Final
Environmental Assessment

State Loop 255, TxDOT Atlanta District

Project Limits from Farm-to-Market Road 1520 to US Highway 271

CSJ Number 3403-01-001

Camp County, Texas

June 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.

Table of Contents

LIST OF APPENDICES III

LIST OF TABLES III

LIST OF ACRONYMS IV

1.0 INTRODUCTION 1

2.0 PROJECT DESCRIPTION 1

2.1 EXISTING FACILITY 1
2.2 PROPOSED PROJECT 1

3.0 PURPOSE AND NEED 2

3.1 NEED 2
3.2 SUPPORTING FACTS AND/OR DATA 2
3.3 PURPOSE 2

4.0 ALTERNATIVES 2

4.1 BUILD ALTERNATIVE 2
4.2 NO-BUILD ALTERNATIVE 3
4.3 PRELIMINARY ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER CONSIDERATION 3

5.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES 4

5.1 RIGHT-OF-WAY/DISPLACEMENTS 4
5.2 LAND USE 5
5.3 FARMLANDS 6
5.4 UTILITIES/EMERGENCY SERVICES 6
5.5 BICYCLE AND PEDESTRIAN FACILITIES 7
5.6 COMMUNITY IMPACTS 7
5.6.1 Environmental Justice 8
5.6.2 Limited English Proficiency 8
5.7 VISUAL/AESTHETICS IMPACTS 9
5.8 CULTURAL RESOURCES 9
5.8.1 Archeology 9
5.8.2 Historic Properties 10
5.9 DOT ACT SECTION 4(F), LWCF ACT SECTION 6(F) AND PWC CHAPTER 26 11
5.10 WATER RESOURCES 11
5.10.1 Clean Water Act Section 404 12
5.10.2 Clean Water Act Section 401 12
5.10.3 Executive Order 11990 Wetlands 12

5.10.4 Rivers and Harbors Act 13
5.10.5 Clean Water Act Section 303(d) 13
5.10.6 Clean Water Act Section 402 13
5.10.7 Floodplains 13
5.10.8 Wild and Scenic Rivers 14
5.10.9 Trinity River Corridor Development Certification 14
5.10.10 Coastal Barrier Resources 14
5.10.11 Coastal Zone Management 14
5.10.12 Edwards Aquifer 14
5.10.13 International Boundary and Water Commission 14
5.10.14 Drinking Water Systems 14
5.11 BIOLOGICAL RESOURCES 14
5.11.1 Vegetation 14
5.11.2 Wildlife 15
5.11.3 Threatened and Endangered Species 17
5.12 AIR QUALITY 17
5.13 HAZARDOUS MATERIALS 18
5.14 TRAFFIC NOISE 19
5.15 INDUCED GROWTH 20
5.16 CUMULATIVE IMPACTS 20
5.17 CONSTRUCTION PHASE IMPACTS 21
6.0 AGENCY COORDINATION 22
7.0 PUBLIC INVOLVEMENT 22
8.0 ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS 22
9.0 CONCLUSION 23
REFERENCES 24

List of Appendices

Appendix A —Project Location Map

Appendix B —Project Photos

Appendix C —Schematics

Appendix D —Typical Sections

Appendix E —Plan and Program Excerpts

Appendix F —Resource-Specific Maps

Appendix G —Resource Agency Coordination

Appendix H —Alternatives Analysis

List of Tables

Table 1: Soil Units and Farmland Classifications for the Proposed SL 255 Roadway 6

Table 2: Traffic Noise Levels dB(A) Leq 19

List of Acronyms

A list of common acronyms used throughout this document and their definitions is provided below.

ACHP	Advisory Council on Historic Preservation
ACM	Asbestos Containing Materials
APE	Area of Potential Effects
AOI	Area of Influence
Atlas	Texas Archeological Sites Atlas
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CGP	Construction General Permit
CO	Carbon Monoxide
CR	County Road
CWA	Clean Water Act
dB(A)	Decibels (A-weighted)
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMST	Ecological Mapping Systems of Texas
EPIC	Environmental Permits, Issues, and Commitments
EO	Executive Order
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FM	Farm-to-Market Road
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
IP	Individual Permit
ISA	Initial Site Assessment
LCP	Lead Containing Paints
LEP	Limited English Proficiency
Leq	Equivalent Sound Level
MBTA	Migratory Bird Treaty Act
MOU	Memorandum of Understanding
MSAT	Mobile Source Air Toxics
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWP	Nationwide Permit
PA	Programmatic Agreement
PCN	Preconstruction Notification
ROW	Right-of-Way
RTHL	Recorded Texas historic Landmark
SAL	State Archeological Landmark
SGCN	Species of Greatest Conservation Need
SHPO	State Historic Preservation Officer
SL	State Loop
SW3P	Storm Water Pollution Prevention Plan
TAQA	Traffic Air Quality Analysis
TAC	Texas Administrative Code

Acronyms (continued)

TCAP	Texas Conservation Action Plan
TCEQ	Texas Commission on Environmental Quality
TPDES	Texas Pollutant Discharge Elimination System
TPWD	Texas Parks and Wildlife Department
TSS	Total Suspended Solids
TWDB	Texas Water Department Board
TxDOT	Texas Department of Transportation
TXNDD	Texas Natural Diversity Database
Uniform Act	Uniform Relocation Assistance and Real Properties Acquisition Policies Act of 1970 as amended, in the Surface Transportation and Uniform Relocation Assistance Act of 1987
UPRR	Union Pacific Railroad
US	U.S. Highway
U.S.	United States of America
USACE	U.S. Army Corps of Engineers
U.S.C.	U.S. Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
vpd	Vehicles per day

1.0 Introduction

The Texas Department of Transportation (TxDOT) Atlanta District Office is proposing the construction of a new location two-lane roadway, State Loop (SL) 255 (formerly referred to as Farm-to-Market Road (FM) 3535), from FM 1520 to US Highway (US) 271 in Camp County, Texas. The total length of the proposed project is approximately 2.45 miles with a proposed right-of-way (ROW) width of approximately 150 feet (ft.). See **Appendix A—Project Location Map.** This Environmental Assessment (EA) has been prepared to comply with the requirements of the National Environmental Policy Act (NEPA) (42 U.S. Code [U.S.C.] Sections 4321-4375) and implementing regulations promulgated by the Council on Environmental Quality (CEQ, 40 Code of Federal Regulations [CFR] Part 1500) and the Federal Highway Administration (FHWA) (23 CFR Part 771). 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 (MOU) dated December 16, 2014, and executed by FHWA and TxDOT. This EA has been made available for public review during a public comment period; subsequently, TxDOT has considered all comments submitted regarding the proposed project.

2.0 Project Description

2.1 Existing Facility

A portion (approximately 3,204 linear feet) of SL 255 would be built along an existing county road, while the remainder (approximately 9,769 linear feet) would be constructed as a new location roadway. The existing CR 2116 roadway is an oil-sand surface and base with two driving lanes, each 9 ft. wide, and no shoulders. CR 2116 originates at the eastern end of the proposed project and runs to the west for approximately 0.6 mile where it terminates at CR 2110. At the western terminus, FM 1520 is an undivided roadway with a single travel lane in each direction. The existing ROW width is approximately 50 feet. Roadway drainage is conveyed along roadside ditches. There are no bicycle or pedestrian facilities or detention ponds. See **Appendix B—Project Photos**, **Appendix C—Schematics**, and **Appendix D—Typical Sections**.

2.2 Proposed Project

The proposed project involves construction of a new location rural roadway connecting US 271 with FM 1520. The proposed roadway would consist of two 12 ft. travel lanes (one in each direction) and two 10 ft. shoulders with adjacent drainage ditches. The roadway would have a typical ROW of 150 ft. varying to 250 ft. at intersections with existing county roads. The CR 2110 roadway would be reconstructed and would be configured with two 12-ft. driving lanes. CR 2120 would also be reconstructed at its intersection with the proposed new location SL 255 roadway. At the proposed intersection of SL 255 and FM 1520, the project includes the addition a striped median with a 300-ft. taper to the southeast of the intersection and a dedicated 12-ft left turn lane onto SL 255 northwest of the intersection. Limits were selected to meet the need and purpose of the project. The proposed

project does not include any bicycle or pedestrian facilities or detention ponds. Approximately 43 acres of additional ROW would be required for the proposed project.

The proposed project is anticipated to cost approximately $5,119,386, with $4,095,509 from federal funding and $1,023,877 from state funding. The proposed project is described in the TxDOT Atlanta District State-wide Transportation Improvement Program for the fiscal years 2017-2020 for completion in 2021 (TxDOT 2017a). It is outside the boundary of any metropolitan planning organizations. See **Appendix E—Plan and Program Excerpts**.

3.0 Purpose and Need

3.1 Need

The proposed project is needed because there is no efficient east-west roadway for the various users of northern Camp County including businesses, residential, and recreational areas associated with Lake Bob Sandlin State Park, a 641-acre park located approximately 2.5 miles northwest of the proposed intersection of SL 255 with FM 1520.

3.2 Supporting Facts and/or Data

Currently, to travel east-west in this area of Camp County, drivers must travel the network of narrow sand-oil surface county roads. These county roads typically consist of two narrow 9 ft. wide lanes without shoulders. An alternative to using the county road system would require traveling FM 1520 and US 271 through the city of Pittsburg, adding approximately five miles to the trip in comparison to the proposed location of SL 255 in the city of Pittsburg.

3.3 Purpose

The purpose of this project is to provide an efficient east-west roadway for the various users of the northern Camp County transportation system while remaining in conformance with current safety standards and criteria. The presence of a safe and efficient east-west roadway is anticipated to reduce traffic currently using US 271 and FM 1520 through Pittsburg. Approximately 1,600 vehicles per day would be expected to use the roadway in 2021, increasing to 2,200 in 2041.

4.0 Alternatives

4.1 Build Alternative

The proposed project involves the construction of a new location roadway generally following the existing CR 2116 alignment from US 271 to the intersection with CR 2110 (a length of approximately 3,204 ft.). From the intersection with CR 2110, a new location roadway would extend west to intersect with FM 1520 (the western terminus of the proposed project). The total length of the proposed project is approximately 2.45 miles.

The existing CR 2116 roadway is an oil-sand surface and base with two 9 ft. driving lanes without shoulders. The proposed project involves constructing on new location a rural roadway with a crown

width of 44 ft. consisting of two 12 ft. travel lanes and two 10 ft. shoulders with ditches situated in a ROW varying from 150 ft. to 250 ft. At existing county road intersections, the proposed ROW would be wider. The CR 2110 roadway would be reconstructed approximately 525 ft. north and 400 ft. south (total length of 925 ft.) of the proposed SL 255 and would be configured with two 12 ft. driving lanes. CR 2120 would also be reconstructed at its intersection with the proposed new location SL 255 approximately 270 ft. south and 130 ft. north and configured with two 12-ft. driving lanes.

The Build Alternative utilizes the existing CR 2116 alignment and minimizes impacts to the adjoining property owners for the portion of the project located along the existing county road. The proposed ROW that would be required along the new location segment would impact more property owners than other preliminary alternatives considered but not analysed in detail (see **Section 4.3** below); however, the Build Alternative would require less ROW from those property owners and minimizes the subdivision of the properties. Thus, the Build Alternative meets the majority of the principal design requirements and desired design benefits. This alternative was selected as the Build Alternative to be evaluated in detail because it minimizes the impacts on adjacent property owners, limits the number of intersections with the existing Camp County road system, and minimizes the size of the "footprint" of the Build Alternative. The Build Alternative was identified as Alternative 3 during preliminary analysis.

Traffic data is not available for the existing county roads. Traffic along the proposed SL 255 is estimated to be 1,600 vehicles per day in the year 2021. Existing and proposed typical sections can be seen in **Appendix D**.

4.2 No-Build Alternative

Under the No-Build Alternative, the existing CR 2116 would not be modified and the portion of roadway on new location would not be built. The No-Build Alternative assumes that no transportation improvements beyond the continued maintenance of the existing facility would occur. This alternative would not improve access or connectivity within the study area; therefore, it would not meet the need and purpose of the project. The No-Build alternative will be carried forward as a baseline by which to compare the recommended alternative.

4.3 Preliminary Alternatives Considered but Eliminated from Further Consideration

The following two preliminary alternatives were considered but have been eliminated from further consideration (see **Appendix H—Alternatives Analysis** for the alternatives exhibit and matrix):

Preliminary Build Alternative (Red Route): Construct a new roadway generally following the existing CR 2116 alignment from US 271 to the intersection with CR 2110 (a length of approximately 3,200 ft.). New location road would extend west to intersect with FM 1520. The new location road would be constructed along a more northerly route than the current Build Alternative (Green Route) and would have a length of approximately 2.49 miles.

Preliminary Build Alternative (Blue Route): Construct a new roadway generally following the existing CR 2116 alignment from US 271 to the intersection with CR 2110 (a length of approximately 3,200 ft.).

New location road would extend west to intersect with FM 1520. The new location road would be constructed along a more southerly route than the current Build Alternative (Green Route) and would have a length of approximately 2.45 miles.

These alternatives were eliminated from further study because, compared to the recommended alternative, they would have greater impacts on adjacent property owners, more intersections with the existing Camp County road system, and a larger project area "footprint".

5.0 Affected Environment and Environmental Consequences

In support of this EA, the following technical reports were prepared:

- Community Impacts Assessment Technical Report, 2016
- Historical Resources Studies, 2008
- Wetlands and Waters of the U.S. Determination Report, 2007
- Biological Evaluation Form, 2015
- Air Quality Technical Report, 2016
- Hazardous Materials Initial Site Assessment, 2016
- Traffic Noise Analysis, 2016
- Indirect and Cumulative Impacts Technical Report, 2016
- Public Involvement Summary, 2006; 2015; 2017
- Public Involvement Plan, 2016

The technical reports may be inspected and copied upon request at the TxDOT Atlanta District Headquarters.

5.1 Right-of-Way/Displacements

The proposed Build Alternative would require displacements and additional ROW. Approximately 43 acres of new ROW would be required to construct SL 255. The existing ROW of CR 2116 is approximately 2.96 acres, and approximately 11.1 acres of proposed new ROW adjacent to CR 2116 would be needed. Approximately 31.9 acres of new ROW would be required for the new location portion of the roadway. Two structures would be impacted by the proposed project (see **Figure 1** in **Appendix F- Resource-Specific Maps**). One is a vacant residence located to the north of the existing CR 2116 roadway, just west of the Union Pacific Railroad (UPRR) track. The second displacement is a metal building located to the northwest of the intersection of the proposed new location roadway and CR 2120. The metal building appears to be utilized for storage. Both structures would be impacted and would need to be relocated as part of the proposed project construction.

TxDOT provides relocation resources to all displaced persons without discrimination in a manner consistent with U.S. Department of Transportation policy as mandated by the Uniform Relocation

Assistance and Real Property Acquisition Policies Act of 1970, as amended in the Surface Transportation and Uniform Relocation Assistance Act of 1987 (the Uniform Act). All property owners from whom property is needed are entitled to receive just compensation for their land and property. Just compensation is based upon the fair market value of the property. TxDOT also provides, through its Relocation Assistance Program, payment and services to aid in movement to a new location.

Both the United States and Texas Constitutions provide that no private land may be taken for public purposes without adequate compensation being paid thereof. The TxDOT ROW Acquisition and Relocation Program would be conducted in accordance with the Uniform Act, and relocation resources are available to all residential and business relocatees without discrimination. Relocation assistance is available to all individuals, families, businesses, farmers, and nonprofit organizations displaced as a result of a state highway or other transportation project. This assistance applies to tenants as well as owners occupying the real property needed for the project. Replacement structures must be located in the same type of neighborhood and be equally accessible to public services and places of employment. The proposed project would proceed to construction only when all displaced persons have been provided the opportunity to be relocated to adequate replacement sites. The available structures must also be open to persons regardless of race, color, religion, or nationality and be within the financial means of those individuals affected.

With respect to displacements, encroachment-alteration impacts would be driven by the relocations of the two buildings that would be displaced by the proposed project. Examples of encroachment-alteration impacts due to relocations and displacements include a minor reduction in the supply of affordable housing, changes in residential and commercial property values due to the proposed increase in access and mobility, changes in the local tax base due to the anticipated displacements, and impacts to the residents (such as potential increased commuting time) who could be displaced by the proposed improvements to SL 255. Residential and commercial properties located near SL 255 that are not physically impacted by the proposed project may experience a change in market value, either positive or negative.

Under the No-Build Alternative, the existing CR 2116 would remain as-is and only normal, routine maintenance would be conducted. No ROW acquisition would be required and no displacements would occur.

5.2 Land Use

The project area is located approximately 5.0 miles north of Pittsburg, Texas, in a rural area of Camp County. Surrounding land use ranges from low density residential and commercial to undeveloped agricultural and woodland areas (see **Figure 1** in **Appendix F**). Located in the vicinity of the CR 2116 and US 271 intersection is a distribution center of Pilgrims Pride, a worldwide company. Located west of the Pilgrims Pride facility and approximately 150 ft. east of the end of the proposed project, on the north side of the existing CR 2116, is an electrical substation that services the area. No impacts are anticipated to the electrical substation as a result of the Build Alternative

The existing CR 2116 ends approximately 3,200 ft. west of US 271 at the intersection with CR 2110. Within this section, a single-line north-south UPRR at-grade track crosses CR 2116 approximately 800 ft. west of US 271. No impacts are anticipated to the UPRR facility as a result of the Build Alternative.

Although the proposed project would change approximately 43 acres of land to transportation use, the proposed project would not substantially alter the existing land use in the area.

Under the No-Build Alternative, no impacts to land use would occur. Land use in the area would remain undeveloped with limited residential and agricultural uses.

5.3 Farmlands

According to the United States Department of Agriculture (USDA) National Resource Conservation Service (NRCS) database, the proposed project area contains prime farmland soils. **Table 1** identifies the soil map units within the project area and farmland classification according to the USDA website (see **Figure 2** in **Appendix F**).

The total corridor assessment was completed on the Farmland Conversion Impact Rating Form for Corridor Type Project (NRCS-CPA-106) for the proposed 43 acres of additional ROW. The total corridor assessment totaled 54 points out of a maximum of 160 points. The NRCS evaluates the relative value of farmland that has a maximum score of 100 points. Based on Farmland Protection Policy Act (FPPA) regulations, if a combined score of the total corridor assessment and the relative value of farmland are 160 or more, the project site should be given more consideration for protection.

Table 1: Soil Units and Farmland Classifications for the Proposed SL 255 Roadway

Soil Unit	Farmland Classification
Bowie fine sandy loam, 2 to 5 percent slopes	All areas are prime farmland
Cuthbert fine sandy loam	Not prime farmland
Kullit very fine sandy loam, 1 to 3 percent slopes	All areas are prime farmland
Nahatche loam-silty clay loam	Not prime farmland

Source: NRCS 2016

Since the total corridor assessment for the proposed project only totaled 54 points, coordination with the NRCS was not warranted and no substantial impacts to prime, unique, or other farmlands of Statewide or local importance are anticipated.

Under the No-Build Alternative, no impacts to farmland would occur. Undeveloped lands used for agriculture would continue to be used as such.

5.4 Utilities/Emergency Services

The proposed project would require approximately 43 acres of new ROW. Implementation of the proposed project may require the relocation and adjustment of utilities such as water lines, sewer

lines, gas lines, fiber optic lines, overhead electrical and telephone lines, and other subterranean and aerial utilities. The need for relocation and adjustment of any utilities would be determined during the detailed design phase and coordinated with the affected utility provider to ensure that no substantial interruption of service would take place. The Camp County EMS, Camp County Sheriff's Office, and Pittsburg Fire and Police Departments would be notified of the construction start dates and any potential detour routes. Construction activities are not expected to cause any delays or access issues for emergency service vehicles. Construction of the proposed roadway could provide enhanced access and reduced response times for local emergency services.

Construction of the proposed project would be phased in a manner that would allow the existing and cross county road system to remain open to traffic during construction of the new roadway and would not require the use of detours except during daylight operations. Construction of the project would not prevent access to any adjacent properties, except for short durations (less than one day).

Under the No-Build Alternative, no impacts to utilities/emergency services would occur. Traffic patterns would remain unchanged and no detours would occur.

5.5 Bicycle and Pedestrian Facilities

Currently, no sidewalks or designated bicycle lanes exist along CR 2116 or the existing facilities that connect to the new location roadway. Current plans for the proposed project do not include the addition of sidewalks or bicycle lanes as part of the widening of CR 2116 and construction of SL 255. SL 255 would be accessible to bicyclists.

Under the No-Build Alternative, pedestrians and cyclists would continue to use the existing transportation network as it is currently provided.

5.6 Community Impacts

A Community Impacts Assessment Technical Report Form was completed in accordance with TxDOT's *Community Impacts, Environmental Justice, Limited English Proficiency and Title VI Compliance* guidance (TxDOT 2015a, 2016a). The proposed project is located within a sparsely populated, rural portion of Camp County, Texas. Surrounding land use ranges from single-family residential and commercial to agricultural and woodlands.

The proposed improvements to SL 255 are expected to increase mobility by creating a new route through the project area and providing improved connections to existing roadways. The proposed project would improve east-west access throughout Camp County, which is expected to have a positive impact on emergency response times and other public services. Improved access to these services is a benefit to all populations, including sensitive elements such as the elderly, children, and persons with disabilities. The improved access would benefit the general population (including environmental justice populations) that utilizes the public facilities and recreation areas within and beyond the general project vicinity.

The overall impact of the proposed SL 255 facility is expected to be positive; the anticipated structural displacements would not impact community cohesion because the proposed project is located in a

sparsely developed, rural portion of Camp County. For most of the traveling public, the proposed improvements would have a positive effect on community cohesion, including increased access to US 271 which connects to the larger neighboring communities of Mt. Pleasant and Pittsburg. The proposed project would not affect, separate, or isolate any distinct neighborhoods, ethnic groups, or other specific groups.

With respect to encroachment-alteration effects to socio-economic resources, indirect impacts would be driven by changes in travel patterns and access associated with the proposed project. The potential indirect impacts would include improved vehicular access to employment opportunities, markets, goods, services, residential uses, and public facilities due to increased vehicular mobility.

Implementation of the No-Build Alternative would not improve connection or mobility within the project area and Camp County.

5.6.1 Environmental Justice

The proposed project would improve mobility and increase connectivity for existing and future residences and businesses within the project vicinity. Environmental justice populations (predominantly minority populations) are present in the proposed project area – they are clustered near the project terminus as depicted in **Figure 3** in **Appendix F**. One of the two anticipated displacements is located within a census block that is comprised of a minority population majority (an estimated total of eight persons reside within Census Block 1050). See **Figures 1** and **3** in **Appendix F** for illustrations of existing land use within the project area, the locations of the two potential displacements, and census geographies.

No existing neighborhoods would be divided because the proposed project limits traverse an undeveloped rural area with scattered residences. Permanent disruptions to normal daily activities are not expected. The design process aimed to minimize adverse impacts to the adjacent residences to the extent possible. Surrounding communities would benefit equally from increased mobility along SL 255. No disproportionately high and adverse impacts to minority or low-income populations are anticipated as a result of the proposed project; therefore, the requirements of Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, are satisfied.

Under the No-Build Alternative, no ROW would be required and no environmental justice impacts would occur. However, the beneficial impacts of the Build Alternative (improved connectivity and mobility) would not be realized for the entire community, including minorities and low-income individuals, living in the project area. The entire community, including minorities and low-income individuals, could be adversely impacted by the increasing congestion and low mobility in the project area that would occur under the No-Build Alternative.

5.6.2 Limited English Proficiency

Limited English Proficiency (LEP) is defined as persons who speak English "less than very well". Of the 2,713 people over five years of age in the adjacent census block group, approximately 5.5 percent

speak English "less than very well". The LEP population within the adjacent census block group primarily speaks Spanish. LEP persons have been afforded the opportunity to participate in the decision-making process by making project-related materials available in English and Spanish.

Reasonable steps will continue to be taken to ensure that all persons have meaningful access to the programs, services, and information TxDOT provides. Any public involvement information and/or materials would be made available in English and Spanish, and a translator (for language or other special communication needs) would be provided upon request. Therefore, the requirements of EO 13166, pertaining to LEP, would be satisfied.

Under the No-Build Alternative, no impacts to LEP populations would occur. However, the beneficial impacts of the Build Alternative (improved safety, connection, and mobility) would not be realized for the entire community living in the project area, including minorities and the LEP population. The entire community, including the LEP population, could be adversely impacted by the increasing congestion and low mobility in the project area.

5.7 Visual/Aesthetics Impacts

Although the proposed project consists of widening the existing CR 2116 and constructing SL 255 on new location, adverse visual impacts are not anticipated as part of the proposed project. The area is currently crisscrossed by a network of county roads so the addition of the new roadway is not anticipated to appreciably change the visual environment.

Under the No-Build Alternative, the viewshed would not be altered by the introduction of a new transportation facility.

5.8 Cultural Resources

5.8.1 Archeology

The archeological area of potential effects (APE) is defined as the entire footprint of the proposed improvements. The archeological APE evaluated by TxDOT archeologists included approximately 3.68 acres of existing ROW and approximately 44 acres of proposed ROW. A review of the Texas Archeological Sites Atlas (Atlas) performed in 2012 indicated that at least four summary projects have taken place in or near the archeological APE. In a memorandum from February 21, 2012, TxDOT archeological staff documented seven archeological sites in or adjacent to the archeological APE. Six of the archeological sites recorded near the APE (41CP61, 41CP234, 41CP306, 41CP311, 41CP313, and 41CP325), would not be impacted by the undertaking. Site 41CP323, recorded as the remains of a twentieth-century farmstead, is within the APE and could be impacted by the undertaking. A review of the Atlas in 2016 did not indicate that any archeological studies had been performed in the area since 2012 (THC 2016).

A review of relevant geologic and soil data indicated that there is potential for alluvial deposits that have demonstrated a high-potential for buried archeological deposits.

In the memorandum from February 21, 2012, TxDOT archeological staff recommended that an archeological investigation be conducted to confirm the absence of potentially significant archeological deposits that could be impacted by the undertaking. Access to conduct the archeological investigations was denied at that time and is still denied to date (TxDOT 2012).

Pursuant to Stipulation IX.B.3. of the Amended Programmatic Agreement for Transportation Undertakings, (PA-TU) between the FHWA, the Texas State Historic Preservation Officer (SHPO), the Advisory Council on Historic Preservation (ACHP), and TxDOT, the undertaking may proceed with further project development, including ROW acquisition and environmental process, without further SHPO approval. However, after access to the proposed ROW is granted or the property is purchased, TxDOT shall oversee completion of archeological investigations.

Further investigation is needed before a description of impacts to cultural resources under the Build Alternative can be prepared.

Under the No-Build Alternative, no impacts to archeological resources would occur and, as a result, no coordination would be required with the THC.

Tribal consultation with federally-recognized Native American tribes with a demonstrated historic interest in the area was initiated in 2007 (see **Appendix G- Resource Agency Coordination**). No objections or expressions of concern were received within the comment period. Further consultation may be required under the Build Alternative if archeological resources are recovered or in the event of an inadvertent discovery.

5.8.2 Historic Properties

A Historic Resources Studies report was completed for the proposed project by Prewitt and Associates Inc. (TxDOT 2008). Review of the National Register of Historic Places (NRHP), the list of State Archeological Landmarks (SAL), and the list of Recorded Texas Historic Landmarks (RTHL) indicated that no historically significant resources have been previously documented within the historic APE. It has been determined through consultation with the SHPO that the APE for the proposed project is 300 ft. from each edge of the proposed ROW. TxDOT personnel conducted a historic properties resource survey and documented 14 historic-age properties (built prior to 1963) within the project APE. Historic properties in the APE consist mainly of mid-twentieth century-residences and agricultural and religious resources. Right-of-entry to one parcel (property 14) was not granted, but the property appears on historic aerial photographs and maps of the parcel. Therefore, the property is assumed eligible for purposes of this project. No new ROW is required from property 14 and the closest built resource is approximately 590 ft. from the proposed ROW of SL 255. The property is not viewable from Google Streetview or Microsoft Bing birds eye aerial software due to its rural location. The remaining surveyed properties have been evaluated through application of the Criteria of Eligibility for listing in the NRHP. The remaining properties documented in the survey are not known to be associated with a significant historical event or associated with a person of transcendent importance. They do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master. Therefore, these properties are determined to be not eligible for listing in the NRHP.

Pursuant to Stipulation VI "Undertakings with Potential to Cause Effects" of the First Amended PA-TU between FHWA, SHPO, the ACHP, and TxDOT and the Memorandum of Understanding (MOU), TxDOT historians determined one historic property is present (#14) within the APE for the proposed project, but that no direct or indirect effects would take place and that individual project coordination with SHPO is not required.

Under the No-Build Alternative, no impacts to historic resources would occur and no coordination with THC would be required.

5.9 DOT Act Section 4(f), LWCF Act Section 6(f) and PWC Chapter 26

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. There are no Section 4(f), Section 6(f), or Chapter 26 properties present in the project corridor.

5.10 Water Resources

Five potential jurisdictional waters were identified within the proposed project limits in the *Wetlands and Waters of the U.S. Determination Report for FM 3535* (see **Figure 4** in **Appendix F**). None of these jurisdictional areas were found to contain wetlands (TxDOT 2007).

One unnamed channel, a tributary to Walkers Creek, crosses the existing CR 2116, just to the east of the intersection with CR 2110. The channel is designated on the United States Geological Service (USGS) Harvard Quadrangle as an intermittent stream. A second unnamed tributary to Walkers Creek crosses under CR 2110 approximately 350 ft. south of the intersection with CR 2116. This water is also designated on the USGS Harvard Quadrangle as an intermittent stream. It flows into the first unnamed tributary approximately 65 ft. east of this crossing. An ephemeral drain is also located within the proposed project limits. This drain is not depicted on the USGS quadrangle. The water flows to the south and is believed to flow into an unnamed tributary to Walkers Creek. The other two waters are located approximately 3,000 ft. east of the intersection of the proposed intersection of SL 255 with FM 1520: a man-made stock pond and an intermittent tributary. The man-made stock pond would be completely filled. The source of water for this stock pond is surface runoff. Overflow from this stock pond flows through an intermittent tributary of Big Cypress Creek. Both of these waters, the stock pond and the tributary, are designated on the USGS Harvard Quadrangle Map as a stock pond and intermittent stream, respectively.

It is anticipated, based on the 2007 report, that any impacts to waters of the U.S. would be authorized through Nationwide Permit (NWP) #14. A Preconstruction Notification (PCN) may be required for impacts to the stock pond. The actual amount of impacts to waters under the jurisdiction of the U. S. Army Corps of Engineers (USACE) would be confirmed during the final design phase, based on acquisition of complete right-of-entry and detailed construction plans. If any impacts a water of the U.S. exceed 0.5 acre, or the thresholds of the general conditions of the NWP are exceeded, an Individual Permit would be required.

Encroachment-alteration effects to water quality occur primarily due to increased impervious surface area which could result in increased runoff and decrease water quality downstream. Construction of the proposed improvements would directly contribute to increases in impervious cover. Effects would also occur in areas where vegetation in the proposed project area is cleared during construction, which could accelerate off-site erosion due to runoff. Use of BMPs within the proposed project area would minimize water quality effects downstream.

Under the No-Build Alternative, the existing drainage structures along and adjacent to the existing CR 2116 would remain as is and only normal maintenance would be required. No impacts to waters of the U.S. would occur within the portion of the project on new location.

5.10.1 Clean Water Act Section 404

According to the Clean Water Act (CWA), coordination with the USACE may be required for this project. For single and complete crossings within public transportation projects, the maximum limit of impacts to non-tidal jurisdictional waters of the U.S. that would be covered under the NWP #14 is 0.5 acres. A PCN would be required if the impacts are greater than 0.1 acres or if there is any proposed discharge within special aquatic sites, including wetlands. The PCN must include a compensatory mitigation proposal to offset permanent losses of waters of the U.S. to ensure that those losses result only in minimal adverse effects to the aquatic environment and a statement describing how temporary losses of waters of the U.S. would be minimized to the maximum extent practicable. A NWP #14 with PCN would cover the construction, expansion, modification, and improvements associated with this linear transportation project if impacts at a single and complete crossing exceed 0.1 acre. Impacts to waters of the US would be minimized to the extent practicable under the Build Alternative.

Under the No-Build Alternative, no impacts to waters of the U.S. would occur and, as a result, no permitting would be required with the USACE.

5.10.2 Clean Water Act Section 401

The proposed project is a Tier I project. In order to comply with the Texas Commission on Environmental Quality's (TCEQ's) 401 Water Quality Certification Conditions for NWPs, at least one Best Management Practice (BMP) from each of the following three categories of onsite water quality management must be used on the proposed project: erosion control, post-construction Total Suspended Solids (TSS) control, and sedimentation control. The BMPs to be used on the proposed project include temporary vegetation for erosion control, silt fences for sedimentation control, and vegetative filter strips for post-construction TSS control.

Under the No-Build Alternative, no impacts to waters of the U.S. would occur and, as a result, no 401 Certification would be required.

5.10.3 Executive Order 11990 Wetlands

Executive Order 11990 Protection of Wetlands (issued in 1977) requires federal agencies to minimize the destruction or modification of wetlands. The proposed project would have no impacts on wetlands; therefore, Executive Order 11990 would not apply.

Under the No-Build Alternative, no impacts to wetlands would occur; therefore, Executive Order 11990 would not apply.

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)

Runoff from this project would discharge within 5 stream miles upstream of Segment 0404_02 of Big Cypress Creek, which is listed as threatened/impaired for bacteria and sulfate on the 2014 303(d) list. The Atlanta District would utilize best management practices (BMPs) to minimize water quality impacts. The proposed project is not expected to contribute the constituent of concern to the impaired water body. Coordination with TCEQ was completed in February, 2017 (see **Appendix G**).

Under the No-Build Alternative, no impacts to impaired water segments would occur and coordination with the TCEQ would not be required. Compliance with a TPDES permit would not be required.

5.10.6 Clean Water Act Section 402

Because this project would disturb more than five acres, TxDOT would be required to comply with the TCEQ TPDES General Permit for Construction Storm Water Discharges. A Notice of Intent (NOI) stating that a Storm Water Pollution Prevention Plan (SW3P) has been developed would be filed with the TCEQ prior to the beginning of construction. The General Permit under which coverage is anticipated to be authorized was issued in March 2013 and will be renewed in March 2018.

Permanent soil erosion control features would be constructed as soon as feasible during the early stages of construction. Disturbed areas would be restored and stabilized as soon as the construction schedule permits and temporary sodding would be considered where large areas of disturbed ground would be left bare for a considerable length of time.

Under the No-Build Alternative, there would be no earth disturbance and compliance with the TPDES Construction General Permit would not be required.

5.10.7 Floodplains

Executive Order 11988, Floodplain Management, requires federal agencies to avoid activities which directly or indirectly result in the development of floodplain area. Camp County has not been mapped by the Federal Emergency Management Agency (FEMA) and as a result, Flood Insurance Rate Maps are not available. Camp County is not a participant in the National Flood Insurance Program. The hydraulic designs for this project would be in accordance with current TxDOT and FHWA design policies and standards. The proposed crossroad structures would not increase the base flood elevation to a level that would violate applicable floodplain regulations or ordinances. Coordination with FEMA would take place if required. The hydraulic design and analysis conducted for the proposed project would address any encroachment alteration effects to the floodplain.

Under the No-Build Alternative, no impacts to floodplains would occur.

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.

5.10.9 Trinity River Corridor Development Certification

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.

5.10.10 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.

5.10.11 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.

5.10.12 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.

5.10.13 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.

5.10.14 Drinking Water Systems

According to the Texas Water Department Board's (TWDB) Groundwater Viewer, a water well (Well ID#74827) is located within the project footprint (**Figure 4** in **Appendix F**) (TWDB 2016). This domestic well was constructed in 2005 and is owned by a private individual. The depth of the well is 522 ft. below ground surface.

In accordance with TxDOT's *Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges*, this well would need to be properly removed, sealed and plugged during construction of the proposed project.

The No-Build Alternative would have no impacts to drinking water systems.

5.11 Biological Resources

5.11.1 Vegetation

The construction of the proposed project is anticipated to impact approximately 18.13 acres of disturbed prairie vegetation, 22.53 acres of mixed forest and woodland, 7.89 acres of riparian vegetation, and 0.62 acre of row crops (**Figure 5** in **Appendix F**) (MoRAP 2013). These habitat types are not considered rare or important remnant vegetation as mapped by the Texas Conservation Action

Plan (TCAP). For more information, see the Biological Evaluation Form (TxDOT 2015b), available in TxDOT's project files and located in TxDOT's Environmental Compliance Oversight System.

Vegetation impacts of disturbed prairie, mixed forest and woodland, and riparian vegetation would exceed the threshold for coordination with TPWD. Coordination was conducted and completed on September 9, 2015 (See **Appendix G**).

Executive Order on 13112 on Invasive Species

In accordance with EO 13112 on Invasive Species, all revegetation will, to the extent practicable, use only native species. Upon completion of earthwork activities, disturbed areas would be reseeded according to TxDOT specifications and in compliance with EO 13112, where applicable.

Executive Memorandum on Beneficial Landscaping

In accordance with the Executive Memorandum of August 10, 1995, all agencies shall comply with the National Environmental Policy Act (NEPA) as it relates to vegetation management and landscape practices for all federally assisted projects. The Executive Memorandum directs that, where cost-effective and to the extent practicable, agencies would (1) use regionally native plants for landscaping; (2) design, use, or promote construction practices that minimize adverse effects on the natural habitat; (3) seed to prevent pollution by, among other things, reducing fertilizer and pesticide use; (4) implement water-efficient and runoff reduction practices; and (5) create demonstration projects employing these practices. Landscaping included with this project would be in compliance with the Executive Memorandum and the guidelines for environmentally and economically beneficial landscape practices.

Under the No-Build alternative, the existing vegetation would remain as it is presently, except for those areas where a landowner could decide to either harvest or clear the land for other uses. The No-Build Alternative would not require any conversion of vegetation to a transportation facility nor would it impact unusual vegetation or special habitat features.

5.11.2 Wildlife

The vegetation of the Pineywoods ecoregion provides habitat for a wide range of reptilian, mammalian, and avian species that are common to the East Texas environment. Common species include the ringtail (*Bassariscus astutus*), Virginia opsossum (*Dedelphis virginianus*), bobcat (*Lynx rufus*), white-tailed deer (*Odocoileus virginaus*), cottonmouse (*Peromyscus gossypinus*), bullfrog (*Lithobates catesbeianus*), prairie kingsnake (*Lampropeltis calligaster*), White-eyed vireo (*Vireo griseus*), Red-bellied Woodpecker (*Melanerpes carolinus*), and the Eastern Bluebird (*Sialia sialis*) (TPWD 2001, 2016a). These species have the potential to occur within the project area and adjacent undeveloped land.

It is anticipated that some wildlife species could occur within undeveloped portions of the existing and proposed ROW. Required clearing or other construction-related activities may directly or indirectly affect animals that reside on or adjacent to the project area ROW. Heavy machinery could kill small, low-mobility animals or could cause soil compaction, impacting animals that live underground. Larger,

more-mobile species will typically avoid construction activities and move into adjacent areas. In order to minimize disturbance to inert microhabitats (e.g., snags, brush piles), clearing within the ROW would be minimized to the extent practicable.

Under the No-Build Alternative, no impacts to wildlife species or their habitats would occur.

Migratory Bird Treaty Act

The project area was investigated for any structures containing migratory birds or indications of nesting migratory birds. No migratory birds were observed nesting during the site visit, though right-of-entry was restricted and individuals may arrive in the project area to breed during construction of the proposed project. Phasing of work and preventative measures would be employed to avoid the take of migratory birds, their occupied nests, eggs, or young, in accordance with the Migratory Bird Treaty Act (MBTA). Bird BMPs would be followed to minimize impacts on avian species. Bird BMPs include not disturbing, destroying, or removing active nests, including those of ground-nesting birds, during the nesting season; avoiding the removal of unoccupied, inactive nests, as practicable; preventing the establishment of active nests during the nesting season on TxDOT-owned and operated facilities and structures proposed for replacement or repair; and not collecting, capturing, relocating, or transporting birds, eggs, young, or active nests without a permit.

The No-Build Alternative would not require any removal or disturbance of migratory birds, their nests, or their young and there would be no impacts to migratory birds.

Bald and Golden Eagle Protection Act of 2007

Bald Eagles are known to winter in the vicinity of the project area at Lake Bob Sandlin located approximately 1.0 mile from the project area, however, there is no suitable nesting habitat within the project area. The project is not anticipated to impact Bald or Golden Eagles.

Under the No-Build Alternative, no impacts to Bald or Golden Eagles would occur.

Other Wildlife Regulations

The Fish and Wildlife Coordination Act, the Magnuson-Stevens Fishery Conservation Management Act, and the Marine Mammal Protection Act were considered but are not applicable to the proposed project.

With regard to encroachment-alteration effects under the Build Alternative, the effects of removing important wildlife habitat areas would not extend beyond the riparian vegetation, unmaintained vegetation, and five water features present within the project construction. Accordingly, impacts to habitat would be limited to the area of direct impacts and no encroachment impacts are expected. The limited direct impacts on wildlife habitat are not expected to affect the populations of any rare species in the area, and no indirect impacts to such species elsewhere are expected as a result of habitat removal. Furthermore, the existing habitats are already fragmented by the original construction of CR 2116, as well as construction of surrounding commercial and residential properties. Indirect

effects to vegetation and wildlife habitat as a result of the proposed improvements are anticipated to be minimal.

5.11.3 Threatened and Endangered Species

No suitable or critical habitat for any federally listed species occurs within the project area. The proposed project is within range with suitable habitat present for the state-listed threatened timber rattlesnake (*Crotalus horridus*) and the designated species of greatest conservation need (SGCN) plains spotted skunk (*Spilogale putorius interrupta*) (TPWD 2016b). Although the proposed project may result in the removal of potentially suitable habitat or the temporary disturbance of individuals of these species, the project is not anticipated to cause a substantial impact to any species. Any impact to individuals would be incidental in nature. The following BMPs would be implemented in an effort to avoid impacts to the state-listed and SGCN species:

- Plains spotted skunk BMPs: 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.
- Timber rattlesnake BMPs: Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.

Under the No-Build Alternative, no impacts to SGCNs or threatened or endangered species or their habitats would occur and, as a result, no coordination would be required with the U.S. Fish and Wildlife Service (USFWS) or Texas Parks and Wildlife Department (TPWD).

With regard to encroachment-alteration effects under the Build Alternative, other than potential impacts to the state-listed threatened timber rattlesnake and the SGCN plains spotted skunk, the proposed project would have no effect on any of the remaining listed species that may occur in Camp County, their habitats, or designated critical habitats. The proposed project would not alter the hydric regime or reduce diversity within the ecosystem.

5.12 Air Quality

A qualitative air quality analysis, as summarized in the *Air Quality Technical Report, State Loop 255* (TxDOT 2016b), was conducted for the proposed project and subsequently reviewed and accepted in October, 2016 in accordance with TxDOT's *Standard Operating Procedures for Preparing Air Quality Statements* (TxDOT 2015c) and *Environmental Handbook – Air Quality* (TxDOT 2016c). The analysis evaluated the project alternatives in relation to: (1) transportation conformity including, potentially, a hot-spot analysis; (2) carbon monoxide (CO) traffic air quality analysis (TAQA); (3) mobile source air toxics (MSAT); (4) Congestion Management Process; and (5) construction air emissions. The qualitative air quality analysis will be made available to local officials and is located in TxDOT's Environmental Compliance Oversight System.

The project is located in Camp County, which is in an area in attainment or unclassifiable for all National Ambient Air Quality Standards (NAAQS); therefore, the transportation conformity rules do not apply to either the Build or No-Build Alternative, and a project level hot-spot analysis was not required.

Since the traffic projections for the project do not exceed 140,000 vehicles per day (vpd) for the design year, a TAQA was not required. The proposed project is within an attainment or unclassifiable area for ozone and CO; therefore, a project level Congestion Management Process analysis was not required. Further, it is not anticipated that emissions from construction of this project would have any significant impact on air quality in the area.

Moreover, Environmental Protection Agency (EPA) regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES2014 model forecasts a combined reduction of over 90 percent in the total annual emissions rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 45 percent (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm). This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

Under the No-Build Alternative, property adjacent to the project area would not be exposed to potentially higher MSAT emissions; however, exposure to increased MSAT emissions could occur on other area roadways. Because concentrations and durations of exposures are uncertain, the health effects from these emissions cannot be estimated.

5.13 Hazardous Materials

In October 2016, a Hazardous Materials Initial Site Assessment (ISA) was completed for the proposed project to identify known and possibly unknown hazardous material contamination within the proposed project limits (TxDOT 2016d). Right-of-entry was not obtained from the various property owners prior to completion of the ISA. Therefore, the site survey was limited to areas publicly accessible from the existing county roads.

The ISA identified 16 hazardous material sites of concern; however, with further research, none of these sites appear likely to impact the proposed project and further investigation was not recommended. Of particular note, one water well, labeled 74827 (**Figure 4** in **Appendix F**), was identified within the proposed SL 255 ROW. In accordance with TxDOT's *Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges (Item 103, Disposal of Wells)* (TxDOT 2014), this water well would need to be properly removed, sealed, and plugged during construction of the proposed project, as discussed in **Section 5.10.14**.

The proposed project would result in the demolition of two structures within the proposed ROW. In accordance with the Texas Asbestos Health Protection Rules (25 Texas Administrative Code [TAC] 295.61), any structures that would be demolished under the proposed project would be surveyed for asbestos-containing material (ACM) and lead-containing paint (LCP) prior to demolition.

Under the No-Build Alternative, no impacts to pipelines or disturbance to any potentially contaminated sites would occur. The No-Build Alternative would not require any actions with regard to hazardous materials.

5.14 Traffic Noise

A traffic noise analysis, *Traffic Noise Analysis, State Loop 255* (TxDOT 2016e) was conducted for the proposed project in accordance with TxDOT's FHWA-approved *Guidelines for Analysis and Abatement of Roadway Traffic Noise* (TxDOT 2011). Existing and predicted traffic noise levels were modeled at receiver locations (**Table 2** and **Figure 6** in **Appendix F**) that represent the land use activity areas adjacent to the proposed project that might be impacted by traffic noise and potentially benefit from feasible and reasonable noise abatement. The traffic noise analysis will be made available to local officials and is located in TxDOT's Environmental Compliance Oversight System.

This analysis indicates that the proposed project would not result in a traffic noise impact. Therefore, consideration of noise abatement measures was not necessary. 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. On the date of approval of this document (Date of Public Knowledge), FHWA and TxDOT are no longer responsible for providing noise abatement for new development adjacent to the project.

Table 2: Traffic Noise Levels dB(A) Leq

Representative Receiver	NAC Category	NAC Level	Existing	Predicted 2039	Change (+/-)	Noise Impact
R-001 Residential	B	67	47	54	7	No
R-002 Residential	B	67	49	57	8	No
R-003 Residential	B	67	46	56	10	No
R-004 Residential	B	67	46	56	10	No
R-005 Church	D	52	16	26	10	No
R-006 Residential	B	67	43	51	8	No

Source: *Traffic Noise Analysis, State Loop 255*, (TxDOT 2016e).

The No-Build Alternative may maintain existing noise levels or noise levels may change as traffic volumes increase with time.

5.15 Induced Growth

An *Indirect and Cumulative Impacts Technical Report* (TxDOT 2016f) was prepared for the proposed project in accordance with TxDOT's *Indirect Impacts Analysis Guidance* (TxDOT 2016g) and *Cumulative Impacts Analysis Guidelines* (TxDOT 2016h).

The Build Alternative would provide a more efficient connection for the traveling public and those who live and recreate in the area south of Lake Bob Sandlin and east to US 271. However, these transportation improvements would not result in changes considered substantial enough to cause shifts in current development rates and patterns within the induced growth area of influence (AOI). See **Figure 7** in **Appendix F** for illustration of the AOI boundary and land uses within the AOI. Considering the nature of the proposed improvements, coupled with the absence in demand for land use changes along the existing portion of the proposed SL 255 corridor or within the AOI, the proposed improvements would not result in induced growth or related effects. This approximately 2.45-mile-long stretch of SL 255 would be expected to continue to function mainly as a primary east-west transportation corridor connecting rural communities in northern Camp County. No induced growth would be anticipated; therefore, no impacts related to induced growth would be expected to occur, and no mitigation is proposed.

Under the No-Build Alternative, current development rates and patterns would remain constant and no induced growth would occur.

5.16 Cumulative Impacts

An *Indirect and Cumulative Impacts Technical Report* (TxDOT 2016d) was prepared for the proposed project in accordance with TxDOT's *Indirect Impacts Analysis Guidance* (TxDOT 2016e) and *Cumulative Impacts Analysis Guidelines* (TxDOT 2016f).

The responses to questions provided in the TxDOT cumulative impacts risk assessment revealed that no substantial direct or indirect impacts are anticipated based on findings from recent evaluations provided in technical reports that were prepared for the current environmental assessment. No potential induced development is anticipated to occur in the induced growth AOI.

While the project area contains potentially suitable habitat for the state-threatened timber rattlesnake and the SGCN plains spotted skunk, BMPs would be implemented in an effort to avoid impacts to these species. No individuals of these species were observed during site visits. Any impact to individuals would be incidental in nature. Thus, no substantial impact to this resource is anticipated. Although the proposed project may result in the removal of potentially suitable habitat or the temporary disturbance of individuals of these species, the project is not anticipated to cause a substantial impact to any species or rare habitat communities. The magnitude of direct impacts to these species' habitat represents a small portion of available habitat when compared to the geographic extent of the range of these species. Per the 2013 TxDOT-TPWD Memorandum of Agreement, BMPs would be implemented for both species. In summary, this project is not expected to have a substantial impact on any state-listed threatened species or SGCNs.

The construction of the proposed project is anticipated to impact approximately 18.13 acres of disturbed prairie vegetation, 22.53 acres of mixed forest and woodland, 7.89 acres of riparian vegetation, and 0.62 acre of row crops. These habitat types are not considered rare or important remnant vegetation as mapped by the Texas Conservation Action Plan. These vegetation types are not considered in poor or declining health due to the presence of adjacent undeveloped tracts of land and due to the proximity of similar habitats near Lake Bob Sandlin.

The proposed project would not result in significant incremental loss of additional suitable habitat through direct or indirect impacts for the abovementioned species and is not expected to cause significant degradation to a resource in poor or declining health. Therefore, neither protected species nor remnant vegetation were carried forward for cumulative impacts analysis.

Based on the results of the TxDOT cumulative impacts risk assessment, supported by the information presented in the technical reports prepared for the proposed project, further Cumulative Impacts Analysis is not required.

Under the No-Build Alternative, no cumulative impacts would be anticipated.

5.17 Construction Phase Impacts

Although temporary congestion may occur as a result of project construction, access to parcels in the project vicinity would be maintained during all phases of construction. All practicable steps would be taken to minimize the inconvenience to drivers using the intersecting roadways during the construction phase. People living and working in the immediate area of the proposed project may experience an increase in noise and dust due to the construction activities. Temporary detours would also be required in the project area to assist with diverting traffic through surrounding areas while certain areas are under construction. See **Section 5.12** for the discussion of construction-related air emissions. The following construction phase BMPs would be utilized:

- Vegetation BMPs
    - Minimize the amount of vegetation cleared. Removal of native vegetation, particularly mature native trees and shrubs, should be avoided to the greatest extent practicable.
    - The use of any non-native vegetation in landscaping and revegetation is discouraged. Locally adapted native species should be used.
- Water Quality BMPs
    - Once construction is complete and disturbed areas have been revegetated, remove silt fence and accumulated sediment to reduce wildlife barriers and hazards.

Under the No-Build Alternative, construction activities would not occur and temporary increases in traffic congestion, air pollution, and MSAT emissions would not occur.

6.0 Agency Coordination

TxDOT coordinated with the Comanche Tribe and the Thlopthlocco Tribal Town in January and February of 2007 regarding cultural and archeological resources. TxDOT also completed coordination with TPWD in September of 2015 and TCEQ in February 2017 (see **Appendix G**). Coordination with USACE, if required, would involve submittal of a PCN in support of a NWP #14.

7.0 Public Involvement

A public meeting was held on February 9, 2006, at the Pittsburg Elementary School Cafetorium. A formal presentation of the proposed project was made and public input was invited regarding the need for the project and suggested alternatives for the project. Comments received as a result of the public meeting concerned front slope ration, traffic handling during construction, and construction timing (TxDOT 2006).

A second public meeting was held on June 23, 2015, at the Region 8 Education Service Center located at 4845 US Highway 271 North. Five of the six written comments received at the meeting support the project. The sixth commenter asked if there would be traffic control or a red light at an intersection (the comment did not specify which intersection). TxDOT also received requests from two property owners for exhibits showing the proposed roadway in reference to their property (TxDOT 2015d).

The Public Meeting Documentation may be inspected and copied upon request at the TxDOT Atlanta District Office and is also located in TxDOT's Environmental Compliance Oversight System.

A public hearing was held on April 27, 2017, at the Region 8 Education Service Center. The hearing began with an open house providing exhibits and environmental documentation and concluded with a formal hearing presentation. Two comments were received, one written and one verbal, both in support of the project (TxDOT 2017b).

The Public Hearing Documentation may be inspected and copied upon request at the TxDOT Atlanta District Office and is also located in TxDOT's Environmental Compliance Oversight System.

Because the project involves construction of a highway on new location, a notice of impending construction will be provided to owners of adjoining property and affected local governments and public officials. The notice may be provided via a sign or signs posted in the ROW, mailed notice, printed notice distributed by hand, or notice via website when the recipient has previously been informed of the relevant website address. This notice must be provided after the environmental decision (i.e., FONSI or recommendation to prepare an EIS), but before earthmoving or other activities requiring the use of heavy equipment begin.

8.0 Environmental Permits, Issues and Commitments

All project-specific commitments and conditions of approval, including resource agency permitting compliance and monitoring requirements, would be incorporated in the project plan for the proposed

project. These commitments and conditions of approval may vary depending on the project's final design and construction. Mitigation monitoring would be conducted by TxDOT and other federal, state, and local agencies to ensure compliance.

This section lists the elements that constitute the Environmental Permits, Issues, and Commitments (EPIC) sheet. The permits, impacts and commitments relevant to the proposed project are as follows:

1. NWP #14
2. TPDES, includes:
    a. Construction General Permit (CGP)
    b. SW3P
    c. Site Notice
    d. NOI
    e. Implementation of erosion control, sedimentation control, and post-construction TSS control BMPs for the TCEQ's 401 Water Quality Certification Conditions for NWPs to prevent water quality impacts from occurring during and after construction
3. Implementation of BMPs for state-listed species and SGCNs (including the timber rattlesnake and the plains spotted skunk)
4. EO 13112 on Invasive Species
5. Executive Memorandum on Beneficial Landscaping
6. MBTA
7. In the event that unanticipated archeological deposits are encountered during construction, work in the immediate area will cease, and TxDOT archeological staff will be contacted to initiate post-review discovery procedures
8. Any unanticipated hazardous materials and/or petroleum contamination encountered during construction would be handled according to applicable federal and state regulations per TxDOT Standard Specifications
9. Implementation of fugitive dust control measures
10. The traffic noise analysis and qualitative air quality analysis will be made available to local officials
11. After access to the proposed ROW is granted or the property is purchased, TxDOT shall oversee completion of archeological investigations.

9.0 Conclusion

The engineering, social, economic, and environmental investigations conducted thus far indicate that implementation of the proposed project would result in no significant impacts on the human or natural environment. A Finding of No Significant Impact is recommended.

References

Budd, John. 2012. Internal review under the First Amended Programmatic Agreement among the Federal Highway Administration, TxDOT, the Texas State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Implementation of Transportation Undertakings (PA-TU), as well as the MOU between the THC and TxDOT. February 21, 2012.

Council on Environmental Quality (CEQ). 2016. "Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews." August 1, 2016.

Missouri Resource Assessment Partnership (MoRAP). 2013. "MoRAP Project: Texas Ecological Systems Classification" http://morap.missouri.edu/Projects.aspx?ProjectId=57, also known as Ecological Mapping Systems of Texas (EMST), prepared for Texas Parks and Wildlife Department. 2010. Accessed December 19, 2016.

Natural Resources Conservation Service (NRCS). 2016. Web Soil Survey - Camp County. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed November 29, 2016.

Texas Commission on Environmental Quality (TCEQ). 2014. 2014 Texas Integrated Report – Texas 303(d) List (Category 5). http://www.tceq.texas.gov/assets/public/waterquality/swqm/assess/12twqi/2012_303d.pdf. Accessed November 29, 2016.

Texas Department of Transportation (TxDOT). 2006. *Public Involvement Summary: FM 3535 from FM 1520 to US Highway 271, Camp County, Texas, CSJ: 3403-01-001*. Prepared for the TxDOT Environmental Affairs Division. Prepared by TxDOT Atlanta Disctrict. August 2006.

_____. 2007. *Wetlands and Waters of the U.S. Determination Report for FM 3535, Camp County, Texas, CSJ: 3403-01-001*. Prepared for the TxDOT Environmental Affairs Division. June 2007.

_____. 2008. *Historic Resources Studies: FM 3535: From FM 1520 to US Highway 271, Vicinity of Pittsburg, Camp County, Texas, CSJ: 3403-01-001*. Prepared for the TxDOT Environmental Affairs Division. Prepared by Prewitt Associates, Inc. March 2008.

_____. 2011. *Guidelines for Analysis and Abatement of Roadway Traffic Noise*. TxDOT Environmental Affairs Division. Release Date: 3/2011, 730.02.GUI, Version 1.

_____. 2014. *Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges*. TxDOT, November 1, 2014.

_____. 2015a. "Community Impacts, Environmental Justice, Limited English Proficiency, and Title VI Compliance." http://ftp.dot.state.tx.us/pub/txdot-info/env/toolkit/710-01-gui.pdf. September 6, 2016.

_____. 2015b. *Biological Evaluation Form: FM 3535: From FM 1520 to US Highway 271, Camp County, Texas, CSJ: 3403-01-001*. Prepared for the TxDOT Environmental Affairs Division. Prepared by TxDOT Atlanta District. June 2015.

_____. 2015c. *Standard Operating Procedures for Preparing Air Quality Statements*. TxDOT Environmental Affairs Division. Release Date: 7/2015, 200.01.SOP, Version 1.

_____. 2015d. *Public Involvement Summary: FM 3535 from FM 1520 to US Highway 271, Camp County, Texas, CSJ: 3403-01-001*. Prepared for the TxDOT Environmental Affairs Division. Prepared by TxDOT Atlanta Disctrict. 2015.

_____. 2016a. *Community Impact Assessment Technical Report: State Loop (SL) 255: From US Highway (US) 271 to Farm-to-Market Road (FM) 1520, Camp County, Texas, CSJ: 3403-01-001*. Prepared for the TxDOT Environmental Affairs Division. Prepared by CMEC. December 2016.

_____. 2016b. *Air Quality Technical Report: State Loop (SL) 255: From US Highway (US) 271 to Farm-to-Market Road (FM) 1520, Camp County, Texas, CSJ: 3403-01-001*. Prepared for TxDOT Environmental Affairs Division. Prepared by Poznecki-Camarillo, Inc. October 2016.

_____. 2016c. *Environmental Handbook – Air Quality*. TxDOT Environmental Affairs Division, Effective Date: 01/2016, 210.01.GUI, Version 3.

_____. 2016d. *Hazardous Materials Initial Site Assessment*: *State Loop (SL) 255: From US Highway (US) 271 to Farm-to-Market Road (FM) 1520, Camp County, Texas, CSJ: 3403-01-001*. Prepared for TxDOT Environmental Affairs Division. Prepared by Poznecki-Camarillo, Inc. November 2016.

_____. 2016e. *Traffic Noise Analysis, State Loop (SL) 255: From US Highway (US) 271 to Farm-to-Market Road (FM) 1520, Camp County, Texas, CSJ: 3403-01-001*. Prepared for TxDOT Environmental Affairs Division. Prepared by Poznecki-Camarillo, Inc. December 2016.

_____. 2016f. *Indirect and Cumulative Impacts Technical Report: State Loop (SL) 255: From US Highway (US) 271 to Farm-to-Market Road (FM) 1520, Camp County, Texas, CSJ: 3403-01-001*. Prepared for the TxDOT Environmental Affairs Division. Prepared by CMEC. December 2016.

_____. 2016g. "Indirect Impacts Analysis Guidance." http://ftp.dot.state.tx.us/pub/txdot-info/env/toolkit/720-02-gui.pdf. Accessed October 25, 2016.

_____. 2016h. "Cumulative Impacts Analysis Guidelines." http://ftp.dot.state.tx.us/pub/txdot-info/env/toolkit/720-03-gui.pdf. Accessed October 25, 2016.

_____. 2017a. State-wide Transportation Improvement Program. Atlanta District. https://www.dot.state.tx.us/apps/estip/index.aspx. Release Date: January 4, 2017.

_____. 2017b. *Public Hearing Documentation: State Loop (SL) 255: From US Highway (US) 271 to Farm-to-Market Road (FM) 1520, Camp County, Texas, CSJ: 3403-01-001*. Prepared for the TxDOT Environmental Affairs Division. Prepared by CMEC. June 2017.

Texas Historical Commission (THC). 2016. *Texas Archeological Sites Atlas Data Sets*. Texas Historical Commission and the Texas Archeological Research Laboratory. Available at http://nueces.thc.state.tx.us. Accessed December 14, 2016.

Texas Parks and Wildlife Department (TPWD). 2001. Birds of the Pineywoods of Eastern Texas. https://tpwd.texas.gov/publications/pwdpubs/media/pwd_bk_w7000_0603.pdf.

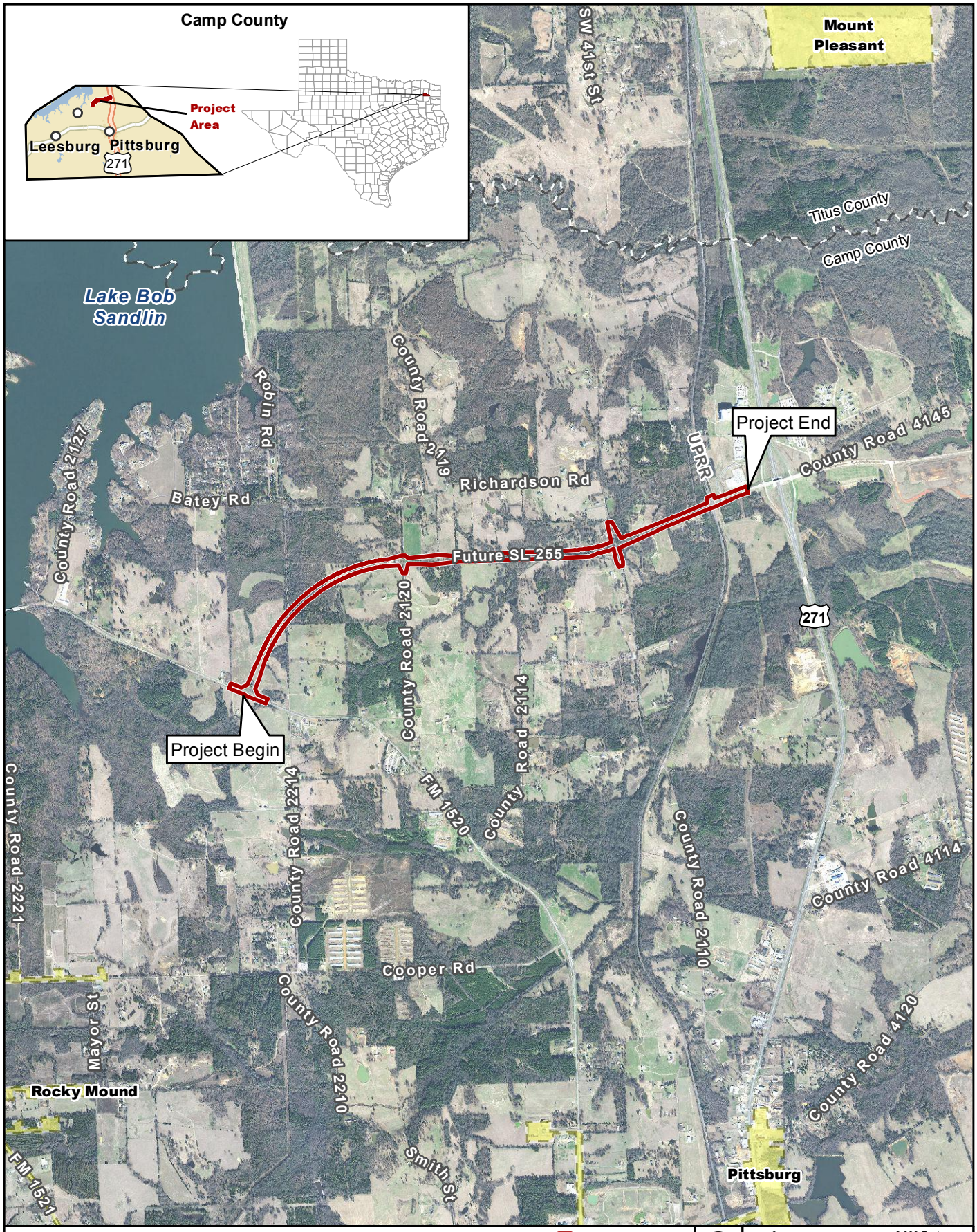
_____. 2016a. Pineywoods. http://tpwd.texas.gov/kids/about_texas/regions/pineywoods/big_kids/. Accessed December 16, 2016.

_____. 2016b. "Annotated County Lists of Rare Species: Camp County" (last revisions July 25, 2016). http://tpwd.texas.gov/gis/rtest/. Accessed December 19, 2016.

Texas Water Development Board (TWDB). 2016. Groundwater Data Viewer. Accessed December 14, 2016.

U.S. Department of Transportation. 2014. *Transportation Climate Change Sensitivity Matrix*. Developed by ICF International for the U.S. Department of Transportation. June 2014. https://toolkit.climate.gov/tool/transportation-climate-change-sensitivity-matrix.. Accessed December 19, 2016.

Appendix A—Project Location Map



Project Location

(Aerial Base)

SL 255 from FM 1520 to US 271

Project Location
City Boundary

Aerial Source: TNRIS (2015)

0 3,000 Feet
0 800 Meters

Prepared for: TxDOT	1 in = 3,000 feet
	Scale: 1:36,000
CSJ: 3403-01-001	Date: 2/9/2017

G:\Projects\TXDOT\SL255\Appendix A_Project Location_Aerial_20170209.mxd

Appendix B—Project Photos

Photo 1: Eastern terminus of proposed SL 255 (existing CR 2116) and US 271; facing west.

Photo 2: Alignment of proposed SL 255 at the intersection of CR 2116 and CR 2110; facing west.

Photo 3: Proposed new location alignment of SL 255; facing east.

Photo 4: Western terminus of proposed SL 255 at FM 1520; facing northeast.

Photo 5: Substation at the northwest corner of US 271 and CR 2116; facing northeast.

Photo 6: View of Region 8 Education Center located northeast of the proposed project's eastern terminus; facing east.

Photo 7: View of Pilgrim's Pride Food Distribution Center located north of the proposed project's eastern terminus; facing west.

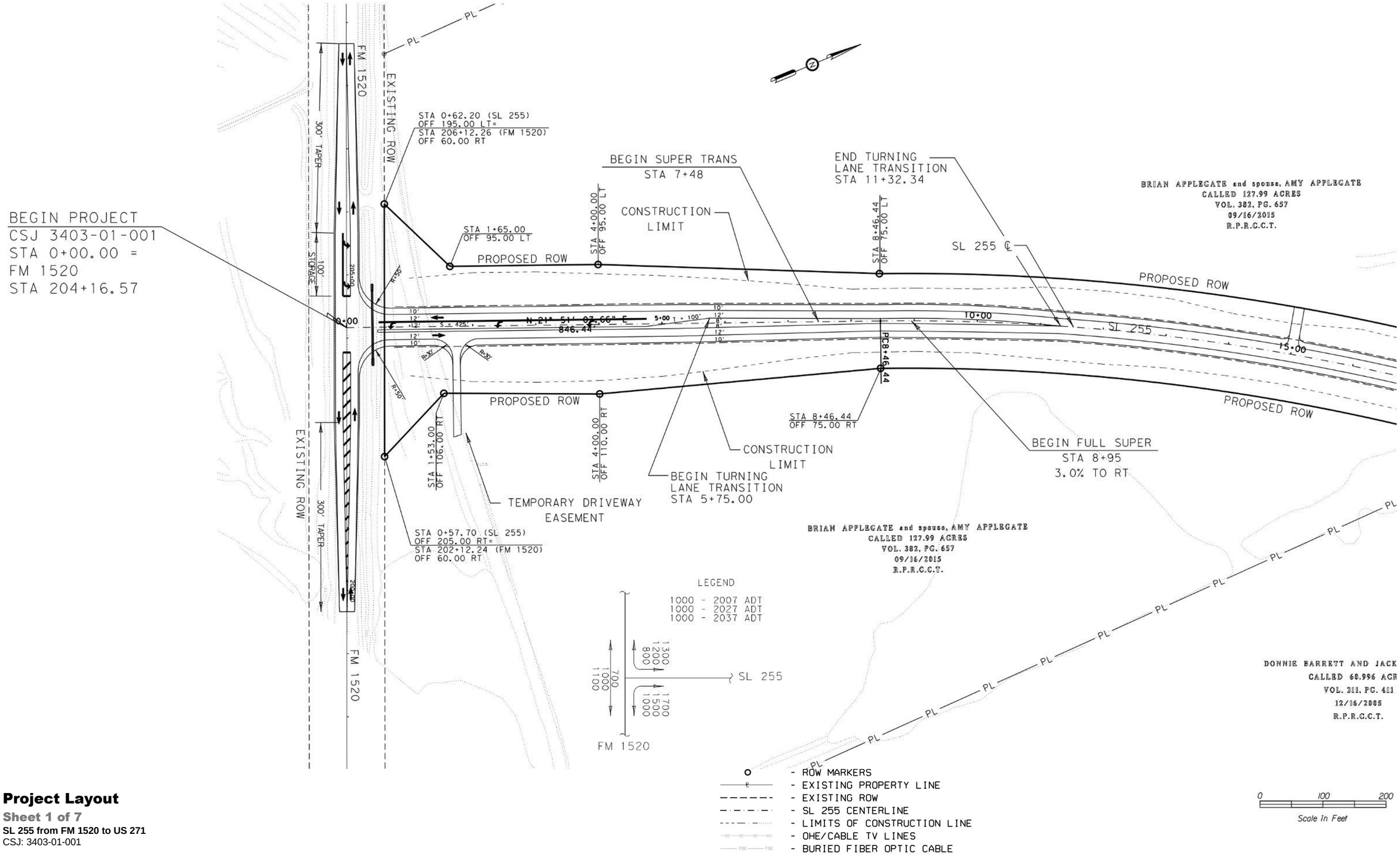
Photo 8: Potential residential displacement (Displacement 1) along CR 2116 at CR 2117 intersection; facing north.

Photo 9: Potential displaced metal building (Displacement 2) located along new location portion of SL 255; facing west.

Photo 10: View of North Chapel C.M.E. Church along CR 2116 (proposed SL 255); facing south.

Photo 11: View of Macedonia Baptist Church located at the corner of CR 2114 and CR 2110. Facing southwest.

Appendix C—Schematics



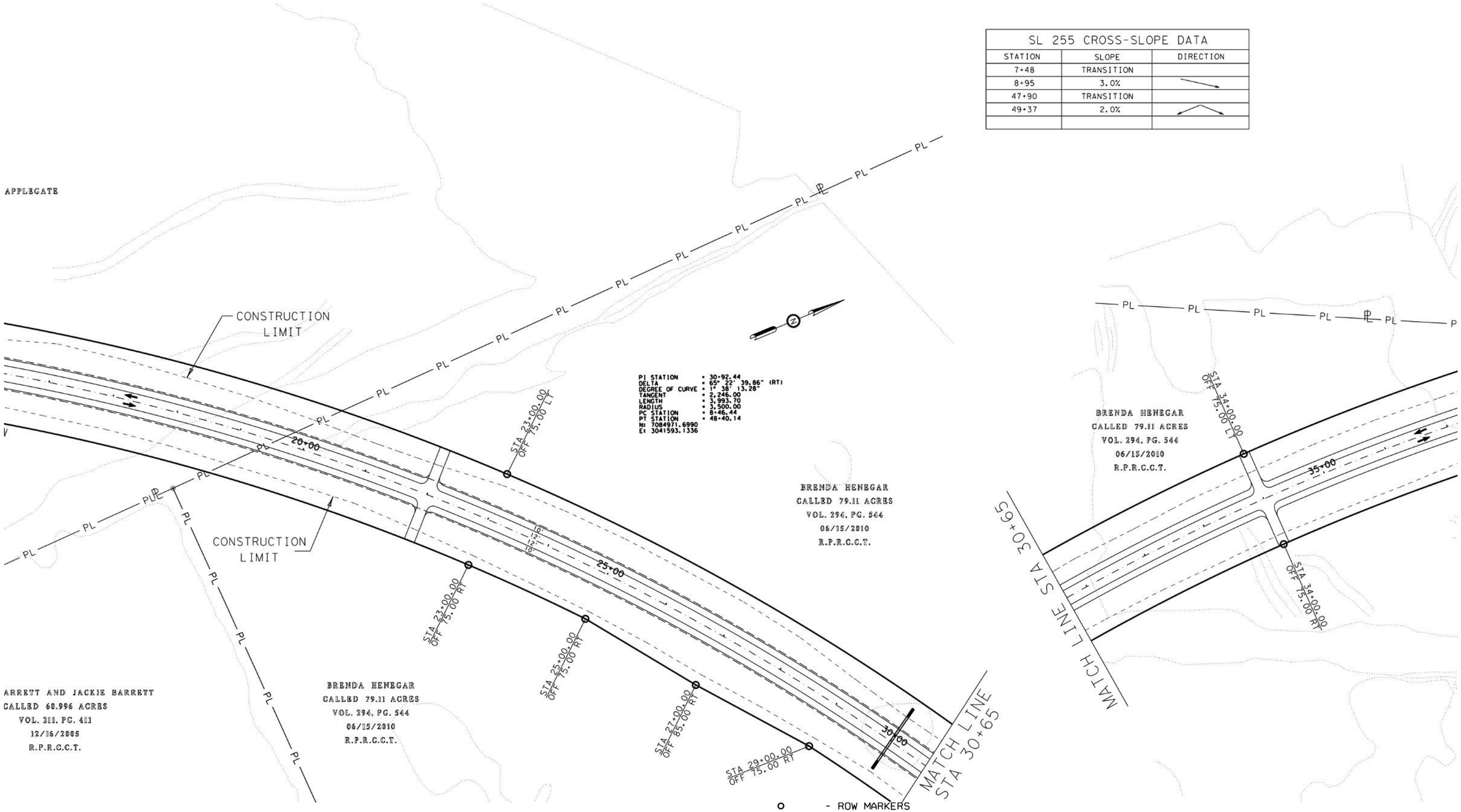
Project Layout

Sheet 1 of 7

SL 255 from FM 1520 to US 271

CSJ: 3403-01-001

SL 255 CROSS-SLOPE DATA		
STATION	SLOPE	DIRECTION
7+48	TRANSITION	
8+95	3.0%	
47+90	TRANSITION	
49+37	2.0%	

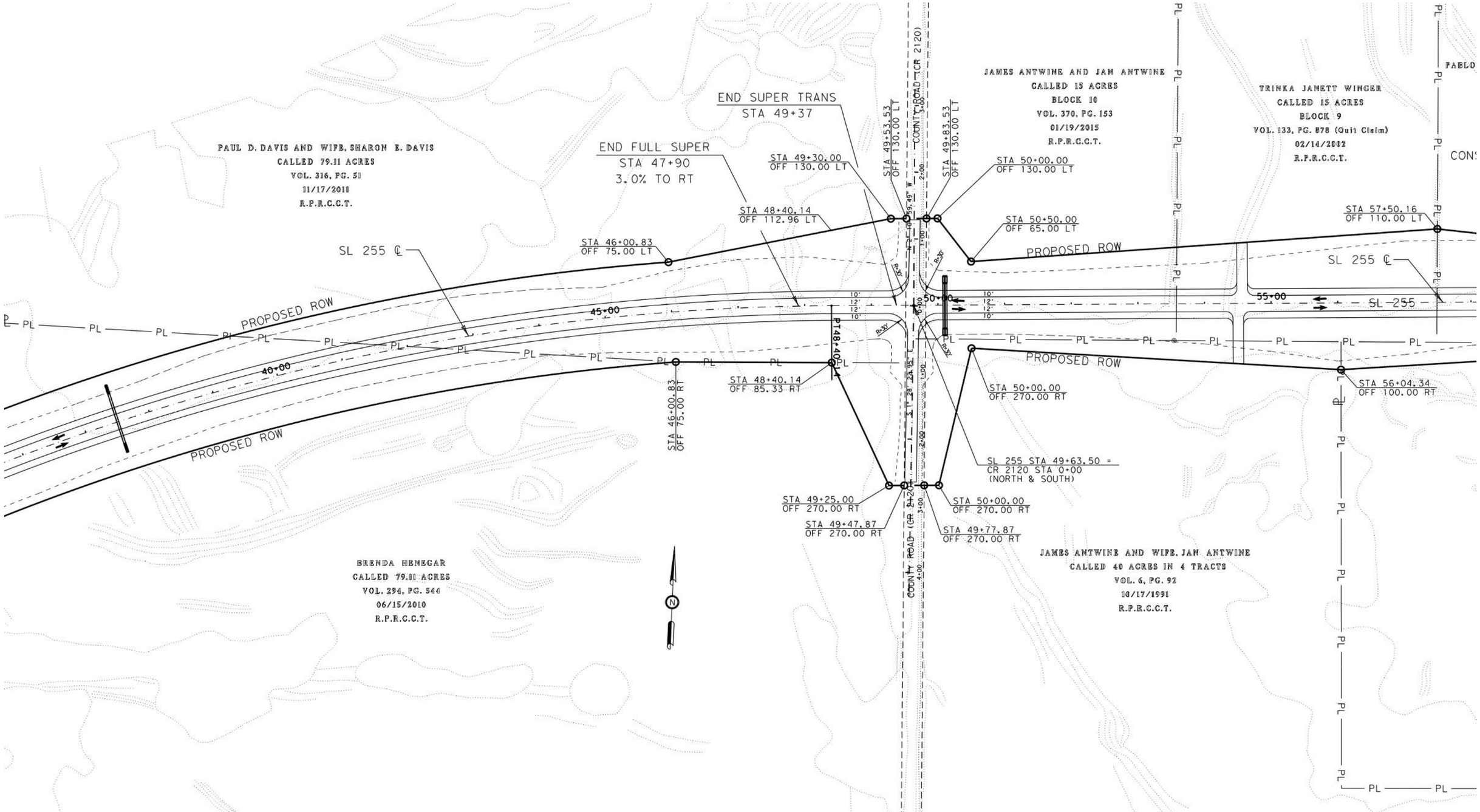


Project Layout

Sheet 2 of 7

SL 255 from FM 1520 to US 271

CSJ: 3403-01-001



- ROW MARKERS
- EXISTING PROPERTY LINE
- EXISTING ROW
- SL 255 CENTERLINE
- LIMITS OF CONSTRUCTION LINE
- OHE/CABLE TV LINES
- BURIED FIBER OPTIC CABLE

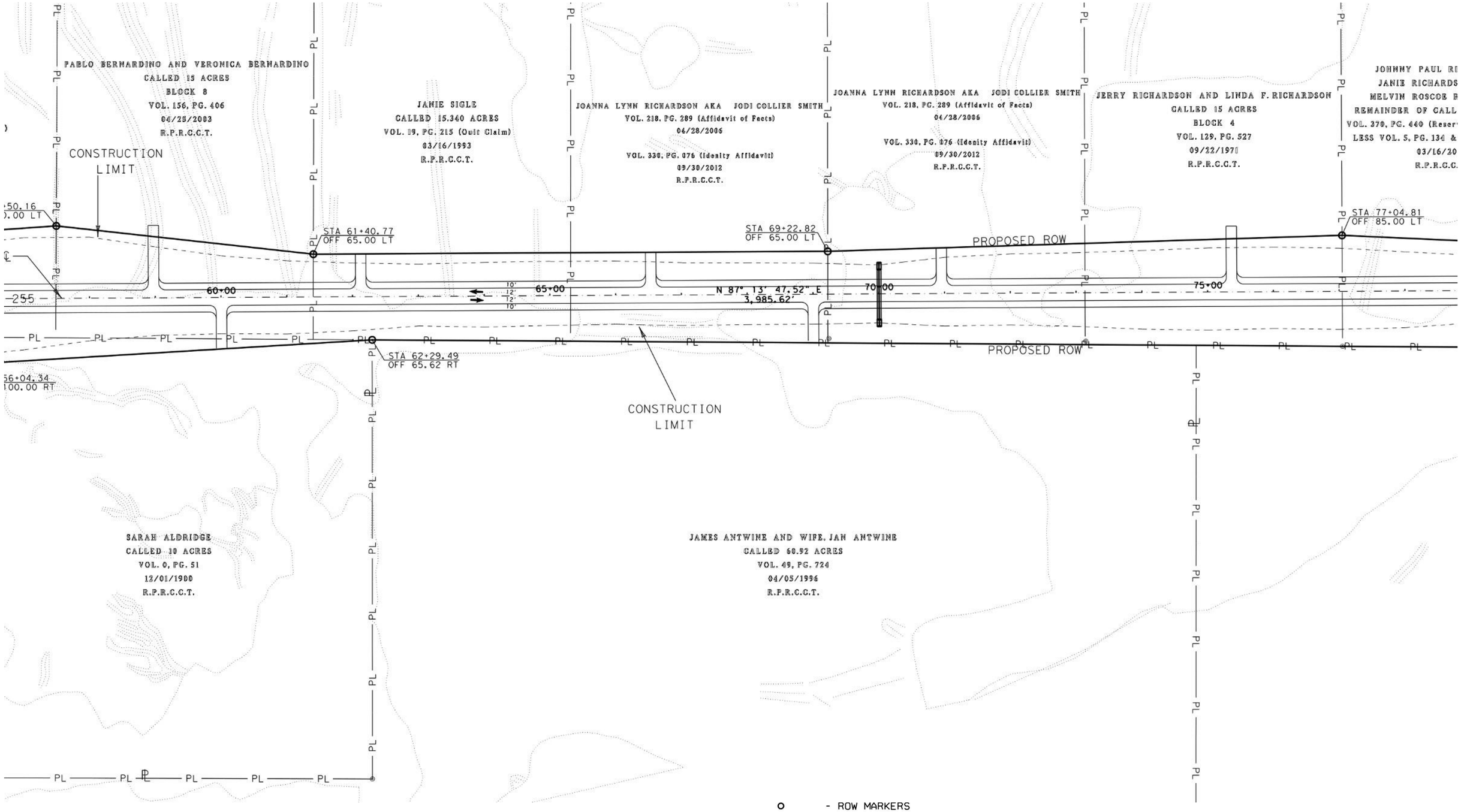
0 100 200
Scale In Feet

Project Layout

Sheet 3 of 7

SL 255 from FM 1520 to US 271

CSJ: 3403-01-001



- ROW MARKERS
- EXISTING PROPERTY LINE
- EXISTING ROW
- SL 255 CENTERLINE
- LIMITS OF CONSTRUCTION LINE
- OHE/CABLE TV LINES
- BURIED FIBER OPTIC CABLE

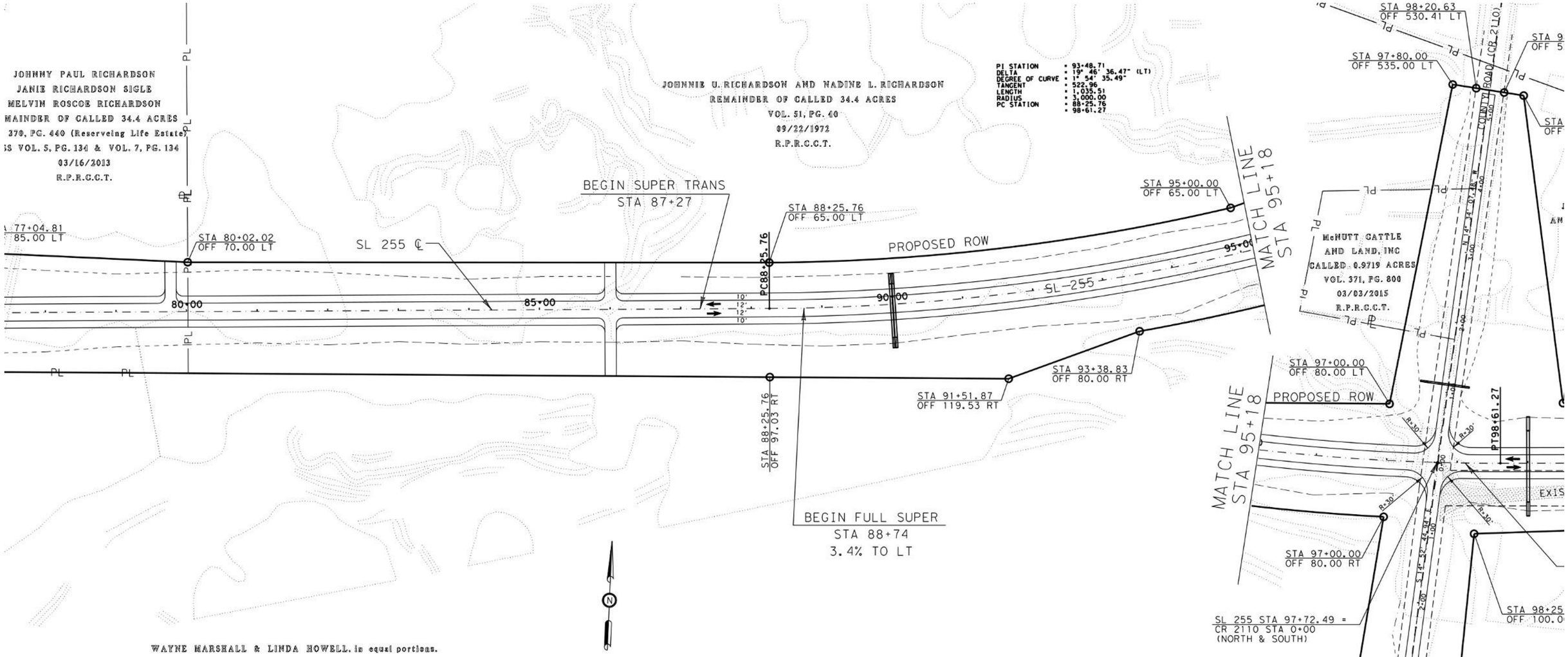
0 100 200
Scale in Feet

Project Layout

Sheet 4 of 7

SL 255 from FM 1520 to US 271

CSJ: 3403-01-001



SL 255 CROSS-SLOPE DATA		
STATION	SLOPE	DIRECTION
87+27	TRANSITION	
88+74	3.4%	↙
98+12	TRANSITION	
99+59	2.0%	↙↗

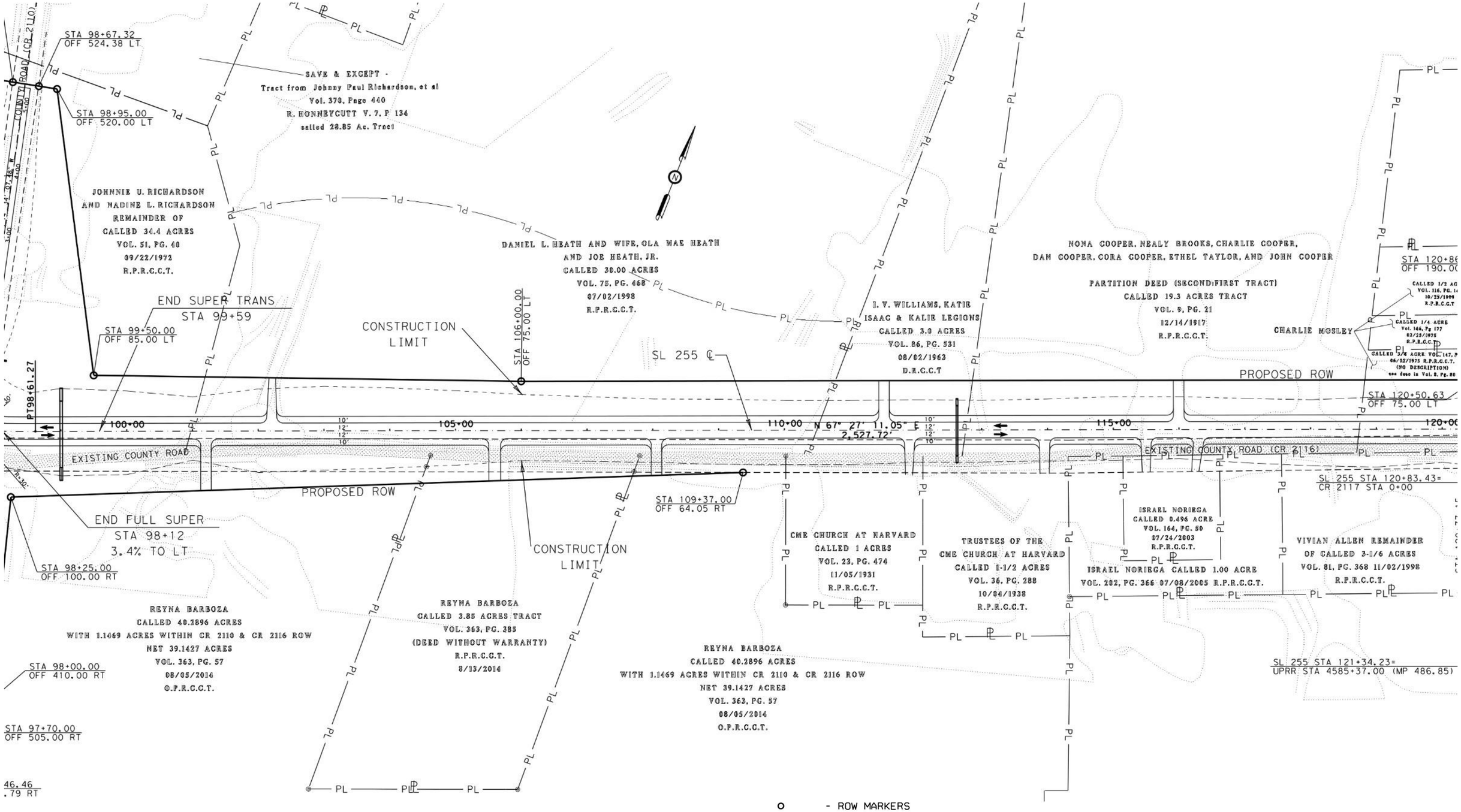
- ROW MARKERS
- EXISTING PROPERTY LINE
- EXISTING ROW
- SL 255 CENTERLINE
- LIMITS OF CONSTRUCTION LINE
- OHE/CABLE TV LINES
- BURIED FIBER OPTIC CABLE

Project Layout

Sheet 5 of 7

SL 255 from FM 1520 to US 271

CSJ: 3403-01-001



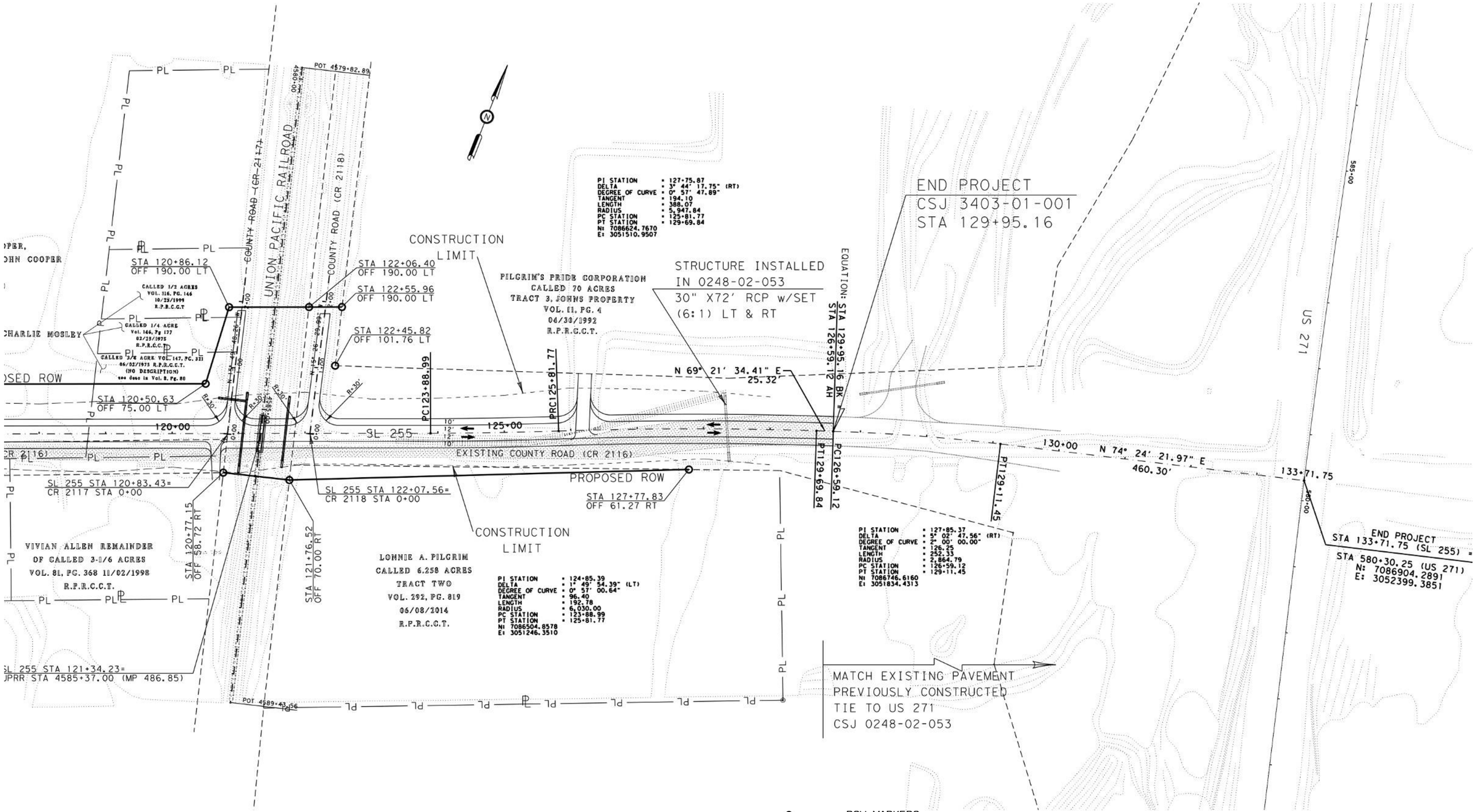
- ROW MARKERS
- EXISTING PROPERTY LINE
- EXISTING ROW
- SL 255 CENTERLINE
- LIMITS OF CONSTRUCTION LINE
- OHE/CABLE TV LINES
- BURIED FIBER OPTIC CABLE

Project Layout

Sheet 6 of 7

SL 255 from FM 1520 to US 271

CSJ: 3403-01-001



- ROW MARKERS
- EXISTING PROPERTY LINE
- EXISTING ROW
- SL 255 CENTERLINE
- LIMITS OF CONSTRUCTION LINE
- OHE/CABLE TV LINES
- BURIED FIBER OPTIC CABLE

0 100 200
Scale In Feet

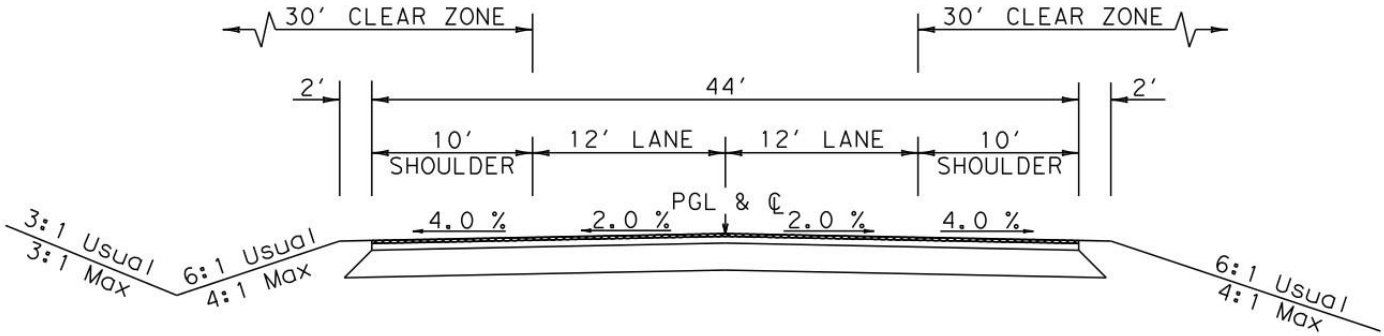
Project Layout

Sheet 7 of 7

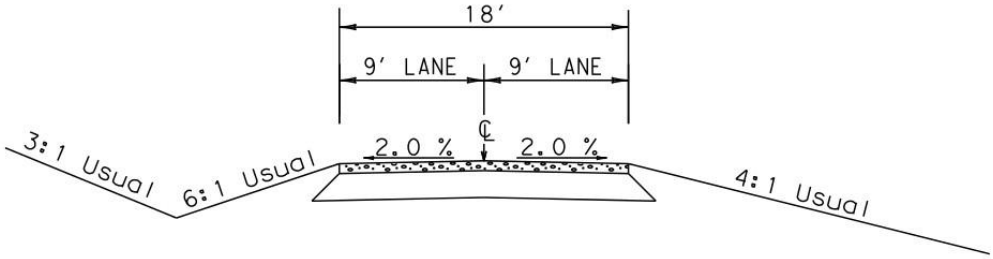
SL 255 from FM 1520 to US 271

CSJ: 3403-01-001

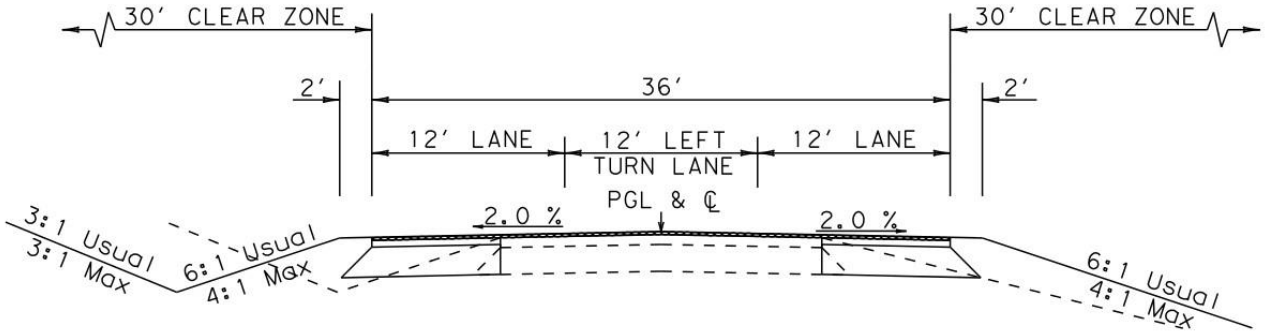
Appendix D—Typical Sections



SL 255
PROPOSED SECTION
STA 0+00 TO STA 129+95.16



CR 2116
EXISTING SECTION
STA 97+60 TO STA 129+74.07



FM 1520
PROPOSED SECTION
STA 202+66 TO STA 205+66

Typical Section
SL 255 from FM 1520 to US 271
CSJ: 3403-01-001

Appendix E—Plan and Program Excerpts

2017-2020 STIP — **07/2016 Revision: Approved 12/19/2016**

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST
ATLANTA		CAMP	3403-01-001	SL 255	C	OTHER	$ 5,119,386

LIMITS FROM US 271
LIMITS TO FM 1520
PROJECT SPONSOR
REVISION DATE 07/2016
PROJECT DESCR CONSTRUCT 2-LANE ROADWAY ON NEW LOCATION
MPO PROJ NUM
FUNDING CAT(S)
REMARKS P7 DESIGNATION CHANGED MO#114460, 12/15 FROM FM 3535 T O SL 255
PROJECT HISTORY APPENDIX D

TOTAL PROJECT COST INFORMATION

PREL ENG	$ 250,850		
ROW PURCH	$ 35,000	**COST OF**	
CONSTR	$ 5,119,386	**APPROVED**	
CONST ENG	$ 250,850	**PHASES**	
CONTING	$ 63,992	$ 5,119,386	
INDIRECT	$ 0		
BOND FIN	$ 0		
PT CHG ORD	$ 279,519		
TOTAL CST	$ 5,720,078		

AUTHORIZED FUNDING BY CATEGORY/SHARE

CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
11	$ 4,095,509	$ 1,023,877	$ 0	$ 0	$ 0	$ 5,119,386
TOTAL	$ 4,095,509	$ 1,023,877	$ 0	$ 0	$ 0	$ 5,119,386

2017-2020 STIP — **07/2016 Revision: Approved 12/19/2016**

DISTRICT	MPO	COUNTY	CSJ	HWY	PHASE	CITY	YOE COST
ATLANTA		UPSHUR	0520-05-040	SH 155	C	OTHER	$ 4,973,191

LIMITS FROM 0.3 MI E OF US 259
LIMITS TO GLENDIA DRIVE
PROJECT SPONSOR TXDOT
REVISION DATE 07/2016
PROJECT DESCR RECONSTRUCT TO 4 LANE DIVIDED SECTION
MPO PROJ NUM
FUNDING CAT(S)
REMARKS P7
PROJECT HISTORY

TOTAL PROJECT COST INFORMATION

PREL ENG	$ 243,686		
ROW PURCH	$ 0	**COST OF**	
CONSTR	$ 4,973,191	**APPROVED**	
CONST ENG	$ 246,670	**PHASES**	
CONTING	$ 98,967	$ 4,973,191	
INDIRECT	$ 0		
BOND FIN	$ 0		
PT CHG ORD	$ 185,998		
TOTAL CST	$ 5,562,514		

AUTHORIZED FUNDING BY CATEGORY/SHARE

CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
11	$ 3,978,553	$ 994,638	$ 0	$ 0	$ 0	$ 4,973,191
TOTAL	$ 3,978,553	$ 994,638	$ 0	$ 0	$ 0	$ 4,973,191

Appendix F—Resource-Specific Maps

Figure 1- Land Use, Community Facilities, and Potential Displacements

Figure 2- Project Area Soils

Figure 3- Census Geographies

Figure 4- Water Resources

Figure 5- EMST Vegetation Types

Figure 6- Noise Analysis Results

Figure 7- Land Use within the Area of Influence

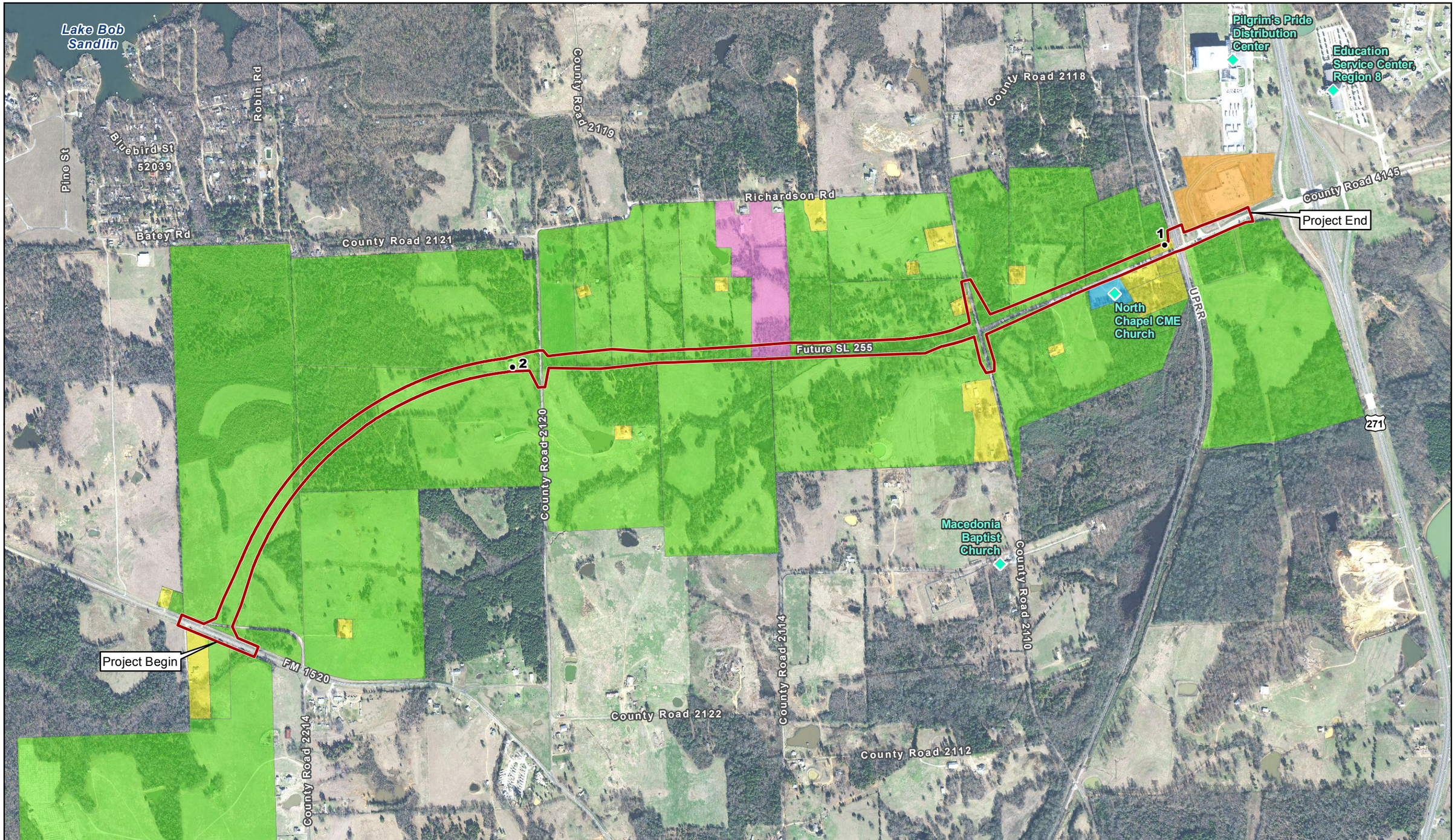


Figure 1

Land Use, Community Facilities, and Potential Displacements

SL 255 from FM 1520 to US 271

Project Location
Community Facility
Potential Displacement
Church
Mixed
Residential
Undeveloped
Utilities

Aerial Source: TNRIS (2015)

0 1,000 Feet
0 300 Meters

Prepared for: TxDOT	1 in = 1,000 feet
	Scale: 1:12,000
CSJ: 3403-01-001	Date: 2/9/2017

G:\Projects\TXDOT\SL255\Appendix F_Figure 1_Land Use and Displacements_20170209.mxd

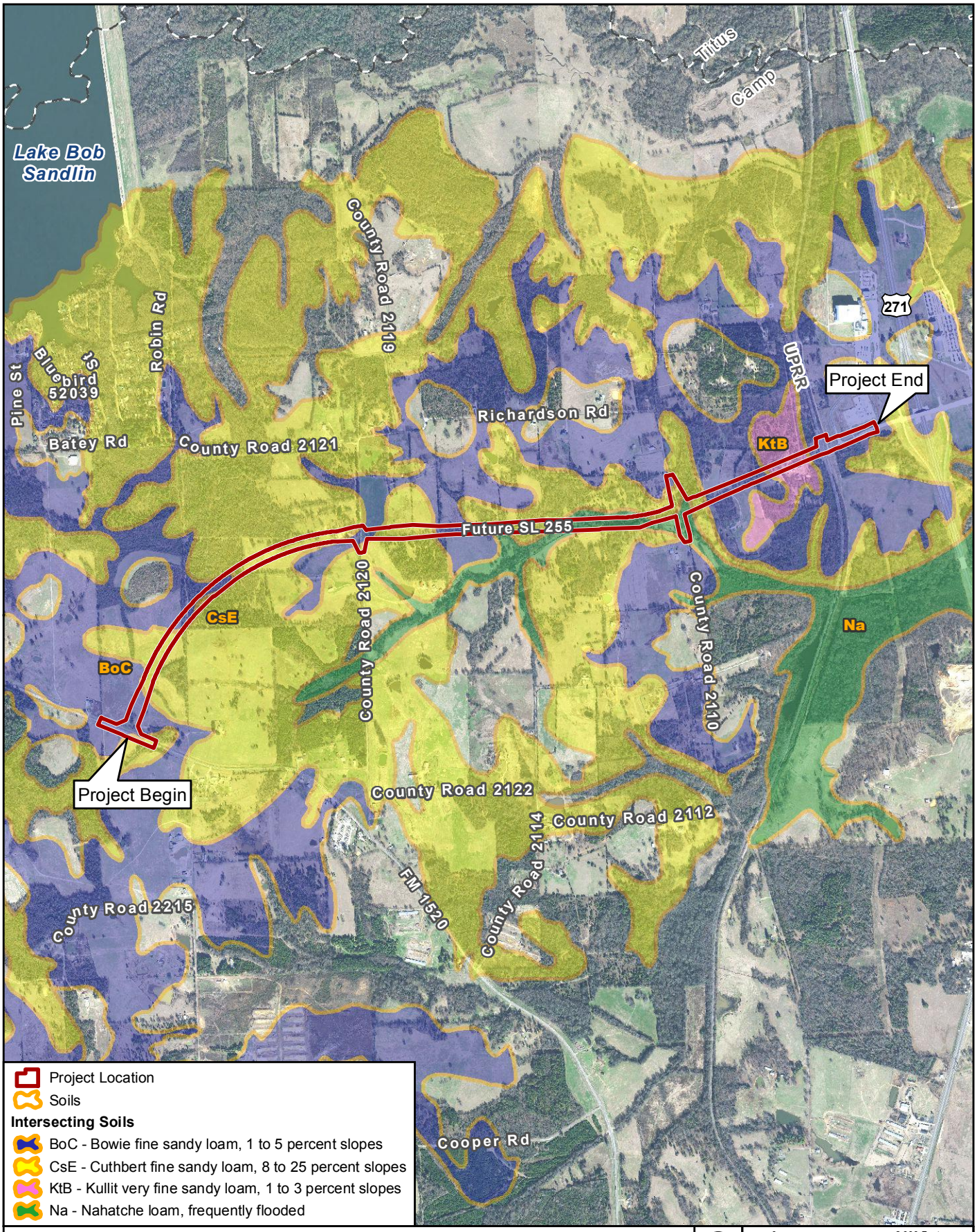


Figure 2

Project Area Soils

SL 255 from FM 1520 to US 271

Data Source: NRCS (2013)
Aerial Source: TNRIS (2015)

0 2,000 Feet
0 600 Meters

Prepared for: TxDOT	1 in = 2,000 feet
	Scale: 1:24,000
CSJ: 3403-01-001	Date: 2/9/2017

G:\Projects\TXDOT\SL255\Appendix F_Figure 2_Soils_20170209.mxd

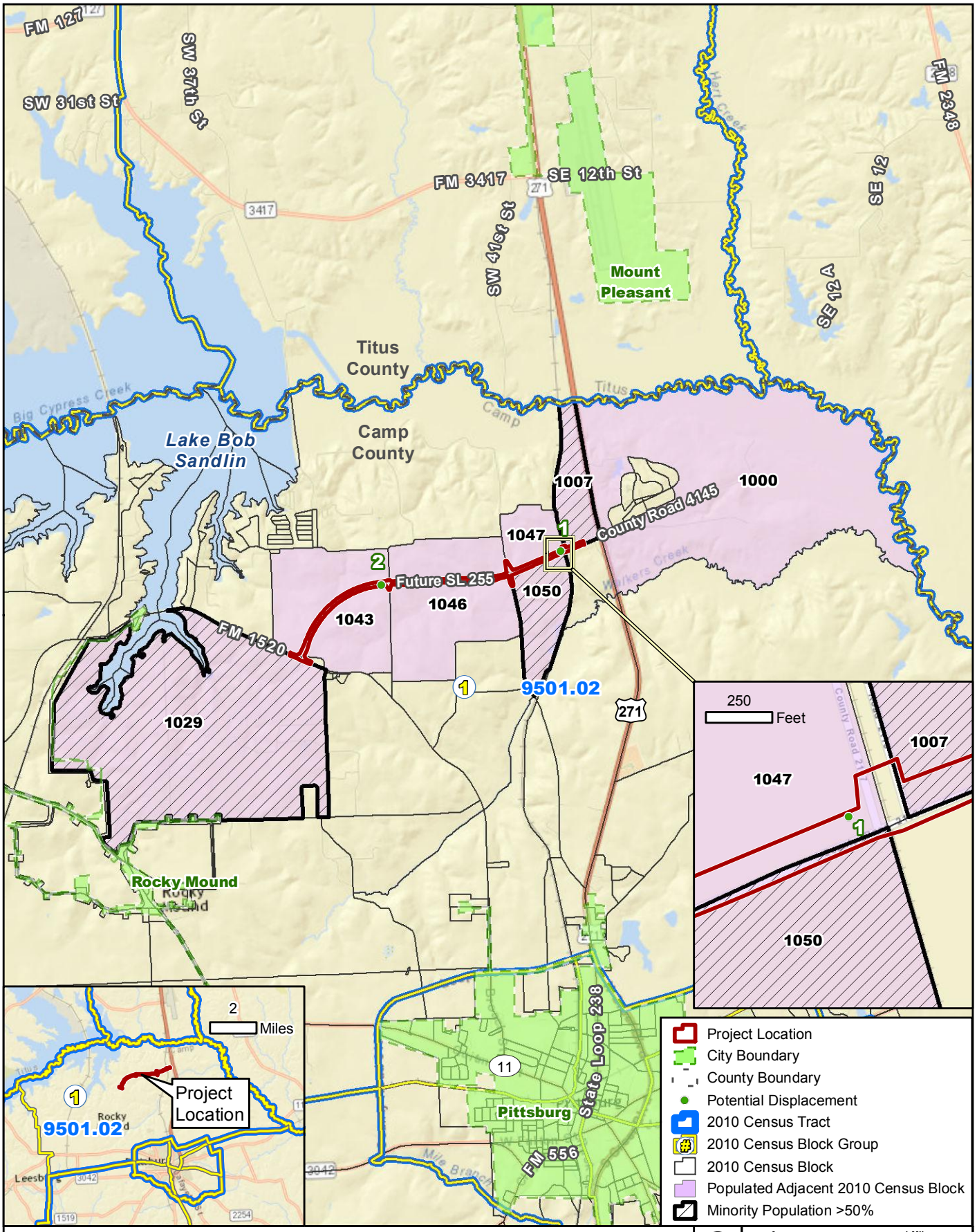


Figure 3

Census Geographies

SL 255 from FM 1520 to US 271

Data Source: US Census Bureau (2010)
Basemap Source: ESRI (2016)

Prepared for: TxDOT	1 in = 1 miles
	Scale: 1:63,360
CSJ: 3403-01-001	Date: 2/9/2017

G:\Projects\TXDOT\SL255\Appendix F_Figure 3_Census Geographies_20170209.mxd

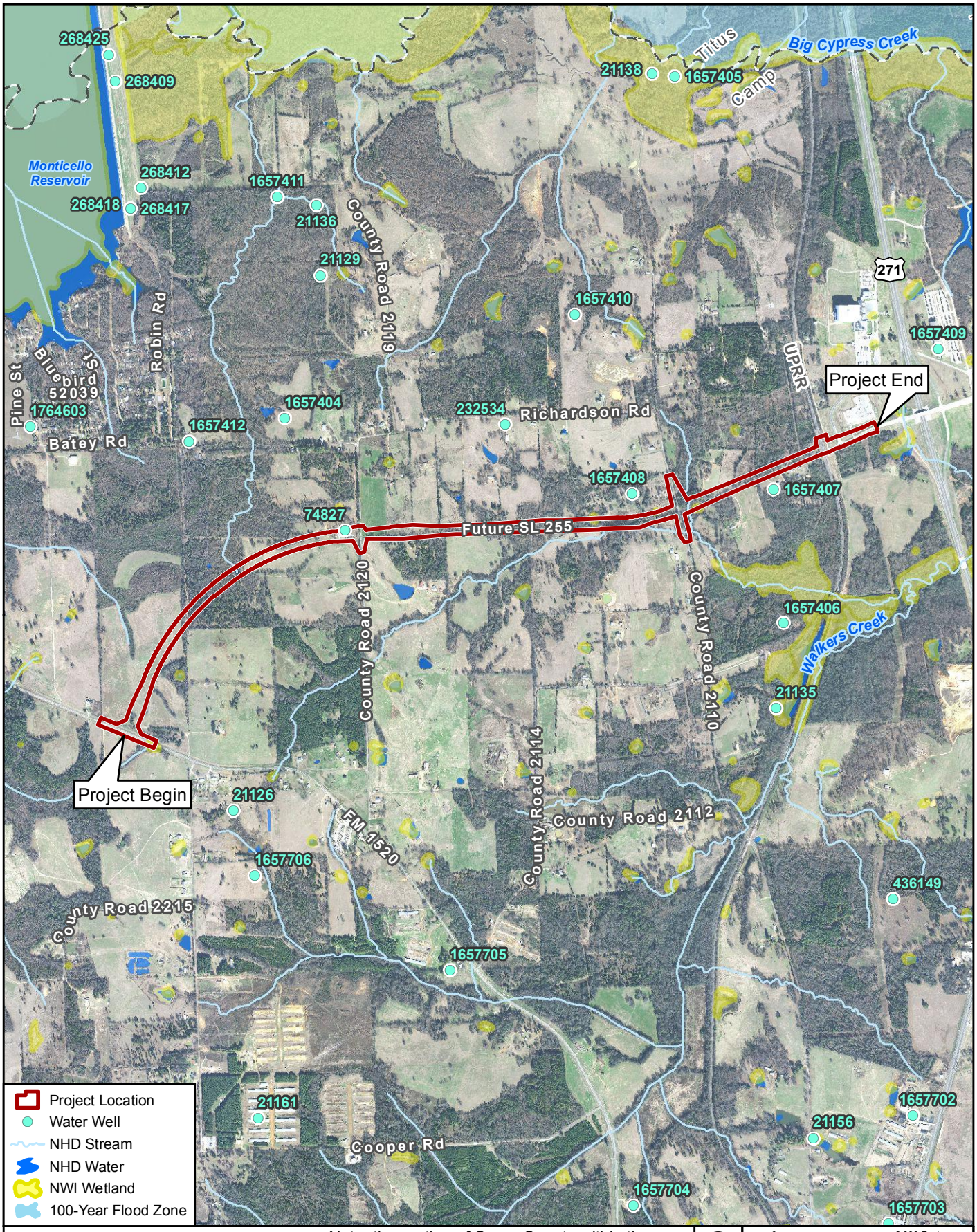


Figure 4

Water Resources

SL 255 from FM 1520 to US 271

Note: the portion of Camp County within the map extent falls within a FEMA Unmapped Area

Data Sources: NHD (2014), NWI (2014), FEMA NFHL (2016), TWDB (2016)
Aerial Source: TNRIS (2015)

0 2,000 Feet
0 600 Meters

Prepared for: TxDOT	1 in = 2,000 feet
	Scale: 1:24,000
CSJ: 3403-01-001	Date: 2/9/2017

G:\Projects\TXDOT\SL255\Appendix F_Figure 4_Water Resources_20170209.mxd

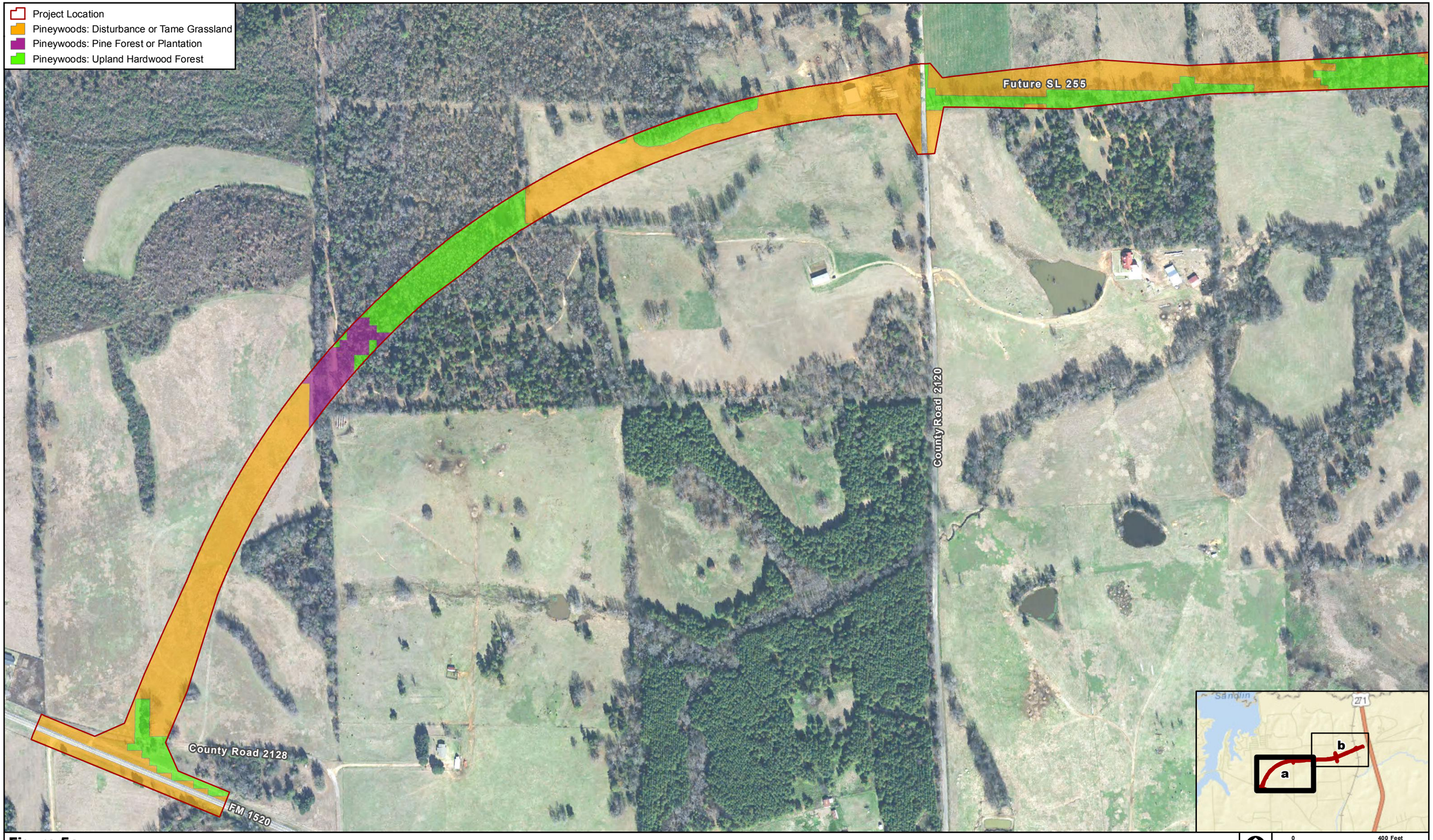


Figure 5a

EMST Vegetation Types

SL 255 from FM 1520 to US 271

Data Source: TxDOT/TPWD EMST/MoRAP (2013)
Aerial Source: TNRIS (2015)

0 400 Feet
0 120 Meters

Prepared for: TxDOT	1 in = 400 feet
	Scale: 1:4,800
CSJ: 3403-01-001	Date: 2/9/2017

G:\Projects\TXDOT\SL255\Appendix F_Figure 5_EMST_20170209.mxd

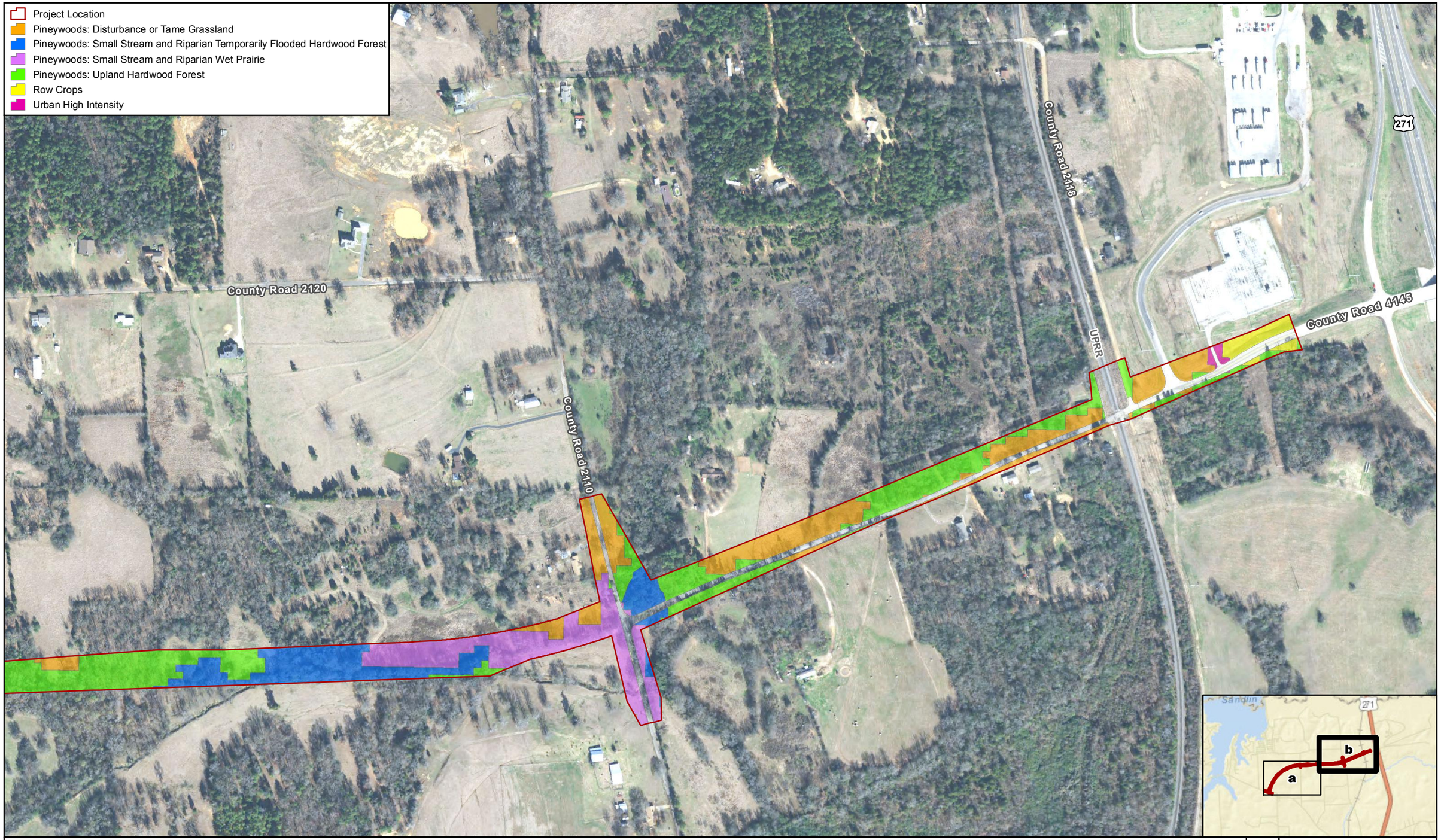


Figure 5b

EMST Vegetation Types

SL 255 from FM 1520 to US 271

Data Source: TxDOT/TPWD EMST/MoRAP (2013)
Aerial Source: TNRIS (2015)

0 400 Feet
0 120 Meters

Prepared for: TxDOT	1 in = 400 feet
	Scale: 1:4,800
CSJ: 3403-01-001	Date: 2/9/2017

G:\Projects\TXDOT\SL255\Appendix F_Figure 5_EMST_20170209.mxd

R-# : Not Impacted

R-# : Impacted, Benefitted by Barrier (none)

R-# : Impacted, Not Benefitted by Barrier (none)

N

0 330 660 1,320 1,980 2,640 Feet

Figure 6a

Noise Analysis Results

SL 255 from FM 1520 to US 271

CSJ: 3403-01-001

R-# : Not Impacted

R-# : Impacted, Benefitted by Barrier (none)

R-# : Impacted, Not Benefitted by Barrier (none)

N

0 330 660 1,320 1,980 2,640 Feet

Figure 6b

Noise Analysis Results

SL 255 from FM 1520 to US 271

CSJ: 3403-01-001

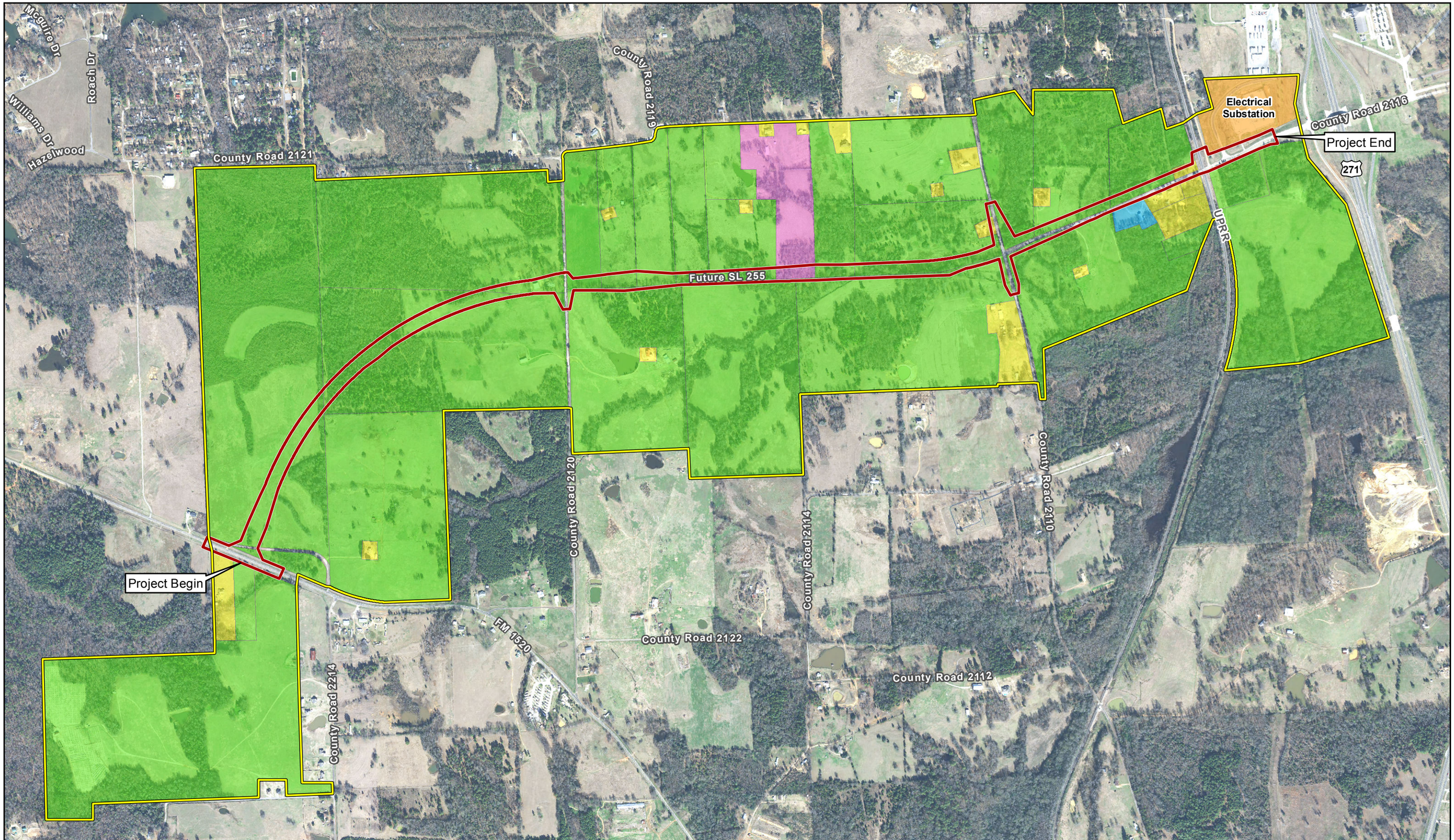


Figure 7

Land Use within the Area of Influence

SL 255 from FM 1520 to US 271

Note: project falls within an area unmapped by FEMA

Project Location
Area of Influence (AOI)

Land Use
Church
Mixed
Residential
Undeveloped
Utilities

0 1,000 Feet
0 300 Meters

Data Source: CMEC (2016)
Aerial Source: TNRIS (2015)

Prepared for: TxDOT	1 in = 1,000 feet
	Scale: 1:12,000
CSJ: 3403-01-001	Date: 2/9/2017

G:\Projects\TXDOT\SL255\Appendix F_Figure 7_AOI_20170209.mxd

Appendix G—Resource Agency Coordination

Tribal Coordination

TCEQ Coordination

TPWD Coordination

COMANCHE TRIBE

NAGPRA

TxDOT - ENV
FEB 16 2007
CRM

February 12, 2007

Lisa Hart, Director
Texas Department of Transportation
Cultural Resources Management Section
Environmental Affairs Division
Dewitt C. Greer State Highway Bldg.
125 E 11th St
Austin, TX 78701-2483

Re: CSJ: 3403-01-001; FM 3535 from; US 271 to FM 1520; Construct roadway on new alignment; Camp County, Atlanta District

Dear Ms. Hart:

Thank you for your letter of January 18th regarding the transportation project under consideration for construction by FHWA and TxDOT .

At this time, the Comanche Nation has no immediate concerns or issues regarding this project; however, please continue to keep us informed as your planning proceeds. We look forward to receiving any project reports, archaeological reports or other information that is derived from the planning, preparation, and construction work.

If in the process of the project human remains or archaeological items are discovered, we request that you immediately cease the project work and notify us so that we may discuss appropriate disposition with you and the other Tribal Nations that may be affected by such discoveries.

We look forward to your reports as activities proceed.

Sincerely,

Ruth Toahty

Ruth Toahty, NAGPRA Coordinator

DISTRIBUTION:
Barbara Maley, FHWA Env Coord
Deanne Simmons, Env Coord, Atlanta District
Juan Valera, ENV-PM
Waldo Troell, ENV-ARCH
ENV-ARCH Reading File

PO Box 908 • Lawton, Oklahoma 73502 • PHONE: (580) 355-2250 • FAX: (580) 355-2270

From: Lisa Hart
To: Sharon Dornheim
Date: 1/29/2007 9:13:34 AM
Subject: Fwd: Projects: CSJ: 0163-03-038; SH 31 Henderson County; CSJ: 3403-01-001; FM 3535 Camp County

>>> Deborah Harjochee <dharjochee@yahoo.com> 1/26/2007 8:25 AM >>>
Dear Ms. Hart: I received your letter regarding
mentioned projects. The Thlopthlocco Tribal Town has
no interest at this time, but respectfully requests
notification in the event of an inadvertent discovery
of human remains or artifacts. Your assistance is
appreciated. Sincerely, Deborah Harjochee, Compliance Officer

---

Never Miss an Email
Stay connected with Yahoo! Mail on your mobile. Get started!
http://mobile.yahoo.com/services?promote=mail

DISTRIBUTION:
Barbara Maley, FHWA Env Coord
Deanne Simmons, Env Coord, Atlanta District
Margaret Canty, ENV-PM
Waldo Troell, ENV-ARCH
ENV-ARCH Reading File

DISTRIBUTION:
Barbara Maley, FHWA Env Coord
Jay Tullos, Env Coord, Tyler District
Mario Mata, ENV-PM
Waldo Troell, ENV-ARCH
ENV-ARCH Reading File

John Callison

From: WHAB_TxDOT <WHAB_TxDOT@tpwd.texas.gov>
Sent: Sunday, June 28, 2015 2:55 PM
To: John Callison; WHAB_TxDOT
Cc: Molly Berridge; Sue Reilly
Subject: RE: FM 3535 - CSJ 3403-01-001, Camp County - TPWD Early Coordination

Good afternoon,

The TPWD Wildlife Habitat Assessment Program has received your request for Early Coordination and has assigned it project ID #34815. The Habitat Assessment Biologist who will complete your project review is copied on this email.

Thank you,
Gloria Garza
Administrative Assistant
Texas Parks and Wildlife Dept
Wildlife Division - Habitat Assessment Program
4200 Smith School Rd
Austin, TX 78744

Office: (512) 389-4571
Fax: (512) 389-4599

gloria.garza@tpwd.texas.gov

Support Texas Wildlife!
Order a conservation license plate today at www.conservationplate.org

---

From: John Callison [mailto:John.Callison@txdot.gov]
Sent: Friday, June 26, 2015 2:14 PM
To: WHAB_TxDOT
Cc: Molly Berridge
Subject: FM 3535 - CSJ 3403-01-001, Camp County - TPWD Early Coordination

The early coordination packet for the FM 3535 project in Camp County is attached. Let me know if you need any additional information.

Thanks,

John Callison
TxDOT – Atlanta District
(903)799-1302

Talk. Text. Crash.

From: Leon Byrd
To: NEPA
Cc: Clay Churchill; Abiy Berehe; Cary Betz
Subject: RE: TXDOT 3404-01-001 SL 255 Atlanta District, Camp County
Date: Friday, February 10, 2017 4:06:37 PM

I have examined information submitted for the NEPA review concerning the above referenced project. Texas has two federally designated Sole Source Aquifers, Edwards Aquifer I and Edwards Aquifer II, located in central Texas. The proposed improvements creating State Loop 255, joining FM 1520 to US Highway 271 in Camp County, Texas are approximately 250 miles northeast of the designated Sole Source Aquifer, Edwards Aquifer II area.

In the project area in Camp County, groundwater occurs in unconsolidated sands of the Carrizo Formation. Recharge is direct through precipitation and surface water inflow, and groundwater is generally of good quality (about 500 milligrams per liter of total dissolved solids). Construction of State Loop 255 should have no significant impact of the quality of groundwater along the proposed route. In summary, the TCEQ has no concerns over potential impacts to the Sole Source Aquifers or groundwater recharge areas. If you have any questions, or need additional information, please do not hesitate to contact me via phone, (512) 239-0540, or e-mail, leon.byrd@tceq.texas.gov .

Thanks for the opportunity to comment.

C. Leon Byrd, P. G.
Senior Technical Specialist
Groundwater Planning & Assessment Team
Water Availability Division, TCEQ
leon.byrd@tceq.texas.gov
(512) 239-0540

From: Clay Churchill [mailto:Clay.Churchill@txdot.gov]
Sent: Tuesday, February 07, 2017 8:28 AM
To: NEPA <NEPA@tceq.texas.gov>
Subject: RE: 3404-01-001 SL 255 Atlanta District, Camp County

The EA is headed your way. It was too big to email. Let me know if you have any questions.
Thanks,
Clay

From: NEPA [mailto:NEPA@tceq.texas.gov]
Sent: Monday, February 06, 2017 3:33 PM
To: Clay Churchill
Subject: RE: 3404-01-001 SL 255 Atlanta District, Camp County

Good afternoon Mr. Churchill.

I have received your e-mail. Once you send over the EA, we will review your request and provide you with a response.

If you need anything else, please feel free to let me know.

Thank you,

Chikaodi Agumadu
NEPA Coordinator
Texas Commission on Environmental Quality
Intergovernmental Relations
12100 Park 35 Circle Bldg. F | Mail Code 119 | Austin, TX 78753
(512) 239-3500

From: Clay Churchill [mailto:Clay.Churchill@txdot.gov]
Sent: Monday, February 06, 2017 2:18 PM
To: NEPA <NEPA@tceq.texas.gov>
Subject: 3404-01-001 SL 255 Atlanta District, Camp County

I have a new location project in the Atlanta District that would discharge within 5 miles upstream of a 303(d) listed water – Segment 0404_02 Big Cypress Creek. I am going to send the EA to you for your review. I am thinking that the document contains all of the information that you will need but let me know if there is anything else I can send along that would make things easier for you.

Best management practices (temporary vegetation, silt fences, and vegetative filter strips) would be used throughout the duration of the project and the project is not expected to contribute the constituent of concern to the impaired water body.

If you don't mind, reply to my email to make sure I am sending this to the correct email. ☺
Thanks for your help!
Clay

Re: Response to Request for TCEQ Environmental Review

The Texas Commission on Environmental Quality (TCEQ) received a request from the Texas Department of Transportation (TxDOT) regarding the following project: 3404-01-001 SL 255 Atlanta District, Camp County.

In accordance with the Memorandum of Understanding between TxDOT and TCEQ addressing environmental reviews, which is codified in Chapter 43, Subchapter I of the Texas Administrative Code (TAC) and 30 TAC § 7.119, TCEQ is responding to your request for review by providing the below comments.

The Office of Water does not anticipate significant long term environmental impacts from this project as long as construction and waste disposal activities associated with it are completed in accordance with applicable local, state, and federal environmental permits, statutes, and regulations. We recommend that the applicant take necessary steps to ensure that best management practices are used to control runoff from construction sites to prevent detrimental impact to surface and ground water.

TxDOT will still need to follow all other applicable laws related to this project, including applying for applicable permits.

If you have any questions, please feel free to contact the NEPA Coordinator at (512) 239-3500 or NEPA@tceq.texas.gov.

Chikaodi Agumadu
NEPA Coordinator
TCEQ, MC-119
NEPA@tceq.texas.gov
512-239-3500

Texas Department of Transportation

Biological Evaluation Form

CSJ: 3403-01-001

FM 3535

From FM 1520 to US 271

TxDOT Environmental Affairs Division
Release Date: 5/2014
320.01.FRM
Version 1

CSJ:	3403-01-001
Date of Evaluation:	June 26, 2015
Proposed Letting Date:	January 2019
County:	Camp
Roadway Name:	FM 3535
Project Limits:	From FM 1520 to US 271
Project Description:	Construct farm to market road on new location. FM 3535 would be constructed from FM 1520 to US 271 in northern Camp County. The proposed project is located approximately 3 miles north of Pittsburg, Texas. The proposed FM 3535 would run along the existing County Road (CR) 2116 alignment from approximately 750 feet (ft) east of the US 271 intersection west to the intersection of CR 2116 and CR 2110, approximately 3,205 ft (0.61 mile). From the CR 2116/CR 2110 intersection, the proposed FM 3535 would be constructed on new location and extend in a southwest direction approximately 9,769 ft (1.85 miles), terminating at FM 1520. The proposed project would construct a 44 foot wide roadway consisting of two 12 ft travel lanes with 10 ft paved shoulders with open ditches in a typical right-of-way of approximately 150 ft varying to 250 ft at intersections with existing county roads. Length of the proposed project is approximately 2.45 miles. Cross drainage structures located within the project limits include: CR 2110 would have a proposed 24" X 50 ft Reinforced Concrete Pipe (RCP) with safety end treatments (SETs) added approximately 110 ft north of the center of the intersection with CR 2116 and replace an existing 66" X 25 ft RCP with a 66" X 64 ft RCP with SETs approximately 350 ft south of the intersection. The CR 2110 roadway would be reconstructed approximately 525 ft north and 400 ft south (total length of 925 ft) and would be configured with two 12-ft driving lanes. CR 2120 would also be reconstructed at its intersection with the proposed new location FM 3535 approximately 270 ft south and 130 ft north and configured with two 12-ft driving lanes. The existing CR 2116 roadway is an oil-sand surface and base with two 9-ft driving lanes and no shoulders that originates at the eastern end of the proposed project and runs to the west for approximately 0.6 mile where it terminates at CR 2110. An existing corrugated metal pipe located on CR 2116 approximately 100 ft east of the CR 2110 intersection would be replaced. A 48"x100 ft RCP with SETs would replace the existing structure at this location.

☐ *Project has no Federal nexus.*

Endangered Species Act (ESA)

1. No Is the action area of the proposed project within the range and in suitable habitat of federally protected species?

Date USFWS County List Accessed: June 11, 2015

Comments:

Resources consulted or activities conducted to make effect determination (if applicable):

- ☐ TPWD County List
- ☐ USFWS Critical Habitat Maps
- ☐ Species Expert Consulted
- ☒ Aerial Photography
- ☐ Coastal Areas Maps
- ☒ Site Visit
- ☐ Topographic Map
- ☐ Species Study Conducted
- ☐ Karst Zone Maps
- ☒ Ecological Mapping System of Texas (EMST)
- ☒ Natural Diversity Database (NDD)

Other:

Migratory Bird Treaty Act (MBTA)

1. Yes Is there potential for nesting birds to be present in the project action area during construction?

   1.1 No Were active nests identified during the site survey?

2. Yes Will BMPs will be incorporated to protect migratory bird nests?

Comments:

Bald and Golden Eagle Protection Act (BGEPA)

1. No Does the proposed project have the potential to impact Bald or Golden Eagles?

Comments:

Fish and Wildlife Coordination Act (FWCA)

1. Yes Does the project have impacts on one or more Waters of the U.S. or wetlands?

1.1 Yes Is the project covered by a Nationwide Permit?

1.2 No Is the project covered by an Individual Permit from the USACE?

Comments:

Executive Order 13112 on Invasive Species

1. Yes Would the proposed project be in compliance with EO 13112?

Comments

Executive Memorandum on Beneficial Landscaping

1. No Would landscaping be included in the proposed projects?

Comments

Farmland Protection Policy Act (FPPA)

1. Yes Would the project require new ROW or permanent easements (*Do not include temporary easements*)?
2. No Is the proposed project exempt from the provisions of FPPA in accordance with §523.11 of the act?
3. Yes Has the new ROW been scored using either FPPA Form AD-1006 or SCS-CPA 106?
4. No Was the resulting score above 60 on part V of either form? (If the project scores above 60 on part V of either form, then coordination with NRCS is required.)

Comments:

General Comments

TPWD Analysis Section

Coordination Conditions

1. No — Is the project limited to a maintenance activity exempt from coordination? https://ftp.dot.state.tx.us/pub/txdot-info/env/env_assessment.pdf

2. No — Has the project previously completed coordination with TPWD?

Tier I Site Assessment

MOU-Triggers

1. Yes — Is the project within range of a state threatened or endangered species or SGCN and suitable habitat is present?

*Explanation:

Mammal: Plains Spotted Skunk
Reptile: Timber Rattlesnake
Please see TPWD's County Species Table for explanations.

Date TPWD County List Accessed: June 12, 2015

Date that the NDD was accessed: May 26, 2015

What agency performed the NDD search? TxDOT

What version of the NDD was used? November 10, 2014

NDD Search Results for EOIDs and Tracked Managed Areas

EOID Number	Common Name	Scientific Name	Listing Status	Buffer Zone
9697	Texas Pigtoe	*Fusconaia askewi*	State Threatened	1.5 Mile

1.1 Yes — Does the BMP PA eliminate the requirement to coordinate for species?

*Explanation:

Skunk BMP, Snake BMP

2. No — NDD and TCAP review indicates adverse impacts to remnant vegetation?

Comments:

3. Yes — Does the project require a NWP with PCN or IP by USACE?

*Explanation:

A NWP 14 with a PCN may be required for impacts to a 0.2509 acre stock pond and associated outfall. The project would also require a NWP 14 without a PCN for minor impacts at three other crossings - two intermittent and one ephemeral. The ephemeral crossing is located approximately 2,100 ft east of the proposed CR 2120/FM 3535 intersection. A 36" x 76 ft RCP with SETs is proposed at this location. Impacts are estimated to be approximately 0.003 acres. An existing RCP at an intermittent tributary to Walker Creek on CR 2110 located approximately 350 ft south of the CR 2116 intersection would be replaced with a 66" x 64 ft RCP with SETs. Impacts at this location would total 0.007 acres. Finally an existing corrugated metal pipe (CMP) on CR 2116 located approximately 100 ft east of the CR 2110 intersection would be replaced with a 48" x 100 ft RCP with SETs. Impacts at this location would total approximately 0.009 acres.

4. No — Does the project include more than 200 linear feet of stream channel for each single and complete crossing of one or more of the following that is not already channelized or otherwise maintained:

Comments:

5. No — Does the project contain known isolated wetlands outside the TxDOT ROW that will be directly impacted by the project?

Comments:

6. Yes — Would the project impact at least 0.10 acre of riparian vegetation?

*Explanation:

According to the EMST, the project would impact 5.89 acres of riparian vegetation.

7. Yes — Does project disturb a habitat type in an area equal to or greater than the area of disturbance indicated in the Threshold Table Programmatic Agreement?

*Explanation:

According to the EMST the project would exceed the threshold for impacts to mixed woodlands & forest and riparian vegetation.

*Attach associated file of EMST output (Mapper Report or other Excel File which includes MOU Type, Ecosystem Name, Common/Vegetation Type Name) in ECOS

Excel File Name:

FM 3535 MOU Full Report.xls

7.1 Yes — Is there a discrepancy between actual habitat(s) and EMST mapped habitat(s)?

*Explanation:

Just west of the proposed FM 3535 & CR 2120 intersection there is a section of land

that EMST called mixed woodlands & forest that has been cleared and is utilized as pasture. It is visible on aerial photography and this amount is in the range of 4 acres that should be subtracted from the mixed woodlands & forest total.

Attach file showing discrepancy between actual and EMST mapped habitat(s).

File Name:

FM 3535 EMST Discrepancy Aerial - (Also attached in this document).

Is TPWD Coordination Required?

Yes

☒ Early Coordination

☐ Administrated Coordination

BMPs Implemented or EPICs included (as necessary):

Migratory Bird EPIC, Invasive Species EPIC, Beneficial Landscaping EPIC, Clean Water Act Sections 401, 402, & 404, Plains Spotted Skunk BMP, Timber Rattlesnake BMP.

TxDOT Contact Information

Name: John Callison

Phone Number: 903-799-1302

E-mail: john.callison@txdot.gov

Findings

Endangered Species Act (ESA)

No suitable habitat was observed for any federally listed species; therefore, there will be no effect on federally listed species. However, measures to avoid harm to any threatened and endangered species will be taken should they be observed during construction of the proposed project. Coordination with the USFWS will not be required. The USFWS County list was accessed on June 11, 2015.

Essential Fish Habitat (EFH)

Essential fish habitat is defined by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.

Tidally influenced waters do not occur within the project action area. Coordination with National Marine Fisheries Service (NMFS) is not required.

Coastal Barrier Resources Act (CBRA)

The Coastal Barrier Resources Act (CBRA) established the Coastal Barrier Resources System (CBRS) to protect a defined set of geographic units along the coast of the U.S.

This project is not located within a designated CBRA map unit. Coordination with the USFWS is not required.

Marine Mammal Protection Act (MMPA)

Marine mammals are protected under the Marine Mammal Protection Act (MMPA). The Texas coast provides suitable habitat and is within range of several marine mammals including the West Indian Manatee (Trichechus manatus), and bottlenose dolphin (Tursiops truncatus).

The project action area does not contain suitable habitat for marine mammals. Coordination with NMFS is not required.

Migratory Bird Treaty Act (MBTA)

The Migratory Bird Treaty Act (MBTA) states that it is unlawful to kill, capture, collect, possess, buy, sell, trade, or transport any migratory bird, nest, young, feather, or egg in part or in whole, without a federal permit issued in accordance within the Act's policies and regulations.

TxDOT will take all appropriate actions to prevent the take of migratory birds, their active nests, eggs, or young by the use of proper phasing of the project or other appropriate actions. A MBTA appropriate EPIC will be included in the PS&E.

Bald and Golden Eagle Protection Act (BGEPA)

The proposed project does not have the potential to impact Bald or Golden Eagles.

Executive Order 13112 on Invasive Species

Re-vegetation of disturbed areas would be in compliance with the Executive Order on Invasive Species (EO 13112). Regionally native and non-invasive plants will be used to the extent practicable in landscaping and re-vegetation.

Executive Memorandum on Beneficial Landscaping

No landscaping would be a part of the proposed project. Disturbed areas would be re-vegetated according to TxDOT's standard practices for rural areas, which to the extent practicable, is in compliance with Executive Memorandum on Beneficial Landscaping.

Farmland Protection Policy Act (FPPA)

The purpose of the Farmland Protection Policy Act (FPPA) is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses. The proposed project would convert farmland subject to the FPPA to a non-agricultural, transportation use, but the combined scores of the relative value of the farmland and the site assessment, as documented with the appropriate NRCS form and supporting documentation, are such that the site need not be given further consideration for protection and no additional sites need to be evaluated.

Fish and Wildlife Coordination Act (FWCA)

The Fish and Wildlife Coordination Act (FWCA) of 1958 requires that federal agencies obtain comments from USFWS and TPWD. This coordination is required whenever a project involves impounding, diverting, or deepening a stream channel or other body of water.

The proposed project is authorized under a Section 404 of the Clean Water Act Nationwide Permit; therefore, no coordination under FWCA would be required.

John Callison 6-26-15

TxDOT Reviewer Date

Suggested Attachments

Aerial Map (with delineated project boundaries)

USFWS T&E List

TPWD T&E List

Species Impact Table

NDD EOID List and Tracked Managed Areas (Required for TPWD Coordination)

NOAA EFH Mapper Printout

USFWS CBRA Mapper Printout

EMST Project MOU Summary Table (Required for TPWD Coordination)

TPWD SGCN List

FPPA Documentation

Landscaping Plans

Photos (Required for TPWD Coordination)

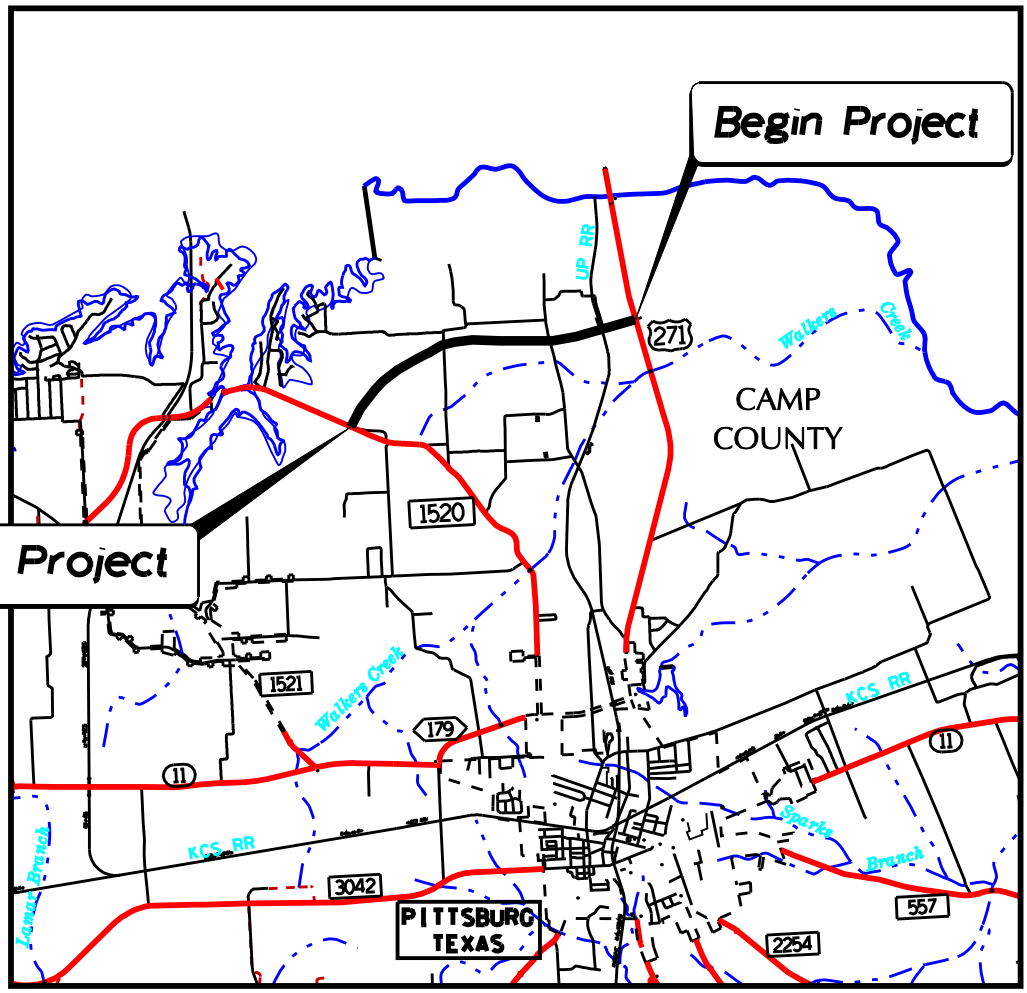
Previous TPWD Coordination Documentation (if applicable)

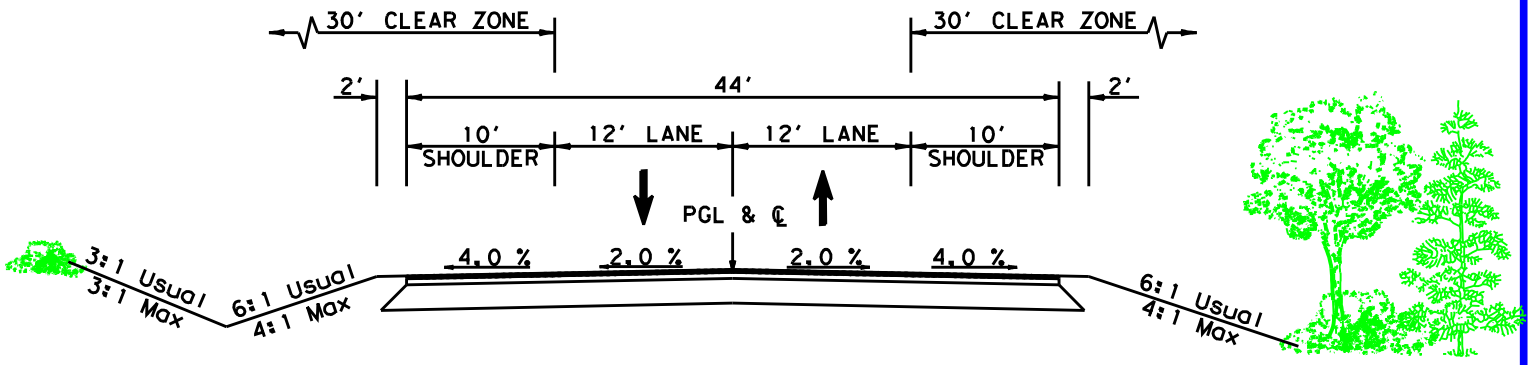
The following table shows the revision history for this guidance document.

Revision History	
Effective Date Month, Year	Reason for and Description of Change

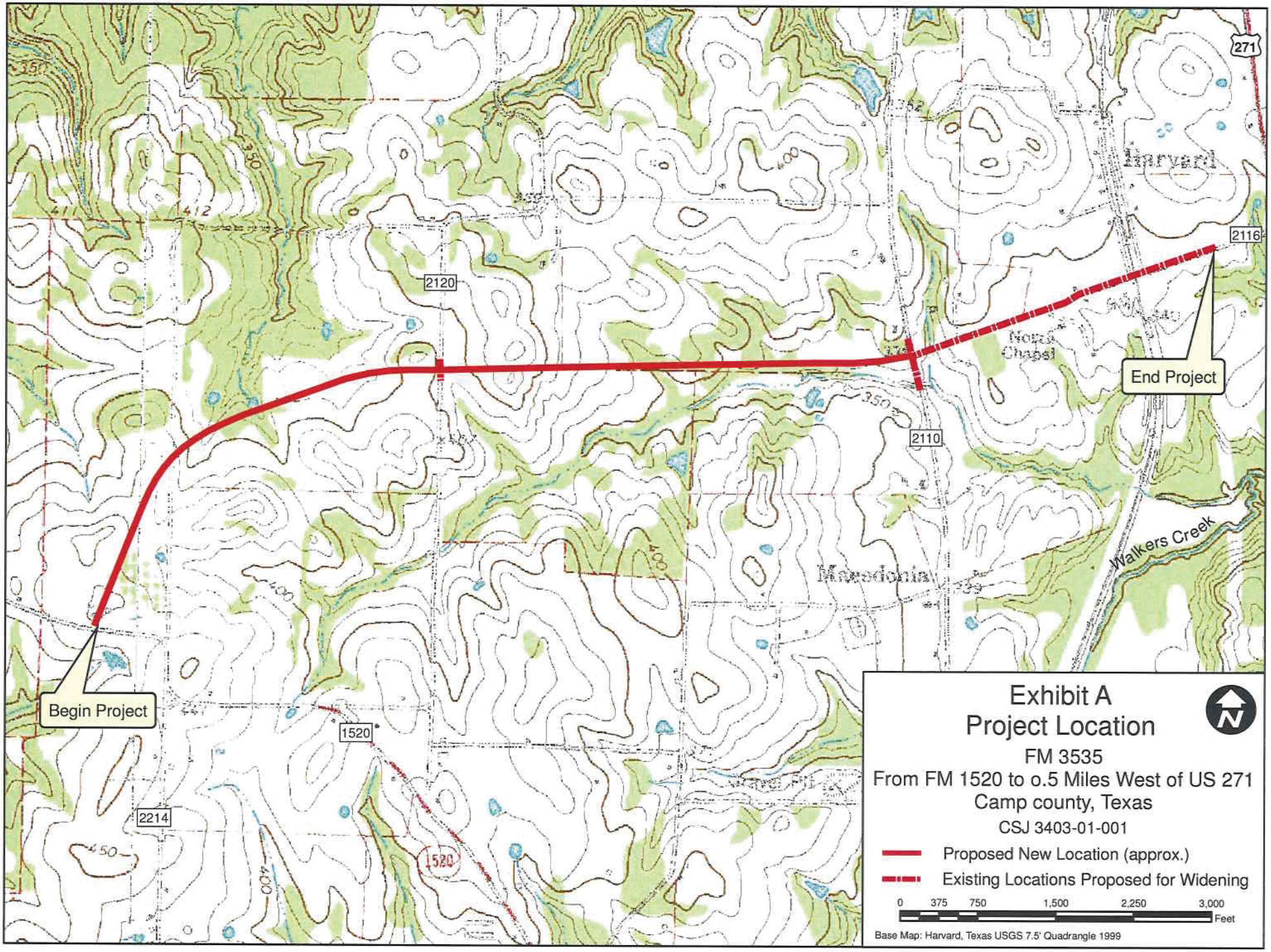
FM 3535 New Location Roadway from US 271 to FM 1520 North of Pittsburg General Location Map and Proposed Typical Section

Texas Department of Transportation





PRELIMINARY PROPOSED
ROADWAY SECTION OF FM 3535


Begin Project
End Project
2120
2110
2116
2214
1520
271
Harvard
Walkers Creek
Exhibit A
Project Location
FM 3535
From FM 1520 to o.5 Miles West of US 271
Camp county, Texas
CSJ 3403-01-001
Proposed New Location (approx.)
Existing Locations Proposed for Widening
0 375 750 1,500 2,250 3,000
Feet
Base Map: Harvard, Texas USGS 7.5' Quadrangle 1999

Project Photos

Photo 1 – West end of the project looking northeast at proposed FM 3535 alignment.

Photo 2 – Looking west at proposed FM 3535 alignment from CR 2120.

Photo 3 – Looking east at proposed FM 3535 alignment from CR 2120.

Photo 4- Looking west at proposed FM 3535 alignment from intersection of CR 2110 & CR 2116

Photo 5 – Looking east at proposed FM 3535 alignment (intersection of CR 2110 & CR 2116).

Photo 6 – Looking west from east end of the project (US 271).

Photos from 2007

Picture 1: Located approximately 1,000 ft. westerly of end of CCR 2116, view is to the east along proposed north ROW. Area is a non-improved pasture with scattered hardwoods. Area to right side of picture contains elm, sweetgum and water oak.

Picture 2: Located approximately 1,800 ft westerly from end of CCR 2116, view is to the east along proposed centerline. Area is described as non-improved pasture with scattered hardwoods (post oak in center of picture, American elm, sweetgum and sycamore).

Picture 3: Located at east boundary line of CCR 2120 (approximately 4,600 ft. west of end of CCR 2116), view is to the east along proposed centerline. Fence row vegetation to right is within proposed ROW along property line. Woody vegetation consists of southern red oak and sweetgum.

Picture 4: Located just west of west margin of CCR 2120, view is to the west along proposed centerline. Metal building recently constructed. Mostly open pasture with woody vegetation consisting of post oak and loblolly pine.

Picture 5: Located approximately 700 ft. westerly of Picture 4, view is westerly along proposed south ROW and is described as non-improved pasture with scattered hardwood (sugarberry and elm) and loblolly pine.

Picture 6: Located within same area as Picture 5 but is along proposed north ROW. Area is described as cutover woodlands with scattered sugarberry, box elder and water oak remaining and regenerating. Thicker area to left of picture was not cut and is approximately 8 ft. in width. Area to left of thicker area is pasture as depicted in Picture 5.

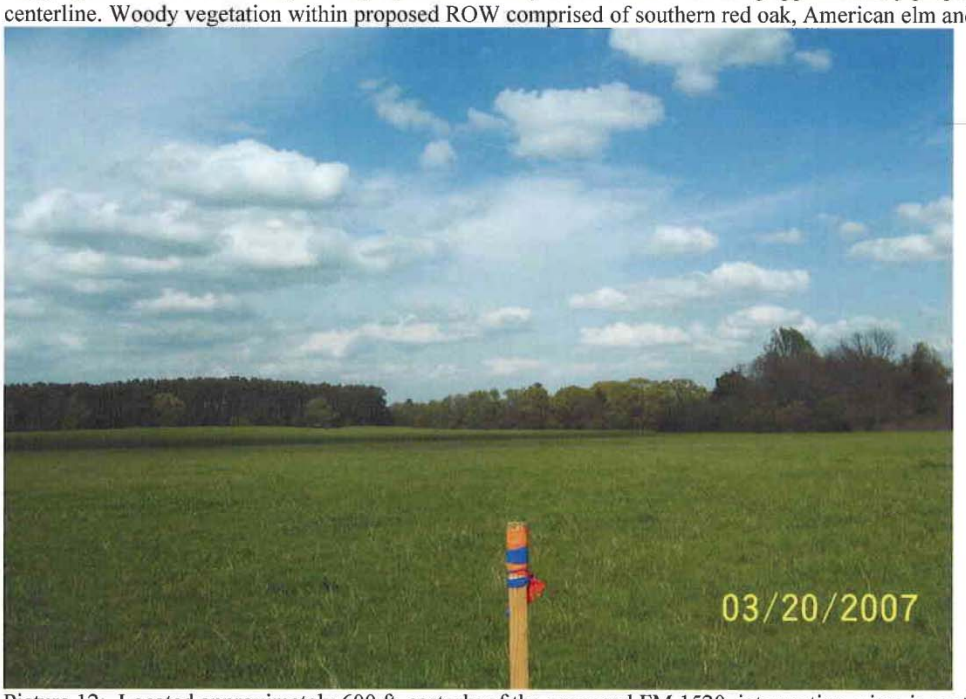
Picture 7: View is westerly at same approximate location as Pictures 5 and 6. Lathe and flagging is proposed centerline. Woody vegetation is same as depicted in left side of Picture 6.

Picture 8: View is westerly along proposed centerline approximately 500 ft. westerly of Picture 7. Area is non-improved pasture. Lathes and flagging in background is proposed centerline.

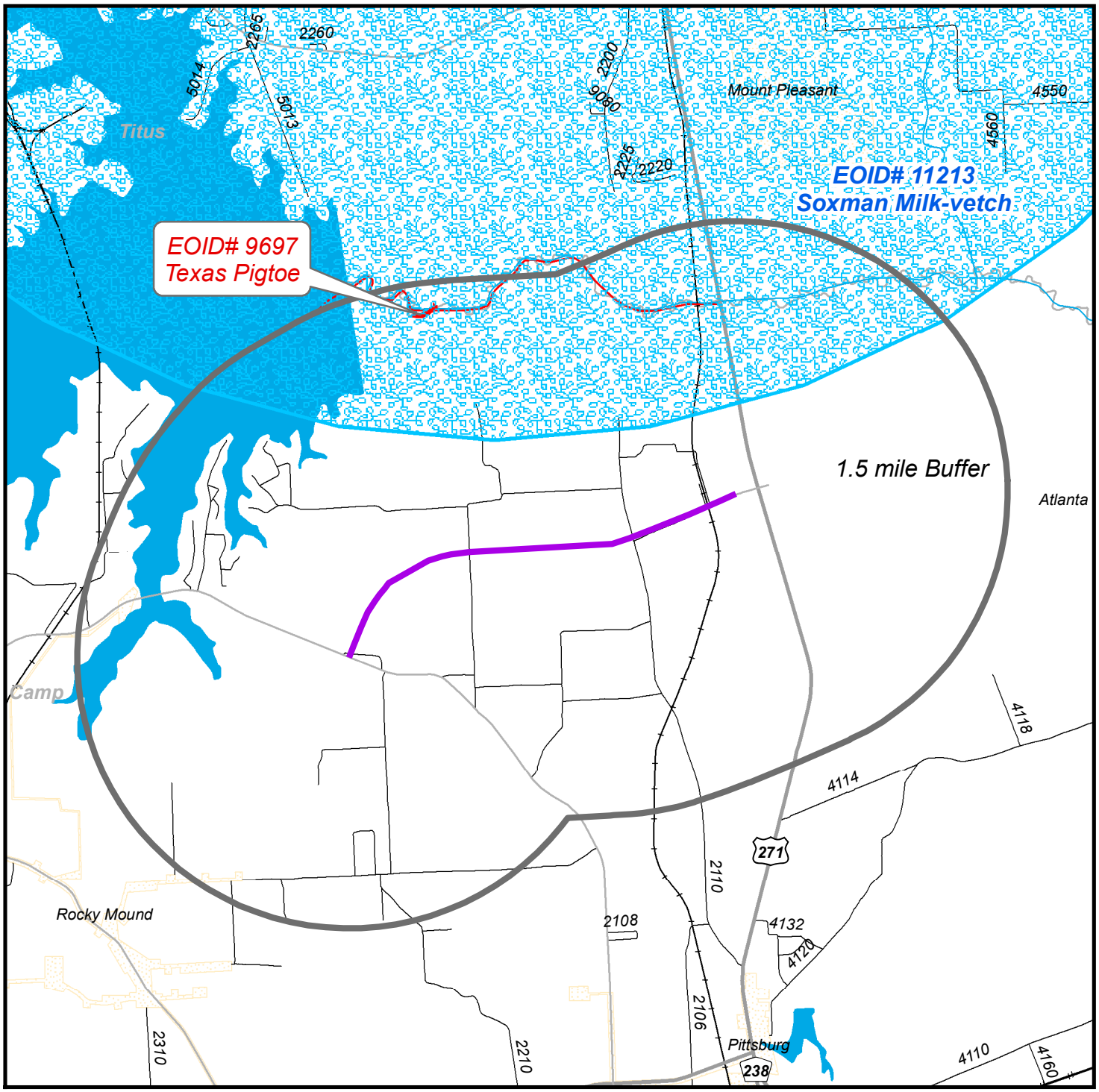
Picture 9: Located approximately 1,900 ft westerly of CCR 2120, (1,000 ft westerly of Picture 8), view is to east of upland pond. Pond is located on approximate proposed centerline.

Picture 10: Located approximately 2,000 ft. easterly of proposed intersection with FM 1520, view is easterly along proposed centerline and is approximately 1,000 ft westerly of Picture 9. Described as regenerating cutover woodlands, woody vegetation is comprised of American elm, sweetgum and water oak in overstory.

Picture 11: Located approximately 1,500 ft. easterly of proposed intersection with FM 1520, aspect is easterly with flagging and lathe on lower right side proposed southerly ROW. Picture is along approximately proposed centerline. Woody vegetation within proposed ROW comprised of southern red oak, American elm and sweetgum.



Picture 12: Located approximately 600 ft. easterly of the proposed FM 1520, intersection, view is northeasterly along proposed centerline. Area is improved coastal pasture. Hardwood tree line in right center of picture is same vegetation as depicted in Picture 11.



FM 3535 Natural Diversity Report

EO REP Tracked (Released 11/10/14)

- Animal Assemblage
- Internatl. Vegetation Classification
- Invertebrate Animal
- Nonvascular Plant
- Terrestrial Community - Other Classification
- Vascular Plant
- Vertebrate Animal

- Managed Areas (Released 11/10/14)
- *Mussel_Sanct*
- Mussel_Reservoirs

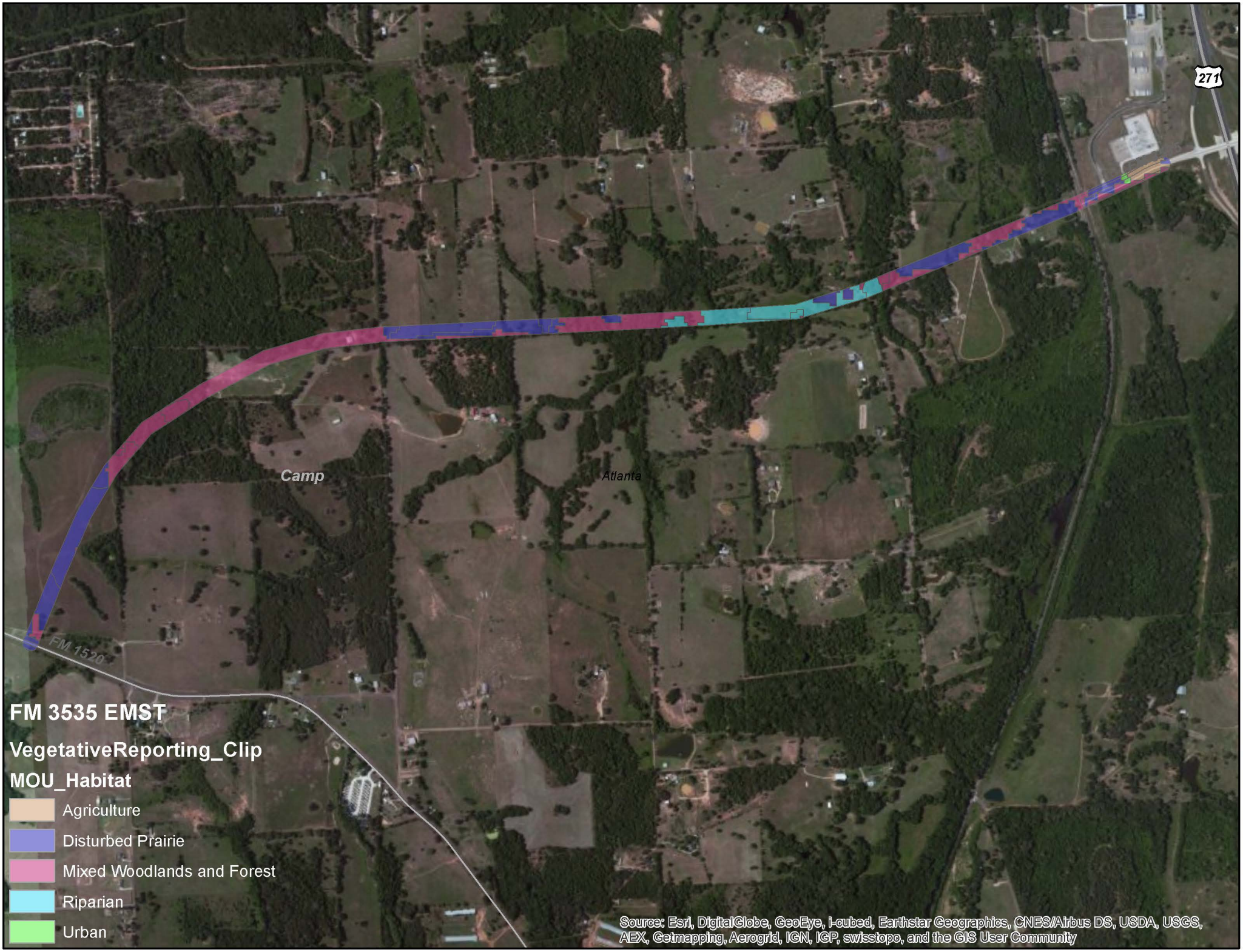
Texas Department of Transportation

N W E S

0.6 0.3 0 0.6

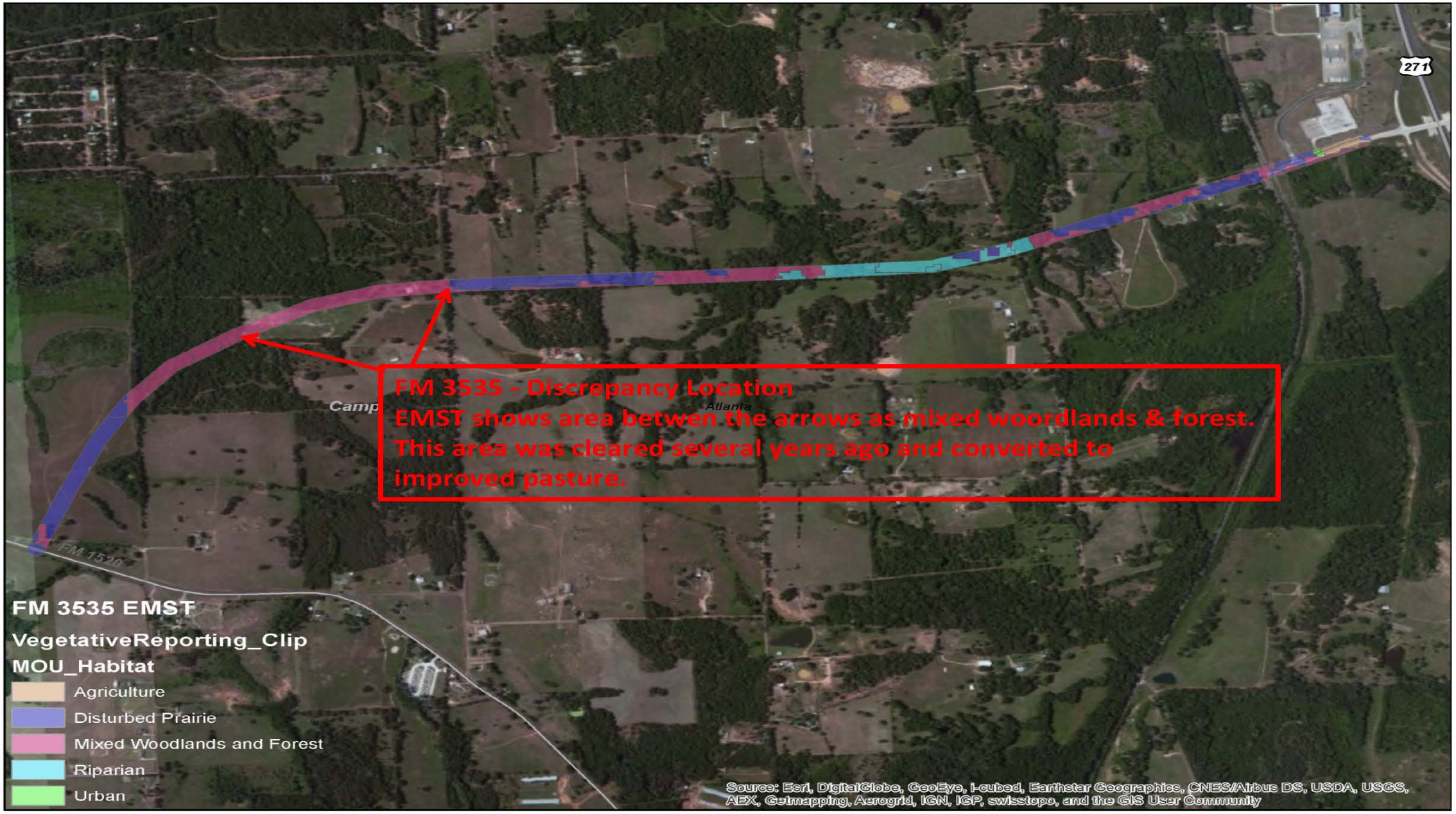
Miles

Map compiled by TxDOT based on information provided by Texas Parks and Wildlife Departments Natural Diversity Database.
No claims are made to the accuracy of the data or to the suitability of the data to a particular use


271
Camp
Atlanta
FM 1520
FM 3535 EMST
VegetativeReporting_Clip
MOU_Habitat
Agriculture
Disturbed Prairie
Mixed Woodlands and Forest
Riparian
Urban
Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

EMST Full Report

Feature Type	Common	TPWD_Ecosys	MOU_Habitat	EcoRegion	Acres
ROADWAY					
	Pineywoods: Disturbance or Tame Grassland	Disturbance Grassland	Disturbed Prairie	South Central Plains	0.597336
	Pineywoods: Upland Hardwood Forest	West Gulf Coastal Plain Pine-Hardwood Forest	Mixed Woodlands and Forest	South Central Plains	0.566297
	Row Crops	Agriculture	Agriculture	South Central Plains	0.579647
	Urban High Intensity	Urban	Urban	South Central Plains	0.082284
				ROADWAY Sum Acres	**1.825565**
ROW					
	Pineywoods: Disturbance or Tame Grassland	Disturbance Grassland	Disturbed Prairie	South Central Plains	0.654514
	Pineywoods: Upland Hardwood Forest	West Gulf Coastal Plain Pine-Hardwood Forest	Mixed Woodlands and Forest	South Central Plains	0.382312
	Row Crops	Agriculture	Agriculture	South Central Plains	0.401472
	Urban High Intensity	Urban	Urban	South Central Plains	0.06544
				ROW Sum Acres	**1.503738**
VEGETATION					
	Pineywoods: Disturbance or Tame Grassland	Disturbance Grassland	Disturbed Prairie	South Central Plains	16.383198
	Pineywoods: Pine Forest or Plantation	West Gulf Coastal Plain Pine-Hardwood Forest	Mixed Woodlands and Forest	South Central Plains	1.180261
	Pineywoods: Small Stream and Riparian Tempora	West Gulf Coastal Plain Small Stream and River Fo	Riparian	South Central Plains	2.986523
	Flooded Hardwood Forest				
	Pineywoods: Small Stream and Riparian Wet Prair	West Gulf Coastal Plain Small Stream and River Fo	Riparian	South Central Plains	2.90605
	Pineywoods: Upland Hardwood Forest	West Gulf Coastal Plain Pine-Hardwood Forest	Mixed Woodlands and Forest	South Central Plains	18.455254
	Row Crops	Agriculture	Agriculture	South Central Plains	0.076557
	Urban High Intensity	Urban	Urban	South Central Plains	0.034739
				VEGETATION Sum Acres	**42.022581**


271
FM 3535 - Discrepancy Location
EMST shows area betwen the arrows as mixed woordlands & forest.
This area was cleared several years ago and converted to
improved pasture.
Camp
Atlanta
FM 1520
FM 3535 EMST
VegetativeReporting_Clip
MOU_Habitat
Agriculture
Disturbed Prairie
Mixed Woodlands and Forest
Riparian
Urban
Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Species	Preferred Habitat	Impacts	Pertinent Information
BIRDS			
American Peregrine Falcon (*Falco peregrinus anatum*) **DL, ST**	Year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	No Impact	No suitable habitat within or adjacent to the project area.
Arctic Peregrine Falcon (*Falco peregrinus tundrius*) **DL, ST**	Migrant throughout state from subspecies' far northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	No Impact	No suitable habitat within or adjacent to the project area.
Bachman's Sparrow (*Aimophila aestivalis)* **ST**	Open pine woods with scattered bushes or understory, bushy or over grown fields with thickets and brambles, and grassy orchards. Nests on ground against grass tuft or under low shrub.	No Impact	No suitable habitat within or adjacent to the existing right-of-way.
Bald Eagle (*Haliaeetus leucocephalus*) **DL, ST**	Near seacoasts, rivers, and large lakes. Nests in tall trees or on cliffs near water	No Impact	Species is known to winter at nearby Lake Bob Sandlin located 1.0 mile from the project area, however, no suitable habitat occurs within the existing or proposed right-of-way.
Henslow's Sparrow (*Ammodramus henslowii*) **SGCN**	Wintering individuals (not flocks) found in weedy fields or cut-over areas where lots of bunch grasses occur along with vines and brambles; a key component is bare ground for running/walking	No Impact	No suitable habitat within or adjacent to the existing right-of-way.
Interior Least Tern (*Stema antillarum athalassos)* **FE, SE**	Nests along sand and gravel bars within braided streams and rivers; also known to nest on manmade structures (inland beaches, wastewater treatment plants, gravel mines, etc); eats small fish and crustaceans, when breeding forages within a few hundred feet of colony.	No Effect	No suitable habitat within or adjacent to the existing right-of-way.
Peregrine Falcon (*Falco peregrinus)* **DL, ST**	Both subspecies migrate across the state from more northern breeding areas in US and Canada to winter along coast and farther south; subspecies (F. p. anatum) is also a resident breeder in west Texas; the two subspecies' listing statuses differ, thus the species level shows this dual listing status; because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat.	No Impact	No suitable habitat within or adjacent to the existing right-of-way.
Piping Plover (*Charadrius melodus*) **FT, ST**	Wintering migrant along the Texas Gulf Coast; beaches and bayside mud or salt flats.	No Effect	No suitable habitat within or adjacent to the project area.

Sprague's Pipit (Anthus spragueii) **FC**	Only in Texas during migration and winter, mid-September to early April; short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal grasslands, uncommon to rare further west; sensitive to patch size and avoids edges.	No Impact	No suitable habitat within or adjacent to the project area.
Wood Stork (*Micteria Americana)* **ST**	Forages in prairie ponds, flooded pastures or fields, ditches and other shallow standing water; usually roosts communally in tall snags; breeds in Mexico.	No Impact	No suitable habitat within or adjacent to the project area.

FISHES			
Blackside Darter (*Percina maculata*) **ST**	Red, Sulphur and Cypress River basins; clear, gravelly streams; prefers pools with some current, or even quiet pools, to swift riffles.	No Impact	No suitable habitat in the project area. There are no sizeable streams within the project limits that could support this species.
Creek Chubsucker (*Erimyzon oblongus*) **ST**	Tributaries of the Red, Sabine, Neches, Trinity, and San Jacinto rivers; small rivers and creeks of various types; seldom in impoundments; prefers headwaters, but seldom occurs in springs; young typically in headwater rivulets or marshes; spawns in river mouths or pools, riffles, lake outlets, upstream creeks.	No Impact	No suitable habitat in the project area. There are no sizeable streams within the project limits that could support this species.
Ironcolor Shiner (*Notropis chalybaeus*) **SGCN**	Big Cypress Bayou and Sabine River basins; spawns April-September, eggs sink to bottom of pool; pools and slow runs of low gradient small acidic streams with sandy substrate and clear well vegetated water; feeds mainly on small insects, ingested plant material not digested	No Impact	No suitable habitat in the project area. There are no sizeable streams within the project limits that could support this species.
Orangebelly Darter (*Etheostoma radiosum*) **SGCN**	Red through Angelina River basins; just headwaters ranging from high gradient streams to more sluggish lowland streams, gravel and rubble riffles preferred; eggs buried in gravel and riffle raceways, post-larvae live in quiet water, move into progressively faster water as they mature, young feed mostly on copepods and cladocerans, adults on mayfly and fly larvae, spawn late February through mid-April in eastern Texas	No Impact	No suitable habitat in the project area. There are no sizeable streams within the project limits that could support this species.
Paddlefish (*Polyodon spathula)* **ST**	Prefers large, free-flowing rivers, but will frequent impoundments with access to spawning sites; spawns in fast, shallow water over gravel bars; larvae may drift from reservoir to reservoir.	No Impact	No suitable habitat in the project area. There are no sizeable streams within the project limits that could support this species.
Tailight Shiner (*Notropis maculatus*) **SGCN**	Sulfur River and Big Cypress Bayou; mostly headwaters, typically large sluggish, mud-bottomed small to large streams and lakes, usually with some aquatic vegetation; spawns March-October in backwaters and pools; feeds mainly on insect larva and cladocerans, also algae.	No Impact	No suitable habitat in the project area. There are no sizeable streams within the project limits that could support this species.

MAMMALS			
Black Bear (*Ursus americanus*) **ST**	Bottomland hardwoods and large tracts of inaccessible forested areas.	No Impact	Although additional ROW is required, much of the surrounding area has been fragmented by roads, utility lines, residential areas and improved pasture.
Plains Spotted Skunk (*Spilogale putorius interrupta*) **SGCN**	Catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie.	May Impact	Skunk BMP - Contractor 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.
Red Wolf (*Canis rufus*) **FE, SE**	Extirpated; formerly known throughout eastern half of Texas in brushy and forested areas, as well as coastal prairies.	No Effect	The red wolf is considered extirpated in Texas.
Southeastern Myotis Bat (*Myotis austroriparius*) **SGCN**	Roosts in cavity trees of bottomland hardwoods, concrete culverts, and abandoned man-made structures.	No Impact	No cavity trees were observed within the project limits.
MOLLUSKS			
Louisiana Pigtoe (*Pleurobema riddellii*) **ST**	Streams and moderate-size rivers, usually flowing water on substrates of mud, sand, and gravel; not generally known from impoundments; Sabine, Neches, and Trinity (historic) River basins.	No Impact	No suitable habitat in the project area. There are no sizeable streams within the project limits that could support this species.
Southern hickorynut (*Obovaria jacksoniana*) **ST**	Medium sized gravel substrates with low to moderate current; Neches, Sabine, and Cypress river basins.	No Impact	No suitable habitat in the project area. There are no sizeable streams within the project limits that could support this species.
REPTILES			
Alligator Snapping Turtle (*Macroclemys temminckii*) **ST**	Perennial water bodies; deep water of rivers, canals, lakes, and oxbows; also swamps, bayous, and ponds near deep running water; sometimes enters brackish coastal waters; usually in water with mud bottom and abundant aquatic vegetation; may migrate several miles along rivers; active March-October; breeds April-October.	No Impact	No suitable habitat in the project area. There are no sizeable streams within the project limits that could support this species.
Northern Scarlet Snake (*Cemophora coccinea copei*) **ST**	Mixed hardwood scrub on sandy soils; feeds on reptile eggs; semi-fossorial; active April-September.	No Impact	No suitable habitat within or adjacent to the proposed project.
Timber Rattlesnake (*Croatalus horridus*) **ST**	Swamps, floodplains, upland pine and deciduous woodlands, riparian zones, abandoned farmland; limestone bluffs, sandy soil or black clay; prefers dense ground cover.	May Impact	Snake BMP - Suitable habitat exists within the project area. Contractor will be advised of potential occurrence in the project area, and to avoid harming species if encountered.

PLANTS			
Panicled Indigobush (*Amorpha paniculata*) **SGCN**	A stout shrub, 3 m (9 ft) tall that grows in acid seep forests, peat bogs, wet floodplain forests, and seasonal wetlands on the edge of Saline Prairies in East Texas. It is distinguished from other Amorpha species by its fuzzy leaflets with prominent raised veins underneath, and the flower panicles, which are 8 to 16 inches long and slender, held above the foliage.	No Impact	No suitable habitat within or adjacent to the proposed project.

FE, FT – Federally Listed Endangered/Threatened **PE, PT** – Federally Proposed Endangered/Threatened
E/SA, T/SA – Generally Endangered/Threatened by Similarity of Appearance
C1 –Federal Candidate, Category 1; information supports proposing to list
SE, ST – State Endangered/Threatened
SGCN – Specie of Greatest Conservation Need

John Callison

From: Sue Reilly <Sue.Reilly@tpwd.texas.gov>
Sent: Wednesday, September 09, 2015 5:02 PM
To: John Callison
Cc: John Young Jr
Subject: FM 3535 in Camp County, CSJ 3403-01-001

John,

I apologize for the extended length of time for my review. I hope all is well.

Thank you for submitting the following project for early coordination: FM 3535 from FM 1520 to US 271 in Camp County (CSJ 3403-01-001). TPWD appreciates TxDOT's commitment to implement the practices listed in the Biological Evaluation Form submitted June 26, 2015. Based on a review of the documentation, the avoidance and mitigation efforts described, and provided that 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 and wildlife.

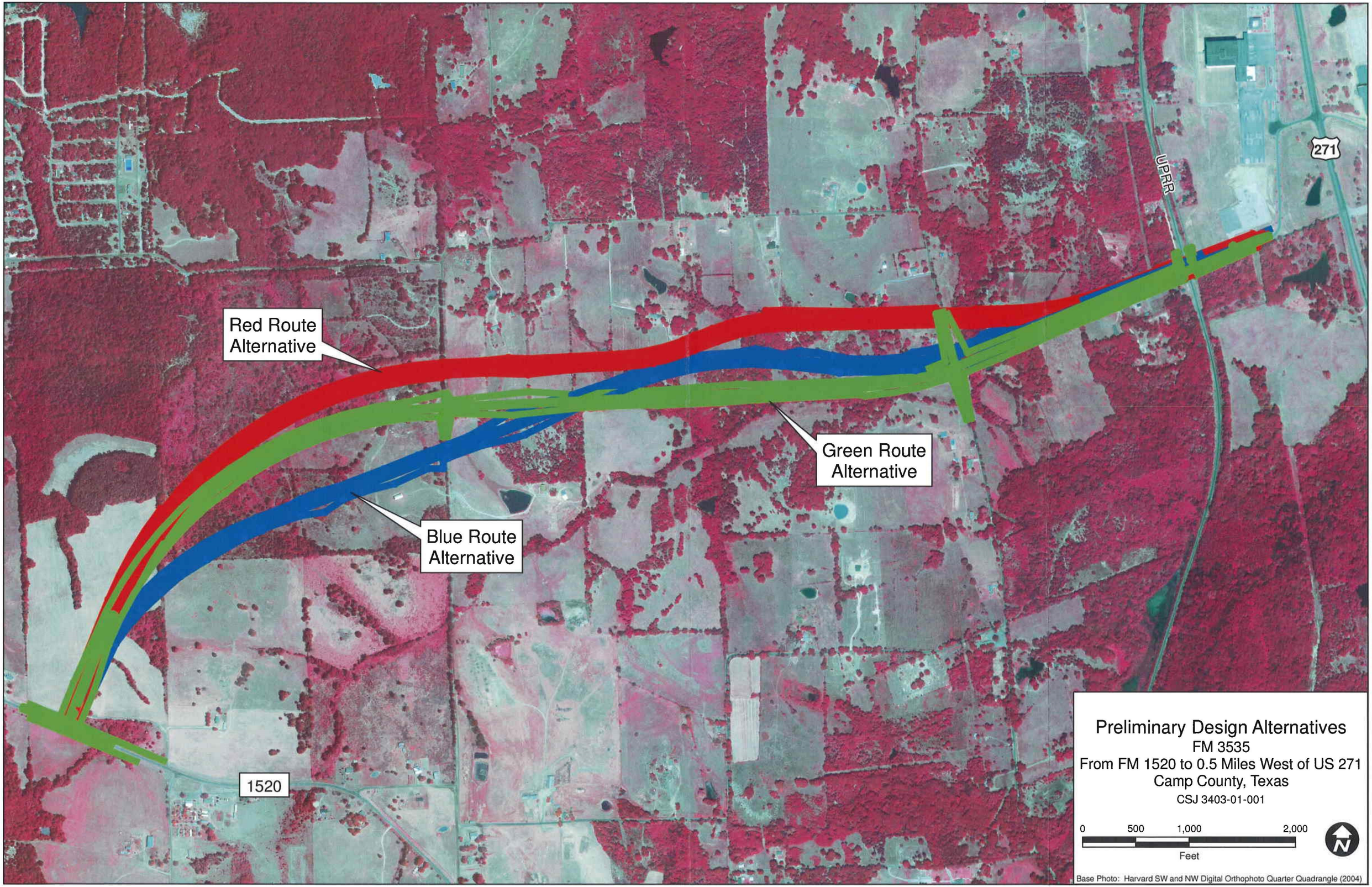
Thank you,

Sue Reilly
Transportation Assessment Liaison
TPWD Wildlife Division
512-389-8021

Appendix H—Alternative Analysis

Preliminary Alternatives Exhibit

Alternatives Analysis Matrix


Red Route Alternative
Green Route Alternative
Blue Route Alternative
UPRR
271
1520
Preliminary Design Alternatives
FM 3535
From FM 1520 to 0.5 Miles West of US 271
Camp County, Texas
CSJ 3403-01-001
0
500
1,000
2,000
Feet
Base Photo: Harvard SW and NW Digital Orthophoto Quarter Quadrangle (2004)

No.	Issue	Max. Score	Weight	Red Route			Blue Route			Green Route		
				Units	Rating	Score	Units	Rating	Score	Units	Rating	Score
1	Length/Cost Issues											
1.1	Total Length (Mi)	3.00	15%	2.49	4	2.4	2.45	4	2.4	2.45	4	2.4
1.2	Utility Impact	2.00	10%		3	1.2		3	1.2		3	1.2
1.3	Construction Cost ($ X M)	5.00	25%	2.490	4	4	2.450	4	4	2.450	4	4
1.4	ROW Cost ($)	5.00	25%	323,600	2	2	301,860	3	3	286,800	4	4
1.5	Total Cost ($ X M))	5.00	25%	2.81360	4	4	2.75186	4	4	2.7368	4	4
	Subtotal	20.00	100%									
	Score Subtotal					13.6			14.6			15.6
2	Roadway/Engineering Issues											
2.1	Topography	5.00	8%		4	4		4	4		4	4
2.2	Constructability	2.00	3%		4	1.6		4	1.6		4	1.6
2.3	Time to Construct	2.00	3%		4	1.6		4	1.6		4	1.6
2.4	Stream Crossings	5.00	8%	0	5	5	0	5	5	0	5	5

No.	Issue	Max. Score	Weight	Red Route			Blue Route			Green Route		
				Units	Rating	Score	Units	Rating	Score	Units	Rating	Score
	(Major)(Number)											
2.5	Stream Crossings (Minor)(Number)	3.00	5%	2	3	1.8	2	3	1.8	2	3	1.8
2.6	User Delays	3.00	5%		5	3		5	3		5	3
2.7	Route Alignment Through Properties	10.00	17%		2	4		3	6		4	8
2.8	Roadway Intersections (No.)	5.00	8%	5	2	2	4	3	3	4	3	3
2.9	Preferred Geometrics	15.00	25%		3	9		3	9		3	9
2.10	Safety	5.00	8%		5	5		5	5		5	5
2.10.1	Driver Safety During Construction	5.00	8%		3	3		3	3		3	3
	Subtotal	60.00	100%									
	Score Subtotal					40			43			45

No.	Issue	Max. Score	Weight	Red Route			Blue Route			Green Route		
				Units	Rating	Score	Units	Rating	Score	Units	Rating	Score
3	Human Environmental Issues											
3.1	Land Use											
3.1.1	Residential											
3.1.1.1	Displacements (Number)	5.00	25%	2	3	3	2	3	3	2	3	3
3.1.1.2	Within 500 ft. (No.)	1.00	5%	11	2	0.4	7	3	0.6	4	4	0.8
3.1.2	Commercial/ Industrial											
3.1.2.1	Displacements (No.)	0.50	3%	0	5	0.5	0	5	0.5	0	5	0.5
3.1.2.2	Access Affected (No.)	0.5	3%	1	4	0.4	1	4	0.4	1	4	0.4
3.1.3	Park/Recreational Facilities (No.)											

No.	Issue	Max. Score	Weight	Red Route			Blue Route			Green Route		
				Units	Rating	Score	Units	Rating	Score	Units	Rating	Score
3.1.3.1	Displacements (No.)	1.00	5%	0	5	1	0	5	1	0	5	1
3.1.3.2	Within 500 ft (No.)	1.00	5%	0	5	1	0	5	1	0	5	1
3.1.4	Churches											
3.1.4.1	Displacements (No.)	2.00	10%	0	5	2	0	5	2	0	5	2
3.1.4.2	Within 500 ft. (No.)	0.50	3%	1	3	0.3	1	3	0.3	1	3	0.3
3.1.5	Cemeteries											
3.1.5.1	Displacements (No.)	5.00	25%	0	5	5	0	5	5	0	5	5
3.1.5.2	Within 500 ft. (No.)	0.50	3%	0	5	0.5	0	5	0.5	0	5	0.5
3.2	Agricultural											

No.	Issue	Max. Score	Weight	Red Route			Blue Route			Green Route		
				Units	Rating	Score	Units	Rating	Score	Units	Rating	Score
	Resources											
3.2.1.1	Total Agricultural Land (Ac.)	1.00	5%	25.8	2.8	0.56	25.34	2.8	0.56	22.1	3	0.6
3.2.2	Special Ag. Resources (Timber)(Ac.)	1.00	5%	10.4	3	0.6	10.28	3	0.6	13.5	2.8	0.56
3.2.3	Stock Ponds (No.)	1.00	5%	0	5	1	0	5	1	0	5	1
	Subtotal	20.0	100%									
	Score Subtotal					16.26			16.46			16.66
	TOTAL SCORE					70			74			77

The most desirable alternatives possess the highest scores. Alternatives are rated from 1 to 5:

5 – Positive Impact; 4 – Negligible Negative Impact; 3 – Low Negative Impact;

2 – Moderate Negative Impact; 1 – High Negative Impact

This report was written on behalf of the Texas Department of Transportation by

COX | McLAIN
Environmental Consulting

8401 Shoal Creek Boulevard, suite 100
Austin, TX, 78757
www.coxmclain.com

CSJ 3403-01-001