



# Draft Environmental Assessment

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## FM 1110, El Paso District

From I-10 to SH 20 (Alameda Avenue)

CSJ Number(s) 1281-01-017 and 1281-02-007

El Paso County, Texas

May 2017

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**1 ACRONYMS**

2 Included below is a list of acronyms used throughout this document and their definitions.

|    |             |  |
|----|-------------|--|
| 3  | AADT        | Average Annual Daily Traffic                   |
| 4  | ADA         | Americans with Disabilities Act                |
| 5  | ASTM        | American Society for Testing and Materials     |
| 6  | BE          | Biological Evaluation                          |
| 7  | BHE         | Border Highway East                            |
| 8  | BMP         | Best Management Practice                       |
| 9  | CAA         | Clean Air Act                                  |
| 10 | CAFO        | Confined animal feeding operation              |
| 11 | CDC         | Corridor Development Certificate               |
| 12 | CEQ         | Council on Environmental Quality               |
| 13 | CGP         | Construction General Permit                    |
| 14 | CFR         | Code of Federal Regulations                    |
| 15 | CMP         | Congestion Management Process                  |
| 16 | CO          | Carbon Monoxide                                |
| 17 | CSJ         | Control-section-job number                     |
| 18 | CWA         | Clean Water Act                                |
| 19 | EA          | Environmental Assessment                       |
| 20 | EIS         | Environmental Impact Statement                 |
| 21 | EJ          | Environmental Justice                          |
| 22 | EMST        | Ecological Mapping Systems of Texas            |
| 23 | EO          | Executive Order                                |
| 24 | EPA         | Environmental Protection Agency                |
| 25 | EPCWID No.1 | El Paso County Water Improvement District No.1 |
| 26 | EPIC        | Environmental Permits, Issues, and Commitments |
| 27 | ESA         | Endangered Species Act                         |
| 28 | ETC         | Estimated Time of Completion                   |
| 29 | FEMA        | Federal Emergency Management Agency            |
| 30 | FHWA        | Federal Highway Administration                 |
| 31 | FIRM        | Flood Insurance Rate Map                       |
| 32 | FM          | Farm-to-Market                                 |
| 33 | FONSI       | Finding of No Significant Impact               |
| 34 | FPPA        | Farmland Protection Policy Act                 |
| 35 | FWCA        | Fish and Wildlife Coordination Act             |
| 36 | GIS         | Geographic Information System                  |
| 37 | HEI         | Health Effects Institute                       |
| 38 | I           | Interstate Highway                             |
| 39 | IBWC        | International Boundary Water Commission        |
| 40 | IRIS        | Integrated Risk Information System             |
| 41 | ISA         | Initial Site Assessment                        |
| 42 | LEP         | Limited English Proficiency                    |
| 43 | MBTA        | Migratory Bird Treaty Act                      |
| 44 | MOA         | Memorandum of Agreement                        |
| 45 | MOU         | Memorandum of Understanding                    |
| 46 | mph         | miles per hour                                 |
| 47 | MPO         | Metropolitan Planning Organization             |
| 48 | MS4         | Municipal Separate Storm Sewer System          |

|    |        |  |
|----|--------|--|
| 1  | MSAT   | Mobile Source Air Toxics                     |
| 2  | MTP    | Metropolitan Transportation Plan             |
| 3  | NAAQS  | National Ambient Air Quality Standards       |
| 4  | NATA   | National Air Toxics Assessment               |
| 5  | NEPA   | National Environmental Policy Act            |
| 6  | NOI    | Notice of Intent                             |
| 7  | NOT    | Notice of Termination                        |
| 8  | NFIP   | National Flood Insurance Program             |
| 9  | NRCS   | Natural Resource Conservation Service        |
| 10 | NRHP   | National Register of Historic Places         |
| 11 | NWI    | National Wetland Inventory                   |
| 12 | PA     | Programmatic Agreement                       |
| 13 | PEL    | Planning and Environmental Linkages          |
| 14 | PM     | Particulate matter                           |
| 15 | POE    | Port of Entry                                |
| 16 | PSL    | Project Specific Locations                   |
| 17 | PST    | Petroleum storage tank                       |
| 18 | REC    | Recognized environmental concern             |
| 19 | ROW    | Right-of-Way                                 |
| 20 | RSA    | Resource Study Area                          |
| 21 | SGCN   | Species of Greatest Conservation Need        |
| 22 | SH     | State Highway                                |
| 23 | SHPO   | State Historic Preservation Officer          |
| 24 | STIP   | Statewide Transportation Improvement Program |
| 25 | SW3P   | Stormwater Pollution Prevention Plan         |
| 26 | TCAP   | Texas Conservation Action Plan               |
| 27 | TCEQ   | Texas Commission on Environmental Quality    |
| 28 | TERP   | Texas Emissions Reduction Plan               |
| 29 | THC    | Texas Historical Commission                  |
| 30 | TPDES  | Texas Pollutant Discharge Elimination System |
| 31 | TPP    | Transportation Planning and Programming      |
| 32 | TPWD   | Texas Parks and Wildlife Department          |
| 33 | TxDOT  | Texas Department of Transportation           |
| 34 | TXNDD  | Texas Natural Diversity Database             |
| 35 | TWDB   | Texas Water Development Board                |
| 36 | UPRR   | Union Pacific Railroad                       |
| 37 | U.S.C. | US Code                                      |
| 38 | USACE  | United States Army Corps of Engineers        |
| 39 | USDOT  | United States Department of Transportation   |
| 40 | USCB   | United States Census Bureau                  |
| 41 | USFWS  | United States Fish and Wildlife Service      |
| 42 | USGS   | United States Geological Survey              |
| 43 | UTP    | Unified Transportation Program               |
| 44 | VPD    | Vehicles per Day                             |
| 45 | VMT    | Vehicle-Miles Traveled                       |

## 1.0 INTRODUCTION

The Texas Department of Transportation (TxDOT) proposes improvements to Farm-to-Market (FM) 1110 between Interstate Highway 10 (I-10) and State Highway 20 (SH 20) in El Paso County, Texas. FM 1110 is a primary roadway perpendicular to I-10, connecting the Town of Clint and the City of San Elizario to I-10. The current alignment of FM 1110, between I-10 and SH 20 is disjointed. The proposed improvements involve the widening and realignment of FM 1110 to provide direct connection from I-10 to SH 20. The project length is approximately 2.76 miles. The proposed project is needed to improve system linkage and mobility in the Lower Valley of El Paso County. The Lower Valley is located within the southwest portion of El Paso County and includes the communities of Socorro, San Elizario, Town of Clint, Fabens and Tornillo Census Designated Places. The study area for this Environmental Assessment (EA) is included in **Appendix A, Exhibit 1: Project Location Map**.

This EA has been developed to analyze the potential environmental consequences that would result from construction, operation, and maintenance of the proposed project and to determine whether such consequences warrant preparation of an Environmental Impact Statement (EIS). This EA was written in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; the President's Council on Environmental Quality (CEQ) Regulations 40 Code of Federal Regulations (CFR) Parts 1500 to 1508, Regulations for Implementing NEPA, 1978; and TxDOT's Environmental Review Rules.

The EA will be made available for public review during the proposed Public Hearing for the project. Following the public comment period, TxDOT will consider any comments submitted and will revise the EA as appropriate. If TxDOT determines that the proposed project would not have any significant adverse environmental impacts, it will issue a Finding of No Significant Impact (FONSI), which will be made available for public review.

## 2.0 PROJECT DESCRIPTION

### 2.1 Existing Facility

FM 1110 is currently a two-lane, undivided, rural facility. Between I-10 and FM 76 the existing roadway consists of two 12-foot (ft) lanes with 4-ft outside shoulders with drainage accommodated via roadside ditches within a right-of-way (ROW) width section that ranges between 128 ft and 130 ft. Between SH 20 and FM 76, the existing roadway meanders through the Town of Clint, and consists of two 11-ft lanes with 3-ft outside shoulders within a ROW width that ranges from 40 ft to 60 ft. Sidewalks, flush with the existing roadway pavement and ranging from 5 ft to 6 ft wide, are provided intermittently between FM 76 and SH 20. **Appendix B** provides photographs of the existing facility, while existing typical sections are depicted in **Appendix D**.

## 2.2 Proposed Facility

The proposed project would consist of widening and realignment of FM 1110 to provide direct connection between I-10 and SH 20 near the Town of Clint and the City of San Elizario. The proposed FM 1110 roadway would be functionally classified as an Urban Minor Arterial (4-lane, divided) with a design speed of 45 miles per hour (mph). The proposed project would include drainage improvements, improvements to the intersections at FM 76 and SH 20, a bridge crossing over the floodplain between Salatrál Lateral and FM 76, and an overpass at the Union Pacific Railroad (UPRR) crossing. The proposed improvements would include a signalized intersection and designated left-turn lanes at SH 20 and Denton Road (Rd.) Designated left-turn lanes would be provided at the new intersections of FM 1110 and Coffin Rd. and FM 1110 and Frey Rd. Drainage improvements, including seven retention ponds, are proposed for the project. **Appendix A** provides a project location map, **Appendix C** provides the project schematic, and **Appendix D** provides the proposed typical sections.

### *Bicycle and Pedestrian Accommodations*

The U.S. Department of Transportation (USDOT) Policy Statement on Bicycle and Pedestrian Accommodation provides guidance on incorporating pedestrian and bicycling facilities into transportation projects. The policy guidance encourages local planning authorities to implement planning and incorporate design features to facilitate increased pedestrian and bicycling activity. In accordance to this policy, TxDOT proactively plans, designs, and constructs facilities to safely accommodate bicyclists and pedestrians.

The proposed project would include bicycle and pedestrian accommodations in accordance with the USDOT Policy Statement on Bicycle and Pedestrian Accommodation. Six-foot wide sidewalks within 20-ft wide borders would be constructed on each side of FM 1110 between the face of curb and proposed ROW. In addition, 5-ft wide bicycle lanes would be constructed on both sides of the roadway. Sidewalks would be constructed in accordance with the Americans with Disabilities Act (ADA) guidelines.

### *Phasing*

The proposed project would be constructed in phases. Phase I would consist of the widening between I-10 and FM 76 and Phase II would consist of the realignment improvements between FM 76 and SH 20.

### *Planning*

The proposed action is consistent with the *Horizon 2040* Metropolitan Transportation Plan (MTP) amendment approved on April 28, 2017. However, the project is not included in the Statewide Transportation Improvement Program (STIP). The El Paso MPO is in the process of revising the TIP/STIP to include the proposed FM 1110 project for consistency. TxDOT will not take final action on this environmental document until the proposed project is included in the STIP. The current MTP page for the proposed project is included in **Appendix E: Supplemental Information**. The STIP page for the proposed project will be included once it becomes available.

1 **3.0 PURPOSE AND NEED**

2  
3 3.1 Need

4  
5 FM 1110 is one of the major thoroughfares in southern El Paso County, which is  
6 experiencing rapid growth, including residential and commercial development. The  
7 project is needed because a) FM 1110 between I-10 and SH 20 is disjointed with an at-  
8 grade crossing with the UPRR, resulting in reduced mobility, insufficient linkage, and  
9 travel delays and b) the project is within an area that is experiencing rapid growth,  
10 resulting in an anticipated future increase in traffic demand.

11  
12 3.2 Supporting Facts

13  
14 *Reduced Mobility, Insufficient Linkage, and Travel Delays*

15 FM 1110 is the primary transportation route through the City of San Elizario and the Town  
16 of Clint. Vehicular traffic (including emergency vehicles) traveling along FM 1110  
17 between SH 20 and I-10 encounter a lack of system connectivity and continuity within the  
18 study area because the roadway is disjointed as shown in **Figure 1-1**. Drivers traveling  
19 northeast on FM 1110 from SH 20, must travel southeast along FM 76 for 1.2 miles to be  
20 able to rejoin FM 1110 to access I-10. The section of FM 1110 between SH 20 and FM  
21 76 is the only continuous roadway providing this connectivity between Clint and San  
22 Elizario. This section includes an at-grade railroad crossing that causes delays to  
23 roadway users and emergency vehicles because of freight crossing and because there  
24 are limited options for alternate routes. Per the *El Paso Freight Rail Study, Phase II*  
25 (TxDOT, July 2013), 30 trains per day travel through this crossing.

26  
27 **Figure 1-1: Existing Route Along FM 1110**



36 Source: Google Maps, 2014.

37  
38 *Traffic Demand*

39 According to the *Horizon 2040 MTP* forecast data, population in the Metropolitan Planning  
40 Organization (MPO) study area is expected to increase to 1,158,195 by 2040, which

1 represents a population growth of approximately 39 percent. The MPO study area covers  
 2 all of El Paso County in Texas and portions of Doña Ana and Otero Counties in New  
 3 Mexico. The anticipated population growth of 39 percent within the MPO study area would  
 4 directly impact the number of households, which is expected to also increase  
 5 approximately 48 percent by 2040 compared to 2010. Employment growth within the  
 6 same area is expected to increase from 306,656 in 2010 to 429,455 in 2040. This  
 7 represents an employment growth of approximately 40 percent. **Table 3-1** lists the  
 8 *Horizon 2040 MTP* forecast data for population, households, and employment growth for  
 9 the MPO study area. Per the TxDOT Transportation Planning and Programming (TPP)  
 10 Division, traffic for the No-Build condition along FM 1110 is projected to increase from  
 11 10,400 vehicles per day (vpd) in 2018 to 14,750 vpd in 2038, and to 16,500 vpd in 2048.  
 12 This represents an increase in traffic of 42 percent by 2038 and 59 percent by 2048.

13

14 **Table 3-1: Regional Forecasts for Population, Household and Employment within**  
 15 **the MPO Study Area**

| Demographics | 2010    | 2020    | 2030      | 2040      | Percent Change 2010-2040 |
|--------------|---------|---------|-----------|-----------|--------------------------|
| Population   | 832,836 | 951,072 | 1,060,674 | 1,158,195 | 39                       |
| Households   | 270,326 | 314,789 | 358,115   | 399,153   | 48                       |
| Employment   | 306,656 | 340,998 | 382,021   | 429,455   | 40                       |

16

Source: *El Paso MPO Horizon 2040 MTP*, October 2013.

17

18 FM 1110 is located approximately 15 miles from the Tornillo-Guadalupe International Port  
 19 of Entry (POE) and is approximately half the distance between Tornillo and Loop 375.  
 20 Population growth in the region and increased trade between the U.S. and Mexico  
 21 indicates an increased future demand on FM 1110 that is anticipated to exceed the  
 22 capacity of the current facility. Per the TxDOT TPP Division, heavy truck (heavy duty  
 23 vehicle) traffic for the No-Build condition on FM 1110 is expected to increase from 451  
 24 trucks in 2018 to 643 trucks in 2038, and to 726 trucks in 2048. This represents an  
 25 increase in truck traffic of 43 percent by 2038 and 61 percent by 2048. This increase may  
 26 be due to increased trade and the opening of the Tornillo-Guadalupe International POE,  
 27 which was designed to accommodate commercial traffic.

28

29 The purpose of the project is to improve mobility and linkage, reduce travel delays at the  
 30 UPRR crossing, and meet anticipated traffic demand along FM 1110 for all roadway  
 31 users.

32

#### 33 4.0 ALTERNATIVES

34

35 In May 2013, TxDOT began the Border Highway East (BHE) Planning and Environmental  
 36 Linkages (PEL) Study to identify transportation-related problems within the BHE study  
 37 area, determine possible viable alternatives for a long-term solution, and recommend  
 38 projects that can be carried forward into a NEPA study. The BHE PEL Study identified  
 39 improvements to FM 1110 as a recommended project to be carried forward into the NEPA  
 40 process.

## 4.1 Build Alternative

The Build Alternative (Alternative D) consists of the recommended preferred alternative identified during the alternative screening process and would consist of widening and realignment of FM 1110 to provide direct connection between I-10 and SH 20. The Build Alternative would improve mobility and linkage, reduce travel delays at the UPRR crossing, and meet anticipated traffic demand along FM 1110. The proposed project would include bicycle and pedestrian accommodations.

### 4.1.1 Logical Termini and Independent Utility

The proposed project is of independent utility and reasonable expenditure even if no additional transportation improvements in the area are made and there are no restrictions on the consideration of alternatives for other reasonably foreseeable projects including those in the *Horizon 2040 MTP*. Based on beginning construction in 2017, the estimated time of completion (ETC) is 2020.

The logical termini for the project is I-10 to the north and SH-20 to the south. I-10 and SH 20 were determined to be the logical termini because the I-10 and SH 20 facilities are considered major traffic generators.

The construction limits account for transitions into the existing roadway along Denton Rd., SH 20, Frey Rd. and FM 76. Limits of construction are shown in **Exhibit 3: Environmental Map** in **Appendix A** and in the **Schematic Plans (Appendix B)**.

### 4.1.2 Right-of-Way Requirements and Displacements

The total length of the project is approximately 2.76 miles. The proposed project would require approximately 40.02 acres of additional ROW for construction of the new location section and retention pond construction; and 0.53 acres of temporary construction easements, for access improvements. To provide a grade-separated crossing at the UPRR crossing, a license agreement of approximately 0.63 acres would be required. The project would also require license agreements for approximately 1.21 acres from the El Paso County Water Improvement District No. 1 (EPCWID No. 1) because the project would cross the Salatral Lateral, Mesa Drain, and the Clint Lateral. See **Exhibit 3: Environmental Map (Appendix A)** and **Schematic Plans (Appendix B)** for specific locations of additional ROW and proposed easements. The proposed project would result in the potential relocation of a residence located at the intersection of Celum Rd. and FM 76. TxDOT would provide relocation assistance to all displaced persons in accordance with the Uniform Relocation Assistance and Real Properties Acquisitions Policies Act.

#### 4.1.3 Utilities

Several utilities are present within the project limits. Based on the proposed design, utility relocations would be required throughout the corridor; however, these relocations would be handled so that there would be no substantial impacts to residences and businesses. Utility crossings and potential parallel conflicts include water lines, gas service lines, sewer lines, fiber optic and overhead electric. Utility agreements and notice to owners would be required for this project. Conflicting utilities would be either adjusted or relocated prior to the construction of the proposed project using standard TxDOT procedures.

#### 4.1.4 Funding

The proposed project is included in the 2013 El Paso County Comprehensive Mobility Plan (CMP) and would be funded 100 percent by El Paso County. The project is also included in the 2017 Unified Transportation Program (UTP) which reflects a total project cost of \$43,371,355. According to the *Horizon 2040 MTP amendment approved on April 28, 2017*, the total project cost (including inflation) is \$36,600,000. The proposed project is consistent with the plans listed above. Copies of the CMP, UTP and MTP pages are available for review in **Appendix E**.

The design schematic encompassing the proposed improvements is available in **Appendix B** and for inspection at the TxDOT El Paso District Office, at 13301 Gateway Blvd. West, El Paso, Texas 79928-5410.

#### 4.2 No-Build Alternative

The No-Build Alternative involves the construction of other projects currently planned and programmed in the *Horizon 2040 MTP*. The No-Build Alternative consists of leaving FM 1110 as it is today, and making no improvements. The No-Build Alternative would not require additional ROW, temporary construction easements or license agreements. However, under the No-Build Alternative, direct connection issues between I-10 and SH 20 and travel delays at the UPRR at-grade railroad crossing would remain. Mobility and linkage would not be improved and anticipated traffic demand would not be met. The No-Build Alternative would not meet the purpose and need of the project. Therefore, the Build Alternative is the preferred alternative.

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

A total of five preliminary alternatives, including the no-build alternative were evaluated during the FM 1110 alternative analysis screening process and were presented to the public during the public meeting held on September 17, 2015. Excluding the No-Build Alternative, the remaining four preliminary alternatives, Alternatives A, B, C and D consisted of the same typical section and scope (intersection improvements and pedestrian and bicycle accommodations). The main difference among these preliminary

1 alternatives involved the alignment of the new location section between FM 76 and SH  
2 20 and the project end (terminus). Alternatives A, B, C and D would have a common  
3 section between I-10 and FM 76. Alternative A would traverse through the Town of Clint,  
4 Alternative B would generally follow the southern boundary of the Town of Clint and  
5 connect to Herring Rd. at SH 20, Alternative C was located south of the Town of Clint,  
6 and Alternative D was the southernmost alignment connecting to Denton Rd. The  
7 preliminary alternatives evaluated are shown in **Exhibit 2: USGS Quadrangle and FEMA**  
8 **Floodplain Map.**

9  
10 A technical alternative screening methodology was developed to ensure an objective  
11 evaluation process for the five preliminary alternatives, including the No-Build Alternative.  
12 The alternatives screening process included a detailed evaluation of each preliminary  
13 alternative based on criteria within four main categories: engineering, cost feasibility,  
14 environmental and public involvement. The result of the alternative screening process  
15 was the identification of the reasonable alternative to be carried forward to schematic  
16 refinement and the detailed environmental evaluation process. Alternative D was selected  
17 as a reasonable alternative and hereafter, referred to as the Build Alternative, based on  
18 the results of the comprehensive evaluation and public support. The No-Build Alternative  
19 was also carried forward as a reasonable alternative as the basis of comparison for all  
20 reasonable alternatives. Alternatives A, B, and C were eliminated from further  
21 consideration.

## 22 23 **5.0 AFFECTED ENVIRONMENT**

24  
25 The proposed project is within a predominately rural area, adjacent to the Town of Clint  
26 and the City of Socorro. Most of the land use adjacent to the proposed project consists of  
27 agricultural and undeveloped land. Other land uses near the project include small  
28 clusters of single-family residences, a new development of single-family residences,  
29 businesses (restaurants and gas stations), a fire station, a chemical plant (T&R  
30 Chemicals), the UPRR tracks, the U.S. Customs and Border Protection facility, Clint High  
31 School, and the EPCWID No. 1 irrigation structures (canals, drains, and ditches). The  
32 proposed project also crosses a 100-year floodplain. **Appendix C** includes representative  
33 photographs of the surrounding area. The proposed project would require approximately  
34 40 acres of ROW which would result in these areas to be converted to transportation use.  
35 Although some of the ROW land is currently in urban use, other areas are currently used  
36 for agricultural purposes, in particular, for the new location portion of the proposed project.  
37 The No-Build Alternative would not result in land use changes from the proposed project.

38  
39 In support of this EA, the following documents/technical reports were prepared and are  
40 currently available for review at the TxDOT-EI Paso District:

- 41 • Biological Evaluation (BE)
- 42 • Community Impacts Assessment Technical Report Form
- 43 • Hazardous Materials Initial Site Assessment (ISA)
- 44 • Indirect Effects Technical Report
- 45 • Report for Historical Studies Survey
- 46 • Traffic Noise Technical Report

- Public Meeting Summaries (2015 and 2016)

## 5.1 Issues Excluded from Further Consideration

Based on the documents listed in **Section 5.0**, scoping, and thorough analysis, it was determined that the proposed project would have no impact on the following resources and were therefore excluded from further consideration.

### 5.1.1 Coastal Barrier/Coastal Zone Management

This project is not located within the Texas Coastal Management Plan boundary; therefore, a consistency determination is not required.

### 5.1.2 Edwards Aquifer Act

The proposed project is not located in a county regulated by the Edwards Aquifer Rules.

### 5.1.3 Wild and Scenic Rivers

This project is not located in a county that contains resources regulated under the Wild and Scenic Rivers Act; therefore, coordination with the National Park Service would not be required.

### 5.1.4 Trinity River Corridor Development Certificate

This project would not occur in a county that contains resources regulated by the Trinity River Corridor Development Certificate (CDC). Therefore, coordination with the Trinity River CDC is not required.

### 5.1.5 Section 6(f) / Land and Water Conservation Fund

No impacts to Section 6(f) properties are anticipated because there are no Section 6(f) properties present in the project area.

### 5.1.6 International Boundary and Water Commission

The proposed project would not be located within the floodplain of the Rio Grande. Therefore, coordination with the International Boundary and Water Commission (IBWC) would not be required.

### 5.1.7 Essential Fish Habitat

There are no tidally influenced waters in El Paso County; therefore, there is no requirement to address Essential Fish Habitat.

### 5.1.8 Rivers and Harbors Act of 1899

Section 10 of the Rivers and Harbors Act of 1899 [33 U.S. Code (U.S.C.) 403] prohibits the unauthorized obstruction or alteration of any navigable water of the U.S. There are no navigable waters of the U.S. in the project area; therefore, there is no requirement to address the Rivers and Harbors Act of 1899.

The following sections describe those issues considered in detail and address impacts associated with the Build Alternative and No-Build Alternative for comparison purposes.

## 5.2 Issues Considered in Detail

### 5.2.1 Community Impacts

The following sections summarize information that is included in the **Community Impacts Assessment Technical Report Form** completed in October 2016.

The proposed project is located within an area characterized as a scattered rural community. The community impacts assessment study area consists of a rural setting with some scattered areas of residential, industrial and commercial development. The proposed project would result in the relocation of one residence. The potential residential displacement is located at the corner of FM 76 and Celum Rd. It is on the edge of a row of five houses along Celum Rd. that is adjacent to farmland to the south, existing roads to the north and east, and an irrigation structure to the west. Typical of the scattered rural character of the study area, these homes are not part of a subdivision or distinct community. Because of the location and lack of neighborhood distinction of this particular location, the one residential displacement associated with the proposed project would not significantly impact the community.

The proposed project would include bicycle and pedestrian accommodations including bike lanes and sidewalks. There are discontinuous sidewalks along the existing FM 1110 between FM 76 and SH 20; however, the new location section of the proposed project would not impact these existing sidewalks. Sidewalks exist only in front of the water district property and in no other portion of FM 1110 from I-10 to FM 76. This portion of FM 1110 would be positively impacted by the proposed project as a result of the additional bicycle and pedestrian accommodations that would be provided. The proposed project would maintain access to adjacent businesses and none of the existing access to any adjacent areas would be eliminated. In addition, the proposed improvements would improve mobility in the area and provide a direct connection from I-10 to SH 20. The existing FM 1110 route extending south from FM 76 would remain in place. The proposed project is not anticipated to adversely impact access or travel patterns for the adjacent community.

The No-Build Alternative would not result in impacts related to the relocation or purchase of additional ROW. However, the No-Build Alternative would not result in positive impacts to communities because it would not improve mobility or linkage, would not reduce the

1 existing travel delays at the UPRR crossing, would not meet the anticipated traffic  
2 demand for FM 1110, would not create improved access or mobility, and would not  
3 provide any aesthetic improvements. Under the No-Build Alternative, negative effects to  
4 communities may result as mobility could decline.

#### 5 6 5.2.1.1 Community Cohesion 7

8 Community cohesion is a term that refers to an aggregate quality of a residential area.  
9 Cohesion is a social attribute that indicates a sense of community, common responsibility,  
10 and social interaction within a limited geographic area. It is the degree to which residents  
11 have a sense of belonging to their neighborhood or community or a strong attachment to  
12 neighbors, groups, and institutions as a continual association over time. The proposed  
13 project would not adversely impact community cohesion and is not anticipated to affect,  
14 separate or isolate any distinct communities or neighborhoods because the  
15 improvements would not create a barrier, would not eliminate access to any particular  
16 area, and because no distinct communities or neighborhoods are located adjacent to the  
17 project limits.

18  
19 Under the No-Build Alternative, no improvements would occur; therefore, no impacts to  
20 community cohesion are anticipated for areas adjacent to the proposed project.

#### 21 22 5.2.1.2 Environmental Justice 23

24 Executive Order (EO) 12898 entitled “Federal Actions to Address Environmental Justice  
25 (EJ) in Minority Populations and Low-Income Populations” requires each Federal agency  
26 to “make achieving environmental justice part of its mission by identifying and addressing,  
27 as appropriate, disproportionately high and adverse human health or environmental  
28 effects of its programs, policies, and activities on minority populations and low-income  
29 populations.” Data from the United States Census Bureau (USCB) *American Community  
30 Survey 2010-2014 Five-Year Estimates* and the *2010 Census* were used to determine  
31 the EJ populations for the proposed project. The community impacts study area consists  
32 of 8 census block groups and 177 census blocks. The low-income populations were  
33 determined at the census block group level and the minority populations were determined  
34 at the census block level.

35  
36 Under the Build Alternative, one residential property displacement and traffic noise impact  
37 located within a census block with a high minority population which is greater than 50  
38 percent of the total population are anticipated. Because the study area for the proposed  
39 project consists of predominantly minority (93.7 percent of the total population), the  
40 displacement and noise impact are not considered disproportionately high to minority  
41 populations compared to non-minority populations in this study area. In addition, there  
42 are no business displacements and no other impacts anticipated that would affect any  
43 public services for minority or low-income populations. Based on the discussion and  
44 analysis included in the **Community Impacts Assessment Technical Report Form**, the  
45 proposed project would not cause any disproportionately high and adverse impacts on

1 minority or low-income populations in accordance with the provisions of EO 12898 and  
2 Federal Highway Administration (FHWA) Order 6640.23.

3  
4 Under the No-Build Alternative, no impacts to EJ populations are anticipated.

#### 5 6 5.2.1.3 Limited English Proficiency

7  
8 Limited English Proficiency (LEP) persons are defined as individuals who speak English  
9 less than “very well.” Executive Order 13166 on LEP calls for all agencies to ensure that  
10 their federally conducted programs and activities are meaningfully accessible to LEP  
11 individuals. Data from the USCB *American Community Survey 2010-2014 Five-Year*  
12 *Estimates* for the eight census block groups were used to determine the LEP populations  
13 for the proposed project. Within the entire study area, the LEP population consisted of  
14 approximately 51 percent of the total population. The LEP population consists of  
15 approximately 50.9 percent Spanish language speakers and 0.2 percent Asian and  
16 Pacific Island language speakers.

17  
18 LEP persons have and will continue to be given meaningful and sufficient access to  
19 information during the NEPA process. Spanish language newspaper notices, bilingual  
20 handouts for the public meeting materials and presence of Spanish interpreters at public  
21 meetings were available during the public involvement activities. The legal notices also  
22 included that requests for interpreters for the public meetings would be accommodated.  
23 A public hearing is anticipated for the summer of 2017. During the preparation for the  
24 public hearing, reasonable steps would be taken to ensure that such persons have  
25 meaningful access to the programs, services, and information that TxDOT provides.  
26 These reasonable steps include the publication of bilingual announcements in local  
27 papers, Spanish interpreters to be present at the public hearing, and the opportunity to  
28 request accommodations (for language or other special communication needs) to be  
29 available at the public hearing. These measures would be taken to ensure that such  
30 persons have meaningful access to the programs, services, and information that TxDOT  
31 provides. The proposed project would satisfy the requirements of EO 13166 and no LEP  
32 populations would be discriminated against because of the proposed project.

33  
34 Under the No-Build Alternative, no impacts to LEP individuals are anticipated because  
35 no improvements would take place.

#### 36 37 5.2.1.4 Public Facilities and Services

38  
39 Changes in access may alter current traffic patterns or routes to and from public facilities  
40 and services; however, access would not be eliminated to any specific area or location.  
41 No ROW impacts to public facilities are anticipated from the Build Alternative. Emergency  
42 response times are anticipated to be improved as a result of the improved mobility within  
43 and through the proposed project area. Additional information can be found in the  
44 **Community Impacts Assessment Technical Report Form** completed in October 2016  
45 and is available for review at the TxDOT El Paso District Office.

1 Under the No-Build Alternative, current conditions would remain resulting in traffic  
2 congestion at certain areas within the project limits. No improvements to the traffic  
3 congestion could result in increases in emergency response times over time.

#### 4 5 5.2.1.5 Visual/Aesthetic Impacts 6

7 Section 136 of the Federal Aid Highway Act of 1970 (Public Law 91-605) requires  
8 consideration of aesthetic values in the highway planning process. In order to achieve  
9 this goal, aesthetic components would be included in the proposed project.

10  
11 A portion of the proposed project is a new location section with elevated bridge sections  
12 that would alter existing views at these specific areas. The proposed bridge section near  
13 the FM 76 and FM 1110 intersection is proposed to span the floodplain behind single-  
14 family residences. The bridge would be a maximum of 8 ft above existing ground. In  
15 addition, because the proposed project would result in traffic noise impacts, a traffic noise  
16 barrier, 8 ft tall, is proposed. Although the barrier and floodplain bridge would block  
17 existing views, resulting in moderate visual impacts, the overall benefit from the noise  
18 barrier and bridge would outweigh the potential visual impacts for the adjacent residents  
19 along Celum Rd. by mitigating for traffic noise impacts and minimizing floodplain impacts.

20  
21 Another elevated roadway section acts as an overpass over the UPRR and would result  
22 in an elevation of 40 ft above the existing ground. Although the elevation would impact  
23 adjacent views, no existing structures, businesses or residential developments currently  
24 exist near or adjacent to this section; therefore, resulting in minimal visual impacts.

25  
26 Aesthetic treatments would be applied to help mitigate any adverse visual impacts. The  
27 proposed project would apply aesthetic treatments to the proposed structures (bridges  
28 and noise barrier), medians and border areas. These elements include the use of local  
29 stone materials and colored concrete. It is anticipated that the aesthetic effect would be  
30 equal to or improve the existing conditions. Aesthetic improvements would follow current  
31 TxDOT aesthetic guidelines. Considering the overall benefits from the proposed bridge  
32 structures and noise barrier, it is anticipated that the improvements would outweigh the  
33 overall visual impacts resulting from the proposed project.

34  
35 The No-Build Alternative would not change the existing visual and aesthetic qualities of  
36 the project area.

#### 37 38 5.2.2 Cultural Resources 39

40 The following sections summarize information also included in the **Report for Historical**  
41 **Studies** and **Archaeological Background Study** which were prepared for the proposed  
42 project and are available for review at the TxDOT El Paso District office. Findings from  
43 the documents are included in the following sections.  
44

### 5.2.2.1 Historical Resources

A total of 17 historic-age resources were identified within the area of potential effect, five of which are contributing resources to the EPCWID No. 1 Historic District listed on the National Register of Historic Places (NRHP). These five resources include the Salatral Lateral Canal, irrigation gate along the Salatral Lateral Canal, irrigation check along the Salatral Lateral Canal, the Mesa Drain and the Clint Lateral Canal. The proposed project is anticipated to have minimal effect on these EPCWID No. 1 components as existing roads already cross these features and historic and current use would not be impacted. Per December 2016 coordination with the State Historic Preservation Officer (SHPO), included in **Appendix D**, the proposed project would have no adverse effects on the EPCWID No. 1.

Under the No-Build Alternative, the proposed improvements would not occur; therefore, no adverse effects to historical properties are anticipated.

### 5.2.2.2 Archaeological Resources

The proposed project, including the existing ROW, proposed ROW, and easements, was evaluated by TxDOT archaeologists. As documented in an internal memo (dated July 21, 2016), TxDOT archaeologists determined that the proposed project would have no effect on archaeological resources that would be afforded further consideration under cultural resource laws (**Appendix D**). As provided under the First Amended Programmatic Agreement among the FHWA, TxDOT, the Texas SHPO, 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 (THC) and TxDOT, consultation with the Texas SHPO is not necessary for this undertaking. The project would not result in impacts to any cemetery. Regarding tribal coordination, TxDOT coordinated the proposed project with representatives of Federally-recognized Tribes with an interest in the project area in June 2016. TxDOT requested comments on historic properties of cultural or religious significance to tribes that may be affected by the proposed project. No comments or questions were received from the tribes. Archeological resources coordination related to the proposed project can be found in **Appendix D**.

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.

Under the No-Build Alternative, the proposed improvements would not occur; therefore, no impacts to archeological resources are anticipated.

### 5.2.3 Section 4(f) Properties

Section 4(f) of the USDOT Act of 1966, as amended, provides for the protection of certain lands affected by transportation projects. Section 4(f) provides that the Secretary of

1 Transportation may not approve any program or project which requires the use of land  
2 from a publicly-owned park, recreational area, or wildlife and waterfowl refuge of nation,  
3 state, or local significance as determined by the official having jurisdiction thereof or any  
4 significant historic site, unless there is no feasible and prudent alternative to the use of  
5 such land and the proposed action includes all possible planning to minimize harm.  
6

7 Three structures of one historic property (EPCWID No.1), the Salatral Lateral Canal,  
8 Mesa Drain, and the Clint Lateral Canal, would be crossed by the project. However, the  
9 roadway project is not anticipated to affect or diminish the qualities and characteristics  
10 that contribute to the historical significance of the property. In accordance to 23 U.S.C. §  
11 138, TxDOT Historians obtained concurrence from THC that the proposed project would  
12 have no adverse effects to the EPCWID No.1. THC provided no comments on the  
13 determination of de minimis impact under Section 4(f) regulations. This documentation is  
14 available for review in **Appendix D**. Final determinations for the Section 4(f) process will  
15 be rendered by TxDOT pursuant to 23 U.S.C. 327 and the MOU dated December 16,  
16 2014 and executed by TxDOT and FHWA.  
17

18 Under the No-Build Alternative, crossings of the EPCWID No. 1 would not occur;  
19 therefore, compliance with FHWA de minimis 4(f) guidelines would not be required.  
20

#### 21 5.2.4 Chapter 26 Parks and Wildlife Code 22

23 The Parks and Wildlife Code (PWC), Title 3, Chapter 26, Sections 26.001-26.004,  
24 referred to as Chapter 26, regulates the transportation use of public parks, recreation  
25 areas, scientific areas, wildlife refuges, and historic sites. The proposed project crosses  
26 three features (Salatral Lateral Canal, Mesa Drain, and Clint Lateral Canal) of the NRHP  
27 listed EPCWID No. 1 resulting in a TxDOT determination of applicability of Chapter 26 to  
28 the proposed project.  
29

30 There is no feasible and prudent alternative to the use of these features. The preferred  
31 alternative for the proposed widening and realignment of FM 1110 was recommended  
32 from four reasonable build alternatives. Each of the four build alternatives considered  
33 would have crossed at least three or more components of the NRHP listed EPCWID No.  
34 1 and would have required some form of use or take. The NRHP Registration Form for  
35 EPCWID No. 1 includes 104 contributing features consisting of 206 miles of canals and  
36 195 miles of drains, totaling 401 miles throughout El Paso County. With the extensive  
37 area that the district covers and how the canals and drains wind through towns and  
38 farmland, it is not feasible to avoid these components with any proposed roadway that  
39 meets the purpose and need of the proposed project.  
40

41 The project includes all reasonable planning to minimize harm to the features as a historic  
42 site resulting from the use. The proposed roadway design would minimize impacts with  
43 the placement of concrete box culverts to allow for crossings at each drainage structure.  
44 The irrigation features will continue to serve in the same capacity, and there would not be  
45 a change to the use or function of the structures. Coordination with the EPCWID No. 1 of  
46 the design at the three crossings occurred during the planning stage. The project would

1 require a license agreement between TxDOT and the EPCWID No. 1 for the proposed  
2 project to cross each drainage structure. The license agreement would involve  
3 approximately 1.21 acres of land within EPCWID No. 1 property. See the **FM 1110 Report**  
4 **for Historical Studies** for additional details.

5  
6 A public hearing is anticipated for the summer of 2017. Required documentation and  
7 publication of notices would be completed in accordance with Chapter 26 requirements.

8  
9 TxDOT determined that there is no feasible and prudent alternative to the use or taking  
10 of Chapter 26 protected land, and that the project includes all reasonable planning to  
11 minimize harm to the land as a historic site, resulting from the use or taking.

12  
13 Under the No-Build Alternative, the proposed improvements would not occur; therefore,  
14 compliance with Chapter 26 would not be required.

#### 15 16 5.2.5 Biological Resources

17  
18 The study area consists of the existing and proposed project ROW, including retention  
19 basins, and is within the Chihuahuan Desert Ecoregion as described in the 2012 Texas  
20 Conservation Action Plan (TCAP). The majority of the study area has been converted  
21 from native habitat to row crops and urban areas.

22  
23 The TCAP identifies issues associated with new transportation projects which may  
24 negatively affect species of greatest conservation need (SGCN) populations, rare  
25 communities, and the habitats on which they depend in this region. Transportation  
26 improvements associated with new corridors may result in the loss of habitat and species  
27 during construction activities, degrade adjacent habitat due to fragmentation, and may  
28 hinder daily or seasonal movement of wildlife. The maintenance of ROW may result in  
29 permanent habitat fragmentation and erosion from mowing and trimming of vegetation,  
30 impact habitat from the use of herbicides to control vegetation, and no protection of some  
31 rare plants only found with the existing TxDOT ROW.

32  
33 The proposed transportation improvements are not expected to alter existing travel  
34 corridors to aquatic and terrestrial wildlife. After construction is completed, the areas of  
35 bare ground resulting from the construction activity would be reseeded/revegetated  
36 according to TxDOT standards. A detailed analysis of biological resources is included in  
37 the following sections.

#### 38 39 *Farmland Protection Policy Act (FPPA)*

40 The FPPA protects prime, unique, or state-wide/locally important farmland. The Natural  
41 Resource Conservation Service (NRCS) has not identified any prime or unique farmland  
42 in El Paso County. Therefore, neither the Build Alternative nor the No-Build Alternative  
43 would impact farmlands. The FPPA is not applicable to the Build or No-Build Alternatives.

44  
45 Under the No-Build Alternative, additional ROW would not be acquired; therefore, no  
46 impacts to topography or soils would be anticipated.

### 5.2.5.1 Threatened and Endangered Species

The Endangered Species Act (ESA) affords protection for federally-listed threatened and endangered species and, where designated, critical habitat for these species. The U.S. Fish and Wildlife Service (USFWS) maintains a list of federally threatened and endangered species of potential occurrence for each Texas County. In El Paso County, the USFWS lists the least tern (*Sterna antillarum*), Mexican spotted owl (*Strix occidentalis lucida*), Northern Aplomado falcon (*Falco femoralis septentrionalis*), piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), Southwestern willow flycatcher (*Empidonax traillii extimus*), yellow-billed cuckoo (*Coccyzus americanus*), and Sneed pincushion cactus (*Coryphantha sneedii* var. *sneedii*). A brief summary of the potential habitat and effect for each species is provided below.

- There is no suitable habitat containing sand or gravel bars, braided streams, or appropriate man-made structures for nesting within the study area for the least tern. The proposed project would have no effect on the species.
- There is no suitable habitat consisting of remote shaded canyons of coniferous mountain woodlands within the study area for the Mexican spotted owl. The proposed project would have no effect on the species.
- Suitable foraging habitat was observed within the study area for the Northern Aplomado falcon. Due to the abundance of available habitat outside of the study area and the urban development and human activity within and adjacent to the proposed project, it is anticipated the proposed project would have no effect on the Northern Aplomado falcon.
- The piping plover and red knot are included in the species list as needing consideration for wind energy projects. This is not a wind energy project, and no suitable habitat is present, so the proposed project would have no effect on the piping plover or red knot.
- There are no thickets of willow, cottonwood, and mesquite along desert streams in the study area for the Southwestern willow flycatcher. The proposed project would have no effect on the species.
- There is no suitable wooded habitat with dense cover and water nearby within the study area for the yellow-billed cuckoo. The proposed project would have no effect on the species.
- There are no limestone outcrops on steep rocky slopes within the study area for Sneed's pincushion cactus. The proposed project would have no effect on the species.

Neither the Build Alternative nor the No-Build Alternative is anticipated to have an effect on federally-listed endangered species.

The Texas Parks and Wildlife Department (TPWD) maintains a list of threatened and endangered species (both state and federally listed) and state species of concern for each Texas County. Based on the evaluation performed for the BE, which is available for review at the TxDOT El Paso District office, the proposed project is within the range and suitable habitat of state protected species. State listed endangered species include the Northern Aplomado Falcon (*Falco femoralis septentrionalis*). State listed threatened species

1 include the Mountain short-horned lizard (*Phrynosoma hernandesi*) and the Texas horned  
2 lizard (*Phrynosoma cornutum*). State listed rare species include the Prairie Falcon (*Falco*  
3 *mexicanus*), Western red bat (*Lasiurus blossevillii*) and the New Mexico garter snake  
4 (*Thamnophis sirtalis dorsalis*). SGCN species would include Ferruginous hawk (*Buteo*  
5 *regalis*), Western burrowing owl (*Athene cunicularia hypugaea*), Pecos River muskrat  
6 (*Odatra zibethicus ripensis*), Western small-footed bat (*Myotis ciliolabrum*), Comal  
7 snakewood (*Colubrina stricta*), Desert night-blooming cereus (*Peniocereus greggii var*  
8 *greggii*), Sand prickly-pear (*Opuntia arenaria*), Sand sacahuista (*Nolina arenicola*), Texas  
9 false saltgrass (*Allolepis texana*), and Wheeler's spurge (*Chamaesyce geyeri var*  
10 *wheeleriana*). If any individuals of state-listed species are observed within the study area  
11 during construction, care would be taken to avoid harming them.

12  
13 The TPWD also maintains special species lists through the Texas Natural Diversity  
14 Database (TXNDD) by county. The TXNDD is a geo-referenced database of documented  
15 occurrences of rare, threatened and endangered species of Texas maintained by TPWD.  
16 Data was initially obtained from TPWD on January 5, 2016 and reviewed for the proposed  
17 project. Data was also obtained from TPWD on April 4, 2017 to determine if  
18 documentation of any additional species had occurred. The occurrences identified on the  
19 2017 data were also included in the data obtained in 2016. The TXNDD review met all  
20 the requirements of the TxDOT-TPWD Memorandum of Agreement (MOA) for sharing  
21 and maintaining TXNDD information. The review revealed no state-listed species within  
22 10 miles of the study area. It did identify two SGCN species, Pecos River muskrat (*Odatra*  
23 *zibethicus ripensis*) and sand prickly-pear (*Opuntia arenaria*) within 1.5 miles of the study  
24 area. Habitat for the Pecos River muskrat consisting of fresh water bodies with clumps  
25 of marshy vegetation is not present within the study area. Because sandy soils are found  
26 within the study area, habitat is present for the sand prickly-pear.

27  
28 One western burrowing owl, an SGCN species, was seen foraging in a plowed agricultural  
29 field approximately 400 ft northwest of the proposed project during the site visit on  
30 February 4, 2016. No burrow was located.

31  
32 The above-mentioned state-listed and SGCN species may be impacted by the Build  
33 Alternative. Many of these species are the subject of a Best Management Practice (BMP)  
34 Programmatic Agreement (PA) between TxDOT and the TPWD. Early Coordination with  
35 TPWD was initiated on April 13, 2016 as documented in **Appendix D: Agency**  
36 **Coordination** and was completed on July 7, 2016. TxDOT agreed to incorporate the  
37 following BMPs for these species into the proposed project. The BMPs primarily involve  
38 contractor education and avoidance directions, as detailed below.

- 39  
40
- 41 • Comal snakewood, desert night-blooming cereus, sand prickly-pear, sand  
42 sacahuista, or Wheeler's spurge
    - 43 ➤ If species is observed during construction, stop construction and notify the  
44 Area Engineer. A determination to conduct a plant rescue will be considered  
45 at that time.
  - Western red bat and Western small-footed bat

- 1           ➤ Large hollow trees should be surveyed for maternity colonies and, if found,  
2           should not be disturbed until after the pups fledge.
- 3       • Mountain short-horned lizard
- 4           ➤ The contractors will be advised of potential occurrence in the project area,  
5           and to avoid harming the species if encountered. Contractors should avoid  
6           harvester ant mounds in the selection of Project Specific Locations (PSLs)  
7           where feasible.
- 8       • New Mexico garter snake
- 9           ➤ The contractors will be advised of potential occurrence in the project area  
10          (specifically along the drainage ditches), and to avoid harming the species  
11          if encountered.
- 12       • Western burrowing owl and all migratory bird species
- 13           ➤ Not disturbing, destroying, or removing active nests, including ground  
14          nesting birds, during the nesting season;
- 15           ➤ Avoiding the removal of unoccupied, inactive nests, as practicable;
- 16           ➤ Preventing the establishment of active nests during the nesting season on  
17          TxDOT owned and operated facilities and structures proposed for  
18          replacement or repair;
- 19           ➤ Not collecting, capturing, relocating, or transporting birds, eggs, young, or  
20          active nests without a permit.

#### 21 *Bald and Golden Eagle Protection Act (BGEPA) of 2007*

22 The proposed project is located in an area that is primarily composed of agricultural,  
23 residential, and commercial properties. No suitable habitat (lakes, rivers, large trees, etc.)  
24 for Bald or Golden Eagles were observed in the study area. The human/urban  
25 disturbances that are within and adjacent to the proposed project would make it unlikely  
26 that bald or golden eagles would utilize the study area for nesting or as stopover habitat  
27 during migration.

28  
29  
30 Under the No-Build Alternative, additional ROW would not be acquired and altered by  
31 construction activities; therefore, no impacts and/or no effect to threatened/endangered  
32 species or wildlife habitat would be anticipated.

#### 33                           5.2.5.2       Migratory Bird Treaty Act

34  
35 The Migratory Bird Treaty Act (MBTA) of 1918 states that it is unlawful to kill, capture,  
36 collect, possess, buy, sell, trade, or transport any migratory bird, nest, young, feather,  
37 egg in part or in whole, without a federal permit issued in accordance within the Act's  
38 policies and regulations. Migratory patterns would not be affected by the proposed  
39 project. In the event that migratory birds are encountered on-site during project  
40 construction, adverse impacts on protected birds, active nests, eggs, and/or young would  
41 be avoided. The contractor would remove all old migratory bird nests from October 1 to  
42 February 15 from any structure where work would be done. In addition, the contractor  
43 would be prepared to prevent migratory birds from building nests between February 15  
44 and October 1, as specified in the environmental permits, issues, and commitments  
45 (EPIC) sheet.

1  
2 Under the No-Build Alternative, no impacts to migratory birds would be anticipated.

### 3 4 5.2.5.3 Vegetation and Wildlife Habitat

#### 5 6 *Vegetation*

7 Based on the field surveys conducted on February 4, 2016, the existing habitat types in  
8 the study area consist of: approximately 31.1 acres of agriculture; 5.6 acres of scrub,  
9 thornscrub, shrubland; 30.6 acres of urban; 9.9 acres of warm desert dunes; and 3.5  
10 acres of warm desert riparian, wash. Vegetation SGCN include Comal snakewood  
11 (*Colubrina stricta*), Desert night-blooming cereus (*Peniocereus greggii var greggii*), Sand  
12 prickly-pear (*Opuntia arenaria*), Sand sacahuista (*Nolina arenicola*), Texas false saltgrass  
13 (*Allolepis texana*), and Wheeler's spurge (*Chamaesyce geyeri var wheeleriana*).

14  
15 Agriculture areas are those areas that have been altered in the past and utilized for row  
16 crops. Typical row crops for the study area are cotton and onions. The fields are fallow  
17 for some portion of the year and some may rotate into and out of cultivation frequently.  
18 The agricultural areas are primarily located between FM 76 and SH 20. Approximately  
19 31.1 acres of agriculture habitat would be impacted by the proposed project.

20  
21 The scrub, thornscrub, shrubland habitat type is found on deep desert sands. Species  
22 such as honey mesquite (*Prosopis glandulosa*), sand sage (*Artemisia filifolia*), soaptree  
23 yucca (*Yucca elata*) are common dominants. Common herbaceous vegetation consists  
24 of sand dropseed (*Sporobolus cryptandrus*), mesa dropseed (*Sporobolus flexuosus*),  
25 giant dropseed (*Sporobolus giganteus*), black grama (*Bouteloua eriopoda*), grassland  
26 croton (*Croton dioicus*), and spectaclepod (*Dimorphocarpa sp.*). This habitat type is  
27 located between I-10 and FM 76. Approximately 5.6 acres of scrub, thornscrub, shrubland  
28 habitat would be impacted by the proposed project.

29  
30 Urban areas contain trees, shrubs, and grasses associated with residential and  
31 commercial properties or unmaintained adjacent properties. The vegetated areas within  
32 the existing FM 1110, FM 76, and SH 20 roadways are considered urban as they have  
33 been manipulated for transportation use. Approximately 30.6 acres of urban habitat  
34 would be impacted by the proposed project.

35  
36 The warm desert dunes habitat type is found on barren sand dunes in low desert areas.  
37 Species such as honey mesquite, yucca, sand dropseed, threeawns (*Aristida sp.*), and  
38 soaptree yucca are often present. This habitat type is located between I-10 and FM 76.  
39 Approximately 9.9 acres of warm desert dunes habitat would be impacted by the  
40 proposed project.

41  
42 The warm desert riparian, wash is found in sparsely vegetated areas along arroyos and  
43 draws at relatively low elevations. Sparse cover of desert shrubs, succulents, and grasses  
44 is usually present. This type is mapped along small upland drainages, and may represent  
45 a denser version of shrublands in the surrounding landscape, or may be more well-  
46 watered than surrounding areas. Common species include honey mesquite, *Baccharis*

1 species, brickellbush species, Apache plume, little walnut, and desert willow. This habitat  
2 type is located between FM 76 and the Mesa Drain. Approximately 3.5 acres of warm  
3 desert riparian would be impacted by the proposed project.

4  
5 In accordance with Title 43 of the Texas Administrative Code, Part 1, Chapter 2,  
6 Subchapter G, of the MOU between TxDOT and TPWD, several coordination triggers are  
7 used to determine whether coordination with TPWD is required. The proposed project  
8 would impact agriculture; scrub, thornscrub, shrubland; warm desert dunes; and warm  
9 desert riparian, wash. Ecological Mapping Systems of Texas (EMST) mapped habitat  
10 types above the thresholds requiring coordination with TPWD. Habitat for SCGN species  
11 are also present within the study area. Early Coordination with TPWD was initiated on  
12 April 13, 2016 as documented in **Appendix D: Agency Coordination**. Per coordination  
13 with TPWD, a determination to conduct a plant rescue will be considered at that time  
14 should the SCGN plant species (Comal snakewood, desert night-blooming cereus, sand  
15 prickly-pear, sand sacahuista, and Wheeler's spurge) be encountered during  
16 construction. Coordination with TPWD was completed on July 7, 2016. TxDOT will  
17 include commitments from coordination on the EPIC sheet for the proposed project.

#### 18 *Wildlife*

19  
20 Overall, there is minimal habitat for wildlife species beyond the limits of most of the study  
21 area due to urban development and altering of native habitat for agricultural and urban  
22 purposes. Wildlife that may be present within the study area would consist of smaller  
23 mammalian species such as rodents; various reptilian species; and various avian species.  
24 Due to the time of the year of the site visit (February 4, 2016) wildlife species actually  
25 observed in the study area were limited and consisted of a covey of Gambel's quail. One  
26 western burrowing owl was observed outside of the study area. No long-term impacts to  
27 wildlife populations are anticipated as a result of the proposed project. In areas  
28 temporarily impacted, wildlife species adapted to urban areas would likely re-colonize the  
29 available habitat areas after construction. Due to the minimal habitat available within the  
30 study area, the impacts to wildlife would be considered minor. The No-Build Alternative  
31 would involve maintenance, which would have minimal impacts on wildlife.

#### 32 *Invasive Species and Beneficial Landscaping Practices*

33  
34 Seeding and replanting with TxDOT approved seeding specifications that is in compliance  
35 with EO 13112 on Invasive Species would be done where possible. Disturbed areas  
36 would be reseeded in accordance with TxDOT's Vegetation Management Guidelines and  
37 in compliance with the intent of EO 13112 and the FHWA Executive Memorandum on  
38 Environmentally and Economically Beneficial Landscaping Practices. Moreover, abutting  
39 turf grasses within the ROW would reestablish throughout the project limits. Soil  
40 disturbance would be minimized to ensure that invasive species would not establish in  
41 the ROW.

42  
43 Under the No-Build Alternative, no additional ROW or easements would be required;  
44 therefore, no impacts to vegetation would be anticipated. The No-Build Alternative would  
45 require ongoing vegetation management including mowing, trimming, and herbicide  
46 treatments.

## 5.2.6 Water Resources

### 5.2.6.1 Groundwater

The Texas Water Development Board (TWDB) and Texas Commission on Environmental Quality (TCEQ) data were used to identify four water wells immediately adjacent to the study area. The four wells were not located in the field. One well is located on the east side of FM 76 adjacent to the irrigation channel near the southern limits of the study area. Three wells are located on the west side of SH 20. One is located adjacent to the northern driveway to Clint High School, one is located at the northwest corner of Denton Rd. and SH 20, and one is located 100 ft west of the intersection of SH 20 and Villalobos Dr. No additional ROW would be required at these locations. According to data from the TWDB, the primary uses of the water wells are for de-watering. If the wells are impacted by construction activities, they would need to be properly plugged in accordance with state statutes.

Under the No-Build Alternative, no impacts to groundwater resources are anticipated.

### 5.2.6.2 Wetlands and Jurisdictional Waters of the U.S.

Pursuant to EO 11990 (Protection of Wetlands), Section 404 of the Clean Water Act (CWA), and Section 10 of the Rivers and Harbors Act of 1899, an investigation was conducted to identify potential waters of the U.S., including wetlands, within the study area.

Two manuals [1987 Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region] were used for identifying potential waters of the U.S., including wetlands based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. National Wetland Inventory (NWI) maps, Geographic Information System (GIS) data, U.S. Geological Survey (USGS) maps, Federal Emergency Management Agency (FEMA) floodplain maps, and field observations on February 4, 2016 were utilized to determine the features that are considered potentially jurisdictional waters and wetlands.

To be considered potentially jurisdictional, drainage features (arroyos, canals, drains, and laterals) must act as a tributary to a traditional navigable water such as the Rio Grande. Then, if any wetlands are associated with these water features, they may also be considered potentially jurisdictional.

The proposed project crosses three irrigation features, the Mesa Drain, Clint Lateral, and Salatral Lateral. These three features were constructed in upland areas to convey irrigation to upland areas. The canals, drains, and laterals do not act as a tributary to the Rio Grande, a traditional navigable water. These features would not be considered jurisdictional and would not be subject to Section 404 of the CWA.

1 The jurisdictional status of the drainage features was also evaluated under the new  
2 regulations in anticipation of the implementation of the Clean Water Rule: Definition of  
3 “Waters of the United States.” Based on the rule the following are not considered waters  
4 of the U.S.; (A) ditches with ephemeral flow that are not a relocated tributary or excavated  
5 in a tributary; (B) ditches with intermittent flow that are not a relocated tributary, excavated  
6 in a tributary, or drain wetlands; and (C) ditches that do not flow, either directly or through  
7 another water, into a traditional navigable water, interstate water, or the territorial seas.  
8 The Mesa Drain, Clint Lateral, and Salatral Lateral are not a relocated tributary or  
9 excavated in a tributary and do not flow directly or indirectly into a traditional navigable  
10 water. These features would not be considered jurisdictional under the Clean Water Rule.

11  
12 Coordination under the Fish and Wildlife Coordination Act (FWCA) would not be  
13 necessary as the proposed project does not contain any waters subject to Section 404.  
14 Executive Order 11990 on wetlands does not apply because no wetlands would be  
15 impacted.

16  
17 Section 401 of the CWA requires that any person applying for a federal permit or license,  
18 which may result in a discharge of pollutants into Waters of the U.S., must obtain a state  
19 water quality certification that the activity complies with all applicable water quality  
20 standards, limitations, and restrictions. The proposed project would not require a USACE  
21 Section 404 Permit; therefore Section 401 Certification would not be required.

22  
23 The Build Alternative would not require a USACE Section 404 permit as no waters of the  
24 U.S., including wetlands, were identified in the study area. Therefore, Section 401  
25 Certification would not be required.

### 26 27 5.2.6.3 Floodplains

28  
29 FEMA Flood Insurance Rate Maps (FIRMs) were reviewed to determine flood zones  
30 within the area for the proposed project. The study area crosses one area that is  
31 designated as a special flood hazard area inundated by the 100-year flood as Zone A, no  
32 base elevations determined. There are approximately 14 acres of 100-year floodplain  
33 within the study area. The floodplain area is located where the proposed project crosses  
34 FM 76.

35  
36 Other areas are designated as Zone X, areas determined to be outside the 500-year  
37 floodplain. The Town of Clint and El Paso County are participants in the National Flood  
38 Insurance Program (NFIP).

39  
40 Portions of the existing roadways (FM 1110 and FM 76) are located within the 100-year  
41 floodplain. All of the total approximately 14 acres of 100-year floodplain in the study area  
42 would be impacted by the proposed project. FEMA regulations require that fill in the 100-  
43 year floodplain be compensated with an equal amount of cut below the 100-year  
44 floodplain elevation in an area with low connectivity to the main channel floodplain. Two  
45 retention basins (totaling approximately 6.2 acres) would be constructed adjacent to the

1 FM 1110/FM 76 intersection to mitigate for the impacts within the 100-year floodplain.  
2 Coordination with the local floodplain administrator would be required.

3  
4 The hydraulic design for this project would be in accordance with FHWA and TxDOT  
5 design policies and standards. The proposed project would be in compliance with 23  
6 Code of Federal Regulations (CFR) 650 regarding location and hydraulic design of  
7 highway encroachments within the floodplains. The proposed project would comply with  
8 EO 11988 which requires federal agencies to avoid to the extent possible the long- and  
9 short-term adverse impacts associated with the occupancy and modification of floodplains  
10 and to avoid direct and indirect support of floodplain development wherever there is a  
11 practicable alternative. The facility would permit the conveyance of the 100-year flood,  
12 inundation of the roadway being acceptable, without causing substantial damage to the  
13 facility, stream, or other property. The proposed project would not increase the base flood  
14 elevation to a level that would violate applicable floodplain regulations and ordinances. In  
15 consideration of the proposed project's mitigation plans for detention, compensatory  
16 floodplain cut, and application of FHWA and TxDOT design policies, the proposed project  
17 would have no adverse effect on floodplains.

18  
19 In accordance with EO 11988, the alternatives considered during the course of project  
20 development that would avoid encroachment on floodplains was the No-Build Alternative.  
21 This was determined to be not practicable and would not meet the purpose and need of  
22 the proposed project. Moreover, the proposed project would conform to state floodplain  
23 protection standards. The proposed project is being designed to avoid impacts to  
24 floodplains to the maximum extent feasible and practicable.

25  
26 The No-Build Alternative would involve maintenance activities that may require minor fill  
27 in the floodplain and future coordination with the floodplain administrator.

#### 28 29 5.2.6.4 Water Quality

30  
31 The proposed project is within 2.2 linear miles of the Rio Grande (Segment 2307\_05), a  
32 threatened/impaired water body, from the 2014 Texas Integrated Report of Surface Water  
33 Quality inventory. There is not a direct connection between the canals, drains, and  
34 laterals from the study area to the Rio Grande.

#### 35 36 *Impaired Waters*

37 Runoff from the proposed improvements would not discharge into Segment 2307-05 of  
38 the Rio Grande which is listed as threatened/impaired for bacteria, chloride, and total  
39 dissolved solids. The project and associated activities will be implemented, operated,  
40 and maintained using appropriate BMPs to control the discharge of pollutants from the  
41 project site. Neither the Built Alternative nor the No-Build Alternative would discharge  
42 into the Rio Grande or contribute to future impairment of the Rio Grande.

#### 43 44 *Texas Pollution Discharge Elimination System (TPDES)*

45 The Built Alternative would include five or more acres of earth disturbance and would be  
46 considered a "large construction activity" under the TCEQ's Texas Pollutant Discharge

1 Elimination System (TPDES) Construction General Permit (CGP). TxDOT would obtain  
 2 coverage under the CGP. A Storm Water Pollution Prevention Plan (SW3P) would be  
 3 implemented, and a construction site notice would be posted on the construction site. A  
 4 Notice of Intent (NOI) and a Notice of Termination (NOT) to the TCEQ and the Municipal  
 5 Separate Storm Sewer System (MS4) operator would be required. In addition, the project  
 6 would comply with applicable MS4 requirements.

7  
 8 Under the No-Build Alternative, no impacts to water quality would be anticipated. The No-  
 9 Build Alternative would involve maintenance activities, which are generally exempt from  
 10 the CGP.

### 11 5.2.7 Traffic Noise

12  
 13  
 14 A traffic noise analysis was prepared in accordance with TxDOT's (FHWA approved)  
 15 2011 *Guidelines for Analysis and Abatement of Roadway Traffic Noise*. Existing and  
 16 predicted traffic noise levels were estimated at receiver locations listed in **Table 5-1**  
 17 (**Appendix A, Exhibit 5: Traffic Noise Receiver Locations**) that represent land use  
 18 activity areas adjacent to the proposed project that might be impacted by traffic noise and  
 19 potentially benefit from feasible and reasonable noise abatement.

20  
 21 **Table 5-1: Traffic Noise Levels [dB(A) Leq]**

| Receiver                              | NAC Category | NAC dB(A) Leq | Existing* | Predicted (2038) | Change (+/-) | Noise Impact |
|---------------------------------------|--------------|---------------|-----------|------------------|--------------|--------------|
| R2-Lower Valley Water District Office | NAC D        | 52            | 57        | 61               | +4           | No           |
| R3-House                              | NAC B        | 67            | 45        | 65               | +20          | Yes          |
| R4-House                              | NAC B        | 67            | 46        | 56               | +10          | No           |
| R5-Clint High School                  | NAC D        | 52            | 40        | 40               | 0            | No           |

22 *Source: Study Team, February 2016.*

23 *\*Existing noise levels reported for R3, R4 and R5 measured on February 4, 2016.*

24  
 25 This analysis indicates that the Build Alternative would result in a traffic noise impact at  
 26 one representative receiver location and the following noise abatement measures were  
 27 considered: traffic management, alteration of horizontal and/or vertical alignments;  
 28 acquisition of undeveloped property to act as a buffer zone and the construction of noise  
 29 barriers.

30  
 31 Before any abatement measure can be proposed for incorporation into the project, it must  
 32 be both feasible and reasonable. In order to be "feasible", the abatement measure must  
 33 be able to reduce the noise level at greater than 50 percent of impacted, first row receivers  
 34 by at least 5 dB(A); and to be "reasonable" it must not exceed the cost-effectiveness  
 35 criterion of \$25,000 for each receiver that would benefit by a reduction of at least 5 dB(A)  
 36 and the abatement measure must be able to reduce the noise level to at least one  
 37 impacted, first row receiver by at least 7 dB(A).  
 38

1 A noise barrier was determined to be the only feasible and reasonable noise abatement  
 2 measure and was proposed for incorporation in the project. Results of the analysis are  
 3 included in the **Traffic Noise Technical Report** prepared in June 2016 and available for  
 4 review at the TxDOT El Paso District office. A noise barrier would be feasible and  
 5 reasonable for receiver R3 (**Table 5-2, and Appendix A, Exhibit 5: Traffic Noise**  
 6 **Receiver Locations**) as described below.

7  
 8 **Table 5-2: Noise Barrier Proposal (Preliminary)**

| Barrier | Representative Receivers | Total # Benefitted | Length | Height in feet | Total Cost | \$/Benefitted Receiver |
|---------|--------------------------|--------------------|--------|----------------|------------|------------------------|
| 1       | R3                       | 5                  | 868    | 8              | \$124,992  | \$24,998               |

Source: Study Team (June 2016).

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

13  
 14 To avoid noise impacts that may result from future development of properties adjacent to  
 15 the project, local officials responsible for land use control programs must ensure, to the  
 16 maximum extent possible, no new activities are planned or constructed along or within  
 17 the following predicted (2038) noise impact contours.

18  
 19 **Table 5-3: Traffic Noise Contours [dB(A) Leq]**

| Location                                | Land use           | Impact Contour | Distance from ROW |
|---|--------------------|----------------|-------------------|
| <b>East of FM 1110 (north of FM 76)</b> | NAC Categories B&C | 66             | 25 ft             |
|   | NAC Category E     | 71             | 0 ft              |
| <b>West of FM 1110 (north of FM 76)</b> | NAC Categories B&C | 66             | 25 ft             |
|   | NAC Category E     | 71             | 0 ft              |
| <b>East of FM 1110 (north of SH 20)</b> | NAC Categories B&C | 66             | 25 ft             |
|   | NAC Category E     | 71             | 0 ft              |
| <b>West of FM 1110 (north of SH 20)</b> | NAC Categories B&C | 66             | 25 ft             |
|   | NAC Category E     | 71             | 0 ft              |

20 Source: Study Team, February 2016.

21  
 22 Noise associated with the construction of the project is difficult to predict. Heavy  
 23 machinery, the major source of noise in construction, is constantly moving in  
 24 unpredictable patterns. However, construction normally occurs during daylight hours  
 25 when occasional loud noises are more tolerable. None of the receivers is expected to be  
 26 exposed to construction noise for a long duration; therefore, any extended disruption of  
 27 normal activities is not expected. Provisions will be included in the plans and

1 specifications that require the contractor to make every reasonable effort to minimize  
2 construction noise through abatement measures such as work-hour controls and proper  
3 maintenance of muffler systems.

4  
5 A copy of this traffic noise analysis would be available to local officials. On the date of  
6 approval of this document (Date of Public Knowledge), FHWA and TxDOT are no longer  
7 responsible for providing noise abatement for new development adjacent to the project.

8  
9 If the No-Build Alternative were implemented, noise levels along FM 1110 would be  
10 expected to increase with an associated increase in traffic volumes.

## 11 12 5.2.8 Air Quality

### 13 14 5.2.8.1 Transportation Conformity

15  
16 The proposed project is located in El Paso County, which contains certain areas in  
17 nonattainment for particulate matter 10 (PM10) (City of El Paso) and in maintenance for  
18 carbon monoxide (CO) (portion of City of El Paso). The proposed project is located  
19 outside of the PM10 nonattainment and CO maintenance areas. The proposed project is  
20 located in an area in attainment or unclassifiable for all national ambient air quality  
21 standards (NAAQS); therefore, the transportation conformity rules do not apply.

22  
23 The proposed action is consistent with the *Horizon 2040 MTP* amendment approved on  
24 April 28, 2017 but is not included in the STIP. TxDOT will not take final action on this  
25 environmental document until the proposed project is included in the STIP. The MTP page  
26 for the proposed project is included in **Appendix E: Supplemental Information**. The  
27 STIP page for the proposed project will be included once it becomes available.

28  
29 The proposed project is not located within a CO or PM nonattainment or maintenance  
30 area; therefore, a project level hot-spot analysis is not required.

### 31 32 5.2.8.2 Carbon Monoxide (CO)

33  
34 Traffic data for the ETC year 2020 and design year 2038 are 11,700 and 16,000 vpd,  
35 respectively, for FM 1110 between I-10 and SH 20. A prior TxDOT modeling study and  
36 previous analyses of similar projects demonstrated that it is unlikely that a CO standard  
37 would ever be exceeded as a result of any project with an average annual daily traffic  
38 (AADT) below 140,000 vpd. The AADT projections for the project do not exceed 140,000  
39 vpd; therefore, a Traffic Air Quality Analysis was not required.

### 40 41 5.2.8.3 Congestion Management Process (CMP)

42  
43 This project is located in an area within El Paso County that is in attainment or  
44 unclassifiable for ozone and CO; therefore, a project-level CMP analysis is not required.

#### 5.2.8.4 Mobile Source Air Toxics (MSAT)

##### *Background*

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act (CAA) Amendments of 1990, whereby Congress mandated that the Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (<https://www.epa.gov/iris/>). In addition, EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 2011 National Air Toxics Assessment (NATA) (<https://www.epa.gov/national-air-toxics-assessment>). These are *1,3-butadiene*, *acetaldehyde*, *acrolein*, *benzene*, *diesel particulate matter (diesel PM)*, *ethylbenzene*, *formaldehyde*, *naphthalene*, and *polycyclic organic matter*. While FHWA considers these the priority MSAT, the list is subject to change and may be adjusted in consideration of future EPA rules.

##### *Motor Vehicle Emissions Simulator (MOVES)*

According to EPA, MOVES2014 is a major revision to MOVES2010 and improves upon it in many respects. MOVES2014 includes new data, new emissions standards, and new functional improvements and features. It incorporates substantial new data for emissions, fleet, and activity developed since the release of MOVES2010.

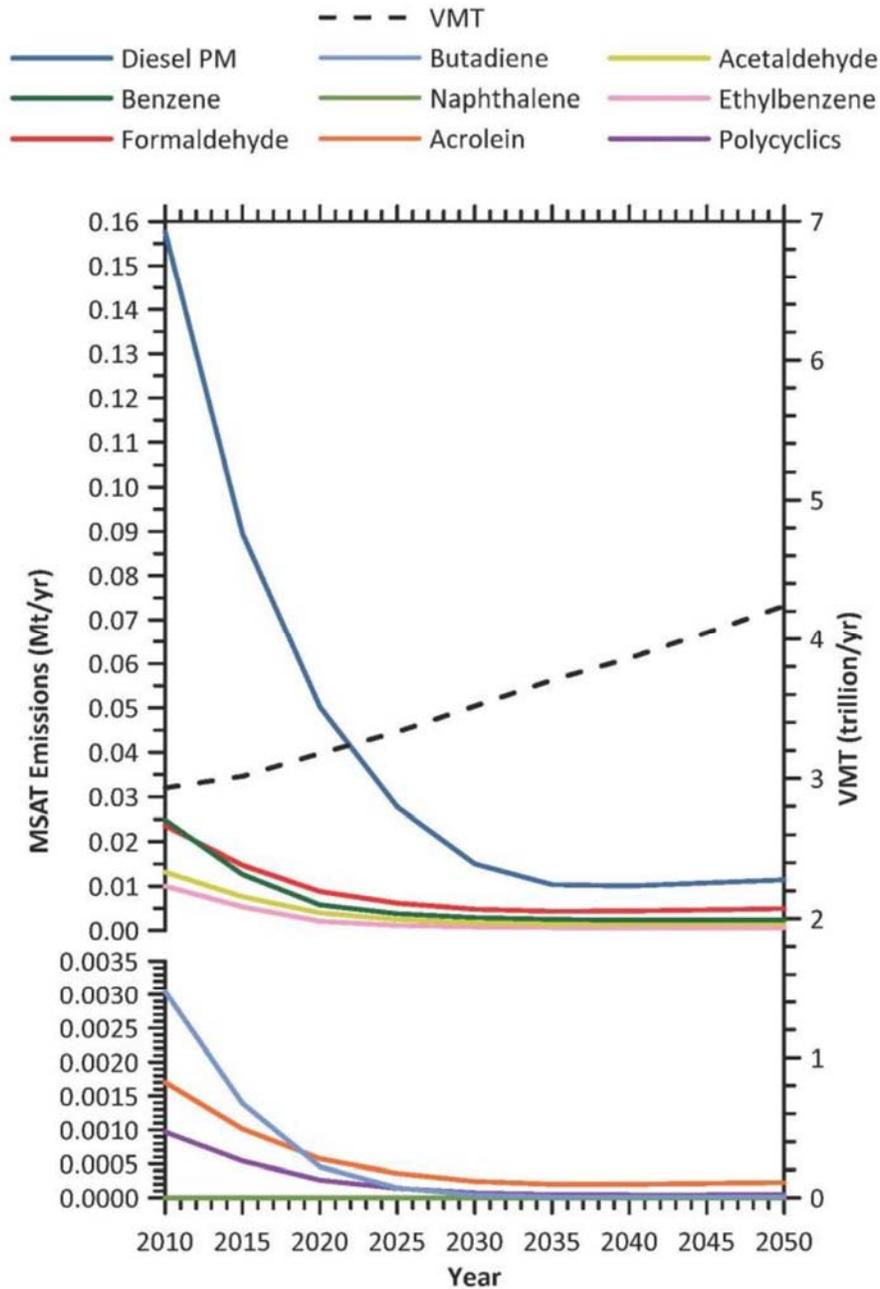
These new emissions data are for light-and heavy-duty vehicles, exhaust and evaporative emissions, and fuel effects. MOVES2014 also adds updated vehicles sales, population, age distribution, and vehicle miles traveled (VMT) data. MOVES2014 incorporates the effects of here new Federal emissions standard rules not included in MOVES2010.

These new standards are all expected to impact MSAT emissions and include Tier 3 emissions and fuel standards starting in 2017 (79 FR 60344), heavy-duty greenhouse gas regulations that phase in during model years 2014-2018 (79 FR 60344), and the second phase of light duty greenhouse gas regulations that phase in during years 2017-2025 (79 FR 60344).

Since the release of MOVES2014, EPA has released MOVES2014a. In the November 2015 MOVES2014a Questions and Answers Guide (<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100NNR0.txt>), EPA states that for on-road emissions, MOVES2014a adds new options requested by users for the input of local VMT, includes minor updates to the default fuel tables, and corrects an error in MOVES2014 brake wear emissions. The change in brake wear emissions results in small decreases in PM emissions, while emissions for other criteria pollutants remain essentially the same as MOVES2014.

- 1 Using EPA's MOVES2014a model, as shown in **Graph 5-1**, FHWA estimates that even if
- 2 VMT increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91
- 3 percent in the total annual emissions for the priority MSAT is projected for the same time
- 4 period.

1 **Graph 5-1: Projected National MSAT Emission Trends 2010-2050 for Vehicles**  
 2 **Operating on Roadways Using EPA’s MOVES2014a Model**



3  
 4 Source: EPA MOVES2014a model runs conducted by FHWA, September 2016.  
 5 Note: Trends for specific locations may be different, depending on locally derived information  
 6 representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs,  
 7 meteorological, and other factors.

8  
 9

1 Diesel PM is the dominant component of MSAT emissions, making up 50 to 70 percent  
2 of all priority MSAT pollutants by mass, depending on calendar year. Users of  
3 MOVES2014a will notice some differences in emissions compared with MOVES2010b.  
4 MOVES2014a is based on updated data on some emissions and pollutant processes  
5 compared to MOVES2010b, and also reflects the latest Federal emissions standards in  
6 place at the time of its release. In addition, MOVES2014a emissions forecasts are based  
7 on lower VMT projections than MOVES2010b, consistent with recent trends suggesting  
8 reduced nationwide VMT growth compared to historical trends.

#### 9 10 *MSAT Research*

11 Air toxics analysis is a continuing area of research. While much work has been done to  
12 assess the overall health risk of air toxics, many questions remain unanswered. In  
13 particular, the tools and techniques for assessing project-specific health outcomes as a  
14 result of lifetime MSAT exposure remain limited. These limitations impede the ability to  
15 evaluate how the potential health risks posed by MSAT exposure should be factored into  
16 project-level decision-making within the context of the NEPA. The FHWA, EPA, the  
17 Health Effects Institute, and others have funded and conducted research studies to try to  
18 more clearly define potential risks from MSAT emissions associated with highway  
19 projects. The FHWA will continue to monitor the developing research in this emerging  
20 field.

#### 21 22 *Project Specific MSAT Assessment*

23 A qualitative analysis provides a basis for identifying and comparing the potential  
24 differences among MSAT emissions, if any, from the various alternatives. The qualitative  
25 assessment presented below is derived in part from a study conducted by the FHWA  
26 entitled A Methodology for Evaluating Mobile Source Air Toxic Emissions Among  
27 Transportation Project Alternatives, found at:  
28 [http://www.fhwa.dot.gov/environment/air\\_quality/air\\_toxics/research\\_and\\_analysis/mobil](http://www.fhwa.dot.gov/environment/air_quality/air_toxics/research_and_analysis/mobile_source_air_toxics/msatemissions.pdf)  
29 [e\\_source\\_air\\_toxics/msatemissions.pdf](http://www.fhwa.dot.gov/environment/air_quality/air_toxics/research_and_analysis/mobile_source_air_toxics/msatemissions.pdf)

30  
31 For each alternative in this document, the amount of MSAT emitted would be proportional  
32 to the VMT, assuming that other variables such as fleet mix are the same for each  
33 alternative. The VMT estimated for the Build Alternative is slightly higher than that for the  
34 No-Build Alternative because the additional capacity increases the efficiency of the  
35 roadway and attracts rerouted trips from elsewhere in the transportation network. This  
36 increase in VMT would lead to higher MSAT emissions for the Build Alternative along the  
37 highway corridor, along with a corresponding decrease in MSAT emissions along the  
38 parallel routes. The emissions increase is offset somewhat by lower MSAT emission  
39 rates due to increased speeds; according to the EPA's MOVES2014 model, emissions of  
40 all of the priority MSAT decrease as speed increases. Also, regardless of the alternative  
41 chosen, emissions will likely be lower than present levels in the design year as a result of  
42 the EPA's national control programs that are projected to reduce annual MSAT emissions  
43 by over 90 percent between 2010 and 2050. (Updated Interim Guidance on Mobile  
44 Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, October  
45 12, 2016 –

1 [http://www.fhwa.dot.gov/environment/air\\_quality/air\\_toxics/policy\\_and\\_guidance/msat/in-](http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm)  
2 [dex.cfm](http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm)). Local conditions may differ from these national projections in terms of fleet mix  
3 and turnover, VMT growth rates, and local control measures. However, the magnitude of  
4 the EPA-projected reductions is so great (even after accounting for VMT growth) that  
5 MSAT emissions in the study area are likely to be lower in the future in nearly all cases.  
6

7 The additional travel lanes contemplated as part of the Build Alternative will have the  
8 effect of moving some traffic closer to nearby homes, schools, and businesses; therefore,  
9 under each alternative there may be localized areas where ambient concentrations of  
10 MSAT could be higher under the Build Alternative than the No-Build Alternative. The  
11 localized increases in MSAT concentrations would likely be most pronounced along the  
12 entire project limits under the Build Alternative because capacity would be added which  
13 would move travel lanes closer to populated areas. However, the magnitude and the  
14 duration of these potential increases compared to the No-Build Alternative cannot be  
15 reliably quantified due to incomplete or unavailable information in forecasting project-  
16 specific MSAT health impacts. In sum, when a highway is widened, the localized level of  
17 MSAT emissions for the Build Alternative could be higher relative to the No-Build  
18 Alternative, but this could be offset due to increases in speeds and reductions in  
19 congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower  
20 in other locations when traffic shifts away from them. However, on a regional basis, the  
21 EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause  
22 substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be  
23 lower than today.  
24

25 *Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis*  
26 In FHWA's view, information is incomplete or unavailable to credibly predict the project-  
27 specific health impacts due to changes in MSAT emissions associated with a proposed  
28 set of highway alternatives. The outcome of such an assessment, adverse or not, would  
29 be influenced more by the uncertainty introduced into the process through assumption  
30 and speculation rather than any genuine insight into the actual health impacts directly  
31 attributable to MSAT exposure associated with a proposed action.

32 The EPA is responsible for protecting the public health and welfare from any known or  
33 anticipated effect of an air pollutant. They are the lead authority for administering the CAA  
34 and its amendments and have specific statutory obligations with respect to hazardous air  
35 pollutants and MSAT. The EPA is in the continual process of assessing human health  
36 effects, exposures, and risks posed by air pollutants. They maintain the IRIS, which is "a  
37 compilation of electronic reports on specific substances found in the environment and  
38 their potential to cause human health effects" (EPA, <http://www.epa.gov/iris/>). Each report  
39 contains assessments of non-cancerous and cancerous effects for individual compounds  
40 and quantitative estimates of risk levels from lifetime oral and inhalation exposures with  
41 uncertainty spanning perhaps an order of magnitude.

42 Other organizations are also active in the research and analyses of the human health  
43 effects of MSAT, including the Health Effects Institute (HEI). A number of studies are  
44 summarized in *Appendix D* of FHWA's *Updated Interim Guidance Update on Mobile*  
45 *Source Air Toxic Analysis in NEPA Documents.*

1 ([http://www.fhwa.dot.gov/environment/air\\_quality/air\\_toxics/policy\\_and\\_guidance/msat/index.cfm](http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm)). Among the adverse health effects linked to MSAT compounds at high  
2 exposures are; cancer in humans in occupational settings; cancer in animals; and  
3 irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the  
4 adverse human health effects of MSAT compounds at current environmental  
5 concentrations (HEI, Special Report 16, <https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposureand-health-effects>) or in the future as  
6 vehicle emissions substantially decrease.  
7  
8

9 The methodologies for forecasting health impacts include emissions modeling; dispersion  
10 modeling; exposure modeling; and then final determination of health impacts – each step  
11 in the process building on the model predictions obtained in the previous step. All are  
12 encumbered by technical shortcomings or uncertain science that prevents a more  
13 complete differentiation of the MSAT health impacts among a set of project alternatives.  
14 These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly  
15 because unsupportable assumptions would have to be made regarding changes in travel  
16 patterns and vehicle technology (which affects emissions rates) over that time frame,  
17 since such information is unavailable.

18 It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and  
19 exposure near roadways; to determine the portion of time that people are actually  
20 exposed at a specific location; and to establish the extent attributable to a proposed  
21 action, especially given that some of the information needed is unavailable.

22 There are considerable uncertainties associated with the existing estimates of toxicity of  
23 the various MSAT, because of factors such as low-dose extrapolation and translation of  
24 occupational exposure data to the general population, a concern expressed by HEI  
25 (Special Report 16, <https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposureand-health-effects>). As a result, there is no national  
26 consensus on air dose-response values assumed to protect the public health and welfare  
27 for MSAT compounds, and in particular for diesel PM. The EPA states that with respect  
28 to diesel engine exhaust, “[t]he absence of adequate data to develop a sufficiently  
29 confident dose-response relationship from the epidemiologic studies has prevented the  
30 estimation of inhalation carcinogenic risk (EPA IRIS database, Diesel Engine Exhaust,  
31 Section II.C.  
32 [https://cfpub.epa.gov/ncea/iris/iris\\_documents/documents/subst/0642.htm#quainhal](https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0642.htm#quainhal)).”  
33  
34

35 There is also the lack of a national consensus on an acceptable level of risk. The current  
36 context is the process used by the EPA as provided by the CAA to determine whether  
37 more stringent controls are required in order to provide an ample margin of safety to  
38 protect public health or to prevent an adverse environmental effect for industrial sources  
39 subject to the maximum achievable control technology standards, such as benzene  
40 emissions from refineries. The decision framework is a two-step process. The first step  
41 requires EPA to determine an “acceptable” level of risk due to emissions from a source,  
42 which is generally no greater than approximately 100 in a million. Additional factors are  
43 considered in the second step, the goal of which is to maximize the number of people  
44 with risks less than 1 in a million due to emissions from a source. The results of this

1 statutory two-step process do not guarantee that cancer risks from exposure to air toxics  
2 are less than 1 in a million; in some cases, the residual risk determination could result in  
3 maximum individual cancer risks that are as high as approximately 100 in a million. In a  
4 June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld  
5 EPA's approach to addressing risk in its two-step decision framework. Information is  
6 incomplete or unavailable to establish that even the largest of highway projects would  
7 result in levels of risk greater than deemed acceptable  
8 ([https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD598525780000](https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/$file/07-1053-1120274.pdf)  
9 [50C9DA/\\$file/07-1053-1120274.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/$file/07-1053-1120274.pdf)). Because of the limitations in the methodologies for  
10 forecasting health impacts described, any predicted difference in health impacts between  
11 alternatives is likely to be much smaller than the uncertainties associated with predicting  
12 the impacts. Consequently, the results of such assessments would not be useful to  
13 decision makers, who would need to weigh this information against project benefits, such  
14 as reducing traffic congestion, accident rates, and fatalities plus improved access for  
15 emergency response, that are better suited for quantitative analysis.

### 16 *Construction Emissions*

17 During the construction phase of this project, temporary increases in PM and MSAT  
18 emissions may occur from construction activities. The primary construction-related  
19 emissions of PM are fugitive dust from site preparation, and the primary construction-  
20 related emissions of MSAT are diesel particulate matter from diesel powered construction  
21 equipment and vehicles.

22  
23 The potential impacts of particulate matter emissions will be minimized by using fugitive  
24 dust control measures contained in standard specifications, as appropriate. The Texas  
25 Emissions Reduction Plan (TERP) provides financial incentives to reduce emissions from  
26 vehicles and equipment. TxDOT encourages construction contractors to use this and  
27 other local and federal incentive programs to the fullest extent possible to minimize diesel  
28 emissions. Information about the TERP program can be found at:  
29 <http://www.tceq.state.tx.us/implementation/air/terp/>.

30  
31 However, considering the temporary and transient nature of construction-related  
32 emissions, the use of fugitive dust control measures, the encouragement of the use of  
33 TERP, and compliance with applicable regulatory requirements; it is not anticipated that  
34 emissions from construction of this project will have any significant impact on air quality  
35 in the area.

### 36 37 5.2.9 Hazardous Waste and Materials

38  
39 The project was investigated for known or possibly unknown hazardous material  
40 contamination within the proposed project area. A hazardous materials **Initial Site**  
41 **Assessment (ISA)** was completed in August 2016. The **ISA** document included the  
42 review of topographic and ROW maps, aerial photographs, a regulatory database search  
43 and review, and results of a site visit on February 4, 2016. The regulatory database search  
44 and review was conducted in February 2016 in accordance with the American Society for  
45 Testing and Materials (ASTM) Practice E1527-13.

1  
2 Two sites were identified as a recognized environmental concern (REC) for the proposed  
3 project as having a potential to impact the project either in the construction or ROW  
4 phase. The following two sites are considered RECs.

- 5
- 6 • Express Fuel (Map ID #1) - Located at 1590 Clint San Elizario Rd., the site was  
7 identified as a petroleum storage tank (PST) site (ID# 65290). Currently the site  
8 contains five underground storage tanks (one 8,000 gallon gasoline, two 6,000  
9 gallon gasoline, one 6,000 gallon diesel, and one 20,000 gallon diesel) in use. The  
10 6,000 and 8,000 gallon storage tanks were installed in 1990 and the 20,000 gallon  
11 diesel storage tank was installed in 2014. The underground storage tanks are  
12 located along the west edge of the parcel approximately 60 feet south of the project  
13 area. Approximately 0.02 acre of easement would be acquired along the north  
14 edge of the parcel. Installation of additional underground storage tanks were  
15 occurring during the site visit. The installation of the new tanks is occurring  
16 approximately 350 feet south of the project area.
  - 17 • Stockpile Area (Map ID #2) - Located in the northeast quadrant of the FM 1110  
18 and FM 76 intersection. The site contained what appeared to be construction  
19 debris consisting primarily of asphalt. Some concrete and rebar may be present  
20 within the larger stockpiles. The area also contained small and large mounds of  
21 dirt. There are smaller stockpiles immediately adjacent to the project area with  
22 larger stockpiles approximately 100 ft north of the project area. This site is  
23 considered a concern because, at this time, the origin of the material is unknown.

24  
25 Although not considered potential hazardous material issues, the following sites and/or  
26 issues were identified during the site survey. It is anticipated that they will be addressed  
27 during the ROW process or as an issue resolved during the pre-construction activities.

- 28
- 29 • Abandoned Facility - Located south of FM 1110 between I-10 and FM 76. The site  
30 contains automotive tire partially buried in the ground. The facility appears to have  
31 been utilized as a local motorcycle racing course. South of the area containing the  
32 buried tires is a former concentrated animal feeding operation (CAFO) and an  
33 impoundment that likely captured runoff from the CAFO. No additional ROW is  
34 required from the site; however, a proposed retention basin would be constructed  
35 immediately southwest of the site. The proposed retention basin would also be  
36 located approximately 65 feet southwest of the former CAFO impoundment. The  
37 berm for the apparent CAFO runoff is visible between the proposed retention basin  
38 and CAFO impoundment.
  - 39 • Residence - Located at the northwest corner of the FM 76 and FM 1110  
40 intersection. The site is a vacant residential structure. The structure was not  
41 present on 1967 aerials, but does appear on 1996 aerials. Due to the age of the  
42 structure an asbestos survey prior to demolition would be needed.
  - 43 • UPRR - The rail line crosses the proposed project northeast of Coffin Rd. The  
44 facility is used by passenger and freight trains. Access to the location where the  
45 rail line crosses the proposed project was not available. General observations

1 along the rail line did not identify obvious signs of potential contamination such as  
2 stressed vegetation.

- 3 • Residence - Located in the southwest quadrant of SH 20 and Denton Rd. The site  
4 contains farm equipment scattered across the site. Approximately 0.22 acre of  
5 additional ROW would be acquired from the north and east sides of the site and  
6 approximately 0.01 acre of easement would be needed along the south side of the  
7 site. The areas of additional ROW do not contain signs of potential contamination.  
8 Access to the property was not available, but from aerial images it appears the  
9 southwest corner of the site may exhibit signs of stressed vegetation and stained  
10 soils. This area is approximately 170 ft from the project area. Along SH 20, utility  
11 work occurred recently (2015) and it is unknown if any contamination was  
12 encountered. However, within the project area there does not appear to be  
13 contamination based on surface conditions.

14  
15 The complete ISA is available for review at the TxDOT El Paso District office.

16  
17 Should unanticipated hazardous materials/substances be encountered during  
18 construction, TxDOT and/or the contractor would be notified and steps would be taken to  
19 protect personnel and the environment. Any unanticipated hazardous materials  
20 encountered during construction would be handled according to the applicable federal,  
21 state, and local regulations per TxDOT Standard Specification. The contractor would take  
22 appropriate measures to prevent, minimize, and control the spill of hazardous materials  
23 in the construction staging area. All construction materials used for the proposed project  
24 would be removed as soon as the work schedules permit. The contractor would initiate  
25 early regulatory agency coordination during project development.

26  
27 Under the No-Build Alternative, no impacts to hazardous waste/substance are  
28 anticipated.

#### 29 30 5.2.10 Construction Phase Impacts

31  
32 The Build Alternative would have short-term effects during the construction phase. The  
33 estimated construction duration for the proposed project is 3 years. Potential construction  
34 impacts include:

- 35 • Construction-related air emissions (see Section 5.2.8 - Air Quality)
  - 36 • Utility relocations would be required throughout the corridor; however, these  
37 relocations would be handled so that there would be no substantial impacts to  
38 residences and businesses. Conflicting utilities would be either adjusted or  
39 relocated prior to the construction of the proposed project using standard TxDOT  
40 procedures.
  - 41 • Noise generated by construction machinery, which is the major source of noise in  
42 construction. However, construction normally occurs during daylight hours when  
43 occasional loud noises are more tolerable.
- 44

- 1 • Potential loss of habitat and species during construction activities, as these
- 2 activities may degrade adjacent habitat due to fragmentation, and may hinder daily
- 3 or seasonal movement of wildlife.
- 4 • Traffic flow disruptions would occur during road closures or detours. Detour timing
- 5 and necessary rerouting of emergency vehicles shall be coordinated with proper
- 6 local officials.

7  
8 Contractors would be required to follow TxDOT standard specifications and applicable  
9 federal, state, and local regulations and ordinances that may minimize construction phase  
10 impacts.

11  
12 The No-Build Alternative would not result in construction phase impacts.

### 13 5.3 Indirect Impacts

14  
15 An indirect effects analysis for the proposed project was conducted using a six-step  
16 approach in accordance with the *Indirect Impacts Analysis Guidance* by TxDOT  
17 (September 2015). Since the preparation of the Indirect Effects Technical Report for the  
18 proposed project, reassessment of the vegetation types identified has been performed.  
19 The Area of Influence (AOI) used for the analysis remains the same; however, the  
20 vegetation types within the entire AOI consist of 43 percent agriculture, 9 percent scrub,  
21 thornscrub, and shrubland, 32 percent warm desert dunes, 5 percent warm desert  
22 riparian, wash, and 11 percent urban. The analysis concluded that substantial indirect  
23 impacts would not be anticipated as a result of the proposed project. Several areas were  
24 identified to have the potential to result in induced growth effects; however, from further  
25 analysis, little anticipated growth would likely occur as a result of the proposed project.  
26 The proposed project would induce growth by increasing the rate of development for two  
27 areas: within undeveloped land located adjacent to the proposed facility and within the  
28 planned Tropicana subdivision near the town of Clint. Impacts related to an increased  
29 rate of development would include loss of vegetation. The potential areas of development  
30 covers approximately 159 acres which consist of approximately 69 percent agriculture,  
31 23 percent scrub, thornscrub, and shrubland, 5 percent warm desert riparian, wash and  
32 3 percent warm desert dunes. For additional information, the analysis is described in the  
33 **Indirect Effects Technical Report** completed in July 2016 and available for review at  
34 the TxDOT El Paso District office.

35  
36  
37 Under the No-Build Alternative, no indirect impacts are anticipated.

### 38 5.4 Cumulative Effects

39  
40 Council on Environmental Quality regulations (40 CFR § 1508.7) defines cumulative  
41 impacts (i.e., effects) as “the impact on the environment which results from the  
42 incremental impact of the proposed action when added to other past, present and  
43 reasonably foreseeable future actions.” The purpose of a cumulative effects analysis is  
44 to view the direct and indirect impacts of the proposed project within the larger context of  
45 past, present, and future activities that are independent of the proposed project, but which  
46

1 are likely to affect the same resources in the future. This approach allows the evaluation  
2 of the incremental impacts of the proposed project in light of the overall health and  
3 abundance of selected resources. The evaluation process for each resource considered  
4 may be expressed in shorthand form as follows:

$$\begin{array}{ccccccc} \text{BASELINE} & & \text{FUTURE EFFECTS} & & \text{PROJECT IMPACTS} & & \text{CUMULATIVE} \\ \text{CONDITION} & + & \text{(expected projects)} & + & \text{(direct and indirect)} & = & \text{EFFECTS} \\ \text{(historical and current)} & & & & & & \end{array}$$

6  
7 The following five-step approach as described in TxDOT's *Cumulative Impacts Analysis*  
8 *Guidelines* (2016), was utilized to assess the potential cumulative effects of the past,  
9 present, and reasonably foreseeable actions to the resources in the study area:

- 10
- 11 1. Resource Study Area, Conditions and Trends;
- 12 2. Direct and Indirect Effects on Each Resource from the Proposed Project;
- 13 3. Other Actions – Past, Present, and Reasonably Foreseeable – and their Effect on
- 14 Each Resource;
- 15 4. The Overall Effects of the Proposed Project Combined with other Actions; and
- 16 5. Mitigation of Cumulative Effects.

17  
18 All of the resource categories considered in this environmental document are candidates  
19 for cumulative effects analysis. The initial step of the cumulative effects analysis uses  
20 information from the evaluation of direct and indirect impacts in the selection of  
21 environmental resources that should be evaluated for cumulative effects. TxDOT's  
22 Guidance states: "If a project will not cause direct or indirect impacts on a resource, it will  
23 not contribute to a cumulative impact on that resource." CEQ guidance recommends  
24 focusing on key resource issues of national, regional, or local significance. To identify  
25 potential issues, the resource is considered whether it is protected by legislation or  
26 resource management plans; ecologically important; culturally important; economically  
27 important; or important to the well-being of a human community.

28  
29 Applying the above criteria, the resources or environmental issues considered for the  
30 cumulative effects analysis are listed in **Table 5-4**. As recommended by CEQ guidance,  
31 specific indicators of each resource's condition are identified and shown. The use of  
32 indicators of a resource's health, abundance, and/or integrity are helpful tools in  
33 formulating quantitative or qualitative metrics for characterizing overall impacts to  
34 resources. These indicators are also key aspects of each resource that have already  
35 been evaluated in terms of the project's direct and indirect impacts and facilitate greater  
36 consistency and objectivity in the analysis of cumulative effects.

1 **Table 5-4: Resources and Topics Considered for the Cumulative Impacts Analysis**

| Resource or Topic Evaluated       | TxDOT/CEQ Criteria <sup>1</sup>                   |   |  |  | Included for Cumulative Impacts Analysis | Explanation for Including or Excluding the Resource or Topic from Cumulative Effects Analysis   |
|-----------------------------------|---|---|--|--|--|---|
|                                   | Would the Resource or Topic be Directly Impacted? | Would the Resource or Topic be Indirectly Impacted? | Would the Direct or Indirect Impacts be Substantial? | Is the Resource in Poor or Declining Health? |  |   |
| Air Quality                       | No  | No  | N/A  | N/A  | No                                       | Excluded because neither direct nor indirect impacts are anticipated.   |
| Traffic Noise                     | Yes   | No  | No   | N/A  | No                                       | Excluded because indirect impacts are not anticipated and the direct impacts are not considered substantial enough to warrant further consideration in the cumulative impacts analysis. |
| Hazardous Waste and Materials     | No  | No  | N/A  | N/A  | No                                       | Excluded because neither direct nor indirect impacts are anticipated.   |
| <b>Biological Resources</b>       |   |   |  |  |  |   |
| Threatened and Endangered Species | No  | No  | N/A  | Yes  | No                                       | Excluded because neither direct nor indirect impacts are anticipated.   |
| Vegetation and Wildlife Habitat   | Yes   | Yes   | Yes  | No   | Yes                                      | Included because direct and indirect impacts are anticipated.   |
| <b>Socio-economic Resources</b>   |   |   |  |  |  |   |
| Community Cohesion                | No  | No  | N/A  | N/A  | No                                       | Excluded because neither direct nor indirect impacts are anticipated.   |
| EJ Populations                    | No  | No  | N/A  | N/A  | No                                       | Excluded because neither direct nor indirect impacts are anticipated.   |
| LEP Populations                   | No  | No  | N/A  | N/A  | No                                       | Excluded because neither direct nor indirect impacts are anticipated.   |

<sup>1</sup> In accordance with CEQ (2007) and TxDOT Cumulative Impacts Handbook (2016) selection criteria for limiting the scope of cumulative impacts analysis.

| Resource or Topic Evaluated    | TxDOT/CEQ Criteria <sup>1</sup>                   |   |  |  | Included for Cumulative Impacts Analysis | Explanation for Including or Excluding the Resource or Topic from Cumulative Effects Analysis   |
|--------------------------------|---|---|--|--|--|---|
|                                | Would the Resource or Topic be Directly Impacted? | Would the Resource or Topic be Indirectly Impacted? | Would the Direct or Indirect Impacts be Substantial? | Is the Resource in Poor or Declining Health? |  |   |
| Public Facilities and Services | No  | No  | N/A  | N/A  | No                                       | Excluded because neither direct nor indirect impacts are anticipated.   |
| Visual/Aesthetic               | Yes   | No  | No   | No   | No                                       | Excluded because indirect impacts are not anticipated and the direct impacts are not considered substantial enough to warrant further consideration in the cumulative impacts analysis. |
| <b>Cultural Resources</b>      |   |   |  |  |  |   |
| Historic Properties            | No  | No  | N/A  | N/A  | No                                       | Excluded because neither direct nor indirect impacts are anticipated.   |
| Archeological Resources        | No  | No  | N/A  | N/A  | No                                       | Excluded because neither direct nor indirect impacts are anticipated.   |
| <b>Section 4(f) and 6(f)</b>   |   |   |  |  |  |   |
| Section 4(f) Properties        | Yes   | No  | No   | N/A  | No                                       | Excluded because indirect impacts are not anticipated and the direct impacts are not considered substantial enough to warrant further consideration in the cumulative impacts analysis. |
| Section 6(f) Properties        | No  | No  | N/A  | N/A  | No                                       | Excluded because neither direct nor indirect impacts are anticipated.   |
| Chapter 26 properties          | No  | No  | N/A  | N/A  | No                                       | Excluded because neither direct nor indirect impacts are anticipated.   |
| <b>Water Resources</b>         |   |   |  |  |  |   |
| Groundwater                    | No  | No  | N/A  | No   | No                                       | Excluded because neither direct nor indirect impacts are anticipated.   |

| Resource or Topic Evaluated                    | TxDOT/CEQ Criteria <sup>1</sup>                   |   |  |  | Included for Cumulative Impacts Analysis | Explanation for Including or Excluding the Resource or Topic from Cumulative Effects Analysis |
|--|---|---|--|--|--|---|
|  | Would the Resource or Topic be Directly Impacted? | Would the Resource or Topic be Indirectly Impacted? | Would the Direct or Indirect Impacts be Substantial? | Is the Resource in Poor or Declining Health? |  |   |
| Wetlands and Jurisdictional Waters of the U.S. | No  | No  | N/A  | No   | No                                       | Excluded because neither direct nor indirect impacts are anticipated.                         |
| Floodplains                                    | No  | No  | N/A  | No   | No                                       | Excluded because neither direct nor indirect impacts are anticipated.                         |
| Water Quality                                  | No  | No  | N/A  | No   | No                                       | Excluded because neither direct nor indirect impacts are anticipated.                         |

1 Source: Project Team, September 2016.

2  
3 As documented in **Section 5.0 Environmental Consequences** and the **Indirect Effects**  
4 **Technical Report**, it was determined that the proposed project would not have  
5 substantial direct or indirect impacts on the following resources and topics of concern: air  
6 quality; hazardous waste and materials; threatened and endangered species; community  
7 cohesion; public facilities and services; EJ Populations; LEP populations; historic  
8 properties; archeological resources; Section 6(f) properties; Chapter 26 properties;  
9 groundwater; floodplains; wetlands and jurisdictional waters of the U.S.; and water quality.

10  
11 Several topics were identified to have direct or indirect impacts: vegetation/wildlife habitat,  
12 visual/aesthetics, Section 4(f), and traffic noise. The topics identified would have  
13 warranted a cumulative impacts analysis if direct or indirect impacts were determined to  
14 have been substantial or if these topics/resources are considered to be in poor or  
15 declining health. Because traffic noise impacts, visual/aesthetic impacts, or impacts to  
16 Section 4(f) properties are not considered substantial or in poor or declining health, these  
17 topics would not be included in the cumulative impacts analysis. Therefore, the resource  
18 warranting a cumulative impacts analysis is vegetation because the potential direct  
19 impacts for this resource are considered substantial.

20  
21 Cumulative impacts are analyzed in terms of the specific resource being affected. Direct  
22 impacts to vegetation are addressed in **Section 5.0 Environmental Consequences**. The  
23 following sections describe steps 1 through 5 of the cumulative impacts analysis applied  
24 to vegetation as a resource eligible for analysis.  
25

## 5.4.1 Vegetation/Wildlife Habitat

### 5.4.1.1 Resource Study Area (RSA), Conditions and Trends

A resource study area (RSA) was determined for the cumulative impacts analysis for vegetation. The watershed boundaries along with the local canals and roads were used to delineate the RSA because vegetation types tend to be affected by the watershed areas and the drainage influences the vegetation types that occur within the area. The vegetation types within the RSA are generally associated with agricultural use and urbanized development. The total area of the RSA is 8,394 acres. The temporal boundary used for the cumulative analysis is from 1948 to 2040. The start year of 1948 reflects the year of TxDOT's new designation of FM 1110 from FM 76 to San Elizario. The future year of 2040 is the horizon year set for the MTP. The timeframe was determined to provide sufficient range of time to determine past, present and reasonably foreseeable actions to be included in the cumulative effects analysis. See **Exhibit 4** for a map of the RSA.

The RSA consists of various vegetation types. Using TPWD's EMST data and aerial imagery, the RSA is categorized into three main vegetation categories: agricultural, urban and desert/shrubland. The two most prevalent types are agricultural land and urbanized areas. These areas provide limited to no habitat for wildlife because these areas have already been disturbed by agricultural practices and development. The largest percentage of the RSA is categorized under agricultural land consisting of cropland, orchards and farmland. These areas cover approximately 51 percent of the entire RSA. Urban areas consist of approximately 18 percent of the entire RSA; whereas, the remaining areas consist of 12 percent of scrub, thornscrub, shrubland; 11 percent warm desert riparian and 7 percent warm desert dune areas. These remaining vegetation types provide minimal wildlife habitat for a variety of species that live in desert environments. These vegetation types are shown in **Table 5-5**.

**Table 5-5: Vegetation Types Within the RSA**

| Type                         | Acres | Percentage of RSA |
|------------------------------|-------|-------------------|
| Agriculture                  | 4,313 | 51.4%             |
| Scrub, Thornscrub, Shrubland | 1,014 | 12.1%             |
| Urban                        | 1,545 | 18.4%             |
| Warm Desert Dunes            | 611   | 7.3%              |
| Warm Desert Riparian, Wash   | 911   | 10.8%             |
| Entire RSA                   | 8,394 | 100.0%            |

Source: TPWD 2013 EMST data and 2015 aerial imagery.

Although the RSA is predominantly agricultural land of cropland and orchards, no prime farmland<sup>2</sup> was identified within the RSA. The gradual trend of this region is conversion

<sup>2</sup> As classified by the NRCS, prime farmland is identified by location and extent of the soils that are best suited to food, feed, fiber, forage and oilseed crops.

1 of farmland and undeveloped lands to urbanized development. Portions of the Town of  
 2 Clint, City of Socorro and City of San Elizario are within the RSA boundary. The current  
 3 population trend for the area is steady growth with a percent change of approximately 26  
 4 percent from 1990 to 2010 for El Paso County. Furthermore, El Paso County is projected  
 5 to have a 47 percent change from 2010 to 2040. In looking at the same percent change  
 6 for the populations of the Town of Clint, San Elizario and Socorro, their percentages are  
 7 shown in **Table 5-6**.

8  
 9 **Table 5-6: Population Data and Projections**

| Area Name      | Population |         |         |                | Percent Change from 1990-2010 | Percent Change from 2010-2040 |
|----------------|------------|---------|---------|----------------|-------------------------------|-------------------------------|
|                | 1990       | 2000    | 2010    | Projected 2040 |                               |                               |
| El Paso County | 591,610    | 679,662 | 800,647 | 1,176,945      | 26.1%                         | 47.0%                         |
| Town of Clint  | 1,035      | 980     | 926     | 980            | -11.8%                        | 5.8%                          |
| San Elizario   | 4,385      | 11,046  | 20,444  | 48,551         | 78.6%                         | 137.5%                        |
| Socorro        | 22,995     | 27,152  | 33,017  | 47,129         | 30.4%                         | 42.7%                         |

10 *Source: Texas Water Development Board, 2016.*

11  
 12 5.4.1.2 Direct and Indirect Effects on Each Resource from the Proposed  
 13 Project

14  
 15 Direct impacts to vegetation/wildlife habitat are confined to areas within the proposed  
 16 ROW. Approximately 40 acres of additional ROW and approximately 2 acres of  
 17 easement and license agreements would result from the proposed project. The  
 18 vegetation types that would be directly impacted include approximately 31.1 acres of  
 19 agriculture, 5.6 acres of scrub, thornscrub, shrubland, 3.5 acres of warm desert riparian,  
 20 wash, and 9.9 acres of warm desert dunes. The direct effects to vegetation/wildlife habitat  
 21 are further discussed in **Section 5.2.5.3**.

22  
 23 Urbanized areas within the RSA provide limited habitat for wildlife; however, certain  
 24 species that have adapted more readily to co-exist with an urban environment can utilize  
 25 some of the few vegetated areas. No long-term impacts to wildlife populations are  
 26 anticipated as a result of the proposed project. The other vegetation types (scrub,  
 27 thornscrub, shrubland; warm desert riparian wash and warm desert dunes) provide  
 28 minimal habitat for wildlife species such as rodents, reptiles, and various birds. Due to  
 29 minimal habitat available within the RSA, the direct impacts to wildlife would be  
 30 considered minor.

31  
 32 The indirect effects that were identified in the induced growth analysis included areas that  
 33 total approximately 159 acres. These areas included 69 percent agriculture, 23 percent  
 34 scrub, thornscrub, and shrubland, 5 percent warm desert riparian, wash and 3 percent  
 35 warm desert dune vegetation types. Based on the totals above, approximately 31 percent  
 36 of the area may provide minimal habitat for wildlife. It was determined in the induced  
 37 growth analysis that the proposed project would increase the rate of development for two

1 potential areas and would result in minimal effects to vegetation. These induced growth  
2 areas include the Tropicana development along SH 20 and adjacent undeveloped parcels  
3 along the proposed FM 1110 facility. Further discussion of the induced growth analysis  
4 is provided in **Section 5.3**.

5  
6 5.4.1.3 Other Actions – Past, Present, and Reasonably Foreseeable – and  
7 their Effect on Each Resource  
8

9 Past actions that impacted the vegetation resource within the RSA are transportation,  
10 residential and commercial developments, and converting agricultural land to urbanized  
11 land use. Historically, this region and the area within the RSA has been heavily  
12 agricultural which provides limited habitat for wildlife. Over time, these agricultural lands  
13 and land with other vegetation types (scrub, thornscrub, shrubland; warm desert riparian  
14 wash and warm desert dunes) have been converted to urbanized development. There  
15 are portions of the Town of Clint, City of San Elizario, and City of Socorro within the RSA  
16 which have had continual development over the last few decades. Commercial  
17 developments along the existing FM 1110 alignment and other facilities were built in  
18 conjunction with major and arterial roadways within the RSA. The existing FM 1110  
19 facility was open to traffic in 2010. These urbanized areas provide limited to no habitat  
20 for wildlife.

21  
22 As part of the indirect impacts analysis, local planners were interviewed to gather  
23 information on local developments and anticipated future developments in their  
24 jurisdiction and the county. Areas were identified and included as induced growth areas  
25 in **Section 5.4.2**; however, other areas that already exist as urban vegetation types were  
26 identified as having future/additional development, such as the build-out of vacant lots  
27 within existing subdivisions. As far as new development, no future development was  
28 identified that would be considered reasonably foreseeable. Reasonably foreseeable  
29 actions must be more than speculated actions, but are actions that are likely or probable,  
30 according to TxDOT's *Cumulative Impacts Analysis Guidelines*.

31  
32 To determine reasonably foreseeable actions within the RSA, master plans and  
33 transportation plans of local entities were researched. No planning documents were  
34 found for the Town of Clint or the City of San Elizario; however, planning documents were  
35 found for the city of Socorro and El Paso County as well as other entities in the area.  
36 **Table 5-7** lists these plans, a summary of the planning document and the potential effect  
37 on vegetation resources.  
38  
39

1

**Table 5-7: Summary of Planning Documents**

| Entity/Planning Document/Summary   | Effect(s) to Resource   |
|--|---|
| <p><u>City of Socorro - Comprehensive Master Plan 2014</u><br/>                     Several goals are outlined with a focus on growth and strategic development in addition to preserving historical assets within the city. Thoroughfare plan is also included for transportation improvements to accommodate for future growth.</p>  | <p>No effects to vegetation/wildlife habitat. Although the plan outlines future zoning areas and light industrial development for the portion within the RSA, no funding sources and construction schedules are determined.</p>   |
| <p><u>City of Socorro - Green Infrastructure Plan 2012</u><br/>                     The map shows existing parks, regional and local trails within the city limits, locations of nine proposed parks, and the location of a proposed Mesa Drain Riverwalk (running north to south) along the eastern boundary of the city limits.</p>  | <p>No effects to vegetation/wildlife habitat at this time. Potential effects from construction related to the proposed Mesa Drain Riverwalk; however, unknown funding and design plans were determined for this project.</p>  |
| <p><u>El Paso County - Stormwater Master Plan (2010)</u><br/>                     Socorro, Texas is one of the identified problem areas within the master plan and specific projects are outlined for reconstruction and construction of detention basins and culverts.</p>  | <p>Minimal effects on vegetation/wildlife habitat. Most of the projects identified are construction/replacement of culverts or detention basins within urbanized areas, specifically along roadways and intersections.</p>  |
| <p><u>City of El Paso – El Paso Regional Intermodal Rail Project (2003)</u><br/>                     The project feasibility and development report discusses potential rail and freight expansions for the region. A rail corridor is proposed circumventing the region. The proposal includes a rail line running east/west connecting to a new railyard facility just south of the Town of Clint limits. The report concluded with recommending three projects to proceed.</p>  | <p>No effects to vegetation/wildlife habitat within the RSA. The report evaluated the feasibility of the overall and portions of the proposed project. The railyard near Clint was not recommended to proceed. All three recommended projects are located within/near the City of El Paso and outside of the RSA boundary.</p>              |
| <p><u>Planning and Environmental Linkages Study: Border Highway East (BHE Study)</u><br/>                     The TxDOT study evaluated possible, viable alternatives that would serve as long-term solutions to the identified needs of the region. Several conceptual transportation and other modal solutions were evaluated and recommended that could be used to inform future NEPA phases of development.</p>  | <p>No effects to vegetation/wildlife habitat within the RSA. Although several alternatives and projects were recommended, proposed projects were not identified as projects planned or funded within this study. Projects that would be considered reasonably foreseeable would be encompassed in the TxDOT project tracker or the MTP.</p> |
| <p><u>El Paso MPO – Horizon 2040 Metropolitan Transportation Plan</u><br/>                     The plan discusses regional projects including roadway construction and improvements, intersection improvements, transit projects, safety, lighting, pedestrian and bicycle improvements and POE efficiencies.</p>  | <p>Minimal effects on vegetation/wildlife habitat. Enhancements discussed in the plan are likely to occur; however, actions are anticipated within urbanized areas or existing roadways. Reasonably foreseeable actions are included in the TxDOT project tracker listings.</p>   |
| <p><u>TxDOT - Project Tracker (accessed Sept. 2016)</u><br/>                     Transportation projects were identified within the RSA and include the following:</p> <ul style="list-style-type: none"> <li>• Construction scheduled for SH 20 seal coat of SH 20 from FM 1110 to FM 76</li> <li>• Overlay of SH 20 from Loop 375 to FM 1110 is under development.</li> <li>• Replacing bridge and approach railing of I-10 from FM 1110 to FM 793 is under development.</li> <li>• I-10 frontage road overlay from Horizon (FM 1281) to FM 1110 is finalizing for construction.</li> <li>• Construction scheduled for the bridge replacement of FM 1110 at I-10.</li> </ul> | <p>Minimal to no effects on vegetation/wildlife habitat. Most of the identified projects are within existing roadways and are unlikely to require additional ROW or undisturbed vegetation areas.</p>   |

Source: Project Team, September 2016.

3

1 Based on the research of planning documents included in **Table 5-7**, the reasonably  
 2 foreseeable actions would include the transportation projects identified through the  
 3 TxDOT project tracker, but as noted in the table, projects are unlikely to require additional  
 4 ROW as they would occur within the existing ROW. Although these projects consist of  
 5 bridge replacements, pavement overlay, and seal coat improvements anticipated to occur  
 6 within the existing ROW, these projects could result in minimal vegetation/wildlife habitat  
 7 impacts and contribute to a cumulative effect on vegetation/wildlife. Other reasonably  
 8 foreseeable actions could include developments in the area; however, no other  
 9 development areas have been identified by local and county staff as likely to be  
 10 constructed in addition to the Tropicana subdivision already mentioned in the indirect  
 11 impacts analysis. In summary, based on interviews with local municipal staff and  
 12 research of planning documents, only the transportation projects from the TxDOT project  
 13 tracker could affect vegetation/wildlife.

14

#### 15 5.4.1.4 Overall Effects of the Proposed Project Combined with other 16 Actions

17

18 Overall cumulative effects include past, present and future actions. **Table 5-8** shows the  
 19 quantitative impacts of the cumulative effects. Past actions include previously developed  
 20 and impacted areas, which are determined by the existing ROW of the proposed project  
 21 and existing urban areas. The present action refers to the proposed project and the future  
 22 action includes potential development areas. The potential development areas are areas  
 23 identified in the indirect impacts analysis consisting of the Tropicana subdivision and the  
 24 adjacent properties along the proposed project.

25

26

**Table 5-8: Cumulative Impacts within the RSA**

| Type of Action   | Approximate Area of Impact in Acres |
|--|-------------------------------------|
| PAST ACTION<br>(Previously Developed and Impacted Areas) | 1,226                               |
| PRESENT ACTION<br>(The Proposed Project)                 | 42                                  |
| FUTURE ACTION<br>(Potential Development Areas)           | 159                                 |
| <b>TOTAL AREA</b>  | <b>1,427</b>                        |

Source: Project Team, September 2016.

27

28

29 The cumulative effects from past development, the proposed project, and future  
 30 developments impact vegetation types and wildlife habitat over time through a conversion  
 31 of undisturbed vegetation types to urbanized development and localized planting typical  
 32 of urbanized environments. **Table 5-8** shows that approximately 1,427 acres could be  
 33 impacted from cumulative effects as a result of the proposed project. Most of the  
 34 cumulative effects are a result of past development and the total acreage accounts for  
 35 approximately 17 percent of the entire RSA. As a result of past actions, lands were  
 36 originally converted to the agriculture vegetation type for agricultural purposes such as

1 croplands and orchards. Over time, the slow but steady population growth of the region  
2 has resulted in the conversion of the agriculture lands to urban areas which provide limited  
3 habitat for wildlife. The growth trend is not substantial; however, the Tropicana  
4 subdivision and roadway construction observed in the region is the evidence that over  
5 time, more urbanized development will continue and could impact the remaining areas of  
6 the other vegetation types. The transportation projects identified in the TxDOT tracker  
7 database could also result in impacts to vegetation/wildlife habitat; however, no  
8 reasonably foreseeable actions besides those identified in this study are anticipated to  
9 substantially impact the non-urban vegetation types within the temporal boundaries for  
10 the cumulative impacts analysis. In the context of the entire RSA, approximately 2.4  
11 percent of the entire RSA would be affected by the present and future actions. The effects  
12 to wildlife habitat and the other vegetation types of scrub, thornscrub, shrubland; warm  
13 desert riparian wash and warm desert dunes would be minimal as a result of the proposed  
14 project.

15

#### 16 5.4.1.5 Mitigation of Cumulative Effects

17

18 Efforts would be taken through local, state and federal regulations to avoid and minimize  
19 any adverse effects from development or future activities. Additional BMPs such as  
20 seeding and replanting in accordance with TxDOT approved seeding specification would  
21 help mitigate effects from transportation projects. Similar activities of landscaping and  
22 planting where feasible would be performed to help mitigate for areas developed for urban  
23 use. Other mitigation measures pursuant to the TxDOT and TPWD MOU on BMPs,  
24 TxDOT would implement BMPs for suitable habitat as discussed in **Table 5-5**. Future city,  
25 county or local plans would help avoid and minimize impacts to these natural resources  
26 from future developments or activities. Any impacts associated with future development  
27 would be the responsibility of developers in coordination with El Paso County, local  
28 municipalities, and local agencies.

29

#### 30 5.4.1.6 Summary and Conclusions

31

32 The proposed project would not result in substantial cumulative effects. Overall,  
33 approximately 1,427 acres of vegetation would be impacted from cumulative effects from  
34 past, present and reasonable foreseeable future actions. It is not anticipated that the  
35 proposed project would substantially affect the current trends of development and  
36 population growth. Although residential development is likely to occur in various portions  
37 within the RSA, the development would not be substantial in the overall context of the  
38 entire RSA.

39

## 40 6.0 INTERAGENCY COORDINATION AND PUBLIC INVOLVEMENT

41

42 TxDOT uses a systematic interdisciplinary approach to project planning to assure full  
43 consideration is given to all appropriate social, economic, and environmental effects of  
44 proposed highway projects. Interdisciplinary planning contributes to effective decisions in  
45 the best public interest by supporting balanced consideration of safe and efficient  
46 transportation needs and national, state, and local environmental protection goals.

1 Engineering analyses and alternative designs are prerequisite components of  
2 interdisciplinary planning for this proposed project.

3  
4 The proposed project was one alternative resulting from the BHE PEL Study completed  
5 in 2014. TxDOT has been planning and developing the FM 1110 proposed project in  
6 close coordination with the local MPO, the City of El Paso, Town of Clint and other local  
7 stakeholders as well as with state, federal and local agencies.

#### 8 6.1 Interagency Coordination

9  
10 TxDOT completed coordination with TPWD on June 3, 2016 regarding potential effects  
11 to natural resources. Tribal coordination was completed in June 17, 2016 while the  
12 archeological resources review related to the project was completed on July 21, 2016.  
13 Coordination with the THC/SHPO regarding historic resources was completed on  
14 December 21, 2016. The coordination documentation is included in **Appendix D**.

#### 15 6.2 Public Involvement

16  
17  
18 Two public meetings were held on September 17, 2015 and May 3, 2016, respectively.  
19 The purpose of the first public meeting was to present four reasonable alternatives and  
20 the No-Build Alternative under consideration; and to offer the public an opportunity to ask  
21 questions and provide input regarding the alternatives. The public also had an opportunity  
22 to learn about the identified environmental constraints. The comments submitted were  
23 regarding design or engineering (proposed ROW, alignment modifications, and  
24 alternative locations); environmental (impacts to properties, farmland, irrigation features,  
25 traffic noise, impacts during construction, and socio-economic impacts); traffic (vehicular,  
26 bus and truck traffic); safety; and access. Individuals expressed concern for safety for  
27 nearby schools and school buses traveling within the project area. Many comments  
28 discussed concern for traffic issues in the Town of Clint and accessing I-10 and the Border  
29 Highway. Several individuals expressed their preference for a specific alternative and/or  
30 disapproval of other alternatives. Alternatively, many commenters expressed desire to  
31 keep existing conditions, not build a new roadway, or to improve/complete other roadways  
32 and postpone the proposed project. Overall, attendees expressed support for the  
33 proposed project and for the proposed overpass at the UPRR.

34  
35 The purpose of the second public meeting was to present the recommended preferred  
36 alternative and gather public input. Commenters expressed concern for environmental  
37 impacts to farmland, design (requests to relocate proposed retention ponds,  
38 implementation of greater turning radius, shift of alignment of the new location section,  
39 and traffic lights). The general consensus of the meeting was support for the project.  
40 Commenters expressed satisfaction about a more direct route between I-10 and SH 20,  
41 the grade separation at the UPRR, the potential to alleviate traffic congestion, and the  
42 deviation of existing vehicular traffic that currently goes through the Town of Clint resulting  
43 from the proposed project.

1 Documentation for both public meetings, including meeting material, comments received  
2 and responses to comments, can be found in the following TxDOT weblinks:  
3 <http://ftp.dot.state.tx.us/pub/txdot-info/elp/notices/091715-meeting-summary.pdf>  
4 <http://ftp.dot.state.tx.us/pub/txdot-info/elp/notices/050316-summary.pdf>  
5

6 Representatives from TxDOT and project team consultants were available at each station  
7 to answer questions and assist attendees with interpretation of the exhibits. A minimum  
8 of two project team members were available at all times to accommodate the  
9 communication needs of individuals speaking Spanish. Several comment tables were  
10 available for attendees to sit and write comments, concerns or questions. A public  
11 hearing is anticipated for the summer of 2017.  
12

13 During the preparation for the public involvement process, reasonable steps were taken  
14 to ensure that such persons have meaningful access to the programs, services, and  
15 information that TxDOT provides. These efforts include the publication of  
16 announcements in both Spanish and English newspapers informing the public of the  
17 opportunity to request the assistance for language or other special communication needs  
18 at the meetings, and that Spanish interpreters for LEP individuals would be present at the  
19 meetings. The Civil Rights Restoration Act of 1987 provides that “no person in the United  
20 States shall, on the ground of race, color, or national origin, be excluded from participation  
21 in, be denied the benefits of, or be subjected to discrimination under any program or  
22 activity receiving Federal financial assistance.”  
23

24 Prior to the onset of construction, a notice of impending construction will be provided to  
25 owners of adjoining property, affected local governments, and public officials. The notice  
26 may be provided via a sign(s) posted in the ROW, mailed notice, printed notice distributed  
27 by hand, or notice via website, as appropriate.

## 7.0 MITIGATION, PERMITS, AND ENVIRONMENTAL COMMITMENTS

The proposed project would involve more than 5 acres of earth disturbance. TxDOT would comply with TCEQ's TPDES CGP. A SW3P would be prepared and implemented, and a construction site notice would be posted on the construction site. A NOI and NOT would be required.

During construction, BMPs, including temporary erosion, sedimentation, and water pollution controls would be implemented. All temporary erosion controls would be in compliance with TxDOT Standard Specifications and would be in place, according to the construction plans, prior to commencement of construction-related activities. The contractor would take appropriate measures to prevent, minimize, and control the spill of fuels, lubricants, and hazardous materials in the construction staging area.

During construction, efforts would be taken to 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.

TxDOT would 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.

There is suitable habitat for state-listed threatened or endangered species in the study area. Due to marginal habitat, adjacent urban development, and highway traffic, the project would have no effect on federal species. If any individuals of state-listed species are observed within the study area during construction, care would be taken to avoid harming them; therefore, no impacts to state-listed species would occur as a result of the proposed project.

Any unanticipated hazardous materials and/or petroleum contamination encountered during construction would be handled according to applicable federal, state and local regulations per TxDOT Standard Specifications. The contractor would take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area. The use of construction equipment within sensitive areas would be minimized or eliminated entirely. All construction materials used for this project would be removed as soon as work schedules permit.

### *Environmental Permits, Issues, and Commitments (EPIC)*

The following EPIC are required for the proposed project. These must be fulfilled prior to, during, or post-construction.

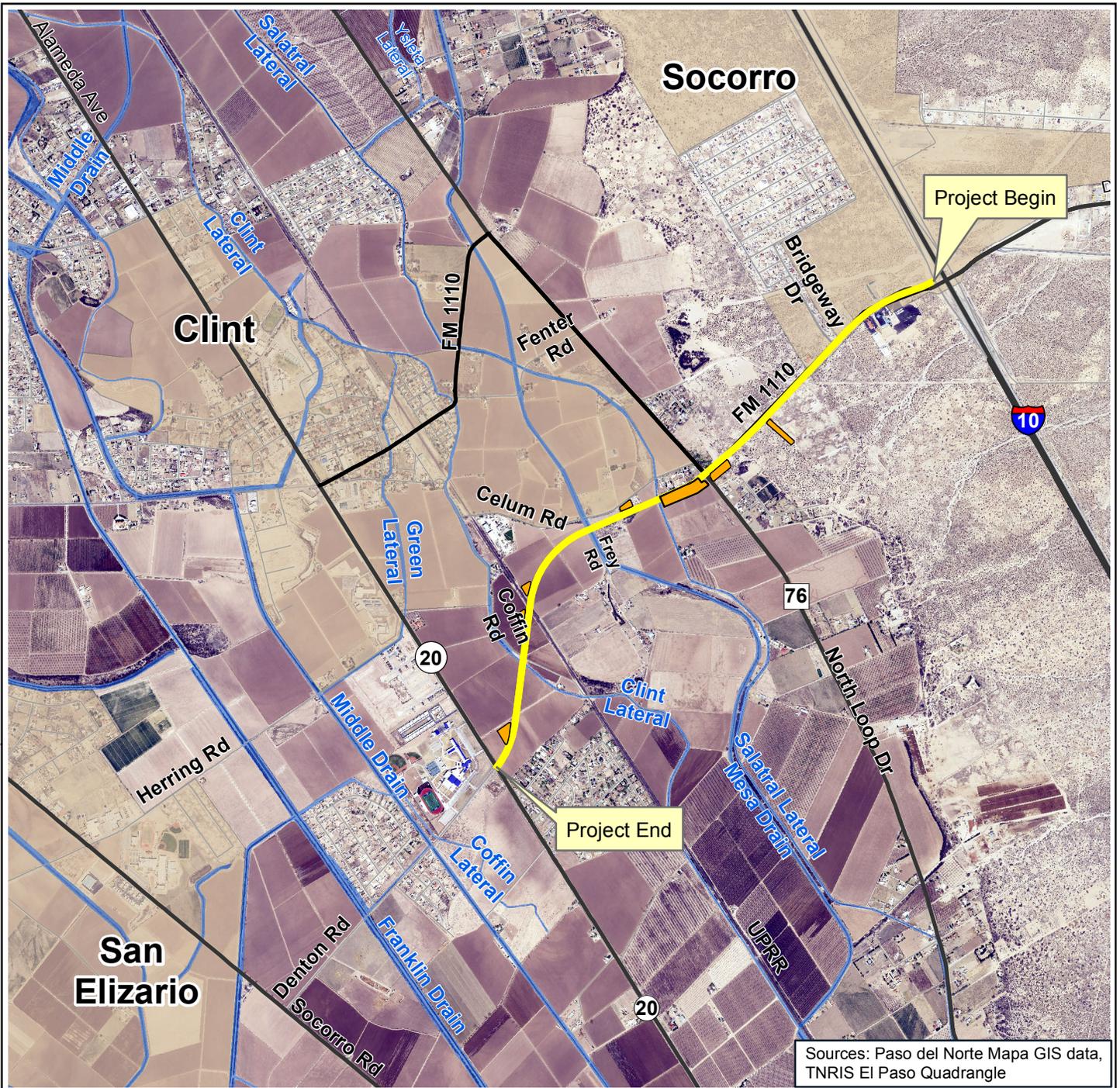
- 1 1. Floodplains: Coordination with local floodplain administrator is required because  
2 the project is within the 100-year floodplain. This coordination will be completed  
3 prior to the start of construction.
- 4 2. Vegetation: Invasive and alien vegetation would be controlled by following the  
5 guidance and provisions of EO 13112 on Invasive Species and the Executive  
6 Memorandum on Environmentally and Economically Beneficial Landscape  
7 practices. The proposed seed mixture (both grasses and forbs) would be in  
8 accordance with Item 164, seeding for Erosion Control in TxDOT's Standard  
9 Specifications for the construction of Highways, Streets, and Bridges.
- 10 3. Air Quality: Proper maintenance and idling of construction equipment and water  
11 sprinkling during construction would be observed to control emissions of PM.
- 12 4. Noise: Provisions would be included in the plans and specifications that require  
13 the contractor to make every reasonable effort to minimize construction noise  
14 through abatement measures such as work-hour controls and proper  
15 maintenance of muffler systems. Notify city and local safety officials of proposed  
16 road closures or detours.
- 17 5. Emergency Vehicles: Detour timing and necessary rerouting of emergency  
18 vehicles shall be coordinated with proper local officials. Lane closures and  
19 detours are to comply with TxDOT requirements and Manual of Uniform Traffic  
20 Control Devices.
- 21 6. Hazardous Materials: No hazardous materials would be stored in the ROW.
- 22 7. Water Quality: A SW3P, construction site notice, NOI, and NOT would be  
23 required.
- 24 8. Migratory Birds: The MBTA of 1918 states that it is unlawful to kill, capture, collect,  
25 possess, buy, sell, trade, or transport any migratory bird, nest, young, feather, egg  
26 in part or in whole, without a Federal permit issued in accordance within the Act's  
27 policies and regulations. Migratory patterns would not be affected by the proposed  
28 project. In the event that migratory birds are encountered on-site during project  
29 construction, adverse impacts on protected birds, active nests, eggs, and/or  
30 young would be avoided. The contractor would remove all old migratory bird nests  
31 from October 1 to February 15 from any structure where work will be done. In  
32 addition, the contractor would be prepared to prevent migratory birds from building  
33 nests between February 15 and October 1, per the EPIC sheet.
- 34 9. Wildlife: The following BMPs from the TPWD TXDOT BMP MOU will be  
35 implemented for the following species:
  - 36 • Comal snakewood, desert night-blooming cereus, sand prickly-pear, sand  
37 sacahuista, or Wheeler's spurge
    - 38 ➤ If species is observed during construction, stop construction and  
39 notify the Area Engineer. A determination to conduct a plant rescue  
40 will be considered at that time.
  - 41 • Western red bat and Western small-footed bat
    - 42 ➤ Large hollow trees should be surveyed for maternity colonies and, if  
43 found, should not be disturbed until after the pups fledge.
  - 44 • Mountain short-horned lizard
    - 45 ➤ The contractors will be advised of potential occurrence in the project  
46 area, and to avoid harming the species if encountered. Contractors

- 1 should avoid harvester ant mounds in the selection of Project  
2 Specific Locations (PSLs) where feasible.
- 3 • New Mexico garter snake
  - 4 ➤ The contractors will be advised of potential occurrence in the project  
5 area (specifically along the drainage ditches), and to avoid harming  
6 the species if encountered.
  - 7 • Western burrowing owl and all migratory bird species
  - 8 ➤ Not disturbing, destroying, or removing active nests, including  
9 ground nesting birds, during the nesting season;
  - 10 ➤ Avoiding the removal of unoccupied, inactive nests, as practicable;
  - 11 ➤ Preventing the establishment of active nests during the nesting  
12 season on TxDOT owned and operated facilities and structures  
13 proposed for replacement or repair;
  - 14 ➤ Not collecting, capturing, relocating, or transporting birds, eggs,  
15 young, or active nests without a permit.
- 16 10. Archeological Resources: In the event that unanticipated archaeological deposits  
17 are encountered during construction, work in the immediate area will cease, and  
18 TxDOT archaeological staff will be contacted to initiate post-review discovery  
19 procedures.
- 20 11. Threatened and Endangered Species: If any species on the El Paso County  
21 threatened and endangered species list is sighted in the project area during  
22 construction, stop construction would stop and contractor would notify the TxDOT  
23 Area Engineer.

## 24 8.0 CONCLUSION

25  
26  
27 The engineering, social, economic, and environmental investigations conducted thus far  
28 indicate that the Build Alternative option best meets the purpose and need of the proposed  
29 project and would result in no significant impacts to the quality of the human or natural  
30 environment. Therefore, an EIS is not anticipated. A FONSI will be prepared, which  
31 affirms that no significant impacts were found through the analysis performed.

## **APPENDIX A: EXHIBITS**



Sources: Paso del Norte Mapa GIS data, TNRIIS El Paso Quadrangle



**LEGEND**

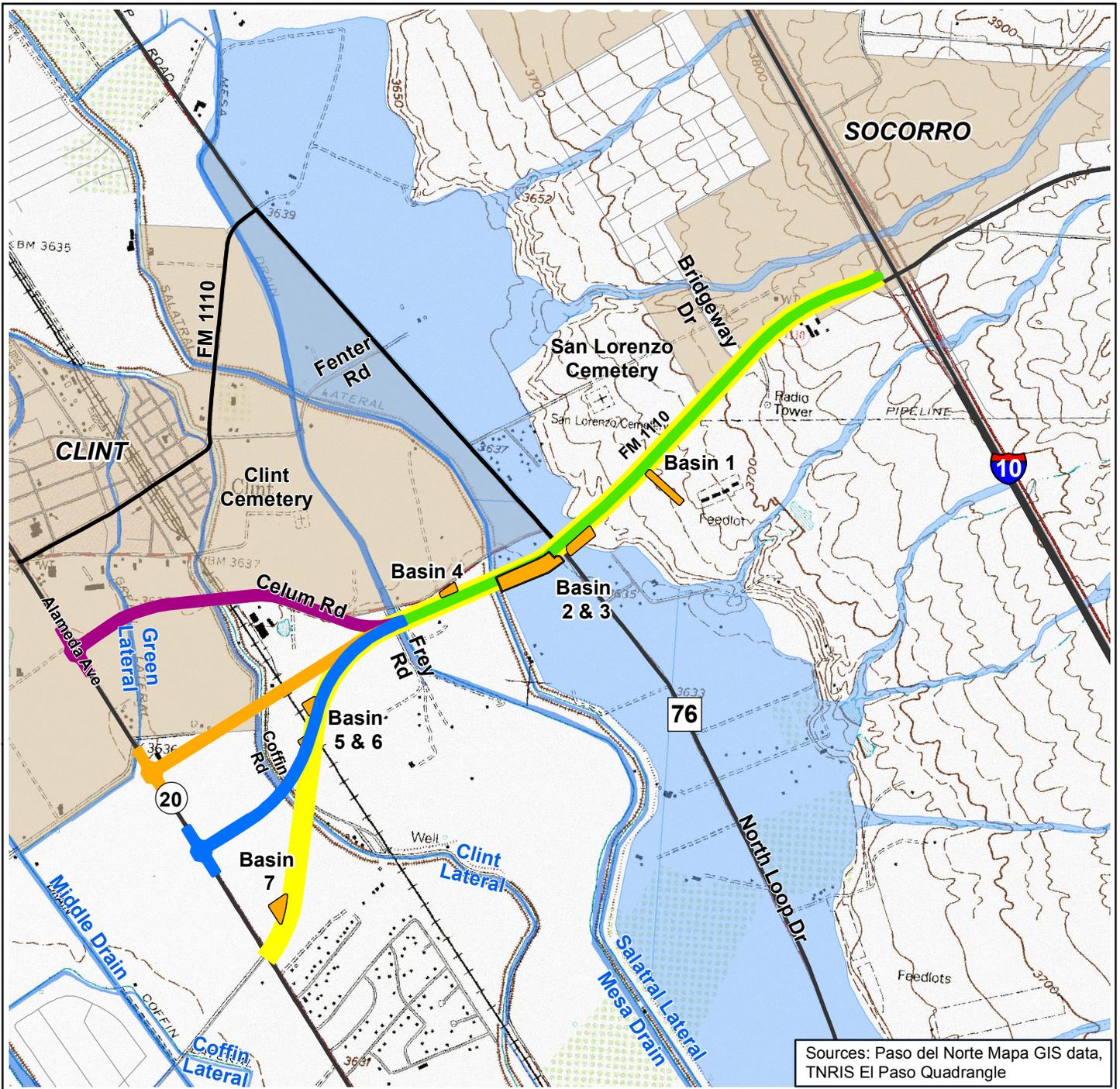
- Proposed Project
- Proposed Retention Basin
- Municipality
- Canal, Drain, Lateral



**EXHIBIT 1  
PROJECT LOCATION MAP  
FM 1110  
WIDENING AND REALIGNMENT  
FROM I-10 TO SH 20**

CSJs: 1281-01-017 AND 1281-02-007

**ENVIRONMENTAL ASSESSMENT  
EL PASO COUNTY, TX**



Sources: Paso del Norte Mapa GIS data, TNRRS El Paso Quadrangle



**LEGEND**

- █ Proposed Project (Alternative D)
- █ All Alternatives
- █ Alternative A
- █ Alternative B
- █ Alternative C
- Municipality
- 100-Yr FEMA Flood Zone
- Canal, Drain, Lateral
- Proposed Retention Basin

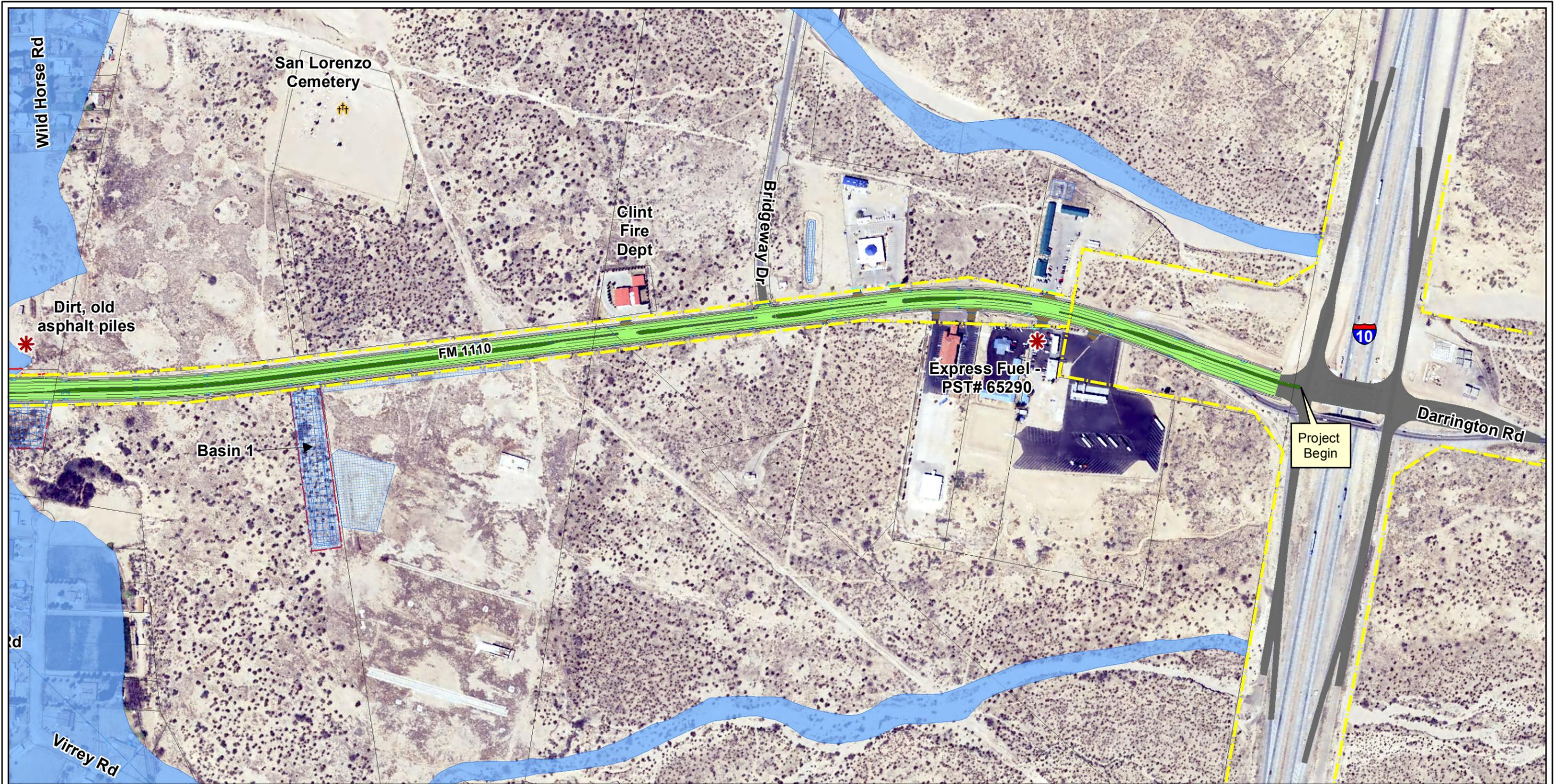


**EXHIBIT 2  
USGS QUADRANGLE AND  
FEMA FLOODPLAIN MAP**

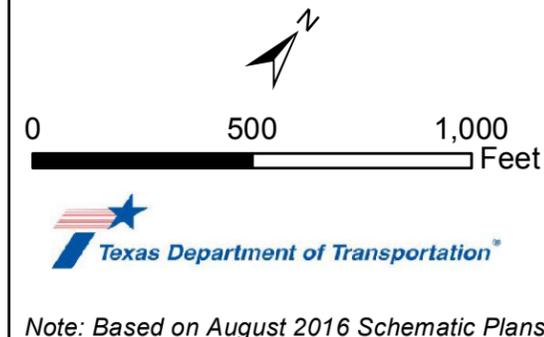
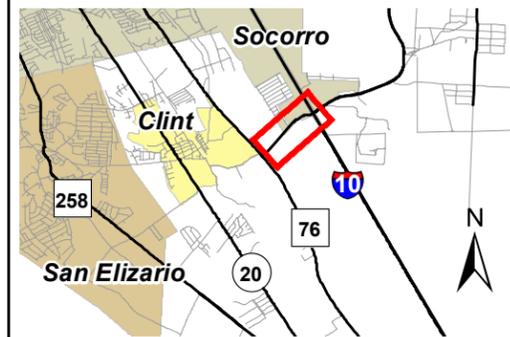
**FM 1110  
WIDENING AND REALIGNMENT  
FROM I-10 TO SH 20**

CSJs: 1281-01-017 AND 1281-02-007

**ENVIRONMENTAL ASSESSMENT  
EL PASO COUNTY, TX**



| LEGEND |                          |  |                           |
|--------|--------------------------|--|---------------------------|
|        | Existing ROW             |  | Union Pacific Railroad    |
|        | Proposed ROW             |  | Flood Zone                |
|        | Proposed Easement        |  | Concrete Bridge           |
|        | Proposed Bridge          |  | Steel Bridge              |
|        | Proposed Retention Basin |  | Driveway                  |
|        | HAZMAT Site              |  | Existing Pavement         |
|        |                          |  | Cemetery                  |
|        |                          |  | Proposed Mill and Overlay |
|        |                          |  | Potential Displacement    |
|        |                          |  | Canals, Drains, Laterals  |
|        |                          |  | Proposed Pavement         |

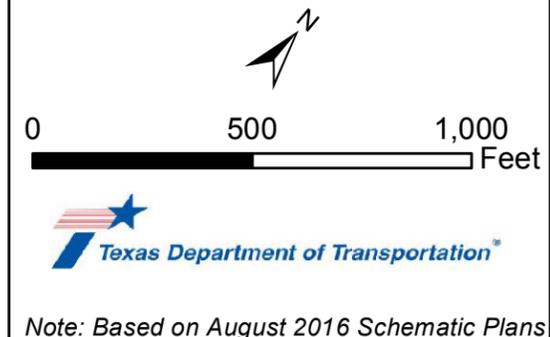


**EXHIBIT 3**  
**ENVIRONMENTAL MAP**  
**SHEET 1 OF 3**  
  
**FM 1110**  
**WIDENING AND REALIGNMENT**  
**FROM I-10 TO SH 20**  
  
 CSJs: 1281-01-017 AND 1281-02-007  
  
**ENVIRONMENTAL ASSESSMENT**  
**EL PASO COUNTY, TX**



**LEGEND**

- |                          |                        |                           |                          |
|--------------------------|------------------------|---------------------------|--------------------------|
| Existing ROW             | Union Pacific Railroad | Concrete Bridge           | Frontage and Crossing    |
| Proposed ROW             | Flood Zone             | Steel Bridge              | Raised Median            |
| Proposed Easement        | Parcels                | Driveway                  | Potential Displacement   |
| Proposed Bridge          | Cemetery               | Existing Pavement         | Canals, Drains, Laterals |
| Proposed Retention Basin | Proposed Pavement      | Proposed Mill and Overlay |                          |
| HAZMAT Site              |                        |                           |                          |



**EXHIBIT 3  
ENVIRONMENTAL MAP  
SHEET 2 OF 3**

**FM 1110  
WIDENING AND REALIGNMENT  
FROM I-10 TO SH 20**

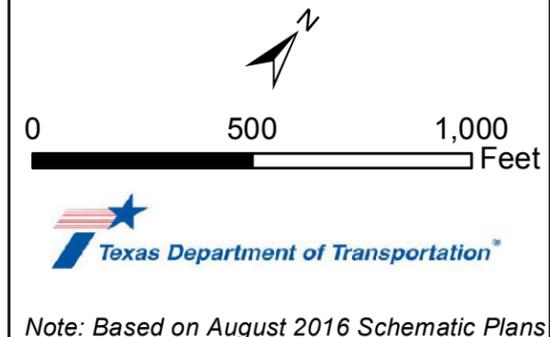
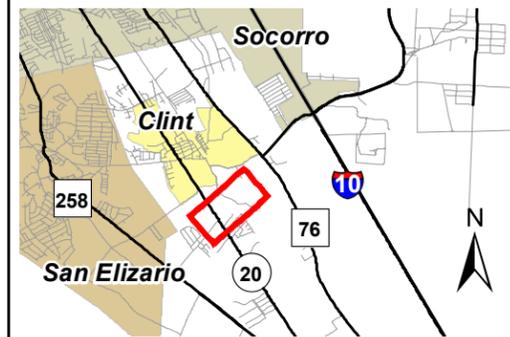
CSJs: 1281-01-017 AND 1281-02-007

**ENVIRONMENTAL ASSESSMENT  
EL PASO COUNTY, TX**



**LEGEND**

- |                          |                        |                           |                          |
|--------------------------|------------------------|---------------------------|--------------------------|
| Existing ROW             | Union Pacific Railroad | Concrete Bridge           | Frontage and Crossing    |
| Proposed ROW             | Flood Zone             | Steel Bridge              | Raised Median            |
| Proposed Easement        | Parcels                | Driveway                  | Potential Displacement   |
| Proposed Bridge          | Cemetery               | Existing Pavement         | Canals, Drains, Laterals |
| Proposed Retention Basin | Proposed Pavement      | Proposed Mill and Overlay |                          |
| HAZMAT Site              |                        |                           |                          |

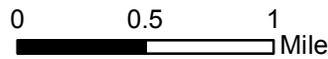
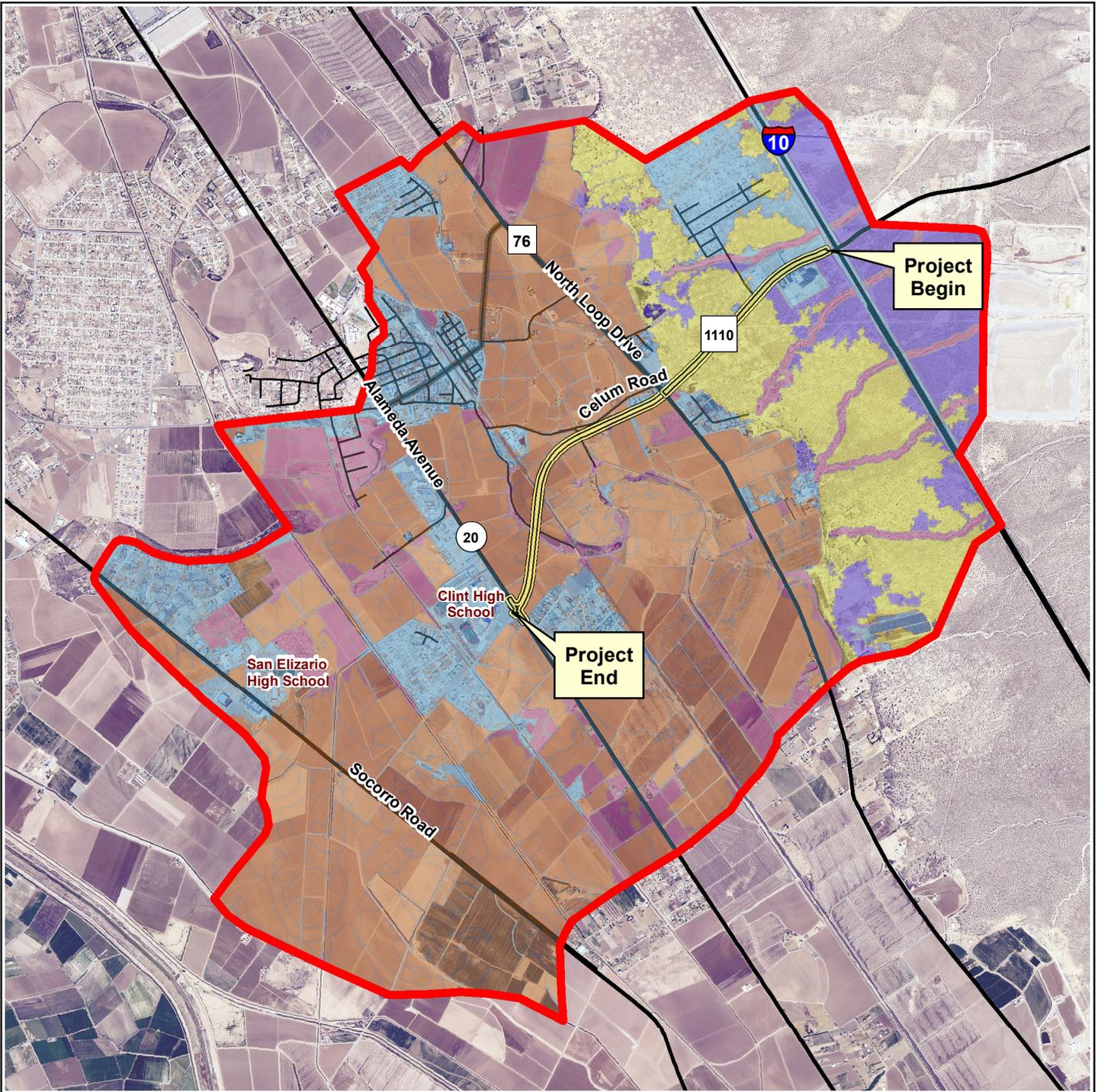


**EXHIBIT 3  
ENVIRONMENTAL MAP  
SHEET 3 OF 3**

**FM 1110  
WIDENING AND REALIGNMENT  
FROM I-10 TO SH 20**

CSJs: 1281-01-017 AND 1281-02-007

**ENVIRONMENTAL ASSESSMENT  
EL PASO COUNTY, TX**



**Legend**

-  Proposed Project
-  RSA Boundary

**Vegetation Types**

-  Agriculture
-  Warm Desert Dunes
-  Scrub, Thornscrub, Shrubland
-  Warm Desert Riparian, Wash
-  Urban



**EXHIBIT 4  
RESOURCE STUDY AREA MAP**

FM 1110  
WIDENING AND REALIGNMENT  
FROM I-10 TO SH 20

CSJs: 1281-02-007 AND 1281-01-017

ENVIRONMENTAL ASSESSMENT  
EL PASO COUNTY, TX

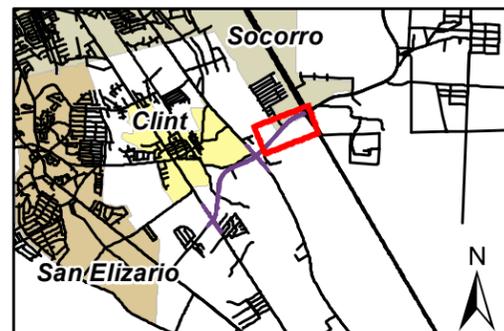


**Legend**

- Benefitted Noise Receiver
- Non-Impacted Noise Receiver
- Proposed Noise Barrier
- Proposed Bridge
- Union Pacific Railroad
- Proposed Easement
- Proposed ROW
- Existing ROW
- Proposed Retention Basin
- Proposed Pavement

**SHEET INDEX**

*\*The extent of each sheet is highlighted in RED.*



*Note: Based on August 2016 Schematic Plans*

**EXHIBIT 5  
TRAFFIC NOISE RECEIVER LOCATIONS  
SHEET 1 OF 3**

FM 1110  
WIDENING AND REALIGNMENT  
FROM I-10 TO SH 20

CSJs: 1281-01-017 AND 1281-02-007

ENVIRONMENTAL ASSESSMENT  
EL PASO COUNTY, TEXAS



**Legend**

- Benefitted Noise Receiver
- Non-Impacted Noise Receiver
- ▬ Proposed Noise Barrier
- ▬ Proposed Bridge
- ▬ Union Pacific Railroad
- - - Proposed Easement
- - - Proposed ROW
- ▬ Existing ROW
- ▨ Proposed Retention Basin
- ▬ Proposed Pavement

**SHEET INDEX**

*\*The extent of each sheet is highlighted in RED.*

Texas Department of Transportation

*Note: Based on August 2016 Schematic Plans*

**EXHIBIT 5**  
**TRAFFIC NOISE RECEIVER LOCATIONS**  
**SHEET 2 OF 3**

FM 1110  
 WIDENING AND REALIGNMENT  
 FROM I-10 TO SH 20

CSJs: 1281-01-017 AND 1281-02-007

ENVIRONMENTAL ASSESSMENT  
 EL PASO COUNTY, TEXAS

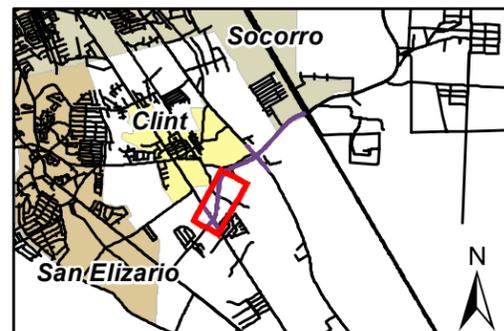


**Legend**

- Benefitted Noise Receiver
- Non-Impacted Noise Receiver
- Proposed Noise Barrier
- Proposed Bridge
- Union Pacific Railroad
- Proposed Easement
- Proposed ROW
- Existing ROW
- Proposed Retention Basin
- Proposed Pavement

**SHEET INDEX**

*\*The extent of each sheet is highlighted in RED.*



*Note: Based on August 2016 Schematic Plans*

**EXHIBIT 5  
TRAFFIC NOISE RECEIVER LOCATIONS  
SHEET 3 OF 3**

FM 1110  
WIDENING AND REALIGNMENT  
FROM I-10 TO SH 20

CSJs: 1281-01-017 AND 1281-02-007

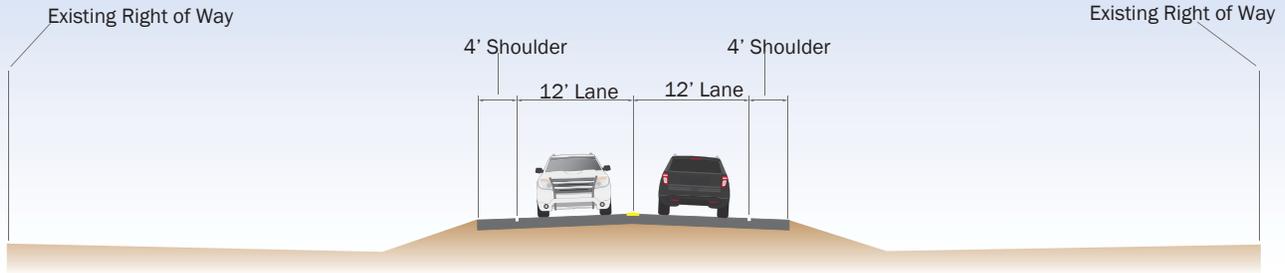
ENVIRONMENTAL ASSESSMENT  
EL PASO COUNTY, TEXAS

## **APPENDIX B: TYPICAL SECTIONS & SCHEMATIC PLANS**

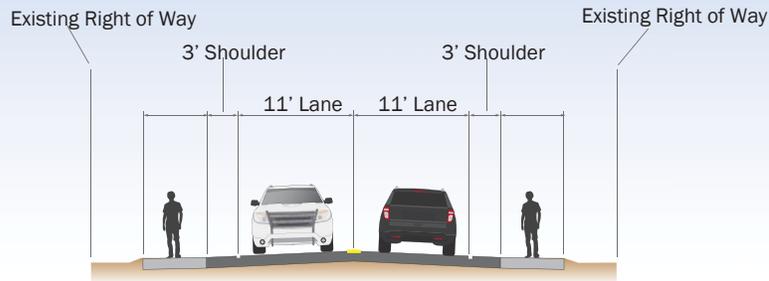
# APPENDIX B: TYPICAL SECTIONS

## EXISTING FM 1110 (2-Lane Urban Collector)

### From I-10 to FM 76

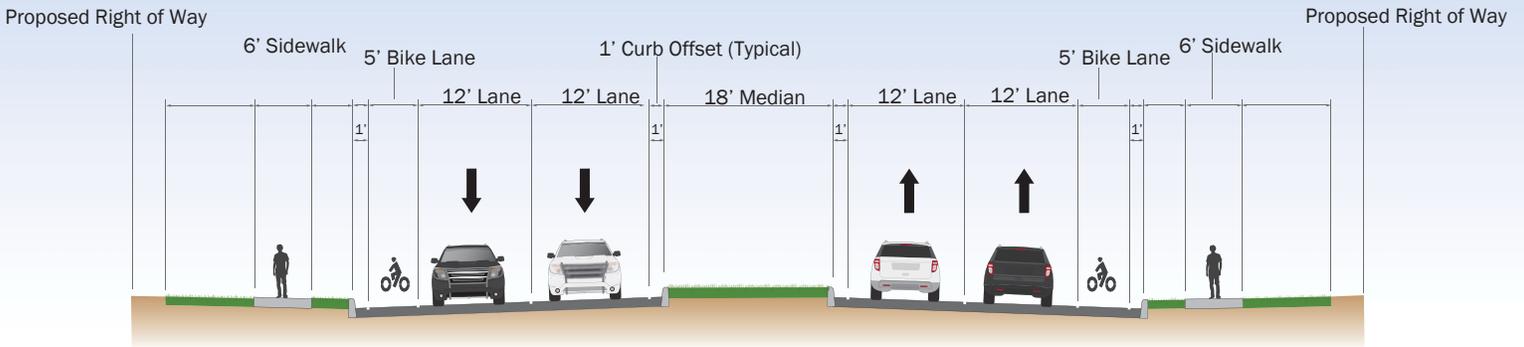


### From FM 76 to SH 20



## PROPOSED FM 1110 (4-Lane Minor Arterial w/Raised Median)

### Proposed FM 1110



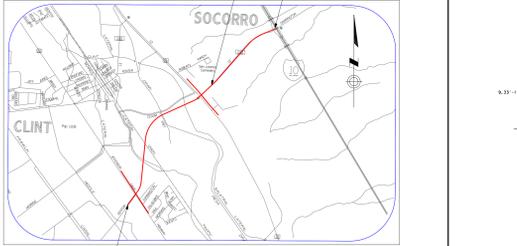


**FM 1110 WIDENING AND REALIGNMENT  
FROM I-10 TO SH 20 (ALAMEDA AVE)**

EL PASO, TEXAS ROLL 1 OF 1

| DATE:      | STATE DISTRICT: | COUNTY: | CONTROL SEC. NO.: | JOB NO.: |
|------------|-----------------|---------|-------------------|----------|
| 4/28/2017  | ELP             | EL PASO | 1281 02           | 007, ETC |
| DATE REV.: | STATE DISTRICT: | COUNTY: | CONTROL SEC. NO.: | JOB NO.: |
| 4/28/2017  | ELP             | EL PASO | 1281 02           | 007, ETC |

| DATE:      | STATE DISTRICT: | COUNTY: | CONTROL SEC. NO.: | JOB NO.: |
|------------|-----------------|---------|-------------------|----------|
| 4/28/2017  | ELP             | EL PASO | 1281 02           | 007, ETC |
| DATE REV.: | STATE DISTRICT: | COUNTY: | CONTROL SEC. NO.: | JOB NO.: |
| 4/28/2017  | ELP             | EL PASO | 1281 02           | 007, ETC |



VICINITY MAP  
EL PASO COUNTY  
NOT TO SCALE

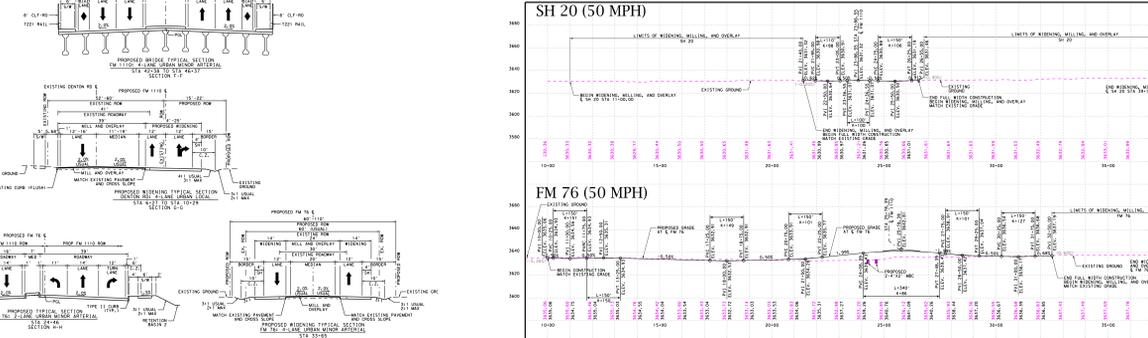
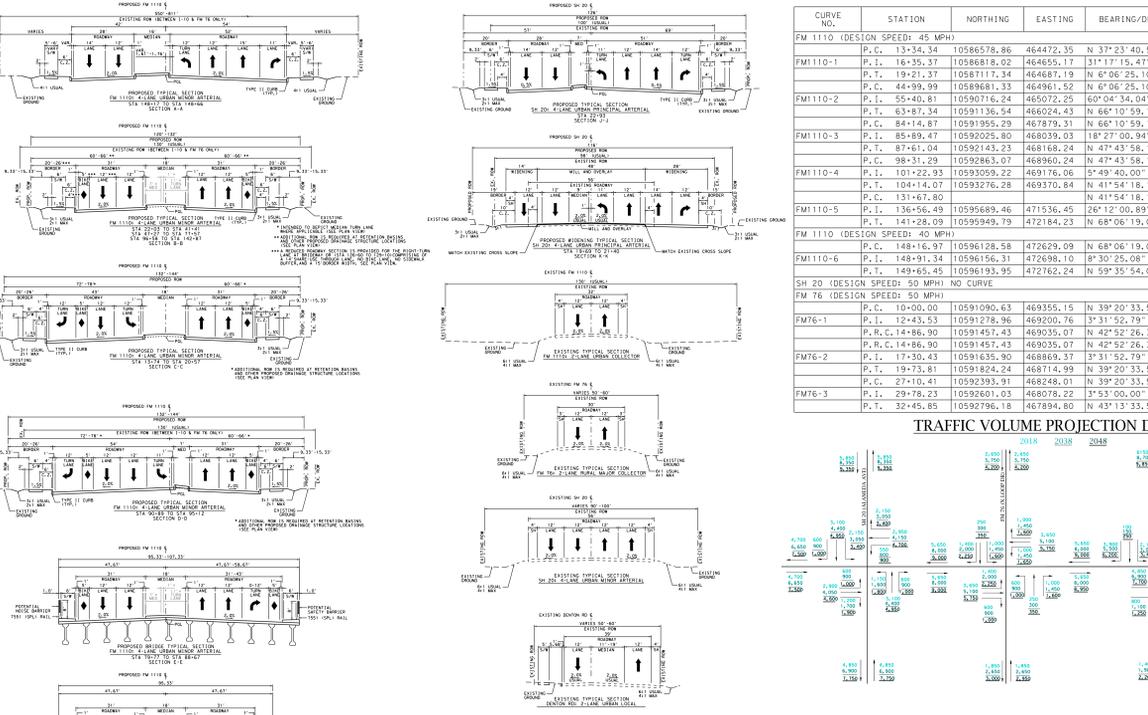
**FUNCTIONAL CLASSIFICATION**

|           |                                     |                           |                          |
|-----------|-------------------------------------|---------------------------|--------------------------|
| FM 1110   | - 45 MPH - URBAN MINOR ARTERIAL     | PROJECT LENGTH:           | APPROXIMATELY 2.76 MILES |
| SH 20     | - 50 MPH - URBAN PRINCIPAL ARTERIAL | LIMITS FROM I-10 TO SH 20 |                          |
| FM 76     | - 50 MPH - URBAN MINOR ARTERIAL     |                           |                          |
| CELUM RD  | - 40 MPH - URBAN COLLECTOR          |                           |                          |
| DENTON RD | - 30 MPH - URBAN LOCAL              |                           |                          |

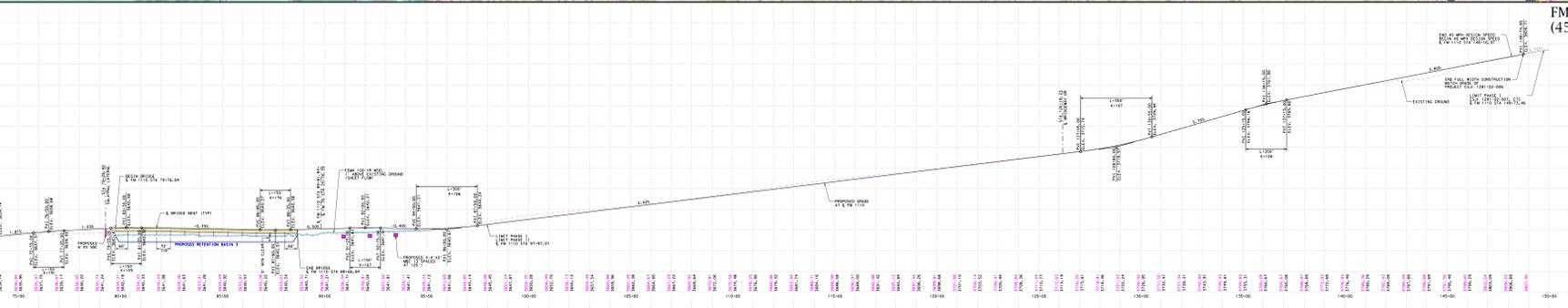
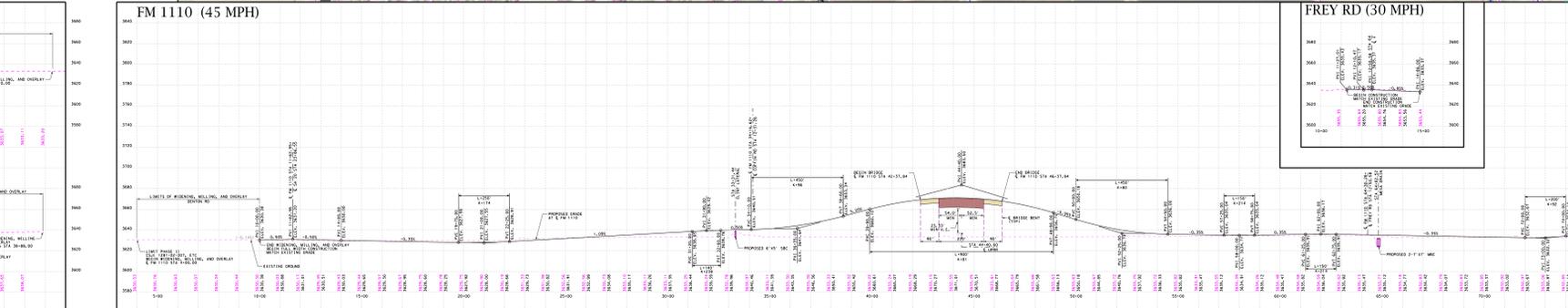
- GENERAL NOTES:**
- PROJECT CONTROL BASED UPON CONTROL POINTS 1 THROUGH 4 ON SHEET 2 OF LRTA INC. PLANS OF PROPOSED RIGHT OF WAY PROJECT, FROM TXDOT CSJ 1281-02-006. ALL PROJECT COORDINATES ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS STATE ZONE 10N 83. MAIN BB. ALL COORDINATES SHOWN ARE SURFACE AND CAN BE CONVERTED TO GRID BY DIVIDING BY A SCALE FACTOR OF 1.000231. UNIT OF MEASURE IS U.S. SURVEY FOOT.
  - ALL DRIVEWAYS IMPACTED BY CONSTRUCTION TO BE RECONSTRUCTED.
  - ROADWAY GEOMETRY AND ROADSIDE ELEMENTS TO BE REFINED DURING PS&E.
  - LOCATIONS WITH SIDESLOPES 2:1 OR STEEPER WILL REQUIRE CONCRETE SLOPE PROTECTION AND PROTECTIVE BARRIER.

**HNTB CORPORATION**  
PRELIMINARY  
NOT INTENDED FOR CONSTRUCTION,  
BIDDING OR PERMIT PURPOSES.  
ENGINEER: SULAIMAN S. ABAIN, P.E.  
SERIAL NO.: 113331  
DATE: 4/28/2017

| FED. RD. DIV. NO. | FEDERAL AID PROJECT | SHEET NO. |
|-------------------|---------------------|-----------|
| 1281              | 02                  | 007, ETC  |



| CURVE NO.                             | STATION         | NORTHING    | EASTING   | BEARING/Delta    | LENGTH (FT) | TANGENT (FT) | RADIUS (FT) |
|---------------------------------------|-----------------|-------------|-----------|------------------|-------------|--------------|-------------|
| FM 1110 (DESIGN SPEED: 45 MPH)        | P.C. 13124.34   | 10586578.86 | 464472.35 | N 37°23'40.56" E |             |              |             |
| FM110-1                               | P.L. 18335.37   | 10586818.02 | 464655.17 | 31°17'15.47" E   | 587.03      | 301.03       | 1075.00     |
|                                       | P.T. 1921.37    | 10587117.34 | 464667.19 | N 6°06'25.10" E  |             |              |             |
|                                       | P.C. 44499.99   | 10589681.33 | 464961.52 | N 6°06'25.10" E  |             |              |             |
| FM110-2                               | P.L. 55403.81   | 10590716.24 | 465072.25 | 60°04'34.04" E   | 1887.35     | 1040.83      | 1800.00     |
|                                       | P.T. 63483.30   | 10591736.54 | 466024.43 | N 68°10'59.13" E |             |              |             |
|                                       | P.C. 84414.87   | 10591955.29 | 467879.31 | N 68°10'59.13" E |             |              |             |
| FM110-3                               | P.L. 85489.47   | 10592025.80 | 468039.03 | 18°27'00.94" L   | 346.17      | 174.60       | 1075.00     |
|                                       | P.T. 87461.04   | 10592143.23 | 468168.24 | N 47°43'58.19" E |             |              |             |
|                                       | P.C. 98431.29   | 10592383.07 | 468960.24 | N 47°43'58.19" E |             |              |             |
| FM110-4                               | P.L. 101222.93  | 10593059.22 | 469176.06 | 5°49'40.00" E    | 582.78      | 291.64       | 5729.58     |
|                                       | P.T. 104114.07  | 10593276.28 | 469370.84 | N 41°54'18.19" E |             |              |             |
|                                       | P.C. 131467.80  | 10593569.46 | 471536.45 | 28°12'00.89" W   | 960.29      | 488.69       | 2100.00     |
| FM110-5                               | P.L. 141228.09  | 10595949.79 | 472184.23 | N 68°06'19.08" E |             |              |             |
| FM 1110 (DESIGN SPEED: 40 MPH)        | P.C. 148116.97  | 10596128.58 | 472629.09 | N 68°06'19.08" E |             |              |             |
| FM110-6                               | P.L. 148491.34  | 10596156.31 | 472698.10 | 8°30'25.08" L    | 148.47      | 74.37        | 1000.00     |
|                                       | P.T. 149465.45  | 10596193.95 | 472762.24 | N 59°35'54.00" E |             |              |             |
| SH 20 (DESIGN SPEED: 50 MPH) NO CURVE |                 |             |           |                  |             |              |             |
| FM 76 (DESIGN SPEED: 50 MPH)          | P.C. 10400.00   | 10591090.63 | 469555.15 | N 39°20'33.51" W | 486.90      | 243.53       | 7900.00     |
|                                       | P.L. 12443.53   | 10591278.96 | 469200.76 | 3°31'52.79" L    |             |              |             |
|                                       | P.R.C. 14486.90 | 10591457.43 | 469035.07 | N 42°52'26.30" W |             |              |             |
|                                       | P.R.C. 14486.90 | 10591457.43 | 469035.07 | N 42°52'26.30" W |             |              |             |
| FM76-1                                | P.L. 1730.43    | 10591635.90 | 468869.37 | 3°31'52.79" W    | 486.90      | 243.53       | 7900.00     |
|                                       | P.T. 19473.81   | 10591824.24 | 468714.99 | N 39°20'33.51" W |             |              |             |
|                                       | P.C. 27104.41   | 10592393.91 | 468248.01 | N 39°20'33.51" W |             |              |             |
| FM76-2                                | P.L. 29478.23   | 10592601.03 | 468078.22 | 3°53'00.00" L    | 535.44      | 267.82       | 7900.00     |
|                                       | P.T. 32445.85   | 10592796.18 | 467894.80 | N 43°13'33.51" W |             |              |             |

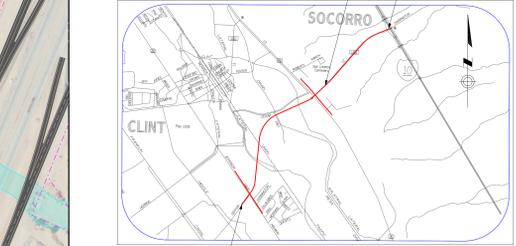


**FM 1110 WIDENING AND REALIGNMENT  
FROM I-10 TO SH 20 (ALAMEDA AVE)**

EL PASO, TEXAS ROLL 1 OF 1

| DATE:      | STATE DISTRICT: | COUNTY: | CONTROL SEC. NO.: | JOB NO.: |
|------------|-----------------|---------|-------------------|----------|
| 4/28/2017  | ELP             | EL PASO | 1281 02           | 007, ETC |
| DATE REV.: | STATE DISTRICT: | COUNTY: | CONTROL SEC. NO.: | JOB NO.: |
| 4/28/2017  | ELP             | EL PASO | 1281 02           | 007, ETC |

| DATE:      | STATE DISTRICT: | COUNTY: | CONTROL SEC. NO.: | JOB NO.: |
|------------|-----------------|---------|-------------------|----------|
| 4/28/2017  | ELP             | EL PASO | 1281 02           | 007, ETC |
| DATE REV.: | STATE DISTRICT: | COUNTY: | CONTROL SEC. NO.: | JOB NO.: |
| 4/28/2017  | ELP             | EL PASO | 1281 02           | 007, ETC |



VICINITY MAP  
EL PASO COUNTY  
NOT TO SCALE

**FUNCTIONAL CLASSIFICATION**

|           |                                     |                           |                          |
|-----------|-------------------------------------|---------------------------|--------------------------|
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| SH 20     | - 50 MPH - URBAN PRINCIPAL ARTERIAL | LIMITS FROM I-10 TO SH 20 |                          |
| FM 76     | - 50 MPH - URBAN MINOR ARTERIAL     |                           |                          |
| CELUM RD  | - 40 MPH - URBAN COLLECTOR          |                           |                          |
| DENTON RD | - 30 MPH - URBAN LOCAL              |                           |                          |

- GENERAL NOTES:**
- PROJECT CONTROL BASED UPON CONTROL POINTS 1 THROUGH 4 ON SHEET 2 OF LRTA INC. PLANS OF PROPOSED RIGHT OF WAY PROJECT, FROM TXDOT CSJ 1281-02-006. ALL PROJECT COORDINATES ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS STATE ZONE 10N 83. MAIN BB. ALL COORDINATES SHOWN ARE SURFACE AND CAN BE CONVERTED TO GRID BY DIVIDING BY A SCALE FACTOR OF 1.000231. UNIT OF MEASURE IS U.S. SURVEY FOOT.
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**HNTB CORPORATION**  
PRELIMINARY  
NOT INTENDED FOR CONSTRUCTION,  
BIDDING OR PERMIT PURPOSES.  
ENGINEER: SULAIMAN S. ABAIN, P.E.  
SERIAL NO.: 113331  
DATE: 4/28/2017

| FED. RD. DIV. NO. | FEDERAL AID PROJECT | SHEET NO. |
|-------------------|---------------------|-----------|
| 1281              | 02                  | 007, ETC  |

## **APPENDIX C: PROJECT PHOTOGRAHS**



1. Looking east on FM 1110, toward curve before I-10 overpass near project begin.



2. From FM 1110, looking west at commercial land uses along the existing facility.



3. Looking southwest at the existing FM 1110 section proposed for widening, near its intersection with I-10.



4. View from north side of FM 1110 toward the potential residential relocation (circled in red) at the corner of FM 76 and Celum Rd.



5. View of cotton field on the northwest corner of Celum Rd. and FM 76.



6. Looking northeast at the existing FM 1110 section proposed for widening, near its intersection with FM 76.



7. Looking southwest at the proposed new location section of the project and along the backyards of the single-family residences represented by noise receiver R3.



8. View looking southeast at commercial buildings located along FM 76.



9. Looking west at noise meter used to measure existing noise levels at Clint High School near the project end.



10. View of irrigation concrete-lined canal located between cotton fields and 975 N. Celum Road.



11. View of adobe farmhouse and farm equipment looking south.



12. View of concrete-lined irrigation canal following along Coffin Road south of Celum Road.

## **APPENDIX D: AGENCY COORDINATION**

**From:** Laura Zebehazy [<mailto:Laura.Zebehazy@tpwd.texas.gov>]  
**Sent:** Friday, June 03, 2016 4:14 PM  
**To:** Joshua Holguin  
**Subject:** RE: TxDOT El Paso: Early TPWD Coordination CSJ: 1281-02-007 FM 1110 Widening & Realignment

Good afternoon, Josh,

I am finalizing my review of the FM 1110 Widening and Realignment project (CSJ 1281-02-007) in El Paso County, and TPWD recommends the following:

- With regard to the rare plants that have the potential to occur within the project area, TPWD recommends that TxDOT survey during the appropriate time to facilitate plant identification in areas with intact native vegetation such as near the intersection with I-10 and in the proposed detention areas. If populations of Comal snakewood, desert night-blooming cereus, sand prickly-pear, sand sacahuista, or Wheeler's spurge are located within the project area, TPWD recommends to either protect those areas from construction impacts or if impacts cannot be avoided, please contact me to assist in facilitating an opportunity to rescue plant propagules or seeds. Also, for any rare plant populations that may be located, please submit data to the TXNDD (you can find more information on how to do that [here](#)). It will also be beneficial to collect a specimen to facilitate positive identification since some of these species can be easily misidentified.
- For the mountain short-horned lizard, TPWD recommends that contractors be advised of potential occurrence in the project area, and to avoid harming the species if encountered. This should include avoiding harvester ant mounds in the selection of Project Specific Locations (PSLs) where feasible.
- For the New Mexico garter snake, TPWD recommends that the contractors be advised of potential occurrence in the project area (specifically along the drainage ditches), and to avoid harming the species if encountered.
- With regards to any potential impacts to western burrowing owls that may occur within or immediately adjacent to the project area, TPWD suggests that TxDOT contact Lois Balin, TPWD Urban Biologist for El Paso, for assistance with any matters concerning this species. Lois has extensive experience with western burrowing owls and has helped other developers when this species has been found on project areas. Please contact her at [lois.balin@tpwd.texas.gov](mailto:lois.balin@tpwd.texas.gov) or 915-774-9603.

Please respond to indicate whether TxDOT will commit to implementing TPWD's recommendations. Also, please let me know if you have any questions.

Sincerely,

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



125 EAST 11TH STREET, AUSTIN, TEXAS 78701-2483 | 512.463.8588 | WWW.TXDOT.GOV

June 17, 2016

RE: CSJ: 1281-02-007; FM 1110, Widening and Realignment, Section 106 Consultation; El Paso County, El Paso District

To: Representatives of Federally-recognized Tribes with Interest in this Project Area

The above referenced transportation project is being considered for construction by the Federal Highway Administration (FHWA) and the Texas Department of Transportation (TxDOT). Environmental studies are in the process of being conducted for this project. 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.

The purpose of this letter is to contact you in order to consult with your Tribe pursuant to stipulations of 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). The project is located in an area that is of interest to your Tribe.

#### *Undertaking Description*

TxDOT's El Paso District is proposing to widen and realign Farm to Market Road (FM) 1110 in El Paso County, Texas (Exhibit A).

The proposed project would widen the existing FM 1110 roadway between IH 10 and FM76; south of FM 76 to SH 20, the project would realign FM 1110 with the construction of a new location roadway (presently the FM 1110 alignment south of FM 76 is two miles to the west) (Exhibits A and B). The proposed project would also include widening at major intersections to accommodate turn lane improvements, culverts at drain crossings, an overpass at the Union Pacific Railroad (UPRR) tracks, and a bridge over the floodplain near FM 76. Widening of the existing segment of FM 1110 would take place entirely within existing ROW, but new ROW would be required for the new location roadway and for seven proposed retention ponds. Some construction easement would be required for driveway improvements that cross TxDOT ROW, and for work within the UPRR and El Paso County Water Improvement District property.

#### *Area of Potential Effects*

The project's area of potential effects (APE) comprises the following area.

- The project limits extend from IH 10 south to the intersection of State Highway (SH) 20 with Denton Road, partially along existing FM 1110. Between FM 76 and the southern terminus

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

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at SH 20 the project would construct a new location roadway for which there is no existing ROW. The total project alignment is 2.76 miles.

- The existing right of way (between IH 10 and FM 76) varies between 128 and 130 feet in width; proposed ROW width would be 124 feet.
- The latitude and longitude for the end points of the project are:
  - Begin latitude: +31.58866700      Begin longitude: -106.19464400
  - End latitude: +31.570508      End longitude: -106.221099
- The existing right of way comprises an area estimated at 60 acres.
- About 40.42 acres of new ROW would be required for the new location alignment, for seven proposed retention ponds, and at the FM 1110 intersections with FM 76 and SH 20.
- About 1.97 acres of construction easement would be required for driveway improvements that cross TxDOT ROW, and for work within the UPRR and El Paso County Water Improvement District property.
- Typical depth of impacts is estimated at two feet, with maximum depth of impacts reaching 50 feet for proposed bridge structures.
- For the purposes of this cultural resources review, the APE also includes an additional 50-foot area around the previously-described horizontal dimensions to account for potential alterations to the proposed APE included in the final project design. Consultation would be continued if potential impacts extend beyond this additional area, based on the final design.

#### *Identification Efforts*

For this project, TxDOT has conducted a desktop-based study of available background information. Based on the results of previous archeological and architectural investigations, the APE has a low probability of encountering intact cultural deposits. Widening of the existing north segment will take place entirely within existing ROW that has been heavily disturbed by previous roadway construction. The proposed new location APE is within the floodplain of the Rio Grande, which has been heavily impacted by decades of agricultural development. The majority of the proposed APE traverses agricultural fields in the floodplain that have been subjected to deep plowing activities (with impacts up to 12 feet). As a result of these land use practices any cultural deposits potentially present in the new location ROW will be destroyed or out of context, and generally lacking in integrity. In summary:

- Much of the sediments within the APE have been previously disturbed by previous roadway construction and modern land use practices. These activities would have destroyed more fragile archeological materials and would have moved more durable materials from their original location. Any sites that may occur within the APE would likely lack sufficient integrity of location, association, and materials to be able to address important questions of history and prehistory (36 CFR 60.4).

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- Based on the foregoing factors, there is little to no reason to expect archeological historic properties (36 CFR 800.16(l)) to be located within the APE.

#### *Findings and Recommendations*

Based on the above, TxDOT proposes the following findings and recommendations:

- a desktop review has found that no archeological historic properties (36 CFR 800.16(l)) would be affected by this proposed undertaking and the proposed project may proceed to construction;
- that a zone of 50 feet beyond the horizontal project limits be considered as part of the cultural resources evaluation; and
- if any future changes to the project APE extend beyond the additional 50-foot zone or if archeological deposits are discovered, your Tribe would then be contacted for further consultation.

According to our procedures and agreements currently in place regarding consultation under Section 106 of the National Historic Preservation Act, we are writing to request your comments on historic properties of cultural or religious significance to your Tribe that may be affected by the proposed project APE and the area within the above defined buffer. Any comments you may have on the TxDOT findings and recommendations should also be provided. Please provide your comments within 30 days of receipt of this letter. Any comments provided after that time will be addressed to the fullest extent possible. If you do not object that the proposed findings and recommendations are appropriate, please sign below to indicate your concurrence. In the event that further work discloses the presence of archeological deposits, we will contact your Tribe to continue consultation.

Thank you for your attention to this matter. If you have questions, please contact Kevin Hanselka (TxDOT Archeologist) at 512/416-2639 (email: Kevin.Hanselka@txdot.gov) or Chantal McKenzie at 512/416-2770 (email: Chantal.McKenzie@txdot.gov). When replying to this correspondence by US Mail, please ensure that the envelope address includes reference to the Archeological Studies Branch, Environmental Affairs Division.

Sincerely,



Scott Pletka, Deputy Section Director  
Environmental Affairs Division

---

Concurrence by:

Date:

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*An Equal Opportunity Employer*

CSJ: 1281-02-007, El Paso County

4

June 17, 2016

Enclosure

cc w/ enclosure: ENV-ARCH ECOS

**OUR GOALS**

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Exhibit B-2. Project schematic, central section.

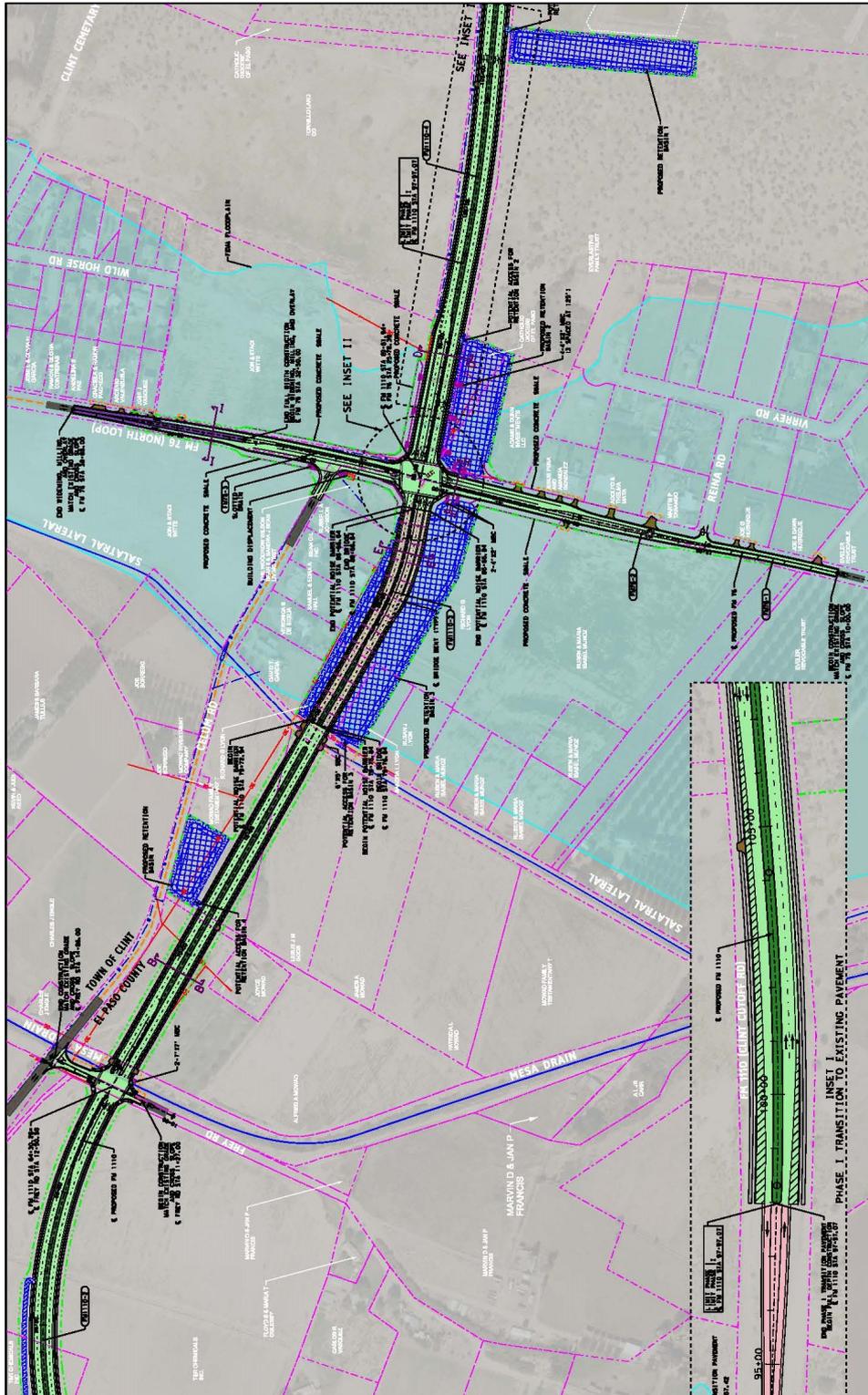
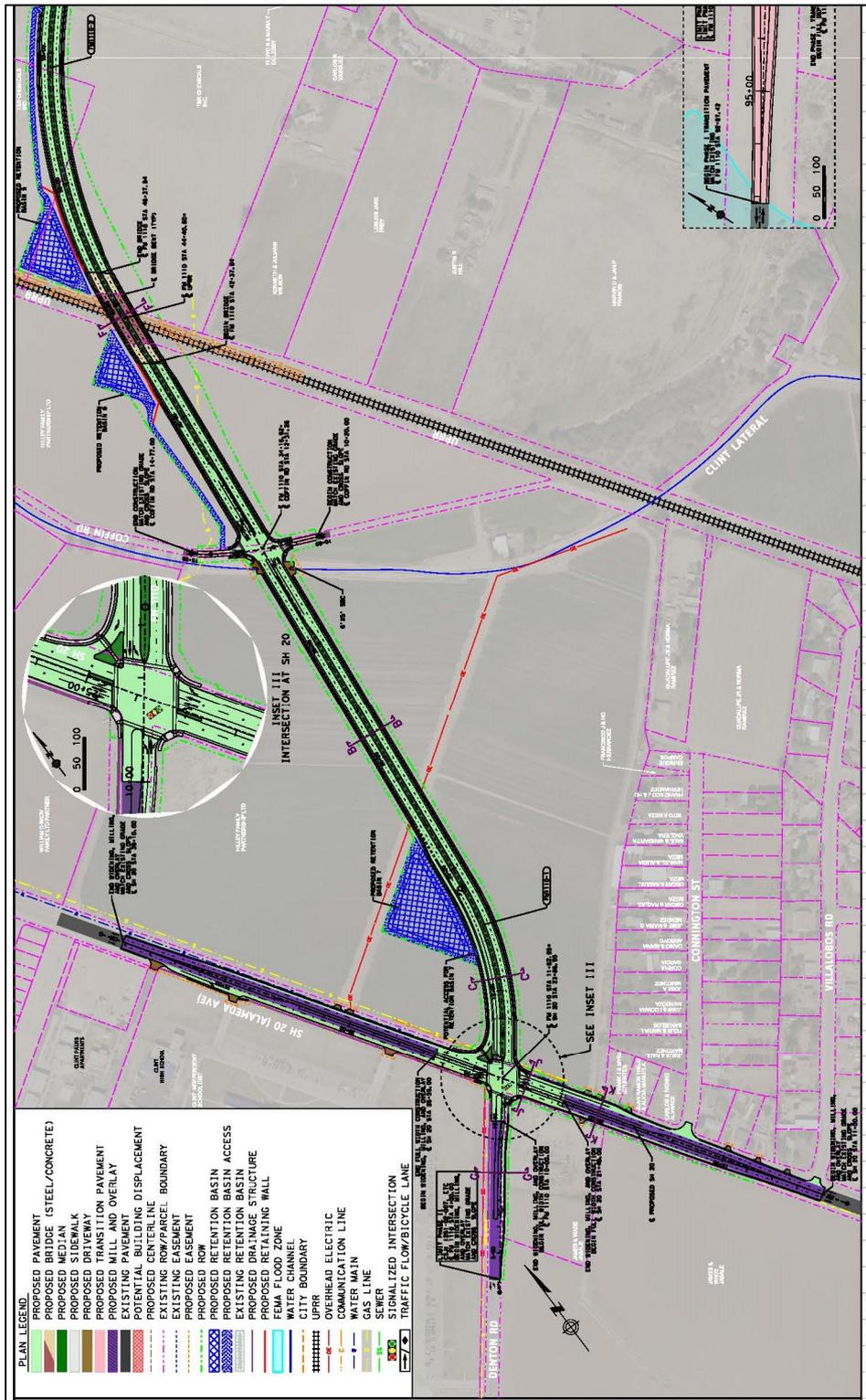


Exhibit B-3. Project schematic, south section.





# MEMO

July 21, 2016

**To:** 850 File, Various Road Projects, Various CSJs, Various Districts

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

**Subject:** Internal review under the First Amended 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 the projects reviewed internally by qualified TxDOT archeologists from 7/14/16 to 7/20/16. 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   |
|-------------|----------|---------|---------|----------------------------------|------------------|
| 1281-02-007 | El Paso  | El Paso | FM 1110 | Highway Widening and Realignment | Background Study |
| 2121-03-154 | El Paso  | El Paso | I-10    | Highway Widening                 | Background Study |
| 0320-02-036 | Waco     | Bell    | SH 95   | Install Passing Lanes            | Background Study |
| 0913-29-035 | Yoakum   | Lavaca  | CR 260  | Bridge Replacement               | Background Study |
|             |          |         |         |                                  |                  |
|             |          |         |         |                                  |                  |
|             |          |         |         |                                  |                  |
|             |          |         |         |                                  |                  |

Signature \_\_\_\_\_

Date: 07 / 21 / 2016

For TxDOT

cc: ECOS Data Entry; PD; ENV\_ARC: PA File

Table Template for Weekly List Memo.doc

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

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[Back To List](#)

[Properties](#) ★ [Details](#)

**Archeology Background Study Details**

**Documentation of Project Setting**

- 1. Does the project conform to a type agreed (per Appendix 3 of PA-TU) to pose no potential to affect historic properties? No ▾
- 2. Geologic Atlas of Texas map or PALM or soils maps examined. Yes ▾
- 3. Texas Archeological Sites Atlas map examined for sites within one kilometer of the project area. Yes ▾
- 4. Historical information examined. Check all that apply. Yes ▾

**Resources Used During the Initial Assessment**

- Topographic map(s)  Soil map(s)  Road map(s)  As-built plans  Other

If other selected, please identify:

Project has been subject to a previous background study dated 5-31-2016 in ECOS, which was based entirely on a background review compiled by HNTB ("2016-06-03 10\_38\_27\_FM 1110-Archeological Resources\_Backgr Study\_Revised\_06-02-

- 5. Aerial images or project area images (e.g., Google Maps with Street View) examined. Yes ▾

**Analysis of Project Setting**

- 6. Have archeological sites been identified within the area of potential effects (APE) or within 150 feet of the APE? No ▾

Comments:

- 7. Do cemeteries occur within the APE or within 25 feet of the APE? No ▾

Comments:

- 8. Do Holocene-age deposits mapped on Geologic Atlas of Texas or PALM or soils maps occur within the APE? Yes ▾

Comments:

Part of the APE spans the Rio Grande floodplain; this setting has been heavily altered by recent historic farming practices.

- 9. Does the APE cross a waterway with the potential for shipwrecks? No ▾

Comments:

- 10. Is the APE within 500 feet of a historically reliable water source? No ▾

Comments:

The APE spans several artificial canals, but no major drainages.

- 11. Does the APE include a wetland or frequently flooded area? No ▾

Comments:

- 12. Does the Atlas map or other information (enter comment) show that occupation typically occurs on particular landform or landforms that the APE does not contain? No ▾

Comments:

- 13. Have all settings that may have been favorable for occupation been subject to previous disturbances? Check all that apply. Yes ▾

**Previous Disturbances Identified During the Initial Assessment**

- Previous road construction and maintenance  Installation of utilities
- Modern land use practices like plowing and brush clearing  Urban and/or suburban development
- Erosion and scouring by natural processes  Other

If other selected, please identify:

Existing ROW is heavily disturbed by FM 1110 roadway construction; new location APE spans agricultural land subjected for decades to "deep plowing," which impacts earth up to 12 feet (pg. 5 in background study in ECOS "2016-06-03

**14. Have the majority of the settings with high potential for archeological sites within the APE been previously surveyed?** No

**Comments:**

---

**Conclusions**

**15. Have previous investigations covered a sufficient proportion of the APE to conclude that the APE is unlikely to contain archeological sites or cemeteries?** No

**Comments:**

---

**16. Has the APE been sufficiently disturbed that any prehistoric archeological sites would lack the integrity to address important questions? Any such sites would lack integrity of (check all that apply):** Yes

**Integrity Issues Identified During the Initial Assessment**

Location  Design  Materials  Association  Other

**If other selected, please identify:**

---

**17. Has the APE been sufficiently disturbed that any historic-era archeological deposits would lack sufficient integrity to address important questions? Any such sites would lack integrity of (check all that apply):** Yes

**Integrity Issues Identified During the Initial Assessment**

Location  Design  Materials  Association  Other

**If other selected, please identify:**

---

**18. Does historic research show that historic-era archeological deposits, cemeteries, and shipwrecks are not likely to occur within the APE?** Yes

**Comments:**

---

**19. Does the project area occur in a setting that was not conducive to human occupation and activity?** No

**Comments:**

---

**20. Will the project adversely affect archeological sites or cemeteries?** No

**Comments:**

Project has been subject to a previous background study dated 5-31-2016 in ECOS, which was based entirely on a background review compiled by HNTB ("2016-06-03 10\_38\_27\_FM 1110-Archeological Resources\_Backgr Study\_Revised\_06-02-

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**Last Updated By:** Kevin Hanselka **Last Updated Date:** 06/15/2016 01:57:20



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October 31, 2016

El Paso County Historical Commission  
Mr. Bernie Sargent  
5326 Rockwood Road  
El Paso, TX 79932

**SECTION 106 REVIEW: FM 1110 Widening, Clint, El Paso County, El Paso District  
CSJ: 1281-02-007**

Dear Mr. Sargent:

We ask that the El Paso County Historical Commission (CHC) comment on area historic resources for the above referenced project. If your CHC does not contact the Texas Department of Transportation (TxDOT) by November 30, 2016 we will assume that the CHC has no comment.

The TxDOT El Paso District is proposing to widen and realign FM 1110 between IH 10 and SH 20 in Clint, El Paso County, Texas.<sup>1</sup> Environmental issues, including the identification of historic properties, are scheduled to be resolved by February 2017. When resolved, the project will be cleared for construction. Please see the attached map for the proposed project location.

TxDOT conducted two historic resources surveys of the project area. We studied in-depth the potential for a rural historic district on properties located between Frey Road and SH 20 (Alameda Avenue). TxDOT did not find a rural historic district present within the project location. I would be happy to provide you with copies of these technical survey reports, upon your request. In addition to these surveys, we request the CHC's help to locate historic properties within our project area. Historic properties are generally those that are 50 years old that are listed in, or eligible to be listed in, the National Register of Historic Places. To date, our research identified the following historic properties within the project area:

- Three components of the El Paso County Water Improvement District Number 1, which are listed in the National Register of Historic Places:
  - Salitral Lateral Canal
  - Mesa Drain
  - Clint Lateral Canal

**Does CHC agree with our findings--**are the above properties the only known historic resources in the project area? If so, please sign where indicated below and return this document to TxDOT by November 30, 2016.

**Does CHC have any additional information about these or other historic resources--**pre-1975 historic buildings, structures, objects, cemeteries or other historic resources that may be important locally within the project area? If so, contact TxDOT via letter, e-mail, or phone call by November 30, 2016.

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Does CHC have general comments or questions about how our project could impact the historic properties in the project area? If so, contact TxDOT via letter, e-mail, or phone call November 30, 2016.

Direct CHC responses and questions to Rebekah Dobrasko (Historic Preservation Specialist) at (512) 416-2570 (email: rebekah.dobrasko@txdot.gov). When replying to this correspondence by US Mail, please ensure that the envelope address includes reference to Environmental Affairs Division, Attn: Rebekah Dobrasko.

Thank you for your assistance in this project.

Sincerely,

*Rebekah Dobrasko*

Rebekah Dobrasko  
Historic Preservation Specialist  
TxDOT Environmental Affairs Division

through: Bruce Jensen, CRM Director, 

This letter and its enclosures serve to initiate consultation with the El Paso CHC on historic resource identification efforts for the proposed project. Please concur with our findings of historic properties listed above or provide other comments below.

\_\_\_\_\_  
El Paso County Historical Commission Chairperson

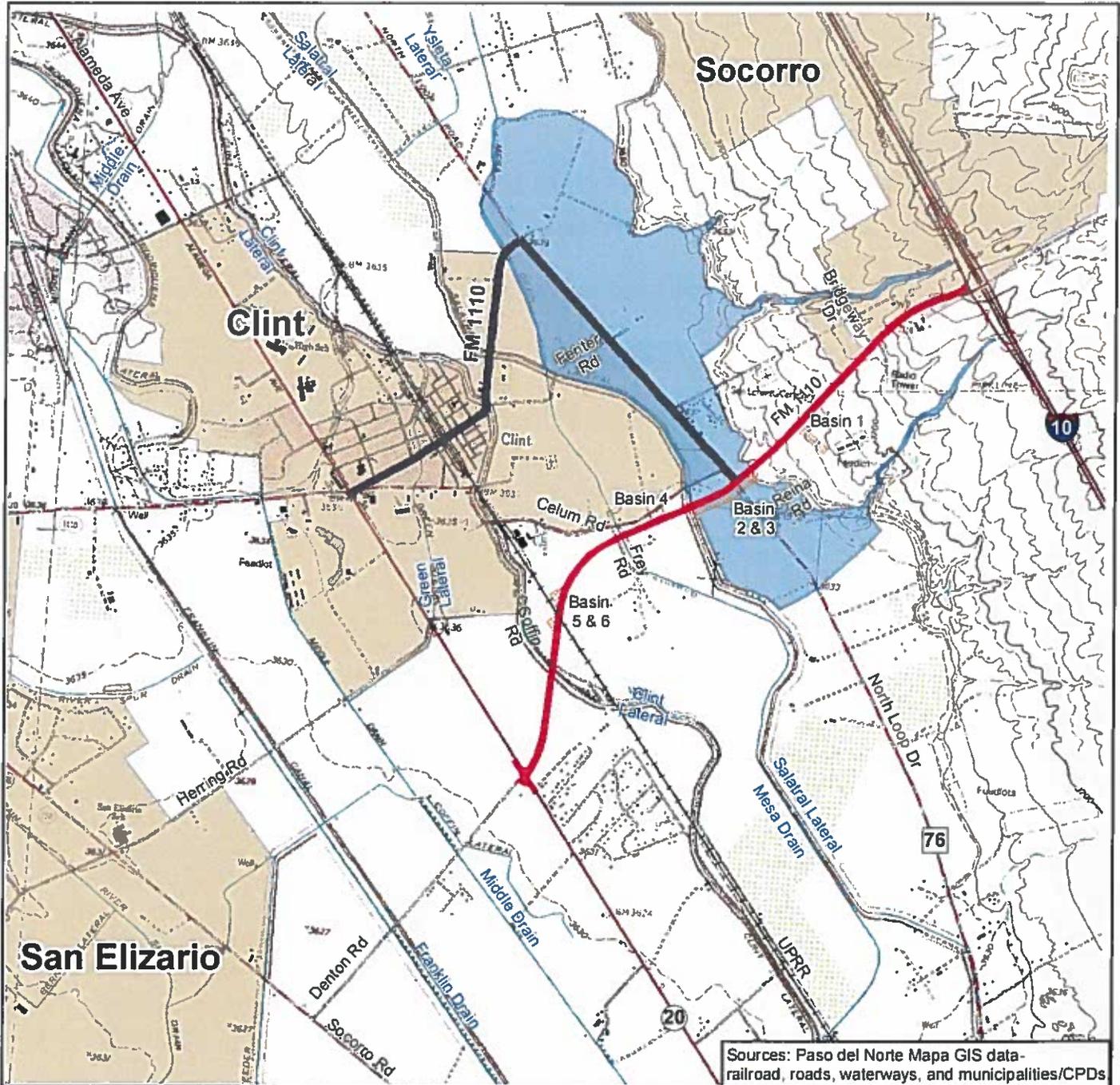
\_\_\_\_\_  
Date:

Contact TxDOT via letter, e-mail, or phone call using information provided in the letter above. If you'd prefer, use the comment section below to share information and return signed copy to TxDOT.

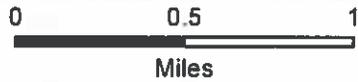
Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

<sup>1</sup> 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. TxDOT's regulatory role for this project is that of the Federal action agency.



Sources: Paso del Norte Mapa GIS data-railroad, roads, waterways, and municipalities/CPDs



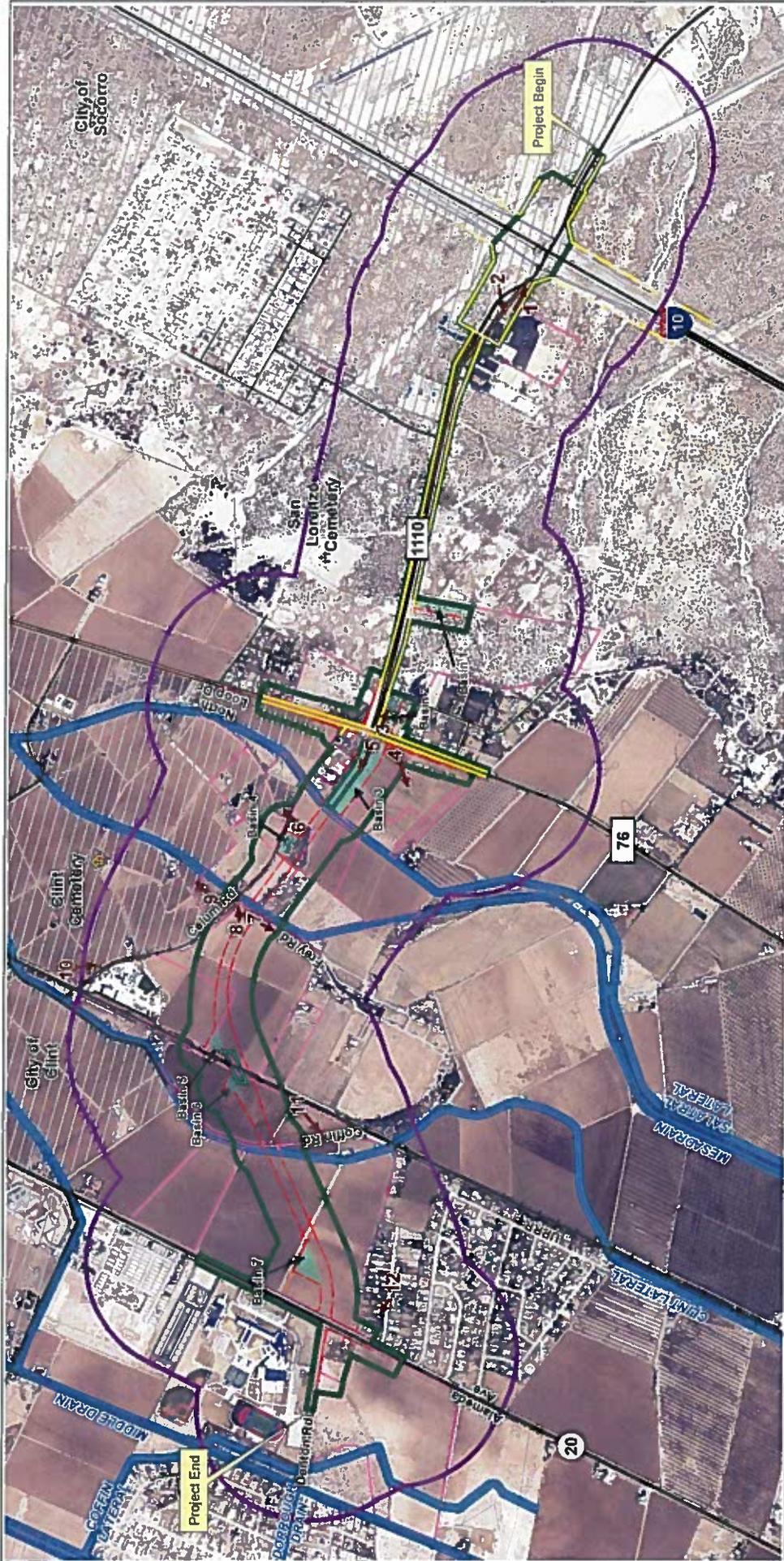
**LEGEND**

- Proposed Project
- Existing FM 1110
- Proposed Retention Basin
- Municipality
- 100-Yr FEMA Flood Zone



**EXHIBIT 1  
PROJECT LOCATION MAP**

FM 1110  
Widening and Realignment  
From I-10 to SH 20  
  
CSJs 1281-02-007 and 1281-01-017  
Historic PCR  
  
El Paso County, Texas



**EXHIBIT 2 - APE MAP**

FM 1110 Realignment and Widening  
 FM 1110 from I-10 to SH 20  
 CSJs 1281-02-007 and 1281-01-017  
 El Paso County, Texas

**LEGEND**

- Study Area
- Area of Potential Effect
- Existing ROW
- Proposed ROW
- Proposed Permanent Easement
- Proposed Retention Basin
- Proposed Bridge
- Parcel Impacted by Proposed ROW
- Existing FM 1110
- City Limits
- Major Arterial
- Local Road
- Union Pacific Railroad
- Cemetery
- NRHP Listed EPCWID#1 Feature
- Project Photograph

Scale: 1,000 500 0 1,000 Feet

Note: Based on March 2016 Schematic Plans

EXHIBIT 6 - Representative Photographs Taken August 7, 2014

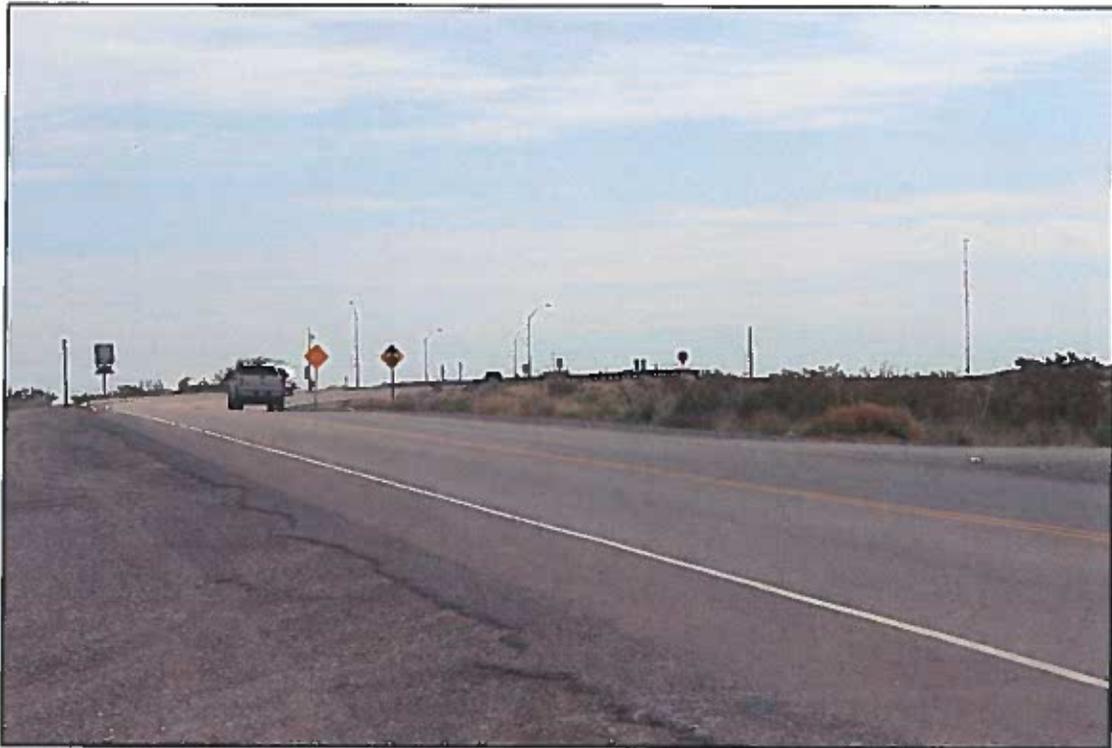


Photo 1 – Existing FM 1110, view facing east toward overpass over I-10.



Photo 2 – Existing FM 1110 near I-10, view facing southwest.



**Photo 3 – Buildings on the southeast corner of FM 76 and existing FM 1110 (site of proposed Basin 2), view facing northeast.**



**Photo 4 – Farm buildings on land southwest of the "T" intersection of Existing FM1110 and FM 76, view facing southwest. The buildings are on a parcel outside the APE.**

EXHIBIT 6 - Representative Photographs Taken August 7, 2014



**Photo 5 – Canal irrigating a field southwest of the “T” intersection of existing FM1110 and FM 76 where Basin 3 is proposed, view facing southwest. The utility poles are along the back yards of existing houses to the right of the intersection. Farmstead east of Cellum Road is in the background.**



**Photo 6 –House at 975 Celum Road, west of the Salatral Lateral, view facing north northeast.**



**Photo 7 – Francis Farm located on Frey Road with associated building on a parcel south of the proposed project APE, view facing south.**

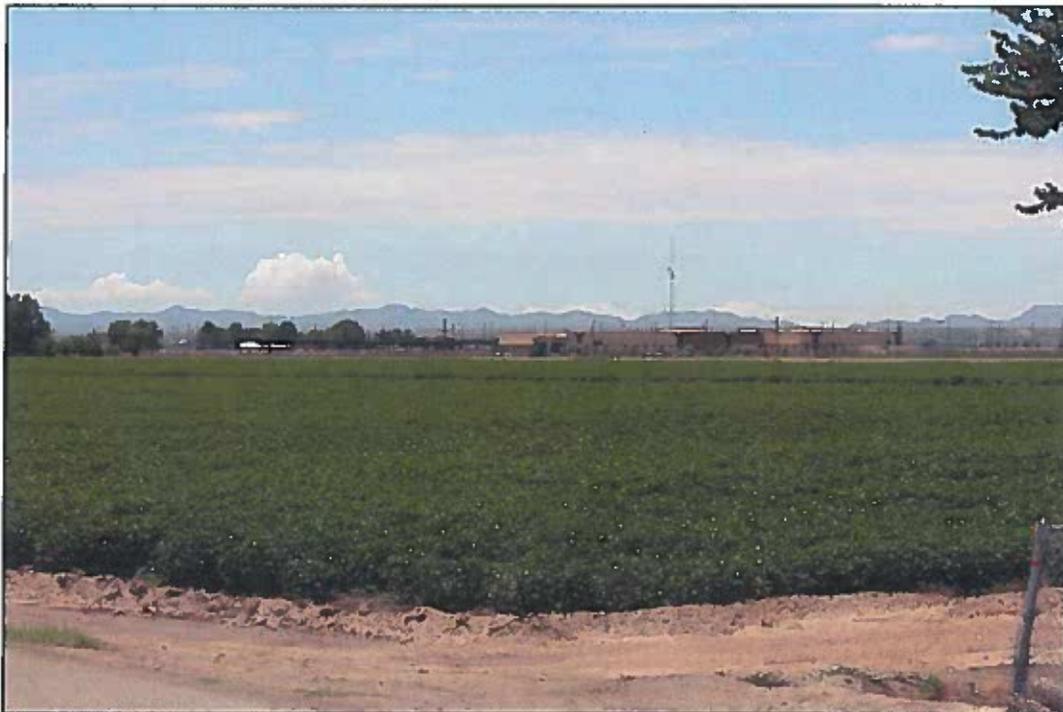


**Photo 8 – House located northeast of the intersection of Frey and Celum Roads within the APE, view facing northeast.**

EXHIBIT 6 - Representative Photographs Taken August 7, 2014



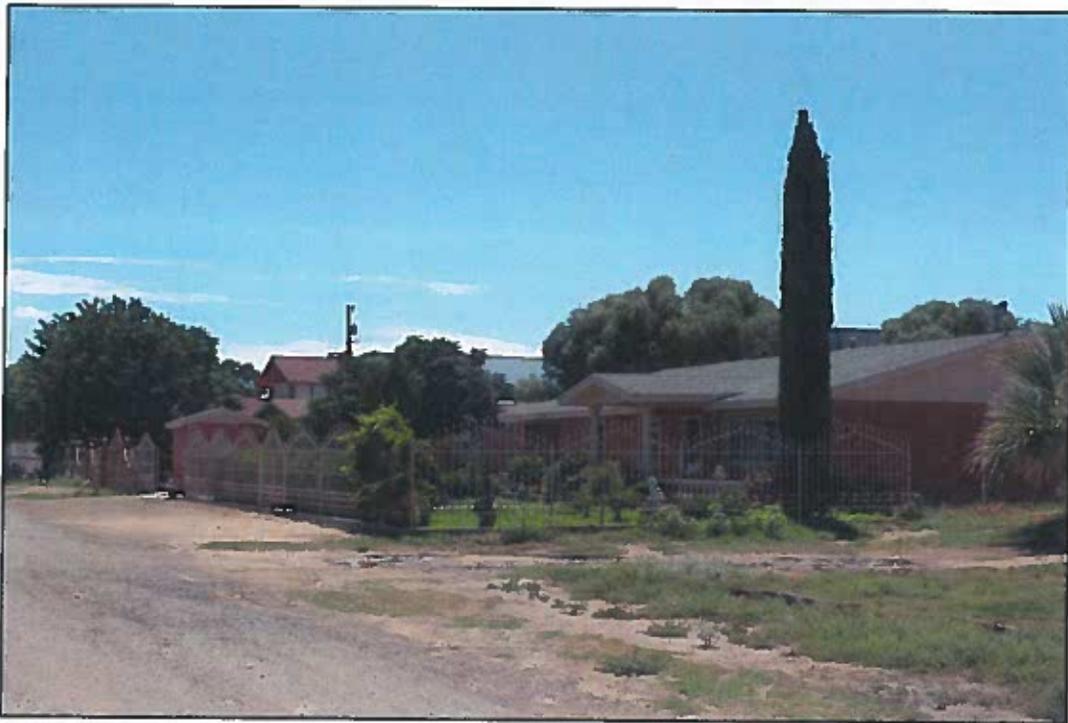
**Photo 9** – Buildings northwest of Celum Road and Frey Road located on a parcel just outside of APE, view facing north.



**Photo 10** – Cotton field near Coffin and Celum Roads with the U.S. Customs and Border Patrol Facility in the background, view facing southwest.



**Photo 11 – Farm house off Coffin Road east of proposed alignment between the Clint Lateral Canal and the Union Pacific Railroad tracks, view facing south.**



**Photo 12 – Houses on Connington Street in Morning Glory neighborhood, view facing southwest near the southwest project limit.**



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October 31, 2016

El Paso County Historical Society  
Mr. Jim Fashing  
603 West Yandell  
El Paso, TX 79902

**SECTION 106 REVIEW: FM 1110 Widening, Clint, El Paso County, El Paso District  
CSJ: 1281-02-007**

Dear Mr. Fashing:

We ask that the El Paso County Historical Society comment on area historic resources for the above referenced project. If you do not contact the Texas Department of Transportation (TxDOT) by November 30, 2016 we will assume that the Historical Society has no comment.

The TxDOT El Paso District is proposing to widen and realign FM 1110 between IH 10 and SH 20 in Clint, El Paso County, Texas.<sup>1</sup> Environmental issues, including the identification of historic properties, are scheduled to be resolved by February 2017. When resolved, the project will be cleared for construction. Please see the attached map for the proposed project location.

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**Does the Historical Society agree with our findings--are the above properties the only known historic resources in the project area? If so, please sign where indicated below and return this document to TxDOT by November 30, 2016.**

**Does the Historical Society have any additional information about these or other historic resources--pre-1975 historic buildings, structures, objects, cemeteries or other historic resources that may be important locally within the project area? If so, contact TxDOT via letter, e-mail, or phone call by November 30, 2016.**

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Does the Historical Society have general comments or questions about how our project could impact the historic properties in the project area? If so, contact TxDOT via letter, e-mail, or phone call November 30, 2016.

Direct responses and questions to Rebekah Dobrasko (Historic Preservation Specialist) at (512) 416-2570 (email: rebekah.dobrasko@txdot.gov). When replying to this correspondence by US Mail, please ensure that the envelope address includes reference to Environmental Affairs Division, Attn: Rebekah Dobrasko.

Thank you for your assistance in this project.

Sincerely,

*Rebekah Dobrasko*

Rebekah Dobrasko  
Historic Preservation Specialist  
TxDOT Environmental Affairs Division

through: Bruce Jensen, CRM Director, *[Signature]*

This letter and its enclosures serve to initiate consultation with the El Paso CHC on historic resource identification efforts for the proposed project. Please concur with our findings of historic properties listed above or provide other comments below.

\_\_\_\_\_  
El Paso Historical Society President

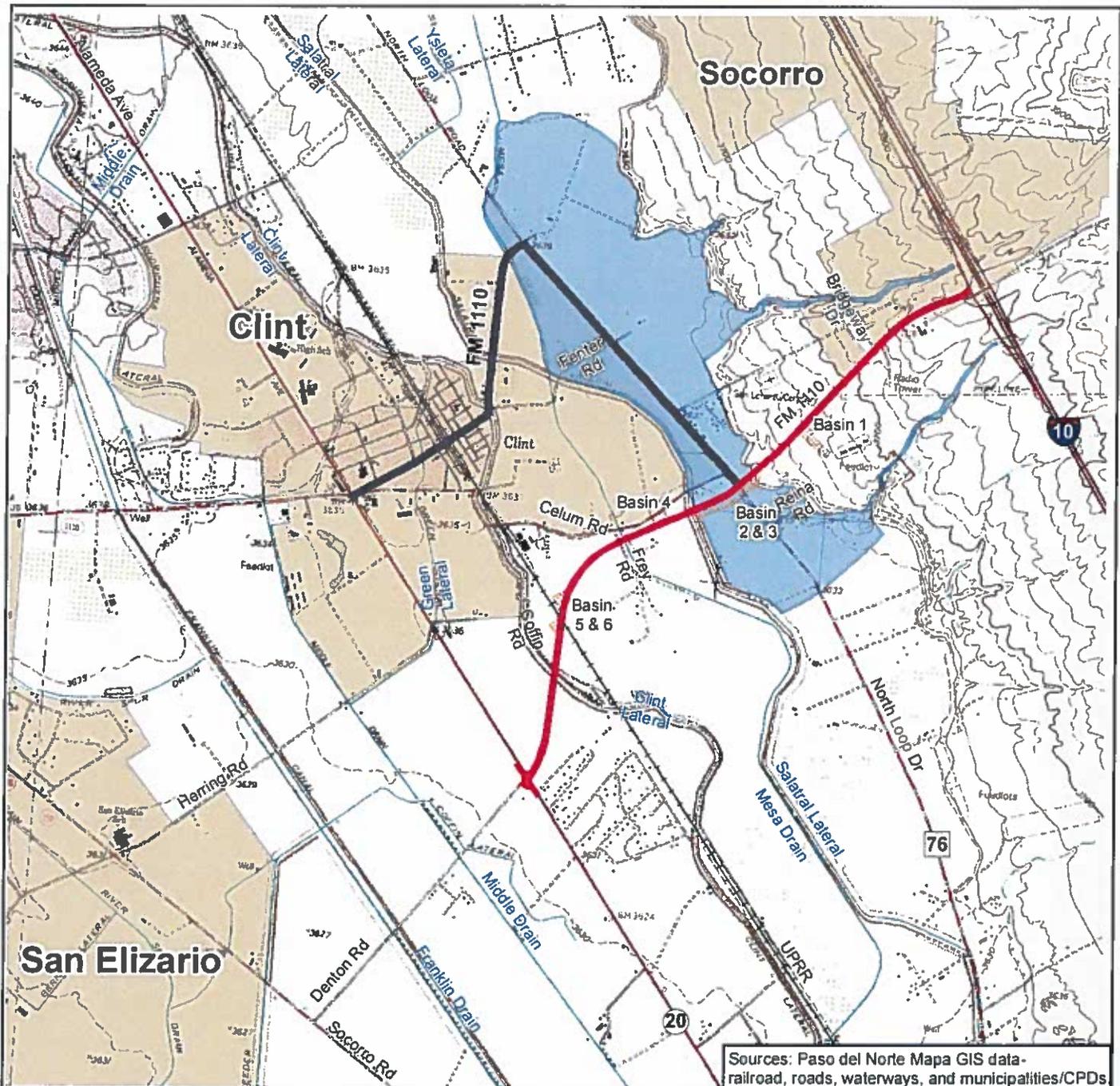
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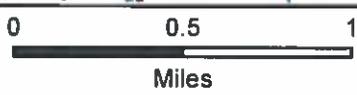
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\_\_\_\_\_  
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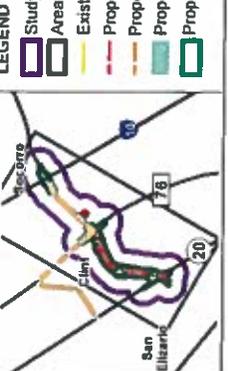
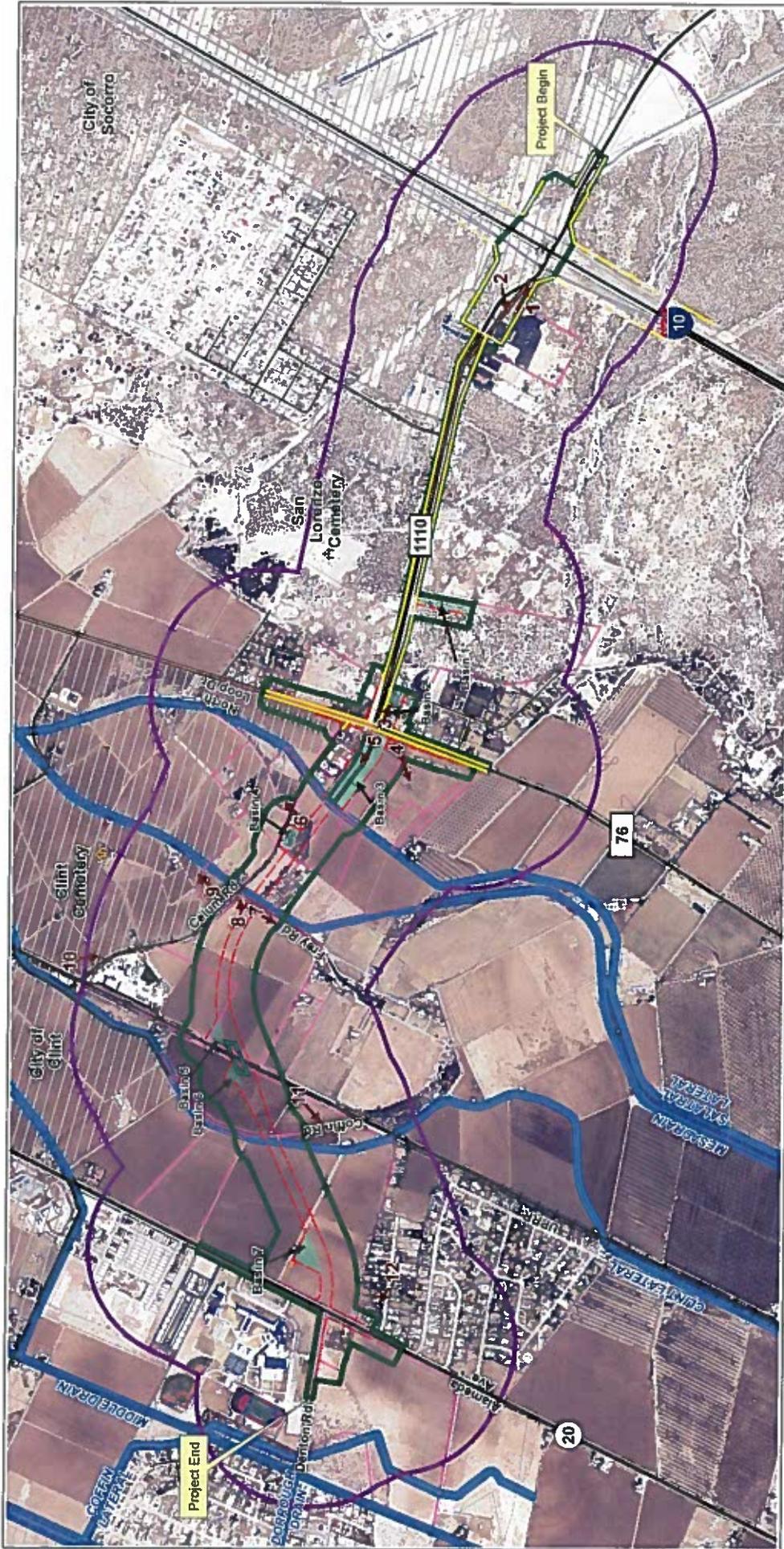
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- Proposed Project
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FM 1110  
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From I-10 to SH 20  
  
CSJs 1281-02-007 and 1281-01-017  
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**LEGEND**

- Study Area
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1,000 500 0 1,000  
Feet

Note: Based on March 2016 Schematic Plans

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FM 1110 Realignment and Widening  
 FM 1110 from I-10 to SH 20  
 CSJs 1281-02-007 and 1281-01-017

El Paso County, Texas

EXHIBIT 6 - Representative Photographs Taken August 7, 2014

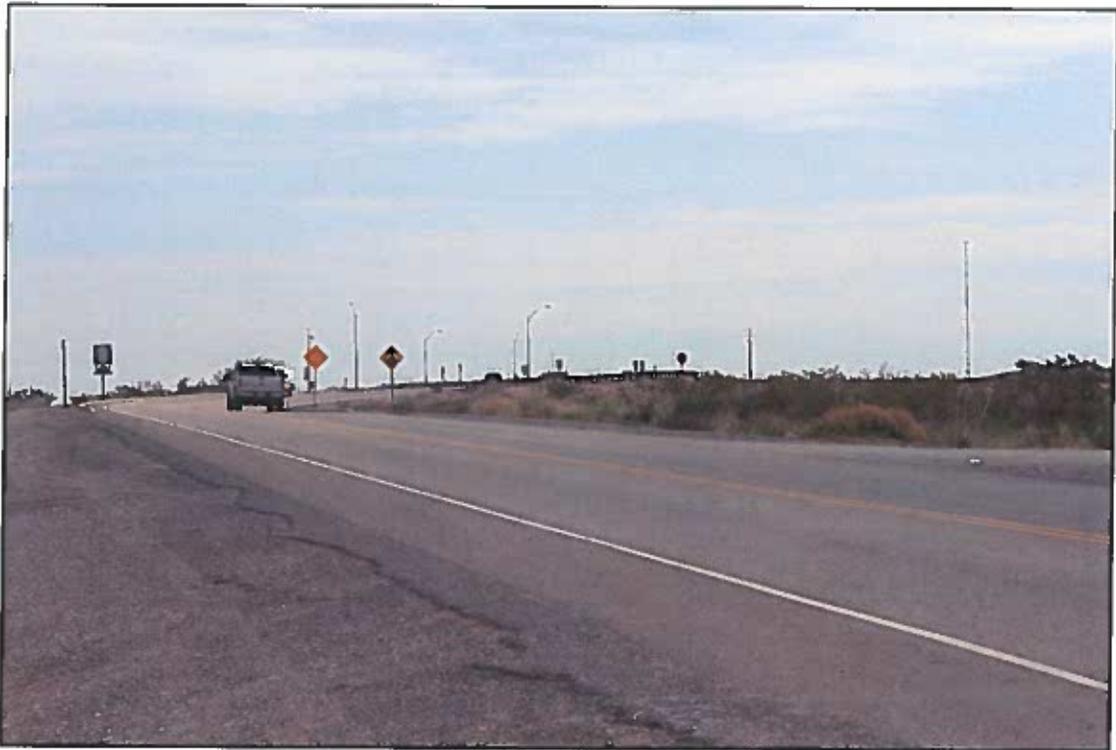


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EXHIBIT 6 - Representative Photographs Taken August 7, 2014



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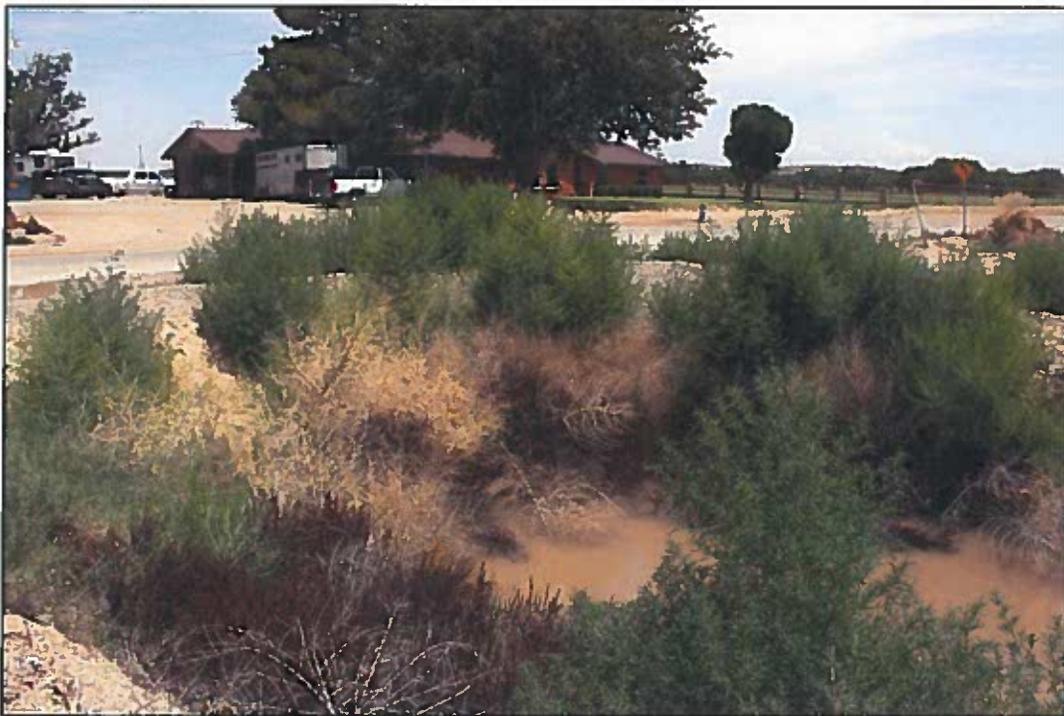


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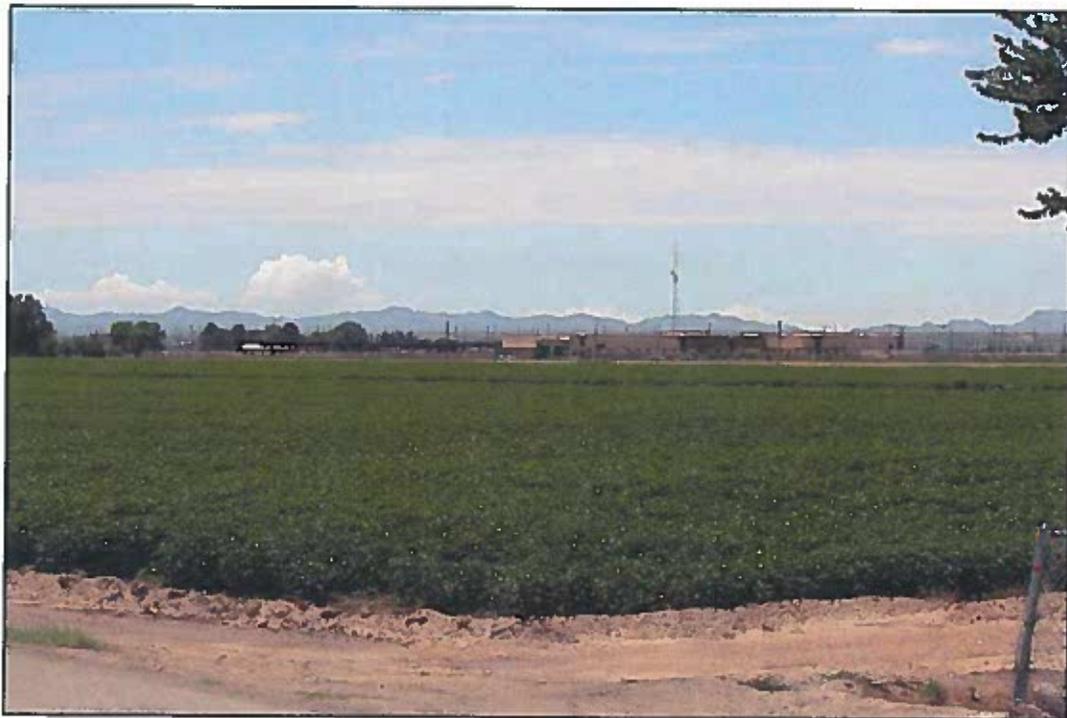


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**Photo 12 – Houses on Connington Street in Morning Glory neighborhood, view facing southwest near the southwest project limit.**



revd-12/7/16

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December 2, 2016

**SECTION 106 REVIEW: DETERMINATION OF NO ADVERSE EFFECT**

**SECTION 4(f) REVIEW: NOTIFICATION OF INTENT TO RENDER *DE MINIMIS* SECTION 4(f) FINDING**

District: El Paso

County: El Paso

CSJ#: 1281-02-007, 1281-01-017

Highway: FM 1110

Project Limits: From IH 10 to SH 20

Section 4(f) Property: El Paso Water Improvement District #1

Ms. Linda Henderson  
History Programs  
Texas Historical Commission  
Austin, Texas 78711

Dear Ms. Henderson:

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. As a consequence of these agreements, TxDOT's regulatory role for this project is that of the Federal action agency. In accordance with 36 CFR 800 and our Section 106 Programmatic Agreement for Transportation Undertakings, this letter initiates Section 106 consultation.

**Project Description**

TxDOT proposes to widen and improve FM 1110 from IH 10 to SH 20 in Clint, El Paso County, Texas. The proposed project would be constructed in phases. Phase I consists of widening FM 1110 between IH 10 and FM 76 (1.1 miles) and Phase II consists of realigning FM 1110 between FM 76 and SH 20 on a new location (1.7 miles). The proposed project will consist of four 12-foot travel lanes, and 18-foot raised median, 5-foot bicycle lanes, and 6-foot sidewalks. The proposed project will include improvements to the intersections at FM 76 and SH 20, an overpass to cross railroad tracks, and a bridge over the floodplains near FM 76.

In addition to these improvements, the proposed new location portion of the project will cross three components of the El Paso Water Improvement District Number 1 (EPWID1). TxDOT will obtain license agreements for approximately 1.21 acres to install concrete culverts along the Salitral Lateral Canal, the Mesa Drain, and the Clint Lateral Canal (see Exhibits 2 and 3 in the Report for Historical Studies by HNTB Corporation).

Overall the project requires approximately 40.02 acres of new right-of-way (ROW), approximately 0.53 acre of temporary construction easement, and 1.21 acres of license

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agreements within the boundaries of the EPWID1. The project has a customized APE. The APE on the first phase of the project is 150 feet from the proposed new ROW along the existing FM 1110 alignment. The APE on the second phase of the project is 300 feet from the proposed new ROW along

### **Determination of Eligibility**

TxDOT performed a search of the National Register of Historic Places (NRHP), the State Antiquities Landmarks (SAL), Recorded Texas Historic Landmarks (RTHL), and TxDOT project files to identify historic properties. TxDOT historians also conducted a reconnaissance survey of the project's APE as well as an intensive survey on three agricultural parcels. TxDOT identified the following historic properties in the APE:

#### **El Paso Water Improvement District Number 1:**

The EPWID1 is a countywide irrigation system listed in the National Register of Historic Places. There are three contributing components of this system within the project's APE:

- Clint Lateral Canal—designed to carry water from the main irrigation canal to ditches that serve the agricultural fields
- Salitral Lateral Canal—designed to carry water from the main irrigation canal to ditches that serve the agricultural fields
- Mesa Drain—designed to carry water away from fields as needed due to rain or other conditions

### **Consultation with Other Parties**

TxDOT contacted the El Paso County Historical Commission and the El Paso County Historical Society regarding this project and our historic property identification efforts. TxDOT did not receive any response from either organization.

### **Determination of Effects**

- Direct Effect: The project consists of constructing three concrete box culverts to allow for crossings at each drain and canal. The irrigation features will continue to serve in the same capacity, and there will not be a change to the use or function of the structures. Additionally, the wingwalls and abutments will meet the EPWID1 standards and would not constitute a major alteration to the banks of the canals or drain. The purpose of the canals and drain to deliver water would be unaffected. This proposed project would not create a noticeable visible change to the overall system's character-defining features, and would not adversely affect the system's integrity of location, setting, feeling, association, design, workmanship, or materials. The function of the EPWID1 will not be impaired, nor will it cease. Therefore, these minor changes pose **no adverse effect** as the property would still possess its significance following completion of the project.
- Indirect Effects: Project activities pose no indirect effects on the EPWID1. The construction of three concrete box culverts would not affect or diminish the qualities and characteristics that contribute to the historic significance of the property.

#### **OUR GOALS**

**MAINTAIN A SAFE SYSTEM • ADDRESS CONGESTION • CONNECT TEXAS COMMUNITIES • BEST IN CLASS STATE AGENCY**

*An Equal Opportunity Employer*

- Cumulative Effects: Additionally, project activities pose no foreseeable cumulative adverse effects to the EPWID1 because the project would not impair the function of the historic irrigation system.

**Conclusion**

In accordance with 36 CFR 800 and the 2015 Section 106 PA, I hereby request your signed concurrence with TxDOT's finding of **no adverse effect** to the El Paso Water Improvement District Number 1. We additionally notify you that SHPO is the designated official with jurisdiction over Section 4(f) resources protected under the provisions of 23 CFR 774 and that your comments on our Section 106 findings will be integrated into decision-making regarding prudent and feasible alternatives for purposes of Section 4(f) evaluations. Final determinations for the Section 4(f) process will be rendered by TxDOT pursuant to 23 U.S.C. 327 and the aforementioned MOU dated 12-16-14.

We look forward to further consultation with your staff and hope to maintain a partnership that will foster effective and responsible solutions for improving transportation, safety and mobility in the state of Texas. Thank you for your cooperation in this federal review process. If you have any questions or comments concerning these evaluations, please contact me at (512) 416-2570 or rebekah.dobrasko@txdot.gov.

Sincerely,

*RMDobrasko*

Rebekah Dobrasko  
Historic Preservation Specialist  
Environmental Affairs

thru: Bruce Jensen, Cultural Resource Management Section Director:

*BJ*

CONCURRENCE WITH NON-ARCHEOLOGICAL SECTION 106 FINDINGS:  
NO ADVERSE EFFECT: EL PASO WATER IMPROVEMENT DISTRICT NUMBER 1

NAME: *Mark Wolfe*  
for Mark Wolfe, State Historic Preservation Officer

DATE: 12/21/16

NO COMMENTS ON DETERMINATION OF DE MINIMIS IMPACT UNDER SECTION 4(F) REGULATIONS

NAME: *Mark Wolfe*  
for Mark Wolfe, State Historic Preservation Officer

DATE: 12/21/16

## **APPENDIX E: SUPPLEMENTAL INFORMATION**

CSJ District EL PASO COUNTY MPO EL PASO City CLINT **FM 1110** Letting FY 2018

Limits From SH 20 (ALAMEDA AVE)

Limits To FM 76 (NORTH LOOP)

Ranking Tier 2

Project Description CONSTRUCT A NEW 4 LANE DIVIDED ARTERIAL

| Total Project Cost Information     |                     | Programmed Funding |              |            |       |              |              |
|------------------------------------|---------------------|--------------------|--------------|------------|-------|--------------|--------------|
| <b>INFORMATIONAL PURPOSES ONLY</b> |                     | Category           | Description  | Authorized | Other | Local        | Total        |
| Preliminary Engineering            | \$1,063,299         | 3                  | LOCAL        | \$0        | \$0   | \$20,000,000 | \$20,000,000 |
| ROW & Utilities                    | \$0                 |                    |              | \$0        | \$0   | \$20,000,000 | \$20,000,000 |
| Construction                       | \$21,699,980        |                    | <b>Total</b> | \$0        | \$0   | \$20,000,000 | \$20,000,000 |
| Construction Engineering           | \$1,063,299         |                    |              |            |       |              |              |
| Contingencies                      | \$271,250           |                    |              |            |       |              |              |
| Indirect Costs                     | \$0                 |                    |              |            |       |              |              |
| Potential Change Orders            | \$1,184,819         |                    |              |            |       |              |              |
| <b>Total Project Cost</b>          | <b>\$25,282,647</b> |                    |              |            |       |              |              |

CSJ District EL PASO COUNTY MPO EL PASO City EL PASO **IH 10** Letting FY 2018

Limits From WESTWAY

Limits To LP 375

Ranking Tier 1

Project Description REHAB AND OPERATIONAL IMPROVEMENTS (PHASE III)

| Total Project Cost Information     |                    | Programmed Funding |              |             |       |       |             |
|------------------------------------|--------------------|--------------------|--------------|-------------|-------|-------|-------------|
| <b>INFORMATIONAL PURPOSES ONLY</b> |                    | Category           | Description  | Authorized  | Other | Local | Total       |
| Preliminary Engineering            | \$365,381          | 5                  | CMAQ         | \$7,490,000 | \$0   | \$0   | \$7,490,000 |
| ROW & Utilities                    | \$0                |                    |              | \$7,490,000 | \$0   | \$0   | \$7,490,000 |
| Construction                       | \$7,456,758        |                    | <b>Total</b> | \$7,490,000 | \$0   | \$0   | \$7,490,000 |
| Construction Engineering           | \$365,381          |                    |              |             |       |       |             |
| Contingencies                      | \$3,728            |                    |              |             |       |       |             |
| Indirect Costs                     | \$0                |                    |              |             |       |       |             |
| Potential Change Orders            | \$337,045          |                    |              |             |       |       |             |
| <b>Total Project Cost</b>          | <b>\$8,528,294</b> |                    |              |             |       |       |             |

CSJ District EL PASO COUNTY MPO EL PASO City EL PASO **IH 10** Letting FY 2018

Limits From 1.7 MI S OF SH 20

Limits To 0.8 MI W OF US 62

Ranking Tier 2

Project Description REPLACE BRIDGE AND APPROACH RAILING

| Total Project Cost Information     |                  | Programmed Funding |                |            |       |       |           |
|------------------------------------|------------------|--------------------|----------------|------------|-------|-------|-----------|
| <b>INFORMATIONAL PURPOSES ONLY</b> |                  | Category           | Description    | Authorized | Other | Local | Total     |
| Preliminary Engineering            | \$36,133         | 6                  | BRIDGE PROGRAM | \$688,500  | \$0   | \$0   | \$688,500 |
| ROW & Utilities                    | \$0              |                    |                | \$688,500  | \$0   | \$0   | \$688,500 |
| Construction                       | \$737,416        |                    | <b>Total</b>   | \$688,500  | \$0   | \$0   | \$688,500 |
| Construction Engineering           | \$36,060         |                    |                |            |       |       |           |
| Contingencies                      | \$8,333          |                    |                |            |       |       |           |
| Indirect Costs                     | \$0              |                    |                |            |       |       |           |
| Potential Change Orders            | \$30,676         |                    |                |            |       |       |           |
| <b>Total Project Cost</b>          | <b>\$848,618</b> |                    |                |            |       |       |           |

CSJ District EL PASO COUNTY MPO EL PASO City EL PASO **SL 375** Letting FY 2018

Limits From BOB HOPE DR

Limits To FM 659 (ZARAGOZA)

Ranking Tier 1

Project Description CONSTRUCT MANAGED LANES

| Total Project Cost Information     |                     | Programmed Funding                           |                       |              |       |       |              |
|------------------------------------|---------------------|--|-----------------------|--------------|-------|-------|--------------|
| <b>INFORMATIONAL PURPOSES ONLY</b> |                     | Category                                     | Description           | Authorized   | Other | Local | Total        |
| Preliminary Engineering            | \$1,834,191         | 2M   | METRO CORRIDOR        | \$22,225,380 | \$0   | \$0   | \$22,225,380 |
| ROW & Utilities                    | \$0                 | 11   | DISTRIC DISCRETIONARY | \$744,620    | \$0   | \$0   | \$744,620    |
| Construction                       | \$37,432,466        | -----Remaining Funding to be Determined----- |                       |              |       |       |              |
| Construction Engineering           | \$2,388,191         |  | <b>Total</b>          | \$22,970,000 | \$0   | \$0   | \$22,970,000 |
| Contingencies                      | \$482,879           |  |                       |              |       |       |              |
| Indirect Costs                     | \$0                 |  |                       |              |       |       |              |
| Potential Change Orders            | \$2,163,597         |  |                       |              |       |       |              |
| <b>Total Project Cost</b>          | <b>\$44,301,324</b> |  |                       |              |       |       |              |

Note: As passed by the 84th Legislature funding allocations and project listings identified in the UTP that generally involve allocations in Categories 2, 4, 11 and 12 may be subject to further consideration by the Texas Transportation Commission to ensure that the Texas Department of Transportation and HB 20 designated Planning Organizations (TxDOT Districts and Metropolitan Planning Organizations) have complied with the requirements of HB 20. Any proposed revisions to funding allocations or project listings will be addressed in future updates to the UTP.

CSJ District EL PASO COUNTY MPO EL PASO City EL PASO CS Letting FY 2017

Limits From (ON TROWBRIDGE) NORTH LOOP  
Limits To MONTANA  
Project Description SAFETY LIGHTING  
Ranking Tier 1

| Total Project Cost Information     |                    | Programmed Funding |              |             |       |       |             |
|------------------------------------|--------------------|--------------------|--------------|-------------|-------|-------|-------------|
| <b>INFORMATIONAL PURPOSES ONLY</b> |                    | Category           | Description  | Authorized  | Other | Local | Total       |
| Preliminary Engineering            | \$81,745           | 8                  | SAFETY       | \$1,625,627 | \$0   | \$0   | \$1,625,627 |
| ROW & Utilities                    | \$0                |                    |              |             |       |       |             |
| Construction                       | \$1,668,257        |                    | <b>Total</b> | \$1,625,627 | \$0   | \$0   | \$1,625,627 |
| Construction Engineering           | \$74,571           |                    |              |             |       |       |             |
| Contingencies                      | \$0                |                    |              |             |       |       |             |
| Indirect Costs                     | \$0                |                    |              |             |       |       |             |
| Potential Change Orders            | \$51,883           |                    |              |             |       |       |             |
| <b>Total Project Cost</b>          | <b>\$1,876,455</b> |                    |              |             |       |       |             |

CSJ District EL PASO COUNTY MPO EL PASO City HORIZON CITY CS Letting FY 2017

Limits From 800 FT E OF DARRINGTON RD  
Limits To KENAZO AVE  
Project Description CONSTRUCTION OF 10 FT WIDE DUAL USE PATH ON BOTH NORTH AND S OUTH SIDES OF EASTLAKE BLVD  
Ranking Tier 1

| Total Project Cost Information     |                    | Programmed Funding |                        |             |       |       |             |
|------------------------------------|--------------------|--------------------|------------------------|-------------|-------|-------|-------------|
| <b>INFORMATIONAL PURPOSES ONLY</b> |                    | Category           | Description            | Authorized  | Other | Local | Total       |
| Preliminary Engineering            | \$53,670           | 9                  | TRANSPORT ALTERNATI VE | \$1,056,898 | \$0   | \$0   | \$1,056,898 |
| ROW & Utilities                    | \$0                |                    |                        |             |       |       |             |
| Construction                       | \$1,095,301        |                    | <b>Total</b>           | \$1,056,898 | \$0   | \$0   | \$1,056,898 |
| Construction Engineering           | \$48,960           |                    |                        |             |       |       |             |
| Contingencies                      | \$0                |                    |                        |             |       |       |             |
| Indirect Costs                     | \$0                |                    |                        |             |       |       |             |
| Potential Change Orders            | \$34,064           |                    |                        |             |       |       |             |
| <b>Total Project Cost</b>          | <b>\$1,231,994</b> |                    |                        |             |       |       |             |

CSJ District EL PASO COUNTY MPO EL PASO City EL PASO VA Letting FY 2017

Limits From COUNTY WIDE  
Limits To .  
Project Description FY 2017 GREEN RIBBON PROJECT  
Ranking Tier 2

| Total Project Cost Information     |                    | Programmed Funding |              |             |       |       |             |
|------------------------------------|--------------------|--------------------|--------------|-------------|-------|-------|-------------|
| <b>INFORMATIONAL PURPOSES ONLY</b> |                    | Category           | Description  | Authorized  | Other | Local | Total       |
| Preliminary Engineering            | \$77,191           | 10                 | GREEN RIBBON | \$1,576,000 | \$0   | \$0   | \$1,576,000 |
| ROW & Utilities                    | \$0                |                    |              |             |       |       |             |
| Construction                       | \$1,575,335        |                    | <b>Total</b> | \$1,576,000 | \$0   | \$0   | \$1,576,000 |
| Construction Engineering           | \$156,588          |                    |              |             |       |       |             |
| Contingencies                      | \$0                |                    |              |             |       |       |             |
| Indirect Costs                     | \$0                |                    |              |             |       |       |             |
| Potential Change Orders            | \$76,876           |                    |              |             |       |       |             |
| <b>Total Project Cost</b>          | <b>\$1,885,991</b> |                    |              |             |       |       |             |

CSJ District EL PASO COUNTY MPO EL PASO City EL PASO FM 1110 Letting FY 2017

Limits From FM 76 (NORTH LOOP)  
Limits To I-10  
Project Description CONSTRUCT AND UPGRADE TO 4 LANE DIVIDED ARTERIAL  
Ranking Tier 2

| Total Project Cost Information     |                     | Programmed Funding |              |            |       |              |              |
|------------------------------------|---------------------|--------------------|--------------|------------|-------|--------------|--------------|
| <b>INFORMATIONAL PURPOSES ONLY</b> |                     | Category           | Description  | Authorized | Other | Local        | Total        |
| Preliminary Engineering            | \$766,802           | 3                  | LOCAL        | \$0        | \$0   | \$15,000,000 | \$15,000,000 |
| ROW & Utilities                    | \$1                 |                    |              |            |       |              |              |
| Construction                       | \$15,649,024        |                    | <b>Total</b> | \$0        | \$0   | \$15,000,000 | \$15,000,000 |
| Construction Engineering           | \$776,192           |                    |              |            |       |              |              |
| Contingencies                      | \$311,416           |                    |              |            |       |              |              |
| Indirect Costs                     | \$0                 |                    |              |            |       |              |              |
| Potential Change Orders            | \$585,274           |                    |              |            |       |              |              |
| <b>Total Project Cost</b>          | <b>\$18,088,708</b> |                    |              |            |       |              |              |

Note: As passed by the 84th Legislature funding allocations and project listings identified in the UTP that generally involve allocations in Categories 2, 4, 11 and 12 may be subject to further consideration by the Texas Transportation Commission to ensure that the Texas Department of Transportation and HB 20 designated Planning Organizations (TxDOT Districts and Metropolitan Planning Organizations) have complied with the requirements of HB 20. Any proposed revisions to funding allocations or project listings will be addressed in future updates to the UTP.

# FM 1110 Construction/Upgrade

- El Paso County/Clint
- Construct/Upgrade to a 4 lane divide arterial from I-10 to SH 20 (Project #13)
- Preliminary Construction Cost Estimate \$38M
- Letting Year 2015



**Amended Horizon 2040 MTP Project List  
TX Highway and Roadway (FHWA and Local funds)**

| CSJ         | Project ID  | Project Name   | Project Description   | From   | To   | Network | Current Const. Cost / 2013-2040 Cost | Est. Const. Cost (Includes Inflation) | Est. PE Cost (Includes Inflation) | Est. ROW Cost (Includes Inflation) | Total Project Cost/YOE (Includes Inflation) | Sponsor   | YOE (FY) |
|-------------|-------------|--|---|--|--|---------|--------------------------------------|---------------------------------------|-----------------------------------|------------------------------------|---|-----------|----------|
| 0924-06-500 | P438X-MOD   | Eastlake Blvd. Phase 2   | Build 4-Lane Divided  | Desert Mist Dr   | Horizon Blvd   |         | \$0                                  | \$0                                   | \$0                               | \$0                                | \$0   | Horizon   | 2016     |
| 0924-06-514 | E402X       | Eastlake Safe Routes To School Project   | Construction Of A 10 Ft Wide Dual Use Path On Both North And South Sides Of Eastlake Blvd To Include Curb Ramps, Signage, Pavement Markings, Landscaping, Lighting, Bike Parking And Bike Racks, As Part Of The Town's Safe Routes To School Plan   | Approximately 800 Feet East Of The Eastlake Boulevard And Darrington Road Intersection | Intersection Of Eastlake Boulevard And Kenazo Avenue | 2020    | \$1,056,898                          | \$1,056,898                           | \$85,000                          | \$0                                | \$1,141,898                                 | Horizon   | 2017     |
| 0924-06-503 | P459X       | Edgemere Blvd. / Rich Beem Blvd Roundabout   | Construct a roundabout that will be designed and constructed to accommodate lanes and parameters.   | Edgemere Blvd/Rich Beem Blvd Roundabout  |  | 2020    | \$2,399,062                          | \$2,399,062                           | \$191,313                         | \$0                                | \$2,590,375                                 | COEP      | 2017     |
| 0924-06-527 | M086X       | El Paso County Regional Transit Feasibility Study  | Provide research to document options for a county-wide transit agency for the County of El Paso   | Countywide   |  | 2020    | \$500,000                            | \$500,000                             | \$0                               | \$0                                | \$500,000                                   | CountyEP  | 2016     |
| 0924-06-446 | T305-CAP    | El Paso Streetcar (Formerly Oregon Streetcar)  | Design/Construct/Procure Roadway/Pedestrian/Other Elements Required For The El Paso Streetcar Project, Including Vehicles   | Oregon Street And Stanton Street   |  | 2020    | \$92,500,000                         | \$92,500,000                          | \$4,500,000                       | \$0                                | \$97,000,000                                | CRRMA     | 2015     |
| 0924-06-344 | C020X       | Feasibility Study For Socorro POE  | Conduct A Feasibility Study For Socorro Port Of Entry   | N/A  |  | 2030    | \$1,000,000                          | \$1,169,859                           | \$0                               | \$0                                | \$1,169,859                                 | Socorro   | 2022     |
|             | P520A-15A   | FM 1110 - Clint Connection Rd.   | Build 2-Lanes From Border Highway Extension To Riverside Rd. And Upgrade/Rehabilitate The Existing Herring Rd. From Riverside Rd To Alameda Ave. (SH 20)  | Border Hwy Extension   | Alameda Ave (SH 20)                                  | 2030    | \$9,106,048                          | \$11,982,938                          | \$587,164                         | \$838,806                          | \$13,408,908                                | Clint     | 2025     |
| 1281-02-007 | P520B-1-15A | FM 1110 Clint Connection Rd. - Phase 1   | Widen from 2 to 4-lane divided roadway  | FM 76 (North Loop Dr)  | I-10   | 2020    | \$5,500,000                          | \$5,500,000                           | \$600,000                         | \$0                                | \$6,100,000                                 | CountyEP  | 2018     |
| 1281-01-017 | P520B-2-15A | FM 1110 Clint Connection Rd. - Phase 2   | Construct a new 4 lane divided roadway with intersection improvements (reconstruction of intersections and additional turnlanes) at FM 76 (North Loop Dr) and SH 20 (Alameda Ave)   | SH 20 (Alameda Ave)  | FM 76 (North Loop Dr.)                               | 2020    | \$29,500,000                         | \$29,500,000                          | \$1,000,000                       | \$0                                | \$30,500,000                                | CountyEP  | 2019     |
| 1281-02-005 | P456X-CAP   | FM 1110 Clint Rd At I-10 Interchange Widening Improvements                                 | Widening FM 1110 Bridge From 2 To 4-Lanes Undivided Including Operational Improvements  | I-10 At FM 1110  |  | 2020    | \$9,449,138                          | \$9,449,138                           | \$0                               | \$0                                | \$9,449,138                                 | TXDOT     | 2014     |
|             | P431X-MOD   | FM 1281 (Horizon Blvd.) Widening   | Widen To 6 Lanes Divided  | I-10   | Antwerp  | 2040    | \$4,454,621                          | \$7,417,271                           | \$363,446                         | \$519,209                          | \$8,299,926                                 | TXDOT     | 2031     |
| 0924-06-406 | E400X       | FM 1281 Horizon Blvd. Walk/Bike Path   | Install Approximately 3 Mi Of Pathway To Accommodate Bikes And Pedestrians.   | Ashford St   | Rifton St  | 2020    | \$1,407,489                          | \$1,407,489                           | \$0                               | \$0                                | \$1,407,489                                 | Horizon   | 2013     |
| 8056-24-003 | A506X-ROW   | FM 1281 Horizon Blvd/ Buford Rd. Row   | Row For Widen To 4 Lanes Divided With Striped Median.   | FM 76 North Loop   | SH 20 Alameda  | 2020    | \$2,808,947                          | \$0                                   | \$0                               | \$2,808,947                        | \$2,808,947                                 | TXDOT     | 2013     |
| 8056-24-001 | A506X-05A   | FM 1281 Horizon Blvd/ Buford Rd. Widening  | Widen To 4 Lanes Divided With Striped Median.   | FM 76 North Loop   | SH 20 Alameda  | 2020    | \$4,267,460                          | \$4,267,460                           | \$324,745                         | \$0                                | \$4,592,205                                 | TXDOT     | 2013     |
|             | P206B-15A   | FM 3255 (Martin Luther King) Widening  | Widen To 4 Lanes Divided  | Nm State Line  | Loma Real Ave.                                       | 2030    | \$4,770,400                          | \$5,803,921                           | \$0                               | \$0                                | \$5,803,921                                 | TXDOT     | 2023     |
| 0924-06-311 | A522C-MOD   | FM 3380 - Manuel F. Aguilera (Mfa) Hwy   | Build 2-Lanes Undivided Including Overpass At SH 20/Upr   | 0.35 Mi S Of SH 20 (Alameda Ave.)  | I-10   | 2020    | \$19,553,540                         | \$19,553,540                          | \$804,978                         | \$0                                | \$20,358,518                                | County EP | 2015     |
|             | A522D-CAP   | FM 3380 - Manuel F. Aguilera Hwy Widening Phase Iii  | Widening From 2 Lane Undivided To 4 Lane Divided. Including Overpass Widening At SH 20 (Alameda Ave.)/Up Railroad   | 0.35 Mi S Of SH 20 (Alameda Ave.)  | I-10   | 2030    | \$15,043,000                         | \$16,921,329                          | \$829,145                         | \$0                                | \$17,750,474                                | County EP | 2021     |
| 1046-01-024 | M405X       | FM 659 - Fiber Interconnect For Zaragoza Road  | FM 659 - Fiber Interconnect For Zaragoza Road   | On FM 659 (Zaragoza Rd)  |  | 2020    | \$726,500                            | \$726,500                             | \$73,500                          | \$0                                | \$800,000                                   | COEP      | 2014     |
|             | P530X-MOD   | FM 659 (Zaragoza Rd.) Widening   | Widen To 6-Lanes Divided  | I-10   | North Loop Dr.                                       | 2040    | \$4,543,713                          | \$7,565,616                           | \$370,715                         | \$529,593                          | \$8,465,925                                 | TXDOT     | 2031     |
| 1046-01-021 | P428X-MOD   | FM 659 (Zaragoza Road) Widening  | Widen 4 Lane To 6 Lanes Divided, to include transitional work from LP 375 to Sunfire  | Sun Fire   | US 62/180 (Montana)                                  | 2020    | \$14,254,786                         | \$15,417,977                          | \$755,481                         | \$1,079,258                        | \$17,252,716                                | TXDOT     | 2020     |
|             | P515-ROW    | FM 659 Zaragoza Rd Overpass-Row  | Row Acquisition   | Sunland St.  | North Mellon   | 2030    | \$12,879,999                         | \$0                                   | \$0                               | \$15,670,488                       | \$15,670,488                                | COEP      | 2023     |
| 0924-06-188 | P515B       | FM 659 Zaragoza Rd RR Overpass   | Grade Separated Overpass  | At Union Pacific Railroad  |  | 2030    | \$10,266,918                         | \$14,050,986                          | \$688,498                         | \$0                                | \$14,739,485                                | COEP      | 2026     |
|             | P518X       | FM 793 (Fabens St)   | Upgrade 2-Lane Street   | K Ave  | I-10   | 2040    | \$1,588,257                          | \$2,644,565                           | \$129,584                         | \$0                                | \$2,774,149                                 | TXDOT     | 2031     |
| 2552-01-054 | F045X       | Franklin Mtn. State Park Entrance Improvements (LET in Nov FY 2015, original YOE was 2020) | Develop A design And Construct A New Entrance For The Franklin Mtn State Park (Loop 375 Transmountain West) And Loop 375 Geometric Improvements May Include Construction Of Curb And Gutter, Left/Right Turn Bays, Signalization, Roundabouts, Pedestrian/Bicycle Amenities, Traffic Control Devices. | Resler   | 0.479 Mi. E. Of Franklin Mtn State Park Entrance     | 2020    | \$7,182,078                          | \$7,182,078                           | \$351,922                         | \$0                                | \$7,534,000                                 | TXDOT     | 2015     |
|             | M069X       | Geometric Improvements City Of El Paso   | Geometric Improvements May Include Construction Of Curb And Gutter, Left/Right Turn Bays, Signalization, Roundabouts, Pedestrian/Bicycle Amenities, Traffic Control Devices.  | Citywide   |  | 2030    | \$1,000,000                          | \$1,124,864                           | \$0                               | \$0                                | \$1,124,864                                 | COEP      | 2021     |
|             | M070X       | Geometric Improvements City Of El Paso   | Geometric Improvements May Include Construction Of Curb And Gutter, Left/Right Turn Bays, Signalization, Roundabouts, Pedestrian/Bicycle Amenities, Traffic Control Devices.  | Citywide   |  | 2030    | \$1,000,000                          | \$1,124,864                           | \$0                               | \$0                                | \$1,124,864                                 | COEP      | 2021     |
|             | M071X       | Geometric Improvements City Of El Paso   | Geometric Improvements May Include Construction Of Curb And Gutter, Left/Right Turn Bays, Signalization, Roundabouts, Pedestrian/Bicycle Amenities, Traffic Control Devices.  | Citywide   |  | 2040    | \$1,000,000                          | \$1,665,074                           | \$0                               | \$0                                | \$1,665,074                                 | COEP      | 2031     |
| 0000-00-000 | M404B-15A   | George Dieter  | Restripe To 6 Lanes   | Rojas  | Montana Ave (US 62/180)                              | 2020    | \$360,000                            | \$389,376                             | \$19,079                          | \$0                                | \$408,455                                   | COEP      | 2020     |
| 0924-06-477 | M082X       | Great Streets And Corridor Plan  | Create A Document To Emphasize A Mechanism To Improve Right-Of-Ways Into High-Quality Public Spaces Intended To Serve All Modes Of Transportation, Including Walkability, Bicycling, And Mass Transit.  | Citywide   |  | 2020    | \$100,000                            | \$100,000                             | \$0                               | \$0                                | \$100,000                                   | COEP      | 2014     |
| 0000-00-000 | P450X-CAP   | Greg Dr./Edgemere Extension  | Build/Widen From 4 To 6 Lanes   | Rene Dr.   | Vista Del Este Rd.                                   | 2020    | \$2,350,000                          | \$2,444,000                           | \$119,756                         | \$171,080                          | \$2,734,836                                 | County EP | 2019     |
| 0000-00-000 | P451X-CAP   | Greg Dr./Edgemere Extension Widening   | Stripe From 4 To 6-Lane Divided Within Existing Row   | Zaragoza   | Rene Dr.   | 2020    | \$273,000                            | \$295,277                             | \$14,469                          | \$0                                | \$309,746                                   | COEP      | 2020     |
| 0924-06-501 | A427X-CAP   | Greg Dr/Edgemere Extension Construction  | Build 4-Lane Divided  | Mager Dr.  | Vista Del Este Rd.                                   | 2020    | \$5,650,000                          | \$5,650,000                           | \$0                               | \$0                                | \$5,650,000                                 | County EP | 2016     |
|             | P531X       | Hawkins Blvd   | Rehabilitation And Intersection Improvements With Right Turn Lanes  | North Loop Dr. (FM 76)   | Ih-10  | 2030    | \$6,622,765                          | \$9,063,711                           | \$444,122                         | \$0                                | \$9,507,833                                 | COEP      | 2026     |
|             | P533X       | Hawkins Blvd. Overpass Design/Construction   | Street Improvements To Include Design And Construction Of Roadway Elements And Overpass.  | North Loop   | Alameda  | 2040    | \$16,785,000                         | \$27,948,259                          | \$1,369,465                       | \$1,956,378                        | \$31,274,102                                | COEP      | 2031     |
|             | P506X-ROW   | Hawkins Blvd. Row  | Row Acquisition   | I-10   | North Loop (FM 76)                                   | 2040    | \$4,767,177                          | \$0                                   | \$0                               | \$7,937,700                        | \$7,937,700                                 | COEP      | 2031     |
| 0924-06-519 | E107X       | Hawthorne Dr Pedestrian and Bicycle Enhancements   | Construction Of New Sidewalks To Include Ada Compliant Curb Ramps, Crosswalks, Landscaping, Irrigation System, Lighting, Reconstruction And Widening Of Existing Sidewalks For On -Street Parking And Bike Lanes  | Rim Road Intersection  | Crosby Avenue Intersection                           | 2020    | \$480,291                            | \$480,291                             | \$39,100                          | \$0                                | \$519,391                                   | UTEP      | 2016     |
| 0924-06-377 | M050X       | Highway Advisory Radio System  | Highway Advisory Radio System On I-10 FM 1905 (Anthony) To Rm793, US 54 Loop 375 Border Hwy To US-54 State Line, & Loop 375 US 62/180 (Montana) Interchange   | Citywide   |  | 2020    | \$317,433                            | \$317,433                             | \$23,356                          | \$0                                | \$340,789                                   | TXDOT     | 2013     |
|             | E004        | I-10 Aesthetics  | Aesthetic Improvements Along I-10   | Citywide   |  | 2030    | \$17,100,000                         | \$19,235,174                          | \$0                               | \$0                                | \$19,235,174                                | COEP      | 2021     |
| 2121-03-153 | E003C       | I-10 At Airway Aesthetics  | Aesthetics At Airway Intersection To Include Fencing, Landscaping And Treatments On Structures  | Geronimo   | Hawkins  | 2020    | \$9,765,000                          | \$9,765,000                           | \$200,000                         | \$0                                | \$9,965,000                                 | CRRMA     | 2013     |
| 2121-04-093 | I007F       | I-10 At Loop 375 (Americas Ave) Direct Connector Nb To Eb And Sb To Eb                     | Interchange Improvements Include: Frontage Rd, Cloverleaf, And Construction Of Remainder Direct Connector Nb To Eb And Sb To Eb   | I-10 At Loop 375 (Americas)  |  | 2020    | \$31,027,043                         | \$31,027,043                          | \$0                               | \$0                                | \$31,027,043                                | TXDOT     | 2014     |