



DRAFT Environmental Assessment

Farm to Market 16, Tyler District
From 4 miles west of FM 849 (CR 481-E) to
United States Highway 69 in the City of Lindale
CSJ: 0522-04-032

Smith County, Texas
April 2018

The Environmental review, consultation and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by the Federal Highway Administration and TxDOT.

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List of Abbreviations and Acronyms

AADT	Average Annual Daily Traffic
ADT	Average Daily Traffic
APE	Area of Potential Effects
BG	Block Group
BMPs	Best Management Practices
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CR	County Road
CT	Census Tract
EJ	Environmental Justice
EMS	Emergency Medical Services
EMST	Ecological Mapping Systems of Texas
EO	Executive Order
ETJ	Extra-territorial Jurisdiction
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FM	Farm to Market
FONSI	Finding of No Significant Impact
ISA	Initial Site Assessment
LEP	Limited English Proficiency
MOU	Memorandum of Understanding
MSAT	Mobile Source Air Toxics
MS4	Municipal Separate Storm Sewer System
MTP	Metropolitan Transportation Plan
NEPA	National Environmental Policy Act of 1969
NHD	National Hydrography Dataset
NOI	Notice of Intent
NOT	Notice of Termination
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
NWP	Nationwide Permit
PCN	Pre-construction Notification
PM	Particulate Matter
ROE	Right-of-Entry
ROW	Right-of-Way
RTHL	Recorded Texas Historic Landmark
SAL	State Antiquities Landmark
SGCN	Species of Greatest Conservation Need
SH	State Highway
SSA	Survey Study Area
SW3P	Storm Water Pollution Prevention Plan

TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
THC	Texas Historical Commission
TIP	Transportation Improvement Program
TPDES	Texas Pollutant Discharge Elimination System
TPWD	Texas Parks and Wildlife Department
TSSWCB	Texas State Soil and Water Conservation Board
TWDB	Texas Water Development Board
TxDOT	Texas Department of Transportation
US	United States Highway
U.S.	United States
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 Introduction

The Texas Department of Transportation (TxDOT), Tyler District, is developing a project to improve Farm-to-Market Road (FM) 16 in Smith County, Texas. The purpose of the proposed project is to accommodate anticipated/projected traffic demand and improve safety. The project would extend from four miles west of FM 849 (which corresponds to County Road [CR] 481-E), west of Lindale, Texas, east to United States Highway 69 (US 69) in Lindale. The length of the proposed project is approximately 4.4 miles. **Appendix A** shows the project location in relation to Smith County and the cities of Lindale, Hideaway, and Tyler. **Appendix B** contains photographs of the project area. A schematic (plan view) of the proposed improvements is included in **Appendix C**.

The purpose of this environmental assessment is to study the potential environmental consequences of the proposed FM 16 project and determine whether those consequences warrant preparation of an environmental impact statement. This document has been prepared in accordance with the procedural provisions of the National Environmental Policy Act (NEPA); the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508); and TxDOT's rules governing the Environmental Review of Transportation Projects (Texas Administrative Code [TAC] Title 43, Part 1, Chapter 2).

Upon approval, this draft environmental assessment will be made available for public review by publishing notice of its availability in the Lindale News and Times and the Tyler Morning Telegraph. A public hearing will be held to present the findings of this environmental assessment and the proposed design to the public, and to receive public comments. Written comments will be solicited through the public notice and public hearing process and should be provided to the TxDOT Tyler District, 2709 W. Front St., Tyler, TX 75702. All comments received will be thoroughly considered by TxDOT as the project is developed further.

Based on information contained in this environmental assessment and any comments submitted, TxDOT will determine whether environmental effects are sufficiently substantial to warrant preparation of an environmental impact statement. If TxDOT determines that there would be no significant adverse effects, TxDOT will prepare and issue a finding of no significant impact, which would then be made available to the public.

2.0 PROJECT DESCRIPTION

2.1 Existing Facility

FM 16 extends from US 271 south of Gladewater to State Highway (SH) 64 southeast of Canton. It crosses most of the northern area of Smith County as an east-west corridor connecting the towns of Starrville, Winona, Lindale, and Garden Valley. From the western terminus of the project (four miles west of FM 849) to the urban limits of Lindale, existing FM 16 is a two-lane, undivided rural highway. Within this area, the existing roadway consists of two 11 feet wide lanes with three feet wide outside shoulders and ditches to convey drainage. The existing right-of-way (ROW) width ranges from 70 feet to 100 feet.

At the Lindale urban limits, approximately 1,300 feet east of Lindale Cemetery Road, the roadway transitions to a two lane urban section. A westbound right-turn bay, along with a continuous two-way left turn lane, is present between North Stadium Street and the entrance to the Lindale Rodeo Arena. An eastbound to northbound left-turn bay is present at the US 69 intersection. There is also a two-way left turn lane in this section. The existing ROW width within this urban section varies from 70 feet to 100 feet. The wider (100 feet) ROW is located between College Street and US 69, and also accommodates diagonal, on-street parking. On the north side of FM 16 from College Street to Henry Street the existing sidewalk varies from four feet to six feet wide, and from Henry Street to US 69 the sidewalk varies from seven feet to nine feet wide. On the south side, between College Street and Henry Street, the sidewalk only exists on the east half of the block and it varies from three feet to five feet wide. From Henry Street to US 69 the sidewalk also only exists on the east half of the block and varies from six feet to nine feet wide.

Photographs of the existing roadway are included in **Appendix B**. **Appendix D** includes typical sections of the existing roadway (**Figure 1** and **Figure 2**).

2.2 Proposed Facility

As proposed, the Build Alternative would include the construction of a three-lane rural highway, one lane in each direction with a continuous left turn lane, from the western terminus of the project (four miles west of FM 849) to 500 feet west of the intersection with CR 436; a five-lane rural highway from CR 436 to the future intersection with Toll 49; and a five-lane urban section from Toll 49 east to US 69 (end of the project limits). The length of the proposed project, including all transitions, is approximately 4.4 miles. A schematic (plan view) of the proposed improvements is included in **Appendix C**.

Proposed improvements vary from the rural and urban sections of FM 16. From the western terminus of the project to 500 feet west of the intersection with CR 436, FM 16 would be reconstructed as a three-lane rural highway (**Appendix D: Figure 3** and **Figure 4**). This section of roadway would include two 12 feet wide travel lanes (one in each direction). Directions of travel

would be separated by a continuous 14 foot wide two-way left-turn lane and 10 feet wide outside shoulders would be provided. Open ditches would convey run-off. The ROW width would vary between 119 feet (minimum) and 310 feet (maximum).

From CR 436 to the future intersection with Toll 49, FM 16 would be a five-lane rural highway (**Appendix D: Figure 5**). This section of roadway would consist of four 12 feet wide travel lanes (two in each direction); directions of travel would be separated by a 14 foot wide continuous two-way left turn lane and ten-foot wide outside shoulders would be provided. Open ditches would convey drainage. The ROW width would vary between 205 feet (minimum) and 280 feet (maximum).

From Toll 49 to 400 feet east of Lindale Cemetery Road, FM 16 would be a five-lane urban section (**Appendix D: Figure 6**). This section of roadway would consist of four 12 feet wide travel lanes (two in each direction); directions of travel would be separated by a 14 foot wide continuous left-turn lane. Curb, gutter, and storm sewer would be installed to convey storm water. Five feet wide sidewalks would be located behind the curb (on each side of the roadway) and would parallel the travel lanes. Within this area the ROW width would vary from 150 feet (minimum) to 365 feet (maximum).

From 400 feet east of Lindale Cemetery Road to College Street, the five lane urban concept would continue (**Appendix D: Figure 7**); however, the through lanes would be reduced to 11 feet wide and the center turn lane would be 12 feet wide. Curb, gutter, and storm sewer would be installed. Five feet wide sidewalks would be located behind the curb. The ROW within this section would vary from 80 feet (minimum) to 282 feet (maximum). Between FM 849 and College Street the ROW would be 80 feet wide (typical). From College Street to Henry Street the existing ROW is 100 feet wide; no additional ROW would be required in this section.

Between Henry Street and US 69, in downtown Lindale, the typical section would include a 12 foot wide travel lane in each direction, a 12 foot wide center-turn lane, and a 12 foot wide eastbound-to-southbound right-turn lane (**Appendix D: Figure 8**). Twenty-two feet would be provided on the north side of the roadway to accommodate diagonal, on-street parking. Curb, gutter, and storm sewer would be installed to convey storm water. In this area, 10 feet wide sidewalks would be located behind the curb. This section would be constructed within the existing (100 feet wide) ROW; additional ROW would not be required.

Throughout the project limits, the vertical and horizontal alignment would be modified to eliminate substandard curves and improve site distance. The most notable of these modifications would be the re-alignment of FM 16 between Springcrest Lane and Lindale Cemetery Road. The realignment would require the construction of a new bridge spanning an impounded area west of Lindale Cemetery Road. The new bridge would consist of two 12 feet wide travel lanes in each direction separated by a 14 foot wide two-way left-turn lane. A 10 foot wide sidewalk would be provided on each side and would be separated from the travel lanes with a concrete barrier. Although FM 16

would be re-aligned in this area, a portion of the existing roadway would remain in place and would continue to provide access to adjacent properties.

There would be three other new bridges, all in the five-lane rural section. One bridge would cross the main channel of Hubbard Creek, while a second would be a relief structure in the western overbank (floodplain) area. The third bridge would cross Luckeible Branch, a tributary of Hubbard Creek. These bridges would replace the existing bridges and bridge-class culvert for those crossings and would be designed to accommodate a 50-year storm event.

In total, approximately 68.6 acres of ROW would be required to accommodate the proposed FM 16 improvements. The additional ROW is necessary to accommodate the additional pavement width, side slope grading, existing terrain, cross drainage structures, utilities, future Toll 49 tie-in, and to maintain property access and improve the roadway geometrics and safety.

Federal regulations [23 CFR 771.111(f)(1)] require that federally funded transportation projects have logical termini. Simply stated, this means that a project must have rational beginning and ending points. Those points may not be created simply to avoid proper analysis of environmental impacts. The western limit of the proposed FM 16 project is 4 miles west of FM 849 (which corresponds to CR 481-E). The eastern limit of the proposed project is US 69 in Lindale. These begin/end points are rational for the proposed project as they provide increased safety and capacity to an area with growing traffic demands. The addition of the left turn lane the length of the project provides enhanced safety for all travelers along the corridor.

It should be noted that the five-lane (added capacity) section of the proposed project begins at US 69 (a major intersecting roadway) and terminates at CR 436. CR 436 provides access to the town of Hideaway. Traffic projections prepared for the proposed project reveal a considerable decrease in traffic west of CR 436 (west of this point additional capacity is not warranted); thus, US 69 and CR 436 provide logical termini for the added capacity component of the proposed project.

Federal regulations [23 CFR 771.111(f)(2)] require that a project have independent utility and be a reasonable expenditure even if no other transportation improvements are made in the area. This means a project must be able to provide benefit by itself, and that the project not compel further expenditures to make the project useful. Stated another way, a project must be able to satisfy its purpose and need with no other project being built. As proposed, the FM 16 project addresses specific transportation needs identified within the project limits. Specifically, the proposed project would enhance safety by eliminating substandard curves and other safety-related conditions within the project limits. The proposed improvements would enhance mobility by providing a continuous two-way left turn lane (the entire length of the project) and adding capacity between US 69 and CR 436 (a need evidenced by traffic projections detailed in **Section 3.2**). The safety and mobility benefits of the proposed FM 16 project stand-alone. Realization of these benefits is not dependent upon other projects/future actions; thus, the proposed project passes the test of independent

utility. Further, because the project would stand alone and is not dependent upon other (future) improvements to properly function, it would not compel further expenditure of funds. For this reason, it cannot and does not irretrievably commit future federal funds.

Federal law [23 CFR 771.111(f)(3)] prohibits a project from restricting consideration of alternatives for other reasonably foreseeable transportation improvements. This means that a project must not dictate or restrict any future roadway alternatives. As proposed, the FM 16 project would in no way limit consideration of improvements, or alternatives for construction of such improvements, in adjoining sections of FM 16 – east or west of the proposed project. For this reason, the proposed project does not foreclose consideration of alternatives for other reasonably foreseeable transportation improvements.

The estimated cost of the proposed FM 16 project is \$39.2 million. The project would be financed with a combination of state and federal financing. The proposed FM 16 project is included in the fiscally-constrained metropolitan transportation plan (MTP) for the area (Tyler Area 2040 MTP). Further, the portion of the project between the Toll 49 Extension and US 69 is included in the MPO's Transportation Improvement Program (TIP) and is described as "widening from two to four lanes". A copy of applicable pages from the MTP and TIP are included in **Appendix E**. The Statewide Transportation Improvement Program (STIP) is currently being revised. The revised STIP, which includes the proposed FM 16 project, is anticipated to be approved in August 2018.

3.0 PURPOSE AND NEED

Environmental documents prepared under NEPA must include a discussion of the "purpose and need" of a proposed action. The purpose and need is essentially the foundation of the NEPA decision-making process as it provides context and criteria for the development and review of alternatives to be considered. Only those alternatives that satisfy the established purpose and need are considered reasonable for further evaluation.

Table 3-1 outlines the purpose and need for the proposed FM 16 project.

Table 3-1: Summary of Purpose and Need

Desired Outcome (Purpose)	Condition to be Addressed (Need)
<ul style="list-style-type: none"> • Enhanced mobility within the corridor • Enhanced safety within the corridor 	<ul style="list-style-type: none"> • Increasing traffic volumes are adversely affecting safety and mobility with the corridor • Lack of conformity with current safety and design standards

3.1 Need

The proposed FM 16 project is needed because the current roadway, from four miles west of FM 849 to US 69 in Lindale, does not meet future capacity needs and does not conform to current safety and design standards. The need for FM 16 improvements is evidenced below.

3.2 Supporting Facts and/or Data

Population Growth

Population in the region has steadily increased over the past 30 years and is anticipated to continue to increase through 2040. Population in Smith County grew 63.4 percent from 128,466 to 209,714 between 1980 and 2010. The City of Lindale grew from 2,180 to 4,818, 121 percent, between the same time period. Smith County is expected to reach a population of 286,140 by 2040 while Lindale is expected to reach 9,167. This growth results in a 36.4 and 90.3 percent growth for Smith County and Lindale, respectively. The City of Hideaway did not have a reported population prior to 2010, but is projected to grow from 3,083 to 4,558, 47.8 percent, between 2010 and 2040. This results in an average of 58.2 percent growth in the region of the FM 16 project. The effects of population growth are reflected in area traffic volumes.

Traffic Volumes

With average daily traffic (ADT) on FM 16 ranging from 1,300 vehicles per day from four miles west of FM 849 to CR 436, to 5,700 vehicles per day from CR 436 to US 69 in Lindale (TxDOT, 2015), portions of the corridor become congested during peak periods of travel or during incidents, such

as vehicular crashes or breakdowns. Traffic in the corridor is projected to increase well into the foreseeable future. ADT in the corridor is expected to reach 1,900 vehicles from four miles west of FM 849 to CR 436 by 2035 and 2,200 by 2045. The portion of FM 16 from CR 436 to US 69 in Lindale is expected to reach 8,000 ADT by the year 2035, and continue to increase to 9,100 by 2045. This is an overall ADT increase of 59 to 63 percent throughout the project corridor by 2045.

Two schools are located within the project limits: Lindale High School and College Street Elementary School. Impacts resulting from the increased traffic demand are acutely noticeable during school-related peak travel periods (before/after school as students arrive/depart the premises).

Safety and Crash Data

FM 16, in its current configuration has substandard curves with limited sight distance and no turn lane. These conditions, combined with increasing traffic volumes, are contributing to crashes within the corridor. Between 2012 and 2014 there were 139 reported traffic crashes, resulting in two fatalities and ten with incapacitating injuries, within the project limits. Both fatalities, and many of the other crashes, occurred in portions of the roadway that have a limited sight distance due to substandard curves in the road. Statewide, there were 551,971 crashes, 130,856 of which were in rural settings, and 599 fatal crashes on farm-to-market roadways in 2016. Smith County had 6,206 crashes resulting in 48 fatal crashes, 11 of which were on farm-to-market roadways in 2016.

3.3 Purpose

The purpose of the proposed project is to enhance safety and improve mobility along the FM 16 corridor. The Build Alternative, described in **Section 2.2**, satisfies the project purpose.

4.0 ALTERNATIVES

The alternatives identification and evaluation process conducted for the proposed project, described in **Section 4.3** (below), resulted in the narrowing of the field of alternatives down to two alternatives: the Build Alternative and the No Build Alternative. These two alternatives are evaluated in detail in **Section 5.0** of this environmental assessment.

4.1 Build Alternative

The Build Alternative, described in **Section 2.2**, satisfies the project purpose and need by enhancing mobility within the corridor and providing increased safety. The capacity provided by the additional travel lanes from US 69 to CR 436 would not extend the entire length of the project but the left-turn lane would continue the entire project length to provide increased safety to the entire corridor. The additional capacity, in and of itself, would enhance mobility within and between the towns of Lindale and Hideaway – the areas where most of the traffic is located. In addition to the left-turn lane, the flattening of curves along the corridor would provide enhanced safety by improving sight distance around curves. Because the Build Alternative satisfies the project’s purpose and need, it is the recommended alternative.

4.2 No Build Alternative

Under the No Build Alternative, the proposed improvements to FM 16 would not be constructed. The No Build Alternative would not require the conversion of approximately 68.6 acres from existing land uses to transportation use (ROW) nor would other project-related impacts occur. The No Build Alternative would not enhance mobility or improve safety within the corridor. Consequently, the anticipated benefits of the proposed project would not be realized and conditions in the FM 16 corridor would continue to deteriorate and pose safety concerns. For this reason, the No Build Alternative does not meet the purpose and need for the proposed improvements (described in **Section 3.0**) and is not the recommended alternative.

Although the No Build Alternative fails to meet the project’s purpose and need and is not the recommended alternative, it was carried forward (per the requirements of NEPA) as the baseline for comparison. The No Build Alternative is evaluated in this environmental assessment along with the Build Alternative.

4.3 Preliminary Alternatives Considered but Eliminated from Further Consideration

A three-step process led to the identification of the Build Alternative: (1) identification, screening, and public vetting of preliminary alternatives; (2) evaluation of public comments and identification of a recommended alternative; and (3) public vetting of the recommended Build Alternative. The No Build Alternative was considered at each step in the process and was carried forward for evaluation in this environmental assessment. Public meetings were conducted to present the

results of each step and to receive public feedback; thus, the public was activity engaged in the alternatives analysis process.

Step One (Identification, Screening, and Public Vetting of the Preliminary Alternatives)

In total, three preliminary build alternatives were identified and screened:

- Alternative 1 (widen to five lanes by acquiring ROW along both sides of the existing roadway)
- Alternative 2 (widen to five lanes by acquiring ROW along the north side of the existing roadway)
- Alternative 3 (widen to five lanes by acquiring ROW along the south side of the existing roadway)

It should be noted that all three of the preliminary build alternatives satisfy the project's purpose and need; however, the ROW footprint (and, thus, resulting impacts) differed by alternative.

The three alternatives were presented for public review and comment at a public meeting on September 15, 2015. Approximately 129 people attended the public meeting and 37 comments were received.

Step Two (Evaluation of Public Comments and Identification of a Recommended Alternative)

Subsequent to the September 2015 public meeting, all comments received were thoroughly considered by the project team. Although the proposed project was generally supported by the public, a common theme among commenters was to reduce the amount of ROW to be acquired and, thereby, minimize the effects on adjacent properties.

The project team responded to these comments by making several changes to the proposed project and developing a single "best-fit" alternative (a hybrid of the three preliminary alternatives) that combined the most desirable elements of the preliminary alternatives. Changes made in response to the public comments included:

- Reducing the five-lane section to three lanes west of CR 436 (with a corresponding reduction of ROW through the area);
- Increasing the amount of retaining wall to be used (which reduces the amount of ROW); and
- Refining the design, when possible, to further reduce the amount of ROW to be acquired.

Collectively, these changes reduced the amount of ROW to be acquired from 108.8 to 68.6 acres.

Another area of the project that underwent revision is the section of FM 16 just west of Lindale Cemetery Road. The existing roadway alignment in this area has been the subject of considerable scrutiny due to a history of serious accidents. Improving the horizontal and vertical geometry in this area was a primary goal of the project and several potential solutions were explored. A solution was

developed to span the wetland area with a bridge to minimize environmental impacts and provide access to local residents. This design would retain a portion of the existing roadway to provide access to several properties. The original section of FM 16 would connect to the new roadway just east of Springcrest Lane and terminate at Lindale Cemetery Road. The existing driveway for three additional properties would pass under the new FM 16 alignment to provide access.

As a result of this process, the three preliminary alternatives were eliminated from further study. In lieu of the preliminary alternatives, a hybrid (“best-fit”) alternative was developed and refined. The recommended Build Alternative, described in **Section 2.2** and evaluated in this environmental assessment, reflects the best-fit alternative.

Step Three (Public Vetting of the Recommended Build Alternative)

A public meeting was held on April 28, 2016, to present the recommended Build Alternative and to solicit public comment. Approximately 148 people attended the public meeting and 27 comments were received.

5.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Table 5-1 identifies the technical reports and other documents that were prepared in conjunction with development of this environmental assessment.

Table 5-1: Documents/Technical Reports Prepared in Conjunction with the EA

Document/Technical Report	Date of Report
Air Quality Technical Report	March 2017
Archaeological Survey Report	December 2017
Biological Evaluation Form	August 2017
Community Impact Assessment Form	April 2017
Hazardous Materials Initial Site Assessment	August 2017
Report for Historical Studies Survey Report	May 2017
Traffic Noise Technical Report	September 2017
Water Resources Technical Report	September 2017
Open House #1 Summary Report	November 2015
Open House #2 Summary	July 2016

The technical reports and documents listed in **Table 5-1** are incorporated by reference in this environmental assessment. Copies of the technical reports are on file and available for review at the TxDOT-Tyler District (2709 W. Front St., Tyler, Texas).

For purposes of environmental study, project-related effects are categorized as direct, indirect and cumulative. Direct effects are defined as those impacts which are caused by the action and occur at the same time and place. Indirect effects, while being reasonably foreseeable, are also caused by the action, but occur later in time or are farther removed in distance. Encroachment-alteration effects are a type of indirect impact, removed from the proposed project in both time and distance, and defined as those impacts that alter the behavior and function of the physical environment. Other indirect effects pertain primarily to induced growth. Cumulative effects result from the incremental impacts of an action when considered together with other past, present and reasonably foreseeable future actions regardless of who takes the other actions. This section (**Section 5.0**) addresses direct, indirect (encroachment-alteration and growth induced) and cumulative effects that would result from the proposed FM 16 project.

5.1 Right-Of-Way/Displacements

Build Alternative: The Build Alternative would require the acquisition of approximately 68.6 acres of new (additional) ROW, none of which has been previously acquired through early acquisition. The additional ROW would be necessary to accommodate the additional pavement width, side slope grading, existing terrain, cross drainage structures, utilities, and to maintain property access and improve the roadway geometrics and safety. ROW acquisition would affect 114 parcels.

The additional ROW would result in the displacement of 16 single-family residences, one active business (Hubbard Creek Small Engines), and one commercial property (a vacant commercial structure consisting of a metal building with two shop/garage doors) (see **Appendix F**).

All ROW acquisition would be completed in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1979, as amended.

Encroachment-Alteration Effects of Build Alternative: ROW acquisition would be limited to those properties required for roadway construction. ROW acquisition would not be expected to change the function or behavior of the physical environment on neighboring properties or in the surrounding area; thus, encroachment-alteration effects stemming from ROW acquisition are not anticipated.

No Build Alternative: Under the No Build Alternative, no project-related ROW would be acquired; thus, no project-related displacements would occur.

5.2 Land Use

The eastern-most portion of the proposed project is located in the City of Lindale in Smith County. In the west, the project is located adjacent to the town of Hideaway and within the extra-territorial jurisdiction (ETJ) of the City of Tyler. Land use immediately adjacent to FM 16 is dominated by residential and open space with commercial development concentrated in the eastern part of the project area within the city of Lindale. Industrial parcels and public buildings and land are also found adjacent to the roadway.

Build Alternative: Given the nature of the corridor and limited undeveloped land within the city limits, it is not anticipated that the proposed improvements (Build Alternative) would alter development patterns within the city of Lindale. Land use on the acquired parcels would change from residential, open space, or commercial to transportation uses.

Encroachment-Alteration Effects of Build Alternative: FM 16 is an established highway traversing a partially developed urban area and a partially undeveloped rural area. Since the area is already projected to increase in population and is being developed mostly along an existing highway,

encroachment-alteration impacts to land use are not anticipated as a result of the FM 16 Build Alternative.

No Build Alternative: Under the No Build Alternative, the additional ROW would not be obtained and there would be no project-related land use impacts.

5.3 Farmlands

Based on a project scoping analysis, it was determined that neither the build nor the no-build alternative would have an impact on this resource category or subject matter. (NOTE: The project area is located entirely within the ETJ of the city of Tyler and the planning boundaries of the Tyler Area Metropolitan Planning Organization. As such, the project area is considered to be dedicated to urban use and exempt from the provisions of the Farmland Protection Policy Act.)

5.4 Utilities/Emergency Services

Build Alternative: The proposed project would require the adjustment or relocation of underground and/or overhead utilities. At the current phase of project development, the locations of utilities potentially requiring adjustment or relocation have not yet been identified. Impacted utilities would be identified during the final design phase. At that time, coordination with utility owners and service providers would occur and relocation/adjustment plans would be developed. Utility relocations and adjustments would be accomplished with the minimal practical disruption in service to utility customers.

The project area is served by the City of Lindale's Fire Station and Emergency Medical Services (EMS). An urgent care clinic is located within Lindale; however, the closest hospital is located in Tyler, approximately 15 miles south of the project corridor. Although project-related delays would be anticipated during construction, every reasonable effort would be made to minimize delays. Further, TxDOT would proactively communicate with emergency service providers throughout the duration of construction; thus, ensuring emergency service providers have accurate, up-to-date information concerning lane closures and construction activities that could impact response times.

Encroachment-Alteration Effects of the Build Alternative: Required utility adjustments would occur prior to or during construction of the proposed project. Efforts would be made during construction to minimize construction-related delays and to ensure emergency responders are aware of road conditions and lane closures. Given that both issues are limited to the construction phase and would be confined to the project area, encroachment-alteration effects are not applicable.

No Build Alternative: Under the No Build Alternative there would be no project-related impacts to utilities. Emergency response would continue to service the area.

5.5 Bicycle and Pedestrian Facilities

Build Alternative: Currently, there are only pedestrian facilities (sidewalks) located within the urban section of the project limits. The existing sidewalks vary in width (up to a maximum of nine feet). The proposed project would include construction of a five-foot sidewalk, on each side of the roadway, between Toll 49 (which is under construction) and Henry Street. From Henry Street east to US 69, 10 feet wide sidewalks are proposed on each side of the roadway.

Designated bike lanes do not currently exist in the project area. The proposed project would not add designated bicycle lanes; however, within the rural section of the project, 10 feet wide shoulders would be provided. These shoulders would accommodate cyclists.

Encroachment-Alteration Effects of Build Alternative: Since the project is being developed along an existing facility, the project would not alter the way people access other parts of the project area, no encroachment alteration impacts bicycle and pedestrian facilities would not occur.

No Build Alternative: Under the No Build Alternative, there would be no FM 16 project-related impacts and improvements to bicycle/pedestrian facilities would not occur. The community would continue to have variable sidewalk widths within the urban section of Lindale and three-foot shoulders within the rural section of the project area.

5.6 Community Impacts

The proposed project passes through rural, unincorporated Smith County and the City of Lindale, a small East Texas community of over 5,000 people located in the northern portion of the county. The city is situated near the intersection of I-20 and US 69, approximately 10 miles north of Tyler. Approximately 20 community facilities are located within the project corridor and consist of one public library, four education facilities, two sports facilities, an emergency medical services and fire department, five places of worship, a veterinarian clinic, one child care facility, a food pantry, a church run thrift store, a medical service clinic, a performing arts facility, and a Meals on Wheels social service facility. Socioeconomic and demographic information about the affected communities is found in the Community Impact Assessment Technical Report.

Build Alternative: The proposed project would widen the existing roadway, add a continuous left turn lane, and realign the roadway in some locations. The proposed project would make it easier and safer to access other parts of the community, because adding a second lane in each direction and a continuous left turn lane would make turning movements safer. These changes would not have an adverse impact on community cohesion, as it would not alter the way people access other parts of the community, interact with others within the community, or use local services and facilities.

Although the proposed project would result in the displacement of 16 single-family homes, one business, and one vacant commercial property, adverse impacts to the community as a whole are not anticipated. The residential displacements would not create a separation between housing areas, and the commercial displacement would not affect a large number of employees. The displaced business is a small engine repair shop (Hubbard Creek Small Engines). There are at least two other small engine repair shops in Lindale; thus, should the displaced business choose not to relocate, loss of the business would not result in a void in services within the community. Although low-cost comparable housing is limited in the project area, state and federal regulations would be followed and would ensure that no one will be displaced until decent, safe, and sanitary housing is available within the financial means of the displaced household.

Encroachment-Alteration Effects of Build Alternative: Since the project is being developed along an existing facility, the project would not alter the way people access other parts of the community, interact with others within the community, or use local services and facilities. No encroachment alteration impacts to community resources or community cohesion would occur.

No Build Alternative: Under the No Build Alternative, there would be no FM 16 project-related impacts to communities and the displacements would not occur. The community would continue to have increased traffic which, in turn, would result in congestion and reduced safety in the project area.

5.6.1 Environmental Justice

Four Census blocks in the study area have a minority population of 50 percent or greater and are, therefore, considered environmental justice (EJ) populations. All four of these blocks are on the east end of the study area, near the City of Lindale. One EJ block is located in Block Group (BG) 3 of Census Tract (CT) 14.03 (Block 3019). The other three EJ blocks are located in BG 1 of CT 14.04 (Blocks 1053, 1063, 1070). The most notable EJ population from a population perspective is in Block 3019, which has a total population of 15. This block has a minority population of 9, which amounts to 60 percent of the block's total population. The total populations of the other three EJ blocks are 2 (50 percent minority), 3 (100 percent minority), and 5 (80 percent minority) people. No Census blocks have a median income below the Department of Health and Human Services poverty level. Potential direct impacts to the EJ populations were analyzed to ensure these groups would not be adversely or disproportionately affected by the Build Alternative.

Build Alternative: The project would not have adverse impacts to EJ populations. None of the 18 total displacements would occur in predominately minority and/or low-income areas. All EJ areas occur east of Stevenson Branch and all displacements occur west of Stevenson Branch. The proposed roadway improvements would benefit the community as a whole, including EJ populations.

Encroachment-Alteration Effects of Build Alternative: The Build Alternative would not alter access to/from the EJ areas and no changes in travel pattern are anticipated. For these reasons, the Build Alternative would not result in adverse encroachment-alteration effects on EJ populations.

No Build Alternative: No FM 16 project-related impacts to minority or low-income populations would occur under the No Build Alternative as the proposed project would not be constructed.

5.6.2 Limited English Proficiency

Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency," requires federal agencies to examine the services they provide, identify any need for services to those with Limited English Proficiency (LEP), and develop and implement a system to provide those services so that LEP persons can have meaningful access to them.

LEP persons were given the opportunity for meaningful involvement in the NEPA process and will continue to be afforded such going forward. Newspaper notices were in English but included a statement and contact information to request assistance to participate in the public meetings. Postcards that were sent out to residents within a half-mile of the project included a notation in Spanish with a contact person for communication in Spanish. Public meeting summaries and related materials are available through the TxDOT Tyler District office. Two public open-house meetings have been held to date for the project (September 15, 2015, and April 28, 2016). Written public comments were solicited at both public meetings and were also accepted for at least 10 calendar days after the meeting via mail or e-mail. The comment period deadline for the first meeting was extended from September 25 to October 1, 2015. For both public meetings, legal notices were published in two newspapers, postcards were sent to residents within a half-mile of the project, and letters were sent to local officials. Copies of the public notices are available through the TxDOT Tyler District office.

5.7 Visual/Aesthetic Impacts

FM 16 is an existing, well established roadway. The western portion of the project area is rural in nature. The eastern portion is within the city of Lindale and is more urban in nature. With little exception, vegetation in the ROW consists of maintained grass with little tree cover. Trees are numerous outside of the ROW. The highway is a dominant visual feature in the project area.

Build Alternative: The proposed project would generally follow the existing alignment of FM 16. The primary changes to the visual environment in the project corridor consist of widening of the roadway to accommodate the continuous turn lane and the addition of two travel lanes within the urban portion of the project. Since the proposed project would be along an existing roadway corridor, the visual and aesthetic impacts would be negligible.

Encroachment-Alteration Effects of the Build Alternative: The proposed project entails improvements/modifications to an existing visual element (FM 16) rather than introducing a new visual element into the environment; thus, visual encroachment-alteration effects are not anticipated.

No Build Alternative: The No Build Alternative would not result in FM 16 project-related visual impacts along the corridor as the proposed improvements would not be constructed.

5.8 Cultural Resources

5.8.1 Archeology

An intensive pedestrian archaeological survey was conducted by SWCA Environmental Consultants (SWCA) in February 2017. Archaeological investigations were performed to comply with the Antiquities Code of Texas, due to the involvement of public lands controlled by TxDOT, a political subdivision of the State of Texas. Additionally, the project may receive funding from the Federal Highway Administration or require a federal permit from the U.S. Army Corps of Engineers and, as such, is subject to Section 106 of the National Historic Preservation Act.

The goal of the archeological survey was to identify cultural (archeological) resources within the proposed project area, establish vertical and horizontal site boundaries as appropriate, and evaluate the significance and eligibility of all discovered cultural resources for the National Register of Historic Places (NRHP) or for designation as a State Antiquities Landmark (SAL). Investigations resulted in the discovery of two archaeological sites (41SM483 and 41SM484) consisting of an early- to mid-twentieth-century single crib barn (41SM483) and a low-density scatter of non-diagnostic prehistoric lithic artifacts (41SM484). Investigations also discovered one isolated find – a single presumably Early Caddo (ca. A.D. 900–1200) ceramic sherd. After evaluation, 41SM483 was recommended as not eligible for the NRHP or for designation as SAL.

The surveyor recommended that prior to construction, further archeological investigations be undertaken for site 41SM484 and the area in the vicinity of the insolated pot sherd (site IF1). In addition, a survey would be conducted on (three) parcels for which right-of-entry was denied by the property owners.

Survey results and recommendations were coordinated with the Texas Historical Commission (THC). Required Section 106 Consultation for archaeological resources and Texas Antiquities Code Consultation was completed on November 9, 2017 (see **Appendix G**). Tribal coordination was initiated on August 7, 2017.

Build Alternative: The proposed project (Build Alternative) would not result in direct impacts to site 41SM483. Additional surveys and research are needed when right-of-entry (ROE) is obtained to make determinations on site 41SM484 and the isolated pot sherd (site IF1). After the additional

surveys are conducted, coordination with THC would occur and final approval of the proposed project would be obtained.

Once the project is under construction, in the unlikely event that cultural resources are discovered, TxDOT would immediately initiate cultural resource discovery procedures. All work in the vicinity of the discovery would cease until a specialist from TxDOT and/or the THC could arrive on site and assess the discovery's significance and the need, if any, for additional investigation.

Encroachment-Alteration Effects of the Build Alternative: Potential impacts to archaeological resources would be limited to the construction phase of the project and confined to the existing and proposed ROW. No encroachment-alteration effects are anticipated.

No Build Alternative: As construction of the proposed FM 16 project would not occur, there would be no project-related impacts on archaeological resources associated with the No Build Alternative.

5.8.2 Historic Properties

In compliance with the Programmatic Agreement for Transportation Undertakings, as executed among Federal Highway Administration (FHWA), TxDOT, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation, an historic resource survey was conducted for the proposed FM 16 project (TxDOT, 2017d).

The results of the historic resources survey have been coordinated with THC. In compliance with the Section 106 Programmatic Agreement, TxDOT historians determined project activities will have no adverse effect to historic properties. The State Historic Preservation Officer concurred with TxDOT's findings of eligibility and effects on September 7, 2017 and on January 22, 2018. Copies of the coordination letters between TxDOT and THC are included in **Appendix G**.

Encroachment-Alteration Effects of the Build Alternative: There would be no direct impacts to historic resources. Therefore, there would be no indirect (encroachment-alternative) effects to the resource as a result of the proposed project.

As indicated above, the proposed project (Build Alternative) would have no effect on historic resources.

No Build Alternative: Because the proposed FM 16 improvements would not be constructed, the No Build alternative would not result in project-related impacts to historic resources.

5.9 DOT Act Section 4(f), Land and Water Conservation Fund Act Section 6(f), and Parks and Wildlife Code Chapter 26

The proposed project would not require the use of, nor substantially impair the purposes of, any publicly owned land from a public park, recreational area, wildlife and waterfowl refuge lands, or

historic sites of national, state, or local significance; therefore, a Section 4(f) Evaluation is not required.

Section 6(f) of the Land and Water Conservation Fund Act requires that recreational facilities receiving U.S. Department of Interior funding from the Land and Water Conservation Fund Act as allocated by the Texas Parks and Wildlife Department (TPWD) may not be converted to non-recreational uses unless approval is received from TPWD and the National Park Service. There are no Section 6(f) resources in the proposed project area.

Chapter 26 of the Texas Parks and Wildlife Code includes provisions similar to the federal Section 4(f) regulation, including requiring a finding that there is no feasible and prudent alternative to the use or taking of the protected land, that the project includes all reasonable planning to minimize harm and that a public hearing be held prior to the approval of the use of land from these publicly-owned park properties. There are no Chapter 26 resources in the proposed project area.

5.10 Water Resources

Water resources occurring in the project area were researched by desktop review of web resources from the United States Geological Survey (USGS) National Hydrography Dataset (NHD) and 7.5-minute topographic data for the Lindale quadrangle, Texas Commission on Environmental Quality (TCEQ), Texas Water Development Board (TWDB), Federal Emergency Management Agency (FEMA), United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping, Texas State Soil and Water Conservation Board (TSSWCB), and aerial photography. Desktop mapping of water resources was performed using Geographic Information System mapping, utilizing spatial data obtained from USGS, FEMA, TSSWCB, and USFWS.

5.10.1 Clean Water Act Section 404

As detailed in the Water Resources Technical Report, a total of 14 surface water features are found in the project area (see **Appendix F**). They include nine jurisdictional waters of the United States (U.S.) (Luckeible Branch, a tributary to Luckeible Branch, Hubbard Branch, a tributary to Hubbard Branch, Stevenson Branch with an impoundment, and four tributaries to Stevenson Branch), two wetland sites (both of which are potentially jurisdictional), and three drainage sites (all of which are likely non-jurisdictional).

Build Alternative: **Table 5-2** identifies the 11 jurisdictional features and anticipated impacts at each. As indicated in **Table 5-2**, this project would result in less than 0.16 acres (460 linear feet) of permanent and less than 0.07 acres (290 linear feet) of temporary impacts to waters of the US, therefore at least one of the Best Management Practices (BMPs) from each category listed in the TCEQ Section 401 Water Quality Certification Conditions would be used (see **Section 5.10.2**).

Impacts to wetlands would be mitigated per U.S. Army Corps of Engineers (USACE) requirements. Mitigation replacement rates are typically higher than the actual impacts, so more wetlands would be created or credits purchased than what the proposed project would directly impact.

Encroachment-Alteration Effects of the Build Alternative: The potential for project-related encroachment-alteration effects on wetlands and waters of the U.S. would be mitigated through permanent (post-construction) BMPs as described above and mitigation through replacement of lost wetlands. Wetlands and waters of the U.S. could receive an increased amount of sediment if storm water were released from the project area despite the use of BMPs. To minimize the potential for adverse impacts, BMPs would be regularly inspected and proactively maintained.

No Build Alternative: Because the proposed FM 16 improvements would not be constructed, the No Build alternative would not result in project-related impacts to wetlands and waters of the U.S.

Table 5-2 Project Surface Waters

Feature ID	Feature Name	Delineated Area (Acres)	Proposed Work or Structure	Permanent Fill		Temporary Impacts		Anticipated Permit	Jurisdictional
				Open Waters	Wetlands or other special aquatic sites	Open Waters	Wetlands or other special aquatic sites		
1	Drainage	<0.01	None	--	--	--	--	None	No
2	Drainage	<0.01	None	--	--	--	--	None	No
3	Unnamed tributary to Luckeible Branch	0.01	None	--	--	--	--	None	Yes
4	Luckeible Branch	0.17	Bridge replacement	<0.1 ac, <400 ft	--	<0.01 ac, <20 ft	--	NWP+ 14, no PCN*	Yes
5*	Potential Wetland	0.21	Bridge and embankment	--	<0.1 ac, <400 ft	--	TBD	NWP 14, PCN	Yes
6	Hubbard Branch	0.08	Bridge replacement	<0.01 ac, <125 ft	--	<0.01 ac, <20 ft	--	NWP 14, no PCN	Yes
7	Unmapped tributary to Hubbard Branch	0.02	None	--	--	--	--	NWP 14, no PCN	Yes
8	Unmapped tributary to Stevenson Branch	0.01	Roadway realignment	<0.01 ac, <80 ft	--	<0.01 ac, <20 ft	--	NWP 14, no PCN	Yes
9	Instream wetland within Stevenson Branch	0.05	None	--	--	--	--	None	Yes
10	Stevenson Branch with impoundment	0.36	Bridge construction and roadway realignment	<0.01 ac, <72 ft	--	<0.01 ac, <150 ft	--	NWP 14, no PCN	Yes
11	Unmapped tributary to Stevenson Branch	0.01	Bridge construction and roadway realignment	<0.01 ac, <10 ft	--	<0.01 ac, <40 ft	--	NWP 14, no PCN	Yes
12	Unmapped tributary to Stevenson Branch	0.01	Roadway realignment	<0.01 ac, <21 ft	--	<0.01 ac, <20 ft	--	NWP 14, no PCN	Yes
13	Drainage	0.01	None	--	--	--	--	None	No
14	Unnamed tributary to Stevenson Branch	0.08	Roadway realignment and culvert placement	<0.01 ac, <22 ft	--	<0.01 ac, <20 ft	--	NWP 14, no PCN	Yes
TOTALS		1.04	--	<0.16 ac, 430 ft	<0.1 ac, <400 ft	<0.07 ac, <290 ft	TBD		--

*NWP – Nationwide Permit

*PCN – Pre-construction Notification

5.10.2 Clean Water Act Section 401

Build Alternative: This project would result in permanent and temporary impacts to waters of the US, therefore at least one of the BMPs from each category listed in the TCEQ Section 401 Water Quality Certification Conditions would be used. For this project, erosion control BMPs would consist of temporary seeding, mulching, blankets, and maintaining natural vegetation; sediment control BMPs would consist of sandbag berms, silt fences, rock berms, stabilized construction exits, sediment traps, and sediment basins; and post-construction total suspended solid control BMPs would consist of vegetative filter strips.

Encroachment-Alteration Effects of the Build Alternative: The potential for project-related encroachment-alteration effects on water quality would be mitigated through temporary and permanent (post-construction) BMPs as described above. Water resources could receive an increased amount of sediment if storm water were released from the project area despite the use of BMPs. To minimize the potential for adverse impacts, BMPs would be regularly inspected and proactively maintained during construction and until the vegetated filter strips are established.

No Build Alternative: Because the proposed FM 16 improvements would not be constructed, the No Build alternative would not result in project-related impacts to water quality.

5.10.3 Executive Order 11990 Wetlands

The purpose of Executive Order (EO) 11990 is to “minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.” The EO requires federal agencies to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided. The proposed project would comply with EO 11990.

Build Alternative: Three potential wetlands were identified within the project area. One of the potential wetlands (Feature 10) did not meet all three wetland criteria and, therefore, would not be considered a wetland per USACE guidelines. One feature (Feature 9) met all three wetland criteria and would be considered a wetland. The third potential wetland (Feature 5) was not delineated due to lack of ROE. Once ROE has been obtained (or the ROW is acquired), delineation of Feature 5 would be performed.

Impacts to wetlands would be mitigated per USACE requirements. Mitigation replacement rates are typically higher than the actual impacts, so more wetlands would be created or credits purchased than what the proposed project would directly impact.

Encroachment-Alteration Effects of the Build Alternative: The potential for project-related encroachment-alteration effects on wetlands would be mitigated through permanent (post-construction) BMPs as described above and mitigation through replacement of lost wetlands.

Wetlands could receive an increased amount of sediment if storm water were released from the project area despite the use of BMPs. To minimize the potential for adverse impacts, BMPs would be regularly inspected and proactively maintained.

No Build Alternative: Because the proposed FM 16 improvements would not be constructed, the No Build alternative would not result in project-related impacts to wetlands.

5.10.4 Rivers and Harbors Act

Based on a project scoping analysis, it was determined that neither the build nor the no-build alternative would have an impact on this resource category or subject matter.

5.10.5 Clean Water Act Section 303(d)

The State of Texas is required, under Sections 305(b) and 303(d) of the federal Clean Water Act, to prepare biennial statewide water quality assessments that identify the status of use attainment for water bodies and to identify water bodies for which effluent limitations are not stringent enough to implement water quality standards. Based on the assessments, the areas of potential effect are accounted for on the 303(d) list. According to the provisions of the TxDOT-TCEQ Memorandum of Understanding (MOU), coordination with TCEQ is required for environmental review documents if all or part of the project drains to an impaired assessment unit that is within five miles of the project and in the same watershed as the project. There are no impaired waters according to the most current 303(d) list, dated 2014. Therefore, no analysis is necessary for this resource.

Build Alternative: Based on a review of the TCEQ 2014 Section 303(d) list, runoff from this project would not discharge directly into an impaired waterbody or into a waterbody that is within five miles upstream of an impaired waterbody

Encroachment-Alteration Effects of the Build Alternative: There are no surface water segments within five miles downstream of the project area; therefore, there would be no encroachment-alteration effect that would result from the build alternative.

No Build Alternative: Because the proposed FM 16 improvements would not be constructed, the No Build Alternative would not result in project-related impacts to impaired waterways

5.10.6 Clean Water Act Section 402

Build Alternative: This project would include five or more acres of earth disturbance. TxDOT would comply with TCEQ's Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit (CGP). A Storm Water Pollution Prevention Plan (SW3P) would be implemented, and a construction site notice would be posted at the construction site. A Notice of Intent (NOI) and a Notice of Termination (NOT) would be required. This project is not located within the boundaries of

a regulated Municipal Separate Storm Sewer System (MS4). Compliance with applicable MS4 regulations would not be required.

Encroachment-Alteration Effects of the Build Alternative: The potential for project-related encroachment-alteration effects on water resources would be mitigated through temporary and permanent (post-construction) BMPs as described above. To minimize the potential for adverse impacts, BMPs would be regularly inspected and proactively maintained.

No Build Alternative: Because the proposed FM 16 improvements would not be constructed, the No Build alternative would not result in project-related impacts to water resources.

5.10.7 Floodplains

Build Alternative: As detailed in the Water Resources Technical Report portions of the proposed project are located within a FEMA designated 100-year floodplain. The hydraulic design for this project would be in accordance with current FHWA and TxDOT design policies. The facility would permit the conveyance of the 100-year flood, inundation of the roadway being acceptable, without causing damage to the facility, stream, or other property. The proposed project would not increase the base flood elevation to a level that would violate applicable floodplain regulations and ordinances. Coordination with the local Floodplain Administrator would be required.

Since the proposed project crosses floodplains, the following is provided:

- 1) Avoiding and minimizing floodplain crossings were considered during design of the Build Alternative. The proposed project must be located in floodplains because in order to avoid floodplains, a significant realignment of FM 16 would be required, resulting in much higher ROW and project costs, as well as residential and commercial displacements. Additionally, no longitudinal encroachments on the floodplain would occur.
- 2) The only alternative considered during the course of project development that would avoid encroachments on floodplains was the No Build Alternative, which does not satisfy the purpose and need for the proposed project.
- 3) The proposed project would conform to state and local floodplain protection standards.

Encroachment-Alteration Effects of the Build Alternative: The potential for project-related encroachment-alteration effects on floodplains would be mitigated through temporary (construction phase) and permanent (post-construction) BMPs. Floodplains could receive an increased amount of sediment if storm water were released from the project area despite the use of BMPs. Build-up of sediment, in turn, could reduce the water storage capacity of the floodplain. To minimize the potential for adverse impacts, erosion and sedimentation BMPs would be effectively installed, regularly inspected and proactively maintained.

No Build Alternative: Because the proposed FM 16 improvements would not be constructed, the No Build alternative would not result in project-related impacts to floodplains.

5.10.8 Wild and Scenic Rivers

Based on a project scoping analysis, it was determined that neither the build nor the no-build alternative would have an impact on this resource category or subject matter. (NOTE: No designated Wild and Scenic Rivers are located within project area.)

5.10.9 Coastal Barrier Resources

Based on a project scoping analysis, it was determined that neither the build nor the no-build alternative would have an impact on this resource category or subject matter. (NOTE: Project area is not located in a coastal area.)

5.10.10 Coastal Zone Management

Based on a project scoping analysis, it was determined that neither the build nor the no-build alternative would have an impact on this resource category or subject matter. (NOTE: Project area is not located in a coastal area.)

5.10.11 Edwards Aquifer

Based on a project scoping analysis, it was determined that neither the build nor the no-build alternative would have an impact on this resource category or subject matter. (NOTE: Project area is not located within boundaries of any Edwards Aquifer zone.)

5.10.12 International Boundary and Water Commission

Based on a project scoping analysis, it was determined that neither the build nor the no-build alternative would have an impact on this resource category or subject matter. (NOTE: Project area is not located along the international boundary with Mexico.)

5.10.13 Drinking Water Systems

Build Alternative: The City of Lindale provides water service to the areas within the urban section of the project. The Texas Water Development Board (TWDB) does not identify any water wells within the project area. The project would not impact water services or drinking water systems. Utilities conflicts would be coordinated with the city department and resolved prior to construction commencing.

Encroachment-Alteration Effects of the Build Alternative: The potential for project-related encroachment-alteration effects on drinking water systems would not occur since there are no

water wells within the project area and no impacts to the city water system would result from the proposed project.

No Build Alternative: Because the proposed FM 16 improvements would not be constructed, the No Build alternative would not result in project-related impacts to the drinking water systems.

5.11 Biological Resources

5.11.1 Texas Parks and Wildlife Coordination

Early coordination with TPWD has been completed for the project. The coordination letters are included in **Appendix G**.

5.11.2 Impacts to Vegetation

The Biological Evaluation Form, prepared for this proposed project, describes nine different vegetation communities that were mapped within the project area. These are shown below on **Table 5-3**.

Table 5-3: Project Area Vegetation

Ecoregion	MOU Vegetation Type	Common Name	EMST* Mapped Acreage	MOU Acreage	Field Verified Acreage
South Central Plains	Agriculture	Pine Plantation > 3 meters tall	0.04	0.04	0.04
	Disturbed Prairie	Pineywoods: Disturbance or Tame Grassland	28.17	28.17	10.98
	Riparian	Pineywoods: Small Stream and Riparian Temporarily Flooded Hardwood Forest	13.09	16.82	13.12
		Pineywoods: Small Stream and Riparian Wet Prairie	3.73		
	Mixed Woodlands and Forest	Pineywoods: Northern Mesic Hardwood Forest	3.87	47.99	34.77
		Pineywoods: Pine Forest or Plantation	3.43		
		Pineywoods: Upland Hardwood Forest	40.69		
	Urban	Urban High Intensity	6.54	15.69	49.80
		Urban Low Intensity	9.15		
	Total			108.71	1018.71

*EMST – Ecological Mapping Systems of Texas

Additionally, unusual vegetation features or special habitat features occurring within the proposed project area (existing and proposed ROW) were identified and described during field investigations in accordance with the 2013 TxDOT-Texas Parks and Wildlife (TPWD) MOU. Unusual vegetation features identified during field investigations include unmaintained vegetation, fencerow vegetation

and riparian vegetation. Special habitat features identified during field investigations include water bodies. These features are described in more detail in the Biological Evaluation Form.

As detailed in §2.206 of the 2013 MOU, coordination with the TPWD is required for projects based on certain triggers, including the disturbance of habitat in an area equal to or greater than the area of disturbance indicated in the Threshold Table Programmatic Agreement. Vegetation within the proposed project falls into five MOU vegetation types: Agriculture; Disturbed Prairie; Riparian; Mixed Woodlands and Forest; and Urban. The Threshold Table Programmatic Agreement sets a disturbance threshold of 10.0 acres for Agriculture; 3.0 acres for Disturbed Prairie; 0.1 acre for Riparian; and 3.0 acres for Mixed Woodlands and Forest. No thresholds have been established for Urban vegetation.

Build Alternative: Vegetation impacts quantified in **Table 5-3** show that the proposed project would exceed the threshold for four MOU vegetation types: Disturbed Prairie, Riparian, and Mixed Woodlands and Forest. Confirmed through email, TxDOT initiated Early Coordination with TPWD in May 2017 in accordance with provisions of the 2013 MOU. Coordination was completed on October 2, 2017. Copies of the coordination letters are included in **Appendix G**.

Impacts to vegetation would be avoided or minimized by limiting disturbance to only that which is necessary to construct the proposed project. The removal of native vegetation, particularly mature native trees and shrubs, would be avoided to the greatest extent practicable. A native and locally-adapted seed mix would be used in the landscaping and re-vegetation of disturbed areas.

Encroachment-Alteration Effects of the Build Alternative: Potential impacts to vegetation would be confined to the existing and proposed ROW; thus, encroachment-alteration effects would not occur.

No Build Alternative: If the No Build Alternative were implemented, the proposed project would not be constructed. No effects to vegetation related to the construction of the FM 16 improvements would occur. Existing land use and activities, including routine mowing, would continue to periodically affect vegetation communities.

5.11.3 Executive Order 13112 on Invasive Species

Build Alternative: In compliance with EO 13112, a native and locally-adapted seed mix would be used in the landscaping and re-vegetation of disturbed areas.

Encroachment-Alteration Effects of the Build Alternative: Potential impacts to vegetation would be confined to the existing and proposed ROW; thus, encroachment-alteration effects would not occur.

No Build Alternative: If the No Build Alternative were implemented, the proposed project would not be constructed; thus, the provisions of EO 13112 would not be triggered.

5.11.4 Executive Memorandum on Environmentally and Economically Beneficial Landscaping

Build Alternative: With the exception of reseeded areas, landscaping is not currently planned for the proposed project. A native and locally-adapted seed mix would be used.

Encroachment-Alteration Effects of the Build Alternative: Potential impacts to vegetation would be confined to the existing and proposed ROW; thus, encroachment-alteration effects would not occur.

No Build Alternative: If the No Build Alternative were implemented, the proposed project would not be constructed; thus, the provisions of the EO would not be triggered.

5.11.5 Impacts to Wildlife

Within the urban area of Lindale, native vegetation/natural habitat is minimal and wildlife is limited to those species adapted to an urban environment. Within the rural area (west of Lindale), native vegetation/natural habitat is present and consists generally of riparian areas, and pineywoods forest which is desirable habitat for a variety of wildlife.

Build Alternative: The proposed project would result in vegetation clearing along the existing and proposed ROW. This clearing activity would remove habitat for wildlife. Adjacent areas are similar in vegetative composition and are in close proximity to the construction limits which allow wildlife to relocate to nearby parcels. Revegetation would occur within the disturbed areas and clearing of trees and shrubs would be avoided to the extent possible.

Encroachment-Alteration Effects of the Build Alternative: FM 16 is an established highway traversing a partially urban area and partially rural. Wildlife in the urban project-area is typical of wildlife adapted to an urban environment while wildlife within the rural project-area can relocate to adjacent parcels composed of similar vegetation. Any land clearance that would occur would not permanently alter wildlife habitat since there is similar habitat in close proximity that would suffice as relocation habitat. For these reasons, encroachment-alteration effects would not be expected to occur.

No Build Alternative: Under the No-Build Alternative, the proposed FM 16 improvements would not be constructed; thus, there would be no project-related impacts to wildlife.

5.11.6 Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 and the Fish and Wildlife Coordination Act serve to regulate impacts to wildlife. Specifically, the Migratory Bird Treaty Act makes it unlawful to kill, capture, collect, possess, buy, sell, trade or transport any migratory bird, nest or egg in part or in whole, without a federal permit issued in accordance with the Act's policies and regulations. Migratory bird nests were not observed during the June and July 2016 field investigations.

Build Alternative: Migratory birds may arrive in the project area to breed during construction of the proposed project. Appropriate measures would be taken to avoid adverse impacts on migratory birds; thus, migratory birds protected under the Migratory Bird Treaty Act would not be impacted by the Build Alternative.

Encroachment-Alteration Effects of the Build Alternative: If vegetation clearing occurs during breeding season, surveys will be conducted in order to avoid impacts to migratory birds. Adjacent areas would go unharmed and would allow for future habitat for migratory birds. For these reasons, encroachment-alteration effects would not be expected to occur.

No Build Alternative: Under the No-Build Alternative, the proposed FM 16 improvements would not be constructed; thus, there would be no project-related impacts to migratory birds.

5.11.7 Fish and Wildlife Coordination Act

Based on a project scoping analysis, it was determined that neither the build nor the no-build alternative would have an impact on this resource category or subject matter. (NOTE: The proposed project does not involve impounding, diverting, or deepening a stream channel or other water body.)

5.11.8 Bald and Golden Eagle Protection Act

Build Alternative: The project area does not contain potential habitat for Bald or Golden Eagles; therefore, no impacts to these species would occur.

Encroachment-Alteration Effects of the Build Alternative: Because no impacts would occur to these species as a result of the construction and operation of the proposed facility, encroachment-alteration effects would not be expected to occur.

No Build Alternative: Under the No-Build Alternative, the proposed FM 16 improvements would not be constructed; thus, there would be no project-related impacts to Bald or Golden Eagles.

5.11.9 Magnuson-Stevens Fishery Conservation Management Act

Based on a project scoping analysis, it was determined that neither the build nor the no-build alternative would have an impact on this resource category or subject matter. (NOTE: Project is not located in a coastal area.)

5.11.10 Marine Mammal Protection Act

Based on a project scoping analysis, it was determined that neither the build nor the no-build alternative would have an impact on this resource category or subject matter. (NOTE: Project is not located in a coastal area.)

5.11.11 Threatened, Endangered, and Candidate Species

Federally-Listed Species

As detailed in the Biological Resources Evaluation Form, desktop analysis and field investigations conducted in June and July 2016 indicate that potential habitat for federally listed threatened, endangered, or candidate species does not occur in the project area (existing and proposed ROW).

Build Alternative: Since there is no suitable habitat for any federally listed threatened or endangered species within the project area, there would be no impacts to any listed species.

Encroachment-Alteration Effects of the Build Alternative: No impacts to threatened or endangered species habitat would occur as a result of the project; therefore, there would be no encroachment-alteration effects are anticipated.

No Build Alternative: Under the No Build Alternative, the proposed FM 16 project would not occur; therefore, there would be no project-related effects on any federally-listed threatened, endangered, or candidate species.

State-Listed Species

Desktop analysis and field investigations conducted in June and July 2016, indicate that suitable habitat for four threatened species could existing within the project area. The species consist of: Bachman's sparrow (*Aimophila aestivalis*), creek chubsucker (*Erimyzon oblongus*), Texas heelsplitter (*Potamilus amphichaenus*), and timber rattlesnake (*Crotalus horridus*).

Build Alternative: Four state-listed species may be impacted by the proposed project since suitable habitat for these species occurs within the project area. BMPs outlined in the Tier I Form consist of advising contractors to not disturb, destroy, or remove active nests, including ground nesting birds, during the nesting season, and to avoid removing unoccupied/inactive nests, as practicable, and to prevent the establishment of active nests during the nesting season on TxDOT owned and operated facilities and structures proposed for replacement or repair, and to not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit for the Bachman's sparrow. For the Timber rattlesnake, contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered. Prior to initiation of construction in waters where appropriate habitat exists for the Texas heelsplitter, surveys for this state listed species would be conducted. If the protected mussels are discovered during the surveys, the individual specimens would be relocated and appropriate water quality BMPs would be implemented. Lastly, for the creek chubsucker, coordination with TPWD was completed.

Encroachment-Alteration Effects of the Build Alternative: With implementation of BMPs, impacts to the species can be avoided; therefore, there would be no encroachment-alteration effects.

No Build Alternative: Under the No Build Alternative, the proposed FM 16 project would not occur; therefore, there would be no project-related impacts on any state-listed threatened or endangered species.

Species of Greatest Conservation Need

Those species included on TPWD's county list, but which have no federal or state regulatory status are classified as species of greatest conservation need (SGCN). Potentially suitable habitat for five SGCN exists within the proposed project area: Henslow's Sparrow (*Ammodramus henslowii*), ironcolor shiner (*Notropis chalybaeus*), orangebelly darter (*Etheostoma radiosum*), plains spotted skunk (*Spilogale putorius interrupta*), and southeastern myotis bat (*Myotis austroriparius*). Initial review indicated that the project area also contained potential habitat for panicked indigobush (*Amorpha paniculata*), rough-stem aster (*Symphotrichum puniceus var scabricaule*), goldenwave tickseed (*Coreopsis intermedia*), Soxman's milkvetch (*Astragalus soxmaniorum*), cypress knee sedge (*Carex decomposita*), and Texas trillium (*Trillium texanum*). Based on the review of range and habitat requirements for the SGCN plant species listed and surveys performed since the impact table was compiled, TxDOT found the project area is not within range nor suitable habitat for the other listed species.

Build Alternative: Native animals or plants designated as a SGCN are generally those that are declining or rare and in need of attention to recover or to prevent the need to list under state or federal regulation. Lists of SGCN were developed through expert consultation and public feedback. Ranks are based on multiple criteria including range extent, known occurrences, abundance, and threats. It should be noted that none of these species is currently afforded regulatory protection.

In accordance with the BMP Programmatic Agreement between TxDOT and TPWD, BMPs have been identified and will be implemented to mitigate impacts to these species. The BMPs are further discussion in **Section 8.0**. Copies of the TPWD coordination documents are included in **Appendix G**.

Encroachment-Alteration Effects of the Build Alternative: With implementation of BMPs and water surveys to determine presence of species, impacts to the species can be avoided; therefore, there would be no encroachment-alteration effects.

No Build Alternative: Under the No-Build Alternative, the proposed FM 16 project would not occur; therefore, there would be no project-related impacts on SGCN.

5.12 Air Quality

The project is located in Smith County, which is designated in attainment or unclassifiable for all National Ambient Air Quality Standards; therefore, the transportation conformity rules do not apply.

The project is not located within a carbon monoxide (CO) or particulate matter (PM) nonattainment or maintenance area; therefore, a project level hot-spot analysis is not required.

Build Alternative:

A qualitative mobile source air toxics (MSAT) assessment has been conducted relative to the Build and No Build Alternatives. As documented in the technical report, all project alternatives may result in increased exposure to MSAT emissions in certain locations although the concentrations and duration of exposure are uncertain. Because of this uncertainty, the health effects from these emissions cannot be estimated.

For the rural section of the project, traffic data for the design year is 1,900 vehicles per day. For the urban section of the project, traffic data for the design year is 8,000 vehicles per day. A prior TxDOT modeling study and previous analyses of similar projects demonstrated that it is unlikely that the CO standard would ever be exceeded as a result of any project with an average annual daily traffic (AADT) below 140,000 vehicles per day. The AADT projections for the project do not exceed 140,000 vehicles per day; therefore a traffic air quality analysis was not required. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region- wide MSAT levels to be significantly lower than today.

Encroachment-Alteration Effects of the Build Alternative: Present and future vehicle miles travelled and the associated MSAT emissions resulting from the proposed project are considered a direct effect and were considered in the air quality analyses discussed above. Additional impacts, in the form of encroachment-alteration effects, would not occur.

No Build Alternative: The No Build Alternative would result in gradually increasing vehicle miles travelled as traffic volumes increase and traffic congestion worsens within the existing roadway system over time. Actual and predicted trends in both criteria pollutant and MSAT emissions would be expected to continue in the future, regardless of the alternative chosen.

5.13 Hazardous Materials

In August 2017, a Hazardous Materials Initial Site Assessment (ISA) was completed to summarize potential hazardous materials within and adjacent to the project corridor. The ISA included a site reconnaissance and environmental regulatory database search for the proposed ROW. The ISA was completed to identify sites or facilities that might pose a potential for hazardous materials impacts to the proposed project.

Build Alternative: An evaluation of the sites identified in the environmental regulatory databases was completed. Three municipal solid waste landfill sites and one closed and abandoned landfill site are found within 0.5 mile of the project area. Additionally, Hubbard Creek Small Engines, a business located on the north side of FM 16 between Hubbard Branch and Luckeible Branch

appears to also serve as an automobile salvage yard and may store automobile batteries. Soil testing of soil may be necessary if staining of the soil is observed. The proposed project includes the demolition of buildings and bridge structures. Asbestos containing materials may be present in the structures. Asbestos inspections, notification, and removal, as applicable, would be addressed prior to demolition in accordance with regulatory requirements.

Encroachment-Alteration Effects of the Build Alternative: Potential impacts to hazardous material sites would be limited to the construction phase of the project (when ground disturbing activities and/or demolition of existing structures would occur) and confined to the existing and proposed ROW; thus, encroachment-alteration effects on hazardous materials would not occur.

No Build Alternative: As construction of the proposed FM 16 improvements would not occur, there would be no project-related hazardous material impacts associated with the No Build Alternative.

5.14 Traffic Noise

A traffic noise analysis was conducted for the proposed project in accordance with TxDOT's (FHWA approved) 2011 Guidelines for Analysis and Abatement of Highway Traffic Noise.

Build Alternative: The traffic noise analysis determined that there would be no traffic noise impacts along the project corridor. Predicted traffic noise levels are included in the Traffic Noise Technical Report and receiver locations have been included in **Appendix F** and the full report is included in **Appendix H**. A copy of this traffic noise analysis would be made available to local officials to ensure, to the maximum extent possible, future developments are planned, designed and programmed in a manner that would avoid traffic noise impacts. On the date of approval of this document (Date of Public Knowledge), TxDOT is no longer responsible for providing noise abatement for new development adjacent to the proposed project.

Encroachment-Alteration Effects of the Build Alternative: Traffic noise impacts from the proposed project would not occur; thus, traffic noise-related encroachment-alteration effects would not occur.

No Build Alternative: The proposed project would not be constructed under the No Build Alternative. Traffic noise levels at modelled receiver locations would be expected to increase due to the increase in traffic volumes that would occur over time.

5.15 Induced Growth

The need for an indirect impacts analysis for the proposed project was reviewed using TxDOT's April 2014 Decision Tree Guidance and July 2016 Guidance on Indirect and Cumulative Impacts Analyses.

The proposed project is not intended to serve an explicit economic development purpose, nor is it planned to serve a specific land development. The purpose of the project is to improve mobility and enhance safety due to the roadway not meeting current design standards. While there is land within the rural portion of the project limits that is available for development, the project would not create new access to these parcels or other already developed parcels within the project vicinity.

The project would add capacity within the urban portion of the project that would terminate at the intersection with proposed Toll 49. There would be a continuous turning lane added throughout the project limits that would improve safety within the corridor. The project is within the Tyler Metropolitan Planning Organization area. No new access to undeveloped tracts of land would be created as a result of the proposed project.

Based on the information above, TxDOT's Induced Growth Indirect Impacts Decision Tree leads to the conclusion that no induced growth impact analysis is required. It is not anticipated that the project would induce growth in the area.

5.16 Cumulative Impacts

The need for a cumulative impacts analysis for the proposed project was reviewed using TxDOT's April 2014 Decision Tree Guidance and July 2016 Guidance on Indirect and Cumulative Impacts Analyses.

Cumulative impacts or effects on the environment are caused by "individually minor but collectively significant actions" that take place over time by individuals, Federal and non-Federal agencies. Past, present, and reasonably foreseeable projects are typically identified by reviewing government records of publicly funded projects, privately owned subdivisions, and regional transportation plans.

Impacts to land use, community resources, farmland, utilities, emergency services, bicycle and pedestrian facilities, visual and aesthetic impacts, cultural resources, air quality, and traffic noise are not anticipated; therefore, cumulative impacts would not occur to these resources.

The project is anticipated to potentially impact biological resources including vegetation and wildlife. BMPs would be implemented in order to avoid significant impacts to these resources; none of the impacted resources are in poor or declining health. Therefore, cumulative impacts would not occur to these resources.

The project is anticipated to require additional ROW resulting in several displacements. Since all ROW acquisitions would be completed in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1979 and no additional displacements would result after the project, no cumulative impacts would occur to surrounding properties.

The proposed project would have minor impacts to waters of the U.S. which would be mitigated for, likely at a higher replacement rate than what would be impacted by the project. Therefore, the project would not result in a substantial impact to waters of the U.S.

The waters and tributaries within the project limits are not TCEQ Section 303(d) threatened/impaired water bodies or in poor or declining health. Additionally, although some streams and one potential wetland would be impacted, mitigation for wetland impacts would be implemented to compensate for the loss.

Based on the information above, the Cumulative Impacts Decision Tree leads to the conclusion that no cumulative impacts analysis is required.

5.17 Construction Phase Impacts

Construction-phase impacts are temporary (short-term; only occurring during actual construction) and potentially encompass a range of issues.

No Build Alternative: As the FM 16 improvements would not be constructed under the No Build Alternative, there would be no construction phase effects. For that reason, the No Build Alternative is not discussed further in this section.

Encroachment-Alteration Effects of the Build Alternative: By definition, encroachment-alteration affects are removed from the project in “both time and distance”. Because construction-phase impacts are temporary (limited to the duration of actual construction), construction-related encroachment-alteration effects are not possible. For that reason, encroachment-alterations affects are not discussed further in this section.

Construction-Phase Noise Impacts

Build Alternative: Noise associated with the construction of the proposed project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the receivers are expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected. Provisions would be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work hour controls and proper maintenance of muffler systems.

Construction-Phase Air Quality Impacts

Build Alternative: As detailed in the Air Quality Technical Report (TxDOT 2017), the construction activity phase of this project may generate a temporary increase in air pollutant emissions.

However, considering the temporary and transient nature of construction-related emissions, as well as the mitigation actions to be utilized, it is not anticipated that emissions from construction of this project would have any significant impact on air quality in the area. Provisions would be included in the plans and specification that require the contractor to make every reasonable effort to minimize construction emissions through abatement measures such as watering of disturbed areas and the use of temporary vegetation to control dust.

Construction-Phase Water Quality Impacts

Build Alternative: NWP 14 (see **Section 9.0**) would be used for impacts to jurisdictional waters in the project area. During the construction phase, appropriate measures would be taken to maintain normal downstream flows to the maximum extent practicable. Construction activities would require compliance with the State of Texas Water Quality Certification Program. The 401 Certification requirements for a NWP 14 would be met by implementing BMPs from the TCEQ 401 Water Quality Certification Conditions for NWPs. Construction equipment, spoil material, supplies, forms, and buildings shall not be placed or stored in the floodway during construction activities. Any item that may be transported by flood flows shall not be stored within the floodway. Any work within jurisdictional areas would be coordinated with USACE and permitted, as necessary.

Construction-Phase Biological Impacts

Build Alternative: Temporary impacts to natural resources due to construction could result from the implementation of the proposed project. These include disturbances to wildlife and vegetative communities. Implementation of the Build Alternative would involve the removal of grasses, shrubs and trees during the construction phase, affecting the natural, erosion-inhibiting ground cover and resulting in the loss of habitat for both resident and migratory species. Disturbed areas would be restored, reseeded and re-contoured as necessary according to TxDOT specifications, making these effects largely temporary.

6.0 Agency Coordination

Archaeological and historic resource surveys have been conducted and survey reports have been prepared. Survey findings have been coordinated with the THC and ENV's Archaeological and Historical Branches (see **Appendix F**). Additional archaeological surveys are required prior to construction as outlined in **Section 10.4**.

The proposed project includes work within a FEMA designated 100-year floodplain; therefore, coordination with the local Floodplain Administrator would be required.

Coordination with the TPWD was required because the proposed project would disturb habitat in an area equal to or greater than the area of disturbance indicated in the TxDOT-TPWD Threshold Table Programmatic Agreement, including over 0.10 acre of riparian vegetation. Early coordination with TPWD has occurred and TPWD has provided recommendations to be implemented, to the extent possible, by TxDOT (see **Appendix G**).

7.0 Public Involvement

To date, public involvement for the proposed project has included two public meetings. The public meetings were held on September 15, 2015, and April 28, 2016 (TxDOT 2015a; TxDOT 2016). Summaries of the public meetings are on file and available for review at the offices of the TxDOT-Tyler District.

The project team has thoroughly considered the comments received as a result of the public meetings and has made modifications to the project in response to those comments. Most notably, the amount of ROW to be acquired was reviewed and reduced in response to public comments.

Once the Environmental Assessment is prepared and ready for public review, a public hearing will be held. All required notices and procedures, as required by TxDOT's rules governing the Environmental Review of Transportation Projects and outlined in TxDOT's Public Involvement Handbook, would be followed.

Prior to construction of the proposed FM 16 project, a notice of impending construction would be provided to pertinent persons including adjoining property owners, local government entities, and public officials.

8.0 Environmental Permits, Issues and Commitments

Impacts to vegetation and wildlife habitat would be avoided or minimized by limiting disturbance to only those areas that are necessary to construct the proposed project. The removal of native vegetation, particularly mature native trees and shrubs, would be avoided to the greatest extent practicable. A non-invasive native and locally-adapted seed mix would be used in the landscaping and re-vegetation of disturbed areas.

Upon completion of earthwork operations, disturbed areas would be restored and reseeded in accordance with TxDOT's vegetation management guidelines. Work would also comply with the intent of EO 13112 on Invasive Species and the FHWA Executive Memorandum on Environmentally and Economically Beneficial Landscape Practices.

Appropriate measures would be taken to avoid adverse impacts on migratory birds. Such measures, which would be coordinated with the TxDOT-Tyler District biologist in advance of implementation, would include the following:

- The removal or destruction of active migratory bird nests (nests containing eggs and/or young) at any time of the year would be prohibited until the nests become inactive, usually between October 1 and February 15.
- If colonial nesting (i.e. swallows) occurs on or in structures, nests would not be removed until all nests in the colony become inactive.
- Measures would be utilized, to the extent practicable, to prevent or discourage migratory birds from building nests within the project area scheduled for imminent construction.
- Inactive nests would be removed from the project area to minimize the potential for reuse by migratory birds.
- When practicable, vegetation clearing, demolition of existing structures and other activities with a greater potential for disturbance of migratory birds would be scheduled outside the typical (February 15 to October 1) nesting season. However, it is recognized that the provisions of the Migratory Bird Treaty Act apply year-around.

The proposed project would not affect any federally-listed species and would not impact state-listed endangered species but may impact state-listed threatened species. The project may impact SGCNs. To mitigate the potential impacts to SGCNs, the following BMPs will be implemented:

- For the Henslow's Sparrow and Bachmann's Sparrow, contractors will be advised to not disturb, destroy, or remove active nests, including ground nesting birds, during the nesting season, and to avoid removing unoccupied/inactive nests, as practicable, and to prevent the establishment of active nests during the nesting season on TxDOT owned and operated facilities and structures proposed for replacement or repair, and to not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit.

- For the Plains spotted skunk, contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered, and to avoid unnecessary impacts to dens.
- For the Southeastern myotis bat, the project area will need to be surveyed by a qualified biologist to determine if bats are present. If bats are present, appropriate measures, such as exclusion or timing activities, will be taken to ensure that bats are not harmed. If maternity colonies are present, exclusion activities should be timed to avoid separating lactating females from nursing pups. If structures used by bats are removed as a result of construction, replacement structures should incorporate bat-friendly design, or artificial roosts should be constructed to replace these features as practical.
- For the Texas heelsplitter, no species were observed during field investigations. Nonetheless, surveys of the project footprint will be conducted prior to initiation of construction in waters where appropriate Texas heelsplitter habitat exists. If the protected mussels are discovered during the surveys, the individual specimens would be relocated and appropriate water quality BMPs should be implemented.
- For the Timber rattlesnake, contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.

Impacts to storm water would be minimized as much as possible by utilizing approved temporary and permanent erosion and sediment control BMPs as specified by the TCEQ General Permit (TXR 150000). The General Permit requires that a SW3P, NOI, and NOT be prepared for the proposed project. The proposed project is not located within the boundaries of a MS4; therefore, MS4 requirements would not apply.

During the final design phase of project development, a SW3P would be developed. The SW3P would identify a system of temporary BMPs to be employed during construction to mitigate construction-related water quality impacts. The SW3P would be site-specific and tailored to project-area conditions. The SW3P would utilize the temporary control measures/BMPs outlined in TxDOT's Standard Specification for the Construction of Highways, Streets and Bridges. Construction phase quality BMPs could include, but would not be limited to, the following:

- Temporary vegetation
- Soil retention blankets/mats
- Silt fences
- Filter dams
- Rock gabions
- Vegetated filter strips
- Water quality (detention) ponds

A USACE Section 404 NWP 14 for Linear Transportation Projects would be required for the placement of temporary or permanent dredge or fill material into jurisdictional waters. If it is determined after ROE is obtained and a delineation is completed that Feature 5 is a wetland, a PCN would be required since there would be a discharge into wetlands. If Feature 5 is determined to not be a wetland, a NWP 14 without PCN could be utilized.

Because the proposed project would require a Section 404 NWP, construction activities would require compliance with the State of Texas Water Quality Certification Program. The 401 Certification requirements for a NWP 14 would be met by implementing BMPs from each category listed in the TCEQ Section 401 Water Quality Certification Conditions. For this project, erosion control BMPs would consist of temporary seeding, mulching, blankets, and maintaining natural vegetation; sediment control BMPs would consist of sandbag berms, silt fences, rock berms, stabilized construction exits, sediment traps, and sediment basins; and post-construction total suspended solid control BMPs would consist of vegetative filter strips.

The hydraulic design for this project would be in accordance with current FHWA and TxDOT design policy and standards. The facility would permit conveyance of the design year flood levels, inundation of the roadway being acceptable, without causing substantial damage to the roadway, stream or other property. The proposed project would not increase the base flood elevation to a level that would violate the applicable floodplain regulations or ordinances. Coordination with the local floodplain administrator would be required.

Additional archeological surveys will be performed in the area of site 41SM484 and an isolated find (ceramic pot sherd) in addition to the parcels where ROE was not obtained at the time of the initial survey. During construction, in the unlikely event that cultural resources are discovered, TxDOT would immediately initiate cultural resource discovery procedures. All work in the vicinity of the discovery would cease until a specialist from TxDOT and/or the THC could arrive on site and assess the discovery's significance and the need, if any, for additional investigation.

Any unanticipated hazardous materials and/or petroleum contamination encountered during construction would be handled in accordance with applicable federal and state regulations, per TxDOT Standard Specifications. Section 6.10 of the General Provisions of the Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges, which applies to all TxDOT highway projects, includes guidelines addressing the contractor's responsibilities regarding the discovery of hazardous materials during construction.

The contractor would observe proper maintenance and idling of construction equipment to control emissions of particulate matter. The contractor would control the generation of dust by site watering.

Disruptions would be minimized to the extent possible by the timely notification of affected residents and business owners through posted notices, personal contact, or other notification procedures. These procedures would include rerouting traffic, barricading, using traffic cones, or any other measures deemed necessary and prudent by TxDOT and the construction contractor to comply with all local, state and federal traffic and safety regulations.

Signage and barrier placement should be alert to the inevitable reordering of travel patterns, both during construction and in the long term, as drivers find cut-through routes to shorten travel times. During construction, procedures to minimize traffic congestion, noise, dust, and risk to public safety should be specifically adapted to the circumstances of the proposed project.

Provisions would be included in the project plans and specifications that require the contractor to make every reasonable effort to minimize construction impacts through abatement measures such as work-hour controls and proper maintenance of muffler systems.

9.0 Conclusion

As proposed, the Build Alternative would include the construction of a three lane rural highway, one lane in each direction with a continuous left turn lane, from the western terminus of the project (four miles west of FM 849) to 500 feet west of the intersection with CR 436; a five lane, rural highway from CR 436 to the future intersection with Toll 49; and a five lane, urban section from Toll 49 east to 400 feet east of Lindale Cemetery Road. The length of the proposed project, including all transitions, is approximately 4.4 miles.

The Build Alternative, described in **Section 2.2**, satisfies the project purpose and need by enhancing mobility within the corridor and providing increased safety. The capacity provided by the additional travel lanes from US 69 to CR 436 would not extend the entire length of the project but the left turn lane would continue the entire project length to provide increased safety to the entire corridor. The additional capacity, in and of itself, would enhance mobility within and between the towns of Lindale and Hideaway – the areas where most of the traffic is located. In addition to the left turn lane, the flattening of curves along the corridor would provide increased safety by improving sight distance around curves. Because the Build Alternative satisfies the project’s purpose and need, it is the recommended alternative.

The engineering, social, economic, and environmental investigations conducted thus far for the proposed project indicate that it would result in no significant adverse impacts to the quality of the human or natural environment. Implementing the proposed project would not significantly affect the quality of the human environment; thus, a finding of no significant impact (FONSI) is anticipated for this project.

10.0 References

Alliance Transportation Group. 2014. 2040 Metropolitan Transportation Plan prepared for Tyler Area Metropolitan Planning Organization.

<http://www.cityoftyler.org/Portals/0/Documents/Metropolitan%20Planning%20Organization/Transportation%20Plans/MTP/Tyler%20Area%20MTP%202040.pdf>. Accessed 13 July 2016.

Texas Water Development Board (TWDB). Carrizo-Wilcox Aquifer.

<http://www.twdb.texas.gov/groundwater/aquifer/majors/carrizo-wilcox.asp>. Accessed 13 July 2016.

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-2015. Traffic and Crash Data

-2015a. Open House #1 Summary Report.

-2016. Open House #2 Summary Report.

2017. Air Quality Technical Report.

-2017a. Biological Resources Evaluation Form.

-2017b. Community Impact Assessment Technical Report.

-2016c. Historic Resource Project Coordination Request.

-2017d. Report for Historic Studies Survey.

-2017e. Traffic Noise Technical Report.

-2017f. Water Resources Technical Report.

-2017g. Intensive Cultural Resources Survey of Proposed Improvements for the FM 16 Project.

11.0 Appendices

Appendix A – Project Location Map

Appendix B – Project Photos

Appendix C – Schematics (Plan View)

Appendix D – Typical Sections

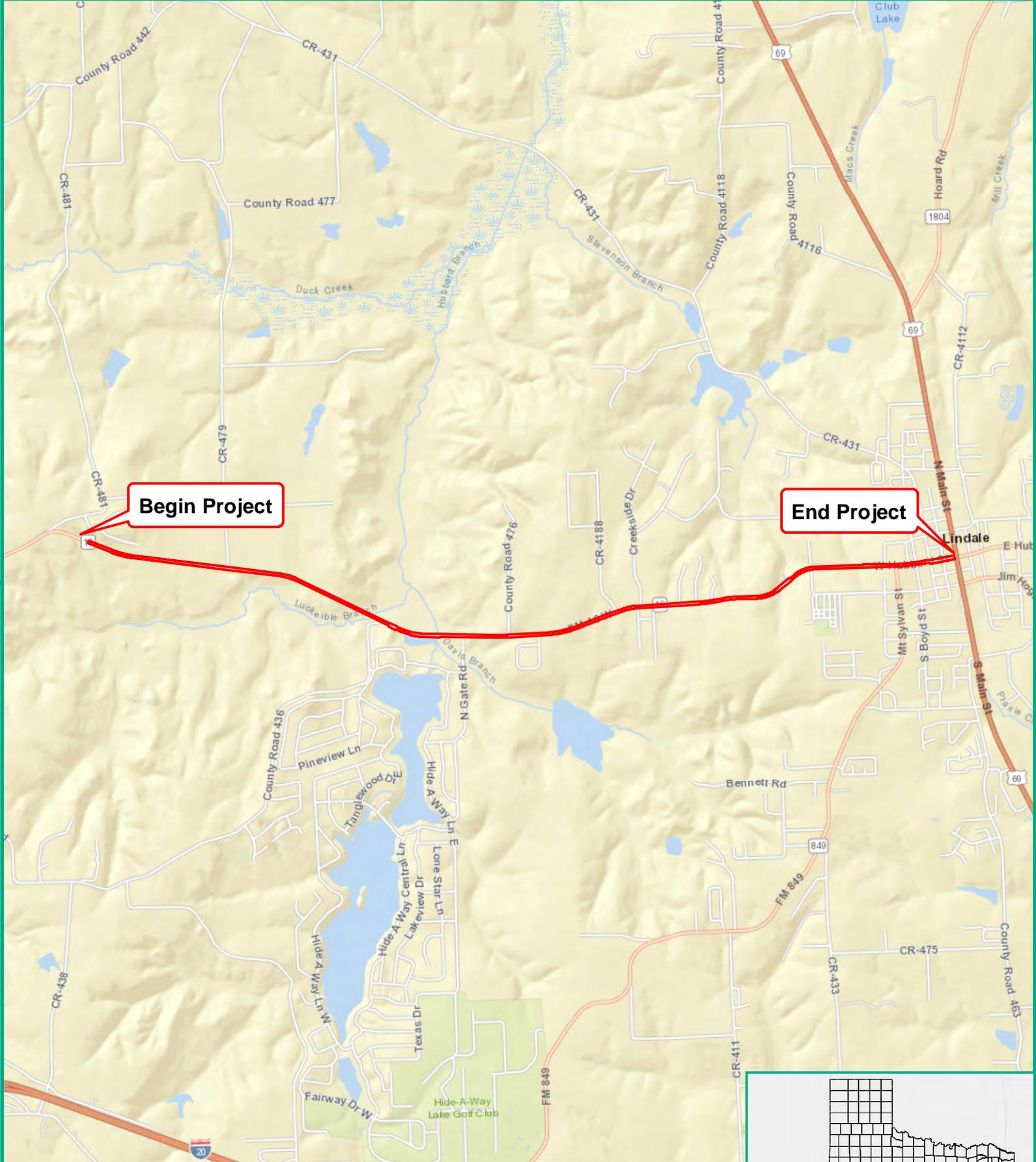
Appendix E – Plan and Program Excerpts

Appendix F – Resource Specific Maps

Appendix G – Resource Agency Coordination

Appendix H – Traffic Noise Technical Report

APPENDIX A
PROJECT LOCATION MAP



Begin Project

End Project

FM 16 Vicinity Map

4 miles west of FM 849
east to US 69 in Lindale

 Project Location



Smith County

APPENDIX B
PROJECT PHOTOS



Photo 1: Beginning of the project limits in Lindale at US 69 and FM 16 intersection; facing east.



Photo 2: Facing west to the US 69 and FM 16 intersection.



Photo 3: FM 16 within the urban section of the project limits. Diagonal parking and sidewalk to storefronts will be in the proposed design.



Photo 4: Blind curve observed along the project limits within the proposed urban section of the project. No turn lane or visibility around the curve.



Photo 5: Proposed urban section within the project limits. Site distance is limited due to hill and curve visible in photograph.



Photo 6: Other side of hill shown in Photo 4 with limited site distance.



Photo 7: Typical view of FM 16 within the rural portion of the project limits.



Photo 8: Typical view of FM 16 within the rural portion of the project limits. Heavily wooded on both sides of right-of-way in some portions.



Photo 9: Typical view of FM 16 within the rural portion of the project limits. Heavily wooded on both sides of right-of-way in some portions.



Photo 10: Western project terminus, looking east.



Photo 11: Western project terminus, looking west.

APPENDIX C
SCHEMATICS (PLAN VIEW)

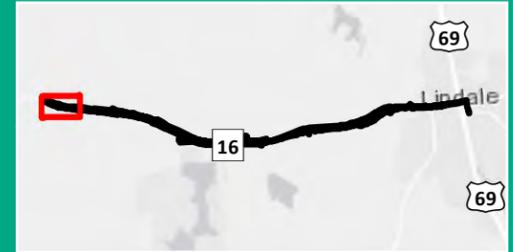


Plan View
 FM 16 from 4 miles west of FM 849 (CR 481)
 to US 69 in Lindale



CSJ: 0522-04-032

- Property Line
- Existing ROW
- Toll 49 (Proposed)
- Proposed ROW
- Proposed Lanes





FM 16

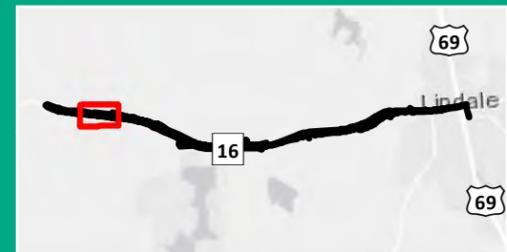
Plan View

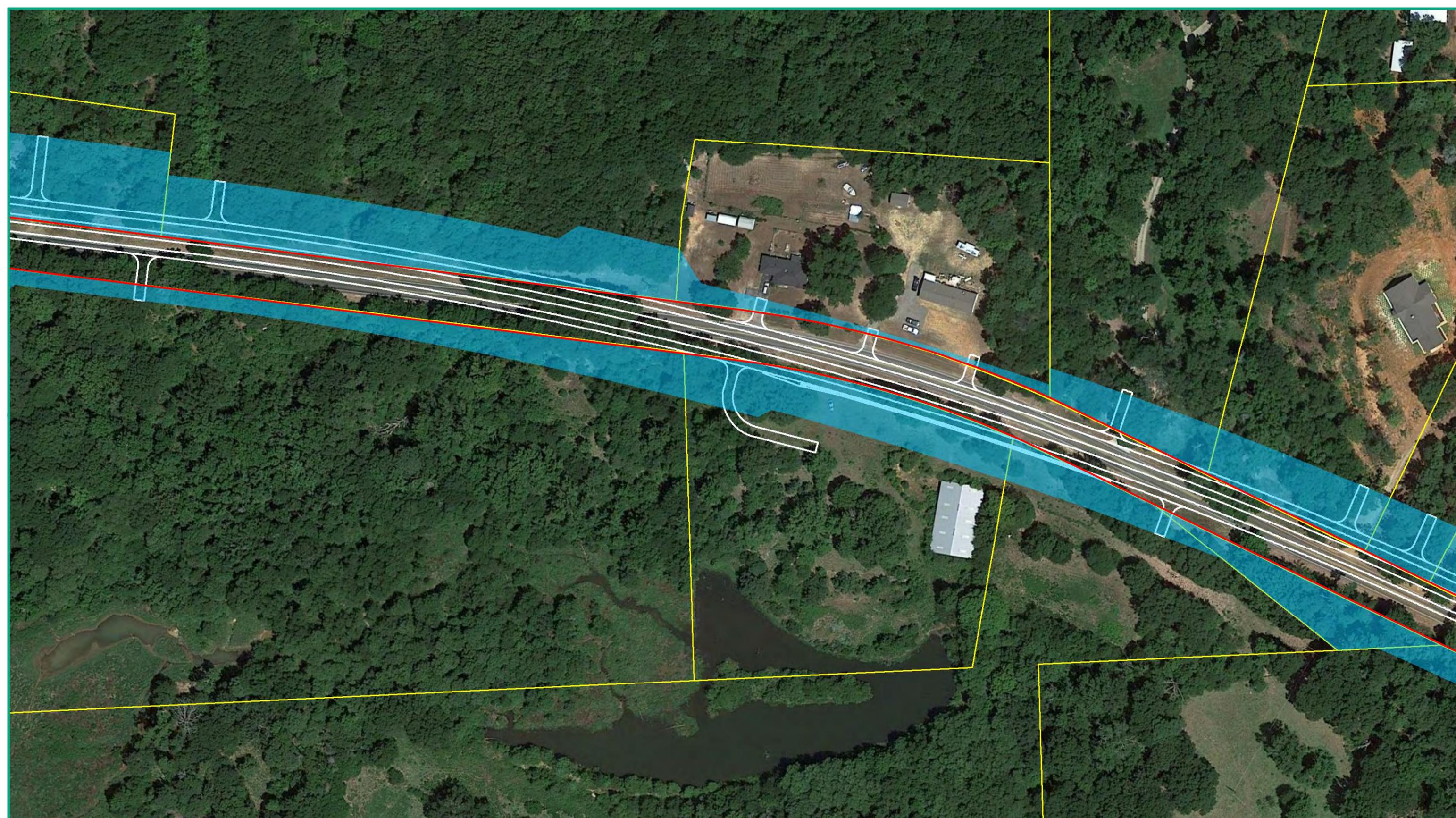
FM 16 from 4 miles west of FM 849 (CR 481) to US 69 in Lindale



CSJ: 0522-04-032

- Property Line
- Existing ROW
- Toll 49 (Proposed)
- Proposed ROW
- Proposed Lanes



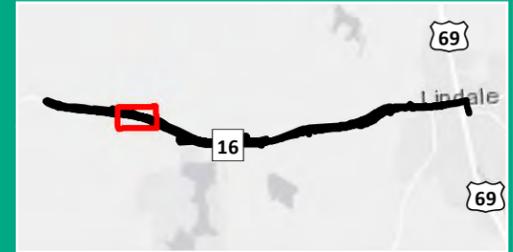


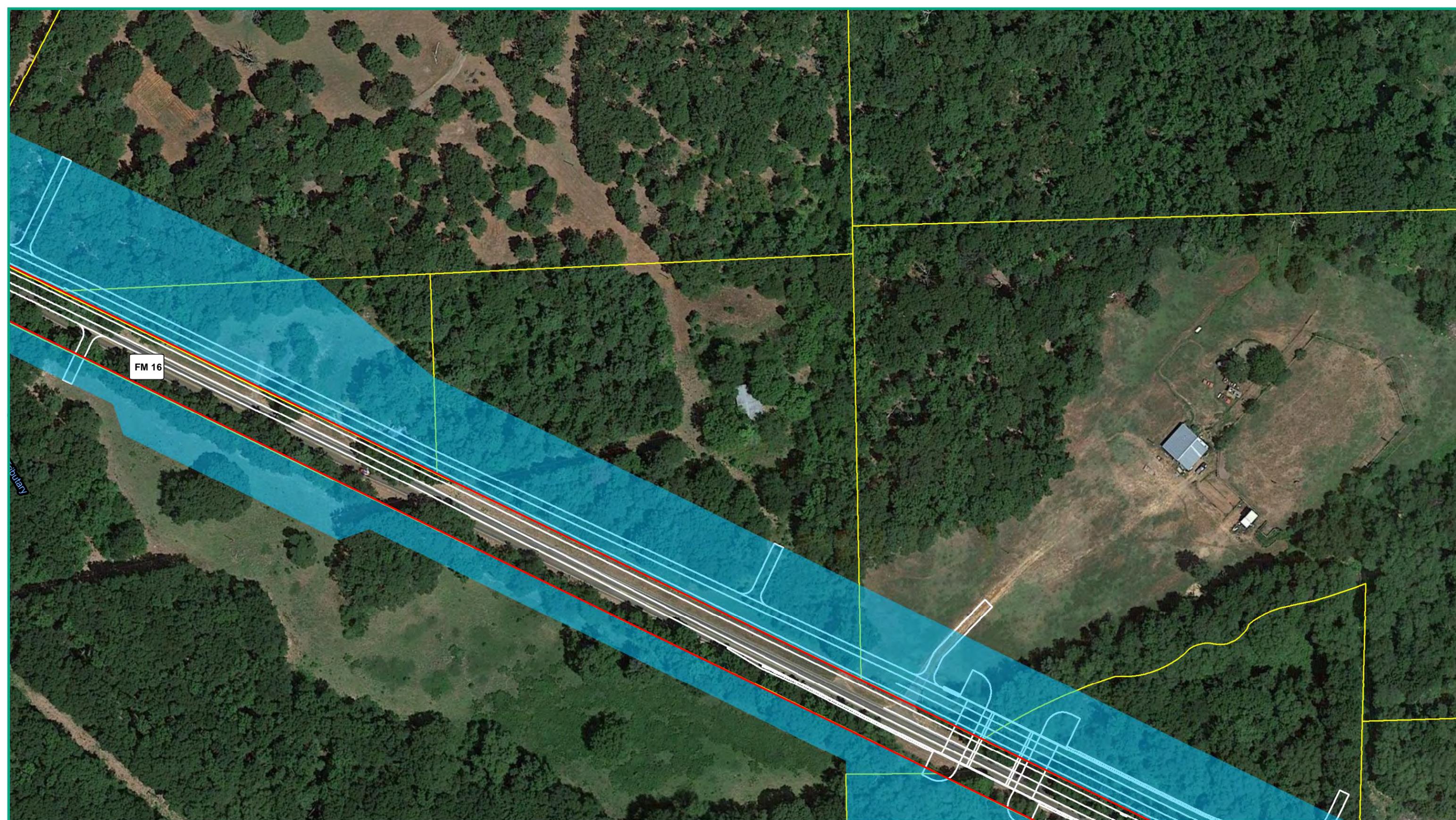
Plan View
 FM 16 from 4 miles west of FM 849 (CR 481)
 to US 69 in Lindale



CSJ: 0522-04-032

- Property Line
- Existing ROW
- Toll 49 (Proposed)
- Proposed ROW
- Proposed Lanes





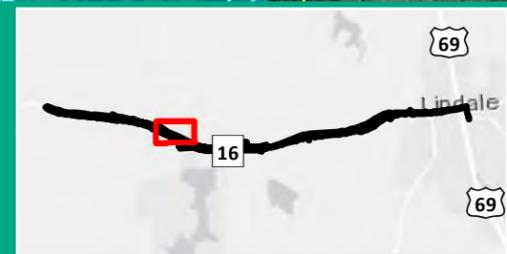
Plan View

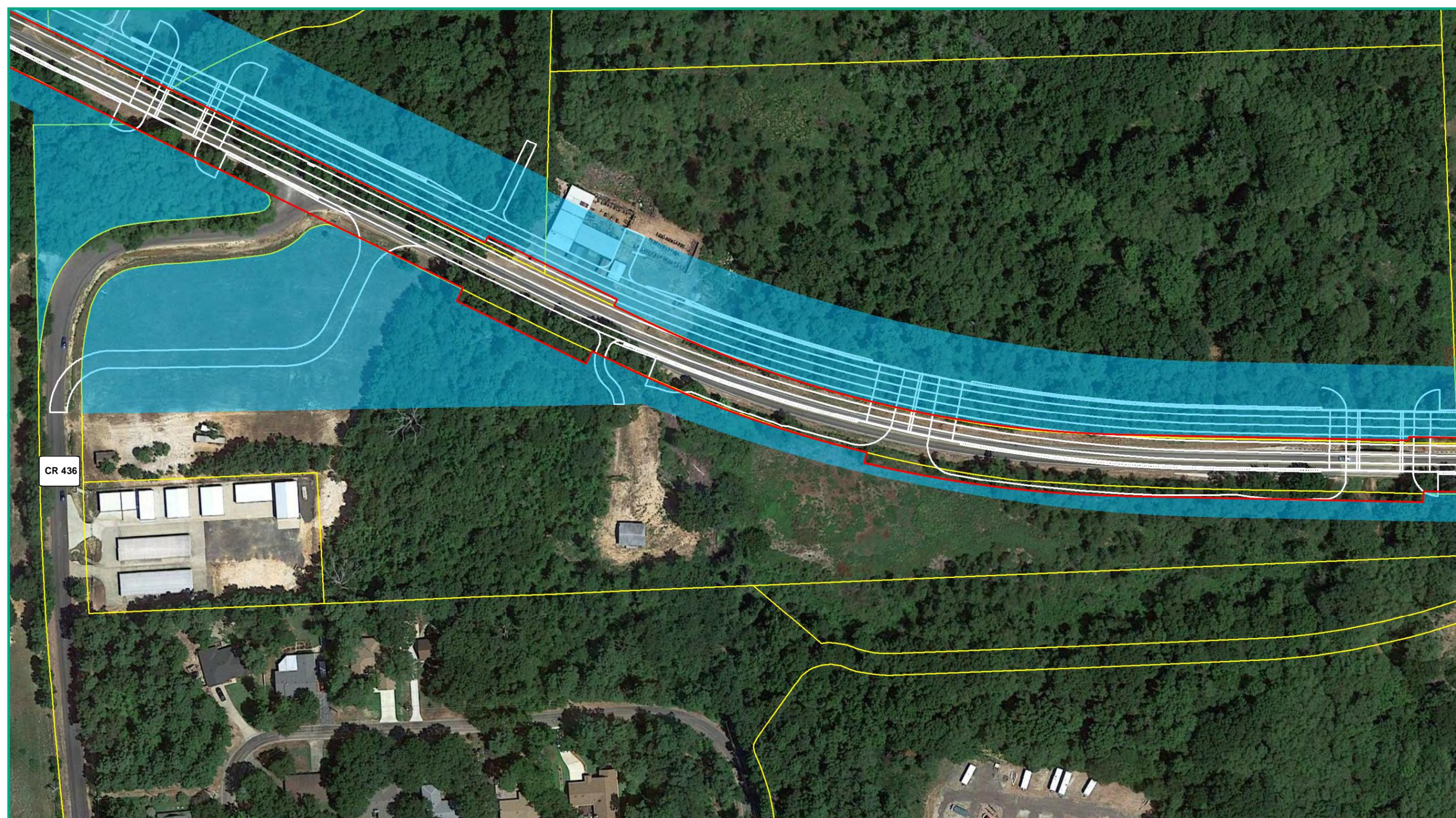
FM 16 from 4 miles west of FM 849 (CR 481)
to US 69 in Lindale



CSJ: 0522-04-032

- Property Line
- Existing ROW
- Toll 49 (Proposed)
- Proposed ROW
- Proposed Lanes



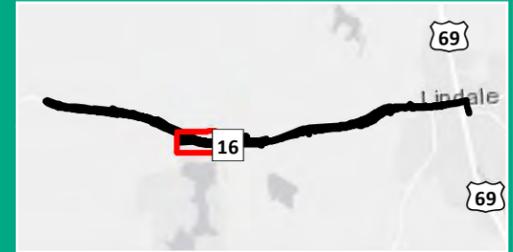


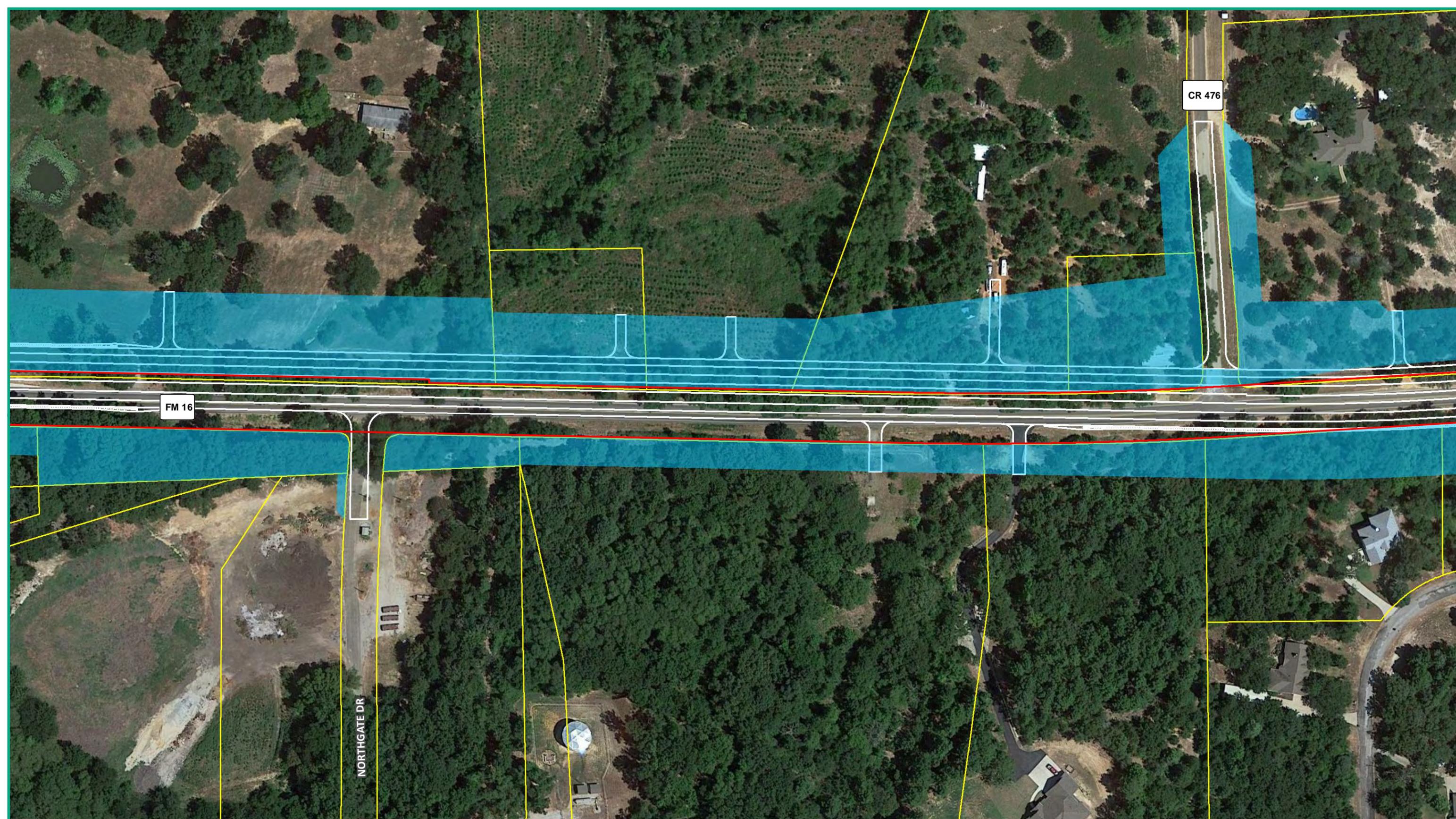
Plan View
 FM 16 from 4 miles west of FM 849 (CR 481)
 to US 69 in Lindale



CSJ: 0522-04-032

- Property Line
- Existing ROW
- Toll 49 (Proposed)
- Proposed ROW
- Proposed Lanes



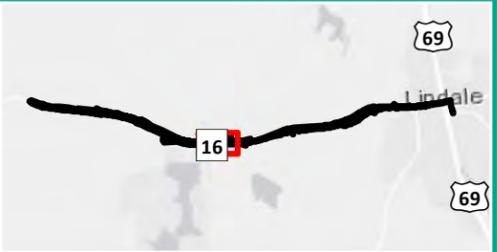


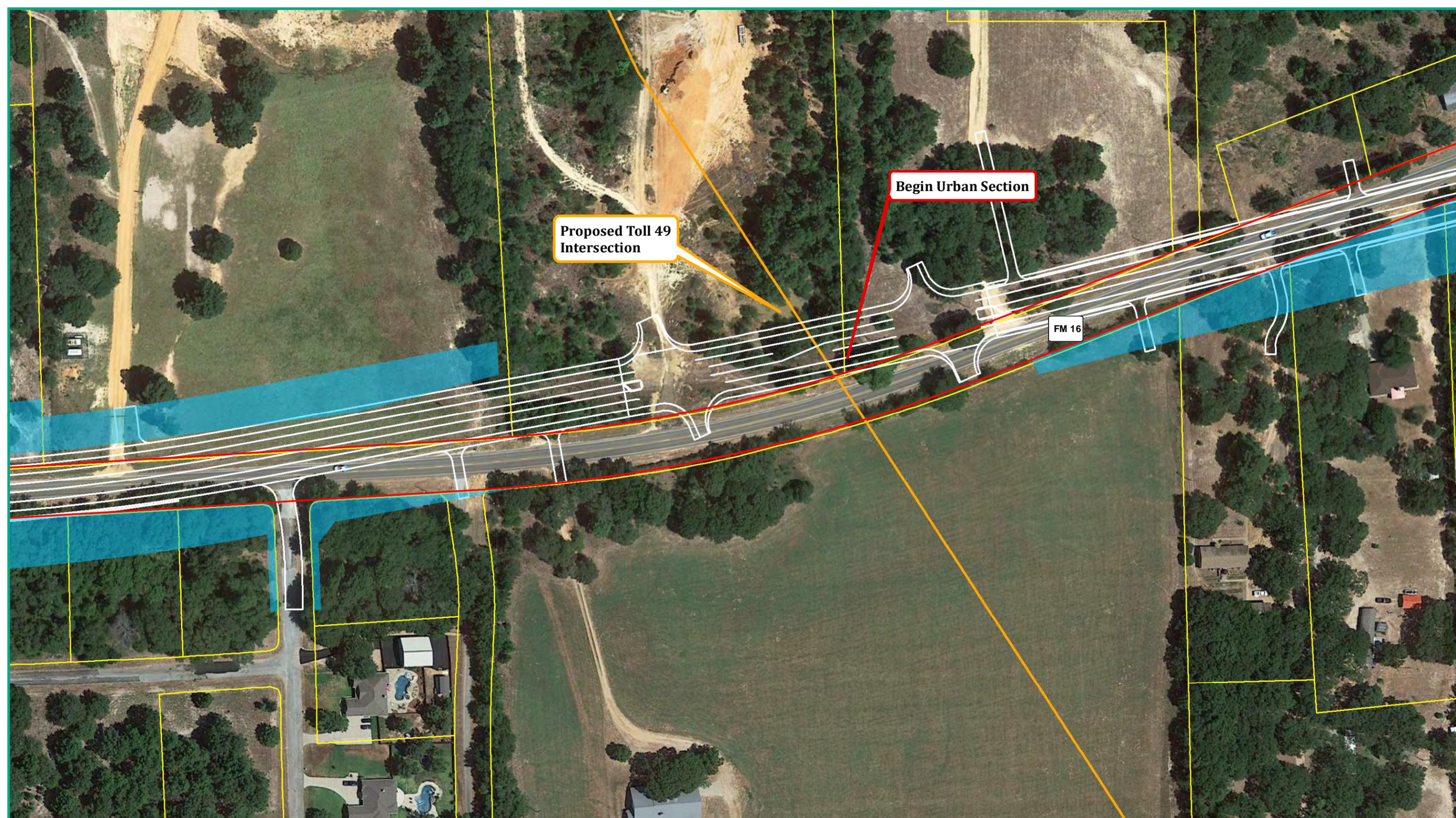
Plan View
 FM 16 from 4 miles west of FM 849 (CR 481)
 to US 69 in Lindale



CSJ: 0522-04-032

- Property Line
- Existing ROW
- Toll 49 (Proposed)
- Proposed ROW
- Proposed Lanes





Plan View

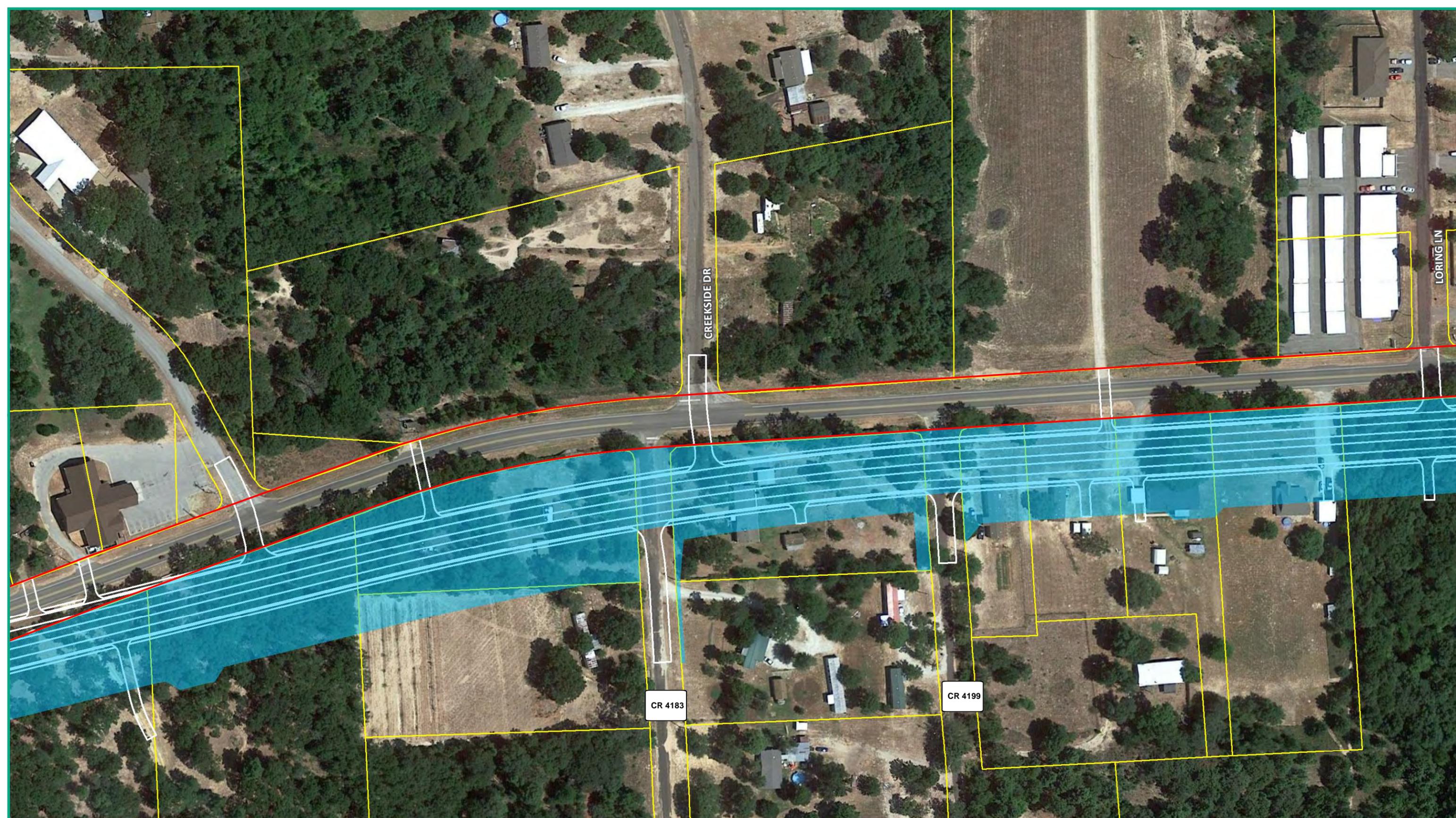
FM 16 from 4 miles west of FM 849 (CR 481) to US 69 in Lindale



CSJ: 0522-04-032

- Property Line
- Existing ROW
- Toll 49 (Proposed)
- Proposed ROW
- Proposed Lanes





Plan View

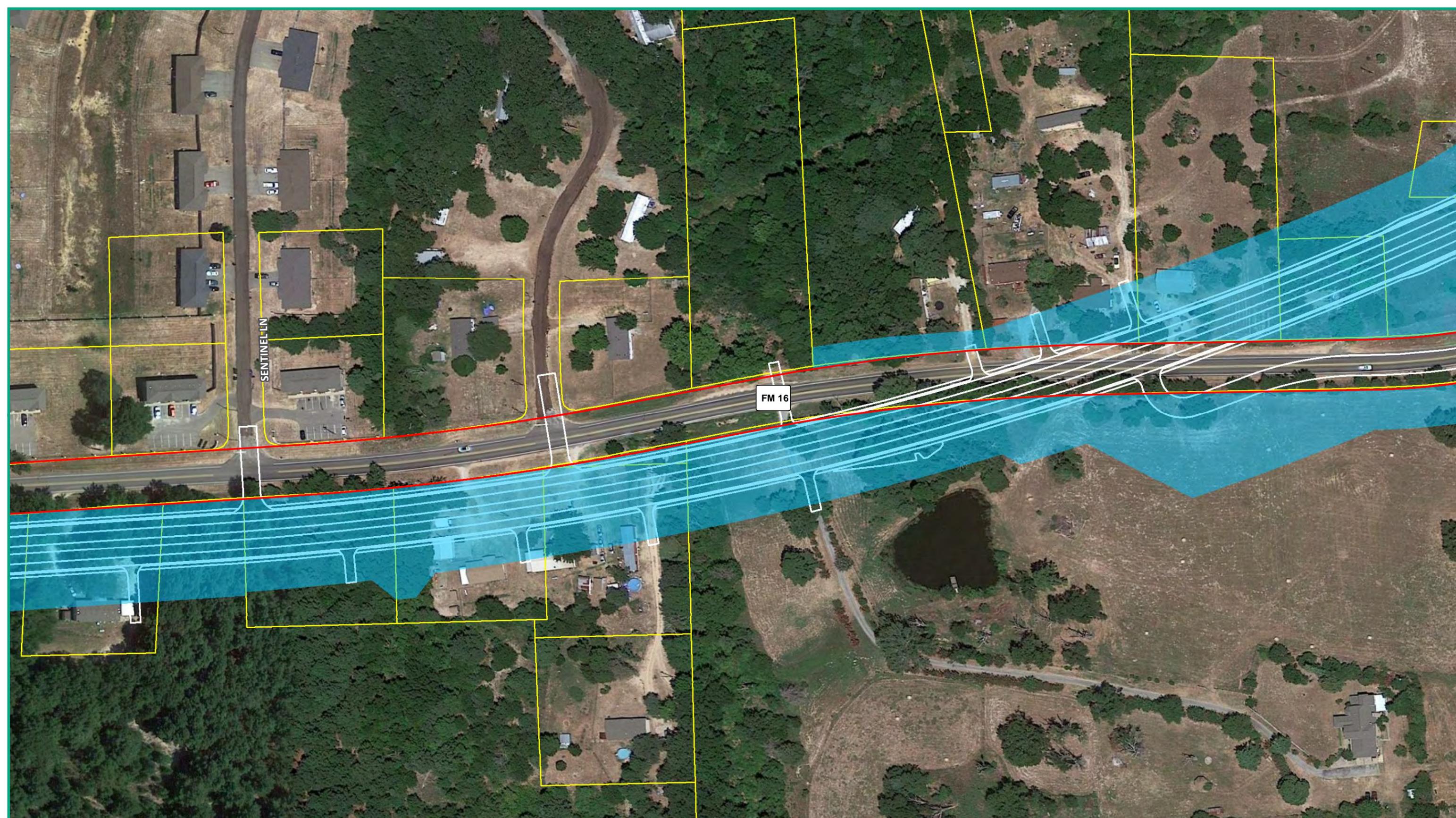
FM 16 from 4 miles west of FM 849 (CR 481) to US 69 in Lindale



CSJ: 0522-04-032

- Property Line
- Existing ROW
- Toll 49 (Proposed)
- Proposed ROW
- Proposed Lanes





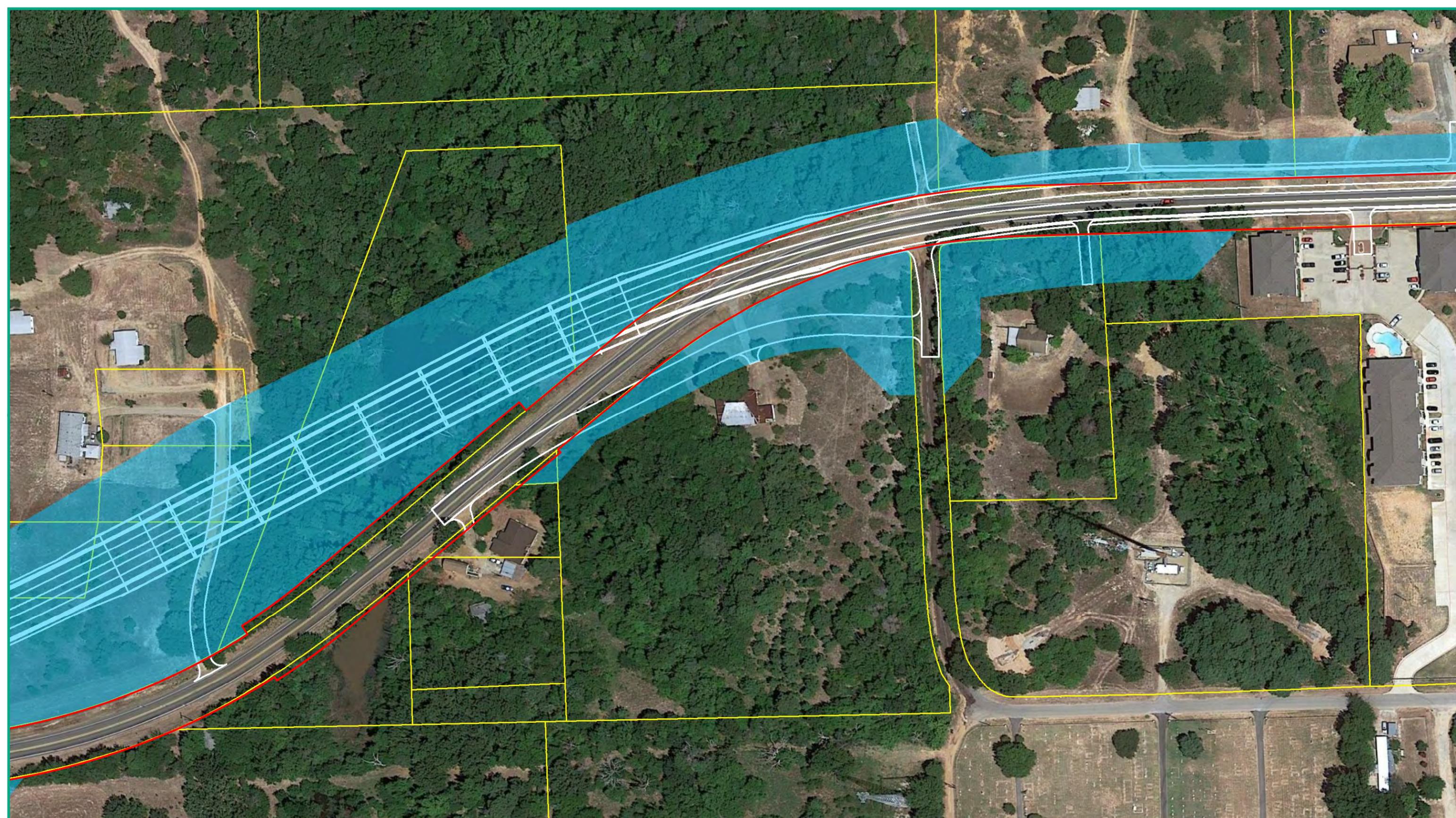
Plan View
 FM 16 from 4 miles west of FM 849 (CR 481)
 to US 69 in Lindale



CSJ: 0522-04-032

- Property Line
- Existing ROW
- Toll 49 (Proposed)
- Proposed ROW
- Proposed Lanes





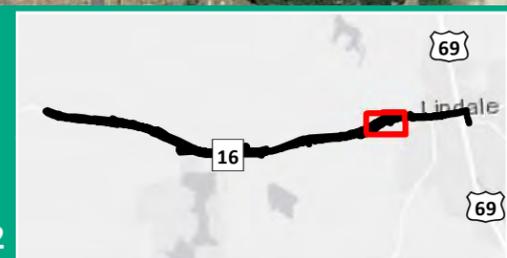
Plan View

FM 16 from 4 miles west of FM 849 (CR 481)
to US 69 in Lindale



CSJ: 0522-04-032

- Property Line
- Existing ROW
- Toll 49 (Proposed)
- Proposed ROW
- Proposed Lanes





Plan View

FM 16 from 4 miles west of FM 849 (CR 481) to US 69 in Lindale



CSJ: 0522-04-032

- Property Line
- Existing ROW
- Toll 49 (Proposed)
- Proposed Lanes
- Proposed ROW





Plan View
 FM 16 from 4 miles west of FM 849 (CR 481)
 to US 69 in Lindale



CSJ: 0522-04-032

- Property Line
- Existing ROW
- Toll 49 (Proposed)
- Proposed ROW
- Proposed Lanes



APPENDIX D
TYPICAL SECTIONS

Figure 1: Existing Rural Typical Section

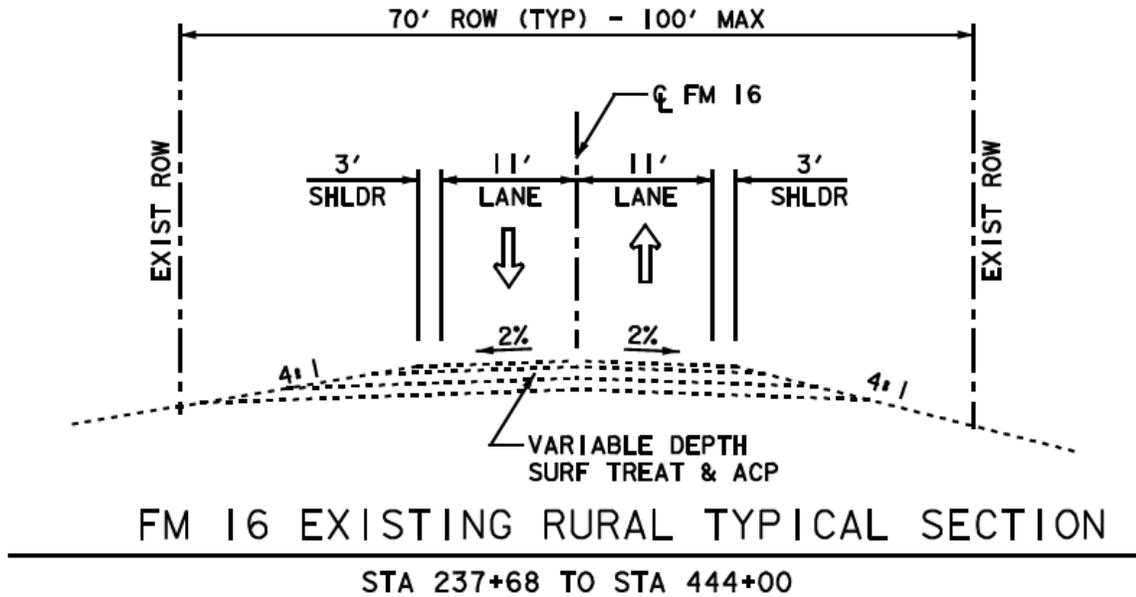


Figure 2: Existing Urban Typical Section

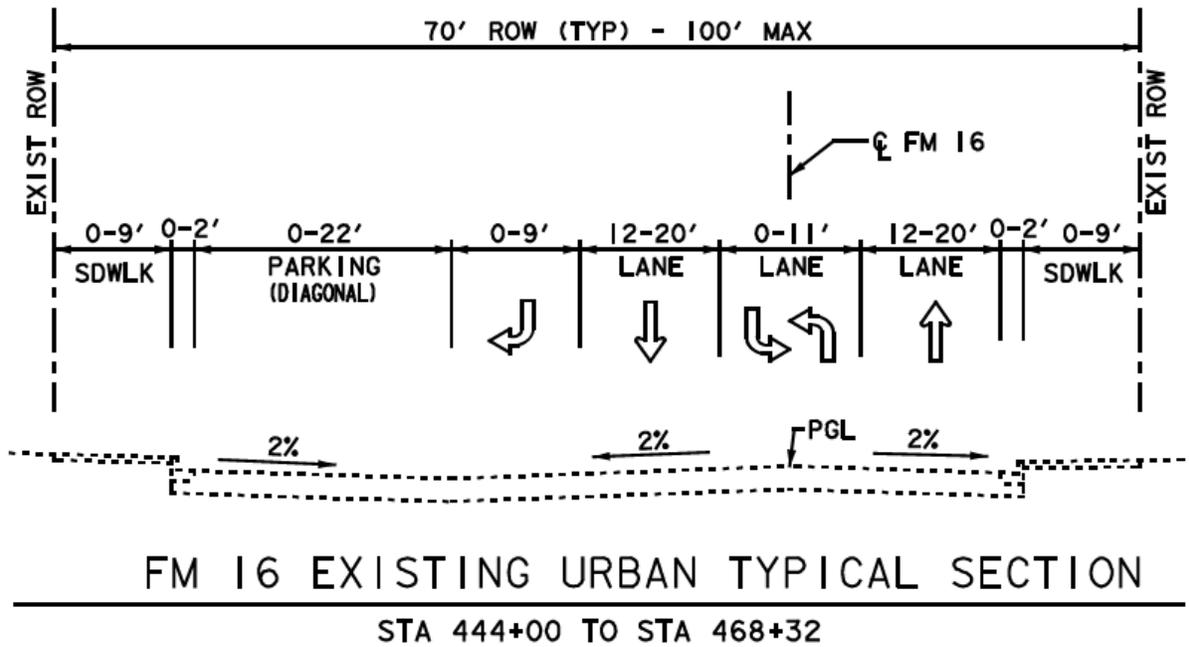


Figure 3: Proposed Rural Typical Section – Station 237+68 to Station 253+70

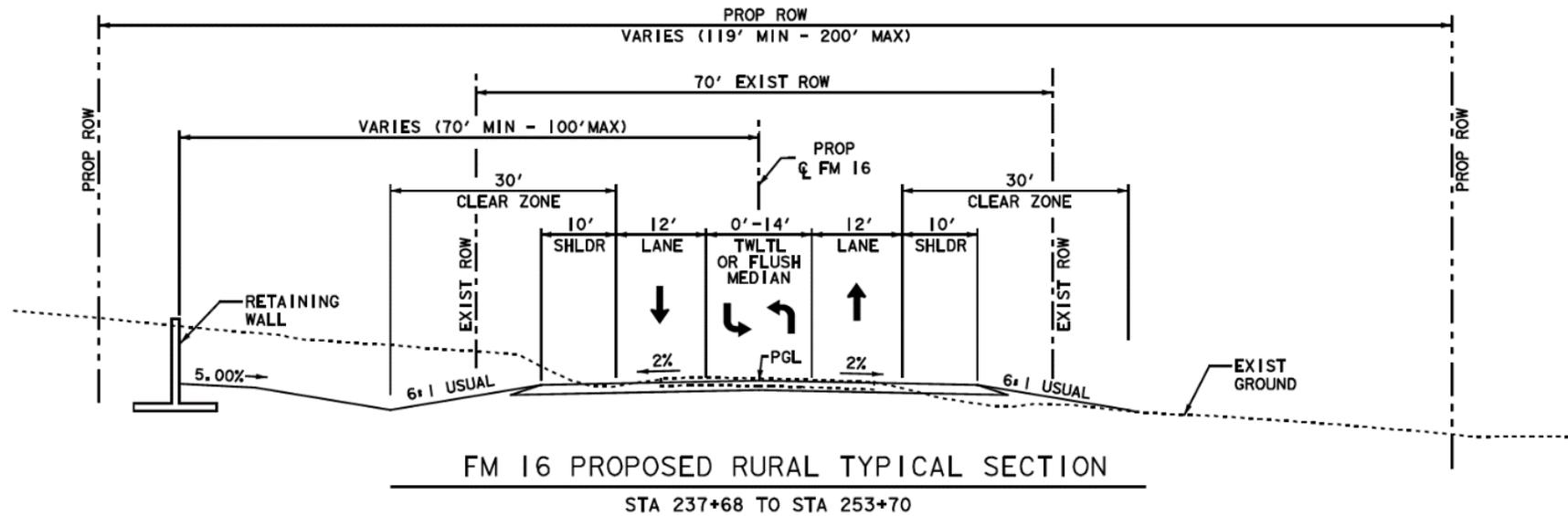


Figure 4: Proposed Rural Typical Section – Station 253+70 to Station 312+30

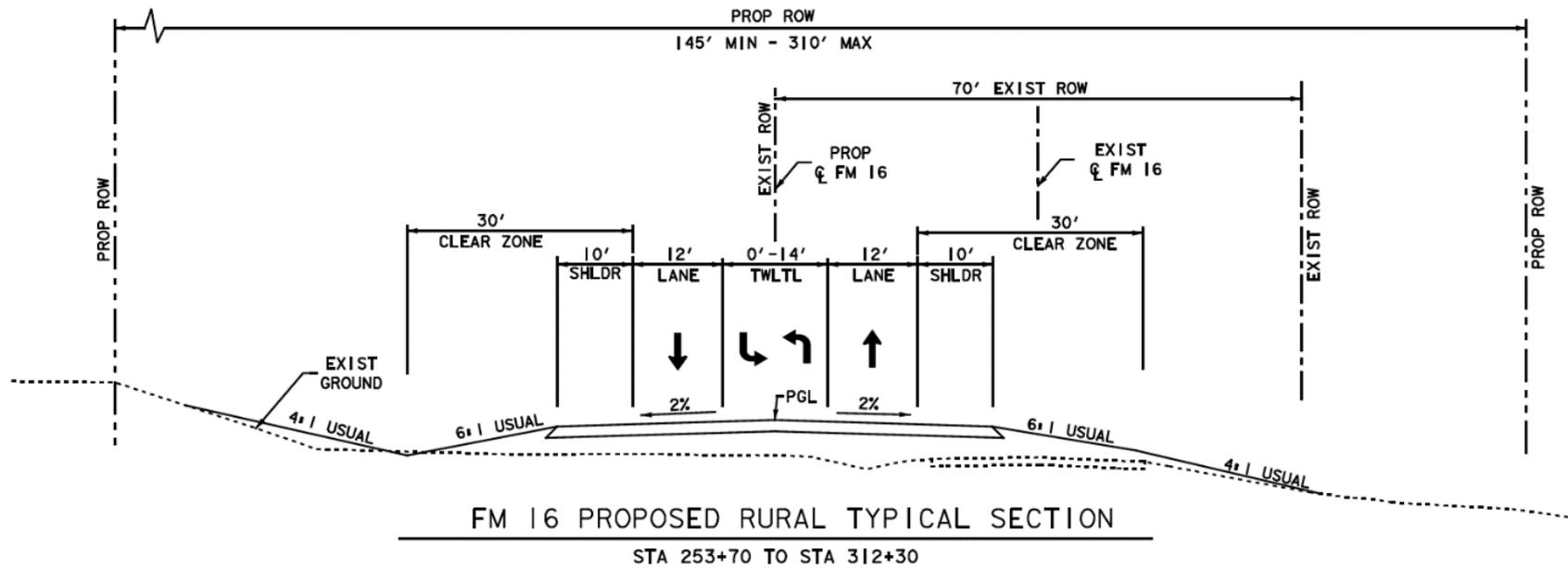


Figure 5: Proposed Rural Typical Section – Station 312+30 to 367+60

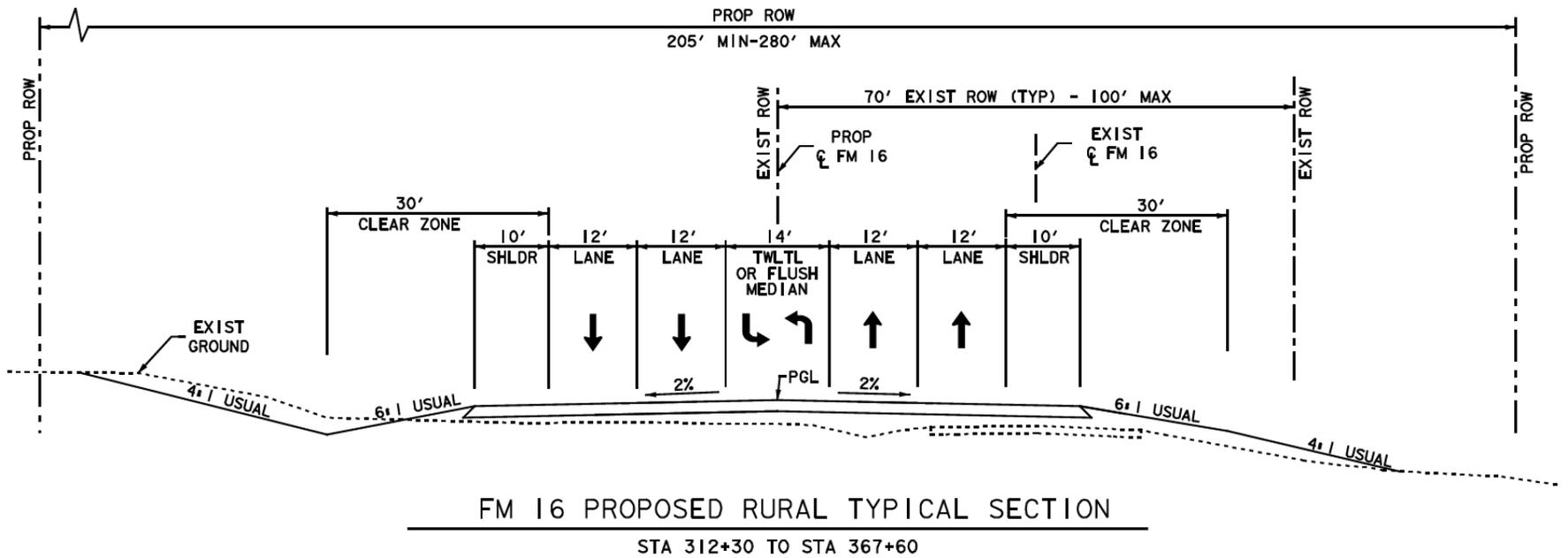


Figure 6: Proposed Urban Typical Section – Station 367+60 to Station 434+10

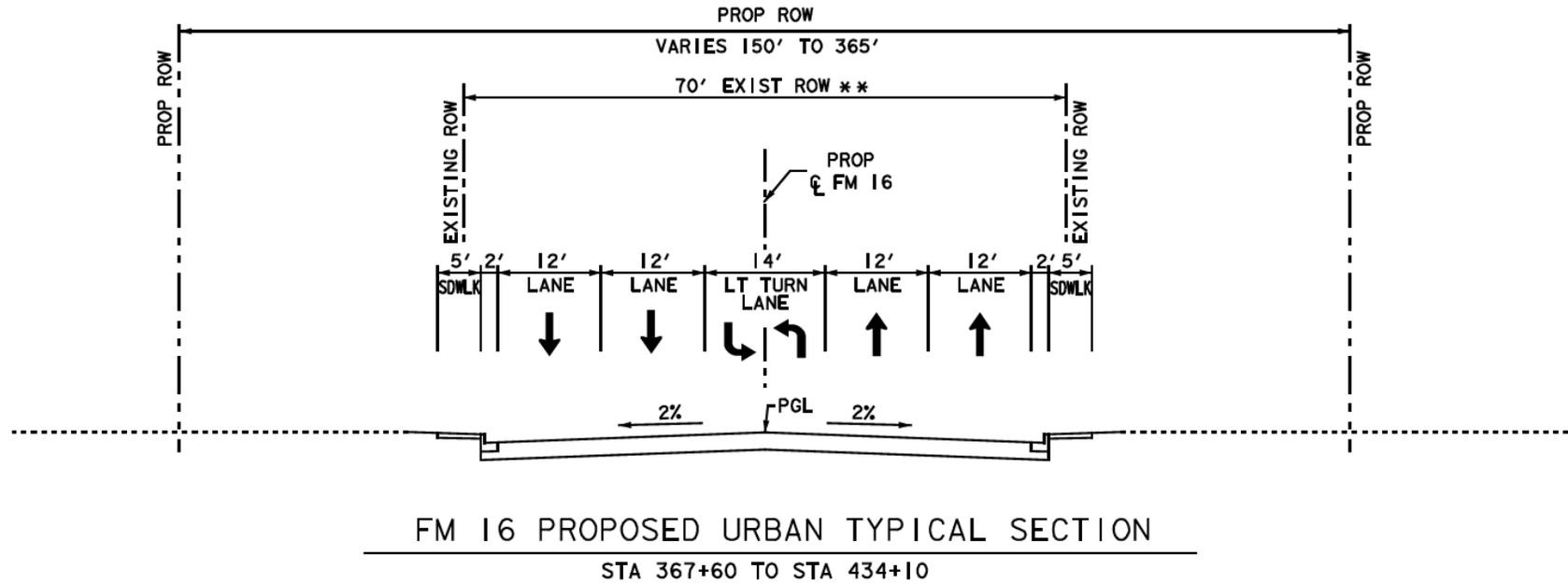
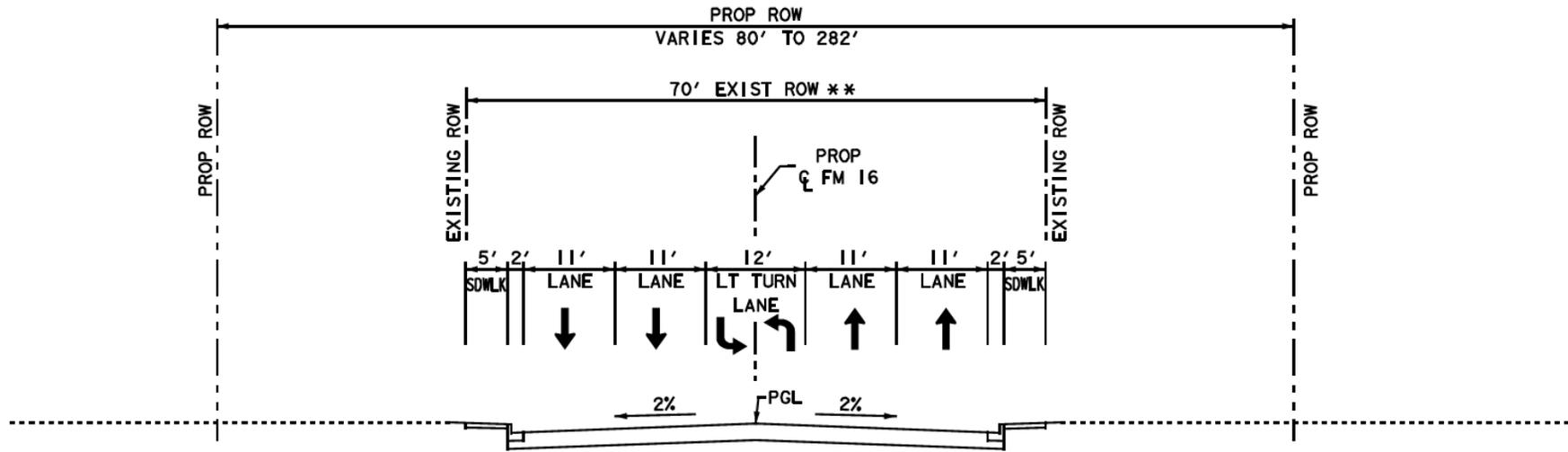


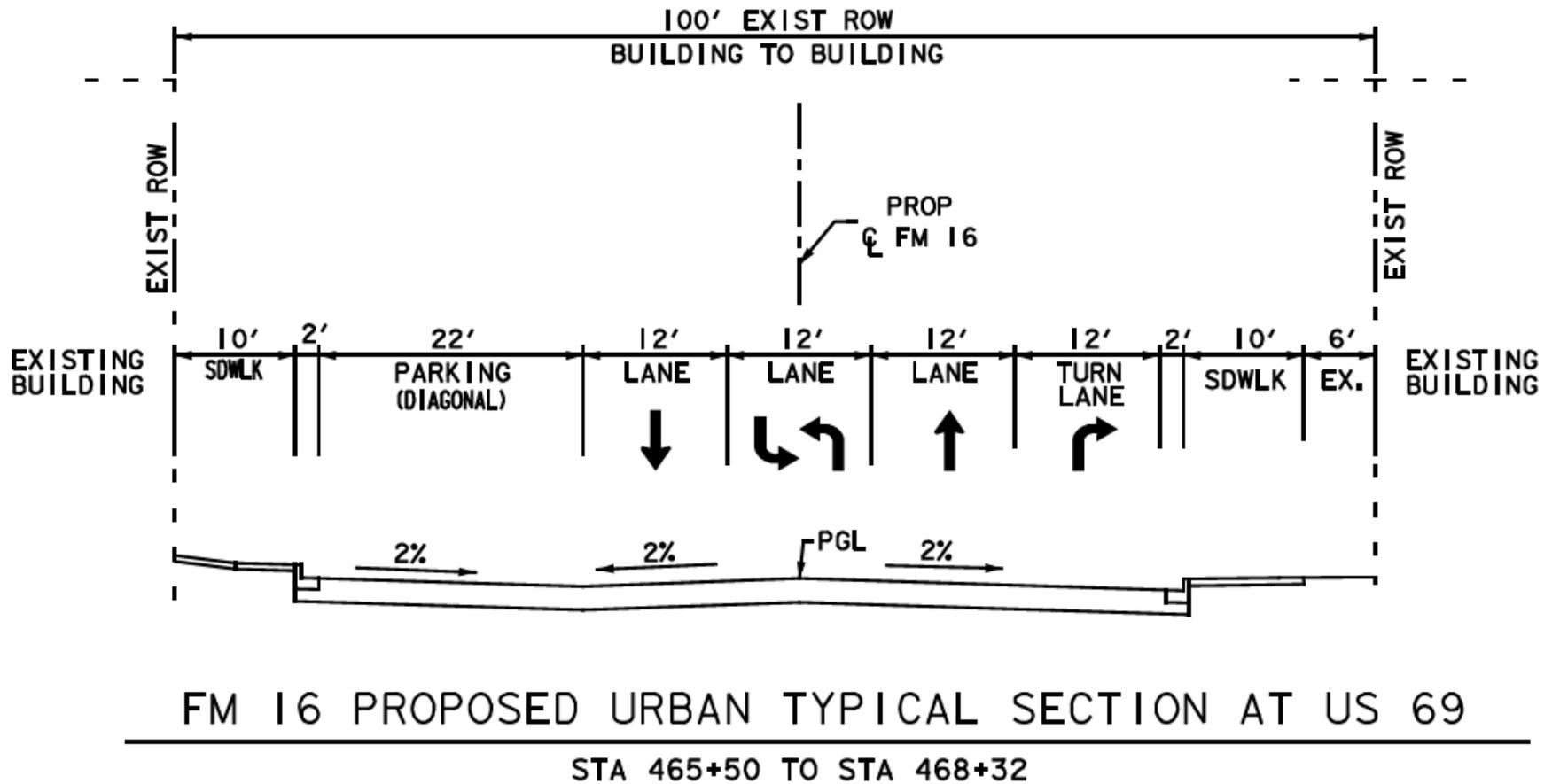
Figure 7: Proposed Urban Typical Section – Station 435+65 to Station 465+10



FM 16 PROPOSED URBAN TYPICAL SECTION

- STA 435+65 TO STA 465+10
- ** STA 419+75 TO STA 424+55 (EXIST ROW=90')
- ** STA 444+30 TO STA 449+85 (EXIST ROW=90')
- ** STA 462+10 TO STA 465+50 (EXIST ROW=100')

Figure 8: Proposed Urban Typical Section - Station 465+50 to Station 468+32



APPENDIX E
PLAN AND PROGRAM EXCERPTS

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM
TIP FY 2017-2020
GROUPED PROJECTS
TYLER METROPOLITAN PLANNING ORGANIZATION
FY 2017

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST	
10 - TYLER	SMITH	0522-04-032	FM 16	E	LINDALE		\$ 26,460,000	
LIMITS FROM:	4 MI W OF FM 849 (CR481-E), E					REVISION DATE:	07/2016	
LIMITS TO:	US 69 IN LINDALE					MPO PROJ NUM:		
PROJECT	WIDEN 2 LNS TO 4 LNS WITH FLUSH WEDIAN WITH THE					FUNDING CAT(S):	2U,1,11	
DESC:	EXT OF TOLL 49 FROM IH 20 TO US 69N					PROJECT HISTORY:	GROUPED FOR PE ONLY IN THE MAY 2015 STIP REVISION. GROUPED FOR PE ONLY IN THE 2017-2020 STIP	
REMARKS	TARGET EST=\$24 M							
P7:								
TOTAL PROJECT COST INFORMATION			AUTHORIZED FUNDING BY CATEGORY/SHARE					
PRELIM ENG:	\$ 1,179,532	COST OF APPROVED PHASES:		FEDERAL	STATE	LOCAL	LC	TOTAL
ROW PURCHASE:	\$ -		2U-URBAN CRDR	\$ 9,272,000	\$ 2,318,000	\$ -	\$ -	\$ 11,590,000
CONST COST:	\$ 24,072,090		1-PRVNT	\$ 8,480,000	\$ 2,120,000	\$ -	\$ -	\$ 10,600,000
CONST ENG:	\$ 1,193,976		11- DIST DIS	\$ 3,416,000	\$ 854,000	\$ -	\$ -	\$ 4,270,000
CONTING:	\$ 479,035		TOTAL	\$ 21,168,000	\$ 5,292,000	\$ -	\$ -	\$ 26,460,000
IND COSTS:	\$ -							
BND FINANCING:	\$ -							
TOTAL PRJ COST:	\$ 26,924,633							

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST	
10 - TYLER	SMITH	0492-01-040	FM 14	E	TYLER		\$ 466,204	
LIMITS FROM:	SL 323 IN TYLER, S					REVISION DATE:	07/2016	
LIMITS TO:	0.5 MI W OF US 271 (MLK BLVD)					MPO PROJ NUM:		
PROJECT	WIDEN 2 LN ROAD TO 4 LANE DIVIDED ROADWAY					FUNDING CAT(S):	1	
DESC:	W/FLUSH MEDIAN					PROJECT HISTORY:	WIDEN 2 LN ROAD TO 4 LANE DIVIDED ROADWAY W/FLUSH MEDIAN. GROUPEU FOR PE ONLY IN THE MAY 2015 STIP REVISION. GROUPEU FOR PE ONLY IN THE 2017-2020 STIP	
REMARKS	TARGET EST=\$4.7M, TPP ADDITIONAL PLANNING AUTHORITY							
P7:								
TOTAL PROJECT COST INFORMATION			AUTHORIZED FUNDING BY CATEGORY/SHARE					
PRELIM ENG:	\$ 231,683	COST OF APPROVED PHASES:		FEDERAL	STATE	LOCAL	LC	TOTAL
ROW PURCHASE:	\$ -		1-PRVNT	\$ 372,963	\$ 93,241	\$ -	\$ -	\$ 466,204
CONST COST:	\$ 4,728,227		TOTAL	\$ 372,963	\$ 93,241	\$ -	\$ -	\$ 466,204
CONST ENG:	\$ 234,520							
CONTING:	\$ 94,092							
IND COSTS:	\$ -							
BND FINANCING:	\$ -							
TOTAL PRJ COST:	\$ 5,288,522							

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST	
10-TYLER	SMITH	0495-04-069	IH 20	E	LINDALE		\$ 1,622,761	
LIMITS FROM:	1 MI E OF TOLL 49 (HARVEY RD), E					REVISION DATE:	02/2017	
LIMITS TO:	US 69 IN LINDALE					MPO PROJ NUM:		
PROJECT	RAMP REVERSAL & ONE-WAY FRONTAGE ROADS					FUNDING CAT(S):	2U, 1	
DESC:						PROJECT HISTORY:		
REMARKS								
P7:								
TOTAL PROJECT COST INFORMATION			AUTHORIZED FUNDING BY CATEGORY/SHARE					
PRELIM ENG:	\$ 730,168	COST OF APPROVED PHASES:		FEDERAL	STATE	LOCAL	LC	TOTAL
ROW PURCHASE:	\$ -		1-PRVNT	\$ 2,728,000	\$ 682,000	\$ -	\$ -	\$ 3,410,000
CONST COST:	\$ 14,901,383		2U-URBAN CRDR	\$ 9,272,000	\$ 2,318,000	\$ -	\$ -	\$ 11,590,000
CONST ENG:	\$ 892,593		TOTAL	\$ 12,000,000	\$ 3,000,000	\$ -	\$ -	\$ 15,000,000
CONTING:	\$ 387,436							
IND COSTS:	\$ -							
BND FINANCING:	\$ -							
TOTAL PRJ COST:	\$ 16,911,580							

PHASE: C=CONSTRUCTION, E=ENGINEERING, R=ROW, T=TRANSFER

*FUNDING NOT FIXED



DEVELOPMENT OF PROPOSED PROJECT LIST

The list of proposed projects was developed iteratively in consultation with state and local transportation partners. The initial list of projects to be considered for inclusion in the 2040 Metropolitan Transportation Plan was developed from the following sources:

- ▶ For continuity purposes, the project selection process used in the previous MTP was reviewed and its validity was confirmed. Those projects that had been identified by the previous MTP, but had not yet been implemented were moved forward for prioritization and consideration in the 2040 Metropolitan Transportation Plan.¹
- ▶ In June 2013, the Tyler Area MPO released an official call for projects to municipalities and transportation stakeholders within the Tyler Urbanized Area. One project was submitted by the North East Texas Regional Mobility Authority (NET RMA), which has been included, but does not require inclusion in the prioritization, as the project is expected to be fully funded by NET RMA. No other projects were submitted as a result of the call for projects.
- ▶ Through coordination with the Texas Department of Transportation district, additional projects were identified for prioritization and possible inclusion in the 2040 Metropolitan Transportation Plan.

The complete list of projects for evaluation and prioritization is shown in Table XIII-2.

Table XIII-2: Projects Proposed for Consideration

Project	Extent	Description	Source	Included in Scoring
SS 248	1.75 mi West of FM 848 (Old Omen Rd) to SH 64	Widen to 4-lane divided roadway with flush median	TxDOT	Short-term
Railroad ROW Acquisition	Hagen Road in Whitehouse to FM 346 in Troup	Purchase 7.25 miles of abandoned Union Pacific Railroad corridor	TxDOT	Short-term
IH 20	US 69 in Lindale to 0.8 mi East of US 69	Realign and lengthen WB exit and EB entrance ramp for US 69	TxDOT	Short-term
IH 20	0.8 mi East of US 69 to 1.75 mi East of US 69 (Jim Hogg Rd)	Realign and lengthen WB exit and EB entrance ramp for US 69	TxDOT	Short-term
FM 2493	FM 2813 in Gresham to FM 346 in Flint	Widen from 2 lanes to 4 lanes with flush median	TxDOT	Short-term
US 69	At FM 346 East of Flint	Construct grade-separated interchange	TxDOT	Short-term
IH 20	US 69 in Lindale	Ramp reversal and one-way frontage roads	TxDOT	Short-term
FM 16	4 mi West of FM 849 (CR 481E) to US 69 in Lindale	Widen to 4 lanes with flush median to Toll 49, then center turn lane for the rest	TxDOT	Short-term

¹ Please note that the locally funded projects will not be prioritized, as these projects are anticipated to be funded with only local dollars and have already been ranked through the City's Capital Improvement Program.



FINAL PROJECT SCORES

The following table depicts the combined results of the project scoring process. Table XIII-5 shows the final scores derived from the publicly weighted criteria, the quantitative travel demand model analysis, and the qualitative analysis by the Technical Advisory Committee, based on the TAC members' local knowledge and expertise.

Table XIII-5: Short- and Long-term Projects in Order of Priority

Project Ranking	Name of Roadway	Project Description	Final Score
Short-Term Projects (2015-2024)			
1	FM 2493 -- from FM 2813 in Gresham to FM 346 in Flint	Widen from 2 lanes to 4 lanes with flush median	2.53
2	SS 248 -- 1.75 Mi W of FM 848 (Old Omen Rd), E to SH 64 SE of Tyler	Widen to 4-lane divided roadway with flush median	2.33
3	FM 2493 -- FM 346 in Flint to 0.3 mi South of FM 344 (Cherokee County Line)	Widen from 2 lanes to 4 lanes with flush median	2.29
4	IH 20 -- At US 69	Ramp improvements at US 69	2.03
4a	US 69 in Lindale to 0.8 mi East of US 69	Realign and lengthen WB exit and EB entrance ramp for US 69	
4b	0.8 mi East of US 69 to 1.75 mi East of US 69 (Jim Hogg Rd)	Realign and lengthen WB exit and EB entrance ramp for US 69	
4c	US 69 in Lindale	Ramp reversal and one-way frontage roads	
5	US 69 -- At FM 346 East of Flint	Construct grade-separated interchange	2.00
6	Railroad ROW Acquisition -- Hagen Road in Whitehouse to FM 346 in Troup	Purchase 7.25 miles of abandoned Railroad corridor	1.89
7	FM 16 -- 4 mi West of FM 849 (CR 481E) to US 69 in Lindale	Widen to 4 lanes with flush median to Toll 49, then center turn lane for the rest	1.76
Long-Term Projects (2025-2040)			
1	FM 756 (Paluxy) -- Jeff Davis Drive to FM 346	Widen from 2 lanes to 4 lanes with flush median	2.05
2	FM 756 (Paluxy) -- FM 346 to FM 344 at Walnut Grove	Widen from 2 lanes to 4 lanes with flush median	2.05
3	FM 2964 (Rhones Quarter) -- SH 110 to FM 346	Widen from 2 to 4 lanes	2.03
4	SH 31 E -- SL 323 to FM 850	Widening from 3 to 4 lanes	1.92
5	SS 364 -- SH 31 to LP 323	Widening from 2 to 4 lanes	1.85
6	FM 2493 -- LP 323 to FM 2813	Widening from 4 to 6 lanes	1.79



Table XIV-3: Cost Estimates for Proposed Projects

Rank	Project Roadway	From	To	Description	Project Length	Estimated Construction	Estimated Engineering	Estimated ROW/Utility	Total Project Cost (\$2014)	Year-of Expenditure 2015-2024 Cost	Year-of Expenditure 2025-2040 Cost
Short-term 1	SS 248	1.75 mi West of FM 848 (Old Omen Rd)	SH 64	Widen to 4-lane divided roadway with flush median	2.2	\$9,109,470	\$1,312,072	\$0	\$10,421,542	\$12,930,501	\$0
Short-term 2	Railroad ROW Acquisition	Hagen Road in Whitehouse	FM 346 in Troup	Purchase 7.25 miles of abandoned Union Pacific Railroad corridor	7.25	\$0	\$0	\$400,000	\$500,000	\$500,000	\$0
Short-term 3	IH 20	US 69 in Lindale	0.8 mi East of US 69	Realign and lengthen WB exit and EB entrance ramp for US 69	0.8	\$9,586,157	\$1,676,619	\$325,000	\$9,400,000	\$11,587,775	\$0
Short-term 4	IH 20	0.8 mi East of US 69	1.75 mi East of US 69 (Jim Hogg Rd)	Realign and lengthen WB exit and EB entrance ramp for US 69	2.0	\$4,079,216	\$713,455	\$0	\$4,000,000	\$4,792,670	\$0
Short-term 5	FM 2493	FM 2813 In Gresham	FM 346 in Flint	Widen from 2 lanes to 4 lanes with flush median	2.2	\$13,979,795	\$2,179,450	\$3,109,765	\$13,400,000	\$19,269,010	\$0
Short-term 6	US 69	At FM 346 East of Flint		Construct grade-separated interchange	0.9	\$16,118,495	\$2,751,427	\$2,146,750	\$15,450,000	\$21,016,672	\$0
Short-term 7	IH 20	US 69 in Lindale		Ramp reversal and one-way frontage roads	1.8	\$16,708,326	\$2,922,286	\$0	\$15,000,000	\$19,630,612	\$0
Short-term 8	FM 16	4 mi West of FM 849 (CR 481E)	US 69 in Lindale	Widen to 4 lanes with flush median to Toll 49, then center turn lane for the rest	4.4	\$28,180,269	\$4,393,304	\$0	\$24,730,000	\$32,573,573	\$0
Short-term 9	FM 2493	FM 346 in Flint	0.3 mi South of FM 344 (Cherokee County Line)	Widen from 2 Lanes to 4 Lanes with flush median	5.2	\$37,811,610	\$5,894,830	\$0	\$32,640,000	\$43,706,440	\$0
Long-term 1	FM 756 (Paluxy)	Jeff Davis Drive	FM 346	Widen from 2 lanes to 4 lanes with flush median	3.7	\$22,890,852	\$3,568,684	\$0	\$19,000,000	\$0	\$27,773,438
Long-term 2	FM 756 (Paluxy)	FM 346	FM 344 at Walnut Grove	Widen from 2 lanes to 4 lanes with flush median	3.2	\$9,312,963	\$1,451,891	\$0	\$7,730,000	\$0	\$10,764,853
Long-term 3	FM 2493	SL 323	FM 2813	Widen from 4 lanes to 6 lanes with flush median	5.1	\$66,384,149	\$10,349,289	\$0	\$52,300,000	\$0	\$76,733,438
Long-term 4	FM 2964 (Rhones Quarter)	SH 110	FM 346	Widen from 2 lanes to 4 lanes	5.1	\$18,973,018	\$2,957,893	\$0	\$14,000,000	\$0	\$21,930,911
Long-term 5	SH 31, East	SL 323 in Tyler	CR 236 (MPO boundary) 1.6 mi East of FM 757	Widen 2 lanes to 4 lane divided highway	10.9	\$111,460,067	\$17,376,624	\$0	\$85,000,000	\$135,234,499	\$162,065,321
Long-term 6	SS 364	SH 31	SL 323	Widen from 2 to 4 lanes	4.3	\$14,168,463	\$1,983,585	\$6,868,632	\$23,020,680	\$28,562,848	\$46,635,674
(NETRMA funded - not ranked)	Toll 49 Segment 4	IH 20 SW of Lindale	US 69 N of Lindale	Construct 2-lane controlled access toll road on new location	5.76	\$54,893,000	\$5,216,000	\$24,072,000	\$119,473,000	\$75,619,000	\$0
(NETRMA funded - not ranked)	Toll 49 Segment 6	SH 110 (appr. 1.2 miles north of Whitehouse)	0.35 miles east of US 271/FM 2908 intersection	Construct 2-lane controlled access toll road on new location	12.5	\$76,739,133	\$10,743,479	\$23,355,388	\$110,838,000	\$137,521,958	\$224,537,451



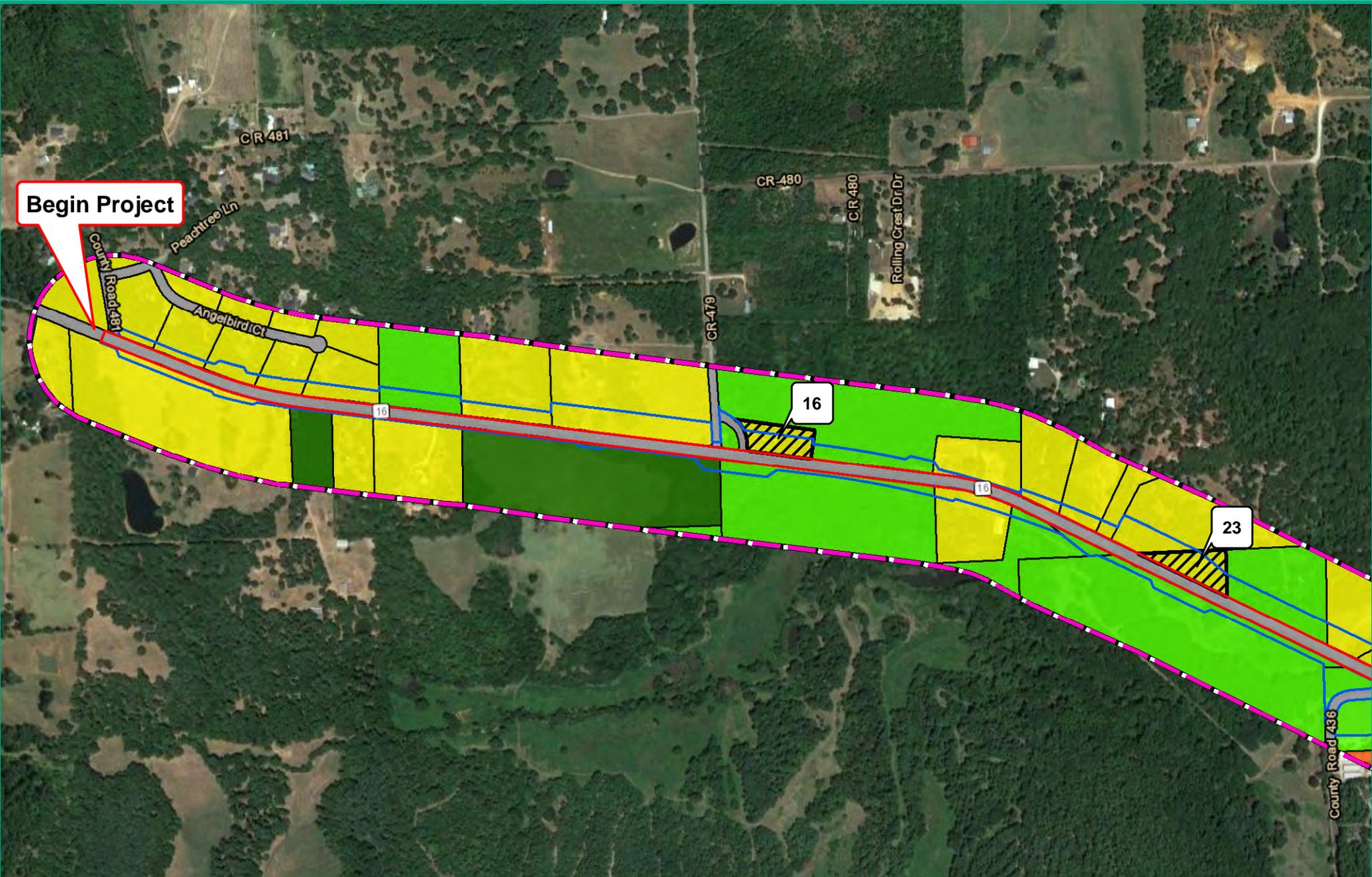
Short-term Implementation

The following projects are recommended for implementation during the short-term phase (2015-2024). They are broken out into mobility and non-mobility projects and are listed by project sponsor:

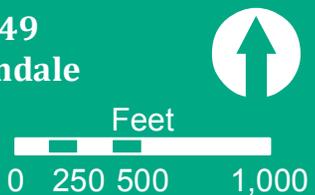
Table XV-1: Roadway Projects Short-Term Implementation Plan

Project Roadway	From	To	Description	Total Project Cost
Short-term Mobility Projects				
State-Sponsored				
SS 248	1.75 Mi W of FM 848 (Old Omen Rd), E	SH 64 SE of Tyler	Widen to a 4-lane divided roadway with flush median	\$12,930,501
Railroad ROW Acquisition	Hagen Road in Whitehouse	FM 346 in Troup	Purchase 7.25 miles of abandoned Union Pacific Railroad corridor	\$500,000
IH 20	US 69 in Lindale	0.8 mi East of US 69	Realign and lengthen WB exit and EB entrance ramp for US 69	\$11,587,775
IH 20	0.8 mi East of US 69	1.75 mi East of US 69 (Jim Hogg Rd)	Realign and lengthen WB exit and EB entrance ramp for US 69	\$4,792,670
FM 2493	FM 2813 in Gresham	FM 346 in Flint	Widen from 2 lanes to 4 lanes with flush median	\$19,269,010
US 69	At FM 346 East of Flint		Construct grade-separated interchange	\$21,016,672
IH 20	US 69 in Lindale		Ramp reversal and one-way frontage roads	\$19,630,612
FM 16	4 mi W of FM 849 (CR 481E)	US 69 in Lindale	Widen 4 lanes with flush median to Toll 49, then center turn lane for the rest	\$32,573,573
FM 2493	FM 346 in Flint	0.3 mi South of FM 344 (Cherokee C/L)	Widen from 2 Lanes to 4 Lanes with flush median	\$43,706,440
Legacy Trail	FM 2813, N along W side of FM 2493	3 Lakes PKWY, S to Cumberland Rd	Construct 10' wide multi-purpose Legacy Trails, phase 1	4,937,650
Short-term Non-Mobility Projects				
Categories 1 and 6 - Preventative Maintenance, Replacement and Rehabilitation				\$59,885,413
Total State-Sponsored Short-term Expenditure				\$165,507,225
Expected Short-term Funds Available				\$225,392,668

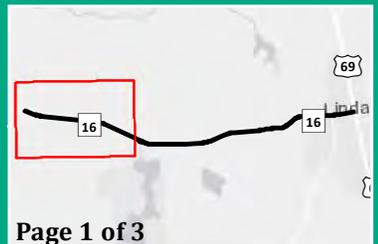
APPENDIX F
RESOURCE SPECIFIC MAPS

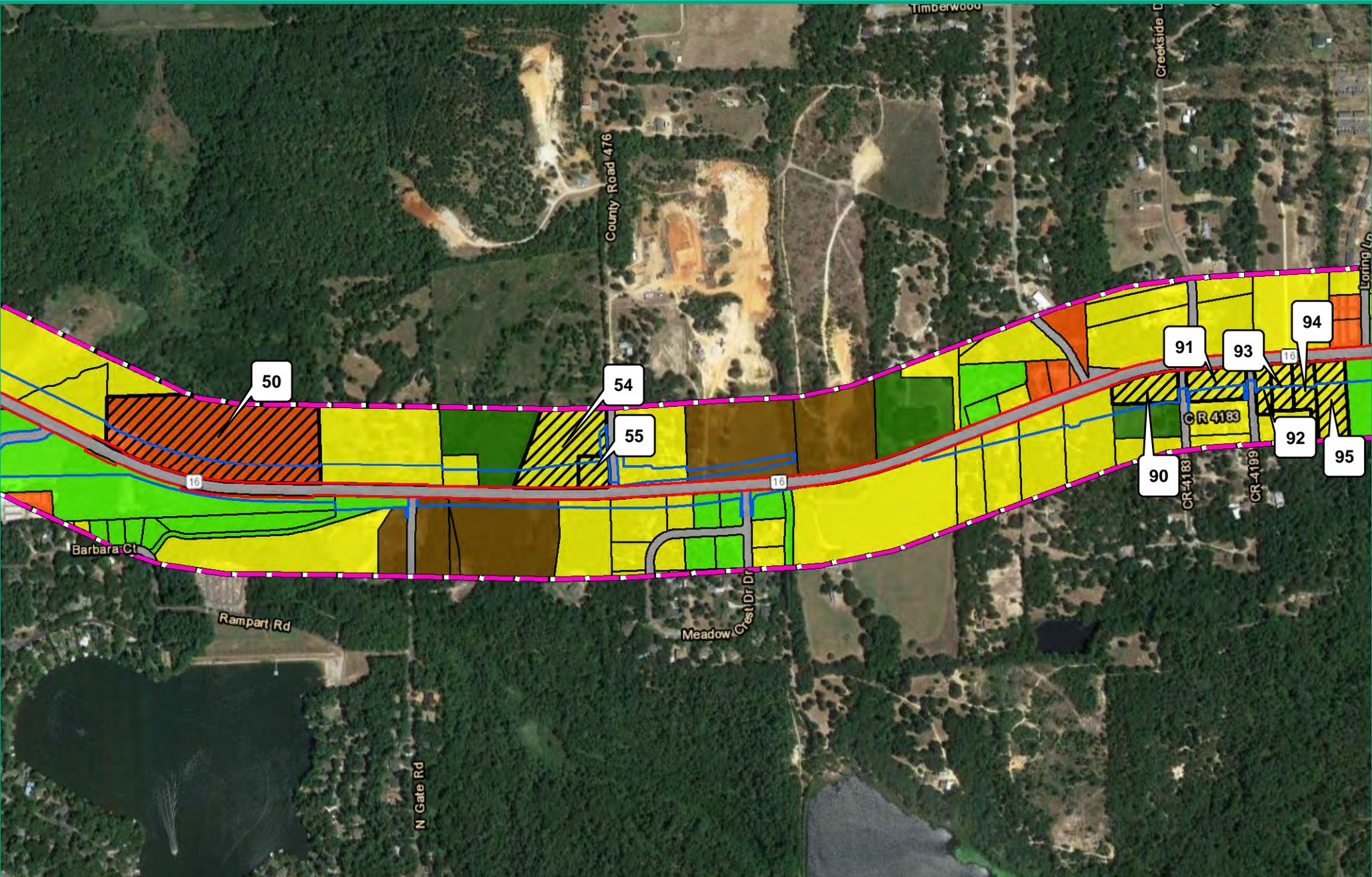


Land Use and Displacements
 FM 16: 4 miles west of FM 849
 (CR 481) east to US 69 in Lindale
 CSJ: 0522-04-032
 Smith County, Texas

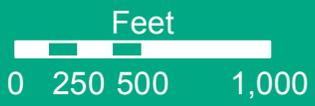


- | | | |
|-------------------|-----------------|------------------|
| 500 ft Study Area | Land Use | Place of Worship |
| Existing ROW | Agricultural | Public |
| Proposed ROW | Commercial | Residential |
| Displacements | Industrial | Utilities |
| | Open Space | Transportation |

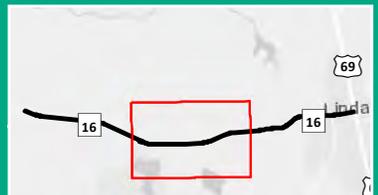


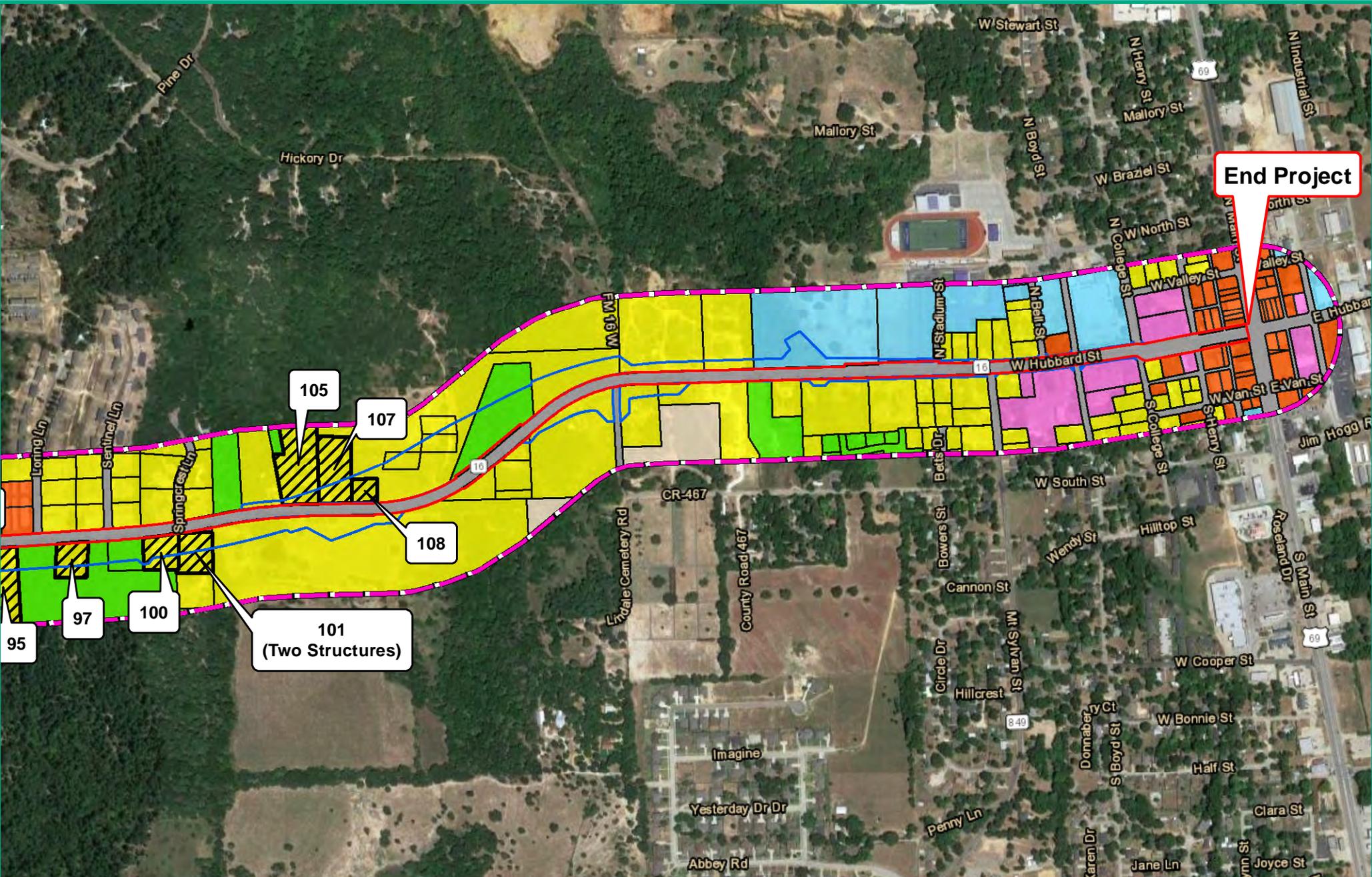


Land Use and Displacements
 FM 16: 4 miles west of FM 849
 (CR 481) east to US 69 in Lindale
 CSJ: 0522-04-032
 Smith County, Texas



- | | | |
|-------------------|-----------------|------------------|
| 500 ft Study Area | Land Use | Place of Worship |
| Existing ROW | Agricultural | Public |
| Proposed ROW | Commercial | Residential |
| Displacements | Industrial | Utilities |
| | Open Space | Transportation |



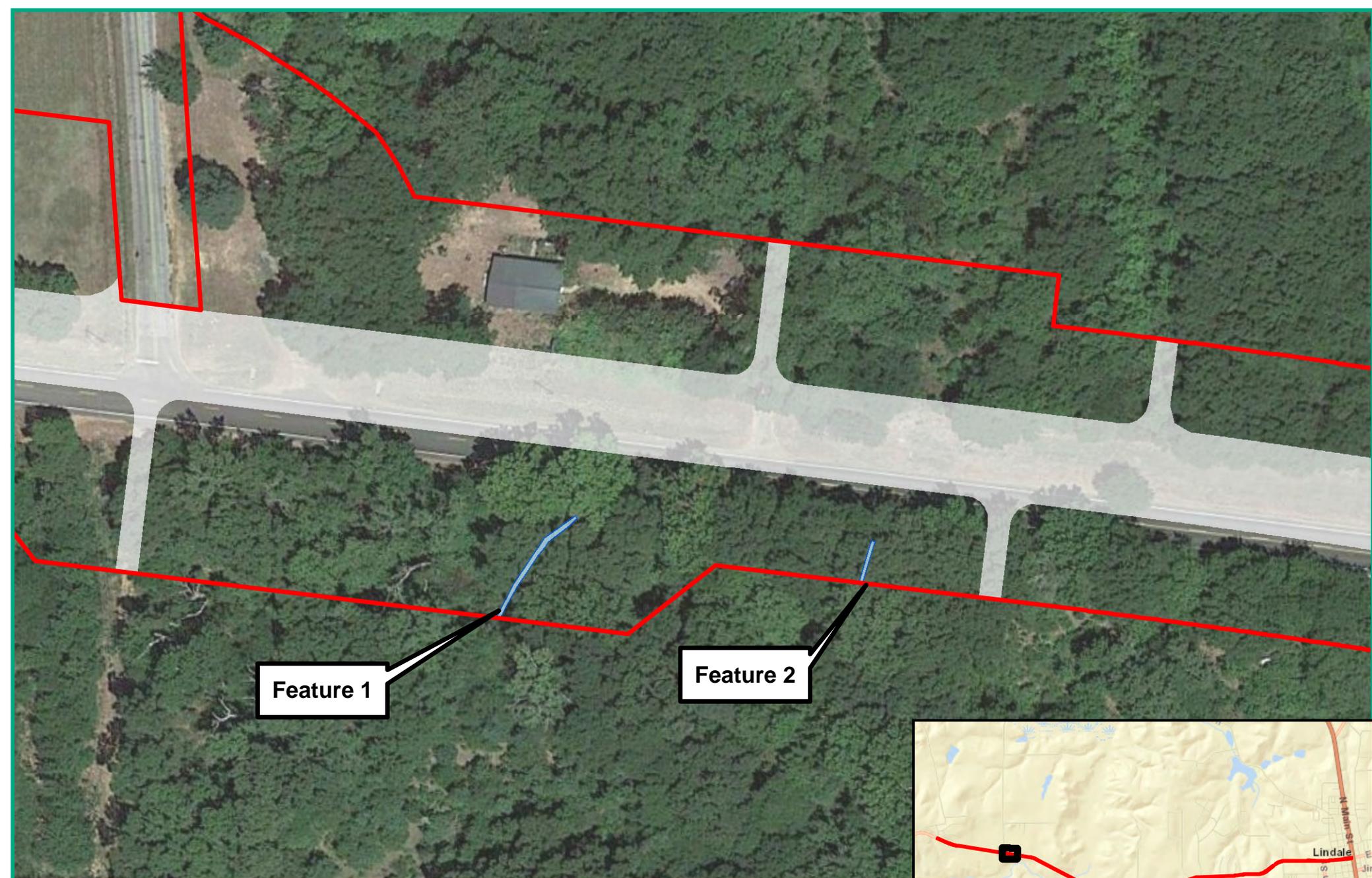


Land Use and Displacements
 FM 16: 4 miles west of FM 849
 (CR 481) east to US 69 in Lindale
 CSJ: 0522-04-032
 Smith County, Texas



500 ft Study Area	Land Use	Place of Worship
Existing ROW	Agricultural	Public
Proposed ROW	Commercial	Residential
Displacements	Industrial	Utilities
	Open Space	Transportation



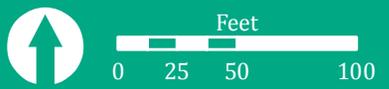
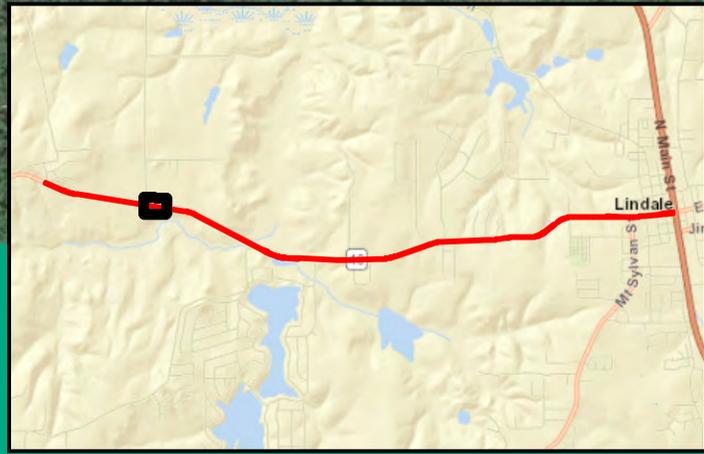


Feature 1

Feature 2

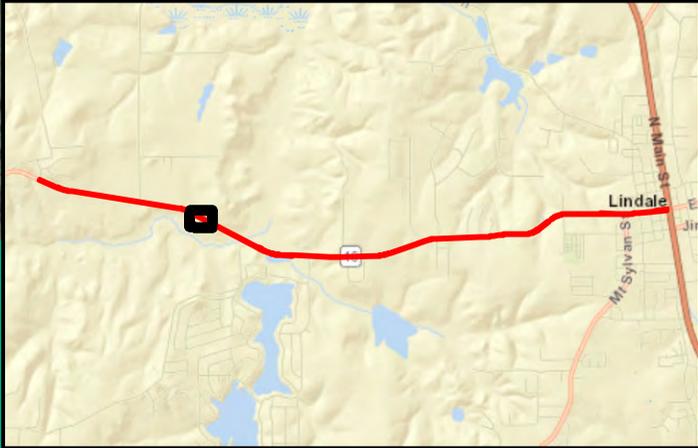
Waters of the U.S. Map
 FM 16: 4 miles west of FM 849
 (CR 481) to US 69 in Lindale
 Smith Co, Texas; CSJ: 0522-04-032

-  Proposed Roadway
-  Project Area
-  OHWM
-  Wetland
-  Wetland Sampling Point





Feature 3



Waters of the U.S. Map

FM 16: 4 miles west of FM 849 (CR 481) to US 69 in Lindale Smith Co, Texas; CSJ: 0522-04-032

-  Proposed Roadway
-  Project Area
-  OHWM
-  Wetland
-  Wetland Sampling Point

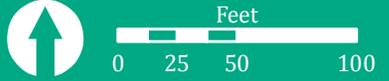
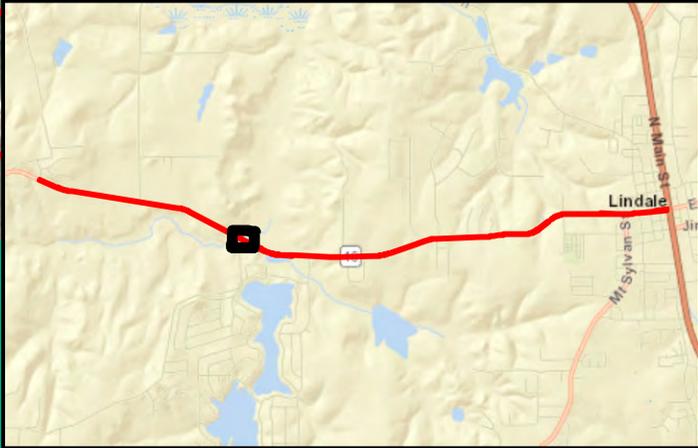




Feature 4

Waters of the U.S. Map
FM 16: 4 miles west of FM 849
(CR 481) to US 69 in Lindale
Smith Co, Texas; CSJ: 0522-04-032

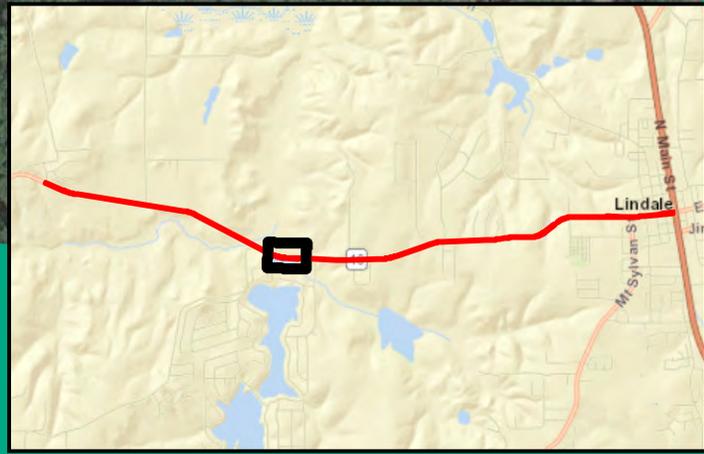
-  Proposed Roadway
-  Project Area
-  OHWM
-  Wetland
-  Wetland Sampling Point

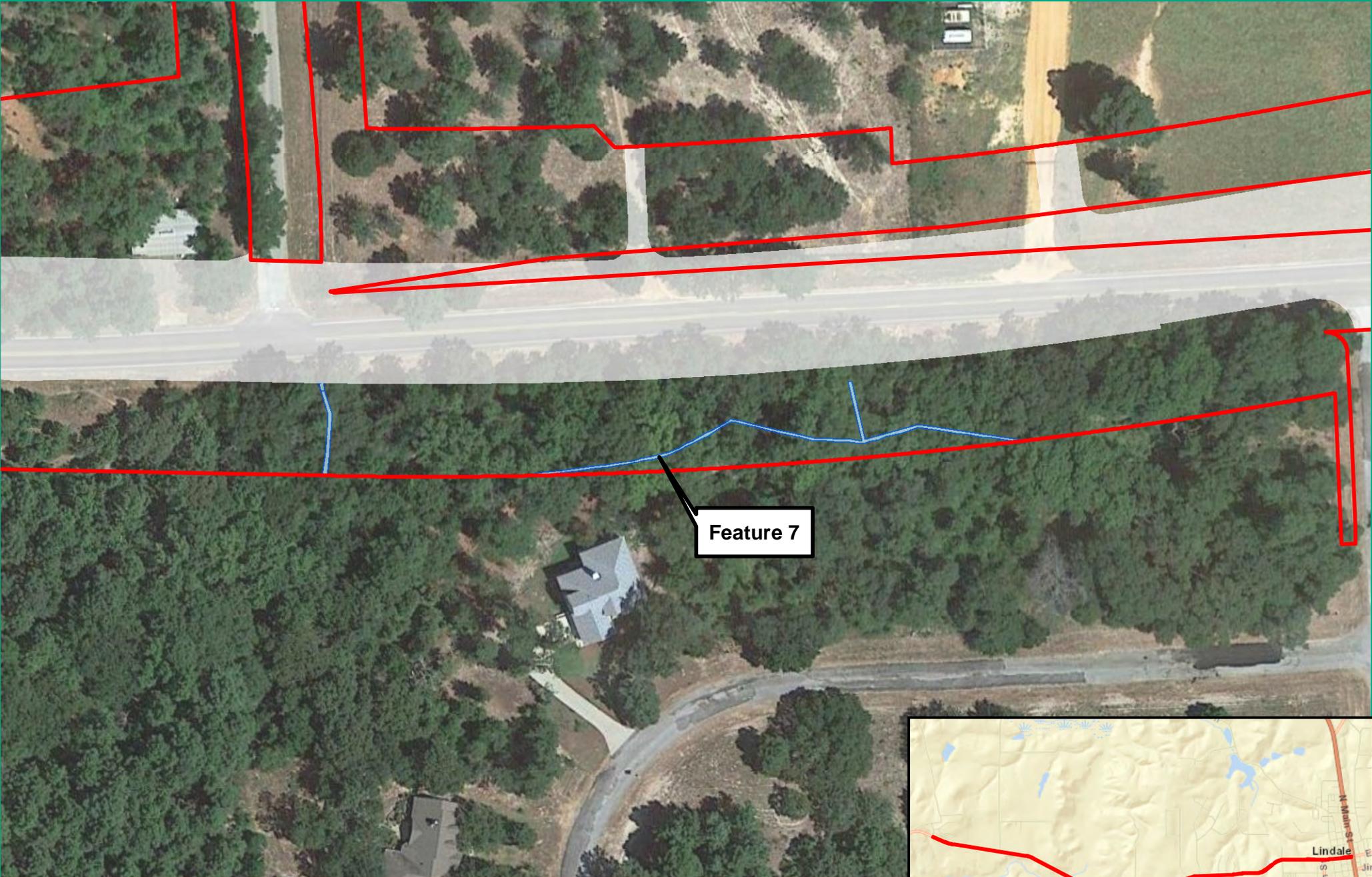




Waters of the U.S. Map
 FM 16: 4 miles west of FM 849
 (CR 481) to US 69 in Lindale
 Smith Co, Texas; CSJ: 0522-04-032

-  Proposed Roadway
-  Project Area
-  OHWM
-  Wetland
-  Wetland Sampling Point

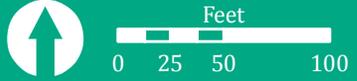
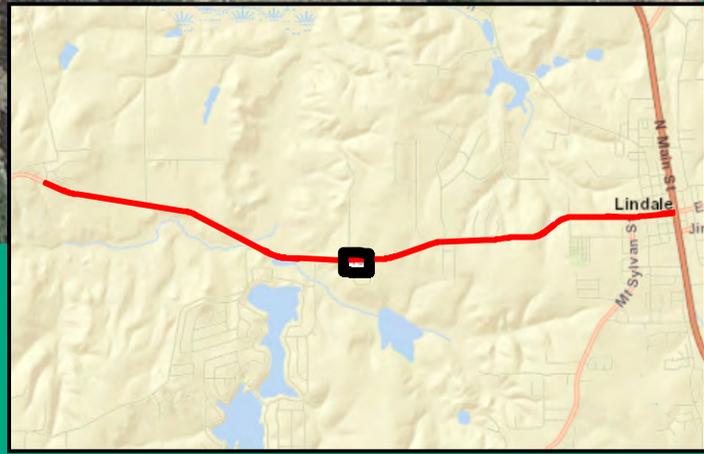




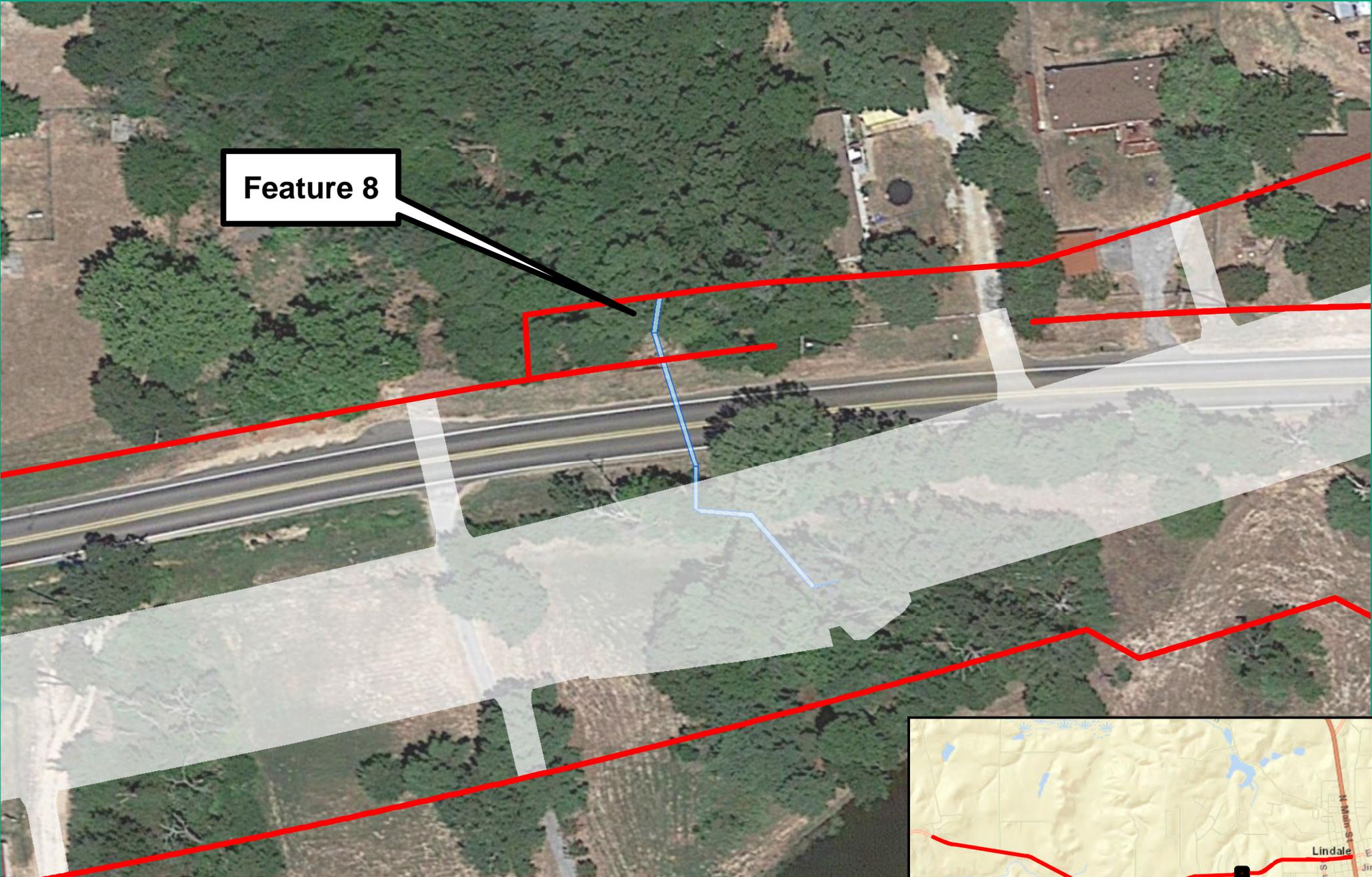
Feature 7

Waters of the U.S. Map
FM 16: 4 miles west of FM 849
(CR 481) to US 69 in Lindale
Smith Co, Texas; CSJ: 0522-04-032

-  Proposed Roadway
-  Project Area
-  OHWM
-  Wetland
-  Wetland Sampling Point

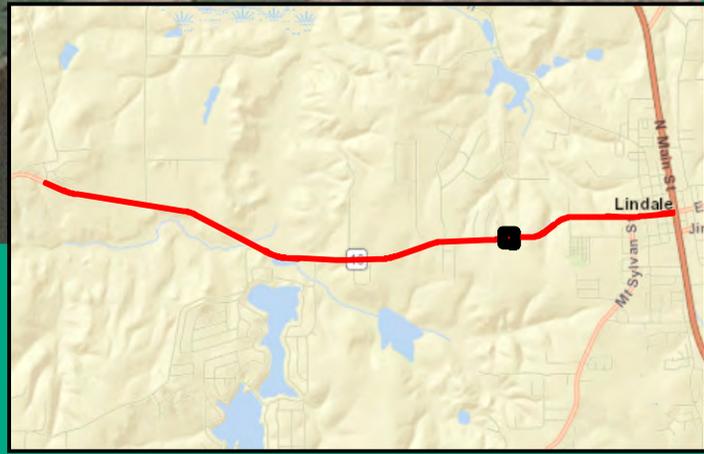


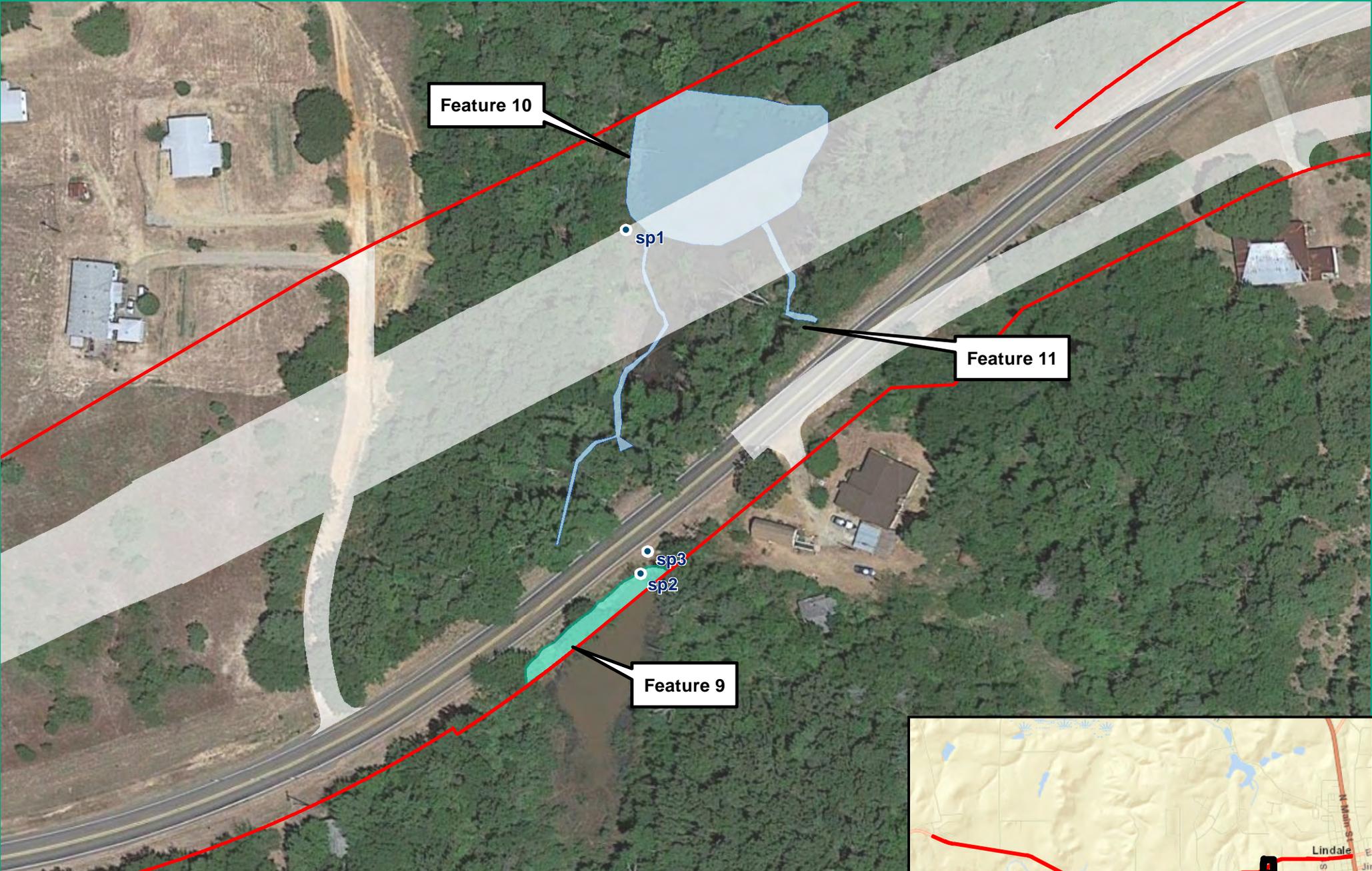
Feature 8



Waters of the U.S. Map
FM 16: 4 miles west of FM 849
(CR 481) to US 69 in Lindale
Smith Co, Texas; CSJ: 0522-04-032

-  Proposed Roadway
-  Project Area
-  OHWM
-  Wetland
-  Wetland Sampling Point





Feature 10

Feature 11

Feature 9

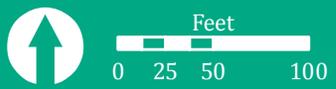
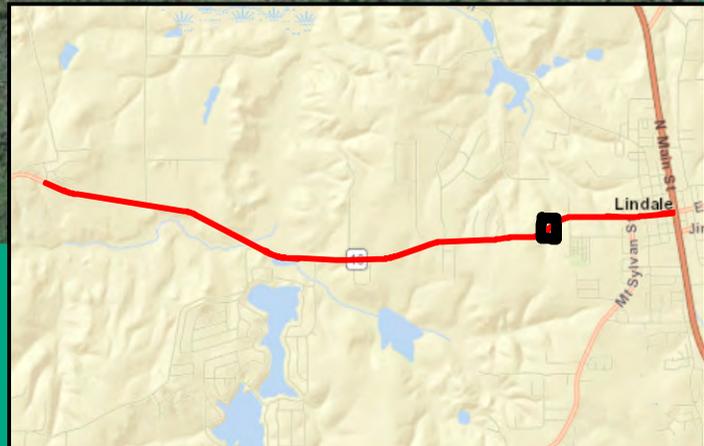
sp1

sp3

sp2

Waters of the U.S. Map
 FM 16: 4 miles west of FM 849
 (CR 481) to US 69 in Lindale
 Smith Co, Texas; CSJ: 0522-04-032

-  Proposed Roadway
-  Project Area
-  OHWM
-  Wetland
-  Wetland Sampling Point



Feature 12

Feature 13

Waters of the U.S. Map
FM 16: 4 miles west of FM 849
(CR 481) to US 69 in Lindale
Smith Co, Texas; CSJ: 0522-04-032



Proposed Roadway



Project Area



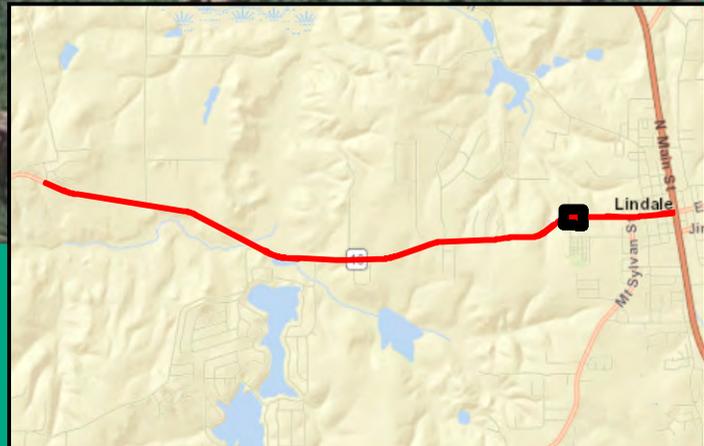
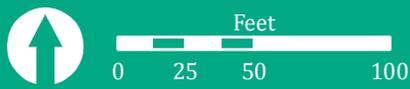
OHWM



Wetland



Wetland Sampling Point

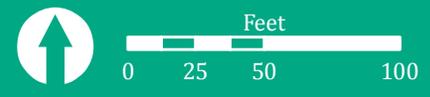
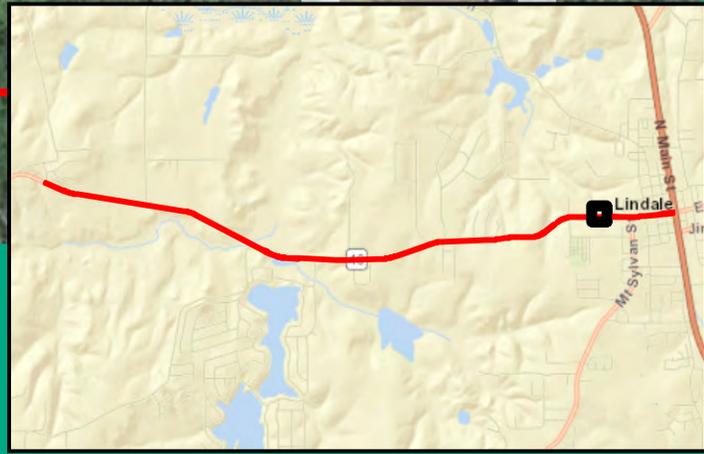


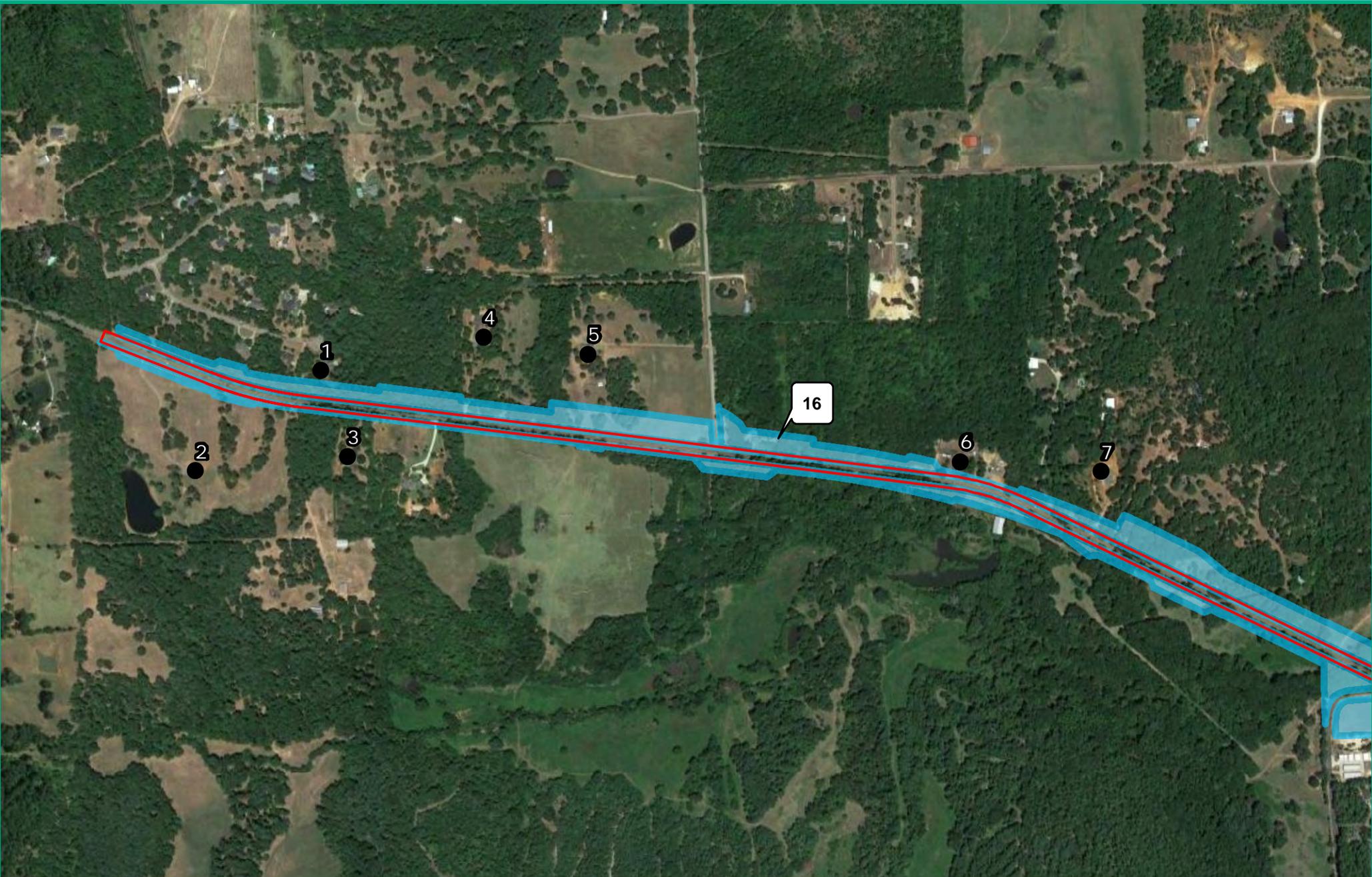
Feature 14



Waters of the U.S. Map
FM 16: 4 miles west of FM 849
(CR 481) to US 69 in Lindale
Smith Co, Texas; CSJ: 0522-04-032

-  Proposed Roadway
-  Project Area
-  OHWM
-  Wetland
-  Wetland Sampling Point



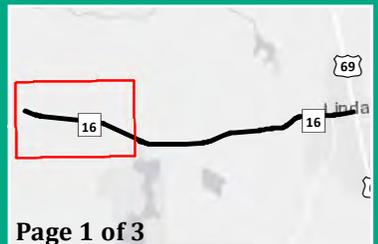


Representative Receivers

FM 16: 4 miles west of FM 849
(CR 481) to US 69 in Lindale

CSJ: 0522-04-032
Smith County, Texas

- Non-Impacted Receivers
- ▭ Existing ROW
- ▭ Proposed ROW



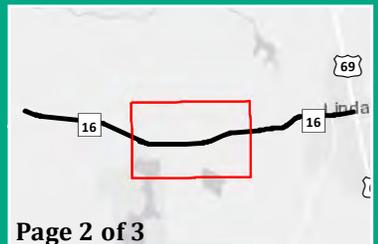


Representative Receivers

FM 16: 4 miles west of FM 849
(CR 481) to US 69 in Lindale

CSJ: 0522-04-032
Smith County, Texas

- Non-Impacted Receivers
- ▭ Existing ROW
- ▭ Proposed ROW



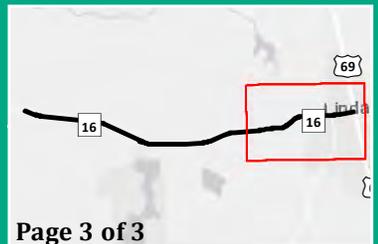


Representative Receivers

FM 16: 4 miles west of FM 849
(CR 481) to US 69 in Lindale

CSJ: 0522-04-032
Smith County, Texas

- Non-Impacted Receivers
- Existing ROW
- Proposed ROW



APPENDIX G
RESOURCE AGENCY COORDINATION



Texas Department of Transportation

125 EAST 11TH STREET | AUSTIN, TEXAS 78701-2483 | (512) 463-8588 | WWW.TXDOT.GOV

August 11, 2017

SECTION 106 REVIEW: DETERMINATION OF ELIGIBILITY and EFFECT
SECTION 4(f) REVIEW: NOTIFICATION OF INTENT TO RENDER SECTION 4(F) *de minimis* FINDING

Smith County / Tyler District
Facility: FM 16
From: CR 481-E to US 69
CSJ: 0522-04-032

Linda Henderson
History Programs
Texas Historical Commission
Austin, TX 78711

Ms. Henderson:

Introduction

This letter *initiates* Section 106 coordination for the above federally funded project. It also includes a review of the project as a *de minimis* to Section 4(f).

The proposed project would widen FM 16 from two lanes to 3-5 lanes and would flatten curves. It would also include construction of a storm sewer in Lindale east of US 69 and a new sidewalk with ADA ramps along the north side of FM 16 immediately west of US 69. TxDOT requires total of 85 acres of new right-of-way (ROW). See attached project schematics.

Determination of Eligibility:

TxDOT historians reviewed the National Register of Historic Places (NRHP), the list of State Antiquities Landmarks (SAL), the list of Recorded Texas Historic Landmarks (RTHL), and TxDOT files and found no previously documented historically significant property within the project area of potential effects (APE). TxDOT historians determined through consultation with the State Historic Preservation Officer (SHPO) that the APE for the proposed project is 150 feet from the project ROW. TxDOT forces conducted a site visit that revealed that there are 66 historic-age resources (built prior to 1976) located within the APE. See attached survey report. TxDOT historians made the following eligibility determinations:

Not NRHP Eligible

The following residential resources lack sufficient associations with events, persons, architectural distinction, or integrity to be NRHP eligible under any criteria: 001, 002, 003, 004, 005, 006, 007, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021a-b, 022a-b, 024a-b, 025, 026b, 029, 030, 031, 033, and 035.

The following commercial resources lack sufficient associations with events, persons, architectural distinction, or integrity to be *individually* NRHP eligible under any criteria: 036a,

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036b, 036c, 036e, 036f, 036h, 036l, 036o, 036p, 036q, 036r, 036w, 036x, 036y1 and 036y2. 036g.

The following religious and civic resources lack sufficient associations with events, persons, architectural distinction, or integrity to be *individually* NRHP eligible under any criteria: 028, 032, 034, 036t, and 036u.

Resource 023, 410 W Hubbard Street, is a circa 1930, one-story classicizing frame residence with hipped roof and recessed porch with Tuscan columns. It is a good example of a vernacular type that retains integrity design, materials, and workmanship. The landscaping, tree, and the fence are not historic age.

However, the 1987 photo-revised 1960 topographic map shows that Resource 023 was not on its present location until after 1960. A review of aerials, other remote imagery also demonstrates that the setting has lost a meaningful amount of integrity. The wide driveway immediately east of #023 improves parking access to the church (First United Methodist Church Resource 028). Constructed in 1973, the church's massing, scale, and landscaping (including the parking lot) speaks more to post WWII Modernist and suburban sensibilities than to the rural vernacular of Resource 023. Indeed, the church driveway marks the beginning of a two-block transitional zone of large public facilities between the downtown commercial district and the residential neighborhood. See pages 30-31, 40-41, 120-124, and supplemental maps. Therefore, TxDOT historians disagree with the survey report's recommendation that Resource 023 is NRHP eligible. Under Criteria Consideration B: Moved Properties, a rural house moved into an urban setting is not eligible. See attached supplemental topographic map.

TxDOT historians *disagree* with the survey report's recommendation that Resource 036x, 110-112 East Hubbard Street contributes to the NR eligible Lindale Downtown Historic District: the façade has been extensively re-clad using modern brick construction methods. Please see the full-height expansion joint visible on the right in photo 3, page 313, of the survey report. Further, aerials show a change in the roof patterns between 1996 and today that suggests a change in internal organization. See attached supplemental images.

Resource #s 008a-f are the remnants of Civilian Conservation Corps Camp # 896. TxDOT historians *disagree* with the report's recommendation that the camp is NRHP eligible under Criterion A. Unlike a business, Corps members both slept and dined at their camps. So while the historic significance of Resource #s 008a-f is clear, TxDOT historians disagree with the report's assessment of integrity. The absence of the character-defining barracks and mess hall (see Exhibit 5 of the attached report) adversely affects integrity of design, feeling, and association. TxDOT historians will re-evaluate this NRHP determination if a design change requires new ROW or easements or if Resource #s 008a-f are in the APE of a subsequent project.¹

NRHP Eligible

Resource 026a, 403 W Hubbard Street, is a circa 1915, two-story brick American four-square Sears and Roebuck kit house. Despite some alterations, it retains sufficient integrity of location, design, materials, workmanship, feeling, and association to convey the significance of the building type under Criterion C for architecture at the local level. See pages 134-142 of the attached report for more details. The contributing features are limited to the footprint of the

¹ The camp is screened from the proposed new ROW by heavy mature vegetation and as such the project is unlikely to change the viewshed to or from the CCC camp.

house; the landscaping, trees, and the fence are not historic age. In addition, the business currently using Resource # 026a constructed a substantial and highly visible parking lot on the east side sometime after 2012.

Resource 036d, 100 North Main Street, is a circa 1910 two-part commercial block with elaborate brickwork on the second floor and the parapet. It is both individually eligible for the NRHP (Criteria A and C) and contributing to NRHP eligible Lindale Downtown Historic District.

Resource 036n, 100-101 East Hubbard Street, is a circa 1900 brick two-part commercial block with cast iron pilasters, decorative recessed-brick stringcourses, and a corbelled cornice. The building has a second main façade or pavilion, facing North Main Street approximate 85 feet from East Hubbard. Replacement plate windows somewhat detract from integrity of materials, workmanship, and feeling. It is both individually eligible for the NRHP (Criteria A and C) and contributing to NRHP eligible Lindale Downtown Historic District.

Resource 036 is the Lindale Downtown Historic District. This collection of one and two-part brick commercial buildings dates from 1900 through the 1940s. The majority that survive are retail buildings that date to the 1910s through to the 1930s. Contributing resources are: 036a, 036b(1-2), 036c(1-2), 036d, 036e, 036g, 036n, 036s, 036t, and 036w. The district is NRHP eligible under Criterion A for Community Development at the local level. See Exhibit 4 for a preliminary district boundary. See pages 33 - 35 of the attached survey report for further details.

Please note: TxDOT historians *disagree* with the survey report's recommendation that Resource 036s, 112 East Hubbard Street, is *individually* eligible. While the façade retains a higher integrity compared to other contributing resources in the historic district, the report does not provide sufficient documentation to justify individual significance. TxDOT historians have determined that Resource 036s, *contributes* to the NR eligible Lindale Downtown Historic District under Criteria A and C at the local level.

Resources 036h, 036i, 036j, 036k, and 036m (1 and 2) are not in the APE. TxDOT historians are not coordinating their eligibility at this time.

Determination of Effects

In accordance with 36 CFR 800.5, TxDOT historians applied the *Criteria of Adverse Effect* and determined that the proposed project poses **no adverse effects** to historic properties.

Resource 036: Lindale Downtown Historic District

- Project activities pose no adverse direct effects, as building protection notes will guide the contractor in best practices within the boundaries of the historic district.
- Project activities pose no adverse indirect effects as the improvements within the historic district are minor and the viewshed will not substantially change to or from the historic properties. See page 43 of the attached survey report for contextual photograph.
- There are no reasonably foreseeable cumulative effects now or in the future because there are no adverse direct or indirect effects.

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Resource 026a: 403 W Hubbard Street

- Project activities pose no adverse direct effects, as the character-defining features are limited to the footprint of the residence itself. The project would require 0.11 acres from the parcel and the relocation of the existing fence. The edge of the new sidewalk would be within the existing ROW and approximately 17 feet from the structure. See attached cross section.
- Project activities pose no adverse indirect effects, as the setting is not a character-defining feature. Further, the setting is adversely compromised by the non historic-age landscaping, trees, fencing, and substantial parking lot. See pages 41-42 of the attached survey report for contextual photographs.
- There are no reasonably foreseeable cumulative effects now or in the future because there are no adverse direct or indirect effects.

Efforts to Minimize Harm

Project engineers minimized the cross-section through the 400 block of West Hubbard Street in order to reduce effects to Resource # 026a. See attached email dated July 25, 2017.

Consultation with Other Parties

The Smith County Historical Commission requested participation in the Section 106 review. We asked them to convey any comments or concerns to us and copy you so that you are aware of their views.

Determination of 4(f) *de minimis* Finding

As part of this coordination, TxDOT determined that the proposed project meets the requirements for a Section 4(f) *de minimis* finding under 23 CFR 774.13(b). TxDOT based its determination on the project facts:

Resource #026a

- the required 0.11 acres, or 2.7% of the 0.410-acre lot, is a minimal amount.
- there would be no adverse effects because the contributing features are limited to the footprint of the residence, the landscaping, trees, and fencing are not historic age, and the setting's integrity is compromised.
- project engineers minimized the cross-section, per the attached email dated July 25, 2017.

Conclusion

In accordance with 36 CFR 800, I hereby request your signed concurrence with TxDOT's findings of eligibility and effect. We additionally notify you that SHPO is the designated official with jurisdiction over Section 4(f) resources protected under the provisions of 23 CFR 774 and that your comments on our Section 106 findings will be integrated into decision-making regarding prudent and feasible alternatives for purposes of Section 4(f) evaluations. Please return a signed copy of this correspondence for our files within 30 calendar days.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327, the Antiquities Code of Texas, and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

Thank you for your cooperation in this federal review process. If you have any questions or comments concerning these evaluations, please call me at (512) 416-2600.

Sincerely,



Mark M. Brown
Historic Preservation Specialist
Historical Studies Branch
Environmental Affairs Division

thru: Bruce Jensen, Cultural Resources Section Director, *BDJ*
Rebekah Dobrasko, Lead Reviewer, *RWD*

CONCURRENCE WITH NON-ARCHEOLOGICAL SECTION 106 FINDINGS OF ELIGIBILITY and EFFECTS:

NRHP Eligible Properties
#s 026a, 036d, 036n, and
Lindale Downtown Commercial District

NO ADVERSE EFFECTS to NRHP Eligible Properties

NAME: _____ DATE: _____

for Mark Wolfe, State Historic Preservation Officer

NO COMMENTS ON DETERMINATION OF de minimis UNDER SECTION 4(F) REGULATIONS
Resources # 026a

NAME: _____ DATE: _____

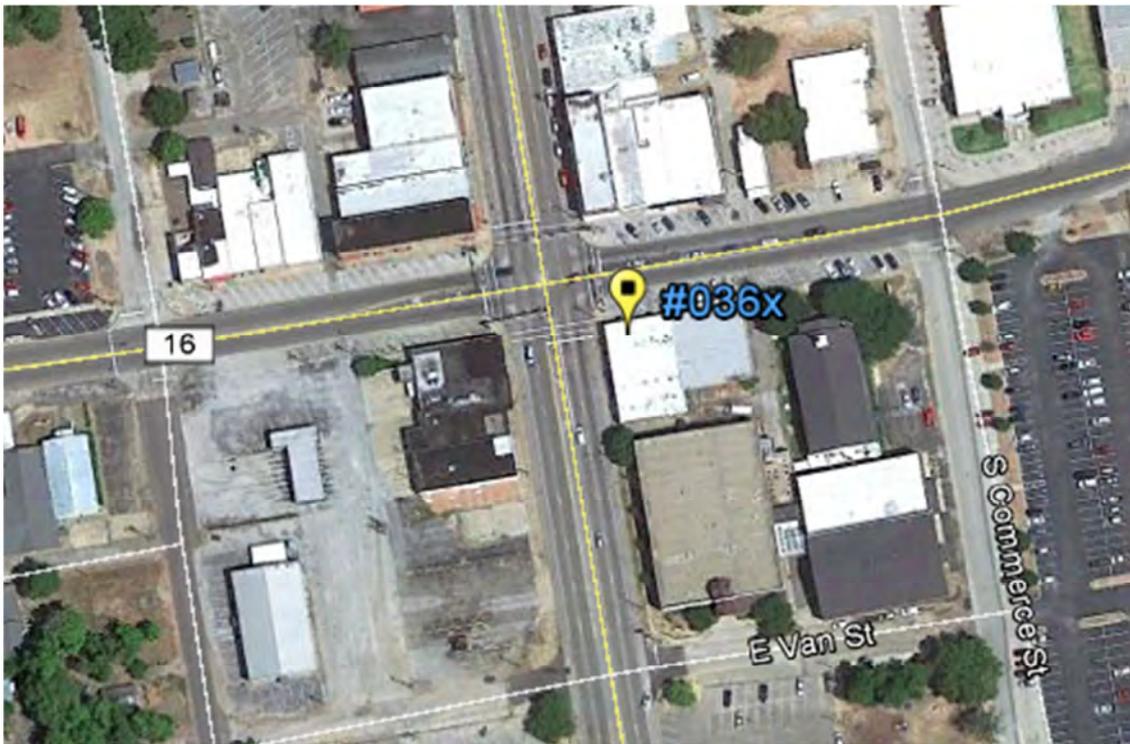
for Mark Wolfe, State Historic Preservation Officer

cc:, SHPO; Jay Tullos, Tyler District; ECOS

Supplemental Images: #036x



1996 aerial: Resource 036x, 110-112 East Hubbard Street. Source: GoogleEarth



2009 aerial: Resource 036x, 110-112 East Hubbard Street. Source: GoogleEarth
Notice change to roof patterns.

Supplemental Images and Maps: #023



Resource # 023, 410 W Hubbard Street looking ESE towards the downtown commercial district.

FM 16

Resouce # 023
Lindale, Smith County, TYL
CSJ: 0522-04-032

Legend
■ W Hubbard St

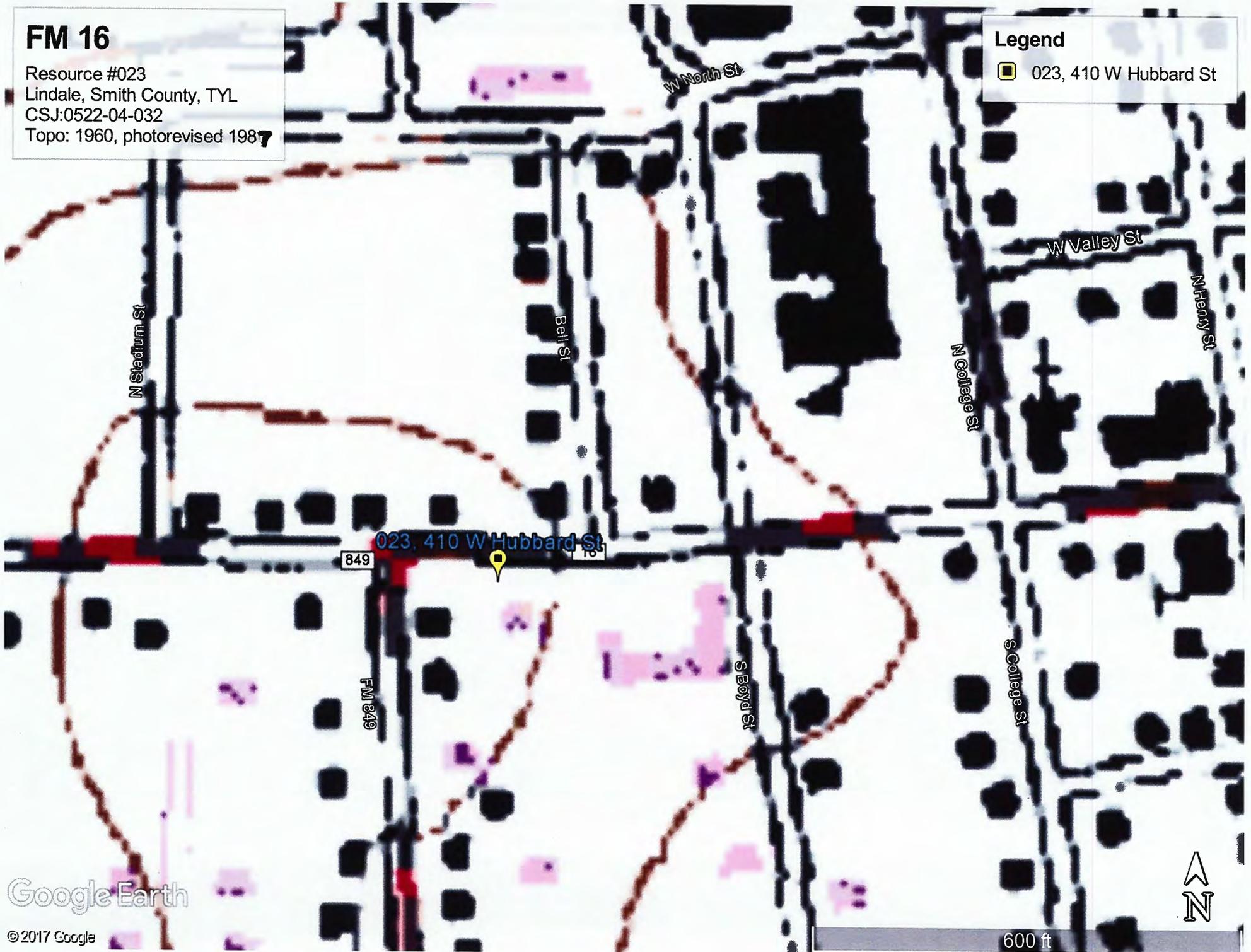


FM 16

Resource #023
Lindale, Smith County, TYL
CSJ:0522-04-032
Topo: 1960, photorevised 1987

Legend

 023, 410 W Hubbard St

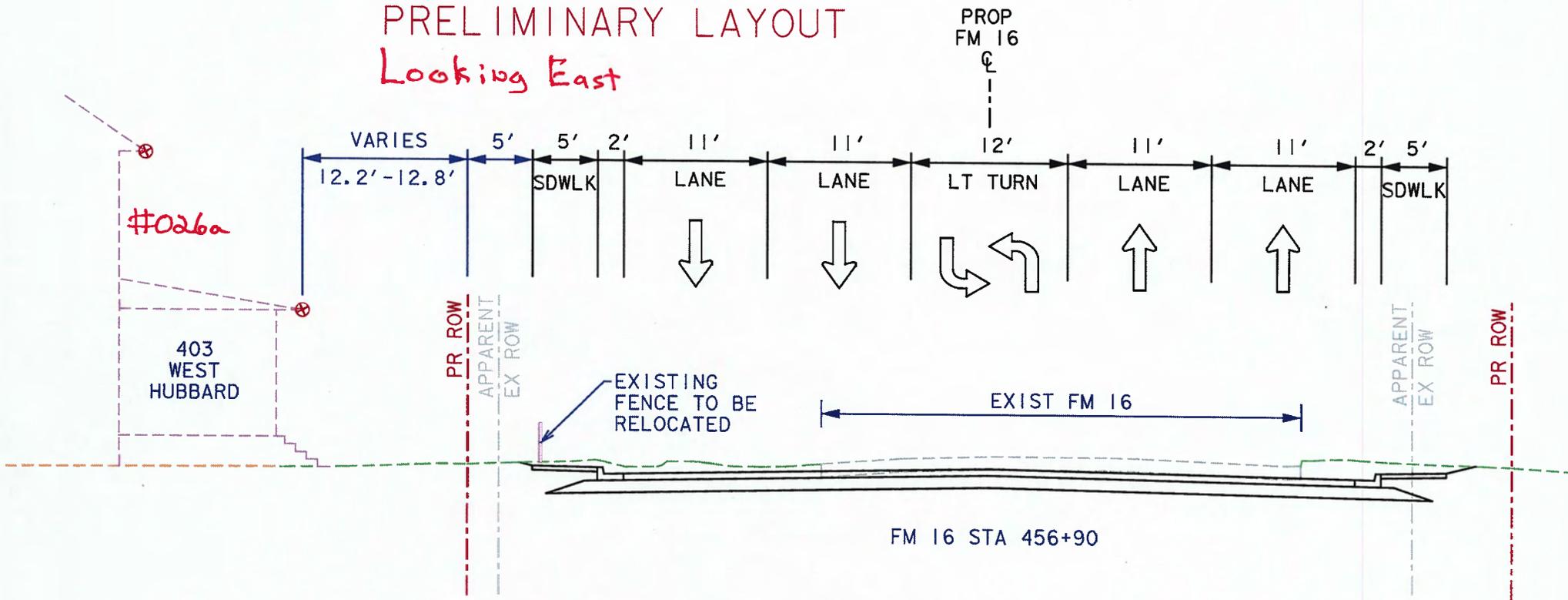


Google Earth

© 2017 Google

600 ft

PRELIMINARY LAYOUT Looking East



LEGEND

- | | | | |
|---|--------------------------------------------------------------------|--|-------------------------|
| ⊗ | OFFSET TAKEN FROM PLAN VIEW OF AERIAL SURVEY. ELEVATION ESTIMATED. | | EXISTING ROADWAY |
| | CONCEPTUAL LOCATION | | OBSCURED AREA IN SURVEY |
| | EXISTING GROUND | | PROPOSED ROADWAY |
| | APPARENT EXISTING ROW | | APPARENT EXISTING ROW |
| | PROPOSED ROW | | PROPOSED ROW |

Mark Brown

From: Christine Crosby
Sent: Wednesday, July 26, 2017 8:13 AM
To: Mark Brown
Subject: FW: FM 16 (0522-04-032) Historical
Attachments: FM16_historical_exhibit_cross_section_1.pdf; FM16_historical_exhibit_cross_section_2.pdf

Categories: Red Category

Mark-

Attached are the cross sections at both houses. Distances of houses from the ROW are depicted on these. Please let me know if you need anything else.

Thanks!
Christine
(903) 510-9159

From: Stacey Benningfield [<mailto:sbenningfield@cpyi.com>]
Sent: Tuesday, July 25, 2017 8:58 PM
To: Christine Crosby
Cc: Alfonso P. Garza; Kevin J. Daily
Subject: FW: FM 16 (0522-04-032) Historical

Here you go . . .

sb

From: Kevin J. Daily [<mailto:kdaily@azb-engrs.com>]
Sent: Tuesday, July 25, 2017 6:13 PM
To: Stacey Benningfield <sbenningfield@cpyi.com>
Cc: Alfonso P. Garza <agarza@azb-engrs.com>
Subject: RE: FM 16 (0522-04-032) Historical

Stacey,

Here are PDFs of the cross section exhibits for the two houses on FM 16.

Regarding the changes or potential changes to minimize effects to these houses, we optimized the typical section in this area by reducing all of the lane widths, eliminating the bike lanes, and reducing the area for the utility corridor. Because the houses are so close together, the alignment cannot be altered to reduce effects to one without increasing effects on the other.

Thanks,
Kevin

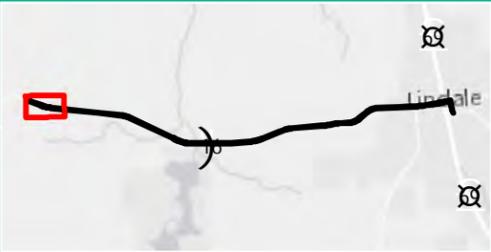


Historic Resources

FM 16 from 4 miles west of FM 849 (CR 481-E) to US 69 in Lindale

CSJ: 0522-04-032

- NRHP-Recommended Eligible
- Documented
- RTHL
- Boundary of NRHP-Recommended Eligible Resources
- Property Line
- Proposed ROW
- Existing ROW
- Proposed Lanes
- Toll 49 (Proposed)





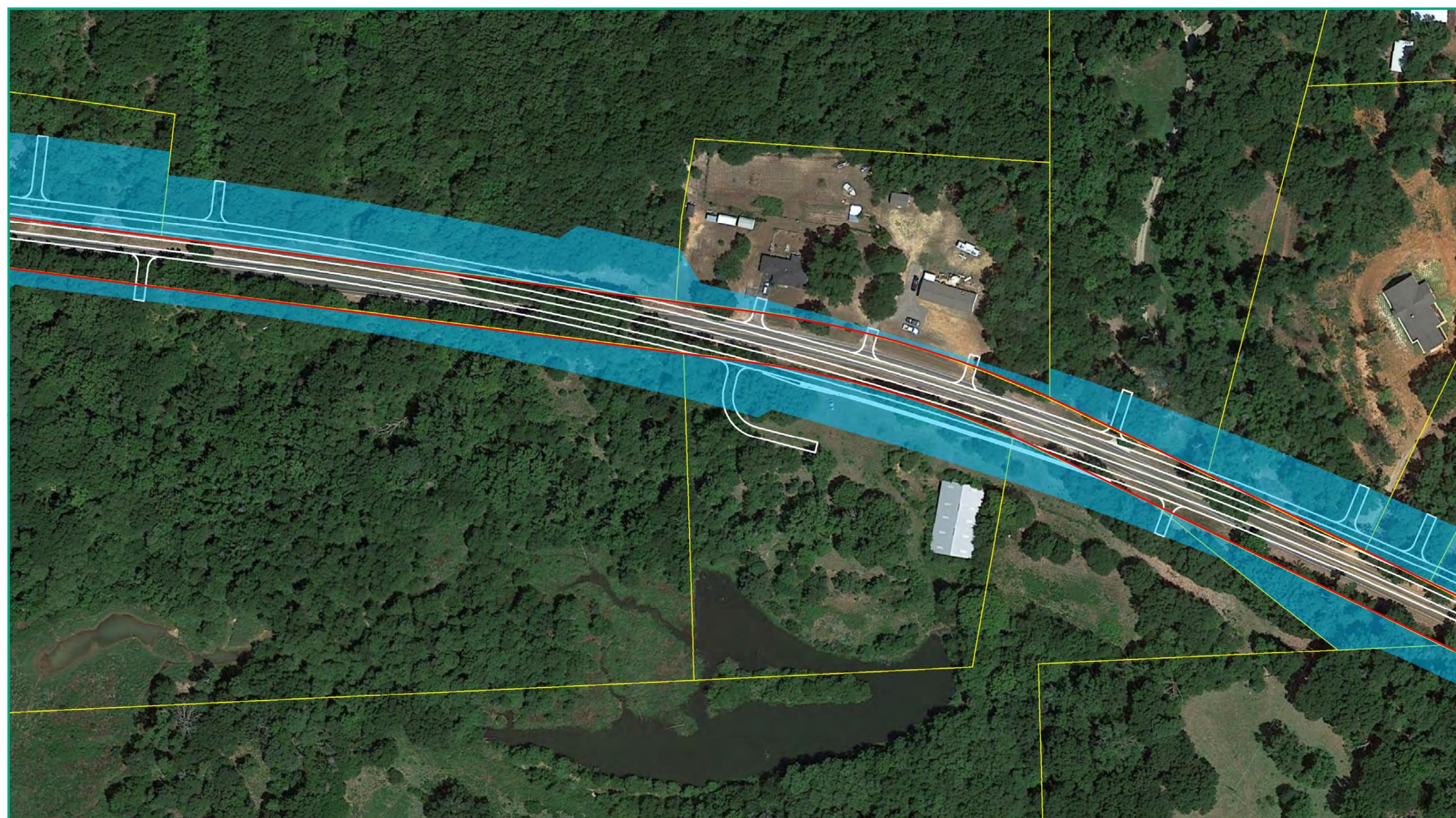
Historic Resources

FM 16 from 4 miles west of FM 849 (CR 481-E) to US 69 in Lindale

CSJ: 0522-04-032

- NRHP-Recommended Eligible
- Documented
- RTHL
- Boundary of NRHP-Recommended Eligible Resources
- Property Line
- Proposed ROW
- Existing ROW
- Proposed Lanes
- Toll 49 (Proposed)





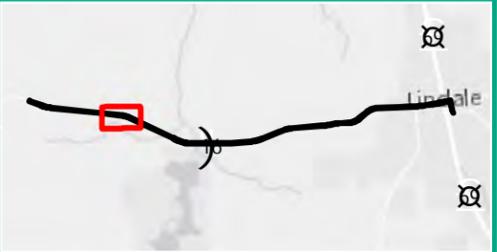
Historic Resources
 FM 16 from 4 miles west of FM 849 (CR 481-E)
 to US 69 in Lindale

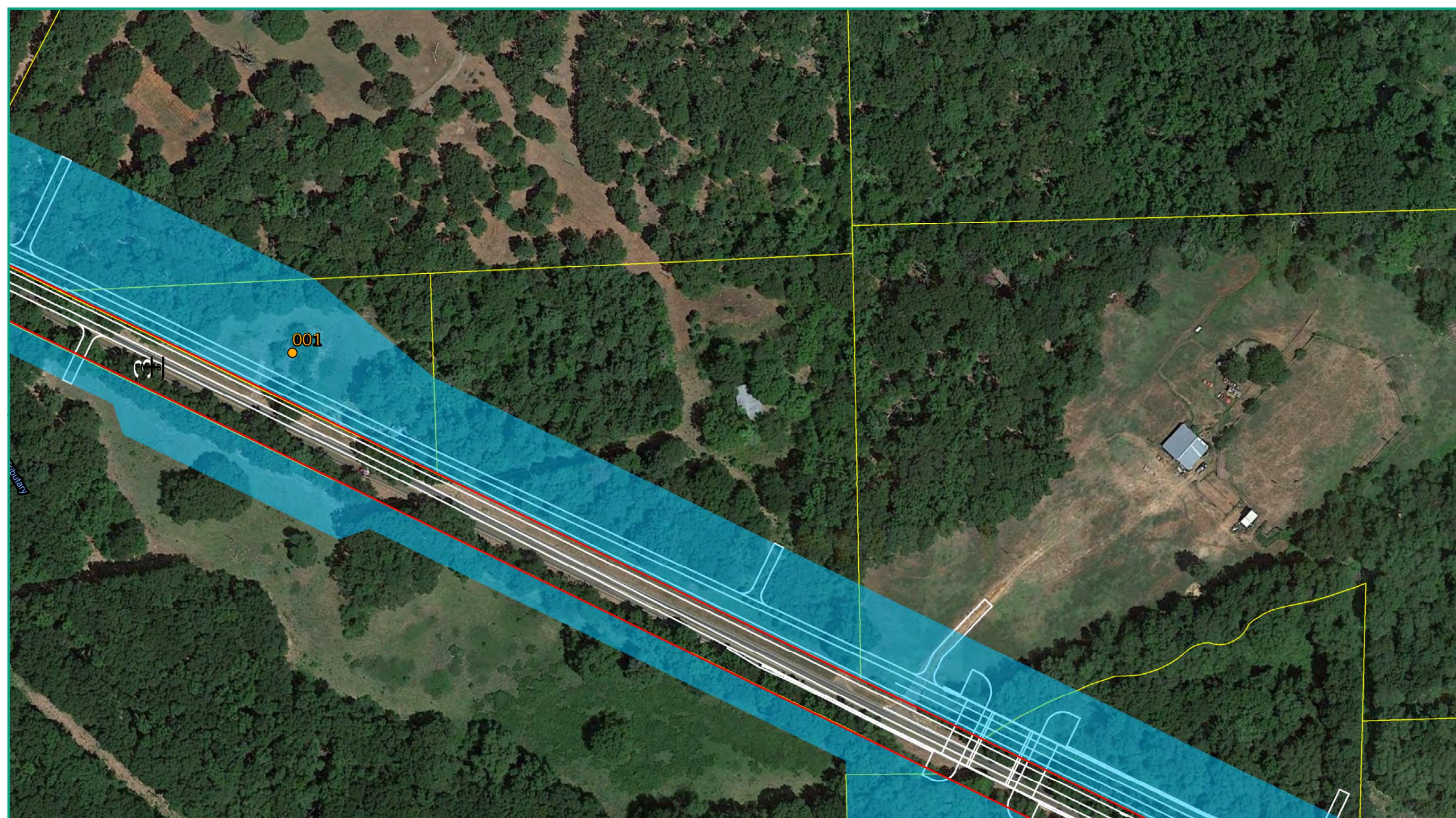


CSJ: 0522-04-032

- NRHP-Recommended Eligible
- Documented
- RTHL
- Boundary of NRHP-Recommended Eligible Resources
- Downtown Historic District Study Boundary
- Property Line
- Proposed ROW
- Existing ROW

- Proposed Lanes
- Toll 49 (Proposed)



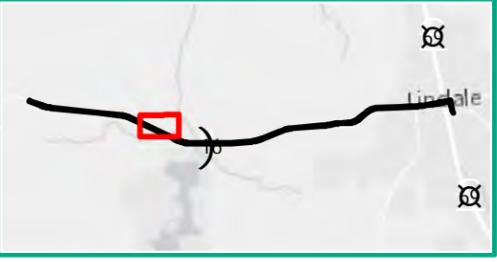


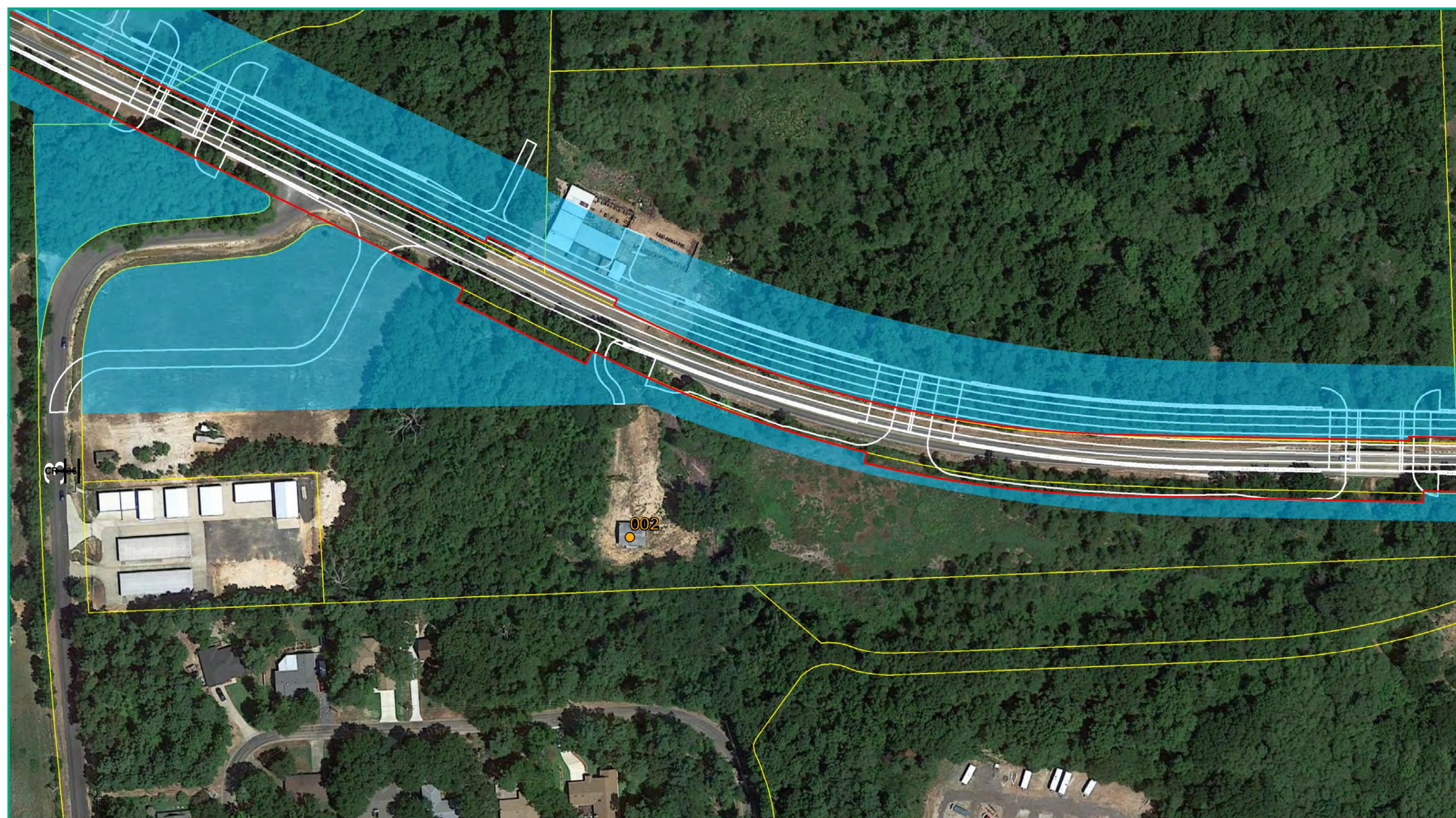
Historic Resources

FM 16 from 4 miles west of FM 849 (CR 481-E) to US 69 in Lindale

CSJ: 0522-04-032

- NRHP-Recommended Eligible
- Documented
- RTHL
- Boundary of NRHP-Recommended Eligible Resources
- Property Line
- Proposed ROW
- Existing ROW
- Proposed Lanes
- Toll 49 (Proposed)



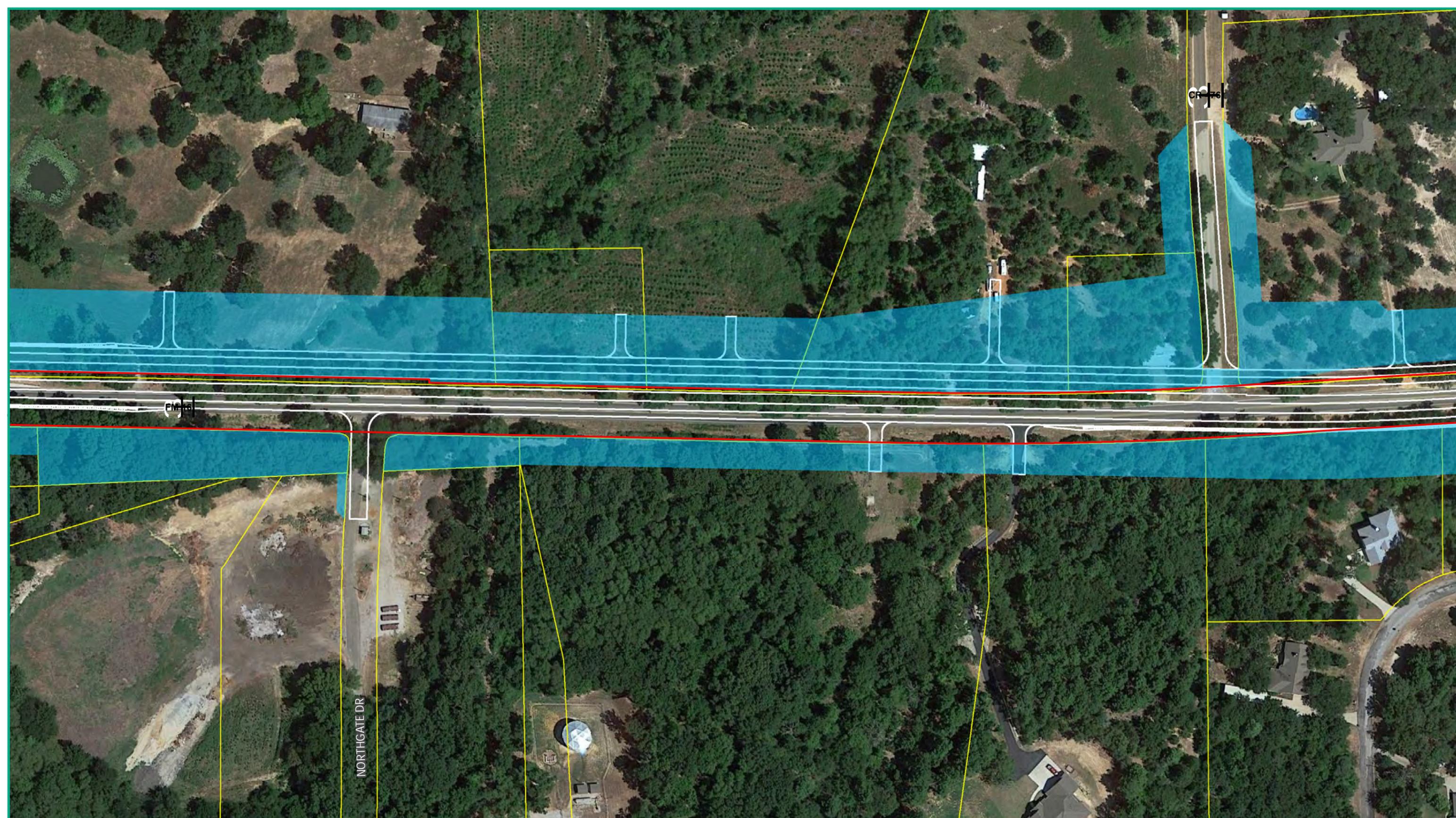


Historic Resources
 FM 16 from 4 miles west of FM 849 (CR 481-E)
 to US 69 in Lindale

CSJ: 0522-04-032

- NRHP-Recommended Eligible
- Documented
- RTHL
- Boundary of NRHP-Recommended Eligible Resources
- Property Line
- Proposed ROW
- Existing ROW
- Downtown Historic District Study Boundary
- Proposed Lanes
- Toll 49 (Proposed)





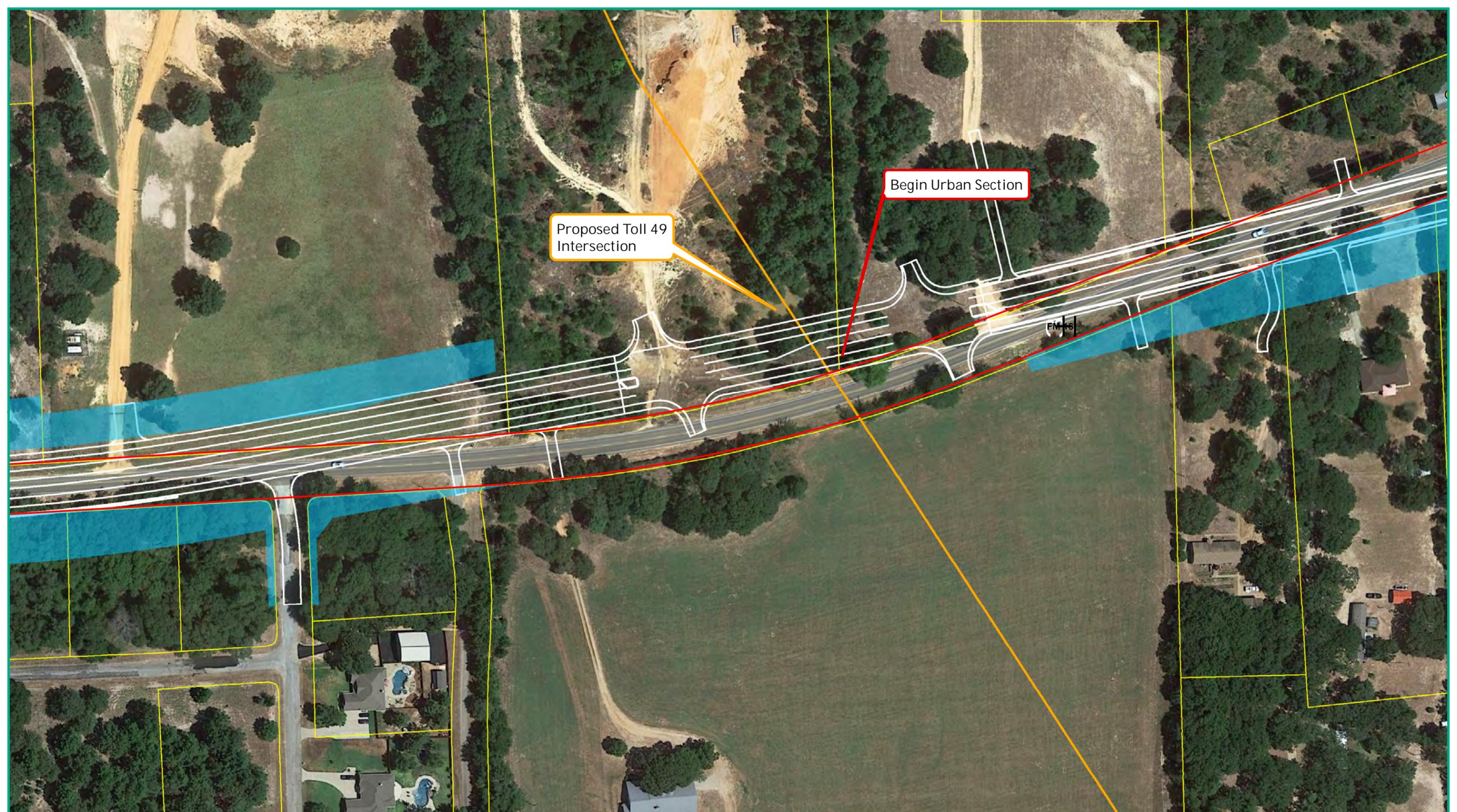
Historic Resources

FM 16 from 4 miles west of FM 849 (CR 481-E) to US 69 in Lindale

CSJ: 0522-04-032

- NRHP-Recommended Eligible
- Documented
- RTHL
- Boundary of NRHP-Recommended Eligible Resources
- Property Line
- Proposed ROW
- Existing ROW
- Proposed Lanes
- Toll 49 (Proposed)





Proposed Toll 49 Intersection

Begin Urban Section

FM 16

Historic Resources

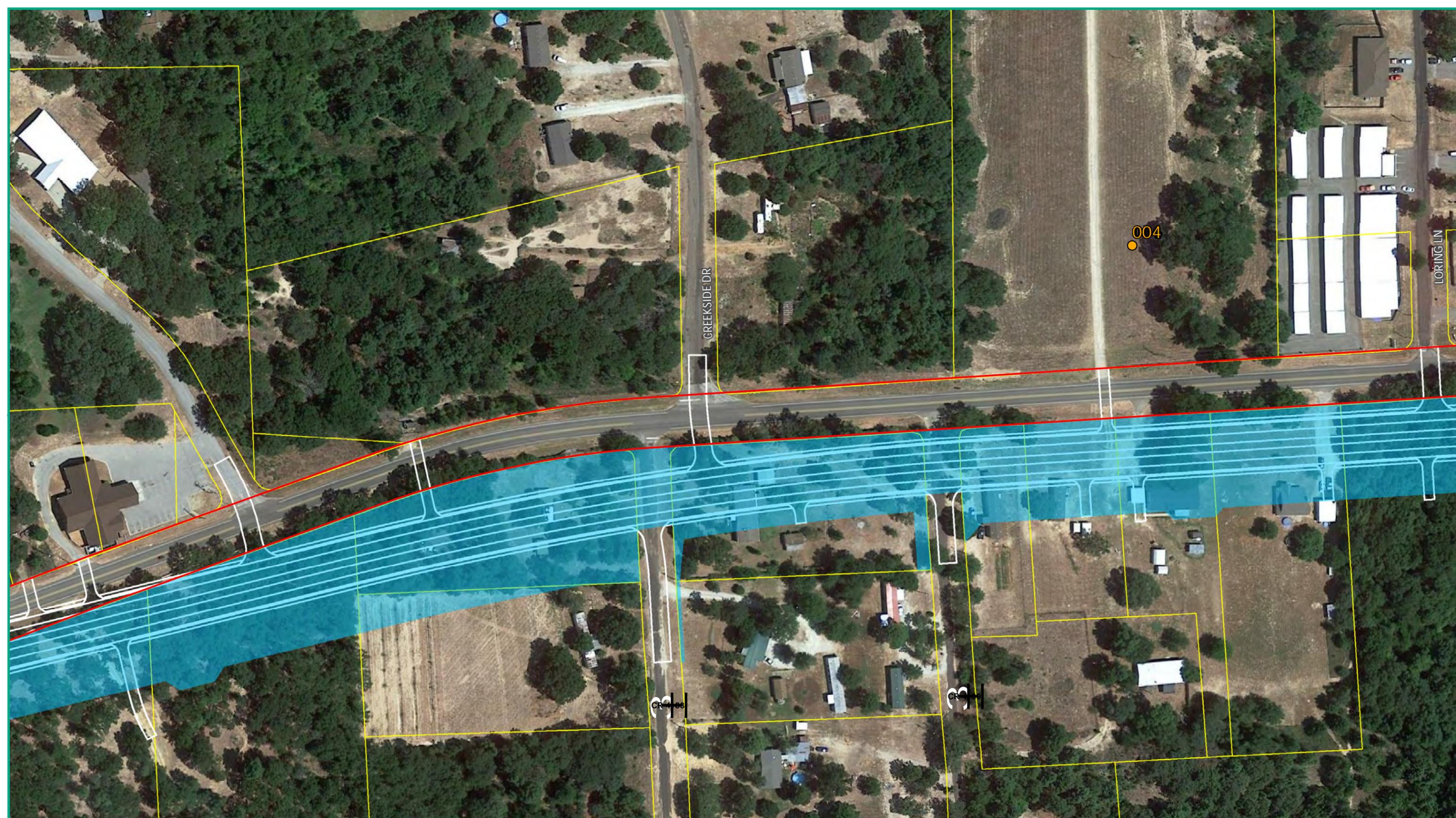
FM 16 from 4 miles west of FM 849 (CR 481-E) to US 69 in Lindale

CSJ: 0522-04-032



- NRHP-Recommended Eligible
- Documented
- RTHL
- Boundary of NRHP-Recommended Eligible Resources
- Property Line
- Proposed ROW
- Existing ROW
- Proposed Lanes
- Toll 49 (Proposed)





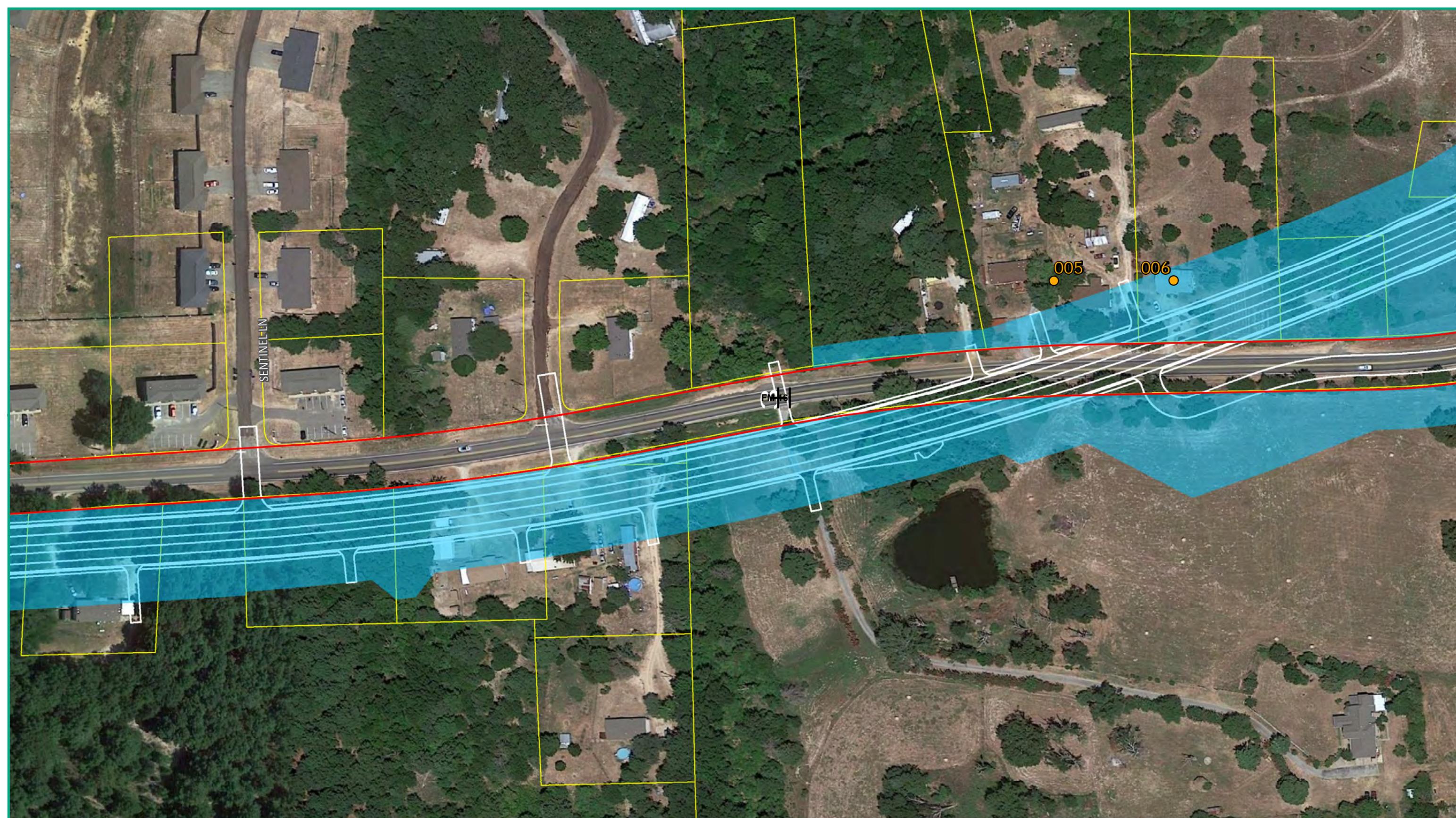
Historic Resources

FM 16 from 4 miles west of FM 849 (CR 481-E) to US 69 in Lindale

CSJ: 0522-04-032

- NRHP-Recommended Eligible
- Documented
- RTHL
- Downtown Historic District Study Boundary
- Property Line
- Proposed ROW
- Existing ROW
- Proposed Lanes
- Toll 49 (Proposed)





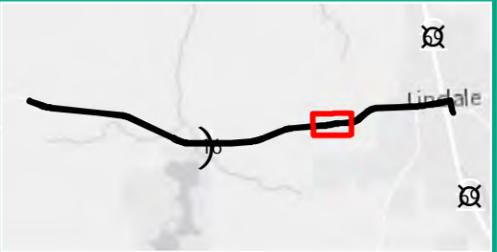
Historic Resources
 FM 16 from 4 miles west of FM 849 (CR 481-E)
 to US 69 in Lindale

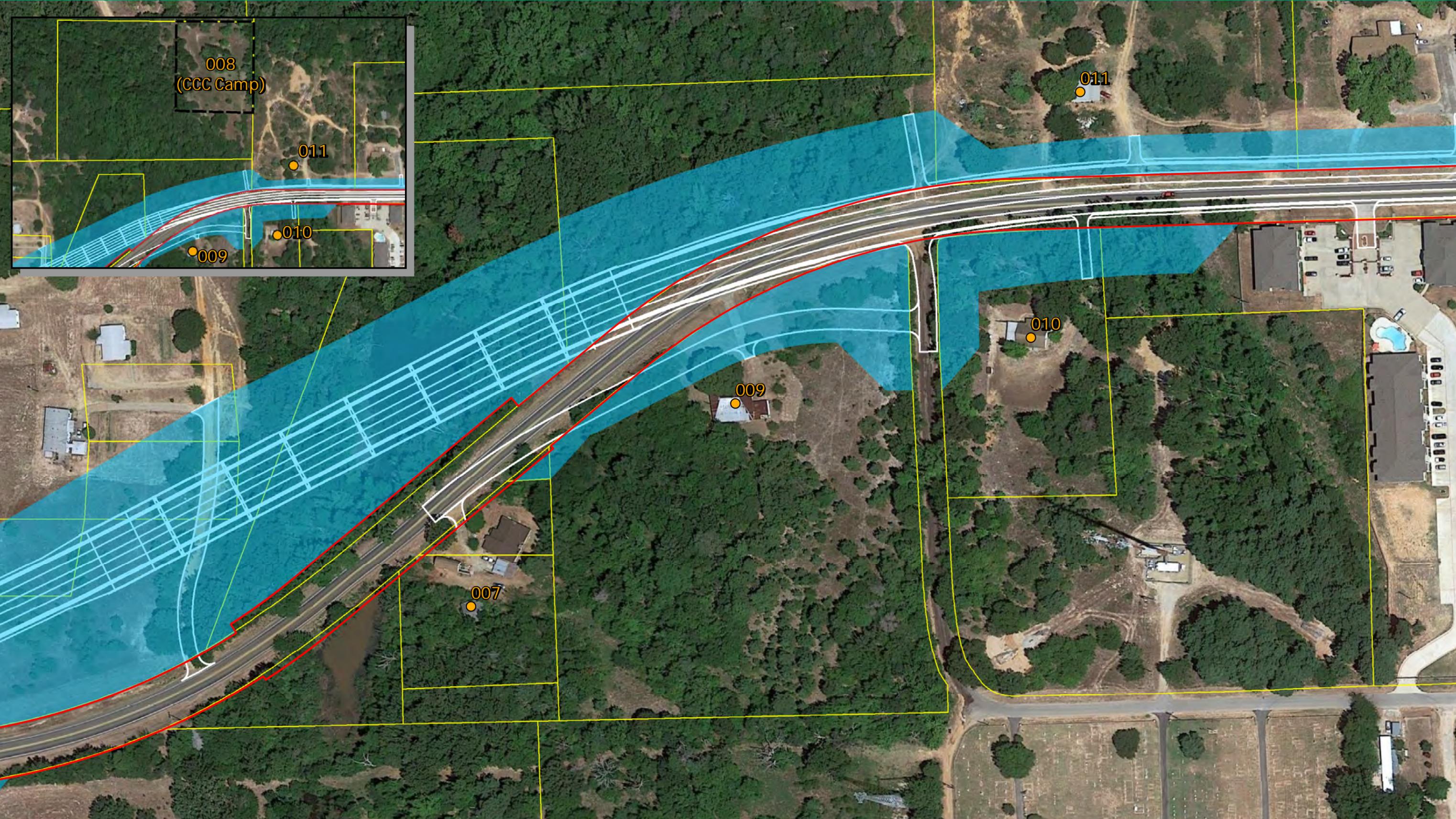


CSJ: 0522-04-032

- NRHP-Recommended Eligible
- Documented
- RTHL
- Downtown Historic District Study Boundary
- Property Line
- Proposed ROW
- Existing ROW

- Proposed Lanes
- Toll 49 (Proposed)



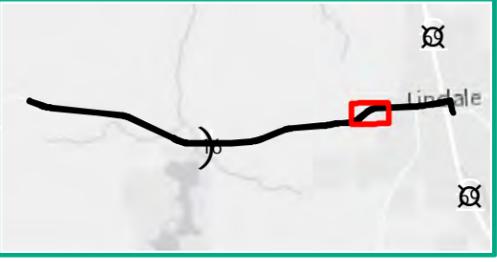


Historic Resources
 FM 16 from 4 miles west of FM 849 (CR 481-E)
 to US 69 in Lindale



CSJ: 0522-04-032

- NRHP-Recommended Eligible
- Documented
- RTHL
- Boundary of NRHP-Recommended Eligible Resources
- Property Line
- Proposed ROW
- Existing ROW
- Proposed Lanes
- Toll 49 (Proposed)





Historic Resources
 FM 16 from 4 miles west of FM 849 (CR 481-E)
 to US 69 in Lindale



CSJ: 0522-04-032

- NRHP-Recommended Eligible
- Documented
- RTHL
- Boundary of NRHP-Recommended Eligible Resources
- Property Line
- Proposed ROW
- Existing ROW
- Proposed Lanes
- Toll 49 (Proposed)





Historic Resources

FM 16 from 4 miles west of FM 849 (CR 481-E) to US 69 in Lindale

CSJ: 0522-04-032

- NRHP-Recommended Eligible
- Documented
- RTHL
- Boundary of NRHP-Recommended Eligible Resources
- Property Line
- Proposed ROW
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I. STORMWATER POLLUTION PREVENTION-CLEAN WATER ACT SECTION 402

TPDES TXR 150004 Stormwater Discharge Permit or Construction General Permit required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 1122.

List MSA Operator(s) that may receive discharges from this project. They may need to be notified prior to construction activities.

1. There are no MSA Operators in the project area.
 No Action Required Required Action

Action No.

2. Comply with TPDES CGP. Contractor must COMPLY WITH SW3P AS STATED IN THE PLANS

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas.

The Contractor must adhere to all of the terms and conditions associated with the following permits:

- No Permit Required
 Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)
 Nationwide Permit 14 - PCN Required (1/10 to 1/2 acre, 1/3 in tidal waters)
 Individual 404 Permit Required
 Other Nationwide Permit Required: NWP# _____

Required Actions: List waters of the US permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

1.
2.

Best Management Practices:

Erosion	Sedimentation	Post Construction TSS
<input type="checkbox"/> Temporary Vegetation	<input type="checkbox"/> Silt Fence	<input type="checkbox"/> Vegetative Filter Strips
<input type="checkbox"/> Blankets/Matting	<input type="checkbox"/> Rock Berm	<input type="checkbox"/> Retention/Irrigation Systems
<input type="checkbox"/> Mulch	<input type="checkbox"/> Triangular Filter Dike	<input type="checkbox"/> Extended Detention Basin
<input type="checkbox"/> Seeding	<input type="checkbox"/> Sand Bag Berm	<input type="checkbox"/> Constructed Wetlands
<input type="checkbox"/> Interceptor Swale	<input type="checkbox"/> Straw Bale Dike	<input type="checkbox"/> Wet Basin
<input type="checkbox"/> Diversion Dike	<input type="checkbox"/> Brush Berms	<input type="checkbox"/> Erosion Control Compound
<input type="checkbox"/> Erosion Control Carpet	<input type="checkbox"/> Erosion Control Compound	<input type="checkbox"/> Mulch Filter Berm and Socks
<input type="checkbox"/> Mulch Filter Berms and Socks	<input type="checkbox"/> Mulch Filter Berms and Socks	<input type="checkbox"/> Compost Filter Berm and Socks
<input type="checkbox"/> Compost Filter Berm and Socks	<input type="checkbox"/> Compost Filter Berm and Socks	<input type="checkbox"/> Vegetation Lined Ditches
	<input type="checkbox"/> Stone Outlet Sediment Traps	<input type="checkbox"/> Sand Filter Systems
	<input type="checkbox"/> Siltment Basins	

III. CULTURAL RESOURCES

Refer to TxDOT Standard Specifications in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the immediate area and contact the Engineer immediately.

- No Action Required Required Action

PROTECTION NOTES FOR THE REMOVAL OF EXISTING PAVEMENT, CURB OR SIDEWALK AND CONSTRUCTION OF NEW PAVEMENT, CURB OR SIDEWALK ADJACENT TO HISTORIC BUILDINGS, MATERIALS, FENCES, AND RETAINING WALLS

Where proposed work is in proximity to historic buildings or other structures (walls, retaining walls, fences, stone markers), planting beds, and vegetation/groundcover, follow the procedures listed below for demolition and construction at these locations the contractor must:

In the City of Lincoln: Along the north side of West Hubbard Street between Henry and Main Streets.

Action No.

1. The contractor shall construct new sidewalk next to the saw cut edge with installation of expansion joint in between. If existing sidewalk is to be removed entirely, the remaining 8 to 12 inches next to the historic structure, material, fence, or retaining wall must be removed by hand. Expansion joint must be placed between historic structure, material, fence or retaining wall and new sidewalk.
2. The contractor must prevent damage to historic structure, materials, fences, retaining walls, including garden elements (planting beds, plantings/during the entire construction project, especially during removal of existing pavement, curb, or sidewalk). During the saw cut and hand removal process contractor shall exercise utmost caution and shall physically protect historic structure foundation, materials, elevations, entryways with decorative flooring, fences, retaining walls, and landscape elements.
3. Contractor must repair or replace in kind, at his own expense, any historic materials damaged in the course of executing the work. Contractor shall locate replacement source for historic materials damaged in the course of the work. TxDOT Environmental Affairs Division shall be informed of proposal to facilitate consultation with Texas Historical Commission prior to completion of repair work.

IV. VEGETATION RESOURCES

- No Action Required Required Action

Action No.

1. Contractor to adhere to specs list above in IV.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.

- No Action Required Required Action

Action No.

1. Follow Migratory Bird Treaty Act guidance as listed below

If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately. Per the Migratory Bird Treaty Act, the work may not remove active nests from project during nesting season of the birds associated with the nests.

LIST OF ABBREVIATIONS

BMP: Best Management Practice	SPCC: Spill Prevention Control and Countermeasure
CGP: Construction General Permit	SW3P: Storm Water Pollution Prevention Plan
DSHS: Texas Department of State Health Services	PNB: Pre-Construction Notification
FHWA: Federal Highway Administration	PSL: Project Specific Location
MOA: Memorandum of Agreement	TCEQ: Texas Commission on Environmental Quality
MOU: Memorandum of Understanding	TPDES: Texas Pollutant Discharge Elimination System
MS4: Municipal Separate Stormwater Sewer System	TPWD: Texas Parks and Wildlife Department
MtA: Migratory Bird Treaty Act	TxDOT: Texas Department of Transportation
NOT: Notice of Termination	TLE: Threatened and Endangered Species
NWP: Nationwide Permit	USACE: U.S. Army Corp of Engineers

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General applies to a project(s):

Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropriate for any hazardous materials used. Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, epoxies, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labeling as required by the Act. Maintain an adequate supply of on site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the District Spill Coordinator immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

Contact the Engineer if any of the following are detected:

- Dead or distressed vegetation that identified as normal
- Trash piles, drums, canisters, barrels, etc.
- Undesirable smells or odors
- Evidence of leaching or seepage of substances

Does the project involve any bridge class structure rehabilitation or replacements (bridge class structures not including box culverts)?

- Yes No

If "No", then no further action is required.

If "Yes", then TxDOT is responsible for completing asbestos assessment/inspection.

Are the results of the asbestos inspection positive (is asbestos present)?

- Yes No

If "Yes", then TxDOT must retain a DSHS licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary. The notification form to DSHS must be postmarked at least 15 working days prior to scheduled demolition.

If "No", then TxDOT is still required to notify DSHS 15 working days prior to any scheduled demolition.

In either case, the Contractor is responsible for providing the details for abatement activities and/or demolition with careful coordination between the Engineer and asbestos consultant in order to minimize construction delays and subsequent claims.

Any other evidence indicating possible hazardous materials or contamination discovered on site. Hazardous Materials or Contamination issues Specific to this Project:

- No Action Required Required Action

Action No.

1.
2.
3.

VII. OTHER ENVIRONMENTAL ISSUES

(Includes regional issues such as Edwards Aquifer District, etc.)

- No Action Required Required Action

Action No.

1. DURING DESIGN PHASE, NOTIFY LOCAL FLOODPLAIN ADMINISTRATOR AS NECESSARY AND COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS REGARDING THE
 2. HYDRAULIC DESIGN OF THE PROJECT.

- 3.



ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS EPIC

FILE#	EPIC.dgn	DATE	11/14/12	REVISION	
03/1007	January 2012				
12/12/2011	REV				

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

Resource ID #: 036x	Historic Use: Flemings Clothing Store
Current Physical Address: 100-101 East Hubbard Street, Lindale, Texas 75771	Latitude/Longitude: 32.516228, -95.409626
Historic Context: Community Planning and Development Lindale, Texas, c 1903- c 1940s	Photo Limitations: Rear elevation could not be accessed.
Architectural Stylistic Influence: No Style	Year(s) Constructed: 1946 (SCAD)
Property Type/Subtype: Commercial/Retail	
<p>Description: This resource is a single-story commercial building with a rectangular plan and a flat roof. It is located on the southeast corner of US 69 and FM 16. It is clad with red brick that displays some corbelling and a row of vertical brick along the cornice. The building is currently divided into 5 storefronts. Two storefronts face West Hubbard Street (FM 16) and three storefronts face US 69. Each storefront contains a three-part façade with a recessed central entrance flanked by a pair of replacement display windows. Most of the doors appear to be original wooden entry doors with a full-length fixed-pane glass. Individual cloth awnings shelter each door and window opening. Archival information indicates that this building was originally Crooks Drugstore.</p>	
<p>Architectural Modifications: Probably replacement cladding on the first story, windows and entry modifications</p>	
<p>Eligibility Justification: This building retains integrity of location, however, integrity of design, materials and workmanship has been somewhat diminished by modifications to the brick cladding near the doorways and window materials. Information received from the bank president across the street, who has worked there for 30 years, is that the building has been <u>re-clad and remodeled</u> but he was not able to provide specifics. The window and door openings appear to have been modified and there are no transom windows which would have been appropriate for this age and style of building. It does appear that the upper portion of the facade does retain some of the original brick cladding, and the original doors are still present, therefore maintaining some semblance of integrity of workmanship, materials, and design. The building does not possess original significant design, materials or workmanship features that would make it individually NRHP-eligible under any criteria.</p>	
<p>NRHP Eligibility Status: Recommended Not Individually NRHP-Eligible.</p>	
<p>^{NON-} Recommended Contributing to NRHP-recommended eligible Lindale Downtown Historic District.</p>	
<p>NRHP Criteria: N/A</p>	
<p>NRHP Areas of Significance: N/A</p>	

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 1: View of front façade looking south.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 2: View of front façade looking southwest.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 3: View of west elevation looking east.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

Resource ID #: 026a	
Current Physical Address: 403 W Hubbard Street, Lindale, Texas 75771	Latitude/Longitude: 32.515519, -95.413122
Historic Context: Community Planning and Development in 20 th century Lindale, Texas	Photo Limitations: Tall trees partially obscure front facade
Architectural Stylistic Influence: Prairie/American Foursquare	Year Constructed: 1915 (SCAD)
Property Type/Subtype: Residential/Single Family	
<p>Description: This resource is a single-story residence with a square plan and a low-pitched hipped roof with composition shingles. The exterior is clad with replacement horizontal siding. The front (north) façade is symmetrical and has a full-width front porch with a hipped roof. The roof is supported by four massive, square, painted brick porch supports. Low brick side walls surround all sides of the porch. The front entry is centered beneath the porch and contains an original door, sidelights, and transom windows. A pair of three-part picture windows flank the entry and contain decorative 16/1 wooden muntins. A painted brick porte-cochere is located on the right side of the house. A central brick chimney pierces the roof at the center and the house is set on a large urban parcel surrounded by several large, mature trees.</p> <p>The second story façade contains three pairs of replacement windows with 9/1 muntin patterns and each is flanked by decorative louvered shutters. The east and west elevations contain large, elaborate, and identical original wooden windows consisting of a fixed pane center window flanked by two 16/1 sash windows. The rear elevation contains a full-width back porch enclosed with 1/1 sash windows on the first story and 9/1 replacement windows on the second story. A detached two-car garage (Resource 26 b) with a replacement door is located to the east and rear of the house.</p> <p>Per conversation with the current owner Leslie Cain, who purchased the house approximately ten years ago, no changes have been made to the house since she bought it. The house was originally constructed by the Marchman family. The Marchmans were a prominent Lindale family that owned a mercantile store along Main Street that is no longer extant. The Marchmans also donated the land to the west of the house on which the current College Street Elementary School is located. Marchman was also president of the Guaranty State Bank of Lindale (Resource 36 n) during the early 20th century. The house was a Sears and Roebuck Kit house. Sears Kit houses were pre-fabricated house components that arrived by railroad for construction on site and according to owner Cain, is the reason that the wood inside the house is East Coast Pine rather than East Texas pine.</p>	
<p>Architectural Modifications: Siding has been replaced; some windows on both stories of the rear and west elevations have replacement windows. It is not known whether the brick porch and porte-</p>	

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

cochere were originally unpainted. White picket fencing and low curb near landscaping are recent additions (according to property owner) and are not considered contributing to the historic resource.

Eligibility Justification: The house retains integrity of location. However, it has diminished integrity of design, materials and workmanship through the replacement of some original windows, particularly those on the second story of the front façade. The appearance of the original upper story windows is unknown as no historic photos were found during research. However the 9/9 sash windows have an appearance that could be historically compatible with the style of the house. The replacement horizontal siding has a similar appearance to the probable original wooden siding.

Despite modifications to design, materials and workmanship the house retains a sufficient amount of original character-defining details to reflect its style and it is easily recognizable to its period of significance as an early 20th century foursquare residence. The result is that the house retains integrity of setting, feeling and association. It is also a rare and good example of a large early 20th century home with distinctive stylistic details in the town of Lindale. The house is recommended NRHP eligible under Criterion C, at the local level, as a good example of a house in the American Foursquare style representing the residential development of Lindale, Texas. The house is associated with the Marchman family, early 20th century merchants and bankers. While a prominent early Lindale resident, research did not support that Marchman possessed the extraordinary significance that would make the house eligible under Criterion B.

NRHP Eligibility Status: Recommended NRHP-Eligible (the house only, landscape features like fencing and low curb are not contributing to the historic resource).

NRHP Criteria: C

NRHP Areas of Significance: Residential Development in Early 20th century Lindale, Texas

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 1: View of front façade looking north.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 2: Oblique view looking northeast.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 3: Oblique view of back porch looking southeast.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 4: Detail of front porch entry.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 5: East elevation with original windows.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 6. Resource 026 a-b, facing west toward linear portion and clip of parking space that would be acquired by proposed ROW.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 7. Resource 026 a-b, facing east toward linear portion and corner clip of parcel of proposed ROW that would be acquired.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

Resource ID #: 026b	
Current Physical Address: 403 W Hubbard Street, Lindale, Texas 75771	Latitude/Longitude: 32.515519, -95.413122
Historic Context: Community Planning and Development in 20 th century Lindale, Texas	Photo Limitations: Tall trees partially obscure front facade
Architectural Stylistic Influence: No Style	Year Constructed: Unknown, may be non-historic-age
Property Type/Subtype: Residential/Single Family/Garage	
Description: This resource is a single-story, double-car automobile garage with a pyramidal roof and composition shingles. It has replacement siding and a replacement overhead door. Windows on the west elevation are replacement. Garage may be non-historic-age. Per discussion with current owner, Leslie Cain, who bought property within last ten years, she does not know the age of the garage and it was on the property when she bought it.	
Architectural Modifications: Replacement overhead door and windows.	
Eligibility Justification: This resource retains integrity of location but either has diminished integrity of design, materials and workmanship due to modifications or may be non-historic-age. For these reasons, it is not individually NRHP eligible under any criteria.	
NRHP Eligibility Status: Recommended Not Individually NRHP-Eligible. Recommended Not-contributing to the NRHP-eligible resource	
NRHP Criteria: N/A	
NRHP Areas of Significance: N/A	

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 1: Backyard garage structure looking north east.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 2: Garage looking west.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

Resource ID #: 036s	Current Name: Gallery Studio Historic Name: Rice's Grocery
Current Physical Address: 112 East Hubbard Street, Lindale, Texas	Latitude/Longitude: 32.515873, -95.409269
Historic Context: Community Planning and Development Lindale, Texas, c 1903 - c 1940s	Photo Limitations: None
Architectural Stylistic Influence: No Style	Year(s) Constructed: c 1910 (Not on SCAD, Pre-1926 per Sanborn Map)
Property Type/Subtype: Commercial/One-part Block	
<p>Description: This resource is a one-story, free-standing, commercial retail building with a rectangular plan and flat roof and is constructed of light brown brick. The front façade of the building consists of a three-part storefront with a central entry flanked by display windows. The front façade has vertical brick piers that define the door and window openings. The entry contains double wooden doors, with full length glass inserts. Based on a historic photo of the building they are likely replacement but are similar in style to the originals. The original wooden-frame windows on the front façade contain a lower, fixed-pane with a four-part muntin pattern across the top. Each window and door opening has a two-part, fixed-pane wooden-frame transom above. The center transom above the door has replacement glass. The parapet has slight brick corbelling along the roofline and a decorative projecting section of brick through the transom area. The windows on the west elevation have been replaced</p> <p>A flat awning suspended by chains attached to the parapet area spans the width of the front façade. Two single wooden-frame windows with false arches are located on the west elevation. There are no window or door openings on the east elevation. The building was operated by Mr. IB Rice as a grocery store until his death in 1983. Circa 1985, the Lindale Heritage group purchased the building with the intention of restoring it and turning it into a museum of the town. At that time, a plain, square, on-story addition was constructed on the rear.</p>	
<p>Architectural Modifications: Addition to rear, replacement west elevation windows, replacement transom glass, probably front door replacement.</p>	
<p>Eligibility Justification: The resource retains integrity of location but the integrity of design and materials and workmanship have been diminished by the addition to the rear. However, this addition is one-story, simple and does not detract from the overall feeling of the building. The west window have been replaced but with a muntin design that is similar to those on the front. The double entry doors may be replaced based on a historic photo; however, the replacements are similar and appear to be of the period. The center transom glass has been replaced with a fixed pane. Despite these</p>	

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

modifications, the building is a good example of a small, free-standing, early twentieth century commercial grocery building. It retains integrity of setting, feeling and association and reflects its type and period of significance. The building is recommended NRHP-eligible under Criteria A and C for its importance to early 20th century Lindale commerce as a local grocery store.

NRHP Eligibility Status:

~~Recommended Individually NRHP Eligible under Criteria A and C at the local level.~~

Recommended Contributing to NRHP-recommended eligible Lindale downtown historic district.

NRHP Criteria: A and C

NRHP Areas of Significance: Commercial Development in Early 20th century Lindale Texas

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 1: Oblique view of front façade looking northeast.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 2: Oblique view of front façade looking northwest.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 3: View of front façade looking north.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 4: Detail of west elevation looking east showing brick cornice detail.

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Photo 5: Oblique view of rear and east elevation looking southwest showing 1980s addition.

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Photo 6: Oblique view of west elevation looking southeast.

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Photo 7: Detail of entry doors.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

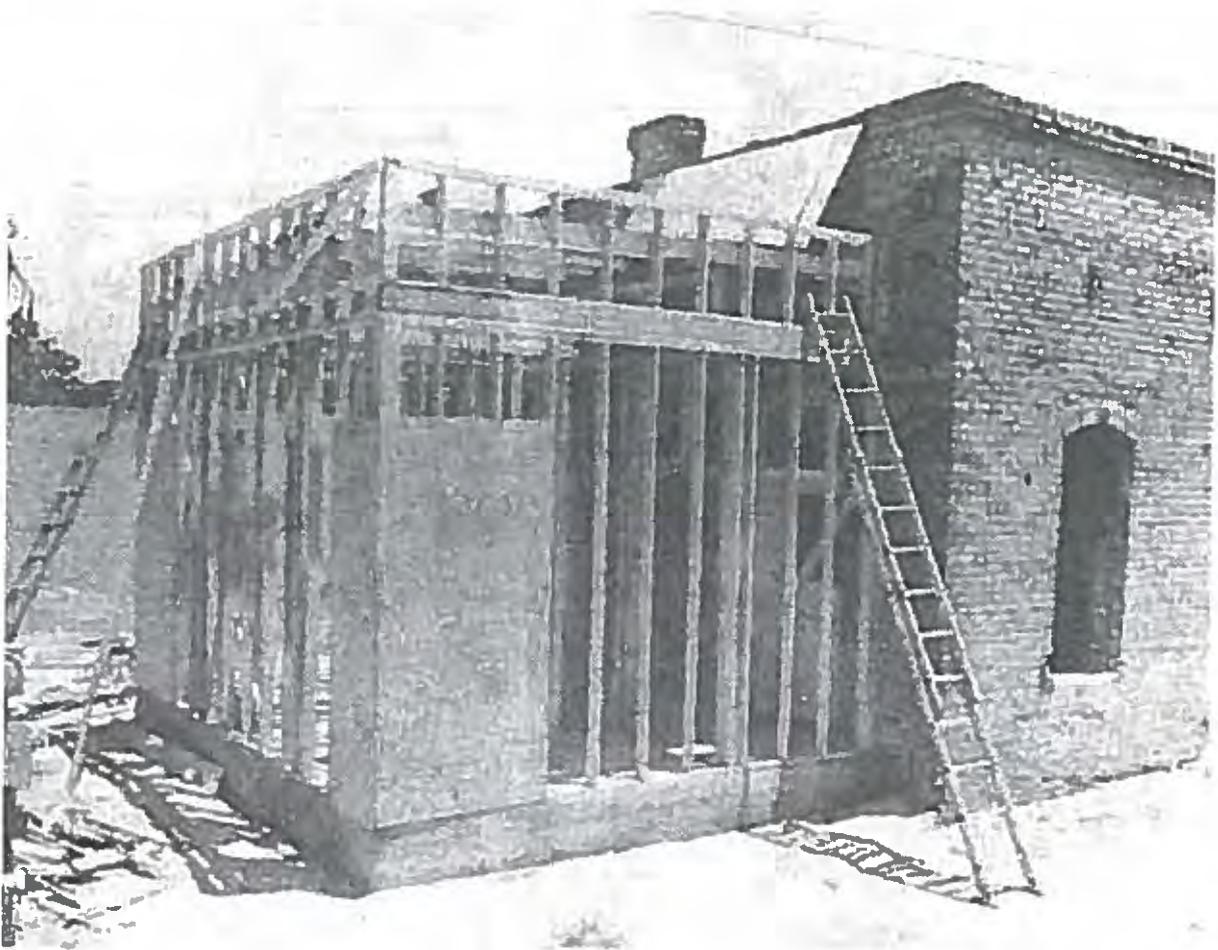


Photo 8: View of rear of building during construction of addition during c 1980s. (Source: Lindale Public Library Vertical Files)

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

Resource ID #: 036	Current Use: Lindale Downtown
Current Physical Address: Roughly bounded by West Valley Street on the north, North Commerce Street on the east, West Van Street on the south and West College Street on the west	Period of Significance: 1903-1950
Historic Context: Community Planning and Development Lindale, Texas - c 1903- c 1940s	Photo Limitations: Various
Architectural Stylistic influence: Includes one and 2-part commercial buildings, as well as non-historic-age buildings	Year(s) Constructed: 1903-present
Property Type/Subtype: Commercial, Municipal and Religious	
<p>Description: The majority of the resources within the downtown area of the crossroads community of Lindale fall within the property type category of Commercial Buildings. Of this type, the subtypes of One-part Commercial Block and Two-part Commercial Block are the most numerous. These resources provided spaces for various types of businesses such as retail stores, banks, offices, and hotels. Most of the buildings in Lindale are one-story but a few are two-stories in height. Most are constructed of brick with an elongated rectangular plan that conforms to the dimensions of the lots that they occupy. Most of the historic-age buildings have asymmetrical storefront façade consisting of central entrances flanked by large display windows at street level. The historic-age buildings generally lack elaborate architectural embellishment and ornamentation. However, the upper area of many buildings, especially the parapets, often features masonry work that exemplifies a tradition of craftsmanship that was popular throughout the late nineteenth and early twentieth centuries. Research indicated that the earliest extant commercial building in the downtown area dated to 1903. Although Lindale was founded during the late 19th century, no buildings were found dating to this period. (See Exhibit 3 for a detailed map of the study district)</p> <p>There is only one historic-age religious resource within the study boundary of the downtown area that was not constructed for commercial use. It is the First Baptist Church building at Hubbard and Commerce Streets that was constructed in 1965. The Sanborn Map from 1926 shows that several stores, including an auto sale and repair shop, a gas station, and a warehouse stood on the block that the church now occupies. The downtown study area also includes two municipal resources, the Lindale Water Tower and the former Lindale Fire Station #1.</p> <p>The study boundary for Lindale Downtown area is roughly four blocks at the intersection of US 69 (Main Street) and FM 16 (Hubbard Street), see map. US 69 is also known as the Mineola Highway, as it led from the Tyler, approximately ten miles to the south, to Mineola, and approximately ten miles</p>	

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to the north. This name for the road is still found on maps today. These boundaries were chosen as logical for study because they contain the highest concentration of historic-age commercial buildings.

The railroad was a significant feature of Lindale through the period of significance that is no longer extant. Lindale originally was a stop on the northern line of the International and Great Northern Railroad (I&GNRR) which ran from Tyler to the town of Mineola, ten miles north of Lindale. The town was organized in anticipation of the arrival of the railroad and the town's primary industry throughout the late 1800s and into the 20th century was the growing and canning of fruit. Lindale had several fruit canneries along the railroad tracks between Commerce and Industrial Streets on the east side of town. Although the railroad was an integral part of the fruit processing industry in Lindale through the mid-20th century, business declined afterwards and the railroad eliminated the Mineola route during the 1960s. In the early 1970s, the railroad tracks were removed and are no longer extant. A depot dating to the turn of the twentieth century, visible on the 1926 Sanborn Map, was once located at the end of Hubbard Street next to the tracks. However, the depot fell into disrepair after the mid-20th century decline of the railroad and is also no longer extant. Today, no evidence of the railroad remains within the vicinity of downtown Lindale east of Commerce Street; nor were railroad related resources observed during the field survey. The land where the tracks once ran now contains parking lots as well as the recently constructed Lindale Library, as well as other municipal buildings. In addition, the numerous canneries located along the tracks in Lindale's downtown area are not extant today. These canning facilities included the Star, Union, and Lindale canning facilities.

Many of the storefronts of the extant historic-age resources have been modified, particularly at the pedestrian level, with replacement materials including doors, windows, and cladding. There are some areas where buildings have been demolished and the lots remain vacant. This is particularly evident on the west side of US 69 between Hubbard Street and Van Street, next to the present bank building. Some lots now contain non-historic-age buildings, particularly the corner of Valley Street and US 69, which had a hotel during the period of significance but is now a donut shop that was constructed in 2002.

Downtown Lindale contains no distinctive historic-age lighting, signage, or street paving materials, such as stone or brick. The 20th century sidewalks are plain concrete and no inscriptions or other distinctive markings were observed. The sidewalks are stepped in a few areas to provide access to the curb-side parking, however, a 2015 sidewalk accessibility project has completely replaced the

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existing sidewalks at the corner of FM 16 and US 69. The new sidewalk material is lighter in color and the design contains ramps and railings.

Architectural Modifications: Multiple and various including modified design and workmanship and replacement materials.

Eligibility Justification:

The downtown Lindale area has diminished ability to convey its historic character and sense of past. Many of the commercial buildings, particularly at the pedestrian level, have overall diminished integrity of design, materials and workmanship. Exterior cladding materials and architectural detailing have been altered, and storefront door and window materials have been replaced after the period of significance. Based on historic maps dating to the city's founding, the layout of the streets and blocks appears to have remained stable. However, the streetscapes no longer visually present a continuous and uninterrupted grouping of historic buildings. The demolition of historic-age buildings, new construction, and the presence of vacant lots interrupt the visual expression of the historic buildings and diminish the integrity of setting, feeling and association of the entire downtown area. The downtown also possesses no historic paving materials, signs, or lighting. Additionally, historic sidewalk materials, at the high-profile intersection of US 69 and FM 16, have recently been replaced in areas. The introduction of recent ADA compliance features such as ramps and railings have visually disturbed the integrity of the pedestrian level resulting further diminishing the integrity of setting, feeling and association.

The entire downtown Lindale area no longer conveys a sense of time and place from its period of significance within the context of community planning and development; however there is a smaller cluster of historic-age buildings near the intersection of US-69 and FM-16 that do retain their integrity of feeling, setting, association, workmanship and design. Lindale experienced its most intense period of development during the late 19th and early 20th centuries when the railroad arrived and the fruit growing and canning industry was in full swing. All railroad related resources, and, with the exception of one cannery building dating to c 1960, all fruit processing related buildings have been completely eradicated from downtown Lindale. The loss of these types of significant resources has resulted in a loss of integrity of setting feeling and association within the downtown area; however, many of the buildings are still occupied and are functioning in other ways.

The historic downtown area of Lindale no longer remains the center of commercial and retail activity within the community, but most of the buildings within the downtown study area boundary are still occupied and in use. Many still provide needed types of services which include several retail stores,

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a hair dresser, chiropractor, bank, candy store, and several food related businesses. In addition, there is also a large church, community theatre, and art studio. However, several important community facilities which were represented in Lindale during the period of significance, and were important elements of a crossroads community, are no longer represented in the historic downtown area. These missing facilities include a post office, drug store, grocery store, gas station, and hotel. Field observations revealed that the types of businesses historically located in downtown Lindale can still be found within the city limits, but the location of these businesses have shifted to the south along US 69 between historic downtown Lindale and the intersection of I-20. Movement of businesses towards the area of the more travelled interstate highway include larger chain businesses constructed within the last decades, such as a Lowes hardware store, a Walmart, several large gas stations, hotels, and restaurants. The shift in the location of the center of commercial activity has diminished a sense of cohesiveness within the greater Lindale downtown community and diminished the integrity of setting, feeling, and association.

For these reasons, it is recommended that there is a smaller Lindale downtown historic district, within the larger downtown survey area, consisting of the most intact sections of historic-age buildings that still maintain their integrity of setting, association, design, materials, workmanship, and feeling.

NRHP Eligibility Status: Recommended NRHP-Eligible as a Historic District (smaller area, consisting of Resources 036a-g, 036l-t, and 036w-x)

NRHP Criteria: A

NRHP Areas of Significance: Commercial Development in Early 20th century Lindale Texas

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Photo 1: Context view of NRHP Lindale downtown historic district looking towards crossroads intersection of US 69 and FM 16 facing north.

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Photo 2: Context photo of crossroads intersection of US 69 and FM 16 looking west toward NRHP Lindale downtown historic district. .

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Photo 3: Context photo of crossroads intersection of US 69 and FM 16 looking east.

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Photo 4: Context photo of crossroads intersection of US 69 and FM 16 looking south.

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Photo 5: Context view looking south toward a portion of the Lindale downtown historic district from north side of US 69 and FM 16 intersection.

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Photo 6: Detail of historic-age sidewalk steps within Lindale downtown historic district boundary.

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Photo 7: Detail view of historic-age sidewalk step down to street at pedestrian level within Lindale downtown historic district boundary.

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Photo 8: View of historic-age concrete sidewalk step within Lindale downtown historic district boundary at northeast corner of US69 and FM 16 intersection looking south.

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Photo 9: View of vacant lots where strip of historic-age buildings stood looking northwest across US 69. Bank building is at right in photo.

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Resource ID #: 036a	
Current Physical Address: 113 West Hubbard Street, Lindale, Texas	Latitude/Longitude: 32.515676, -95.410771
Historic Context: Community Planning and Development Lindale, Texas - c 1903- c 1940s	Photo Limitations: None
Architectural Stylistic Influence: No Style	Year(s) Constructed: 1920 (SCAD)
Property Type: Subtype: Commercial/One-Part Commercial Block	
<p>Description: This resource is a one-story, one-part commercial retail building with a rectangular plan. The building is clad with brick that has been painted, however, the vertical brick piers that defined the door and window openings are still visible. A minimal amount of brick corbelling is located along the roof cornice and two bands of raised brick form horizontal lines across the upper part of the façade. Metal rings that supported an awning shown on the Sanborn Map are extant above the transom window area. The entry opening faces Hubbard Street and is located on the right side of the façade with a replacement metal-frame door. A window opening occupies the left side of the façade and has been partially filled with vertical siding. The building is located on a corner parcel and the west elevation displays four window opening that have filled with brick. In addition, the sidewalk in front of the building has been recently replaced modified for ADA compliance.</p>	
<p>Architectural Modifications: Replacement entry door and doorway modification. Replacement window and opening modification. Windows on west elevation have been filled.</p>	
<p>Eligibility Justification: The resource retains integrity of location. However integrity of design, materials and workmanship has been diminished through alterations to the doorway opening and the replacement door. It is likely that the door opening originally held double wooden doors based on its size. A transom window likely was located above the doorway. Integrity is also diminished through the alteration of the window opening which appears to have extended lower to the ground than it currently does. The brick in the area beneath the window does not match the brick on either side. The enclosure of the side elevation windows with brick further diminishes integrity of design, materials and workmanship and it is unlikely that the original windows are extant.</p> <p>The integrity of setting, feeling and association has been diminished by the modifications mentioned above, although the setting within the historic downtown crossroad area is intact. In addition, the building has lost most of its ability to convey its period of significance, other than its mass and brick cladding. The building is recommended Not Individually Eligible for the NRHP. Alterations diminish</p>	

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many of the distinctive qualities of the building but it does retain enough character to be recommended Contributing to the Lindale downtown historic district.

NRHP Eligibility Status: Recommended Not Individually NRHP Eligible.

Recommended Contributing to the NRHP-recommended eligible Lindale downtown Historic District.

NRHP Criteria: N/A

NRHP Areas of Significance: N/A

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Photo 1: View of front façade looking north.

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Photo 2; Oblique view of front and west elevation looking northeast.

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Photo 3: Oblique view of rear and west elevation looking southeast.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

Resource ID #: 036b (1 and 2)	Current Name: Lindale Candy Company(1) and Lindale Community Theatre (2)
Current Physical Address: 109 West Hubbard Street, Lindale, Texas	Latitude/Longitude: 32.515732, -95.410690
Historic Context: Community Planning and Development Lindale, Texas, c 1903 - c 1940s	Photo Limitations: None
Architectural Stylistic Influence: No Style	Year(s) Constructed: 1925 (SCAD)
Property Type/Subtype: Commercial/One-part Block	
<p>Description: This resource is a single-story commercial retail building with a rectangular plan and a flat roof. The building contains two, three-part storefronts and shares the same address. The building is clad with brick that has been painted, however, the vertical brick piers that defined the door and window openings are still visible. Decorative brick corbelling is located along the width of the roof cornice. Three depressed panels are located above the door and window openings. The front façade of the building on the west has a central entry that has been partially enclosed with a single glass and metal door. The door is flanked by two large, fixed-pane display windows. Transom windows over the doorway and each window have been covered with vertical siding. Vertical metal siding is also present beneath the two fixed pane windows and is likely covering the original brick cladding in this area as it is on the building next door which is identical in design to this resource. Three non-historic-age metal awnings are located above each window and door opening. Building 2 adjacent to the east that has the front façade has a central double entry that holds replacement metal and glass doors. The door is flanked by two large, fixed-pane display windows. Three cloth awning shelter each door and window opening. The sidewalk in front of the building has been recently replaced and modified for ADA compliance.</p>	
<p>Architectural Modifications: Doorway openings have been modified and have replacement doors. Transom windows have been covered and brick painted.</p>	
<p>Eligibility Justification: The resource retains integrity of location, as well setting as part of a downtown crossroads commercial area. The integrity of design, materials and workmanship, and feeling and association is diminished due to the modifications to the doorway. It is likely that originally, the single doorway held double doors, as it is identical in design to the building adjacent to the east that retains a double door opening. The transom windows have been covered and it is unknown whether they are extant beneath. Although alterations diminish several of the distinctive qualities of the building, it retains enough character defining features that it is recommended Contributing to the NRHP Lindale downtown historic district.</p>	
<p>NRHP Eligibility Status: Recommended Not Individually NRHP-Eligible. Recommended Contributing to the NRHP-recommended eligible Lindale Downtown Historic District.</p>	

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NRHP Criteria: A
NRHP Areas of Significance: Commercial Development in Early 20 th century Lindale Texas

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Photo 1: View of front façade of storefront 1 looking north.

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Photo 1: View of front façade of storefront 2 looking north.

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Resource ID #: 036c (1 and 2)	Current Name: Lindale Community Theatre(both buildings)
Current Physical Address: 105 East Hubbard Street, Lindale, Texas	Latitude/Longitude: 32.515754, -95.410515
Historic Context: Community Planning and Development Lindale, Texas, c 1903 -c 1940s	Photo Limitations: None
Architectural Stylistic Influence: No Style	Year(s) Constructed: 1925 (SCAD)
Property Type/Subtype: Commercial/One-Part Block	
<p>Description: This resource is a single-story commercial retail building with a rectangular plan and a flat roof. The building originally contains two separate storefronts. The building is clad in brick that has been painted. Decorative brick corbelling is located along the width of the roof cornice. A full-width rectangular flat panel spans the upper part of the façade. The front façade of storefront 1 has a central double entry that holds replacement metal and glass doors. The door is flanked by two large, fixed-pane display windows. Transom windows over the doorway and each window have been covered with vertical siding. Three cloth awnings shelter each door and window opening. This building is identical in design to the adjacent building to the east.</p> <p>A full-width, rectangular, flat panel spans the upper part of the façade. The entire storefront area of the front façade of building 2 has been enclosed with brick and painted. The area where transom windows would be located over the storefront have been covered with vertical siding. The building has no awning but is shown to have had one on the 1926 Sanborn map. Based on the detail on the upper part, this building was identical in design to the adjacent building to the west.</p>	
<p>Architectural Modifications: Replacement entry doors, covered transom windows, and painted brick on building 1. Entire storefront of building 2 filled in with brick and entire brick cladding painted.</p>	
<p>Eligibility Justification: This building retains integrity of location and setting. It has diminished integrity of design, materials and workmanship due to the replacement entry doors, covered transoms, painted brick, and storefront enclosure. It is not known whether the transoms are extant beneath the covering. The replacement doors of storefront 1 occupy approximately one-third of the front façade also diminish the integrity of feeling and association and the building is not recommended individually NRHP eligible. Despite the alterations the building retains enough character defining features that it is recommended contributing to the NRHP Lindale downtown historic district.</p>	
<p>NRHP Eligibility Status: Recommended Not Individually NRHP Eligible. Recommended Contributing to the NRHP-recommended eligible Lindale Downtown Historic District.</p>	
<p>NRHP Criteria: A</p>	

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Photo 1: view of front façade of building 1 looking north.

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Photo 2: View of front façade of building 2 looking northeast.

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Resource ID #: 036d	Current Name: Guns and Guitars Historic Use: Drug store (Sanborn Map 1926)
Current Physical Address: 100 North Main Street, Lindale, Texas	Latitude/Longitude: 32.515740, -95.410104
Historic Context: Community Planning and Development Lindale, Texas, c 1903 - c 1940s	Photo Limitations: None
Architectural Stylistic Influence: Classical Revival	Year(s) Constructed: 1913 (SCAD)
Property Type/Subtype: Commercial/Two-Part Block	
<p>Description: This resource is a two-story commercial building with a rectangular plan and flat roof. It is clad with tan brick and has cast stone accents. It is located at one of the primary intersection of the downtown area on the northwest corner of the crossroads of Hubbard and Main Streets.</p> <p>The cornice of the front façade consists of segmented panels periodically recessed at equal distances and capped with cast stone. Below the top portion of the cornice, the brick is corbelled across the width of the façade. The cornice area is accented below the corbelling with vertical lines of rough cast stone in groups of three. A wide horizontal band of cast stone extends beneath the corbelling. Four large rectangular window openings spaced evenly across the façade are located on the second story of the front façade and are covered by wooden louvered covers. The building is typical of the two-part block; and has two distinct zones between each story that are separated by the horizontal architectural element of a second row of corbelled bricks, just below the upper level windows.</p> <p>The lower part of the front façade contains a pedestrian level storefront with transom windows that have been covered with metal vertical siding. Two replacement fixed-pane display windows are located in the center of the façade. Pink and brown colored bricks have been installed below the display windows that do not match the original bricks. The main entry is located at the southeast corner and is accessible from both the south and east sides. The original wooden and glass door appears to be extant and is recessed and set at an angle, sheltered beneath the southeast corner of the building. A single-door secondary entry with a replacement door leading to the upper story is located on the right side of the façade.</p> <p>Because of its corner location, the south elevation is also decorated with architectural detail and contains brick ornamentation similar to the front façade at the cornice and across the upper level façade. The upper level of the south façade contains a row of eight evenly-spaced rectangular window openings that are also covered with wooden louvered screens. The pedestrian level contains</p>	

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a variety of window and door openings. Four small arched fixed-pane windows set high on the first level extend west from the front of the building. A thin band of rough faced brick extends from the front and around the small arched windows towards the rear of the building. Next are two separate, three-part storefronts that lead into the rear of the first story. Each storefront consists of central doorway opening flanked by two large fixed-pane display windows. The storefront near the center of the south elevation has its door openings covered. The storefront towards the rear of the south elevation had one window opening covered. Transom windows with fixed-panes are located above all of the door and window openings.

Fixed metal awnings extend above all openings on both the front and south elevations. The rear elevation was also visible along an alley. The rear elevation consists of a covered doorway and two covered windows on the upper story and another covered doorway and a single covered window on the lower level. Metal rings and hooks above the transom windows indicate a previous awning, which is no longer extant, but is shown on the 1926 Sanborn Map. New sidewalks and ADA ramps and railing have been installed along the south elevation and across the front façade.

Architectural Modifications: Some window and door openings covered or modified, installation of new sidewalk, ramps and railings.

Eligibility Justification: This resource retains integrity of location and setting. However, integrity of design, materials and workmanship are diminished by modifications to the door and window openings. However, per a conversation with the building owner, the original wooden windows are extant beneath the upper level louvered screens but could not be accessed for observation. These screens are easily removed as is the siding covering the transom. The addition of new ADA compliant sidewalk, ramps and railings diminishes integrity of feeling and association. Despite these alterations, the distinctive qualities of the building, such as its materials, window and door openings, and many of its character defining details are retained. The building is easily recognizable to its period of significance.

The building is a good example of an important two-story brick commercial building to Lindale's development during the period of significance. The building retains sufficient physical integrity to be recognizable to its historic community use as a corner drug store and is recommended NRHP eligible under Criteria A and C at the local level; it is also recommended contributing to the NRHP Lindale downtown historic district.

NRHP Eligibility Status: Recommended Individually NRHP-Eligible under Criteria A and C.

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Recommended Contributing to the NRHP-recommended eligible Lindale Downtown Historic District.
NRHP Criteria: A and C
NRHP Areas of Significance: Commercial Development in Early 20 th century Lindale Texas.

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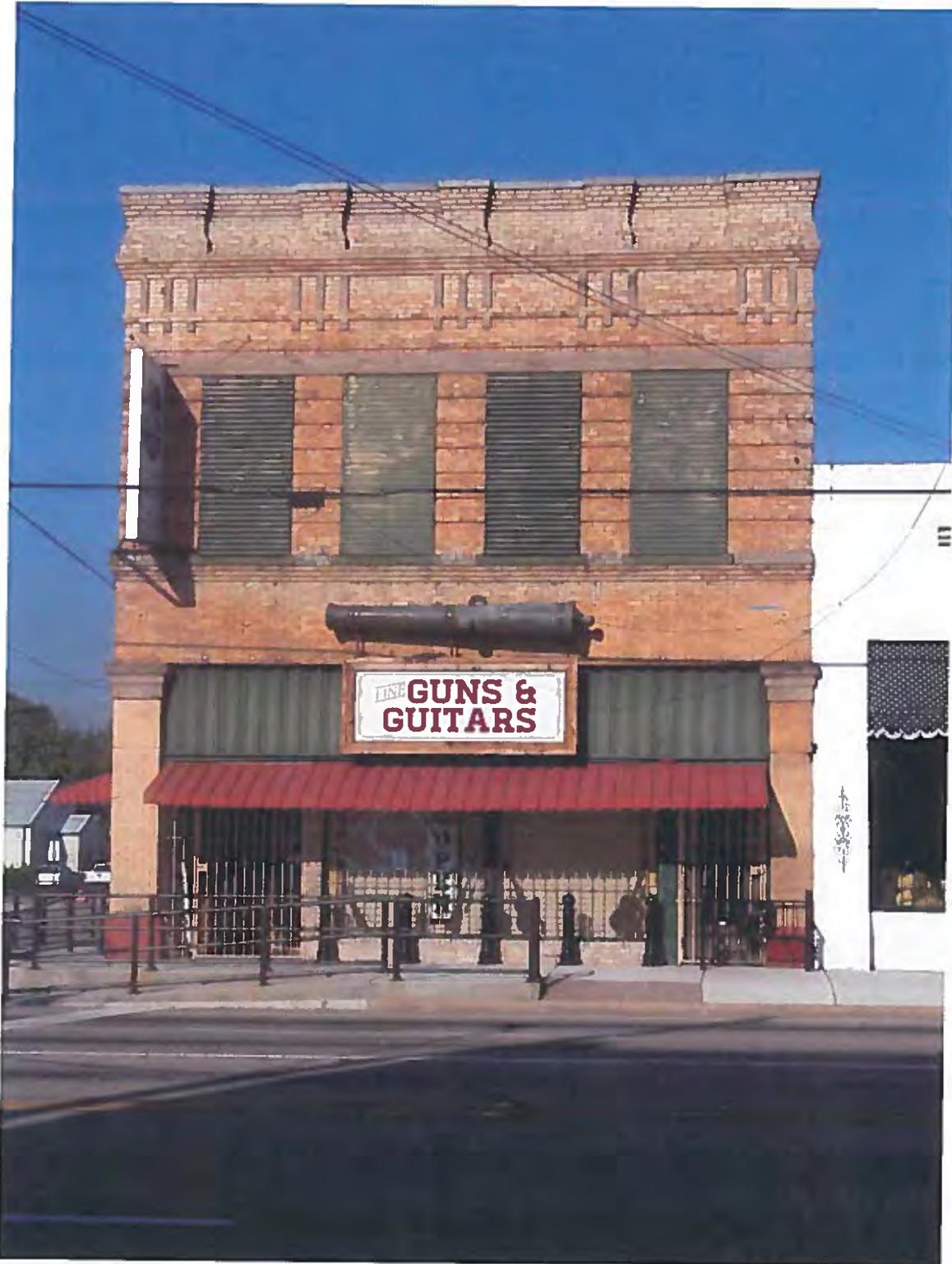


Photo 1: View of front façade looking west.

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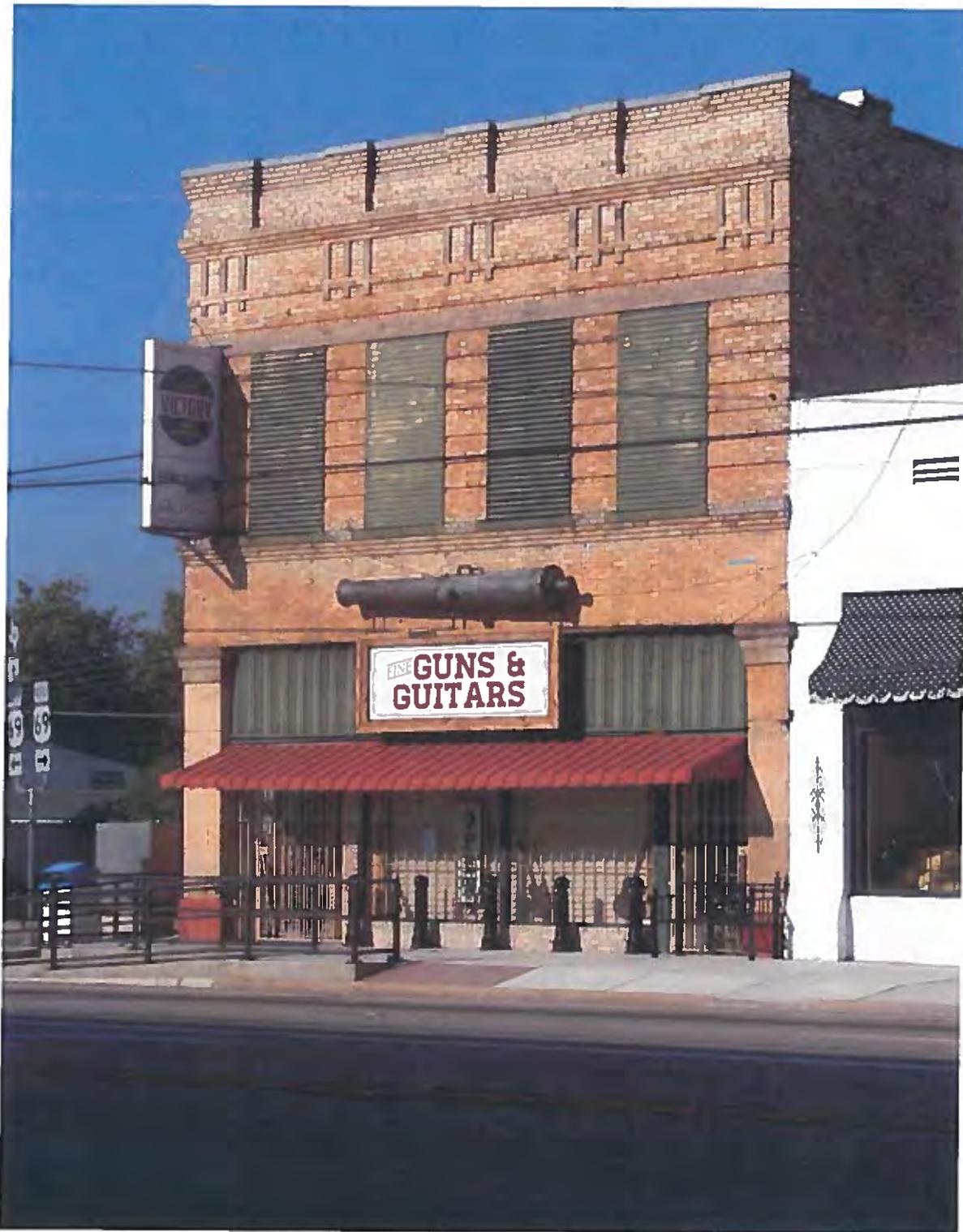


Photo 2: Oblique view of front façade looking southwest.

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Photo 3: View of south elevation looking north.

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Photo 4: Oblique view of rear and south elevation looking northeast.

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Photo 5: Oblique view of rear looking southeast.

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Photo 6: Detail of cornice ornamentation.

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Photo 7: View of front sidewalk showing recent ADA changes.

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Photo 8: Detail of front entry looking west.

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Resource ID #: 036e	Current Name: Pinkie Pie Boutique Historic Use: Zenith Radio Sales and Repair (Historic Photo 1953)
Current Physical Address: 102 North Main Street, Lindale, Texas	Latitude/Longitude: 32.515855, -95.410116
Historic Context: Community Planning and Development Lindale, Texas, c 1903 - c 1940a	Photo Limitations: None
Architectural Stylistic Influence: No Style	Year(s) Constructed: 1928 (SCAD)
Property Type/Subtype: Commercial/One-part Block	
<p>Description: This resource is a single-story commercial retail building with a rectangular plan and a flat roof. The building is clad in brick that has been painted. The front façade has a central entry with double doors and a fixed horizontal pane transom with another larger transom above it divided into two fixed-panes. The door is flanked by two large, fixed-pane display windows. Transom windows are located above each window. Two cloth awnings shelter the display windows; however, a historic photo from 1953 shows a wooden awning with roof shingles.</p>	
<p>Architectural Modifications: Painted brick, possible replacement doors and windows.</p>	
<p>Eligibility Justification: This resource retains integrity of location and setting. However, the painting of the brick cladding, windows and doors have diminished the integrity of design, materials and workmanship. The modifications have also resulted in diminished feeling and association and the building does not retain sufficient integrity for individual NRHP eligibility. The building, though, retains some aspects of integrity of design that are sufficient to contribute minimally to the historic character and is recommended as contributing to the Lindale downtown historic district.</p>	
<p>NRHP Eligibility Status: Recommended Not Individually NRHP-Eligible. Recommended Contributing to the NRHP-recommended eligible Lindale Downtown Historic District.</p>	
<p>NRHP Criteria: A</p>	
<p>NRHP Areas of Significance: Commercial Development in Early 20th century Lindale Texas</p>	

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Photo 1: View of front façade looking west.

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Photo 2: View of rear looking southeast showing original brick cladding.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

Resource ID #: 036g	Historic Use: Post Office with 2 nd story Hall (1926 Sanborn Map)
Current Physical Address: 106-112 North Main Street, Lindale, Texas	Latitude/Longitude: 32.516052, -95.410044
Historic Context: Community Planning and Development Lindale, Texas, c 1903 -c 1940s	Photo Limitations: None
Architectural Stylistic Influence: Classical Revival	Year(s) Constructed: 1913 (SCAD)
Property Type/Subtype: Commercial/Two-part Block	
<p>Description: This resource is a two-story commercial building with a rectangular plan and flat roof. It is clad with tan brick and has brick accents. A shallow triangular brick parapet is centered at the top of the front façade. Seven 1/1 wooden sash windows extend evenly spaced across the façade. The area below the parapet contains decorative brick corbelling and two rectangular flat panels outline with raised bricks.</p> <p>The upper and lower zones are separated by additional decorative raised brick corbelling. The pedestrian level of the front façade appears to have been originally divided into two, three-part storefronts with a doorway leading to the second level in the center of the façade. The center doorway contains a replacement metal and glass door. The original openings have been enclosed with rough-cut stone. Field observation revealed the original brick beneath the single layer of replacement cladding. The storefront to the left contains a central single doorway with a replacement door flanked by two small replacement windows. The storefront on the left contains a double entry with two wooden and glass doors that may be original. They are flanked by two large fixed-pane display windows that appear to be replacements and are surrounded by variegated brown bricks that do not match the original bricks. Seven original transom windows are located above each of the seven door and window openings and contain two-part fixed-panes. Two cloth awnings span the façade beneath the transoms. A local building owner stated that this building was once a Masonic Hall; however, no cornerstone was observed but may have been obscured behind the cladding. The 1926 Sanborn Map states that the Post Office was located in the right side storefront.</p>	
<p>Architectural Modifications: Storefront replacement window, door, and cladding.</p>	
<p>Eligibility Justification: This resource retains integrity of location and setting. However, modifications to the cladding, windows and doors on the pedestrian level have diminished the integrity of design, materials and workmanship. Particularly at the pedestrian level the integrity of association and feeling has been severely diminished and the building does not reflect its type and period. The resource is not recommended individually NRHP eligible. However, the building does retain aspects</p>	

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

of integrity of design, particularly at the upper level, that are sufficient to contribute to the Lindale downtown historic district.
NRHP Eligibility Status: Recommended Not Individually NRHP-Eligible. Recommended Contributing NRHP-recommended eligible Lindale Downtown Historic District.
NRHP Criteria: A
NRHP Areas of Significance: Commercial Development in Early 20th century Lindale Texas

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 1: View of front façade looking west.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 2: Oblique view of front and south elevations looking northwest.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 3: View of pedestrian level looking north.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 4: View of rear looking east.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

Resource ID #: 036n	Current Use: Vacant Historic Use: Guaranty State Bank, Second floor: Hall (1926 Sanborn Map), 1940s: York's Hardware, Sporting Goods, Furniture and Appliance Store
Current Physical Address: 100-101 East Hubbard Street, Lindale, Texas	Latitude/Longitude: 32.516233, -95.409580
Historic Context: Community Planning and Development Lindale, Texas, c 1903 - c 1940s	Photo Limitations: Large awning obscures part of façade.
Architectural Stylistic Influence: Classical Revival	Year(s) Constructed: 1903 (SCAD) and also on building parapet
Property Type/Subtype: Commercial/Two-part Block	
<p>Description: This resource is a two-story commercial building with a rectangular plan and flat roof. It is clad in red brick and is located on the northeast corner of the crossroads of Hubbard and Main Streets. A brick parapet consisting of four short, square, pinnacles with cast stone pyramidal caps extend across the cornice of the front façade. Multiple rows of brick corbelling are across the cornice below the parapet extends across the width of the façade, and there are three rectangular recessed panels located below the corbelling. The center panel contains a metal plaque with raised lettering that reads, '19 J.W, Ogburn 03'. Evenly spaced horizontal bands of raised brick continue across the façade to the ground level. The lower part of the front façade contains a pedestrian level storefront that has a central, recessed main entry flanked by fixed-pane display windows. The doors and window frames appear to be original on the front façade, however all of the glass on all elevations has been replaced. A pair of decorative cast iron pilasters flank the main entry which has double wooden doors with large single-pane lights.</p> <p>Because of its corner location, the west elevation contains additional window and door openings. On the second level, six 1/1 sash windows extend across the west elevation and contain false arched tops, raised brick hoods, and cast stone sills. The pedestrian level on the west elevation contains a single replacement doorway to the north end of the building, presumably providing access to the second floor from outside. A section at the north end of the building projects forward slightly and is designed to appear as a separate building facing west onto Main Street (US 69) However, it is part of the building facing Hubbard Street and Sanborn map evidence showing the building's footprint confirms that it is part of the 100 East Hubbard Street building. In addition, both the west and north façades share similar design, materials and workmanship consisting of brick cornice details and window and door openings. The first level contains two large fixed-pane display windows flanking a central double door entry. The upper story contains three original 1/1 wooden sash windows topped with fixed-pane transoms with a segmental arched top and cast stone sills. A rectangular recessed</p>	

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

space is located at the center of the brick cornice area above the west rear façade. It likely held a metal panel similar to the one on the north facade and has been removed and patched with new replacement red brick. A panel embedded in the upper west side of the building reads '19 BANK 03", and is similar in design and materials to the panel on the front façade facing East Hubbard Street further unifying the building and could be seen from the east by those arriving by rail to Lindale.

The original owner of the building was J.W. Ogburn who was born and raised in Quitman, Texas approximately 20 miles north of Lindale. In Quitman, he grew Alberta peaches on 550 acres of land. His interest in Lindale centered on the fruit canning industry there and the trade generated by the railroad. In 1903, he constructed the building which housed the Guaranty State Bank of Lindale. His son, J.S. Ogburn, was a bank cashier in 1914 according to bank letterhead. J.S. Ogburn also owned the Lindale Canning Company and was mayor of the Lindale in 1905 when the town was incorporated. Although J.W. Ogburn and J.S. Ogburn were prominent Lindale residents during the late 19th and early 20th centuries research does not support that their significance was extraordinary or greater than other early business leaders in the town and the resource is not recommended eligible under Criterion B. It retains sufficient integrity to reflect its significance and is recommended NRHP-eligible under Criterion C.

Architectural Modifications: Replacement window and door glass, replacement door on west elevation. Missing cornice panel on west elevation.

Eligibility Justification: This resource retains integrity of location and setting. Integrity of design, materials and workmanship are somewhat diminished by modifications to the door and window glass on both the east and north elevations and the removal of the cornice panel on the west elevation. Despite these alterations, the overall integrity of these aspects is retained and the distinctive character defining qualities of the building, such as its brick façade details, cast iron pilasters and window and door openings remain and the building is easily recognizable to its period of significance.

The building is the earliest extant example of a two-story Commercial Two-part Block brick building constructed in Lindale. It is a good and uncommon example of its type, retains overall remarkable physical integrity and is easily recognizable to its type and period. In addition, the building housed an important early Lindale business, the Guaranty State Bank, and the design, materials and workmanship of the building reflect the significance of the bank in the community. The building is recommended NRHP eligible under Criteria A and C at the local level.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

NRHP Eligibility Status: Recommended Individually NRHP-Eligible under Criteria A and C at the local level.
Recommended Contributing to the NRHP-recommended eligible Lindale downtown historic district.
NRHP Criteria: A and C
NRHP Areas of Significance: Commercial Development in Early 20 th century Lindale Texas

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 1: View of front façade looking north.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 2: Detail of pedestrian level front entry looking northeast.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 3: Detail of front window looking northeast.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 4: View of front façade looking east. Note panel removed in cornice area.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 5: Front view of west elevation looking east from west side of Main Street.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

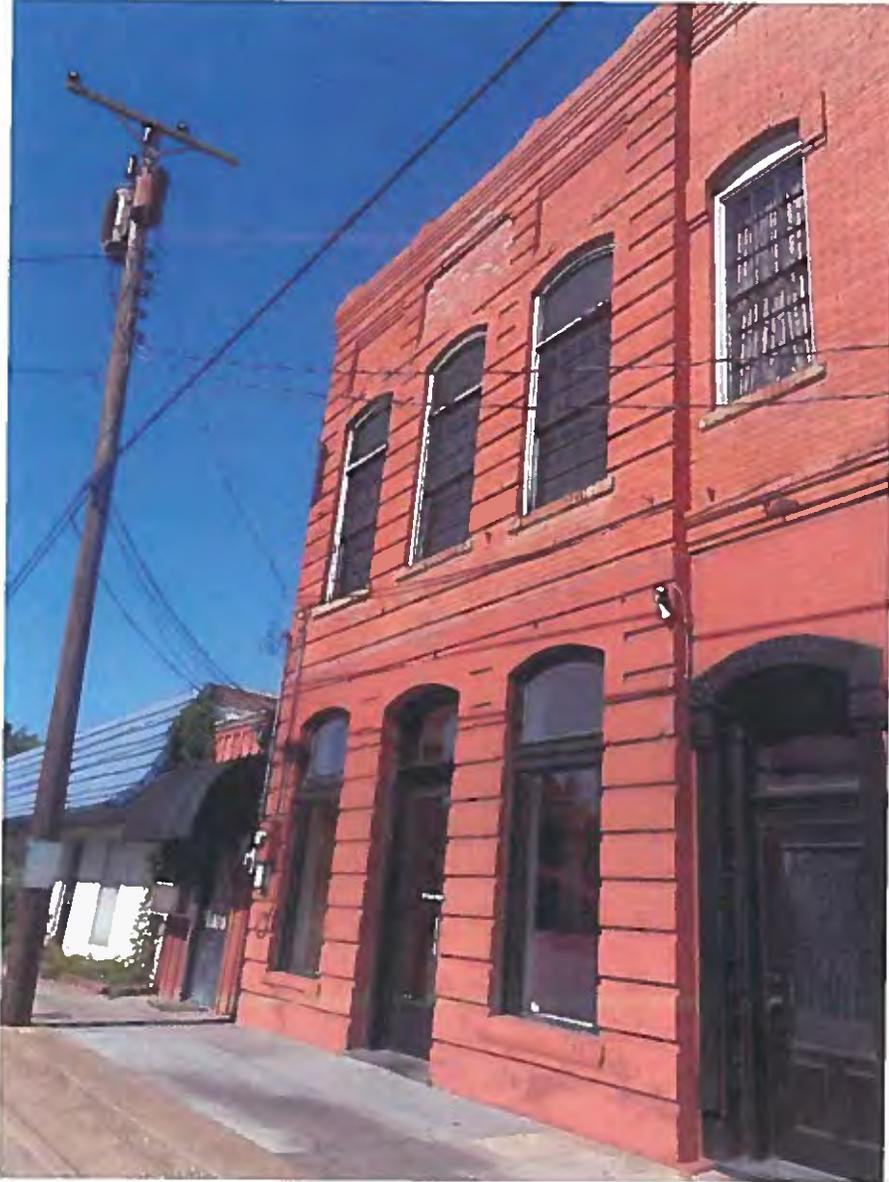


Photo 6: Oblique view of 101 North Hubbard Street looking northeast.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 7: Detail of inset panel on east (rear) elevation of 101 Main Street. Although the location of this panel may initially seem obscure, it once faced the depot and train tracks during the period of significance providing directional information to arrivals looking for bank services.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 8: Historic photo of bank interior with bank president, Mr. Boyd, in the center. Date unknown but probably c 1920. (Source: Lindale Public Library vertical files)

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

Resource ID #: 036s	Current Name: Gallery Studio Historic Name: Rice's Grocery
Current Physical Address: 112 East Hubbard Street, Lindale, Texas	Latitude/Longitude: 32.515873, -95.409269
Historic Context: Community Planning and Development Lindale, Texas, c 1903 - c 1940s	Photo Limitations: None
Architectural Stylistic Influence: No Style	Year(s) Constructed: c 1910 (Not on SCAD, Pre-1926 per Sanborn Map)
Property Type/Subtype: Commercial/One-part Block	
<p>Description: This resource is a one-story, free-standing, commercial retail building with a rectangular plan and flat roof and is constructed of light brown brick. The front façade of the building consists of a three-part storefront with a central entry flanked by display windows. The front façade has vertical brick piers that define the door and window openings. The entry contains double wooden doors, with full length glass inserts. Based on a historic photo of the building they are likely replacement but are similar in style to the originals. The original wooden-frame windows on the front façade contain a lower, fixed-pane with a four-part muntin pattern across the top. Each window and door opening has a two-part, fixed-pane wooden-frame transom above. The center transom above the door has replacement glass. The parapet has slight brick corbelling along the roofline and a decorative projecting section of brick through the transom area. The windows on the west elevation have been replaced</p> <p>A flat awning suspended by chains attached to the parapet area spans the width of the front façade. Two single wooden-frame windows with false arches are located on the west elevation. There are no window or door openings on the east elevation. The building was operated by Mr. IB Rice as a grocery store until his death in 1983. Circa 1985, the Lindale Heritage group purchased the building with the intention of restoring it and turning it into a museum of the town. At that time, a plain, square, on-story addition was constructed on the rear.</p>	
<p>Architectural Modifications: Addition to rear, replacement west elevation windows, replacement transom glass, probably front door replacement.</p>	
<p>Eligibility Justification: The resource retains integrity of location but the integrity of design and materials and workmanship have been diminished by the addition to the rear. However, this addition is one-story, simple and does not detract from the overall feeling of the building. The west window have been replaced but with a muntin design that is similar to those on the front. The double entry doors may be replaced based on a historic photo; however, the replacements are similar and appear to be of the period. The center transom glass has been replaced with a fixed pane. Despite these</p>	

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

modifications, the building is a good example of a small, free-standing, early twentieth century commercial grocery building. It retains integrity of setting, feeling and association and reflects its type and period of significance. The building is recommended NRHP-eligible under Criteria A and C for its importance to early 20th century Lindale commerce as a local grocery store.

NRHP Eligibility Status:

~~Recommended Individually NRHP Eligible under Criteria A and C at the local level.~~

Recommended Contributing to NRHP-recommended eligible Lindale downtown historic district.

NRHP Criteria: A and C

NRHP Areas of Significance: Commercial Development in Early 20th century Lindale Texas

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 1: Oblique view of front façade looking northeast.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 2: Oblique view of front façade looking northwest.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 3: View of front façade looking north.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 4: Detail of west elevation looking east showing brick cornice detail.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 5: Oblique view of rear and east elevation looking southwest showing 1980s addition.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 6: Oblique view of west elevation looking southeast.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 7: Detail of entry doors.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

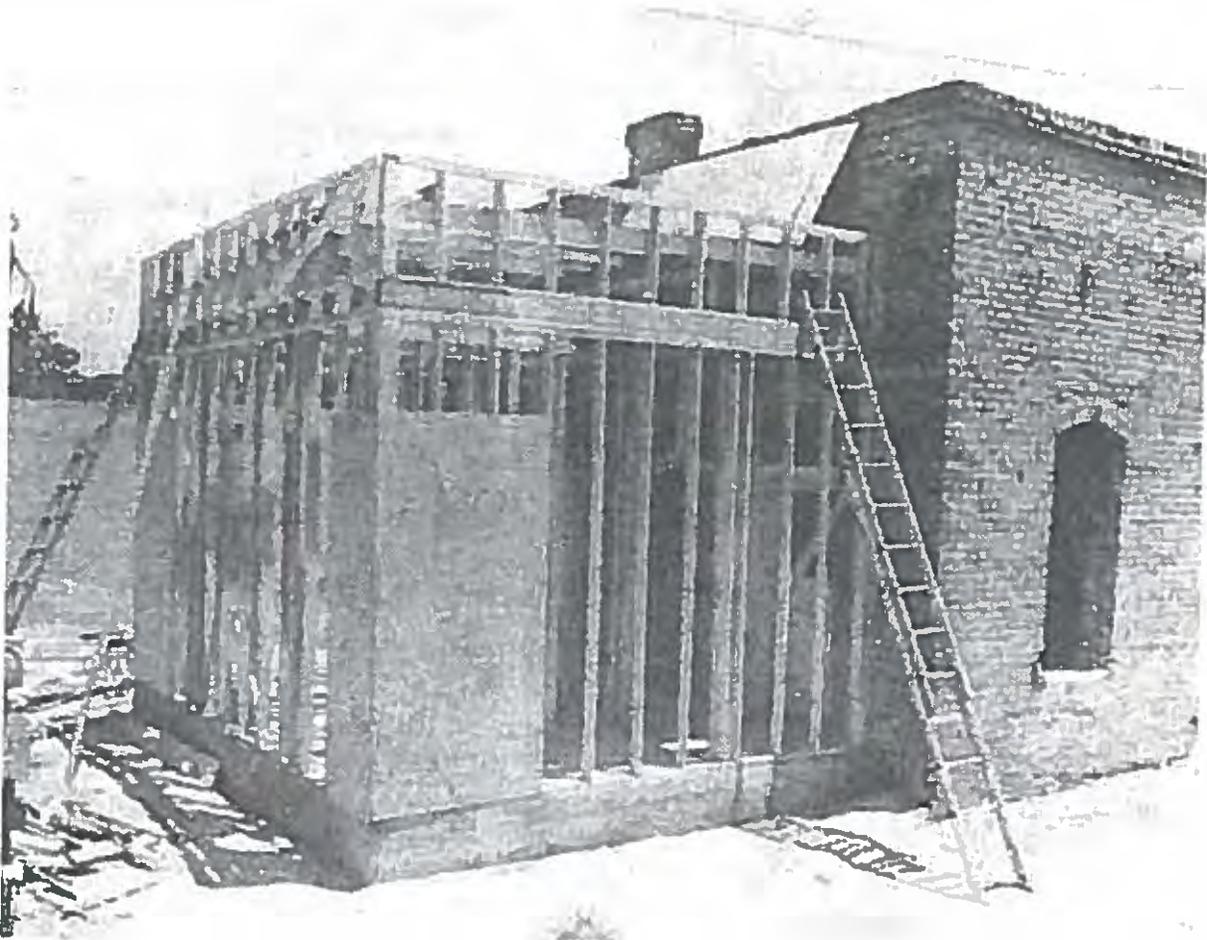


Photo 8: View of rear of building during construction of addition during c 1980s. (Source: Lindale Public Library Vertical Files)

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

Resource ID #: 036t	Current Name: Texas Baptist Men Historic Name: Lindale Fire Station #1
Current Physical Address: 114 East Hubbard Street, Lindale, Texas 75771	Latitude/Longitude: 32.515875, -95.409212
Historic Context: Community Planning and Development Lindale, Texas, c 1903 - c 1940s	Photo Limitations: None
Architectural Stylistic Influence: No Style	Year(s) Constructed: 1948 (Per Lindale Director of Utilities) (SCAD)
Property Type/Subtype: Municipal/ firehouse	
<p>Description: This resource is a single-story former municipal building that originally had a rectangular form and flat roof. It is constructed of painted brick. The front façade contains four garage bay openings. The three bays on the left side have replacement metal overhead doors. The fourth bay opening has been enclosed with horizontal siding and a door. A single entry with a replacement door and a small window are located on the right side of the façade. Four small windows with metal-frame 2/2 horizontal windows extend across the east elevation where the offices were located. A brick section at the rear contains a single entry but no windows on the east elevation and may be original. Further to the rear is a two-bay metal garage addition with replacement doors. Further back towards the rear is a single-story building constructed of cinderblocks and has two metal-frame sliding windows on the rear that was constructed as office space for the fire station. The current Lindale Fire station is located a block to the east and was constructed c 2000.</p>	
<p>Architectural Modifications: Replacement garage doors, entry doors and painted brick. Addition of garage building and a small rectangular office on rear (facing east).</p>	
<p>Eligibility Justification: This resource retains integrity of locations but has diminished integrity of design, materials and workmanship due to the modifications. In particular, the replacement garage bay wooden doors and additions to the rear. The original design, materials and workmanship is typical of municipal post-war buildings and reflects no distinctive style or ornamentation that is significant for its period or type. No historic signage or other details that reflect the building's use as a fire station are extant and it is now used as an auxiliary church building. It is not recommended individually NRHP eligible, but as a surviving municipal building during the period of significance would be considered contributing to the Lindale downtown historic district.</p>	
<p>NRHP Eligibility Status: Recommended Not Individually NRHP Eligible. Recommended Contributing to the NRHP-recommended eligible Lindale downtown historic district.</p>	
<p>NRHP Criteria: A</p>	
<p>NRHP Areas of Significance: Commercial Development in Early 20th century Lindale Texas</p>	

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 1: Oblique view looking northwest

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 2: Oblique view looking northwest.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 3: View of east elevation looking west is showing multiple additions.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES

Resource ID #: 036w	Current Use: Lindale Optical/Chiropractor Historic Use: Voyles Beauty Shop (left)
Current Physical Address: 105-109 East Hubbard Street, Lindale, Texas 75771	Latitude/Longitude: 32.515406, -95.408913
Historic Context: Community Planning and Development Lindale, Texas, c 1903 - c 1940s	Photo Limitations: None
Architectural Stylistic Influence: No Style	Year(s) Constructed: 1946 (SCAD)
Property Type/Subtype: Commercial/One-Part Block/ Retail	
<p>Description: This resource is one single-story building containing a strip of three separate three-part storefronts. The building has a rectangular plan and a flat roof which on Google earth, appears to support that it is one building. The rear elevation displays the original buff brick cladding that has stucco cladding across the front façade at the pedestrian level. The upper level is clad with metal siding. The three storefronts contain a central entry with a metal and glass door flanked by two metal-frame fixed-pane display windows. The rear elevation displays a similar three-part configuration of doors and windows, all covered with smaller windows. The storefront on the east end of the building at 109 appears to have a slightly different design than those at 105 and 107, and consists of a pair of two-pane fixed display windows and a single door with a sidelight. It is possible that the space at 109 originally had double doors. This space also appears to be wider than the others. It is possible that this storefront is a separate building from the others, however, examination of the roof plan and observations from the rear support that the building is likely one unit.</p>	
Architectural Modifications: Metal siding covering upper level. Stucco cladding applied to lower level.	
<p>Eligibility Justification: This resource retains integrity of location; however, it has diminished integrity of design, materials, and workmanship due to modifications to the cladding. The metal storefront window and door frames are likely original based on the post-war construction date. The stucco and metal cladding have diminished the integrity of setting, feeling and association and the building has a diminished ability to convey its type and period. In addition, it is a common example of its type and exhibits no significant original design, materials or workmanship features that would make it NRHP eligible under any criteria.</p>	
<p>NRHP Eligibility Status: Recommended Not Individually NRHP-Eligible. Recommended Contributing to NRHP-recommended eligible Lindale Downtown Historic District.</p>	
NRHP Criteria: A	
NRHP Areas of Significance: Commercial Development in Early 20th century Lindale Texas	

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 1: View of strip of three buildings looking south.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 2: Rear of strip of 3 buildings looking northwest showing original brick construction. Portion of building on the right has been painted red over buff brick.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 3: View of front façade looking south.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 4: View of east elevation along alley looking southwest showing painted brick.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 5: View of storefront 107, façade looking south.

APPENDIX B – SURVEY FORMS FOR ALL SURVEYED PROPERTIES



Photo 6: View of storefront 105 façade looking south.

TEXAS HISTORICAL COMMISSION
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7 September 2017

Mark Brown, Historian
Environmental Affairs Division
Texas Department of Transportation
125 E. 11th Street
Austin, Texas 78701-2483

*Re: Project review under Section 106 of the National Historic Preservation Act of 1966 and the Texas Antiquities Code
Proposed widening of FM 16 from CR 481-E to IS 69, Lindale, Smith County, Texas
(FHWA/TxDOT CSJ 0522-04-032)*

Dear Dr. Brown,

Thank you for submitting information for our review of the above-referenced project. This letter serves as official comment from Texas' State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC).

THC staff led by Linda Henderson reviewed the materials. The photos from the survey pages are not labeled with resource numbers or addresses. In the future, please ask consultants to label them so that it is clear what is shown in images. In addition, we offer the following comments:

We concur with your determination that the following resources are not eligible for listing in the National Register of Historic Places (NRHP): 001, 002, 003, 004, 005, 006, 007, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021a-b, 022a-b, 024, 025, 026b, 028, 029, 031, 032, 033, 034, 035, 036t, and 036u.

We recognize the integrity issues of Resource 008a-f, but additional research including a combined evaluation of architectural and archeological potential at the site should be conducted if the project design changes in a way that might affect the site. The integrity issues may not be enough to disqualify the property for NRHP listing.

We also concur with the assessments associated with a potential Lindale Historic District (036a-y), although, in addition to resources 036d and 036n, additional resources including 036s might also be determined individually eligible pending additional research. That research is not necessary for the purposes of this project as proposed. We concur that the project as planned will have no adverse effect on the contributing properties of the historic district.

Page 1 of 2



Re: *Project review under Section 106 of the National Historic Preservation Act of 1966 and the Texas Antiquities Code*
Proposed widening of FM 16 from CR 481-E to IS 69, Lindale, Smith County, Texas
(FHWA/TxDOT CSJ 0522-04-032)

As we discussed, Resource 027 was inadvertently left out of your letter to us. The masonry wall that runs along a portion of the project area was determined not eligible by the consultants conducting the historic resource survey. We understand this wall is locally important and hope that the project can avoid it, regardless of its NRHP eligibility.

We concur that Resource 026a is eligible for NRHP listing. We do not concur that the project as proposed will have no adverse effect, but we do appreciate the attempts so far at minimizing effects to it. Although the property no longer serves as a private residence, its front lawn and siting relative to the street retains a residential feel. Cutting into that lawn as much as proposed significantly detracts from the property's historic residential setting, feeling, and even design, because of the substantial alteration of its setback and how it was sited to address the street. We do not think sufficient planning to avoid this adverse effect have yet been demonstrated. For the purposes of Section 4(f), additional design options should be considered to avoid as great an impact as currently planned.

Thank you for helping identify and protect Texas' cultural and architectural resources. Please contact us with any questions: linda.henderson@thc.texas.gov or 512/463-5851.

Sincerely,



Linda Henderson, Historian

For:

Mark Wolfe, State Historic Preservation Officer

Cc: David Hudson, Chair, Smith County Historical Commission

November 2, 2017

Section 106/Antiquities Code of Texas: Archeological Draft Survey Review
CSJ: 0522-04-032
Texas Antiquities Code Permit # 7926
Survey of FM 16, from west of FM 849 to east of US 69, Smith County
Tyler District

Pat Mercado-Allinger
Archeology Division Director/State Archeologist
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

Dear Ms. Pat Mercado-Allinger:

This letter continues consultation on this project. In accord with the First Revised Programmatic Agreement (PA) among the Advisory Council on Historic Preservation, the Federal Highway Administration, the Texas State Historic Preservation Officer (SHPO), and the Texas Department of Transportation (TxDOT), and the Memorandum of Understanding (MOU) between TxDOT and the Texas Historical Commission (THC), TxDOT hereby continues consultation under Section 106 of the National Historic Preservation Act and the Antiquities Code of Texas for the undertaking identified above.

The proposed project would consist of widening FM 16 within existing and proposed right-of-way (ROW). The proposed project includes approximately 39.1 acres of existing FM 16 ROW, which ranges from 70 to 100 feet wide. Proposed ROW for the project would encompass approximately 68.1 acres and have a variable width of 145 to 315 feet within rural sections; in urban sections, the proposed ROW would be a minimum of 80 feet wide to a maximum of 370 feet wide. In summary, the overall area of potential effects (APE) is approximately 23,232.08 feet (4.4 miles) long, 70 to 370 feet wide, and will extend 4 to 6 feet below ground surface for roadway improvements, up to 10 feet below ground for cross drainage culverts, and 20 to 30 feet below ground for bridge support columns. Utility relocations are anticipated, but the exact locales of such relocations are currently unknown.

Your office previously issued Texas Antiquities Permit No. 7926 to conduct an intensive cultural resource survey along FM 16 from 4 Miles west of FM 849 to east of US 69, Smith County. Field investigations were conducted by SWCA. A copy of the draft report is attached for your review.

The survey identified two archeological sites and one location:

- Site 41SM483 is a historic ruin of a 20th century barn that is recommended not eligible for the National Register of Historic Places.
- Site 41SM484 is a lithic scatter that is recommended as not eligible for the National Register of Historic Places; however, the site appears to be a good location for a Caddo farmstead, therefore **TxDOT disagrees and recommends further investigation of the site.**
- The one location is an isolated prehistoric ceramic sherd found on parcel 52; TxDOT recommends that the parcels located adjacent to parcel 52 in the area of potential effect be surveyed for a potential archeological site related to the ceramic sherd.

TxDOT proposes the following finding and recommendations:

- TxDOT will survey remaining parcels when right of entry is obtained to identify potential archeological historic properties (36 CFR 800.16(l)) is warranted to verify that archeological historic properties do not occur within the APE;
- That site 41SM483 which is a historic ruin of a 20th century barn and is recommended as not eligible for the National Register of Historic Places.
- TxDOT will conduct further investigations at the prehistoric site 41SM484.
- Parcels 49, 50 and 51 will be investigated when right of entry is obtained to try to locate a possible site that may be related to the pot sherd found on parcel 52.

In the event that unanticipated archeological deposits are encountered during construction, work will cease in the immediate area and professional archeologists will be contacted to initiate post-review discovery procedures under the provisions of 36 CFR 800.13 and the MOU between TxDOT and THC (43 TAC 2.24).

Please sign below to indicate your concurrence. Thank you for your consideration of the project.

Sincerely



Waldo Troell, M.A., RPA
Staff Archeologist
Environmental Affairs Division

Attachment

cc w/out attachments: ECOS

Concurrence by: _____

For: Mark Wolfe, State Historic Preservation Officer
And Executive Director

11/9/17
Date

**DRAFT REPORT
ACCEPTABLE**

by William A. Bruntz
for Mark Wolfe
Executive Director, THC
Date 11/9/17
Track#

**Intensive Cultural Resources
Survey of Proposed
Improvements to Farm-to-Market
Road 16 from 4.0 Miles West of
Farm-to-Market Road 849, East
to United States Highway 69,
Smith County, Texas**

CSJ: 0522-04-032

Texas Antiquities Permit No. 7926
SWCA Cultural Resources Report No. 17-116

June 2017

SUBMITTED TO:

Arredondo, Zepeda, & Brunz, LLC
and
Texas Department of Transportation
Tyler District

SUBMITTED BY:

SWCA Environmental Consultants
4407 Monterey Oaks Boulevard
Building 1, Suite 110
Austin, Texas 78749



125 EAST 11TH STREET | AUSTIN, TEXAS 78701-2483 | (512) 463-8588 | WWW.TXDOT.GOV

rcvd 1/8/18
eTRAC

January 8, 2018

SECTION 106 REVIEW: DETERMINATION OF ELIGIBILITY and EFFECT on 403 W Hubbard Street

Smith County / Tyler District
Facility: FM 16
From: CR 481-E to US 69
CSJ: 0522-04-032

Linda Henderson
History Programs
Texas Historical Commission
Austin, TX 78711

Ms. Henderson:

Thank you for your letter of September 7, 2017 and its comments on our coordination package dated August 11, 2017.

This letter *continues* Section 106 coordination for the above federally funded project and *re-evaluates* our previous National Register of Historic Places (NRHP) eligibility determination of Resource 026a, 403 W Hubbard Street, Lindale, Texas.

On December 14, 2017, I personally conducted a joint site visit of Resource 026a with both David Hudson, Chair of the Smith County Historical Commission (CHC) and with Bobby McClenny, current CHC member, former Mayor of the City of Lindale.

Design, materials, workmanship, and feeling are the most important aspects of integrity when evaluating NRHP eligibility under Criterion C. As documented by the attached photographs, the c. 1915, two-story brick American foursquare residence lacks sufficient integrity of design, materials, workmanship and feeling to convey its significance under Criterion C: Architecture at any level:

- the original siding is covered (or replaced) with aluminum or similar siding.
- all windows on the second floor are replacements.
- the modest rear porch is of similar modern materials.
- while the survey report suggests Resource 026a is a Sears Kit House, per *National Register Bulletin 15*, page 12, speculation is not sufficient to establish association.

Although the original windows remain intact on the first floor and the brick porch supports appear original, the losses to design, materials, and workmanship are so extensive that

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they overpower both the ability of the property to express the aesthetic and a sense of a particular of time.¹ See attached supplemental photographs.

While an informal windshield survey identified no other comparative examples of a American four-square in Lindale, per *Bulletin 15*, "a property is not eligible simply because it has been identified as the only such ever fabricated; it must be demonstrated to be significant as well." *Bulletin 15* also notes, "a structure is eligible as a specimen of its type or period of construction if it is an example (within its context) of building practices of a particular time in history." Thus per National Park Service guidance, rarity is insufficient for eligibility in the absence of a context that demonstrates significance.

Finally, the historic context on pages 15-23 and survey information on pages 31-32 of the survey report attached to our August 11, 2017 letter do not support eligibility under Criterion A or B. Consultation with the CHC did not identify any local significance. TxDOT historians determined Resource 026a not NRHP eligible based on the new information obtained from the site visit regarding the integrity of design, materials, and workmanship.

Determination of Effects

In accordance with 36 CFR 800.5, TxDOT historians applied the *Criteria of Adverse Effect* and determined that the proposed project poses no effect to Resource 026a as it is not eligible for listing on the National Register of Historic Places under any Criteria and at any level.

Consultation with Other Parties

As noted above, the Smith County Historical Commission participated in the December 14, 2017 site visit. The CHC was not by impressed Resource 026a, did not consider it NRHP eligible, and expressed no concerns about the project.

Conclusion

In accordance with 36 CFR 800, I hereby request your signed concurrence with TxDOT's findings of eligibility and effect with respect to Resource 026a. Please return a signed copy of this correspondence for our files within 20 calendar days.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327, the Antiquities Code of Texas, and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

Thank you for your cooperation in this federal review process. If you have any questions or comments concerning these evaluations, please call me at (512) 416-2600.

¹ TxDOT historians reassert their August 11, 2017 determinations about Resource 026a's seriously compromised integrity of setting.

Sincerely,



Mark M. Brown
Historic Preservation Specialist
Historical Studies Branch
Environmental Affairs Division

thru: Bruce Jensen, Cultural Resources Section Director, 
Rebekah Dobrasko, Lead Reviewer, 

cc: SHPO; Jay Tullos, Tyler District; ECOS

CONCURRENCE WITH NON-ARCHEOLOGICAL SECTION 106 FINDINGS OF ELIGIBILITY:

**Not NRHP Eligible
026a**

NAME:



DATE:

1/22/18

for Mark Wolfe, State Historic Preservation Officer

OUR VALUES: People • Accountability • Trust • Honesty

OUR MISSION: Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.

An Equal Opportunity Employer

Supplemental Images: #026a
December 14, 2017

OUR VALUES: *People • Accountability • Trust • Honesty*

OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

An Equal Opportunity Employer



026a: Looking N. Note the non-historic age plastic fencing and non-historic landscaping.

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OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

An Equal Opportunity Employer



026a: Looking NW

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OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

An Equal Opportunity Employer



026a: Looking SE

OUR VALUES: *People • Accountability • Trust • Honesty*

OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

An Equal Opportunity Employer



026a: Looking E

OUR VALUES: *People • Accountability • Trust • Honesty*

OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

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026a: Looking SE. Note: unweathered and perfect condition of replacement siding and soffit.

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OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

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026a: Looking E. Note rear addition and the J-channels around the window.

OUR VALUES: *People • Accountability • Trust • Honesty*

OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

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026a: Looking E

OUR VALUES: *People • Accountability • Trust • Honesty*

OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

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026a: Looking NW. Note the break in the siding above the right porch pier.

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OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

An Equal Opportunity Employer



026a: Looking NW. Note the unsympathetic shutters, J-channels, and vertical seems in the siding just above the foundation.

OUR VALUES: *People • Accountability • Trust • Honesty*

OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

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026a: Looking SW (026b in right foreground). Note the unsympathetic replacement windows and shutters.

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OUR MISSION: *Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.*

An Equal Opportunity Employer

Christine Crosby

From: WHAB_TxDOT <WHAB_TxDOT@tpwd.texas.gov>
Sent: Friday, May 26, 2017 4:46 PM
To: Christine Crosby
Cc: WHAB_TxDOT
Subject: TPWD has received your request for early coordination

This notification was automatically generated to indicate TPWD has received your Early Coordination request. You will soon be contacted by the biologist assigned to review your project.

If the request you submitted was for Administrated Coordination, please follow the process described in the Memorandum of Understanding between TxDOT and TPWD regarding Administrated Project Coordination (see [Texas Administrative Code Title 43 Part 1 Chapter 2 Subchapter G Rule §2.208](#)).

Amy Esguerra

From: Laura Zebehazy <Laura.Zebehazy@tpwd.texas.gov>
Sent: Monday, October 2, 2017 3:22 PM
To: Christine Crosby
Subject: RE: Request for Early Coordination: FM 16 (TxDOT CSJ: 0522-04-032)

Good afternoon, Christine,

Again, I apologize for the long delays in responding to this review coordination. With that being said, thank you for submitting the FM 16 Widening project in Smith County for early coordination. TPWD appreciates TxDOT's commitment to implement the Best Management Practices discussed in the information provided for early coordination and in the emails below. Based on a review of the project description and the avoidance and minimization efforts described, and provided that the project plans do not change, TPWD considers coordination to be complete. However, please note it is the responsibility of the project proponent to comply with all federal, state, and local laws that protect fish, wildlife, and plants.

According to §2.204(g) of the 2013 TxDOT-TPWD MOU, TxDOT agreed to provide TXNDD reporting forms for observations of tracked SGCN (which includes federal- and state-listed species) occurrences within TxDOT project areas. Please keep this mind when completing project due diligence tasks. For TXNDD submission guidelines, please visit the following link: http://tpwd.texas.gov/huntwild/wild/wildlife_diversity/txndd/submit.phtml

Sincerely,

Laura Zebehazy, CWB
Program Leader
TPWD – Wildlife Habitat Assessment Program
Phone: (512)389-4638

From: Christine Crosby [mailto:Christine.Crosby@txdot.gov]
Sent: Friday, September 01, 2017 10:40 AM
To: Laura Zebehazy <Laura.Zebehazy@tpwd.texas.gov>
Subject: RE: Request for Early Coordination: FM 16 (TxDOT CSJ: 0522-04-032)

Laura –

As noted in my responses below, and based on the review of range and habitat requirements for the other SGCN species listed and surveys performed since the impact table was compiled, TxDOT found the project area is not within range nor suitable habitat for the other listed species. At this point, TxDOT is unable to perform further analysis for SGCN plants for this project. If any rare plants were to be identified during construction by personnel on sight, TxDOT would take measures to avoid these areas, as practicable. We ask this coordination be closed.

Thank you,
Christine

From: Laura Zebehazy [mailto:Laura.Zebehazy@tpwd.texas.gov]
Sent: Thursday, August 31, 2017 5:12 PM

To: Christine Crosby

Subject: RE: Request for Early Coordination: FM 16 (TxDOT CSJ: 0522-04-032)

Christine,

I do appreciate any efforts that TxDOT will make to avoid rare plants during construction, but without surveys, I am not sure how they will be identified prior to impacts. Also, I am still confused about the rare plants that may or may not be in the project area. According to the Species Impact Table you provided for coordination, all of the species listed in the July 3rd email may be impacted by the project. Can you clarify why in your response below you are now saying that there isn't? Also, the surveys for rough stem aster occurred 22 years ago. It is possible that this species occurs in suitable habitat within the project area at this time.

Once I hear back from you on this point, I'll close coordination on this project.

Thank you,
Laura

Laura Zebehazy, CWB
Program Leader
TPWD – Wildlife Habitat Assessment Program
Phone: (512)389-4638

From: Christine Crosby [<mailto:Christine.Crosby@txdot.gov>]

Sent: Tuesday, August 29, 2017 5:00 PM

To: Laura Zebehazy <Laura.Zebehazy@tpwd.texas.gov>

Subject: RE: Request for Early Coordination: FM 16 (TxDOT CSJ: 0522-04-032)

Laura:

Thank you for your comments in association with the FM 16 road widening project.

- As to TPWD's recommendation for design regarding bridges and culverts, TxDOT has spanned all areas to the greatest extent possible in order to minimize wetland and waters impacts. Our design balances impacts to waters and wetlands and also meets our specifications for roadway mobility and safety.
- Comment noted. Streambank stabilization recommendations will be considered, as feasible.
- Regarding TPWD's comments on limiting personnel and equipment in streams, Comments are noted. USACE permitting requirements limiting equipment in streams will be followed.
- Regarding rare plants (all SGCN) with potential suitable habitat within the project: Rough stem aster surveys have been performed in the District, and no rough stem asters were found within the project area. There is no suitable habitat within the project area for panicked indigo bush. A review of range and habitat requirements for the other SGCN species indicates the project area is not both range and suitable habitat for the other listed species. If any rare plants were to be identified, TxDOT would take measures to avoid these areas during construction.
- As for the offer of assistance in locating 404 mitigation sites, we have identified suitable areas, but appreciate the offer and will certainly keep that in mind if alternative sites become necessary.

Christine Crosby

Environmental Specialist
TxDOT Tyler District
(903) 510-9159
christine.crosby@txdot.gov

From: Laura Zebehazy [<mailto:Laura.Zebehazy@tpwd.texas.gov>]
Sent: Friday, August 25, 2017 5:13 PM
To: Christine Crosby
Subject: RE: Request for Early Coordination: FM 16 (TxDOT CSJ: 0522-04-032)

I am appending the rare plants survey recommendation with the following:

- If rare plants are located within the project area either avoid impacting individuals or populations with barrier fencing and contractor education or if impacts cannot be avoided, contact me as soon as that is determined so I might be able to coordinate a salvage opportunity prior to construction impacts.

Thank you,

Laura Zebehazy, CWB
Program Leader
TPWD – Wildlife Habitat Assessment Program
Phone: (512)389-4638

From: Laura Zebehazy
Sent: Friday, August 25, 2017 5:02 PM
To: 'Christine Crosby' <Christine.Crosby@txdot.gov>
Subject: RE: Request for Early Coordination: FM 16 (TxDOT CSJ: 0522-04-032)

Good afternoon, Christine,

I apologize for the delay in finalizing my review of FM 16 Widening project in Smith County. As of June 1, I am now the Program Leader for the Wildlife Habitat Assessment Program at TPWD, and unfortunately due to this new position, this project coordination fell off my plate. My sincerest apologies and thank you for your patience.

TPWD makes the following recommendations regarding this proposed project:

- TPWD recommends installing bridge spans and matching culverts with existing flow lines and mimic existing channel characteristics during final design. We also recommend providing adequate vertical and horizontal clearances and wide enough bridge spans that provides dry ground or an artificial ledge to facilitate crossing by terrestrial wildlife species during final design.
- TPWD recommends considering wildlife movement in selecting and installing streambank stabilization devices such as rip rap, live native vegetation, or a combination of vegetative and structural materials in final design and construction phases.
- TPWD recommends limiting personnel and equipment in streams and riparian areas to essential work periods, limiting vegetation removal and impacts during wet periods, providing appropriate vegetated, upland equipment storage areas, and utilizing protective mats.
- For rare plants with potential suitable habitat within the project area, TPWD recommends surveying during the flowering period to facilitate observation and assist in identification. Most of the species (see email string below), can be surveyed for between April and May with the exception of rough-stem aster which blooms in late September – early November.
- Please let TPWD know if we can be of any assistance in locating 404 mitigation sites for impacts to Waters of the US.

Thank you for your patience, Christine. Please indicate if TxDOT is willing to commit to the recommendations provided in this email. Also, let me know if you have any questions.

Sincerely,

Laura Zebehazy, CWB
Program Leader
TPWD – Wildlife Habitat Assessment Program
Phone: (512)389-4638

From: Christine Crosby [<mailto:Christine.Crosby@txdot.gov>]
Sent: Wednesday, July 05, 2017 10:33 AM
To: Laura Zebehazy <Laura.Zebehazy@tpwd.texas.gov>
Subject: RE: Request for Early Coordination: FM 16 (TxDOT CSJ: 0522-04-032)

None of these species were observed during field surveys by TxDOT's contractors.

From: Laura Zebehazy [<mailto:Laura.Zebehazy@tpwd.texas.gov>]
Sent: Monday, July 03, 2017 3:28 PM
To: Christine Crosby
Subject: RE: Request for Early Coordination: FM 16 (TxDOT CSJ: 0522-04-032)

Good afternoon, Christine,

Thank you responding to my questions. I think there may have been a misunderstanding about the rare plants and surveys. In your species impact table, the proposed project was found to "may impact" the following species:

- Panicked indigobush – Bogs and wet woodlands on acid soils; flowering May-June
- Rough-stem aster – Unshaded wet habitats associated with seepage from Carrizo, Sparta, and Queen City Eocene sand formations, including sphagnum bogs, marshes, pond margins, open streambanks and roadside ditches; flowering in late September through early November
- Goldenwave tickseed – Deep sandy soils of sandhills in openings in or along margins of post oak woodlands and pine-oak forests; flowering April-August, more commonly in spring than summer
- Soxman's milkvetch – Primarily in deep sandy soils of sandhills, fallow fields, and open scrub oak-pine woodlands; flowering in spring
- Cypress knee sedge – In shallow water or on bald cypress stumps and logs in wooded ponds or swamps; fruiting mid April-August
- Texas trillium – In or along the margins of hardwood forests on wet acid soils of bottoms and lower slopes, often in or downslope from hillside seeps, often associated with ferns; flowering March-mid April

Based on your most recent email, are you now suggesting that panicked indigobush and rough-stem aster do not have potential suitable habitat within the project area? Lastly, thank you for the info about the rough-stem aster survey conducted by TPWD; however my question was if TxDOT or its contractors have completed rare plant surveys for those plants that are listed as possibly being impacted by this project?

Laura

Laura Zebehazy, CWB
Program Leader
TPWD – Wildlife Habitat Assessment Program
Phone: (512)389-4638

From: Christine Crosby [<mailto:Christine.Crosby@txdot.gov>]
Sent: Thursday, June 22, 2017 11:39 AM
To: Laura Zebehazy <Laura.Zebehazy@tpwd.texas.gov>
Subject: RE: Request for Early Coordination: FM 16 (TxDOT CSJ: 0522-04-032)

Hi Laura:

Thank you for your review and input. Wanted to make sure I could address all of these points before responding.

The right-of-way will be cleared for the lane construction as well as a 16-ft. clear zone. The only wider clear zone within the project limits is 30-ft. at LP 49, which has already been cleared for that project and is under the NETRMA, and not TxDOT. The urban sections will only have a 7-ft. clear zone.

The rip-rap in the vicinity of Hubbard Creek will be concrete, as it is needed for structural support.

Attached is an NDD search performed this morning (6/22/2017). The only two SGCN's (panicled indigo bush and rough stem aster) appearing are north of FM 16, outside of construction areas, but also have no suitable habitat on this project for these species. Have attached a rough-stem aster survey by TPWD, documenting this in the area, and at least one following subsequent survey has verified that. The State list was referenced, and habitat listed for the panicled indigo bush is not present either.

Please let me know if this answers your questions or if you have any additional questions or concerns.

Thanks!
Christine Crosby
Environmental Specialist
TxDOT Tyler District
(903) 510-9159
Christine.crosby@txdot.gov

From: Laura Zebehazy [<mailto:Laura.Zebehazy@tpwd.texas.gov>]
Sent: Wednesday, June 21, 2017 4:45 PM
To: Christine Crosby
Subject: RE: Request for Early Coordination: FM 16 (TxDOT CSJ: 0522-04-032)

Good afternoon, Christine,

First, I want to apologize for the delay in communicating with you about the FM 16 Widening project in Smith County. I have finished my preliminary review of the coordination materials and I have a couple of questions:

- Will the **entire** proposed right-of-way be cleared of vegetation or will vegetation clearing occur only where the lanes will be constructed plus mandated safety clearance for the roadway?
- What type of rip rap is anticipated in the vicinity of Hubbard Creek and elsewhere that it runs parallel with the proposed roadway?
- I am concerned that it has been over a year since the county list and TXNDD were reviewed for this project. Can you revisit and make sure that no new data or species have been added for the project area since March 2016? If new data and/or species have been added, can you update your coordination materials to reflect those changes?

- On Page 2 of the Tier I Site Assessment form, there is an incorrect statement in the comments box for Question #3 – “No coordination is required for the panicked indigobush, rough-stem aster, goldenwave tickseed, Soxman’s milkvetch, cypress knee sedge, and Texas trillium.” Coordination is required for any species listed on the county list that has potential suitable habitat within the project area and for which no best management practices are listed in Section 1 of the TxDOT-TPWD BMP PA. Please rectify this statement. I appreciate the proposed bmp and I will take that into consideration during my review.
- Were rare plant surveys conducted for any of the species that were determined to have potential suitable habitat within the project area?

Please let me know if you have any questions.

Sincerely,

Laura Zebehazy, CWB
Program Leader
TPWD – Wildlife Habitat Assessment Program
Phone: (512)389-4638

From: WHAB_TxDOT
Sent: Tuesday, May 30, 2017 11:44 AM
To: Christine Crosby <Christine.Crosby@txdot.gov>
Cc: Laura Zebehazy <Laura.Zebehazy@tpwd.texas.gov>
Subject: RE: Request for Early Coordination: FM 16 (TxDOT CSJ: 0522-04-032)

The TPWD Wildlife Habitat Assessment Program has received your request and has assigned it project ID # 38022. The Habitat Assessment Biologist who will complete your project review is copied on this email.

Thank you,

John Ney
Administrative Assistant
Texas Parks & Wildlife Department
Wildlife Diversity Program – Habitat Assessment Program
4200 Smith School Road
Austin, TX 78744
Office: (512) 389-4571

From: Christine Crosby [<mailto:Christine.Crosby@txdot.gov>]
Sent: Friday, May 26, 2017 4:46 PM
To: WHAB_TxDOT <WHAB_TxDOT@tpwd.texas.gov>
Subject: Request for Early Coordination: FM 16 (TxDOT CSJ: 0522-04-032)

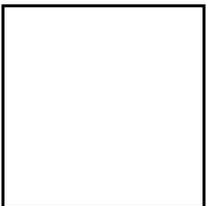
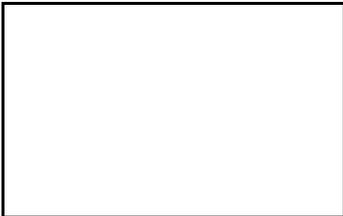
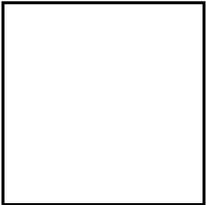
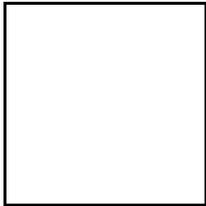
Please find attached a request for early coordination in association with the above-referenced proposed project. Attached are files including the project description, location maps, and BioEval. I have three more files which were too large to email. Is there a dropbox I can use to transmit them?

If you have any questions, or need any further information, please let me know.

Thank you,

Christine Crosby
TxDOT – Tyler District

(903) 510-9159
christine.crosby@txdot.gov



APPENDIX H
TRAFFIC NOISE TECHNICAL REPORT



Traffic Noise Technical Report

FM 16

From 4 miles west of FM 849 to US 69 in the City of Lindale

Smith County, Texas

CSJ: 0522-04-032

September 2017

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

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Appendices

Appendix A: Representative Receivers

Appendix B: Traffic Data

1.0 INTRODUCTION

The Texas Department of Transportation (TxDOT) proposes to improve Farm-to-Market (FM) 16 from four miles west of FM 849 to United States Highway (US) 69, locally known as Main Street, in Lindale, Smith County, Texas. The purpose of this project is to accommodate anticipated traffic demand and improve safety. The length of the proposed project is approximately 4.4 miles. This technical report analyzes the traffic noise impacts that would result from the proposed project.

1.1 Existing Conditions

FM 16 extends from US 271 south of Gladewater to State Highway 110 east of Van. It traverses most of the northern area of Smith County as an east-west corridor connecting the towns of Starrville, Winona, Lindale, and Garden Valley. Within the project limits, existing FM 16 is an undivided highway consisting of one lane in each direction with zero to two-foot-wide outside shoulders. A left turn lane is present at the intersection of FM 16 and Main Street. A center turn lane and a dedicated (westbound to northbound) right turn lane is located in the vicinity of the school complex (extending from Stadium Drive to the entrance to the Lindale Rodeo Arena). The existing right-of-way (ROW) in the project area varies from 70 to 85 feet in width and totals approximately 39 acres.

1.2 Proposed Action

As proposed, the FM 16 improvements would entail upgrading the existing roadway to a five-lane highway with two lanes in each direction and a continuous left turn lane from US 69 to County Road (CR) 436, and a three-lane highway, with one lane in each direction and a continuous left turn lane from CR 436 to the western project terminus. The proposed ROW would vary between 145 feet to 370 feet in width. A more detailed description of the proposed improvements is on file in the project ECOS record.

To accommodate the proposed improvements, approximately 68 acres of additional (new) ROW would be required. Upon completion, the FM 16 ROW – within the project limits – would encompass approximately 108 acres in total (40 acres of existing ROW and 68 acres of new ROW).

2.0 TRAFFIC NOISE ANALYSIS

Sound from highway traffic is generated primarily from a vehicle's tires, engine and exhaust. It is commonly measured in decibels and is expressed as "dB." Sound occurs over a wide range of

frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as “dB(A).” Also, because traffic sound levels are never constant due to the changing number, type and speed of vehicles, a single value is used to represent the average or equivalent sound level and is expressed as “Leq.”

The traffic noise analysis process includes the following elements:

- Identification of land use activity areas that might be impacted by traffic noise;
- Determination of existing noise levels;
- Prediction of future noise levels;
- Identification of possible noise impacts; and
- Consideration and evaluation of measures to reduce noise impacts.

FHWA has established the following Noise Abatement Criteria (NAC), shown in **Table 1**, for various land use activity areas that are used as one of two means to determine when a traffic noise impact would occur. As reflected in TxDOT’s *Guidance for Analysis and Abatement of Roadway Traffic Noise* (TxDOT, 2011), TxDOT has adopted the federal NACs as its standard. A noise impact occurs when either the absolute or relative criterion is met:

Absolute criterion: The predicted noise level at the receiver approaches, equals, or exceeds the NAC. Approach is defined as one dB(A) below the NAC (TxDOT, 2011). For example, a noise impact would occur at an exterior activity area of a Category B residence if the noise level is predicted to be 66 dB(A) or above.

Relative criterion: The predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal, or exceed the NAC. “Substantially exceeds” is defined as more than 10 dB(A) (TxDOT, 2011). For example: a noise impact would occur at a Category B residence if the existing level is 54 dB(A) and the predicted level is 65 dB(A).

Table 1: FHWA Noise Abatement Criteria (NAC)

Activity Category	FHWA dB(A) Leq	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.
B	67 (exterior)	Residential
C	67 (exterior)	Active sports areas, amphitheatres, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or non-profit 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.
E	72 (exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	--	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	--	Undeveloped lands that are not permitted.

When a traffic noise impact occurs, noise abatement measures must be considered. A noise abatement measure is any positive action taken to reduce the impact of traffic noise on an activity area.

2.1 Existing Conditions

Land use activity categories located adjacent to the project area include: residential (Category B); schools, public institutional structures, day care centers, and places of worship (Category C). The predominant noise source identified in the project area is generated from traffic on the existing FM 16, CR 479, 436, Creekside Drive, College Street, FM 849, US 69, and adjacent local roads. No other major noise sources were identified.

3.0 DIRECT EFFECTS

This analysis was accomplished in accordance with TxDOT’s (FHWA approved) *Guidelines for Analysis and Abatement of Roadway Traffic Noise* (TxDOT, 2011).

The FHWA Traffic Noise Model 2.5 (TNM 2.5) was used to calculate existing and proposed traffic noise levels at representative receivers along FM 16. The model primarily considers the number, type, and speed of vehicles; highway alignment and grade; cuts, fills, and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise.

Existing and predicted traffic noise levels were modeled at receiver locations (see **Table 2** and **Appendix A**) that represent the land use activity areas adjacent to the project alternatives that might be impacted by traffic noise and might potentially benefit from feasible and reasonable noise abatement. **Appendix B** shows the traffic data and turning movements utilized in the traffic noise model that was approved by TxDOT’s Transportation Planning and Programming Division (TP&P) for the years 2015/2035.

Table 2: Traffic Noise Levels dB(A) Leq

Representative Receiver	Location	NAC Category	NAC Level	Existing (2015)	Predicted (2035)	Change (+/-)	Noise Impact
R1	Residential	B	67	49	53	+4	N
R2	Residential	B	67	39	41	+2	N
R3	Residential	B	67	46	47	+1	N
R4	Residential	B	67	41	43	+2	N
R5	Residential	B	67	42	44	+2	N
R6	Residential	B	67	56	55	-1	N
R7	Residential	B	67	44	47	+3	N
R8	Residential	B	67	44	47	+3	N
R9	Residential	B	67	58	60	+2	N
R10	Residential	B	67	48	52	+4	N
R11	Residential	B	67	52	55	+3	N
R12	Residential	B	67	62	60	-2	N
R13	Residential	B	67	61	59	-2	N
R14	Residential	B	67	60	58	-3	N

Representative Receiver	Location	NAC Category	NAC Level	Existing (2015)	Predicted (2035)	Change (+/-)	Noise Impact
R15	Residential	B	67	59	56	-3	N
R16	Residential	B	67	62	58	-4	N
R17	Residential	B	67	63	62	-1	N
R18	Residential	B	67	59	59	0	N
R19	Residential	B	67	47	49	+2	N
R20	Residential	B	67	49	58	+9	N
R21	Residential	B	67	60	56	-4	N
R22	Residential	B	67	58	57	-1	N
R23	Residential	B	67	55	57	+2	N
R24	Residential	B	67	54	57	+3	N
R25	Residential	B	67	55	57	+2	N
R26	Residential	B	67	60	61	+1	N
R27	Residential	B	67	57	58	+1	N
R28	Residential	B	67	56	58	+2	N
R29	School	C	67	57	59	+2	N
R30	School	C	67	51	53	+2	N
R31	Church	C	67	60	61	+1	N
R32	Church	C	67	59	61	+2	N
R33	Church	C	67	57	59	+2	N
R34	Church	C	67	61	63	+2	N
R35	Residential	B	67	59	61	+2	N
R36	Residential	B	67	50	53	+3	N
R37	Residential	B	67	46	50	+4	N
R38	Residential	B	67	48	51	+3	N
R39	Residential	B	67	52	60	+8	N
R40	Residential	B	67	52	59	+7	N

As indicated in **Table 2**, the proposed project would not result in a traffic noise impact. Because the proposed roadway alignment deviates from the existing FM 16 alignment, some traffic has shifted farther from the noise receivers. This traffic shift results in a noise decrease for certain receivers.

4.0 NOISE PLANNING

To avoid noise impacts that may result from future development of properties adjacent to the improved roadway, local officials responsible for land use control programs must ensure, to the maximum extent possible, no new activities are planned or constructed along or within the following

predicted (2035) noise impact contours (see **Table 3**). Based on the results of the noise analysis, both the 66 dB(A) and 71dB(A) contours fall within the proposed ROW.

Table 3: Proposed Contours

Modeled Location	Section Represented	Distance from ROW	
		NAC Category B & C 66 dB(A)	NAC Category E 71 dB(A)
300 ft west of CR-467 (north of FM 16)	Urban (from CR 436 to US 69)	0 ft	0 ft
700 ft east of CR-479 (south of FM 518)	Rural (from 4 mi W of FM 849 to CR 436)	0 ft	0 ft

5.0 CONCLUSION

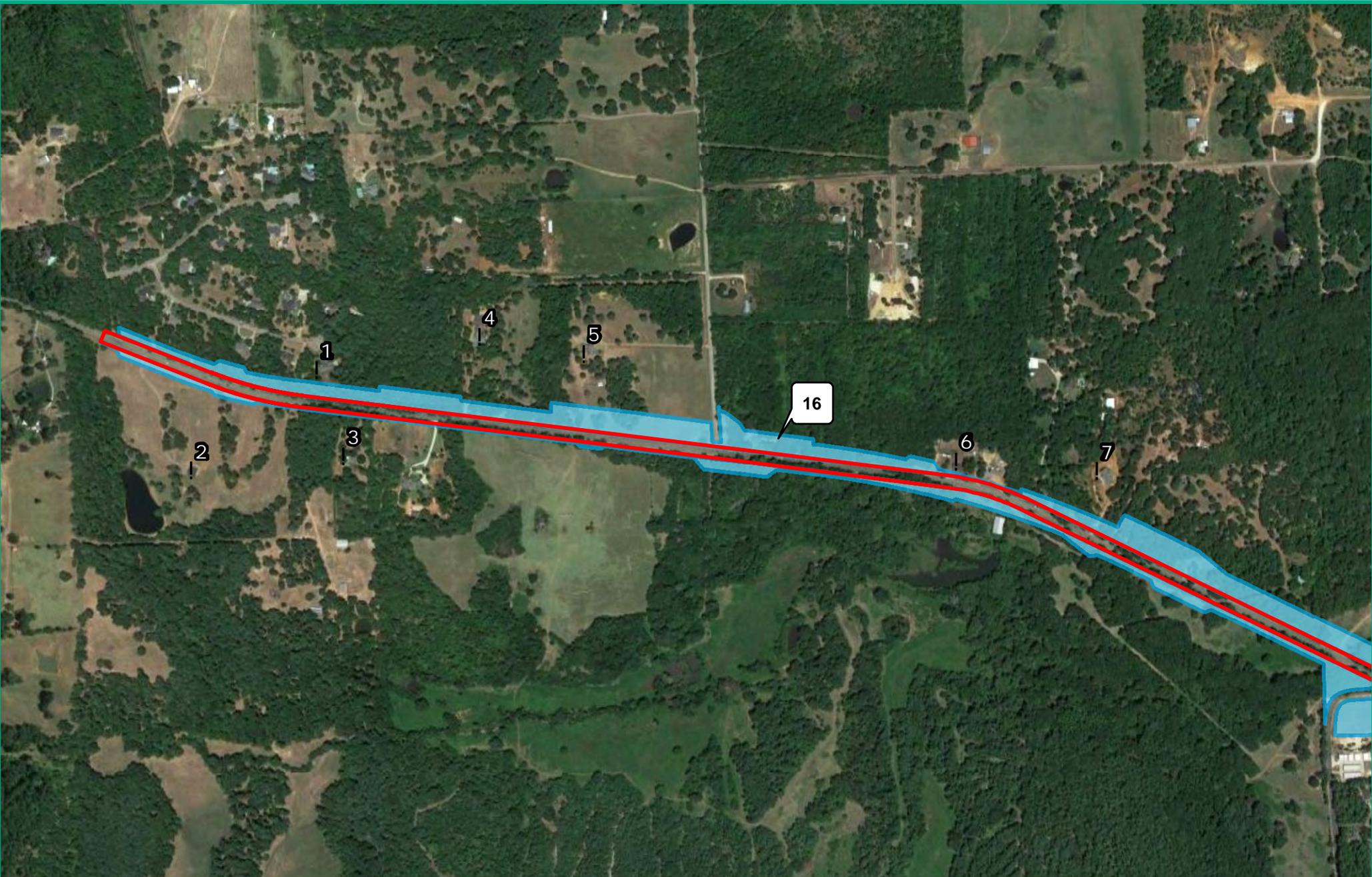
Based on this modeled noise analysis, there are no existing or projected noise impacts throughout the corridor.

Noise associated with the construction of the proposed project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. No extended disruption of normal activities is expected. Provisions would be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

A copy of this traffic noise analysis would be made available to local officials to ensure, to the maximum extent possible, future developments are planned, designed and programmed in a manner that would avoid traffic noise impacts. On the date of approval of this document (Date of Public Knowledge), TxDOT is no longer responsible for providing noise abatement for new development adjacent to the proposed project.

APPENDIX A

Representative Receivers

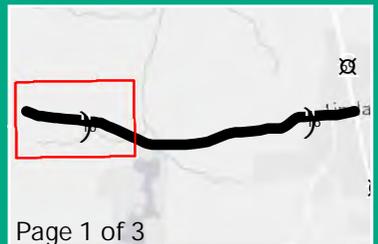
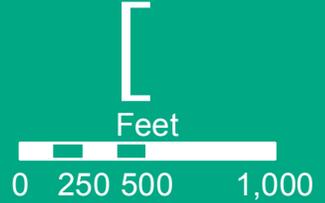


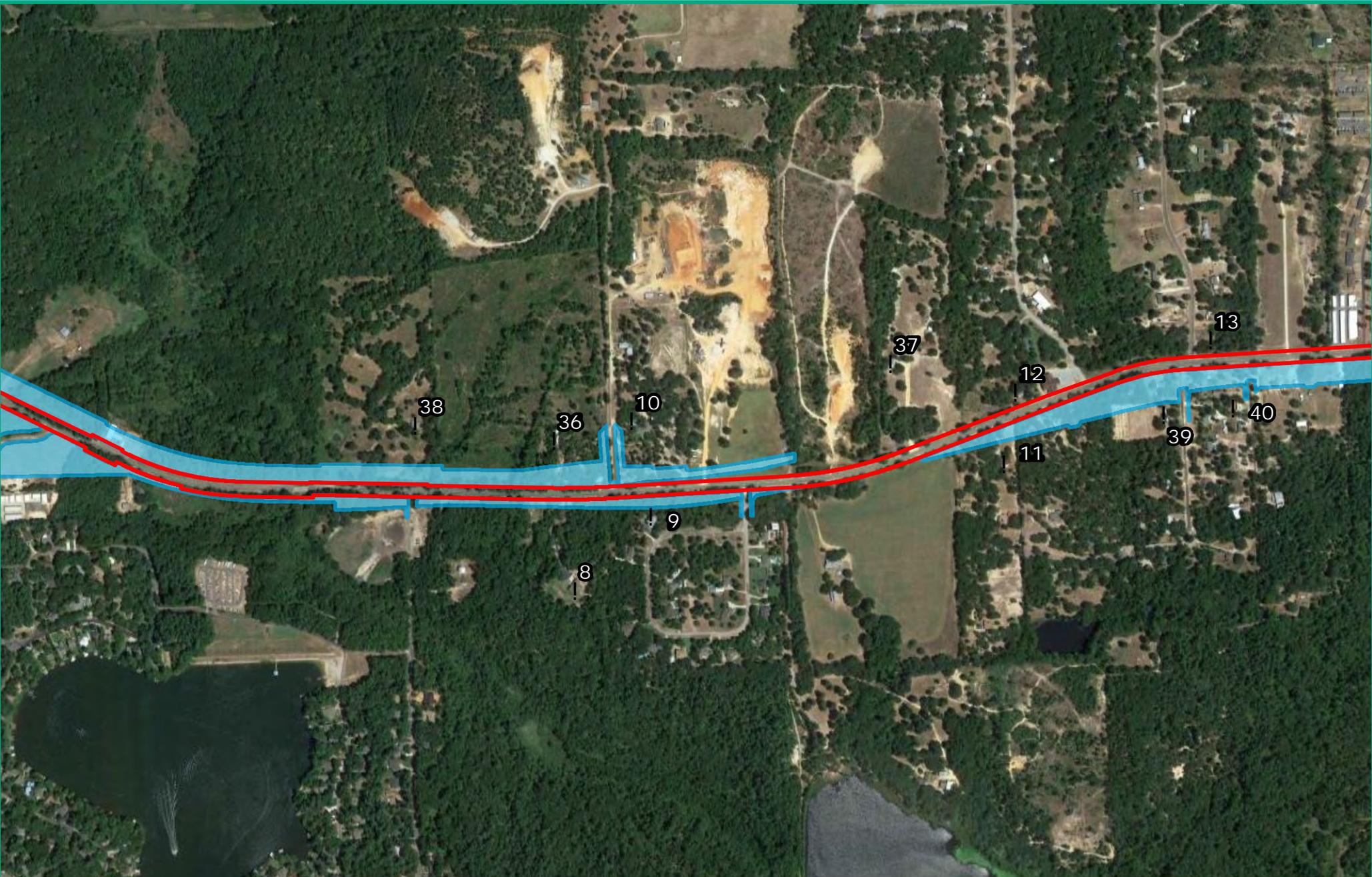
Representative Receivers

FM 16: 4 miles west of FM 849
(CR 481-E) to US 69 in Lindale

CSJ: 0522-04-032
Smith County, Texas

- ! Non-Impacted Receivers
- Existing ROW
- Proposed ROW



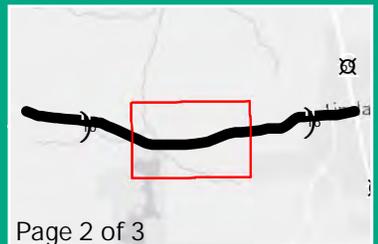
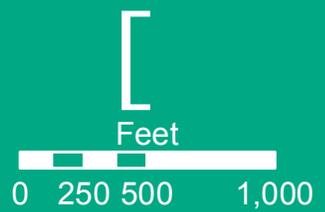


Representative Receivers

FM 16: 4 miles west of FM 849
(CR 481-E) to US 69 in Lindale

CSJ: 0522-04-032
Smith County, Texas

- ! Non-Impacted Receivers
- Existing ROW
- Proposed ROW



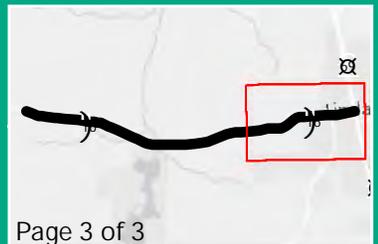
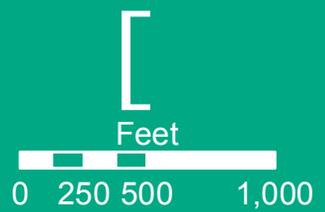


Representative Receivers

FM 16: 4 miles west of FM 849
(CR 481-E) to US 69 in Lindale

CSJ: 0522-04-032
Smith County, Texas

- ! Non-Impacted Receivers
- Existing ROW
- Proposed ROW



APPENDIX B

Traffic Data



MEMO

December 22, 2015

To: Dennis R. Cooley, P.E.
Attention: Vernon Webb, P.E.

From: William E. Knowles, P.E.

Subject: Traffic Data
CSJ: 0552-04-032
FM 16:
From 4 mi W. of FM 849, East
To US 69 in Lindale
Smith County

Attached is a diagram depicting 2015, 2035 and 2045 average daily traffic volumes and turning movements on FM 16 from 4 mi W. of FM 849, East to US 69 in Lindale. Also attached are tabulations showing traffic analysis for highway design for the 2015 to 2035 twenty year period and 2015 to 2045 thirty year period for the described limits of the route. Also included are tabulations showing data for use in air and noise analysis. This project was worked as a free facility.

Due to differences in traffic volumes the project was separated into two sections.

Section 1: From 4 mi W. of FM 849, East to CR 436

Section 2: From CR 436 to US 69 in Lindale

Please refer to your original request dated November 4, 2015

If you have any questions or need additional information, please contact Robert Williams at (512) 486-5145.

Attachments

CC: Mary Fletcher, Tyler District
Transportation Specialist
Design Division

TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Tyler District

December 18, 2015

										Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2015 to 2035)			
Description of Location	Average Daily Traffic		Dir Dist %	K Factor	Percent Trucks		ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement	S N	Rigid Pavement	SLAB	
	2015	2035			ADT	DHV							
	Base Year				Base Year								
FM 16 Section 1 From 4 mi W. of FM 849, East To CR 436 Smith County	1,300	1,900	59 - 41	12.8	6.8	5.1	9,800	40	213,000	3	230,000	8"	
Data for Use in Air & Noise Analysis													
Vehicle Class	Base Year		Base Year										
	% of ADT		% of DHV										
	Light Duty		93.2		94.9								
	Medium Duty		5.5		4.1								
Heavy Duty		1.3		1.0									
										Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2015 to 2045)			
Description of Location	Average Daily Traffic		Dir Dist %	K Factor	Percent Trucks		ATHWLD	Percent Tandem Axles in ATHWLD	Flexible Pavement	S N	Rigid Pavement	SLAB	
	2015	2045			ADT	DHV							
	Base Year				Base Year								
FM 16 Section 1 From 4 mi W. of FM 849, East To CR 436 Smith County	1,300	2,200	59 - 41	12.8	6.8	5.1	9,800	40	350,000	3	378,000	8"	

NOT INTENDED FOR CONSTRUCTION
 BIDDING OR PERMIT PURPOSES
 William Erick Knowles, P.E.
 Serial Number 84704

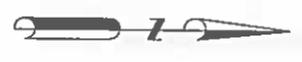
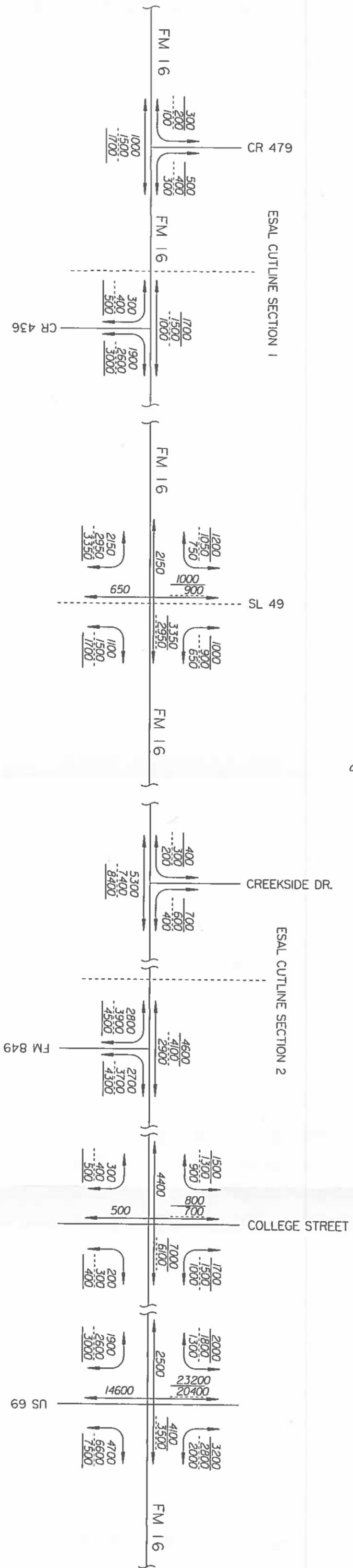
TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Tyler District

December 18, 2015

Description of Location	Average Daily Traffic		Dir Dist %	K Factor	Percent Trucks		ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2015 to 2035)			
	2015	2035			ADT	DHV			Flexible Pavement	S N	Rigid Pavement	SLAB
	FM 16 Section 2 From CR 436 To US 69 in Lindale Smith County	5,700			8,000	59 - 41			12.8	3.7	2.8	10,200
Data for Use in Air & Noise Analysis												
Vehicle Class	Base Year											
	% of ADT		% of DHV									
Light Duty	96.3		97.2									
Medium Duty	3.0		2.3									
Heavy Duty	0.7		0.5									
Description of Location	Average Daily Traffic		Dir Dist %	K Factor	Percent Trucks		ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2015 to 2045)			
	2015	2045			ADT	DHV			Flexible Pavement	S N	Rigid Pavement	SLAB
	FM 16 Section 2 From CR 436 To US 69 in Lindale Smith County	5,700			9,100	59 - 41			12.8	3.7	2.8	10,200

NOT INTENDED FOR CONSTRUCTION
 RIDDING OR PERMIT PURPOSES
 William Erick Knowles, P.E.
 Serial Number 84704



2015, 2035 AND 2045 ANTICIPATED AVERAGE DAILY TRAFFIC VOLUMES AND TURNING MOVEMENTS AT SPECIFIED POINTS ALONG FM 16 FROM 4 MI. W. OF FM 849, EAST TO US 69 IN LINDALE
 TRANSPORTATION PLANNING AND PROGRAMMING DIVISION
 DECEMBER 18, 2015

SHEET 1 OF 1

NOT INTENDED FOR CONSTRUCTION
 BIDDING OR PERMIT PURPOSES
 William Erick Knowles, P.E.
 Serial Number 84704