	-1	N	64	-1	N	64	N
N570	Residential	B	67	1	66	64	-2	N	64	-2	N	64	-2	N	64	-2	N	65	N
N571	Residential	B	67	2	59	61	+2	N	60	+1	N	59	0	N	60	+1	N	58	N
N572	Residential	B	67	1	62	62	0	N	62	0	N	61	-1	N	61	-1	N	61	N
N573	Residential	B	67	1	60	61	+1	N	61	+1	N	59	-1	N	60	0	N	59	N
N574	Residential	B	67	1	59	60	+1	N	60	+1	N	59	0	N	59	0	N	58	N
N575	Residential	B	67	1	59	60	+1	N	60	+1	N	59	0	N	59	0	N	58	N
N576	Residential	B	67	1	59	60	+1	N	60	+1	N	59	0	N	59	0	N	58	N
N577	Residential	B	67	1	59	60	+1	N	60	+1	N	59	0	N	59	0	N	58	N
N578	Residential	B	67	1	59	60	+1	N	60	+1	N	59	0	N	59	0	N	58	N
N579	Residential	B	67	1	59	60	+1	N	60	+1	N	59	0	N	59	0	N	58	N
N580	North Little Rock High School Sophomore Campus	C	67	1	58	58	0	N	58	0	N	58	0	N	58	0	N	57	N
N581	North Little Rock High School Sophomore Campus	C	67	1	58	58	0	N	59	+1	N	58	0	N	59	+1	N	58	N
	Summary	NAC B, C, D, E	Total Receptors	163	Min level, change, and num of "Y" impacts on Receivers	42	0	8	42	0	8	42	0	0	43	0	4		
	Total Number of Receivers	111	Existing Noise Min.	Max level, change, and num of "N" impacts on Receivers	68	+4	103	68	+5	103	65	+3	111	66	+3	107			
	NAC B Receivers	99		Number and Type of Impacted Receptors: Residences		11		11		0		4							
	NAC C Receivers	8		Total Number of Impacted Receptors		11		11		0		4							
	NAC D Receivers	1		41															
	NAC E Receivers	3		67															
	Existing Noise Max.					6LN SPUI Min. Impacted	66	6LN SDI Min. Impacted		66	8 LN SPUI Min. Impacted		N/A	8 LN SDI Min. Impacted		66	Number of Impacted Receptors for FNB:	2	
						6LN SPUI Max. Impacted	68	6LN SDI Max. Impacted		68	8 LN SPUI Max. Impacted		N/A	8 LN SDI Max. Impacted		66		FNB Min:	40
															FNB Max:	66			

Table C-8: Design Hour Noise Levels, dBA, Leq(1h), NSA 8

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]																				
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact						
N582	Football Stadium	C	67	1	58	59	+1	N	59	+1	N	58	0	N	59	+1	N	57	N						
N583	Best Western - Hotel	E	72	1	59	60	+1	N	60	+1	N	59	0	N	59	0	N	58	N						
N584	Football Stadium	C	67	1	57	57	0	N	57	0	N	56	-1	N	56	-1	N	56	N						
N585	Police Admin Building	E	72	1	60	65	+5	N	65	+5	N	64	+4	N	64	+4	N	60	N						
N586	Dental Associates	C	67	2	60	60	0	N	61	+1	N	60	0	N	60	0	N	59	N						
N587	Hotel - Country Inn & Suites	E	72	1	63	64	+1	N	64	+1	N	63	0	N	64	+1	N	61	N						
N588	Holiday Inn-Pool	E	72	1	54	55	+1	N	55	+1	N	54	0	N	54	0	N	52	N						
N589	Hotel	E	72	1	65	65	0	N	65	0	N	64	-1	N	64	-1	N	63	N						
N590	Royal Buffet - Restaurant	E	72	1	70	71	+1	Y	71	+1	Y	70	0	N	71	+1	Y	66	N						
N591	North Little Rock School District Administration Building	C	67	1	74	76	+2	Y	76	+2	Y	75	+1	Y	75	+1	Y	69	Y						
N592	Motel	E	72	1	64	65	+1	N	65	+1	N	64	0	N	64	0	N	63	N						
N593	Public Health Dept.	C	67	1	61	62	+1	N	62	+1	N	60	-1	N	61	0	N	59	N						
N594	Public Library	C	67	1	63	65	+2	N	65	+2	N	63	0	N	63	0	N	61	N						
N595	Holiday Inn - Hotel	E	72	1	70	71	+1	Y	71	+1	Y	69	-1	N	69	-1	N	67	N						
N596	Motel 6	E	72	1	59	60	+1	N	60	+1	N	59	0	N	59	0	N	57	N						
N597	Motel 6-Pool	E	72	1	60	62	+2	N	62	+2	N	60	0	N	61	+1	N	59	N						
N598	Legion Post	E	72	1	64	65	+1	N	65	+1	N	63	-1	N	64	0	N	62	N						
N599	Office	E	72	1	58	55	-3	N	56	-2	N	55	-3	N	55	-3	N	55	N						
	Summary	NAC C, E	Total Receptors	19	Min level, change, and num of "Y" impacts on Receivers	55	0	3	55	0	3	54	0	1	54	0	2								
	Total Number of Receivers	18		Max level, change, and num of "N" impacts on Receivers	76	+5	15	76	+5	15	75	+4	17	75	+4	16									
	NAC C Receivers	6		Number and Type of Impacted Receptors: Hotel		1		1		0		0													
	NAC E Receivers	12		Number and Type of Impacted Receptors: School Admin. Building		1		1		1															
		Number and Type of Impacted Receptors: Restaurant		1		1		0		1															
		Total Number of Impacted Receptors		3		3		1		2															
	Existing Noise Min.	54																							
	Existing Noise Max.	74																							
	6LN SPUI Min. Impacted	71	6LN SDI Min. Impacted		71		8 LN SPUI Min. Impacted		75		8 LN SDI Min. Impacted														
	6LN SPUI Max. Impacted	76	6LN SDI Max. Impacted	76	8 LN SPUI Max. Impacted	75	8 LN SDI Max. Impacted	75	FNB Min:	52															
																						FNB Max:	69		

This page is intentionally left blank

Table C-9: Design Hour Noise Levels, dBA, Leq(1h), NSA 9

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N600	Residential	B	67	2	61	62	+1	N	62	+1	N	62	+1	N	63	+2	N	60	N
N601	Residential	B	67	1	60	60	0	N	60	0	N	60	0	N	61	+1	N	59	N
N602	Residential	B	67	2	58	58	0	N	58	0	N	58	0	N	59	+1	N	57	N
N603	Residential	B	67	3	57	56	-1	N	56	-1	N	56	-1	N	57	0	N	55	N
N604	Residential	B	67	1	57	56	-1	N	57	0	N	57	0	N	57	0	N	56	N
N605	Residential	B	67	2	69	68	-1	Y	68	-1	Y	67	-2	Y	68	-1	Y	67	Y
N606	Residential	B	67	2	64	63	-1	N	63	-1	N	62	-2	N	63	-1	N	62	N
N607	Residential	B	67	1	68	67	-1	Y	67	-1	Y	66	-2	Y	67	-1	Y	65	N
N608	Residential	B	67	1	68	66	-2	Y	67	-1	Y	65	-3	N	66	-2	Y	65	N
N609	Residential	B	67	1	66	65	-1	N	66	0	Y	64	-2	N	65	-1	N	63	N
N610	Residential	B	67	1	71	70	-1	Y	71	0	Y	70	-1	Y	70	-1	Y	68	Y
N611	Residential	B	67	1	69	69	0	Y	69	0	Y	68	-1	Y	68	-1	Y	65	N
N612	Residential	B	67	3	53	53	0	N	53	0	N	52	-1	N	53	0	N	50	N
N613	Residential	B	67	2	55	54	-1	N	55	0	N	54	-1	N	55	0	N	53	N
N614	Residential	B	67	1	71	71	0	Y	71	0	Y	70	-1	Y	70	-1	Y	67	Y
N615	Residential	B	67	1	68	68	0	Y	69	+1	Y	68	0	Y	68	0	Y	64	N
N616	Residential	B	67	1	72	72	0	Y	73	+1	Y	71	-1	Y	72	0	Y	69	Y
N617	Residential	B	67	1	71	71	0	Y	72	+1	Y	70	-1	Y	70	-1	Y	67	Y
N618	Residential	B	67	1	74	75	+1	Y	75	+1	Y	73	-1	Y	74	0	Y	72	Y
N619	Residential	B	67	1	73	74	+1	Y	74	+1	Y	72	-1	Y	73	0	Y	72	Y
N620	Residential	B	67	10	57	57	0	N	58	+1	N	57	0	N	57	0	N	55	N
N621	Residential	B	67	11	51	51	0	N	52	+1	N	51	0	N	51	0	N	50	N
N622	Residential	B	67	1	73	74	+1	Y	74	+1	Y	72	-1	Y	73	0	Y	71	Y
N623	Residential	B	67	1	71	71	0	Y	71	0	Y	69	-2	Y	70	-1	Y	68	Y
N624	Residential	B	67	1	68	69	+1	Y	69	+1	Y	67	-1	Y	68	0	Y	65	N
N625	Residential	B	67	1	69	67	-2	Y	68	-1	Y	66	-3	Y	66	-3	Y	66	Y
N626	Residential	B	67	1	65	64	-1	N	65	0	N	63	-2	N	64	-1	N	62	N
N627	Residential	B	67	1	56	56	0	N	56	0	N	55	-1	N	55	-1	N	55	N
N628	Residential	B	67	1	62	63	+1	N	63	+1	N	62	0	N	62	0	N	60	N
N629	Residential	B	67	1	66	66	0	Y	66	0	Y	65	-1	N	65	-1	N	64	N
N630	Residential	B	67	1	66	67	+1	Y	67	+1	Y	66	0	Y	66	0	Y	64	N
N631	Residential	B	67	1	63	64	+1	N	64	+1	N	63	0	N	64	+1	N	62	N
N632	Residential	B	67	1	63	64	+1	N	64	+1	N	63	0	N	64	+1	N	62	N
N633	Residential	B	67	1	63	64	+1	N	64	+1	N	63	0	N	63	0	N	62	N
N634	Residential	B	67	1	64	65	+1	N	65	+1	N	64	0	N	65	+1	N	63	N
N635	Home Builders Association	E	71	1	65	66	+1	N	66	+1	N	66	+1	N	66	+1	N	64	N
N636	Residential	B	67	1	65	66	+1	Y	66	+1	Y	65	0	N	66	+1	Y	64	N
N637	Residential	B	67	1	65	66	+1	Y	66	+1	Y	65	0	N	65	0	N	64	N
N638	Residential	B	67	1	64	65	+1	N	65	+1	N	64	0	N	64	0	N	62	N
N639	Travelodge Hotel	E	72	1	63	65	+2	N	65	+2	N	64	+1	N	65	+2	N	63	N
N640	Crest View Park	C	67	1	62	64	+2	N	64	+2	N	64	+2	N	64	+2	N	63	N
N641	Crest View Park	C	67	1	58	60	+2	N	60	+2	N	60	+2	N	59	+1	N	58	N
N642	Crest View Park	C	67	1	57	59	+2	N	59	+2	N	58	+1	N	59	+2	N	57	N
N643	Crest View Park	C	67	1	58	60	+2	N	60	+2	N	59	+1	N	60	+2	N	58	N
N644	Travelodge Hotel-Pool	E	72	1	58	59	+1	N	59	+1	N	60	+2	N	60	+2	N	61	N
N645	Residential	B	67	1	64	64	0	N	64	0	N	63	-1	N	63	-1	N	63	N
N646	Residential	B	67	1	66	65	-1	N	65	-1	N	64	-2	N	64	-2	N	65	N
N647	Residential	B	67	1	66	65	-1	N	65	-1	N	64	-2	N	65	-1	N	65	N
N648	Residential	B	67	1	66	66	0	Y	66	0	Y	65	-1	N	65	-1	N	66	Y
N649	Residential	B	67	1	66	65	-1	N	65	-1	N	64	-2	N	64	-2	N	66	Y
N650	Residential	B	67	3	60	59	-1	N	59	-1	N	58	-2	N	58	-2	N	59	N
N651	Residential	B	67	8	55	56	+1	N	56	+1	N	55	0	N	55	0	N	54	N
N652	Residential	B	67	1	65	64	-1	N	64	-1	N	64	-1	N	64	-1	N	65	N
N653	Residential	B	67	1	65	64	-1	N	64	-1	N	64	-1	N	64	-1	N	66	Y
N654	Residential	B	67	1	65	63	-2	N	63	-2	N	64	-1	N	64	-1	N	66	Y
N655	Residential	B	67	1	64	62	-2	N	62	-2	N	62	-2	N	63	-1	N	65	N
N656	Residential	B	67	1	64	62	-2	N	62	-2	N	62	-2	N	62	-2	N	65	N
N657	Residential	B	67	1	62	60	-2	N	60	-2	N	61	-1	N	61	-1	N	63	N
N658	Residential	B	67	5	49	48	-1	N	49	0	N	49	0	N	49	0	N	49	N
N659	Residential	B	67	2	50	49	-1	N	49	-1	N	50	0	N	50	0	N	50	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]															
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact	
	Summary	NAC B, C, E	Total Receptors	102	Min level, change, and num of "Y" impacts on Receivers	48	0	20	49	0	21	49	0	15	49	0	17			
	Total Number of Receivers	60			Max level, change, and num of "N" impacts on Receivers	75	+2	40	75	+2	21	73	+2	45	74	+2	43			
	NAC B Receivers	53			Number and Type of Impacted Receptors: Residences			21			22			16			18			
	NAC C Receivers	4			Total Number of Impacted Receptors			21			22			16			18			
	NAC E Receivers	3			Existing Noise Min.	49														
					Existing Noise Max.	74														
				6LN SPUI Min. Impacted	66		6LN SDI Min. Impacted	66		8 LN SPUI Min. Impacted	66		8 LN SDI Min. Impacted	66		Number of Impacted Receptors for FNB:	15			
				6LN SPUI Max. Impacted	75		6LN SDI Max. Impacted	75		8 LN SPUI Max. Impacted	73		8 LN SDI Max. Impacted	74		FNB Min:	49			
																FNB Max:	72			

Table C-10: Design Hour Noise Levels, dBA, Leq(1h), NSA 10

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														Future No Build	Future No Build Noise Impact
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)			
N660	Residential	B	67	1	62	62	0	N	62	0	N	63	+1	N	64	+2	N	62	N	
N661	Residential	B	67	1	63	63	0	N	63	0	N	62	-1	N	63	0	N	62	N	
N662	Residential	B	67	1	63	63	0	N	63	0	N	63	0	N	63	0	N	62	N	
N663	Residential	B	67	3	57	57	0	N	57	0	N	57	0	N	58	+1	N	56	N	
N664	Residential	B	67	3	59	61	+2	N	61	+2	N	60	+1	N	61	+2	N	58	N	
N665	Residential	B	67	1	62	61	-1	N	61	-1	N	61	-1	N	62	0	N	61	N	
N666	Residential	B	67	1	61	61	0	N	61	0	N	60	-1	N	61	0	N	61	N	
N667	Residential	B	67	1	61	61	0	N	61	0	N	61	0	N	61	0	N	61	N	
N668	Residential	B	67	1	58	58	0	N	58	0	N	57	-1	N	58	0	N	57	N	
N669	Residential	B	67	1	60	60	0	N	60	0	N	59	-1	N	60	0	N	60	N	
N670	Residential	B	67	2	64	63	-1	N	63	-1	N	63	-1	N	63	-1	N	64	N	
N671	Residential	B	67	1	64	63	-1	N	63	-1	N	63	-1	N	64	0	N	64	N	
N672	Residential	B	67	1	64	63	-1	N	63	-1	N	63	-1	N	64	0	N	64	N	
N673	Residential	B	67	1	64	63	-1	N	63	-1	N	63	-1	N	64	0	N	64	N	
N674	Residential	B	67	2	66	65	-1	N	65	-1	N	65	-1	N	66	0	Y	66	Y	
N675	Residential	B	67	1	67	65	-2	N	65	-2	N	66	-1	Y	66	-1	Y	66	Y	
N676	Residential	B	67	1	67	67	0	Y	67	0	Y	67	0	Y	67	0	Y	67	Y	
N677	Residential	B	67	1	68	67	-1	Y	67	-1	Y	67	-1	Y	68	0	Y	67	Y	
N678	Residential	B	67	1	68	68	0	Y	68	0	Y	68	0	Y	68	0	Y	67	Y	
N679	Residential	B	67	1	69	68	-1	Y	68	-1	Y	69	0	Y	69	0	Y	68	Y	
N680	Residential	B	67	1	69	68	-1	Y	68	-1	Y	69	0	Y	69	0	Y	68	Y	
N681	Residential	B	67	1	69	69	0	Y	69	0	Y	69	0	Y	69	0	Y	68	Y	
N682	Residential	B	67	1	69	69	0	Y	69	0	Y	69	0	Y	70	+1	Y	68	Y	
N683	Residential	B	67	6	61	62	+1	N	62	+1	N	63	+2	N	63	+2	N	59	N	
N684	Residential	B	67	1	70	70	0	Y	70	0	Y	70	0	Y	70	0	Y	68	Y	
N685	Residential	B	67	1	69	68	-1	Y	68	-1	Y	69	0	Y	69	0	Y	67	Y	
N686	Residential	B	67	1	67	68	+1	Y	68	+1	Y	68	+1	Y	68	+1	Y	66	Y	
N687	Residential	B	67	1	66	66	0	Y	66	0	Y	66	0	Y	67	+1	Y	64	N	
N688	First Penecostal Church	D	52	1	48	48	0	N	48	0	N	46	-2	N	47	-1	N	47	N	
N689	Calvary Academy	D	52	1	48	48	0	N	48	0	N	47	-1	N	47	-1	N	47	N	
N690	Residential	B	67	1	62	63	+1	N	63	+1	N	63	+1	N	63	+1	N	61	N	
N691	Residential	B	67	1	65	66	+1	Y	66	+1	Y	65	0	N	66	+1	Y	64	N	
N692	Residential	B	67	1	67	68	+1	Y	68	+1	Y	68	+1	Y	68	+1	Y	66	Y	
N693	Residential	B	67	1	69	70	+1	Y	70	+1	Y	69	0	Y	69	0	Y	67	Y	
N694	Residential	B	67	1	70	71	+1	Y	71	+1	Y	70	0	Y	70	0	Y	68	Y	
N695	Residential	B	67	3	66	67	+1	Y	67	+1	Y	67	+1	Y	67	+1	Y	65	N	
N696	Residential	B	67	1	70	71	+1	Y	71	+1	Y	70	0	Y	70	0	Y	69	Y	
N697	Residential	B	67	1	68	70	+2	Y	70	+2	Y	69	+1	Y	69	+1	Y	68	Y	
N698	Residential	B	67	1	68	69	+1	Y	69	+1	Y	68	0	Y	69	+1	Y	67	Y	
N699	Residential	B	67	1	69	70	+1	Y	70	+1	Y	69	0	Y	70	+1	Y	68	Y	
N700	Residential	B	67	1	69	70	+1	Y	70	+1	Y	70	+1	Y	70	+1	Y	69	Y	
N701	Residential	B	67	1	69	71	+2	Y	71	+2	Y	70	+1	Y	70	+1	Y	69	Y	
N702	Residential	B	67	1	70	71	+1	Y	71	+1	Y	71	+1	Y	71	+1	Y	70	Y	
N703	Residential	B	67	1	69	71	+2	Y	71	+2	Y	70	+1	Y	70	+1	Y	69	Y	
N704	Residential	B	67	1	69	70	+1	Y	70	+1	Y	70	+1	Y	70	+1	Y	69	Y	
N705	Residential	B	67	1	69	70	+1	Y	70	+1	Y	69	0	Y	69	0	Y	68	Y	
N706	Residential	B	67	1	69	70	+1	Y	70	+1	Y	69	0	Y	70	+1	Y	69	Y	
N707	Residential	B	67	1	69	71	+2	Y	71	+2	Y	70	+1	Y	70	+1	Y	69	Y	
N708	Residential	B	67	1	69	70	+1	Y	70	+1	Y	69	0	Y	70	+1	Y	69	Y	
N709	Residential	B	67	1	69	70	+1	Y	70	+1	Y	69	0	Y	70	+1	Y	69	Y	
N710	Residential	B	67	1	69	70	+1	Y	70	+1	Y	69	0	Y	70	+1	Y	69	Y	
N711	Residential	B	67	1	69	70	+1	Y	70	+1	Y	69	0	Y	70	+1	Y	69	Y	
N712	Residential	B	67	11	59	59	0	N	59	0	N	59	0	N	59	0	N	59	N	
N713	Residential	B	67	1	69	70	+1	Y	70	+1	Y	69	0	Y	70	+1	Y	69	Y	
N714	Residential	B	67	1	69	70	+1	Y	70	+1	Y	69	0	Y	69	0	Y	69	Y	
N715	Residential	B	67	1	69	70	+1	Y	70	+1	Y	69	0	Y	70	+1	Y	69	Y	
N716	Residential	B	67	1	69	70	+1	Y	70	+1	Y	69	0	Y	70	+1	Y	70	Y	
N717	Residential	B	67	6	59	60	+1	N	60	+1	N	59	0	N	60	+1	N	60	N	
N718	Residential	B	67	1	70	71	+1	Y	71	+1	Y	69	-1	Y	70	0	Y	70	Y	
N719	Residential	B	67	1	70	71	+1	Y	71	+1	Y	70	0	Y	71	+1	Y	71	Y	
N720	Residential	B	67	1	71	72	+1	Y	72	+1	Y	70	-1	Y	71	0	Y	71	Y	
N721	Residential	B	67	1	71	72	+1	Y	72	+1	Y	70	-1	Y	71	0	Y	71	Y	
N722	Residential	B	67	2	68	68	0	Y	68	0	Y	67	-1	Y	68	0	Y	68	Y	
N723	Residential	B	67	2	65	66	+1	Y	66	+1	Y	64	-1	N	65	0	N	66	Y	
N724	Residential	B	67	2	61	61	0	N	61	0	N	60	-1	N	61	0	N	61	N	
N725	Residential	B	67	3	48	48	0	N	48	0	N	48	0	N	48	0	N	48	N	
N726	Residential	B	67	2	53	53	0	N	53	0	N	51	-2	N	52	-1	N	54	N	
N727	Residential	B	67	1	70	70	0	Y	70	0	Y	69	-1	Y	69	-1	Y	71		

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N733	Residential - Apts	B	67	2	64	65	+1	N	65	+1	N	64	0	N	64	0	N	65	N
N734	Residential - Apts	B	67	2	64	65	+1	N	65	+1	N	64	0	N	64	0	N	65	N
N735	Residential - Apts	B	67	2	60	61	+1	N	61	+1	N	61	+1	N	61	+1	N	61	N
N736	Residential - Apts	B	67	2	62	63	+1	N	63	+1	N	62	0	N	62	0	N	62	N
N737	Residential -Woodland Terrace Apts Pool	B	67	1	38	39	+1	N	39	+1	N	39	+1	N	39	+1	N	38	N
N738-1	Residential - Apts	B	67	1	65	66	+1	Y	66	+1	Y	65	0	N	65	0	N	66	Y
N738-2	Residential - Apts	B	67	1	65	66	+1	Y	66	+1	Y	65	0	N	66	+1	Y	66	Y
N738-3	Residential - Apts	B	67	1	66	66	0	Y	66	0	Y	66	0	Y	66	0	Y	66	Y
N739-1	Residential - Apts	B	67	1	65	66	+1	Y	66	+1	Y	65	0	N	65	0	N	66	Y
N739-2	Residential - Apts	B	67	1	65	66	+1	Y	66	+1	Y	65	0	N	65	0	N	66	Y
N739-3	Residential - Apts	B	67	1	65	66	+1	Y	66	+1	Y	65	0	N	65	0	N	66	Y
N740-1	Residential - Apts	B	67	1	65	66	+1	Y	66	+1	N	65	0	N	65	0	N	66	Y
N740-2	Residential - Apts	B	67	1	65	66	+1	Y	66	+1	Y	65	0	N	65	0	N	66	Y
N740-3	Residential - Apts	B	67	1	65	66	+1	Y	66	+1	Y	65	0	N	65	0	N	66	Y
N741-1	Residential - Apts	B	67	1	65	65	0	N	65	0	N	65	0	N	65	0	N	65	N
N741-2	Residential - Apts	B	67	1	65	65	0	N	65	0	N	65	0	N	65	0	N	65	N
N741-3	Residential - Apts	B	67	1	65	65	0	N	65	0	N	65	0	N	65	0	N	65	N
N742-1	Residential - Apts	B	67	1	65	65	0	N	65	0	N	65	0	N	65	0	N	65	N
N742-2	Residential - Apts	B	67	1	65	65	0	N	65	0	N	65	0	N	65	0	N	65	N
N742-3	Residential - Apts	B	67	1	65	65	0	N	65	0	N	65	0	N	65	0	N	65	N
N743-1	Residential - Apts	B	67	1	64	65	+1	N	65	+1	N	65	+1	N	65	+1	N	65	N
N743-2	Residential - Apts	B	67	1	64	65	+1	N	65	+1	N	65	+1	N	65	+1	N	65	N
N743-3	Residential - Apts	B	67	1	65	65	0	N	65	0	N	65	0	N	65	0	N	65	N
N744-1	Residential - Apts	B	67	1	64	65	+1	N	65	+1	N	65	+1	N	65	+1	N	65	N
N744-2	Residential - Apts	B	67	1	64	65	+1	N	65	+1	N	65	+1	N	65	+1	N	65	N
N744-3	Residential - Apts	B	67	1	64	65	+1	N	65	+1	N	65	+1	N	65	+1	N	65	N
N745-1	Residential - Apts	B	67	1	64	65	+1	N	65	+1	N	65	+1	N	65	+1	N	65	N
N745-2	Residential - Apts	B	67	1	64	65	+1	N	65	+1	N	65	+1	N	65	+1	N	65	N
N745-3	Residential - Apts	B	67	1	64	65	+1	N	65	+1	N	65	+1	N	65	+1	N	65	N
N746-1	Residential - Apts	B	67	1	60	60	0	N	60	0	N	60	0	N	60	0	N	61	N
N746-2	Residential - Apts	B	67	1	61	61	0	N	61	0	N	60	-1	N	60	-1	N	62	N
N746-3	Residential - Apts	B	67	1	61	61	0	N	61	0	N	61	0	N	61	0	N	62	N
N747-1	Residential - Apts	B	67	1	57	58	+1	N	58	+1	N	58	+1	N	58	+1	N	58	N
N747-2	Residential - Apts	B	67	1	58	58	0	N	58	0	N	59	+1	N	59	+1	N	59	N
N747-3	Residential - Apts	B	67	1	59	59	0	N	59	0	N	59	0	N	59	0	N	59	N
N748-1	Residential - Apts	B	67	1	57	57	0	N	57	0	N	57	0	N	57	0	N	57	N
N748-2	Residential - Apts	B	67	1	57	58	+1	N	58	+1	N	58	+1	N	58	+1	N	58	N
N748-3	Residential - Apts	B	67	1	58	58	0	N	58	0	N	58	0	N	58	0	N	59	N
N749-1	Residential - Apts	B	67	1	56	56	0	N	56	0	N	56	0	N	56	0	N	56	N
N749-2	Residential - Apts	B	67	1	56	57	+1	N	57	+1	N	57	+1	N	57	+1	N	57	N
N749-3	Residential - Apts	B	67	1	57	58	+1	N	58	+1	N	58	+1	N	58	+1	N	58	N
	Summary	NAC B, D	Total Receptors	157	Min level, change, and num of "Y" impacts on Receivers	39	0	54	39	0	53	39	0	45	39	0	48		
	Total Number of Receivers	116			Max level, change, and num of "N" impacts on Receivers	72	+2	62	72	+2	63	71	+2	71	71	+2	68		
	NAC B Receivers	114			Number and Type of Impacted Receptors: Residences			58			57			48			54		
	NAC D Receivers	2			Total Number of Impacted Receptors			58			57			48			54		
					Existing Noise Min.	38													
			Existing Noise Max.	71															
			6LN SPUI Min. Impacted	66			6LN SDI Min. Impacted	66			8 LN SPUI Min. Impacted	66			8 LN SDI Min. Impacted	66	Number of Impacted Receptors for FNB:		56
			6LN SPUI Max. Impacted	72			6LN SDI Max. Impacted	72			8 LN SPUI Max. Impacted	71			8 LN SDI Max. Impacted	71			FNB Min:
																	FNB Max:	71	

Table C-12: Design Hour Noise Levels, dBA, Leq(1h), NSA 12

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria, Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N750-1	Residential - Apts (Foothills Apts.)	B	67	1	57	58	+1	N	59	+2	N	60	+3	N	60	+3	N	58	N
N750-2	Residential - Apts (Foothills Apts.)	B	67	1	60	60	0	N	60	0	N	61	+1	N	61	+1	N	60	N
N750-3	Residential - Apts (Foothills Apts.)	B	67	1	61	60	-1	N	60	-1	N	62	+1	N	62	+1	N	61	N
N751-1	Residential - Apts (Foothills Apts.)	B	67	1	58	59	+1	N	59	+1	N	60	+2	N	60	+2	N	58	N
N751-2	Residential - Apts (Foothills Apts.)	B	67	1	60	60	0	N	60	0	N	62	+2	N	62	+2	N	60	N
N751-3	Residential - Apts (Foothills Apts.)	B	67	1	61	60	-1	N	61	0	N	62	+1	N	62	+1	N	61	N
N752-1	Residential - Apts (Foothills Apts.)	B	67	1	58	59	+1	N	59	+1	N	60	+2	N	60	+2	N	59	N
N752-2	Residential - Apts (Foothills Apts.)	B	67	1	60	60	0	N	60	0	N	62	+2	N	62	+2	N	61	N
N752-3	Residential - Apts (Foothills Apts.)	B	67	1	61	61	0	N	61	0	N	63	+2	N	63	+2	N	62	N
N753-1	Residential - Apts (Foothills Apts.)	B	67	1	59	60	+1	N	60	+1	N	61	+2	N	61	+2	N	59	N
N753-2	Residential - Apts (Foothills Apts.)	B	67	1	61	61	0	N	61	0	N	62	+1	N	62	+1	N	61	N
N753-3	Residential - Apts (Foothills Apts.)	B	67	1	62	61	-1	N	61	-1	N	63	+1	N	63	+1	N	62	N
N754-1	Residential - Apts (Foothills Apts.)	B	67	1	60	61	+1	N	61	+1	N	62	+2	N	62	+2	N	60	N
N754-2	Residential - Apts (Foothills Apts.)	B	67	1	62	62	0	N	62	0	N	63	+1	N	63	+1	N	62	N
N754-3	Residential - Apts (Foothills Apts.)	B	67	1	63	63	0	N	63	0	N	64	+1	N	64	+1	N	63	N
N755-1	Residential - Apts (Foothills Apts.)	B	67	1	60	61	+1	N	61	+1	N	62	+2	N	62	+2	N	61	N
N755-2	Residential - Apts (Foothills Apts.)	B	67	1	62	62	0	N	62	0	N	64	+2	N	63	+1	N	62	N
N755-3	Residential - Apts (Foothills Apts.)	B	67	1	63	63	0	N	63	0	N	64	+1	N	64	+1	N	63	N
N756-1	Residential - Apts (Foothills Apts.)	B	67	1	60	61	+1	N	61	+1	N	62	+2	N	62	+2	N	61	N
N756-2	Residential - Apts (Foothills Apts.)	B	67	1	62	62	0	N	62	0	N	64	+2	N	64	+2	N	63	N
N756-3	Residential - Apts (Foothills Apts.)	B	67	1	63	63	0	N	63	0	N	65	+2	N	64	+1	N	64	N
N757-1	Residential - Apts (Foothills Apts.)	B	67	1	61	62	+1	N	62	+1	N	63	+2	N	63	+2	N	61	N
N757-2	Residential - Apts (Foothills Apts.)	B	67	1	63	63	0	N	63	0	N	64	+1	N	64	+1	N	63	N
N757-3	Residential - Apts (Foothills Apts.)	B	67	1	64	64	0	N	64	0	N	65	+1	N	65	+1	N	64	N
N758-1	Residential - Apts (Foothills Apts.)	B	67	1	43	44	+1	N	44	+1	N	43	0	N	43	0	N	43	N
N758-2	Residential - Apts (Foothills Apts.)	B	67	1	47	48	+1	N	48	+1	N	47	0	N	48	+1	N	48	N
N758-3	Residential - Apts (Foothills Apts.)	B	67	1	51	51	0	N	51	0	N	50	-1	N	51	0	N	51	N
N759-1	Residential - Apts (Foothills Apts.)	B	67	1	43	44	+1	N	44	+1	N	43	0	N	44	+1	N	43	N
N759-2	Residential - Apts (Foothills Apts.)	B	67	1	48	49	+1	N	49	+1	N	48	0	N	49	+1	N	48	N
N759-3	Residential - Apts (Foothills Apts.)	B	67	1	52	52	0	N	52	0	N	51	-1	N	52	0	N	52	N
N760-1	Residential - Apts (Foothills Apts.)	B	67	1	43	44	+1	N	44	+1	N	44	+1	N	44	+1	N	44	N
N760-2	Residential - Apts (Foothills Apts.)	B	67	1	49	50	+1	N	50	+1	N	48	-1	N	49	0	N	49	N
N760-3	Residential - Apts (Foothills Apts.)	B	67	1	52	53	+1	N	53	+1	N	52	0	N	53	+1	N	52	N
N761-1	Residential - Apts (Foothills Apts.)	B	67	1	44	45	+1	N	45	+1	N	44	0	N	45	+1	N	44	N
N761-2	Residential - Apts (Foothills Apts.)	B	67	1	50	51	+1	N	51	+1	N	49	-1	N	50	0	N	50	N
N761-3	Residential - Apts (Foothills Apts.)	B	67	1	53	54	+1	N	54	+1	N	53	0	N	54	+1	N	53	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria, Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N762-1	Residential - Apts (Foothills Apts.)	B	67	1	46	47	+1	N	47	+1	N	46	0	N	46	0	N	46	N
N762-2	Residential - Apts (Foothills Apts.)	B	67	1	52	53	+1	N	53	+1	N	51	-1	N	53	+1	N	52	N
N762-3	Residential - Apts (Foothills Apts.)	B	67	1	56	56	0	N	56	0	N	56	0	N	56	0	N	56	N
N763-1	Residential - Apts (Foothills Apts.)	B	67	1	46	48	+2	N	48	+2	N	47	+1	N	47	+1	N	47	N
N763-2	Residential - Apts (Foothills Apts.)	B	67	1	53	54	+1	N	54	+1	N	52	-1	N	54	+1	N	54	N
N763-3	Residential - Apts (Foothills Apts.)	B	67	1	57	57	0	N	57	0	N	55	-2	N	56	-1	N	57	N
N764-1	Residential - Apts (Foothills Apts.)	B	67	1	47	49	+2	N	49	+2	N	48	+1	N	48	+1	N	48	N
N764-2	Residential - Apts (Foothills Apts.)	B	67	1	54	55	+1	N	55	+1	N	53	-1	N	54	0	N	54	N
N764-3	Residential - Apts (Foothills Apts.)	B	67	1	57	58	+1	N	58	+1	N	57	0	N	58	+1	N	57	N
N765-1	Residential - Apts (Foothills Apts.)	B	67	1	50	52	+2	N	52	+2	N	50	0	N	50	0	N	50	N
N765-2	Residential - Apts (Foothills Apts.)	B	67	1	55	56	+1	N	56	+1	N	55	0	N	56	+1	N	56	N
N765-3	Residential - Apts (Foothills Apts.)	B	67	1	59	60	+1	N	60	+1	N	58	-1	N	59	0	N	59	N
N766-1	Residential - Apts (Foothills Apts.)	B	67	1	48	44	-4	N	44	-4	N	49	+1	N	49	+1	N	48	N
N766-2	Residential - Apts (Foothills Apts.)	B	67	1	50	50	0	N	50	0	N	52	+2	N	52	+2	N	51	N
N766-3	Residential - Apts (Foothills Apts.)	B	67	1	55	54	-1	N	54	-1	N	56	+1	N	56	+1	N	55	N
N767-1	Residential - Apts (Foothills Apts.)	B	67	1	46	44	-2	N	44	-2	N	48	+2	N	48	+2	N	46	N
N767-2	Residential - Apts (Foothills Apts.)	B	67	1	50	51	+1	N	51	+1	N	52	+2	N	52	+2	N	50	N
N767-3	Residential - Apts (Foothills Apts.)	B	67	1	55	55	0	N	55	0	N	57	+2	N	57	+2	N	55	N
N768-1	Residential - Apts (Foothills Apts.)	B	67	1	45	45	0	N	45	0	N	47	+2	N	47	+2	N	45	N
N768-2	Residential - Apts (Foothills Apts.)	B	67	1	49	51	+2	N	51	+2	N	52	+3	N	52	+3	N	49	N
N768-3	Residential - Apts (Foothills Apts.)	B	67	1	55	55	0	N	55	0	N	57	+2	N	57	+2	N	55	N
N769-1	Residential - Apts (Foothills Apts.)	B	67	1	46	47	+1	N	47	+1	N	48	+2	N	48	+2	N	46	N
N769-2	Residential - Apts (Foothills Apts.)	B	67	1	49	51	+2	N	51	+2	N	52	+3	N	52	+3	N	50	N
N769-3	Residential - Apts (Foothills Apts.)	B	67	1	56	56	0	N	56	0	N	57	+1	N	57	+1	N	56	N
N770-1	Residential - Apts (Foothills Apts.)	B	67	1	54	56	+2	N	56	+2	N	57	+3	N	57	+3	N	54	N
N770-2	Residential - Apts (Foothills Apts.)	B	67	1	57	58	+1	N	58	+1	N	59	+2	N	59	+2	N	58	N
N770-3	Residential - Apts (Foothills Apts.)	B	67	1	60	60	0	N	60	0	N	61	+1	N	61	+1	N	60	N
N771-1	Residential - Apts (Foothills Apts.)	B	67	1	55	57	+2	N	57	+2	N	58	+3	N	58	+3	N	56	N
N771-2	Residential - Apts (Foothills Apts.)	B	67	1	58	59	+1	N	59	+1	N	60	+2	N	60	+2	N	59	N
N771-3	Residential - Apts (Foothills Apts.)	B	67	1	60	61	+1	N	61	+1	N	62	+2	N	62	+2	N	61	N
N772-1	Residential - Apts (Foothills Apts.)	B	67	1	56	57	+1	N	57	+1	N	58	+2	N	58	+2	N	56	N
N772-2	Residential - Apts (Foothills Apts.)	B	67	1	59	60	+1	N	60	+1	N	60	+1	N	60	+1	N	59	N
N772-3	Residential - Apts (Foothills Apts.)	B	67	1	61	62	+1	N	62	+1	N	62	+1	N	62	+1	N	62	N
N773-1	Residential - Apts (Foothills Apts.)	B	67	1	56	58	+2	N	58	+2	N	57	+1	N	57	+1	N	56	N
N773-2	Residential - Apts (Foothills Apts.)	B	67	1	59	60	+1	N	60	+1	N	60	+1	N	60	+1	N	59	N
N773-3	Residential - Apts (Foothills Apts.)	B	67	1	62	62	0	N	63	+1	N	62	0	N	63	+1	N	62	N
N774-1	Residential - Apts (Foothills Apts.)	B	67	1	48	49	+1	N	49	+1	N	47	-1	N	48	0	N	48	N
N774-2	Residential - Apts (Foothills Apts.)	B	67	1	51	53	+2	N	53	+2	N	50	-1	N	52	+1	N	52	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria, Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N774-3	Residential - Apts (Foothills Apts.)	B	67	1	54	55	+1	N	55	+1	N	53	-1	N	54	0	N	54	N
N775-1	Residential - Apts (Foothills Apts.)	B	67	1	48	50	+2	N	50	+2	N	48	0	N	49	+1	N	48	N
N775-2	Residential - Apts (Foothills Apts.)	B	67	1	52	53	+1	N	53	+1	N	51	-1	N	52	0	N	52	N
N775-3	Residential - Apts (Foothills Apts.)	B	67	1	54	56	+2	N	56	+2	N	53	-1	N	55	+1	N	55	N
N776-1	Residential - Apts (Foothills Apts.)	B	67	1	48	50	+2	N	50	+2	N	48	0	N	49	+1	N	49	N
N776-2	Residential - Apts (Foothills Apts.)	B	67	1	52	54	+2	N	54	+2	N	51	-1	N	52	0	N	52	N
N776-3	Residential - Apts (Foothills Apts.)	B	67	1	55	56	+1	N	56	+1	N	53	-2	N	55	0	N	55	N
N777-1	Residential - Apts (Foothills Apts.)	B	67	1	49	50	+1	N	50	+1	N	48	-1	N	49	0	N	49	N
N777-2	Residential - Apts (Foothills Apts.)	B	67	1	53	54	+1	N	54	+1	N	51	-2	N	53	0	N	53	N
N777-3	Residential - Apts (Foothills Apts.)	B	67	1	55	57	+2	N	57	+2	N	54	-1	N	56	+1	N	56	N
N778-1	Residential - Apts (Foothills Apts.)	B	67	1	49	51	+2	N	51	+2	N	49	0	N	50	+1	N	50	N
N778-2	Residential - Apts (Foothills Apts.)	B	67	1	54	55	+1	N	55	+1	N	53	-1	N	54	0	N	54	N
N778-3	Residential - Apts (Foothills Apts.)	B	67	1	57	58	+1	N	58	+1	N	56	-1	N	57	0	N	57	N
N779-1	Residential - Apts (Foothills Apts.)	B	67	1	50	52	+2	N	52	+2	N	49	-1	N	50	0	N	50	N
N779-2	Residential - Apts (Foothills Apts.)	B	67	1	55	57	+2	N	57	+2	N	54	-1	N	56	+1	N	55	N
N779-3	Residential - Apts (Foothills Apts.)	B	67	1	57	58	+1	N	58	+1	N	57	0	N	58	+1	N	58	N
N780-1	Residential - Apts (Foothills Apts.)	B	67	1	51	53	+2	N	53	+2	N	50	-1	N	52	+1	N	51	N
N780-2	Residential - Apts (Foothills Apts.)	B	67	1	56	58	+2	N	58	+2	N	55	-1	N	56	0	N	56	N
N780-3	Residential - Apts (Foothills Apts.)	B	67	1	58	59	+1	N	59	+1	N	57	-1	N	59	+1	N	59	N
N781-1	Residential - Apts (Foothills Apts.)	B	67	1	52	54	+2	N	54	+2	N	52	0	N	53	+1	N	53	N
N781-2	Residential - Apts (Foothills Apts.)	B	67	1	57	59	+2	N	59	+2	N	56	-1	N	58	+1	N	57	N
N781-3	Residential - Apts (Foothills Apts.)	B	67	1	60	61	+1	N	61	+1	N	59	-1	N	60	0	N	60	N
N782	Residential - Apts (Foothills Apts.)	B	67	1	55	57	+2	N	57	+2	N	56	+1	N	57	+2	N	55	N
N783	Residential - Apts (Foothills Apts.)	B	67	1	56	58	+2	N	58	+2	N	56	0	N	57	+1	N	56	N
N784	Foothills Apts. Pool	C	67	1	67	69	+2	Y	69	+2	Y	66	-1	Y	68	+1	Y	67	Y
N784A	Foothills Apts. Barbecue Area	C	67	1	64	65	+1	N	65	+1	N	64	0	N	64	0	N	64	N
N785	Residential - Apts (Foothills Apts.)	B	67	1	55	56	+1	N	56	+1	N	54	-1	N	55	0	N	55	N
N786	Foothills Apts. Pool	C	67	1	60	61	+1	N	61	+1	N	61	+1	N	61	+1	N	61	N
N786A	Foothills Apts. Barbecue Area	C	67	1	63	63	0	N	63	0	N	63	0	N	63	0	N	63	N
N787	Residential - Apts (Foothills Apts.)	B	67	1	55	56	+1	N	56	+1	N	54	-1	N	55	0	N	55	N
N788	Foothills Apts. Pool	C	67	1	63	65	+2	N	65	+2	N	64	+1	N	64	+1	N	64	N
N788A	Foothills Apts. Bark Park	C	67	1	60	62	+2	N	62	+2	N	60	0	N	60	0	N	60	N
N789	Residential - Apts (Foothills Apts.)	B	67	1	60	61	+1	N	61	+1	N	59	-1	N	60	0	N	60	N
N790	Residential - Apts (Foothills Apts.)	B	67	1	62	63	+1	N	63	+1	N	61	-1	N	62	0	N	62	N
N791	Residential - Apts (Foothills Apts.)	B	67	1	63	65	+2	N	65	+2	N	63	0	N	64	+1	N	63	N
N792	Residential - Apts (Foothills Apts.)	B	67	1	65	66	+1	Y	66	+1	Y	64	-1	N	65	0	N	65	N
N793	Residential - Apts (Foothills Apts.)	B	67	1	52	57	+5	N	57	+5	N	53	+1	N	53	+2	N	52	N
N794	Residential - Apts (Foothills Apts.)	B	67	1	54	59	+5	N	59	+5	N	55	+1	N	55	+2	N	55	N

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]														
	Description	Category	Criteria, Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact
N795	Residential - Apts (Foothills Apts.)	B	67	1	63	66	+3	Y	66	+3	Y	62	-1	N	63	0	N	63	N
N796	Residential - Apts (Foothills Apts.)	B	67	1	62	65	+3	N	65	+3	N	62	0	N	63	+1	N	63	N
N797	Residential - Apts (Foothills Apts.)	B	67	1	50	52	+2	N	52	+2	N	50	0	N	50	0	N	51	N
N798	Residential - Apts (Foothills Apts.)	B	67	1	52	53	+1	N	53	+1	N	51	-1	N	52	0	N	52	N
N799	Residential - Apts (Foothills Apts.)	B	67	1	61	63	+2	N	63	+2	N	60	-1	N	61	0	N	62	N
N800	Residential - Apts (Foothills Apts.)	B	67	1	61	62	+1	N	62	+1	N	60	-1	N	61	0	N	61	N
N801	Northeast High School Active Sports Area	C	67	1	51	52	+1	N	52	+1	N	51	0	N	52	+1	N	52	N
N802	Northeast High School	C	67	1	55	56	+1	N	56	+1	N	55	0	N	56	+1	N	56	N
N803	Northeast High School	C	67	1	57	58	+1	N	58	+1	N	57	0	N	58	+1	N	58	N
Summary		NAC B, C	Total Receptors	121	Min level, change, and num of "Y" impacts on Receivers	44	0	3	44	0	3	43	0	1	43	0	1		
Total Number of Receivers		121			Max level, change, and num of "N" impacts on Receivers	69	+5	118	69	+5	118	66	+3	120	68	+3	120		
NAC B Receivers		112			Number and Type of Impacted Receptors: Residences			2			2			0			0		
NAC C Receivers		9			Number and Type of Impacted Receptors: Apt. Pool			1			1			1			1		
					Total Number of Impacted Recentors			3			3			1			1		
					Existing Noise Min.			43											Number of Impacted Receptors for FNB: FNB Min: FNB Max:
					Existing Noise Max.			67									1		
					6LN SPUI Min. Impacted	66		6LN SDI Min. Impacted	66		8 LN SPUI Min. Impacted	66		8 LN SDI Min. Impacted	68		43		
					6LN SPUI Max. Impacted	69		6LN SDI Max. Impacted	69		8 LN SPUI Max. Impacted	66		8 LN SDI Max. Impacted	68		67		

Table C-14: Design Hour Noise Levels, dBA, Leq(1h), NSA 14

Receiver ID	Noise Abatement Criteria (NAC)			Number of Receptors	Noise Levels [Leq(h)]															
	Description	Category	Criteria, Leq(h)		Existing	Predicted 6 LN with C/D Lanes with SPUI	Change	Impact (Y/N)	Predicted 6 LN with C/D Lanes with SDI	Change	Impact (Y/N)	Predicted 8 LN GP with SPUI	Change	Impact (Y/N)	Predicted 8 LN GP with SDI	Change	Impact (Y/N)	Future No Build	Future No Build Noise Impact	
N805	Urgent Care	D	52	1	46	46	0	N	46	0	N	46	0	N	46	0	N	46	N	
N806	Restaurant	E	72	1	68	67	-1	N	67	-1	N	67	-1	N	68	0	N	67	N	
	Summary	NAC D, E	Total Receptors	2	Min level, change, and num of "Y" impacts on Receivers	46	0	0	46	0	0	46	0	0	46	0	0			
	Total Number of Receivers	2			Max level, change, and num of "N" impacts on Receivers	67	0	2	67	0	2	67	0	2	68	0	2			
	NAC D Receivers	1			Total Number of Impacted Receptors			0			0									
	NAC E Receivers	1			Existing Noise Min.	46														
					Existing Noise Max.	68													Number of Impacted Receptors for FNB:	0
					6LN SPUI Min. Impacted	N/A			6LN SDI Min. Impacted	N/A			8 LN SPUI Min. Impacted	N/A			8 LN SDI Min. Impacted	N/A	FNB Min:	46
					6LN SPUI Max. Impacted	N/A			6LN SDI Max. Impacted	N/A			8 LN SPUI Max. Impacted	N/A			8 LN SDI Max. Impacted	N/A	FNB Max:	67

This page is intentionally left blank

Attachment D: Noise Receiver Location Maps

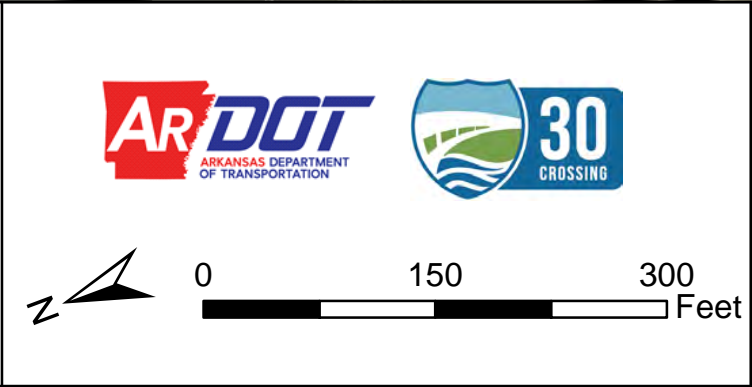
This page is intentionally left blank



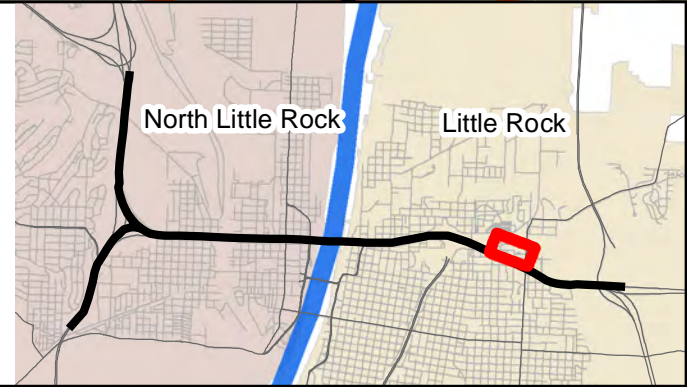
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚶 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index
**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 1: SHEET 1 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

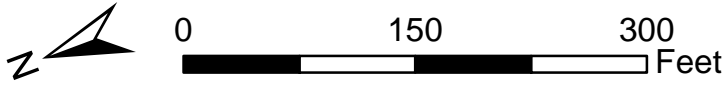
Draft Traffic Noise Study Report
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

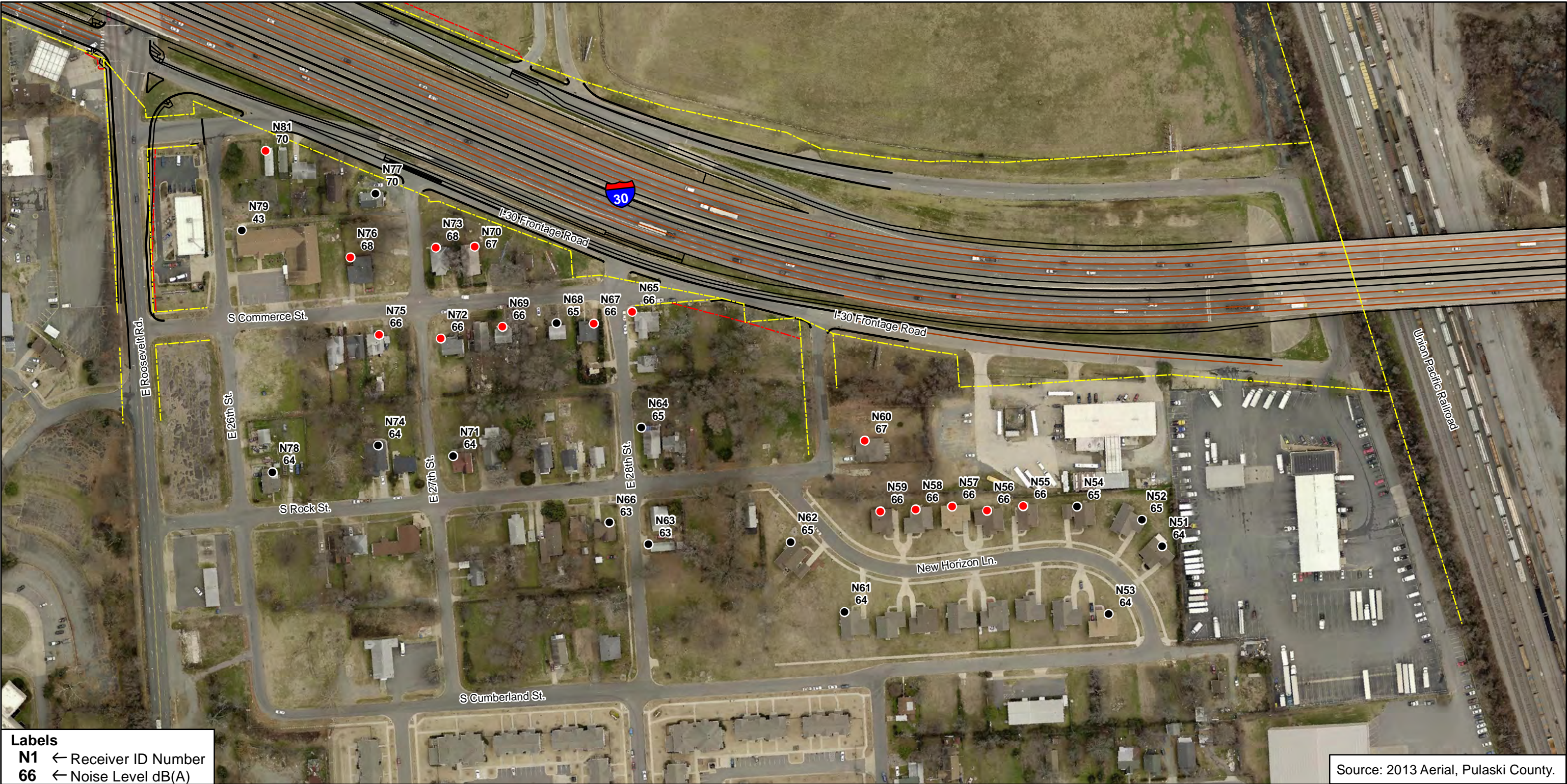
**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 1: SHEET 2 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

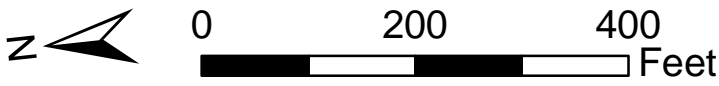
Draft Traffic Noise Study Report
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

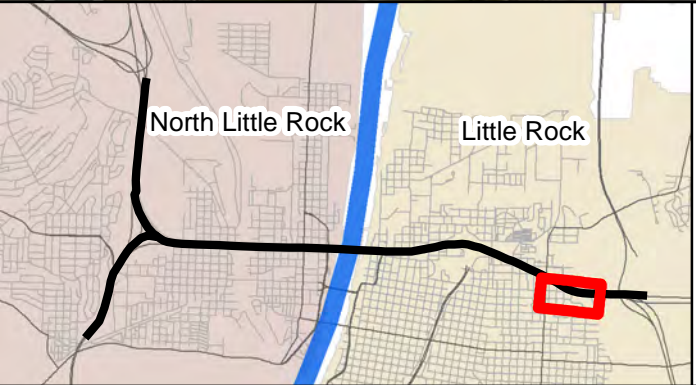
Source: 2013 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 2: SHEET 1 of 1

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

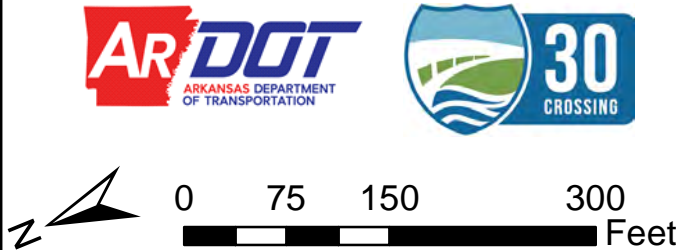
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🏟️ Public Park
 - 🏡 Historic District



Sheet Index

*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 3: SHEET 1 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

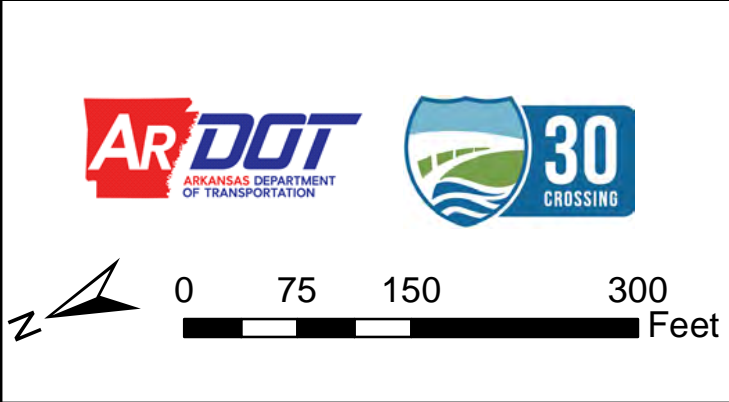
Pulaski County, Arkansas



Source: 2013 Aerial, Pulaski County.

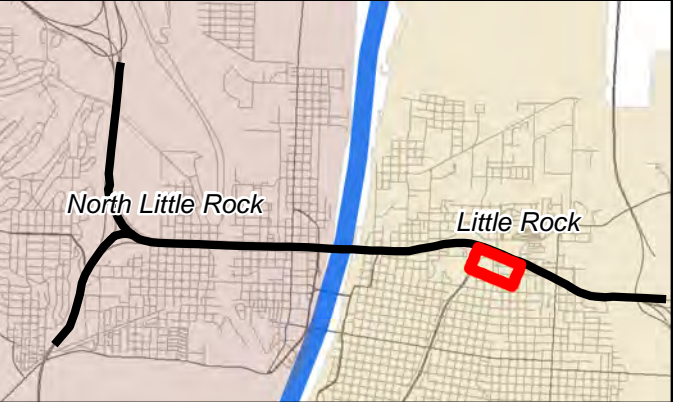
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

*The extent of each sheet is highlighted in red

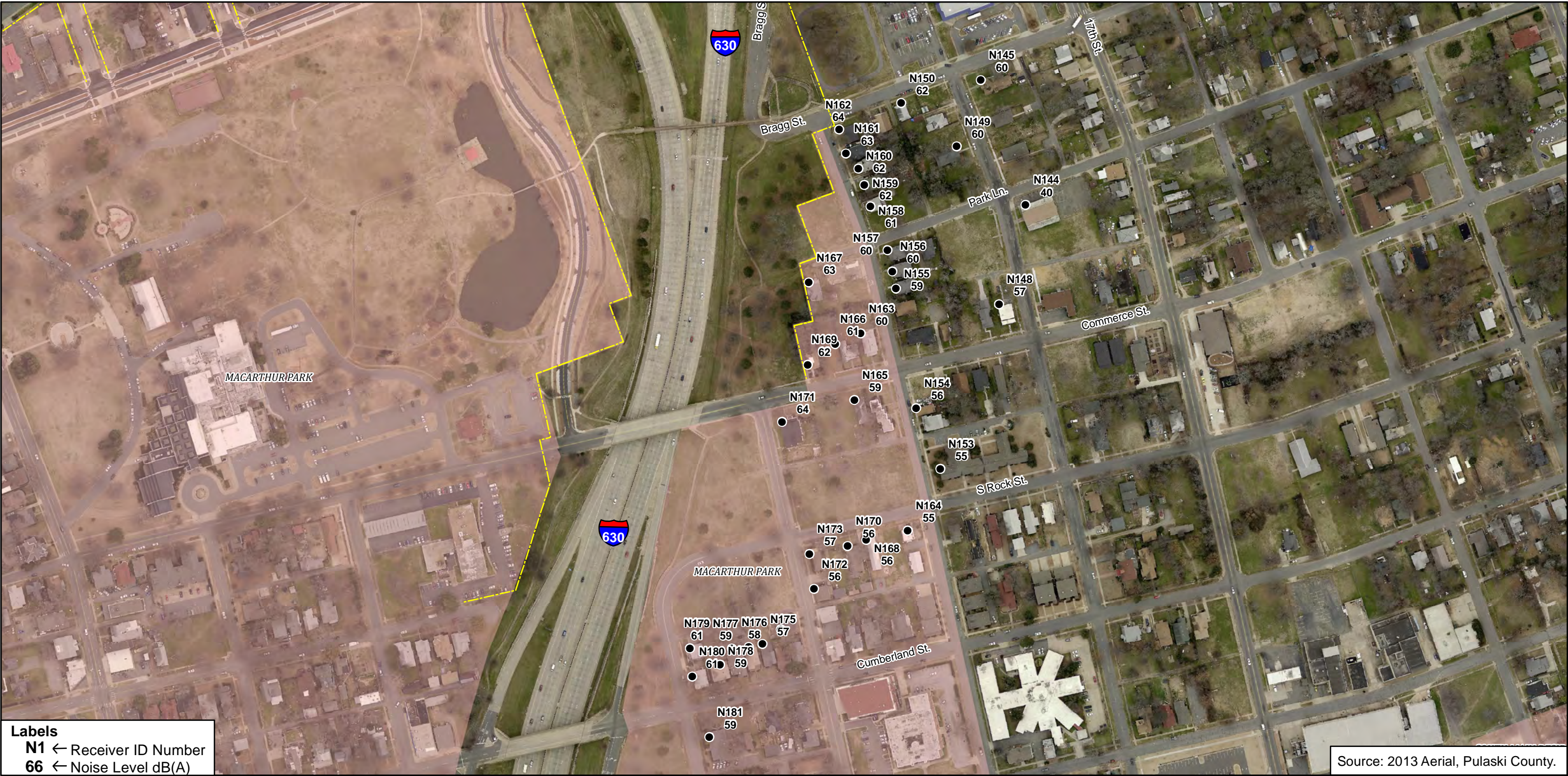


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 3: SHEET 2 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

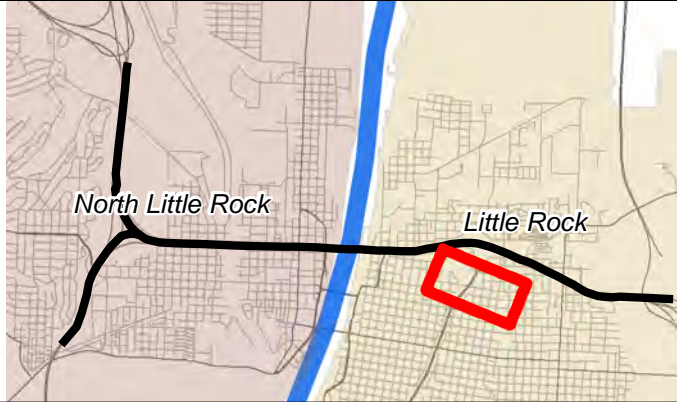
- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏠 Historic District



0 125 250 500 Feet

Sheet Index

**The extent of each sheet is highlighted in red*

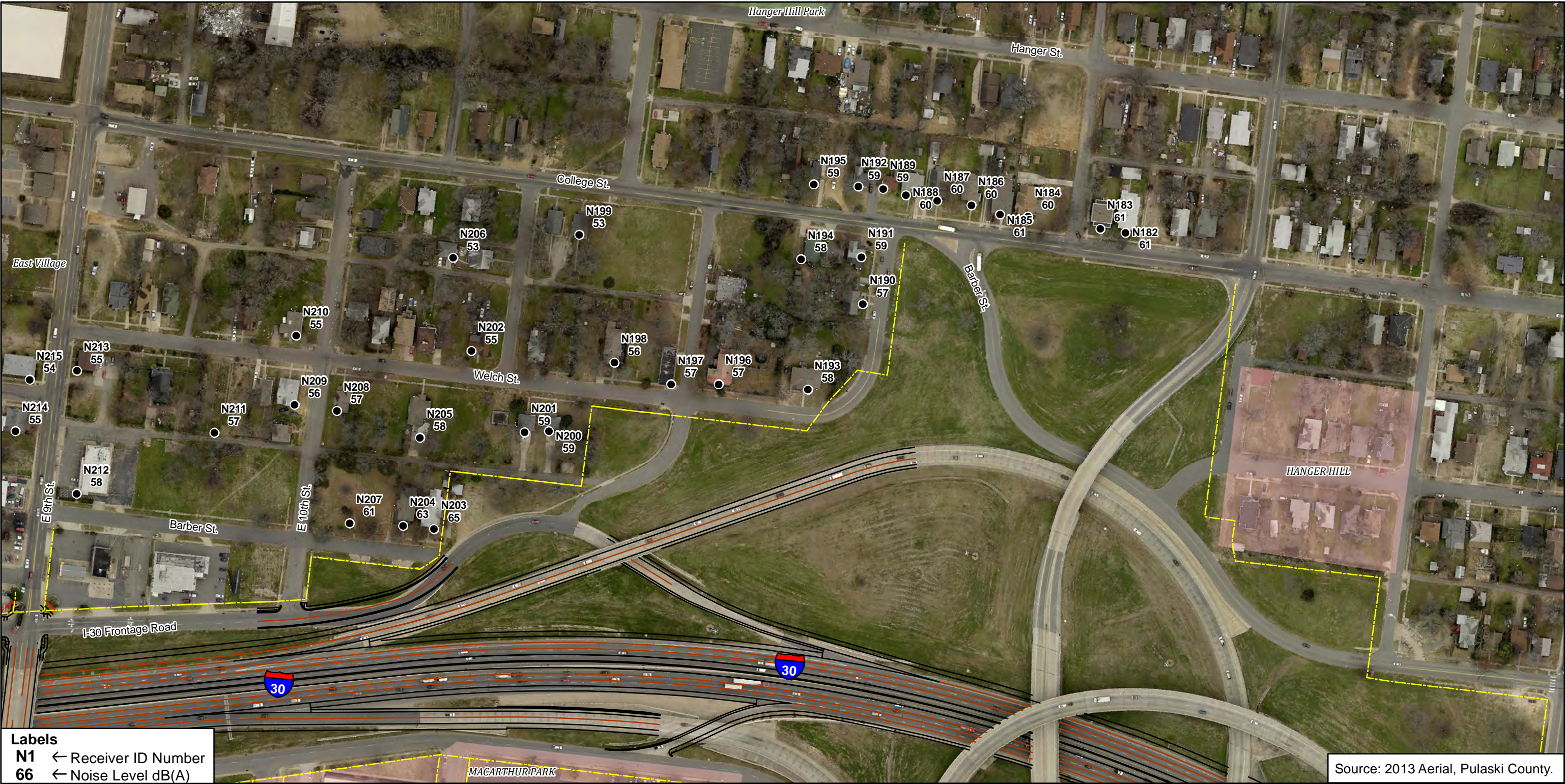


**NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 3: SHEET 3 OF 3**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

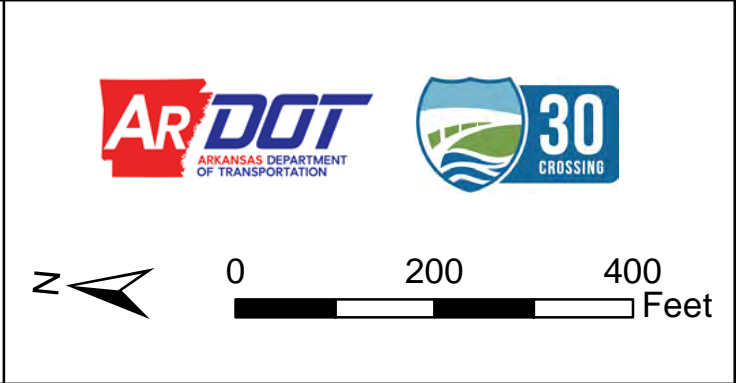
Draft Traffic Noise Study Report

Pulaski County, Arkansas

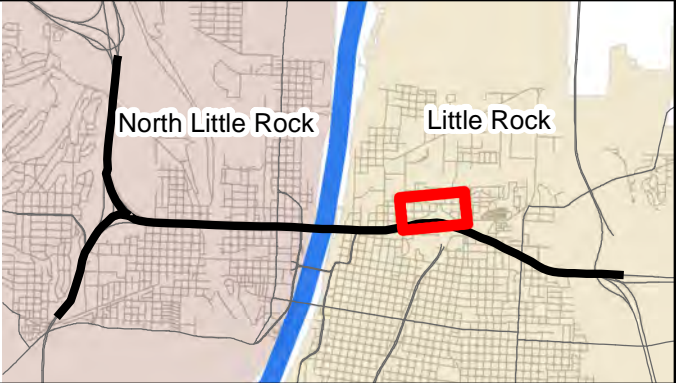


Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



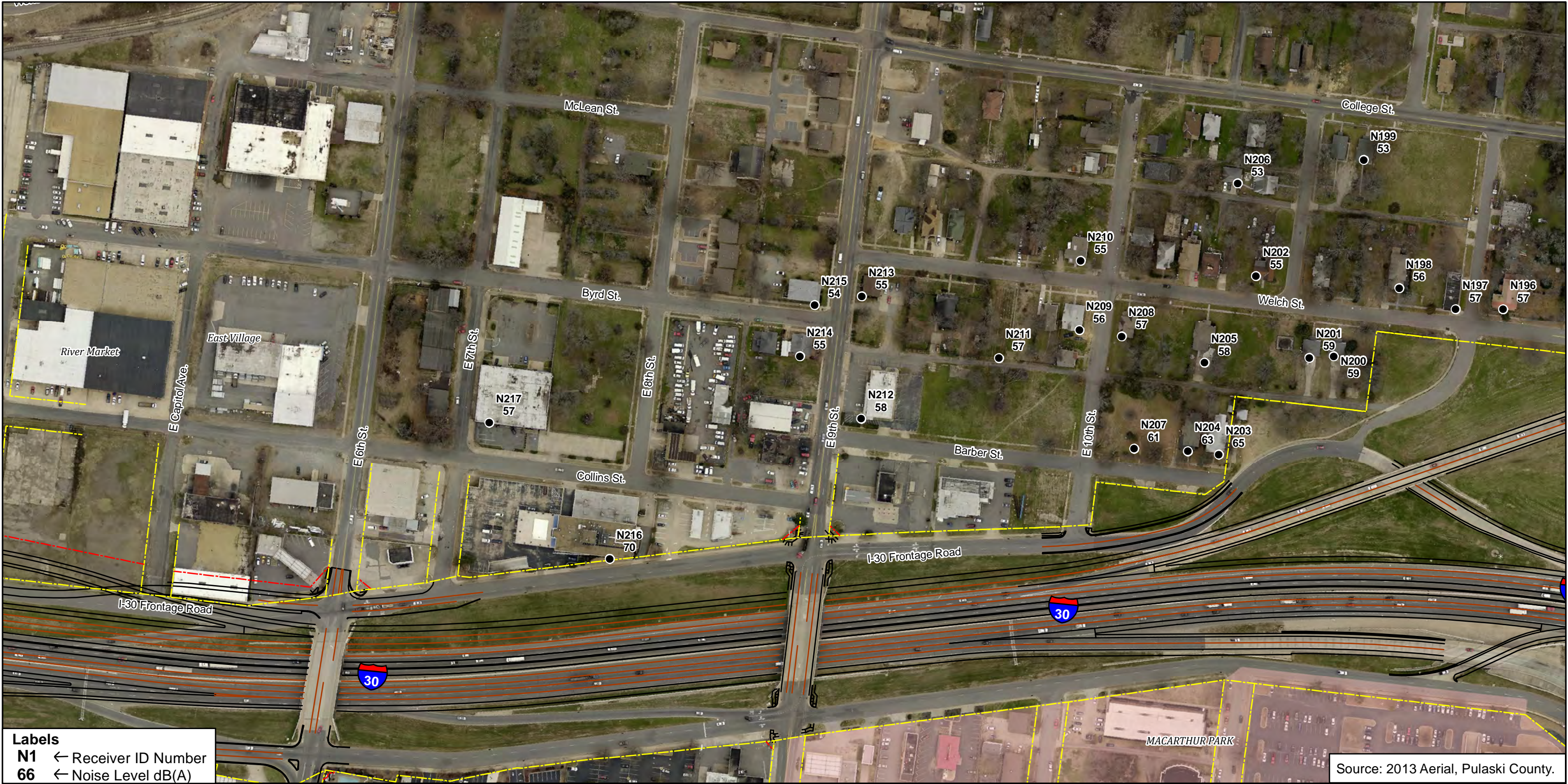
Sheet Index
*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 4: SHEET 1 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report
Pulaski County, Arkansas

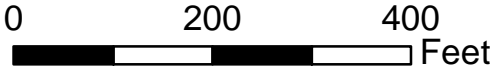



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	

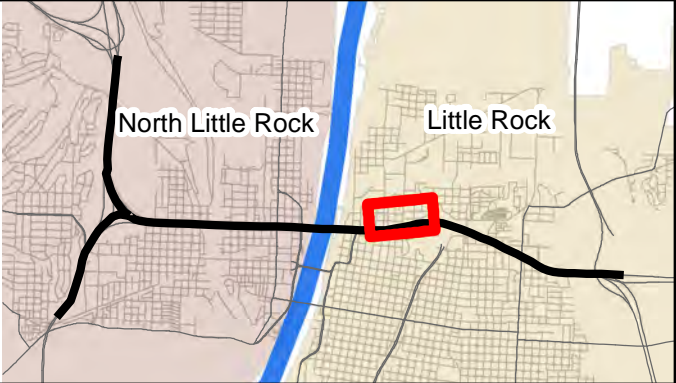




Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 4: SHEET 2 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report



Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)


- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏠 Historic District

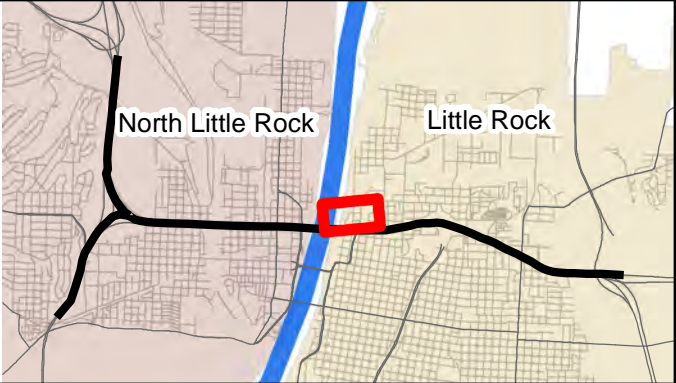




Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 4: SHEET 3 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report



Pulaski County, Arkansas




Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	




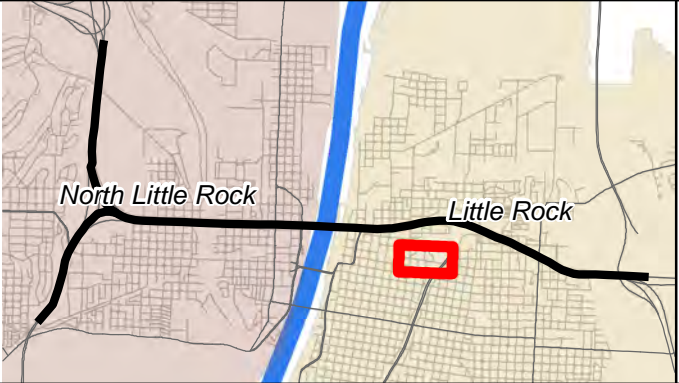
0 150 300 Feet



Sheet Index

**The extent of each sheet is highlighted in red*



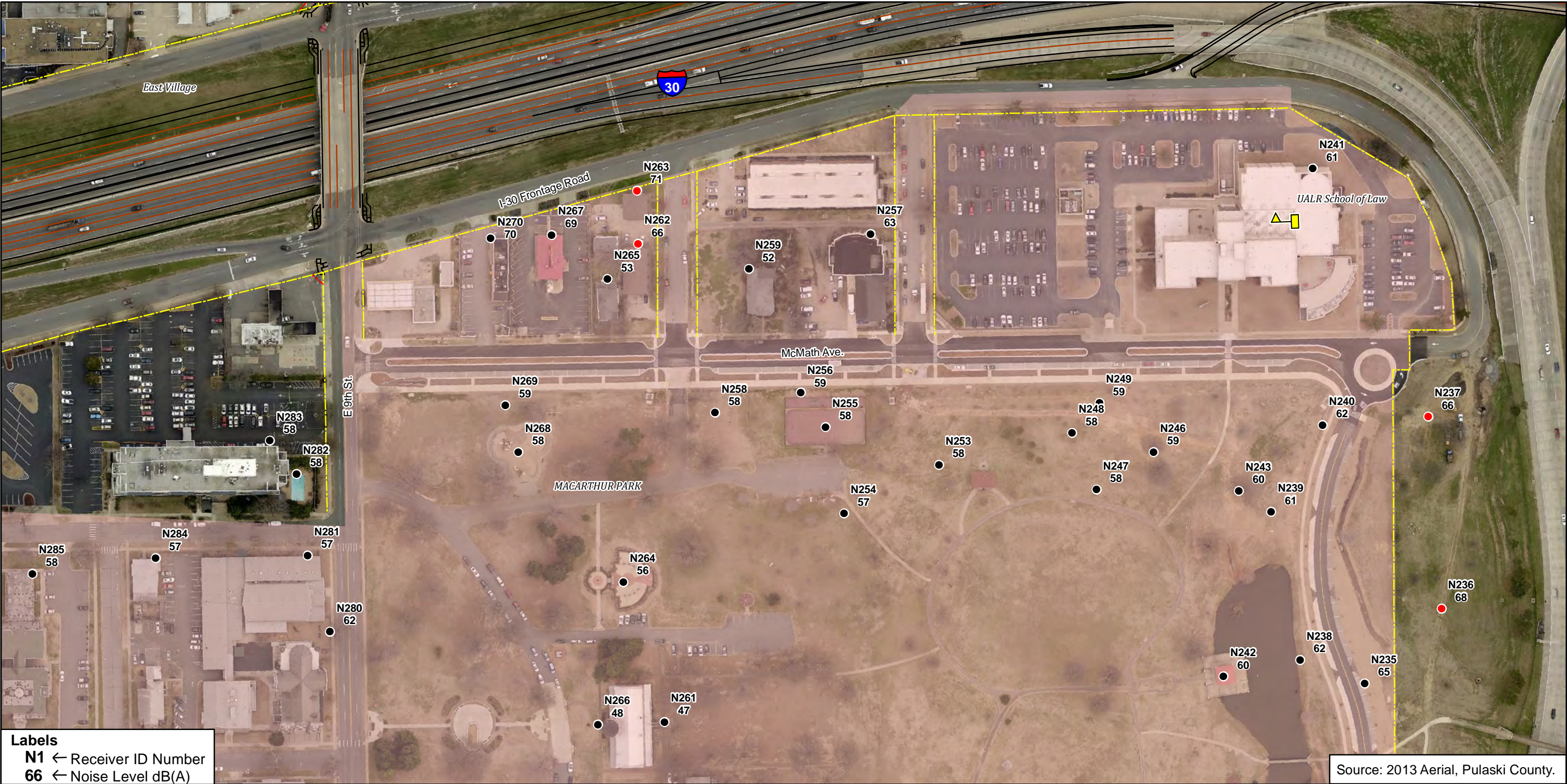


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 5: SHEET 1 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

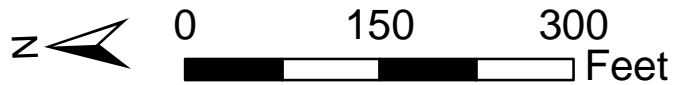
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

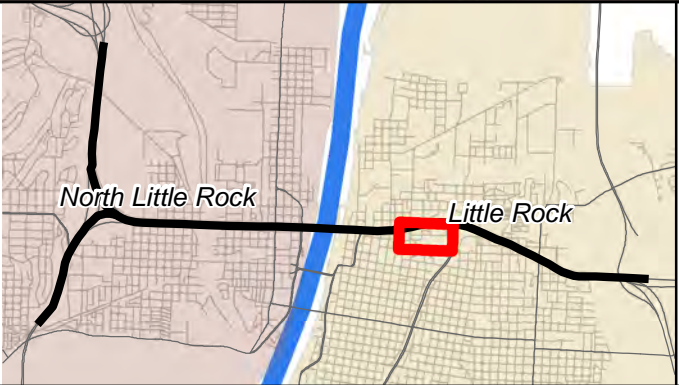
Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*

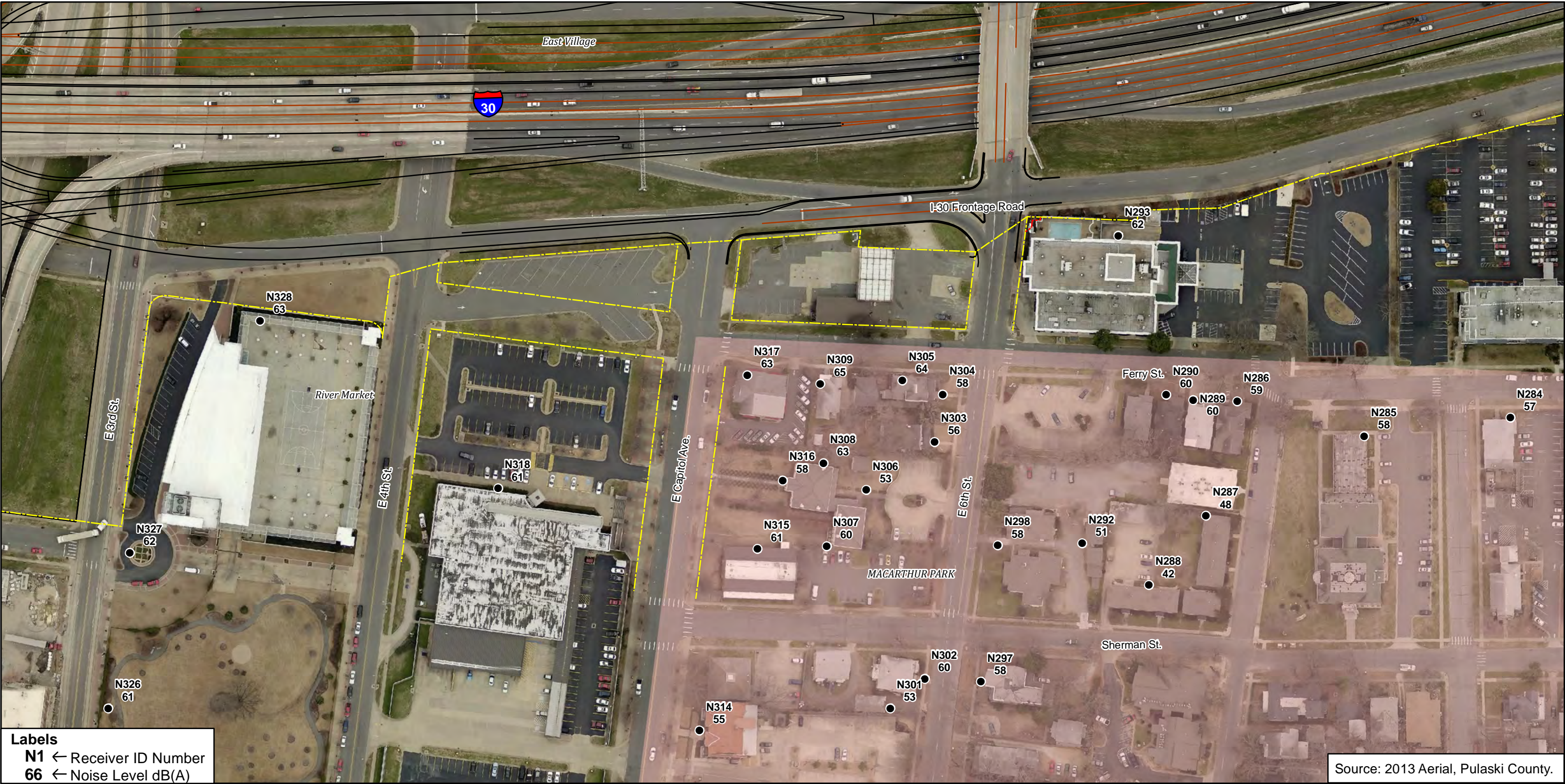


**NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 5: SHEET 2 OF 6**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas





Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)


Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	




0 125 250 Feet



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 5: SHEET 3 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

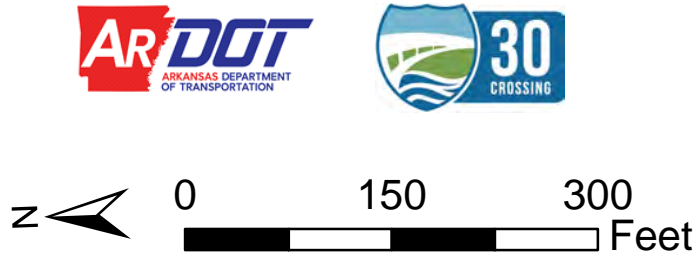
Draft Traffic Noise Study Report

Pulaski County, Arkansas



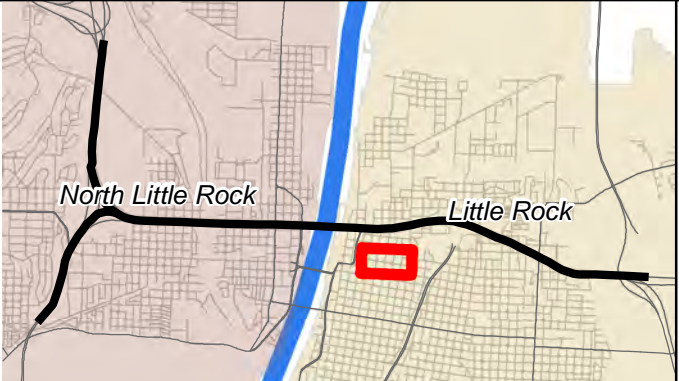
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*

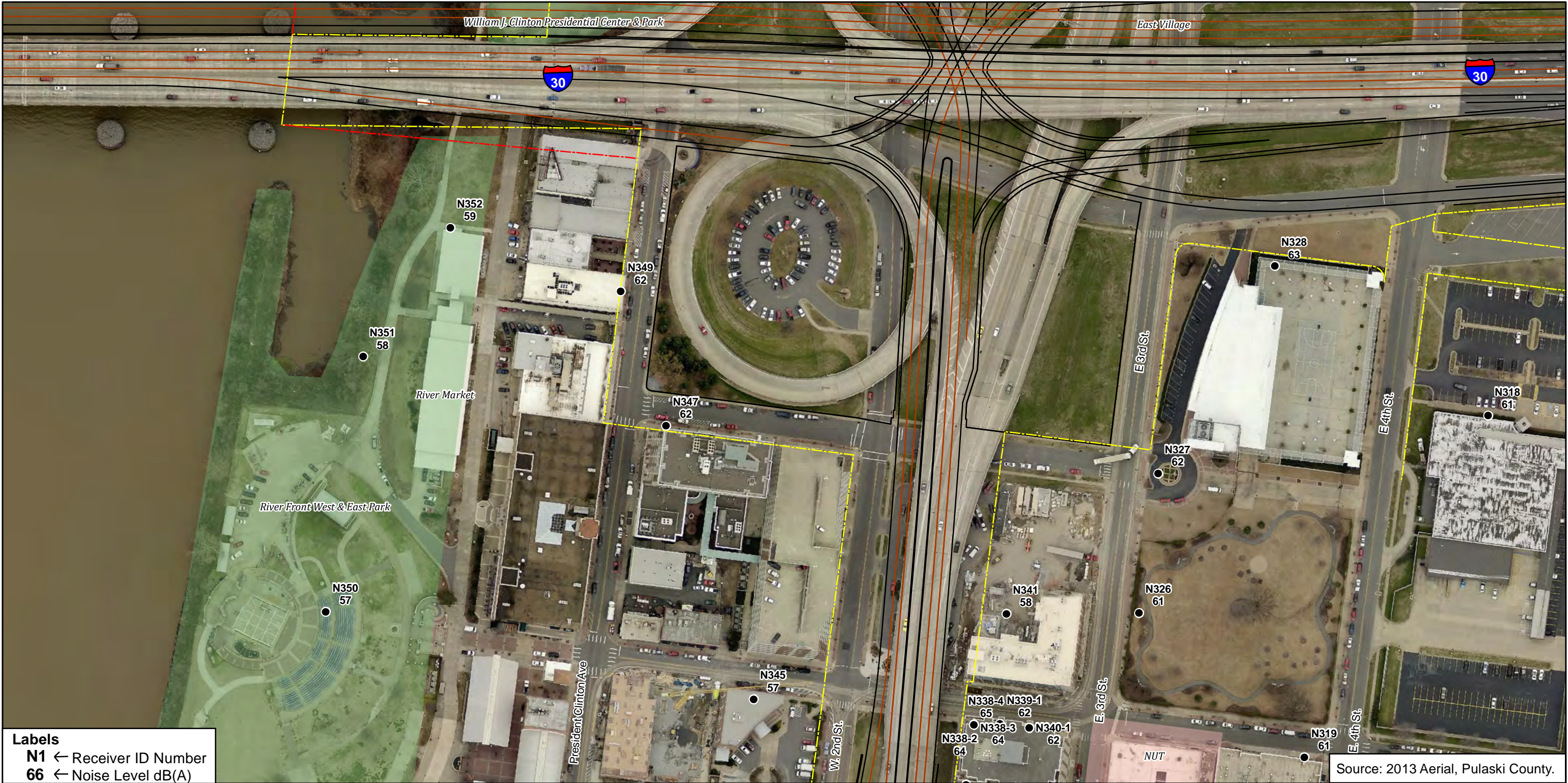


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 5: SHEET 4 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report



Pulaski County, Arkansas




Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🏡 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
- - - Existing ROW	




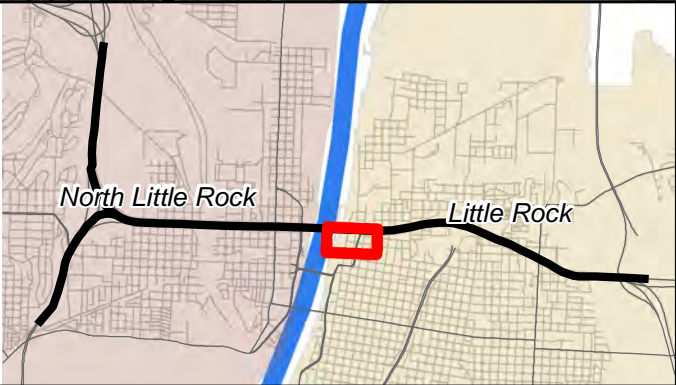
0 150 300 Feet



Sheet Index

**The extent of each sheet is highlighted in red*



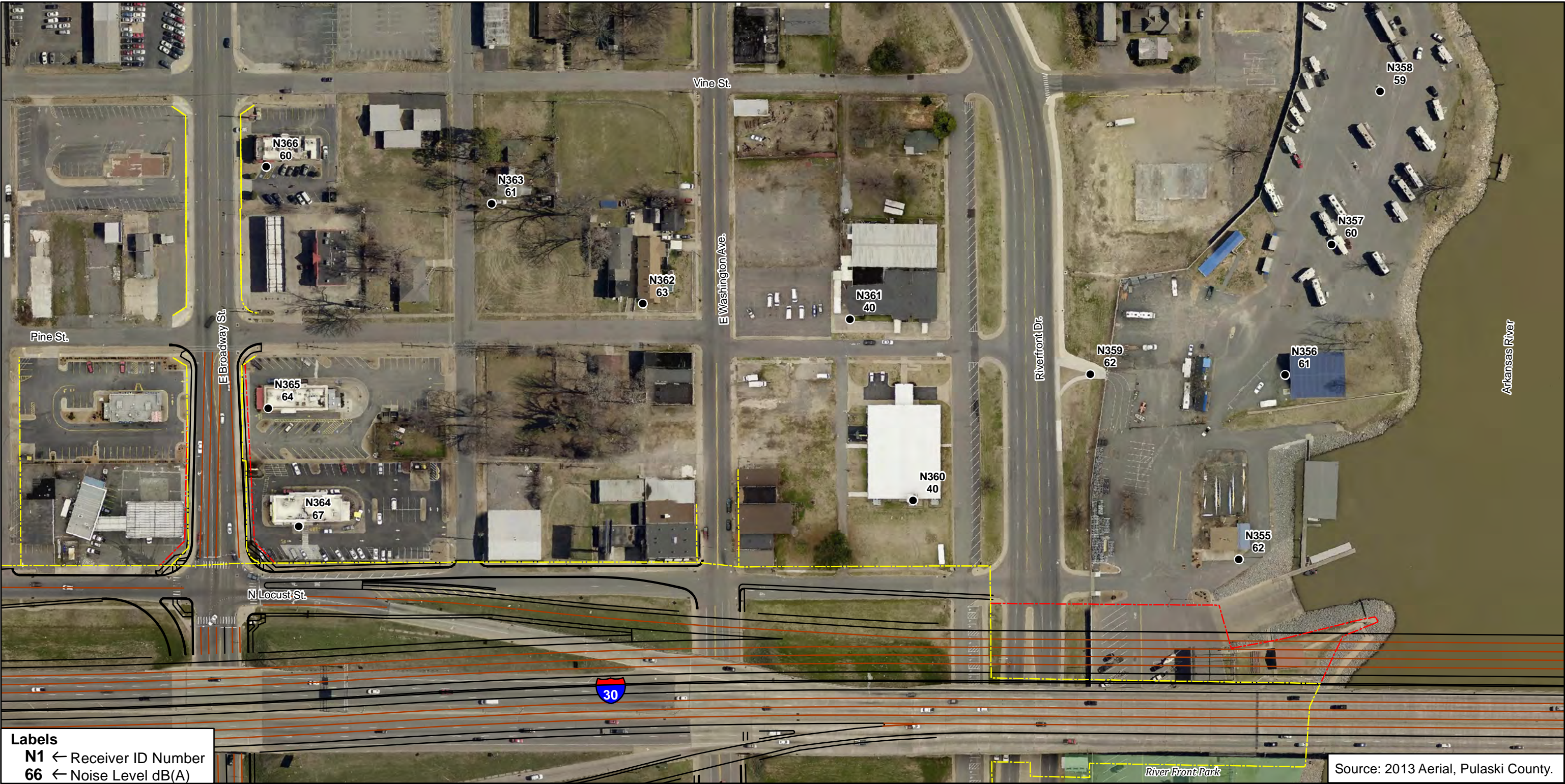


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 5: SHEET 6 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



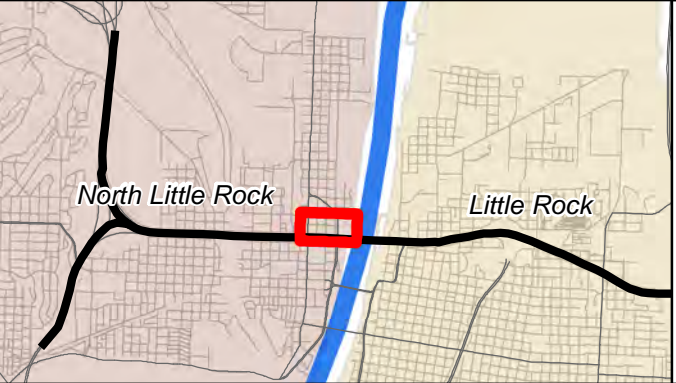
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 6: SHEET 1 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas





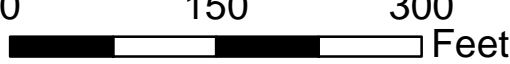

Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	

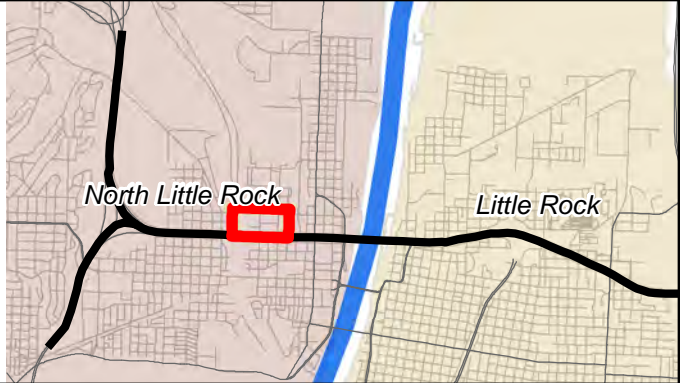




Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 6: SHEET 2 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report



Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

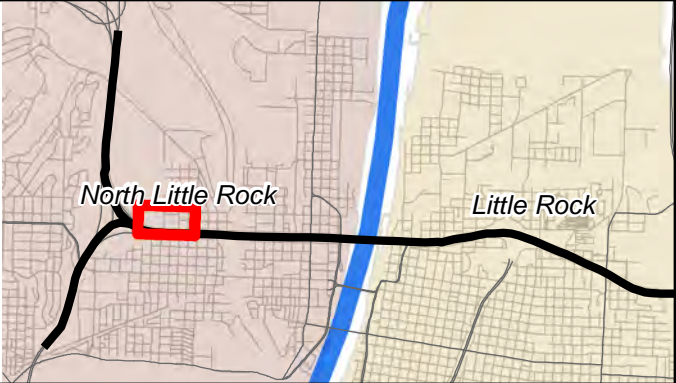
- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District





Sheet Index

**The extent of each sheet is highlighted in red*

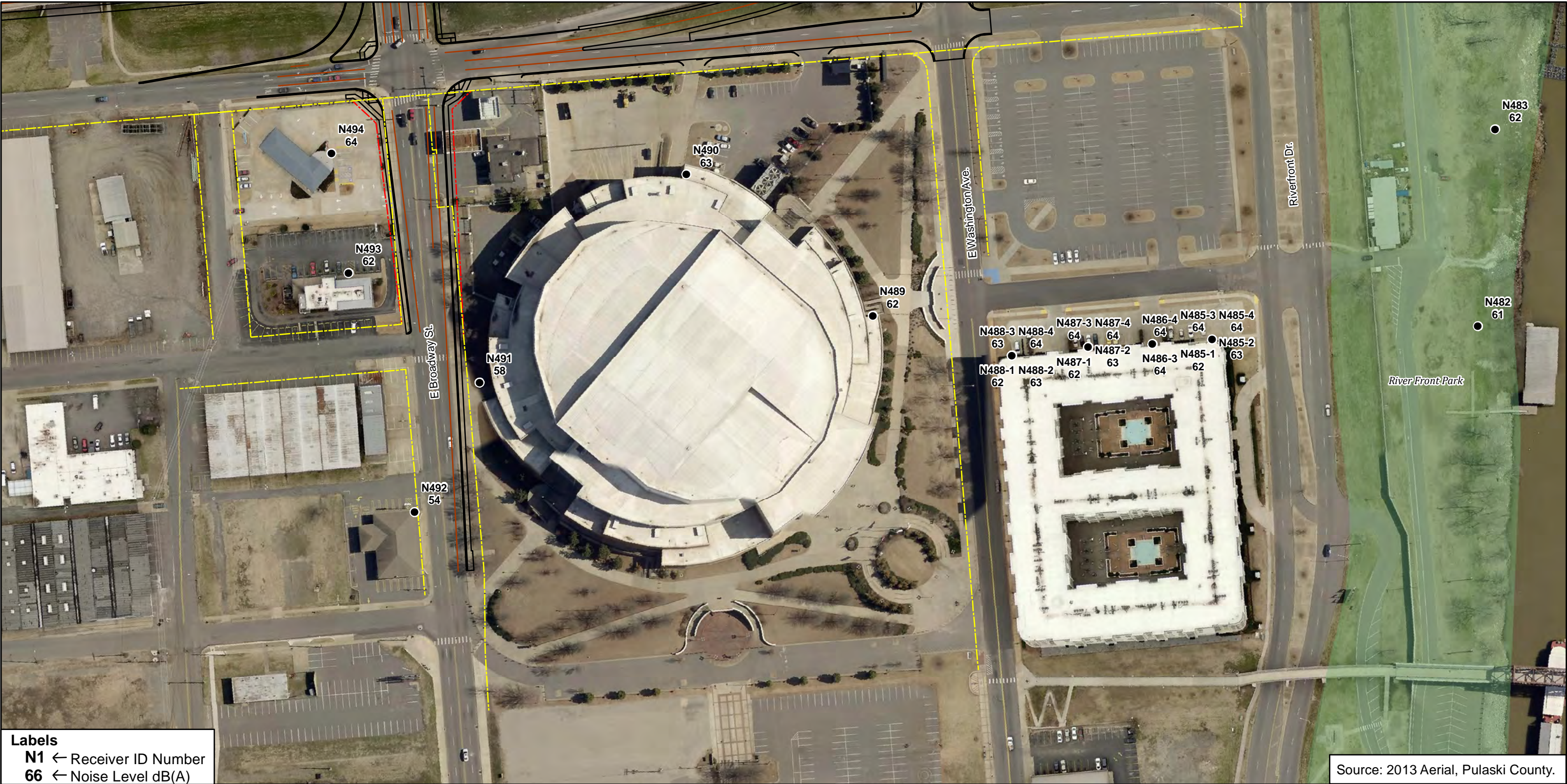


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 6: SHEET 4 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas








Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

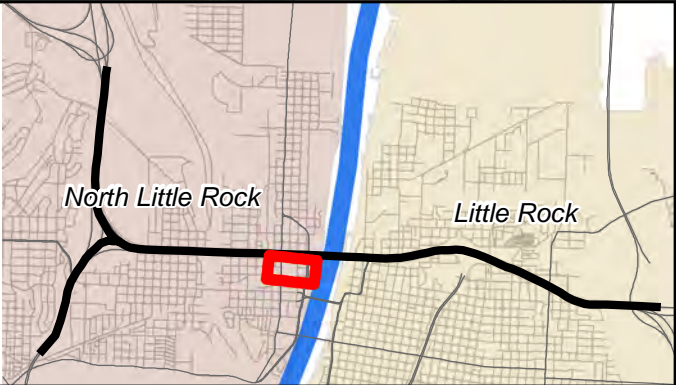
● Non-Impacted Receiver	🚶 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 7: SHEET 1 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report



Pulaski County, Arkansas






Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*

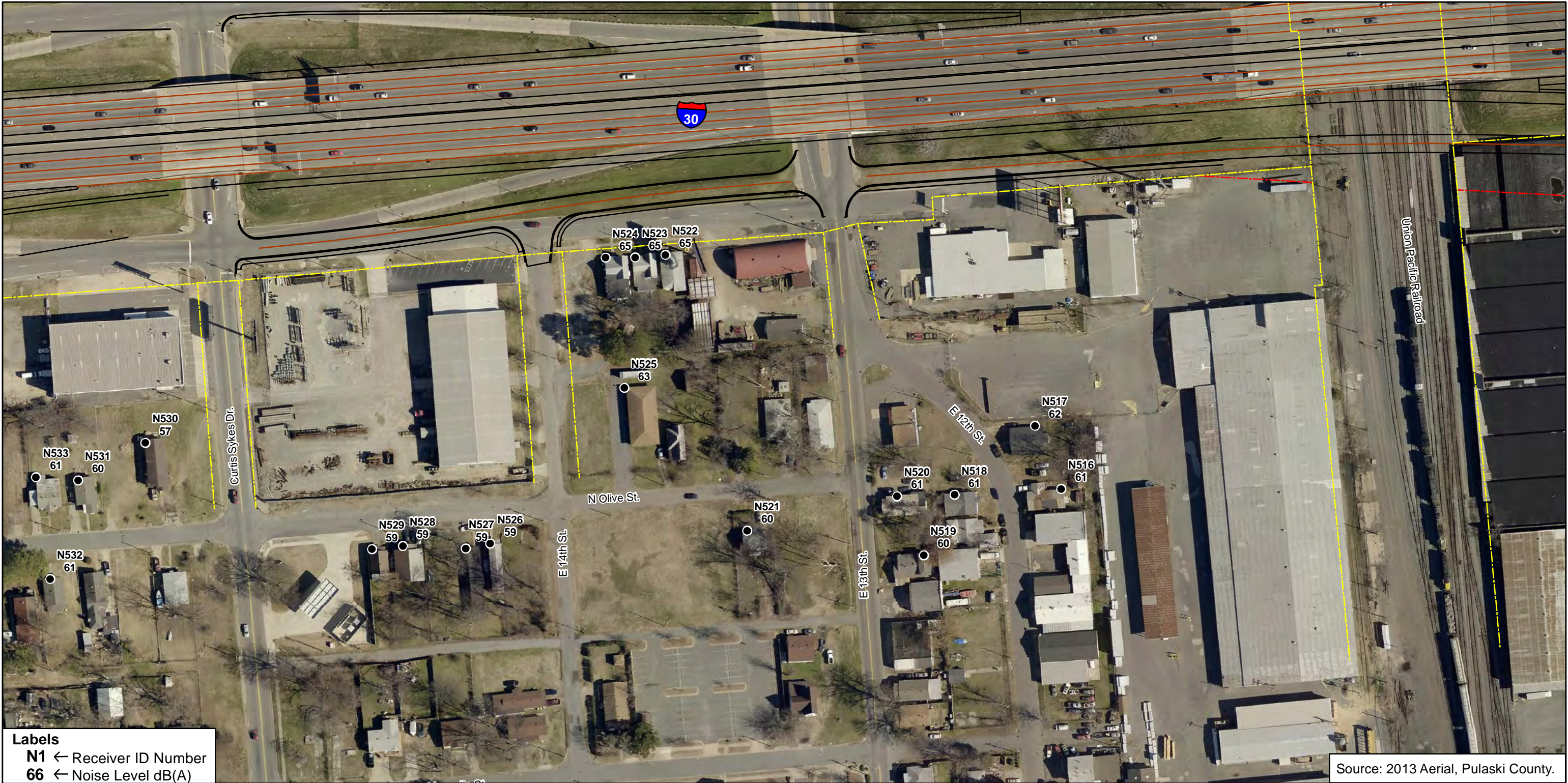


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 7: SHEET 2 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

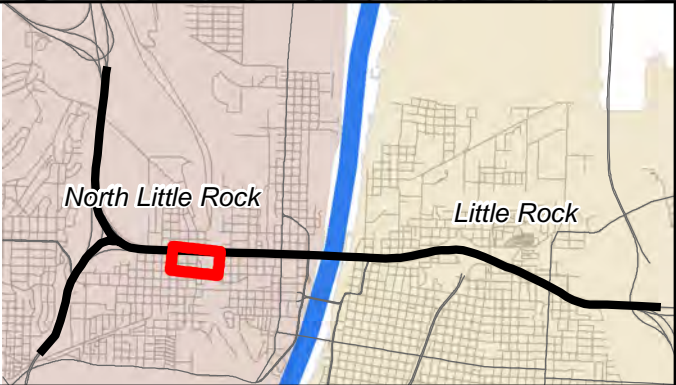
● Non-Impacted Receiver	🚏 School
● Impacted Receiver	
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	🌳 Public Park
--- Proposed ROW	
--- Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*

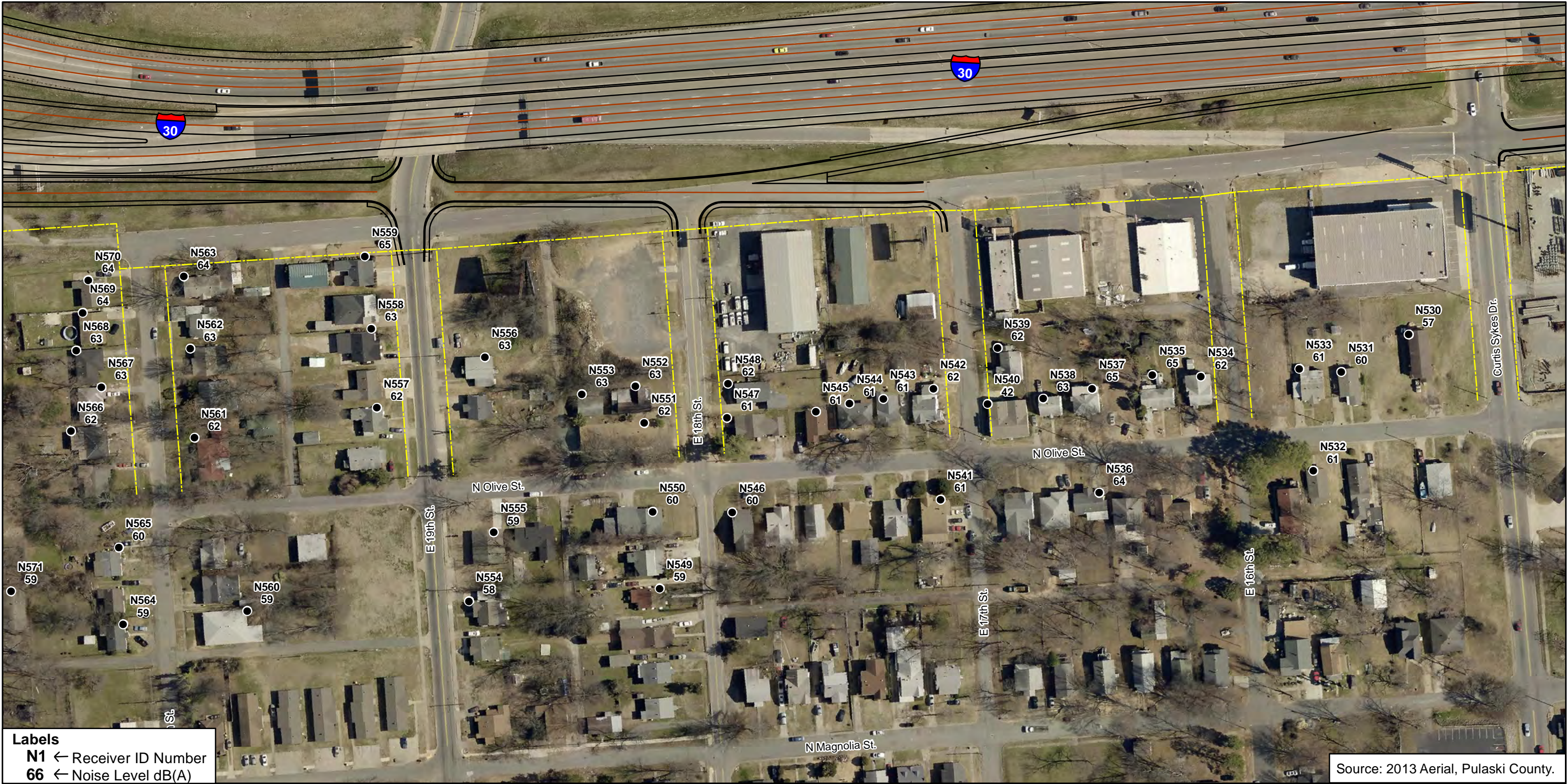


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 7: SHEET 3 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas








Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

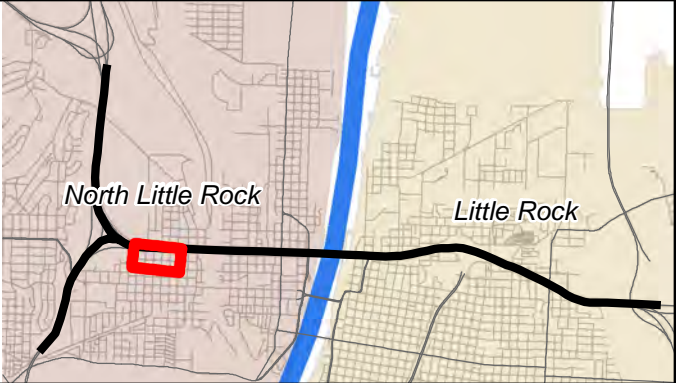
● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 7: SHEET 4 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

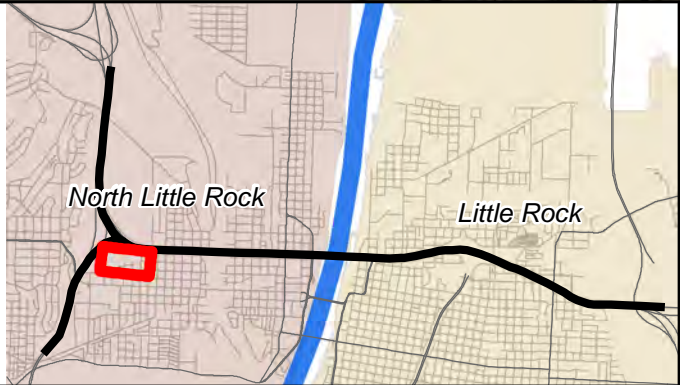
● Non-Impacted Receiver	🚩 School
● Impacted Receiver	
— Proposed Lane Markings	Historic District
— Proposed Pavement Edge	Public Park
- - - Proposed ROW	
- - - Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 7: SHEET 5 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas





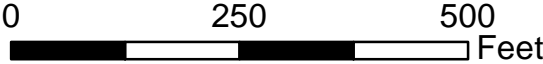

Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

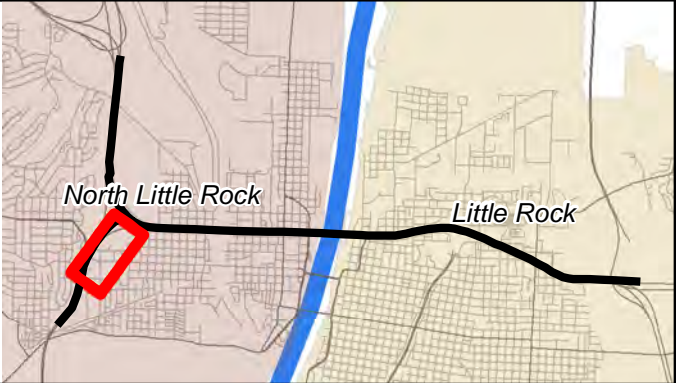
● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*

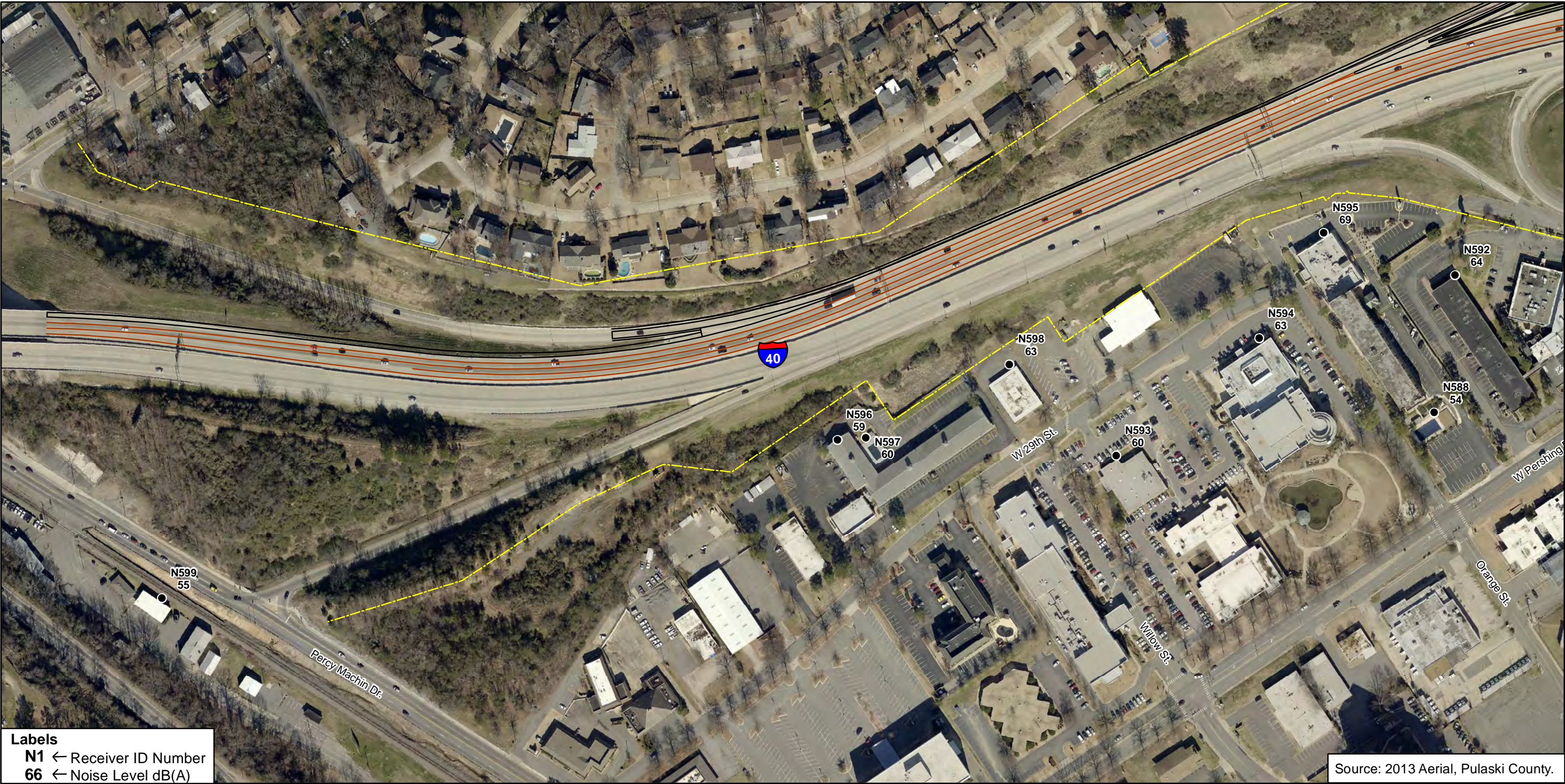


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 8: SHEET 1 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

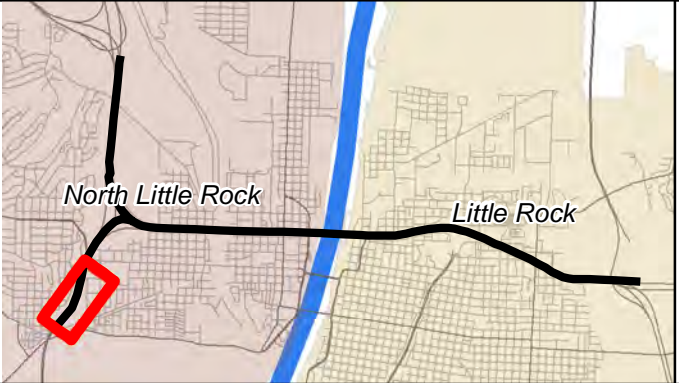
● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 8: SHEET 2 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

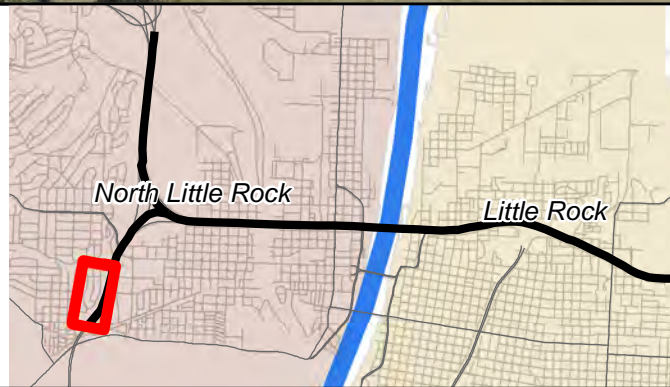
- | | |
|--------------------------|---------------------|
| ● Non-Impacted Receiver | 🚏 School |
| ● Impacted Receiver | 🌳 Public Park |
| — Proposed Lane Markings | 🏡 Historic District |
| — Proposed Pavement Edge | |
| - - - Proposed ROW | |
| - - - Existing ROW | |



0 200 400 Feet

Sheet Index

*The extent of each sheet is highlighted in red



**NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 9: SHEET 1 OF 2**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	

AR DOT
ARKANSAS DEPARTMENT OF TRANSPORTATION

30
CROSSING

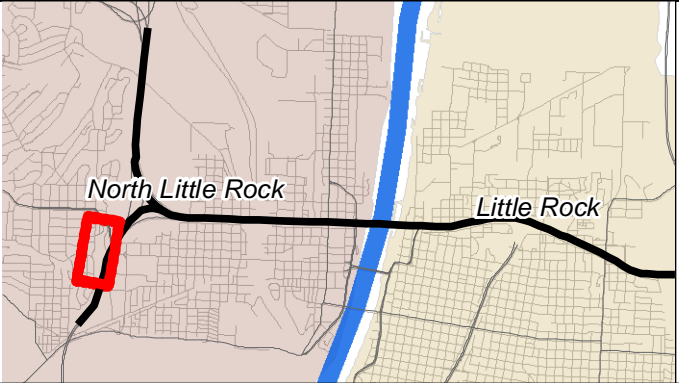
N

0 200 400 Feet

Sheet Index

*The extent of each sheet is highlighted in red

z

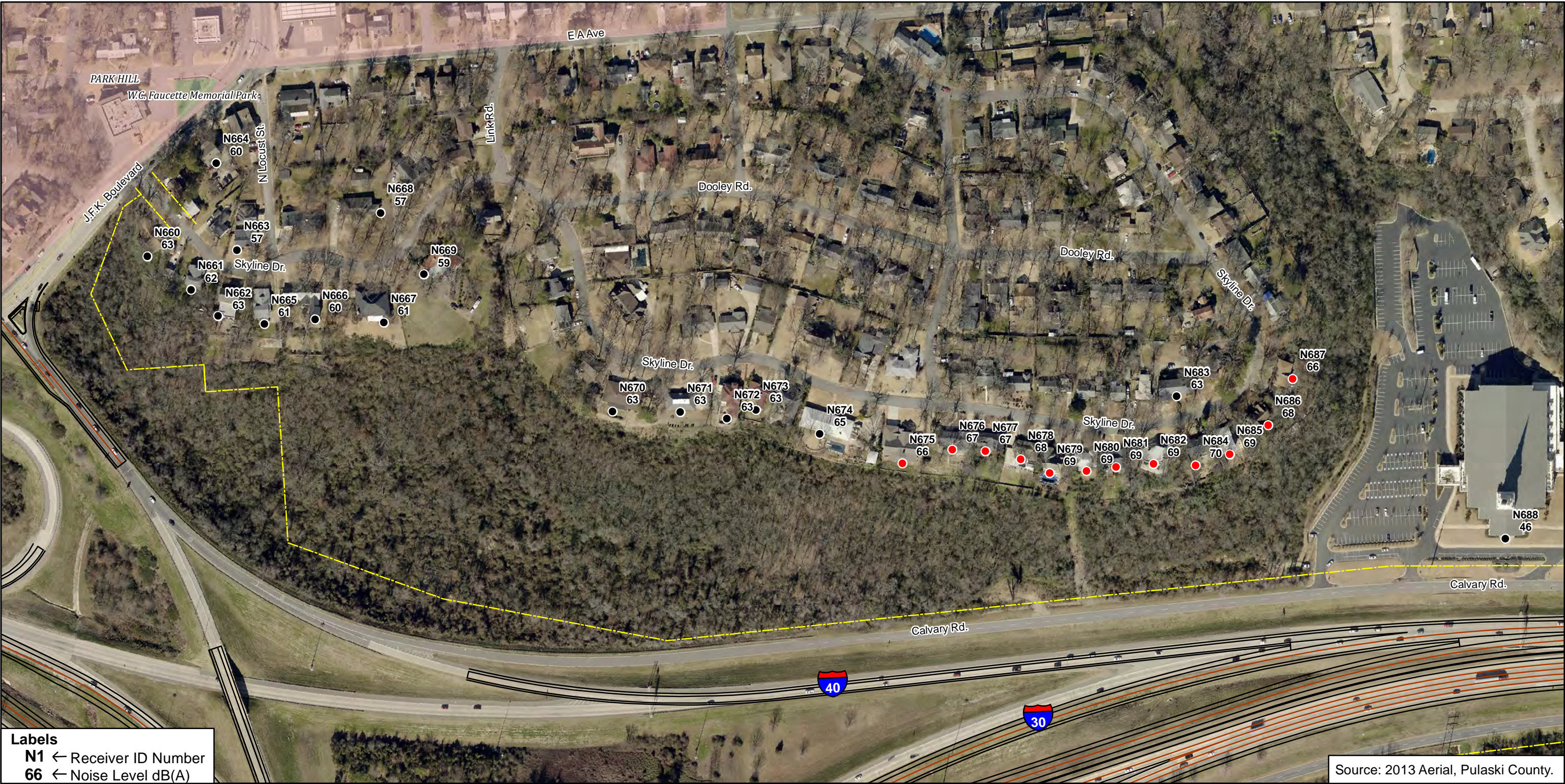


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 9: SHEET 2 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas





Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)



Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	

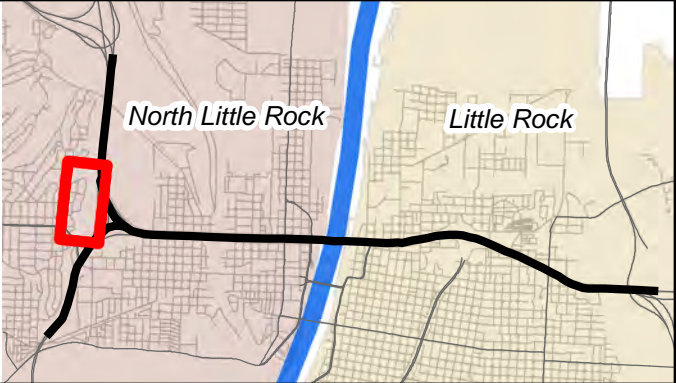


N



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 10: SHEET 1 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report

Pulaski County, Arkansas





Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	



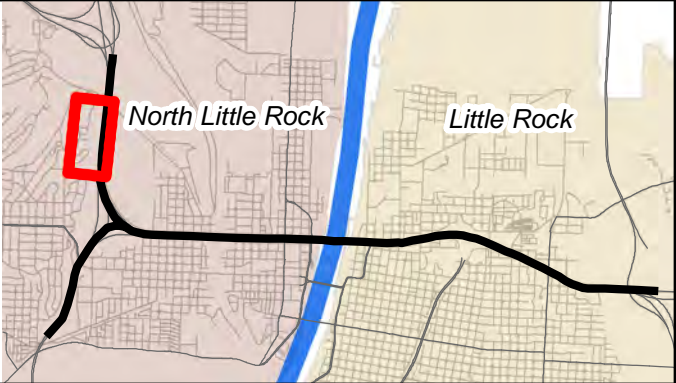
N



0 250 500 Feet

Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 10: SHEET 2 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

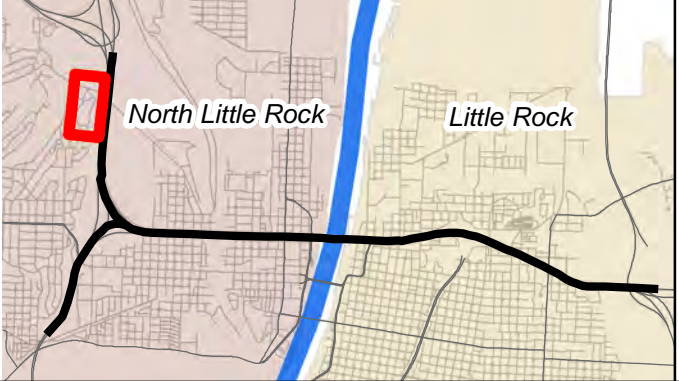
- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



0 200 400 Feet

Sheet Index

*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 10: SHEET 3 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend


● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	

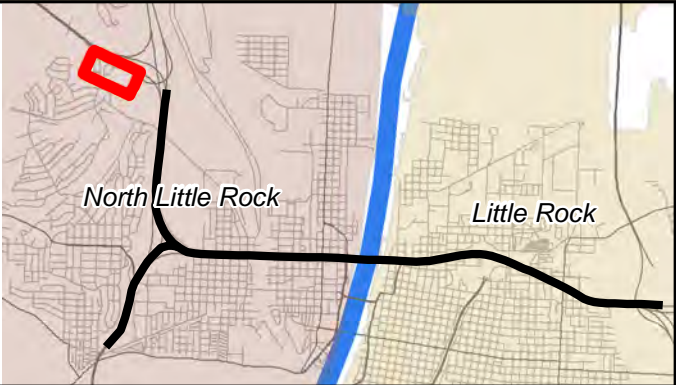




Sheet Index

**The extent of each sheet is highlighted in red*



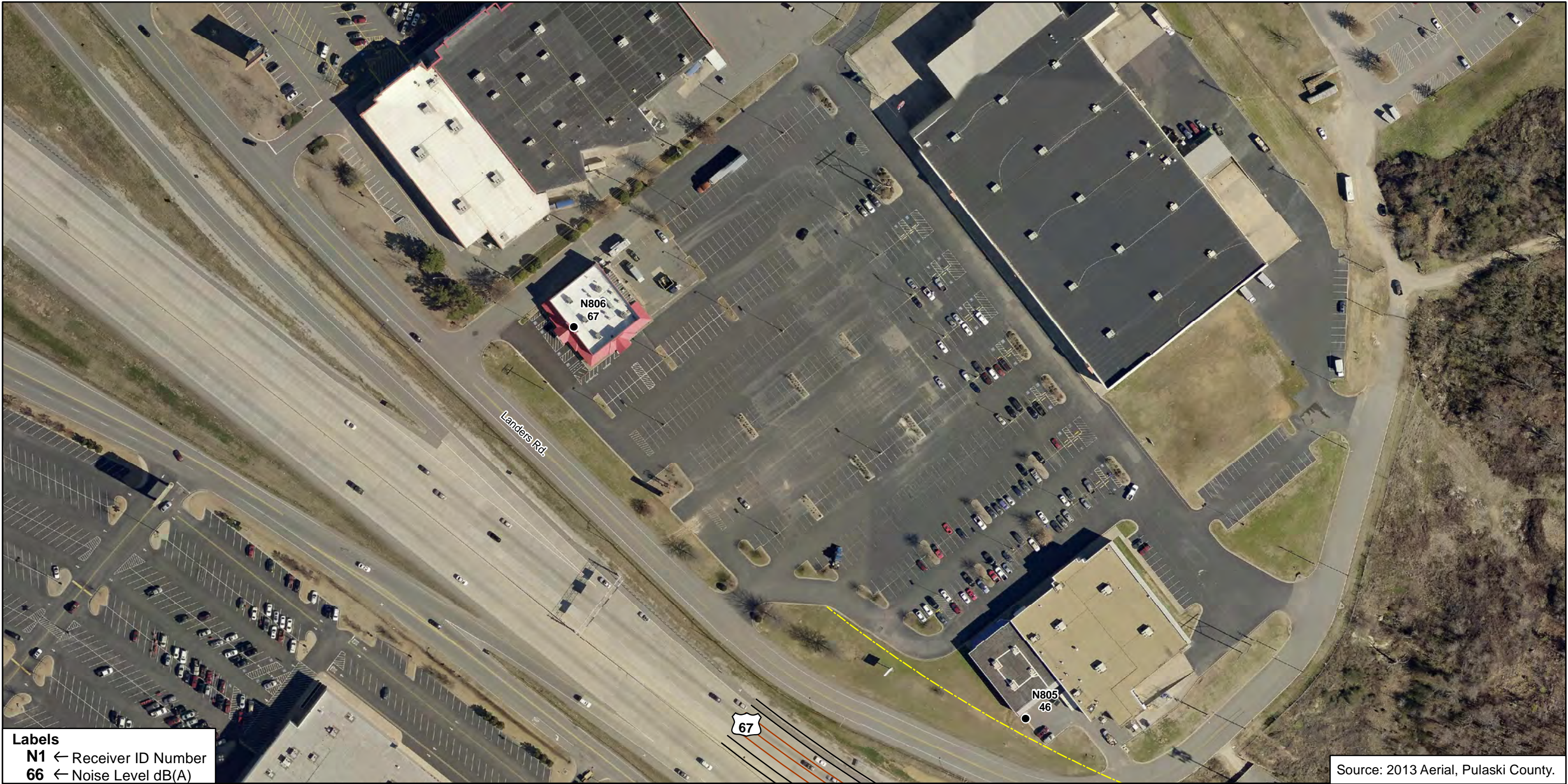


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 12: SHEET 1 OF 1

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

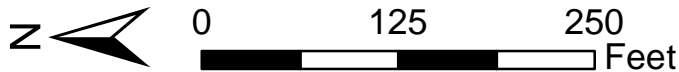
Draft Traffic Noise Study Report

Pulaski County, Arkansas



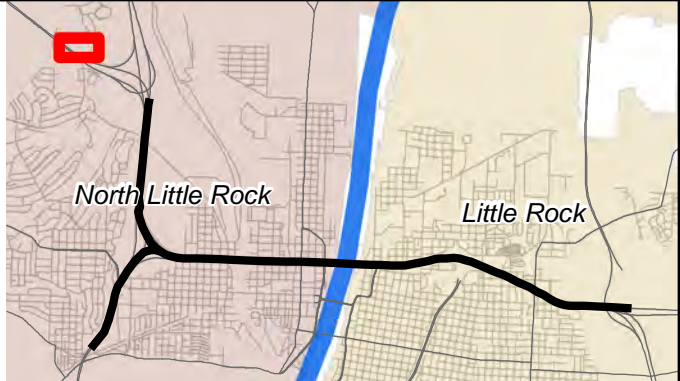
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SPUI
NSA 14: SHEET 1 OF 1

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

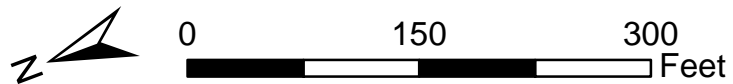
Draft Traffic Noise Study Report
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

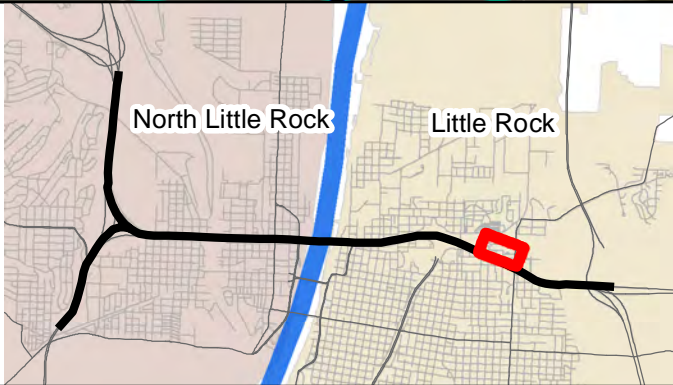
Source: 2013 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

*The extent of each sheet is highlighted in red



**NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 1: SHEET 1 OF 2**

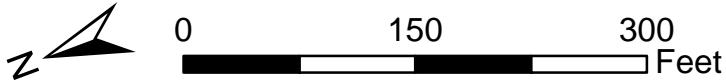
I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚶 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 1: SHEET 2 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

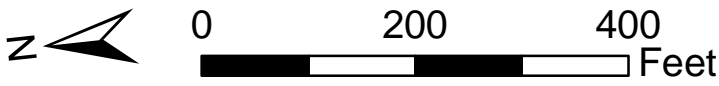
Draft Traffic Noise Study Report
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

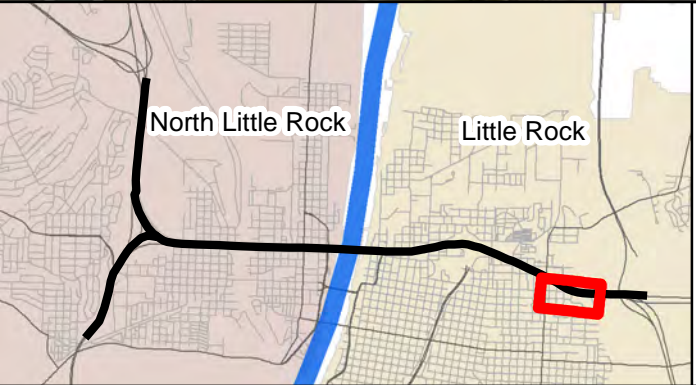
Source: 2013 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 2: SHEET 1 of 1

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas

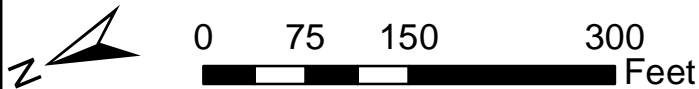


Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

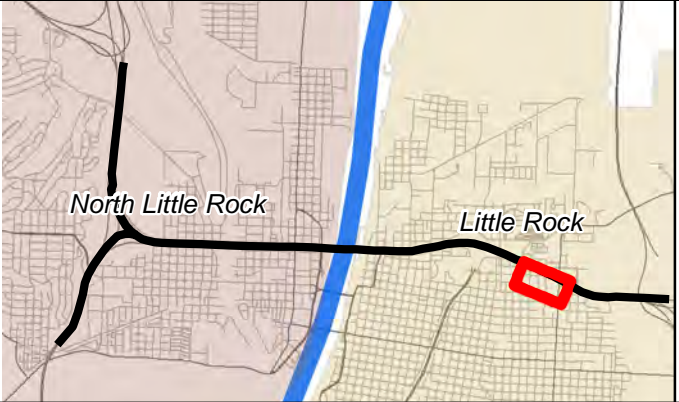
Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- School
- Public Park
- Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 3: SHEET 1 OF 3**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

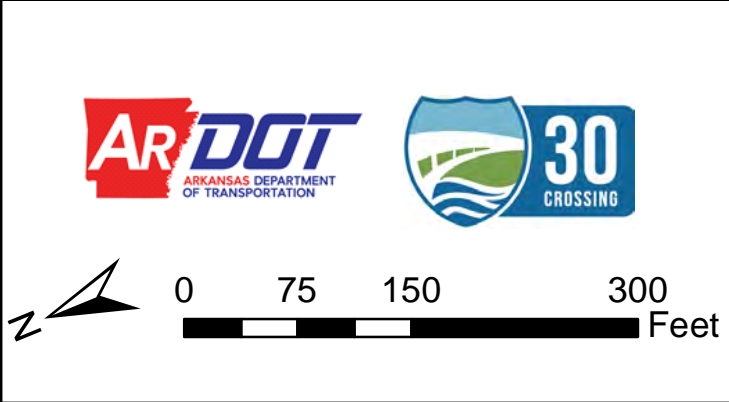
Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 3: SHEET 2 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

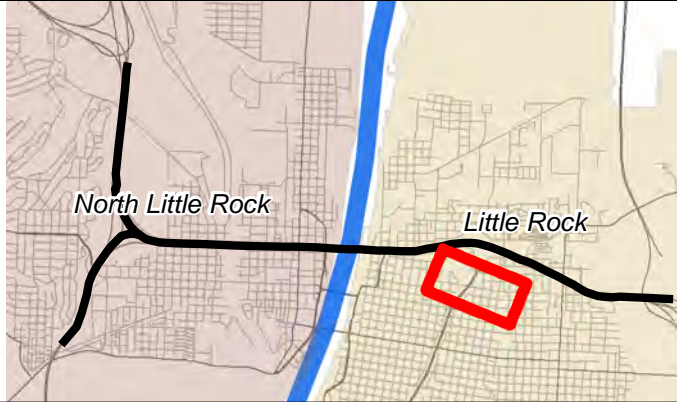
- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏠 Historic District



0 125 250 500 Feet

Sheet Index

**The extent of each sheet is highlighted in red*

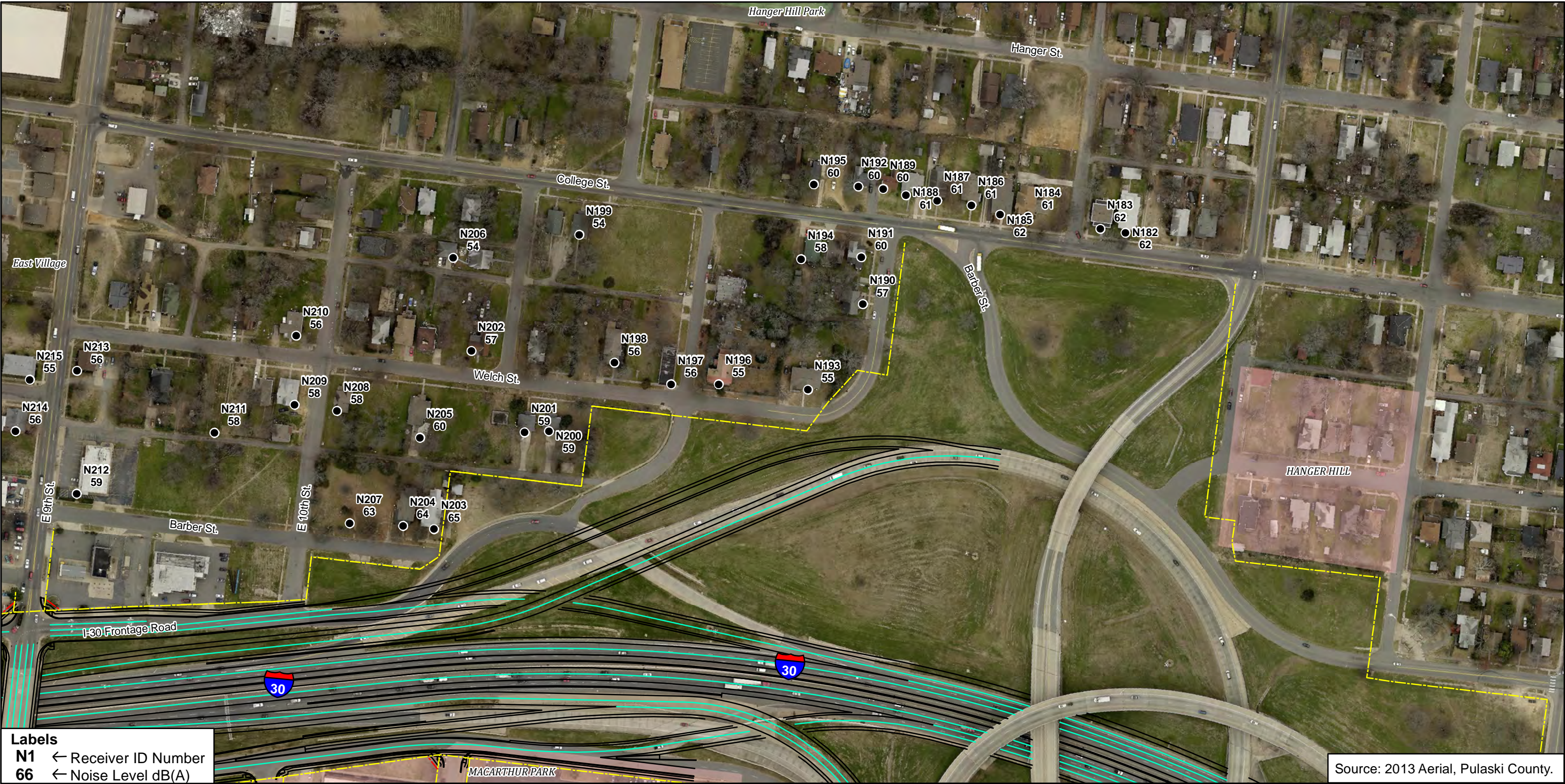


**NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 3: SHEET 3 OF 3**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

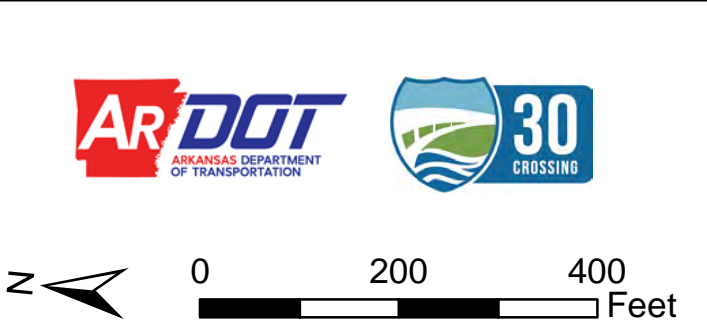
Draft Traffic Noise Study Report

Pulaski County, Arkansas

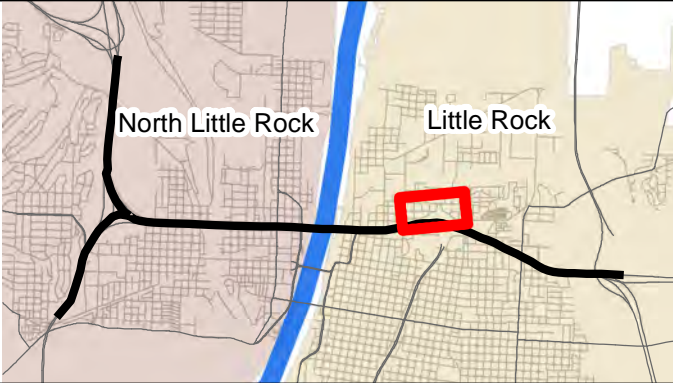


Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index
*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 4: SHEET 1 OF 3



I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

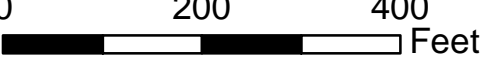

Draft Traffic Noise Study Report
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

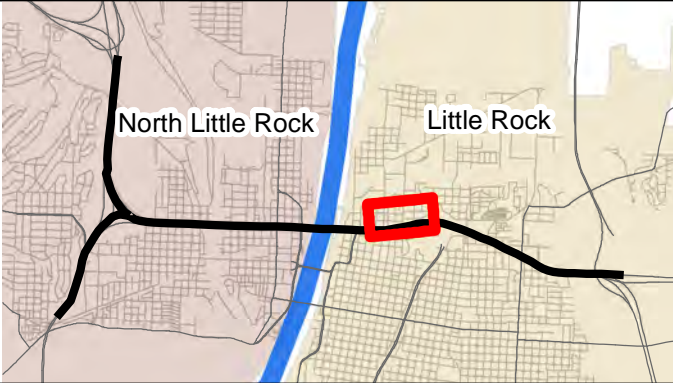

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏠 Historic District





Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 4: SHEET 2 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

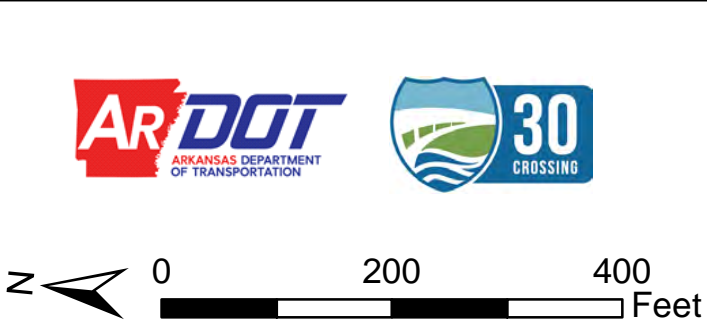
Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - School
 - Public Park
 - Historic District



Sheet Index
**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 4: SHEET 3 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

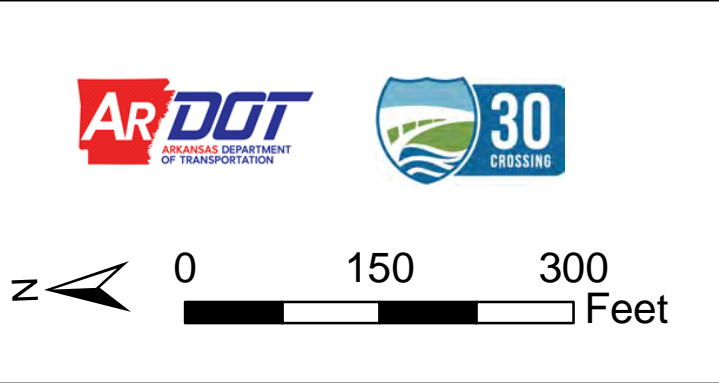
Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*

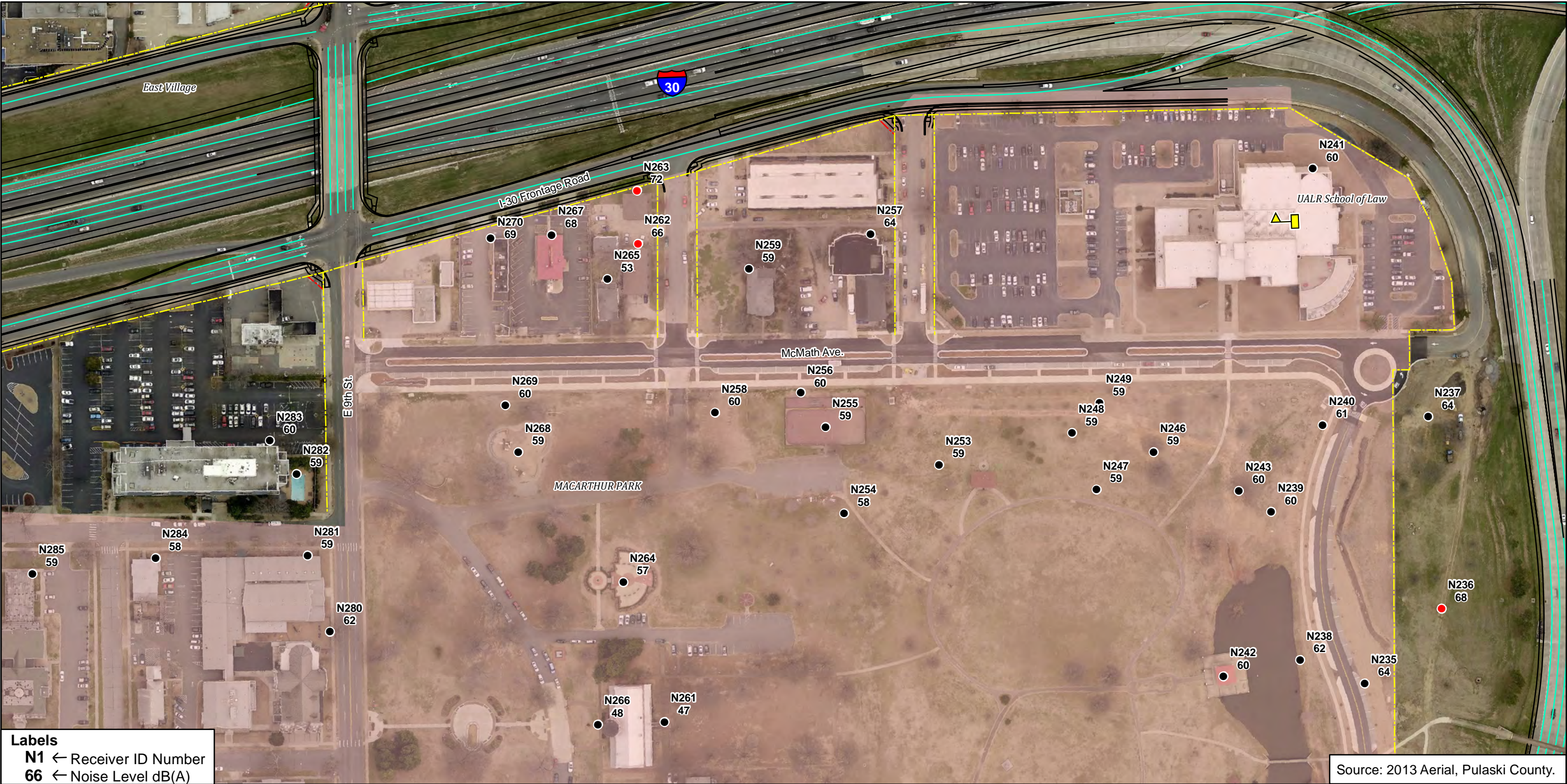


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 5: SHEET 1 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

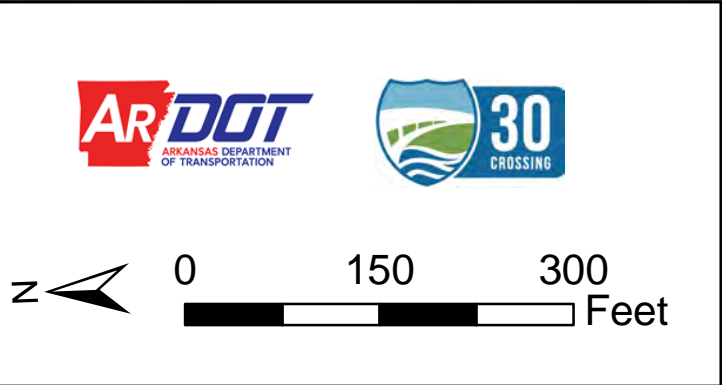
Draft Traffic Noise Study Report

Pulaski County, Arkansas



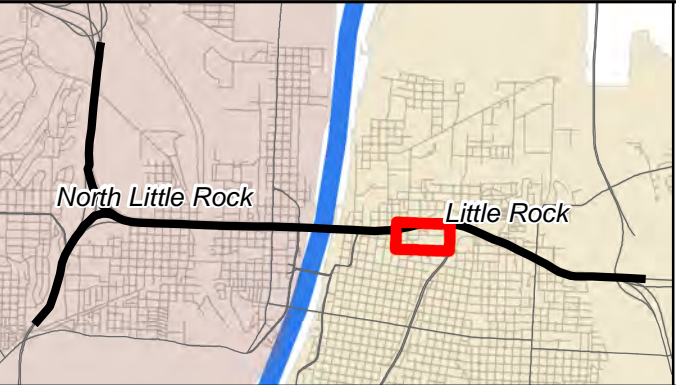
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*

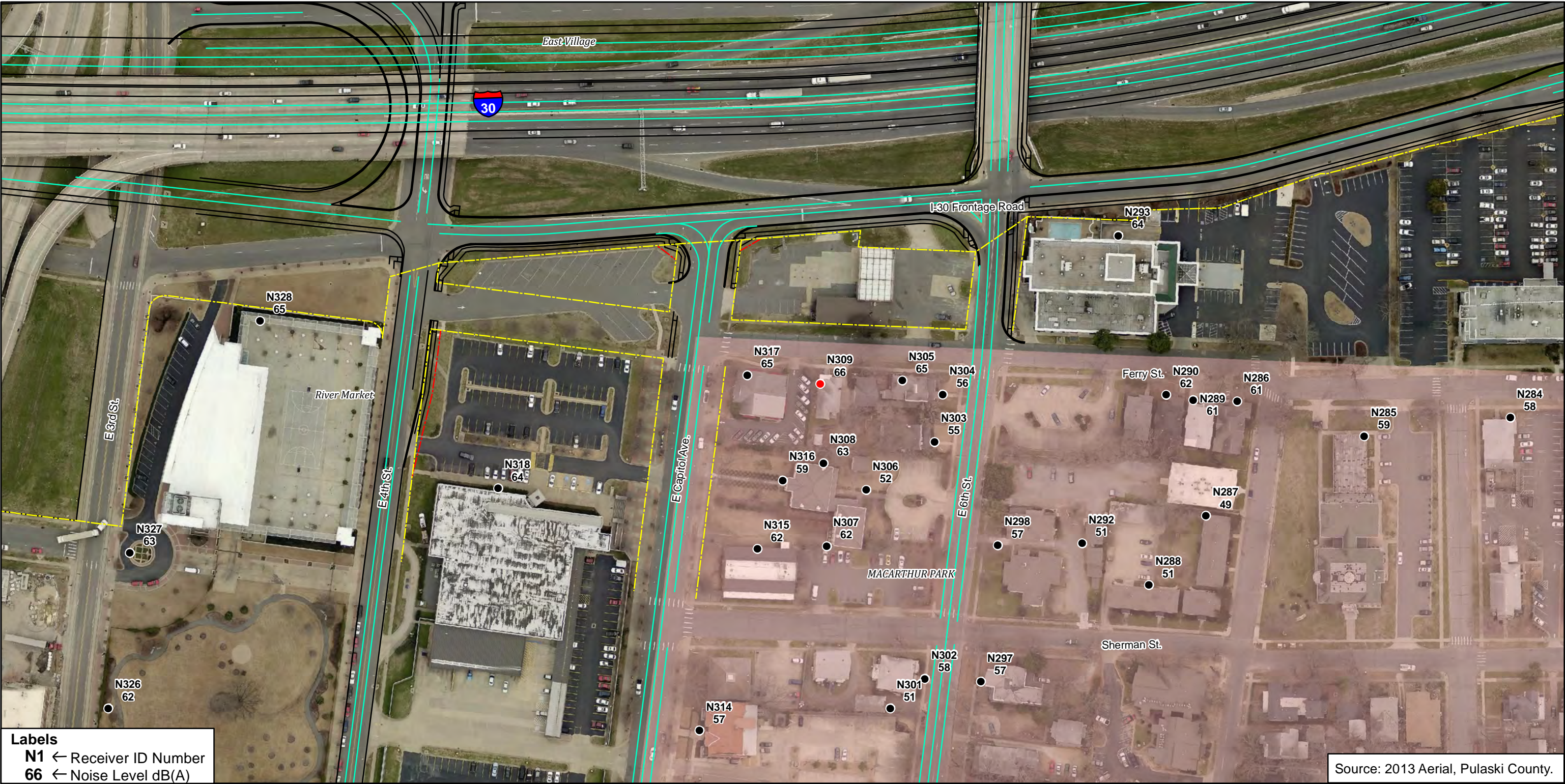


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 5: SHEET 2 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

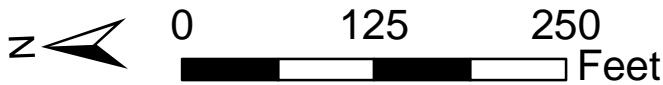
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 5: SHEET 3 OF 6**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

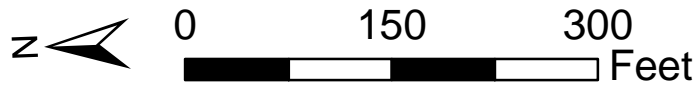
Draft Traffic Noise Study Report
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

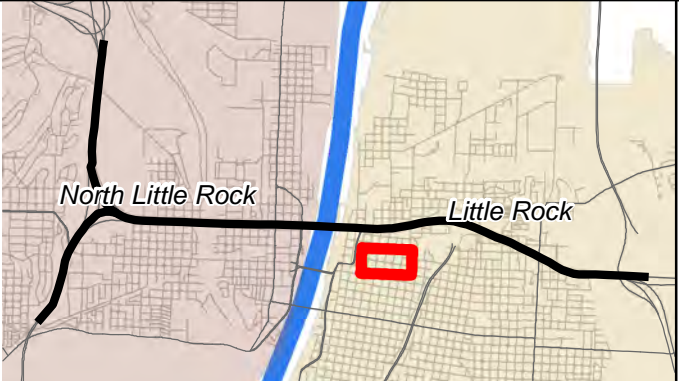
Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚏 School
- 🌳 Public Park
- 🏠 Historic District



Sheet Index

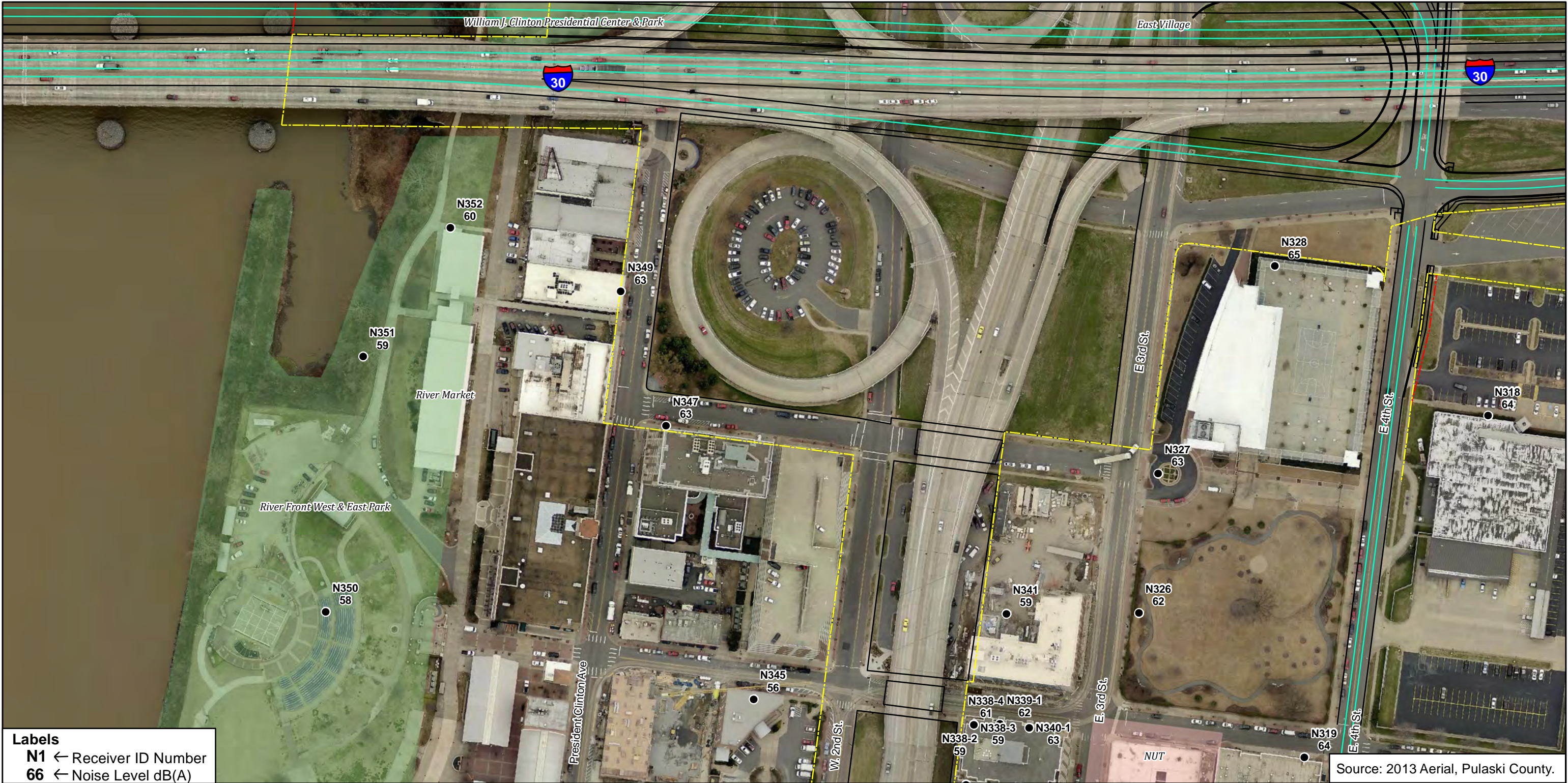
**The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 5: SHEET 4 OF 6**

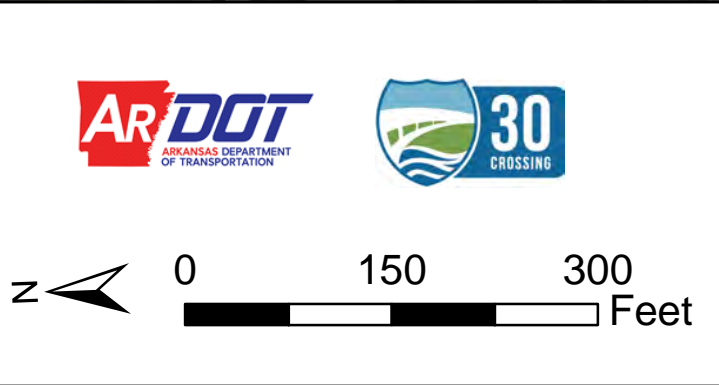
I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*

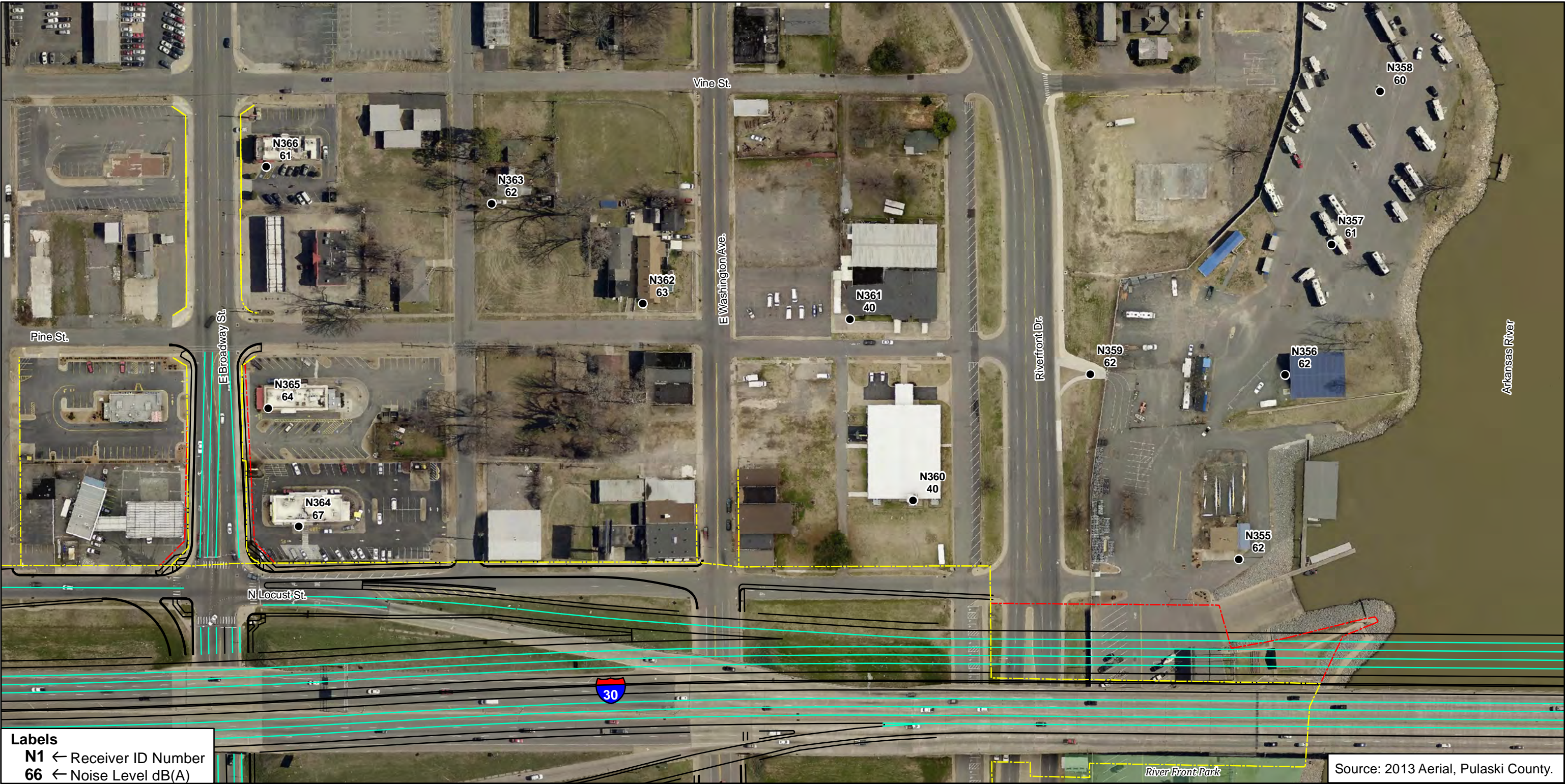


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 5: SHEET 6 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas

Source: 2013 Aerial, Pulaski County.



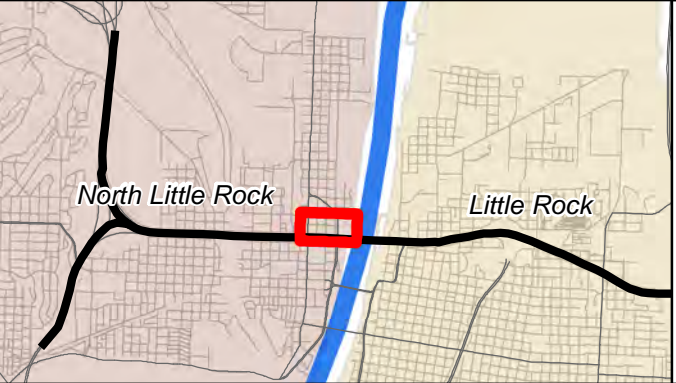
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

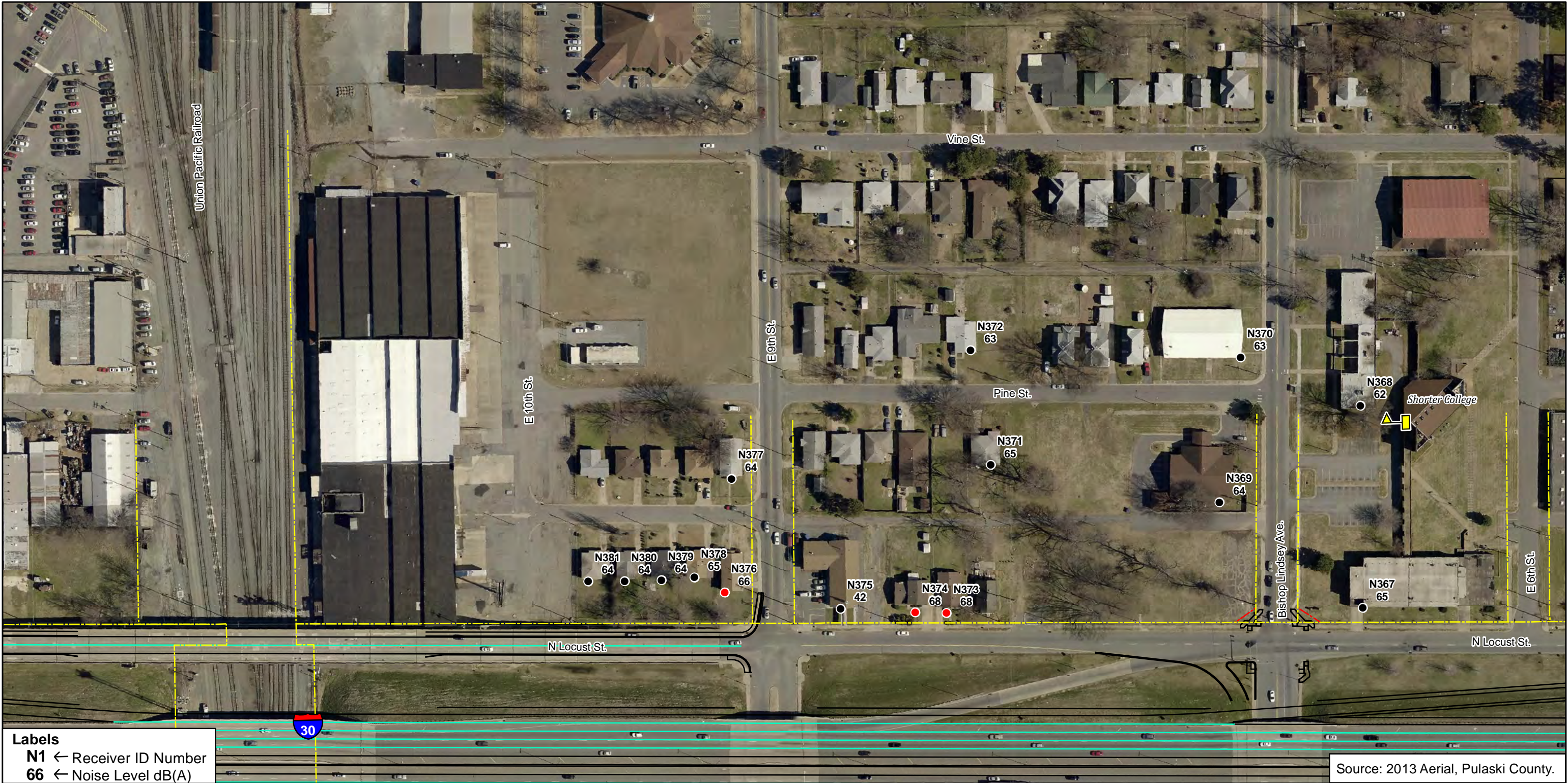
**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 6: SHEET 1 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

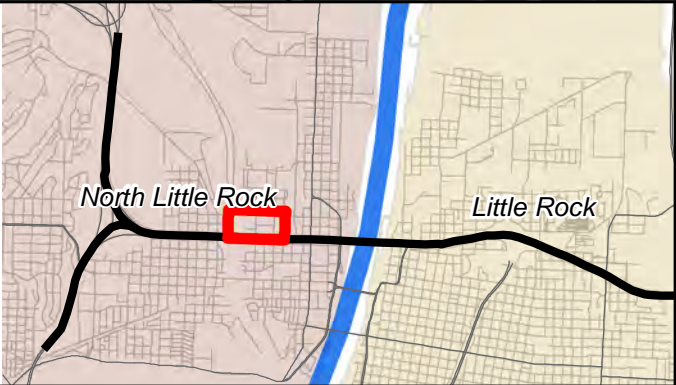
● Non-Impacted Receiver	🚶 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
— Proposed ROW	
— Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*

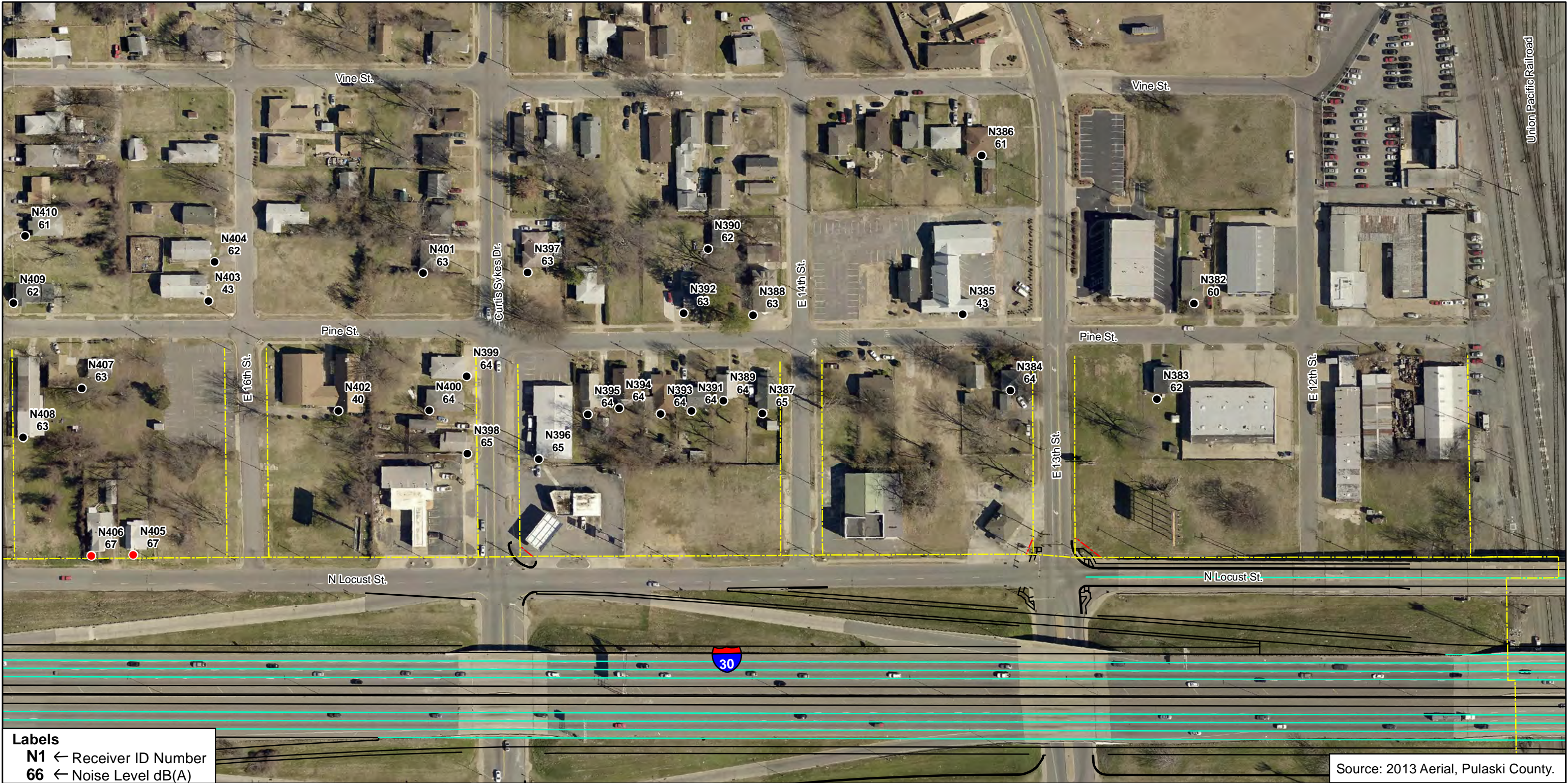


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 6: SHEET 2 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas





Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)


Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
— Proposed ROW	
— Existing ROW	

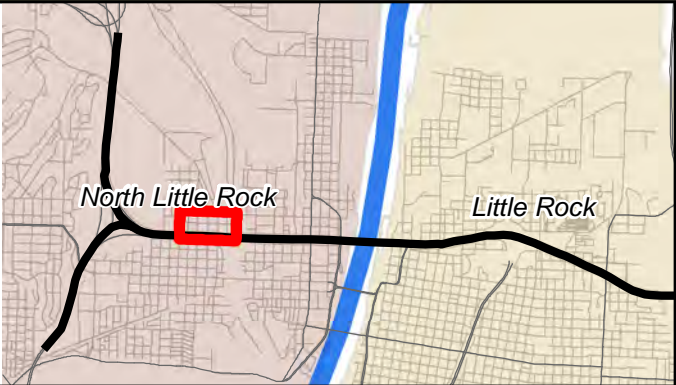


0 150 300 Feet



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 6: SHEET 3 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

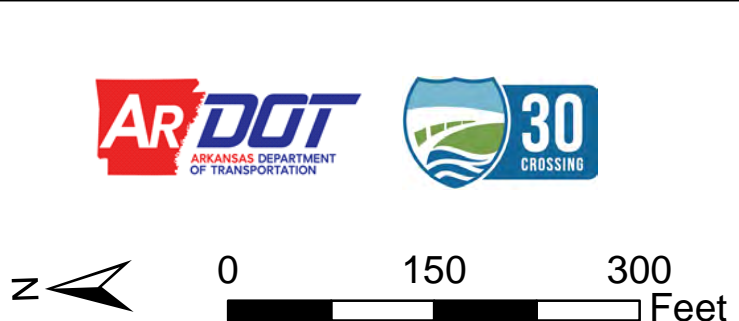
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

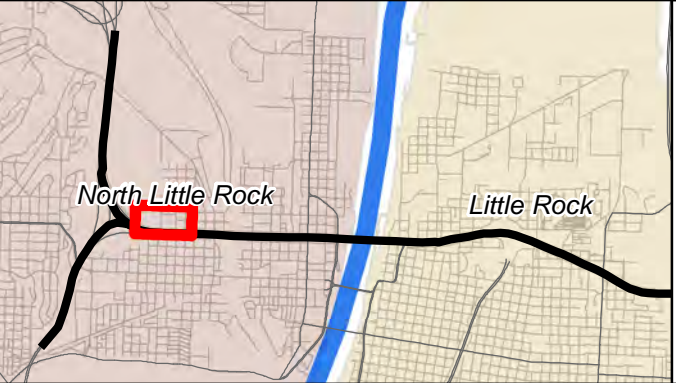
Source: 2013 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

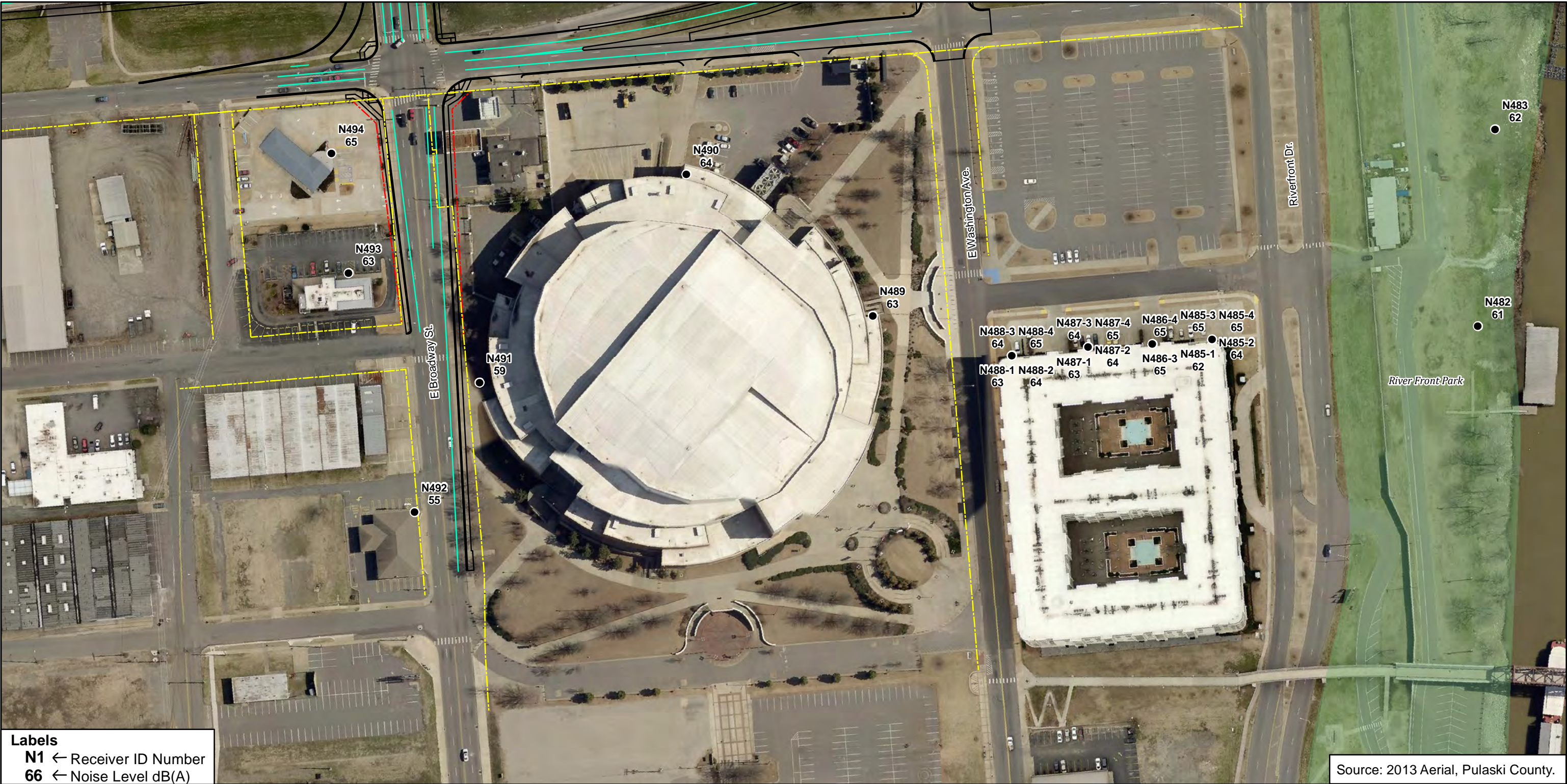
**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 6: SHEET 4 OF 4

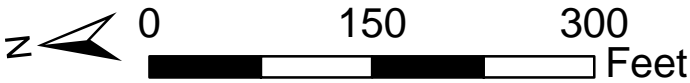
I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas



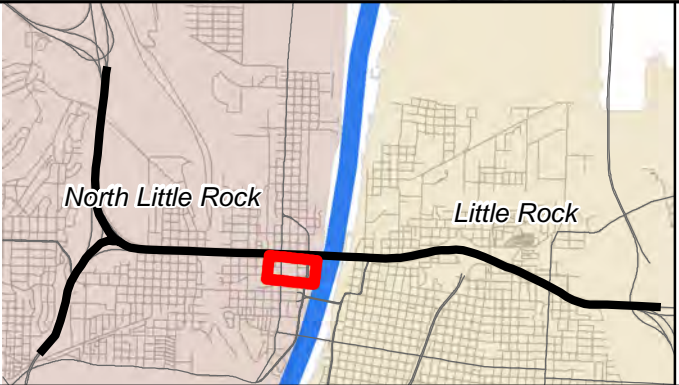
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🏠 Historic District
 - 🌳 Public Park



Sheet Index

*The extent of each sheet is highlighted in red

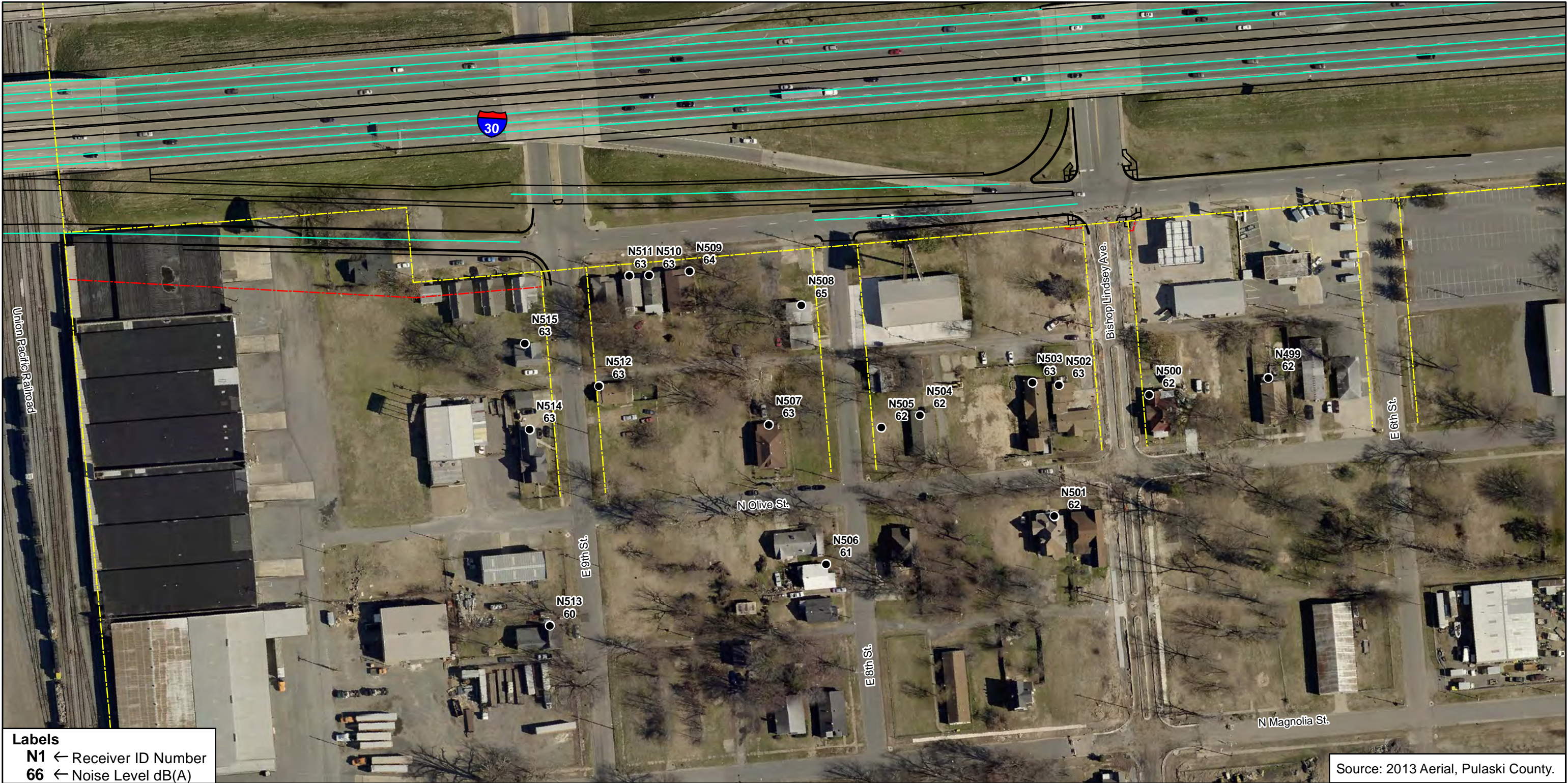


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 7: SHEET 1 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report



Pulaski County, Arkansas



Legend

● Non-Impacted Receiver	🚶 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
— Proposed ROW	
— Existing ROW	

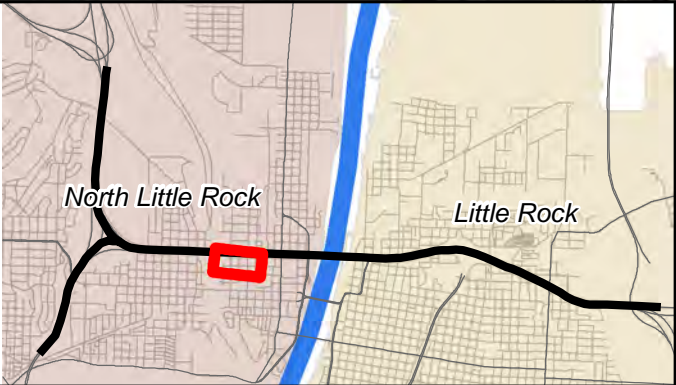




Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 7: SHEET 2 OF 5

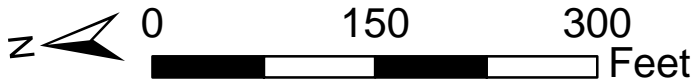
I-30 from I-530 to Hwy. 67
 30 Crossing Project
 CA0602

Draft Traffic Noise Study Report
 Pulaski County, Arkansas



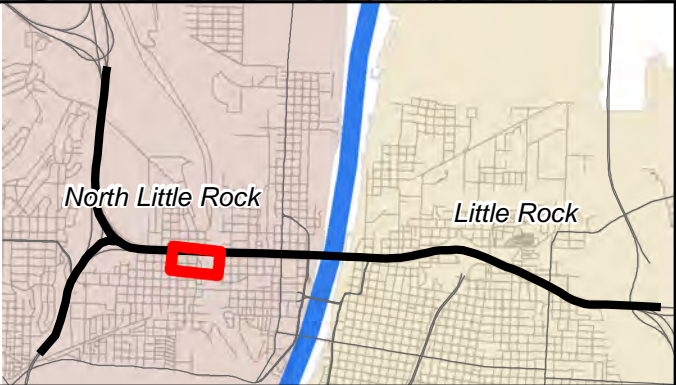
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🏠 Historic District
 - 🌳 Public Park



Sheet Index

*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 7: SHEET 3 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

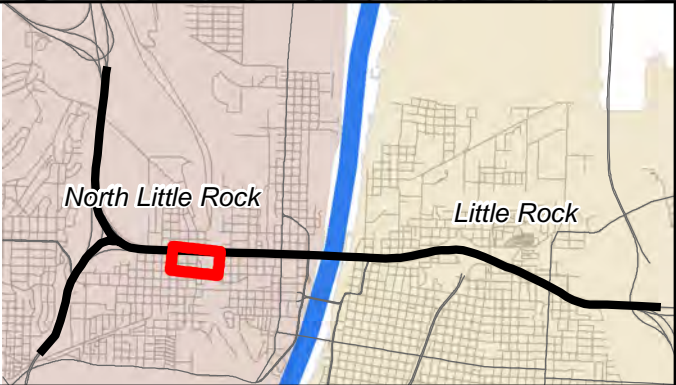
● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
— Proposed ROW	
— Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 7: SHEET 4 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
— Proposed ROW	
— Existing ROW	

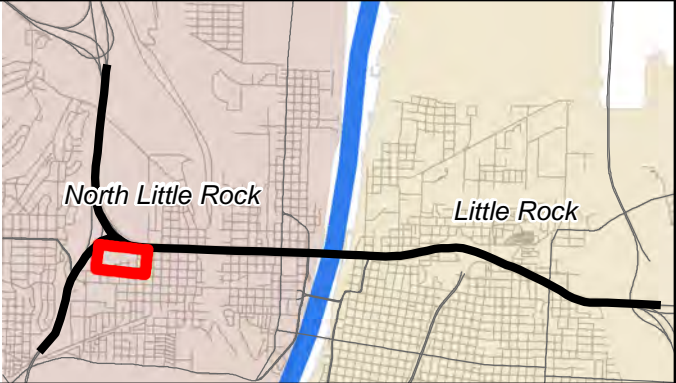




Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 7: SHEET 5 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

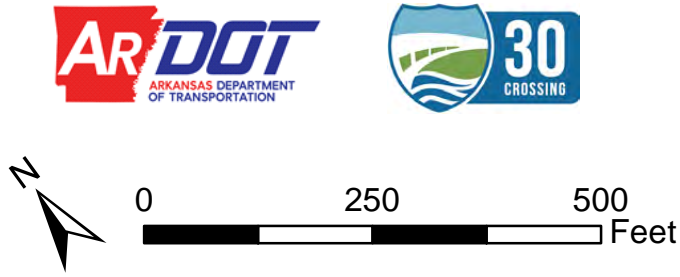
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Legend

- | | |
|--------------------------|---------------------|
| ● Non-Impacted Receiver | 🚩 School |
| ● Impacted Receiver | 🌳 Public Park |
| — Proposed Lane Markings | 🏡 Historic District |
| — Proposed Pavement Edge | |
| --- Proposed ROW | |
| --- Existing ROW | |



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 8: SHEET 1 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

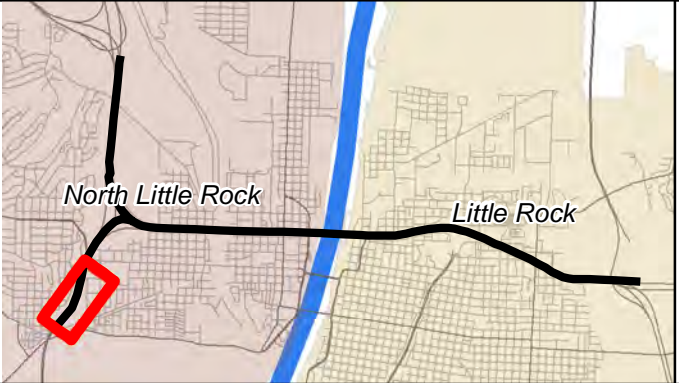
● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 8: SHEET 2 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	

AR DOT
ARKANSAS DEPARTMENT OF TRANSPORTATION

30
CROSSING

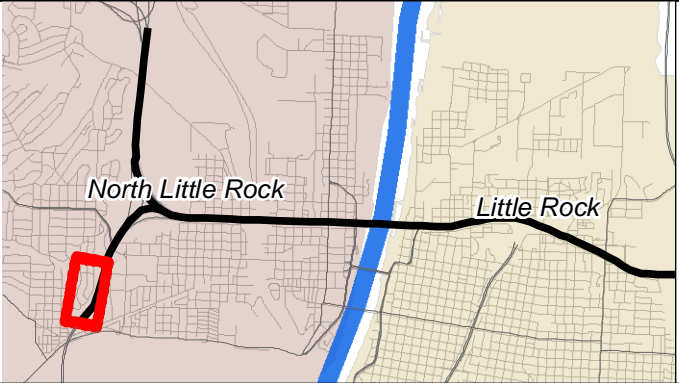
N

0 200 400 Feet

Sheet Index

*The extent of each sheet is highlighted in red

z



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 9: SHEET 1 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas





Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

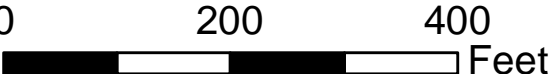

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	

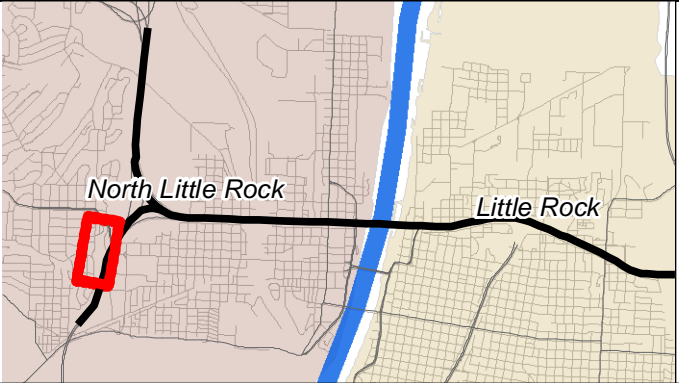


N



Sheet Index

**The extent of each sheet is highlighted in red*

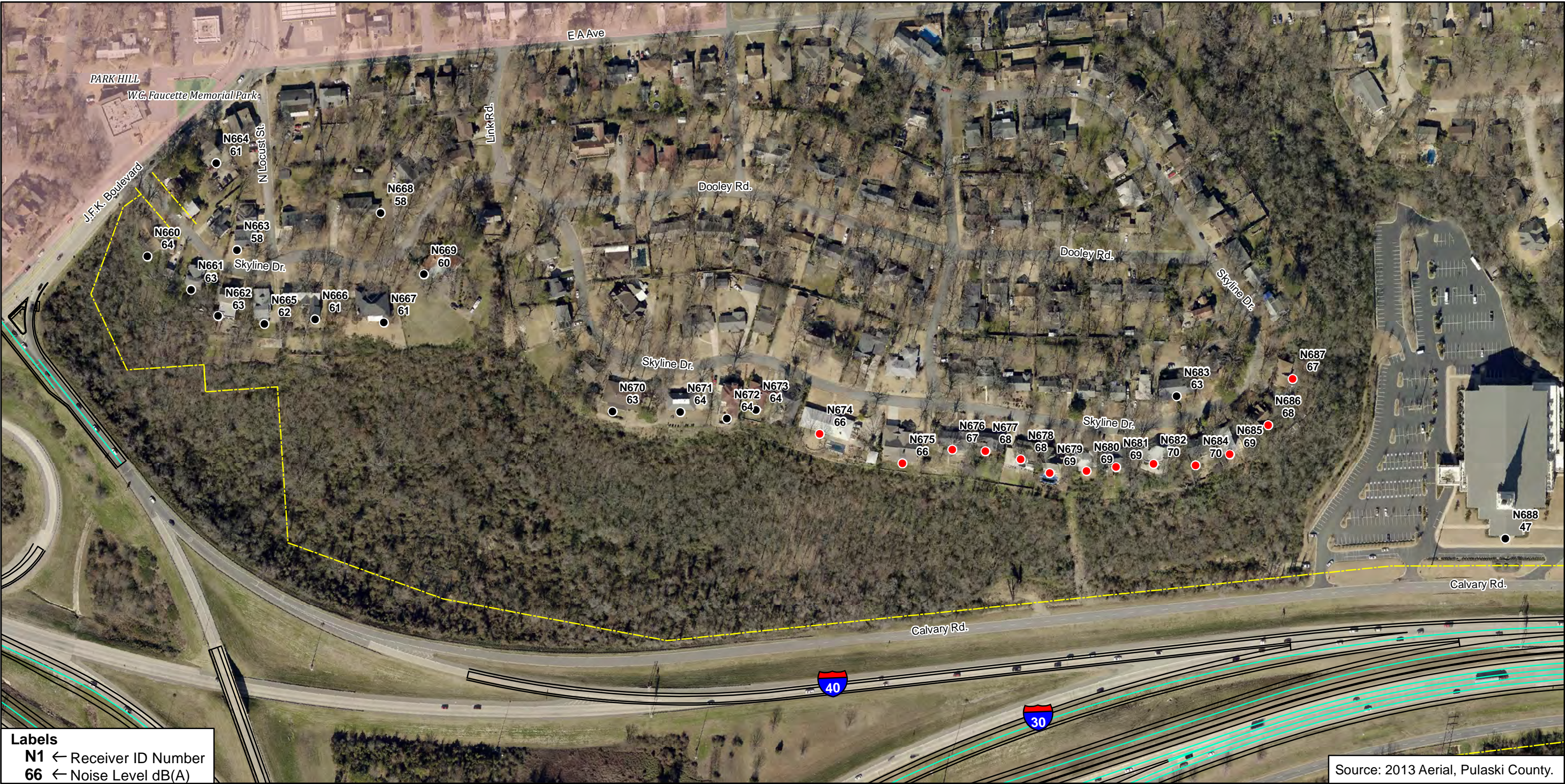


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 9: SHEET 2 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas





Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)


Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	

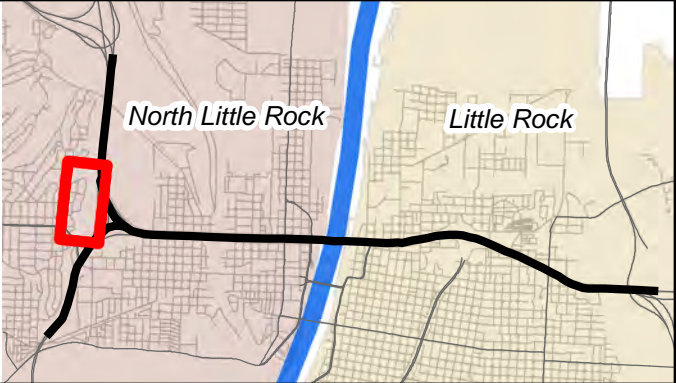


N



Sheet Index

**The extent of each sheet is highlighted in red*

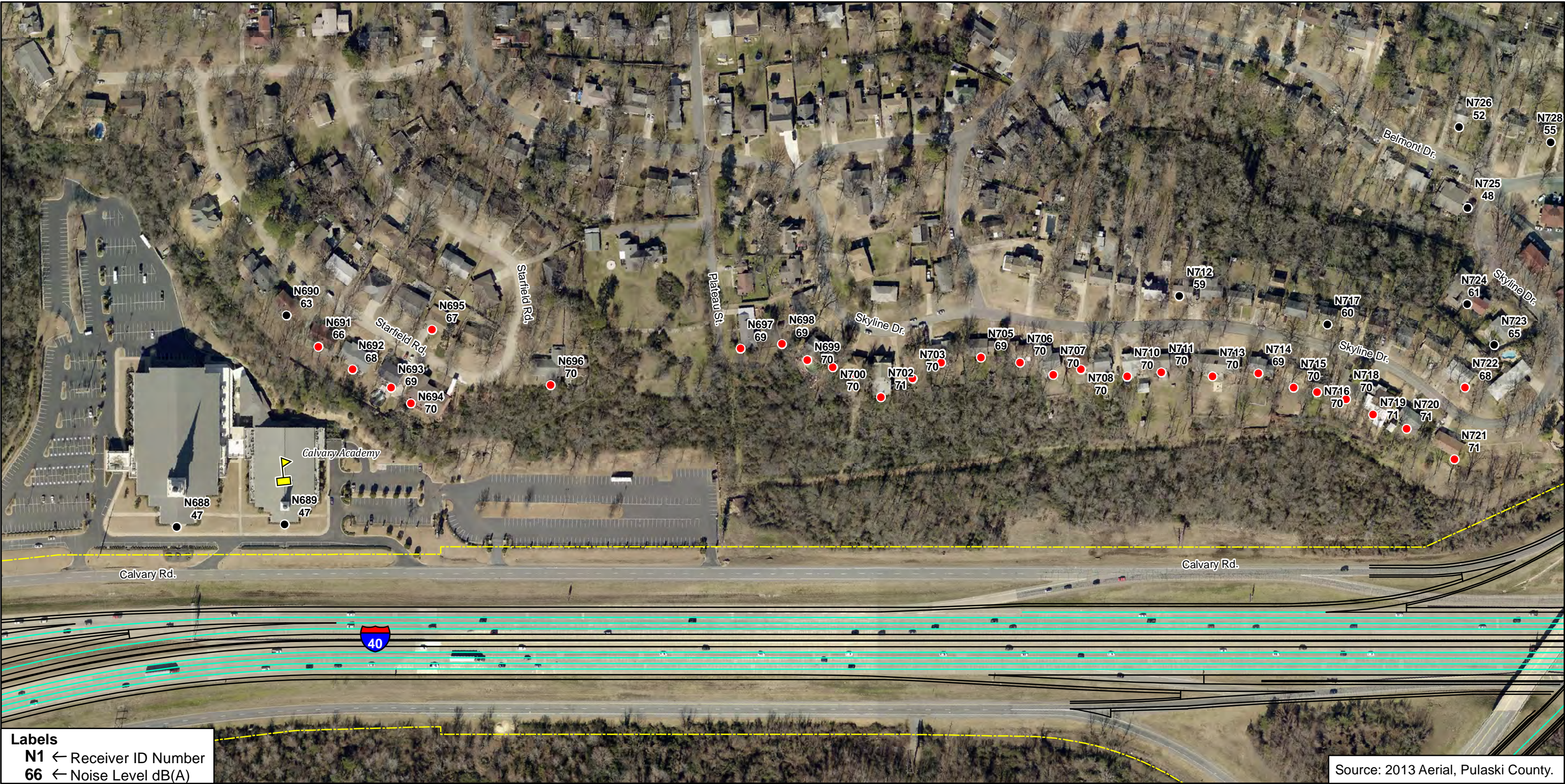


NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 10: SHEET 1 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report



Pulaski County, Arkansas




Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	

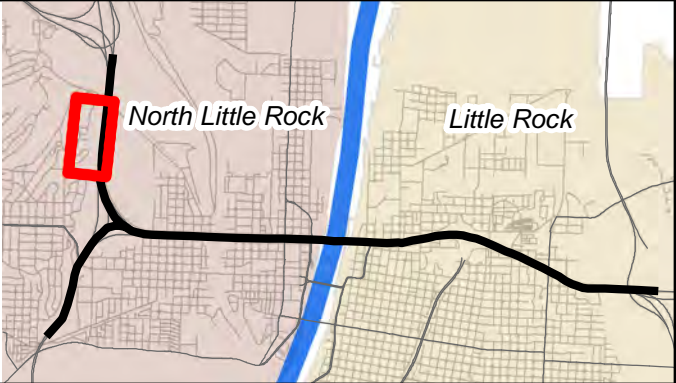


0 250 500 Feet



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 10: SHEET 2 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

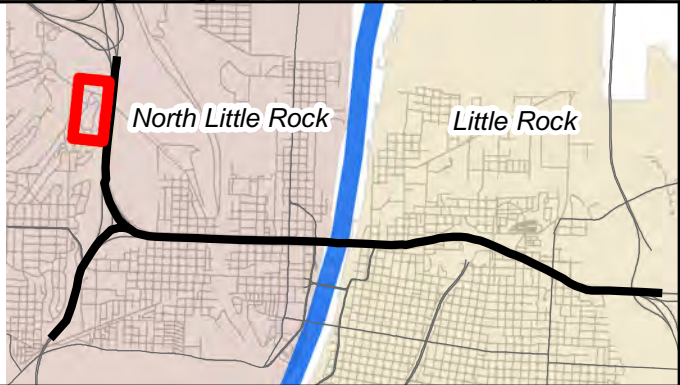
- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



0 200 400 Feet

Sheet Index

*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 10: SHEET 3 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

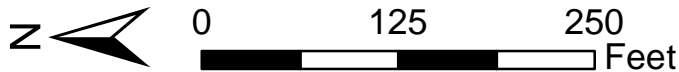
Draft Traffic Noise Study Report

Pulaski County, Arkansas



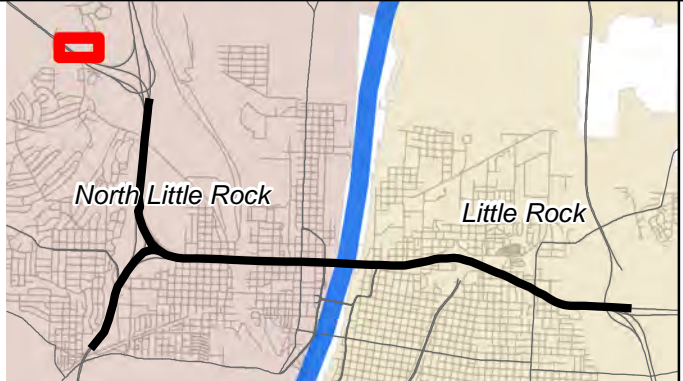
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
8 LN GP WITH SDI
NSA 14: SHEET 1 OF 1

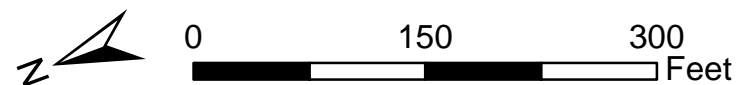
I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas



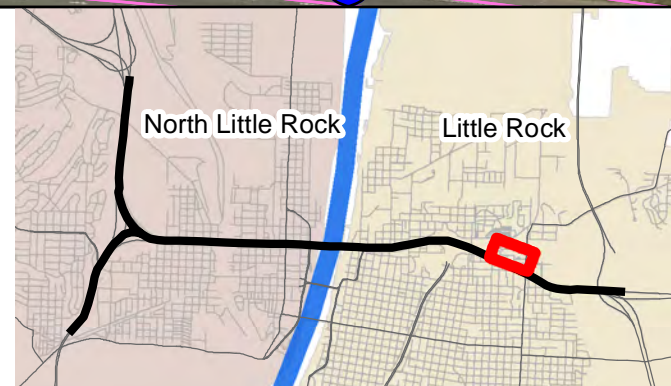
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚦 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 1: SHEET 1 OF 2**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏠 Historic District

AR DOT
ARKANSAS DEPARTMENT OF TRANSPORTATION

30
CROSSING

0 150 300 Feet

Sheet Index

*The extent of each sheet is highlighted in red

North Little Rock Little Rock

NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 1: SHEET 2 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

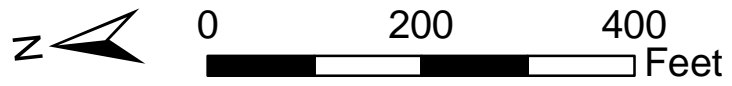
Draft Traffic Noise Study Report

Pulaski County, Arkansas



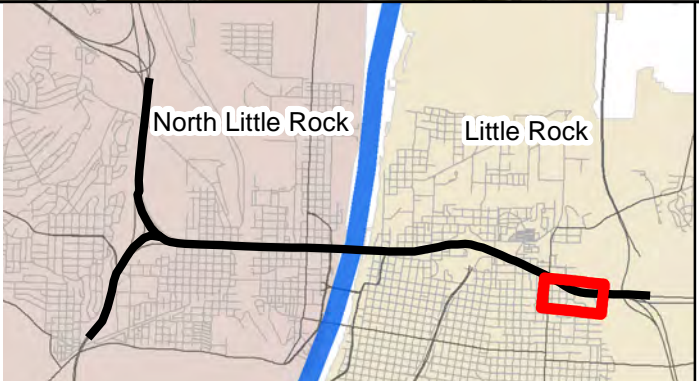
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 2: SHEET 1 of 1

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas

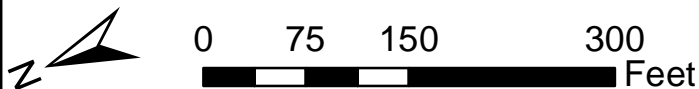


Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

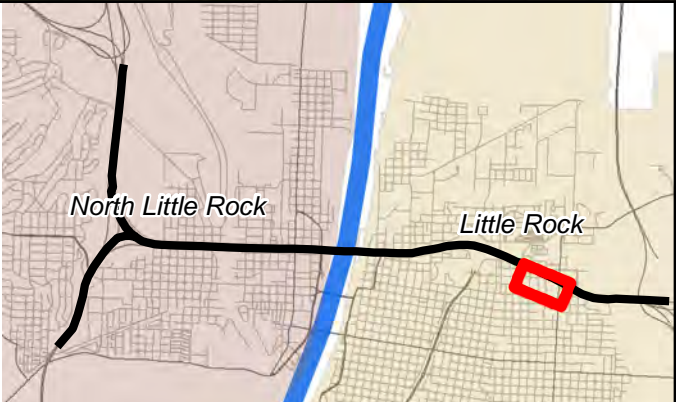
Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚏 School
- 🌳 Public Park
- 🏡 Historic District



Sheet Index

*The extent of each sheet is highlighted in red



**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 3: SHEET 1 OF 3**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

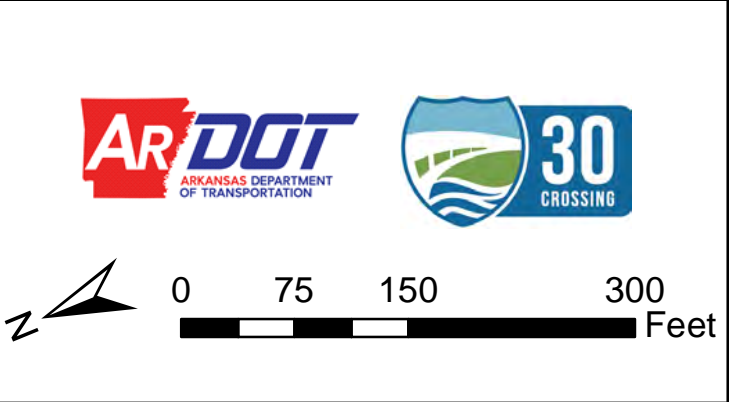
Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 3: SHEET 2 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report



Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

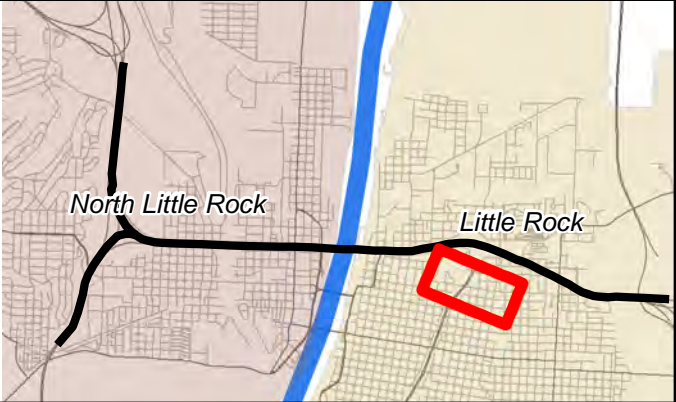

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District





Sheet Index

**The extent of each sheet is highlighted in red*

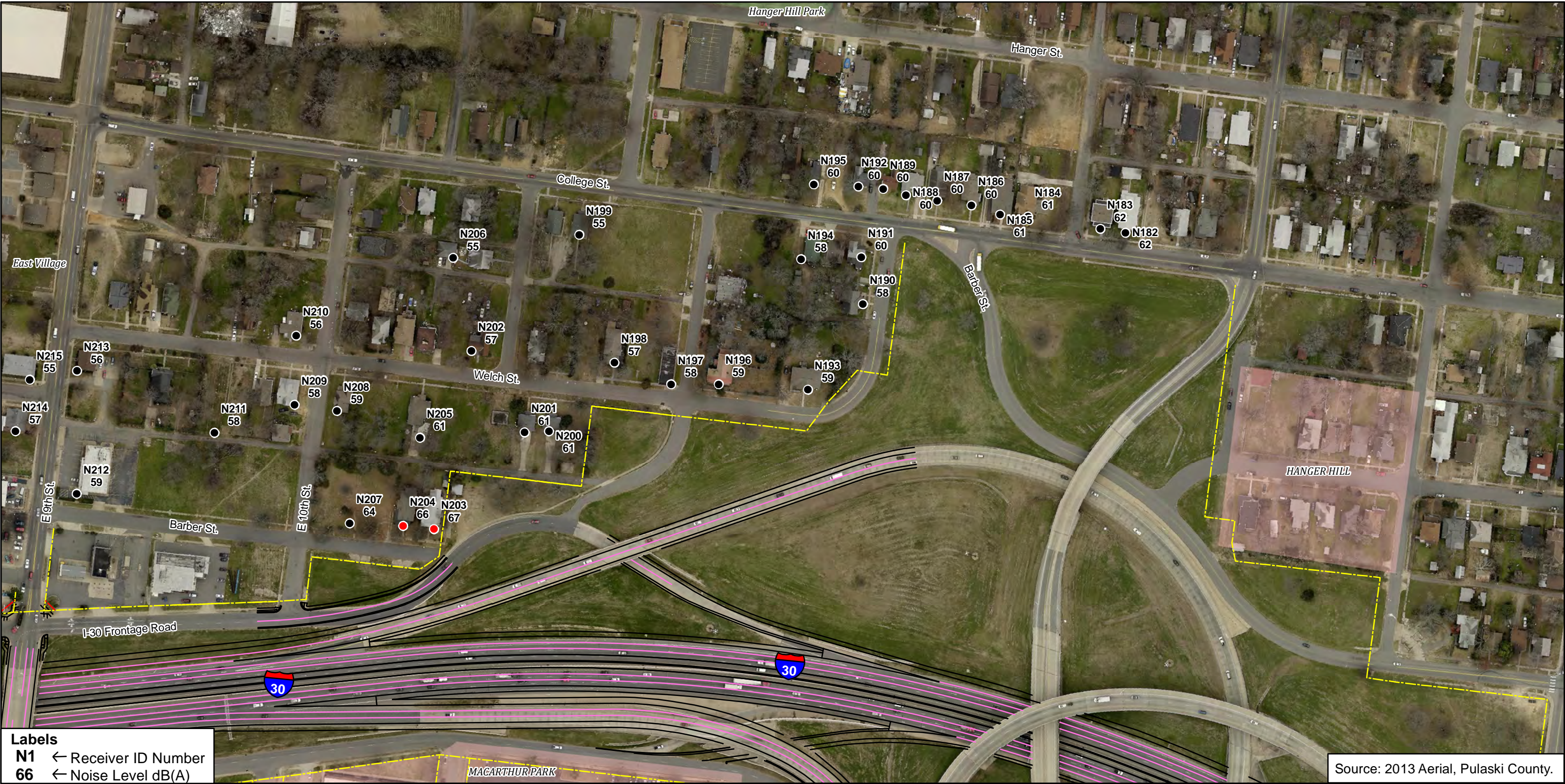


**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 3: SHEET 3 OF 3**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report



Pulaski County, Arkansas





Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	

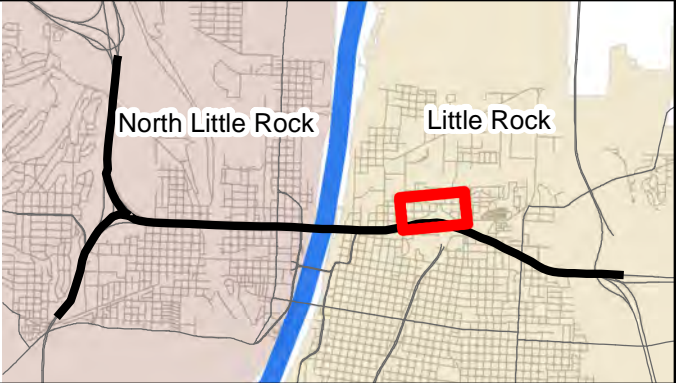




Sheet Index

**The extent of each sheet is highlighted in red*

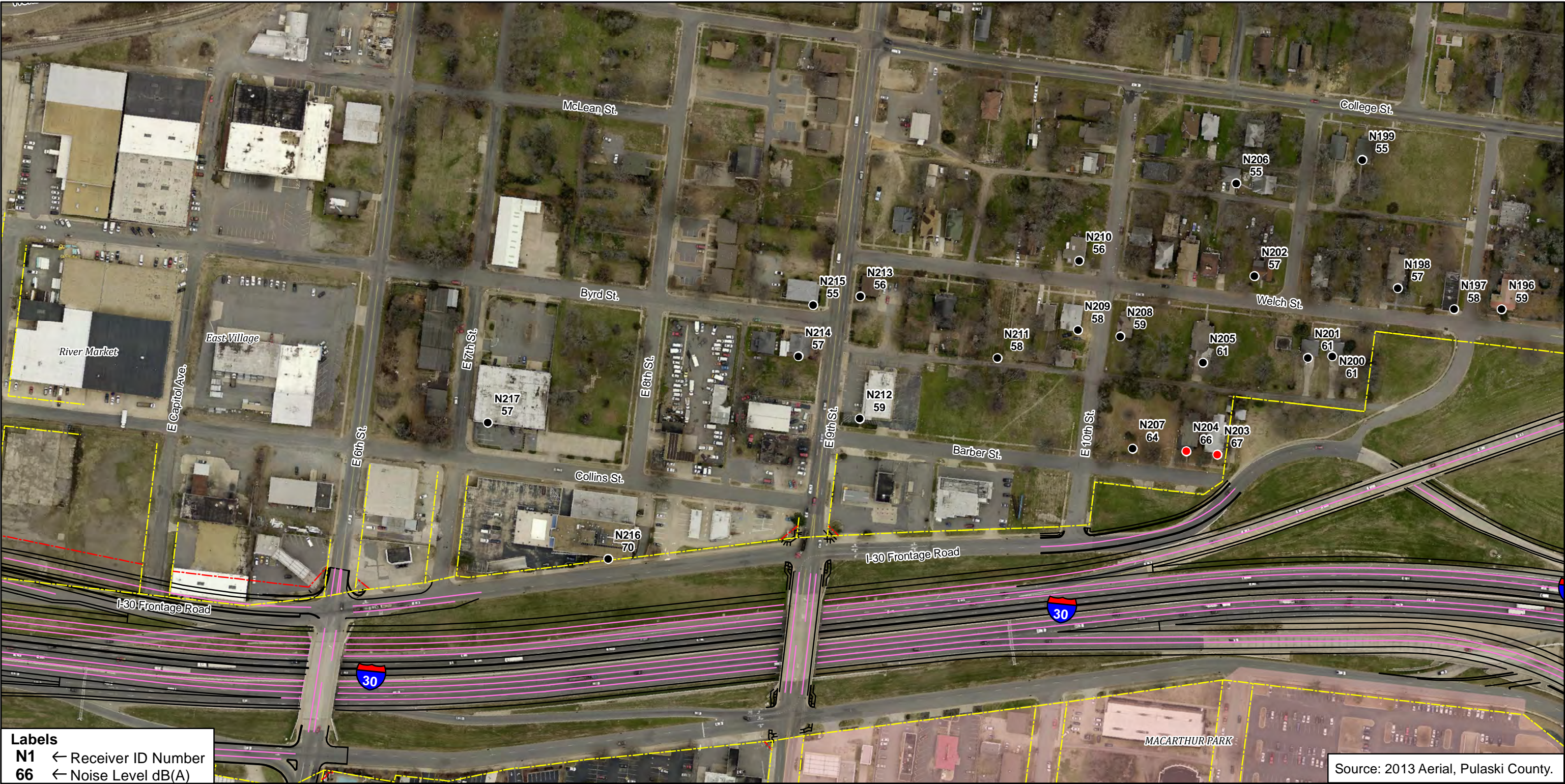




NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 4: SHEET 1 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas

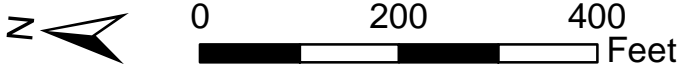


Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚏 School
- 🌳 Public Park
- 🏡 Historic District



Sheet Index

*The extent of each sheet is highlighted in red



**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 4: SHEET 2 OF 3**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report

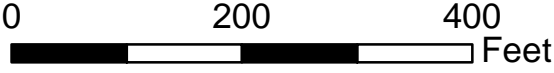

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)


- Legend**
- | | |
|--------------------------|---------------------|
| ● Non-Impacted Receiver | 🚏 School |
| ● Impacted Receiver | 🌳 Public Park |
| — Proposed Lane Markings | 🏠 Historic District |
| — Proposed Pavement Edge | |
| - - - Proposed ROW | |
| - - - Existing ROW | |

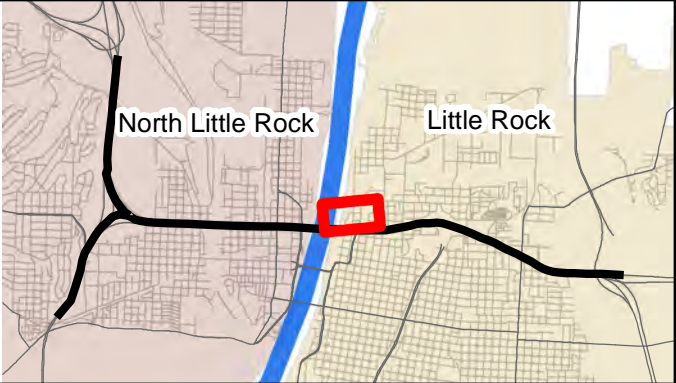




Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 4: SHEET 3 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report

Pulaski County, Arkansas




Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏡 Historic District

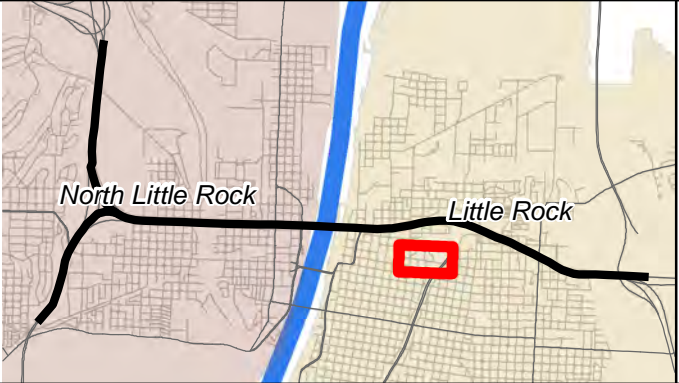



0 150 300 Feet



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 5: SHEET 1 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

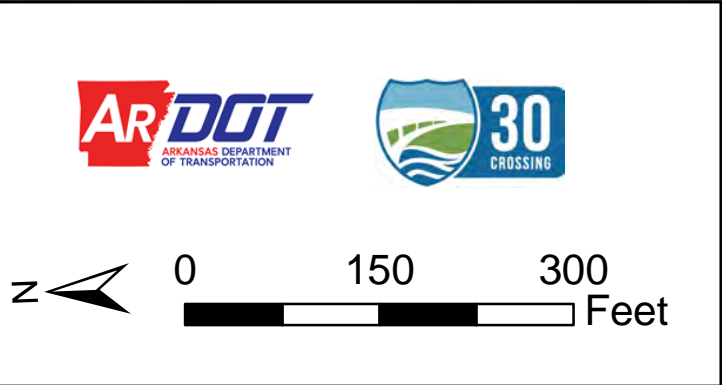
Draft Traffic Noise Study Report

Pulaski County, Arkansas



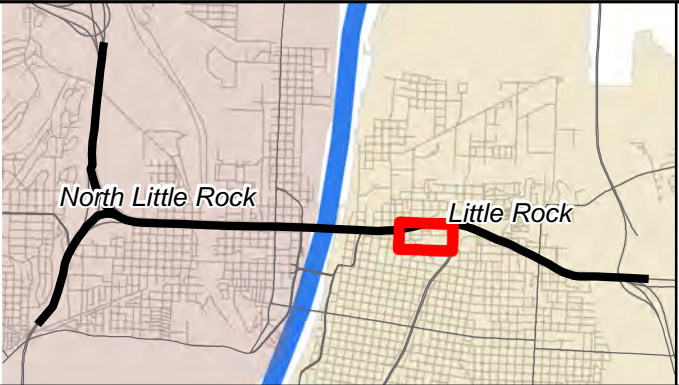
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*

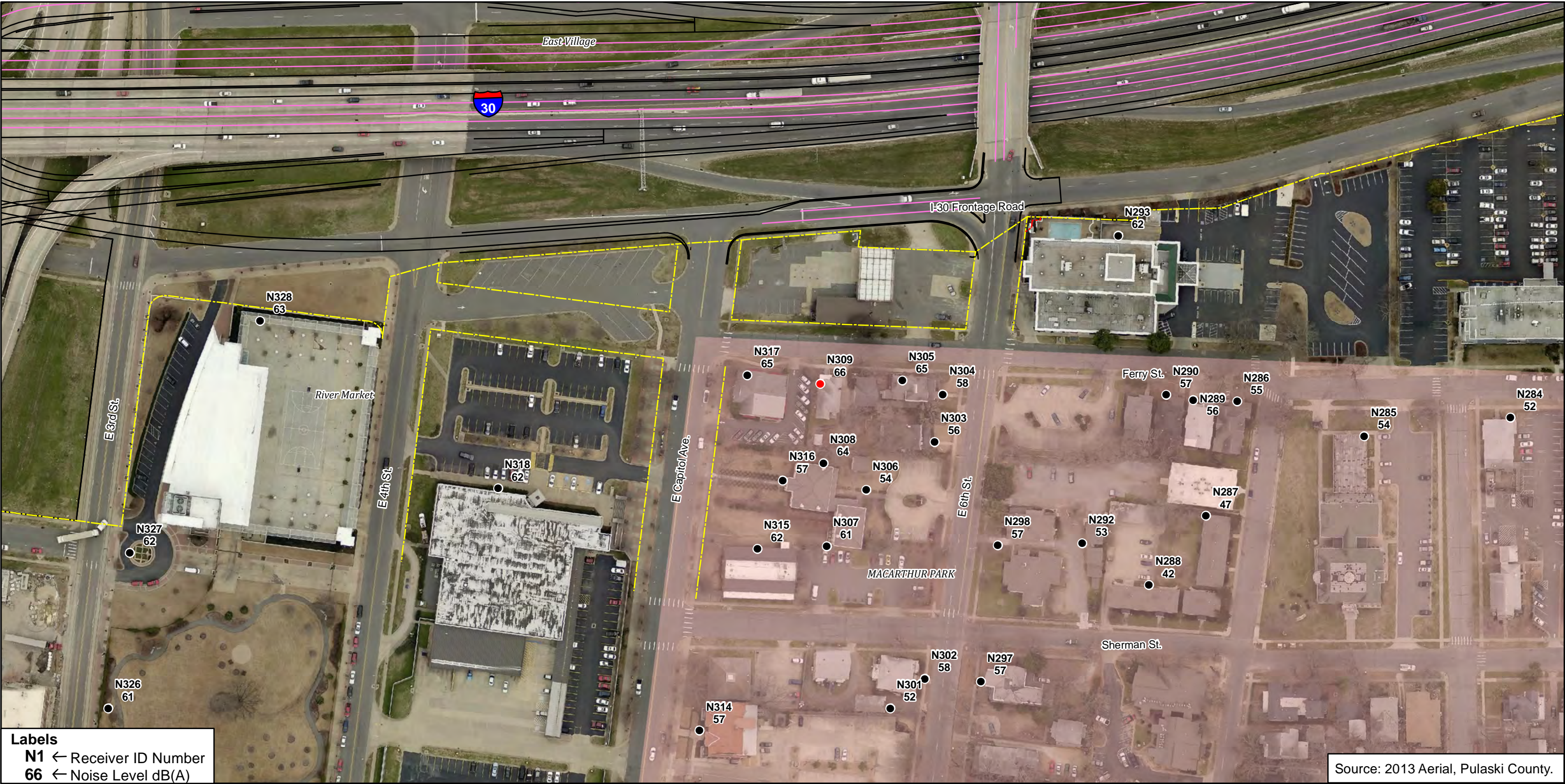


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 5: SHEET 2 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

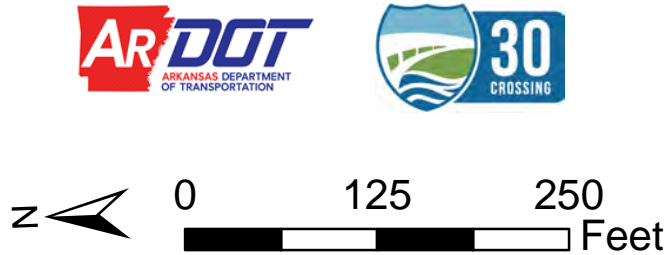
Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 5: SHEET 3 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report
Pulaski County, Arkansas





Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Legend


● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	

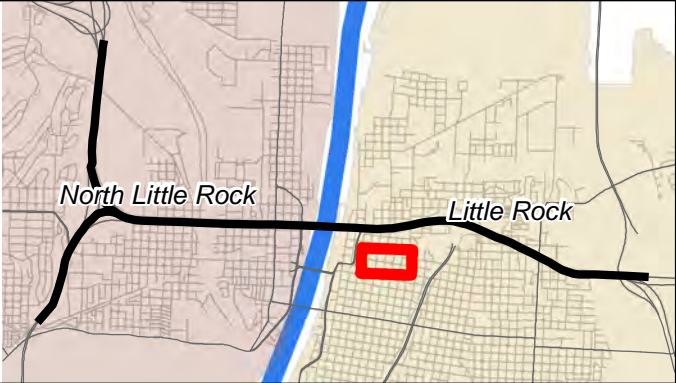




Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 5: SHEET 4 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

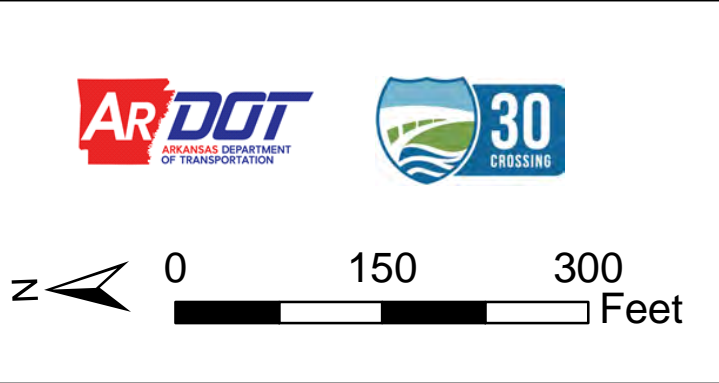
Draft Traffic Noise Study Report

Pulaski County, Arkansas



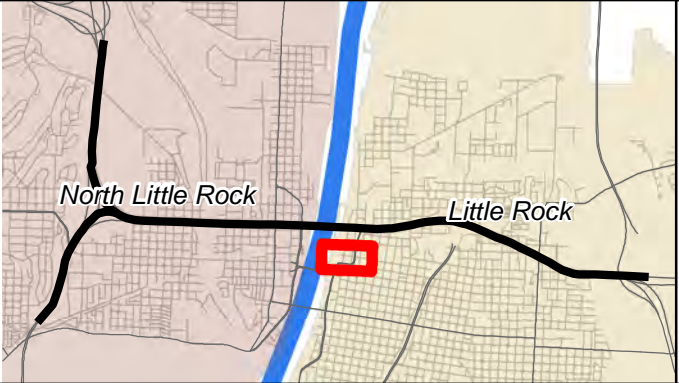
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*

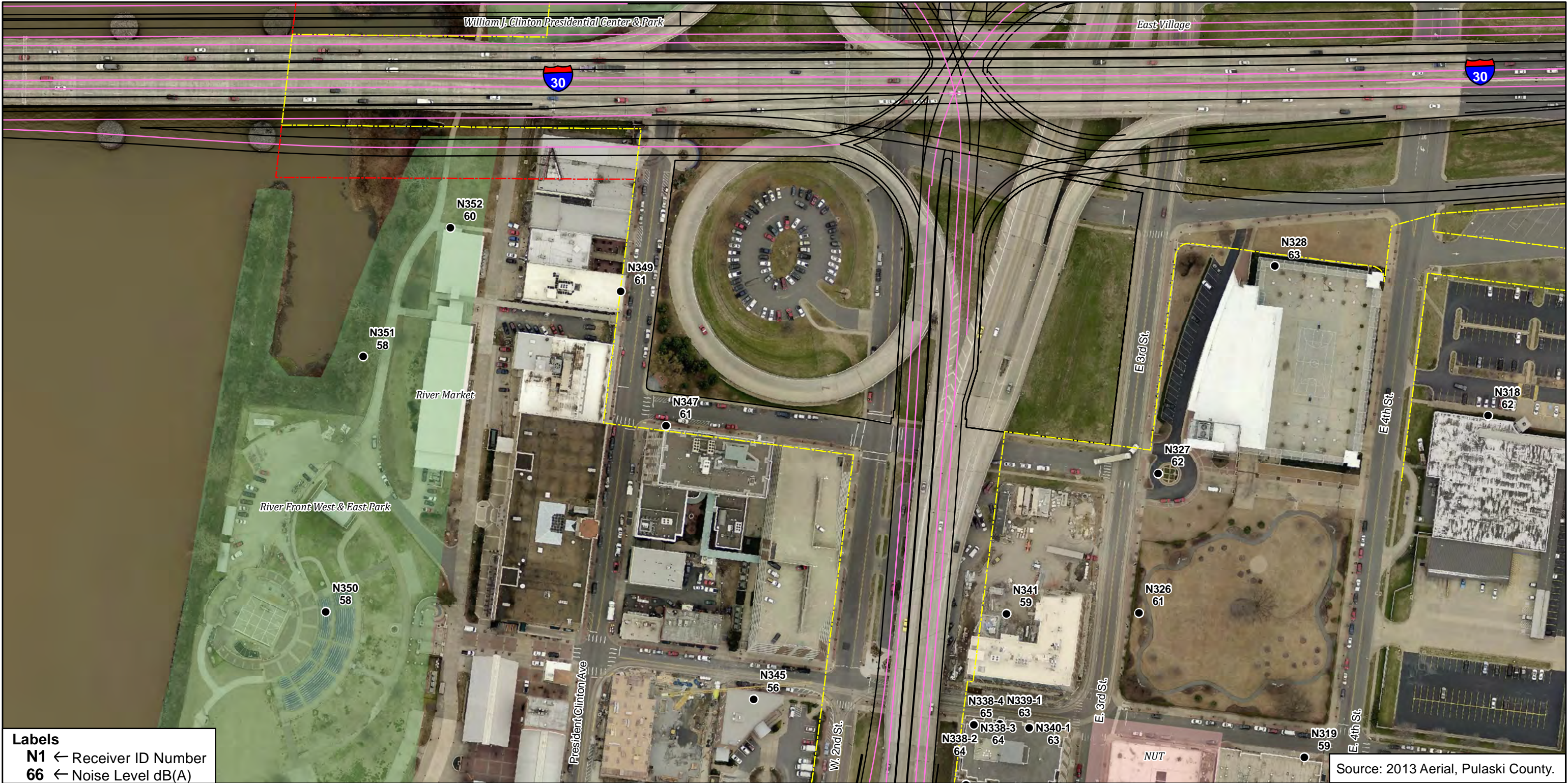


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 5: SHEET 5 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report



Pulaski County, Arkansas





Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Legend


● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
- - - Existing ROW	

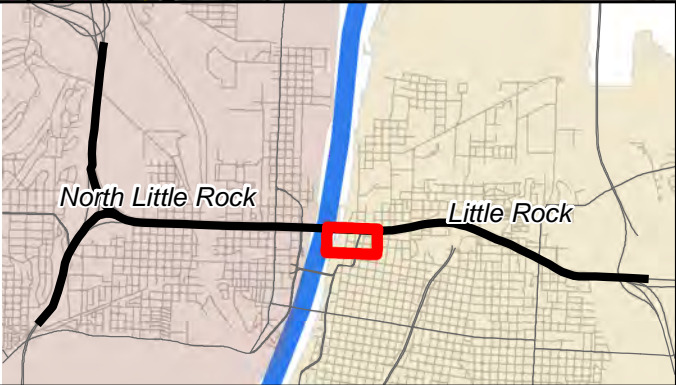




Sheet Index

**The extent of each sheet is highlighted in red*



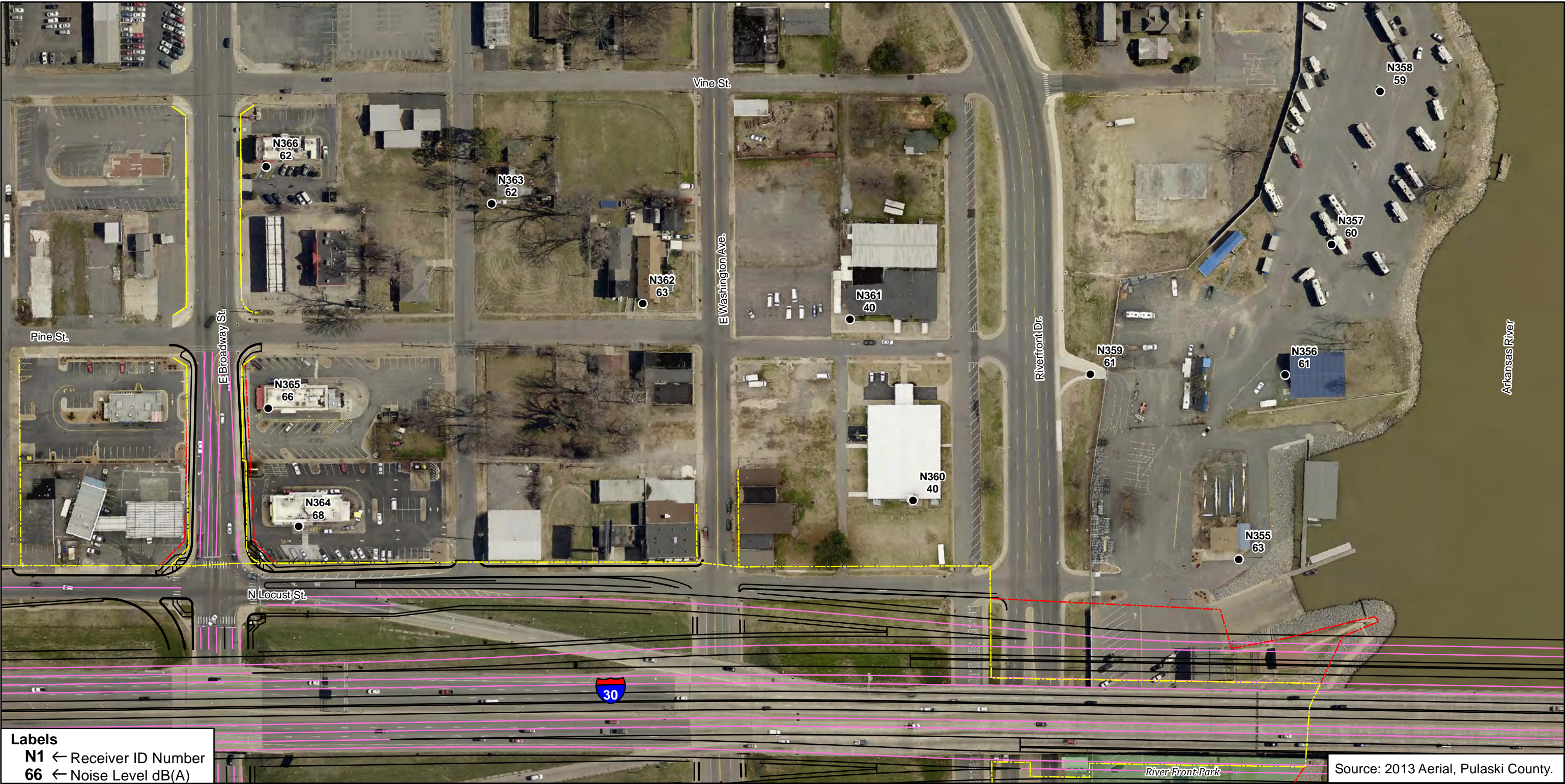


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 5: SHEET 6 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚏 School
- 🌳 Public Park
- 🏡 Historic District

AR DOT ARKANSAS DEPARTMENT OF TRANSPORTATION

30 CROSSING

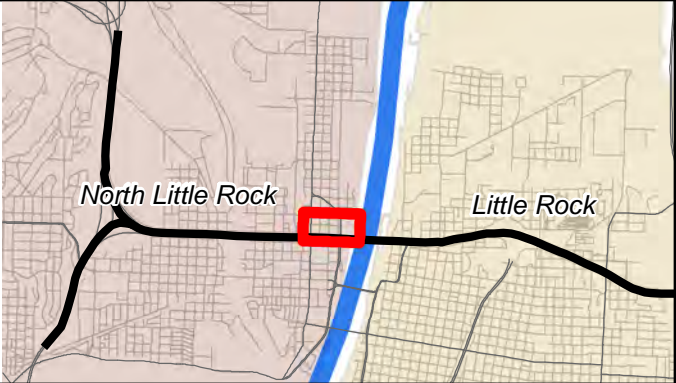
0 150 300 Feet

North Arrow

Sheet Index

*The extent of each sheet is highlighted in red

North Arrow



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 6: SHEET 1 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report



Pulaski County, Arkansas



Legend


● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
— Proposed ROW	
— Existing ROW	

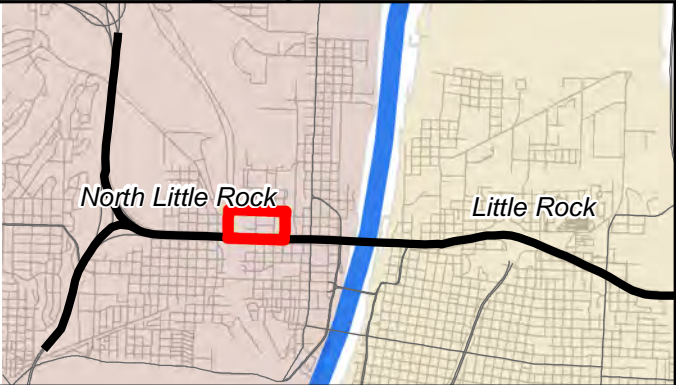




Sheet Index

**The extent of each sheet is highlighted in red*



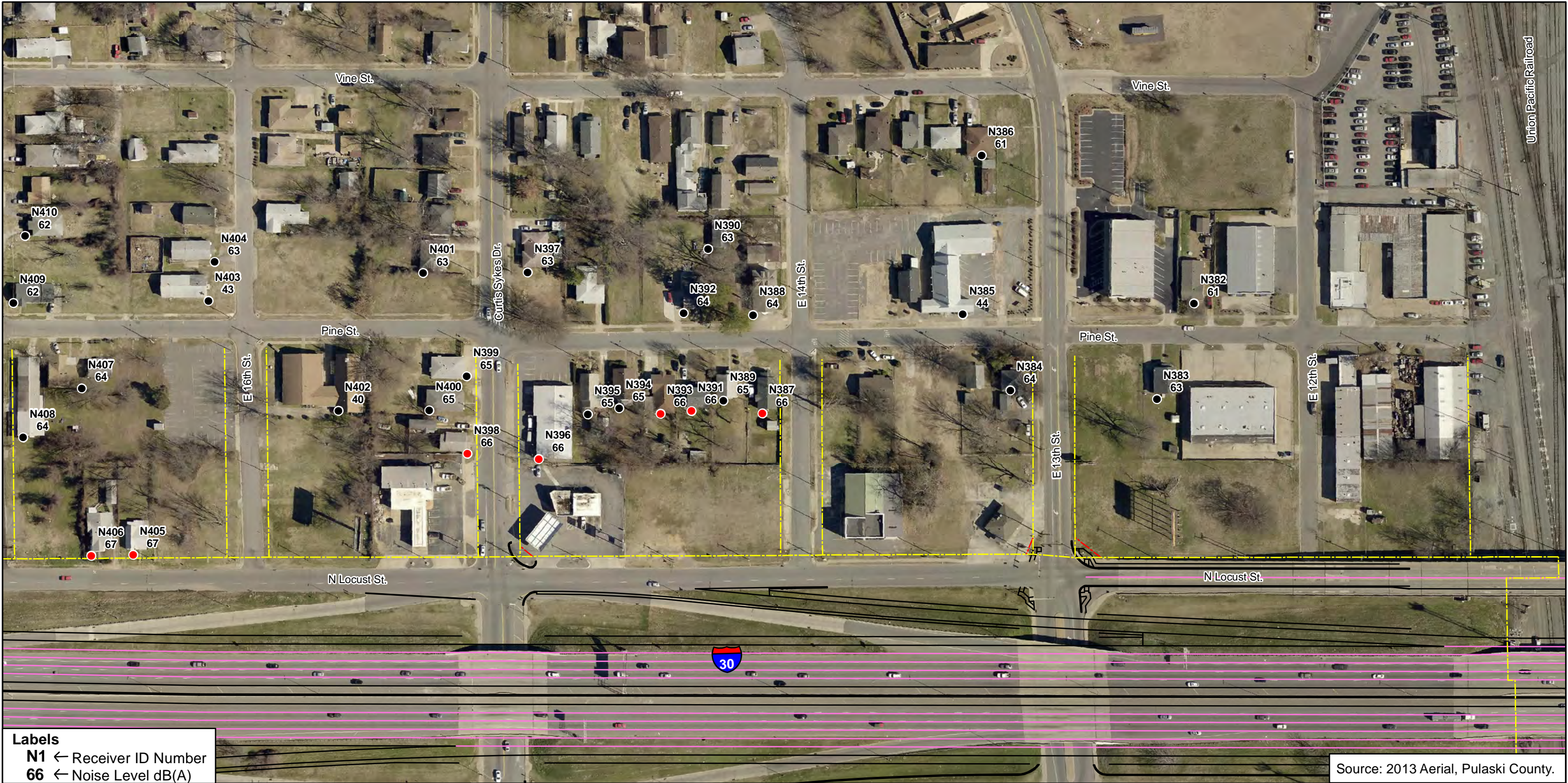


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 6: SHEET 2 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report




Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)




Source: 2013 Aerial, Pulaski County.

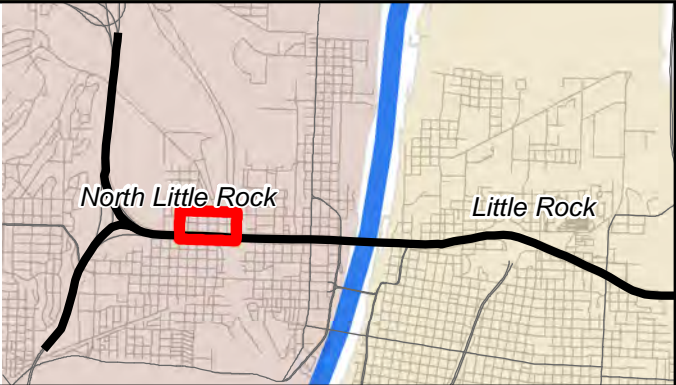
- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 6: SHEET 3 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602




Draft Traffic Noise Study Report

Pulaski County, Arkansas



Source: 2013 Aerial, Pulaski County.

Legend

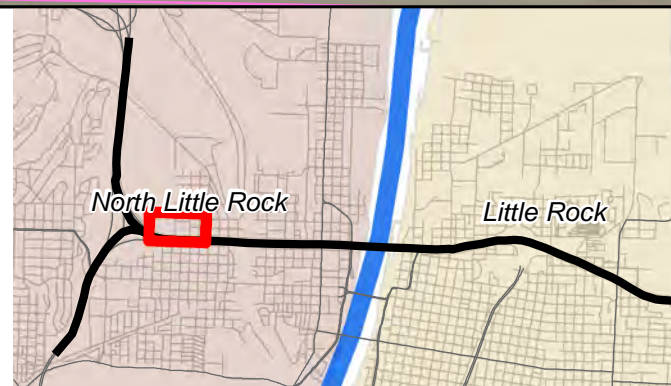
- Non-Impacted Receiver
 ● Impacted Receiver
 Proposed Lane Markings
 Proposed Pavement Edge
 Proposed ROW
 Existing ROW
-  School
 Public Park
 Historic District



0 150 300 Feet

Sheet Index

**The extent
of each sheet is
highlighted in red*

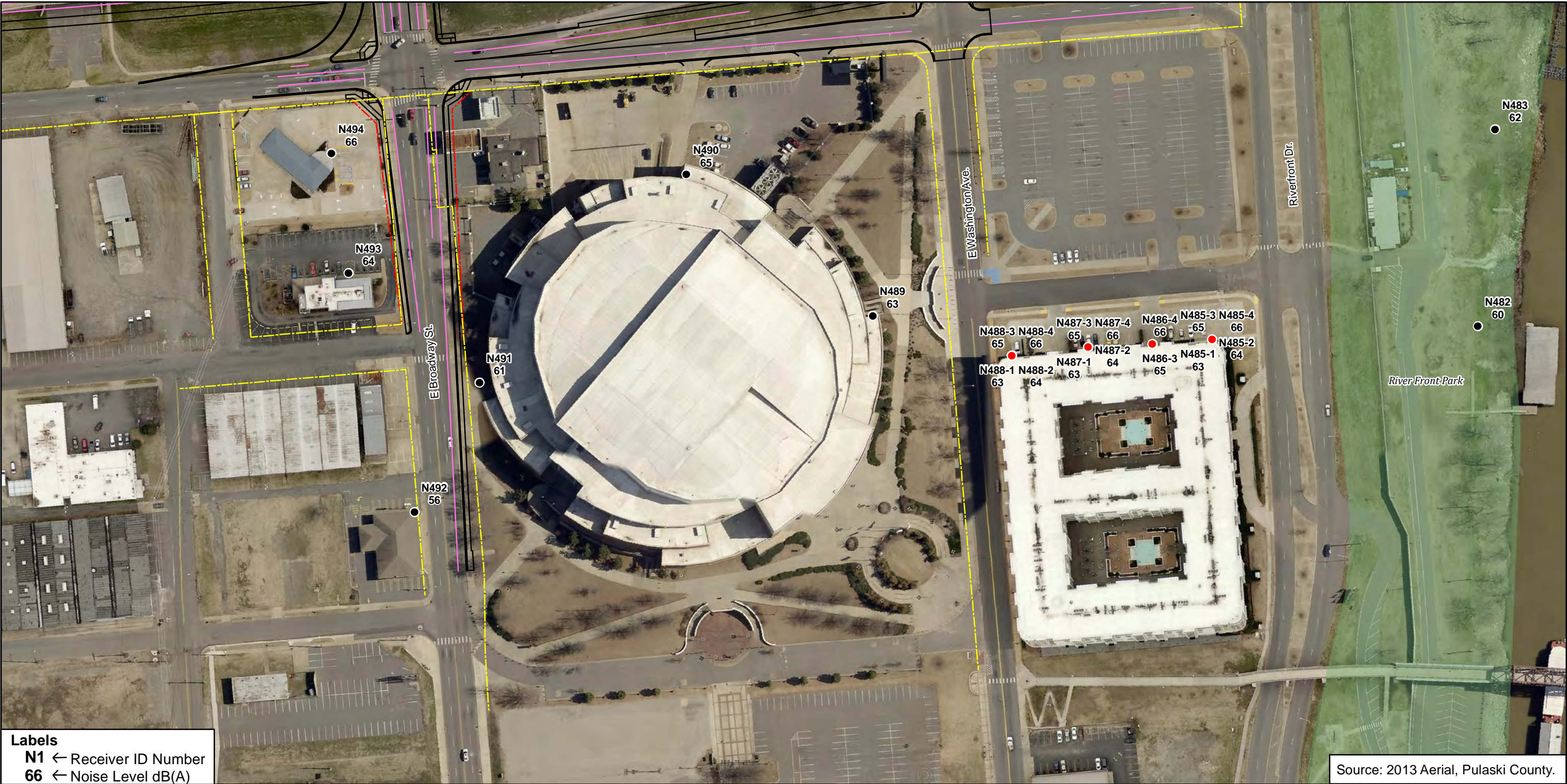


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 6: SHEET 4 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas






Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- - - Existing ROW

- School
- Historic District
- Public Park

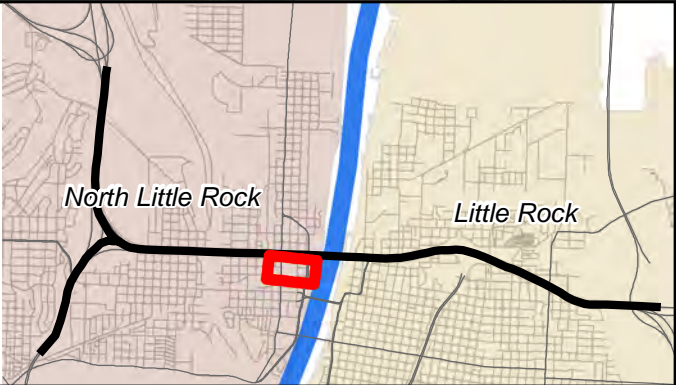


0 150 300 Feet

Sheet Index

*The extent of each sheet is highlighted in red





NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 7: SHEET 1 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*

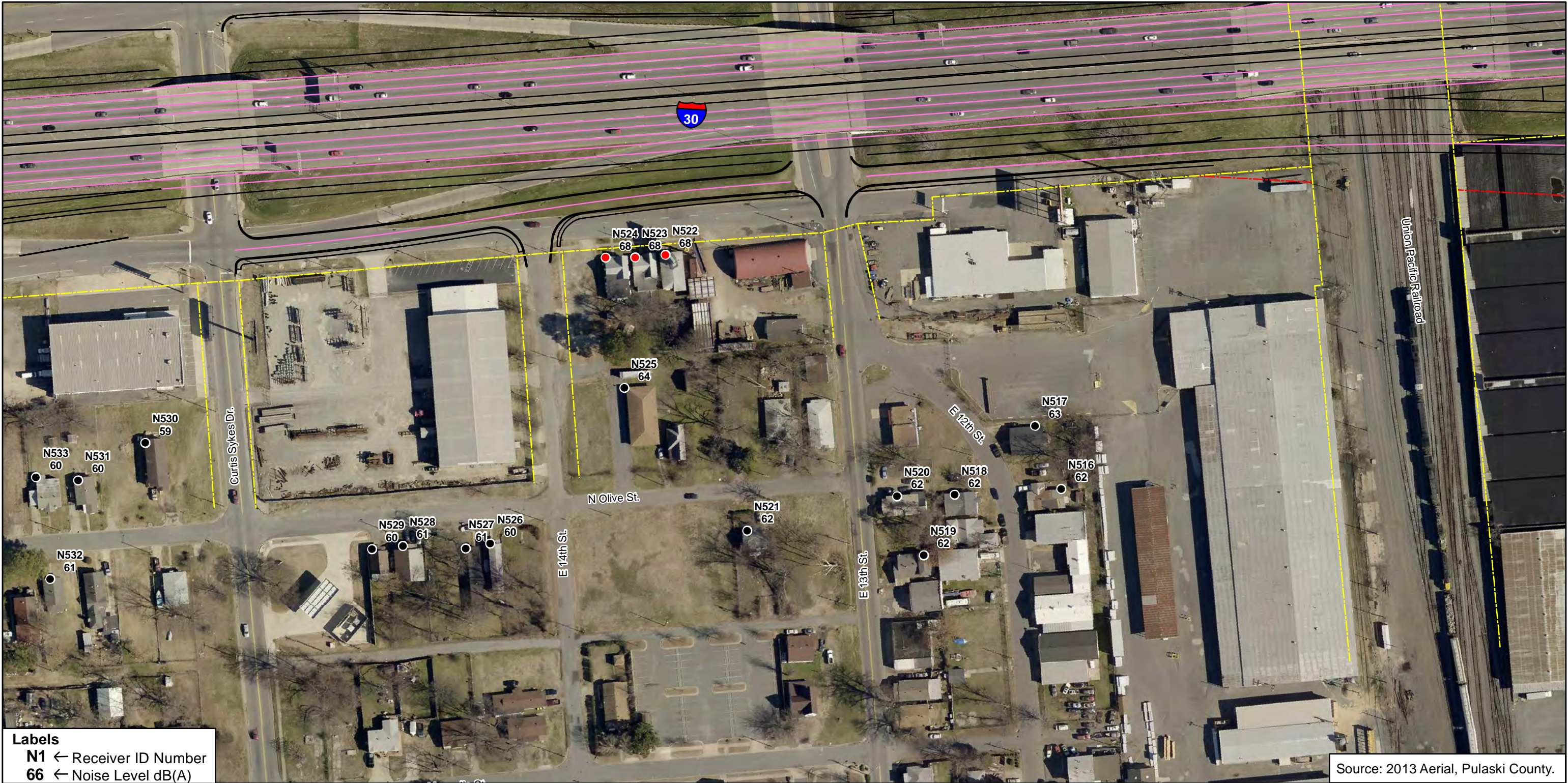


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 7: SHEET 2 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

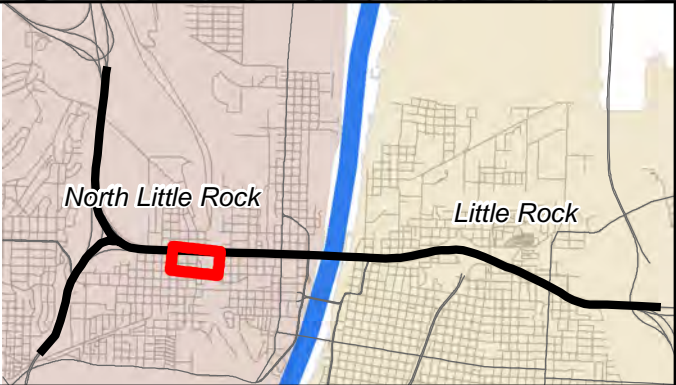
● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*

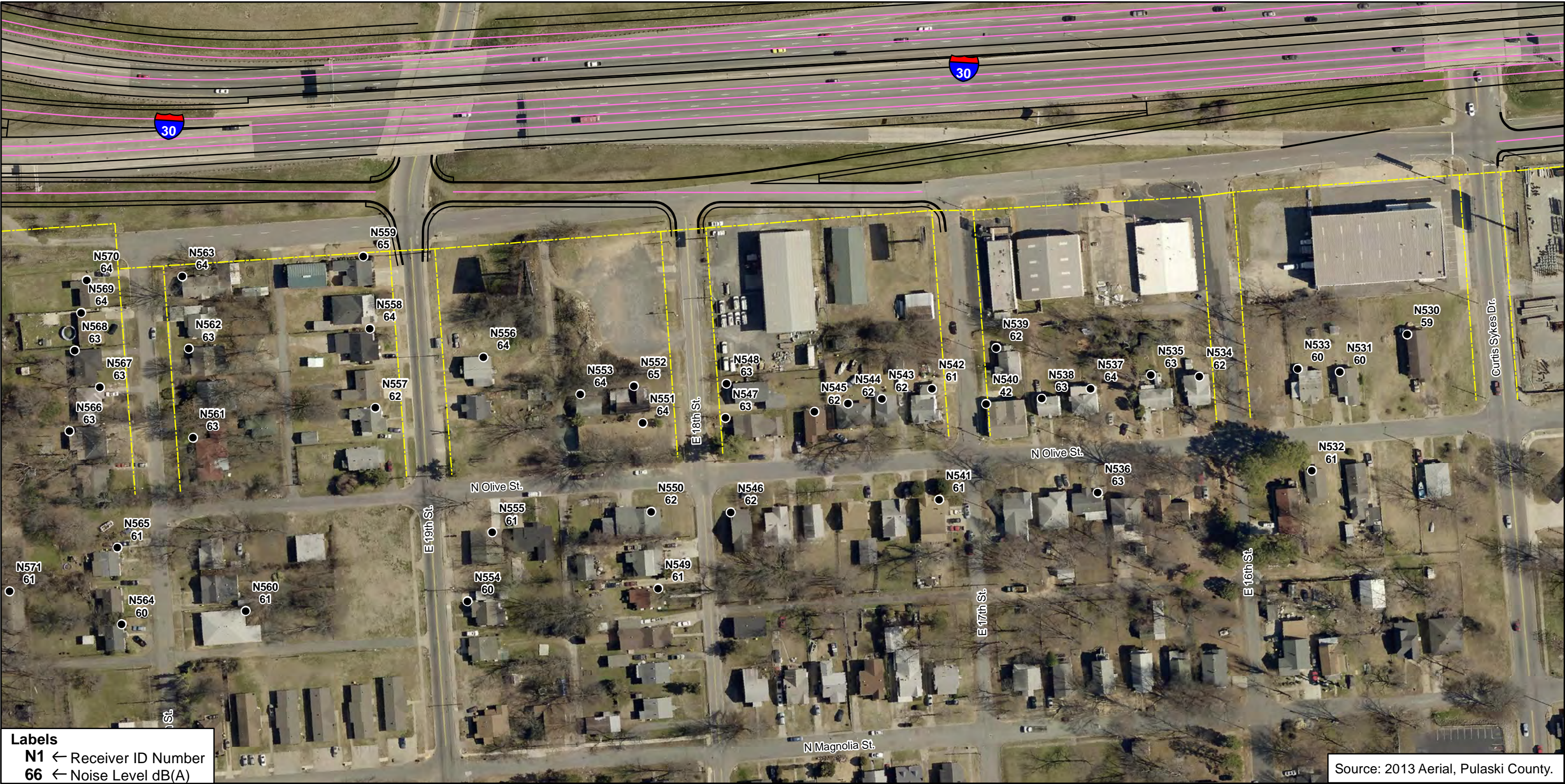


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 7: SHEET 3 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

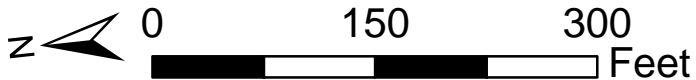
Draft Traffic Noise Study Report

Pulaski County, Arkansas



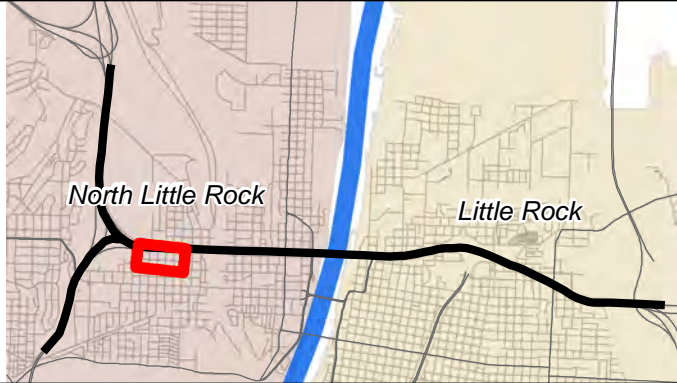
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🏠 Historic District
 - 🌳 Public Park



Sheet Index

*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 7: SHEET 4 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

Source: 2013 Aerial, Pulaski County.







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
— Proposed ROW	
— Existing ROW	

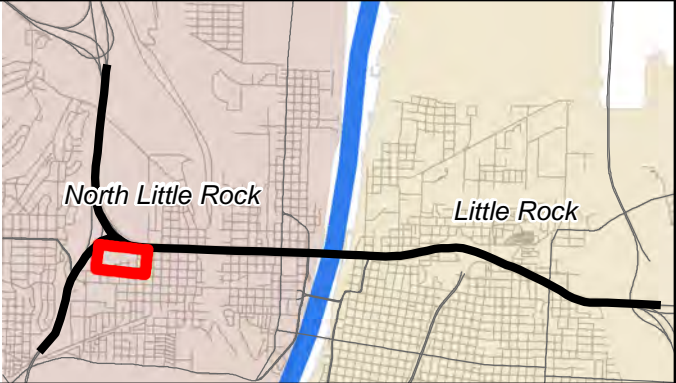




Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 7: SHEET 5 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

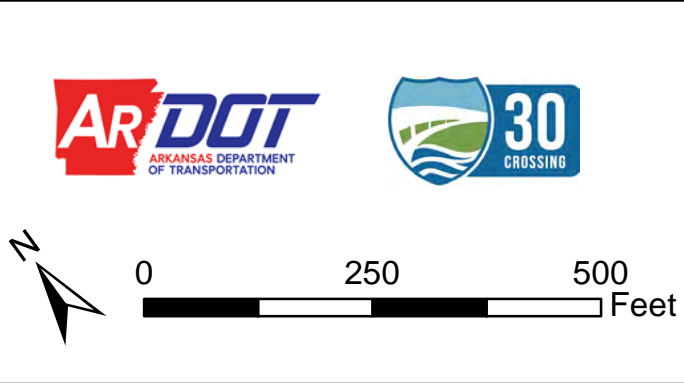
Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

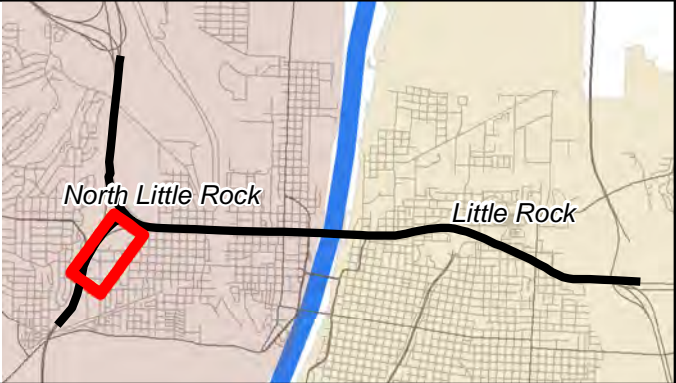
- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*

z



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 8: SHEET 1 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

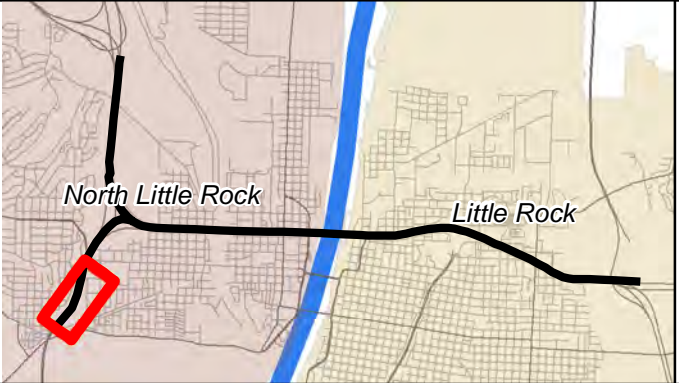
● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 8: SHEET 2 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas





Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

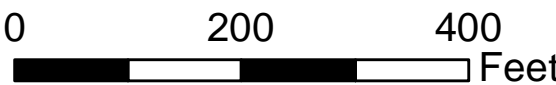

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	



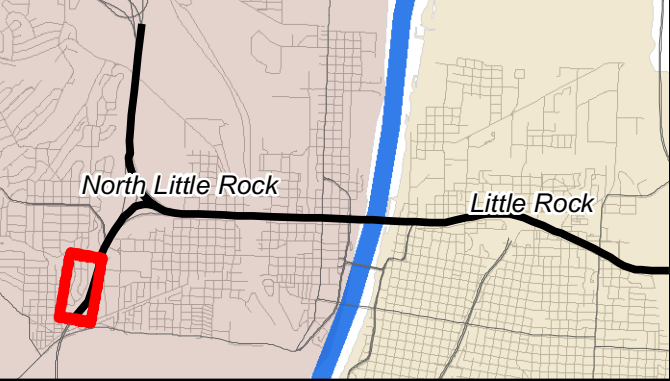

N



0 200 400 Feet

Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 9: SHEET 1 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
— Proposed ROW	
— Existing ROW	

AR DOT
ARKANSAS DEPARTMENT OF TRANSPORTATION

30
CROSSING

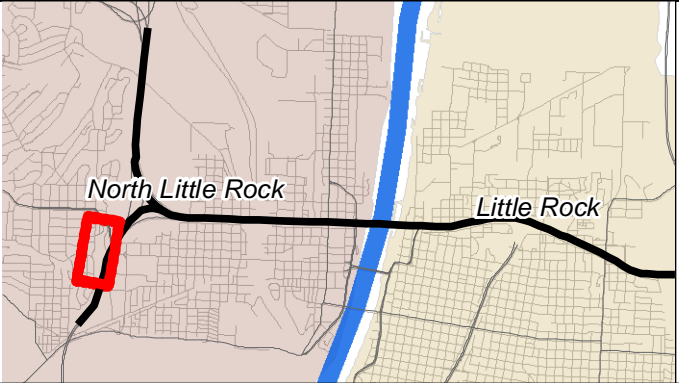
N

0 200 400 Feet

Sheet Index

*The extent of each sheet is highlighted in red

N

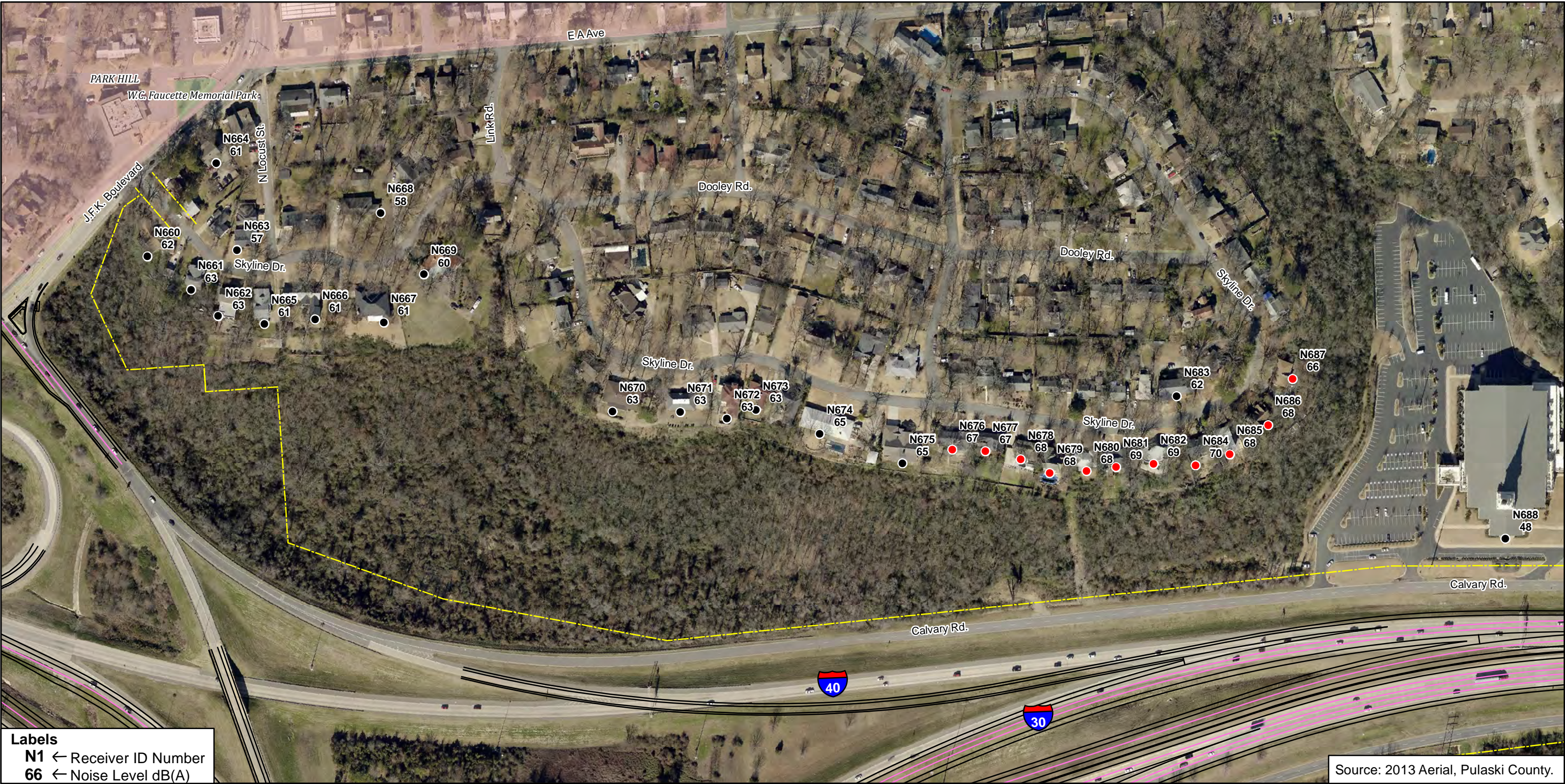


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 9: SHEET 2 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

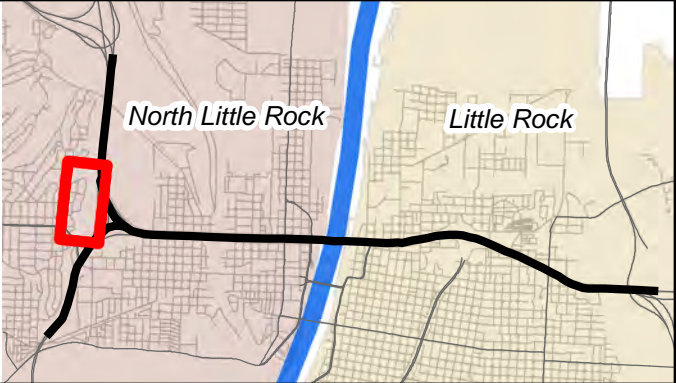
● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*

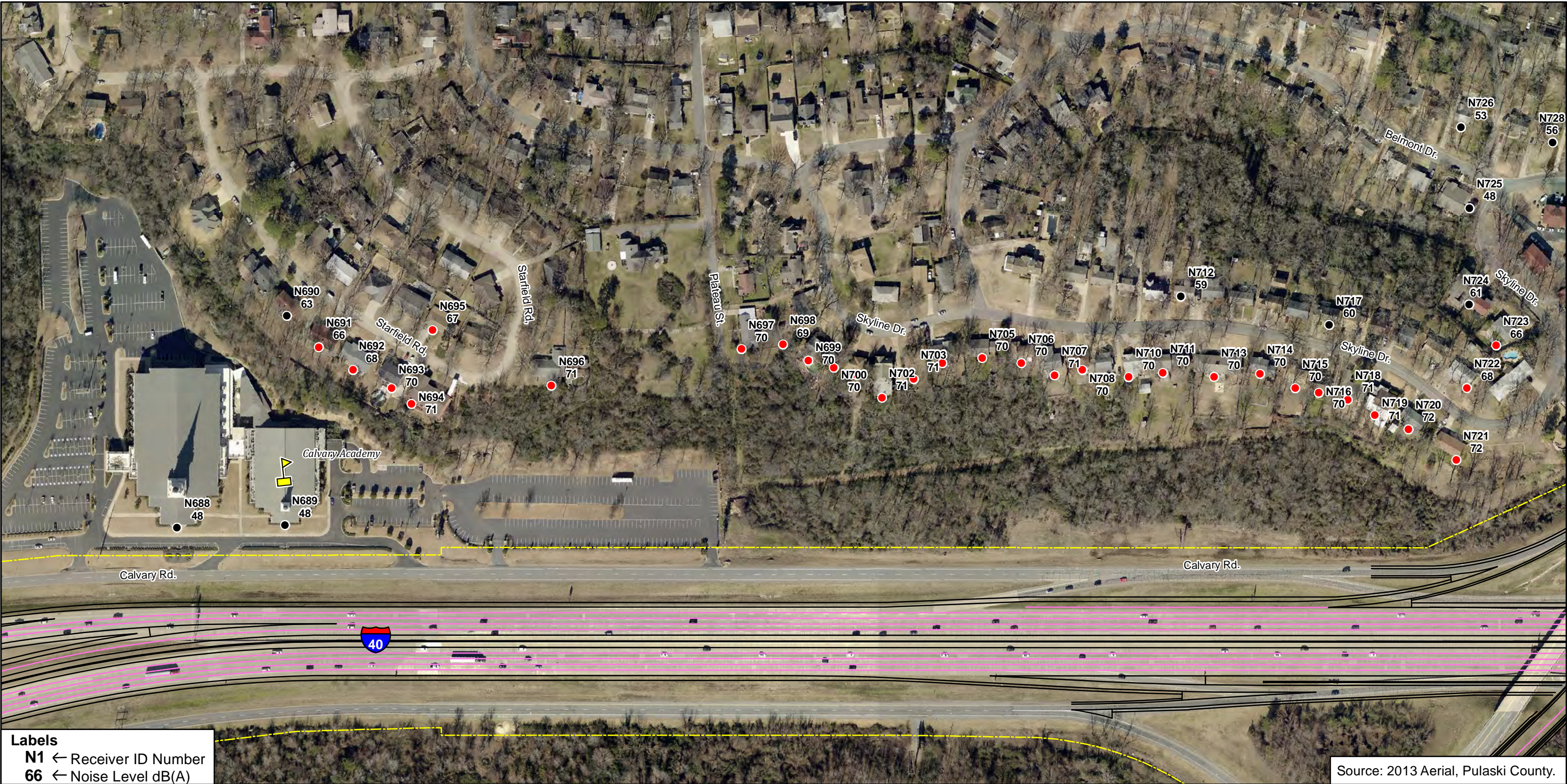


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 10: SHEET 1 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

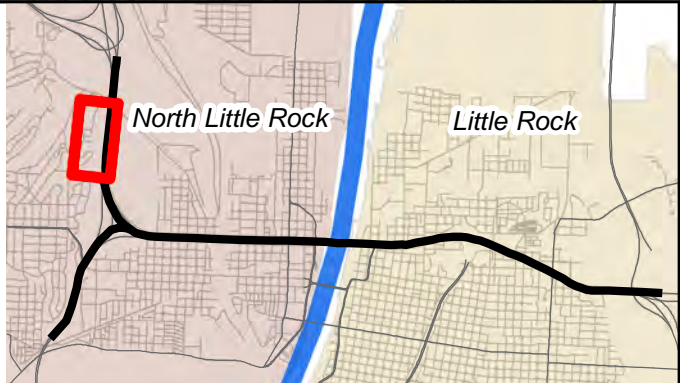
- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏡 Historic District



0 250 500 Feet

Sheet Index

**The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 10: SHEET 2 OF 3**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

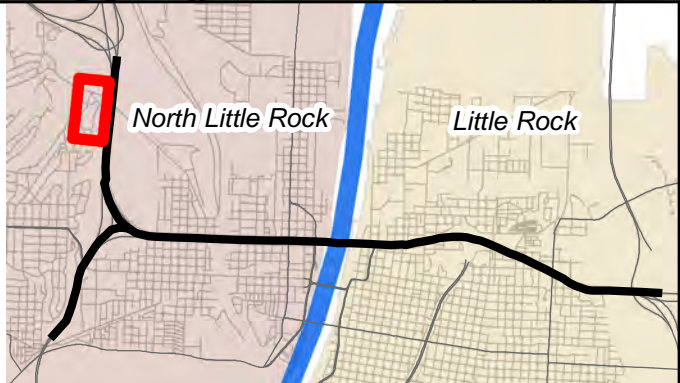
- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



0 200 400 Feet

Sheet Index

*The extent of each sheet is highlighted in red

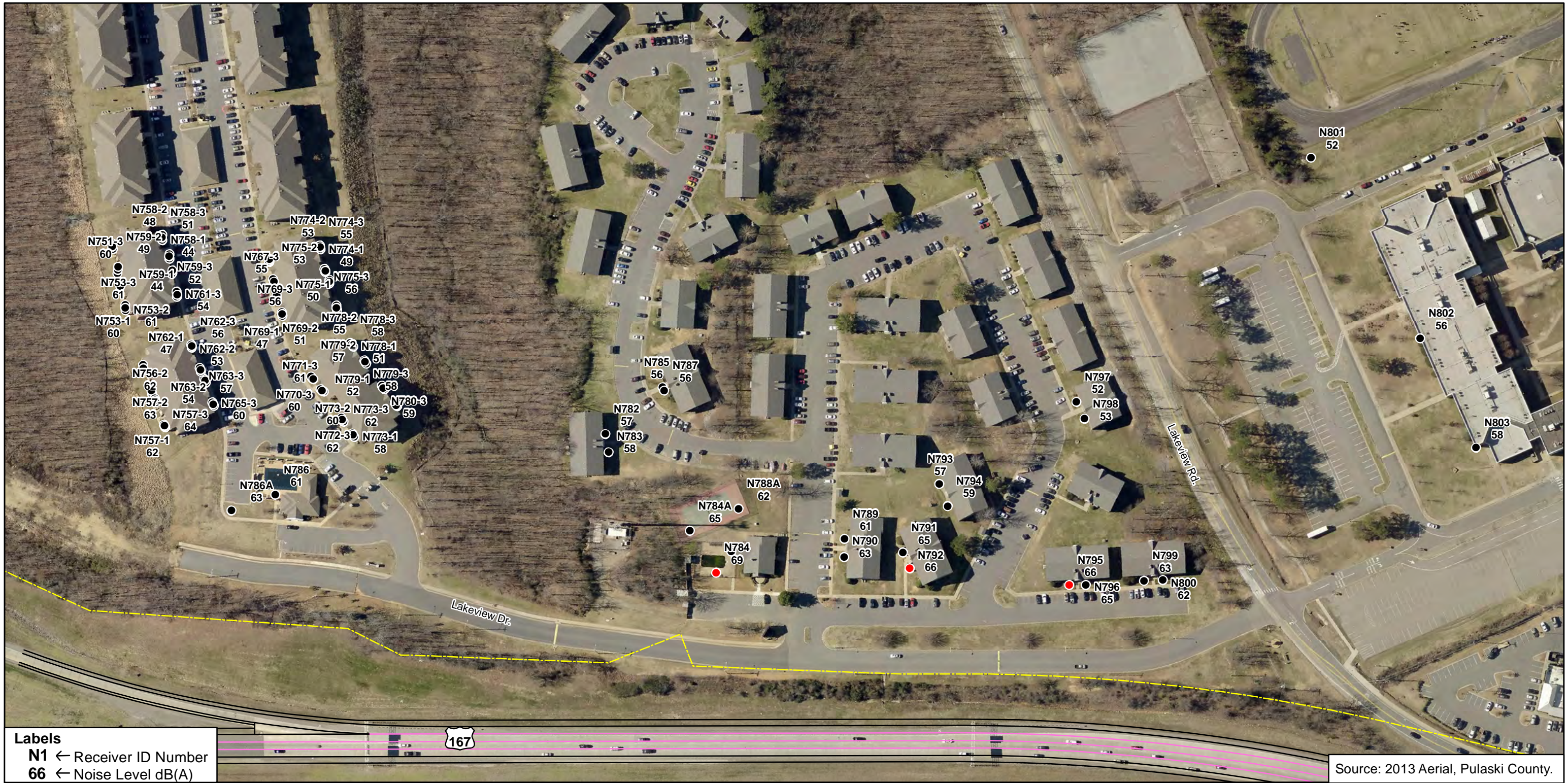


**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 10: SHEET 3 OF 3**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	

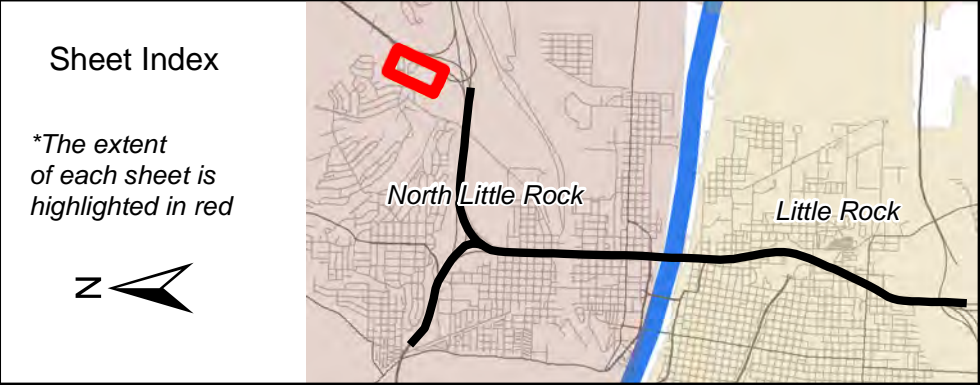
AR DOT
ARKANSAS DEPARTMENT OF TRANSPORTATION

30
CROSSING

0 150 300 Feet

Sheet Index

*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 12: SHEET 1 OF 1

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

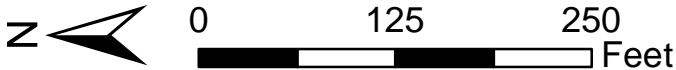
Draft Traffic Noise Study Report

Pulaski County, Arkansas



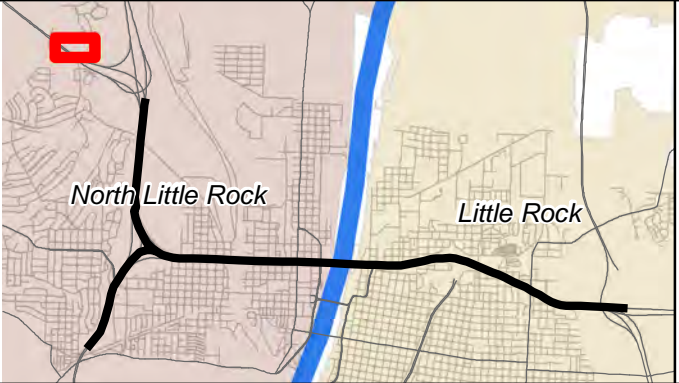
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SPUI
NSA 14: SHEET 1 OF 1**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- - - Proposed ROW
- - - Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏠 Historic District

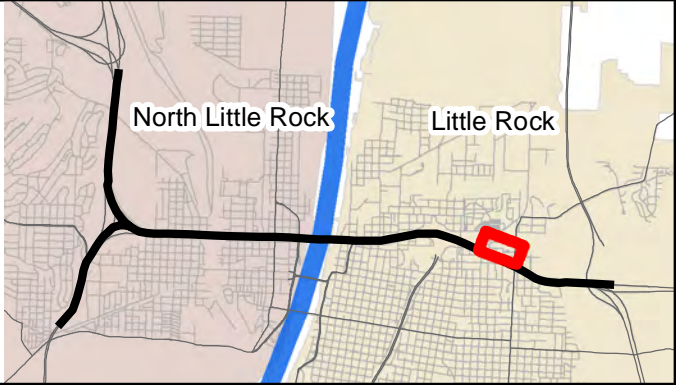
AR DOT ARKANSAS DEPARTMENT OF TRANSPORTATION

30 CROSSING

0 150 300 Feet

Sheet Index

*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 1: SHEET 1 OF 2

I-30 from I-530 to Hwy. 67
 30 Crossing Project
 CA0602

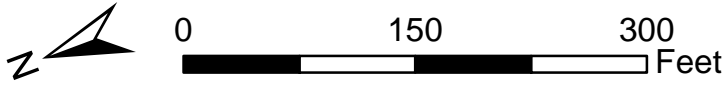
Draft Traffic Noise Study Report
 Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚶 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

*The extent of each sheet is highlighted in red



**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 1: SHEET 2 OF 2**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

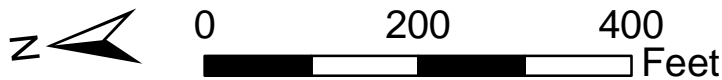
Draft Traffic Noise Study Report
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

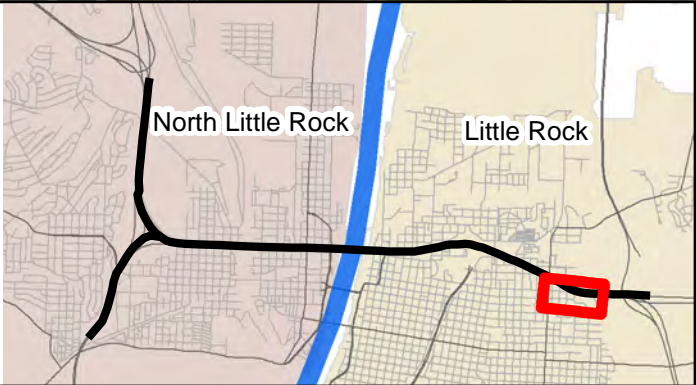
Source: 2013 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 2: SHEET 1 of 1

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

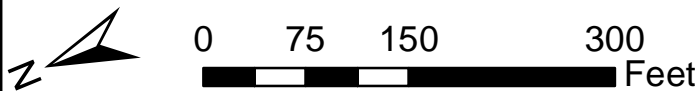


Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

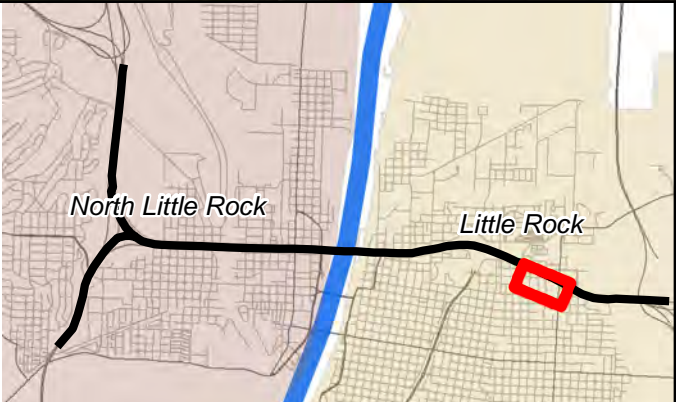
Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚏 School
- 🌳 Public Park
- 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 3: SHEET 1 OF 3**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

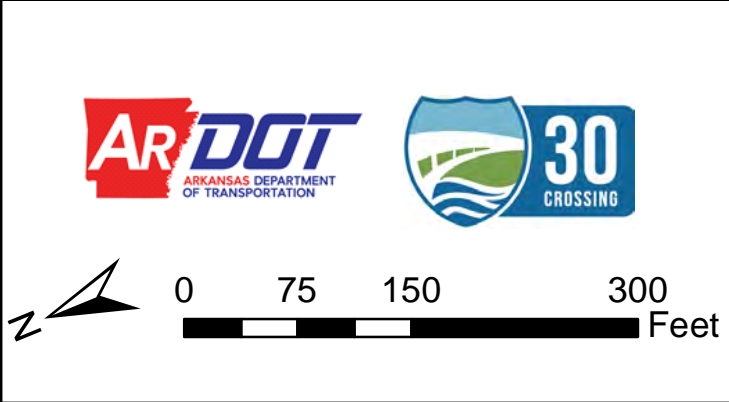
Draft Traffic Noise Study Report

Pulaski County, Arkansas



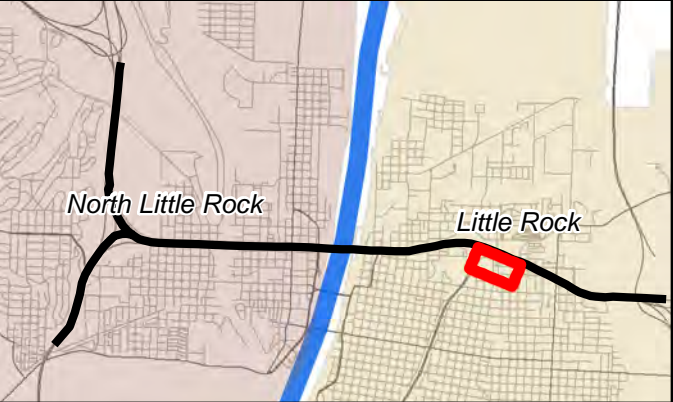
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*

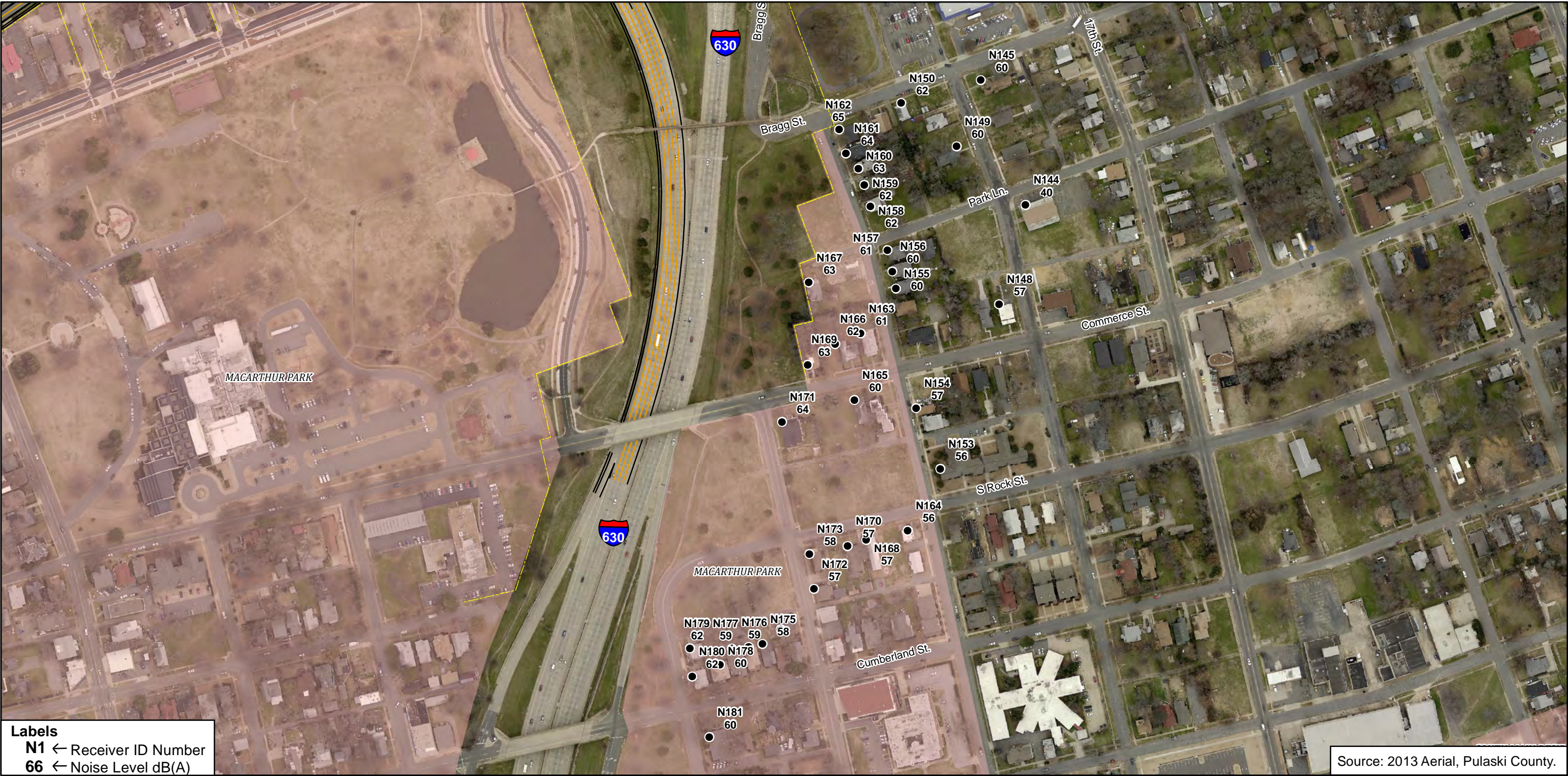


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 3: SHEET 2 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

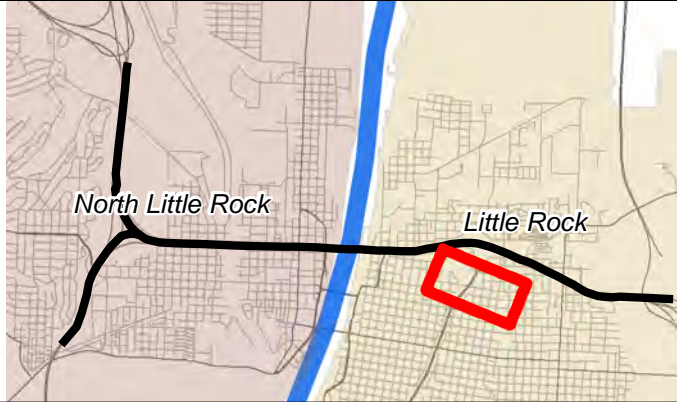
- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚏 School
- 🌳 Public Park
- 🏡 Historic District



0 125 250 500 Feet

Sheet Index

*The extent of each sheet is highlighted in red

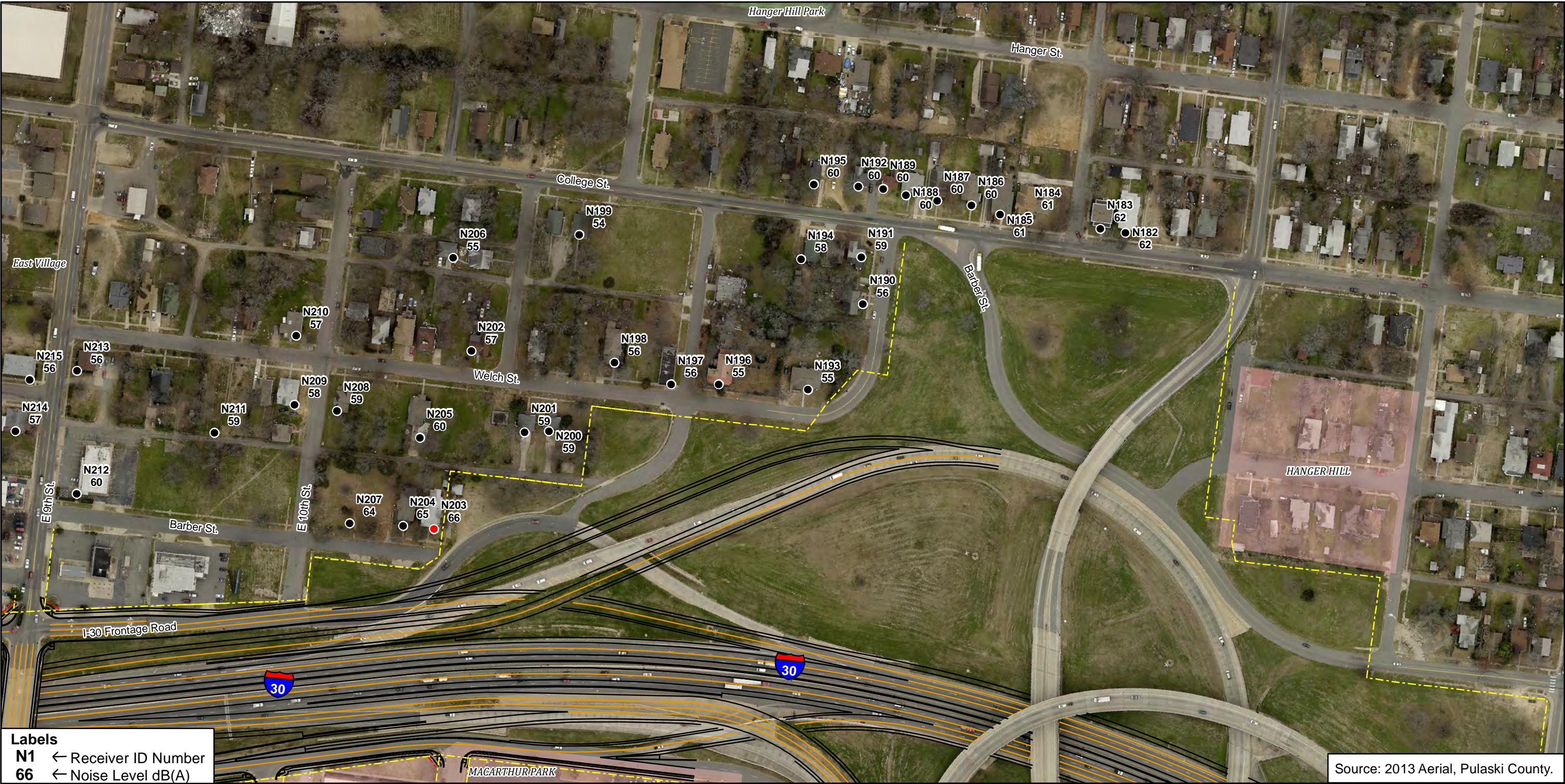


**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 3: SHEET 3 OF 3**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas





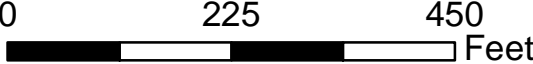

Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend


● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	

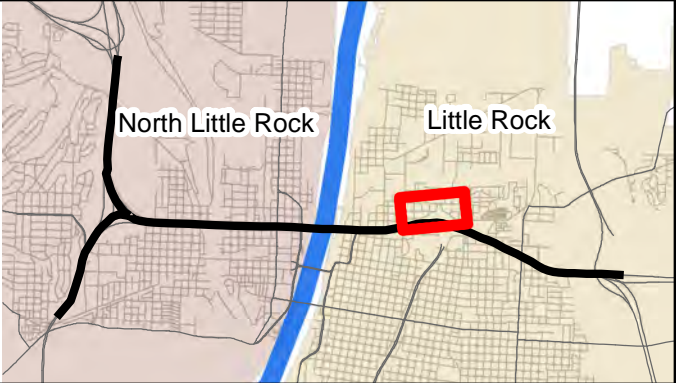




Sheet Index

**The extent of each sheet is highlighted in red*

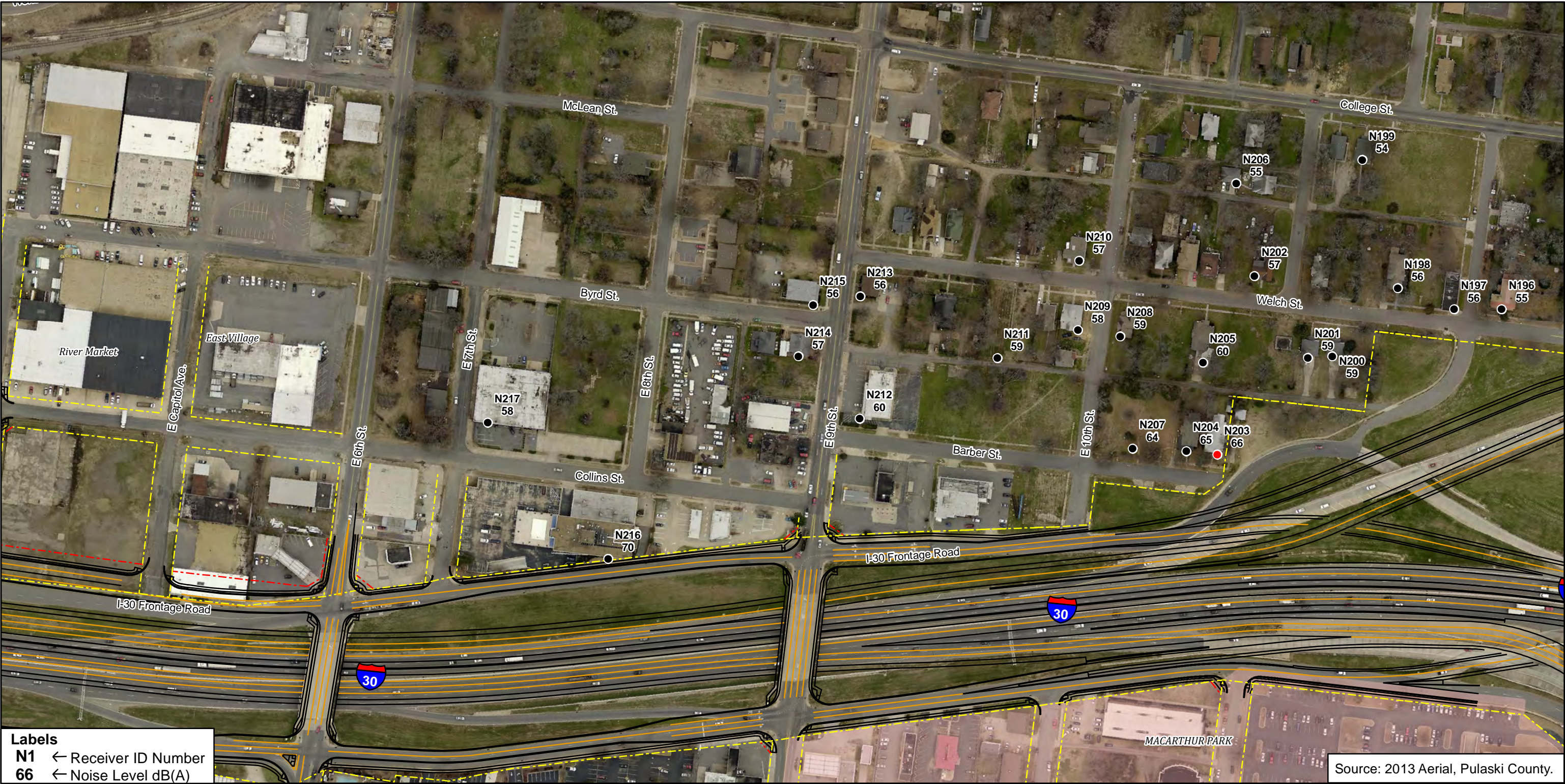




NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 4: SHEET 1 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report
Pulaski County, Arkansas

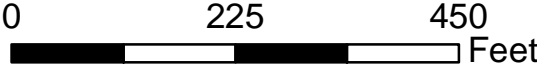



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Legend


● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
- - - Propsed ROW	
- - - Existing ROW	

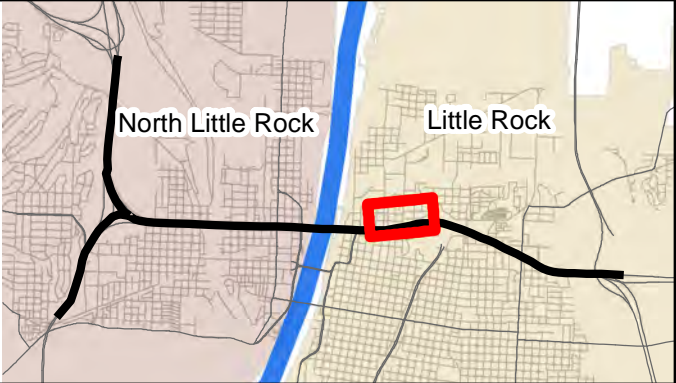




Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 4: SHEET 2 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report



Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

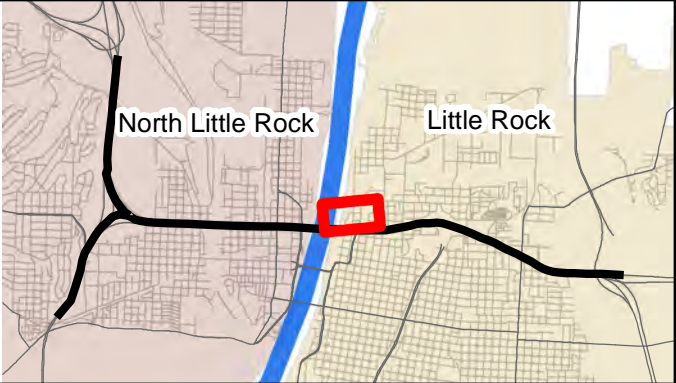

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Propsed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏠 Historic District





Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 4: SHEET 3 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report



Pulaski County, Arkansas




Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏘️ Historic District
— Proposed Pavement Edge	
- - - Propsed ROW	
- - - Existing ROW	




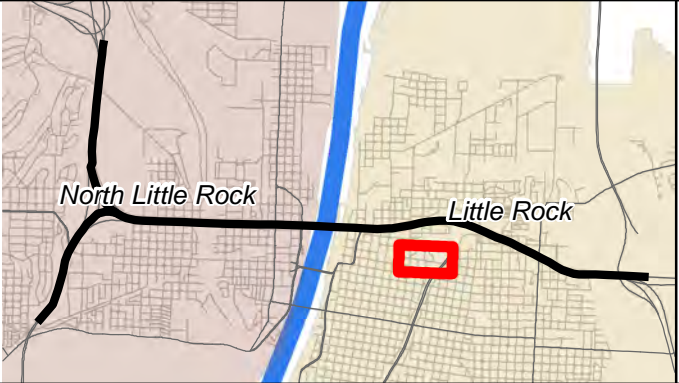
0 150 300 Feet



Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 5: SHEET 1 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

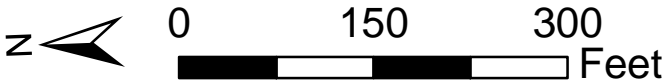
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

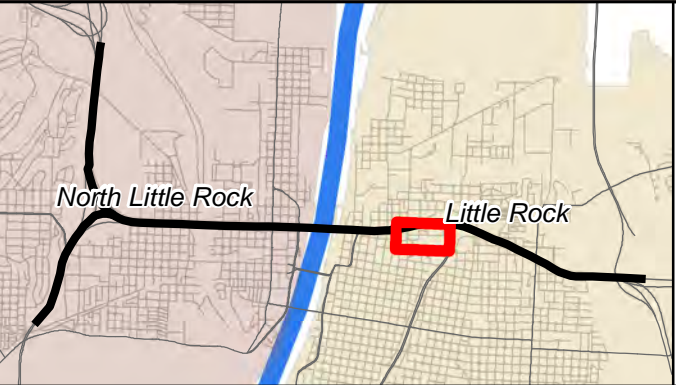
Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- - - Propsed ROW
- - - Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏠 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 5: SHEET 2 OF 6**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

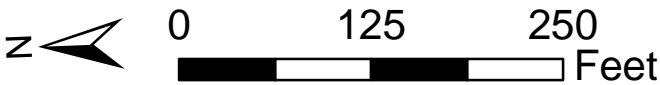


Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- - - Propsed ROW
- - - Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏡 Historic District



Sheet Index

*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 5: SHEET 3 OF 6

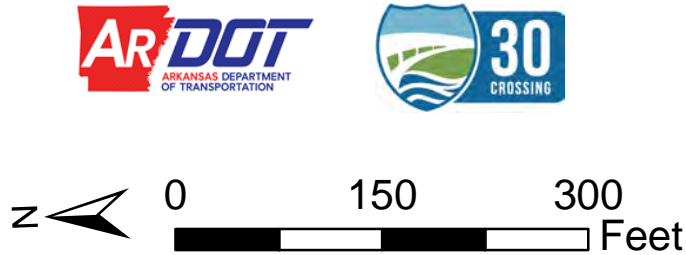
I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas



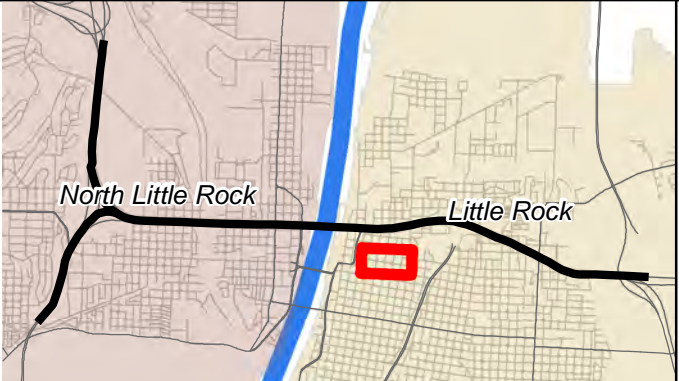
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Propsed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

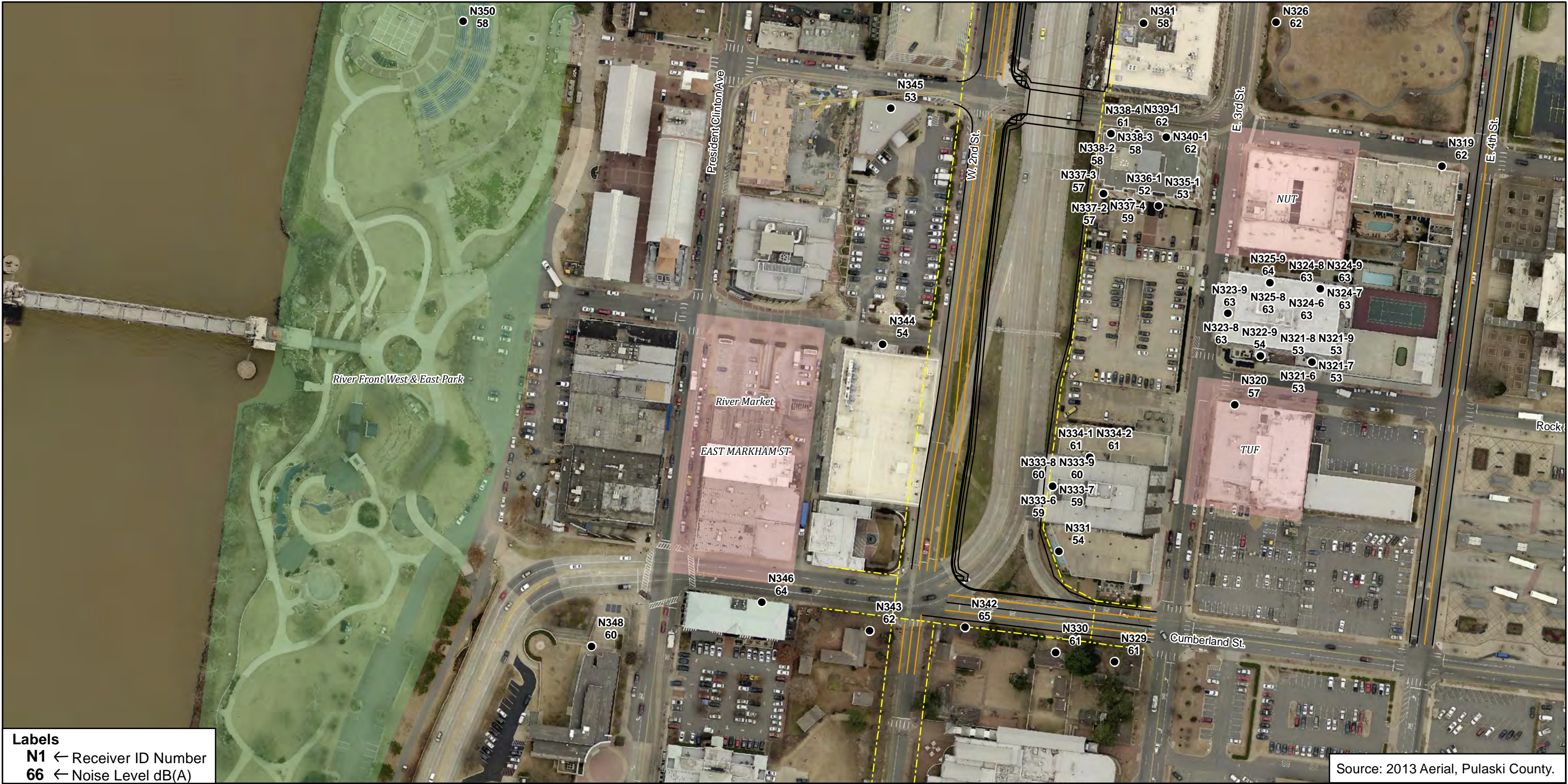
**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 5: SHEET 4 OF 6

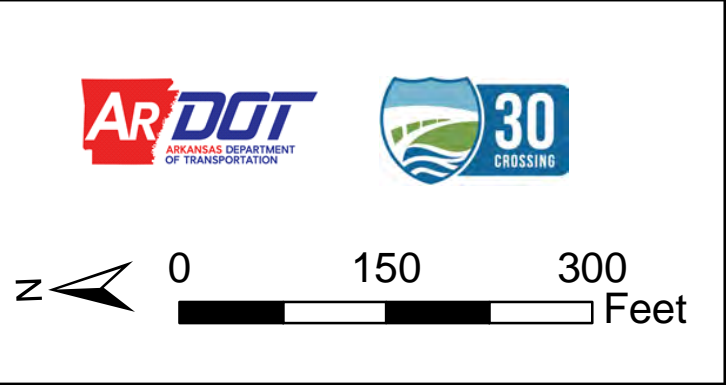
I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas



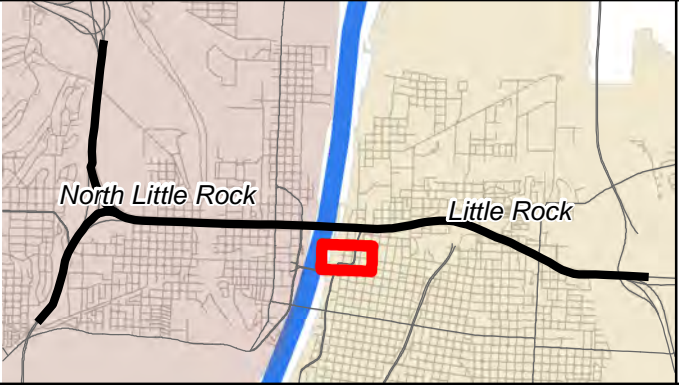
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Propsed ROW
 - - - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*

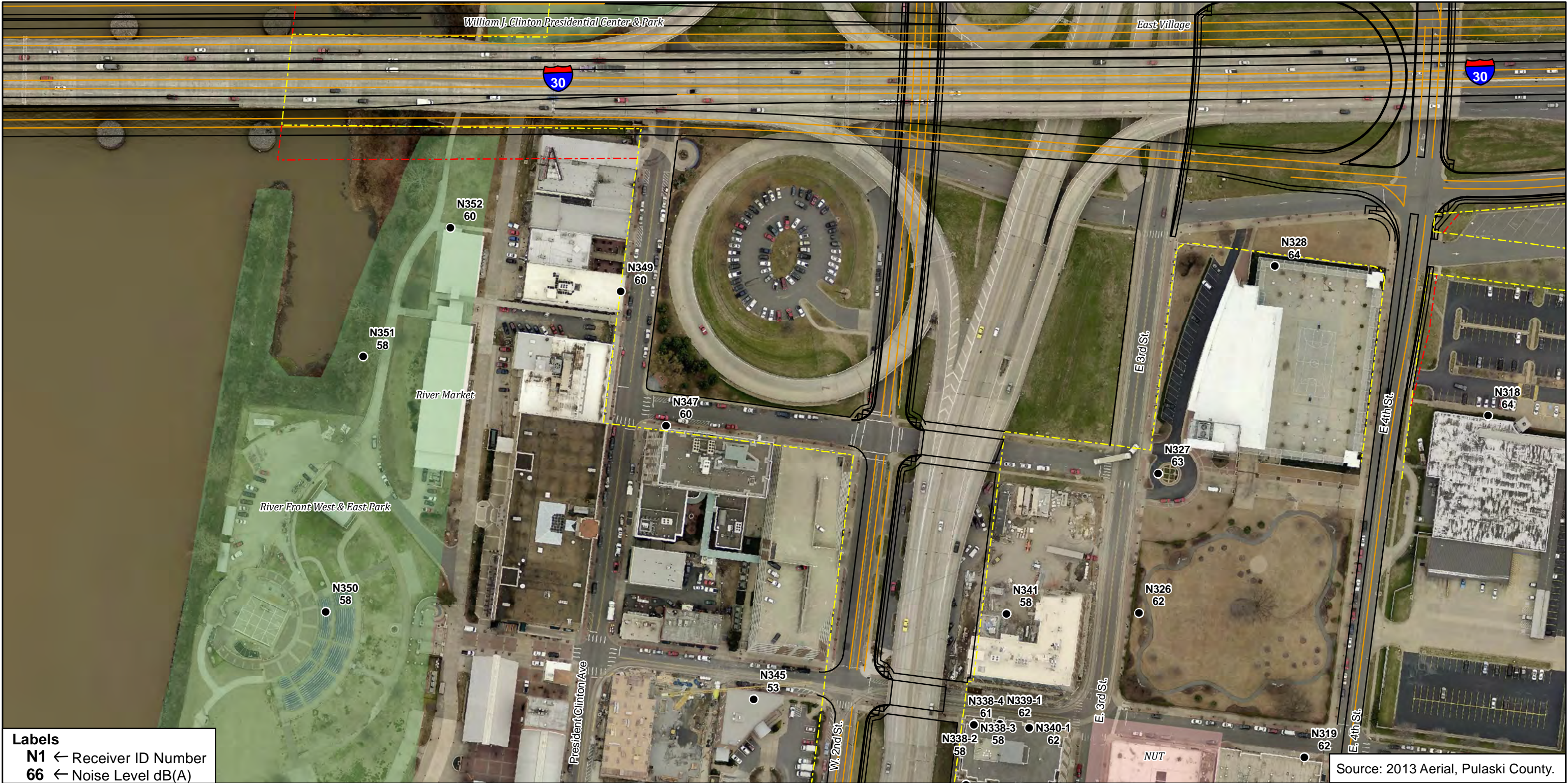


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 5: SHEET 5 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

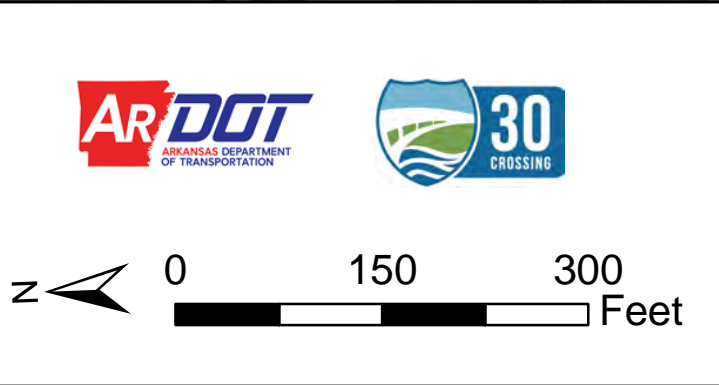
Draft Traffic Noise Study Report

Pulaski County, Arkansas



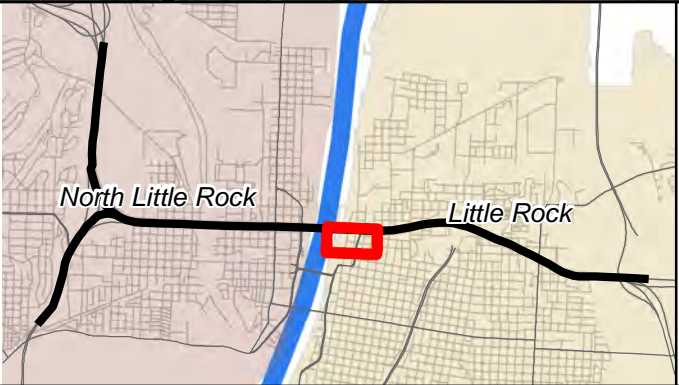
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Propsed ROW
 - - - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

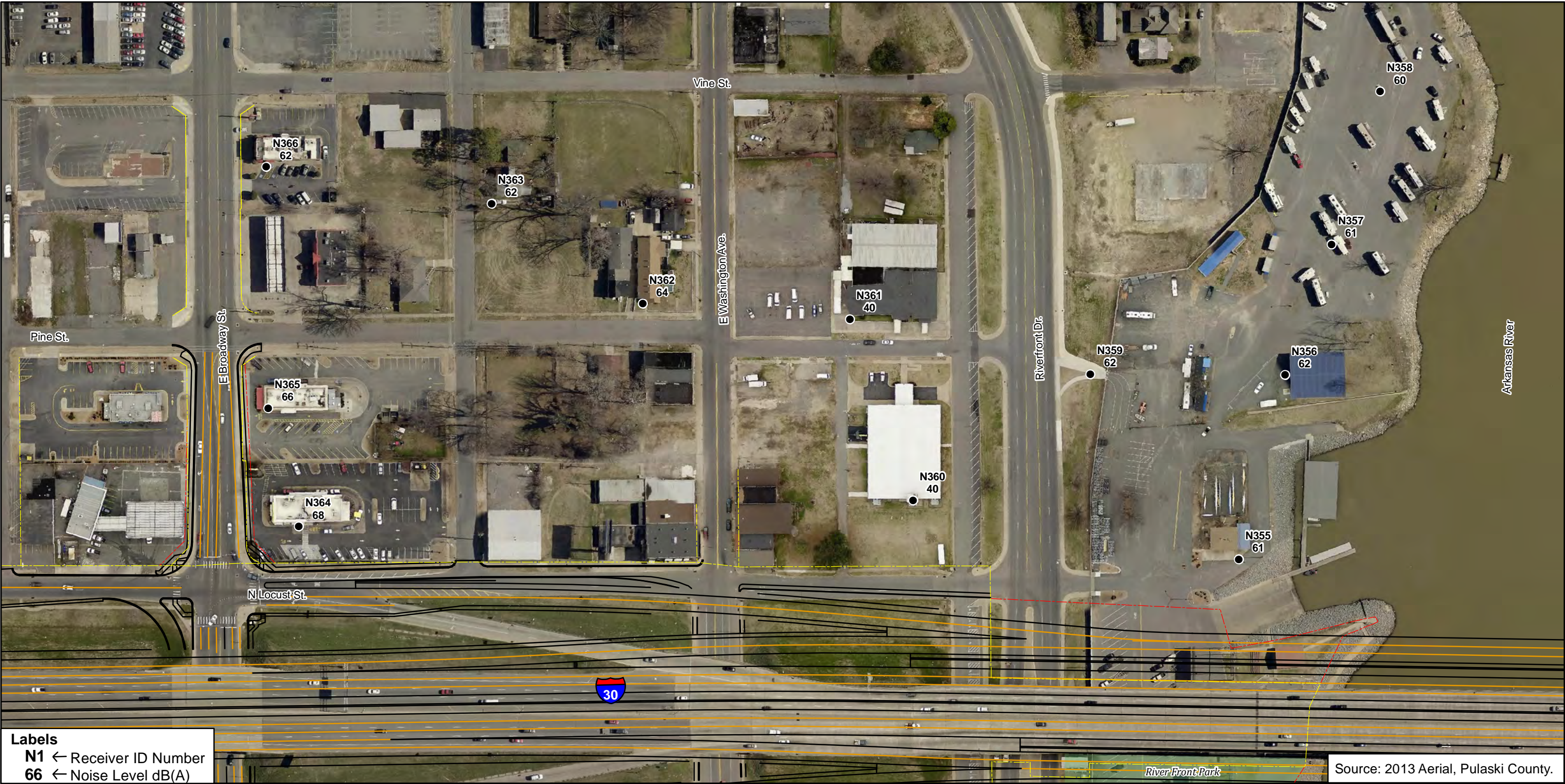
**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 5: SHEET 6 OF 6

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

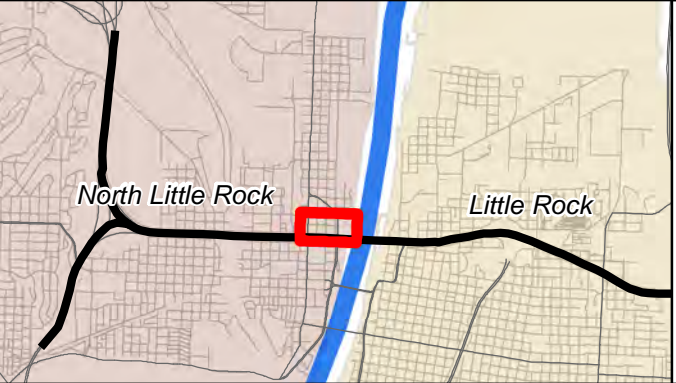
- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



0 150 300 Feet

Sheet Index

**The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 6: SHEET 1 OF 4**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



Draft Traffic Noise Study Report
Pulaski County, Arkansas




Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏠 Historic District

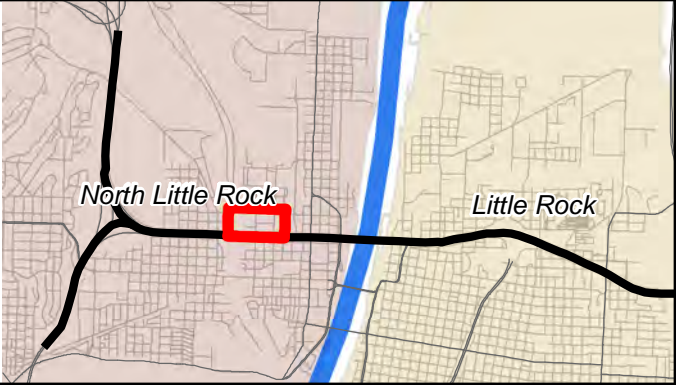


0 150 300 Feet



Sheet Index

**The extent of each sheet is highlighted in red*

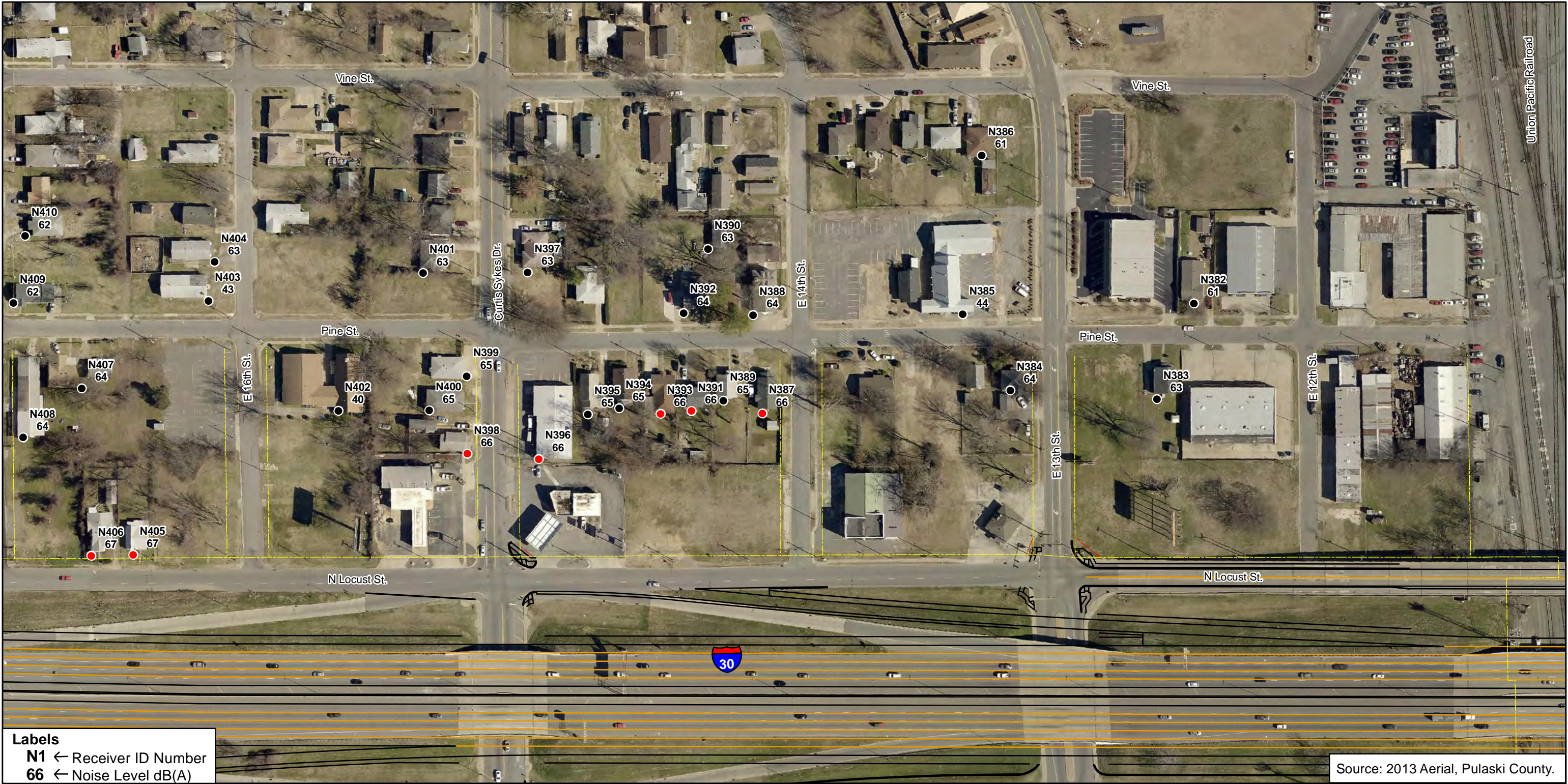


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 6: SHEET 2 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas





Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)


Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	

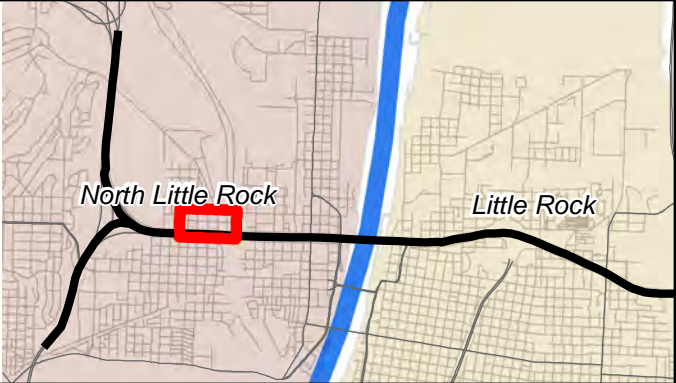


0 150 300 Feet



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 6: SHEET 3 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

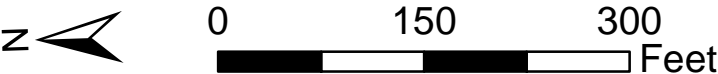
Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

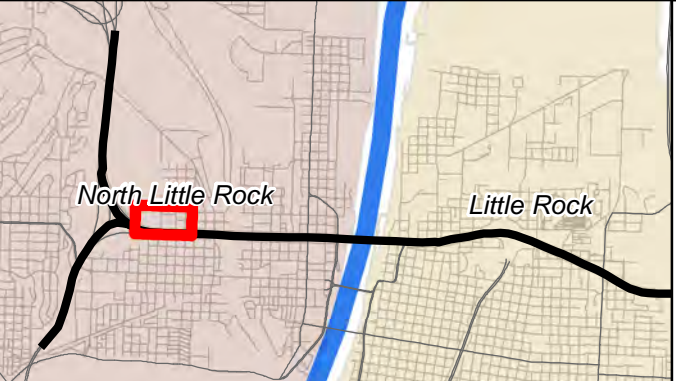
Source: 2013 Aerial, Pulaski County.

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏠 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*

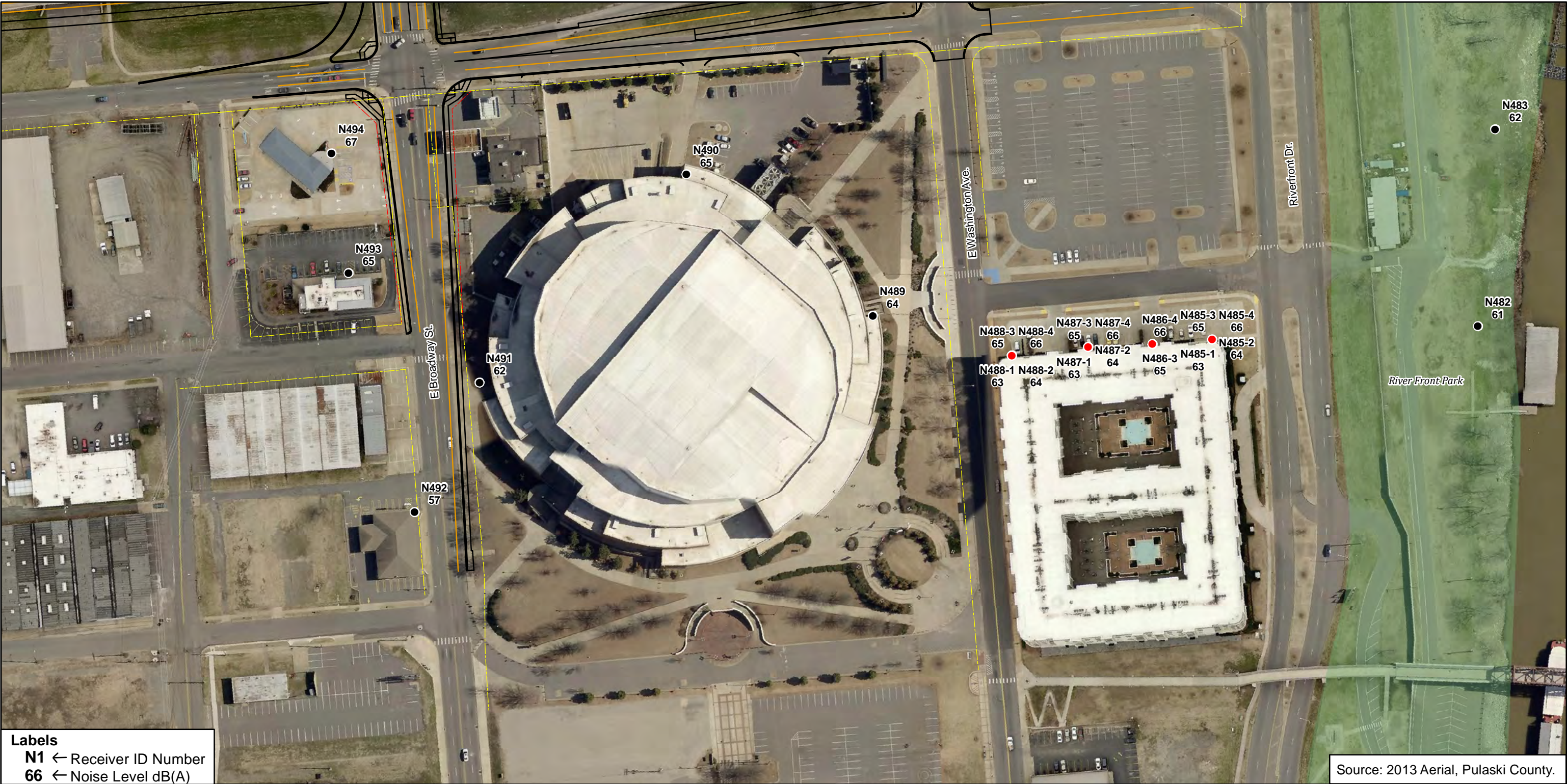


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 6: SHEET 4 OF 4

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚶 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
— Proposed ROW	
— Existing ROW	

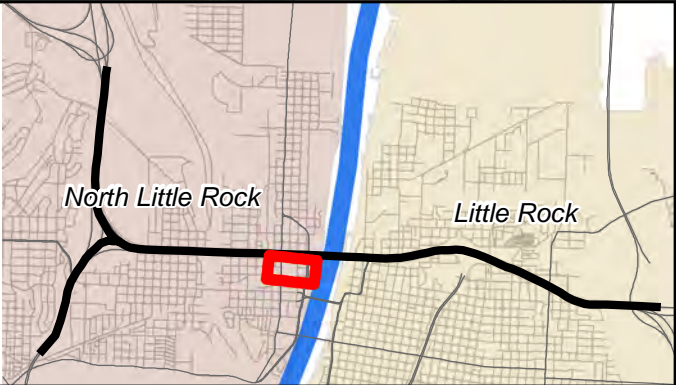




Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 7: SHEET 1 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*



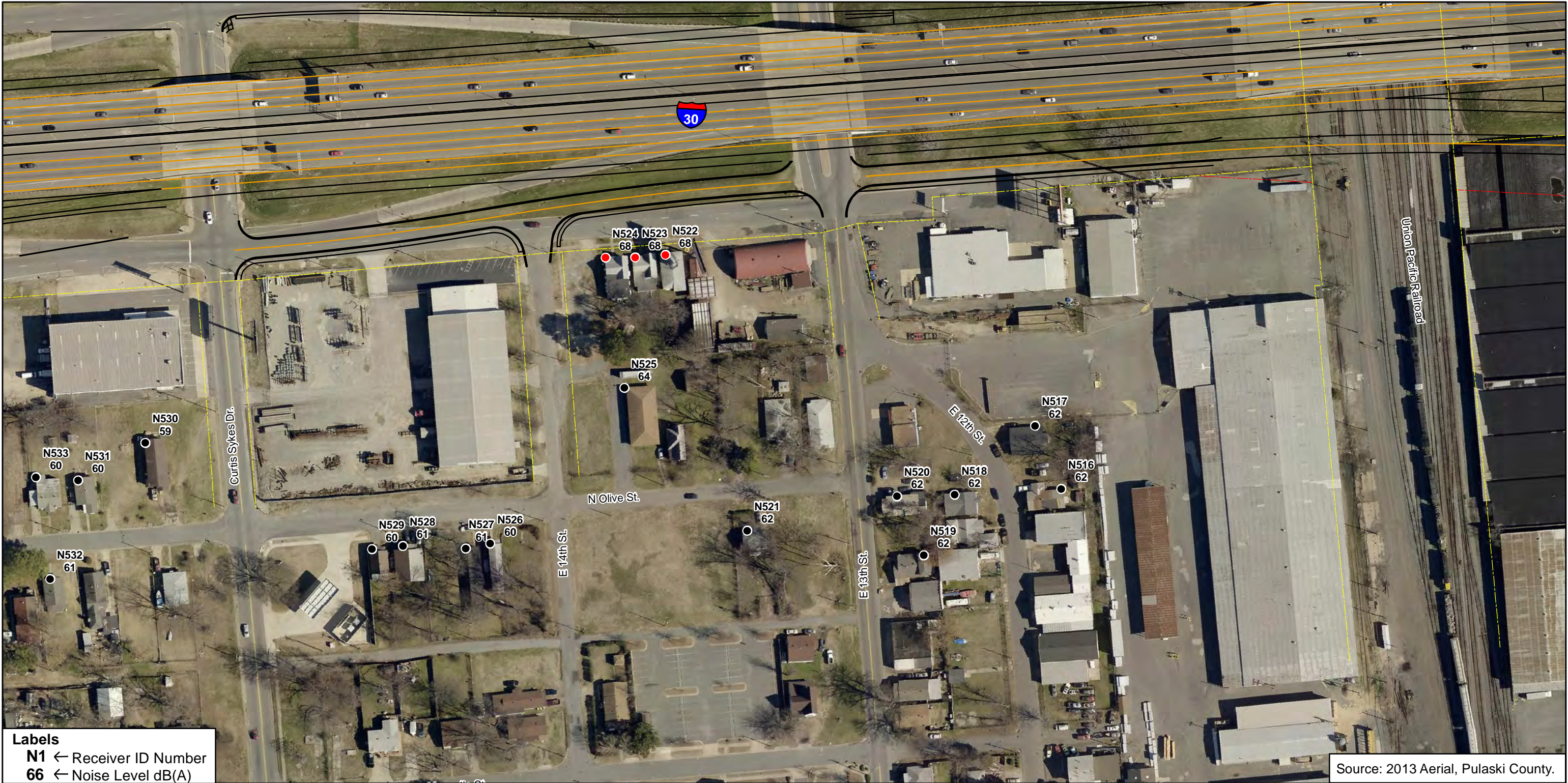


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 7: SHEET 2 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

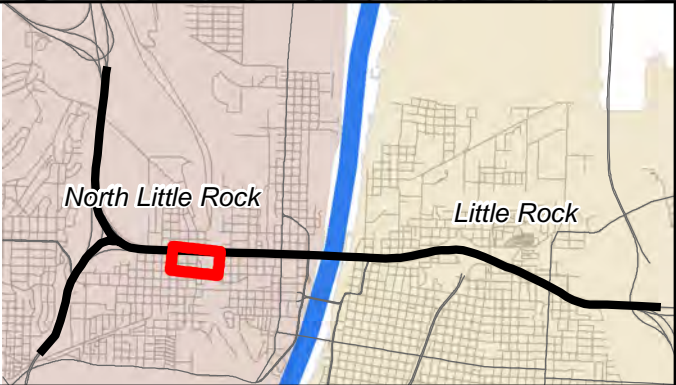
● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*

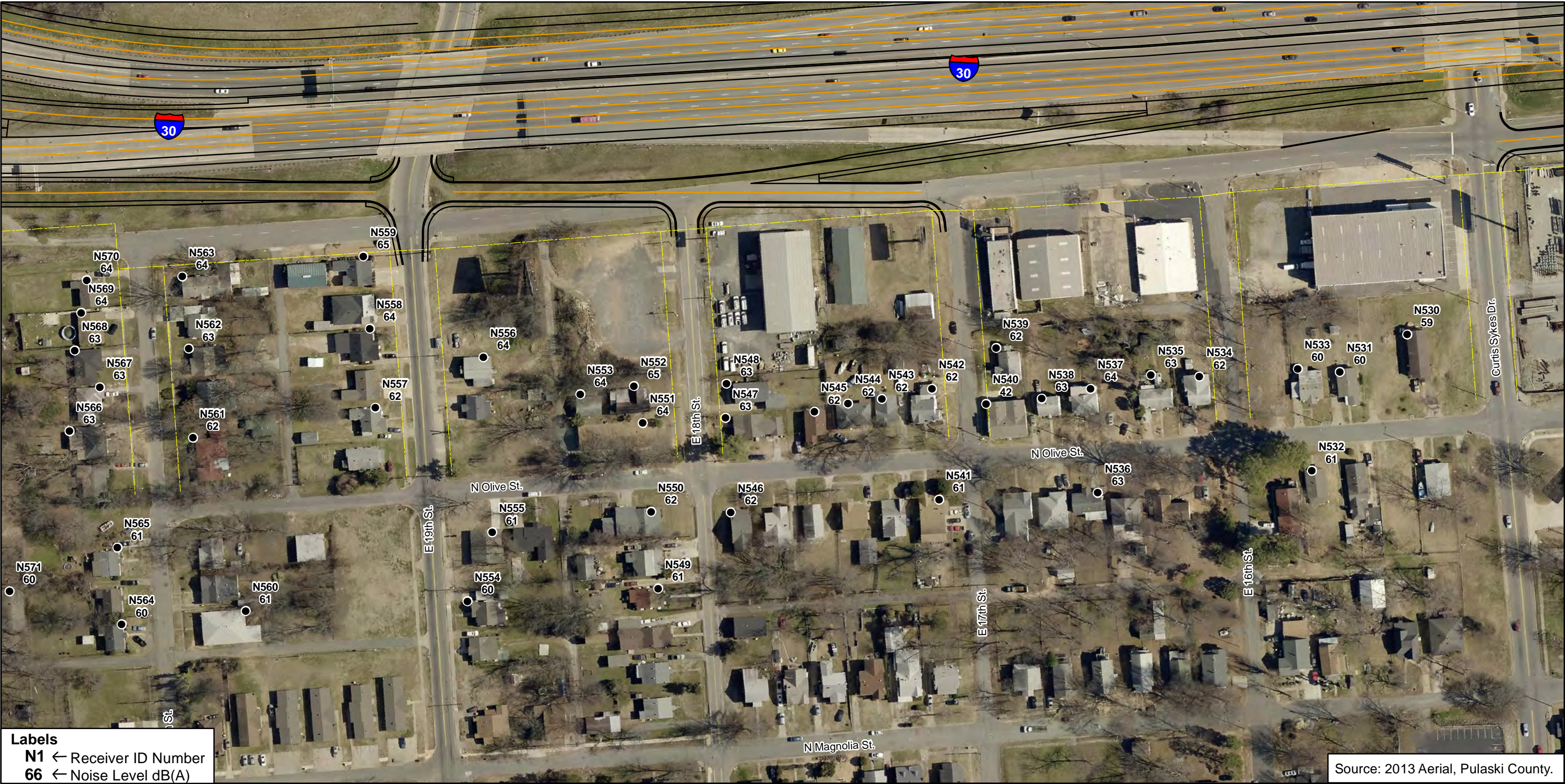


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 7: SHEET 3 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

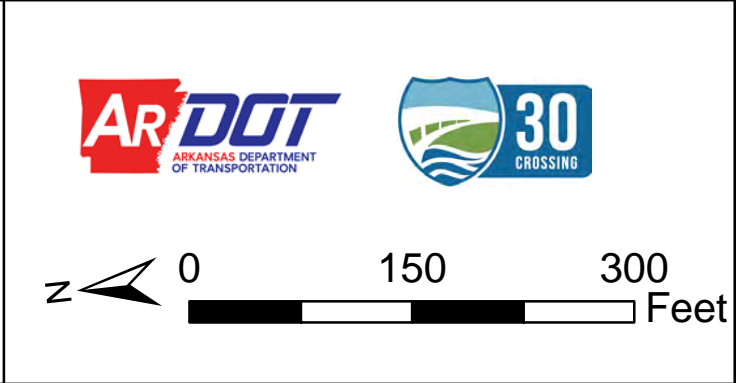
Draft Traffic Noise Study Report

Pulaski County, Arkansas



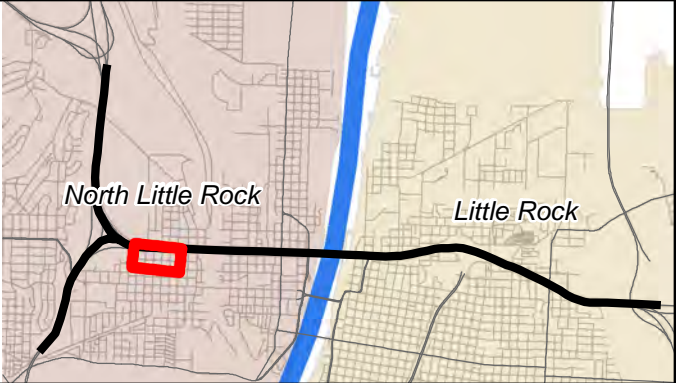
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- | | |
|--------------------------|---------------------|
| ● Non-Impacted Receiver | 🚏 School |
| ● Impacted Receiver | 🏠 Historic District |
| — Proposed Lane Markings | 🌳 Public Park |
| — Proposed Pavement Edge | |
| — Proposed ROW | |
| — Existing ROW | |



Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 7: SHEET 4 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🏠 Historic District
— Proposed Lane Markings	🌳 Public Park
— Proposed Pavement Edge	
— Proposed ROW	
— Existing ROW	

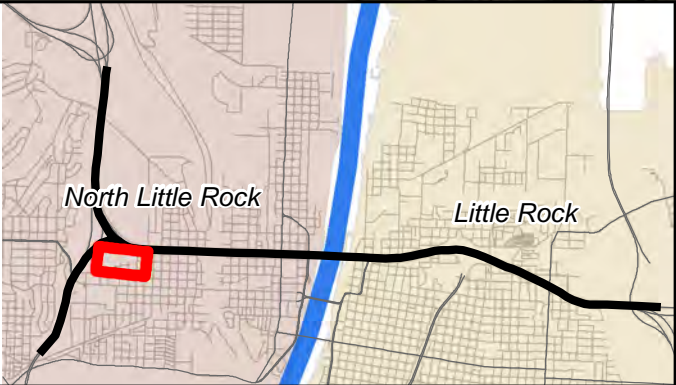




Sheet Index

**The extent of each sheet is highlighted in red*





NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 7: SHEET 5 OF 5

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

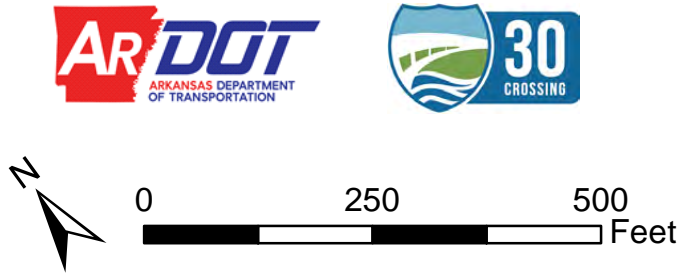
Draft Traffic Noise Study Report

Pulaski County, Arkansas



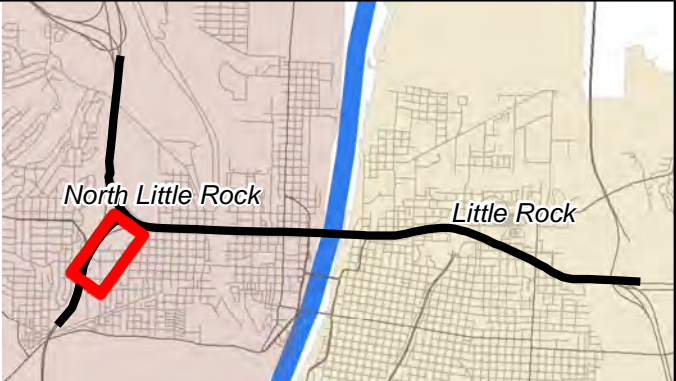
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚩 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

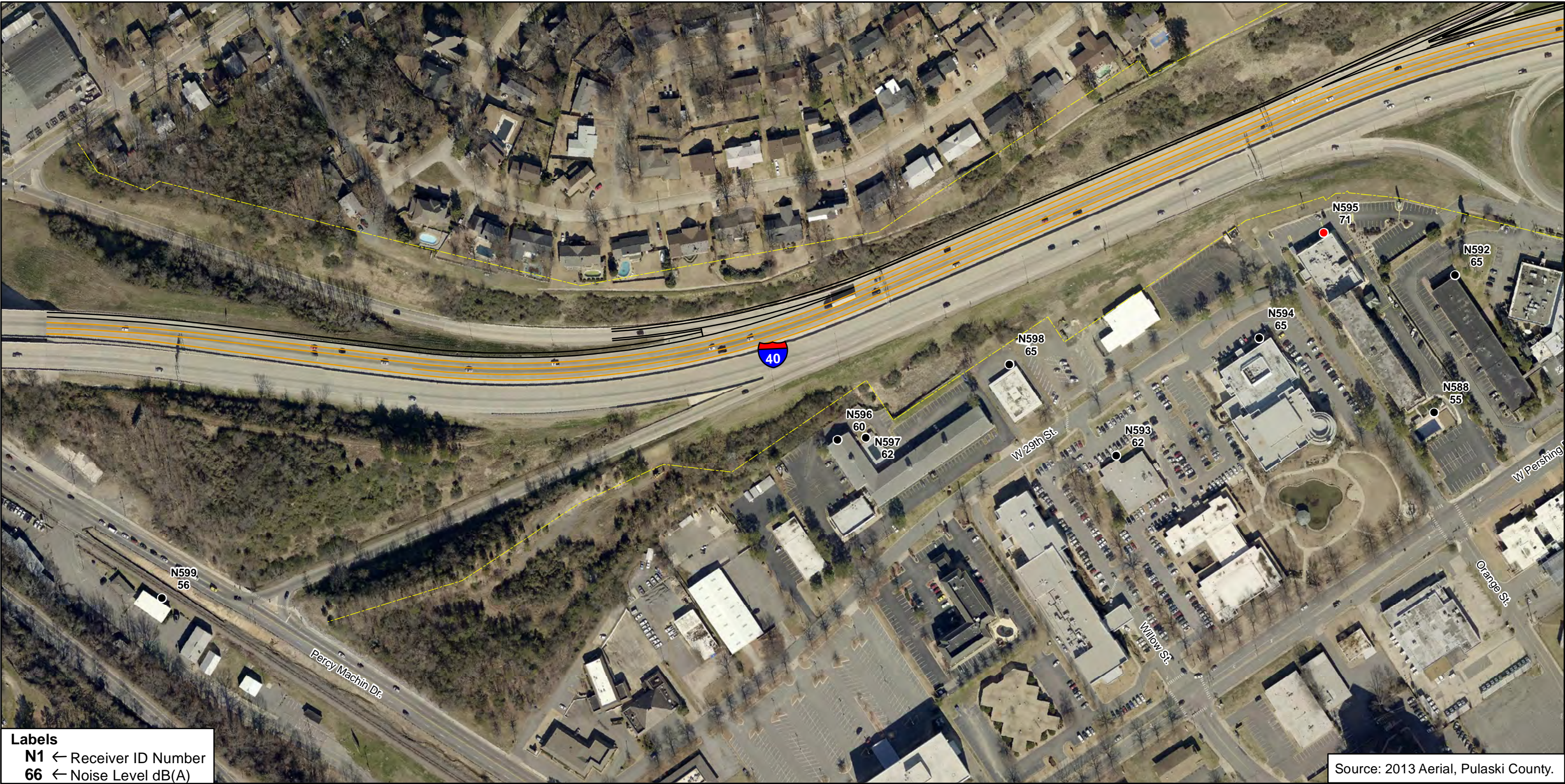
**The extent of each sheet is highlighted in red*



**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 8: SHEET 1 OF 2**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
- - - Existing ROW	

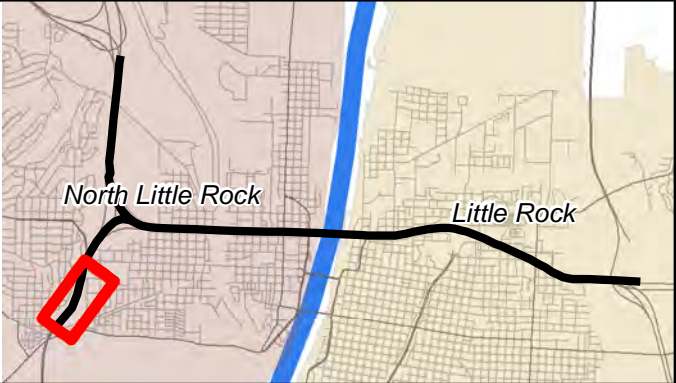
 

Sheet Index

**The extent of each sheet is highlighted in red*



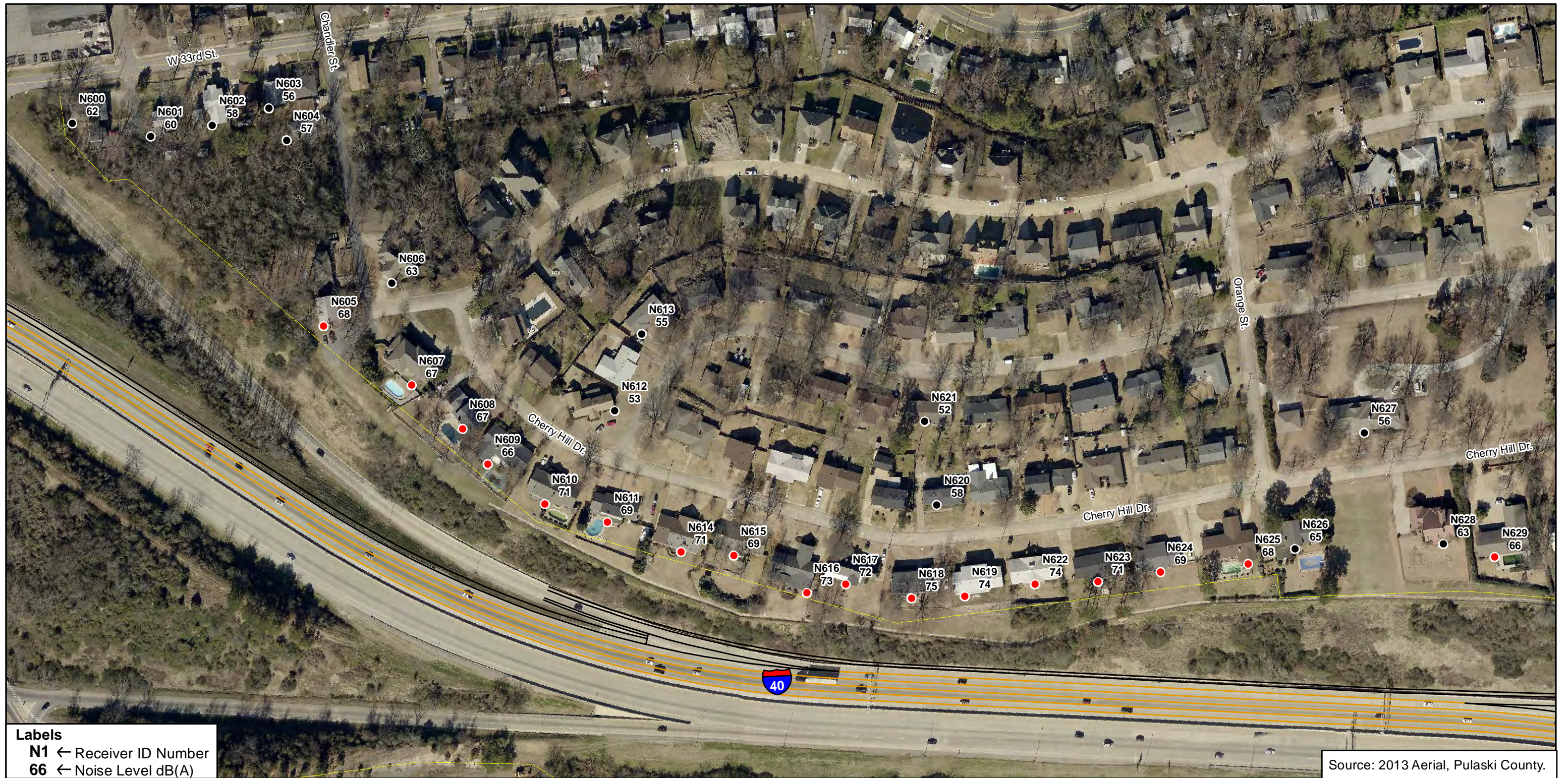


NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 8: SHEET 2 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

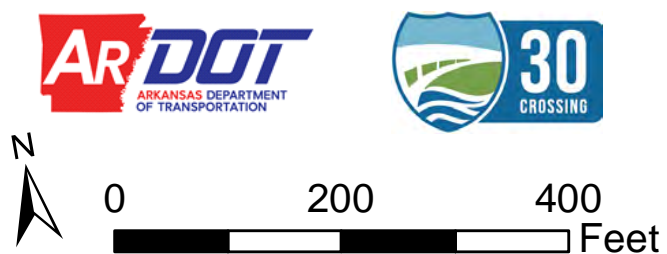


Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

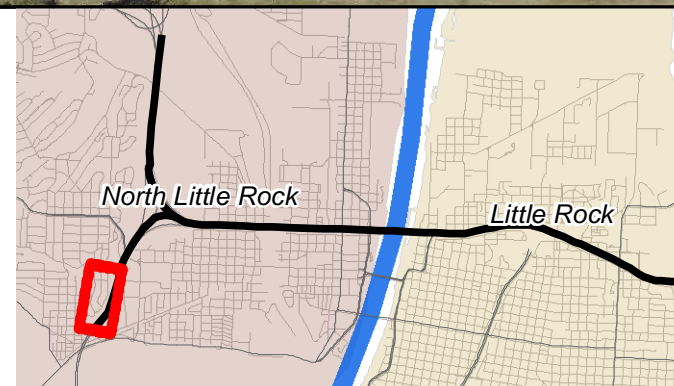
Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Existing ROW
- 🚩 School
- 🌳 Public Park
- 🏠 Historic District



Sheet Index

*The extent of each sheet is highlighted in red



NOISE RECEIVER LOCATION MAP 6 LN WITH C/D WITH SDI NSA 9: SHEET 1 OF 2

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

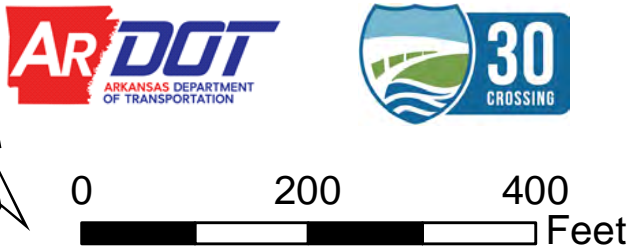


Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

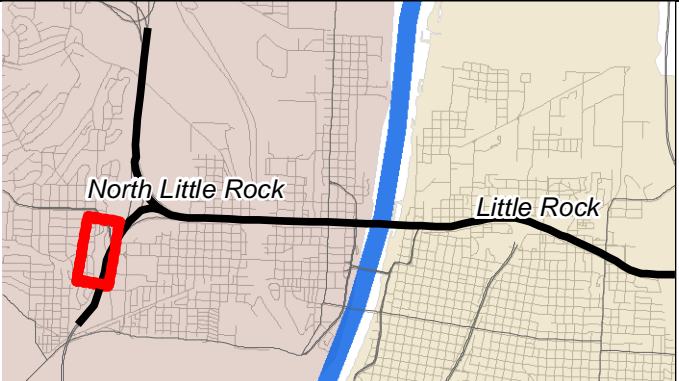
Legend

- Non-Impacted Receiver
- Impacted Receiver
- Proposed Lane Markings
- Proposed Pavement Edge
- Existing ROW
- 🚏 School
- 🌳 Public Park
- 🏡 Historic District



Sheet Index

*The extent of each sheet is highlighted in red

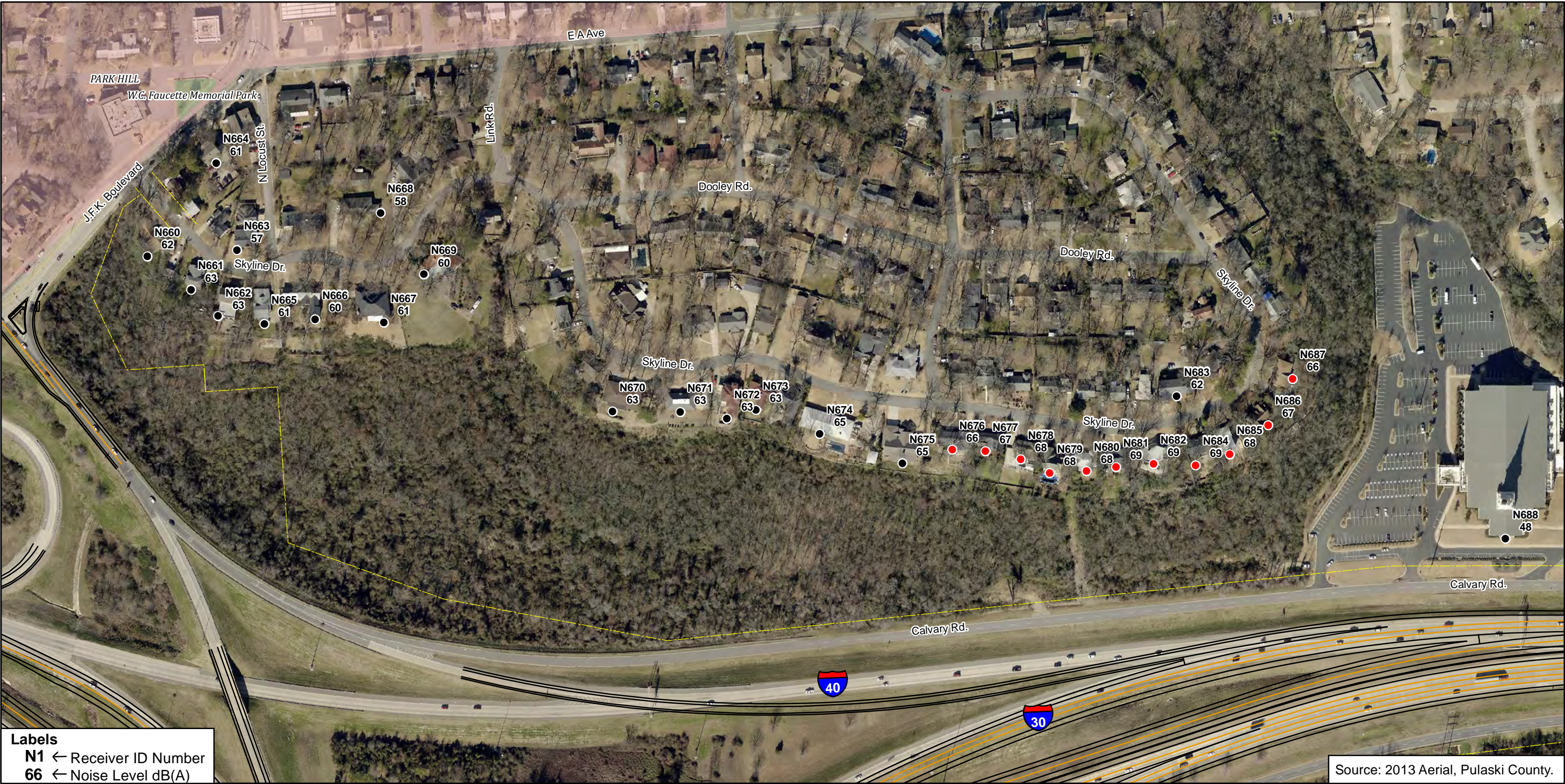


**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 9: SHEET 2 OF 2**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas







Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

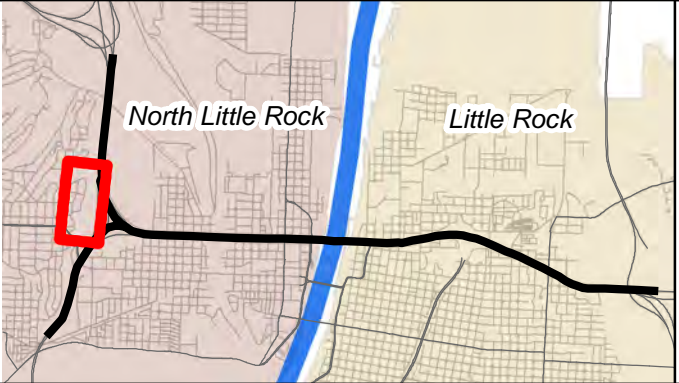
● Non-Impacted Receiver	🚏 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏡 Historic District
— Proposed Pavement Edge	
- - - Proposed ROW	
- - - Existing ROW	





Sheet Index

**The extent of each sheet is highlighted in red*



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 10: SHEET 1 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas





Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

Legend

● Non-Impacted Receiver	🚩 School
● Impacted Receiver	🌳 Public Park
— Proposed Lane Markings	🏠 Historic District
— Proposed Pavement Edge	
--- Proposed ROW	
--- Existing ROW	



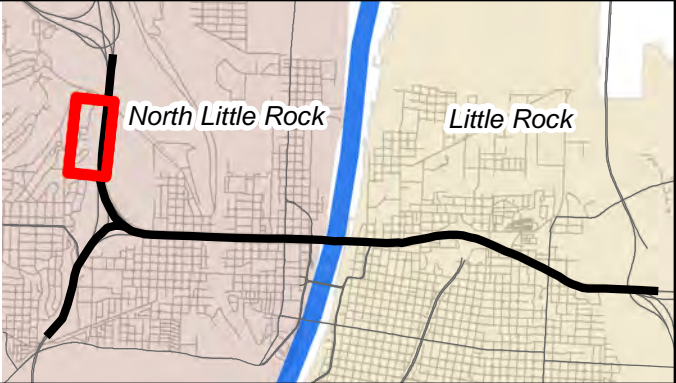
N

0 250 500 Feet

Sheet Index

**The extent of each sheet is highlighted in red*

z



NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 10: SHEET 2 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

Source: 2013 Aerial, Pulaski County.

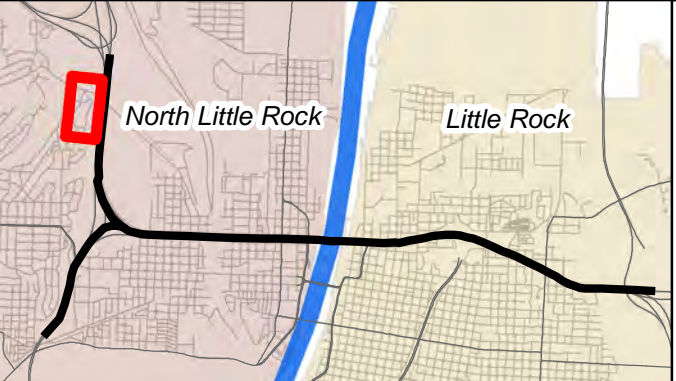
- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - - - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



0 200 400 Feet

Sheet Index

*The extent of each sheet is highlighted in red

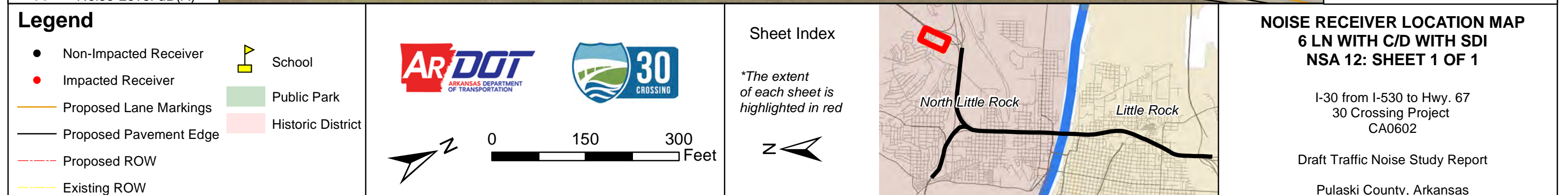


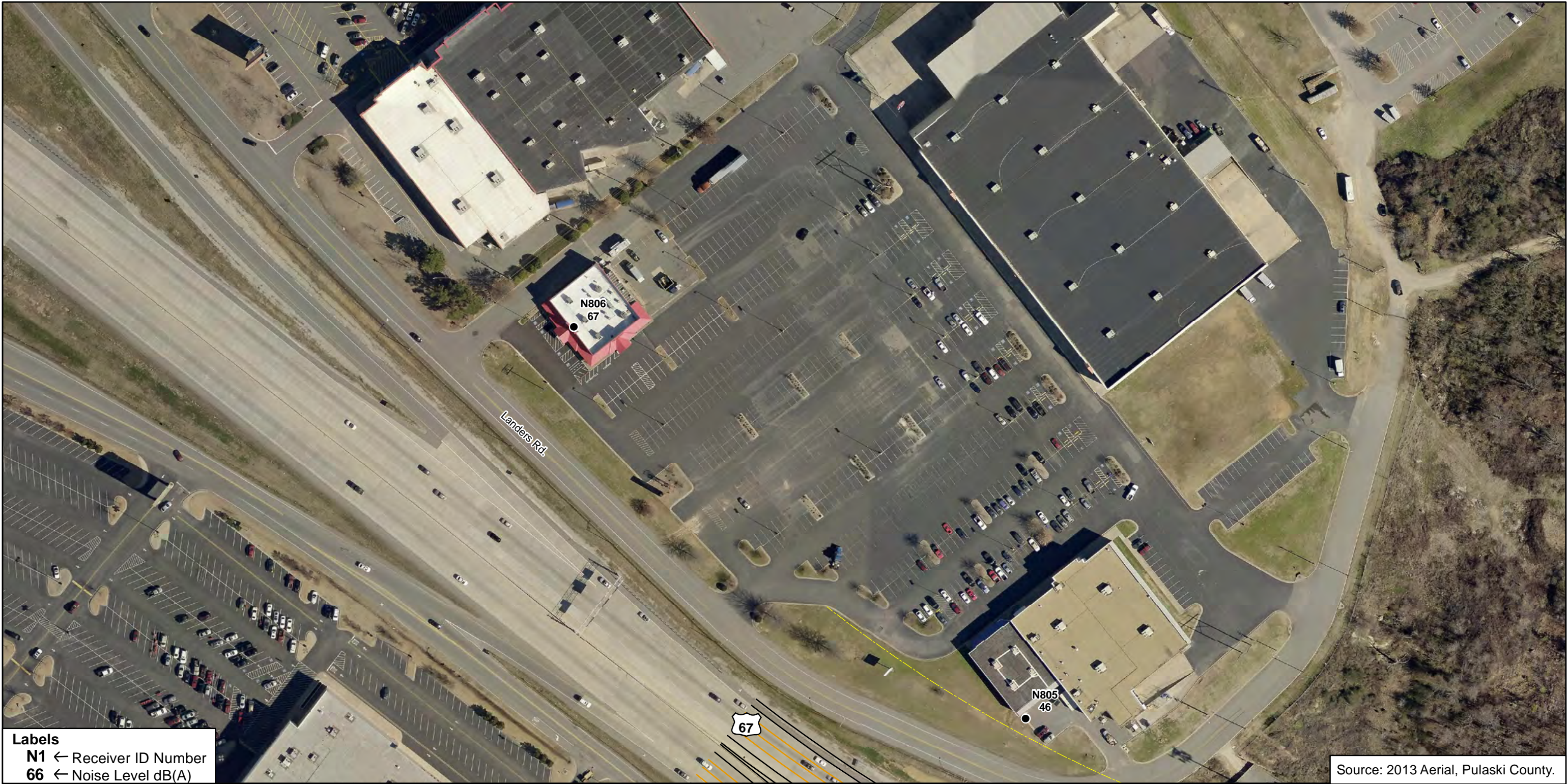
NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 10: SHEET 3 OF 3

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

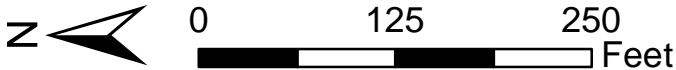
Pulaski County, Arkansas





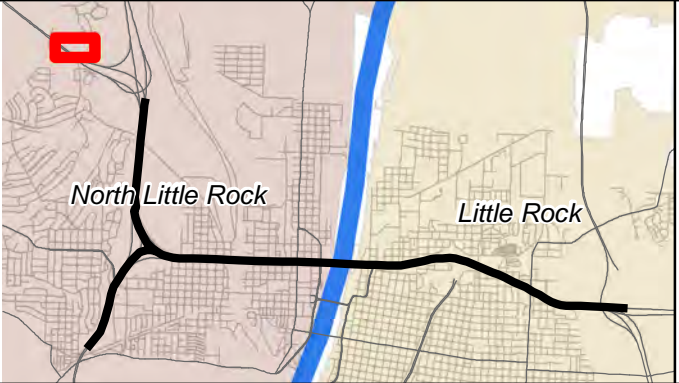
Labels
N1 ← Receiver ID Number
66 ← Noise Level dB(A)

- Legend**
- Non-Impacted Receiver
 - Impacted Receiver
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - - - Existing ROW
 - 🚏 School
 - 🌳 Public Park
 - 🏡 Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



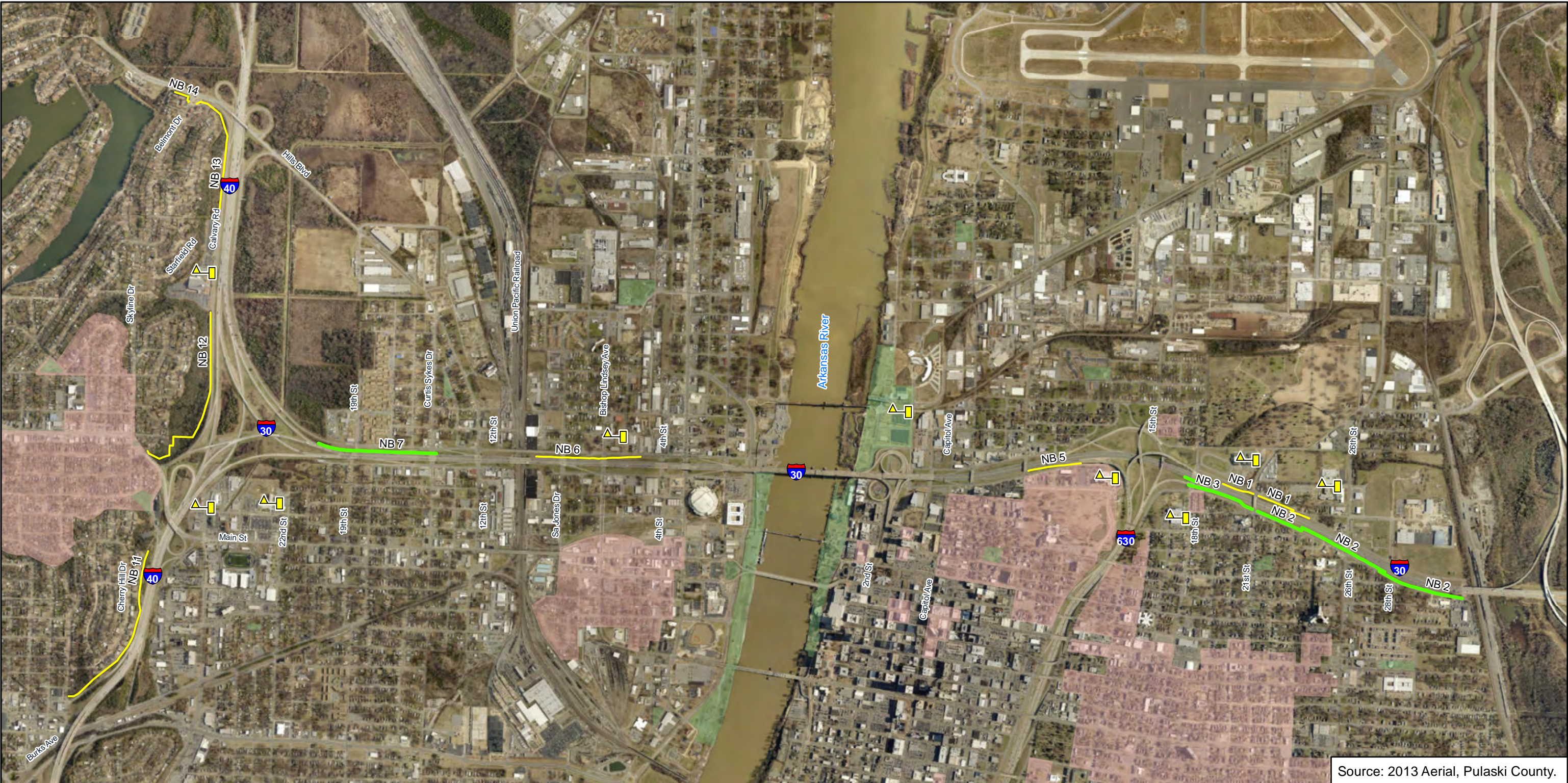
**NOISE RECEIVER LOCATION MAP
6 LN WITH C/D WITH SDI
NSA 14: SHEET 1 OF 1**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report
Pulaski County, Arkansas

Attachment E: Traffic Noise Barriers

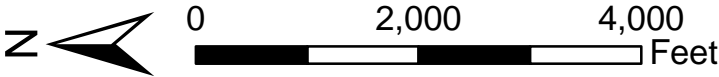
This page is intentionally left blank



Source: 2013 Aerial, Pulaski County.

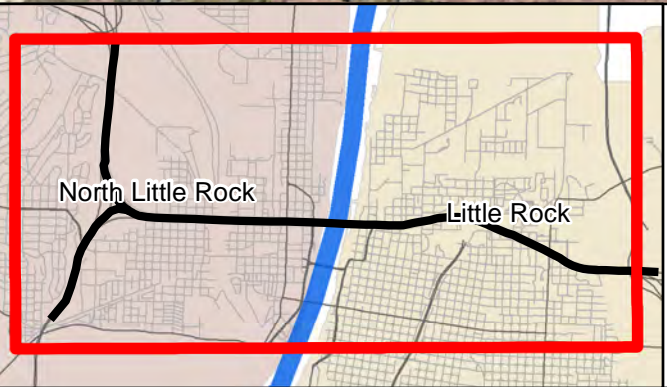
Legend

- Feasible, Not Reasonable Barriers
- Feasible and Reasonable Barriers
- School
- Public Park
- Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



**PROPOSED TRAFFIC NOISE BARRIERS
8 LN GP WITH SPUI
SHEET 1 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

DraftTraffic Noise Study Report



Pulaski County, Arkansas




Source: 2013 Aerial, Pulaski County.

Legend

● Non Benefitted Receiver	🚩 School
● Benefitted Receiver (NR Barrier)	🌳 Public Park
● Benefitted Receiver (F&R Barrier)	🏠 Historic District
— Feasible, NR Barriers	📏 NSA 1
— Feasible and Reasonable Barriers	📏 NSA 2
— Proposed Lane Markings	📏 NSA 3
— Proposed Pavement Edge	📏 NSA 4
— Proposed ROW	📏 NSA 5
— Existing ROW	

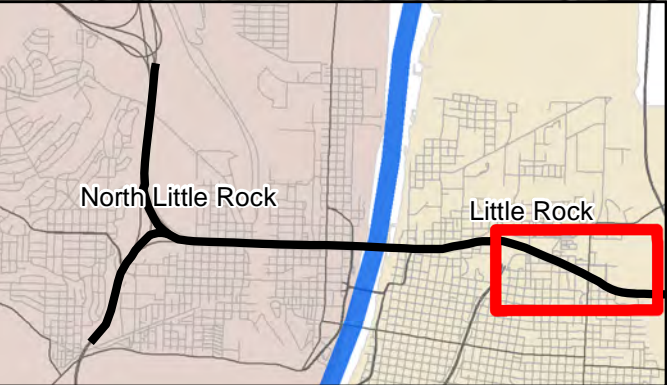



0 500 1,000 Feet



Sheet Index

**The extent of each sheet is highlighted in red*



**PROPOSED TRAFFIC NOISE BARRIERS
8 LN GP WITH SPUI
SHEET 2 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one receptor. Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

Legend

● Non Benefitted Receiver	▲ School
● Benefitted Receiver (NR Barrier)	■ Public Park
● Benefitted Receiver (F&R Barrier)	■ Historic District
— Feasible, NR Barriers	— NSA 1
— Feasible and Reasonable Barriers	— NSA 3
— Proposed Lane Markings	— NSA 4
— Proposed Pavement Edge	— NSA 5
— Proposed ROW	— NSA 6
— Existing ROW	

AR DOT
ARKANSAS DEPARTMENT OF TRANSPORTATION

30 CROSSING

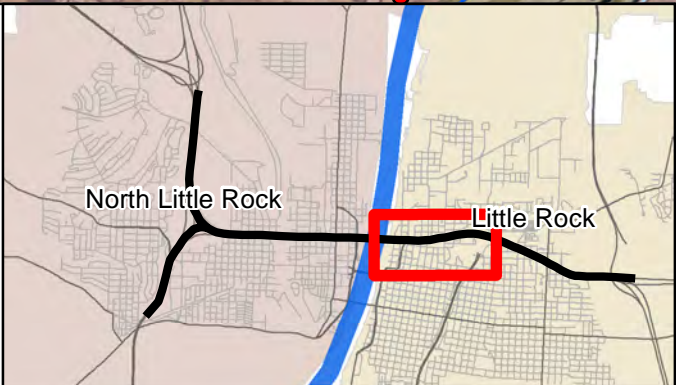
0 500 1,000 Feet

N

Sheet Index

**The extent of each sheet is highlighted in red*

N



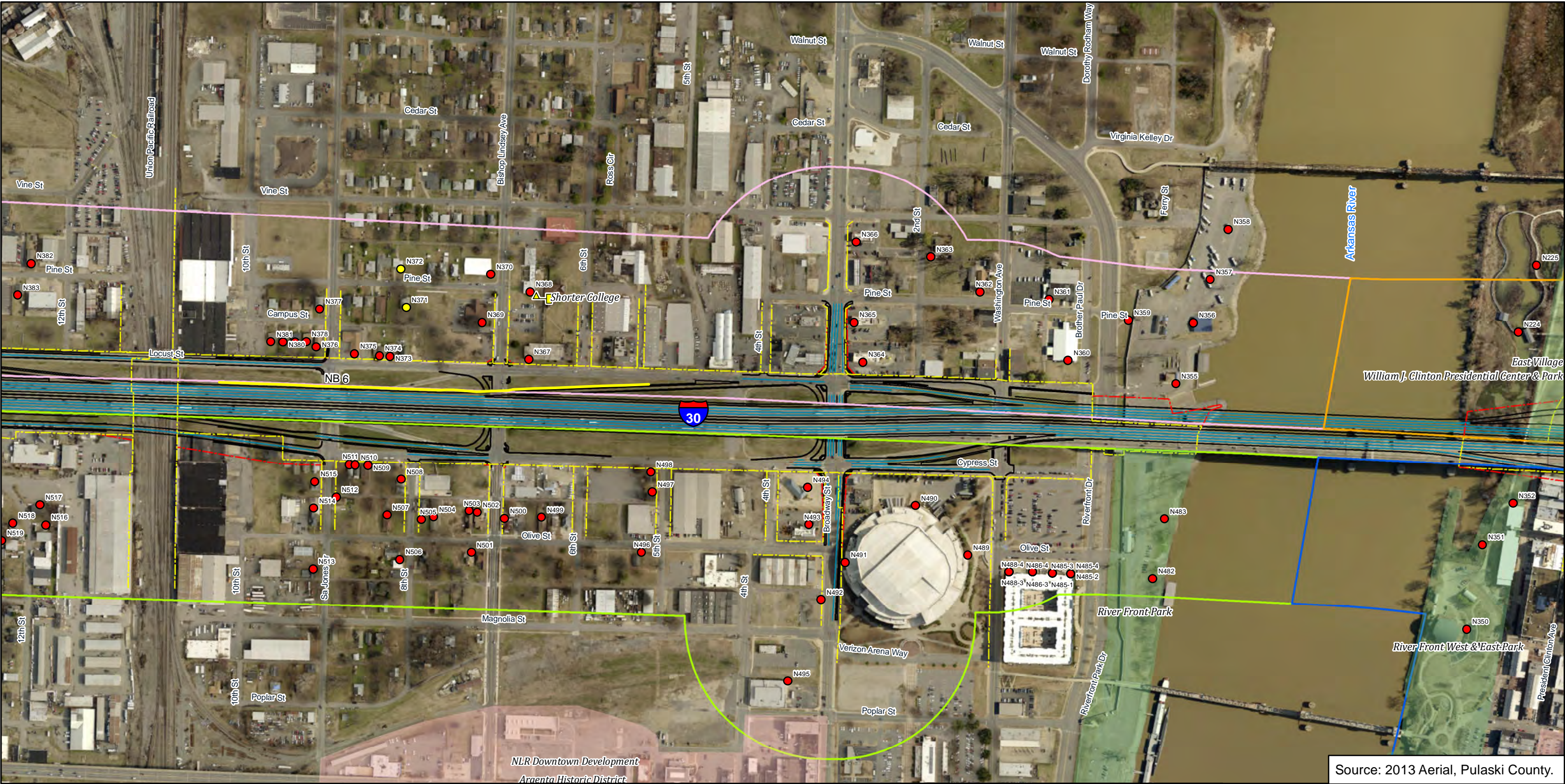
PROPOSED TRAFFIC NOISE BARRIERS
8 LN GP WITH SPUI
SHEET 3 OF 8

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one receptor. Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

● Non Benefitted Receiver

● Benefitted Receiver (NR Barrier)

● Benefitted Receiver (F&R Barrier)

— Feasible, NR Barriers

— Feasible and Reasonable Barriers

— Proposed Lane Markings

— Proposed Pavement Edge

--- Proposed ROW

— Existing ROW

▲ School

■ Public Park

■ Historic District

■ NSA 4

■ NSA 5

■ NSA 6

■ NSA 7

AR

DOT

ARKANSAS DEPARTMENT OF TRANSPORTATION

30

CROSSING

0

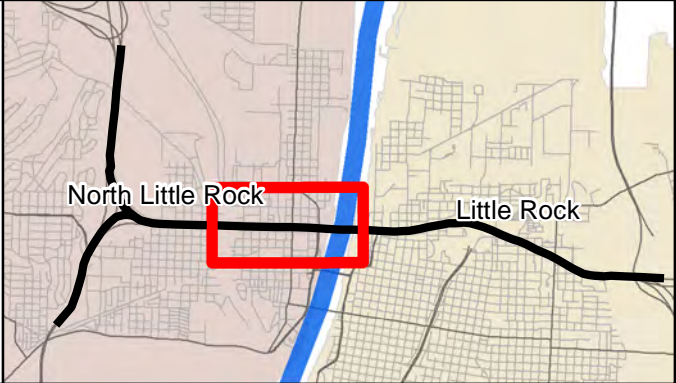
500

1,000

Feet

Sheet Index

**The extent of each sheet is highlighted in red*



PROPOSED TRAFFIC NOISE BARRIERS

8 LN GP WITH SPUI

SHEET 4 OF 8

I-30 from I-530 to Hwy. 67

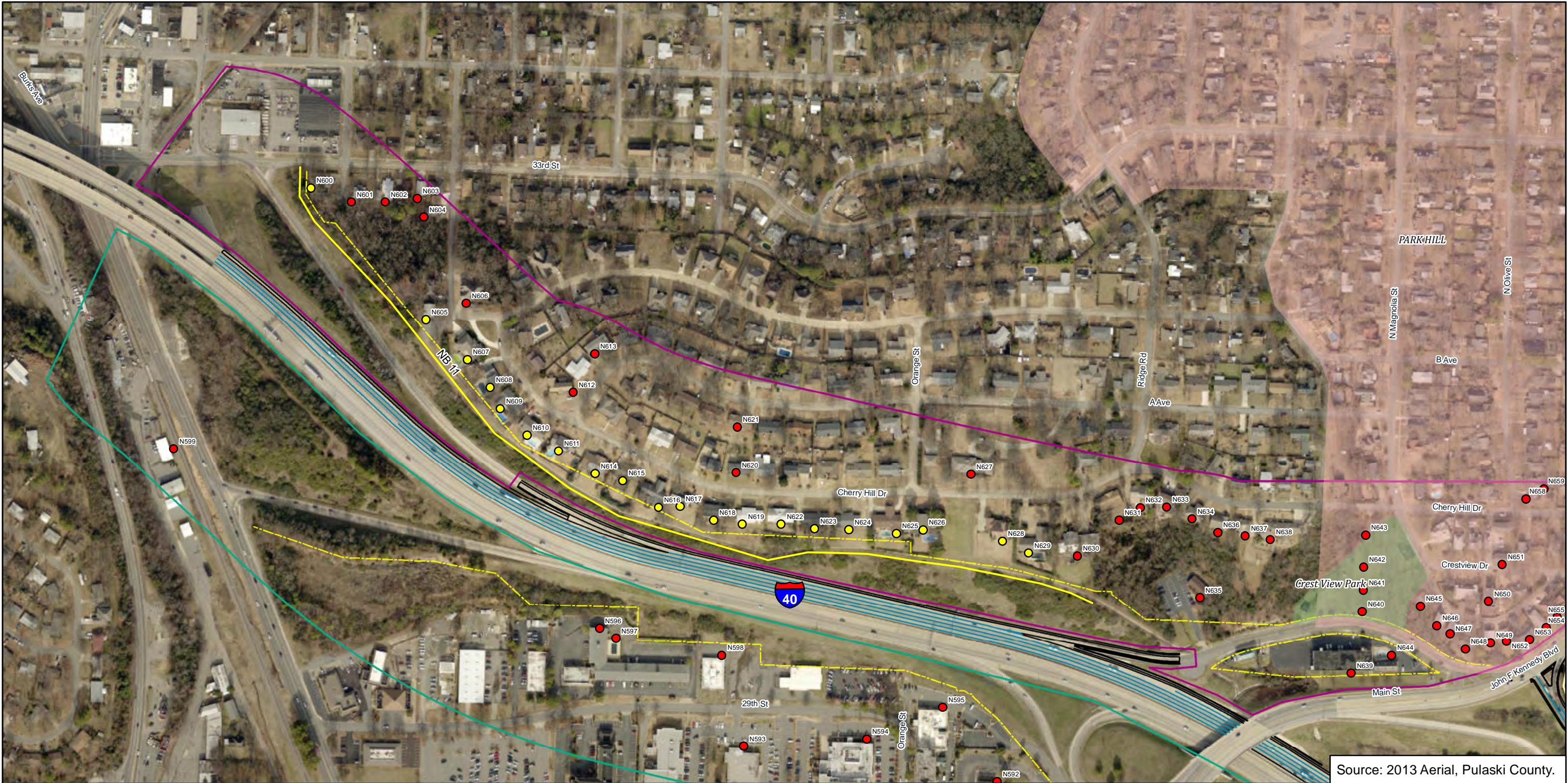
30 Crossing Project

CA0602

DraftTraffic Noise Study Report

Pulaski County, Arkansas

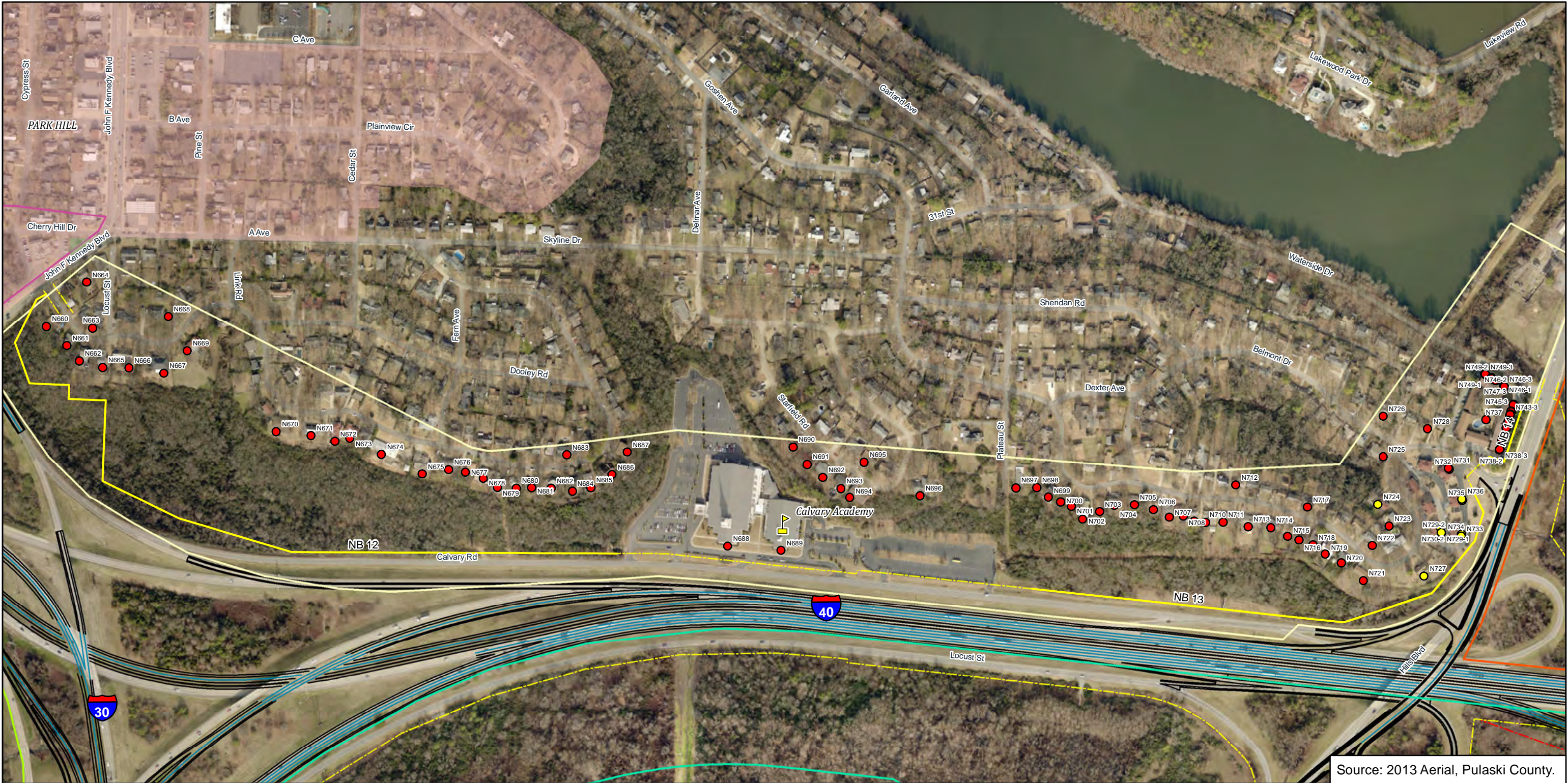
NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

Legend <ul style="list-style-type: none">Non Benefitted ReceiverBenefitted Receiver (NR Barrier)Benefitted Receiver (F&R Barrier)Feasible, NR BarriersFeasible and Reasonable BarriersProposed Lane MarkingsProposed Pavement EdgeProposed ROWExisting ROWSchoolPublic ParkHistoric DistrictNSA 8NSA 9NSA 10	 	Sheet Index <i>*The extent of each sheet is highlighted in red</i> 		PROPOSED TRAFFIC NOISE BARRIERS 8 LN GP WITH SPUI SHEET 6 OF 8 I-30 from I-530 to Hwy. 67 30 Crossing Project CA0602 Draft Traffic Noise Study Report Pulaski County, Arkansas
---	--------------	--	--	--

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

Legend

● Non Benefitted Receiver	🚩 School
● Benefitted Receiver (NR Barrier)	🌳 Public Park
● Benefitted Receiver (F&R Barrier)	🏠 Historic District
— Feasible, NR Barriers	🟡 NSA 7
— Feasible and Reasonable Barriers	🟠 NSA 9
— Proposed Lane Markings	🟡 NSA 10
— Proposed Pavement Edge	🟠 NSA 11
— Proposed ROW	🟡 NSA 13
— Existing ROW	

AR DOT
ARKANSAS DEPARTMENT
OF TRANSPORTATION

30
CROSSING

Sheet Index

**The extent of each sheet is highlighted in red*

North Little Rock Little Rock

PROPOSED TRAFFIC NOISE BARRIERS
8 LN GP WITH SPUI
SHEET 7 OF 8

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Legend

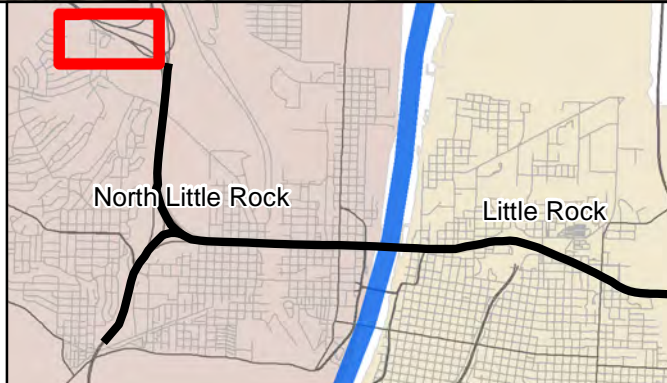
- Non Benefitted Receiver
- Benefitted Receiver (NR Barrier)
- Benefitted Receiver (F&R Barrier)
- Feasible, NR Barriers
- Feasible and Reasonable Barriers
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🏫 School
- 🌳 Public Park
- 🏠 Historic District
- 📏 NSA 11
- 📏 NSA 12
- 📏 NSA 14



0 300 600 Feet

Sheet Index

**The extent of each sheet is highlighted in red*



**PROPOSED TRAFFIC NOISE BARRIERS
8 LN GP WITH SPUI
SHEET 8 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

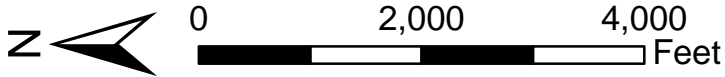
NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

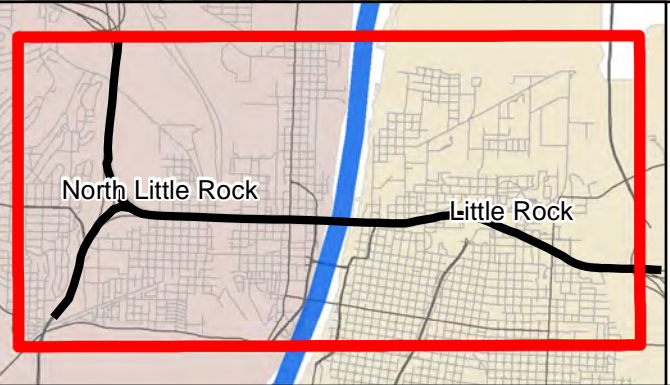
Legend

- Feasible, Not Reasonable Barriers
- Feasible and Reasonable Barriers
- School
- Public Park
- Historic District



Sheet Index

**The extent of each sheet is highlighted in red*



PROPOSED TRAFFIC NOISE BARRIERS
8 LN GP WITH SDI
SHEET 1 OF 8

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602



DraftTraffic Noise Study Report
Pulaski County, Arkansas





Source: 2013 Aerial, Pulaski County.

Legend


● Non Benefitted Receiver	🚩 School
● Benefitted Receiver (NR Barrier)	🟢 Public Park
● Benefitted Receiver (F&R Barrier)	🟡 Historic District
— Feasible, NR Barriers	🟠 NSA 1
— Feasible and Reasonable Barriers	🟡 NSA 2
— Proposed Lane Markings	🟢 NSA 3
— Proposed Pavement Edge	🟠 NSA 4
— Proposed ROW	🟡 NSA 5
— Existing ROW	

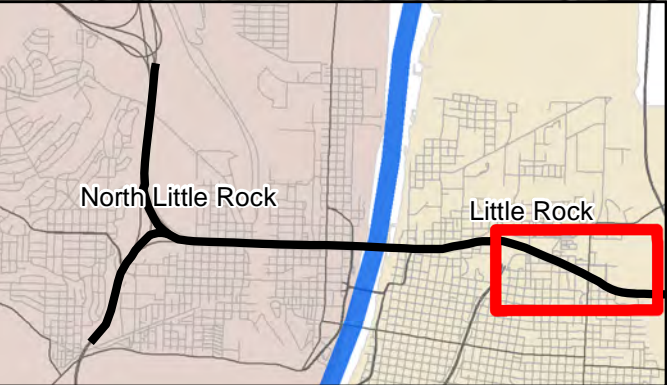




Sheet Index

**The extent of each sheet is highlighted in red*





**PROPOSED TRAFFIC NOISE BARRIERS
8 LN GP WITH SDI
SHEET 2 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

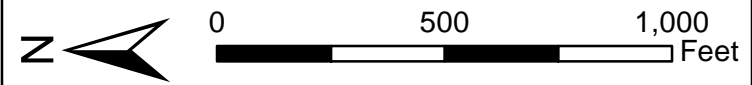
Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one receptor. Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



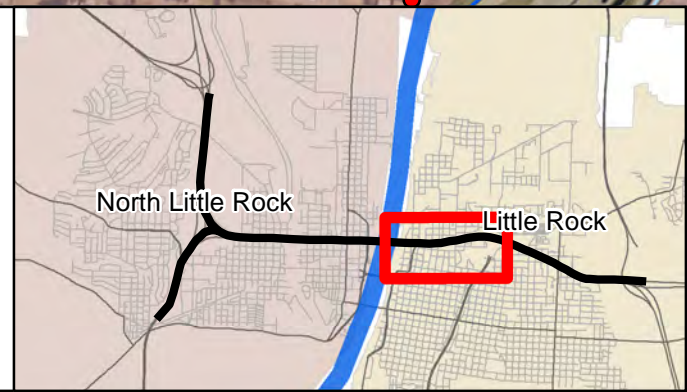
Source: 2013 Aerial, Pulaski County.

- Legend**
- Non Benefitted Receiver
 - Benefitted Receiver (NR Barrier)
 - Benefitted Receiver (F&R Barrier)
 - Feasible, NR Barriers
 - Feasible and Reasonable Barriers
 - Proposed Lane Markings
 - Proposed Pavement Edge
 - Proposed ROW
 - Existing ROW
 - ▲ School
 - Public Park
 - Historic District
 - NSA 1
 - NSA 3
 - NSA 4
 - NSA 5
 - NSA 6



Sheet Index

**The extent of each sheet is highlighted in red*



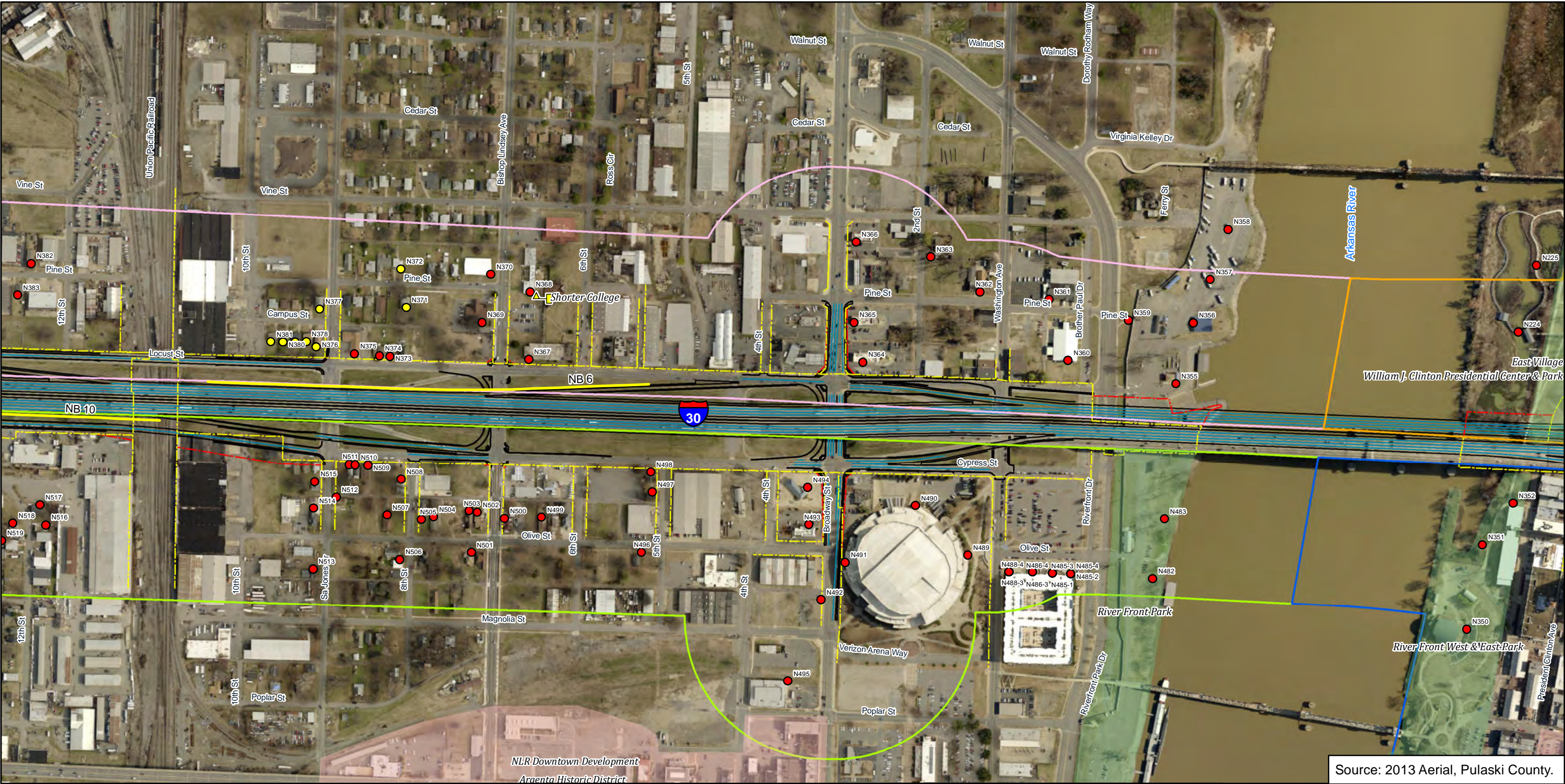
PROPOSED TRAFFIC NOISE BARRIERS
8 LN GP WITH SDI
SHEET 3 OF 8

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one receptor. Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

● Non Benefitted Receiver

● Benefitted Receiver (NR Barrier)

● Benefitted Receiver (F&R Barrier)

— Feasible, NR Barriers

— Feasible and Reasonable Barriers

— Proposed Lane Markings

— Proposed Pavement Edge

--- Proposed ROW

— Existing ROW

▲ School

■ Public Park

■ Historic District

■ NSA 4

■ NSA 5

■ NSA 6

■ NSA 7

AR

DOT

ARKANSAS DEPARTMENT OF TRANSPORTATION

30

CROSSING

0

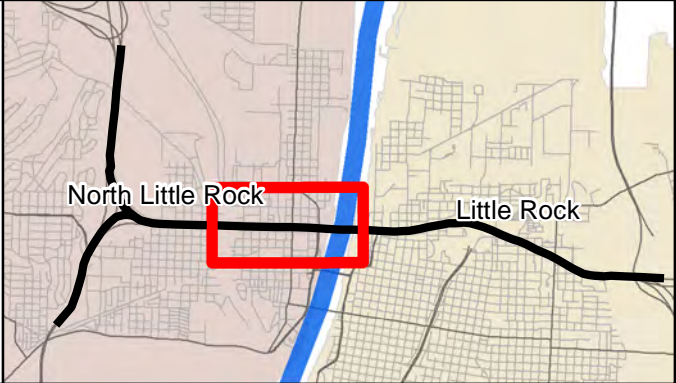
500

1,000

Feet

Sheet Index

**The extent of each sheet is highlighted in red*



PROPOSED TRAFFIC NOISE BARRIERS

8 LN GP WITH SDI

SHEET 4 OF 8

I-30 from I-530 to Hwy. 67

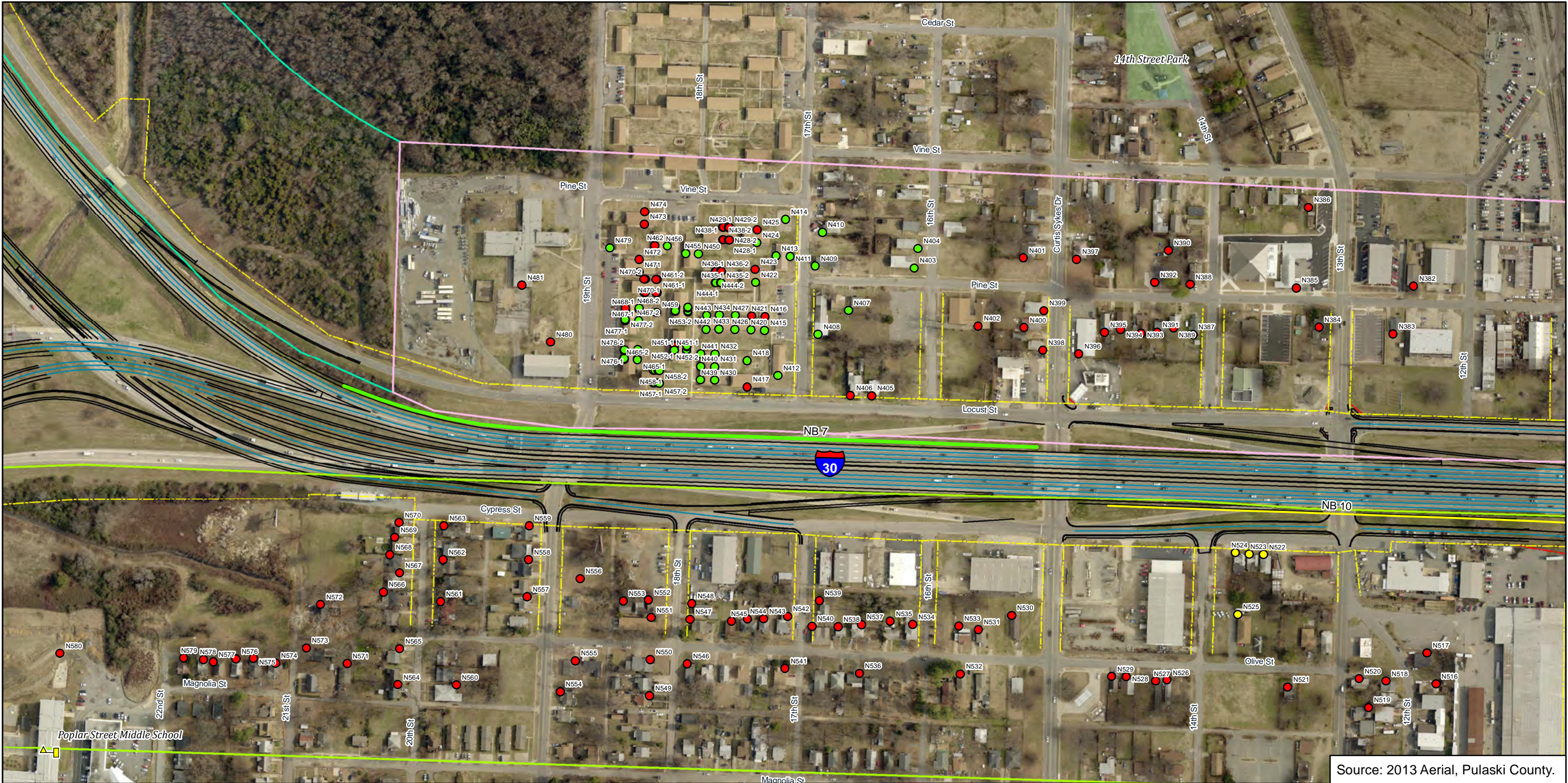
30 Crossing Project

CA0602

DraftTraffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

Legend

Non Benefitted Receiver

Benefitted Receiver (NR Barrier)

Benefitted Receiver (F&R Barrier)

Feasible, NR Barriers

Feasible and Reasonable Barriers

Proposed Lane Markings

Proposed Pavement Edge

Proposed ROW

Existing ROW

School

Public Park

Historic District

NSA 6

NSA 7

NSA 13

AR

DOT

ARKANSAS DEPARTMENT OF TRANSPORTATION

30

CROSSING

Sheet Index

**The extent of each sheet is highlighted in red*

North Little Rock

Little Rock

PROPOSED TRAFFIC NOISE BARRIERS

8 LN GP WITH SDI

SHEET 5 OF 8

I-30 from I-530 to Hwy. 67

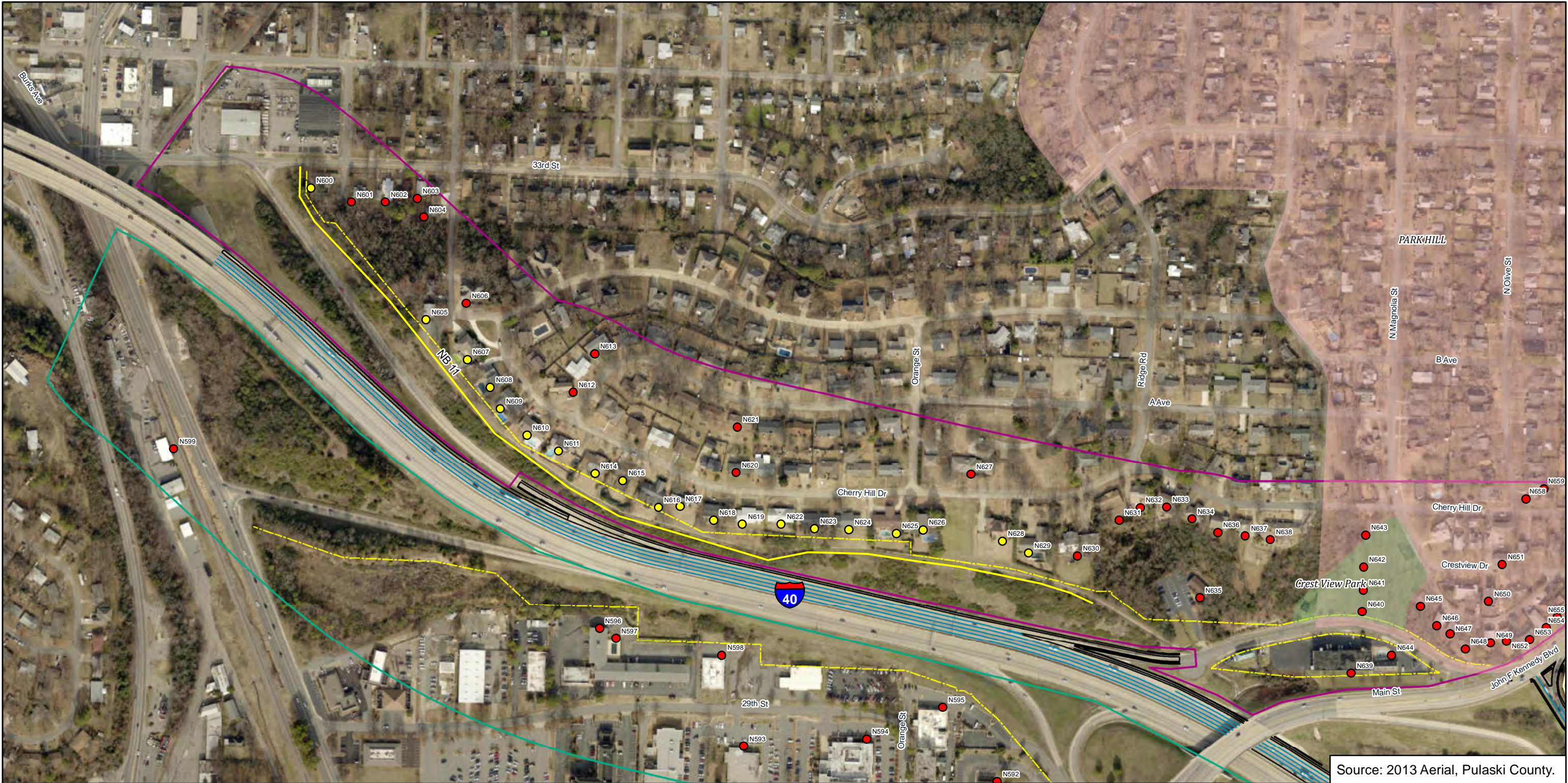
30 Crossing Project

CA0602



DraftTraffic Noise Study Report

Pulaski County, Arkansas

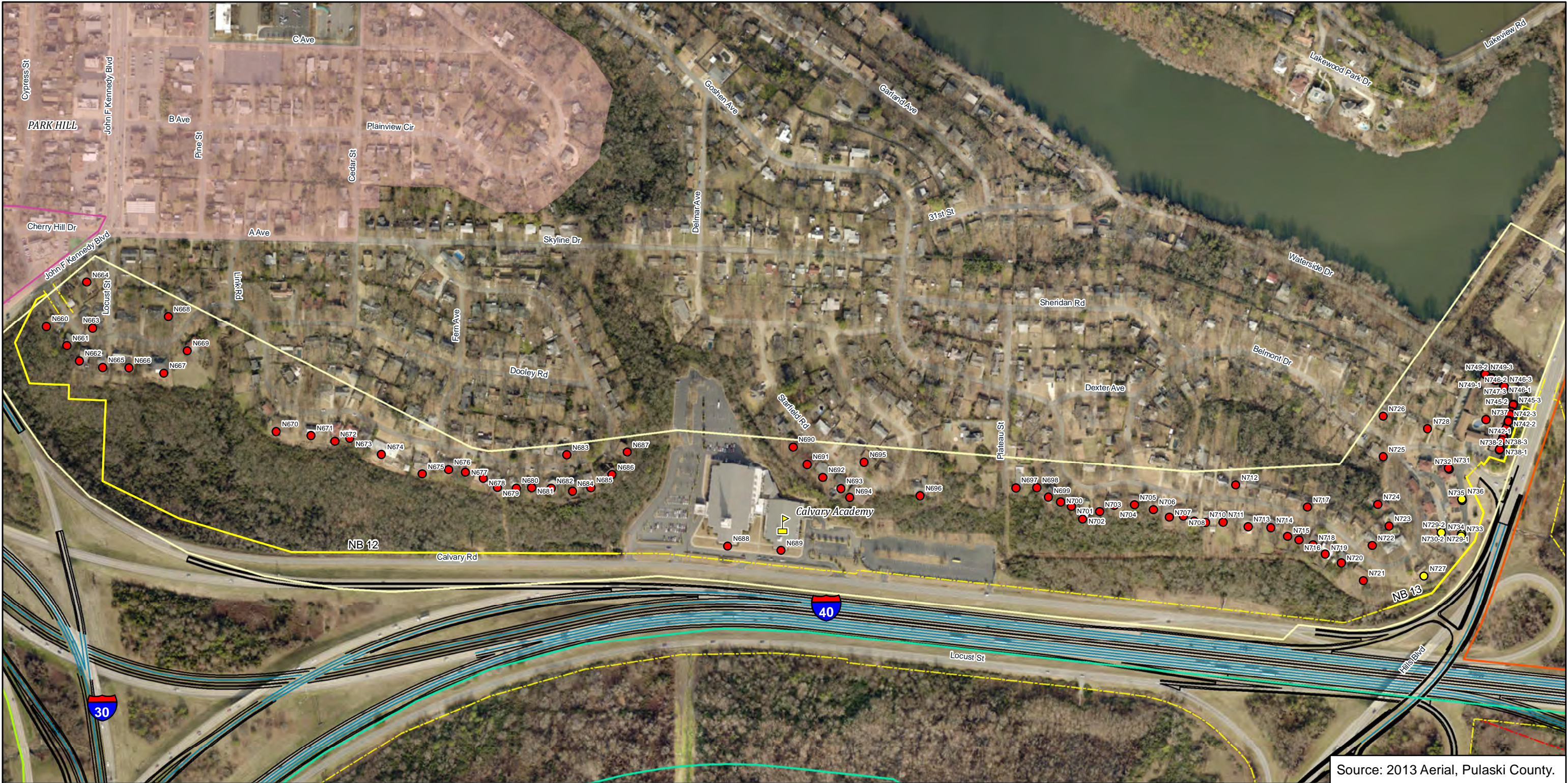
NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

Legend <ul style="list-style-type: none">● Non Benefitted Receiver● Benefitted Receiver (NR Barrier)● Benefitted Receiver (F&R Barrier)— Feasible, NR Barriers— Feasible and Reasonable Barriers— Proposed Lane Markings— Proposed Pavement Edge— Proposed ROW— Existing ROW🚶 School🌳 Public Park🏡 Historic District📏 NSA 8📏 NSA 9📏 NSA 10	  <div><p>North Arrow</p><p>0 400 800 Feet</p></div>	<p>Sheet Index</p> <p><i>*The extent of each sheet is highlighted in red</i></p> <p>North Arrow</p>		<p>PROPOSED TRAFFIC NOISE BARRIERS 8 LN GP WITH SDI SHEET 6 OF 8</p> <p>I-30 from I-530 to Hwy. 67 30 Crossing Project CA0602</p> <p>Draft Traffic Noise Study Report</p> <p>Pulaski County, Arkansas</p>
---	---	---	--	--

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Legend

● Non Benefitted Receiver	🚩 School
● Benefitted Receiver (NR Barrier)	🌳 Public Park
● Benefitted Receiver (F&R Barrier)	🏠 Historic District
— Feasible, NR Barriers	🟡 NSA 7
— Feasible and Reasonable Barriers	🟠 NSA 9
— Proposed Lane Markings	🟡 NSA 10
— Proposed Pavement Edge	🟠 NSA 11
— Proposed ROW	🟡 NSA 13
— Existing ROW	

AR DOT
ARKANSAS DEPARTMENT
OF TRANSPORTATION

30
CROSSING

0 500 1,000 Feet

North
N

Sheet Index

**The extent of each sheet is highlighted in red*

z

North Little Rock

Little Rock

**PROPOSED TRAFFIC NOISE BARRIERS
8 LN GP WITH SDI
SHEET 7 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

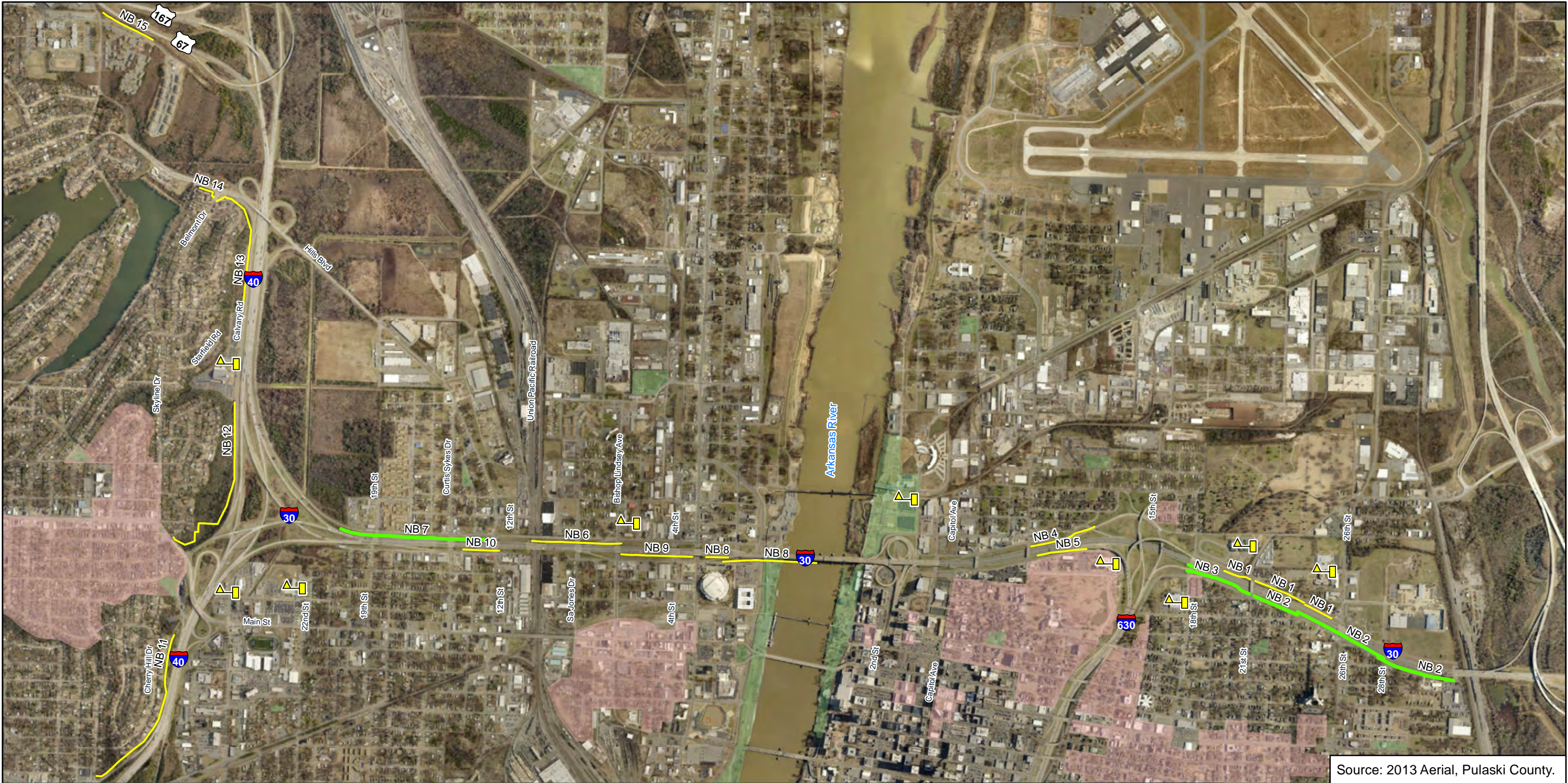
NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

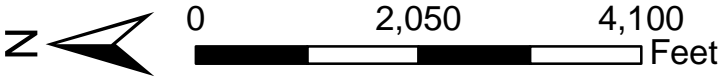
<p>Legend</p> <ul style="list-style-type: none">● Non Benefitted Receiver● Benefitted Receiver (NR Barrier)● Benefitted Receiver (F&R Barrier)— Feasible, NR Barriers— Feasible and Reasonable Barriers— Proposed Lane Markings— Proposed Pavement Edge— Proposed ROW— Existing ROW🚶 School🌳 Public Park🏠 Historic District📏 NSA 11📏 NSA 12📏 NSA 14	<p>AR DOT ARKANSAS DEPARTMENT OF TRANSPORTATION</p> <p>30 CROSSING</p> <p>0 300 600 Feet</p> <p>North Arrow</p>	<p>Sheet Index</p> <p><i>*The extent of each sheet is highlighted in red</i></p> <p>North Arrow</p>	<p>North Little Rock Little Rock</p> <p>Red box indicating sheet extent</p>	<p>PROPOSED TRAFFIC NOISE BARRIERS 8 LN GP WITH SDI SHEET 8 OF 8</p> <p>I-30 from I-530 to Hwy. 67 30 Crossing Project CA0602</p> <p>DraftTraffic Noise Study Report</p> <p>Pulaski County, Arkansas</p>
--	---	---	---	---

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



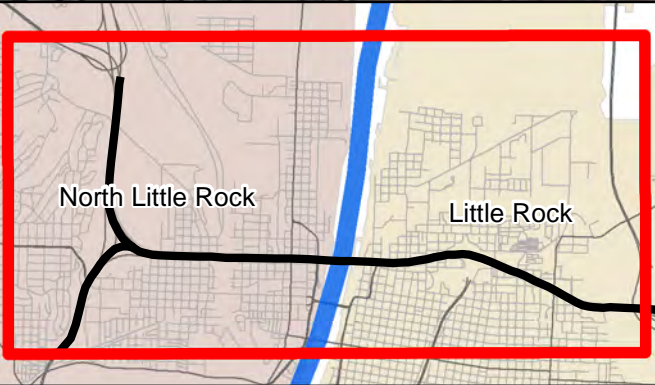
Legend

- Feasible, Not Reasonable Barriers
- Feasible and Reasonable Barriers
- School
- Public Park
- Historic District



Sheet Index

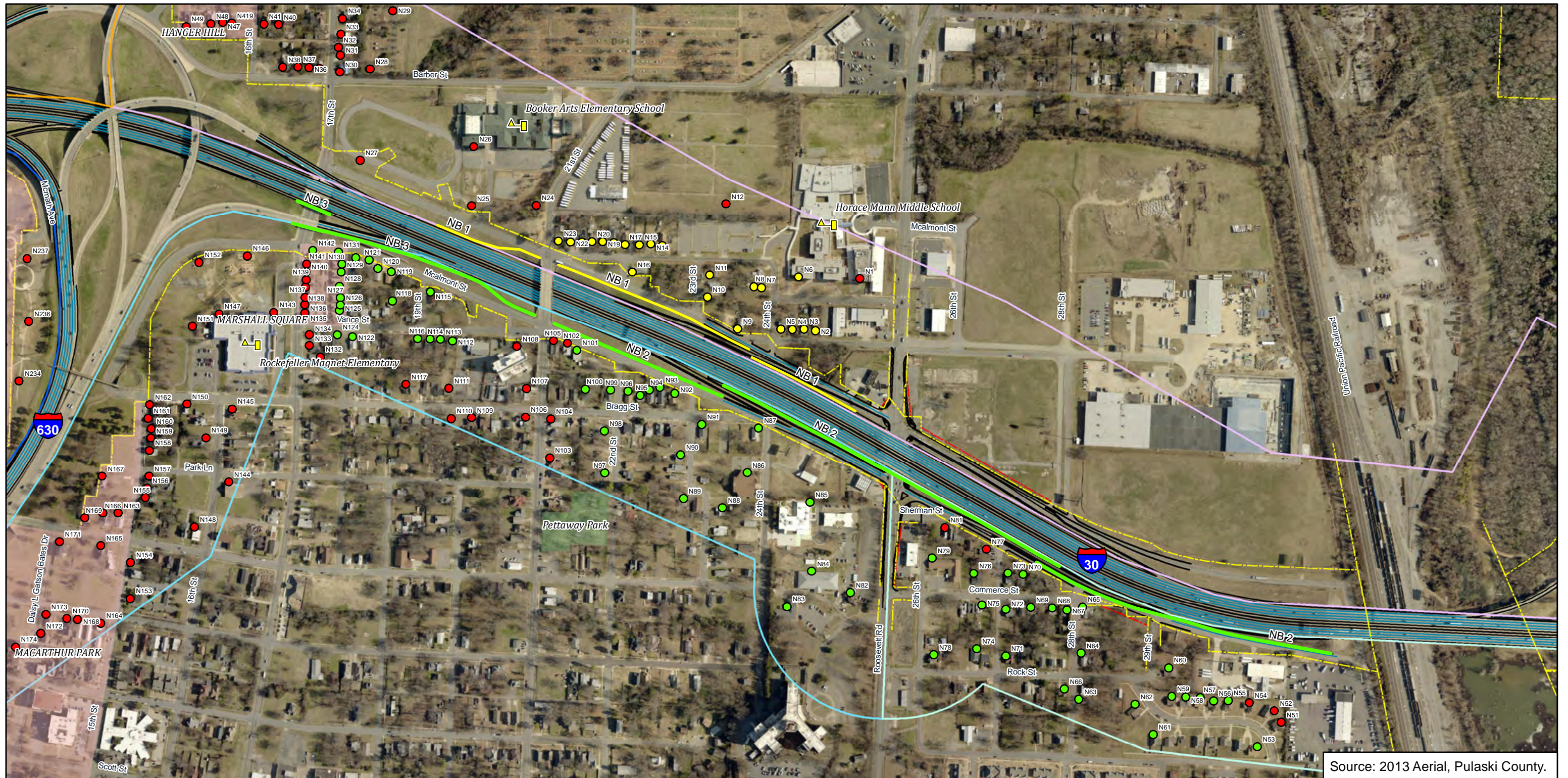
**The extent of each sheet is highlighted in red*



**PROPOSED TRAFFIC NOISE BARRIERS
6 LN WITH C/D WITH SPUI
SHEET 1 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

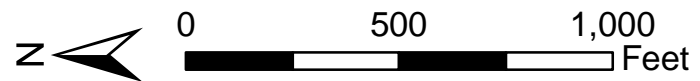
DraftTraffic Noise Study Report
Pulaski County, Arkansas



Source: 2013 Aerial, Pulaski County.

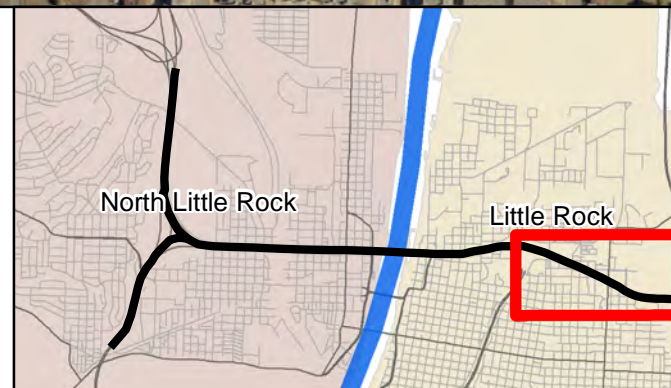
Legend

● Non Benefitted Receiver	🚩 School
● Benefitted Receiver (NR Barrier)	🌳 Public Park
● Benefitted Receiver (F&R Barrier)	🏠 Historic District
— Feasible, NR Barriers	📏 NSA 1
— Feasible and Reasonable Barriers	📏 NSA 2
— Proposed Lane Markings	📏 NSA 3
— Proposed Pavement Edge	📏 NSA 4
— Proposed ROW	📏 NSA 5
— Existing ROW	



Sheet Index

**The extent of each sheet is highlighted in red*



**PROPOSED TRAFFIC NOISE BARRIERS
6 LN WITH C/D WITH SPUI
SHEET 2 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one receptor. Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

Legend

● Non Benefitted Receiver	▲ School
● Benefitted Receiver (NR Barrier)	■ Public Park
● Benefitted Receiver (F&R Barrier)	■ Historic District
— Feasible, NR Barriers	— NSA 1
— Feasible and Reasonable Barriers	— NSA 3
— Proposed Lane Markings	— NSA 4
— Proposed Pavement Edge	— NSA 5
— Proposed ROW	— NSA 6
— Existing ROW	

AR DOT
ARKANSAS DEPARTMENT OF TRANSPORTATION

30 CROSSING

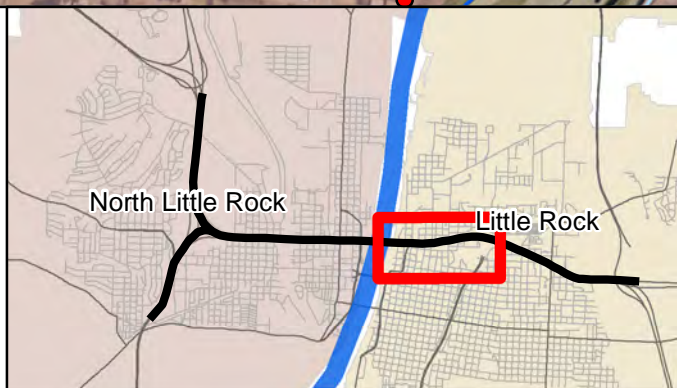
0 500 1,000 Feet

N

Sheet Index

**The extent of each sheet is highlighted in red*

N



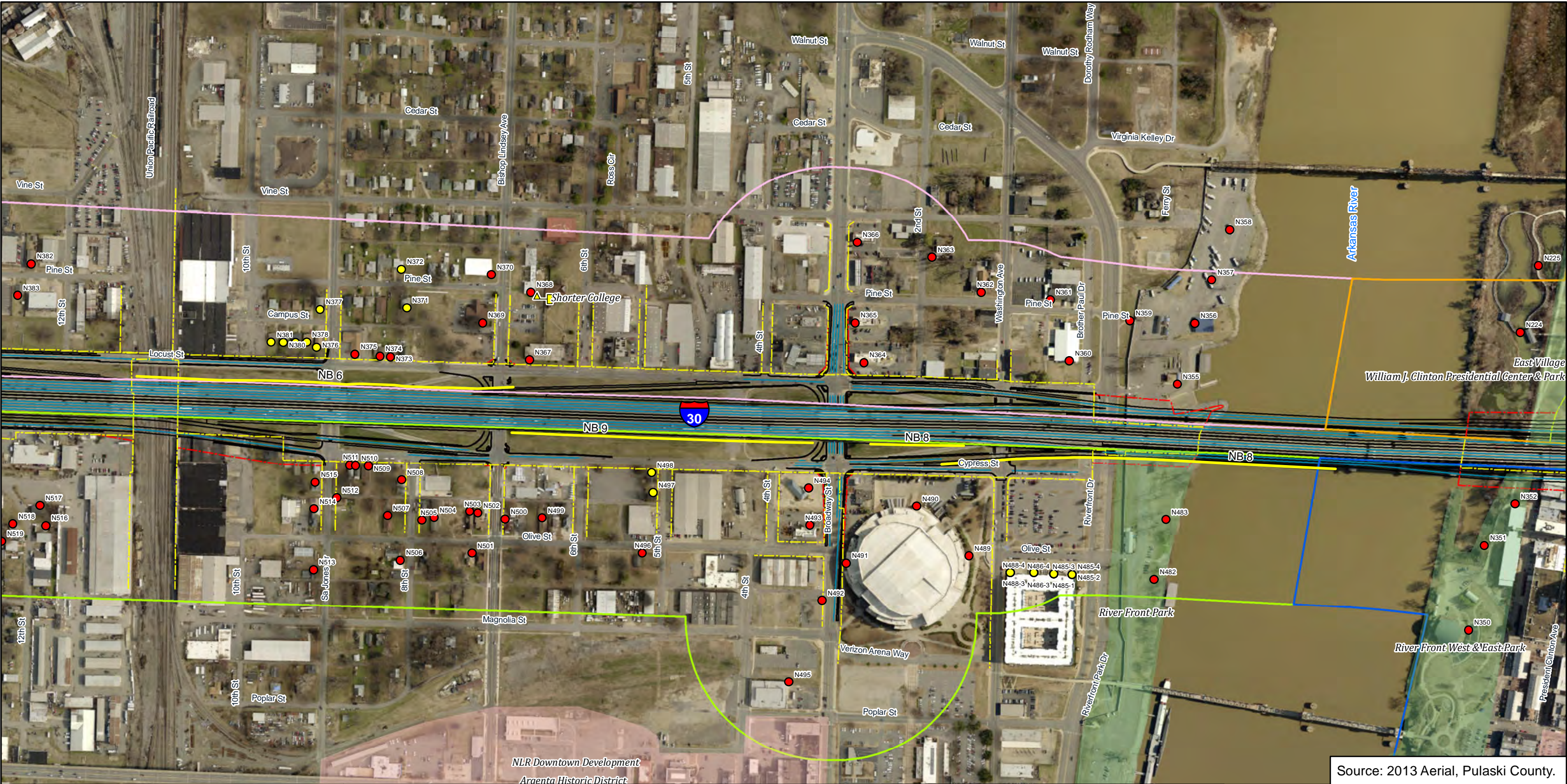
**PROPOSED TRAFFIC NOISE BARRIERS
6 LN WITH C/D WITH SPUI
SHEET 3 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one receptor. Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

Legend

Non Benefitted Receiver

Benefitted Receiver (NR Barrier)

Benefitted Receiver (F&R Barrier)

Feasible, NR Barriers

Feasible and Reasonable Barriers

Proposed Lane Markings

Proposed Pavement Edge

Proposed ROW

Existing ROW

School

Public Park

Historic District

NSA 4

NSA 5

NSA 6

NSA 7

AR

DOT

ARKANSAS DEPARTMENT OF TRANSPORTATION

30

CROSSING

Sheet Index

**The extent of each sheet is highlighted in red*

North Little Rock

Little Rock

PROPOSED TRAFFIC NOISE BARRIERS

6 LN WITH C/D WITH SPUI

SHEET 4 OF 8

I-30 from I-530 to Hwy. 67

30 Crossing Project
















CA0602

DraftTraffic Noise Study Report

Pulaski County, Arkansas



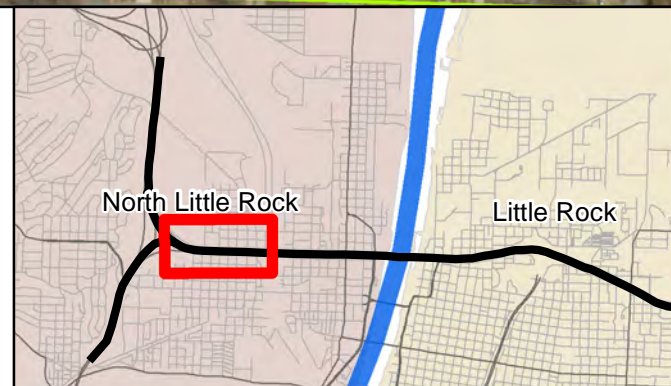
Legend

- | | | | |
|---|-----------------------------------|---|-------------------|
|  | Non Benefitted Receiver |  | Existing ROW |
|  | Benefitted Receiver (NR Barrier) |  | School |
|  | Benefitted Receiver (F&R Barrier) |  | Public Park |
|  | Feasible, NR Barriers |  | Historic District |
|  | Feasible and Reasonable Barriers |  | NSA 6 |
|  | Proposed Lane Markings |  | NSA 7 |
|  | Proposed Pavement Edge |  | NSA 13 |
|  | Proposed ROW | | |



Sheet Index

**The extent
of each sheet is
highlighted in red*



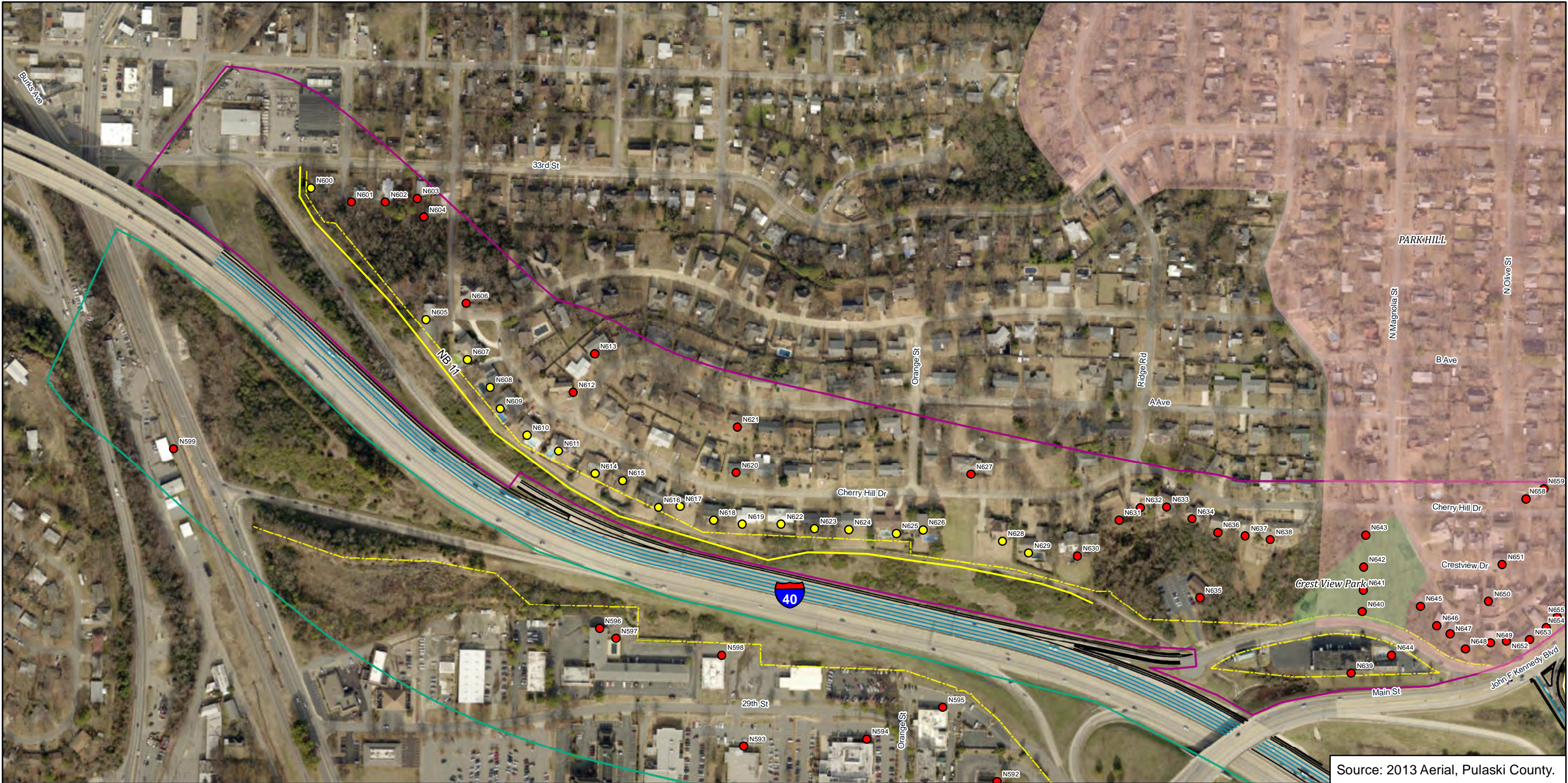
PROPOSED TRAFFIC NOISE BARRIERS
6 LN WITH C/D WITH SPUI
SHEET 5 OF 8

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

DraftTraffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

Legend

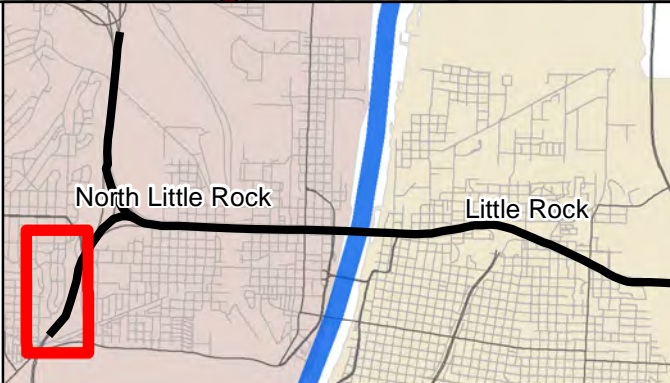
- Non Benefitted Receiver
- Benefitted Receiver (NR Barrier)
- Benefitted Receiver (F&R Barrier)
- Feasible, NR Barriers
- Feasible and Reasonable Barriers
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚦 School
- 🌳 Public Park
- 🏠 Historic District
- 📏 NSA 8
- 📏 NSA 9
- 📏 NSA 10



0 400 800 Feet

Sheet Index

**The extent of each sheet is highlighted in red*



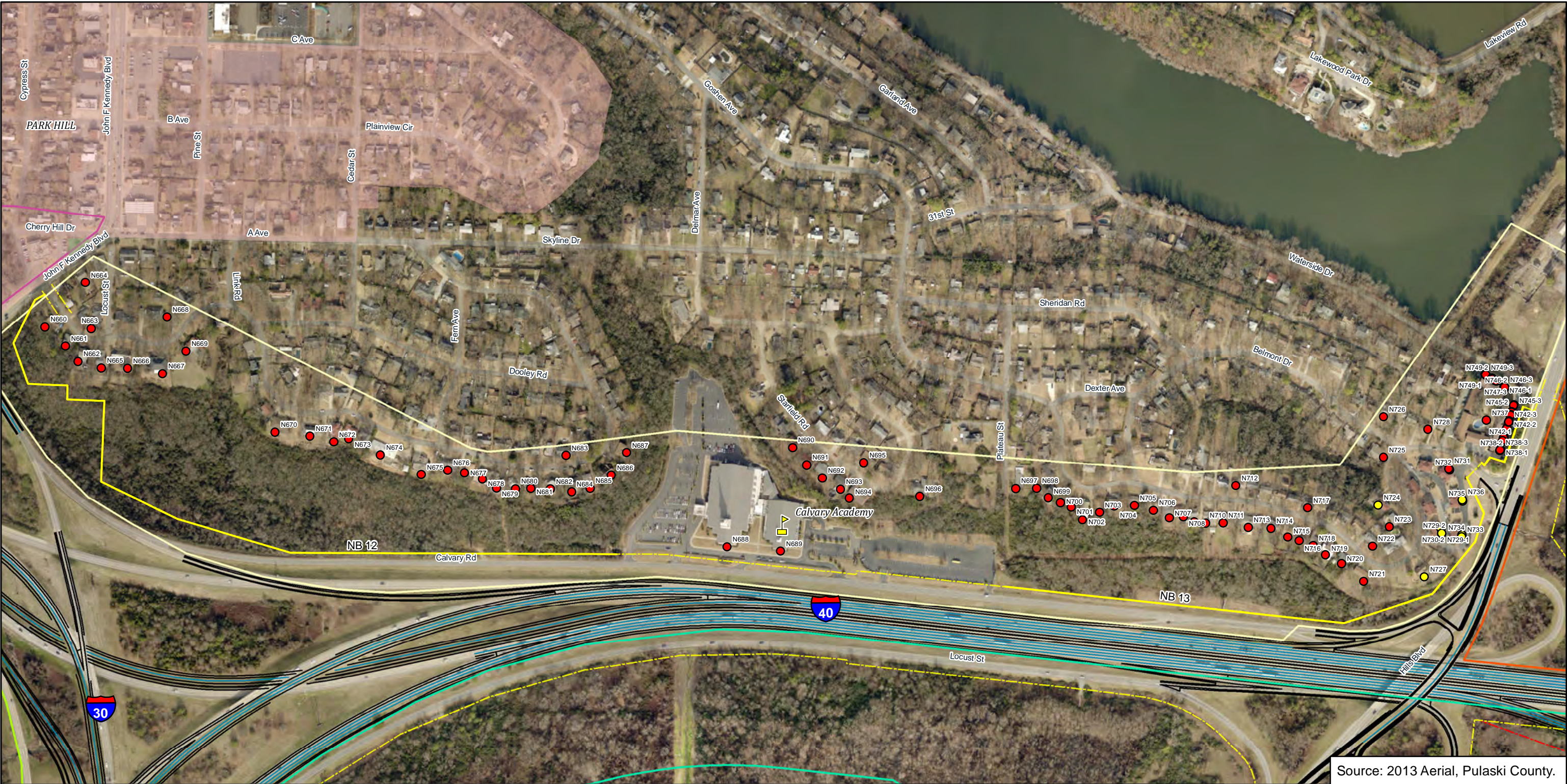
PROPOSED TRAFFIC NOISE BARRIERS 6 LN WITH C/D WITH SPUI SHEET 6 OF 8

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

Legend

● Non Benefitted Receiver	🚩 School
● Benefitted Receiver (NR Barrier)	🌳 Public Park
● Benefitted Receiver (F&R Barrier)	🏠 Historic District
— Feasible, NR Barriers	🟡 NSA 7
— Feasible and Reasonable Barriers	🟠 NSA 9
— Proposed Lane Markings	🟡 NSA 10
— Proposed Pavement Edge	🟠 NSA 11
— Proposed ROW	🟢 NSA 13
— Existing ROW	




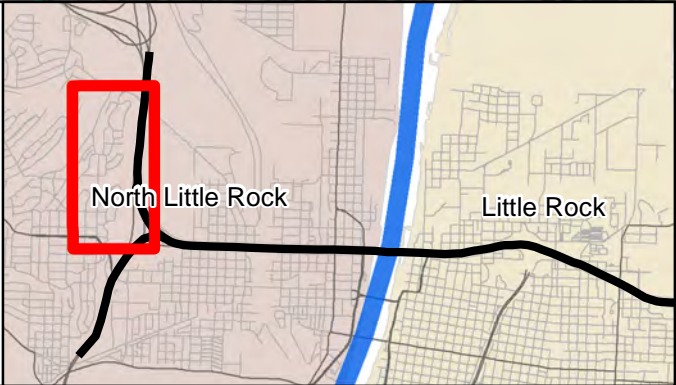
0 500 1,000 Feet

North Arrow

Sheet Index

**The extent of each sheet is highlighted in red*





**PROPOSED TRAFFIC NOISE BARRIERS
6 LN WITH C/D WITH SPUI
SHEET 7 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



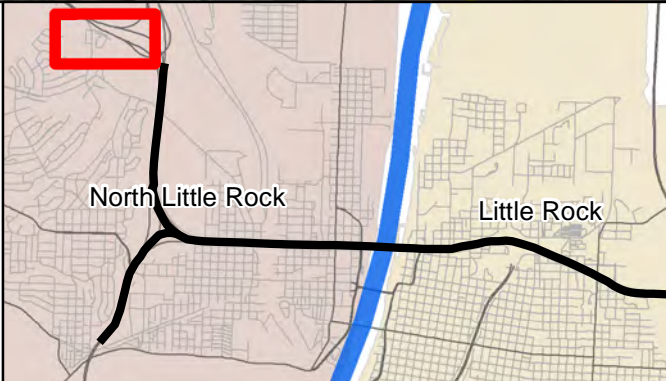
Legend

- | | |
|-------------------------------------|---------------------|
| ● Non Benefitted Receiver | 🚩 School |
| ● Benefitted Receiver (NR Barrier) | 🚩 Public Park |
| ● Benefitted Receiver (F&R Barrier) | 🚩 Historic District |
| — Feasible, NR Barriers | 🚩 NSA 11 |
| — Feasible and Reasonable Barriers | 🚩 NSA 12 |
| — Proposed Lane Markings | 🚩 NSA 14 |
| — Proposed Pavement Edge | |
| — Proposed ROW | |
| — Existing ROW | |



Sheet Index

**The extent of each sheet is highlighted in red*



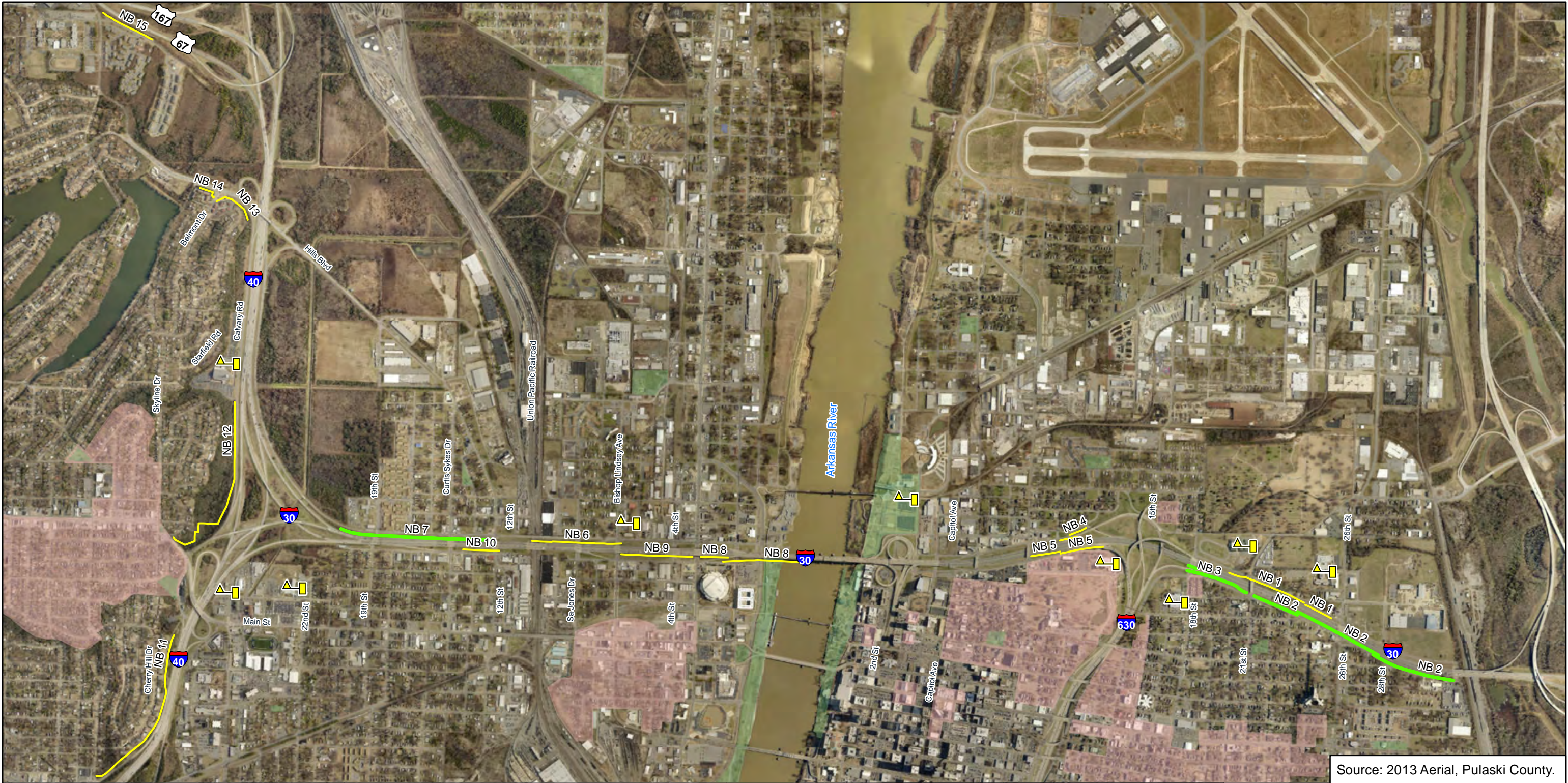
**PROPOSED TRAFFIC NOISE BARRIERS
6 LN WITH C/D WITH SPUI
SHEET 8 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

DraftTraffic Noise Study Report

Pulaski County, Arkansas

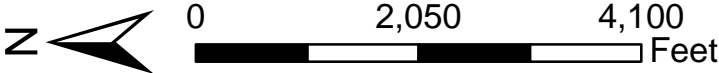
NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

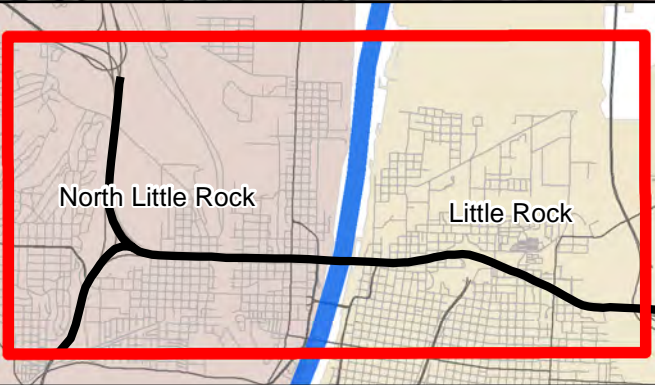
Legend

- Feasible, Not Reasonable Barriers
- Feasible and Reasonable Barriers
- School
- Public Park
- Historic District



Sheet Index

**The extent of each sheet is highlighted in red*

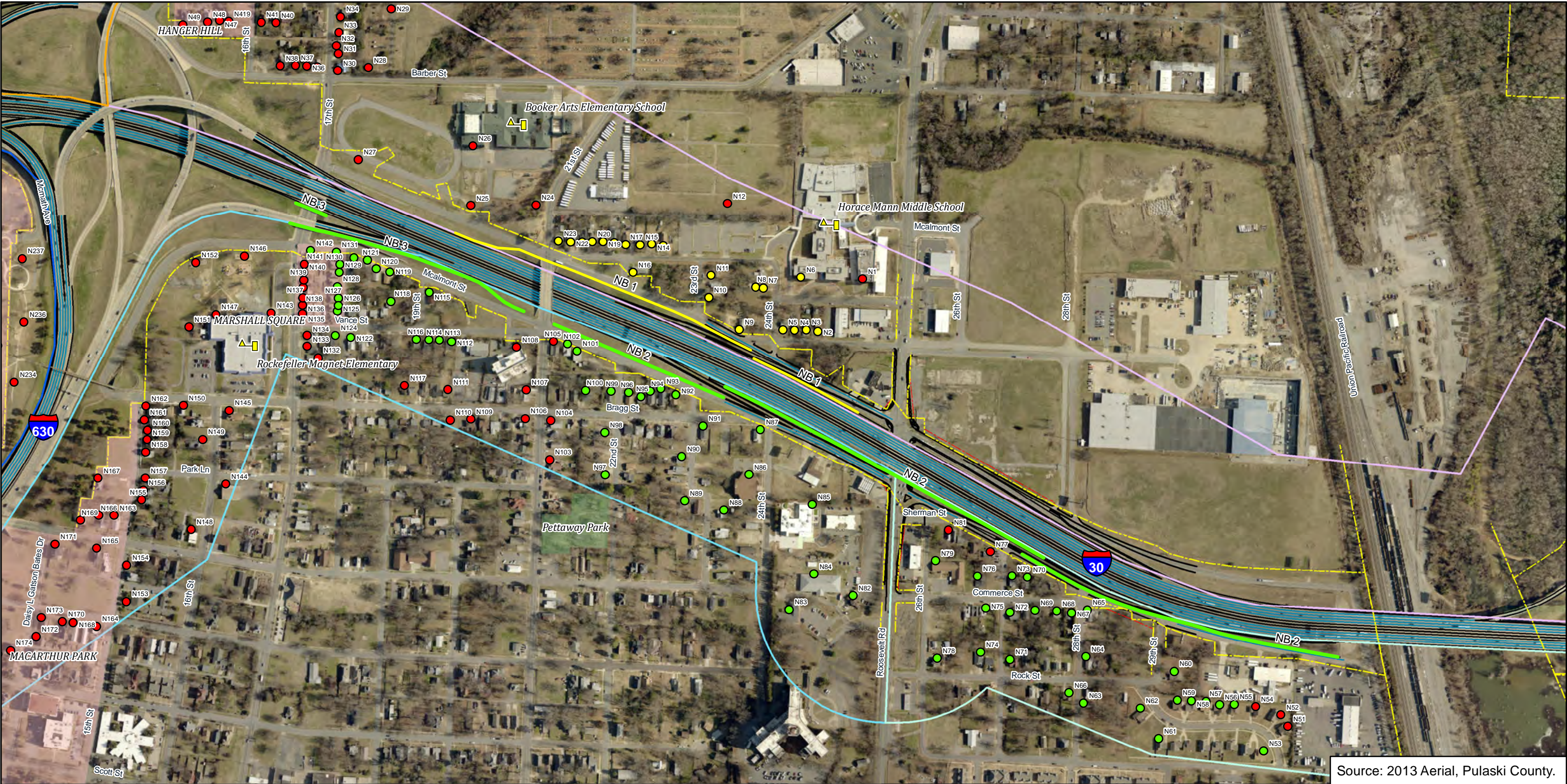


**PROPOSED TRAFFIC NOISE BARRIERS
6 LN WITH C/D WITH SDI
SHEET 1 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas



Source: 2013 Aerial, Pulaski County.

Legend

● Non Benefitted Receiver	🚩 School
● Benefitted Receiver (NR Barrier)	🌳 Public Park
● Benefitted Receiver (F&R Barrier)	🏠 Historic District
— Feasible, NR Barriers	📏 NSA 1
— Feasible and Reasonable Barriers	📏 NSA 2
— Proposed Lane Markings	📏 NSA 3
— Proposed Pavement Edge	📏 NSA 4
— Proposed ROW	📏 NSA 5
— Existing ROW	

AR DOT
ARKANSAS DEPARTMENT OF TRANSPORTATION

30 CROSSING

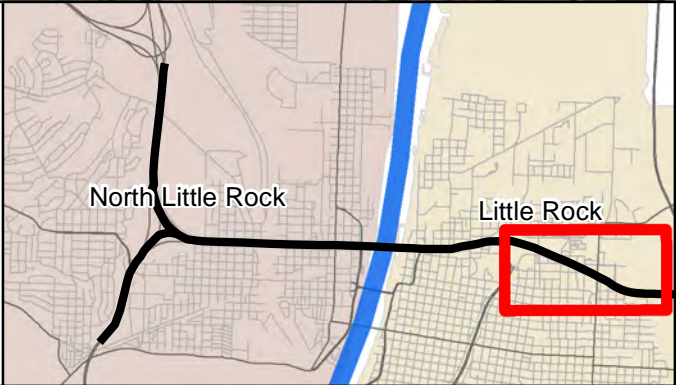
0 500 1,000 Feet

North Arrow

Sheet Index

**The extent of each sheet is highlighted in red*

North Arrow



**PROPOSED TRAFFIC NOISE BARRIERS
6 LN WITH C/D WITH SDI
SHEET 2 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one receptor. Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

Legend

● Non Benefitted Receiver	🚶 School
● Benefitted Receiver (NR Barrier)	🌳 Public Park
● Benefitted Reciever (F&R Barrier)	🏠 Historic District
— Feasible, NR Barriers	📏 NSA 1
— Feasible and Reasonable Barriers	📏 NSA 3
— Proposed Lane Markings	📏 NSA 4
— Proposed Pavement Edge	📏 NSA 5
— Propsed ROW	📏 NSA 6
— Existing ROW	

AR DOT
ARKANSAS DEPARTMENT
OF TRANSPORTATION

30
CROSSING

0 500 1,000 Feet

Sheet Index

*The extent of each sheet is highlighted in red

North Little Rock

Little Rock

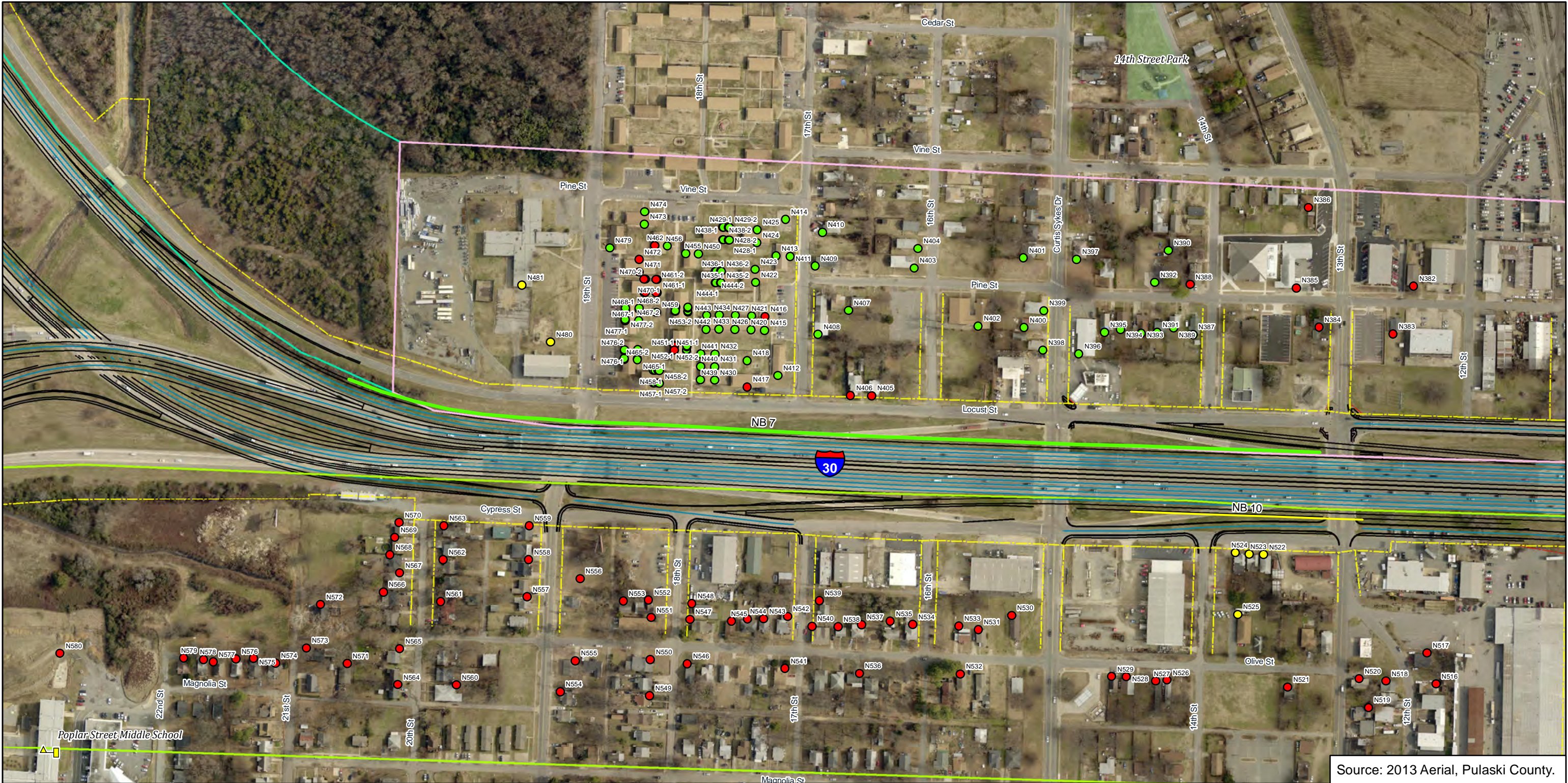
PROPOSED TRAFFIC NOISE BARRIERS
6 LN WITH C/D WITH SDI
SHEET 3 OF 8

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one receptor. Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

Legend

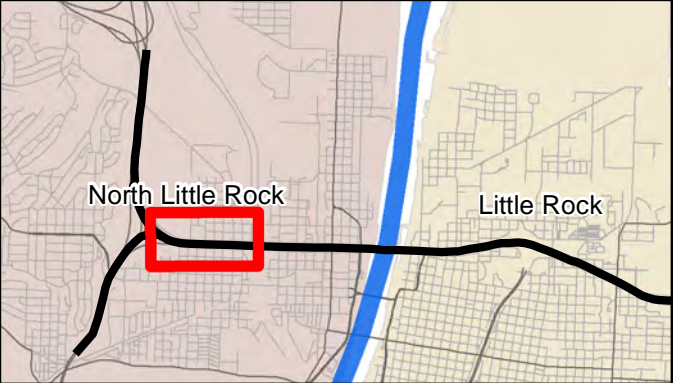
- Non Benefitted Receiver
- Benefitted Receiver (NR Barrier)
- Benefitted Receiver (F&R Barrier)
- Feasible, NR Barriers
- Feasible and Reasonable Barriers
- Proposed Lane Markings
- Proposed Pavement Edge
- Proposed ROW
- Existing ROW
- 🚏 School
- 🌳 Public Park
- 🏠 Historic District
- 📏 NSA 6
- 📏 NSA 7
- 📏 NSA 13



0 300 600 Feet

Sheet Index

**The extent of each sheet is highlighted in red*



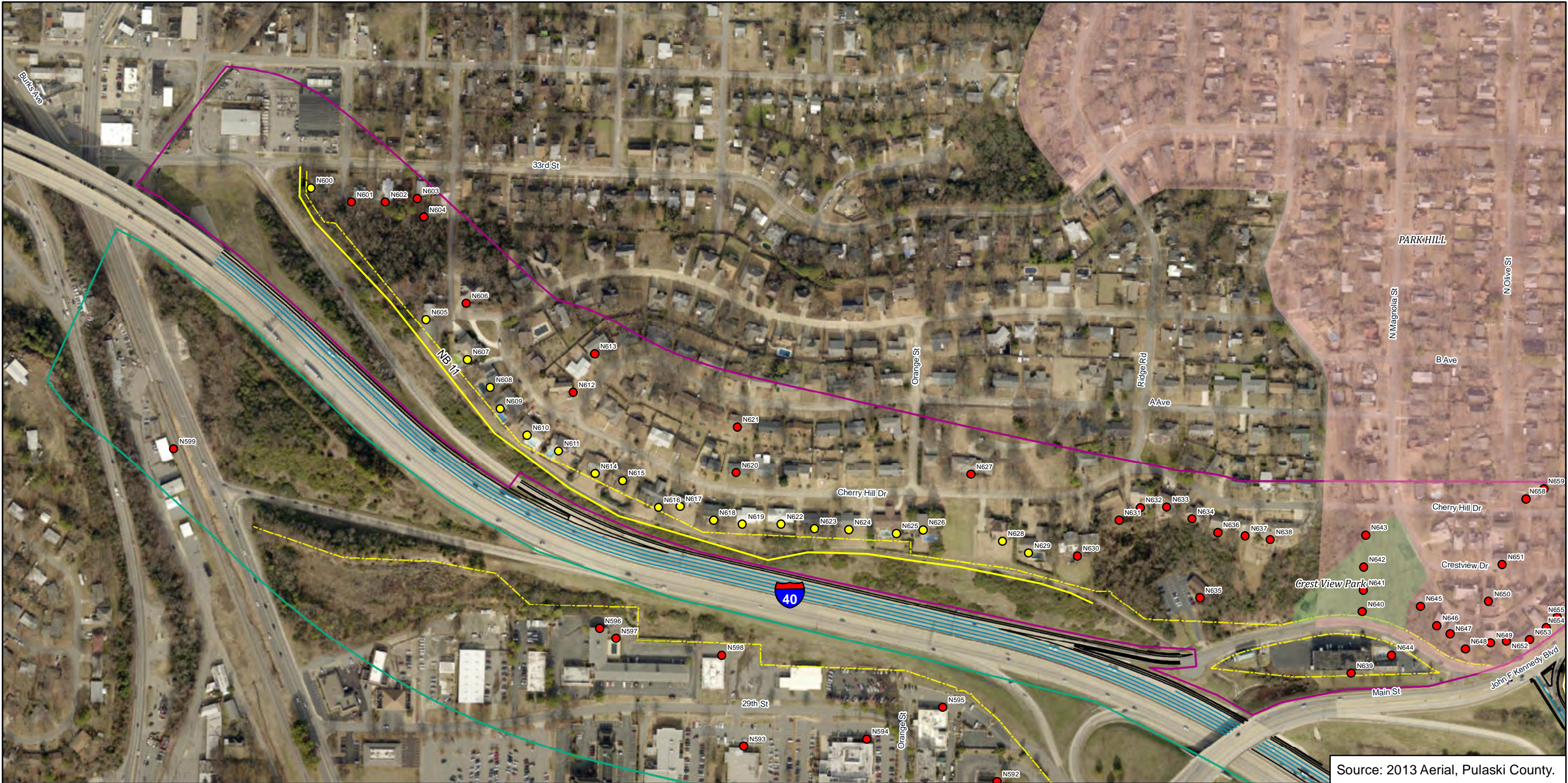
**PROPOSED TRAFFIC NOISE BARRIERS
6 LN WITH C/D WITH SDI
SHEET 5 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Source: 2013 Aerial, Pulaski County.

Legend

Non Benefitted Receiver

Benefitted Receiver (NR Barrier)

Benefitted Reciever (F&R Barrier)

Feasible, NR Barriers

Feasible and Reasonable Barriers

Proposed Lane Markings

Proposed Pavement Edge

Proposed ROW

Existing ROW

School

Public Park

Historic District

NSA 8

NSA 9

NSA 10

AR

DOT

ARKANSAS DEPARTMENT OF TRANSPORTATION

30

CROSSING

N

0

400

800

Feet

Sheet Index

**The extent of each sheet is highlighted in red*

N

North Little Rock

Little Rock

PROPOSED TRAFFIC NOISE BARRIERS

6 LN WITH C/D WITH SDI

SHEET 6 OF 8

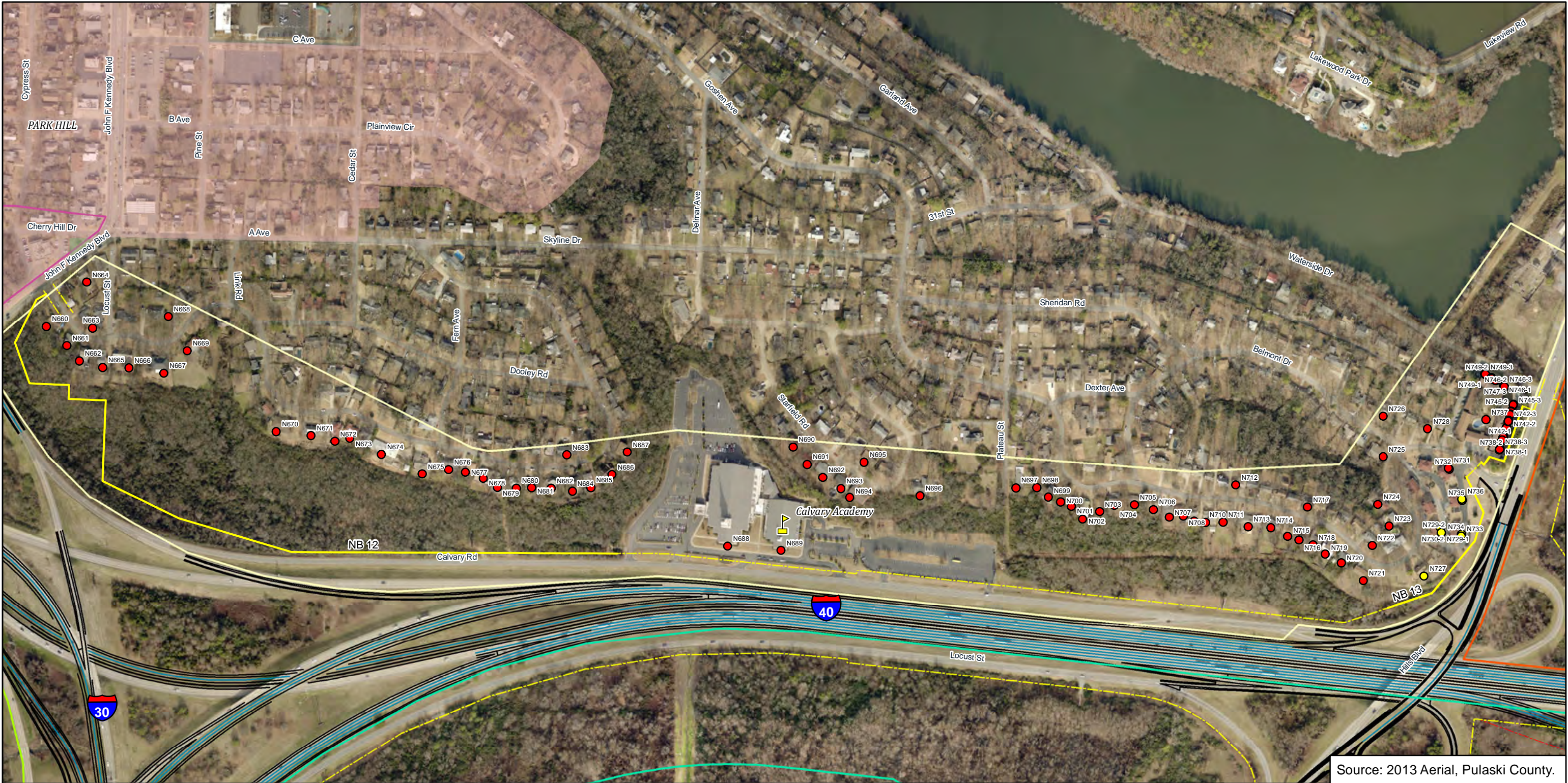
I-30 from I-530 to Hwy. 67

30 Crossing Project

CA0602

DraftTraffic Noise Study Report



Pulaski County, Arkansas



Source: 2013 Aerial, Pulaski County.

Legend


● Non Benefitted Receiver	🚩 School
● Benefitted Receiver (NR Barrier)	🌳 Public Park
● Benefitted Receiver (F&R Barrier)	🏡 Historic District
— Feasible, NR Barriers	🟡 NSA 7
— Feasible and Reasonable Barriers	🟠 NSA 9
— Proposed Lane Markings	🟡 NSA 10
— Proposed Pavement Edge	🟠 NSA 11
— Proposed ROW	🟡 NSA 13
— Existing ROW	

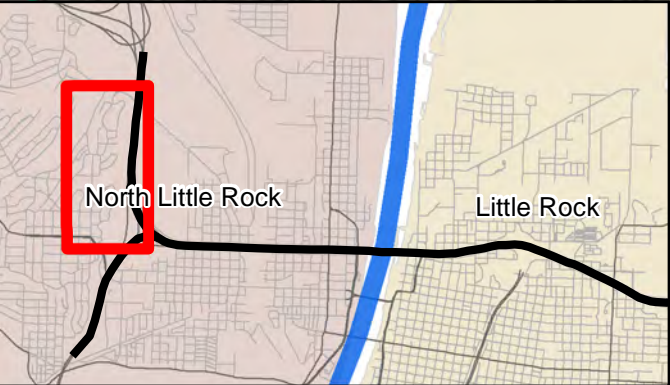


0 500 1,000 Feet

Sheet Index

**The extent of each sheet is highlighted in red*





**PROPOSED TRAFFIC NOISE BARRIERS
6 LN WITH C/D WITH SDI
SHEET 7 OF 8**

I-30 from I-530 to Hwy. 67
30 Crossing Project
CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver



Legend

- Non Benefitted Receiver
- Benefitted Receiver (NR Barrier)
- Benefitted Receiver (F&R Barrier)
- Feasible, NR Barriers
- Feasible and Reasonable Barriers
- Proposed Lane Markings
- Proposed Pavement Edge
- - - Proposed ROW
- Existing ROW
- School
- Public Park
- Historic District
- NSA 11
- NSA 12
- NSA 14

Sheet Index

**The extent of each sheet is highlighted in red*

PROPOSED TRAFFIC NOISE BARRIERS
6 LN WITH C/D WITH SDI
SHEET 8 OF 8

I-30 from I-530 to Hwy. 67
 30 Crossing Project
 CA0602

Draft Traffic Noise Study Report

Pulaski County, Arkansas

NB= Noise Barrier
NR= Not Reasonable
F&R= Feasible and Reasonable
Receivers may represent more than one "receptor." Refer to tables in Attachment C of the Traffic Noise Study Report for the number of receptors represented by each receiver