



1 DEIS Reasonable Alternatives
2 Historic Resources Technical Report

3 SH 68 from I-2/US 83 to I-69C/US 281

4 CSJs: 3629-01-001, -002, -003

5 Hidalgo County, Texas

6 Texas Department of Transportation - Pharr District

7 February 2018

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

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1 1.0 INTRODUCTION

2 The Pharr District of the Texas Department of Transportation (TxDOT) proposes to construct
3 State Highway (SH) 68, a new highway facility from Interstate Highway (I)-2/U.S. Highway
4 (US) 83 to I-69C/US 281, located in eastern Hidalgo County. The proposed project would begin
5 at I-2/US 83 and travel north then west to connect to I-69C/US 281. The total length of the
6 proposed project is approximately 22 miles.

7 The purpose of this technical report is to identify possible historic properties (e.g., buildings,
8 structures, historic districts that are eligible for or listed in the National Register of Historic
9 Places [NRHP]) and assess potential impacts to historic resources for the three reasonable
10 alternatives and the No-Build Alternative identified for the proposed project. This document
11 would serve as support for Section 4, the Affected Environment and Environmental
12 Consequences of the SH 68 Draft Environmental Impact Statement (DEIS).

13 1.1 Project Description

14 SH 68, as currently described in the Metropolitan Transportation Plan (MTP) and the
15 Statewide Transportation Improvement Program (STIP), is a proposed four-lane divided rural
16 highway facility with future mainlanes and overpasses.

17 SH 68 would be constructed in several phases, as funding becomes available. Funding has
18 been secured for Phase I of the proposed project. Funding for future phases has not yet been
19 determined.

20 Phase I would construct a new four-lane divided rural highway facility from I-2/US 83 to Farm-
21 to-Market (FM) 1925, which is also known as Monte Cristo Road. The four-lane divided facility
22 would serve as frontage roads for the ultimate facility and consist of two lanes in each
23 direction with shoulders, separated by a grassy median. Future phases would extend the four-
24 lane divided rural highway from FM 1925 to I-69C/US 281, and eventually would complete
25 the ultimate facility by constructing the mainlanes and overpasses. The proposed project is
26 being developed as a non-tolled facility.

27 The ultimate, controlled-access facility would be contained within a 350-foot typical right-of-
28 way (ROW) width, with up to 400 feet of ROW needed at proposed grade separations. The
29 proposed frontage roads would consist of two 12-foot-wide lanes in each direction, with 4-
30 foot-wide inside shoulders and 8-foot-wide outside shoulders. The frontage roads would
31 include curb and gutter to accommodate drainage requirements. The proposed mainlanes
32 would consist of two 12-foot-wide lanes in each direction, with 4-foot-wide inside shoulders
33 and 10-foot-wide outside shoulders. Mainlanes would be separated by a grassy median.
34 Mainlane overpasses would be provided at major roadway crossings. Proposed future
35 entrance and exit ramps would consist of 14-foot-wide lanes, with 2-foot-wide inside shoulders

1 and 8-foot-wide outside shoulders. The termini at I-2/US 83 and I-69C/US 281 would include
2 proposed connections to existing frontage roads and proposed direct connector ramps to and
3 from existing mainlanes.

4 As part of the alternatives analysis and public involvement process for SH 68, study corridors
5 and preliminary alternatives were developed within an approximately 179 square mile project
6 study area for the proposed project. The preliminary alternatives were analyzed and evaluated
7 to identify three reasonable alternatives. These reasonable alternatives, as well as the No-
8 Build Alternative, are being advanced for more detailed analysis in order to identify a
9 recommended preferred alternative. For more information about development of the
10 reasonable alternatives and the alternatives analysis methodology, refer to the *DEIS*
11 *Alternatives Analysis Technical Report* on file at TxDOT (TxDOT 2018).

12 The reasonable alternatives are shown in **Exhibits 1** and **2** and are described below, along
13 with the No-Build Alternative. The alternatives are presented in order geographically, from
14 west to east. All alternatives would have the same ultimate typical section, as described
15 above.

16 **1.1.1 2014 Modified 2 Alternative**

17 The 2014 Modified 2 Alternative (light purple route in **Exhibits 1** and **2**) is approximately 21.7
18 miles in length and would require an estimated 1,057 acres of additional ROW. The 2014
19 Modified 2 Alternative is almost entirely on new location.

20 This alternative connects to I-2/US 83 approximately 7 miles east of I-69C/US 281, between
21 the FM 1423/Val Verde Road overpass and the North Hutto Road overpass, near the existing
22 intersection of the I-2/US 83 westbound frontage road and Valley View Road. From I-2/US 83,
23 the 2014 Modified 2 Alternative would travel northwest on new location for approximately 3
24 miles to near Minnesota Road before turning generally northward for approximately 7 miles
25 through the communities of Muniz and San Carlos to north of SH 107.

26 Approximately 1 mile north of SH 107, near Mile 17 ½ Road, the 2014 Modified 2 Alternative
27 would curve to the west for approximately 2 miles, crossing FM 1925/Monte Cristo Road and
28 Davis Road. North of Davis Road, the 2014 Modified 2 route would run parallel to the west
29 side of Brushline Road for approximately 5 miles. The proposed roadway would then curve to
30 the northwest for approximately 2 miles before running along the north side of the existing
31 FM 490 for approximately 3 miles and connect to I-69C/US 281 near the South Texas
32 International Airport at Edinburg.

1 Future mainlane overpasses are assumed to be at Ferguson Road, Sioux Road, East Nolana
2 Loop/Earling Road, Owassa Road, Alberta Road, Trenton Road, Wisconsin Road, Canton Road,
3 SH 107, FM 1925, FM 2812, Brushline Road and Air Cargo Drive.

4 **1.1.2 2014 PSM Alternative**

5 Like the 2014 Modified 2 Alternative, the 2014 PSM Alternative (orange route in **Exhibits 1**
6 and **2**) is almost entirely on new location. The 2014 PSM Alternative is approximately 22.4
7 miles in length and would require an estimated 1,076 acres of additional ROW. The 2014
8 PSM Alternative follows the same new location route as the 2014 Modified 2 Alternative from
9 its intersection with I-2/US 83 to SH 107, a distance of approximately 8 miles, and continues
10 generally northward for another 2 miles to cross FM 1925.

11 North of FM 1925, the 2014 PSM corridor would curve to the east for approximately 1 mile,
12 approaching Mile 19 N Road, where it would then run parallel to the west side of Val Verde
13 Road for approximately 4 miles. The corridor would then curve to the northwest for
14 approximately 4 miles before running along the north side of the existing FM 490 for
15 approximately 3 miles and connect to I-69C/US 281 near the South Texas International Airport
16 at Edinburg.

17 This alternative would also pass through the communities of Muniz and San Carlos. Future
18 mainlane overpasses are assumed to be at Ferguson Road, Sioux Road, East Nolana
19 Loop/Earling Road, Owassa Road, Alberta Road, Trenton Road, Wisconsin Road, Canton Road,
20 SH 107, FM 1925, FM 2812, Brushline Road, and Air Cargo Drive.

21 **1.1.3 FM 1423 PSM Alternative**

22 The FM 1423 PSM Alternative (dark pink route in **Exhibits 1** and **2**) is approximately 21.6
23 miles in length and would require an estimated 1,061 acres of additional ROW. This
24 alternative would connect to I-2/US 83 approximately 6 miles east of I-69C/US 281.

25 This alternative would generally follow FM 1423/Val Verde Road northward for approximately
26 7.5 miles from the intersection with I-2/US 83 to SH 107 in the community of San Carlos.
27 From SH 107, the alternative would continue northward along Val Verde Road approximately
28 2 miles to FM 1925/Monte Cristo Road. Approximately 1.5 miles north of FM 1925, between
29 Mile 19 Road and Mile 20 Road, the route would then follow the 2014 PSM Alternative route
30 for approximately 11 miles north and west to I-69C/US 281 near the South Texas International
31 Airport at Edinburg.

32 This alternative would pass through the City of Donna and the community of San Carlos.
33 Future mainlane overpasses are assumed to be at FM 495/Kansas Road, Sioux Road, East

1 Nolana Loop/Earling Road, Roosevelt Road, Alberta Road, Trenton Road, Wisconsin Road,
2 Canton Road, SH 107, FM 1925, FM 2812, Brushline Road, and Air Cargo Drive.

3 **1.1.4 No Build Alternative**

4 The No-Build Alternative means that the proposed improvements associated with the SH 68
5 project would not occur. Under this alternative, the existing facilities would operate as they
6 currently do and there would be no new roadway called SH 68 constructed. There would be
7 no relocations or conversion of land to transportation uses, and no adverse environmental or
8 economic impacts associated with this alternative would occur. However, the No-Build
9 Alternative would not address the purpose and need for the proposed project because it would
10 not improve north-south mobility, increase travel capacity for local and regional traffic, or
11 provide an alternate north-south evacuation route during emergency events.

12 **1.2 Public Involvement To Date**

13 Preliminary public involvement began in 2014, when the proposed project was in the early
14 planning stages and it was anticipated that an Environmental Assessment would be
15 completed. There were six stakeholder meetings conducted between April and September
16 2014. There were no specific historic resources of concern identified during these meetings.

17 Since the proposed project progressed to an Environmental Impact Statement (EIS), and three
18 reasonable alternatives were selected, plus the No-Build Alternative, there have been three
19 public meetings. These meetings, and comments related to potential historic resources, are
20 discussed below.

21 Project Public Scoping Meeting – March 15, 2016

22 There were no documented comments expressed during this public meeting regarding historic
23 resources.

24 Agency Scoping Meeting - March 29, 2016

25 Following the scoping meeting, the U.S. Environmental Protection Agency (EPA) sent a follow-
26 up letter dated April 20, 2016 providing TxDOT with recommendations for complying with the
27 National Historic Preservation Act (NHPA). In particular, it recommended that TxDOT conduct
28 coordination with Native American Tribes, avoid adversely affecting sacred sites, identify
29 NRHP-listed or eligible sites, and a develop a Cultural Resources Management Plan.

30 Public Meeting - January 3, 2017

31 During the public meeting, there were several attendees who expressed concern over
32 potential impacts to cemeteries located adjacent to the three reasonable alternatives. One
33 attendee stated that the 2014 Modified 2 Alternative would avoid all cemeteries and
34 churches, and was therefore preferred. However, two attendees expressed concern over the

1 Cavazos Cemetery (also known as the El Carmen Cemetery), which is located on a parcel
2 within the historic Area of Potential Effect (APE) of the 2014 Modified 2 Alternative. It is
3 approximately 600 feet west of Brushline Road and 1.13 miles north of Mile 22 ½ Road (see
4 **Exhibit 5.10**).

5 Several attendees expressed concerns about potential impacts to the Fike Farm. The exact
6 boundaries of the Fike Farm (and any other historic-age farms) are not known at this time, as
7 it appears that the Fike Family owns numerous parcels of land in Hidalgo County. One of the
8 attendees stated that the ca. 1930s family run farm would be impacted by the proposed
9 project, and the business headquarters would be separated from the farmland. The attendees
10 did not specifically mention a concern regarding the historical significance of the farm.

11 As with all historic-age farms and agricultural properties, additional research would be
12 necessary in order to determine the property's boundary and potential NRHP-eligibility.

13 2.0 METHODOLOGY

14 In accordance with the Section 106 of the National Historic Preservation Act (NHPA) and the
15 2015 Programmatic Agreement among TxDOT, the Texas State Historic Preservation Officer
16 (SHPO), the Advisory Council on Historic Preservation (ACHP), and the Federal Highway
17 Administration (FHWA) Regarding the Implementation of Transportation Undertakings, TxDOT
18 determined that a detailed desktop analysis for assessing each of the reasonable
19 alternative's potential impacts to historic properties was appropriate at the DEIS-level of
20 analysis. This methodology section outlines the procedures TxDOT utilized to equally evaluate
21 each alternative's potential for impacts to historic properties.

22 First, TxDOT defined the historic APE, which is area where the proposed project may pose
23 potential effects to historic resources. In accordance with the aforementioned programmatic
24 agreement, TxDOT defined the historic APE as any parcel within or partially within 300 feet
25 from each of the reasonable alternatives. Additionally, in accordance with TxDOT protocol, a
26 0.25-mile historic study area from each reasonable alternative was established. This 0.25-
27 mile historic study area fosters the development of an appropriate contextual analysis of the
28 area immediately surrounding the reasonable alternatives (see **Exhibits 3.0** through **3.3**).

29 Determining potential NRHP eligibility for properties required that TxDOT follow the Secretary
30 of the Interior (SOI) guidelines for NRHP eligibility. The SOI guidelines prescribes criteria that
31 outline how a historic resource can be eligible for the NRHP. According to the SOI guidance
32 and 36 Code of Federal Regulation (CFR) 800.16(1), a resource must generally be 50-years-
33 old or older for consideration for inclusion in the NRHP. TxDOT ENV requires a 45-year cutoff
34 (45 years prior to the letting date) in the guidelines provided in the April 2014 *Environmental*
35 *Handbook: Historic Properties* to allow for unforeseen delays in letting. Accordingly, the term

1 “historic-age resource,” as it is used in this report, refers to any buildings, structures, objects,
2 and potential historic districts that are, or will be, 45 years of age or older at the time of project
3 letting for construction. For the purposes of this technical report and to allow for any potential
4 delays in project letting, a 2020 letting date has been assumed. Therefore, historic-age refers
5 to any properties built in or before 1975.

6 SOI guidance and 36 CFR 60.4 states districts, sites, buildings, structures, and objects may
7 be eligible for the NRHP if they meet one of the following four criteria for significance:

- 8 • Criterion A: Event – Significant historical associations with events, trends, or patterns.
- 9 • Criterion B: Person – Significant associations with persons of transcendent
10 importance.
- 11 • Criterion C: Design/Construction – Embody distinctive characteristics of a type, period,
12 or method of construction; represent the work of a master; possess high artistic values;
13 or represent a significant and distinguishable entity whose components may lack
14 individual distinction.
- 15 • Criterion D: Archaeology - Have yielded, or may yield, information important to
16 prehistory or history.¹

17 In addition to meeting one of the four criteria listed above, historic resources must retain their
18 integrity of location, design, setting, materials, workmanship, feeling, and association in order
19 to convey their historic significance.

20 Finally, certain types of resources that are not usually considered eligible for listing on the
21 NRHP are given special considerations, which the National Park Service terms “Criterion
22 Considerations.” These resource types may include:

- 23 • Religious properties (Criterion Consideration A)
- 24 • Moved properties (Criterion Consideration B)
- 25 • Birthplaces or graves (Criterion Consideration C)
- 26 • Cemeteries (Criterion Consideration D)
- 27 • Reconstructed properties (Criterion Consideration E)
- 28 • Commemorative properties (Criterion Consideration F)

¹ It should be noted that NRHP Criterion D is most applicable to archaeological sites and districts. Per the National Register Bulletin: How to Apply the National Register Criteria for Evaluation, in order for above-ground buildings, structures and objects “to be eligible under Criterion D, they themselves must be, or must have been, the principal source of the important information.” In order to obtain this information, it most often requires disassembling or demolishing the above-ground resource in question. As such, the eligibility of above-ground buildings, structures and objects is most readily evaluated under Criteria A, B and C while Criterion D is only applicable in very rare circumstances.

- 1 • Properties fewer than 50 years old with exceptional significance (Criterion
2 Consideration G)

3 2.1 Desktop Analysis Review Sources

4 In order to review all of the reasonable alternatives equally, a historic context and desktop
5 analysis of the historic resources within the reasonable alternatives were completed. Prior to
6 conducting a desktop analysis, primary and secondary sources were gathered and reviewed
7 to gain a preliminary understanding of the historic context of the area.² Documented source
8 material, along with additional sources gathered for this desktop analysis, were used to help
9 identify the types of potential historic resources that may be found within the historic APE and
10 0.25-mile historic study area for the reasonable alternatives. The most applicable information
11 utilized in this technical report are listed below by repository or online source:

- 12 • Research at Austin Repositories
- 13 ○ University of Texas at Austin Dolph Briscoe Center for American History
- 14 – Texas Counties Vertical Files on Hidalgo County
- 15 – Vertical File on Hidalgo County, Texas
- 16 – Vertical File on Donna, Texas
- 17 • Online Sources
- 18 ○ Texas Historical Commission's (THC) Texas Historic Sites Atlas website
- 19 ○ The Handbook of Texas Online articles and associated bibliographies on the topics
20 listed below:
- 21 – Hidalgo County, Texas
- 22 – Donna, Texas
- 23 – Edinburg, Texas
- 24 – San Carlos, Texas
- 25 – Faysville, Texas
- 26 – St. Louis, Brownsville, and Mexico Railway
- 27 – Colonias
- 28 • Historic and current maps gathered from HistoricAerials.com, the Texas State Library
29 and Archives Commission Map Collection, the University of Texas Perry Castañeda
30 Library's Map Collection, the Texas Historic Overlay, and the United States Geological
31 Survey (USGS)
- 32 ○ HistoricAerials.com images
- 33 – Aerial photographs from 1961, 1970, 1995, 2004, and 2012

² B&A consulted previously-reviewed sources used for its December 2014 Research Design for Historical Studies for the SH 68 project, which was submitted to TxDOT prior to the initiation of the EIS-level of analysis.

- 1 - Topographic maps from 1914, 1916, 1932, 1949, 1965, 1981, 1984, 2003
- 2 ○ Texas Highway Department (THD) county highway maps from 1936 and 1955
- 3 (highways revised to 1961)
- 4 ○ USGS topographic maps
- 5 - Topographic maps from 1936, 1963, and 1983
- 6 ○ Google.com historic and current aerial photography
- 7 - Aerial photographs from 1950, 1962, 1995, 2000, 2002, 2003, 2005, 2006-
- 8 2010, 2013-2016
- 9 ○ Bing.com current aerial photography

10 2.2 Review of Previously Identified Historic Properties

11 The THC's *Historic Sites Atlas* was reviewed to identify the previously identified historic
12 resources listed on the NRHP, designated as National Historic Landmarks (NHLs), Recorded
13 Texas Historic Landmarks (RTHLs), standing structure State Antiquities Landmarks (SALs), or
14 Official Texas Historical Markers (OTHM). No NHL, RTHL, OTHM, or SAL resources are located
15 within the 0.25-mile historic study area. In reviewing the Historic Sites Atlas, several resources
16 were mismatched and/or not recorded on the website's online mapping tool. The
17 aforementioned sources were used to confirm or correct locations of these resources.

18 There is one NRHP-listed property located within the historic APE of the three reasonable
19 alternatives, the Louisiana – Rio Grande Canal Company System (also known as the Hidalgo
20 County Irrigation District No.2 [HCID #2]) (see **Exhibit 4**).

21 Additionally, TxDOT's April 2014 list of NRHP-listed and previously determined NRHP-eligible
22 irrigation districts was consulted. Per the list, TxDOT considers the Engleman and Donna
23 Irrigation Districts (IDs) as eligible for the NRHP until an intensive-level survey is completed.
24 As such, for the purposes of this analysis, both the Engleman and Donna IDs are treated as
25 NRHP-eligible properties. The three reasonable alternatives also pass through the Delta Lake
26 ID and the HCID #1, which have both been previously determined not eligible for the NRHP.
27 See **Exhibit 4** for irrigation districts within the historic APE and 0.25-mile historic study area.

28 TxDOT-ENV's online database of properties previously determined NRHP-eligible was also
29 consulted. Other than the Donna and Engleman IDs, there are no other properties previously
30 determined NRHP-eligible within the historic APE. Finally the TxDOT Google Earth layer of
31 historic-age bridges was reviewed. There is one historic-age bridge located on the FM 1423
32 PSM Alternative. The County Road (CR) 934 bridge over the Donna East Main Canal (National
33 Bridge Inventory [NBI] Number 211090AA0934001) is located near the southern terminus of
34 the alternative. The concrete slab bridge was built in 1962 and was previously determined
35 not eligible for the NRHP as part of a statewide study of post-war (constructed between 1945
36 and 1965) bridges in Texas.

1 2.3 Review of Hidalgo County Appraisal District (CAD) Data

2 Using dates of construction listed in the Hidalgo County Appraisal District (CAD) as a general
3 foundation, a detailed desktop analysis of the historic APE for the three reasonable
4 alternatives was completed. A Google Earth layer was created that identified potential historic-
5 age properties within the historic APE. The CAD data was filtered by date and color coded
6 parcels into two categories: properties with buildings constructed between 1900 and 1944
7 (pre-World War II [WWII]) and properties with buildings constructed between 1945 and 1975
8 (post-WWII). The years 1900 to 1944 were selected to illustrate the initial wave of migration
9 to the region, following the construction of the irrigation systems in the early 1900s. The
10 second time period, from 1945 to 1975, illustrates an intense period of building in the area,
11 particularly of residential resources and outbuildings. According to CAD data (and additional
12 research outlined above), it is likely that there are no pre-1900 buildings within the historic
13 APE of the reasonable alternatives, which is consistent with the historic context of the region.
14 For more information about settlement within the region, see the Historic Context below.

15 After gathering and reviewing the CAD data, current and historic aerial photographs and
16 topographic maps was used to confirm and verify the accuracy of the CAD data. When CAD
17 data and aerial photographs and maps provided inconclusive construction dates, Google
18 Streetview was used, where available, and consulted video footage of the project area taken
19 in 2016 to help ascertain if a property was historic-age. All of this information was then used
20 to update and correct the Google Earth color-coded parcel data. See **Exhibits 5.1** through **5.13**
21 for results of the findings.

22 Finally, the data was analyzed during the desktop review to determine the potential for
23 impacts to historic resources for the three reasonable alternatives.

24 3.0 **RESOURCES IN THE HISTORIC STUDY AREA**

25 3.1 Historic Context

26 3.1.1 **Community Planning and Development**

27 European explorers were recorded in south Texas as early as the sixteenth century; however,
28 Spanish settlement in the region did not begin in earnest until the mid-eighteenth century. A
29 majority of the development that occurred during the late eighteenth through mid-nineteenth
30 centuries was concentrated along the Rio Grande. In 1848 the Treaty of Guadalupe Hidalgo
31 officially established the Rio Grande as the U.S./Mexico border, and in 1852 Hidalgo County
32 was formed out of part of Cameron County. With the land officially part of the U.S., Anglo-
33 American, settlement increased in the region (Garza 2017a).

1 Throughout the nineteenth century lack of transportation in the region, which consisted of
2 primitive roads, was a major hindrance to growth. In 1904 the St. Louis, Brownsville, and
3 Mexico Railway was completed from Corpus Christi to Brownsville, with a branch from
4 Harlingen through Mission to Sam Fordyce (known as the Sam Fordyce Branch) completed
5 that same year (Werner 2017). The town of Donna (located near the three reasonable
6 alternatives' southern termini) was founded along the railroad in 1904, although a cattle
7 ranch had been located there since the mid-nineteenth century. The arrival of numerous
8 railroads to the region in the early decades of the twentieth century allowed easier transport
9 of goods and opened the area to larger state and national markets. Coupled with the
10 construction of the railroad, the establishment of large-scale irrigation systems such as the
11 Louisiana–Rio Grande Canal Company (HCID #2), also enabled the area to develop during the
12 early twentieth century. These irrigation systems pumped water from the Rio Grande, and as
13 a result, the economy shifted from ranching to farming in the county's irrigation areas. Since
14 farming required less acreage per landowner than cattle ranching, irrigation made increased
15 settlement of the area possible.

16 Development companies enticed farmers from the U.S. Midwest to settle in Hidalgo County
17 bringing their farming skills with them. As a result, people began pouring into the Lower Rio
18 Grande Valley, and many of these newcomers settled in the newly established towns in the
19 county, such as McAllen (1904), Edinburg (1908), Pharr (1909), and San Juan (1909). Race
20 relations between the Anglo-American farmers and Hispanic residents were tense as many of
21 the newly arrived farmers were unwilling to adapt to the Hispanic culture that was so
22 prominent in the area. Subsequently, many of the towns established during that time period,
23 such as McAllen and Weslaco, had segregated neighborhoods (Garza 2017a).

24 During the early twentieth century, the population of Hidalgo County more than doubled
25 because of a second wave of development that occurred after World War I (WWI). During this
26 time, the passage of a series of legislative bills allocated funds to war veterans for the
27 purchase of farms, equipment, and houses (Knight 2009:48). Additional irrigation systems
28 constructed during the late 1910s and 1920s in the southern portions of the project study
29 area led to the vast expansion of the farming industry and the introduction of citrus fruit
30 production, which thrived in the south Texas climate. Cattle ranching still remained the
31 predominant agricultural pursuit in the northern areas of the project study area.

32 The formation of the THD in 1917 led to the construction of the first hard-surfaced highways
33 in the area. During the 1920s, the THD constructed several paved roads with permanent
34 bridges and culverts, and by 1931, there were roughly 525 miles of paved roads complete in
35 the Lower Rio Grande Valley region (Knight, 2009:50). The construction and pavement of
36 roads during this time helped boost truck farming in the area as well. The truck farming
37 economy helped sustain the area during the Great Depression years, and the county's

1 population increased by nearly 30,000 people between 1930 and 1940 (Garza 2017a). New
2 industries were taking root in the area too, from oil exploration, drilling, and refining to food
3 production (such as canning and juicing). Many local residents began working in industrial
4 facilities in the area, especially during WW II.

5 During the post-war years, the economy boomed and the area experience sustained growth.
6 With the G.I. Bill allowing returning veterans to purchase homes at low interest rates,
7 neighborhoods began to spring up on the periphery of Edinburg, McAllen, and Pharr. With an
8 improved economy, more people came to Hidalgo County and the citrus industry was a primary
9 focus of the economy.

10 Racial tensions between Anglo-American and Hispanic residents continued throughout the
11 mid- to late-twentieth century, particularly after the civil rights movement of the 1960s.
12 Simultaneously, in the 1960s and 1970s, the Lower Rio Grande Valley began to see the
13 establishment of numerous *colonias*, or unincorporated immigrant settlements outside
14 municipal boundaries. In many cases, immigrants in search of better opportunities in the U.S.
15 purchased land with assurances that municipal utilities such as water, electricity, and sewage
16 would eventually be provided. For many *colonias* the arrival of these services took decades, if
17 they were even provided at all, leading to poverty and serious health problems for these
18 communities (Garcia 2017).

19 Because of the influx of immigrants in the latter part of the twentieth century, Hidalgo County
20 never experienced any population decline. However, the concurrent rise of corporate
21 agriculture meant less agricultural jobs and in the continued exploitation of immigrant or
22 migrant workers resulted in a high rate of poverty in Hidalgo County.

23 3.1.2 Agriculture

24 Agriculture began in Hidalgo County with the arrival of the early settlers in the eighteenth
25 century. Settlers established cattle and sheep ranches along the Rio Grande River, such as
26 the Santa Anita Ranch (present-day McAllen Ranch). The ranches in the southern part of the
27 county were diverse in their pursuits and included transportation and trade endeavors, while
28 ranches in the northern part of the county focused solely on livestock raising. Cattle ranching
29 in Hidalgo County reached its peak in 1890. The last decade of the nineteenth century saw
30 the introduction and expansion of new crops to the farms in the area, in particular sugar cane
31 and citrus fruit. It was also during this time that local residents began constructing early
32 irrigation infrastructure, particularly in southern Hidalgo County.

33 At the turn of the twentieth century, a series of events coalesced and drastically altered the
34 economic and agricultural make-up of the Lower Rio Grande Valley and Hidalgo County. The
35 arrival of the railroads in the early twentieth century was perhaps the most significant, leading

1 to a massive population boom and the proliferation of farming. Whereas the previous
2 transportation system in the region was limited to primitive roads, the railroads opened up the
3 region to state and national markets, and allowed access to better equipment and the ability
4 to ship goods. In 1904 former Hidalgo County Sheriff John Closner won Gold Medal at the
5 World's Fair for his sugar cane, which was used in advertisements to draw investors and
6 Midwest farmers to the area (Knight 2009:21). Additionally, the onset of the Mexican
7 Revolution led to mass emigration of Mexican citizens, bolstering the agricultural labor force
8 of the Lower Rio Grande Valley.

9 Between 1900 and 1910 the number of irrigation companies in the Lower Rio Grande Valley
10 went from four to at least 20 (Knight 2009:29). Even ranching communities north of the Rio
11 Grande began to experiment with farming and introduce irrigation systems. In 1904, the town
12 of Donna was established on the Alameda (Grove) Ranch and the former cattle community
13 began cultivating citrus and vegetable crops (Garza 2017b). In 1915, Edinburg began
14 constructing an irrigation system and the area surrounding the city began shifting from
15 livestock raising to farming.

16 The first two decades of the twentieth century were a transformative time period in Hidalgo
17 County. The post-war economy had taken a downturn, the Mexican revolution impacted
18 regional trade, and a series of flood and drought events resulted in agricultural devastation.
19 Many of the private irrigation companies founded at the turn of the twentieth century could
20 not weather these external forces, resulting in transference to publicly owned irrigation
21 districts. Despite the economic and agricultural setbacks of the post-war years, between 1910
22 and 1920 the population of Hidalgo County more than doubled and the number of farms grew
23 to more than seven times its 1890 count (Garza 2017a). A number of factors contributed to
24 another land boom in the 1920s, including transportation improvements and the construction
25 of hard surfaced roadways, the invention of the refrigerated truck, and the expansion of
26 existing and construction of new irrigation districts. Finally, in 1926 the Rio Grande Valley Gas
27 Company was established to construct natural gas infrastructure, which bolstered industrial
28 development and provided an alternate fuel source for pumping water from the Rio Grande
29 northward (Knight 2009:54).

30 Overall, farming dominated Hidalgo County's economy through the 1920s. Citrus fruits, corn,
31 and cotton were the county's primary crops, while cattle, sheep, and poultry were the primary
32 livestock raised in the northern part of the county. Much of the growth in the farming industry
33 during the 1920s occurred south of Edinburg in towns located near the Rio Grande, such as
34 Pharr, McAllen, and Mission. Access to water was essential to successful farming operations,
35 and therefore proximity to the Rio Grande and the ability to easily install irrigation systems
36 meant that the southern portion of the region was better suited to this purpose. In the area
37 east and north of Edinburg, and further removed from the river, the availability of shallow

1 surface water meant easy construction of wells to service livestock, and ranching continued
2 to be the primary agricultural pursuit. An increase in beef prices after World War I resulted in
3 a boom in the cattle industry; however, prices began to decline because of deflation, foreign
4 competition, and the shift from farming to ranching in Wyoming, Colorado, and Nebraska.
5 Regardless, several large ranching complexes, such as the Curry Ranch, La Esperanza Ranch,
6 and Cibolo Ranch, were located east of present-day Faysville and Edinburg during this time.

7 The post-World War II era saw the rise of agribusiness, as mechanization of farming equipment
8 and advances in fertilization technology led to the consolidation of small farms in Hidalgo
9 County and statewide. In addition, severe droughts and freezes in the 1940s and 1950s
10 dramatically impacted the citrus crop, and as a result the citrus industry peaked in 1950.

11 The rise of corporate farming continued throughout the latter half of the twentieth century and
12 the number of individual or family farms continued to drop. As a result of political upheaval in
13 Mexico in the 1960s and 1970s there was another wave of immigrants that led to a massive
14 population boom. Many of the immigrants established themselves in unincorporated *colonias*
15 and sought work in the agricultural sector. Competition for water resources and a lack of
16 quality employment opportunities for immigrants resulted in the Lower Rio Grande Valley
17 becoming one of the poorest regions in the nation.

18 3.2 Development Trends and Resource Types

19 Many of the historic-age residential resources that are present in the historic APE of the three
20 reasonable alternatives consist of houses and outbuildings on ranches or farms. Historically,
21 agricultural development in the northern portion of the three reasonable alternatives area was
22 primarily centered on ranching, while the southern portion of the area closer to the Rio Grande
23 had better access to irrigation facilities and farming was more typical.

24 Although parts of the southern portions of the three reasonable alternatives travel through or
25 are adjacent to large residential neighborhoods, historic aerial photographs indicate that
26 many of these residential developments were constructed since the 1980s and therefore are
27 not historic-age. However, beginning in the 1960s an influx of Mexican immigrants led to the
28 creation of numerous *colonias* within Hidalgo County. Preliminary research suggests there
29 may be several *colonias* within the vicinities of San Carlos and Muniz. Therefore, it is possible
30 there are historic-age resources associated with the *colonias* within the historic APE of the
31 three reasonable alternatives.

32 As previously outlined in the historic context, the historic APE and 0.25-mile historic study area
33 for all three reasonable alternatives was sparsely settled by ranchers until more widespread
34 development began around 1900 as a result of the introduction of irrigation. The area boomed
35 during the early twentieth century after the railroad was constructed and several communities

1 sprang up. In the mid-twentieth century, the area developed much like the rest of the country,
2 with numerous homeowners upgrading their houses or moving to new houses during the post-
3 WWII years. Additionally, new and larger outbuildings constructed during the post-WWII era
4 demonstrate the shift to more widespread automation in cultivation activities. Post-1975
5 construction is extensive, since the region has experienced significant growth in the last
6 several decades.

7 Finally, analysis of historic aerial photographs cross referenced with Google Streetview
8 revealed that many of the historic-age residential buildings within the historic APE of the three
9 alternatives are moved buildings. The practice of relocating residential buildings is common
10 in the Rio Grande Valley as it is often less expensive than constructing new homes. Although
11 it is possible for moved buildings to be eligible for the NRHP, the threshold for significance
12 and eligibility is much higher, since the buildings no longer retain their integrity of setting and
13 location.

14 **3.3 Potential Resources with High Probability for Eligibility**

15 Preliminary review of primary and secondary resources and analysis of current and historic
16 aerials suggests that there are few properties within the historic APEs of the three reasonable
17 alternatives that would have high potential for NRHP-eligibility. Desktop analysis revealed that
18 a majority of the historic-age resources within the historic APEs are post-war residences or
19 agricultural outbuildings. These building types are common in the Lower Rio Grande Valley
20 and in Texas, and therefore the threshold for NRHP-eligibility for these resources is high.
21 Furthermore, many of these buildings have been moved from their original locations and are
22 divorced from their historic context and setting. As such, moved properties must meet certain
23 criteria (Criterion Consideration B: Moved Properties) to be considered significant for any of
24 the NRHP criteria.

25 Pre-1945 historic resources may have slightly more potential for historical significance than
26 post-1945 historic resources. Post-war resources are typically formulaic resources that are
27 extremely common across the region and country, and therefore have a higher threshold for
28 eligibility. However, the pre-1945 historic resources may have the potential to illustrate early
29 development trends of the area. Regardless, all historic resources (including pre-1945
30 resources) must be considered important within their historic context and retain historic
31 integrity.

32 In addition to the NRHP-listed HDIC #2, the resources within the historic APEs that do have a
33 high probably for NRHP-eligibility are the Donna and Engleman IDs. For the purposes of this
34 analysis, the districts are assumed eligible.

1 The present-day South Texas International Airport at Edinburg is located at the northern
2 terminus of all three reasonable alternatives, southwest of the I-69C/US 281 and CR 490
3 intersection. The airport was originally part of the Moore Air Force Base and appears on the
4 1963 topographic map as Auxiliary Field No. 1. The base was founded in 1941 approximately
5 13.2 miles southwest of the South Texas International Airport, and before its closing in 1945
6 it trained over 6,000 pilots. The base operated for a brief period as a municipal airport before
7 it was reactivated in the Cold War between 1959 and 1962 (Wallace 2017). According to
8 historic aerials and topographic maps, there were no buildings at the Auxiliary Field No. 1
9 during the historic-age period, although the runways remain intact. Current airport buildings
10 are not historic-age. Although the runways at the airport are historic-age, it is unlikely that the
11 facility retains enough historic integrity to be eligible for the NRHP.

12 There are also two cemeteries within the historic APE and 0.25-mile study of the three
13 reasonable alternatives. As previously mentioned, these property types need to meet special
14 criteria in accordance with the National Park Service (NPS) guidance in order to be considered
15 NRHP-eligible.

16 4.0 ASSESSMENT OF ALTERNATIVES

17 4.1 2014 Modified 2 Alternative

18 The southern portion of the 2014 Modified 2 Alternative is a mix of residential development,
19 small farms, and agricultural fields and orchards. From the southern terminus to SH 107 at
20 San Carlos, the alternative is more densely populated with residential neighborhoods and
21 some commercial development along the major roadways. Between SH 107 and Mile 22 ½
22 Road development becomes less dense and this alternative begins to feature pockets of
23 residential neighborhoods nestled among agricultural fields and orchards. The homes in these
24 neighborhoods are primarily non-historic-age, although there are scattered post-WWII homes
25 within them. North of Mile 22 ½ Road, the historic APE consists primarily of undeveloped land,
26 cattle rangeland, and cultivated fields with scattered non-historic-age residences and
27 agricultural outbuildings.

28 According to preliminary desktop review and aerial analysis, there are 91 historic-age
29 properties within the historic APE of the 2014 Modified 2 Alternative. This includes five
30 properties likely constructed between 1900-1944 and 86 properties likely constructed
31 between 1945-1975. There are also no historic-age bridges and one cemetery within the
32 historic APE of this reasonable alternative.

33 4.2 2014 PSM Alternative

34 From the southern terminus to just north of Mile 17 ½ Road, the 2014 PSM Alternative follows
35 the same alignment as the 2014 Modified 2 Alternative. The southern portion of this

1 alternative is a mix of residential development, small farms, and agricultural fields and
2 orchards. From the southern terminus to SH 107 in San Carlos the alternative is more densely
3 populated with residential neighborhoods and some commercial development along the
4 major roadways. Between SH 107 and of FM 2812 this alternative is less densely populated,
5 with pockets of residential neighborhoods and small-scale farms. The homes in these
6 neighborhoods are primarily non-historic-age, although there are scattered post-war homes
7 within them. North of FM 2812, the historic APE consists primarily of undeveloped land, cattle
8 rangeland, and cultivated fields with scattered non-historic-age residences and agricultural
9 outbuildings.

10 According to preliminary desktop review and aerial analysis, there are 80 historic-age
11 properties within the historic APE of the 2014 PSM Alternative. This includes six properties
12 likely constructed between 1900-1944 and 74 properties likely constructed between 1945-
13 1975. There are also no historic-ages bridges and no cemeteries within the historic APE of
14 this reasonable alternative.

15 4.3 FM 1423 PSM Alternative

16 The FM 1423 PSM Alternative roughly follows the footprint of FM 1423/Val Verde Road from
17 its southern terminus at I-2/US 83 to FM 1925. The historic APE between I-2/US 83 and
18 FM 1925 consists primarily of small-scale farms and orchards, a few residential
19 neighborhoods, and scattered commercial development along the major roadways. Several of
20 the small-scale farms feature historic-age residences or outbuildings. North of FM 1925 the
21 alternative jogs slightly east where it meets up with the 2014 PSM Alternative. Between FM
22 1925 and FM 2812 this alternative is less densely developed begins to feature pockets of
23 residential neighborhoods and small-scale farms. The homes in these neighborhoods are
24 primarily non-historic-age, although there are scattered post-war homes within them. North of
25 FM 2812, the historic APE consists primarily of undeveloped land, cattle rangeland, and
26 cultivated fields with scattered non-historic-age residences and agricultural outbuildings

27 According to preliminary desktop review and aerial analysis, there are 62 historic-age
28 properties within the historic APE of the FM 1423 PSM Alternative. This includes four
29 properties likely constructed between 1900-1944 and 58 properties likely constructed
30 between 1945-1975. There is also one historic-age bridge and one cemetery within the
31 historic APE of this reasonable alternative.

32 4.4 No Build Alternative

33 Because the No Build Alternative would not include the construction, alteration, or
34 improvement to transportation facilities in relation to the construction of the three reasonable
35 alternatives, it would have no potential impact on historic resources.

1 5.0 CONCLUSION

2 Historic-age resources are located within the historic APE of all three reasonable alternatives.
3 However, preliminary desktop analysis did not reveal any historic-age resources that have a
4 high potential for NRHP-eligibility within the historic APEs of these alternatives, with the
5 exception of the Donna and Englemen IDs. Additionally, two reasonable alternatives (the 2014
6 Modified 2 Alternative and the 2014 PSM Alternative) cross the NRHP-listed HCWID #2.
7 Although the three reasonable alternatives would cross these irrigation districts, it is
8 anticipated that bridges will be built over and completely span the irrigation canals. As a result,
9 the construction activities would not change the character-defining features of these irrigation
10 districts, and the proposed project would not alter use and function of the irrigation features.
11 Therefore, in accordance with 36 CFR 800.5, such construction activities would likely pose a
12 no adverse effect to the NRHP-listed and potentially NRHP-eligible irrigation districts under
13 Section 106 of the NHPA.

14 Under Section 4(f) of the U.S. Department of Transportation (DOT) Act (23 CFR 774), the
15 construction activities may constitute a “use” of the NRHP-listed and potentially NRHP-eligible
16 irrigation districts if potential acquisition of ROW and/or license agreements are required from
17 these irrigation districts. However, as outlined in 23 CFR 774, since the proposed project
18 would pose no adverse effect under Section 106 of the NHPA, the proposed project poses
19 only *de minimis* impacts under Section 4(f).

20 The non-irrigation-related historic-age resources within the historic APEs of the three
21 reasonable alternatives appear to consist primarily of post-WWII residences and agricultural
22 outbuildings, which are common in the area and in Texas and have a high threshold for NRHP-
23 eligibility. Although there are several pre-1945 residences within the historic APEs, several of
24 them have been moved and they appear to have significant alterations that may negatively
25 affect their historic integrity.

26 See **Table 1** below for the historic-age resources identified within the APEs of the reasonable
27 alternatives.

28 **Table 1. Potential Historic-age Resources by Alternative**

Alternative	No Build	2014 Modified 2	2014 PSM	FM 1423 PSM
Total # of Properties 1900-1944	0	5	6	4
Total # of Properties 1945-1975	0	86	74	58
Cemeteries	0	1	0	1
Historic-age Bridges	0	0	0	1
NRHP-Listed or Assumed NRHP-Eligible Irrigation Districts	0	2	3	2

Source: B&A 2017.

1 Once a preferred alternative is selected, a full analysis of the potential NRHP eligibility of each
2 historic-age resource located in the reasonable alternatives' historic APE will be conducted.
3 The analysis will begin with a reconnaissance-level historic resources survey, which will be
4 conducted to determine if any historic-age resources within the historic APE are eligible for
5 the NRHP using on-the-ground fieldwork to verify the aerial desktop analysis results. The
6 historic resources survey will be completed in accordance with TxDOT Environmental Affairs
7 Division's (ENV) April 2014 *Documentation Standard, Reconnaissance Survey Report*. In
8 accordance with this guidance, all historic-age (pre-1976) resources and any potential historic
9 districts on parcels within or partially within the historic APE will be surveyed and
10 documented.³ In addition, a survey and evaluation of a potential rural historic landscape
11 within the historic APE of the preferred alternative will also be conducted. Per TxDOT guidance,
12 two photographs of each historic-age resource will be taken, including both primary façade
13 and a side elevation. In cases where vegetation, fencing, lack of access, or safety concerns
14 limit or prohibit photographic documentation, the best view available from the public ROW will
15 be provided and aerial photographs for further documentation of the resource will be included
16 in the survey report.

17 The Historic Resources Survey Report (HRSR) will document results of the fieldwork and
18 evaluations of the NRHP eligibility of each historic-age resource in accordance with SOI
19 standards and 36 CFR 60.2. The HRSR will also include an assessment of the preferred
20 alternative's potential for adverse effects to NRHP-listed and NRHP-eligible properties (as
21 outlined in 36 CFR 800.5). TxDOT will consult with the Texas SHPO regarding the report
22 findings and possible mitigation options, if mitigation to historic properties is required under
23 Section 106 of the NHPA.

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³ The 300-foot historic APE utilized during this desktop analysis is based on no grade separated interchanges. When the preferred alternative is selected and detailed schematics are created TxDOT will consult with the SHPO to confirm the historic APE for the reconnaissance-level historic resources survey.

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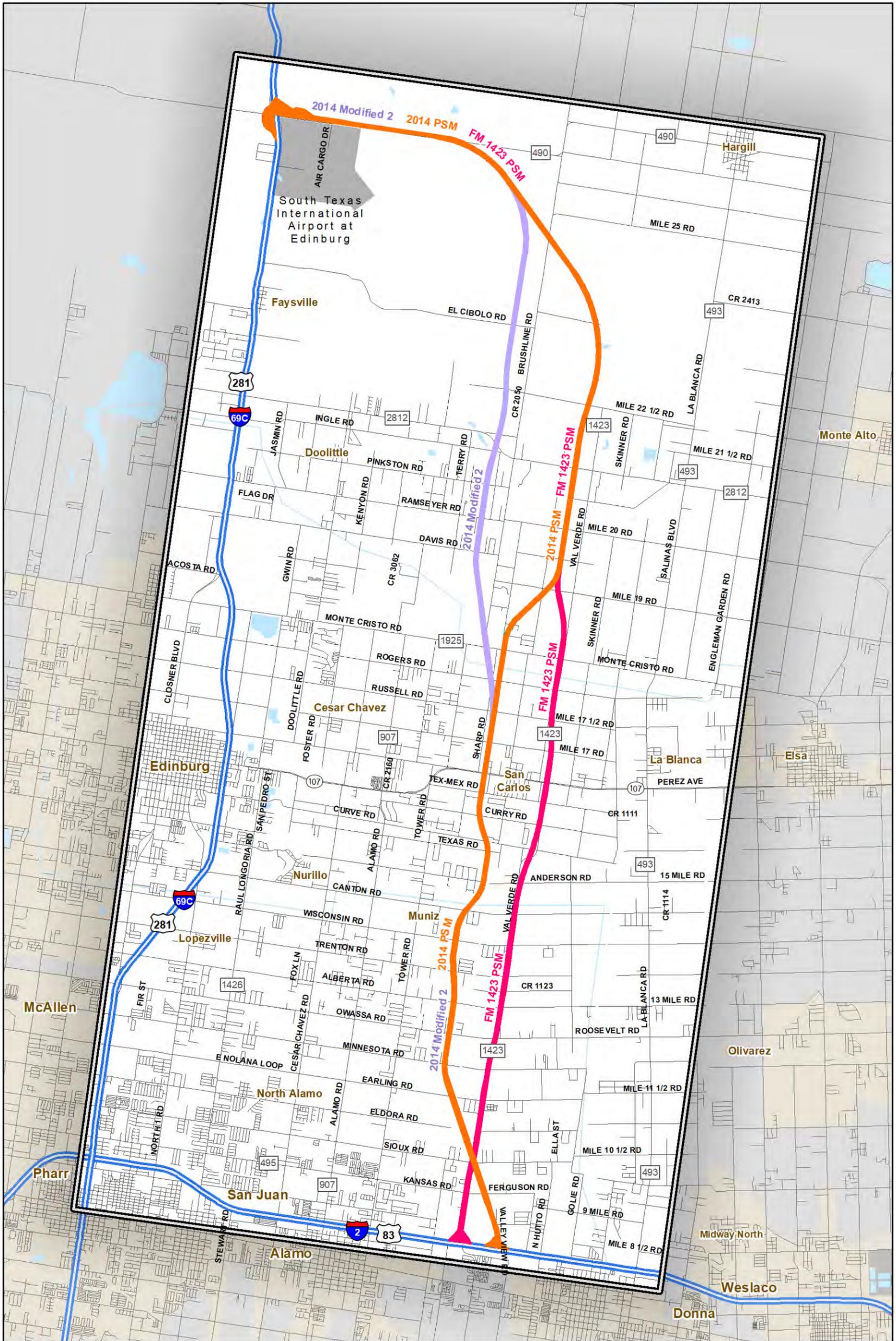
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2
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Attachment
Exhibits



Base Map: ESRI-USA Base Map

- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Study Area

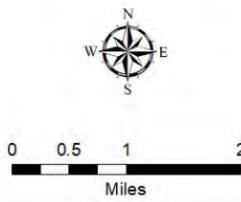
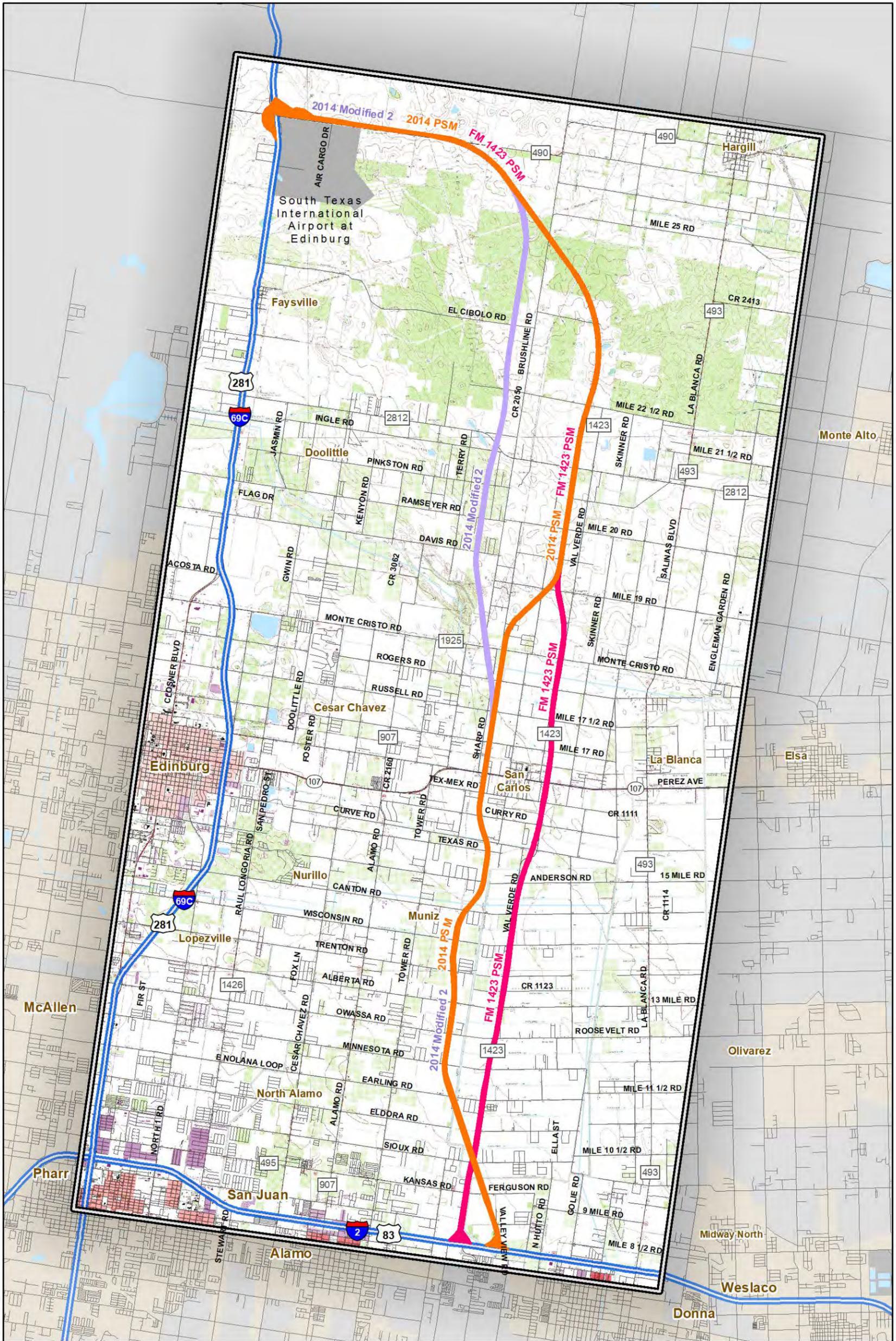


Exhibit 1
 Project Location on County Base
 SH 68 from
 I-2/US 83 to I-69C/US 281
 Hidalgo County, Texas
 CSJs: 3629-01-001, 002, and 003



Base Map: ESRI-USA Base Map

- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Study Area

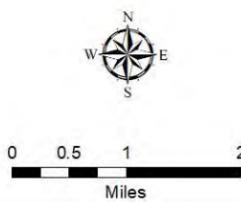
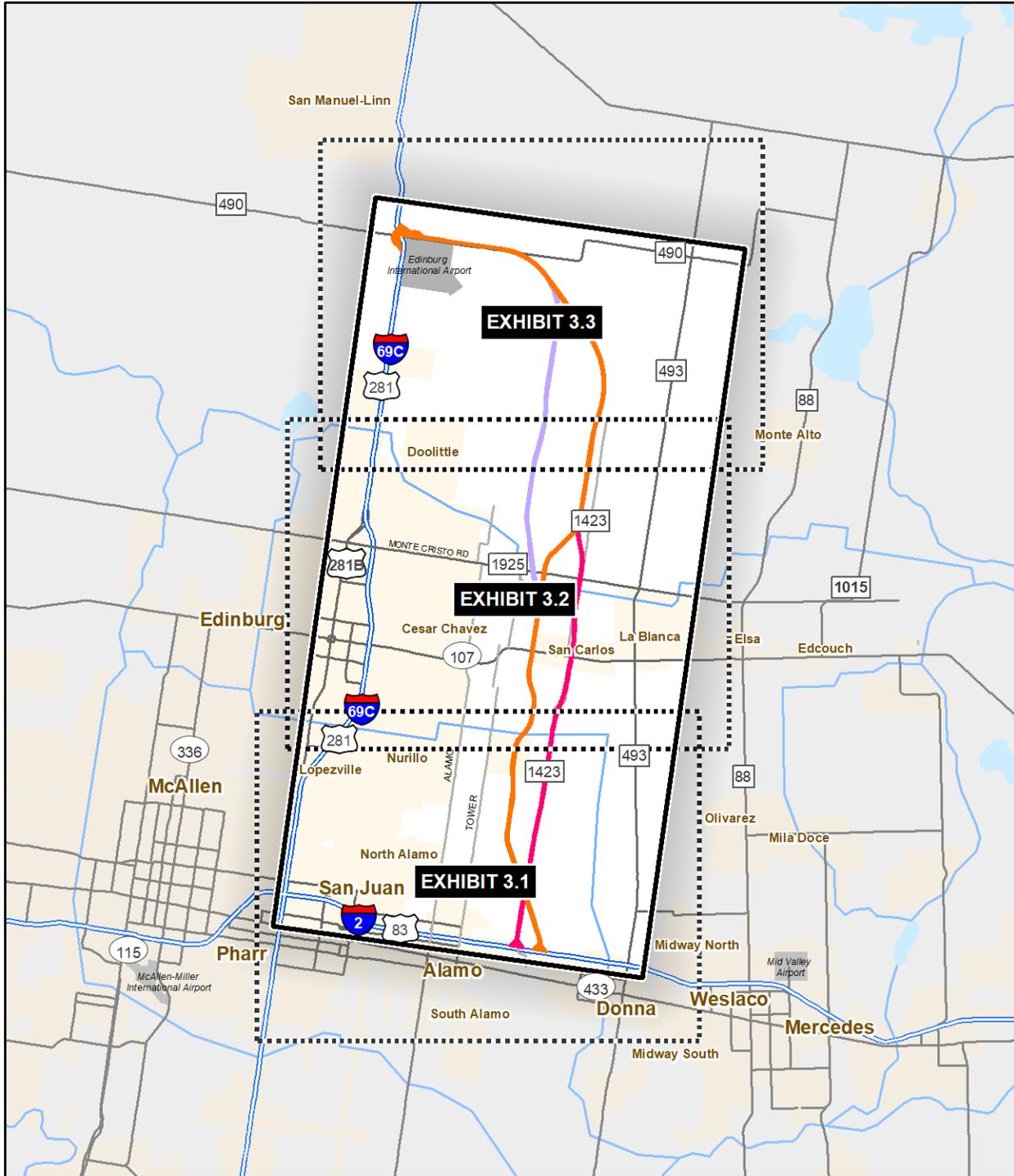


Exhibit 2
 Project Location on
 7.5' USGS Topographic
 SH 68 from
 I-2/US 83 to I-69C/US 281
 Hidalgo County, Texas
 CSJs: 3629-01-001, 002, and 003



<ul style="list-style-type: none"> 2014 Modified 2 Alternative 2014 PSM Alternative FM 1423 PSM Alternative Project Study Area 	  <p>Miles</p>	<p>Exhibit 3.0 Study Area Index SH 68 from I-2/US 83 to I-69C/US 281 Hidalgo County, Texas CSJs: 3629-01-001, 002, and 003</p>
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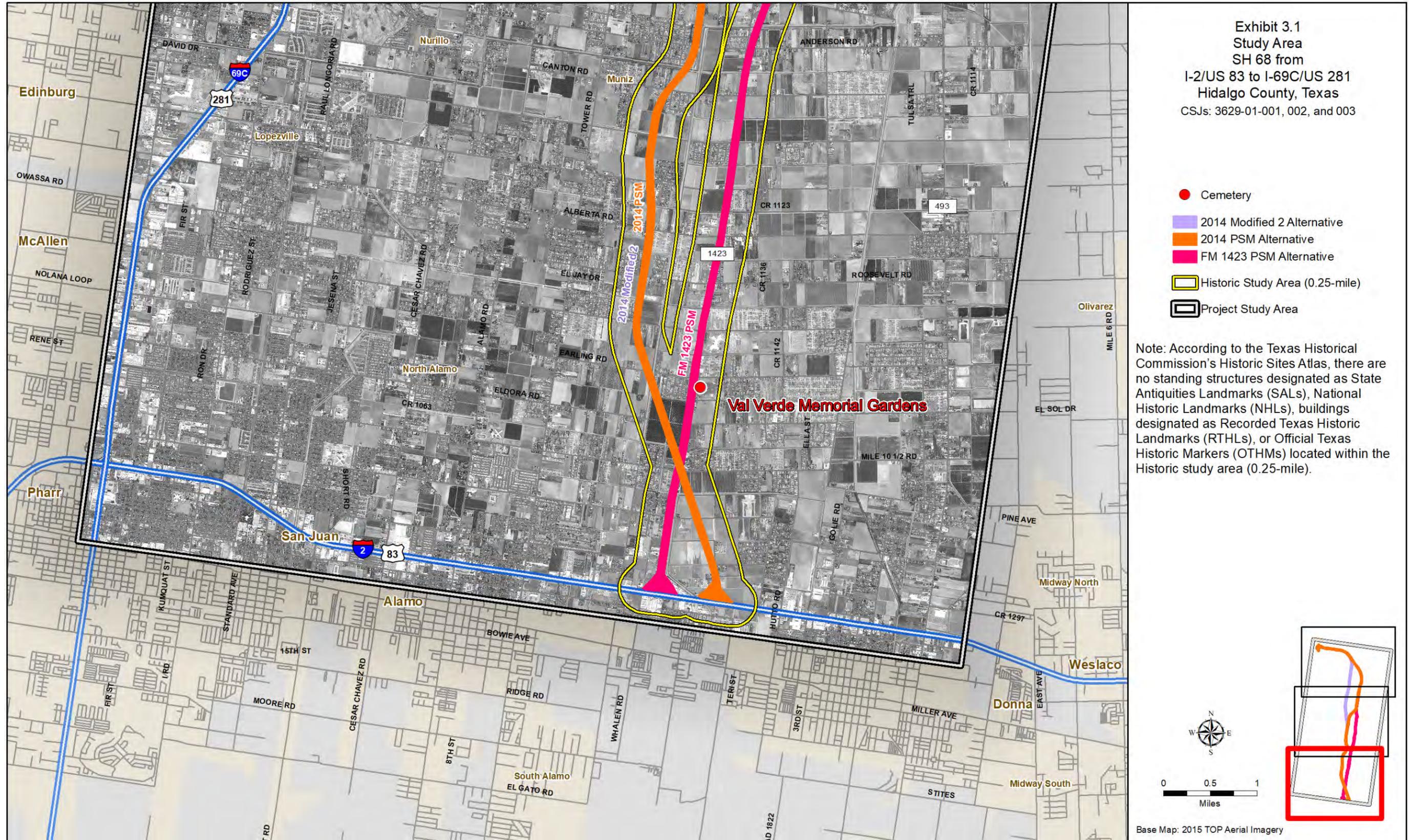
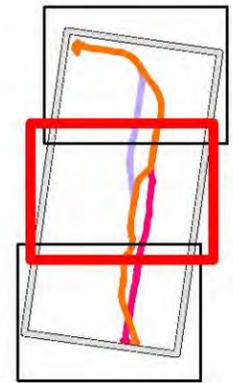
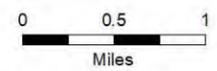




Exhibit 3.2
Study Area
SH 68 from
I-2/US 83 to I-69C/US 281
Hidalgo County, Texas
CSJs: 3629-01-001, 002, and 003

- Cemetery
- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Historic Study Area (0.25-mile)
- Project Study Area

Note: According to the Texas Historical Commission's Historic Sites Atlas, there are no standing structures designated as State Antiquities Landmarks (SALs), National Historic Landmarks (NHLs), buildings designated as Recorded Texas Historic Landmarks (RTHLs), or Official Texas Historic Markers (OTHMs) located within the Historic study area (0.25-mile).



Base Map: 2015 TOP Aerial Imagery

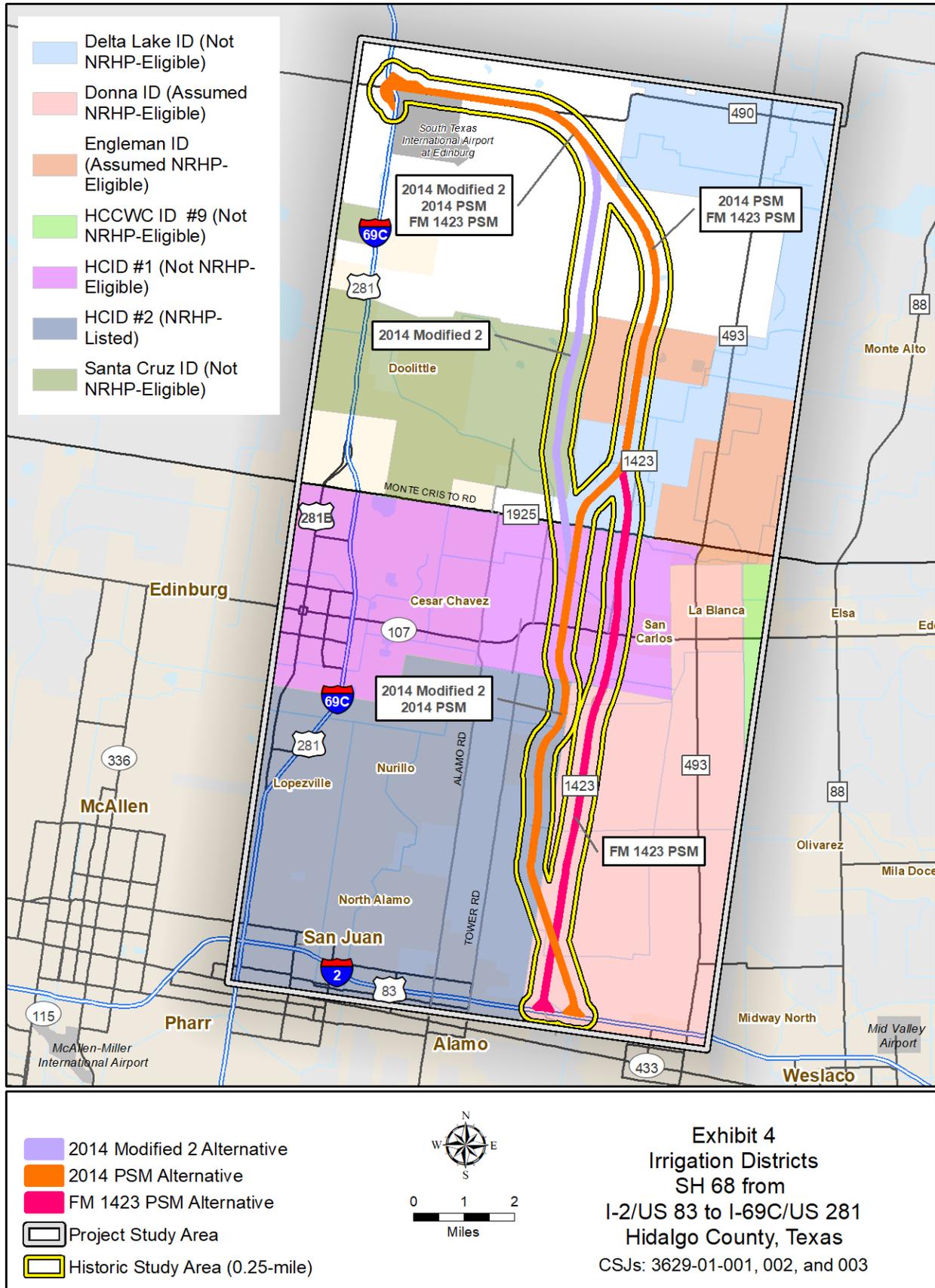


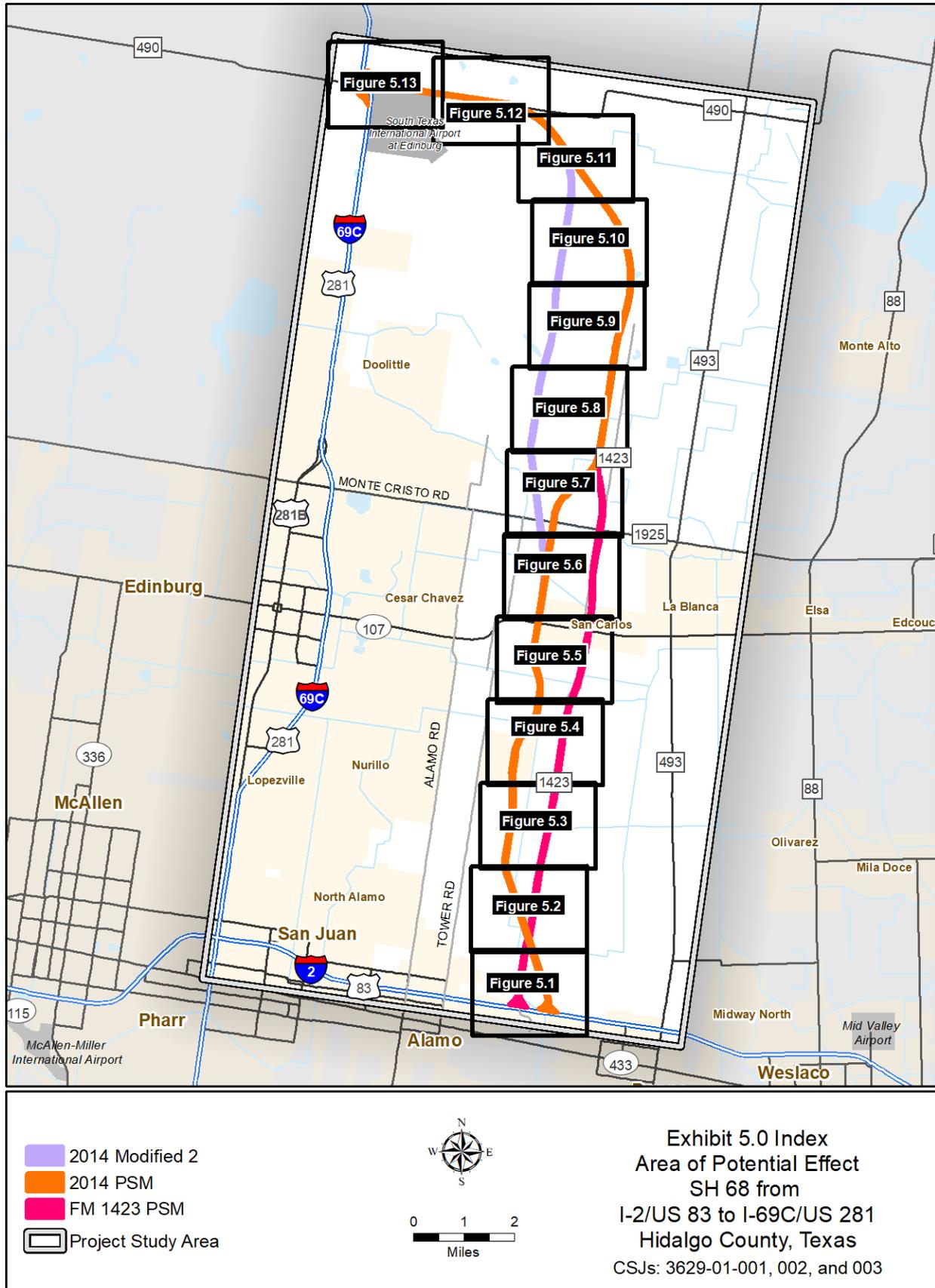
Exhibit 3.3
Study Area
SH 68 from
I-2/US 83 to I-69C/US 281
Hidalgo County, Texas
CSJs: 3629-01-001, 002, and 003

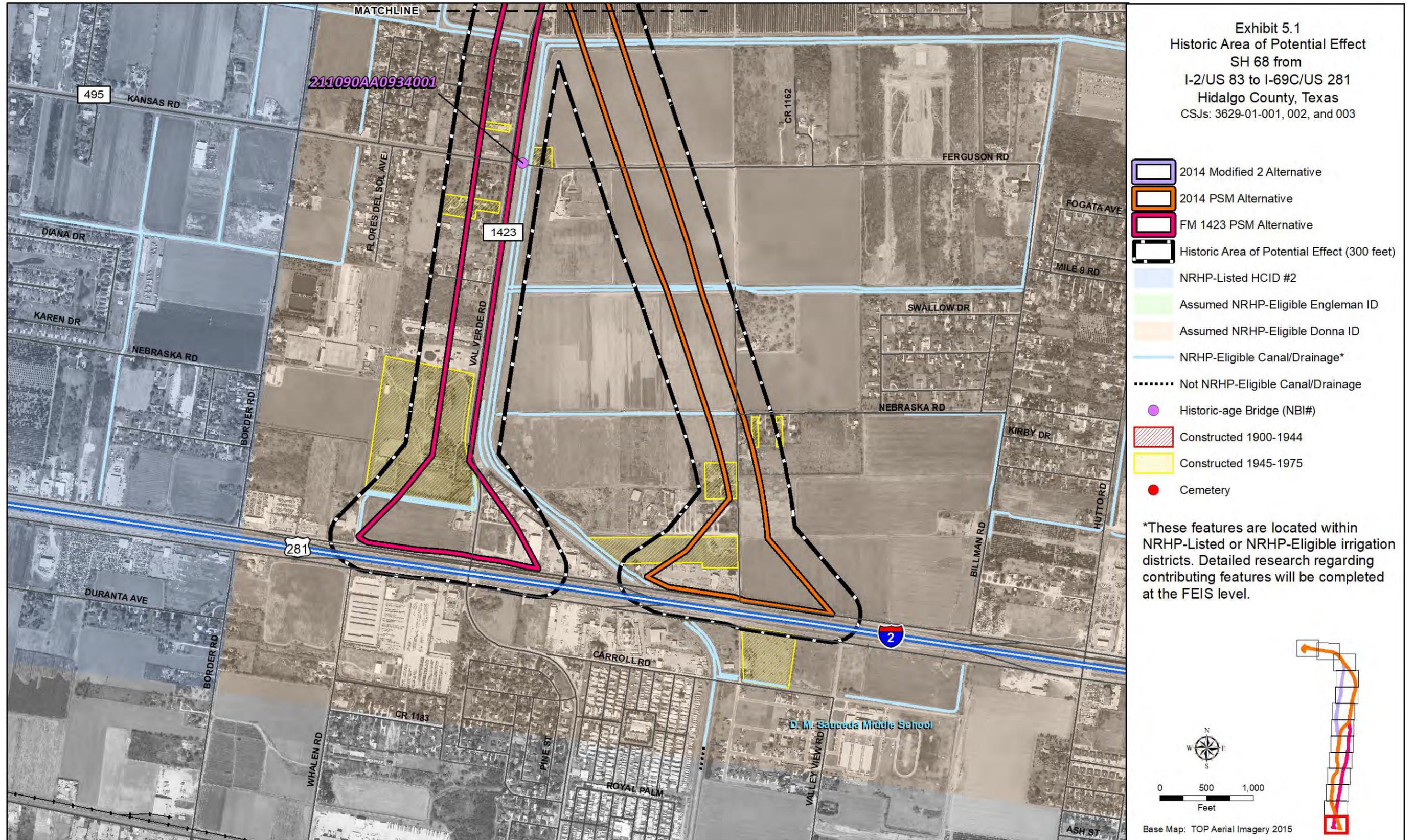
- Cemetery
- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Historic Study Area (0.25-mile)
- Project Study Area

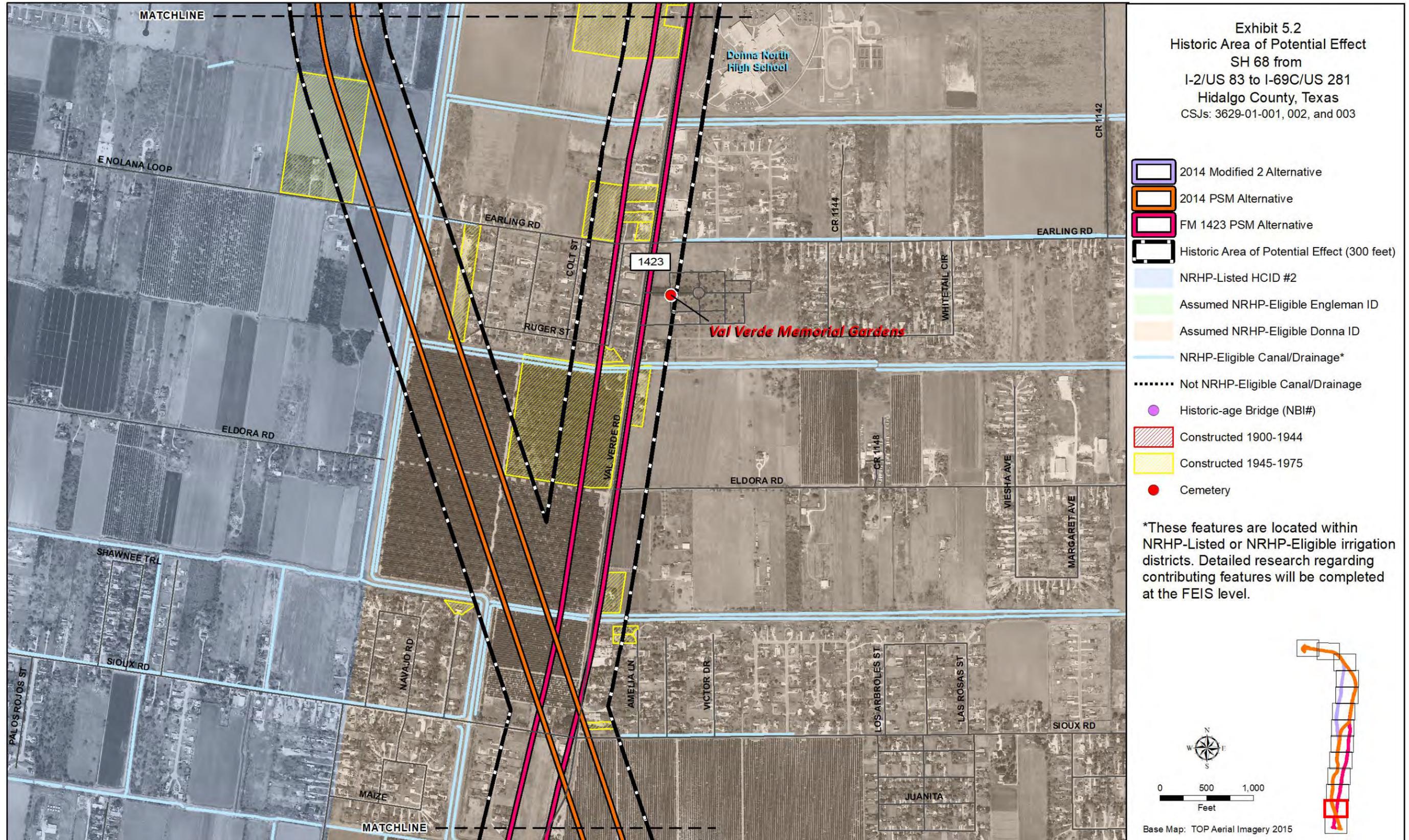
Note: According to the Texas Historical Commission's Historic Sites Atlas, there are no standing structures designated as State Antiquities Landmarks (SALs), National Historic Landmarks (NHLs), buildings designated as Recorded Texas Historic Landmarks (RTHLs), or Official Texas Historic Markers (OTHMs) located within the Historic study area (0.25-mile).

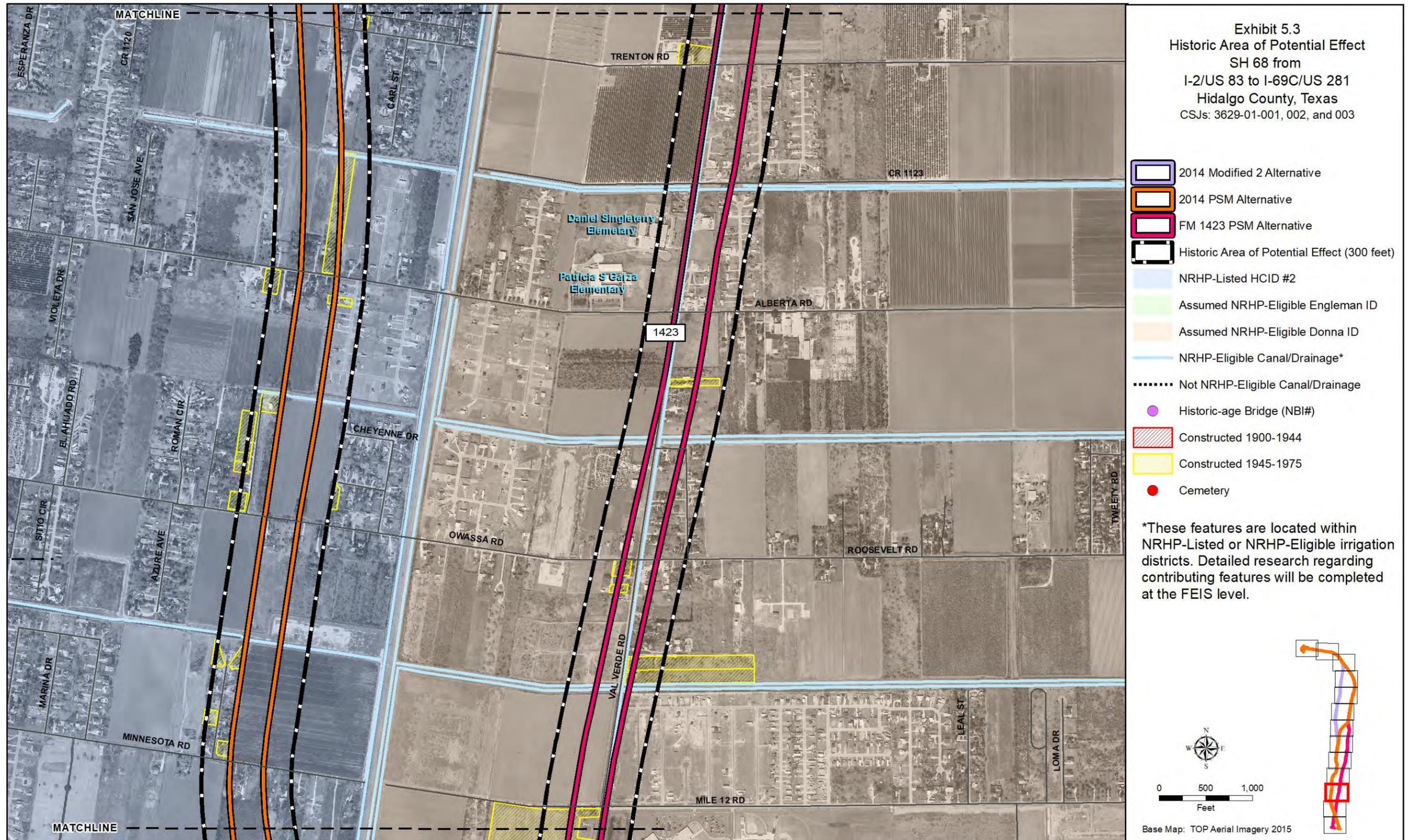
Base Map: 2015 TOP Aerial Imagery











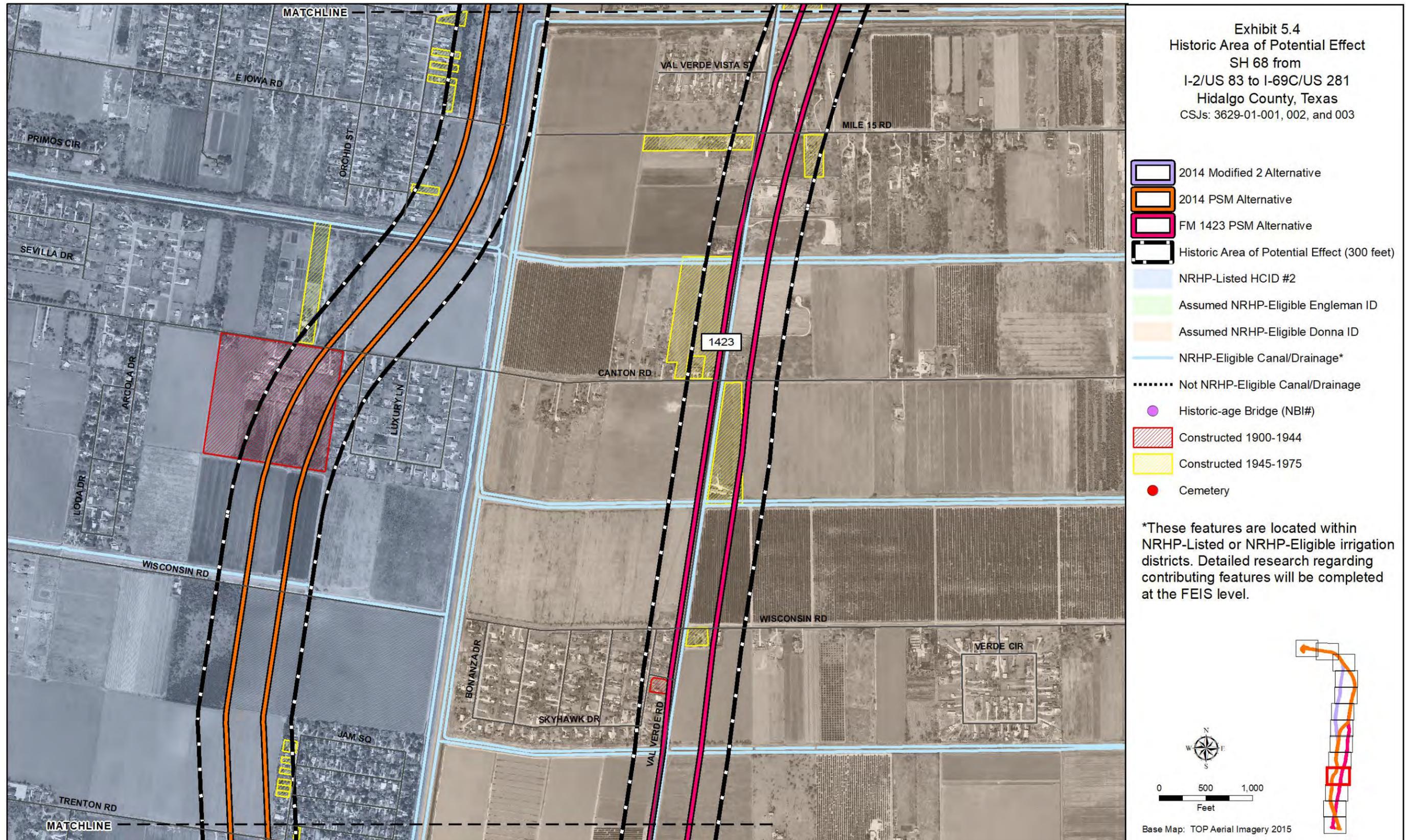
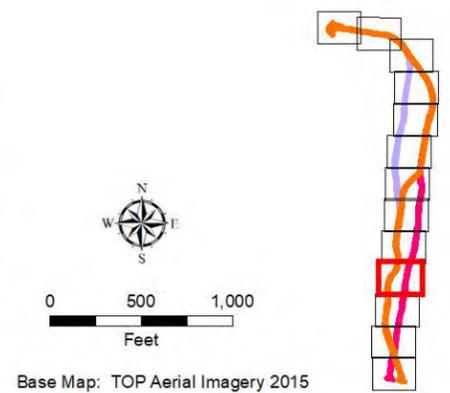


Exhibit 5.4
Historic Area of Potential Effect
SH 68 from
I-2/US 83 to I-69C/US 281
Hidalgo County, Texas
CSJs: 3629-01-001, 002, and 003

- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Historic Area of Potential Effect (300 feet)
- NRHP-Listed HCID #2
- Assumed NRHP-Eligible Engleman ID
- Assumed NRHP-Eligible Donna ID
- NRHP-Eligible Canal/Drainage*
- Not NRHP-Eligible Canal/Drainage
- Historic-age Bridge (NBI#)
- Constructed 1900-1944
- Constructed 1945-1975
- Cemetery

*These features are located within NRHP-Listed or NRHP-Eligible irrigation districts. Detailed research regarding contributing features will be completed at the FEIS level.



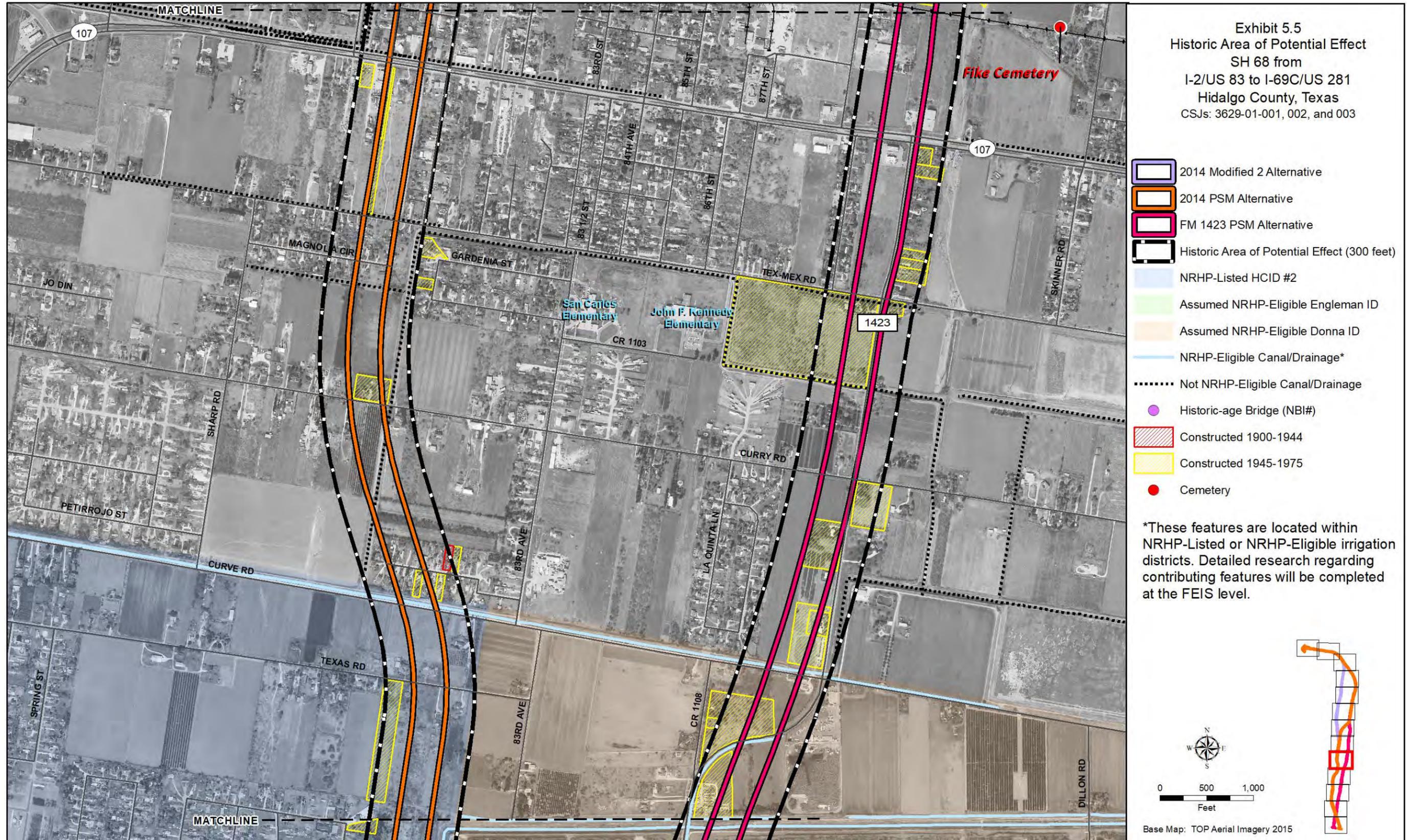


Exhibit 5.5
Historic Area of Potential Effect
SH 68 from
I-2/US 83 to I-69C/US 281
Hidalgo County, Texas
CSJs: 3629-01-001, 002, and 003

- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Historic Area of Potential Effect (300 feet)
- NRHP-Listed HCID #2
- Assumed NRHP-Eligible Engleman ID
- Assumed NRHP-Eligible Donna ID
- NRHP-Eligible Canal/Drainage*
- Not NRHP-Eligible Canal/Drainage
- Historic-age Bridge (NBI#)
- Constructed 1900-1944
- Constructed 1945-1975
- Cemetery

*These features are located within NRHP-Listed or NRHP-Eligible irrigation districts. Detailed research regarding contributing features will be completed at the FEIS level.

Base Map: TOP Aerial Imagery 2015

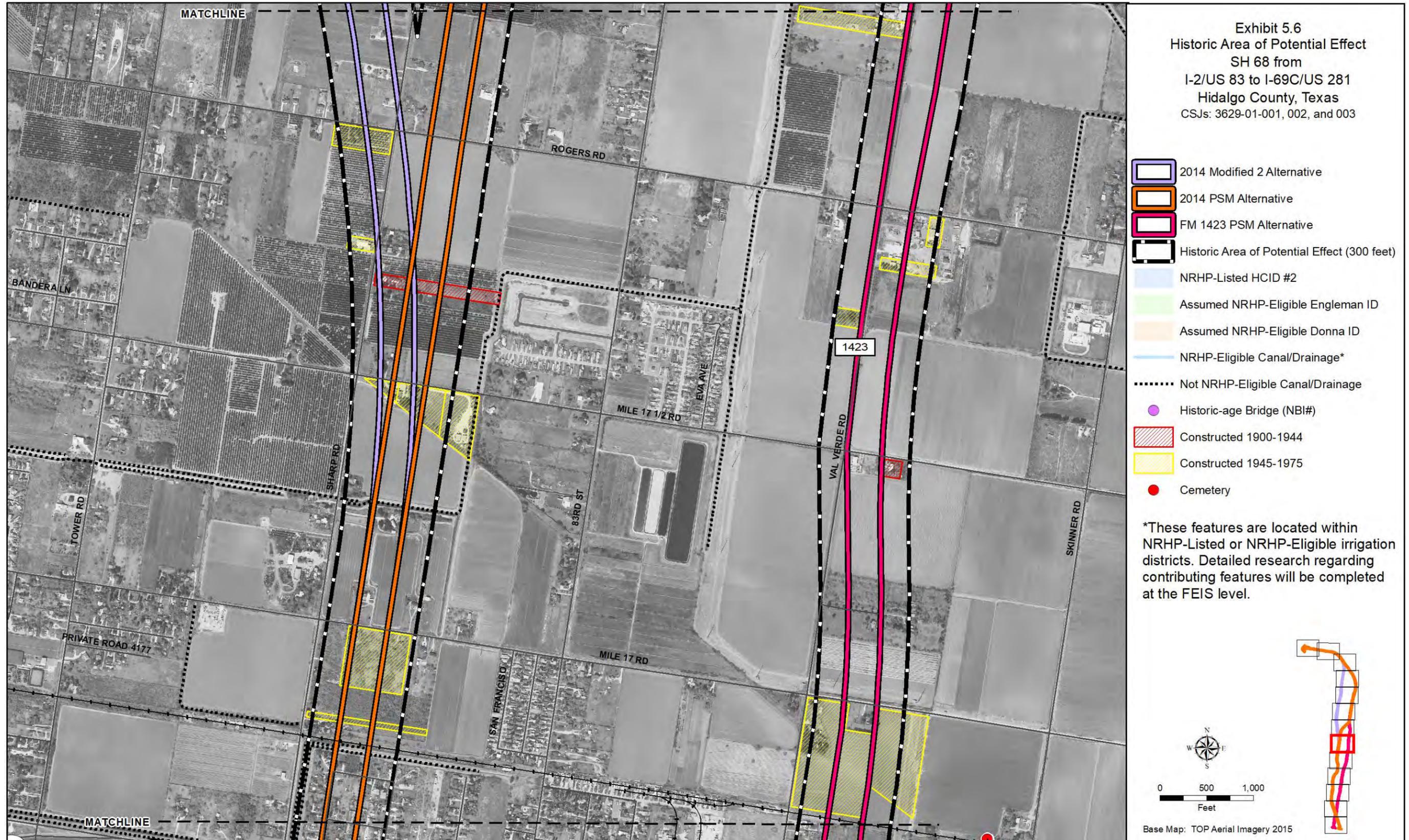
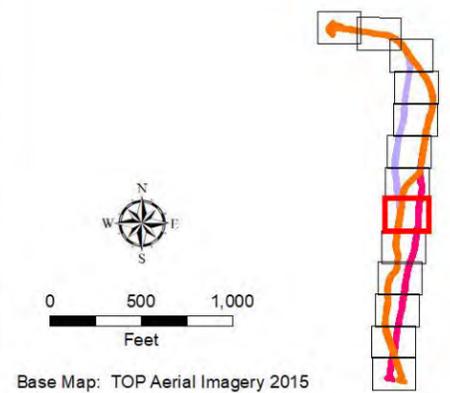


Exhibit 5.6
Historic Area of Potential Effect
SH 68 from
I-2/US 83 to I-69C/US 281
Hidalgo County, Texas
CSJs: 3629-01-001, 002, and 003

- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Historic Area of Potential Effect (300 feet)
- NRHP-Listed HCID #2
- Assumed NRHP-Eligible Engleman ID
- Assumed NRHP-Eligible Donna ID
- NRHP-Eligible Canal/Drainage*
- Not NRHP-Eligible Canal/Drainage
- Historic-age Bridge (NBI#)
- Constructed 1900-1944
- Constructed 1945-1975
- Cemetery

*These features are located within NRHP-Listed or NRHP-Eligible irrigation districts. Detailed research regarding contributing features will be completed at the FEIS level.



Base Map: TOP Aerial Imagery 2015

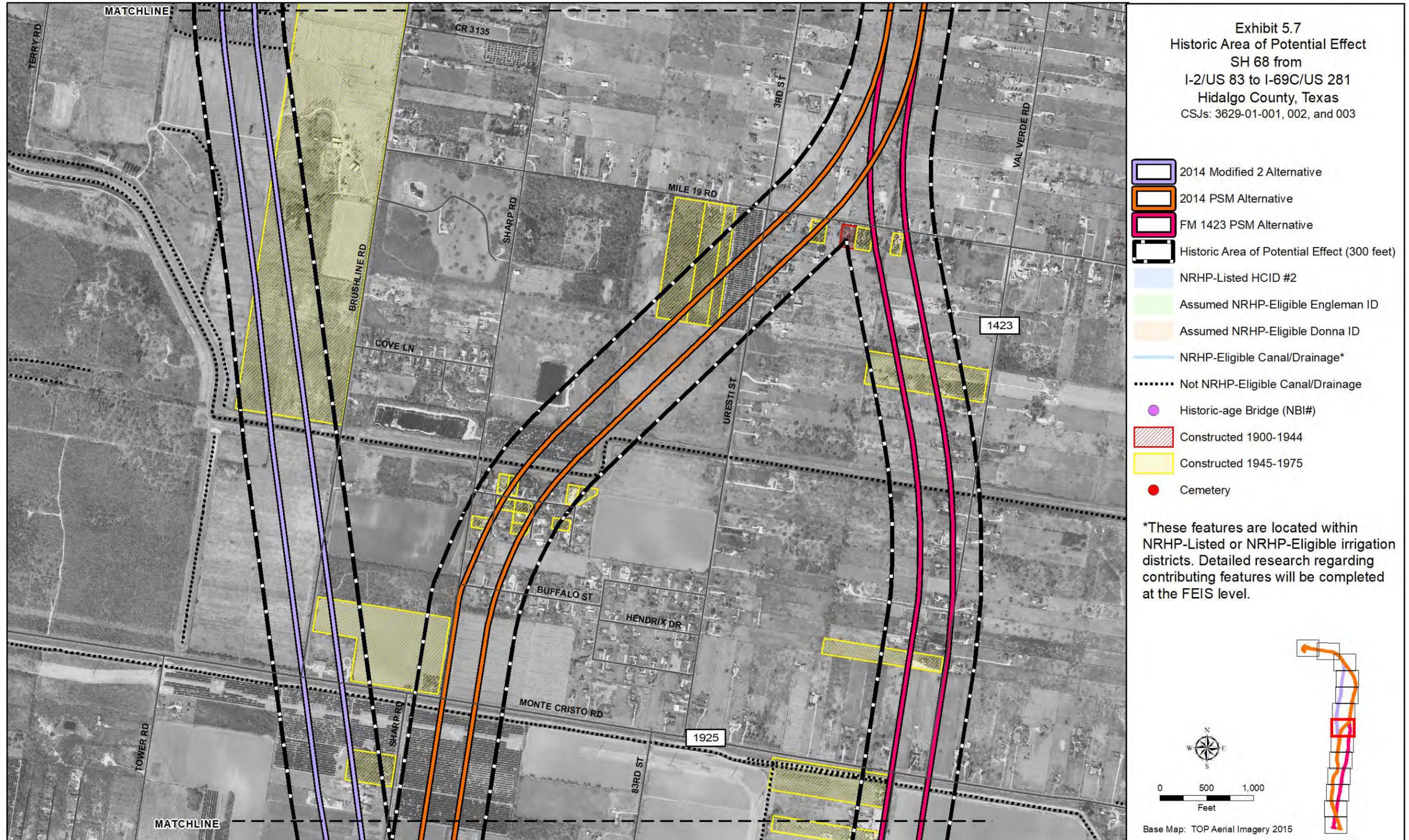


Exhibit 5.7
Historic Area of Potential Effect
SH 68 from
I-2/US 83 to I-69C/US 281
Hidalgo County, Texas
CSJs: 3629-01-001, 002, and 003

- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Historic Area of Potential Effect (300 feet)
- NRHP-Listed HCID #2
- Assumed NRHP-Eligible Engleman ID
- Assumed NRHP-Eligible Donna ID
- NRHP-Eligible Canal/Drainage*
- Not NRHP-Eligible Canal/Drainage
- Historic-age Bridge (NBI#)
- Constructed 1900-1944
- Constructed 1945-1975
- Cemetery

*These features are located within NRHP-Listed or NRHP-Eligible irrigation districts. Detailed research regarding contributing features will be completed at the FEIS level.

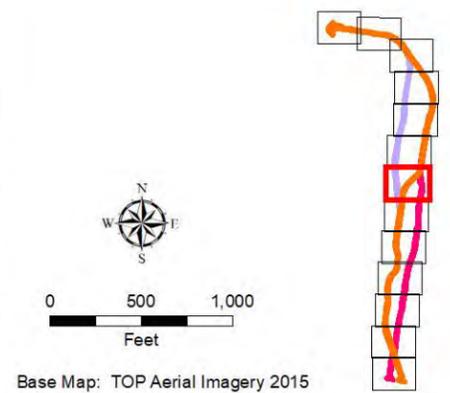
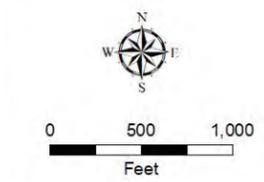
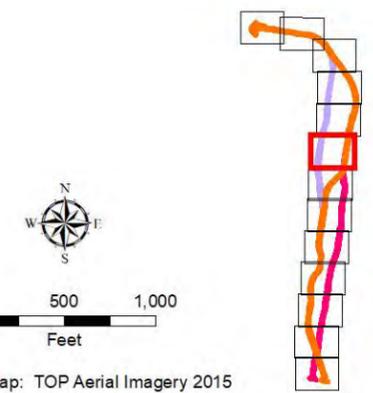




Exhibit 5.8
Historic Area of Potential Effect
SH 68 from
I-2/US 83 to I-69C/US 281
Hidalgo County, Texas
CSJs: 3629-01-001, 002, and 003

- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Historic Area of Potential Effect (300 feet)
- NRHP-Listed HCID #2
- Assumed NRHP-Eligible Engleman ID
- Assumed NRHP-Eligible Donna ID
- NRHP-Eligible Canal/Drainage*
- Not NRHP-Eligible Canal/Drainage
- Historic-age Bridge (NBI#)
- Constructed 1900-1944
- Constructed 1945-1975
- Cemetery

*These features are located within NRHP-Listed or NRHP-Eligible irrigation districts. Detailed research regarding contributing features will be completed at the FEIS level.



Base Map: TOP Aerial Imagery 2015

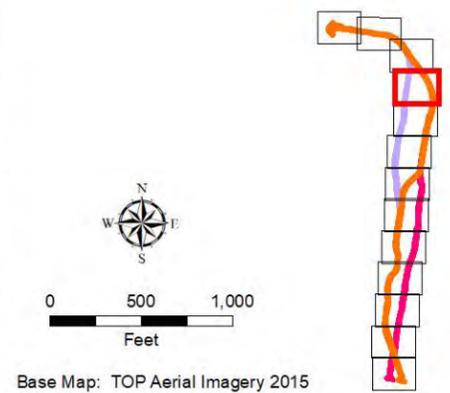




Exhibit 5.10
Historic Area of Potential Effect
SH 68 from
I-2/US 83 to I-69C/US 281
Hidalgo County, Texas
CSJs: 3629-01-001, 002, and 003

- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Historic Area of Potential Effect (300 feet)
- NRHP-Listed HCID #2
- Assumed NRHP-Eligible Engleman ID
- Assumed NRHP-Eligible Donna ID
- NRHP-Eligible Canal/Drainage*
- Not NRHP-Eligible Canal/Drainage
- Historic-age Bridge (NBI#)
- Constructed 1900-1944
- Constructed 1945-1975
- Cemetery

*These features are located within NRHP-Listed or NRHP-Eligible irrigation districts. Detailed research regarding contributing features will be completed at the FEIS level.



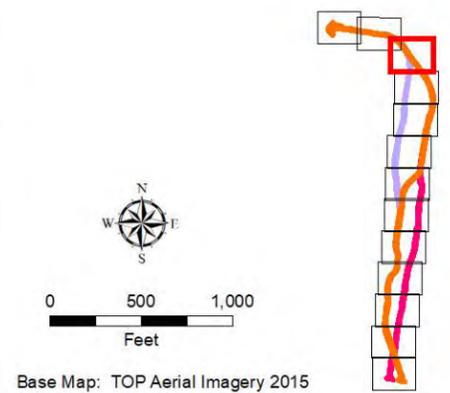
Base Map: TOP Aerial Imagery 2015



Exhibit 5.11
Historic Area of Potential Effect
SH 68 from
I-2/US 83 to I-69C/US 281
Hidalgo County, Texas
CSJs: 3629-01-001, 002, and 003

- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Historic Area of Potential Effect (300 feet)
- NRHP-Listed HCID #2
- Assumed NRHP-Eligible Engleman ID
- Assumed NRHP-Eligible Donna ID
- NRHP-Eligible Canal/Drainage*
- Not NRHP-Eligible Canal/Drainage*
- Historic-age Bridge (NBI#)
- Constructed 1900-1944
- Constructed 1945-1975
- Cemetery

*These features are located within NRHP-Listed or NRHP-Eligible irrigation districts. Detailed research regarding contributing features will be completed at the FEIS level.





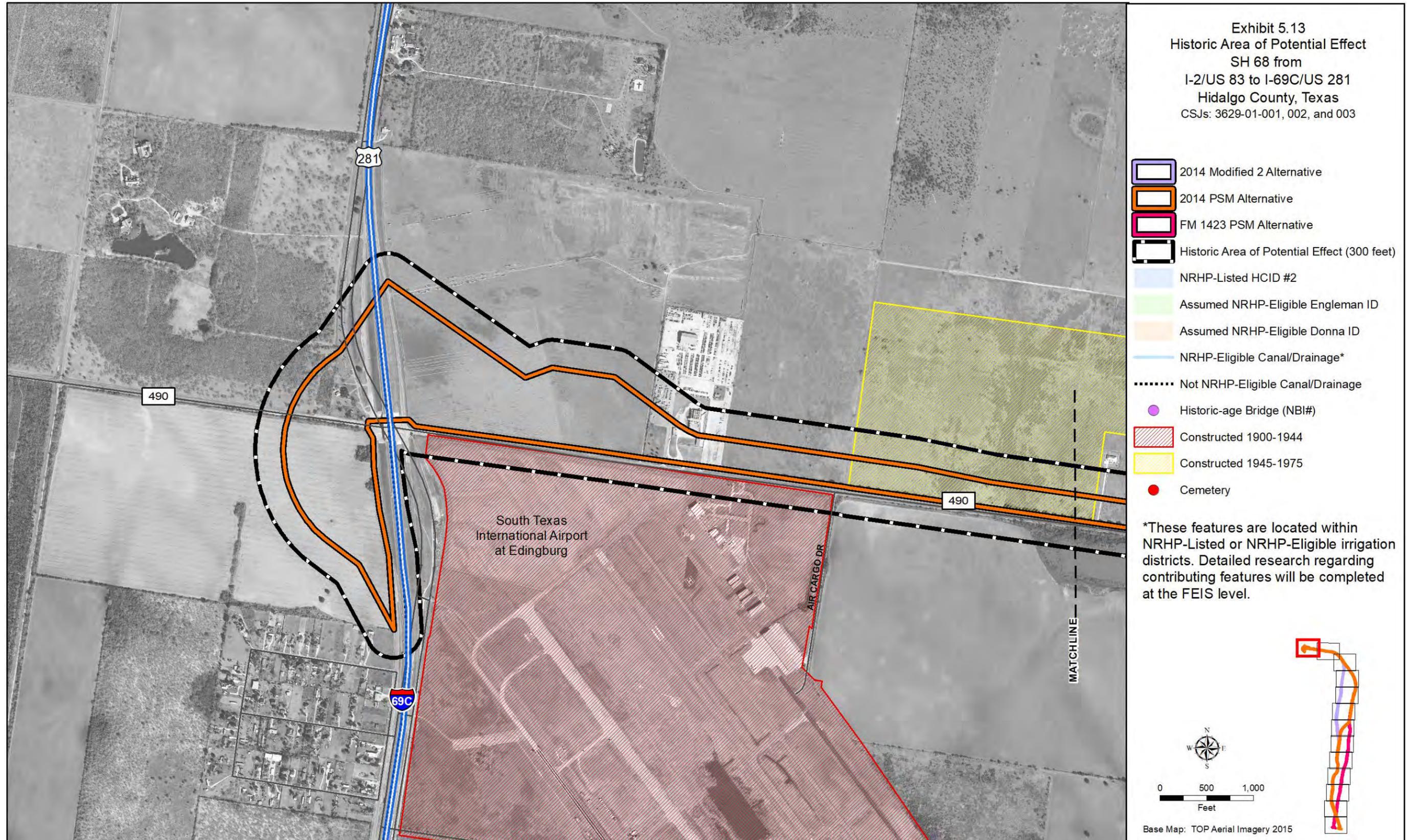


Exhibit 5.13
Historic Area of Potential Effect
SH 68 from
I-2/US 83 to I-69C/US 281
Hidalgo County, Texas
 CSJs: 3629-01-001, 002, and 003

- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Historic Area of Potential Effect (300 feet)
- NRHP-Listed HCID #2
- Assumed NRHP-Eligible Engleman ID
- Assumed NRHP-Eligible Donna ID
- NRHP-Eligible Canal/Drainage*
- Not NRHP-Eligible Canal/Drainage
- Historic-age Bridge (NBI#)
- Constructed 1900-1944
- Constructed 1945-1975
- Cemetery

*These features are located within NRHP-Listed or NRHP-Eligible irrigation districts. Detailed research regarding contributing features will be completed at the FEIS level.

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Base Map: TOP Aerial Imagery 2015

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



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