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## 1.0 INTRODUCTION

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### 1.1 BACKGROUND

The Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) entitled: *“Installation of Fencing, Lights, Cameras, Guardrails, and Sensors along the American Canal Extension El Paso District, El Paso, Texas”* was finalized on June 4, 1999 by the Immigration and Naturalization Service (INS) (INS 1999). Chain link fence and permanent lights were subsequently installed along the U.S.-Mexico border through El Paso to the Riverside Diversion Canal in accordance with that EA. U.S. Customs and Border Protection (CBP) now proposes to extend the project along the U.S. Section, International Boundary and Water Commission (USIBWC) levee, to a point 2.8 miles east of the Fort Hancock Port of Entry (POE), including replacement of a portion of the chain link fence previously installed, for a total distance of approximately 56.7 miles.

In 2006, CBP and U.S. Border Patrol (USBP) completed the *“Programmatic Environmental Assessment (PEA) for Proposed Tactical Infrastructure, USBP El Paso Sector, Texas Stations”* (USBP 2006). The USBP PEA discussed the tactical infrastructure (TI) program and the impacts of new infrastructure such as that proposed and addressed in this EA. Therefore, this EA is tiered from that PEA, and discussions concerning the affected environment and cumulative impacts are incorporated by reference from the 2006 USBP PEA. In addition, in 2001, Immigration and Naturalization Service (INS) completed the *“Supplemental Programmatic Environmental Impact Statement (SPEIS), Immigration and Naturalization Service and JTF-6 Activities on the Southwest U.S./Mexican Border U.S. Army Corps of Engineers, Fort Worth District, Fort Worth, Texas, June 2001”* (INS 2001). Applicable discussions from the 2006 PEA and the 2001 SPEIS are incorporated by reference, where applicable.

1 **1.2 USBP BACKGROUND**

2  
3 The mission of CBP is to prevent terrorists and terrorist weapons from entering the U.S.,  
4 while also facilitating the flow of legitimate trade and travel. In supporting CBP's  
5 mission, USBP is charged with establishing and maintaining effective control of the  
6 borders of the U.S. USBP's mission strategy consists of five main objectives:

- 7
- 8 • Establish substantial probability of apprehending terrorists and their  
9 weapons as they attempt to enter illegally between the POEs;
  - 10 • Deter illegal entries through improved enforcement;
  - 11 • Detect, apprehend, and deter smugglers of humans, drugs, and other  
12 contraband;
  - 13 • Leverage "smart border" technology to multiply the effect of enforcement  
14 personnel; and
  - 15 • Reduce crime in border communities and consequently improve quality of  
16 life and economic vitality of targeted areas.
- 17

18 USBP has nine administrative sectors along the U.S.-Mexico border. Each sector is  
19 responsible for implementing an optimal combination of personnel, technology, and  
20 infrastructure appropriate for its operational requirements. The El Paso Sector is  
21 responsible for El Paso and Hudspeth counties, Texas and the entire state of New  
22 Mexico. The areas affected by the Proposed Action include El Paso and Hudspeth  
23 counties in Texas along the levees and floodplain of the Rio Grande.

24  
25 **1.3 PURPOSE AND NEED**

26  
27 The purpose of the Proposed Action Alternative is to increase border security and  
28 USBP agent safety within USBP El Paso Sector through the construction, operation,  
29 and maintenance of TI in the form of fences, roads, bridges, lights, and supporting  
30 technological and tactical assets. In alignment with Federal mandates USBP has  
31 identified this area of the border as a location where primary pedestrian fence would  
32 contribute significantly to their priority homeland security mission. The need for the  
33 proposed action is to meet USBP operational requirements; provide a safer

1 environment for USBP agents and general public; deter IAs by constructing an  
2 impediment to northward movement into the U.S.; enhance the response time of USBP  
3 agents; and meet the mandates of Federal legislation (i.e., Secure Fence Act of 2006  
4 and 2007 Department of Homeland Security [DHS] Appropriations Act [HR 5441]).

5  
6 USBP El Paso Sector has identified distinct areas along the border that experience high  
7 levels of illegal cross-border activity, and would require additional TI. This activity  
8 occurs in areas that are adjacent to the Rio Grande and not easily accessed by USBP  
9 agents, near POEs where concentrated populations might live on either side of the  
10 border or have quick access to U.S. transportation routes, and in areas where there is  
11 no TI to deter illegal cross-border activity.

12  
13 The Proposed Action is needed to provide USBP agents with the tools necessary to  
14 strengthen control of the U.S. borders between POEs in the USBP El Paso Sector. It is  
15 designed to help deter illegal cross-border activities within the USBP El Paso Sector by  
16 improving enforcement abilities, thus preventing terrorists and terrorist weapons from  
17 entering the U.S., reducing the flow of illegal drugs, and enhancing agents' response  
18 time, while providing a safer work environment for USBP agents.

19  
20 **1.4 PROPOSED ACTION ALTERNATIVE**

21  
22 The Proposed Action Alternative would install approximately 56.7 miles of primary  
23 pedestrian fence along the north side of the USIBWC levee from a point 0.9 mile west of  
24 Ascarate Park in El Paso to a point located 2.8 miles east of the Fort Hancock POE  
25 (Figure 1-1). Existing chain link fence would be replaced with primary pedestrian fence  
26 for the portion of the project corridor labeled K-2A (see Figures 2-1a to 2-1d). An  
27 additional 21 miles of permanent lights would be installed from the Riverside Canal  
28 diversion to a point 1 mile east of the Fabens POE (see Figures 2-1d to 2-1j). Eight  
29 bridges across the irrigation canals on the U.S. side of the levee would be constructed  
30 within the project corridor, and approximately 2 miles of existing dirt road would be  
31 improved with an all-weather surface within the same area. Gates would be installed in

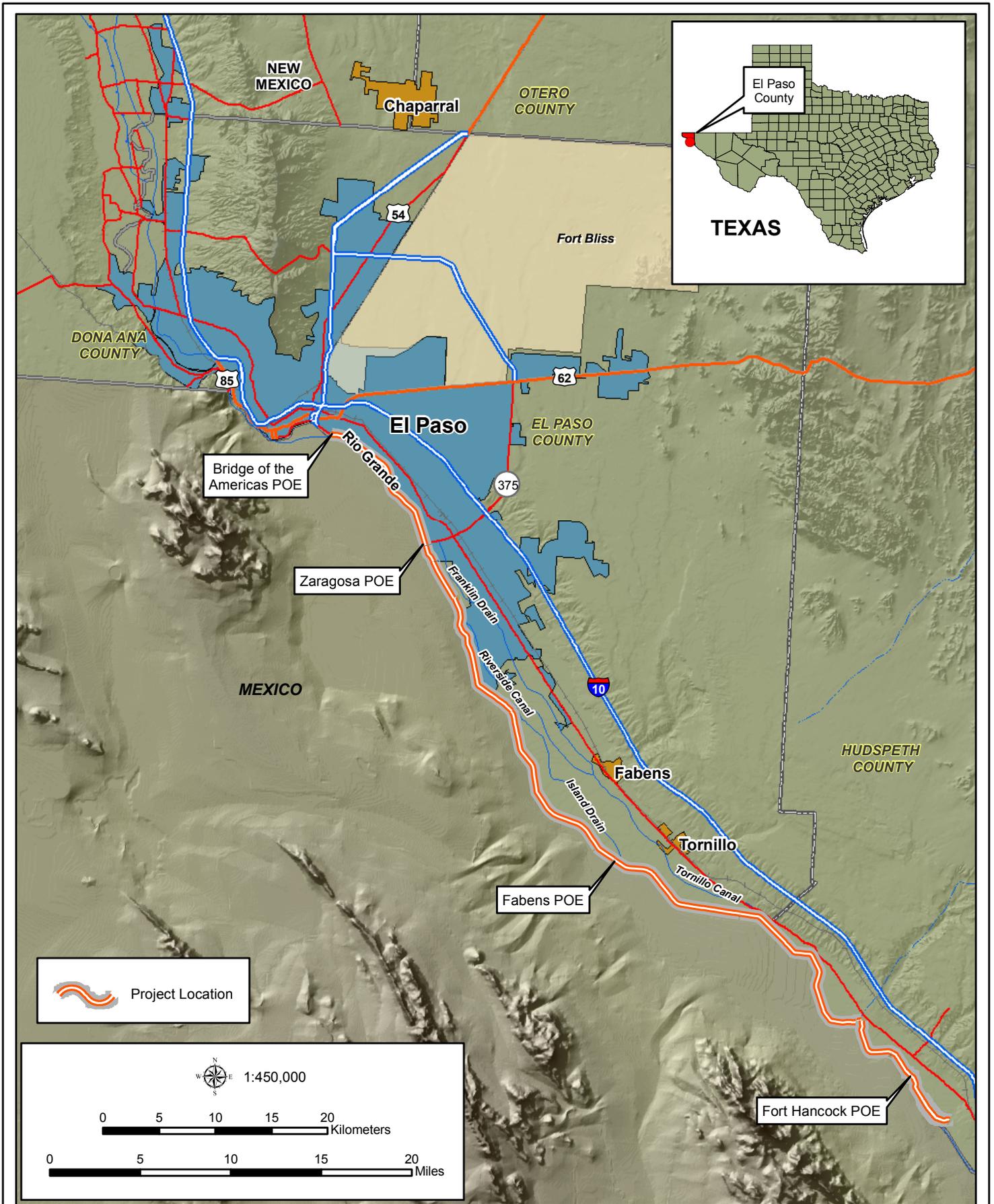


Figure 1-1: Vicinity Map



January 2008

1 the fence at each bridge crossing to provide access to the USIBWC levee and the Rio  
2 Grande floodplain. Temporary construction staging areas would occur both in the Rio  
3 Grande floodplain and at discrete locations north of the levee along the project corridor.

4  
5 The proposed locations of TI are based on a USBP El Paso Sector assessment of local  
6 operational requirements where such infrastructure would assist USBP agents in  
7 reducing illegal cross-border activities. The Fiscal Year (FY) 2007 U.S. Department of  
8 Homeland Security (DHS) Appropriations Act (Public Law [P.L.] 109-295) provided  
9 \$1,187,565,000 under the Border Security Fencing, Infrastructure, and Technology  
10 appropriation for the installation of fencing, infrastructure, and technology along the  
11 border (CRS 2006).

## 13 **1.5 PUBLIC INVOLVEMENT**

### 15 **1.5.1 Agency Coordination**

16 A Notice of Availability (NOA) for this draft EA and draft Finding of No Significant Impact  
17 (FONSI) will be published in the *El Paso Times*. This is done to solicit comments on the  
18 Proposed Action Alternative and involve the local community in the decision-making  
19 process. Comments from the public and other Federal, state, and local agencies will be  
20 incorporated into the Final EA and included in Appendix F.

21  
22 This Draft EA also serves as a public notice regarding impacts on floodplains.  
23 Executive Order (EO) 11988 directs Federal agencies to avoid floodplains unless the  
24 agency determines that there is no practicable alternative. Where the only practicable  
25 alternative is to site in a floodplain, a specific process must be followed to comply with  
26 EO 11988. This eight-step process is detailed in the Federal Emergency Management  
27 Agency (FEMA) document "Further Advice on EO 11988 Floodplain Management." The  
28 eight steps are as follows:

- 29  
30 1. Determine whether the action will occur in, or stimulate development in, a  
31 floodplain.
- 32 2. Receive public review/input of the Proposed Action.

- 1           3.     Identify and evaluate practicable alternatives to locating in the floodplain.
- 2           4.     Identify the impacts of the Proposed Action (when it occurs in a
- 3                 floodplain).
- 4           5.     Minimize threats to life, property, and natural and beneficial floodplain
- 5                 values, and restore and preserve natural and beneficial floodplain values.
- 6           6.     Reevaluate alternatives in light of any new information that might have
- 7                 become available.
- 8           7.     Issue findings and a public explanation.
- 9           8.     Implement the action.
- 10

11 Steps 1, 3, and 4 have been undertaken as part of this Draft EA and are further  
12 discussed in Section 3.5. Steps 2 and 6 through 8 are being conducted simultaneously  
13 with the EA development process, including public review of the Draft EA. Step 5 relates  
14 to mitigation and is currently undergoing development.

15  
16 Throughout the National Environmental Policy Act (NEPA) process, the public may  
17 obtain information concerning the status and progress of the EA via the project web site  
18 at [www.BorderFenceNEPA.com](http://www.BorderFenceNEPA.com), by emailing [information@BorderFenceNEPA.com](mailto:information@BorderFenceNEPA.com), or  
19 by written request to Mr. Charles McGregor, Environmental Manager, U.S. Army Corps  
20 of Engineers (USACE), Fort Worth District, Engineering and Construction Support  
21 Office (ECSO), 819 Taylor Street, Room 3B10, Fort Worth, TX 76102; and Fax: (225)  
22 761- 8077.

## 24 **1.6 COOPERATING AGENCIES**

### 26 **1.6.1 U.S. Section, International Boundary and Water Commission**

27 The Proposed Action Alternative will take place between a point 0.9 mile west of  
28 Asacarte Park and a point 2.8 miles east of the Fort Hancock POE on property owned  
29 by USIBWC (see Figure 1-2 and 1-3). Because most construction activities would take  
30 place on USIBWC property, USIBWC agreed to be a cooperating agency for this EA.

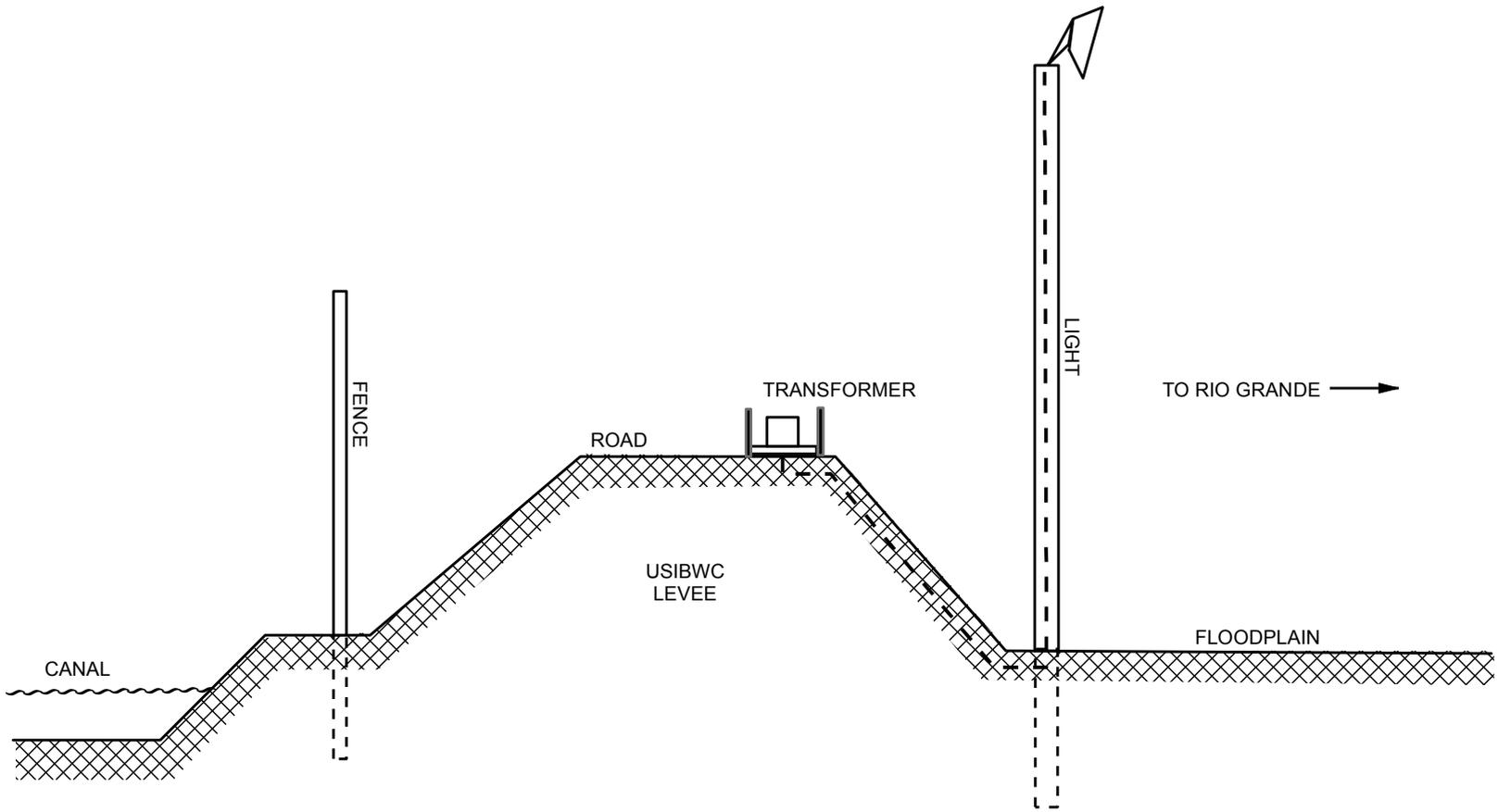


Figure 1-2: Typical Schmatic Cross Section, Proposed Action

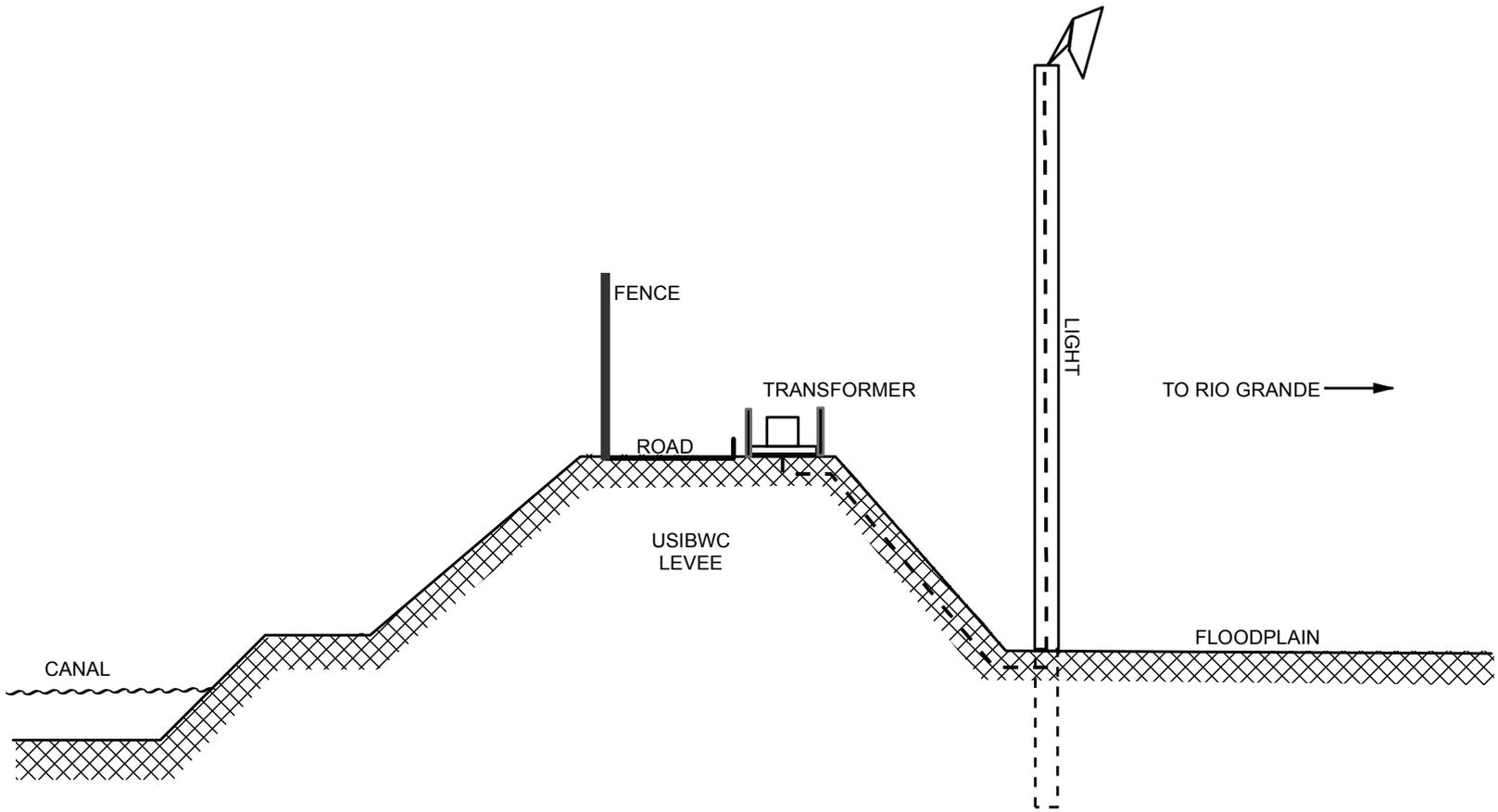


Figure 1-3: Typical Schmatic Cross Section, Floating Foundation Fence

1 **1.6.2 U.S. Department of the Interior**

2 The U.S. Department of the Interior (DOI) has agreed to be a cooperating agency for  
3 this EA. DOI cooperating agencies include National Park Service, U.S. Fish and  
4 Wildlife Service (USFWS), Bureau of Land Management, Bureau of Reclamation, and  
5 Bureau of Indian Affairs. A Memorandum of Agreement (MOA) was signed indicating a  
6 commitment to work closely with CBP on this and other consultations regarding CBP  
7 projects along the U.S.-Mexico border. USFWS would coordinate with CBP during the  
8 Section 7 consultation, to identify the nature and extent of potential effects, and to jointly  
9 develop measures that would avoid or reduce potential effects on listed species.

10

11 **1.6.3 Joint Task Force North**

12 Joint Task Force-North (JTF-N) provides support to CBP using active duty, Reserve,  
13 and National Guard units from all military branches. CBP obtains military assistance  
14 through support requests forwarded to the Border Patrol Special Coordination Center,  
15 who then forwards the support request to JTF-N for sourcing. JTF-N staffs the request  
16 and, with appropriate approval, identifies a unit that is willing and capable of providing  
17 the skill sets necessary to support the request. Proposed projects must be able to  
18 satisfy the training requirements of the participating military unit. A portion of each unit's  
19 respective Mission-Essential Task List must be accomplished during each JTF-N  
20 operation. JTF-N forces may be utilized to construct all or portions of the proposed TI;  
21 therefore, JTF-N has been invited to be a cooperating agency for this EA.

22

23 **1.6.4 U.S. Army Corps of Engineers, Albuquerque District**

24 USACE, Albuquerque District is charged with facilitating real estate actions for the  
25 Proposed Action, and is a cooperating agency for this EA.

26

27 **1.7 FRAMEWORK FOR ANALYSIS**

28

29 NEPA is a Federal statute requiring the identification and analysis of potential  
30 environmental impacts of proposed Federal actions before those actions are taken.  
31 NEPA also established the Council on Environmental Quality (CEQ), which is charged

1 with the development of implementing regulations and ensuring agency compliance with  
2 NEPA. CEQ regulations mandate that all Federal agencies use a systematic  
3 interdisciplinary approach to environmental planning and the evaluation of actions that  
4 might affect the environment. This process evaluates potential environmental  
5 consequences associated with a Proposed Action Alternative and considers alternative  
6 courses of action. The intent of NEPA is to protect, restore, or enhance the  
7 environment through well-informed Federal decisions.

8  
9 The process for implementing NEPA is codified in 40 Code of Federal Regulations  
10 (CFR) 1500–1508, Regulations for Implementing the Procedural Provisions of NEPA,  
11 and DHS Management Directive (MD) 5100.1, Environmental Planning Program. CEQ  
12 was established under NEPA to implement and oversee Federal policy in this process.  
13 CEQ regulations specify that the following must be accomplished when preparing an  
14 EA:

- 15 • Briefly provide evidence and analysis for determining whether to prepare  
16 an Environmental Impact Statement (EIS) or a FONSI;
- 17 • Aid in an agency’s compliance with NEPA when an EIS is unnecessary;  
18 and  
19
- 20 • Facilitate preparation of an EIS when one is necessary.  
21

22 To comply with NEPA, the planning and decision-making process for actions proposed  
23 by Federal agencies involves a study of other relevant environmental statutes and  
24 regulations. The NEPA process, however, does not replace procedural or substantive  
25 requirements of other environmental statutes and regulations. It addresses them  
26 collectively in the form of an EA or EIS, which enables the decision maker to have a  
27 comprehensive view of major environmental issues and requirements associated with  
28 the Proposed Action Alternative. According to CEQ regulations, the requirements of  
29 NEPA must be integrated “with other planning and environmental review procedures  
30 required by law or by agency so that all such procedures run concurrently rather than  
31 consecutively.”

1 In addition to NEPA, additional authorities that will be addressed during the preparation  
2 of this EA will include Immigration Reform and Illegal Immigrant Responsibility Act  
3 (IIRIRA), Secure Fence Act (SFA), Clean Air Act, Clean Water Act (CWA) (including a  
4 National Pollutant Discharge Elimination System [NPDES] storm water discharge  
5 permit), Noise Control Act, Endangered Species Act (ESA), National Historic  
6 Preservation Act (NHPA), Archaeological Resources Protection Act, Resource  
7 Conservation and Recovery Act (RCRA), Toxic Substances Control Act, Environmental  
8 Quality Improvement Act of 1970, as amended, and Migratory Bird Treaty Act (MBTA).

9  
10 Executive Orders (EOs) bearing on the Proposed Action Alternative include EO 11988  
11 (Floodplain Management), EO 11990 (Protection of Wetlands), EO12088 (Federal  
12 Compliance with Pollution Control Standards), EO 12580 (Superfund Implementation),  
13 EO 12898 (Federal Actions to Address Environmental Justice in Minority Populations  
14 and Low-Income Populations), EO 13045 (Protection of Children from Environmental  
15 Health Risks and Safety Risks), EO 13423 (Strengthening Federal Environmental,  
16 Energy, and Transportation Management), EO 13175 (Consultation and Coordination  
17 with Indian Tribal Governments), EO 13148 (Greening the Government through  
18 Leadership in Environmental Management), EO 13186 (Responsibilities of Federal  
19 Agencies to Protect Migratory Birds), EO 11514 (Protection and Enhancement of  
20 Environmental Quality, as amended by EO 11991); EO 12114 (Environmental Effects  
21 Abroad of Major Federal Actions); EO 13101 (Greening the Government through Waste  
22 Prevention, Recycling, and Federal Acquisition); EO 13123 (Greening the Government  
23 through Efficient Energy Management); and EO 13149 (Greening the Government  
24 through Federal Fleet and Transportation Efficiency).

25  
26 **1.7.1 Federal, State and Local Permits, Licenses and Fees**

27 Prior to construction, a Storm Water Pollution Prevention Plan (SWPPP) would be  
28 developed for the entire project area, and an appropriate storm water construction  
29 permit would be acquired from the responsible state or local agency.

1 There are no jurisdictional Waters of the U.S. (WUS) or regulated wetlands within the  
2 project footprint, and no Section 404 permit or Section 401 Water Quality Certification  
3 would be required from the U.S. Army Corps of Engineers (USACE) or the Texas  
4 Commission on Environmental Quality (TCEQ).

5  
6 **1.8 RELATED ENVIRONMENTAL DOCUMENTS**

7  
8 *“Installation of Fencing, Lights, Cameras, Guardrails, and Sensors along the American*  
9 *Canal Extension El Paso District, El Paso, Texas”*: EA and FONSI prepared by INS,  
10 June 4, 1999.

11  
12 *“Supplemental Programmatic Environmental Impact Statement, Immigration and*  
13 *Naturalization Service and JTF-6 Activities on the Southwest U.S./Mexican Border U.S.*  
14 *Army Corps of Engineers, Fort Worth District, Fort Worth, Texas”* prepared by INS, June  
15 2001

16  
17 *“Programmatic Environmental Assessment For Proposed Tactical Infrastructure, U.S.*  
18 *Border Patrol, El Paso Sector, Texas Stations”*: PEA and FONSI prepared by USBP,  
19 October 2006.

20  
21 *“Final Environmental Assessment, Rio Grande Rectification Project: Flood Control*  
22 *Improvements, International Dam to Riverside Diversion Dam, El Paso County, Texas”*:  
23 EA and FONSI prepared by USIBWC, May 2007.

24  
25 *“Draft FONSI and Draft Environmental Assessment for El Paso County Riverside Canal*  
26 *and Structure Improvement Project”*: EA and FONSI prepared by U.S. Department of  
27 the Interior, Bureau of Reclamation, January 2007.

**SECTION 2.0**  
***PROPOSED ACTION ALTERNATIVE AND ALTERNATIVES***





## 2.0 PROPOSED ACTION AND ALTERNATIVES

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This section provides detailed information on CBP's proposal to construct, operate, and maintain TI along the U.S.-Mexico border within the USBP El Paso Sector, Texas. The range of reasonable alternatives considered in this EA is constrained to those that would meet the purpose and need described in Section 1.3 to provide USBP agents with the tools necessary to maintain effective control of the border in the USBP El Paso Sector. Such alternatives must also meet essential technical, engineering, and economic threshold requirements to ensure that each alternative is environmentally sound, economically viable, and complies with governing standards and regulations.

### 2.1 SCREENING CRITERIA FOR ALTERNATIVES

The following screening criteria were used to develop the Proposed Action Alternative and evaluate potential alternatives. These criteria are presented in no particular order of priority.

- USBP Operational Requirements: The selected alternative must support USBP mission needs to hinder or delay individuals crossing the border; once they have entered an urban area or suburban neighborhood, it is much more difficult for USBP agents to identify and apprehend suspects engaged in unlawful border entry. Additionally, around populated areas it is relatively easy for cross border violators to find transportation into the interior away from the USBP patrol areas. For these reasons, primary border fencing could be constructed in urban population centers adjacent to the border. However, other operational criteria are also considered, including deterrence of illegal aliens from remote areas with harsh conditions and protection of natural resource areas north of the border.
- Threatened or Endangered Species and Critical Habitat: The selected alternative would be designed to minimize adverse impacts on threatened or endangered species and their critical habitat to the maximum extent practicable. USBP is working with the USFWS to identify potential conservation and mitigation measures.
- Wetlands and Floodplains: The selected alternative would be designed to avoid and minimize impacts on wetlands and floodplain resources to the maximum extent practicable.

- 1 • Cultural and Historic Resources: The selected alternative would be  
2 designed to minimize impacts on cultural and historic resources to the  
3 maximum extent practicable. USBP will coordinate with the State Historic  
4 Preservation Officer (SHPO) to identify potential conservation and  
5 mitigation measures.
- 6 • Suitable Landscape: Some areas of the border have steep topography,  
7 have highly erodible soils, are in a floodway, or have other characteristics  
8 that could compromise the integrity of fence or other TI. For example, in  
9 areas susceptible to flash flooding, fence and other TI might be prone to  
10 erosion that could undermine the fence's integrity. Areas with suitable  
11 landscape conditions would be prioritized.  
12

## 13 **2.2 ALTERNATIVES ANALYSIS**

14

15 CBP evaluated a range of possible alternatives to be considered for the Proposed  
16 Action Alternative. During the early planning staging and public involvement process  
17 described in Section 1.5, the following potential alternatives were proposed: (1) stronger  
18 enforcement and harsher penalties for employers that hire illegal immigrants,  
19 (2) additional USBP agents in lieu of primary pedestrian fence, and (3) manned towers  
20 and electronic surveillance in lieu of primary pedestrian fence. Alternative fence  
21 designs were also proposed to make the fence taller, wider, or more impenetrable.  
22

23 The following sections describe the alternative analysis for this Proposed Action  
24 Alternative. Sections 2.2.1 through 2.2.8 describe alternatives considered but  
25 eliminated from further detailed analysis. Sections 2.2.9 and 2.2.10 provide specific  
26 details of the Proposed Action Alternative and the Floating Foundation Fence  
27 Alternative, both of which will be carried forward for analysis. Section 2.2.11 presents  
28 the No Action Alternative. Section 2.3 is the identification of the preferred alternative.  
29

### 30 **2.2.1 Stronger Enforcement and Harsher Penalties for Employers That Hire** 31 **Illegal Immigrants**

32 Public comments that have been submitted regarding other TI projects have  
33 encouraged CBP to consider stronger enforcement of current immigration laws and  
34 harsher penalties for employers that hire illegal immigrants. This alternative was not  
35 studied in detail primarily because it would not meet the USBP El Paso Sector's

1 purpose and need and the screening criteria established for viable alternatives. The  
2 Proposed Action Alternative is needed to provide USBP agents with the tools necessary  
3 to strengthen their control of the U.S. border between POEs in the USBP El Paso  
4 Sector. USBP enforces current laws to the maximum extent practical. The alternative  
5 of stronger enforcement and harsher penalties would not prevent terrorists and terrorist  
6 weapons from entering the U.S., reduce the flow of illegal drugs, provide a safer work  
7 environment for USBP agents, or meet the USBP operational screening criteria of  
8 hindering or delaying individuals crossing the border illegally. For these reasons, this  
9 alternative is not a practical alternative to the construction of TI in the USBP El Paso  
10 Sector and will not be carried forward for detailed analysis.

11

### 12 **2.2.2 Additional USBP Agents in Lieu of Tactical Infrastructure**

13 CBP considered the alternative of increasing the number of USBP agents assigned to  
14 the U.S.-Mexico border as a means of gaining more effective control of the U.S.-Mexico  
15 border. Under this alternative, USBP would hire and deploy a significantly larger  
16 number of agents than are currently deployed along the U.S.-Mexico border and  
17 increase patrols to apprehend cross-border violators. USBP would deploy additional  
18 agents as determined by operational needs. Patrols might include the use of 4-wheel  
19 drive vehicles, all-terrain vehicles, helicopters, or fixed-wing aircraft. Currently, USBP  
20 maintains an aggressive hiring program and a cadre of well-trained agents.

21

22 This alternative was determined not to meet the screening criteria of USBP operational  
23 requirements. The physical presence of an increased number of agents could provide  
24 an enhanced level of deterrence against illegal entry into the U.S., but the use of  
25 additional agents alone, in lieu of the proposed TI, would not provide a practical solution  
26 to achieving the level of effective control of the border necessary in the USBP El Paso  
27 Sector. The use of physical barriers has been demonstrated to slow cross-border  
28 violators and provide USBP agents with additional time to make apprehensions  
29 (USACE 1994). Additionally, as TI is built, agents could be more effectively redeployed  
30 to secure other areas.

31

1 A Congressional Research Service (CRS) report concluded that USBP border security  
2 initiatives such as the 1994 San Diego Sector's "Operation Gatekeeper" or El Paso  
3 Sector's Operation "Hold the Line" required a 150 percent increase in USBP manpower,  
4 lighting, and other equipment. The report states that "It soon became apparent to  
5 immigration officials and lawmakers that USBP needed, among other things, a 'rigid'  
6 enforcement system that could integrate infrastructure (i.e., multi-tiered fence and  
7 roads), manpower, and new technologies to further control the border region" (CRS  
8 2006).

9  
10 Increased numbers of patrol agents would aid in interdiction activities, but not to the  
11 extent anticipated by the construction of primary pedestrian fence and other TI along  
12 sections within the El Paso Sector area of operations (AO). As such, this alternative is  
13 not practical in the USBP El Paso Sector and will not be carried forward for further  
14 detailed analysis.

### 15 16 **2.2.3 Technology in Lieu of Tactical Infrastructure**

17 CBP does and would continue to use various forms of technology to identify cross-  
18 border violators. The use of technology is a critical component of USBP efforts to  
19 maintain control of the U.S.-Mexico border in certain areas, and an effective force  
20 multiplier that allows USBP to monitor large areas and deploy agents to where they  
21 would be most effective and to apprehend cross-border violators. However, due to the  
22 large urban areas in Mexico along the U.S.-Mexico border in the USBP El Paso Sector,  
23 physical barriers represent the most effective means to control illegal entry into the U.S.  
24 The use of technology alone would not provide a practical solution to achieving the level  
25 of effective control of the U.S.-Mexico border necessary in the USBP El Paso Sector.  
26 Current USBP El Paso Sector operations include the use of technology to identify cross-  
27 border violations and deploying agents to make apprehensions. This alternative would  
28 not meet the purpose and need for increased safety for USBP agents and physical  
29 barriers to cross-border violators as described in Section 1.3, and will not be carried  
30 forward for further detailed analysis.

1 **2.2.4 Fence and Light Placement on the Flood Side of the USIBWC Levee**

2 Placement of the primary pedestrian fence along the toe of the south side (flood side) of  
3 the USIBWC levee was considered, but eliminated from further consideration for the  
4 following reasons:

- 5
- 6 • USIBWC determined that placement of the fence within the floodplain of  
7 the Rio Grande would interfere with flood water flows and would trap  
8 debris during high water stages.
- 9 • USIBWC is planning to raise the height of the levee in the future and, due  
10 to space constraints on the north side (protected side) of the levee, any  
11 expansion of the levee footprint during the elevation of the levee would  
12 have to occur on the south side; therefore, the fence placement on the  
13 south side of the levee would interfere with those efforts.
- 14

15 Because implementation of this alternative would conflict with flood control programs  
16 and planned improvements under the control of the property owner (USIBWC), it was  
17 eliminated from further consideration.

18

19 **2.2.5 Conventional Fence Placement at the Top of the USIBWC Levee**

20 Placement of the primary pedestrian fence along the crest of the USIBWC levee with a  
21 conventional foundation was considered, but was eliminated from further consideration.  
22 The installation of the fence on the crest of the USIBWC levee would require boring and  
23 filling within the levee structure, and USIBWC determined that the levee structure might  
24 be weakened by those activities. The potential weakening would result in an increased  
25 possibility of levee failure during flood events in the Rio Grande. Due to these  
26 increased risks of levee failure, and the consequent environmental and socioeconomic  
27 damages that could result, this alternative was eliminated from further consideration.

28

29 **2.2.6 Installation of Primary Pedestrian Fence Only Without Lights**

30 Installation of primary pedestrian fence only along the project corridor would have an  
31 effect of delaying and deterring IA traffic along the project corridor. However, it would  
32 not provide increased visibility for USBP agents during nighttime periods when most IA  
33 activity occurs, and it would not provide increased safety for USBP agents operating  
34 after dark in the area. Because this alternative does not meet the USBP agent safety

1 requirements, as stated in the purpose and need of the project, it was eliminated from  
2 further consideration.

3  
4 **2.2.7 Installation of Lights Only Without the Primary Pedestrian Fence**

5 Installation of permanent lights along the project corridor would increase the visibility for  
6 USBP agents during hours of darkness, and would provide some benefit by providing  
7 an increased level of safety for USBP agents by allowing them to see IAs and drug  
8 smugglers in the illuminated areas. However, it would not provide much benefit for the  
9 enhanced apprehension of IAs crossing the project corridor, since there would be no  
10 physical barrier to prevent or delay IA movement sufficient to allow USBP agents to  
11 apprehend them more efficiently. This alternative also does not meet the requirements  
12 of recent Federal legislation. Because this alternative does not meet the purpose and  
13 need of the project, it was eliminated from further consideration.

14  
15 **2.2.8 Secure Fence Act Alternative**

16 The Secure Fence Act (SFA) of 2006 (P.L. 109-367) authorized USBP to construct at  
17 least two layers of reinforced fencing along the U.S.-Mexico international border. Under  
18 the SFA Alternative, two layers of fence, known as primary and secondary fence, would  
19 be constructed approximately 130 feet apart along the same route as the Proposed  
20 Action Alternative. Due to the close proximity of the USIBWC levee, the irrigation  
21 canals and the public roads located adjacent to the canals on the north side, it would  
22 not be feasible to construct two layers of fencing as authorized by the SFA without  
23 interfering with operation of the irrigation canals, restricting floodwater conveyance with  
24 the Rio Grande floodplain, or restricting access to public roads. Therefore, this  
25 alternative was eliminated from further consideration.

### 1 **2.2.9 Proposed Action Alternative**

3 A primary pedestrian fence (Photograph  
5 2-1) would be installed for  
7 approximately 56.7 miles on the north  
9 (protected) side of the USIBWC levee,  
11 from a point 0.9 mile west of Ascarate  
13 Park in El Paso to a point 2.8 miles east  
15 of the Fort Hancock POE (Figure 2-1).  
17 Existing chain link fence would be  
19 replaced with primary pedestrian fence  
21 for the portion of the project length  
23 identified as K-2A (see Figures 2-1a



Photograph 2-1: Typical primary pedestrian fence

24 through 2-1d). Installation would require excavation and ground disturbance to install  
25 the fence. The fence would be constructed with a conventional concrete foundation  
26 along the entire length of the project. Fence designs that would be installed in this area  
27 are included in Appendix C. Based upon performance specifications established at the  
28 time of construction, fence placement would be similar to the design shown in Figure 1-  
29 2. Gates would be installed in the fence at canal bridge locations and at set intervals for  
30 emergency rescues within the canal and the Rio Grande for ingress/egress of USBP  
31 agents and USIBWC personnel. USBP would be responsible for maintenance of the  
32 fence.

33

34 Preliminary design performance measures dictate that the fence must:

35

- 36 • extend 15 to 18 feet above ground and 3 to 6 feet below ground;
- 37 • be capable of withstanding an impact from a 10,000-pound gross weight  
38 vehicle traveling at 40 miles per hour (mph);
- 39 • be resistant to vandalism, cutting, or penetrating;
- 40 • be semi-transparent, as dictated by operational need;
- 41 • be designed to survive extreme climate changes of a desert environment;
- 42 • not impede the natural flow of water.

43

44 Lights would be installed within the project corridor for a distance of approximately 21  
45 miles along the USIBWC levee from the end of the Phase II Project, as described in the

2 June 1999 EA (INS 1999), near the City of  
4 El Paso water treatment plant at Rio  
6 Bosque to a point 1 mile east of the Fabens  
8 POE. The light standards would be steel  
10 poles approximately 45 feet high and  
12 installed at the south toe (flood side) of the  
14 USIBWC levee, within the floodplain.  
16 Transformers would be placed on the  
18 ground near the top of the levee on the  
20 south side, and six metal bollards,  
22 approximately 4 feet high, would be  
23 installed for protection (Photograph 2-2). El Paso Electric (EPE) would install the poles,  
24 lights, and transformers. Sections of the lights would be fitted with a switch so that lights  
25 could be turned off during Ysleta del Sur Pueblo Tribal ceremonies. The lights and  
26 fence for Phase II were described in a MOA with USIBWC, and a similar MOA would be  
27 executed between USBP and USIBWC for the proposed fence and lighting included in  
28 the Proposed Action Alternative.



Photograph 2-2. Typical light standard and transformer installation

29  
30 The lights would be dual 1000 watt high pressure sodium (HPS) or metal halide lights  
31 installed at 150-foot intervals and directed toward the river. The power lines would be  
32 underground with the possible exception of any lateral feeds from the local grid. The  
33 locations of these lateral feeds are not known at present. EPE would be responsible for  
34 installing the power lines and connections to the existing grid, and for the maintenance  
35 of the lights and light standards.

36  
37 In addition, approximately 2 miles of road improvements would be constructed on  
38 levee/ditch bank roads that are owned by the EPCWID1 and others. The roads are  
39 currently dirt roads, and become impassable during inclement weather. The roads are  
40 integral access points and patrol roads for USBP near the center of the project corridor.  
41 The proposed improvements would entail grading/leveling and application of an all-

1 weather aggregate surface. USBP would be responsible for maintenance of the all-  
2 weather surface on the roads once the improvements are made.

3  
4 Up to eight bridges would be installed over the EPCWID1 and HCCRD1 irrigation  
5 canals at locations shown in Figures 2-1a through 2-1p. These bridges would be  
6 designed to extend across the canal with no structures or pilings within the canal, and  
7 would not require substantial ground disturbance. Some locations for the new bridges  
8 are the sites of previous canal bridges, which have been destroyed or removed for  
9 various reasons. The bridges would provide additional access points to the USIBWC  
10 levee and Rio Grande floodplain, and enhance the response time of USBP agents, thus  
11 increasing the apprehension rate for IAs in the area and providing enhanced response  
12 time for IA rescue in the Rio Grande floodplain during times of high water, when many  
13 IAs attempt to cross the river.

14  
16 As part of the construction efforts for the  
18 fence and lights installation, temporary  
20 turnarounds and staging areas would be  
22 used approximately every mile along the  
24 project corridor between the USIBWC levee  
26 and the Rio Grande (Photograph 2-3).



**Photograph 2-3. Typical floodplain between the levee and the Rio Grande**

28 Approximately 40 10,000 square foot  
30 staging areas would be located adjacent to  
32 the flood side of the levee on previously  
34 disturbed sites, as much as possible.  
36 Additional staging areas would be located

37 north of the levee on private lands for the purpose of staging equipment and  
38 maintenance activities. An approximately 2-acre staging area would be temporarily  
39 disturbed at the south end of each bridge location. Figures 2-1a through 2-1p show the  
40 location of the proposed project components on topographic maps of the project  
41 corridor. The project corridor is divided into sections, designated K-2A through K-5, to  
42 designate contract and construction sections.

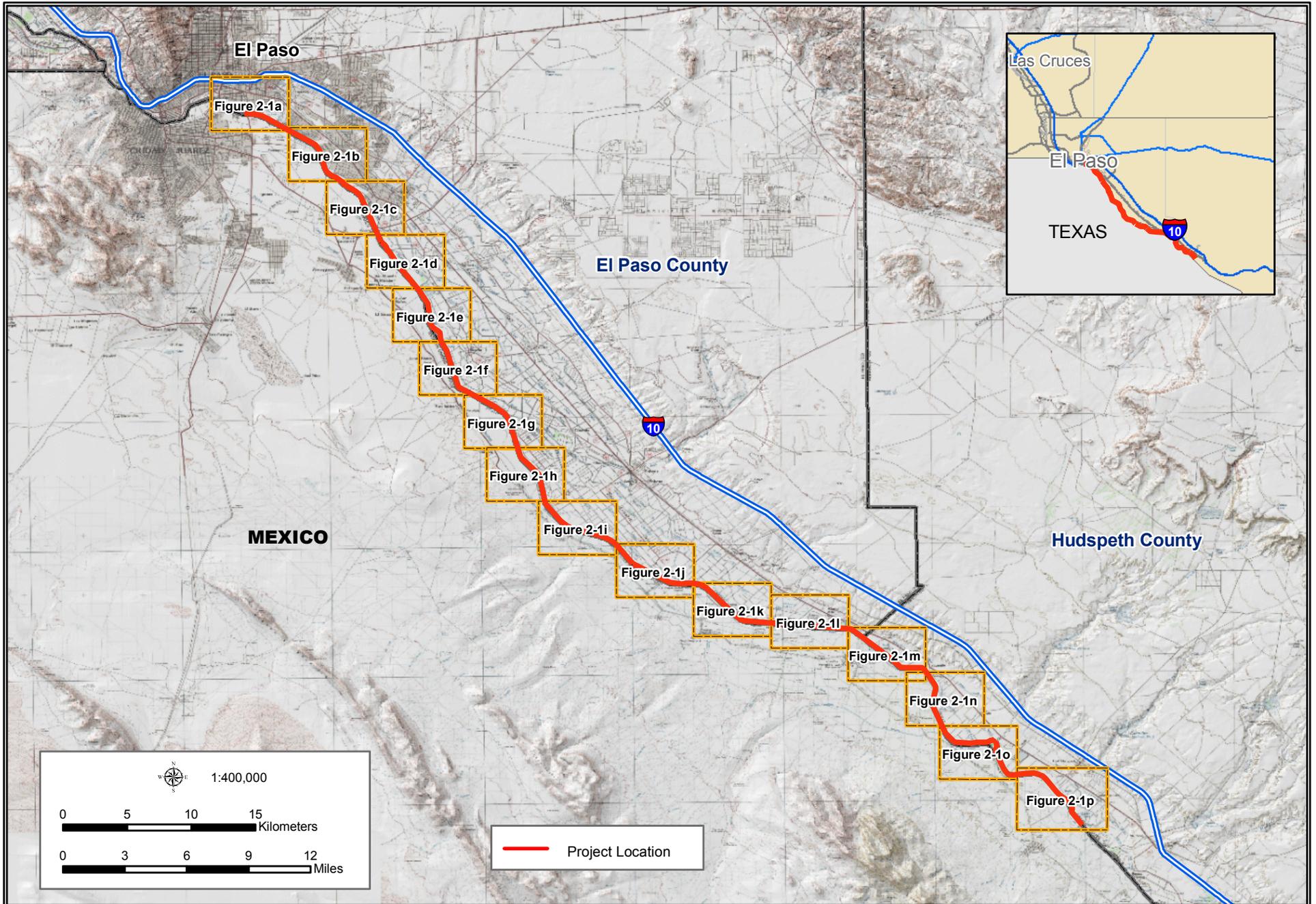
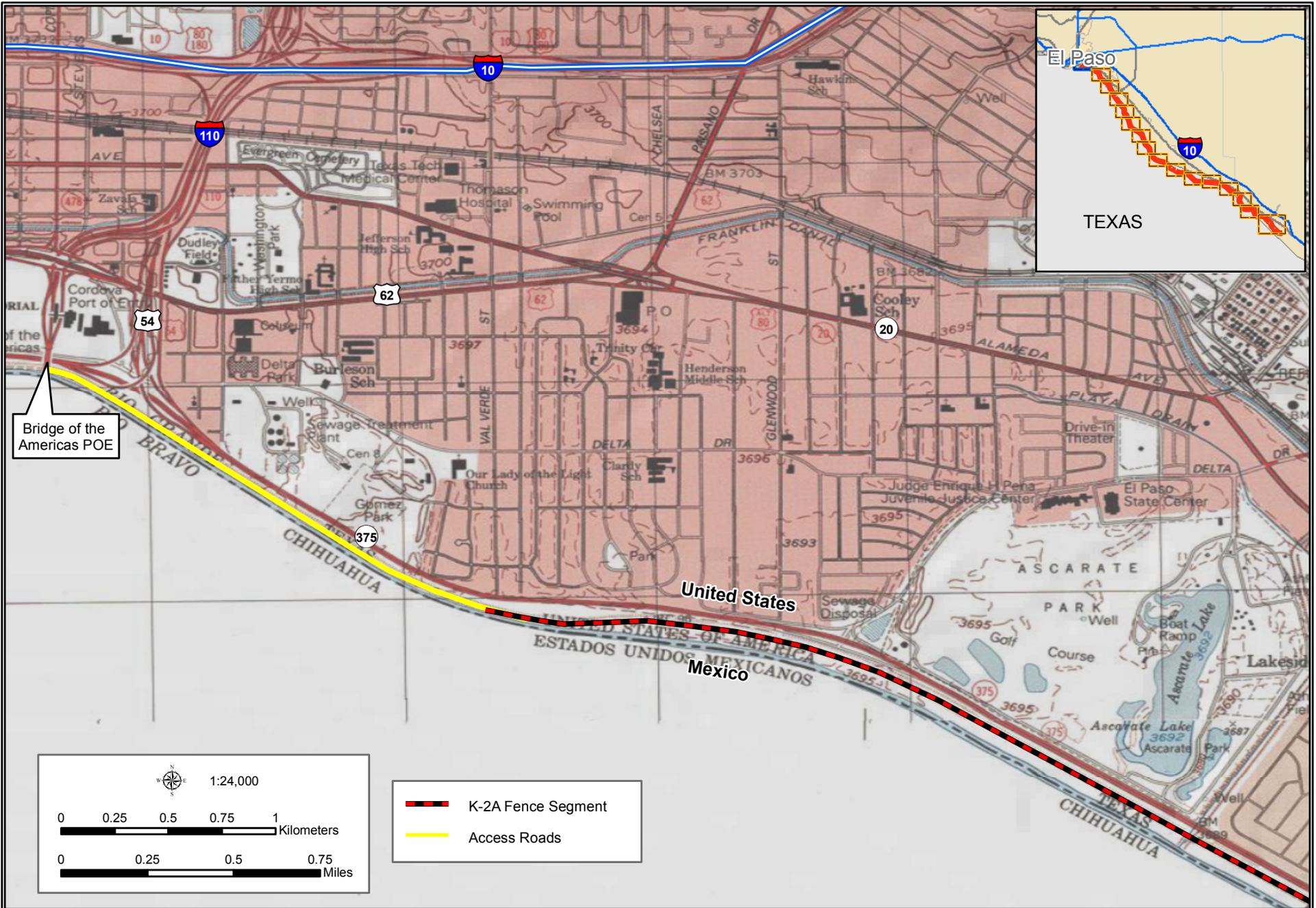


Figure 2-1: Project Area Index Map



2-11

Figure 2-1a: Project Area Map

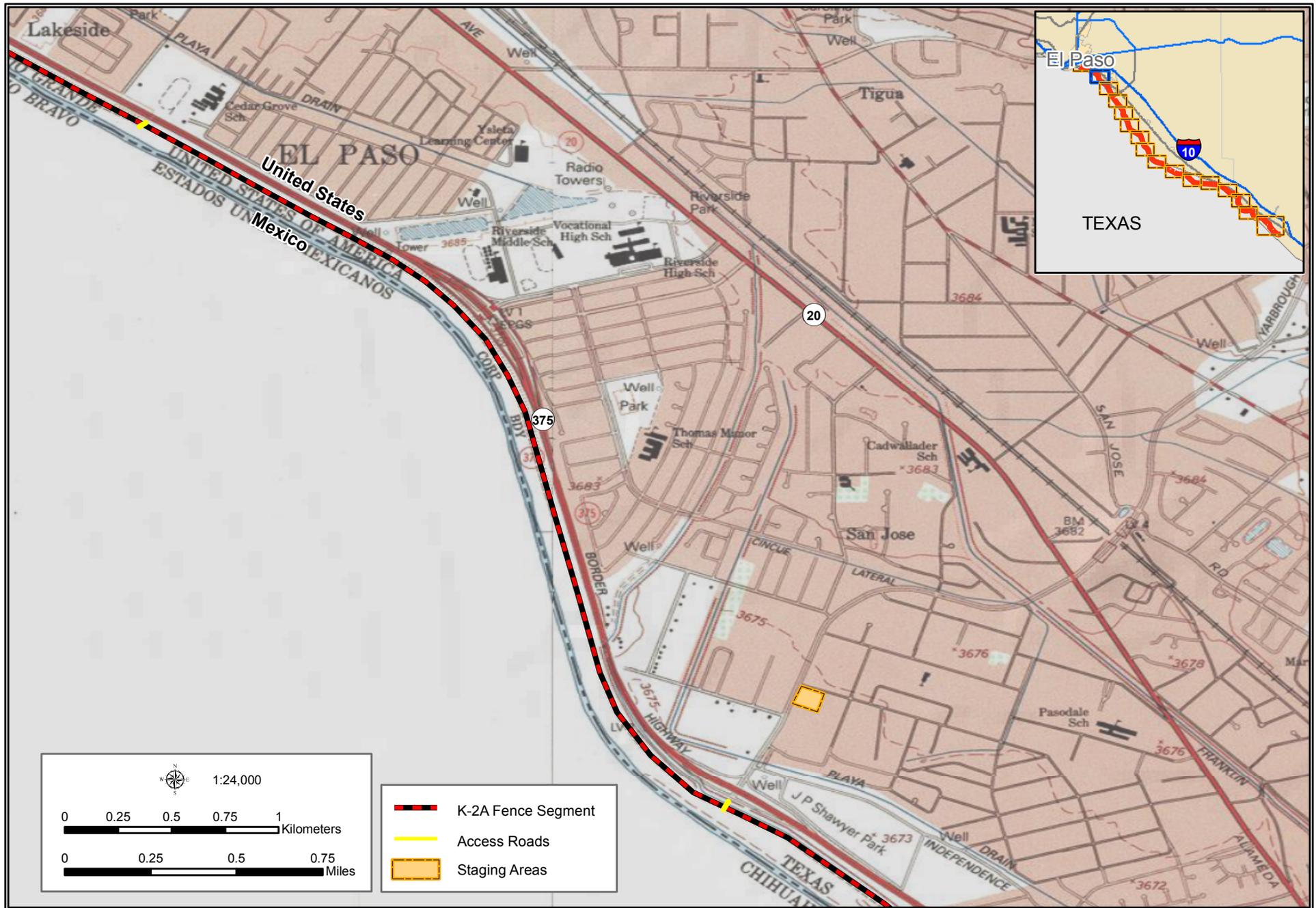


Figure 2-1b: Project Area Map

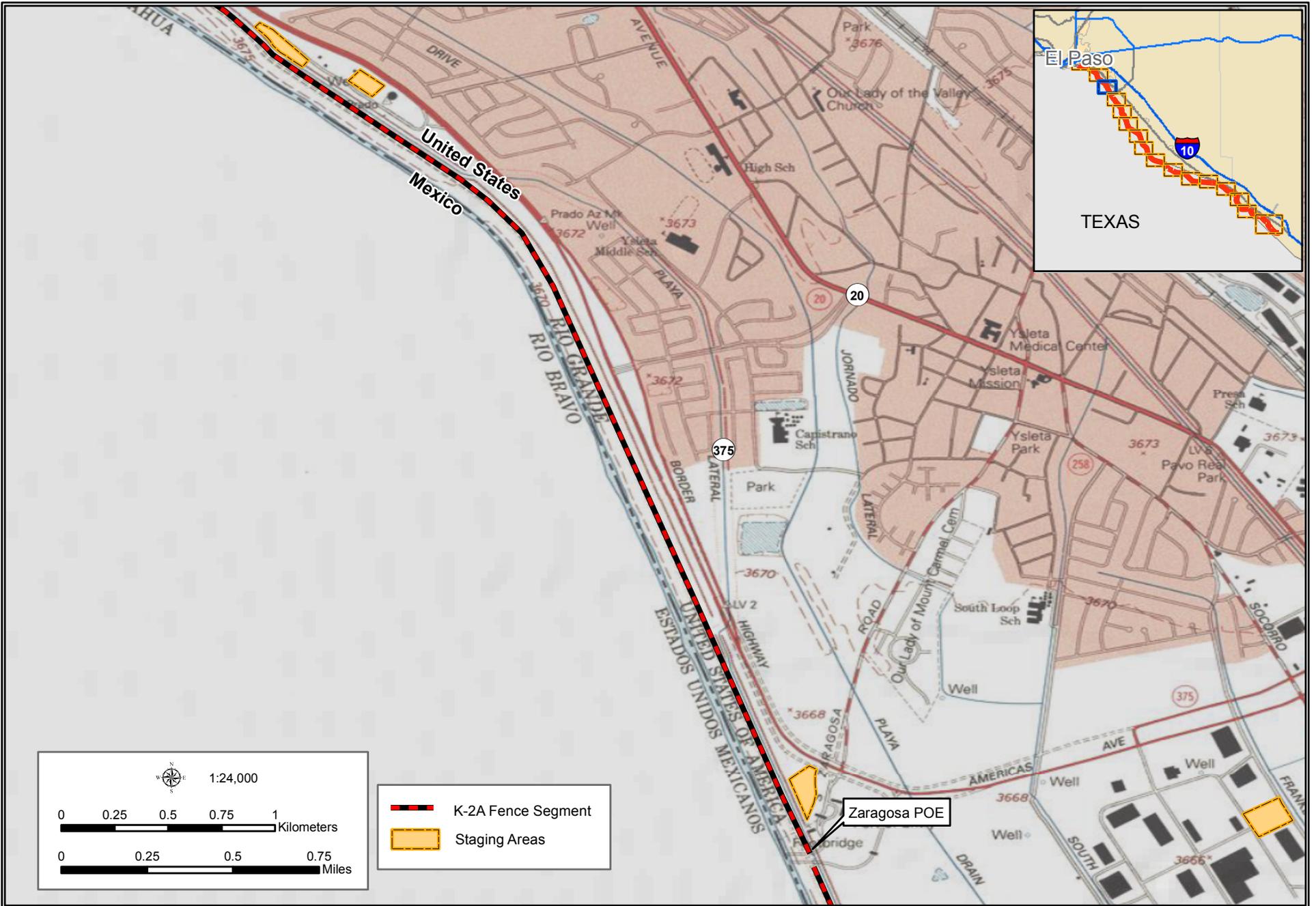


Figure 2-1c: Project Area Map

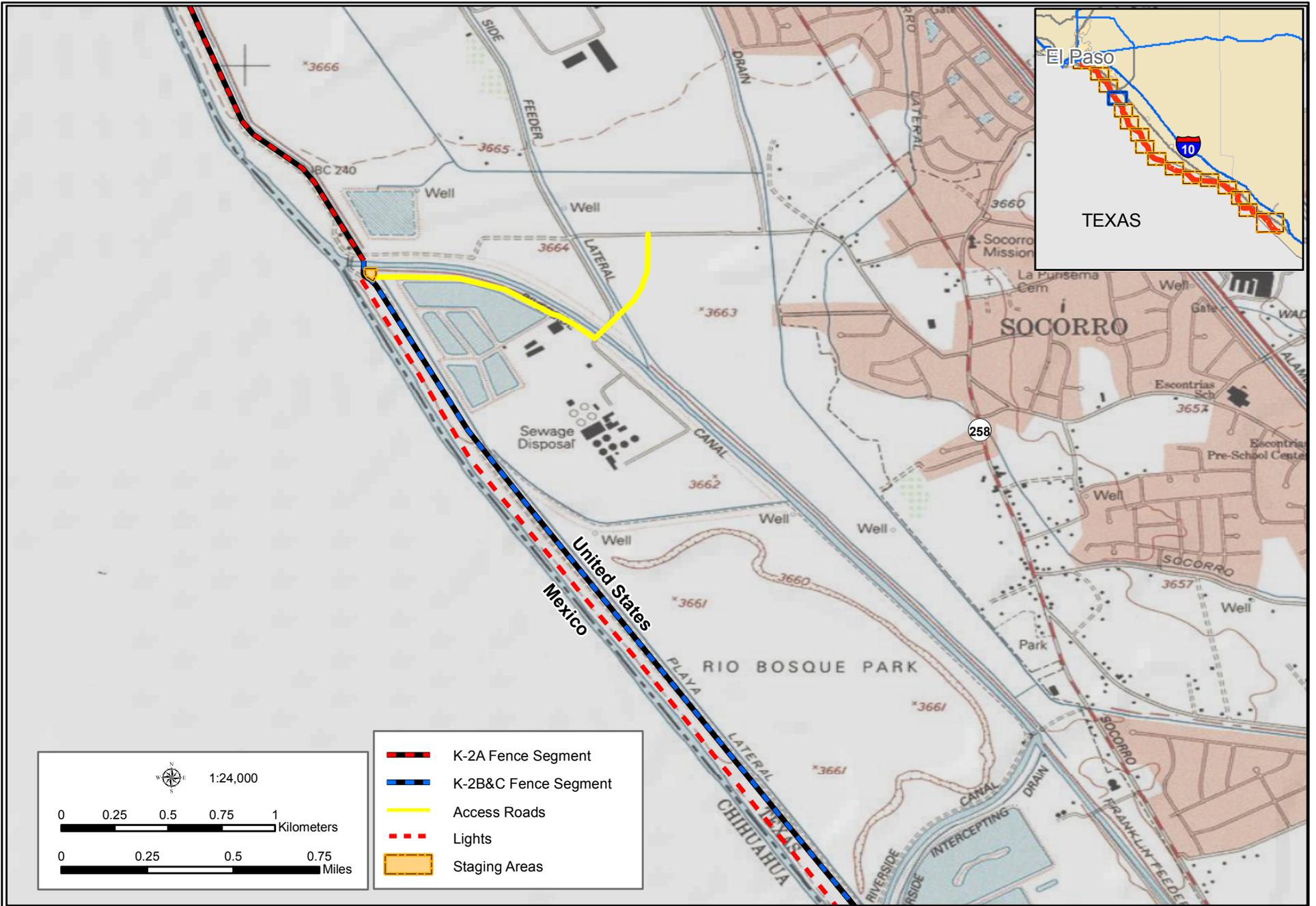


Figure 2-1d: Project Area Map

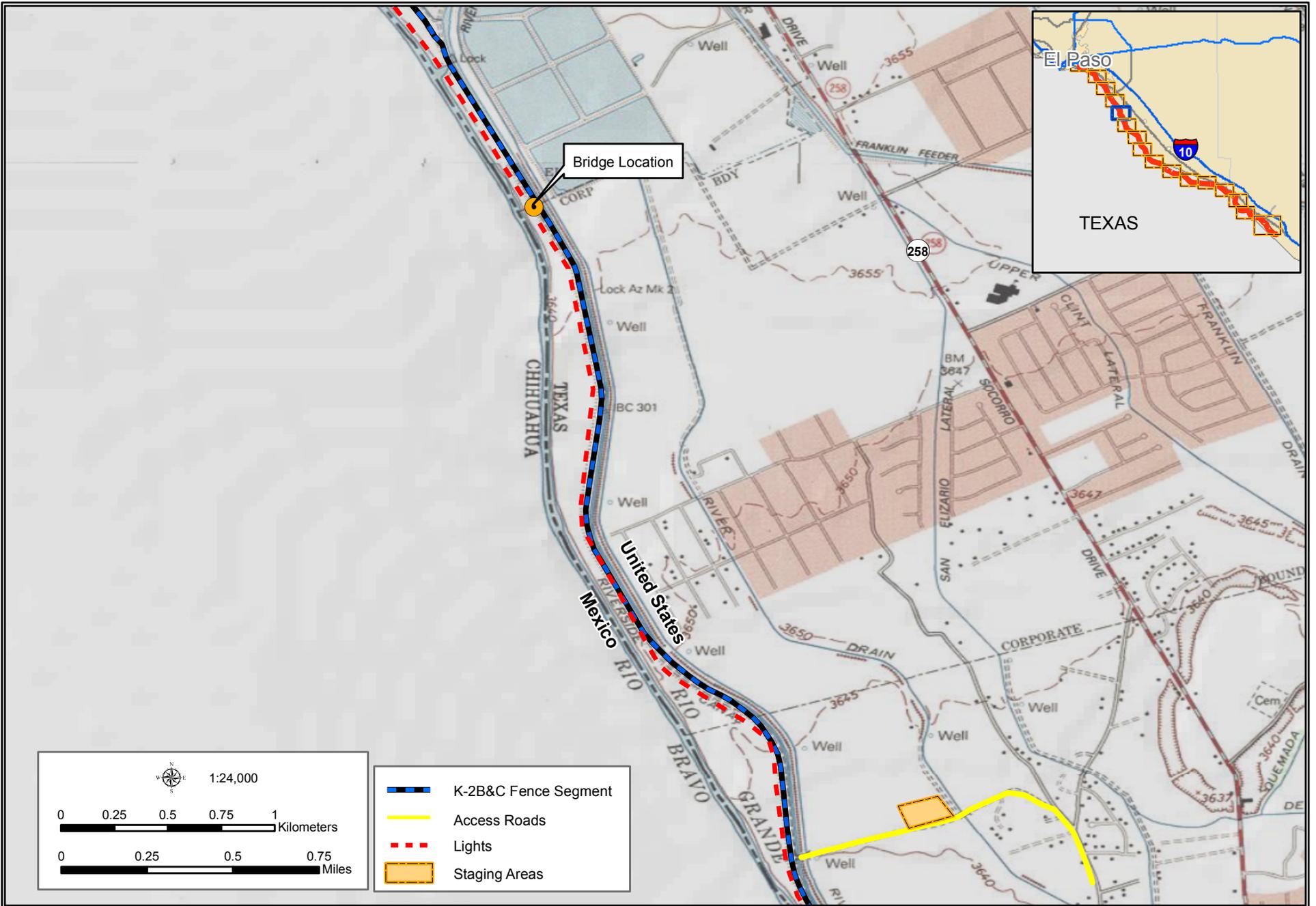


Figure 2-1e: Project Area Map

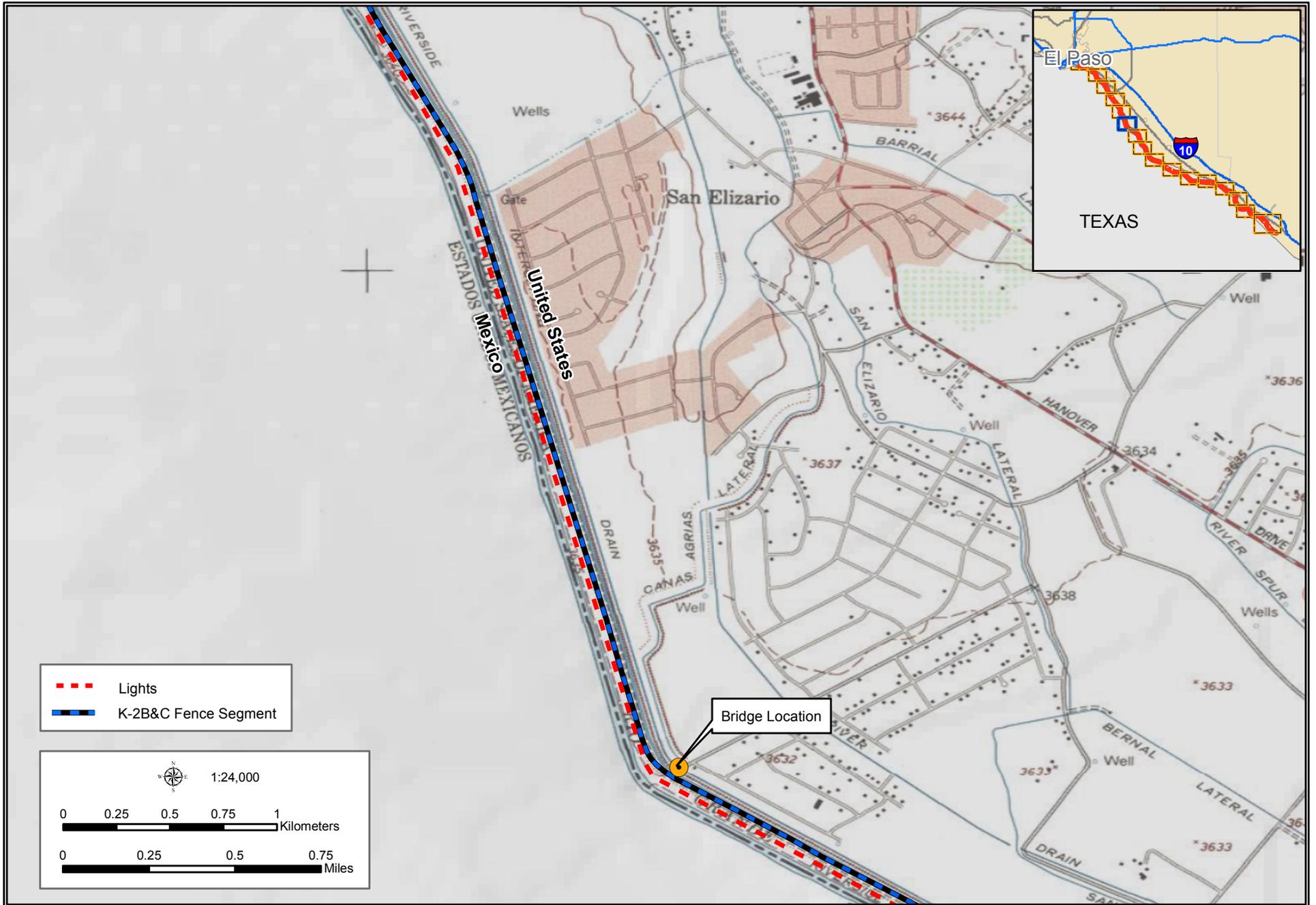


Figure 2-1f: Project Area Map

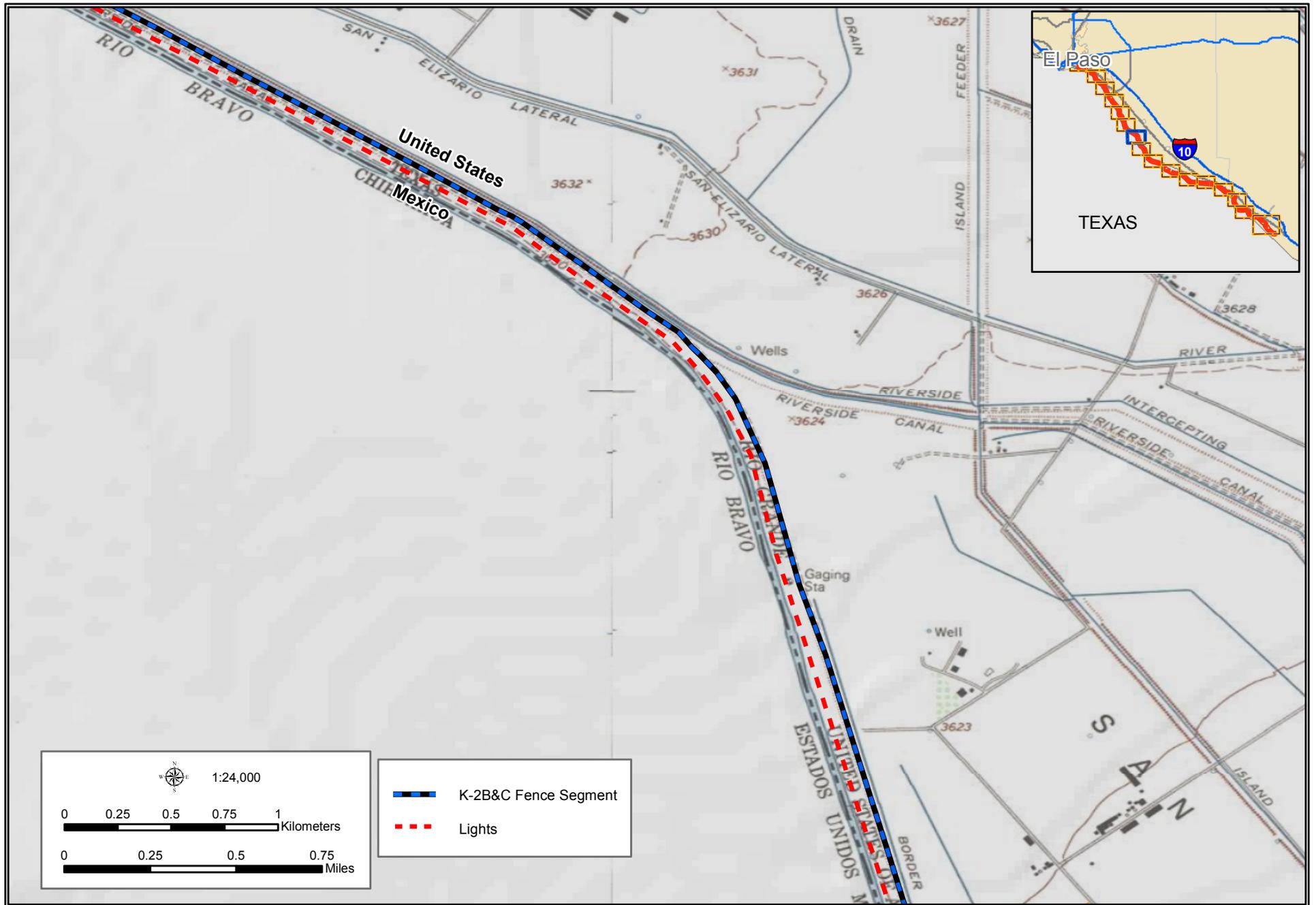


Figure 2-1g: Project Area Map

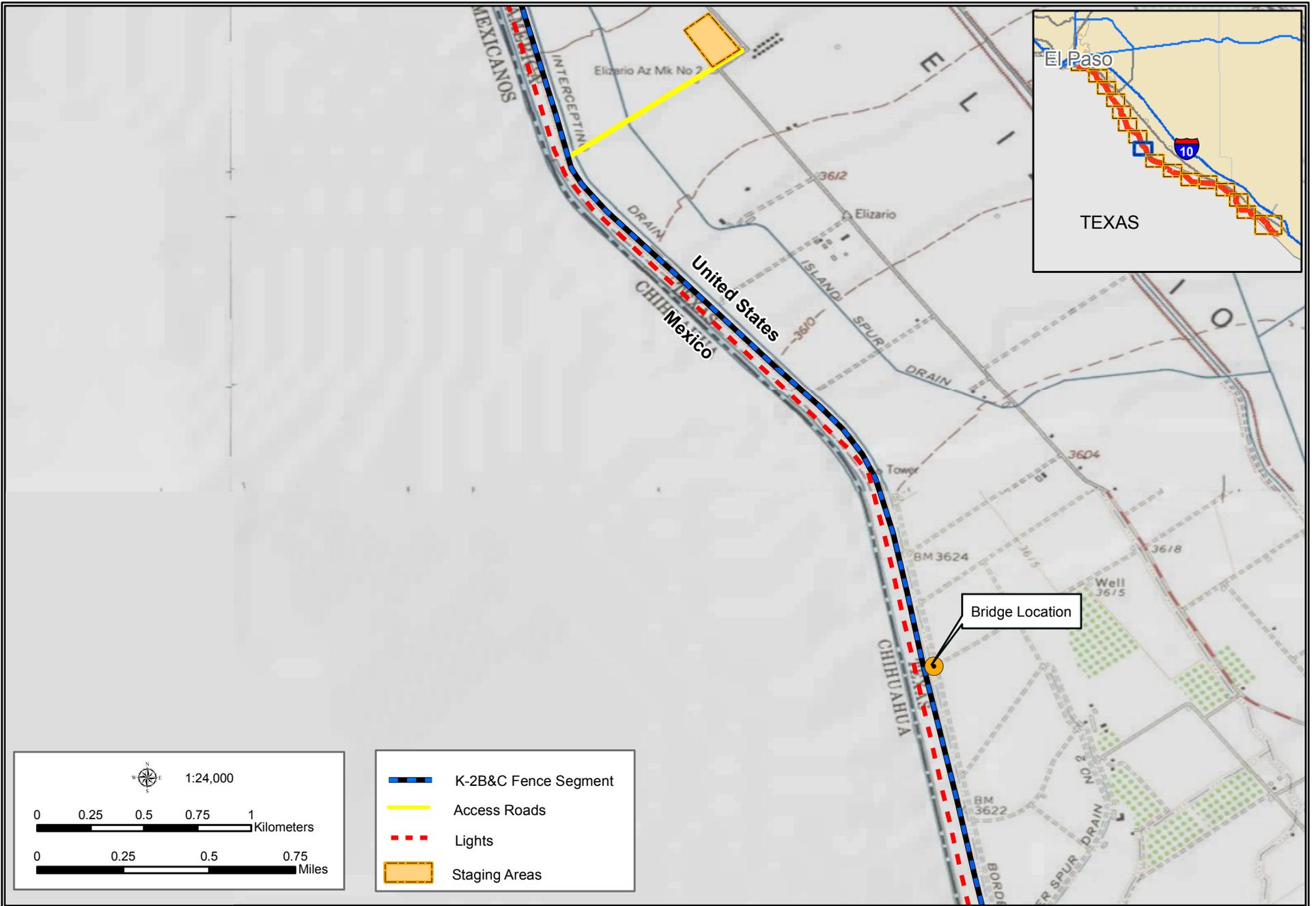


Figure 2-1h: Project Area Map

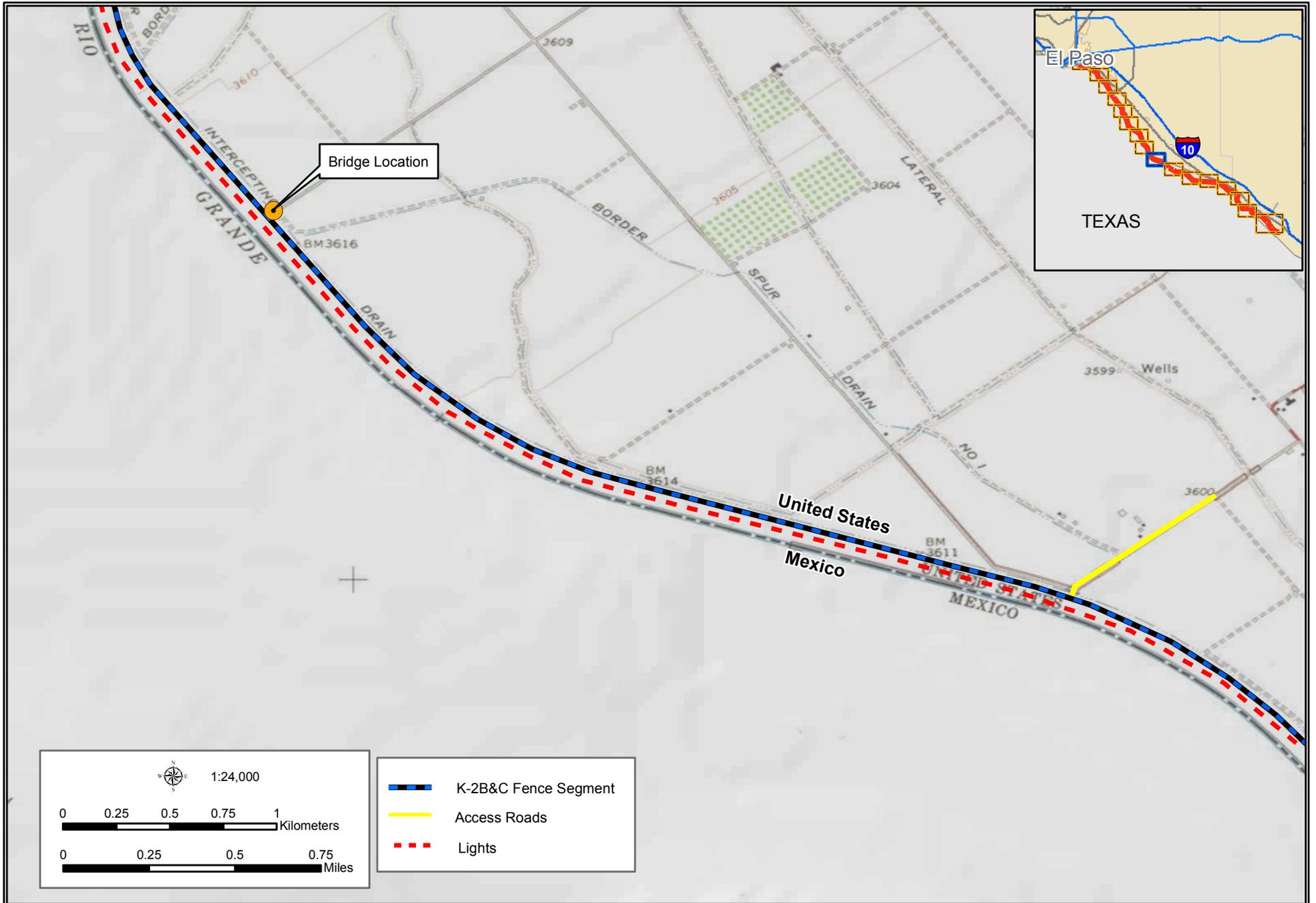


Figure 2-1i: Project Area Map

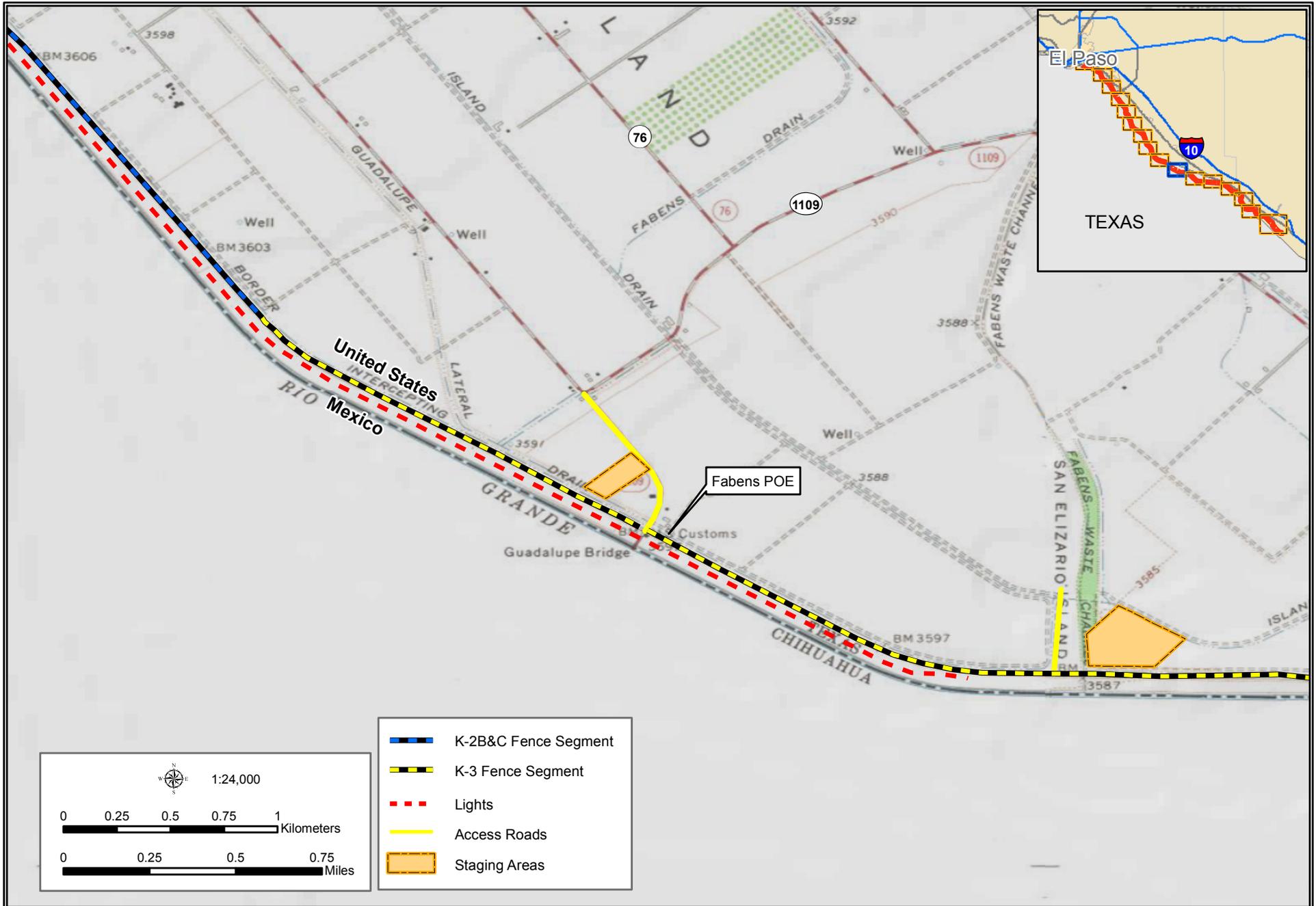


Figure 2-1j: Project Area Map



Figure 2-1k: Project Area Map

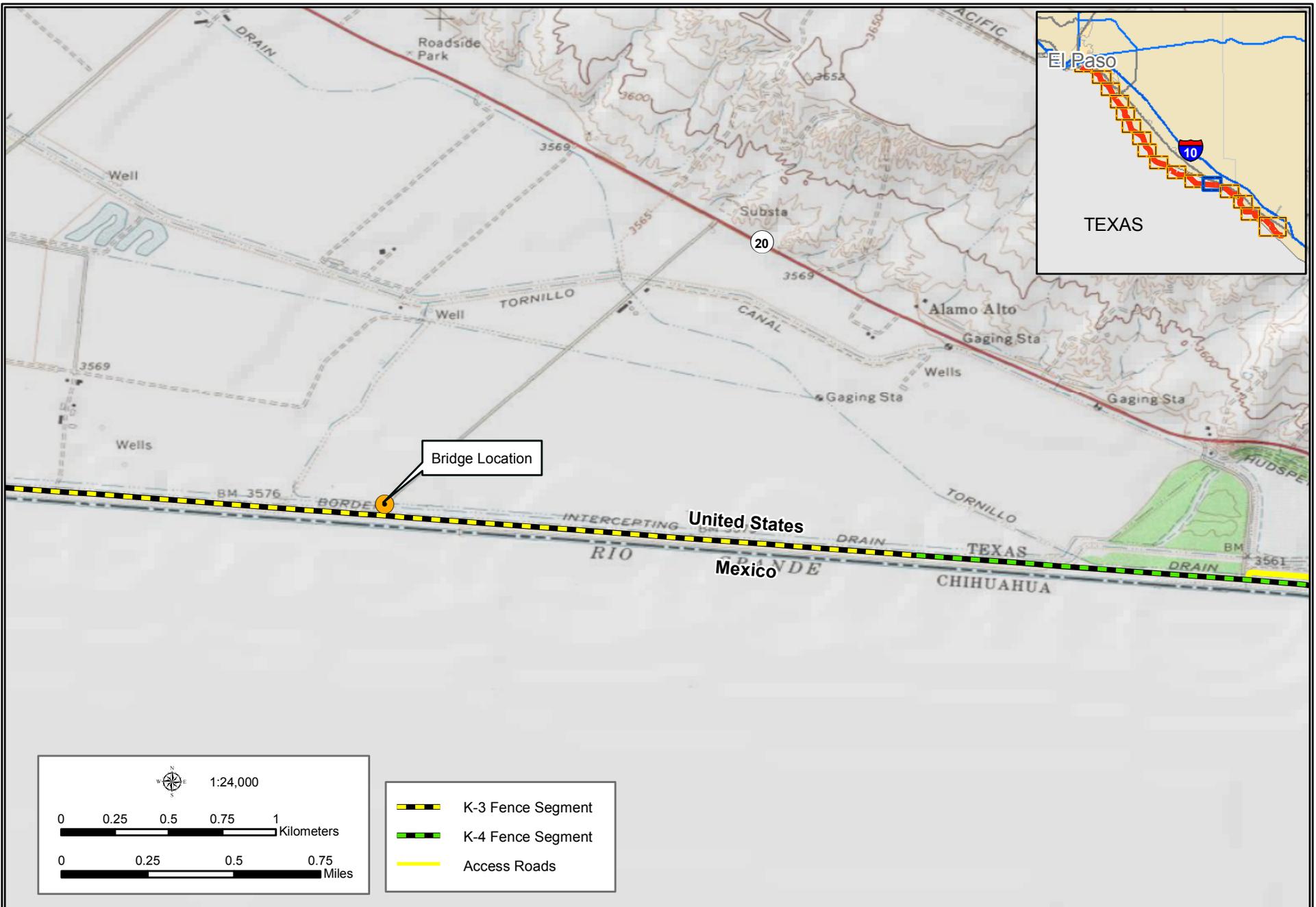


Figure 2-11: Project Area Map



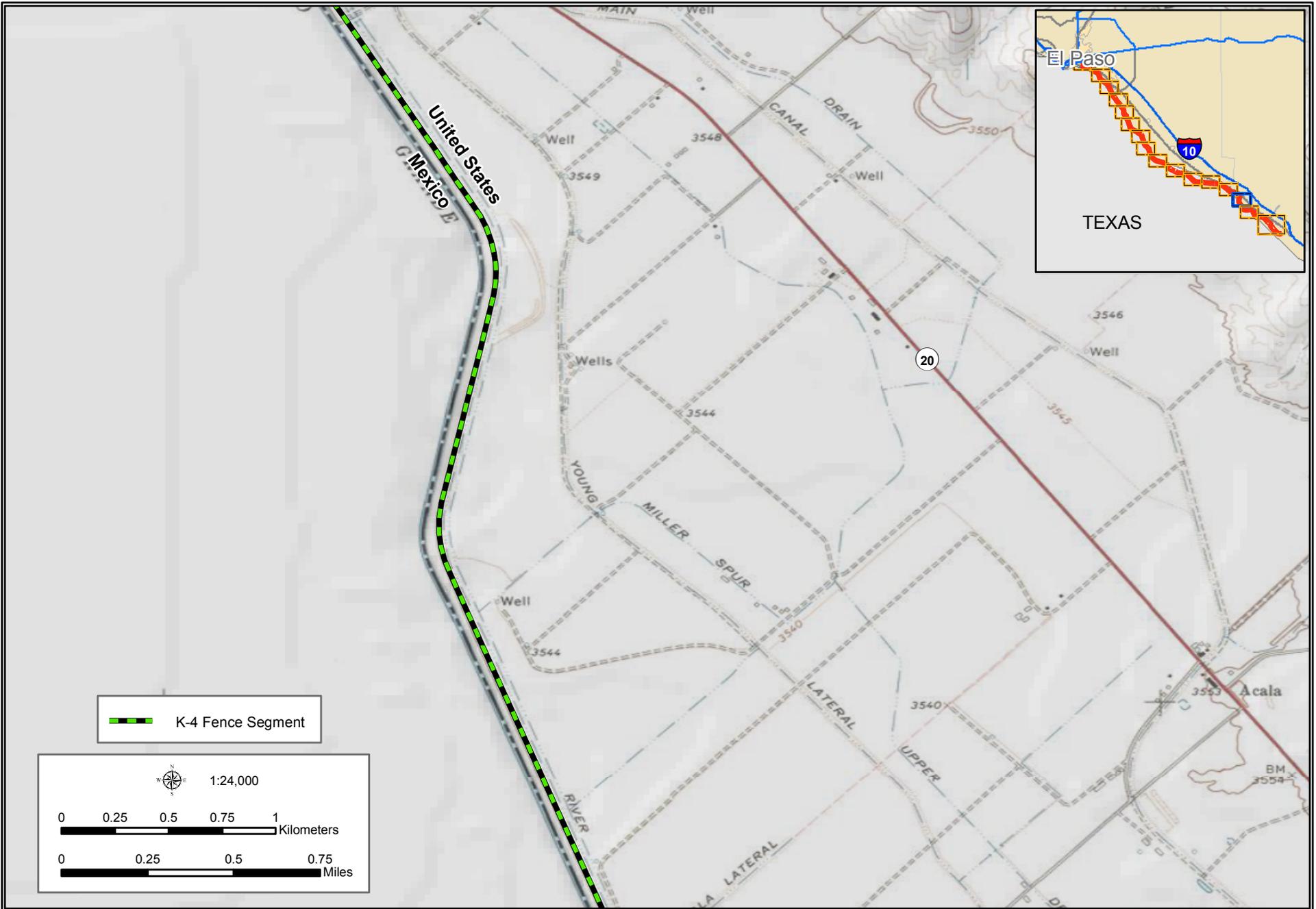


Figure 2-1n: Project Area Map



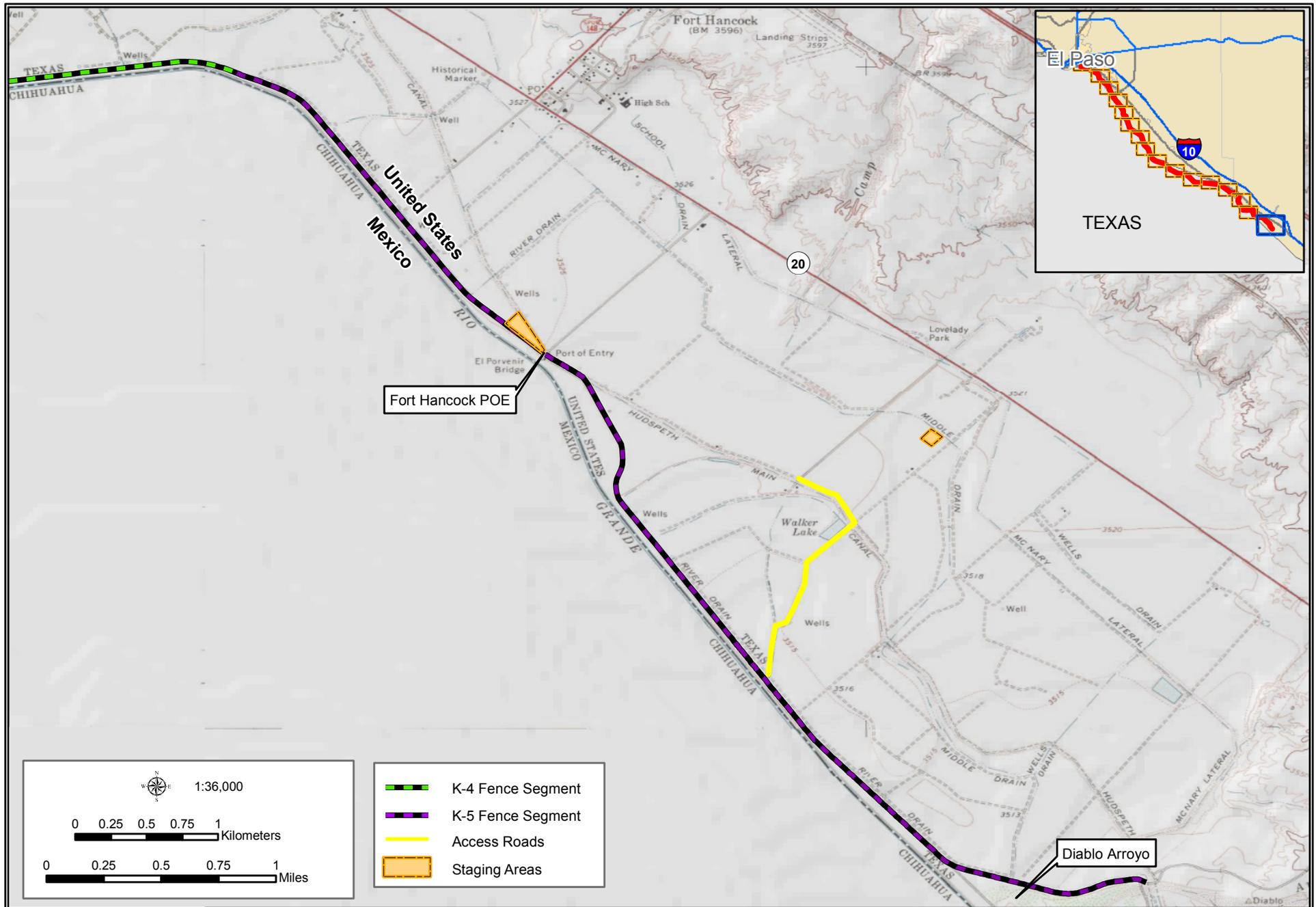


Figure 2-1p: Project Area Map

1 Table 2-1, below, presents the general locations and lengths of each section of the  
 2 proposed fence.

3

4

**Table 2-1. Proposed Fence Segments for USBP El Paso Sector**

<b>Map Number</b>	<b>Border Patrol Station</b>	<b>General Location</b>	<b>Land Ownership</b>	<b>Length (mi) of Fence Segment</b>
K-2A	El Paso	El Paso, west of Ascarate Park to Rio Bosque	USIBWC	9.6
K-2B&C	Ysleta/Fabens	Rio Bosque to 1 mile west of Fabens POE	USIBWC	19.42
K-3	Fabens	1 mile west of Fabens POE to 8.2 miles east of Fabens POE	USIBWC	9.02
K-4	Fabens/Fort Hancock	8.2 miles east of Fabens POE to 1.5 miles west of Ft. Hancock POE	USIBWC	13.48
K-5	Fort Hancock	1.5 miles west of Ft. Hancock POE to 2.8 miles east of Ft. Hancock POE	USIBWC	5.21
<b>Total</b>				<b>56.73</b>

5

#### 6 **2.2.10 Floating Foundation Fence Alternative**

7 This alternative would install a fence constructed to the same performance  
 8 specifications as the Proposed Action Alternative. The fence would be pre-fabricated in  
 9 modular sections off-site, and would be transported in sections to the work site, and  
 10 placed and secured along the top of the levee with no ground disturbance other than  
 11 leveling the surface for placement. A road parallel to the fence would be cast into each  
 12 modular foundation segment, and would be integral to the design. The lights, bridges  
 13 and road improvements would occur as described in the Proposed Action Alternative. A  
 14 schematic diagram of the Floating Foundation Fence Alternative design is shown in  
 15 Figure 1-3. The included hard surface road may limit use of some USIBWC equipment  
 16 and may limit vehicle ingress and egress from the road due to its location on top of the  
 17 levee. USBP might need to implement this alternative at some point in the future, in the  
 18 event an agreement between USIBWC, EPCWID1, HCCRD1 and CBP cannot be  
 19 reached in a timely fashion for the construction of the Proposed Action Alternative.  
 20 Thus, it is carried forward as a viable action alternative. The Floating Foundation Fence  
 21 Alternative could also be used interchangeably with the Proposed Action, as necessary,  
 22 in any section of the project corridor.

1 **2.2.11 No Action Alternative**

2 CEQ regulations require inclusion of the No Action Alternative. Under the No Action  
3 Alternative, the lights, fence, bridges and road improvements would not be constructed.  
4 Implementation of the No Action Alternative would not meet the USBP mission or  
5 operational needs. The No Action Alternative will serve as a baseline against which the  
6 impacts of the other action alternatives can be evaluated.

7  
8 **2.3 IDENTIFICATION OF THE ENVIRONMENTALLY PREFERRED ALTERNATIVE**

9  
10 CEQ's implementing regulation 40 CFR 1502.14(c) instructs NEPA preparers to  
11 "Identify the agency's preferred alternative or alternatives, if one or more exists, in the  
12 draft statement and identify such alternative in the final statement unless another law  
13 prohibits the expression of such a preference." USBP has identified its Preferred  
14 Alternative as the Proposed Action Alternative. Throughout the remainder of this EA,  
15 Preferred Alternative and Proposed Action Alternative are synonymous.

16  
17 Implementation of Proposed Action Alternative would meet USBP's purpose and need  
18 described in Section 1.2. The No Action Alternative would not meet USBP's purpose  
19 and need. The Floating Foundation Fence Alternative would meet USBP's purpose and  
20 need, but would have greater operational issues for both USIBWC and USBP compared  
21 to the Proposed Action Alternative. As indicated above, the Floating Foundation Fence  
22 Alternative design could also be used for discrete sections of the project corridor, in lieu  
23 of the Proposed Action Alternative design.

24  
25 **2.4 SUMMARY**

26  
27 Table 2-2 provides a matrix of alternatives analyzed and their relationship with the  
28 purpose and need for the project. Table 2-3 summarizes the potential impacts to  
29 environmental resources for the Proposed Action Alternative, Floating Foundation  
30 Fence Alternative and the No Action Alternative.

1

**Table 2-2. Alternatives Matrix**

<b>Purpose and Need</b>	<b>No Action Alternative</b>	<b>Proposed Action Alternative</b>	<b>Floating Foundation Fence Alternative</b>
To comply with the Federal legislation.	○	●	●
To provide USBP agents with the tools necessary to prevent terrorists and terrorist weapons from entering the U.S.	○	●	●
To provide a safer work environment for USBP agents.	○	●	●
To enhance the response time of USBP agents and to reduce the flow of illegal drugs.	○	●	●

2

**Legend:** ○ NO      ● YES

Table 2-3. Summary of Effects for the Proposed Action Alternative and Other Alternatives

Impacted Resource	No Action Alternative	Proposed Action Alternative	Floating Foundation Fence Alternative
Land Use	No adverse effects	There would be no change in land use, and no adverse effects.	There would be no change in land use, and no adverse effects.
Water Resources	No adverse effects	There are no WUS in the project footprint, no wetlands in project area, no significant increase in water resources demand, and BMPs would minimize erosion and surface water effects.	There are no WUS in the project footprint, no wetlands in project area, no significant increase in water resources demand, and BMPs would minimize erosion and surface water effects.
Native Vegetation	No adverse effects	The area is already highly disturbed, and vegetation would re-colonize, thus, there would be no long-term effects.	The area is already highly disturbed, and vegetation would re-colonize, thus, there would be no long-term effects.
Common Wildlife Species	No adverse effects	The wildlife habitat is highly disturbed, thus there would be negligible effects.	The wildlife habitat is highly disturbed, thus there would be negligible effects.
Threatened/Endangered Species	No adverse effects	Habitat in the project area is highly disturbed, and no listed species are present, thus there would be no adverse effects. Lights would be designed and installed to avoid illumination of the riparian areas along the Rio Grande.	Habitat in the project area is highly disturbed, and no listed species are present, thus there would be no adverse effects. Lights would be designed and installed to avoid illumination of the riparian areas along the Rio Grande.
Cultural Resources	No adverse effects	The area is heavily disturbed, and no adverse effects are anticipated.	The area is heavily disturbed, and no adverse effects are anticipated.
Air Quality	No adverse effects	The area is rural, effects would be temporary and negligible, BMPs would minimize adverse effects.	The area is rural, effects would be temporary and negligible, BMPs would minimize adverse effects.
Noise	No adverse effects	Portions of the project corridor are adjacent to sensitive receptors; however, BMPs would reduce adverse effects to less than significant.	Portions of the project corridor are adjacent to sensitive receptors; however, BMPs would reduce adverse effects to less than significant.
Utilities and Infrastructure	No adverse effects	No significant effects	No significant effects
Aesthetics	No adverse effects	Effects would be negligible due to remote site locations and existing visual impacts.	Effects would be negligible due to remote site locations and existing visual impacts.
Socioeconomics	No adverse effects	No adverse effects would occur.	No adverse effects would occur.
Hazardous Materials	No adverse effects	No adverse effects would occur, since no hazardous waste is present, and BMPs will be used during construction.	No adverse effects would occur, since no hazardous waste is present, and BMPs will be used during construction.

Table 2-3 continued

Impacted Resource	No Action Alternative	Proposed Action Alternative	Floating Foundation Fence Alternative
Human Health and Safety	Long-term adverse effects for USBP and general public	There would be long-term beneficial effects for USBP and the general public.	There would be long-term beneficial effects for USBP and the general public.
Cumulative Effects	Adverse cumulative effects on crime rate and public safety	Minor cumulative effects would occur due to construction of all USBP projects.	Minor cumulative effects would occur due to construction of all USBP projects.

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