



# Draft Environmental Assessment

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## Interstate Highway 35 West (IH 35W) Frontage Roads, TxDOT Dallas District

From: Dale Earnhardt Way

To: The IH 35E/IH35W Interchange

Control-Section-Job (CSJ): 0081-13-065

Denton County, Texas

Date: March 2020

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 9, 2019, and executed by FHWA and TxDOT.

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## LIST OF ACRONYMS

The following is a list of acronyms used throughout this document and their definitions.

ACS	American Community Survey
ACT	Antiquities Code of Texas
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
AOI	Area of Influence
APE	Area of Potential Effect
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CGP	Construction General Permit
CIA	Community Impacts Assessment
CMP	Congestion Management Process
CO	Carbon Monoxide
CSJ	Control-section-job number
CWA	Clean Water Act
DHHS	Department of Health and Human Services
EA	Environmental Assessment
EIS	Environmental Impact Statement
EJ	Environmental Justice
EO	Executive Order
EPA	Environmental Protection Agency
EPIC	Environmental Permits, Issues, and Commitments
ETC	Estimated Time of Completion
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Floodplain Insurance Rate Map
FM	Farm-to-Market Road
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FTA	Federal Transit Administration
IH	Interstate Highway
ISA	Initial Site Assessment
LEP	Limited English Proficiency
LPST	Leaking Petroleum Storage Tank
LWCF	Land and Water Conservation Fund
MBTA	Migratory Birds Treaty Act
MOU	Memorandum of Understanding
MPH	Miles Per Hour
MSAT	Mobile Source Air Toxics
MS4	Municipal Separate Storm Sewer System
MTP	Metropolitan Transportation Plan
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria

NCTCOG	North Central Texas Council of Governments
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWP	Nationwide Permit
PCN	Preconstruction Notification
PM	Particulate Matter
PS&E	Plans, Specifications, and Estimates
PST	Petroleum Storage Tank
PWC	Parks and Wildlife Code
ROW	Right-of-Way
RSA	Resource Study Area
RTC	Regional Transportation Council
RTHL	Recorded Texas Historic Landmarks
SAL	State Antiquities Landmark
SGCN	Species of Greatest Conservation Need
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
STIP	Statewide Transportation Program
SW3P	Stormwater Pollution Prevention Plan
TAC	Texas Administrative Code
TAQA	Traffic Air Quality Analysis
TCAP	Texas Conservation Action Plan
TCEQ	Texas Commission on Environmental Quality
TERP	Texas Emissions Reduction Plan
THC	Texas Historical Commission
TIP	Transportation Improvement Program
TMDL	Total Maximum Daily Load
TPDES	Texas Pollutant Discharge Elimination System
TP&P	Transportation Planning and Programming Division
TPW	Texas Parks and Wildlife
TPWD	Texas Parks and Wildlife Department
TWDB	Texas Water Development Board
TxDOT	Texas Department of Transportation
URARPAPA	Uniform Relocation Assistance and Real Property Acquisition Policies Act
US	United States Highway
USACE	United States Army Corps of Engineers
USC	United States Code
USCB	United States Census Bureau
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WOUS	Waters of the United States

## 1.0 INTRODUCTION

The Texas Department of Transportation (TxDOT) is proposing improvements to Interstate Highway 35 West (IH 35W) from Dale Earnhardt Way in the City of Fort Worth to south of the IH 35E/IH35W interchange in the City of Denton, Denton County, Texas; a distance of approximately 12.3 miles. The proposed project consists of the construction of continuous, one-way, two-lane urban, northbound and southbound frontage roads along IH 35W, entrance and exit ramp reversals, flipping three interchanges so that the IH 35W mainlanes cross over these streets; constructing a new interchange for the future Denton Creek Road, and expanding the Cleveland Gibbs Road, FM 407, Robson Ranch Road/Crawford Road, and proposed Loop 288/Vintage Road interchanges. See **Appendix A: Maps – Project Location Map, USGS Topographic Map, and Aerial Map**.

This Environmental Assessment (EA) evaluates the social, economic, and environmental impacts of the proposed project and determines whether such impacts warrant preparation of an Environmental Impact Statement (EIS). The planning process for this project follows TxDOT and Federal Highway Administration (FHWA) environmental policies and procedures in compliance with the National Environmental Policy Act (NEPA). The EA will be made available for public review and TxDOT will consider all comments received. If TxDOT determines that there are no significant adverse effects as a result of the proposed project, a Finding of No Significant Impact (FONSI), will be prepared, signed, and be made available to the public.

## 2.0 PROJECT DESCRIPTION

### 2.1 Existing Facility

#### *Mainlanes*

The mainlanes consist of two 12-foot wide general-purpose lanes in each direction with 4-foot to 6-foot wide inside shoulders and 9-foot to 12-foot wide outside shoulders separated by a 35 to 40-foot wide median.

#### *Frontage Roads*

At the north end of the project, the existing IH 35W contains an approximate 0.5-mile long, discontinuous, two-way, southbound frontage road consisting of two 12-foot wide lanes with a 10-foot wide outside shoulder and a 4-foot wide inside shoulder. The frontage road provides no access to IH 35W.

#### *Entrance/ Exit Ramps*

The existing northbound and southbound entrance and exit ramps consist of one 14-foot wide lane with 2-foot wide inside shoulders and 10-foot wide outside shoulders. All of the existing ramp configurations at interchanges are of a conventional diamond design.

### *Interchanges*

The existing Dale Earnhardt Way at IH 35W consists of two 12-foot wide eastbound and westbound travel lanes separated by 14-foot wide two-way left-turn lane, and 10-foot wide outside shoulders. Dale Earnhardt Way crosses over the IH 35W mainlanes.

The existing FM 1171 (Cross Timbers Road) at IH 35W consists of one 12-foot wide travel lane in each direction. FM 1171 (Cross Timbers Road) crosses over the IH 35W mainlanes.

The existing Cleveland Gibbs Road at IH 35W consists of one 12-foot wide travel lane in each direction. Cleveland Gibbs Road crosses over the IH 35W mainlanes.

The existing FM 407 at IH 35W consists of one 12-foot wide travel lane in each direction separated by 14-foot wide two-way left-turn lane. FM 407 crosses under the IH 35W mainlanes.

The existing Old Justin Road at IH 35W consists of one 12-foot wide travel lane in each direction. Old Justin Road crosses over the IH 35W mainlanes. There is no access to IH 35W from Old Justin Road.

The existing Robson Ranch Road west of IH 35W consists of one eastbound 12-foot wide travel lane, one eastbound 12-foot wide dedicated right-turn lane, and two westbound 12-foot wide travel lanes. The existing Crawford Road at IH 35W consists of one eastbound 12-foot wide travel lane and one westbound 12-foot wide travel lane. Robson Ranch Road/Crawford Road crosses under the IH 35W mainlanes.

The existing John Paine/Allred Road at IH 35W consists of one eastbound 12-foot wide travel lane and one westbound 12-foot wide travel lane. John Paine/Allred Road crosses over the IH 35W mainlanes. There is no access to IH 35W from John Paine/Allred Road.

The existing FM 2449/Vintage Road at IH 35W consists of one eastbound 12-foot wide travel lane and one westbound 12-foot wide travel lane. The FM 2449/Vintage Road crosses over the IH 35W mainlanes.

See **Appendix B: Project Photographs**, **Appendix C: Project Schematic**, and **Appendix D: Typical Sections**.

## **2.2 Proposed Facility**

### *Mainlanes*

The proposed project includes replacement of the existing IH 35W cross-street overpasses with new overpasses at IH 35W/Cross Timbers Road, IH 35W/FM 407, IH 35W/Old Justin Road, IH 35W/Robson Ranch Road/Crawford Road, and IH 35W/John Paine Road/Allred Road. The width of the bridge structures is based on the ultimate IH 35W mainlanes. Constructing the ultimate bridge structures along with changing the IH 35W ramp



configuration from a conventional diamond to a reverse diamond (X ramp), requires portions of the ultimate IH 35W mainlanes to be constructed with transition pavement sections to tie back to the existing. The proposed mainlanes at the interchanges would consist of three 12-foot wide lanes in each direction with 10-foot wide inside shoulders and 12-foot wide outside shoulders.

#### *Frontage Roads*

The proposed northbound and southbound frontage roads would consist of one 12-foot wide inside travel lane, one 14-foot wide outside shared use lane with 2-foot wide curb offsets, and a 6-foot wide sidewalk in each direction.

The proposed northbound and southbound frontage road bridges would consist of one 12-foot wide inside travel lane, one 14-foot wide outside shared use lane with two-foot wide inside and outside shoulders, and an 8-foot wide sidewalk in each direction.

#### *Entrance/ Exit Ramps*

The proposed northbound and southbound entrance and exit ramps would consist of one 14-foot wide lane with 4-foot wide inside shoulders and 8-foot wide outside shoulders. All of the proposed ramp configurations at interchanges would be of a reverse diamond (X ramp) design.

#### *Interchanges*

The proposed Dale Earnhardt Way at IH 35W would consist of one inside 12-foot wide travel lane, one 14-foot wide outside shared use lane with a 2-foot wide curb offset, a 10-foot wide outside median, and a 20-foot wide U-turn lane with 2-foot wide inside and outside curb offsets in each direction. The eastbound and westbound roadways would be separated by a 14-foot wide two-way left-turn lane.

The proposed FM 1171 (Cross Timbers Road) at IH 35W would consist of one inside 12-foot wide dedicated left-turn lane with a 2-foot wide inside curb offset, two 12-foot wide travel lanes, one 14-foot wide outside shared use lane with a 2-foot wide outside curb offset, an 18-foot wide outside median, and a 20-foot wide U-turn lane with 2-foot wide inside and outside curb offsets in each direction. FM 1171 (Cross Timbers Road) would be flipped so that the IH 35W mainlanes cross over FM 1171 (Cross Timbers Road).

The proposed eastbound Cleveland Gibbs Road at IH 35W would consist of one inside 12-foot wide dedicated left-turn lane with a 2-foot wide inside curb offset, one 12-foot wide travel lane, and one outside 14-foot wide shared use lane. The westbound roadway would consist of one inside 12-foot wide dedicated left-turn lane with a 2-foot wide inside curb offset, one 12-foot wide travel lane, one 14-foot wide outside shared use lane with a 2-foot wide outside curb offset, an 18-foot wide outside median, and a 20-foot wide U-turn lane with 2-foot wide inside and outside curb offsets. Cleveland Gibbs Road would be flipped so that the IH 35W mainlanes cross over Cleveland Gibbs Road. The interchange would be relocated

approximately 400 feet north of its existing location and would tie into a future Cleveland Gibbs Road designed and constructed by others.

The proposed eastbound Denton Creek Road at IH 35W is a new interchange and would consist of one inside 12-foot wide dedicated left-turn lane with a 2-foot wide inside curb offset, one 12-foot wide travel lane, one 14-foot wide outside shared use lane with a 2-foot wide outside curb offset, an 18-foot wide outside median, and a 20-foot wide U-turn lane with 2-foot wide inside and outside curb offsets. The westbound roadway would consist of one inside 12-foot wide dedicated left-turn lane with a 2-foot wide inside curb offset, one 12-foot wide travel lane, and one outside 14-foot wide shared use lane. The new interchange would tie into a future Denton Creek Road designed and constructed by others.

The proposed FM 407 at IH 35W would consist of one inside 12-foot wide dedicated left-turn lane with a 2-foot wide inside curb offset, two 12-foot wide travel lanes, one 14-foot wide outside shared use lane with a 2-foot wide outside curb offset, an 18-foot wide outside median, and a 20-foot wide U-turn lane with 2-foot wide inside and outside curb offsets in each direction.

The proposed Old Justin Road at IH 35W interchange would consist of one inside 12-foot wide dedicated left-turn lane with a 2-foot wide inside curb offset, one 12-foot wide travel lane, one 14-foot wide outside shared use lane with a 2-foot wide outside curb offset, an 18-foot wide outside median, and a 20-foot wide U-turn lane with 2-foot wide inside and outside curb offsets in each direction. Old Justin Road would be flipped so that the IH 35W mainlanes cross over Old Justin Road and access from Justin Road to IH 35W would be provided via ramps.

The proposed Robson Ranch Road/Crawford Road at the IH 35W interchange would consist of one inside 12-foot wide dedicated left-turn lane with a 2-foot wide inside curb offset, one 12-foot wide travel lane, one 14-foot wide outside shared use lane with a 2-foot wide outside curb offset, an 18-foot wide outside median, and a 20-foot wide U-turn lane with 2-foot wide inside and outside curb offsets in each direction.

The proposed Loop 288/Vintage Road (FM 2499) at the IH 35W interchange would consist of one inside 12-foot wide dedicated left-turn lane with a 2-foot wide inside curb offset, one 12-foot wide travel lane, one 14-foot wide outside shared use lane with a 2-foot wide outside curb offset, an 18-foot wide outside median, and a 20-foot wide U-turn lane with 2-foot wide inside and outside curb offsets in each direction.

#### *Right of Way*

The proposed project would require approximately 95.43 acres of additional right of way (ROW) and 2.47 acres of permanent drainage easements.

**See Appendix B: Project Photographs, Appendix C: Project Schematic, and Appendix D: Typical Sections.**

## 2.3 Logical Termini and Independent Utility

### *Logical Termini*

Federal regulations require that federally funded transportation projects have logical termini. 23 CFR 771.111(f)(1). Simply stated, this means that a project must have rational beginning and end points. Those end points may not be created simply to avoid proper analysis of environmental impacts. The logical termini for the IH 35W Frontage Roads project are from Dale Earnhardt Way to the IH 35E/IH 35W interchange, and were determined to be the logical termini because these roadways are major traffic generators.

### *Independent Utility*

Federal regulations require that a project have independent utility and be a reasonable expenditure even if no other transportation improvements are made in the area. 23 CFR 771.111(f)(2). This means a project must be able to provide benefit by itself, and that the project not compel further expenditures to make the project useful. Stated another way, a project must be able to satisfy its purpose and need with no other projects being built. Within the logical termini, the IH 35W Frontage Roads project is of independent utility because the proposed project can improve safety and provide access to adjacent land uses, which satisfies the project's need with no other projects being constructed. Because the project stands alone, it cannot and does not irretrievably commit federal funds for other future transportation projects. The project limits encompass the entire length of the project in which construction would take place and account for transitions into the existing roadway.

Federal law prohibits a project from restricting consideration of alternatives for other reasonably foreseeable transportation improvements. 23 CFR 771.111(f)(3). This means that a project must not dictate or restrict any future roadway alternatives. The proposed project would not restrict the consideration of alternatives for other foreseeable transportation improvements because ongoing design coordination has occurred to ensure that the proposed project would accommodate projects by others in the area. Other projects within the project limits include improvements to Cleveland Gibbs Road, Denton Creek Road, FM 407, and Loop 288/Vintage Road (FM 2499). The proposed project and these projects as mentioned are included in the transportation planning documents of the region. See **Appendix A: Project Location Map, USGS Map, and Aerial Map; Appendix B: Project Photographs; Appendix C: Project Schematic; and Appendix D: Typical Sections.**

## 2.4 Planning and Programming Status

The proposed project is included in the North Central Texas Council of Governments (NCTCOG) Mobility 2045 Metropolitan Transportation Plan (MTP) and in the 2019-2022 Transportation Improvement Program (TIP). The total project cost is estimated to be approximately \$354 million. The project would be funded by state, and federal funds. The MTP and Statewide Transportation Improvement Program (STIP) pages for the proposed IH 35W Frontage Roads

project are included in **Appendix E: Plan and Program Excerpts**. The proposed project letting date would be 2022 and the estimated time of completion (ETC) would be 2028.

### 3.0 PURPOSE AND NEED

#### 3.1 Need

The proposed project is needed to address transportation issues associated with travel safety, population and employment growth, and access to development in the project corridor. These issues are discussed in greater detail in Section 3.2.

#### 3.2 Supporting Facts and Data

##### 3.2.1 *Travel Safety*

IH 35W vehicle crash data for the years 2017 to 2019 was obtained from TxDOT and used to identify design or operational issues leading to safety concerns, such as vehicle conflicts associated with problematic merging areas, ramp queue spillback onto mainlanes, or uncontrolled freeway access. The total crash concentration was calculated by determining the number of crashes per mile, converting to percentages of the total number of crashes (267), and assigning the percentages to one of seven crash concentration ranges. The highest crash concentrations on IH 35W are centered around 1) FM 2449/Vintage Road, 2) Robson Ranch Road/Crawford Road, and 3) FM 407. There are also slightly higher crash concentrations from Dale Earnhardt Way to just north of FM 1171 (Cross Timbers Road).

##### 3.2.2 *Population and Employment*

*Mobility 2045*, prepared by the NCTCOG, is a guidance document for the implementation of multimodal transportation improvements, policies, and programs in the 12-county Metropolitan Planning Area (MPA) through the year 2045. According to *Mobility 2045*, the 12-county Dallas-Fort Worth (DFW) MPA had a 2010 population of approximately 6.4 million persons. By 2045, the population of the 12-county DFW MPA is projected to be 11.2 million persons; an increase in growth of approximately 75%.

According to NCTCOG population projections, the 2017 population of Denton County was 804,396 persons and the 2045 population is projected to be 1,346,316 persons; an increase in growth of approximately 67.3%.

The Texas Water Development Board (TWDB) conducts population projections to assist in regional water planning. **Table 1** shows the projected populations of five of the six cities or towns within the IH 35W project area for the years 2020 and 2040.

**Table 1: Projected Populations for the Cities in the IH 35W Project Area**

City	2020	2040	Percent Increase
Town of Argyle	6,000	13,000	116.7
City of Denton	160,145	211,733	32.2
Town of Flower Mound	75,555	93,000	23.1
City of Fort Worth	953,971	1,490,815	56.3
Town of Northlake	4,500	31,010	589.1

Source: TWDB 2016 Regional Water Plan.

[http://www2.twdb.texas.gov/ReportServerExt/Pages/ReportViewer.aspx?%2fProjections%2fpop\\_City&rs:Command=Render](http://www2.twdb.texas.gov/ReportServerExt/Pages/ReportViewer.aspx?%2fProjections%2fpop_City&rs:Command=Render)

Accessed 7-18-19

As shown in **Table 1**, the 2020 projected populations for five of the six cities or towns in the IH 35W Frontage Roads project area are projected to grow from 23.1 to 589.1% by 2040.

According to the NCTCOG, 4,584,235 persons were employed in the 12-county DFW MPA in 2017. By 2045, 7,024,227 persons are projected to be employed in the 12-county DFW MPA; an increase in growth of approximately 53.2 percent. In Denton County, 298,071 persons were forecast to be employed in 2017. By 2045, Denton County employment is projected to be 479,619 persons; an increase in growth of approximately 60.9%.

### **3.2.3 Access to Development in the Project Corridor**

The IH 35W corridor is one of the last areas north of DFW with room for the development of large master planned communities with access to major employment centers such as Charles Schwab, Mercedes-Benz Financial, and Stanley Black and Decker. A number of existing and planned residential and commercial developments are under construction or are pending along the IH 35W corridor. The proposed frontage roads would facilitate access to these developments, which include the following:

- Indian Springs – This 160-acre development in the Town of Northlake will consist of high-density residential and commercial uses.
- Canyon Falls – This is a 1,119-acre master-planned community in the towns of Flower Mound, Northlake, and Argyle.
- Avalon at Argyle – This 404-acre development in the Town of Argyle includes a mix of commercial and residential uses with a mix of lot sizes and densities.
- Pecan Square – This 1,157-acre development in the Town of Northlake includes a mix of commercial and residential uses with a mix of lot sizes and densities.
- The Highlands – This is a 363-acre residential development with one-acre homesites in the Town of Northlake.

- The Heath Tract – This is an approximate 417-acre tract of land in Argyle, Texas that is proposed for development.
- Harvest – This is a 1,200-acre residential development in the Town of Argyle.
- The Ridge at Northlake – This is an approximate 820-acre mixed use development in the Town of Northlake.
- Hunter Ranch – This 3,179-acre master planned community in the City of Denton will include retail/commercial, industrial, single-family residential, medium density residential, schools, parks, and open space.
- Robson Ranch – This is a 2,700-acre master planned retirement community with 7,200 homes in the City of Denton.
- Cole Ranch – This 3,432-acre master planned community in the City of Denton will include retail/commercial, industrial, single-family residential, medium density residential, schools, parks, and open space.

### **3.3 Purpose**

The purpose of the project is to improve safety and provide access to adjacent land uses.

## **4.0 ALTERNATIVES**

### **4.1 Build Alternative**

The Build Alternative consists of the construction of continuous, one-way, two-lane urban, northbound and southbound frontage roads along IH 35W. Other improvements would include changing the IH 35W ramp configuration from a conventional diamond to a reverse diamond (X ramp); flipping the Farm-to-Market (FM) 1171 (Cross Timbers Road), Old Justin Road, and John Paine Road/Allred Road interchanges so that the IH 35W mainlanes cross over these streets; constructing an interchange for the future Denton Creek Road, and expanding the Cleveland Gibbs Road, FM 407, Robson Ranch Road/Crawford Road, and proposed Loop 288/Vintage Road interchanges.

In accordance with the March 11, 2010 Federal policy statement on Bicycle and Pedestrian Accommodations Regulations and Recommendations by the U.S. Department of Transportation, bicycle and pedestrian facilities would be included as part of the proposed project. Bicycle traffic would be accommodated with 14-foot wide outside shared-use lanes with two-foot wide outside curb offsets and Americans with Disabilities Act (ADA) compliant sidewalks (width of 6 to 8 feet) would be included along the proposed frontage roads for the entire project limits.



The proposed project would require approximately 95.43 acres of additional ROW and 2.47 acres of permanent drainage easements.

#### **4.2 No-Build Alternative**

The No-Build Alternative serves as both the baseline against which the Build Alternative is evaluated and as an actual option within the project limits. The No-Build Alternative assumes no construction of any improvements within the project limits. The geometric configurations for the frontage roads, and ramps will remain in their present state. The No-Build Alternative would not improve safety or provide access to adjacent land uses and therefore, does not meet the purpose and need of the proposed improvements.

#### **4.3 Alternatives Considered but Eliminated from Further Consideration**

A preliminary constraints analysis was conducted prior to schematic design so that environmental impacts could be avoided or minimized during the preliminary design process. Consequently, the proposed Build Alternative is the only build alternative considered.

### **5.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

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

- Air Quality Assessment Technical Report
- Archeological Background Study
- Biological Resources Technical Report
- Community Impacts Assessment Technical Report Form
- Hazardous Materials Initial Site Assessment Report
- Project Coordination Request for Historical Studies Project
- Indirect and Cumulative Impacts Analysis
- Traffic Noise Technical Report
- Water Resources Technical Report
- Public Involvement Summary

The technical reports and documents may be inspected and copied upon request at the TxDOT Dallas District Office, 4777 E. Highway 80, Mesquite, Texas 75150.

The following sub-sections identify the environmental consequences of the Build and No-Build Alternative on each resource.

#### **5.1 Right of way/Displacements**

**Build Alternative:** The Build Alternative would require approximately 95.43 acres of additional ROW and 2.47 acres of permanent drainage easements. No displacements are required. The

ROW would be acquired from numerous properties along the east and west sides of the project.

The ROW acquisition would be limited to those properties required for roadway construction and would be acquired from properties along the east and west sides of the project (see **Appendix C: Project Schematic** and **Appendix D: Typical Sections**). Encroachment-alteration effects could include the loss of developable land for commercial use.

The following avoidance, minimization, or compensatory mitigation was conducted/analyzed for the Build Alternative:

- Constraints were mapped and used in the planning process to avoid displacements.
- ROW acquisition would be conducted in accordance with the Federal Uniform Relocation and Real Property Acquisition Policy Act of 1970 (Uniform Act).

**No-Build Alternative:** Under the No-Build Alternative, no project-related ROW or easements would be acquired, and no displacements would occur.

## 5.2 Land Use

Developed and undeveloped lands are present within the proposed project area; however, the majority of land in the project area is undeveloped. Adjacent undeveloped land consists of vacant (not utilized), agriculture (ranch and pasture), woodlands, fence row vegetation, streams, and ponds. Adjacent developed land includes the Texas Motor Speedway at the southwest corner of IH 35W at Dale Earnhardt Way, a concrete plant on the west side of IH 35W north of Cross Timbers Road, the Town of Draper RV Park and liquor store at the southwest corner of IH 35W at FM 407, the Harvest Residential Subdivision on the west side of IH 35W north of FM 407, and a number of industrial facilities on the west side of IH 35W north of Corbin Road, and University of North Texas Lovelace Stadium and Mean Green Village on the east side of IH 35W south of FM 1515.

There are 26 stream crossings within the proposed project limits. These streams consist of two tributaries to Elizabeth Creek, Catherine Branch, Denton Creek and one tributary, Cleveland Branch and one tributary, Graham Branch and seven tributaries, five tributaries to Graveyard Branch, Roark Branch and one tributary, Hickory Creek, and Dry Fork Hickory Creek and one tributary. There are floodplains and potential wetlands associated with some of these stream crossings within the proposed project area. Stream crossings and 100-year floodplains are shown on the **Project Resource Map** in **Appendix F: Resource-specific Maps**.

**Build Alternative:** Implementation of the Build Alternative would result in the conversion of approximately 95.43 acres of vacant land into transportation ROW and 2.47 acres of vacant land into permanent drainage easements. The land use changes associated with the proposed project do not conflict with the goals of the Towns of Argyle, Northlake, Flower Mound, and the City of Denton's Comprehensive Plans. The land use changes would not delay



or interfere with any other planned improvements, and are consistent with applicable laws; therefore, no mitigation is warranted.

**No-Build Alternative:** Under the No-Build Alternative, the additional ROW and easements would not be obtained and there would be no land use changes resulting from the proposed project.

### 5.3 Farmlands

Observations made during the site reconnaissance on October 4, 2016, November 8, 2017, January 10, 2018, and July 17, 2018, revealed that active agricultural lands exist adjacent to the proposed project.

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) *Custom Soil Resource Report for Denton County, Texas* (December 5, 2019) was used to determine the soil units present within the proposed project area. **Table 2** lists the soil units within the project area (existing and proposed ROW) and their farmland classification.

**Table 2: Soil Units Within the Project Area and Their Farmland Classifications**

Map Unit Name	Farmland Classification	Acres in Project Area <sup>1</sup>	Percent of Project Area
Aledo association, undulating	Not prime farmland	1.0	0.13
Altoga silty clay, 2 to 5 percent slopes	Farmland of statewide importance	31.0	4.13
Altoga silty clay, 5 to 8 percent slopes	Not prime farmland	0.1	0.01
Altoga silty clay, 5 to 12 percent slopes, eroded	Not prime farmland	7.9	1.06
Arents, gently undulating, occasionally flooded	Not prime farmland	4.5	0.60
Branyon clay, 0 to 1 percent slopes	All areas are prime farmland	2.5	0.33
Branyon clay, 1 to 3 percent slopes	All areas are prime farmland	0.3	0.04
Burleson clay, 0 to 1 percent slopes	All areas are prime farmland	19.9	2.65
Burleson clay, 1 to 3 percent slopes	All areas are prime farmland	4.0	0.53
Frio silty clay, frequently flooded	Not prime farmland	70.7	9.43
Gasil fine sandy loam, 1 to 3 percent slopes	All areas are prime farmland	0.5	0.07
Gasil fine sandy loam, 3 to 8 percent slopes	Not prime farmland	1.0	0.13
Gowen clay loam, frequently flooded	Not prime farmland	9.8	1.31
Justin fine sandy loam, 1 to 3 percent slopes	All areas are prime farmland	1.4	0.19
Justin fine sandy loam, 3 to 5 percent slopes	All areas are prime farmland	4.3	0.57
Lindale clay loam, 1 to 3 percent slopes	All areas are prime farmland	73.6	9.81
Medlin-Sanger clay, 5 to 15 percent slopes	Not prime farmland	43.9	5.85
Medlin-Sanger stony clay, 5 to 15 percent slopes	Not prime farmland	7.4	0.99
Mingo clay loam, 1 to 3 percent slopes	Farmland of statewide importance	14.8	1.97
Navo clay loam, 0 to 1 percent slopes	Farmland of statewide importance	0.2	0.03
Navo clay loam, 1 to 3 percent slopes	Farmland of statewide importance	24.1	3.21

**Table 2: Soil Units Within the Project Area and Their Farmland Classifications**

Map Unit Name	Farmland Classification	Acres in Project Area <sup>1</sup>	Percent of Project Area
Ovan clay, occasionally flooded	Not prime farmland	2.7	0.36
Ponder loam, 0 to 1 percent slopes	All areas are prime farmland	15.5	2.07
Ponder loam, 1 to 3 percent slopes	All areas are prime farmland	125.9	16.79
Sanger clay, 1 to 3 percent slopes	All areas are prime farmland	87.9	11.72
Sanger clay, 3 to 5 percent slopes	All areas are prime farmland	57.8	7.71
Slidell clay, 1 to 3 percent slopes	All areas are prime farmland	47.5	6.33
Somervell gravelly loam, 1 to 5 percent slopes	Not prime farmland	50.4	6.72
Speck clay loam, 1 to 3 percent slopes	Not prime farmland	23.7	3.16
Wilson clay loam, 1 to 3 percent slopes	Farmland of statewide importance	15.7	2.09
<b>Total</b>		<b>750<sup>2</sup></b>	<b>100</b>

Source: *Custom Soil Resource Report for Denton County, Texas*. USDA NRCS. December 5, 2019.

<sup>1</sup> Project area is defined as existing and proposed ROW.

<sup>2</sup> Approximate number.

**Build Alternative:** The Farmland Conversion Impact Rating for Corridor Type Projects was completed on November 26, 2019 and scored 35 on Part IV for Denton County. The NRCS has identified the proposed corridor as containing areas of Prime Farmland. The total rating of the Denton County site was under 160. Therefore, the project area need not be given further consideration for protection, and no additional sites need to be evaluated. Refer to the FPPA documentation available in ECOS, which is on file with TxDOT Dallas District.

Farmland impacts would be limited to areas directly adjacent to the existing IH 35W Frontage Road project corridor and would not result in the division or separation of existing agricultural land. Farmlands would continue to function as they do under existing conditions; therefore, encroachment-alteration effects stemming from farmland impacts are not anticipated as a result of the Build Alternative.

It is not possible to fully mitigate for the loss of agricultural acreage without bringing non farmed land into production.

**No-Build Alternative:** There would be no IH 35W Frontage Road project related impacts because no ROW would be acquired.

#### 5.4 Utilities/Emergency Services

Utility adjustment requirements within the project area have not been determined. Adjacent existing utilities along the proposed project include television cables, fiber optic cables, electrical cables, telephone cables, water lines, and gas lines. The proposed project area is currently served by the fire and police departments in the Towns of Argyle, Flower Mound, Northlake, and City of Denton. The closest fire department is located approximately 1.14 miles

west of the project on Old Justine Road. The closest hospital is located adjacent to the project at the northeast corner of IH 35W at Crawford Road. The closest police station is located approximately 0.93 mile west of the project on FM 407.

**Build Alternative:** Formal utilities location and advance planning would be required to facilitate pipeline and utilities adjustments and to otherwise avoid associated impacts. TxDOT Dallas District SUE Coordinator and ROW would be responsible for the adjustments and displacements. Required utility adjustments would occur prior to or during construction of the proposed project. The adjustments and relocation of any utilities would be managed so that no substantial interruptions would occur. Utility adjustments would be confined to the project area; therefore, encroachment-alteration effects are not anticipated.

Emergency services project-related delays would be anticipated during construction; however, every reasonable effort would be made to minimize delays. Roadway closures are not anticipated at connecting roadways, but traffic patterns would be temporarily affected with alternating lane closures, temporary reductions in lane widths, and reduction in speed. During construction, temporary lane closures at connecting roadways would be kept to a minimal length and time.

Following completion of the proposed project, emergency services would have a more efficient facility to use in the performance of their duties resulting in faster response times, which is crucial for emergencies requiring an immediate response. After construction is complete, emergency response times are expected to be lower than current response times.

**No-Build Alternative:** Under the No-Build Alternative there would be no project-related impacts to utilities or emergency services.

## 5.5 Bicycle and Pedestrian Facilities

**Build Alternative:** Bicycle and pedestrian facilities would be constructed as part of the proposed project in accordance with TxDOT's *Guidelines for Emphasizing Bicycle and Pedestrian Accommodations*. These guidelines implement the USDOT's March 11, 2010 Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations.

Bicycle traffic would be accommodated on the proposed northbound and southbound frontage roads with 14-foot wide outside shared use lanes with 2-foot wide curb offsets. There would be six to eight-foot wide ADA-compliant sidewalks along the entire project limits in each direction (see **Appendix C: Project Schematic** and **Appendix D: Typical Sections**).

Encroachment-alteration effects consist of the potential for the project area to experience changes in the mode(s) of transportation utilized by area residents and changes in traffic volumes. The introduction of new bike/pedestrian facilities in the immediate area may encourage people to pursue alternative modes of transportation. With improved access to

bike/pedestrian facilities, people may have more desire to visit or use local services and facilities. The addition of bicycle and pedestrian facilities is a positive benefit; therefore, mitigation is not warranted.

**No-Build Alternative:** Under the No-Build Alternative, bicycle and pedestrian facilities would not be constructed.

## 5.6 Community Impacts

A community impacts assessment (CIA) was performed for the proposed project within a study area that was developed to include the communities potentially impacted by the proposed project. The assessment included an evaluation of community cohesion, access and travel patterns, environmental justice (EJ) and limited English proficiency (LEP) populations potentially affected by the proposed project. The boundaries of the community study area are based upon adjacent Census Block Groups within Denton County, and encompass the Towns of Argyle and Draper, as well as portions of the Towns of Bartonville, Flower Mound and Northlake, and City of Denton. A detailed discussion of the community impacts can be found in the *Community Impacts Assessment Technical Report Form* completed for the proposed project and available at the TxDOT Dallas District office.

Land use within the community study area is primarily agricultural and ranch land in its western portion; however, the area is quickly developing with a number of existing and planned residential developments underway. The eastern portion of the study area is primarily residential neighborhoods. Existing residential areas can be found along either side of US 377, in the northeast in Denton, and southeast in Flower Mound and Bartonville. There are also large areas of newly-built single-family residential developments within Northlake. The majority of residential areas throughout the study area are single family, though areas of higher-density urban development can be found in the northern limits in Denton. There are educational facilities interspersed across the central and northern portions of the study area. There is one area of industrial land use on the east side of IH 35W near Dale Earnhardt Way and another area at the northern limits of the study area adjacent to the IH 35W on the west side. There are a number of golf courses surrounded by older single-family developments in the eastern portion of the study area. There is a large area of undeveloped land within a riparian/floodplain in the southern portion of the study area, stemming from Denton Creek, which flows into Grapevine Lake just east of the study area.

**Build Alternative:** Access to adjacent land from Dale Earnhardt Way north to FM 1515 would be improved by the continuous frontage roads, improved intersections, and new roadway connections. Currently, there is only access via cross streets.

All of the existing entrance and exit ramps on IH 35W would be flipped and moved from approximately 0.45 mile to 1.63 mile north or south of their present locations. Changes in travel time relative to the existing ramp locations are anticipated to be minimal.

The Build Alternative would also provide access to Cleveland Gibbs Road, the future Denton Creek Road, Sam Davis Road, Old Justin Road, John Paine Road/Allred Road. Currently, there is no access to IH 35W from these roadways.

The proposed FM 1515 at IH 35 interchange would be constructed by others and currently does not have access to IH 35W. The proposed IH 35W Frontage Roads project would construct one southbound IH 35W entrance ramp from the proposed FM 1515 interchange approximately 2.36 miles south of the existing FM 1515 and one northbound IH 35W exit ramp to the proposed FM 1515 interchange approximately 1.45 miles south of the existing FM 1515.

No adverse impacts are anticipated as a result of the ramp reversals and relocations. Travel times in the CIA study area would not be negatively impacted and new access to IH 35W from roadways without existing access would be provided.

The proposed project would not change the existing level of separation of any geographic areas or groups of people in the project area. The proposed project would not require any displacements. The addition of continuous frontage roads would provide direct access to all adjacent properties reducing their physical separation, while reconstructed interchanges as well as new interchanges, would substantially reduce physical separation for other properties with current access to those cross-streets. The inclusion of continuous sidewalks and shared-use lanes along frontage roads would also reduce physical separation for pedestrian and bicycle movement, which would aid future development adjacent to the project. Furthermore, the inclusion of frontage roads with sidewalks would provide a framework for future public transport as adjacent commercial and residential developments advance. The proposed project would also improve safety for movements across and along the project area by providing greater capacity for vehicular movement and new capacity for pedestrians and bicycles.

### **5.6.1 Environmental Justice**

A detailed discussion of the Environmental Justice (EJ) can be found in the *Community Impacts Assessment Technical Report Form* for the proposed project.

Executive Order (EO) 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” requires the responsibility of each Federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”

Based on 2010 U.S. Census data, there are 25 census blocks that indicate half or more of the population as minorities. The majority of these census blocks have very low populations. The EJ-predominant census block with the largest population (52% minority population) can

be found just north of the project limits, at the edge of the study area within the City of Denton, and located less than a mile from the University of North Texas. The largest minority populations within this census block are Hispanic or Latino and Black or African American. The next largest EJ-predominant census block within the study area can be found at the very eastern edge of the study area, within the Town of Flower Mound. This census block is predominantly Hispanic or Latino.

Only two EJ census blocks can be found adjacent to the project corridor, with large portions of the corridor being unpopulated ranchland. It should be noted that demographics have likely changed significantly since the 2010 census was conducted nearly a decade ago. Notably, a number of recent housing developments have brought many people to areas near adjacent to the project location.

According to the 2013-2017 American Community Survey 5-Year Estimates Median Income Summary, no census block group or census block geographies show a median household income below the DHHS poverty level for a family of four of \$25,750; however, Census Tract 209 does have a median income level below the poverty level. Median income in the study area within census block groups ranges from \$36,641 to \$119,535 and within census tracts ranges from \$21,285 to \$119,015. There are an estimated 632 households within the study area below the poverty level. Block Group 1, Census Tract 208 has the lowest median income and the most households below poverty level at 189 households for block groups. This is the same block group with the largest population and a majority minority population, found in the City of Denton on the northern limits of the study area near the University of North Texas.

**Build Alternative:** The proposed project would be consistent with Executive Order (EO) 12898. EJ populations would realize the same benefits as non-EJ populations: improved access, increased capacity, improved mobility, alleviated congestion, and improved traffic safety. There would be no displacements, separation of neighborhoods, or changes in community cohesion. It is not anticipated that the populations in the two EJ census blocks adjacent to the project corridor would be adversely impacted to changes in access or travel patterns because motorists would enter and exit IH 35W from the same cross streets as they currently do and travel times would be similar. No adverse encroachment-alteration effects on EJ populations are anticipated.

Disproportionately high and adverse impacts on any minority or low-income populations are not anticipated; therefore, mitigation measures for EJ populations were not considered.

**No-Build Alternative:** Implementation of the No-Build Alternative would result in no adverse or beneficial impacts to EJ populations.



### **5.6.2 Limited English Proficiency**

A detailed discussion of the Limited English Proficiency (LEP) can be found in the *Community Impacts Assessment Technical Report Form* for the proposed project.

EO 13166 requires federal agencies to develop and implement a plan to provide services to LEP individuals to ensure meaningful access to programs and activities conducted by federal agencies. LEP Individuals are defined as individuals who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English. Meaningful access is defined as language assistance that results in accurate, timely, and effective communication to the LEP individual.

According to the 2013-2017 American Community Survey 5-Year Estimates Limited English Proficiency Summary, all census block groups show the presence of LEP populations, with the highest being Block Group 1, Census Tract 208 with 8.2%. At the census tract level, Census Tract 208 has 14% LEP population, and Census Tract 209 has 11%, with Spanish being the most spoken. The primary language spoken by LEP populations is Spanish at 52% of all LEP populations across all census block groups. However, Block Group 2, Census Tract 203.07 has a slightly larger LEP population that speaks Other Indo-European Languages (3.1%) compared to Spanish-speaking LEP population (2.9%). Also, Block Group 2, Census Tract 203.10 has zero Spanish-speaking LEP peoples, but has an Asian and Pacific Island language speaking LEP population of 4.8% of the total population, and amounts to an estimated 22 persons.

A public meeting was held on May 16, 2019 at the Argyle Middle School. Bilingual English/Spanish public meeting notices were mailed to adjacent property owners. Public meeting display ads were published in English and Spanish newspapers and Spanish-speaking staff were present at the public meeting. The public meeting notices stated that accommodations for other non-English languages would be provided if requested ahead of the meeting; however, no assistance in a language other than English was required.

A public hearing will be conducted in spring 2020. Bilingual English/Spanish public hearing notices will be mailed to adjacent property owners and other interested persons. Public hearing display ads will be published in English and Spanish newspapers, and Spanish-speaking staff will be present at the public hearing. The public hearing notices will state that accommodations for other non-English languages would be provided if requested ahead of the hearing.

## **5.7 Visual/Aesthetics**

IH 35W is a divided four-lane highway with an approximate 0.5-mile long, discontinuous, two-way, southbound frontage road at the north end of the project. Eight roads cross the project with Dale Earnhardt Way, FM 1171 (Cross Timbers Road), Cleveland Gibbs Road, Old Justin

Road, John Paine/Allred Road, and FM 2449/Vintage Road crossing over the IH 35W mainlanes, and FM 407 and Robson Ranch Road/Crawford Road crossing under the mainlanes. Vegetation in the ROW primarily consists of maintained grasses with minimal tree cover at some of the stream crossings. Aesthetic enhancement of the existing roadway is minimal.

**Build Alternative:** Visual impacts resulting from the Build Alternative would include the construction of northbound and southbound frontage roads along IH 35W; changing the IH 35W ramp configuration from a conventional diamond to a reverse diamond (X ramp) configuration; flipping FM 1171 (Cross Timbers Road), Cleveland Gibbs Road, and Old Justin Road so that they cross under the IH 35W mainlanes, moving the location of the Cleveland Gibbs Road intersection; constructing a future Denton Creek Road interchange, and expanding the Cleveland Gibbs Road, FM 407, Robson Ranch Road/Crawford Road, and proposed Loop 288/Vintage Road interchanges..

Because this is a change from the existing condition, the viewsheds of existing residences and business facilities would be directly impacted. The proposed project would not substantially change the views and setting from the existing conditions within the project limits because there are already mainlanes and numerous grade-separated interchanges within the corridor. No substantial visual impacts are anticipated for views towards and from the roadway.

Where reasonable and feasible, mitigation measures that would result in beneficial visual and aesthetic impacts may be programmed for this project. These measures may include aesthetic enhancements, such as lighting, and/or decorative details. Aesthetics treatments would be developed during final design and incorporated into the project design as appropriate.

**No-Build Alternative:** The No-Build Alternative would not result in IH 35W Frontage Road project-related visual impacts along the existing corridor as the proposed improvements would not be constructed.

## 5.8 Cultural Resources

Cultural resources are structures, buildings, archeological sites, districts (a collection of related structures, buildings, and/or archeological sites), cemeteries and objects. Both federal and state laws require consideration of cultural resources during project planning. At the federal level, NEPA and the National Historic Preservation Act (NHPA) of 1966, among others, apply to transportation projects such as this one. In addition, state laws such as the Antiquities Code of Texas apply to these projects. Compliance with these laws often requires consultation with the Texas Historical Commission (THC)/Texas State Historic Preservation Officer (SHPO) and/or federally recognized tribes to determine the project's effects on cultural resources. Review and coordination of this project followed approved procedures for



compliance with federal and state laws. See **Appendix G: Resources Agency Coordination** for the coordination documentation.

### **5.8.1 Archeological Resources**

The purpose of the archeological investigation is to conduct an inventory or determine the presence/absence of archeological resources (36 Code of Federal Regulations [CFR] 800.4) and to evaluate identified resources for their eligibility for inclusion on the National Register of Historic Places (NRHP), per Section 106 (36 CFR 800) of the NHPA of 1966, as amended, or as a designated state archeological landmark (SAL) under the Antiquities Code of Texas (13 Texas Administrative Code 26.12).

**Build Alternative:** An archeological background study was completed in September 2019. Results of the background study concluded that local geologic and soil conditions are not conducive to the preservation of buried archeological materials. Since no sites were identified in the APE or areas adjacent to the currently proposed improvements and the subject area would be considered low probability for containing intact archeological materials, no additional survey is recommended at this time.

Pursuant to Stipulation VI of the Programmatic Agreement (PA-TU) and 43 TAC 2.24(f)(1)(C) of the MOU, TxDOT finds that the proposed undertaking would not affect archeological historic properties on or eligible for listing in the NRHP (36 CFR 800.16(l)) or as SALs. No further investigations are warranted. See **Appendix G: Resources Agency Coordination** for archeological resources coordination documentation.

If 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 under the provisions of the PA-TU and MOU.

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.

**No-Build Alternative:** The proposed improvements would not occur; therefore, no impacts to potential archeological resources would occur.

### **5.8.2 Historic Properties**

TxDOT historians reviewed the National Register of Historic Places (NRHP), the list of State Antiquities Landmarks (SAL), the list of Recorded Texas Historic Landmarks (RTHL), and TxDOT files and found no historically significant resources previously documented within the area of potential effects (APE). The TxDOT Section 106 Programmatic Agreement defines the APE for this project as 150' from the proposed new ROW and the existing ROW where no new

ROW is necessary. TxDOT historians conducted a desktop analysis and examination of historic aerial photographs of the APE.

TxDOT identified the historic-age date of 1980 for any potential historic properties. TxDOT historians identified one historic-age property in the APE, a barn constructed prior to 1968. This barn (on the southwest corner of the intersection of IH 35W and CR 338 is abandoned and no longer associated with any agricultural residence or activities. Therefore, TxDOT finds this barn to be not eligible for listing in the NRHP.

TxDOT held a public meeting about this project in May 2019 and did not receive any comments related to any historic properties in the project area.

**Build Alternative:** Pursuant to Stipulation IX, Appendix 6 “Undertakings with the Potential to Cause Effects per 36 CFR 800.16(i)” of the Section 106 PA and the MOU, On January 9, 2020, TxDOT historians determined that there are no historic properties affected by this project. In compliance with the Antiquities Code of Texas and the MOU, TxDOT historians determined project activities have no potential for adverse effects. Individual project coordination with SHPO is not required. See **Appendix G: Resources Agency Coordination** for historic resources coordination documentation.

**No-Build Alternative:** The No-Build Alternative would not affect historic properties.

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

Section 4(f) protects publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, State or local significance, and any land from a historic site of national, State, or local significance. Section 6(f) protects properties funded by the Land and Water Conservation Fund (LWCF). Texas Parks and Wildlife Code (PWC) Chapter 26 mandates that any department, agency, political subdivision, county, or municipality of Texas may not approve any program or project that requires the use or taking of any public land designated and used prior to the arrangement of the program or project as a park, recreation area, scientific area, wildlife refuge, or historic site unless it is determined that there is no feasible and prudent alternative to the use or taking of such land; and the program or project includes all reasonable planning to minimize harm to the land, as a park, recreation area, scientific area, wildlife refuge, or historic site, resulting from the use or taking.

There are no Section 4(f) or Section 6(f) properties present in the project area.

## 5.10 Water Resources

The proposed project is in the Trinity River Basin, as detailed in the *Water Resources Technical Report*. The proposed project crosses 27 streams within the project limits. These streams consist of two tributaries to Elizabeth Creek; Catherine Branch; Denton Creek and one tributary to Denton Creek; Cleveland Branch and one tributary to Cleveland Branch, Graham Branch and seven tributaries to Graham Branch, five tributaries to Graveyard Branch, Roark Branch and one tributary to Roark Branch, Hickory Creek, and Dry Fork Hickory Creek and one tributary to Dry Fork Hickory Creek.

**Build Alternative: Table 3** lists the Waters of the U.S. in the proposed project area, amount of impacts to the water bodies that would result from implementation of the proposed project, and the applicable U.S. Army Corps of Engineers (USACE) permit.

Table 3: Waters of the U.S. in the Project Area and Build Alternative Impacts

Crossing Number	Waterbody or Wetland Number	Waterbody Name (Type)	Temporary Fill for Crossing			Permanent Fill for Crossing			Authorization Type
			Waterbody or Wetlands (Acres)	Streams (Linear Feet/ Acres)	Cubic Yards of Fill Material to be Discharged	Waterbody or Wetlands (Acres)	Streams (Linear Feet/Acres)	Cubic Yards of Fill Material to be Discharged	
1	1	Unnamed Tributary of Elizabeth Creek (Ephemeral stream)	-	17/ 0.002	1.30	-	-		NWP 14
2	2	Elizabeth Creek Tributary 2 (Ephemeral stream)	-	22/ 0.002	1.48	-	-		NWP 14
3	3	Catherine Branch (Perennial stream)	-	150/ 0.038	30.56	-	-		NWP 14
4	4	Open Water 1 (Pond/ Impoundment)	-	-	-	0.057	-	23.27	NWP 14 with PCN
5	5	Denton Creek Tributary 6 (Intermittent stream)	-	588/ 0.027	1.85	-	22/ 0.001	0.17	NWP 14
6	6	Denton Creek (Perennial stream)	-	120/ 0.138	111.11	-	-		NWP 14
7	7	Unnamed Tributary of Cleveland Branch (Ephemeral stream)	-	240/ 0.011	3.07	-	-		NWP 14
8	8	Cleveland Branch (Ephemeral stream)	-	87/ 0.002	0.62	0.038	60/ 0.014	10.24	NWP 14 with PCN
	9	Wetland 1 (Palustrine emergent)							
9	10	Graham Branch Tributary 10 (Ephemeral stream)	-	189/ 0.013	8.80	0.017	-	16.67	NWP 14 with PCN
	11	Wetland 2 (Palustrine emergent)							
10	12	Graham Branch Tributary 10.1 (Ephemeral stream)	-	218/ 0.01	5.19	0.018	-	7.74	NWP 14 with PCN
	13	Wetland 3 (Palustrine emergent)							
11	14	Unnamed Tributary of Graham Branch 1 (Ephemeral stream)	-	152/ 0.007	3.95	-	-	-	NWP 14
12	15	Graham Branch Tributary 13 (Intermittent stream)	-	73/ 0.01	5.41	-	-	-	NWP 14
13	16	Unnamed Tributary of Graham Branch 2 (Intermittent stream)	-	78/ 0.018	9.75	0.001	-	0.74	NWP 14 with PCN
	17	Wetland 4 (Palustrine emergent)							
14	18	Unnamed Tributary of Graham Branch 3 (Intermittent stream)	-	54/ 0.01	5.33	0.001	-	0.61	NWP 14

Table 3: Waters of the U.S. in the Project Area and Build Alternative Impacts

Crossing Number	Waterbody or Wetland Number	Waterbody Name (Type)	Temporary Fill for Crossing			Permanent Fill for Crossing			Authorization Type
			Waterbody or Wetlands (Acres)	Streams (Linear Feet/ Acres)	Cubic Yards of Fill Material to be Discharged	Waterbody or Wetlands (Acres)	Streams (Linear Feet/Acres)	Cubic Yards of Fill Material to be Discharged	
	19	Wetland 5 (Palustrine emergent)							NWP 14 with PCN
15	20	Graham Branch at Sam Davis Rd. (Intermittent stream)	0.043	112/ 0.09	68.50	-	-	-	NWP 14 with PCN
	21	Wetland 6 (Palustrine emergent)							
	22	Wetland 7 (Palustrine emergent)							
16	23	Graham Branch Tributary 15 (Intermittent stream)	-	185/ 0.017	6.97	0.025	-	9.33	NWP 14 with PCN
	24	Wetland 8 (Palustrine emergent)							
17	25	Graham Branch at IH 35W (Intermittent stream)	-	305/ 0.035	14.26	-	-	-	NWP 14
18	26	Unnamed Tributary of Graveyard Branch 1 (Ephemeral stream)	-	100/ 0.023	3.78	0.027	-	5.56	NWP 14 with PCN
	27	Wetland 9 (Palustrine emergent)							
19	28	Unnamed Tributary of Graveyard Branch 2 (Ephemeral stream)	-	276/ 0.019	10.74	0.008	-	7.53	NWP 14 with PCN
	29	Wetland 10 (Palustrine emergent)							
	30	Wetland 11 (Palustrine emergent)							
20	31	Graveyard Branch Tributary 2.1 (Ephemeral stream)	-	44/ 0.004	2.27	-	152/ 0.014	7.41	NWP 14
21	32	Graveyard Branch Tributary 2 (Ephemeral stream)	-	42/ 0.003	5.19	-	145/ 0.01	1.61	NWP 14
22	33	Graveyard Branch Tributary Unnamed (Ephemeral stream)	-	44/ 0.003	1.48	0.061	131/ 0.009	39.18	NWP 14 with PCN
	34	Wetland 12 (Palustrine emergent)							
23	35	Roark Branch Tributary 5.1 (Ephemeral stream)	-	739/ 0.051	27.41	-	319/ 0.022	11.85	NWP 14 with PCN
24	36	Roark Branch (Intermittent stream)	-			-	150/ 0.069	92.59	NWP 14

Table 3: Waters of the U.S. in the Project Area and Build Alternative Impacts

Crossing Number	Waterbody or Wetland Number	Waterbody Name (Type)	Temporary Fill for Crossing			Permanent Fill for Crossing			Authorization Type
			Waterbody or Wetlands (Acres)	Streams (Linear Feet/ Acres)	Cubic Yards of Fill Material to be Discharged	Waterbody or Wetlands (Acres)	Streams (Linear Feet/Acres)	Cubic Yards of Fill Material to be Discharged	
25	37	Hickory Creek (Intermittent stream)	-	70/ 0.092	49.26	-	-	-	NWP 14
26	38	Dry Fork Hickory Creek (Intermittent stream)	-	128/ 0.044	24.07	-	-	-	NWP 14
27	39	Unnamed Tributary of Dry Fork Hickory Creek Tributary 1 (Ephemeral stream)	-	22/ 0.001	0.77	-	87/ 0.004	2.69	NWP 14

Source: Study Team. November 2019.

As shown in **Table 3**, implementation of the Build Alternative would result in impacts to Waters of the U.S. These impacts would result from paved roadway construction, culvert installation, culvert replacement, and bridge column and riprap installation. Stream crossings and 100-year floodplains are shown on the **Project Resource Map** in **Appendix F: Resource-specific Maps**. See the *IH 35W Frontage Roads Water Resources Technical Report* for detailed information and figures.

#### **5.10.1 Clean Water Act Section 404**

Crossings 4 and 5, Crossings 8 through 10, Crossings 13 and 14, Crossing 16, Crossings 18 through 24, and Crossing 27 would be permanently impacted by the proposed project. These crossings would be authorized under Nationwide Permit (NWP) 14 – Linear Transportation Projects. The activities at these crossings have been identified as single and complete projects as defined in the NWPs because each crossing occurs at a separate and distant location and would therefore be permitted under the same NWP.

A Preconstruction Notification (PCN) would be required at Crossing 4, Crossings 8 through 10, Crossings 13 through 16, Crossings 18 and 19, and Crossing 22 because of wetland impacts. Compensatory mitigation would be required for crossings that exceed 0.10-acre thresholds, according to the current NWP criteria.

Appropriate measures would be taken to maintain normal downstream flows and minimize flooding. Temporary fills would consist of clean materials and be placed in a manner that would not be eroded by expected high flows. Temporary fills would be removed in their entirety and the affected area returned to preconstruction elevations, and revegetated as appropriate. If the project involves stream modification, stream channel modifications, including bank stabilization, would be limited to the minimum necessary to construct or protect the structure and the immediate vicinity of the project. The activity would comply with all general and regional conditions applicable to NWP 14.

The proposed project would comply with U.S. Environmental Protection Agency's (EPA) Section 404(b)(1) Guidelines 40 CFR Part 230, allowing the discharge of dredged or fill material only if there is no practicable alternative that would have less adverse effects on the aquatic ecosystem. Since the proposed project would consist of extending an existing facility, and there are no other practicable build alternatives, the discharge of dredged or fill material into Waters of the U.S. is permissible.

The potential for project-related encroachment-alteration effects on Waters of the U.S. would be mitigated through permanent (post-construction) Best Management Practices (BMPs) as described below. To minimize the potential for adverse impacts, BMPs would be regularly inspected and proactively maintained.

**No-Build Alternative:** Construction of the proposed IH 35W Frontage Roads project would not occur so there would be no project-related impacts to Waters of the U.S.

### **5.10.2 Clean Water Act Section 401**

General Condition 25 of the NWP Program requires applicants using NWP 14 to comply with Section 401 of the Clean Water Act (CWA). Compliance with Section 401 requires the use of BMPs to manage water quality on construction sites. General Condition 12 also requires applicants using NWP 14 to use appropriate soil erosion and sedimentation controls.

**Build Alternative:** The Storm Water Pollution Prevention Plan (SW3P) would include at least one BMP from the 401 Water Quality Certification Conditions for NWPs as published by the Texas Commission on Environmental Quality (TCEQ). These BMPs would address each of the following categories:

- Category I Erosion Control would be addressed by using temporary vegetation, permanent seeding/sodding, and stone outlet structures such as stone riprap.
- Category II Sedimentation Control would be addressed by installing silt fence, rock berms, and mulch filter socks.
- Category III Post-Construction Total Suspended Solids (TSS) control would be addressed by installing vegetative-lined drainage ditches and storm inlet sediment traps.

Other approved methods would be substituted if necessary, using one of the BMPs from the identical category.

The potential for project-related encroachment-alteration effects on water quality would be mitigated through permanent (post-construction) BMPs as described above. To minimize the potential for adverse impacts, BMPs would be regularly inspected and proactively maintained.

BMPs would be implemented to ensure that water quality impacts would not be significant; therefore, mitigation is not considered.

**No-Build Alternative:** As construction of the proposed IH 35W Frontage Roads project would not occur, there would be no project-related impacts on water quality associated with the No-Build Alternative.

### **5.10.3 Executive Order 11990 Wetlands**

Executive Order (EO) 11990 (Protection of Wetlands) prohibits new construction in wetlands unless (1) there is no practicable alternative to such construction, and (2) the project includes all practicable measures to minimize harm to wetlands.



**Build Alternative:** Pursuant to EO 11990 and Section 404 of the CWA, field reconnaissance was conducted to identify Waters of the U.S., including wetlands, within the proposed project limits on August 14-15 and August 22-23, 2019. Results of the reconnaissance identified wetlands within the project limits at Crossing 4, Crossings 8 through 10, Crossings 13 through 16, Crossings 18 and 19, and Crossing 22. These wetlands consist of one impoundment in the 100-year floodzone with the remaining wetlands abutting streams. Based on the current design analysis, there are no practicable alternatives to construction in wetlands.

The proposed action includes all practicable measures to minimize harm to wetlands. Impacts on wetlands would be minimized by keeping the construction footprint as small as possible while enabling construction that meets all requirements for the proposed project's implementation. The construction contractor would be required to avoid and minimize unnecessary impacts on wetlands during construction and BMPs would be implemented.

When taking economic, environmental, and other pertinent factors into consideration, impacts to the wetlands cannot be completely avoided based on the current design. However, impacts to the wetlands would be minimized to the greatest extent practicable and permitted through the appropriate Section 404 permit. Further information is provided in the Water Resources Technical Report available for review at the TxDOT Dallas District office.

**No-Build Alternative:** There would be no project-related impacts on wetlands associated with the No-Build Alternative because construction would not occur.

#### **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. Likewise, a navigational clearance under the General Bridge Act of 1946, and Section 9 of the Rivers and Harbors Act (administered by the U.S. Coast Guard [USCG]) is not applicable. Coordination with the USCG (for Section 9 and the General Bridge Act) and the USACE (for Section 10) would not be required.

#### **5.10.5 Clean Water Act Section 303(d)**

The project is located within five linear miles upstream of an impaired assessment unit (0826\_07). It is within the watershed (Lower Denton Creek) of the impaired assessment unit, and drains to the impaired assessment unit. The proposed project is located approximately 3.9 linear miles northwest of the impaired assessment unit. The proposed project and the impaired assessment unit are in the middle of the watershed. See **Table 4** for a description and location of the impaired water.

Table 4: 2018 Section 303(d) List of Impaired Waters

Assessment Unit ID	Segment ID	Segment Name	Description	Constituent of Concern	Is the project within five linear miles of an impaired assessment unit, and within the watershed of, and draining to that impaired assessment unit?	Will project contribute to Constituent of Concern?
0826_07	0826	Grapevine Lake	From Grapevine Dam in Tarrant County up to normal pool elevation of 535 feet (impounds Denton Creek); upper portion of reservoir east of Marshall Creek Park.	pH	Yes	No

Sources: 2018 Texas Integrated Report - Texas 303(d) List [https://www.tceq.texas.gov/assets/public/waterquality/swqm/assess/18txir/2018\\_303d.pdf](https://www.tceq.texas.gov/assets/public/waterquality/swqm/assess/18txir/2018_303d.pdf) (accessed 2/10/20) and TCEQ Surface Water Quality Viewer <https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=b0ab6bac411a49189106064b70bbe778> (accessed 2/10/20).

To date, TCEQ has not identified (through either a total maximum daily load (TMDL) or the review of projects under the TCEQ MOU) a need to implement control measures beyond those required by the construction general permit (CGP) on road construction projects. Therefore, compliance with the project’s CGP, along with coordination under the TCEQ MOU for certain transportation projects, collectively meets the need to address impaired waters during the environmental review process. As required by the CGP, the project and associated activities will be implemented, operated, and maintained using best management practices to control the discharge of pollutants from the project site.

#### 5.10.6 Clean Water Act Section 402

**Build Alternative:** Since Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit (CGP) authorization and compliance (and the associated documentation) occur outside of the environmental clearance process, compliance is ensured by the policies

and procedures that govern the design and construction phases of the projects. The TxDOT *Project Development Process Manual* and the TxDOT *Plans, Specifications, and Estimates (PS&E) Preparation Manual* require that a storm water pollution prevention Plan (SW3P) be included in the plans of all projects that disturb one or more acres. The TxDOT *Construction Contract Administration Manual* requires that the appropriate CGP authorization documents (Notice of Intent [NOI] or site notice) be completed, posted, and submitted, when required by the CGP, to TCEQ and the Municipal Separate Storm Sewer System (MS4) operator. The proposed project would be subject to Section 402 of the CWA, which in the state of Texas is implemented via the TCEQ Texas Pollutant Discharge Elimination System (TPDES) Construction General permit (CGP). The proposed project would include five or more acres of earth disturbance. As a result, the proposed project would require the TCEQ TPDES CGP. The proposed project corridor is also located within the boundaries and jurisdictions of the City of Denton Municipal Separate Storm Sewer System (MS4), Denton County MS4, and TxDOT MS4.

The *PS&E Preparation Manual* requires that all projects include Standard Specification Item 506 (Temporary Erosion, Sedimentation, and Environmental Controls), and the “Required Specification Checklists” require Special Provision 506-003 on all projects that need authorization under the CGP. These documents require the project contractor to comply with the CGP and SW3P and complete the appropriate authorization documents.

**No-Build Alternative:** This alternative would not alter the amount of runoff generated within the proposed project area.

#### **5.10.7 Floodplains**

**Build Alternative:** Based on a review of the Federal Emergency Management Agency’s (FEMA’s) Flood Insurance Rate Map (FIRM) numbers 48121C0360G, 48121C0365G, 48121C0370G, 48121C0505G, 48121C0495G, and 48121C0515G for Denton County, Texas, the proposed project area lies within Zone A, Zone AE, and Zone X and intersects the 100-year floodplain at 13 locations (FEMA 2012). There are 126.08 acres of the proposed project that are located within the 100-year floodplain. 100-year floodplains are shown on the **Project Resource Map in Appendix F: Resource-specific Maps.**

This project is subject to and will comply with EO 11988 on Floodplain Management. The department implements the Executive Order on a programmatic basis through the Hydraulic Design Manual. Design of this project will be conducted in accordance with the departments Hydraulic Design Manual. Adherence to the TxDOT Hydraulic Design Manual ensures that this project will not result in a “significant encroachment” as defined by FHWA’s rules implementing Executive Order 11988 at 23 CFR 650.105(q).

Construction would be limited to the proposed project's existing/proposed ROW/easement areas, and would have no effect on floodplain areas outside the construction area.

The proposed project would not increase the base flood elevation to a level that would violate applicable floodplain regulations and ordinances; therefore, mitigation is not proposed.

**No-Build Alternative:** This alternative would not alter the existing level of roadway encroachments into floodplains.

#### **5.10.8 Wild and Scenic Rivers**

The proposed project would not impact any present, proposed, or potential unit of the National Wild and Scenic Rivers System.

#### **5.10.9 Coastal Barrier Resources**

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

#### **5.10.10 Coastal Zone Management**

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

#### **5.10.11 Edwards Aquifer**

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

#### **5.10.12 International Boundary and Water Commission (IBWC)**

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 Drinking Water Systems**

The TCEQ's Source Water Assessment Viewer and the Texas Water Development Board (TWDB) Groundwater Data Viewer, accessed January 13, 2020, did not reveal any registered water wells within the IH 35W Frontage Roads project area.

In accordance with TxDOT's Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (Item 103, Disposal of Wells), any drinking water wells would need to be properly removed and disposed of during construction of the project.

## 5.11 Biological Resources

This section of the EA addresses potential impacts to biological resources under the various subheadings below. For more information regarding biological resources refer to the *IH 35W Frontage Roads Tier I Site Assessment* and *Species Analysis Form* available at the TxDOT Dallas District office.

### 5.11.1 Texas Parks and Wildlife Coordination

**Build Alternative:** Coordination with the Texas Parks and Wildlife Department (TPWD) is required per the 2013 TPWD/TxDOT (2017 Revision) MOU because:

- 1) The proposed project requires a NWP with PCN from the U.S. Army Corps of Engineers (USACE).
- 2) The proposed project would impact more than 200 linear feet of stream channel at a single and complete stream crossing.
- 3) The proposed project is within range and potential suitable habitat is present for the following Species of Greatest Conservation Need (SGCN) for which there are no species BMPs: Strecker's chorus frog (*Pseudacris streckeri*), Woodhouse's toad (*Anaxyrus woodhousii*), eastern spotted skunk (*Spilogale putorius*), long-tailed weasel (*Mustela frenata*), mink (*Neovison vison*), mountain lion (*Puma concolor*), southern short-tailed shrew (*Blarina carolinensis*), swamp rabbit (*Sylvilagus aquaticus*), thirteen-lined ground squirrel (*Ictidomys tridecemlineatus*), western hog-nosed skunk (*Conepatus leuconotus*), woodland vole (*Microtus pinetorum*), eastern box turtle (*Terrapene carolina*), slender glass lizard (*Ophisaurus attenuatus*), smooth softshell (*Apolone mutica*), western box turtle (*Terrapene ornata*), and Topeka purple-coneflower (*Echinacea atrorubens*).
- 4) The proposed project may impact remnant vegetation according to NDD and TCAP review.
- 5) The proposed project would impact at least 0.10 acre of riparian vegetation, and
- 6) The proposed project disturbs habitat in an area equal to or greater than the area of disturbance indicated in the Threshold Table PA.

Early coordination with TPWD was initiated on January 24, 2020 and completed on March 13, 2020. See **Appendix G: Resources Agency Coordination** for the coordination documentation. The *IH 35W Frontage Roads Biological Resources Technical Report* documentation is maintained in the project file at the TxDOT Dallas District Office.

**No-Build Alternative:** The No-Build Alternative would not potentially impact state-listed threatened species and SGCN.

### 5.11.2 Impacts to Vegetation

**Build Alternative:** According to the MOU with TPWD, important remnant vegetation includes 1) rare vegetation communities and 2) those that are suitable habitat for SGCNs. To address the first component, Texas Natural Diversity Database (TXNDD) data obtained from TPWD on December 20, 2019 was reviewed along with the USFWS Official Species List, dated December 3, 2019. The TXNDD search radii was 1.5 miles and 10 miles from the proposed project. The NDD search revealed one element of occurrence record within 1.5 miles of the proposed project area: Mollisol Blackland Prairie (*Schizachyrium scoparium* – *Andropogon gerardii* - *Sorghastrum nutans* – *Bifora americana* Mollisol Grassland). This community is located outside of the project area; therefore, it would not be impacted by the proposed project. The NDD search also revealed seven element of occurrence records within 10 miles of the proposed project area and consist of two records for the Texas heelsplitter (*Potamilus amphichaenus*), four records for Mollisol Blackland Prairie (*Schizachyrium scoparium* – *Andropogon gerardii* - *Sorghastrum nutans* – *Bifora americana* Mollisol Grassland), and one record for the Eastern spotted skunk (*Spilogale putorius*). These species and plant communities are located outside of the project area and would not be impacted by the proposed project.

To address important remnant vegetation's second component, general habitat types of those SGCNs that may be impacted by the proposed project (see **Section 5.11.1**), include agricultural, forest, freshwater wetland, grassland, riparian, riverine, savanna/open woodland, shrubland, and woodland. These habitat types are located immediately adjacent to the existing IH 35 corridor, and each includes an edge component. The majority of riparian, riverine, freshwater wetland, woodland, and forest habitat is located along Denton Creek, with smaller amounts present at Tributary to Graham Branch, Roark Branch, Hickory Creek, Dry Branch Hickory Creek, and smaller culvert crossings. Habitat in an agricultural area is present north of Old Justin Road. In general, savannah/open woodland, shrubland, and grassland areas are located throughout the project area within rural residential properties, pastures, and areas used for hay production. Developed habitat is located throughout the project area. Impacts to these habitats were quantified, based on the MOU type that best fits vegetation present in the given habitat, by using the Ecological Management Systems of Texas (EMST) correcting for discrepancies using actual observed vegetation types as discussed below.

Plant species from the TPWD Annotated County Lists of Rare Species for Denton County with potential suitable habitat present in the proposed project's action area that may be impacted consist of the Topeka purple-coneflower (*Echinacea atrorubens*). This species was not observed during the site visits conducted on November 6, 2019 and December 7-8, 2019.



No remnant vegetation was observed during site reconnaissance and no remnant vegetation is anticipated to be impacted by the proposed project.

Species BMPs for the Topeka purple-coneflower have not been established in the MOU BMPs PA between TxDOT and TPWD.

Vegetation impacts from the proposed project were assessed using Ecological Mapping System of Texas (EMST) vegetation data for the corridor followed up with field investigations to verify the mapped MOU type habitats. The proposed project would directly impact the following MOU Type habitats: Agriculture (1.2 acre); Cross Timbers Woodland and Forest (16.1 acres); Disturbed Prairie (77.2 acres); Edwards Plateau Savannah, Woodland, and Shrubland (0.1 acre); Open Water (2.1 acres); Riparian (7.1 acres); and Urban (659.7 acres). The vegetation impacted by the proposed project fits into the TBPR Ecoregion described in the Threshold Programmatic Agreement (PA) Under the 2013 MOU, 2017 Revision (MOU) (Threshold PA).

- a) The 16.1 acres of impacts to Cross Timbers Woodland and Forest MOU type exceeds the 2-acre threshold described in the Threshold PA.
- b) The 77.2-acre impact to the Disturbed Prairie MOU type exceeds the 3-acre threshold described in the Threshold PA.
- c) The 7.1-acre impact to the Riparian MOU type exceeds the 0.1-acre threshold described in the Threshold PA.

As stated in the Threshold PA, there is no threshold for project impacts to areas classified as the Open Water MOU type or areas classified as the Urban MOU type.

Potential impacts to vegetation would be confined to the existing and proposed ROW and permanent drainage easements; thus, encroachment-alteration effects would not occur.

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

**No-Build Alternative:** The No-Build Alternative would not cause construction-related impacts to vegetation; however, routine mowing would continue to periodically affect vegetation communities.

### **5.11.3 Executive Order 13112 on Invasive Species**

This project is subject to and will comply with federal EO 13112 on Invasive Species. The department implements this EO on a programmatic basis through its *Roadside Vegetation Management Manual* and *Landscape and Aesthetics Design Manual*.

### **5.11.4 Executive Memorandum on Environmentally and Economically Beneficial Landscaping**

This project is subject to and will comply with the federal Executive Memorandum on Environmentally and Economically Beneficial Landscaping, effective April 26, 1994. The department implements this Executive Memorandum on a programmatic basis through its *Roadside Vegetation Management Manual* and *Landscape and Aesthetics Design Manual*.

### **5.11.5 Impacts to Wildlife**

The proposed project is located in Denton County. Developed and undeveloped lands are present within the proposed project area. Developed land includes single-family residences, retail, commercial, public facilities, and places of worship. Undeveloped lands comprise vacant (not utilized), agriculture (ranch and pasture), woodlands, fence row vegetation, streams, and ponds. Wildlife species expected to inhabit the proposed project area are likely adapted to both a rural environment as well as an urban, developed environment. Mammalian species that likely inhabit the area include the coyote (*Canis latrans*), Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), and eastern gray squirrel (*Sciurus carolinensis*). Amphibian and reptilian species would also utilize the different available habitats. The species would include various snakes, turtles, lizards, and frogs native to North-Central Texas. Examples would be the western cottonmouth (*Agkistrodon piscivorus leucostoma*), red-eared slider (*Trachemys scripta*), great plains rat snake (*Pantherophis emoryi*), and the American toad (*Anaxyrus americanus*). Various waterfowl species could utilize the aquatic habitat. The agricultural fields and pastures still serve as foraging areas for resident and migratory species. No wildlife species were observed during field reconnaissance.

There is suitable habitat present within the proposed project area for the SGCN species identified in **Section 5.11.1**.

**Build Alternative:** Substantial impacts to wildlife are not anticipated. The proposed project is the widening of an existing roadway and therefore, is not newly bisecting continuous wildlife habitat. It is likely that wildlife currently avoids the proposed project area due to the adjacent development and high-speed traffic. Terrestrial wildlife that does cross IH 35W would have to travel a greater distance when crossing the widened roadway upon project completion. This



would result in their being exposed to predators, people, domestic pets, vehicles, etc. for a greater amount of time. Wildlife that does currently inhabit adjacent urban development and existing roadway structures (culverts, utility poles, etc.) would be temporarily impacted due to potential structural displacements/relocations and roadway structure reconstruction and relocation. It is likely that the impacted wildlife would recolonize the available habitat once construction of the proposed project is complete.

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

#### **5.11.6 *Migratory Bird Protections***

**Build Alternative:** This project will comply with applicable provisions of the Migratory Bird Treaty Act (MBTA) and Texas Parks and Wildlife Code Title 5, Subtitle B, Chapter 64, Birds. It is the department's policy to avoid removal and destruction of active bird nests except through federal or state approved options. In addition, it is the department's policy to, where appropriate and practicable:

- Use measures to prevent or discourage birds from building nests on man-made structures within portions of the project area planned for construction, and
- Schedule construction activities outside the typical nesting season.

**No-Build Alternative:** Under the No-Build Alternative, the proposed improvements would not occur; therefore, no impacts to migratory birds are anticipated.

#### **5.11.7 *Fish and Wildlife Coordination Act***

**Build Alternative:** All impacts to Waters of the U.S. would be authorized by NWP 14 with a PCN. Therefore, the USFWS considers Fish and Wildlife Coordination Act coordination to be complete as part of the NWP review, which was last authorized and reissued on March 19, 2017.

**No-Build Alternative:** Under the No-Build Alternative, the proposed improvements would not occur; therefore, coordination under the FWCA is not anticipated.

#### **5.11.8 *Bald and Golden Eagle Protection Act of 2007***

**Build Alternative:** No Eagles were observed during field investigations conducted on November 6, 2019 and December 7-8, 2019. The project area does not contain mature coniferous or hardwood trees adjacent to large open bodies of water. The riparian canopy adjacent to narrow streams is too dense to accommodate Eagle wingspans. Lake Grapevine is approximately five miles away and would provide better foraging habitat for the Bald Eagle.

Therefore, no impact to Bald or Golden Eagles or their habitat is anticipated as a result of the proposed project, as verified by a qualified biologist. The proposed project is not anticipated to impact Bald and Golden Eagles.

**No-Build Alternative:** Under the No-Build Alternative, the proposed improvements would not occur; therefore, impacts to bald and golden eagles are not anticipated.

#### **5.11.9 Magnuson-Stevens Fishery Conservation Management Act**

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

#### **5.11.10 Marine Mammal Protection Act**

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

#### **5.11.11 Threatened, Endangered, and Candidate Species**

As detailed in the Biological Resource Technical Report, specifically the Species Analysis Spreadsheet and Species Analysis Form, desktop analysis, and field investigations conducted on November 6, 2019 and December 7-8, 2019 indicate that this proposed project would have no effect on any federally listed threatened, endangered, or candidate species.

#### **Endangered Species Act**

The 1973 Endangered Species Act (ESA) provides a means for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife, and plants depend, and to provide a program for endangered and threatened species conservation. Section 7 of the ESA requires Federal agencies to ensure that any action authorized, funded or carried out by them is not likely to jeopardize the continued existence of listed species or modify their critical habitat.

**Build Alternative:** According to the USFWS Official Species List, dated December 3, 2019, the following federally protected species may occur or could potentially be affected by the proposed project: Least Tern (*Sterna antillarum*), Piping Plover (*Charadrius melodus*), Red Knot (*Calidris canutus rufa*), and Whooping Crane (*Grus americana*).

The Official Species List states that Least Tern, Piping Plover, and Red Knot only need consideration for wind energy projects. For the Piping Plover and Red Knot, there is no suitable habitat present within the action area, such as beaches, sand, algal, or tidal flats, or sparsely vegetated shores and islands of shallow lakes, ponds, rivers, and impoundments. Effects to the Least Tern are not anticipated because there is no suitable habitat present within the

action area, such as sand and gravel bars within braided streams and rivers. Therefore, TxDOT has determined that the proposed project would have no effect on Least Tern, Piping Plover, or Red Knot. For the Whooping Crane, the action area does not include large rivers, marshes, flooded croplands, playas, or large wetlands. In addition, it is not suitable migratory or foraging habitat due to the proximity to a high-speed roadway and other developed areas. Therefore, TxDOT has determined that the proposed project would have no effect on Whooping Crane.

USFWS designated Critical Habitat is not present within the proposed project action area, which lines up with the proposed project area.

**No-Build Alternative:** Under the No-Build Alternative, the proposed project would not be constructed; thus, there would be no effects to federally listed threatened, endangered, or candidate species.

### **State-listed Threatened and Endangered Species, and SGCN**

During the field investigations potential suitable habitat was observed within the proposed project area for the following state-listed threatened species (as identified on TPWD's Annotated County List of Rare Species for Denton County): Louisiana pigtoe (*Pleurobema riddellii*), sandbank pocketbook (*Lampsillis satura*), Texas heelsplitter (*Potamilus amphichaenus*), and timber rattlesnake (*Crotalus horridus*). Suitable habitat was also observed within the proposed project for the following SGCN (as identified on TPWD's Annotated County List of Rare Species for Denton County, accessed on December 3, 2019): Strecker's chorus frog (*Pseudacris streckeri*), Woodhouse's toad (*Anaxyrus woodhousii*), Western Burrowing Owl (*Athene cunicularia hypugaea*), eastern spotted skunk (*Spilogale putorius*), long-tailed weasel (*Mustela frenata*), mink (*Neovison vison*), mountain lion (*Puma concolor*), southern short-tailed shrew (*Blarina carolinensis*), swamp rabbit (*Sylvilagus aquaticus*), thirteen-lined ground squirrel (*Ictidomys tridecemlineatus*), western hog-nosed skunk (*Conepatus leuconotus*), woodland vole (*Microtus pinetorum*), eastern box turtle (*Terrapene carolina*), slender glass lizard (*Ophisaurus attenuatus*), smooth softshell (*Apolone mutica*), Texas garter snake (*Thamnophis sirtalis annectens*), western box turtle (*Terrapene ornata*), and Topeka purple-coneflower (*Echinacea atrorubens*).

The implementation of approved species-specific BMPs for the Louisiana pigtoe, sandbank pocketbook, Texas heelsplitter, Timber rattlesnake, Texas garter snake, and Western burrowing owl eliminates the need for coordination for impacts to the above state-listed threatened species and SGCN as described in §2.206(1) of the 2013 TPWD/TxDOT (2017 Revision) MOU. These BMPs and other avoidance and minimization measures for the SGCNs that do not have approved species-specific BMPs are included in **Section 8.1: Post-Environmental Clearance Activities**.

**Build Alternative:** There is the potential that impacts to suitable habitat could result in direct impacts to the Louisiana pigtoe, sandbank pocketbook, Texas heelsplitter, and timber rattlesnake; however, the proposed project is not anticipated to result in the ‘take’ of any state-listed threatened species.

**No-Build Alternative:** Under the No-Build Alternative, the proposed project would not be constructed; therefore, there would be no potential impacts to suitable habitat for state-listed species or SGCN.

## 5.12 Air Quality

**Build Alternative:** An *Air Quality Assessment Technical Report* was completed for the proposed project and is maintained in the project file at the TxDOT Dallas District Office. Because the proposed project would add capacity in a nonattainment area, it was coordinated under TxDOT’s MOU with TCEQ.

### 5.12.1 Transportation Conformity

This project is located within an area designated by the U.S. Environmental Protection Agency (EPA) as a serious and marginal nonattainment area for the 2008 and 2015 ozone national ambient air quality standards (NAAQS), respectively; therefore, transportation conformity rules apply. Conformity for older standards is satisfied by conformity to the more stringent 2008 and 2015 ozone NAAQS.

The proposed action is consistent with the NCTCOG’s financially constrained *Mobility 2045* and the 2019-2022 TIP, as amended, which were initially found to conform to the TCEQ State Implementation Plan (SIP) by FHWA and FTA on November 21, 2018. All projects in the NCTCOG’s TIP that are proposed for federal or state funds were initiated in a manner consistent with federal guidelines in Section 450, of Title 23 CFR and Section 613.200, Subpart B, of Title 49 CFR. Copies of the MTP and STIP pages, and FHWA Determination of Project-level Conformity are included in **Appendix E: Plan and Program Excerpts**.

### 5.12.2 CO Traffic Air Quality Analysis (TAQA)

Traffic data for the estimated time of completion (ETC) year 2028 and design year 2045 is 96,120 vehicles per day and 126,850 vehicles per day, respectively. A prior TxDOT modeling study and previous analyses of similar projects demonstrated that it is unlikely that the carbon monoxide standard would ever be exceeded as a result of any project with an average annual daily traffic (AADT) below 140,000. The AADT projections for the project do not exceed 140,000 vehicles per day; therefore, a Traffic Air Quality Analysis was not required.

### 5.12.3 Mobile Source Air Toxics (MSAT)

A qualitative Mobile Source Air Toxics (MSAT) analysis was completed for the proposed project and found that the Build Alternative may result in increased exposure to MSAT emissions in certain locations, although the concentrations and duration of exposures are uncertain and, because of this uncertainty, the health effects from these emissions cannot be estimated. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

### 5.12.4 Congestion Management Process (CMP)

A Congestion Management Process was conducted to identify operational improvements and travel demand reduction strategies at the project level. Committed congestion reduction strategies and operational improvements within the study boundary will consist of addition of shared use lanes; dedicated left-turn and right-turn lanes, and sidewalks. Individual projects are listed in **Table 5**.

**Table 5: Congestion Process Management Strategies**

Operational Improvements in Travel Corridor			
Location	Type	Project Code	Implementation Date
SH 114 From East of FM 156 to West of IH 35W	New Roadway	53195.00	2028
US 377 From Crawford Road to North of Hickory Creek	Addition of Lanes	55242.00	2045
IH 35W From SH 114 to IH 35W/IH 35E Interchange	Addition of Lanes	55242.00	2045
FM 1515 From Bonnie Brae to Masch Branch	Addition of Lanes	55239.00	2045
IH 35W From Tarrant County Line to SH 114	Addition of Lanes	55230.00	2045

Source: NCTCOG Transportation Improvement Program Information System (TIPINS). Accessed September 2, 2019.

### 5.12.5 Air Quality Construction Emissions Reduction Strategies

It is not anticipated that emissions from construction of this project would have any significant impact on air quality in the area due to the use of fugitive dust control measures, the encouragement of the use of the Texas Emissions Reduction Plan (TERP), and compliance with applicable regulatory requirements.

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

The use of fugitive dust control measures, the encouragement of the use of TERP, and compliance with applicable regulatory requirements would mitigate impacts to air quality.

**No-Build Alternative:** Due to federal fuel and vehicle control programs, air quality would be expected to improve regardless of the Build or No-Build Alternative.

### 5.13 Hazardous Materials

An initial site assessment (ISA) including a visual survey of the project limits and surrounding area, research of existing and previous land use, and limited review of federal and state regulatory databases/lists was performed in general accordance with the American Society for Testing and Materials Practice Standard E1527-13. The purpose of the ISA is to identify possible hazardous materials within the project limits.

#### 5.13.1 Hazardous Materials Regulatory Database

A review of a regulatory database list was conducted as part of the ISA. Section 5.1 of the ISA lists the regulatory records that were reviewed. The *IH 35W Frontage Roads Hazardous Materials Initial Site Assessment Report* is maintained in the TxDOT Dallas District project files.

**Build Alternative:** Based on the search results of the Hazardous Materials Regulatory Database, there is the potential for hazardous materials impacts to the project from existing hazardous materials sites within the proposed ROW and/or adjoining the project. A total of 13 sites were identified in the database. These sites were assessed for risk and grouped into one of three categories (low, moderate, or high environmental risk) as to their potential to affect the proposed project.

**Low Environmental Risk:** The issue has a low or no potential to affect the proposed project and no further investigations are required.

**Moderate Environmental Risk:** The issue has a moderate potential to affect the proposed project. Not enough information is currently known about the project and/or the issue to determine potential impacts. Further investigation, and/or additional project design and ROW, is required.

**High Environmental Risk:** The issue has a high potential to impact the proposed project and further investigations, coordination, or contingencies may be required.

One site was determined to be a moderate environmental risk to the proposed project. The site, Interstate Texaco, 1201 FM 407, Corral City, TX (Map ID 8) is at the adjacent southwest corner of FM 407 at IH 35W. The site is a PST, LPST, and VCP site, and is currently a vacant



lot. ROW acquisition is proposed from this site along FM 407 and at the corner with IH 35W. The site is shown on the **Project Resource Map** in **Appendix F: Resource-specific Maps**.

The remaining sites are considered low environmental risks to the project. There are no high-risk sites.

### **5.13.2 Petroleum Pipelines**

According to the Texas Railroad Commission Well and Pipeline Viewer (accessed 7-30-19), one gas transmission line and 11 gas gathering lines cross the project. Based on the contents of the natural gas pipelines, these features are not considered an environmental concern. Formal utilities location and advance planning would be required to facilitate pipeline and utilities adjustments and to otherwise avoid associated impacts. TxDOT Dallas District SUE Coordinator and ROW will be responsible for the adjustments and displacements.

### **5.13.3 Oil/Gas Wells**

Eleven gas wells on six pad sites are situated within 200 feet of existing and/or proposed ROW. These gas wells and pad sites are considered a low environmental risk at this time. If the project design was to change and ROW would be acquired from any of these pad sites or any wells would be displaced, the risk level may be elevated.

One gas well/pad site (API 12131372) is adjacent to existing ROW along FM 338 (Cleveland Gibbs Rd). The schematic shows FM 338 will be removed from its current location. No significant excavation adjacent to or ROW from this well site is proposed. Based on this information, the well site is a low environmental risk to the project at this time. If the project design was to change and ROW would be acquired from this pad site and/or the well would be displaced, the risk level may be elevated.

### **5.13.4 Field Investigations**

During field investigations, pole-mounted electrical transformers were identified along various sections of IH 35W. No environmental concerns were observed. These transformers are considered a low environmental risk for the project.

### **5.13.5 Asbestos and Lead-Containing-Paint**

The proposed project would require bridge structures to be demolished or renovated. These structures would be assessed and mitigated for asbestos and lead-containing-paint, as needed, within the construction process according to Standard Specification Item 6.10 (and applicable Provisions), and the TxDOT guidance document: *Guidance for Handling Asbestos in Construction Projects*, dated January 26, 2007.



**No-Build Alternative:** Under the No-Build Alternative, impacts associated with hazardous materials are not anticipated.

#### 5.14 Traffic Noise

**Build Alternative:** A traffic noise analysis was accomplished in accordance with TxDOT's (FHWA approved) *Guidelines for Analysis and Abatement of Roadway Traffic Noise* (2011). Refer to the *IH 35W Frontage Roads Traffic Noise Technical Report* for a detailed discussion of the traffic noise analysis. Sound from highway traffic is generated primarily from a vehicle's tires, engine and exhaust. It is commonly measured in decibels and is expressed as "dB." The FHWA has established the Noise Abatement Criteria (NAC) shown in **Table 5** for various land use activity areas that are used as one of two means to determine when a traffic noise impact would occur.

**Table 5: FHWA Noise Abatement Criteria**

Activity Category	dB(A) Leq	Description of Land Use Activity Areas
A	57 (exterior)	Lands on which serenity and quiet are of extra-ordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (exterior)	Residential
C	67 (exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D or F.
F	--	Agricultural, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	--	Undeveloped lands that are not permitted.

A noise impact occurs when either the absolute or relative criterion is met:

**Absolute criterion** - The predicted noise level at a receiver approaches, equals or exceeds the NAC. "Approach" is defined as one dB(A) below the NAC. For example, a noise impact would occur at a Category B residence if the noise level is predicted to be 66 dB(A) or above.

**Relative criterion** - The predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal or exceed the NAC.

“Substantially exceeds” is defined as more than 10 dB(A). For example, a noise impact would occur at a Category B residence if the existing level is 54 dB(A) and the predicted level is 65 dB(A).

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

The FHWA traffic noise modeling software was used to calculate existing and predicted traffic noise levels. The model primarily considers the number, type and speed of vehicles; highway alignment and grade; cuts, fills and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise. Existing year traffic (2025) and proposed year (2045) volumes utilized in the model were approved by TxDOT – Transportation Planning and Programming Division (TPP).

Existing and predicted traffic noise levels were modeled at receiver locations (**Table 6** and **Project Resource Map in Appendix F: Resource-specific Maps**) 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.

**Table 6: Traffic Noise Levels dB(A) Leq**

Representative Receiver	NAC Category	NAC Level	Existing	Predicted 2045	Change (+/-)	Noise Impact
R1 - Single-family Residential	B	67	61	62	+1	No
R2 - Single-family Residential	B	67	51	53	+2	No
R3 - RV Park	B	67	69	73	+4	Yes
R4 - Townhome Phase 2 - Single-family Residential	B	67	63	66	+3	Yes
R5 - Townside Phase 2 - Single-family Residential	B	67	63	66	+3	Yes
R6 - Single-family Residential	B	67	61	64	+3	No
R7 - Single-family Residential	B	67	52	55	+3	No
R8 - Women’s Heath Surgical Hospital	D	52	40	46	+6	No
R9 - Single-family Residential	B	67	56	61	+5	No
R10 - Single-family Residential	B	67	54	57	+3	No
R11 - Single-family Residential	B	67	54	57	+3	No
R12 - Mean Green Village (UNT baseball field, bleacher seating)	B	67	57	62	+5	No
R13 - Apogee Stadium (football field, bleacher seating)	B	67	51	53	+2	No

Source: Study team. December 2019.

As indicated in **Table 6**, the proposed project would result in traffic noise impact to three receivers. The following noise abatement measures were considered: traffic management; alteration of horizontal and/or vertical alignments; acquisition of undeveloped property to act as a buffer zone; and the construction of noise barriers.

Before any abatement measure can be proposed for incorporation into the project, it must be both feasible and reasonable. In order to be "feasible," the abatement measure must be able to reduce the noise level at greater than 50% of impacted, first row receivers by at least five dB(A); in order to be "reasonable," it must not exceed the cost-effectiveness criterion of \$25,000 for each receiver that would benefit by a reduction of at least five dB(A) and the abatement measure must be able to reduce the noise level at least one impacted, first row receiver by at least seven dB(A).

Noise barriers are the most commonly used noise abatement measure. Noise barriers were evaluated for each of the impacted receiver locations. It was determined that noise barriers would not be feasible and reasonable for the three impacted receivers and, therefore, are not proposed for incorporation into the project.

Any subsequent project design changes may require a reevaluation of this preliminary noise barrier proposal. The final decision to construct the proposed noise barrier will not be made until completion of the project design, utility evaluation, and polling of adjacent property owners.

However, to avoid noise impacts that may result from future development of properties adjacent to the project, local officials responsible for land use control programs must ensure, to the maximum extent possible, no new activities are planned or constructed along or within the predicted (2045) noise impact contours shown in **Table 7**.

**Table 7: Noise Impact Contours in the Project Study Area**

Limits	Land Use NAC Category	Impact Contour*	Distance from Proposed ROW Line
Dale Earnhardt Way to FM 1171	B & C	66 dB(A)	265 feet
	E	71 dB(A)	30 feet
FM 1171 to IH 35E/IH35W Interchange	B & C	66 dB(A)	200 feet
	E	71 dB(A)	5 feet

\* Impact contours are one dB(A) lower than the NAC per category to reflect impacts that would occur as a result of approaching the NAC for the respective contours.

A copy of this traffic noise analysis will be available to local officials. 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.

**No-Build Alternative:** Under the No-Build Alternative, noise levels along IH 35W would be expected to increase with an associated increase in traffic volumes.

### 5.15 Induced Growth

**Build Alternative:** Refer to the *IH 35W Frontage Roads Indirect and Cumulative Impacts Analysis* for a detailed discussion of the indirect impacts associated with the proposed project. The Council on Environmental Quality (CEQ) defines indirect effects as those caused by the action and occur later in time or farther removed in distance than direct effects but are still reasonably foreseeable. Indirect impacts may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (40 Code of Federal Regulations [CFR] Section 1508.8). Indirect effects differ from the direct impacts associated with the construction and operation of the Build Alternative and are caused by another action or actions that have an established relationship or connection to the Build Alternative. These induced actions are those that would not or could not occur without the implementation of the Build Alternative.

The potential for induced growth impacts was determined using a planning judgment approach consisting of interviews with the planning departments of the City of Denton and Towns of Argyle, Flower Mound, and Northlake. Cartographic techniques using map overlays of environmental constraints such as cemeteries, floodplains, and parks were used to identify areas where potential induced growth would not likely occur.

The AOI for the proposed project was established with a methodology of using the location of next major parallel roadways. The proposed project's AOI was established using US 377 and FM 156 as eastern and western borders, with SH 114 and US 380 as southern and northern borders to encompass the proposed project limits. Then, meetings and communication were initiated with the City of Denton and Towns of Argyle, Draper, Flower Mound, and Northlake to discuss the AOI and locations of potential induced growth.

Based on the information from the planning departments of the City of Denton and Towns of Argyle, Flower Mound and Northlake, planning documents, land use and zoning maps, thoroughfare plans, and population, employment and housing trend data, there is potential for induced growth on the approximately 2,355.8 acres of land. The induced growth is anticipated to consist of commercial, community facilities, and mixed-use development.

These induced growth areas would impact approximately 4.3 percent of the existing non-urban land cover within the AOI. These non-urban land cover types include Agriculture, Crosstimbers Woodland and Forest, Disturbed Prairie, Edwards Plateau Savannah, Woodland, and Shrubland, Riparian, and Tallgrass Prairie, Grassland. Numerous wildlife species may

utilize the vegetation for food and habitat; however, similar and higher quality habitat is present in the surrounding areas such as the 100-year floodplains and riparian areas associated with Catherine Branch, Denton Creek, Cleveland Branch, Roark Branch, Hickory Creek, Dry Fork of Hickory Creek, and various tributaries.

Approximately 4.3 percent of the prime farmland soils and farmland soils of statewide importance in the AOI would be impacted by potential induced development; however, this is not considered substantial.

Waters of the US and floodplains are unlikely to undergo induced impact due to regulatory protections; therefore, the open waters, wetlands, and floodplains were avoided in the determination of induced growth areas indicated by planners.

The expected development in the AOI would improve the socioeconomic conditions of the communities through the construction of new homes and businesses. It is anticipated that environmental justice (EJ) and non-EJ populations would benefit from the induced growth impacts equally.

The induced growth associated with the proposed project does not conflict with study area goals, would not delay or interfere with the planned improvement of a resource, and is not inconsistent with any applicable laws; therefore, mitigation for the impacts to Waters of the U.S., floodplains, and socio-economic/community resources is not warranted. All developers, public and private, would be subject to the Clean Water Act, Endangered Species Act, and Migratory Bird Treaty Act; however, private developers would not be subject to Section 106 of the National Historic Preservation Act. There are no known mitigative responsibilities for private developers in Texas for impacts to Agriculture; Disturbed Prairie; Post Oak Savanna; Riparian; or Tallgrass Prairie, Grassland vegetation. Private developers would not be subject to the FPPA for impacts to prime farmland soils and farmland soils of statewide importance. Land development activities would be regulated by the local municipalities. The mitigation of potential development within the AOI considered for this assessment would be the responsibility of the agencies with the authority to implement such controls. This authority rests with the municipal governments of Northlake, Flower Mound, Argyle, Denton and, to a lesser extent, Denton County.

**No-Build Alternative:** Under the No-Build Alternative, indirect and induced growth impacts are not anticipated.

## 5.16 Cumulative Impacts

The CEQ defines cumulative impacts as those which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR §1508.7). The purpose of a cumulative impacts analysis is to assess the direct and indirect impacts of the proposed project within the larger context of past, present, and future actions that are independent of the proposed project, but which are likely to affect the same resources.

**Build Alternative:** In accordance with TxDOT's *Cumulative Impacts Analysis Guidelines* (January 2019), the cumulative impacts analysis evaluated past, present and reasonably foreseeable actions that would impact vegetation and wildlife habitat, and farmlands. These resources were evaluated in the cumulative impacts analysis because there are direct and induced-growth impacts, and the resources are in poor and/or declining health.

The cumulative impact analysis considers both geographic and temporal study limits. A Resource Study Area (RSA) has both temporal and geographic components. The year 2001 was used as the beginning temporal boundary because it corresponds to the end of the longest period of economic expansion in recent U.S. history. The temporal boundary extends to 2045, the end of the current MTP planning cycle. The geographical boundary for vegetation and wildlife habitat, and farmlands consists of the Elm Fork Trinity River and Denton Creek watershed subbasins.

The cumulative impacts to vegetation and wildlife habitat would affect approximately 66 percent of non-Urban MOU Habitat-type vegetation within the RSA. It is likely that most of the wildlife that resides in the RSA would migrate to other areas of available non-human-altered habitat such as those protected within floodplain areas near rivers and streams. In addition, riparian areas are known to be migration corridors for wildlife. It is expected that these areas would not be adversely affected due to municipal protections to riparian resources within floodplains. That is, restrictions on construction within floodplains and tree preservation regulations make it probable that most of the riparian habitat within the RSA would not be subject to widespread removal. Based on the continued availability of protected habitat areas, the potential cumulative impact occurring over a 44-year period, allowing for resource recovery; and assuming appropriate implementation of regulated avoidance, minimization, and mitigation strategies for vegetation and habitat impacts, the proposed project would not contribute to substantial cumulative impacts to the area's vegetation and habitat.



The cumulative impacts to prime farmland soils subject to the FPPA would affect approximately 69 percent of the prime farmland soils subject to FPPA within the RSA.

Incorporating parks, open spaces, and riparian corridors around and within developed areas would provide wildlife habitat and shelter. Planting these areas with native fruit or nut-bearing trees and shrubs, and native grain-bearing grasses would provide food for wildlife and would help to mitigate impacts to habitat used by wildlife. This mitigation could be conducted by whoever is responsible for the impact such as a city or a developer. Private development within the associated municipalities within the RSA (Northlake, Flower Mound, Argyle, Denton and, to a lesser extent, Denton County) would be subject to the laws and ordinances regulating residential, commercial and industrial development set by each municipal government.

Private developers would not be subject to the FPPA for impacts to prime farmland soils and farmland soils of statewide importance. The Texas Farm and Ranch Lands Conservation Program (TFRLCP), created in 2005, is a grant-making program that provides landowners with financial incentives to conserve their land and productivity through Agricultural Conservation Easements. These easements restrict all future development while allowing the landowner to continue farming or ranching (American Farmland Trust, 2009). The TFRLCP was transferred from the Texas General Land Office (GLO) to TPWD in 2016. Approved grant projects awarded by the Texas GLO range in size from 175 acres to 2,995 acres and by the TPWD range in size from 144 acres to 7,229 acres. This type of program could be effective mitigation within the Farmland (Soils) RSA. The average farm size in Denton County is 120 acres.

**No-Build Alternative:** Under the No-Build Alternative, cumulative impacts are not anticipated.

### 5.17 Construction Phase Impacts

**Build Alternative:** Depending on required traffic control and phasing, the construction phase of the proposed project, and associated construction impacts, is anticipated to be 36 months. During the construction phase of the proposed project, there is the potential for noise, dust or light pollution; impacts associated with physical construction activity and other traffic disruptions. These potential impacts are discussed as follows:

#### 5.17.1 Construction Noise

There would be loud noise from heavy equipment during construction of the project. Noise associated with the construction is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns and would not be restricted to any specific location.

Construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the businesses and residences along the project are expected to be



exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected.

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

### **5.17.2 Fugitive Dust and Air Pollutants**

During the construction phase of this project, temporary increases in particulate matter (PM) and MSAT emissions may occur from construction activities. The primary construction-related emissions of PM are fugitive dust from site preparation, and the primary construction-related emissions of MSAT are diesel PM from diesel powered construction equipment and vehicles. Refer to **Section 5.12** of this EA and the *IH 35W Frontage Roads Air Quality Assessment Technical Report* for a detailed discussion of fugitive dust and air pollutants.

Construction-related pollutants that are not contained onsite are expected to dissipate readily in the normal course of atmospheric mixing. Considering the temporary and transient nature of construction-related emissions, as well as the mitigation actions to be utilized, it is not anticipated that emissions from construction of this project would have any substantial impact on air quality in the proposed project area.

The potential impacts of PM emissions would be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. The TERP provides financial incentives to reduce emissions from vehicles and equipment. TxDOT encourages construction contractors to use this and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions. Information about the TERP program can be found at: <https://www.tceq.texas.gov/airquality/terp>.

### **5.17.3 Light Pollution**

Construction normally occurs during daylight hours; however, construction could occur during the night-time hours to minimize impacts to the traveling public during the daylight hours. If construction were to occur during the night-time hours, it would be of short duration and would not be conducted late in the evening. Construction during the night-time hours would follow any local policies and ordinances established for construction activities, such as light limitations.

#### **5.17.4 Construction Activity Impacts**

Construction activities would be limited to the proposed project footprint. Excessive vibration from construction equipment is not anticipated. If there was excessive vibration from construction equipment, it would be of short duration.

#### **5.17.5 Temporary Lane, Road or Bridge Closures (Including Detours)**

Traffic control plans would be prepared and implemented in coordination with the city and the county. Construction that would require cross street closures would be scheduled so only one crossing in an area is affected at one time. Where detours are required, clear and visible signage for an alternative route would be displayed. In residential areas, major activity would be limited to normal work hours whenever practicable, to avoid noise and related impacts to the local population.

Motorists would be inconvenienced during construction of the project due to lane and cross-street closures; however, these closures would be of short duration and alternate routes would be provided.

Residents and businesses in the immediate construction area would be notified in advance of proposed construction activity using a variety of techniques, including signage, electronic media, community newspapers, and other techniques. The proposed project would not restrict access to any existing public or community services, businesses, commercial areas, or employment centers.

**No-Build Alternative:** This alternative would not result in noise, dust or light pollution; impacts associated with physical construction activity, temporary lane, road closures; and other traffic disruptions associated with construction.

#### **5.18 Airway-Highway Clearance**

There are two publicly-owned airports, three privately-owned airports, and five privately-owned heliports found near the proposed project area. The elevations of the airports/ heliports, runway lengths, and the approximate distances between the airports/ heliports and proposed project are provided in **Table 8**.

**Table 8: Airports and Heliports Near the Project Area**

Site No.	Site Information	Elevation (Feet)	Runway Length (Feet)	Airport Location Relative to Project (Approximate)
24625.1*A	Northwest Regional Airport -97.232237 W 33.049845 N Roanoke, TX 76092 (Public Airport)	643	3,500	6,307 feet east
23749.04*H	Denton Community Hospital Denton, TX 76201 (Private Heliport)	675	Not applicable	6,737 feet north
23750.*A	Denton Enterprise Municipal Airport 97.197946 W 33.202099 N Denton, TX 76201 (Public Airport)	642	7,002	9,963 feet west
23887.31*H	Bell Training Facility Fort Worth, TX 76101 (Private Heliport)	657	Not applicable	10,560 feet west-northwest
23887.12*H	Beechwood Denton, TX 76219 (Private Heliport)	645	Not applicable	10,626 feet southwest
24137.67*A	Dooley Airport 97.272517 W 33.098732 N Justin, TX 76247 (Private Airport)	650	1,750	14,439 feet west
23749.2*A	Myska Field Airport -97.138068 W 33.155676 N Denton, TX 76205 (Private, Airport)	595	1,250	15,535 feet east
23348.01*H	Hawk Nest Heliport Argyle, TX 76226 (Private Heliport)	657	Not applicable	16,648 feet east
23348.02*H	Furst Ranch Argyle, TX 76226 (Private Heliport)	725	Not applicable	16,779 feet east
23348.*A	Leroux Airport 97.155013 W 33.101788 N Argyle, TX 76226 (Private Airport)	670	2,380	20,622 feet east
23895.3*A	Fort Worth Alliance Airport 97.318806 W 32.987639 N Fort Worth, TX 76177 (Public Airport)	722	11,010	26,255 feet southwest

Source: Source: Federal Aviation Administration, Airport Data and Contact Information Form; Airport Facilities Data and Airport Runways Data. [https://www.faa.gov/airports/airport\\_safety/airportdata\\_5010/](https://www.faa.gov/airports/airport_safety/airportdata_5010/). Accessed 1/21/20.

According to the FHWA, highway projects within 10,000 feet of an airport runway (actual length of 3,200 feet or less), 20,000 feet of an airport runway (actual length greater than 3,200 feet), or 5,000 feet of a heliport require Federal Aviation Administration (FAA) coordination if construction height would exceed a plane (extending outward from helipad or end of runway) defined by a distance: height ratio of 50:1 for airports (runway no more than 3,200 feet in actual length); 100:1 for airports (runway more than 3,200 feet in actual length); or 25:1 for heliports. Coordination is also required within this buffer for any construction or alteration of more than 200 feet in height above the ground level. Lastly, coordination is required for minimum 15-foot upward adjustment (lane elevation) of a public roadway (not an Interstate Highway that is part of the National System of Military and Interstate Highways). Due to the proximity of the airports/ heliports listed in **Table 8** to the proposed project, the TxDOT Dallas District will determine if FAA coordination would be required. If it is determined that coordination is required, FAA Form 7460-1 (Notice of Proposed Construction or Alteration) would be completed and submitted by TxDOT to the FAA for their approval prior to construction of proposed improvements.

## 6.0 AGENCY COORDINATION

Coordination with the THC, FAA, TCEQ, TPWD, and federally-recognized tribes has occurred under TxDOT's respective MOUs and PA with these agencies/entities. **Appendix G: Resources Agency Coordination** includes the written coordination exchanges.

## 7.0 PUBLIC INVOLVEMENT

### Stakeholder Meetings

TxDOT conducted an initial project stakeholder meeting in April 2011 with representatives of the Northwest Independent School District (ISD), City of Roanoke, Town of Argyle, Town of Northlake, City of Haslet, North Central Texas Council of Governments (NCTCOG), TxDOT, City of Denton, Town of Flower Mound, Denton County, and Hillwood Properties.

In May 2017, TxDOT conducted an IH 35W project meeting with representatives of the Town of Northlake and in June 2017, TxDOT conducted an IH 35W/Loop 288 ramp and mainlane meeting with the TxDOT Denton Area Office. In January 2018, TxDOT conducted an IH 35W project meetings with representatives of the City of Fort Worth, City of Haslet, Town of Argyle, and Town of Northlake.

In February and March of 2018, TxDOT conducted project stakeholder meetings with representatives of Denton County, Tarrant County, Town of Draper (formerly Corral City), Denton County Transit Authority (DCTA), U.T. Austin Center for Transportation Research, Town of Flower Mound, and the North Tarrant Express (NTE) project team.

### **Public Meeting**

An open house public meeting was conducted by TxDOT on May 16, 2019 for elected and public officials, county and municipal staff, and the general public to view and comment on the proposed IH 35W Frontage Roads project. There were five commenters from the public meeting. The comments were positive regarding the proposed project improvements. One comment regarding flooding associated with a culvert outfall was coordinated with the property owner by TxDOT. The **Public Meeting Comment and Response Matrix** is included in **Appendix H**.

### **Public Hearing**

The NOA of the Draft EA will be published in both English and Spanish in various newspapers that serve the project area, and also made available online at [www.txdot.gov](http://www.txdot.gov) and [www.keepitmovingdallas.com](http://www.keepitmovingdallas.com). The Draft EA, maps showing the proposed project location and design, and other information regarding the project will be on file and available for public viewing at the TxDOT Dallas District Office, 4777 E. Highway 80, Mesquite, Texas 75150; the TxDOT Denton Area Office, 2624 W. Prairie Street, Denton, TX 76201; Town of Argyle Town Hall, 308 Denton Street E., Argyle, TX 76226; Town of Northlake Town Hall, 1500 Commons Circle, Suite 300, Northlake, TX 76226; Flower Mound Town Hall, 2121 Cross Timbers Road, Flower Mound, TX 75028; and City of Denton City Hall, 215 E. McKinney Street, Denton, TX 76201.

Once the Draft EA has been approved, a public hearing for the proposed project would be held. Representatives from TxDOT and project team members would be available to answer questions about the proposed project improvements. The hearing would consist of an open house from 6 p.m. to 7 p.m. and a presentation from 7 p.m. onwards.

A notice of impending construction would 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 would be provided after the environmental decision (i.e. FONSI), but before earthmoving or other activities requiring the use of heavy equipment begin.

## 8.0 POST-ENVIRONMENTAL CLEARANCE ACTIVITIES AND CONTRACTOR COMMUNICATIONS

### 8.1 Post-Environmental Clearance Activities

Activities to be completed after environmental clearance are listed and discussed as follows:

1. Utilities: Utility relocations would be required throughout the corridor. Utility agreements and notice to owners would be required for this project prior to construction.
2. Section 404: The proposed project would require a NWP 14 with a PCN. The PCN would be obtained before construction. The proposed project would comply with all general conditions of the NWP.
3. Section 401: The Section 401 Certification requirements for NWP 14 be met by implementing a SW3P. The SW3P would include at least one BMP for erosion control, sediment control, and post-construction TSS control from the Tier 1 Section 401 Water Quality Certification Conditions for NWPs as published by the TCEQ.
4. Section 402: The project contractor would comply with the CGP, SW3P, and complete the appropriate authorization documents.
5. Wetlands: The project contractor would minimize impacts to wetlands during construction by keeping the construction footprint as small as possible while enabling construction that meets all requirements for the proposed project's implementation. BMPs would be implemented during construction.
6. Floodplains: Notification and coordination with the local floodplain administrator is required because portions of the project are within the 100-year floodplain. This coordination would be completed prior to the start of construction.
7. Invasive Species: The project contractor is required to preserve native vegetation to the extent practical. The contractor must adhere to Construction Specification Requirements Specs 162, 164, 192, 193, 506, 730, 751, & 752 in order to comply with requirements for invasive species, beneficial landscaping, and tree/brush removal commitments.
8. Threatened, Endangered, and Candidate Species: The following BMPs would be implemented per the 2013 MOU (2017 Revision) for the proposed project:
  - a) For the Western Burrowing Owl, the following Bird BMPs and MBTA guidelines, as present as a Special Note on the PS&E EPIC sheet, would be implemented:
    - i. Prior to construction, perform daytime surveys for nests including under bridges and in culverts to determine if they are active before removal. Nests that are active should not be disturbed.

- ii. Do not disturb, destroy, or remove active nests, including ground nesting birds, during the nesting season.
  - iii. Avoid the removal of unoccupied, inactive nests as practicable.
  - iv. Prevent the establishment of active nests during the nesting season on TxDOT owned and operated facilities and structures proposed for replacement or repair.
  - v. Do not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit.
  - vi. Migratory Birds: The Migratory Bird Treaty Act of 1918 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. The contractor would remove all old migratory bird nests from any structure where work would be done from October 1 to February 15. In addition, the contractor would be prepared to prevent migratory birds from building nest(s) between February 15 and October 1. In the event that migratory birds are encountered on-site during project construction, efforts to avoid adverse impacts on protected birds, active nests, eggs, and/or young would be observed.
- b) The following Freshwater Mussel BMPs would be implemented for the Louisiana pigtoe, sandbank pocketbook, and Texas heelsplitter:
- i. When work is in the water; survey project footprints for state listed species where appropriate habitat exists.
  - ii. When work is in the water and mussels are discovered during surveys; relocate state listed and SGCN mussels under TPWD authorization and implement Water Quality BMPs.
  - iii. When work is adjacent to the water; Water Quality BMPs implemented as part of the SWPPP for a construction general permit or any conditions of the 401 water quality certification for the project will be implemented. (Note, SWPPP and 401 BMPS are not listed in this PA).
- c) The following SWPPP and 401 Water Quality BMPs would be implemented:
- i. Category I Erosion Control would be addressed by using temporary vegetation, permanent seeding/sodding, and stone outlet structures such as stone riprap.
  - ii. Category II Sedimentation Control would be addressed by installing silt fence, rock berms, and mulch filter socks.
  - iii. Category III Post-Construction Total Suspended Solids (TSS) control would be addressed by installing vegetative-lined drainage ditches and storm inlet sediment traps.



Other approved methods would be substituted if necessary, using one of the BMPs from the identical category.

- d) The following Terrestrial Reptile BMPs would be implemented for the timber rattlesnake and Texas garter snake:
  - i. Apply hydro-mulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas where feasible. If hydro-mulching and/or hydroseeding are not feasible due to site conditions, utilize erosion control blankets or mats that contain no netting or contain loosely woven, natural fiber netting is preferred. Plastic netting should be avoided to the extent practicable.
  - ii. For open trenches and excavated pits, install escape ramps at an angle of less than 45 degrees (1:1) in areas left uncovered. Visually inspect excavation areas for trapped wildlife prior to backfilling.
  - iii. Inform contractors that if reptiles are found on project site allow species to safely leave the project area.
  - iv. Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter where feasible.
  - v. Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.
- e) TxDOT proposes the following for species that do not have approved species BMPs:
  - i. Eastern spotted skunk and western hog-nosed skunk - Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered, and to avoid unnecessary impacts to dens.
  - ii. Eastern box turtle, slender glass lizard, and western box turtle - Terrestrial Reptile BMPs (see above).
  - iii. Strecker's chorus frog, Woodhouse's toad, and smooth softshell - Amphibian and Aquatic Reptile BMPs:
    - i) Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.
    - ii) Minimize impacts to wetland, temporary and permanent open water features, including depressions, and riverine habitats.
    - iii) Maintain hydrologic regime and connections between wetlands and other aquatic features.
    - iv) Use barrier fencing to direct animal movements away from construction activities and areas of potential wildlife-vehicle collisions in construction areas directly adjacent, or that may directly impact, potential habitat for the target species.
    - v) Apply hydromulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas where feasible. If hydromulching

and/or hydroseeding are not feasible due to site conditions, using erosion control blankets or mats that contain no netting, or only contain loosely woven natural fiber netting is preferred. Plastic netting should be avoided to the extent practicable.

- vi) Project specific locations (PSLs) proposed within state-owned ROW should be located in uplands away from aquatic features.
  - vii) When work is directly adjacent to the water, minimize impacts to shoreline basking sites (e.g., downed trees, sand bars, exposed bedrock) and overwinter sites (e.g., brush and debris piles, crayfish burrows) where feasible.
  - viii) Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter, which may be refugia for terrestrial amphibians, where feasible.
  - ix) If gutters and curbs are part of the roadway design, where feasible install gutters that do not include the side box inlet and include sloped (i.e. mountable) curbs to allow small animals to leave roadway. If this modification to the entire curb system is not possible, install sections of sloped curb on either side of the storm water drain for several feet to allow small animals to leave the roadway. Priority areas for these design recommendations are those with nearby wetlands or other aquatic features.
  - x) For sections of roadway adjacent to wetlands or other aquatic features, install wildlife barriers that prevent climbing. Barriers should terminate at culvert openings in order to funnel animals under the road. The barriers should be of the same length as the adjacent feature or 80-feet long in each direction, or whichever is the lesser of the two.
  - xi) For culvert extensions and culvert replacement/installation, incorporate measures to funnel animals toward culverts such as concrete wingwalls and barrier walls with overhangs.
  - xii) When riprap or other bank stabilization devices are necessary, their placement should not impede the movement of terrestrial or aquatic wildlife through the water feature. Where feasible, biotechnical streambank stabilization methods using live native vegetation or a combination of vegetative and structural materials should be used.
- iv. Long-tailed weasel, mink, mountain lion, southern short-tailed shrew, swamp rabbit, thirteen-lined ground squirrel, woodland vole, Topeka purple coneflower - Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.

9. Detours: County and local public safety officials would be notified of any road closures or detours during construction. Detour timing and necessary rerouting of emergency vehicles would be coordinated with the proper local agencies during construction.
10. Air Quality: Implement fugitive dust control measures contained in standard specifications to minimize potential impacts of PM emissions during construction.
11. Hazardous Materials: One site is considered a moderate environmental risk. Additional investigation and/or research is warranted to determine if this site may potentially affect the proposed project. Any unanticipated hazardous materials encountered during construction would be handled according to the applicable federal, state and local regulations per TxDOT Standard Specification.
12. Hazardous Materials for Bridge Structures: Bridge structures being demolished or renovated will need to be assessed and mitigated for asbestos and lead containing paint, as needed, within the construction process according to Standard Specification Item 6.10 (and applicable Provisions), and the TxDOT guidance document: *Guidance for Handling Asbestos in Construction Projects*, dated January 26, 2007.
13. Public Involvement: Before construction, a notice of impending construction will be provided to owners of adjoining property and affected local governments and public officials.

## **8.2 Contractor Communications**

**Archeological Resources:** If unanticipated archaeological deposits are encountered during construction, work in the immediate area will cease, and TxDOT archaeological staff will be contacted to initiate post-review discovery procedures.

**Wetlands:** The construction contractor would be required to avoid and minimize unnecessary impacts on wetlands during construction.

**Construction (TPDES):** Contractor shall comply with the CGP and SW3P. Complete, post and submit notice of intent and notice of termination to TCEQ and the MS4 operator. Inspect the project to ensure compliance with the CGP.

**Drinking Water Systems:** If any unknown wells are encountered during construction activities, they would need to be properly plugged in accordance with state statutes.

**Hazardous Materials:** The contractor would take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area. All construction materials used for the proposed project would be removed as soon as the work schedules

permit. The contractor would initiate early regulatory agency coordination during project development.

**Vegetation:** Avoid and minimize disturbance of vegetation and soils. All disturbed areas would be revegetated, according to TxDOT specifications, as soon as it becomes practicable. In accordance with EO 13112 on Invasive Species, the Executive Memorandum on Beneficial Landscaping, and the 1999 FHWA guidance on invasive species, all revegetation would, to the extent practicable, use only native species. Furthermore, BMPs would be used to control and prevent the spread of invasive species.

**Migratory Birds:** 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. Refer to Section 8.1 for applicable BMPs.

**Air Quality:** The TERP provides financial incentives to reduce emissions from vehicles and equipment. TxDOT encourages construction contractors to use this and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions.

**Threatened, Endangered, and Candidate Species:** If any species on the Denton County threatened and endangered species list is sighted in the project area during construction, construction would stop and contractor would notify the TxDOT Area Engineer. Refer to **Section 8.1** for applicable BMPs.

## 9.0 CONCLUSION

Implementation of the proposed project would not result in a significant impact on the human or natural environment. Therefore, a finding of no significant impact (FONSI) is recommended.

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## 11.0 APPENDICES

Appendix A – Maps

Appendix B – Project Photographs

Appendix C – Project Schematic

Appendix D – Typical Sections

Appendix E - Plan and Program Excerpts

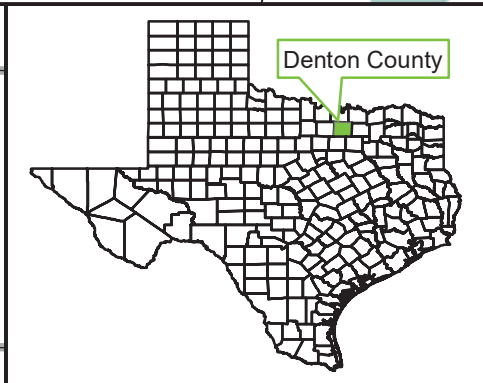
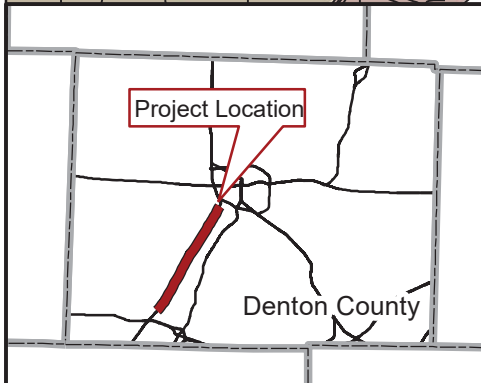
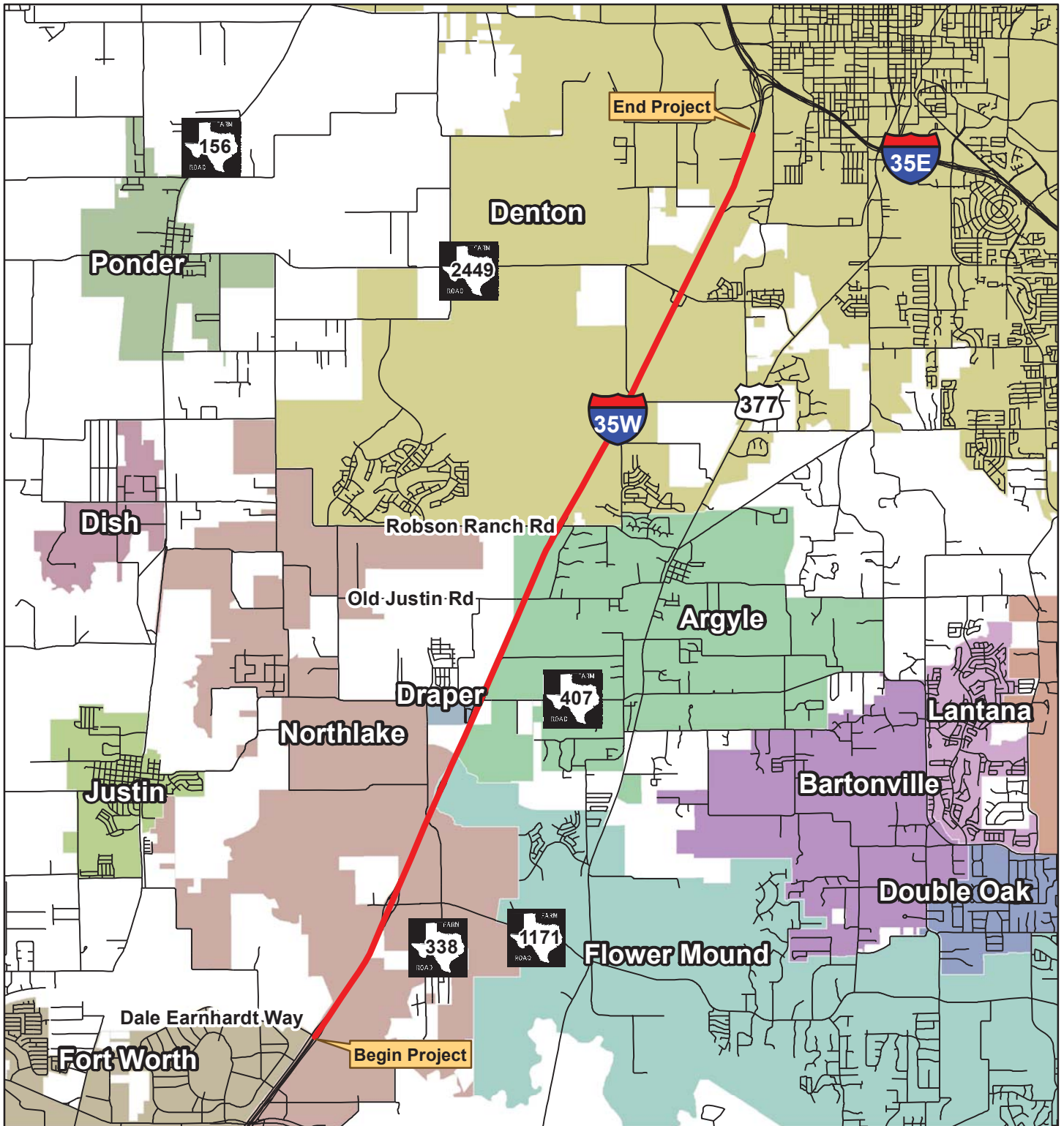
Appendix F – Resource-specific Maps

Appendix G – Resources Agency Coordination

Appendix H – Comment and Response Matrices

## Appendix A Maps

Description	Number of Pages
Project Location Map	1
USGS Map	1
Aerial Map	1



0 9,000 Feet

W N E S

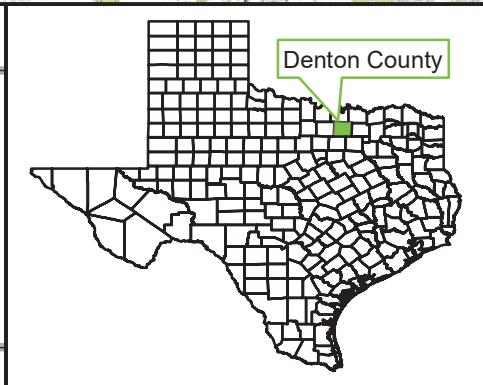
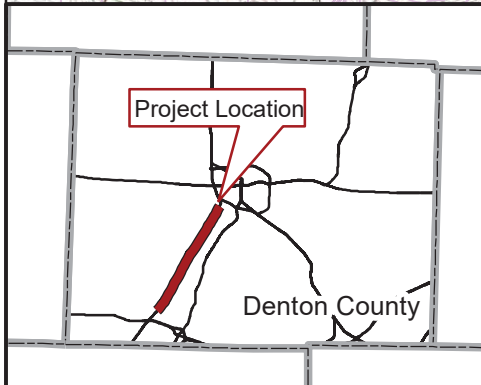
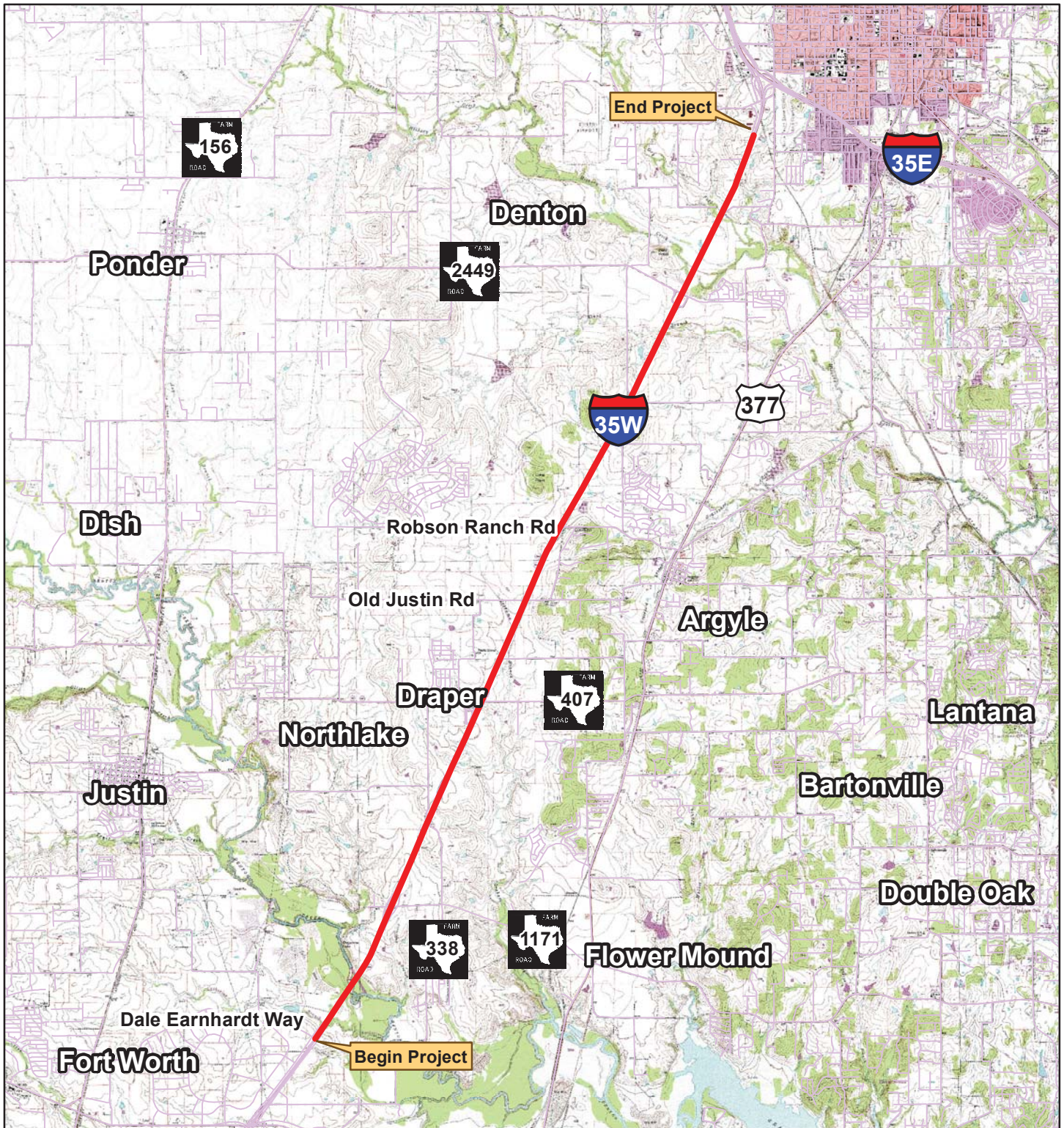
**PROJECT LOCATION MAP**  
**IH 35W FRONTAGE ROADS**

FROM DALE EARNHARDT WAY  
 TO SOUTH OF THE IH 35E/IH 35W  
 INTERCHANGE

DENTON COUNTY

CSJ: 0081-13-065

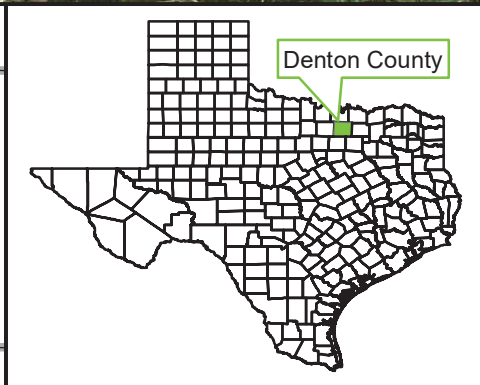
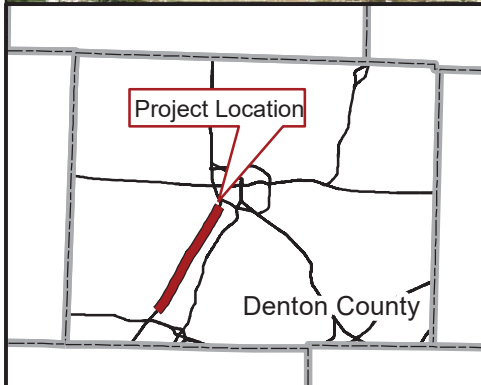
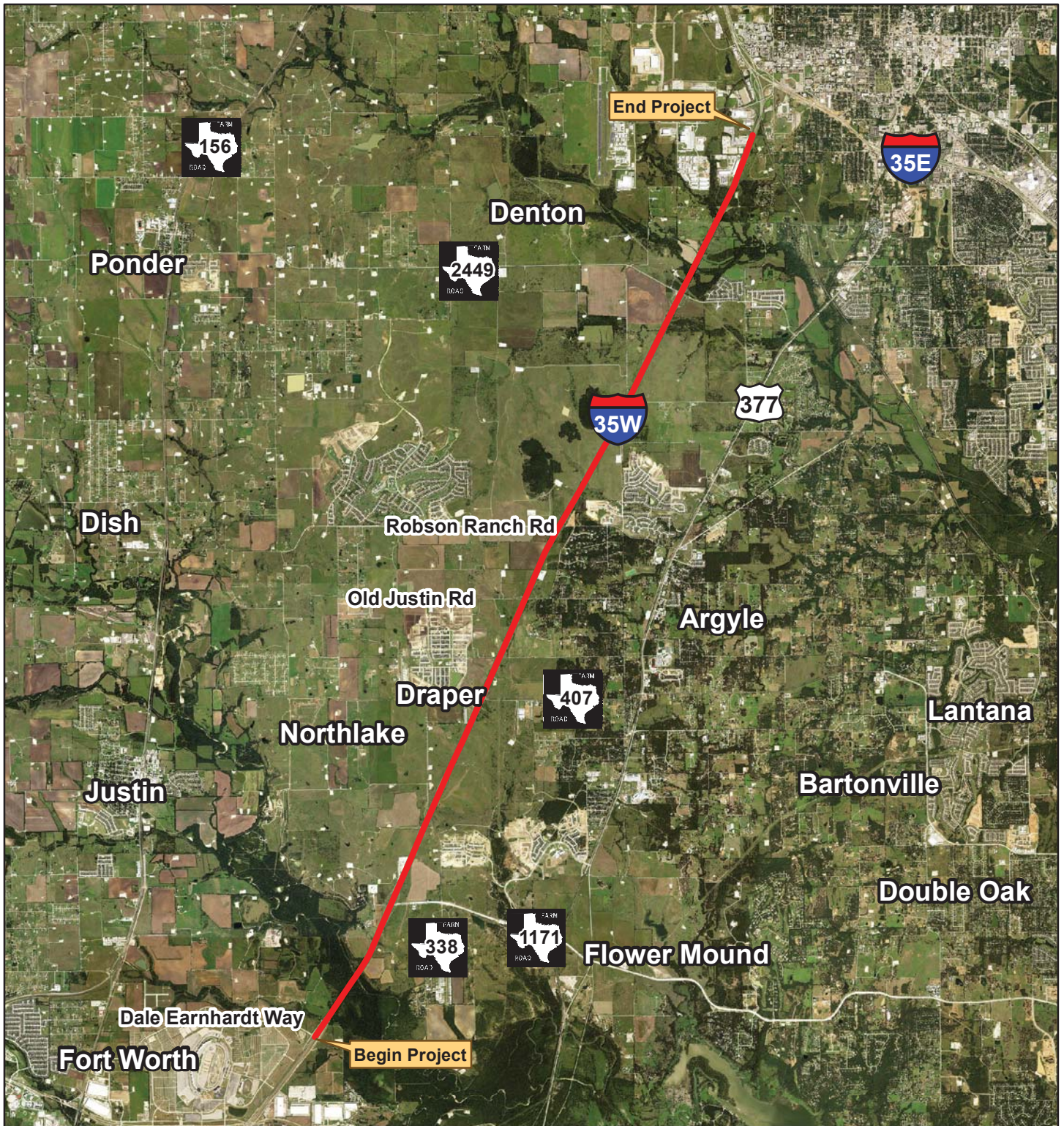




0 9,000  
Feet

USGS TOPOGRAPHIC MAP  
IH 35W FRONTAGE ROADS  
FROM DALE EARNHARDT WAY  
TO SOUTH OF THE IH 35E/IH 35W  
INTERCHANGE  
DENTON COUNTY  
CSJ: 0081-13-065





**AERIAL MAP**  
**IH 35W FRONTAGE ROADS**  
 FROM DALE EARNHARDT WAY  
 TO SOUTH OF THE IH 35E/IH 35W  
 INTERCHANGE  
 DENTON COUNTY  
 CSJ: 0081-13-065



# Appendix B

## Project Photographs



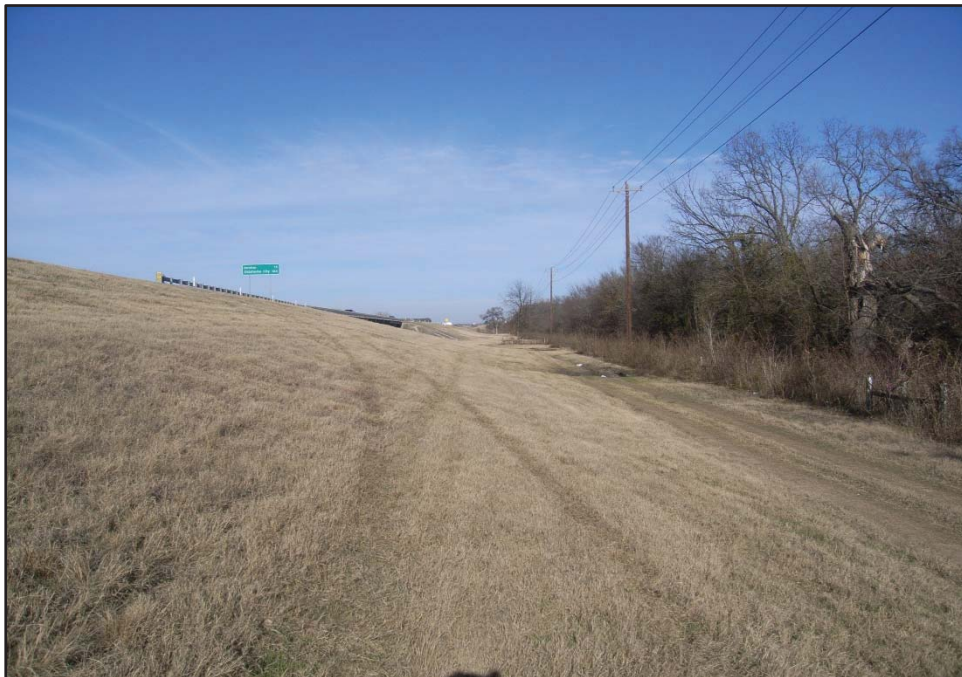
**Photograph 1:** View looking south along the IH 35W northbound frontage road near STA. 229+00 at the southern project terminus. Date of photograph: 12/7/19.



**Photograph 2:** View looking north along the IH 35W northbound entrance ramp near STA. 229+00 from near the southern project terminus. Date of photograph: 12/7/19.



**Photograph 3:** View looking west southwest along the southbound IH 35W exit ramp to Dale Earnhardt Way. Date of photograph: 12/8/19.



**Photograph 4:** View looking northeast towards Catherine Branch crossing on the IH 35W east ROW from near STA. 237+00. Date of photograph: 12/7/19.





**Photograph 5:** View looking northeast towards the Catherine Branch from the IH 35W west ROW near STA. 240+00. Date of photograph: 12/8/19.



**Photograph 6:** View looking southwest across Denton Creek from the IH 35W west ROW near STA. 277+00. Date of photograph: 12/8/19.



**Photograph 7:** View looking south-southwest towards the Denton Creek at IH 35W crossing from the IH 35W east ROW near STA. 280+00. Date of photograph: 12/7/19.



**Photograph 8:** View looking east southeast towards the Cleveland Branch from the IH 35W east ROW near STA. 300+00. Date of photograph: 12/7/19.





**Photograph 9:** View looking south towards IH 35 W west from the FM 1171/ Cross Timbers Road ROW near STA. 330+00. Date of photograph: 12/8/19.



**Photograph 10:** View looking northeast across the former Interstate Texaco PST, LPST, and VCP site (currently a vacant lot) at 1201 FM 407, Corral City (now Draper), TX. (Map ID 8). ROW would be required from this site and it is a moderate environmental risk to the project. Date of photograph: 8/1/19.



**Photograph 11:** View looking northwest towards Graham Branch from IH 35W west ROW near STA. 520+00. Date of photograph: 12/8/19.



**Photograph 12:** View looking south along southbound IH 35W from the IH 35W west ROW near STA. 561+00. Date of photograph: 12/8/19.





**Photograph 13:** View looking northwest from Taylor Road towards Wise Health Emergency Center and iCare Urgent Care at 7214 Crawford Road, Argyle, TX. This facility is at the northeast corner of Crawford Road at IH 35W. Date of photograph: 11/26/19.



**Photograph 14:** View looking north along southbound IH 35W from the west ROW near STA. 665+00. Date of photograph: 12/8/19.



**Photograph 15:** View looking northeast across the Roark Branch from IH 35W west ROW near STA. 734+00. Date of photograph: 12/8/19.



**Photograph 16:** View looking south-southwest towards FM 2449/ Vintage Boulevard from the IH 35W west ROW near STA. 765+00. Date of photograph: 12/8/19.





**Photograph 17:** View looking east towards Hickory Creek from the IH 35W west ROW near STA. 779+00. Date of photograph: 12/8/19.



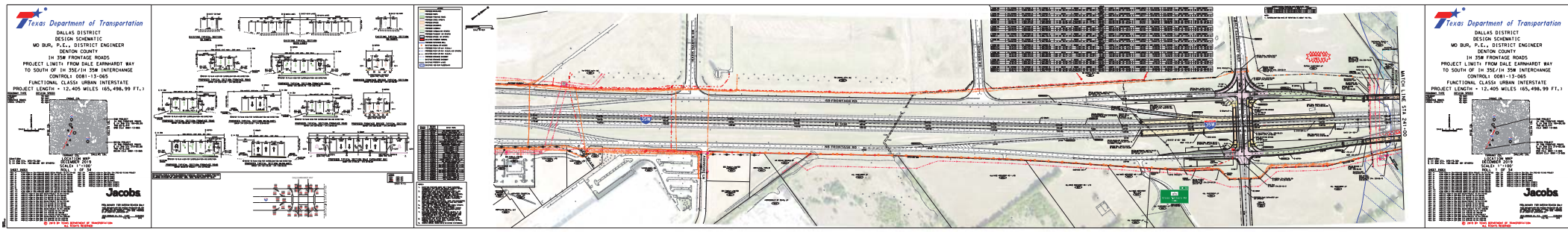
**Photograph 18:** View looking southwest towards Corbin Road from the IH 35W west ROW near STA. 825+00. Date of photograph: 12/7/19.



**Photograph 19:** View looking south along the southbound IH 35W mainlanes north of FM 1515 and the northern project terminus. Date of photograph: 12/8/19.

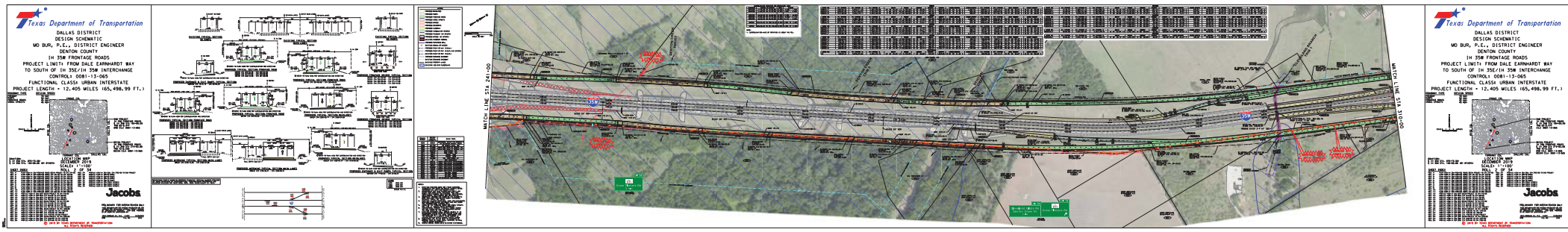
# Appendix C

## Project Schematic



**Texas Department of Transportation**  
 DALLAS DISTRICT  
 DESIGN SCHEMATIC  
 MO BUN, P.E., DISTRICT ENGINEER  
 DENTON COUNTY  
 IN 396 FRONTAGE ROADS  
 PROJECT LIMITS FROM DALE EARNHARDT BAY  
 TO SOUTH OF IH 35E/IN 396 INTERCHANGE  
 CONTROL# 0081-13-065  
 FUNCTIONAL CLASS URBAN INTERSTATE  
 PROJECT LENGTH = 12.405 MILES (60,496.99 FT.)  
 DATE: 08/28/2018  
 SCALE: AS SHOWN  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
**Jacobs**  
 1000 PEARSON DRIVE  
 SUITE 1000  
 FORT WORTH, TEXAS 76102

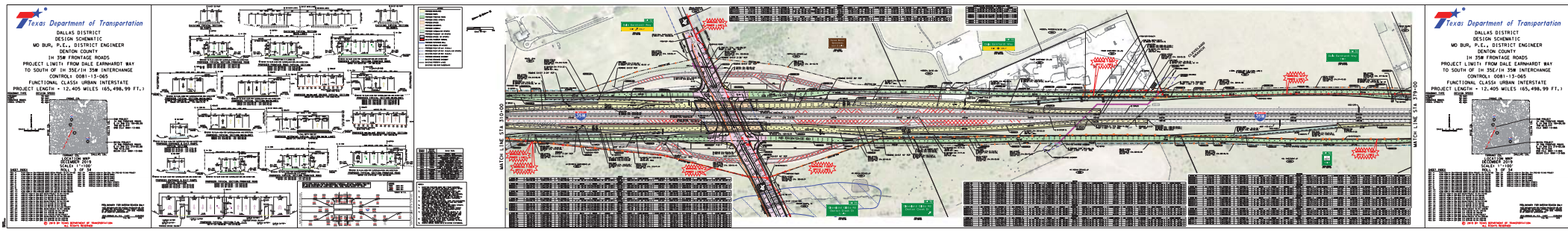
**Texas Department of Transportation**  
 DALLAS DISTRICT  
 DESIGN SCHEMATIC  
 MO BUN, P.E., DISTRICT ENGINEER  
 DENTON COUNTY  
 IN 396 FRONTAGE ROADS  
 PROJECT LIMITS FROM DALE EARNHARDT BAY  
 TO SOUTH OF IH 35E/IN 396 INTERCHANGE  
 CONTROL# 0081-13-065  
 FUNCTIONAL CLASS URBAN INTERSTATE  
 PROJECT LENGTH = 12.405 MILES (60,496.99 FT.)  
 DATE: 08/28/2018  
 SCALE: AS SHOWN  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
**Jacobs**  
 1000 PEARSON DRIVE  
 SUITE 1000  
 FORT WORTH, TEXAS 76102



**Texas Department of Transportation**  
 DALLAS DISTRICT  
 DESIGN SCHEMATIC  
 MO BUS, P.L.L. DISTRICT ENGINEER  
 DENTON COUNTY  
 PROJECT LIMITS FROM DALE EARNHARDT WAY  
 TO SOUTH OF IH 35E/IN 35W INTERCHANGE  
 CONTROL# 008-13-005  
 FUNCTIONAL CLASS URBAN INTERSTATE  
 PROJECT LENGTH = 12.405 MILES (60,496.99 FT.)  
 DATE: 08/13/05  
 CONTROL# 008-13-005  
**Jacobs**

**Texas Department of Transportation**  
 DALLAS DISTRICT  
 DESIGN SCHEMATIC  
 MO BUS, P.L.L. DISTRICT ENGINEER  
 DENTON COUNTY  
 PROJECT LIMITS FROM DALE EARNHARDT WAY  
 TO SOUTH OF IH 35E/IN 35W INTERCHANGE  
 CONTROL# 008-13-005  
 FUNCTIONAL CLASS URBAN INTERSTATE  
 PROJECT LENGTH = 12.405 MILES (60,496.99 FT.)  
 DATE: 08/13/05  
 CONTROL# 008-13-005  
**Jacobs**





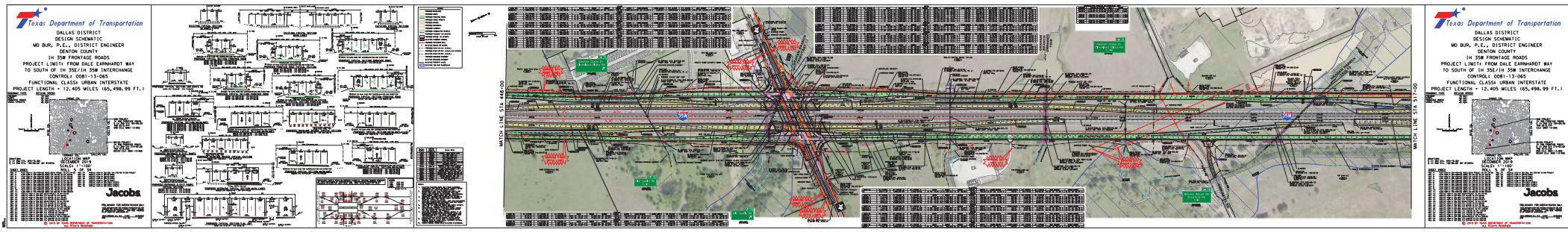
**Texas Department of Transportation**  
 DALLAS DISTRICT  
 DESIGN SCHEMATIC  
 MO BUN, P.E., DISTRICT ENGINEER  
 DENTON COUNTY  
 IN 396 FRONTAGE ROADS  
 PROJECT LIMITS FROM DALE EARNHARDT BAY  
 TO SOUTH OF IH 35E/IN 396 INTERCHANGE  
 CONTROL# 00811-13-065  
 FUNCTIONAL CLASS: URBAN INTERSTATE  
 PROJECT LENGTH = 12.405 MILES (63,496.99 FT.)

**Texas Department of Transportation**  
 DALLAS DISTRICT  
 DESIGN SCHEMATIC  
 MO BUN, P.E., DISTRICT ENGINEER  
 DENTON COUNTY  
 IN 396 FRONTAGE ROADS  
 PROJECT LIMITS FROM DALE EARNHARDT BAY  
 TO SOUTH OF IH 35E/IN 396 INTERCHANGE  
 CONTROL# 00811-13-065  
 FUNCTIONAL CLASS: URBAN INTERSTATE  
 PROJECT LENGTH = 12.405 MILES (63,496.99 FT.)

MATCH LINE STA. 11+00.00

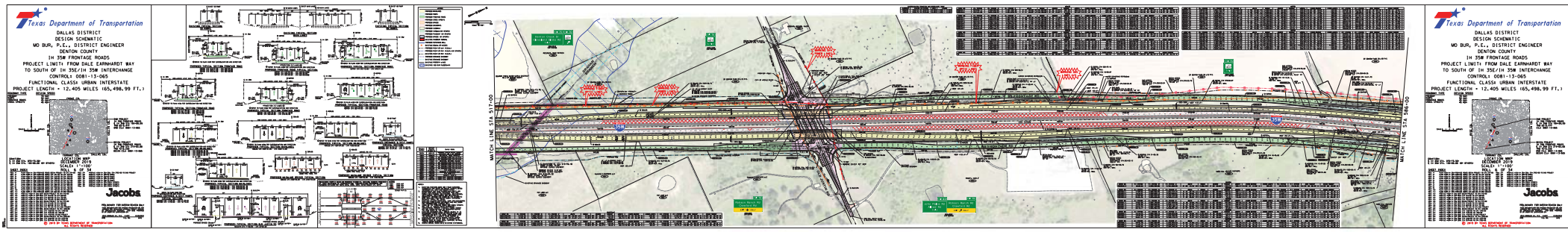
MATCH LINE STA. 11+00.00





**Texas Department of Transportation**  
 DALLAS DISTRICT  
 DESIGN SCHEMATIC  
 MO BUN, P.E., DISTRICT ENGINEER  
 DENTON COUNTY  
 IN 396 FRONTAGE ROADS  
 PROJECT LIMITS FROM DALE EARNHARDT BAY  
 TO SOUTH OF IH 35E/IN 396 INTERCHANGE  
 CONTROL: 008-13-065  
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**Jacobs**

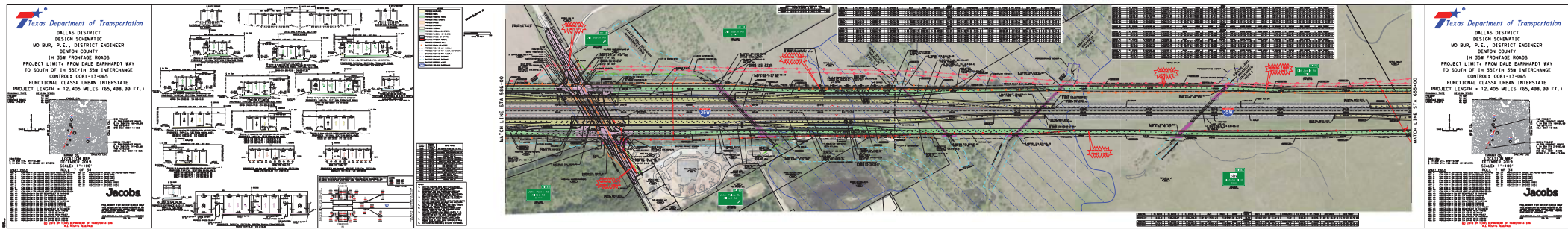
**Texas Department of Transportation**  
 DALLAS DISTRICT  
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 MO BUN, P.E., DISTRICT ENGINEER  
 DENTON COUNTY  
 IN 396 FRONTAGE ROADS  
 PROJECT LIMITS FROM DALE EARNHARDT BAY  
 TO SOUTH OF IH 35E/IN 396 INTERCHANGE  
 CONTROL: 008-13-065  
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 PROJECT LENGTH = 12.405 MILES (60,496.99 FT.)  
 DATE: 08/20/2014  
 SCALE: AS SHOWN  
**Jacobs**



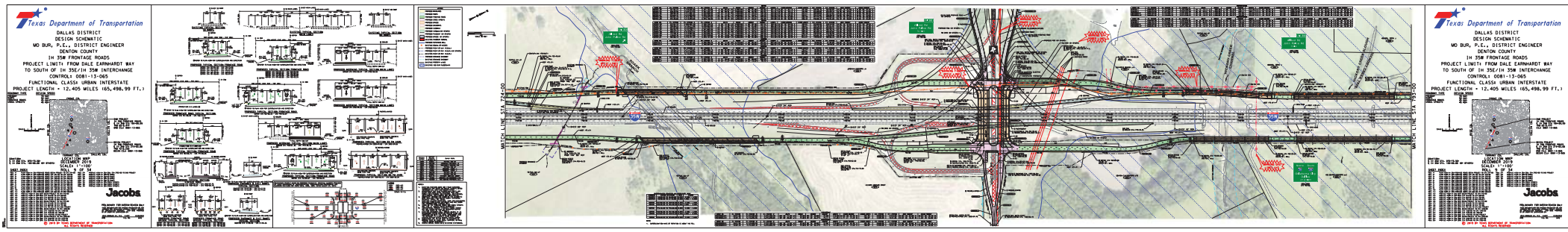
**Texas Department of Transportation**  
 DALLAS DISTRICT  
 DESIGN SCHEMATIC  
 MO BUN, P.E., DISTRICT ENGINEER  
 DENTON COUNTY  
 IN 396 FRONTAGE ROADS  
 PROJECT LIMITS FROM DALE EARNHARDT WAY  
 TO SOUTH OF IH 35E/IN 396 INTERCHANGE  
 CONTROL# 008-13-065  
 FUNCTIONAL CLASS URBAN INTERSTATE  
 PROJECT LENGTH = 12.405 MILES (63,496.99 FT.)  
 DATE: 08/28/2018  
 SCALE: AS SHOWN  
 DRAWN BY: [unreadable]  
 CHECKED BY: [unreadable]  
**Jacobs**  
 1000 PEARSON DRIVE  
 SUITE 1000  
 FORT WORTH, TEXAS 76102-3899  
 TEL: 817.424.4000  
 FAX: 817.424.4001  
 WWW.JACOBS.COM

**Texas Department of Transportation**  
 DALLAS DISTRICT  
 DESIGN SCHEMATIC  
 MO BUN, P.E., DISTRICT ENGINEER  
 DENTON COUNTY  
 IN 396 FRONTAGE ROADS  
 PROJECT LIMITS FROM DALE EARNHARDT WAY  
 TO SOUTH OF IH 35E/IN 396 INTERCHANGE  
 CONTROL# 008-13-065  
 FUNCTIONAL CLASS URBAN INTERSTATE  
 PROJECT LENGTH = 12.405 MILES (63,496.99 FT.)  
 DATE: 08/28/2018  
 SCALE: AS SHOWN  
 DRAWN BY: [unreadable]  
 CHECKED BY: [unreadable]  
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 1000 PEARSON DRIVE  
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 FORT WORTH, TEXAS 76102-3899  
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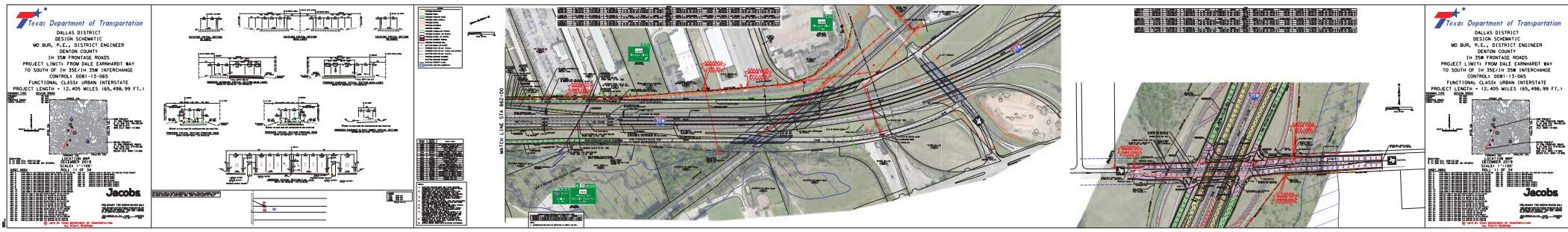


**Texas Department of Transportation**  
 DALLAS DISTRICT  
 DESIGN SCHEMATIC  
 MO BUN, P.E., DISTRICT ENGINEER  
 DENTON COUNTY  
 IN 396 FRONTAGE ROADS  
 PROJECT LIMITS FROM DALE EARNHARDT WAY  
 TO SOUTH OF IH 35E/IN 396 INTERCHANGE  
 CONTROL# 0081-13-065  
 FUNCTIONAL CLASS URBAN INTERSTATE  
 PROJECT LENGTH = 12.405 MILES (60,496.99 FT.)  
 DATE: 08/28/2018  
 TIME: 10:00 AM  
 PROJECT NO: 0081-13-065  
 SHEET NO: 100-100-100-100  
**Jacobs**  
 10000 RIVERSIDE DRIVE  
 FORT WORTH, TEXAS 76154  
 TEL: 817.424.4000  
 WWW.JACOBS.COM

**Texas Department of Transportation**  
 DALLAS DISTRICT  
 DESIGN SCHEMATIC  
 MO BUN, P.E., DISTRICT ENGINEER  
 DENTON COUNTY  
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 PROJECT LIMITS FROM DALE EARNHARDT WAY  
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 DATE: 08/28/2018  
 TIME: 10:00 AM  
 PROJECT NO: 0081-13-065  
 SHEET NO: 100-100-100-100  
**Jacobs**  
 10000 RIVERSIDE DRIVE  
 FORT WORTH, TEXAS 76154  
 TEL: 817.424.4000  
 WWW.JACOBS.COM

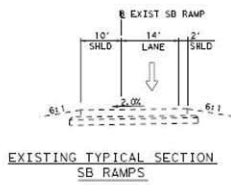




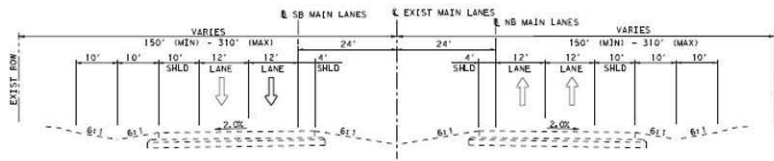


# Appendix D

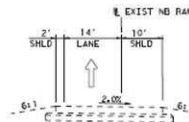
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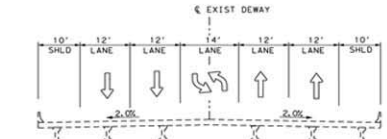
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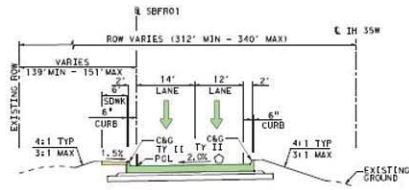
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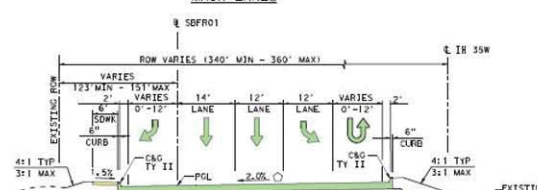
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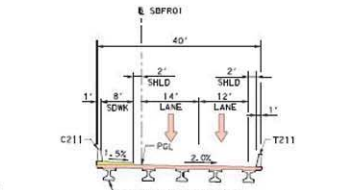
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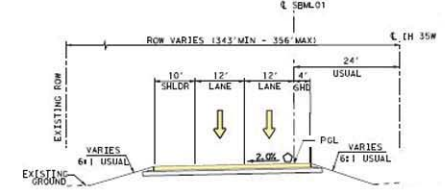
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PROPOSED TYPICAL SECTION FRONTAGE ROAD  
SBFR01 STA 236+15.00 - STA 238+82.00



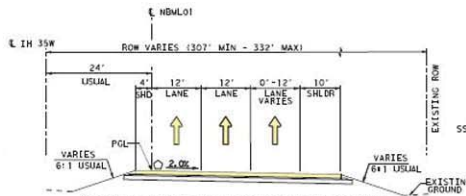
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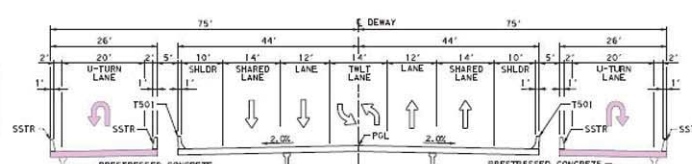
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SBFR01 STA 236+55.00 - STA 241+03.00



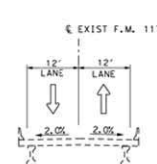
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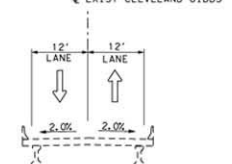
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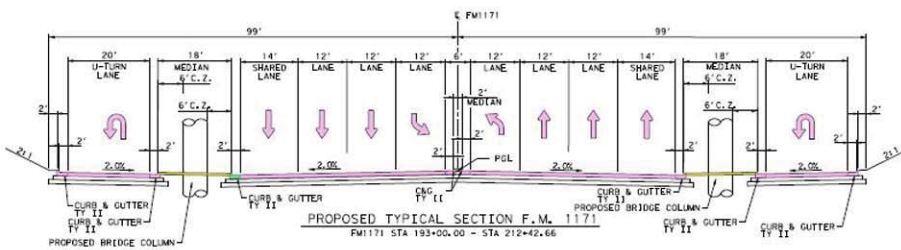
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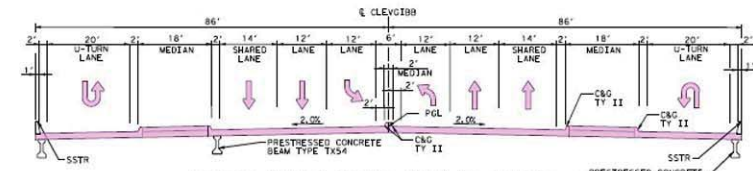
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EXISTING TYPICAL SECTION CLEVELAND GIBBS



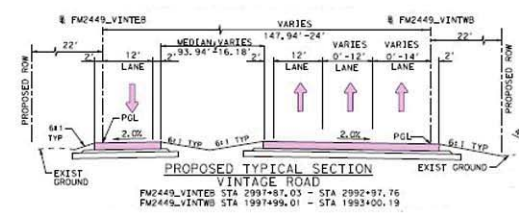
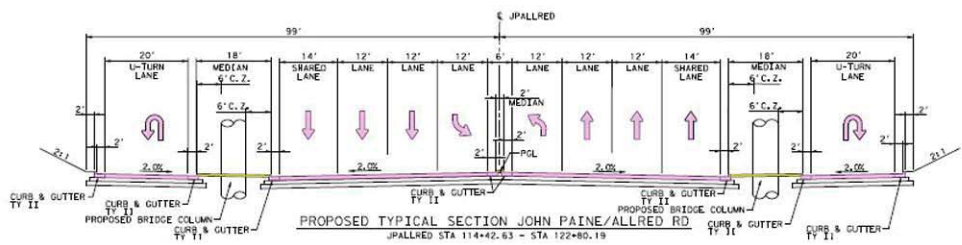
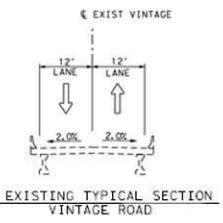
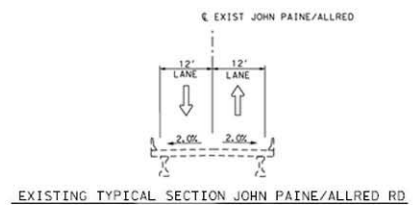
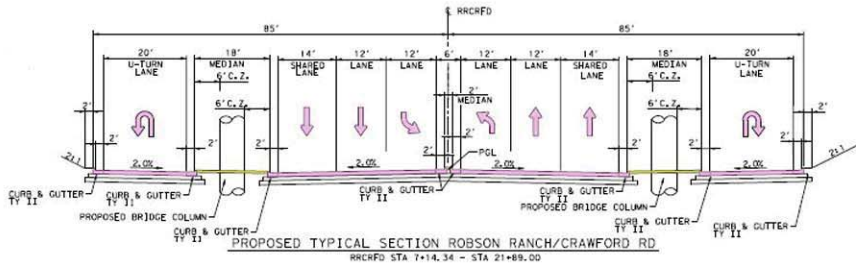
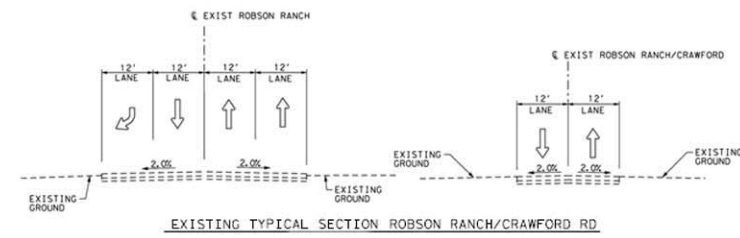
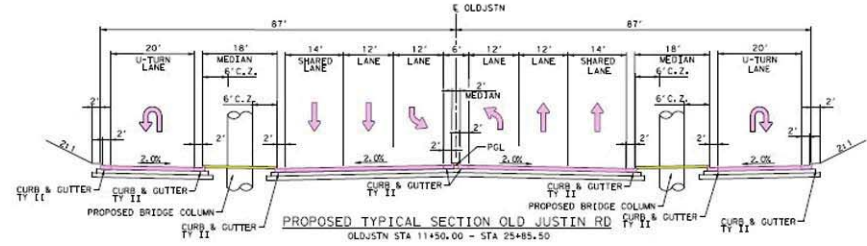
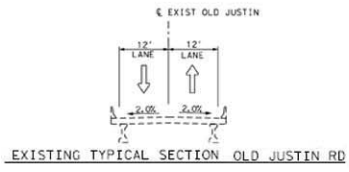
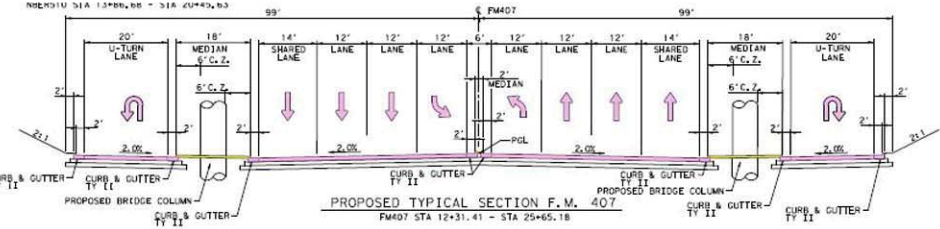
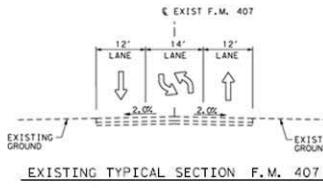
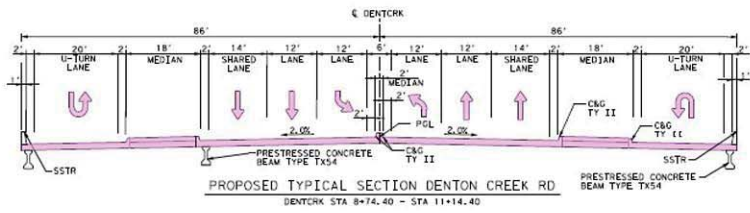
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FM1171 STA 193+00.00 - STA 212+42.66



PROPOSED TYPICAL SECTION CLEVELAND GIBBS RD  
CLEV01B STA 14+22.49 - STA 16+00.49

**TYPICAL SECTIONS**  
**IH 35W FRONTAGE ROADS**  
 FROM DALE EARNHARDT WAY  
 TO SOUTH OF THE IH 35E/IH 35W  
 INTERCHANGE  
 DENTON COUNTY  
 CSJ: 0081-13-065  
 Page 1 of 2





**TYPICAL SECTIONS  
IH 35W FRONTAGE ROADS**  
FROM DALE EARNHARDT WAY  
TO SOUTH OF THE IH 35E/IH 35W  
INTERCHANGE  
DENTON COUNTY  
CSJ: 0081-13-065  
Page 2 of 2



## Appendix E Plan and Program Excerpts

Description	Number of Pages
Metropolitan Transportation Plan (MTP) Page	1
Statewide Transportation Improvement Program (STIP) Page	1
FHWA Determination of Project-level Conformity	1

**Mobility 2045  
Freeway/Tollway Summary Table**

Revised September 25, 2019

FT Corridor	ID	Facility	From	To	2018 (Attainment Year)	2020 (Attainment Year)	2028	2037	2045	Type	YOE Cost
21 - IH 35E Stemmons	7.40.1	IH 35E	IH 635	Loop 12	10 (Frwy) + 4 (ML/T-C), 4/6 (Frtg-D)	10 (Frwy) + 4 (ML/T-C), 4/6 (Frtg-D)	10 (Frwy) + 4 (ML/T-C), 4/6 (Frtg-D)	10 (Frwy) + 4 (ML/T-C), 2/6 (Frtg-C)	12 (Frwy) + 4 (ML/T-C), 2/6 (Frtg-C)		included w/ 7.50.1
21 - IH 35E Stemmons	7.50.1	IH 35E	Loop 12	Spur 482/Storey Lane	6 (Frwy) + 2 (ML/T-C), 2/3 NB (Frtg-D)	6 (Frwy) + 2 (ML/T-C), 2/3 NB (Frtg-D)	6 (Frwy) + 2 (ML/T-C), 4/6 (Frtg-D)	6 (Frwy) + 2 (ML/T-C), 4/6 (Frtg-D)	8 (Frwy) + 2 (ML/T-C), 4/6 (Frtg-D)		\$400,000,000
21 - IH 35E Stemmons	7.50.2	IH 35E	Spur 482/Storey Lane	SH 183	6 (Frwy), 4/6 (Frtg-D)	6 (Frwy), 4/6 (Frtg-D)	6 (Frwy), 4/6 (Frtg-D)	6 (Frwy), 4/6 (Frtg-D)	8 (Frwy), 4/6 (Frtg-D)		included w/ 7.50.1
21 - IH 35E Stemmons	7.60.1	IH 35E	SH 183	Inwood Blvd	10 (Frwy), 4/6 (Frtg-C)	10 (Frwy), 4/6 (Frtg-C)	10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)		\$975,322,754
21 - IH 35E Stemmons	7.60.2	IH 35E	Inwood Blvd	Medical District Dr	10 (Frwy), 4/6 (Frtg-C)	10 (Frwy), 4/6 (Frtg-C)	10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)		included w/ 7.60.1
21 - IH 35E Stemmons	7.60.4	IH 35E	Medical District Dr	Market Center Blvd	10 (Frwy), 4/6 (Frtg-C)	10 (Frwy), 4/6 (Frtg-C)	10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)		included w/ 7.60.1
21 - IH 35E Stemmons	7.60.5	IH 35E	Market Center Blvd	Oak Lawn Avenue	10 (Frwy), 4/6 (Frtg-C)	10 (Frwy), 4/6 (Frtg-C)	10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)	10 (Frwy) + 2 (ML/T-R), 4/6 (Frtg-C)		included w/ 7.60.1
22 - IH 35W (North)	5.10.1	IH 35W	IH 35W/IH 35E	Loop 288 (S of Denton)	4 (Frwy), 2 SB (Frtg-D)	4 (Frwy), 2 SB (Frtg-D)	4 (Frwy), 4/6 (Frtg-D)	4 (Frwy), 4/6 (Frtg-D)	6 (Frwy), 4/6 (Frtg-D)		included w/ 3.10.1
22 - IH 35W (North)	5.10.2	IH 35W	Loop 288 (S of Denton)	SH 114	4 (Frwy), 4 (Frtg-D)	4 (Frwy), 4 (Frtg-D)	4 (Frwy), 4/6 (Frtg-D)	4 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)		included w/ 3.10.1
22 - IH 35W (North)	5.20.1	IH 35W	SH 114	Eagle Pkwy	4 (Frwy), 4 (Frtg-D)	4 (Frwy), 4/6 (Frtg-C)	4 (Frwy), 4/6 (Frtg-C)	4 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)		included w/ 3.10.1
23 - IH 35W (South)	5.80.1	IH 35W	IH 20	FM 1187	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	10 (Frwy), 4/6 (Frtg-C)	10 (Frwy), 4/6 (Frtg-C)		\$600,000,000
23 - IH 35W (South)	5.80.2	IH 35W	FM 1187	SH 174 (Tarrant County Line)	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	8 (Frwy), 4/6 (Frtg-C)	8 (Frwy), 4/6 (Frtg-C)		included w/ 5.80.1
23 - IH 35W (South)	5.90.1	IH 35W	SH 174 (Tarrant County Line)	Hidden Creek Pkwy	4 (Frwy), 4/6 (Frtg-C)	4 (Frwy), 4/6 (Frtg-C)	4 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)	6 (Frwy), 4/6 (Frtg-C)		\$800,000,000

(HOV/ExL) - HOV/Tolled Express Lanes  
(HOV) - HOV Lanes  
(ExL) - Express Lanes  
(ML/T) - Tolled Managed Lanes  
(-C) - Concurrent Lanes  
(-R) - Reversible Lanes

\*Interim Pk-Hr Lanes  
\*\*Technology Lanes

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM  
NCTCOG MPO - HIGHWAY PROJECTS  
FY 2021

2019-2022 STIP		11/2019 Revision: Approved 01/29/2020							
DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOE COST	
DALLAS	NCTCOG	COLLIN	0135-03-046	2021	US 380	E,ENG,R,ACQ	PRINCETON	\$ 12,000,000	
LIMITS FROM AIRPORT DRIVE		PROJECT SPONSOR TXDOT-DALLAS							
LIMITS TO 4TH STREET		REVISION DATE 11/2019							
PROJECT WIDEN 4 LANE ROADWAY TO 6 LANE DIVIDED		MPO PROJ NUM 55233							
DESCR		FUNDING CAT(S) SW PE,SW ROW							
REMARKS ADVANCE ENGINEERING AND ROW PHASES TO FY2021; ADD P7 PROJECT TO THE 2019-2022 TIP/STIP				PROJECT PART OF REGIONAL 10 YEAR PLAN HISTORY					
TOTAL PROJECT COST INFORMATION				AUTHORIZED FUNDING BY CATEGORY/SHARE					
PREL ENG \$	2,000,000	COST OF APPROVED PHASES	CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
ROW PURCH \$	10,000,000		SW PE	\$ 0	\$ 2,000,000	\$ 0	\$ 0	\$ 0	\$ 2,000,000
CONSTR \$	30,000,000		SW ROW	\$ 8,000,000	\$ 1,000,000	\$ 0	\$ 1,000,000	\$ 0	\$ 10,000,000
CONST ENG \$	1,767,178		TOTAL	\$ 8,000,000	\$ 3,000,000	\$ 0	\$ 1,000,000	\$ 0	\$ 12,000,000
CONTING \$	73,975								
INDIRECT \$	0								
BOND FIN \$	0								
PT CHG ORD \$	0								
TOTAL CST \$	43,841,153								

2019-2022 STIP		11/2019 Revision: Approved 01/29/2020							
DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOE COST	
DALLAS	NCTCOG	DALLAS	0095-13-038	2021	IH 20	E,ENG,R,ACQ	MESQUITE	\$ 13,000,000	
LIMITS FROM LAWSON ROAD		PROJECT SPONSOR TXDOT-DALLAS							
LIMITS TO KAUFMAN COUNTY LINE		REVISION DATE 11/2019							
PROJECT ADD 0 TO 4 LANE CONTINUOUS FRONTAGE ROADS		MPO PROJ NUM 55232							
DESCR		FUNDING CAT(S) SW PE,SW ROW							
REMARKS ADD PROJECT TO THE 2019-2022 TIP/STIP				PROJECT HISTORY					
TOTAL PROJECT COST INFORMATION				AUTHORIZED FUNDING BY CATEGORY/SHARE					
PREL ENG \$	3,000,000	COST OF APPROVED PHASES	CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
ROW PURCH \$	10,000,000		SW PE	\$ 0	\$ 3,000,000	\$ 0	\$ 0	\$ 0	\$ 3,000,000
CONSTR \$	74,050,000		SW ROW	\$ 9,000,000	\$ 1,000,000	\$ 0	\$ 0	\$ 0	\$ 10,000,000
CONST ENG \$	3,628,450		TOTAL	\$ 9,000,000	\$ 4,000,000	\$ 0	\$ 0	\$ 0	\$ 13,000,000
CONTING \$	925,625								
INDIRECT \$	0								
BOND FIN \$	0								
PT CHG ORD \$	0								
TOTAL CST \$	91,604,075								

2019-2022 STIP		11/2019 Revision: Approved 01/29/2020							
DISTRICT	MPO	COUNTY	CSJ	TIP FY	HWY	PHASE	CITY	YOE COST	
DALLAS	NCTCOG	DENTON	0081-13-065	2021	IH 35W	E,ENG,R,ACQ	VARIOUS	\$ 44,502,945	
LIMITS FROM DALE EARNHARDT WAY		PROJECT SPONSOR TXDOT-DALLAS							
LIMITS TO SOUTH OF IH 35E/IH 35W INTERCHANGE		REVISION DATE 11/2019							
PROJECT RECONSTRUCT 2 TO 4/6 LANE DISCONTINUOUS FRONTAGE ROADS		MPO PROJ NUM 55259							
DESCR		FUNDING CAT(S) SW PE,SW ROW							
REMARKS ADD PROJECT TO THE 2019-2022 TIP/STIP				PROJECT HISTORY					
TOTAL PROJECT COST INFORMATION				AUTHORIZED FUNDING BY CATEGORY/SHARE					
PREL ENG \$	14,502,945	COST OF APPROVED PHASES	CATEGORY	FEDERAL	STATE	REGIONAL	LOCAL	LC	TOTAL
ROW PURCH \$	30,000,000		SW PE	\$ 0	\$ 14,502,945	\$ 0	\$ 0	\$ 0	\$ 14,502,945
CONSTR \$	295,978,469		SW ROW	\$ 27,000,000	\$ 3,000,000	\$ 0	\$ 0	\$ 0	\$ 30,000,000
CONST ENG \$	12,728,000		TOTAL	\$ 27,000,000	\$ 17,502,945	\$ 0	\$ 0	\$ 0	\$ 44,502,945
CONTING \$	532,800								
INDIRECT \$	0								
BOND FIN \$	0								
PT CHG ORD \$	0								
TOTAL CST \$	353,742,214								



**Transportation Conformity Report Form**

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**TxDOT ENV Transportation Conformity Validation Complete:**

**Project CSJ Numbers:** 0081-13-065

**Signature** Timothy Wood \_\_\_\_\_

**Name:** Tim Wood

**Title:** ENV Air Specialist

**Date:** 2/18/2020

---

**FHWA/FTA Determination of the Project-level Conformity:**

**Signature** BARBARA C MALEY Digitally signed by BARBARA C MALEY  
Date: 2020.02.20 11:06:33 -06'00'

**Name:** \_\_\_\_\_

**Title:** Air Quality Specialist and Transportation Planner

**Date:** \_\_\_\_\_

## Appendix F Resource-specific Maps

Description	Number of Pages
Project Resource Map	20





**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
| Proposed Right-of-Way | Delineated Stream          | Non-Impacted Noise Receiver     |
| Proposed Easement     | Delineated Open Water      | Impacted Noise Receiver         |
| Proposed Pavement     | Delineated Wetland Feature | Hardous Materials Moderate Risk |
| Sidewalks             | 100-Year Floodplain        | Gas Well                        |



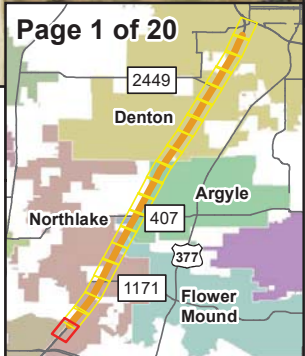
Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065

Page 1 of 20







**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
| Proposed Right-of-Way | Delineated Stream          | Non-Impacted Noise Receiver     |
| Proposed Easement     | Delineated Open Water      | Impacted Noise Receiver         |
| Proposed Pavement     | Delineated Wetland Feature | Hardous Materials Moderate Risk |
| Sidewalks             | 100-Year Floodplain        | Gas Well                        |

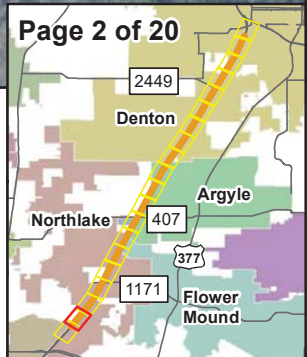


Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065







**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
| Proposed Right-of-Way | Delineated Stream          | Non-Impacted Noise Receiver     |
| Proposed Easement     | Delineated Open Water      | Impacted Noise Receiver         |
| Proposed Pavement     | Delineated Wetland Feature | Hardous Materials Moderate Risk |
| Sidewalks             | 100-Year Floodplain        | Gas Well                        |



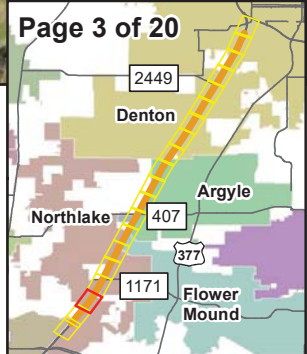
0 250 500 Feet

Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065







Legend					
	Existing Right-of-Way		Stream		Cemetery
	Proposed Right-of-Way		Delineated Stream		Non-Impacted Noise Receiver
	Proposed Easement		Delineated Open Water		Impacted Noise Receiver
	Proposed Pavement		Delineated Wetland Feature		Hardous Materials Moderate Risk
	Sidewalks		100-Year Floodplain		Gas Well

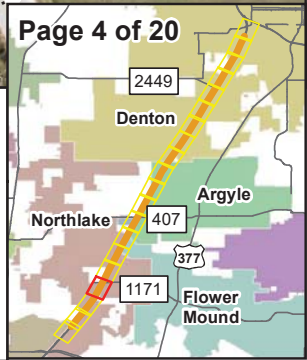
0      250      500  
 Feet

Base Map Source:  
 TNRIS Aerial Imagery (2018)  
 Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

From Dale Earnhardt Way  
 to south of the IH 35E/IH 35W  
 Interchange  
 Denton County, Texas

CSJ: 0081-13-065

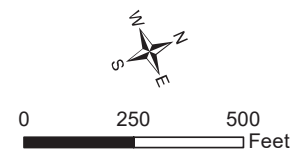






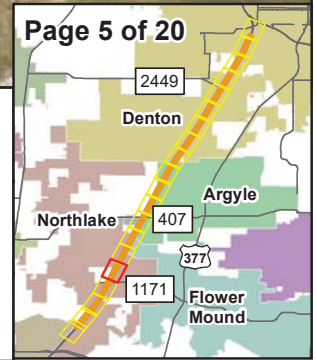
**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
| Proposed Right-of-Way | Delineated Stream          | Non-Impacted Noise Receiver     |
| Proposed Easement     | Delineated Open Water      | Impacted Noise Receiver         |
| Proposed Pavement     | Delineated Wetland Feature | Hardous Materials Moderate Risk |
| Sidewalks             | 100-Year Floodplain        | Gas Well                        |



Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**  
From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas  
CSJ: 0081-13-065

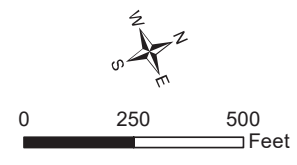






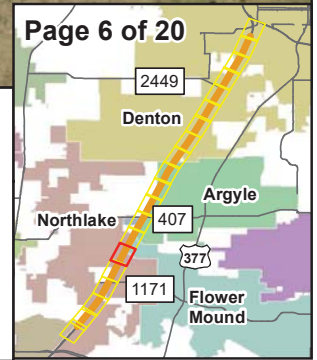
**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
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| Proposed Pavement     | Delineated Wetland Feature | Hardous Materials Moderate Risk |
| Sidewalks             | 100-Year Floodplain        | Gas Well                        |

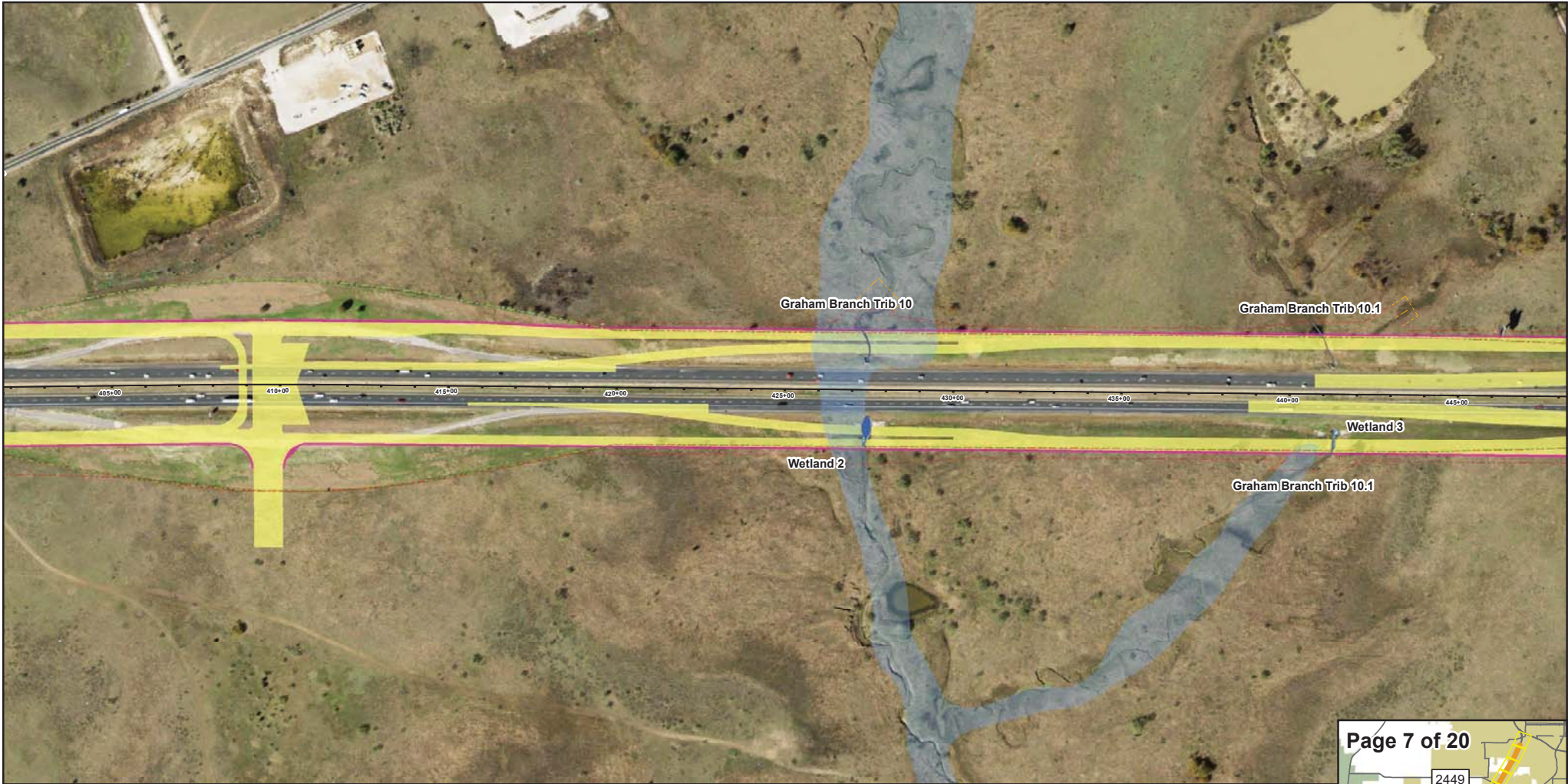


Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**  
From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas  
CSJ: 0081-13-065

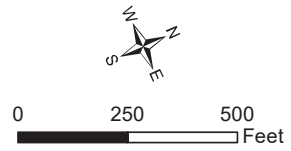






**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
| Proposed Right-of-Way | Delineated Stream          | Non-Impacted Noise Receiver     |
| Proposed Easement     | Delineated Open Water      | Impacted Noise Receiver         |
| Proposed Pavement     | Delineated Wetland Feature | Hardous Materials Moderate Risk |
| Sidewalks             | 100-Year Floodplain        | Gas Well                        |

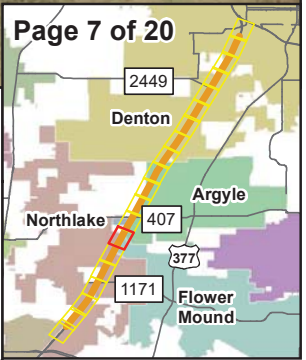


Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065

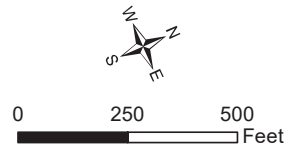






**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
| Proposed Right-of-Way | Delineated Stream          | Non-Impacted Noise Receiver     |
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| Proposed Pavement     | Delineated Wetland Feature | Hardous Materials Moderate Risk |
| Sidewalks             | 100-Year Floodplain        | Gas Well                        |

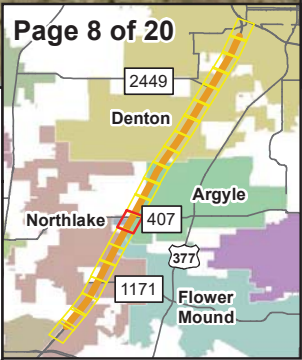


Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

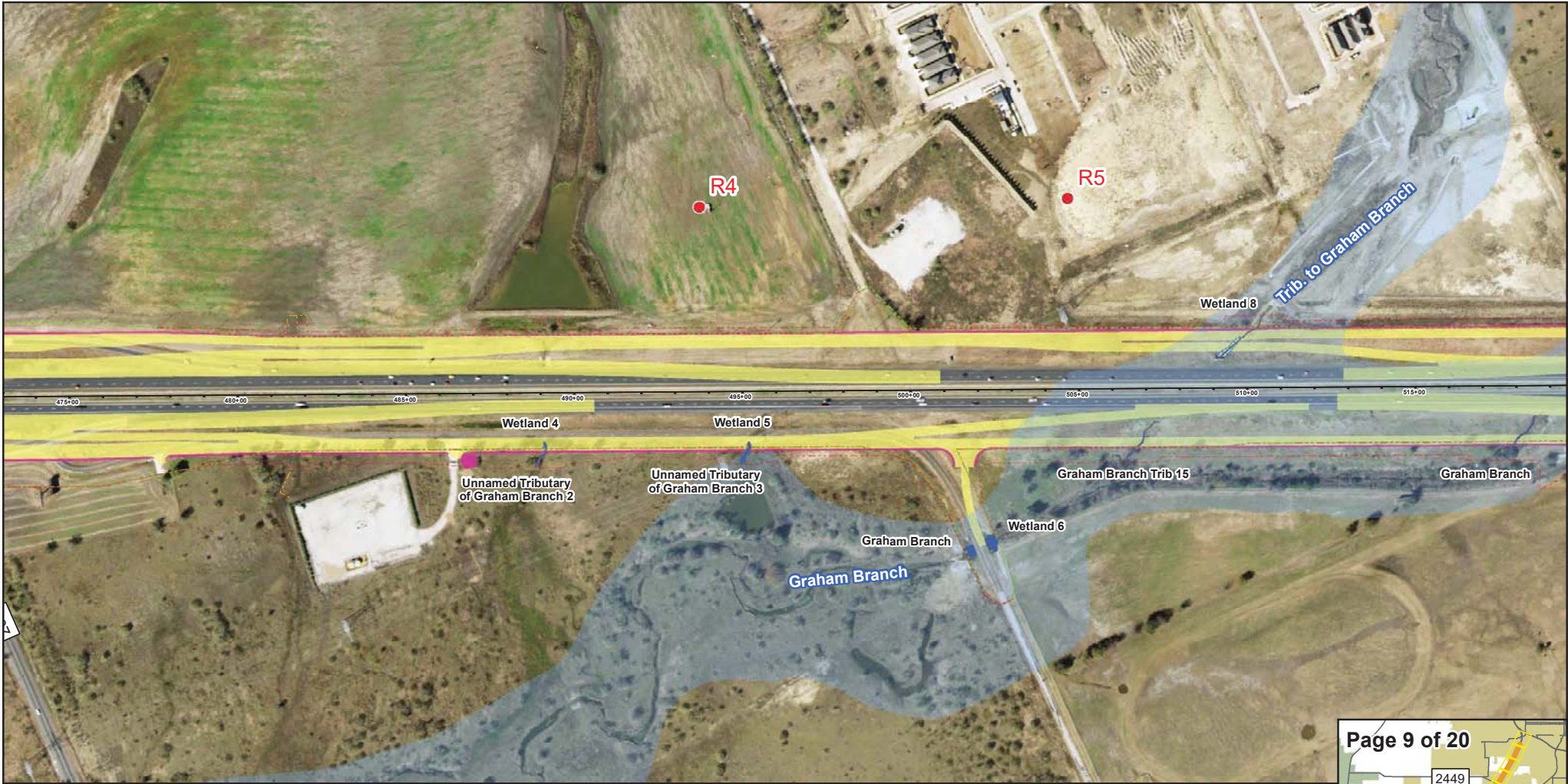
**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065

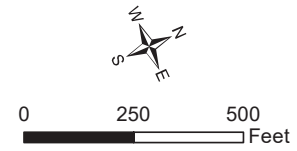






**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
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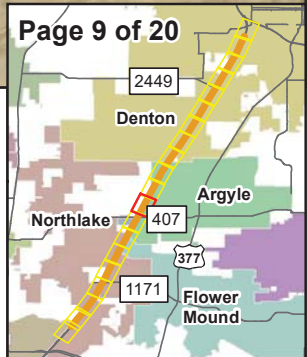


Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065

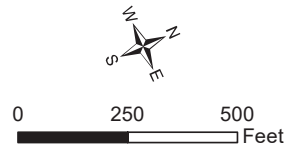






**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
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| Sidewalks             | 100-Year Floodplain        | Gas Well                        |

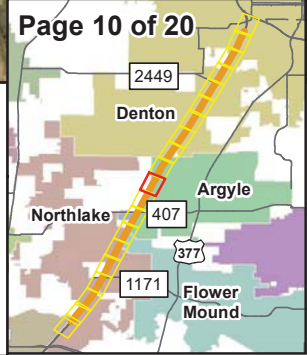


Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065

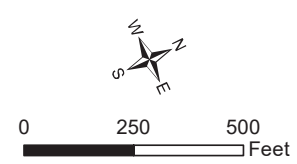






**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
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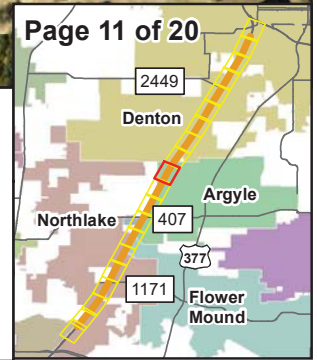


Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065







**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
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| Proposed Pavement     | Delineated Wetland Feature | Hardous Materials Moderate Risk |
| Sidewalks             | 100-Year Floodplain        | Gas Well                        |

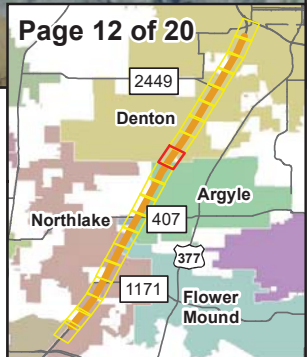


Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065







**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
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| Sidewalks             | 100-Year Floodplain        | Gas Well                        |

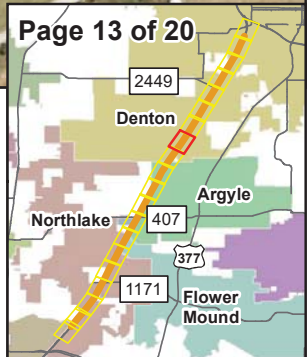


Base Map Source:  
 TNRIS Aerial Imagery (2018)  
 Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

From Dale Earnhardt Way  
 to south of the IH 35E/IH 35W  
 Interchange  
 Denton County, Texas

CSJ: 0081-13-065

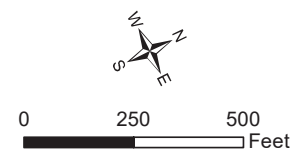






**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
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| Proposed Pavement     | Delineated Wetland Feature | Hardous Materials Moderate Risk |
| Sidewalks             | 100-Year Floodplain        | Gas Well                        |

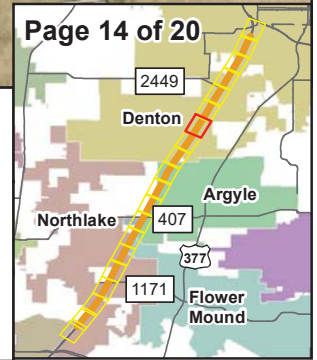


Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065

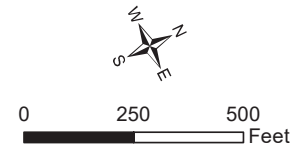






**Legend**

- |                       |                            |                                 |
|-----------------------|----------------------------|---------------------------------|
| Existing Right-of-Way | Stream                     | Cemetery                        |
| Proposed Right-of-Way | Delineated Stream          | Non-Impacted Noise Receiver     |
| Proposed Easement     | Delineated Open Water      | Impacted Noise Receiver         |
| Proposed Pavement     | Delineated Wetland Feature | Hardous Materials Moderate Risk |
| Sidewalks             | 100-Year Floodplain        | Gas Well                        |

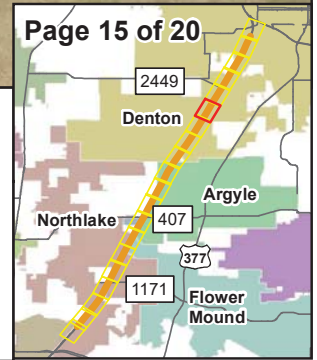


Base Map Source:  
TNRIS Aerial Imagery (2018)  
Study Group (2019)

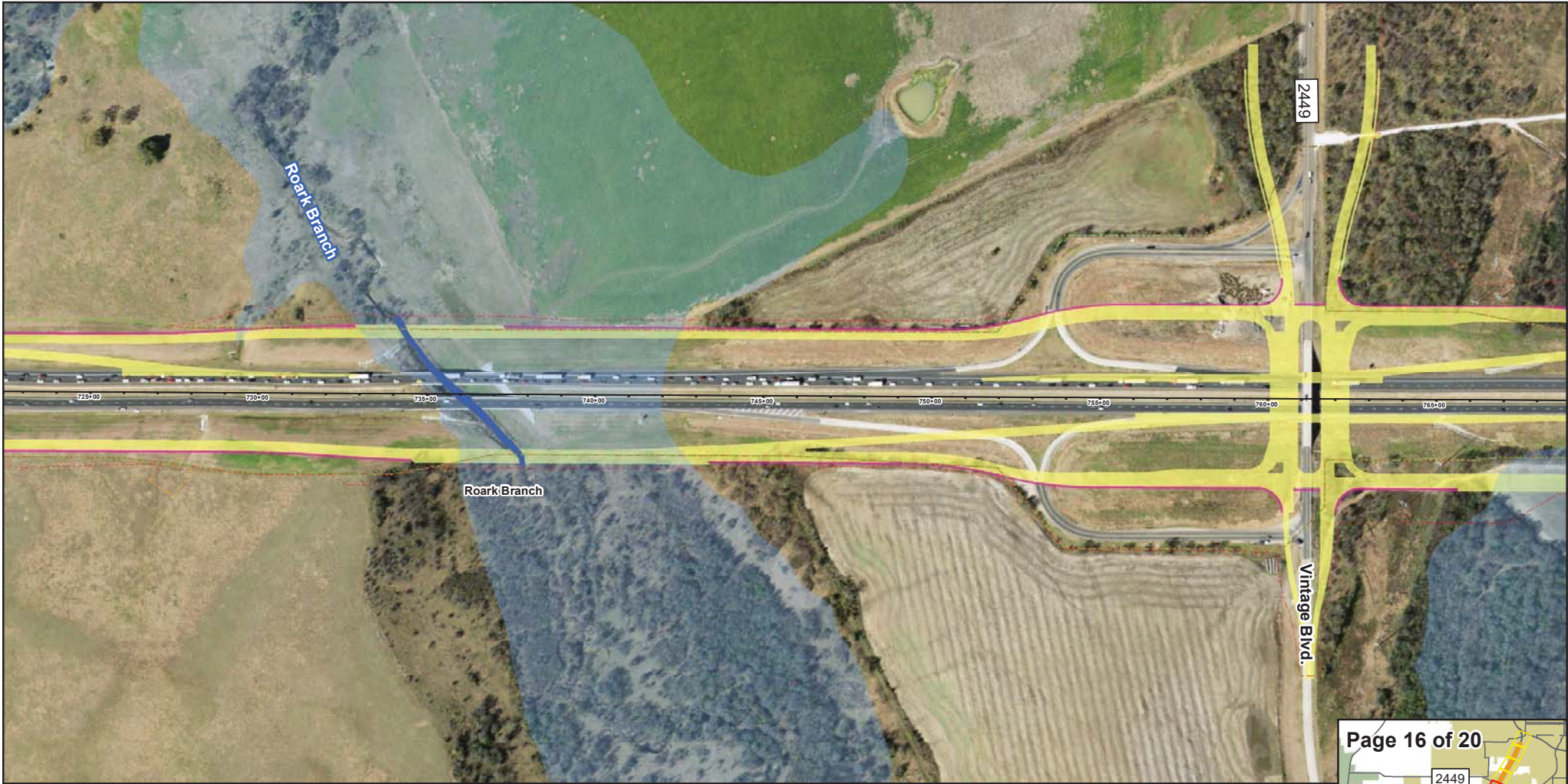
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to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065

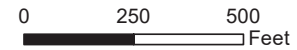






**Legend**

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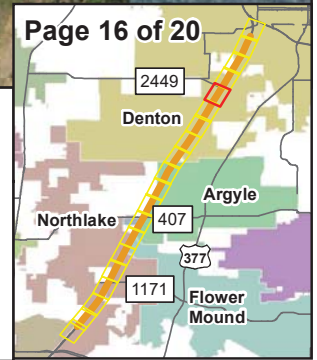


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From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065







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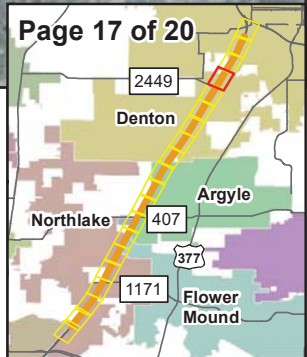


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Study Group (2019)

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**IH 35W FRONTAGE ROADS**

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Interchange  
Denton County, Texas

CSJ: 0081-13-065







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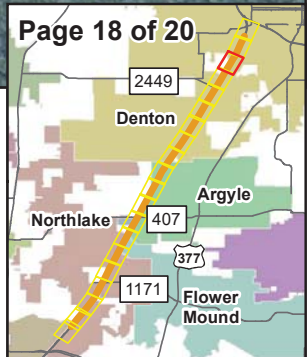


Base Map Source:  
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**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

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Denton County, Texas

CSJ: 0081-13-065

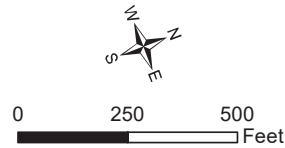






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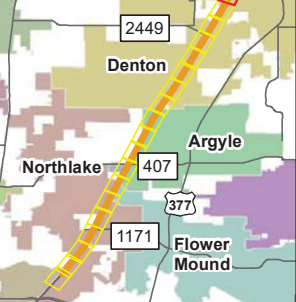
Base Map Source:  
TNRIS Aerial Imagery (2018)  
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**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**

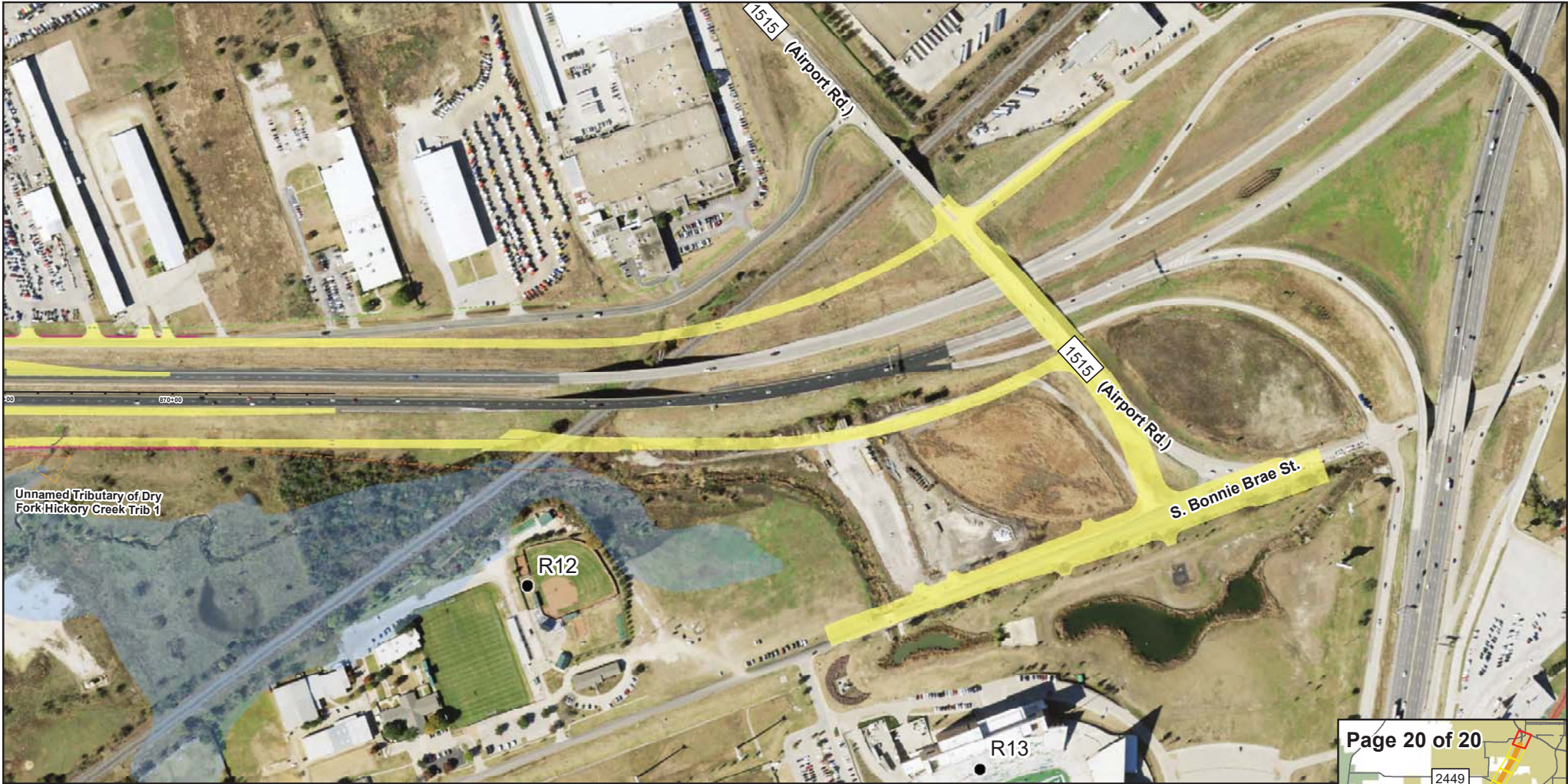
From Dale Earnhardt Way  
to south of the IH 35E/IH 35W  
Interchange  
Denton County, Texas

CSJ: 0081-13-065

Page 19 of 20

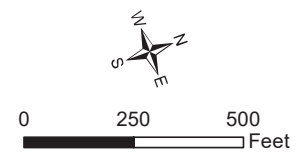






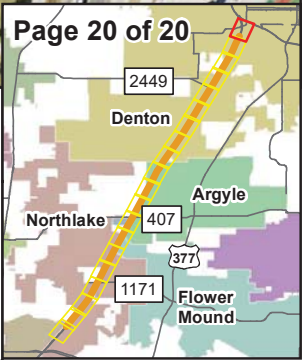
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**PROJECT RESOURCE MAP**  
**IH 35W FRONTAGE ROADS**  
 From Dale Earnhardt Way  
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 Denton County, Texas  
 CSJ: 0081-13-065



## Appendix G Resources Agency Coordination

Description	Number of Pages
Archeological Resources Coordination Documentation	1
Historic Resources Coordination Documentation	5
Texas Parks and Wildlife Department (TPWD) Coordination	4



# MEMO

October 9, 2019

**To:** ECOS, Various Road Projects, Various CSJs, Various Districts

**From:** Scott Pletka, Ph.D.

**Subject:** Internal review under the Programmatic Agreement Among the Federal Highway Administration, the Texas Department of Transportation, the Texas State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Implementation of Transportation Undertakings (PA-TU), and internal review under the Memorandum of Understanding (MOU) Between the Texas Historical Commission and the Texas Department of Transportation

Listed below are projects reviewed internally by qualified TxDOT archeologists. The projects will have no effect on archeological historic properties. As provided under the PA-TU, consultation with the Texas State Historic Preservation Officer is not necessary for these undertakings. As provided under the MOU, the proposed projects do not require individual coordination with the Texas Historical Commission.

CSJ	District	County	Roadway	Description	Work Performed	Consultation	Initial Consult Date
0081-13-065	DAL	Denton	IH 35W	New road	Background Study	ETCT	3/2/2018
0204-06-059	BRY	Milam	US 79	Trail/sidewalk	Background Study	Formal	

Signature \_\_\_\_\_  
For TxDOT  
cc: THC

Date: 10 / 09 / 2019

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.

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

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

An Equal Opportunity Employer





# MEMO

January 9, 2020

**TO:** Administrative File  
**From:** Rebekah Dobrasko

**District:** Dallas  
**County:** Denton  
**CSJ#:** 0081-13-065  
**Highway:** IH 35 W  
**Project Limits:** From Dale Earnhardt Way to south of the IH 35E/IH 35W Interchange  
**Let Date:** September 2025

**SUBJECT:** Internal review under the Section 106 Programmatic Agreement (Section 106 PA) among the Texas Department of Transportation, Texas State Historic Preservation Officer, Advisory Council on Historic Preservation, and Federal Highway Administration; and the Memorandum of Understanding (MOU) between the Texas Historical Commission and the Texas Department of Transportation

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 9, 2019, and executed by FHWA and TxDOT.

---

## Project Description

See the attachment from TxDOT's Environmental Compliance Oversight System (ECOS) that describes the project, setting, and amount of right-of-way (ROW) and easements necessary for the project.

## Determination of Eligibility:

TxDOT historians reviewed the National Register of Historic Places (NRHP), the list of State Antiquities Landmarks (SAL), the list of Recorded Texas Historic Landmarks (RTHL), and TxDOT files and found no historically significant resources previously documented within the area of potential effects (APE). The TxDOT Section 106 Programmatic Agreement defines the APE for this project as 150' from the proposed new ROW and the existing ROW where no new ROW is necessary.

TxDOT historians conducted a desktop analysis and examination of historic aerial photographs of the APE. The proposed project will take place on approximately 12 miles of IH 35W in the southwestern portion of Denton County. This area of Denton County was historically agricultural. The Texas Highway Department constructed IH 35W through Denton County in the late 1960s. This portion of the interstate was open to traffic by 1969.

The interstate brought minimal changes to this area of Denton County. The most notable landscape change is the development of oil and gas extraction industries along the interstate, the construction of industrial buildings outside of Denton on the northern portion of the project, and the construction

of the Texas Motor Speedway (1996) and associated parking on the southern portion of the project. Based on the letting date for this project, TxDOT identified the historic-age date of 1980 for any potential historic properties. TxDOT historians identified one historic-age property in the APE, a barn constructed prior to 1968. This barn (on the southwest corner of the intersection of IH 35W and CR 338 is abandoned and no longer associated with any agricultural residence or activities. Therefore, TxDOT finds this barn to be **not eligible** for listing in the NRHP.

**Public Involvement:**

TxDOT held a public meeting about this project in May 2019 and did not receive any comments related to any historic properties in the project area.

**Determination of Effects:**

Pursuant to Stipulation IX, Appendix 6 "Undertakings with the Potential to Cause Effects per 36 CFR 800.16(i)" of the Section 106 PA and the MOU, TxDOT historians determined that there are no historic properties affected by this project. In compliance with the Antiquities Code of Texas and the MOU, TxDOT historians determined project activities have no potential for adverse effects. Individual project coordination with SHPO is not required.

Lead Reviewer Rebekah Dobrasko for TxDOT 1/9/2020  
0F414A49C0E44B3...  
Rebekah Dobrasko Date

Approved by Bruce Jensen for TxDOT 1/9/2020  
7EBA09BEB8043B...  
Bruce Jensen Date

[Back To List](#)

WPD Section I - Project Definition | WPD Section II - Tool | WPD Section III - Project Work Plan | WPD Section IV - Findings

+ -

[Archived WPD I](#)

[Print this Page](#)

**Project Definition**

Project Name:

CSJ:  -  -

Anticipated Environmental Classification:

Is this an FHWA project that normally requires an EIS per 23 CFR 771.115(a)?

+ Project Association(s)

+ DCIS Project Funding and Location

+ DCIS & P6 Letting Dates

+ DCIS Project Description

- Jurisdiction

Does the project cross a state boundary, or require a new Presidential Permit or modification of an existing Presidential Permit?

Who is the lead agency responsible for the approval of the entire project?

FHWA - Assigned to TxDOT  TxDOT - No Federal Funding  FHWA - Not Assigned to TxDOT

Who is the project sponsor as defined by 43 TAC 2.7?

Is a local government's or a private developer's own staff or consultant preparing the CE documentation, EA or EIS?

Does the project require any federal permit, license, or approval?

USACE  IBWC  USCG  NPS  IAJR  Other

Does the project occur, in part or in total, on federal or tribal lands?

- Environmental Clearance Project Description

Project Area

Typical Depth of Impacts:  (Feet)      Maximum Depth of Impacts:  (Feet)  
New ROW Required:  (Acres)  
New Perm. Easement Required:  (Acres)      New Temp. Easement Required:  (Acres)

Project Description

Describe Limits of All Activities:

The Texas Department of Transportation (TxDOT) is proposing improvements to Interstate Highway 35 West (IH 35W) from Dale Earnhardt Way in the City of Fort Worth to south of the IH 35E/IH35W interchange in the City of Denton, Denton County, Texas; a distance of approximately 12.3 miles. The proposed project consists of the construction of continuous, one-way, two-lane urban, northbound and southbound frontage roads, along IH 35W. Other improvements would include changing the IH 35W ramp configuration from a conventional diamond to a reverse diamond (X ramp); flipping the Farm-to-Market (FM) 1171 (Cross Timbers Road), Old Justin Road, and John Paine Road/Allred Road interchanges so that the IH 35W mainlanes cross over these streets; constructing an interchange for the future Denton Creek Road, and expanding the Cleveland Gibbs Road, FM 407, Robson Ranch Road/Crawford Road, and proposed Loop 288/Vintage Road interchanges.

Describe Project Setting:



Land use surrounding IH 35W within the project limit includes a mix of light commercial and sparse retail businesses consisting of hardware stores, laboratory supplies and services, and RV park. IH 35W primarily traverses a more rural, agricultural landscape that features crop and livestock production. Fields of wheat, oats, maize, millet, and cotton can be seen on both sides of IH 35W, as well as improved pastures for cattle and other livestock production. Isolated residences are scattered along the project corridor between city of Denton to the north and Northlake to the south. Several creeks cross the roadway and create a large floodplain area, the major being Denton Creek just north of Dale Earnhardt Way, and Hickory Creek located north of Vintage boulevard.

**Describe Existing Facility:**

**Mainlanes**

The existing IH 35W within the project limits does not contain frontage roads and consists of two 12-foot wide mainlanes in each direction with 4-foot to 6-foot wide inside shoulders and 9-foot to 12-foot wide outside shoulders separated by a 35 to 40-foot wide median.

**Entrance/ Exit Ramps**

The existing northbound and southbound entrance and exit ramps consist of one 14-foot wide lane with 2-foot wide inside shoulders and 10-foot wide outside shoulders. All of the existing ramp configurations at interchanges are of a conventional diamond design.

**Interchanges**

The existing Dale Earnhardt Way at IH 35W consists of two 12-foot wide eastbound and westbound travel lanes separated by 14-foot wide two-way left-turn lane, and 10-foot wide outside shoulders. Dale Earnhardt Way crosses over the IH 35W mainlanes.

The existing FM 1171 (Cross Timbers Road) at IH 35W consists of one 12-foot wide travel lane in each direction. FM 1171 (Cross Timbers Road) crosses over the IH 35W mainlanes.

The existing Cleveland Gibbs Road at IH 35W consists of one 12-foot wide travel lane in each direction. Cleveland Gibbs Road crosses over the IH 35W mainlanes.

**Describe Proposed Facility:**

**Mainlanes**

The proposed project includes replacement of the existing IH 35W cross-street overpasses with new overpasses at IH 35W/Cross Timbers Road, IH 35W/FM 407, IH 35W/Old Justin Road, IH 35W/Robson Ranch Road/Crawford Road, and IH 35W/John Paine Road/Allred Road. The width of the bridge structures is based on the ultimate IH 35W mainlanes. Constructing the ultimate bridge structures along with changing the IH 35W ramp configuration from a conventional diamond to a reverse diamond (X ramp), requires portions of the ultimate IH 35W mainlanes to be constructed with transition pavement sections to tie back to the existing. The proposed mainlanes at the interchanges would consist of three 12-foot wide lanes in each direction with 10-foot wide inside shoulders and 12-foot wide outside shoulders.

**Frontage Roads**

The proposed northbound and southbound frontage roads would consist of one 12-foot wide inside travel lane, one 14-foot wide outside shared use lane with 2-foot wide curb offsets, and a 6-foot wide sidewalk in each direction. The proposed northbound and southbound frontage road bridges would consist of one 12-foot wide inside travel lane, one 14-foot wide outside shared use lane with two-foot wide inside and outside shoulders, and an 8-foot wide sidewalk in each direction.

<input type="button" value="Yes"/> Would the project add capacity?
<input type="button" value="+"/> Transportation Planning
<input type="button" value="+"/> Environmental Clearance Information
<input type="button" value="+"/> Project Contacts
<b>Last Updated By:</b> System Admin
<b>Last Updated Date:</b> 09/12/2019 07:14:58



## Leslie Mirise

---

**From:** Suzanne Walsh <Suzanne.Walsh@tpwd.texas.gov>  
**Sent:** Friday, March 13, 2020 12:44 PM  
**To:** Leslie Mirise  
**Cc:** Mohammed Shaikh; Dan Perge; Stirling Robertson  
**Subject:** RE: CSJ 0081-13-065 IH 35W Frontage Roads - Request for Early Coordination

Leslie,

TPWD accepts the Best Management Practices proposed by the district for species in Denton County that have suitable habitat present but do not yet have BMPs identified under the 2017 BMP PA: We appreciate that TxDOT commits to implementing these proposed BMPs for the IH 35W frontage road project. Please contact our Kast and Spills Team (KAST) to coordinate with them should dewatering be needed for the project. Contact information for TPWD KAST Region 2 for Denton County can be found at the weblink: [https://tpwd.texas.gov/landwater/water/environconcerns/kills\\_and\\_spills/regions/kas\\_r2.phtml](https://tpwd.texas.gov/landwater/water/environconcerns/kills_and_spills/regions/kas_r2.phtml). If I can provide any assistance with the USACE mitigation for this project, please feel free to reach out to me.

Thank you for submitting the following project for early coordination: IH 35W Frontage Roads (CSJ: 0081-13-065). TPWD appreciates TxDOT's commitment to implement the practices listed in the Tier I Site Assessment form submitted on February 28, 2020. 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 plants, fish, and wildlife.

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

Sincerely,

Suzanne Walsh  
Transportation Conservation Coordinator  
(512) 389-4579

---

**From:** Leslie Mirise <Leslie.Mirise@txdot.gov>  
**Sent:** Wednesday, March 4, 2020 4:20 PM  
**To:** Suzanne Walsh <Suzanne.Walsh@tpwd.texas.gov>  
**Cc:** Mohammed Shaikh <Mohammed.Shaikh@txdot.gov>; Dan Perge <Dan.Perge@txdot.gov>; Stirling Robertson <Stirling.Robertson@txdot.gov>  
**Subject:** RE: CSJ 0081-13-065 IH 35W Frontage Roads - Request for Early Coordination

ALERT: This email came from an external source. Do not open attachments or click on links in unknown or unexpected emails.

Great – thanks!

*Leslie Mirise*

Environmental Specialist  
Dallas District – DAL-ENV  
Texas Department of Transportation  
4777 East Highway 80  
Mesquite, Texas 75150  
(214) 320-6162 office  
(214) 320-4470 FAX

---

**From:** Suzanne Walsh [<mailto:Suzanne.Walsh@tpwd.texas.gov>]  
**Sent:** Wednesday, March 4, 2020 3:53 PM  
**To:** Leslie Mirise <[Leslie.Mirise@txdot.gov](mailto:Leslie.Mirise@txdot.gov)>  
**Cc:** Mohammed Shaikh <[Mohammed.Shaikh@txdot.gov](mailto:Mohammed.Shaikh@txdot.gov)>; Dan Perge <[Dan.Perge@txdot.gov](mailto:Dan.Perge@txdot.gov)>; Stirling Robertson <[Stirling.Robertson@txdot.gov](mailto:Stirling.Robertson@txdot.gov)>  
**Subject:** RE: CSJ 0081-13-065 IH 35W Frontage Roads - Request for Early Coordination

This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Leslie,

Thanks for the email. I appreciate the update the project schedule. I have two projects ahead of your IH 35 W Frontage Roads that I am finalizing my review. I should be able to provide any comments/recommendations next week.

Suzanne

---

**From:** Leslie Mirise <[Leslie.Mirise@txdot.gov](mailto:Leslie.Mirise@txdot.gov)>  
**Sent:** Tuesday, March 3, 2020 4:33 PM  
**To:** Suzanne Walsh <[Suzanne.Walsh@tpwd.texas.gov](mailto:Suzanne.Walsh@tpwd.texas.gov)>  
**Cc:** Mohammed Shaikh <[Mohammed.Shaikh@txdot.gov](mailto:Mohammed.Shaikh@txdot.gov)>; Dan Perge <[Dan.Perge@txdot.gov](mailto:Dan.Perge@txdot.gov)>; Stirling Robertson <[Stirling.Robertson@txdot.gov](mailto:Stirling.Robertson@txdot.gov)>  
**Subject:** RE: CSJ 0081-13-065 IH 35W Frontage Roads - Request for Early Coordination

ALERT: This email came from an external source. Do not open attachments or click on links in unknown or unexpected emails.

Hi Suzanne,

Just checking in to find out if there's anything I can provide for your review. There has been a slight change in the schedule I included in the submittal email. Originally the public hearing was scheduled for today; however, it's been pushed to mid-April. The overall environmental clearance date in May has not changed due to limited funding availability.

Thanks,



*Leslie Mirise*

Environmental Specialist  
Dallas District – DAL-ENV  
Texas Department of Transportation  
4777 East Highway 80  
Mesquite, Texas 75150  
(214) 320-6162 office  
(214) 320-4470 FAX

---

**From:** Suzanne Walsh [<mailto:Suzanne.Walsh@tpwd.texas.gov>]  
**Sent:** Friday, February 14, 2020 4:31 PM  
**To:** Leslie Mirise <[Leslie.Mirise@txdot.gov](mailto:Leslie.Mirise@txdot.gov)>  
**Cc:** Mohammed Shaikh <[Mohammed.Shaikh@txdot.gov](mailto:Mohammed.Shaikh@txdot.gov)>; Dan Perge <[Dan.Perge@txdot.gov](mailto:Dan.Perge@txdot.gov)>; Stirling Robertson <[Stirling.Robertson@txdot.gov](mailto:Stirling.Robertson@txdot.gov)>  
**Subject:** RE: CSJ 0081-13-065 IH 35W Frontage Roads - Request for Early Coordination

Hi Leslie,

I have initiated review of this project and will let you know if I have any questions or need additional information.

Thanks,  
Suzanne

Suzanne Walsh  
Transportation Conservation Coordinator  
(512) 389-4579

---

**From:** WHAB\_TxDOT <[WHAB\\_TxDOT@tpwd.texas.gov](mailto:WHAB_TxDOT@tpwd.texas.gov)>  
**Sent:** Friday, January 24, 2020 3:00 PM  
**To:** Leslie Mirise <[Leslie.Mirise@txdot.gov](mailto:Leslie.Mirise@txdot.gov)>; Mohammed Shaikh <[Mohammed.Shaikh@txdot.gov](mailto:Mohammed.Shaikh@txdot.gov)>; Dan Perge <[Dan.Perge@txdot.gov](mailto:Dan.Perge@txdot.gov)>; Stirling Robertson <[Stirling.Robertson@txdot.gov](mailto:Stirling.Robertson@txdot.gov)>  
**Cc:** Suzanne Walsh <[Suzanne.Walsh@tpwd.texas.gov](mailto:Suzanne.Walsh@tpwd.texas.gov)>  
**Subject:** RE: CSJ 0081-13-065 IH 35W Frontage Roads - Request for Early Coordination

The TPWD Wildlife Habitat Assessment Program has received your request and has assigned it project ID # 43061. The Habitat Assessment Biologist who will complete your project review is copied on this email.

Thank you,

*John Ney*

*Administrative Assistant  
Texas Parks & Wildlife Department  
Wildlife Diversity Program – Habitat Assessment Program  
4200 Smith School Road*

Austin, TX 78744  
Office: (512) 389-4571

---

**From:** Leslie Mirise <[Leslie.Mirise@txdot.gov](mailto:Leslie.Mirise@txdot.gov)>  
**Sent:** Friday, January 24, 2020 1:55 PM  
**To:** WHAB\_TxDOT <[WHAB\\_TxDOT@tpwd.texas.gov](mailto:WHAB_TxDOT@tpwd.texas.gov)>  
**Cc:** Mohammed Shaikh <[Mohammed.Shaikh@txdot.gov](mailto:Mohammed.Shaikh@txdot.gov)>; Dan Perge <[Dan.Perge@txdot.gov](mailto:Dan.Perge@txdot.gov)>; Stirling Robertson <[Stirling.Robertson@txdot.gov](mailto:Stirling.Robertson@txdot.gov)>  
**Subject:** CSJ 0081-13-065 IH 35W Frontage Roads - Request for Early Coordination

Hello,

TxDOT requests early coordination for the IH 35W Frontage Roads Project in Denton County, Texas. Please see ECOS for the project description. New ROW is required, and the project is classified as an EA. Project documents include the following, and those of appropriate file size are attached:

1. Species Analysis Spreadsheet;
2. Species Analysis Form;
3. Tier 1 Site Assessment Form;
4. USFWS Official Species List;
5. TPWD RTEST for Collin County;
6. NDD and EO reports;
7. EMST and Observed Vegetation Spreadsheet
8. EMST and Observed Vegetation Figures (available in ECOS due to file size)
9. Photos (available in ECOS due to file size)
10. TCAP for CRTB Ecoregion
11. NRCS Soil Report
12. Approved Schematic (available in ECOS due to file size; uploaded on 12/16/2019)

These documents, along with other project-related information, are available in ECOS under the CSJ: 0081-13-065.

The letting date is currently September 2025. However, the planned NEPA clearance date for this project is March 2020. The public hearing is tentatively scheduled for March 3, 2020. Please provide comments or complete coordination on or before March 2, 2020.

Please feel free to contact me with any questions or if you need any additional information.

Thank you,

*Leslie Mirise*

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## Appendix H Comment and Response Matrices

Description	Number of Pages
Public Meeting Comment and Response Matrix	1
Public Hearing Comment and Response Matrix	

Comment Number	Commenter Name	Date Received	Source	Comment Topic	Response
1	Louis A Burch	5/16/19	Form	Coordinate with TxDOT 407 Expansion Team. Hurry!!	Three agency meetings were held in March 2018, November 2018, and February 2019 to discuss the FM 407 study. Coordination with the TxDOT Dallas District, TxDOT Denton Area Office, and Jacobs Engineering was conducted for any available information concerning the IH 35W design.
2	John Harris	5/16/19	Form	Look forward to the widening and service roads; truly needed. Great job TxDOT.	Comment noted.
3	Stephen Ralston	5/16/19	Form	Please get the plans out as soon as possible on TxDOT's website. Thank you.	The plans can be viewed at the TxDOT Denton Area Office at 2624 W. Prairie Denton, TX 76201 or the TxDOT Dallas District Office at 4777 E. Highway 80, Mesquite, TX 75150.
4	Ron Fornae	5/16/19	Form	Absolutely wonderful. Please hit the gas.	Comment noted.
5	David Frazlor (Managing Partner is Brad Pazandak)	5/31/19	Form	Our property is on the SW corner of FM 407 and 1-35. Name is Randol Mill Capital Cup. While looking at the plans for Frontage Road along the west side of our property, I noticed TEX DOT was changing the drainage flow across our property. We already have a floodplain problem and we are working on CLOMR letter from FEMA. TEX DOT is moving the 3 6'x6' culvers that drain in the creek to the north some 140' replacing with 4 7'x7' culverts and does not drain into creek-140' + away. This will dump possibly almost twice as much water on our property and is really unacceptable with some mitigation plan on your part. We will be seriously damaged by this.	The culvert outfall on your property was shifted to avoid crossing proposed bridges and retaining walls. TxDOT will coordinate with Mr. Frazlor and Mr. Pazandak to discuss existing conditions and to prevent upstream and downstream flooding.