



SECTION 1

Introduction



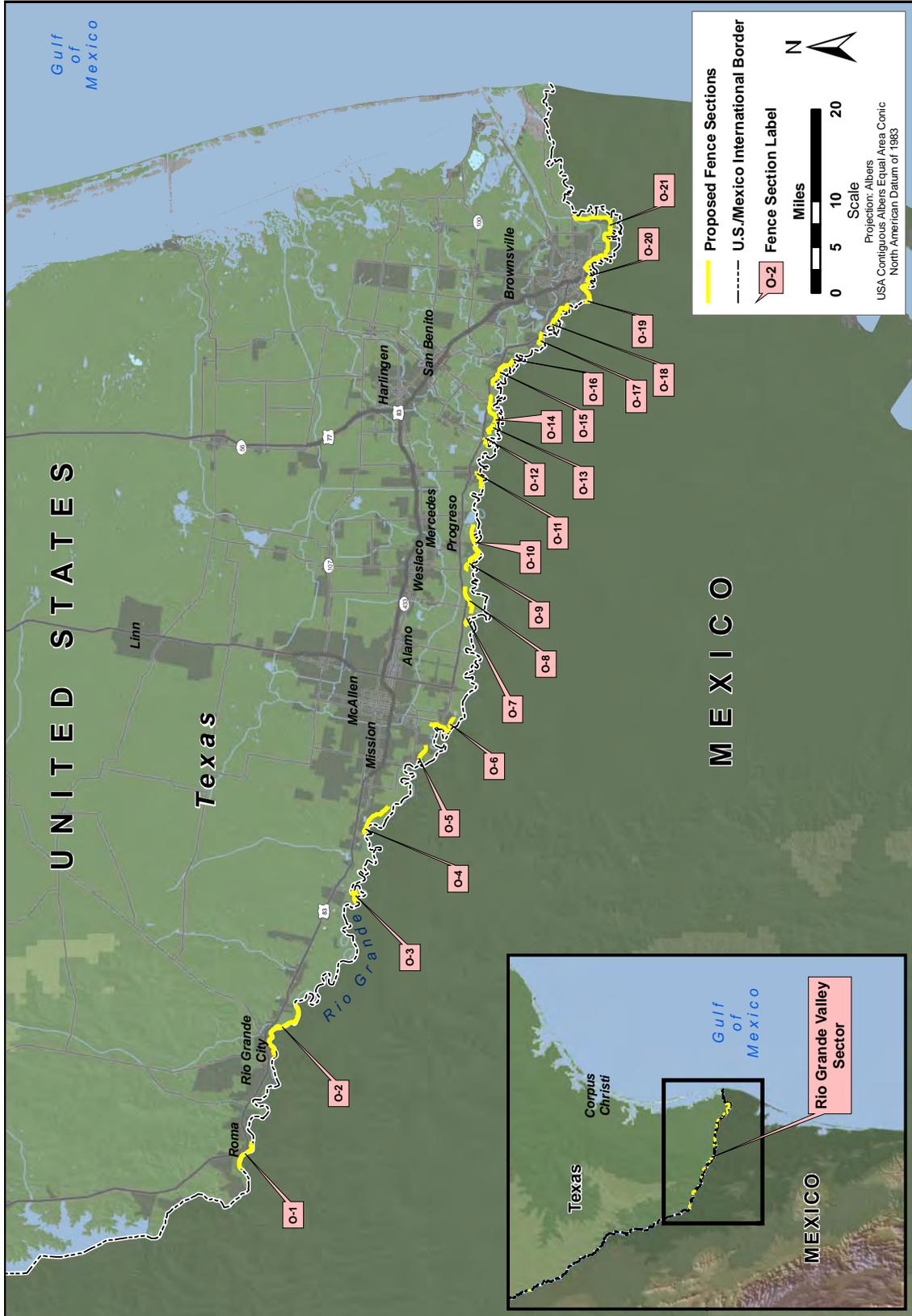
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1. INTRODUCTION

2 The U.S. Department of Homeland Security (DHS), U.S. Customs and Border
3 Protection (CBP), U.S. Border Patrol (USBP) proposes to construct, maintain,
4 and operate approximately 70 miles of tactical infrastructure, including 21
5 discrete sections of pedestrian fence and associated patrol roads, and access
6 roads along the U.S./Mexico international border in the USBP Rio Grande Valley
7 Sector, Texas.

8 The Proposed Action includes the installation of tactical infrastructure in 21
9 discrete fence sections (designated O-1 through O-21) along the international
10 border with Mexico in the vicinity of Roma, Rio Grande City, McAllen, Progreso,
11 Mercedes, Harlingen, and Brownsville, Texas (see **Figure 1-1**). The locations of
12 the individual tactical infrastructure sections were proposed based on the
13 situational and operational requirements of the USBP Rio Grande Valley Sector.
14 Although some of the fence sections would be contiguous, each fence section
15 would represent an individual project and could proceed independent of the other
16 sections. Detailed descriptions of the fence sections are presented in
17 **Section 2.2.2**. Individual sections would range from approximately 1 mile to
18 more than 13 miles in length. For much of its length, the proposed tactical
19 infrastructure would follow the International Boundary and Water Commission
20 (IBWC) levee along the Rio Grande. The IBWC enforces and oversees the
21 boundary and water treaties of the United States and Mexico and settles
22 differences that arise in their application (IBWC 2007a). The tactical
23 infrastructure would cross multiple land use types, such as agricultural, rural,
24 suburban, and urban. Impacted parcels are both publicly and privately owned.
25 The Proposed Action would also encroach upon portions of the Lower Rio
26 Grande Valley National Wildlife Refuge (LRGVNWR) and Texas state parks in
27 the Rio Grande Valley. A detailed description of the Proposed Action and the
28 alternatives considered is presented in **Section 2**.

29 This Draft Environmental Impact Statement (EIS) is divided into eight sections
30 and appendices. **Section 1** provides background information on USBP missions,
31 identifies the purpose of and need for the Proposed Action, describes the area in
32 which the Proposed Action would occur, and explains the public involvement
33 process. **Section 2** provides a detailed description of the Proposed Action,
34 alternatives considered, and the No Action Alternative. **Section 3** describes
35 existing environmental conditions in the areas where the Proposed Action would
36 occur. **Section 4** identifies potential environmental impacts that could occur
37 within each resource area under the alternatives evaluated in detail. **Section 5**
38 discusses potential cumulative impacts and other impacts that might result from
39 implementation of the Proposed Action, combined with foreseeable future
40 actions. **Sections 6** and **7** provide references and acronyms, respectively.
41 **Section 8** identifies the preparers of the Draft EIS.



Source: ESRI StreetMap USA 2005

Figure 1-1. General Location of the Proposed Action – Rio Grande Valley Sector, Texas

1 **Appendix A** contains a listing of those laws, regulations, and executive orders
2 potentially applicable to the Proposed Action. **Appendix B** presents the Scoping
3 Summary Report which includes the *Federal Register*, Notice of Intent (NOI), the
4 newspaper ads posted in local papers, and agency coordination letters.
5 **Appendix C** will present materials related to the Draft EIS comment process and
6 public involvement. **Appendix D** contains a detailed description of the 21
7 proposed tactical infrastructure sections along Routes A and B. **Appendix E**
8 provides potential fence designs and a description of the proposed tactical
9 infrastructure. **Appendix F** contains detailed maps of each of the 21 proposed
10 tactical infrastructure sections. **Appendix G** contains detailed soil maps of each
11 of the 21 proposed tactical infrastructure sections. **Appendix H** contains a
12 detailed summary of soils in Starr, Hidalgo, and Cameron counties. **Appendix I**
13 contains the Draft Biological Survey Report. **Appendix J** contains preliminary
14 cultural resource findings. **Appendix K** presents air quality information.

15 1.1 USBP BACKGROUND

16 The mission of CBP is to prevent terrorists and terrorist weapons from entering
17 the United States, while also facilitating the flow of legitimate trade and travel. In
18 supporting CBP's mission, USBP is charged with establishing and maintaining
19 effective control of the border of the United States. USBP's mission strategy
20 consists of five main objectives:

- 21 • Establish substantial probability of apprehending terrorists and their
22 weapons as they attempt to enter illegally between the Ports of Entry
23 (POEs)
- 24 • Deter illegal entries through improved enforcement
- 25 • Detect, apprehend, and deter smugglers of humans, drugs, and other
26 contraband
- 27 • Leverage "smart border" technology to multiply the effect of enforcement
28 personnel
- 29 • Reduce crime in border communities and consequently improve quality of
30 life and economic vitality of targeted areas.

31 USBP has nine administrative sectors along the U.S./Mexico international border.
32 Each sector is responsible for implementing an optimal combination of personnel,
33 technology, and infrastructure appropriate to its operational requirements. The
34 Rio Grande Valley Sector is responsible for 17,000 square miles of land in
35 southeastern Texas, including the following counties: Cameron, Willacy, Hidalgo,
36 Starr, Brooks, Kenedy, Kleberg, Nueces, San Patricio, Jim Wells, Bee, Refugio,
37 Calhoun, Goliad, Victoria, Dewitt, Jackson, and Lavaca (CBP 2007). The areas
38 affected by the Proposed Action include the southernmost portions of Starr,
39 Hidalgo, and Cameron counties, Texas, within the Rio Grande Valley Sector.

1 **1.2 PURPOSE AND NEED**

2 The purpose of the Proposed Action is to increase border security within the
3 USBP Rio Grande Valley Sector through the construction, operation, and
4 maintenance of tactical infrastructure in the form of fences, roads, and supporting
5 technological and tactical assets. The USBP Rio Grande Valley Sector has
6 identified 21 discrete areas along the border that experience high levels of illegal
7 cross-border activity. This activity occurs in areas that are remote and not easily
8 accessed by USBP agents, near POEs where concentrated populations might
9 live on either side of the border, contain thick vegetation that can provide
10 concealment, or have quick access to U.S. transportation routes.

11 The Proposed Action is needed to provide USBP agents with the tools necessary
12 to strengthen their control of the U.S. borders between POEs in the USBP Rio
13 Grande Valley Sector. The Proposed Action would help to deter illegal cross-
14 border activities within the USBP Rio Grande Valley Sector by improving
15 enforcement, preventing terrorists and terrorist weapons from entering the United
16 States, reducing the flow of illegal drugs, and enhancing response time, while
17 providing a safer work environment for USBP agents.

18 **1.3 PROPOSED ACTION**

19 USBP proposes to construct, maintain, and operate tactical infrastructure
20 consisting of pedestrian fence and associated patrol roads, and access roads
21 along 21 discrete areas of the U.S./Mexico international border in the USBP Rio
22 Grande Valley Sector, Texas (examples of pedestrian fence are included in
23 **Appendix E**). Proposed tactical infrastructure includes installation of fence
24 sections in areas of the border that are not currently fenced. The proposed
25 locations of tactical infrastructure are based on a USBP Rio Grande Valley
26 Sector assessment of local operational requirements where such infrastructure
27 would assist USBP agents in reducing illegal cross-border activities. The Fiscal
28 Year (FY) 2007 DHS Appropriations Act (Public Law [P.L.] 109-295) provided
29 \$1,187,565,000 under the Border Security Fencing, Infrastructure, and
30 Technology appropriation for the installation of fencing, infrastructure, and
31 technology along the border (CRS 2006). **Figure 1-1** illustrates the location of
32 the proposed tactical infrastructure within the Rio Grande Valley Sector. Details
33 of the Proposed Action are included in **Section 2.2.2**.

34 **1.4 FRAMEWORK FOR ANALYSIS**

35 The process for implementing the National Environmental Policy Act (NEPA) is
36 codified in Code of Federal Regulations 40 (CFR) Parts 1500–1508, *Regulations*
37 *for Implementing the Procedural Provisions of the National Environmental Policy*
38 *Act*, and DHS’s related Management Directive (MD) 5100.1, *Environmental*
39 *Planning Program*. The Council on Environmental Quality (CEQ) was
40 established under NEPA to implement and oversee Federal policy in this
41 process.

1 An EIS is prepared when a proposed action is anticipated to have potentially
2 “significant” environmental impacts, or a proposed action is environmentally
3 controversial. An EIS generally presents separate chapters specifically tailored
4 to address the following:

- 5 • The purpose and need for the Proposed Action
- 6 • Reasonable alternatives to the Proposed Action
- 7 • A characterization of the affected environment
- 8 • The nature and extent of potential environmental impacts associated with
9 the Proposed Action and alternatives (including the No Action Alternative)
- 10 • A listing of agencies and persons contacted during the EIS preparation
11 process and public involvement efforts.

12 To comply with NEPA, the planning and decisionmaking process for actions
13 proposed by Federal agencies involves a study of other relevant environmental
14 statutes and regulations. The NEPA process, however, does not replace
15 procedural or substantive requirements of other environmental statutes and
16 regulations. It addresses them collectively in the form of an Environmental
17 Assessment (EA) or EIS, which enables the decisionmaker to have a
18 comprehensive view of major environmental issues and requirements associated
19 with the Proposed Action. According to CEQ regulations, the requirements of
20 NEPA must be integrated “with other planning and environmental review
21 procedures required by law or by agency so that all such procedures run
22 concurrently rather than consecutively.”

23 Within the framework of environmental impact analysis under NEPA, additional
24 authorities that may be applicable include the Clean Air Act (CAA), Clean Water
25 Act (CWA) (including a National Pollutant Discharge Elimination System
26 [NPDES] storm water discharge permit and Section 404 permit), Section 10 of
27 the Rivers and Harbors Act of 1899, Noise Control Act, Endangered Species Act
28 (ESA), Migratory Bird Treaty Act (MBTA), National Historic Preservation Act
29 (NHPA), Archaeological Resources Protection Act, Resource Conservation and
30 Recovery Act, Toxic Substances Control Act, and various Executive Orders
31 (EOs). A summary of laws, regulations, and EOs that might be applicable to the
32 Proposed Action are shown in **Appendix A. Table 1-1** lists major Federal and
33 state permits, approvals, and interagency coordination required to construct,
34 maintain, and operate the proposed tactical infrastructure.

35 The Proposed Action and analysis in this Draft EIS is complementary to that in a
36 recent EIS prepared by CBP. The *Environmental Impact Statement for*
37 *Operation Rio Grande*, April 2004 (DHS 2004), was prepared to address tactical
38 infrastructure needs within the Rio Grande Valley Sector (formerly McAllen
39 Sector) associated with Operation Rio Grande. Operation Rio Grande is a
40 strategy that was initiated in August 1997 to aid in reducing illegal immigration
41

1 **Table 1-1. Major Permits, Approvals, and Interagency Coordination**

Agency	Permit/Approval/Coordination
U.S. Department of the Interior, U.S. Fish and Wildlife Service (USFWS)	<ul style="list-style-type: none"> - Section 7 ESA consultation - MBTA coordination - Special Use Permits for access to National Wildlife Refuge areas
U.S. Environmental Protection Agency (USEPA)	<ul style="list-style-type: none"> - CWA NPDES permit
U.S. Army Corps of Engineers	<ul style="list-style-type: none"> - CWA Section 404 permit Rivers and Harbors Act of 1899, Section 10
Texas Commission on Environmental Quality (TCEQ)	<ul style="list-style-type: none"> - CWA Section 401 State Water Quality Certification - CAA permit consultation
Texas General Land Office (TxGLO)	<ul style="list-style-type: none"> - Coastal Zone Management Act (CZMA) - Consistency Determination
Texas Parks and Wildlife Department (TPWD)	<ul style="list-style-type: none"> - Texas Endangered Species Act coordination
National Park Service	<ul style="list-style-type: none"> - NHPA Section 106 consultation for National Historic Landmarks (NHLs)
Texas Historical Commission (THC)	<ul style="list-style-type: none"> - NHPA Section 106 consultation
Federally recognized American Indian Tribes	<ul style="list-style-type: none"> - Consultation regarding potential effects on cultural resources
Advisory Council on Historic Preservation (ACHP)	<ul style="list-style-type: none"> - NHPA Section 106 consultation

2
3 and drug trafficking along the Rio Grande corridor of the Rio Grande Valley
4 Sector. The tactical infrastructure proposed and analyzed in the Operation Rio
5 Grande EIS includes permanent and portable lighting, road improvement, fence
6 construction, boat ramp construction, and maintenance mowing. The Record of
7 Decision (ROD) for the Operation Rio Grande EIS was signed on April 15, 2005.
8 The discussion and analysis in the Operation Rio Grande EIS are incorporated
9 into this EIS by reference because the proposals analyzed in each EIS are
10 complementary to each other.

11 **1.5 PUBLIC INVOLVEMENT**

12 Agency and public involvement in the NEPA process promotes open
13 communication between the public and the government and enhances the
14 decisionmaking process. All persons or organizations having a potential interest
15 in the Proposed Action are encouraged to participate in the decisionmaking
16 process.

17 NEPA and implementing regulations from the CEQ and DHS direct agencies to
18 make EISs available to the public during the document development process and

1 prior to any decisionmaking on what actions are to be taken. The premise of
2 NEPA is that the quality of Federal decisions will be enhanced if proponents
3 provide information to the public and involve the public in the planning process.

4 Public scoping activities for this EIS were initiated on September 24, 2007, when
5 a NOI to prepare this EIS was published in the *Federal Register* (72 FR 184, pp.
6 54276–77, see **Appendix B**). Besides providing a brief description of the
7 Proposed Action and announcing CBP’s intent to prepare this EIS, the NOI also
8 established a 20-day public scoping period. The purpose of the scoping process
9 was to solicit public comments regarding the range of issues, including potential
10 impacts and alternatives that should be addressed in the EIS. Public comments
11 received during the public scoping period were taken into consideration as part of
12 the preparation of this Draft EIS (see **Appendix B**).

13 In addition to the NOI published in the *Federal Register*, newspaper notices
14 coinciding with the NOI was published in *The Monitor*, *The Brownsville Herald*,
15 and *The Valley Morning Star* on September 24 and 30, 2007. A notice was also
16 published in Spanish in *La Frontera* and *El Nuevo Herald* on September 24,
17 2007. Copies of the newspaper notices are included in **Appendix B**.

18 The U.S. Environmental Protection Agency (USEPA) will publish the Notice of
19 Availability (NOA) for this Draft EIS in the *Federal Register*. The purpose of the
20 USEPA NOA is to announce to the public the availability of this Draft EIS, and to
21 begin a 45-day public comment period. In addition to the USEPA NOA, CBP will
22 publish a separate NOA in the *Federal Register* announcing the dates, times,
23 and places for public informational meetings and to request comments on the
24 Draft EIS. All comments received will be taken into consideration in the
25 development of the Final EIS and subsequent to this draft will also be included in
26 **Appendix C**. Upon completion, CBP will make the Final EIS available to the
27 public for 30 days. At the conclusion of the 30-day period, a Record of Decision
28 (ROD) regarding the Proposed Action can be signed and published in the
29 *Federal Register*.

30 Through the public involvement process, USBP also notified relevant Federal,
31 state, and local agencies of the Proposed Action and requested input on
32 environmental concerns they might have regarding the Proposed Action. The
33 public involvement process provides USBP with the opportunity to cooperate with
34 and consider state and local views in its decision regarding implementing this
35 Federal proposal. As part of the EIS process, USBP coordinated with the
36 USEPA; U.S. Fish and Wildlife Service (USFWS); Texas State Historic
37 Preservation Office (SHPO); and other Federal, state, and local agencies (see
38 **Appendix B**). Input from responses received by these agencies has been
39 incorporated into the analysis of potential environmental impacts.

40 This Draft EIS also serves as a public notice regarding impacts on floodplains.
41 EO 11988 directs Federal agencies to avoid floodplains unless the agency
42 determines that there is no practicable alternative. Where the only practicable

1 alternative is to site in a floodplain, a specific process must be followed to comply
2 with EO 11988. This eight-step process is detailed in the Federal Emergency
3 Management Agency (FEMA) document “Further Advice on EO 11988
4 Floodplain Management.” The eight steps are as follows:

- 5 1. Determine whether the action will occur in, or stimulate development in, a
6 floodplain
- 7 2. Receive public review/input of the Proposed Action
- 8 3. Identify and evaluate practicable alternatives to locating in the floodplain
- 9 4. Identify the impacts of the Proposed Action (when it occurs in a floodplain)
- 10 5. Minimize threats to life, property, and natural and beneficial floodplain
11 values, and restore and preserve natural and beneficial floodplain values
- 12 6. Reevaluate alternatives in light of any new information that might have
13 become available
- 14 7. Issue findings and a public explanation
- 15 8. Implement the action.

16 Steps 1, 3, and 4 have been undertaken as part of this Draft EIS and are further
17 discussed in **Sections 3.6** and **4.6**. Steps 2 and 6 through 8 are being
18 conducted simultaneously with the EIS development process, including public
19 review of the Draft EIS. Step 5 relates to mitigation and is currently undergoing
20 development.

21 Anyone wishing to provide written comments, suggestions, or relevant
22 information regarding the Proposed Action may submit comments to CBP by
23 contacting SBI, Tactical Infrastructure Program Office. To avoid duplication,
24 please use only one of the following methods:

- 25 (a) Electronically through the web site at: www.BorderFenceNEPA.com;
- 26 (b) By email to: RGVcomments@BorderFenceNEPA.com;
- 27 (c) By mail to: Rio Grande Valley Tactical Infrastructure EIS, c/o e²M, 2751
28 Prosperity Avenue, Suite 200, Fairfax, Virginia 22031; or
- 29 (d) By fax to: (757) 282-7697.

30 Throughout the NEPA process, the public may obtain information concerning the
31 status and progress of the EIS via the project web site at
32 www.BorderFenceNEPA.com, by emailing information@BorderFenceNEPA.com,
33 or by written request to Mr. Charles McGregor, Environmental Manager, U.S.
34 Army Corps of Engineers (USACE), Fort Worth District, Engineering Construction
35 Support Office (ECISO), 814 Taylor Street, Room 3B10, Fort Worth, TX 76102;
36 and Fax: (757) 282-7697.

1 **1.6 COOPERATING AND COORDINATING AGENCIES**

2 The USACE-Galveston District and the IBWC as cooperating agencies, and the
3 USFWS as a coordinating agency, also have decisionmaking authority for
4 components of the Proposed Action and intend for this EIS to fulfill their
5 requirements for compliance with NEPA. The CEQ regulations implementing
6 NEPA instruct agencies to combine environmental documents to reduce
7 duplication and paperwork (40 CFR 1506.4).

8 The USACE-Galveston District Engineer has the authority to authorize actions
9 under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act of
10 1899 (33 United States Code [U.S.C.] 403). Applications for work involving the
11 discharge of fill material into waters of the United States and work in, or affecting,
12 a navigable water of the United States will be submitted to the USACE-Galveston
13 District Regulatory Program Branch for review and a decision on issuance of a
14 permit will be reached.

15 Section 7 of the ESA (16 U.S.C. Section 1531–1544) states that any project
16 authorized, funded, or conducted by any Federal agency should not
17 “...jeopardize the continued existence of any endangered species or threatened
18 species or result in the destruction or adverse modification of habitat of such
19 species which is determined ... to be critical.” The USFWS is a coordinating
20 agency regarding this Proposed Action to determine whether any federally listed,
21 proposed endangered, or proposed threatened species or their designated
22 critical habitats would be adversely impacted by the Proposed Action. As a
23 coordinating agency, the USFWS will assist in completing the Section 7
24 consultation process, identifying the nature and extent of potential effects, and
25 developing measures that would avoid or reduce potential effects on any species
26 of concern. The USFWS will prepare the Biological Assessment and will issue
27 the Biological Opinion (BO) of the potential for jeopardy to species of concern. If
28 the USFWS determines that the project is not likely to jeopardize any listed
29 species, it can also issue an incidental take statement as an exception to the
30 prohibitions in Section 9 of the ESA.

31 The Proposed Action would encroach upon multiple component parcels of the
32 LRGVNWR. In order to proceed with geotechnical studies, and natural and
33 cultural resources surveys prior to fence and road construction on LRGVNWR
34 lands, the USFWS would need to issue special use permits for the proposed
35 studies and surveys to commence.

36 For much of the proposed fence sections, the tactical infrastructure would follow
37 the Rio Grande levee rights-of-ways (ROWs) administered by the IBWC. The
38 IBWC is an international body composed of a U.S. Section and a Mexican
39 Section, each headed by an Engineer-Commissioner appointed by their
40 respective president. Each Section is administered independently of the other.
41 The U.S. Section of the IBWC is a Federal government agency headquartered in
42 El Paso, Texas, and operates under the foreign policy guidance of the

1 Department of State (IBWC 2007a). The U.S. Section of the IBWC would
2 provide access and ROWs to construct proposed tactical infrastructure along its
3 levee system within the Rio Grande Valley Sector. It will also ensure that design
4 and placement of the proposed tactical infrastructure does not impact flood
5 control process and does not violate treaty obligations between the United States
6 and Mexico. For purposes of the analysis in this EIS, the phrase “north of the
7 proposed project corridor” refers to the area on the U.S. side of the tactical
8 infrastructure.



SECTION 2

Proposed Action and Alternatives



2. PROPOSED ACTION AND ALTERNATIVES

This section provides detailed information on USBP's proposal to construct, maintain, and operate tactical infrastructure along the U.S./Mexico international border in the Rio Grande Valley Sector, Texas. The range of reasonable alternatives considered in this EIS is constrained to those that would meet the purpose and need described in **Section 1** to provide USBP agents with the tools necessary to achieve effective control of the border in the Rio Grande Valley Sector. Such alternatives must also meet essential technical, engineering, and economic threshold requirements to ensure that each 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 and evaluate potential alternatives. The USBP Rio Grande Valley Sector is working to develop the right combination of personnel, technology, and infrastructure to meet its objective to gain effective control of the border in the Rio Grande Valley Sector.

- USBP Operational Requirements. Pedestrian border fencing must support USBP mission needs to hinder or delay individuals crossing the border illegally. Once individuals 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. In addition, around populated areas it is relatively easy for cross-border violators to find transportation into the interior of the United States.
- Threatened or Endangered Species and Critical Habitat. The construction, maintenance, and operation of the proposed tactical infrastructure would be designed to minimize adverse impacts on threatened or endangered species and their critical habitat to the maximum extent practical. USBP is working with the USFWS to identify potential conservation and mitigation measures.
- Wetlands and Floodplains. The construction, maintenance, and operation of the proposed tactical infrastructure would be designed to avoid and minimize impacts on wetlands, surface waters, and floodplain resources to the maximum extent practical. USBP is working with the USACE-Galveston District and IBWC to avoid, minimize, and mitigate potential impacts on wetlands, surface waters, and floodplains.
- Cultural and Historic Resources. The construction, maintenance, and operation of the proposed tactical infrastructure would be designed to minimize impacts on cultural and historic resources to the maximum extent practical. USBP is working with the Texas SHPO to identify potential conservation and mitigation measures.

- 1 • Suitable Landscape. Some areas of the border have steep topography,
2 highly erodible soils, unstable geology, or other characteristics that could
3 compromise the integrity of fence or other tactical infrastructure. For
4 example, in areas susceptible to flash flooding, fence and other tactical
5 infrastructure might be prone to the effects of erosion that could
6 undermine the fence's integrity. Areas with suitable landscape conditions
7 would be prioritized.

8 2.2 ALTERNATIVES ANALYSIS

9 The following sections describe the alternative analysis for this Proposed Action.
10 **Section 2.2.1** presents the No Action Alternative, **Section 2.2.2** provides specific
11 details of the Proposed Action, and **Section 2.2.3** discusses the Secure Fence
12 Act Alternative. **Section 2.3** discusses alternatives considered but not analyzed
13 in detail, **Section 2.4** is a summary comparison of the alternatives, and **Section**
14 **2.5** is the identification of the preferred alternative.

15 2.2.1 Alternative 1: No Action Alternative

16 Under the No Action Alternative, proposed tactical infrastructure would not be
17 built and there would be no change in fencing, access roads, or other facilities
18 along the U.S./Mexico international border in the proposed project locations
19 within the Rio Grande Valley Sector. The No Action Alternative would not meet
20 USBP mission or operational needs. However, inclusion of the No Action
21 Alternative is prescribed by the CEQ regulations implementing NEPA and will be
22 carried forward for analysis in the EIS. The No Action Alternative also serves as
23 a baseline against which to evaluate the impacts of the alternatives.

24 2.2.2 Alternative 2: Routes A and B

25 USBP proposes to construct, maintain, and operate tactical infrastructure
26 consisting of pedestrian fence, patrol roads, and access roads along the
27 U.S./Mexico international border in the Rio Grande Valley Sector, Texas.
28 Congress has appropriated funds for the construction of the proposed tactical
29 infrastructure. Construction of additional tactical infrastructure might be required
30 in the future as mission and operational requirements are continually reassessed.

31 The proposed tactical infrastructure would be constructed in 21 distinct sections
32 along the border within the Rio Grande Valley Sector in Starr, Hidalgo, and
33 Cameron counties, Texas. Individual fence sections might range from
34 approximately 1 mile in length to more than 13 miles in length. Each proposed
35 tactical infrastructure section would be an individual project and could proceed to
36 completion independent of the other sections. These 21 sections of pedestrian
37 fence are designated as Sections O-1 through O-21 on **Figures 2-1** through **2-3**
38 and are shown in more detail in **Appendix F**. **Table 2-1** presents general
39 information for each of the 21 proposed sections.

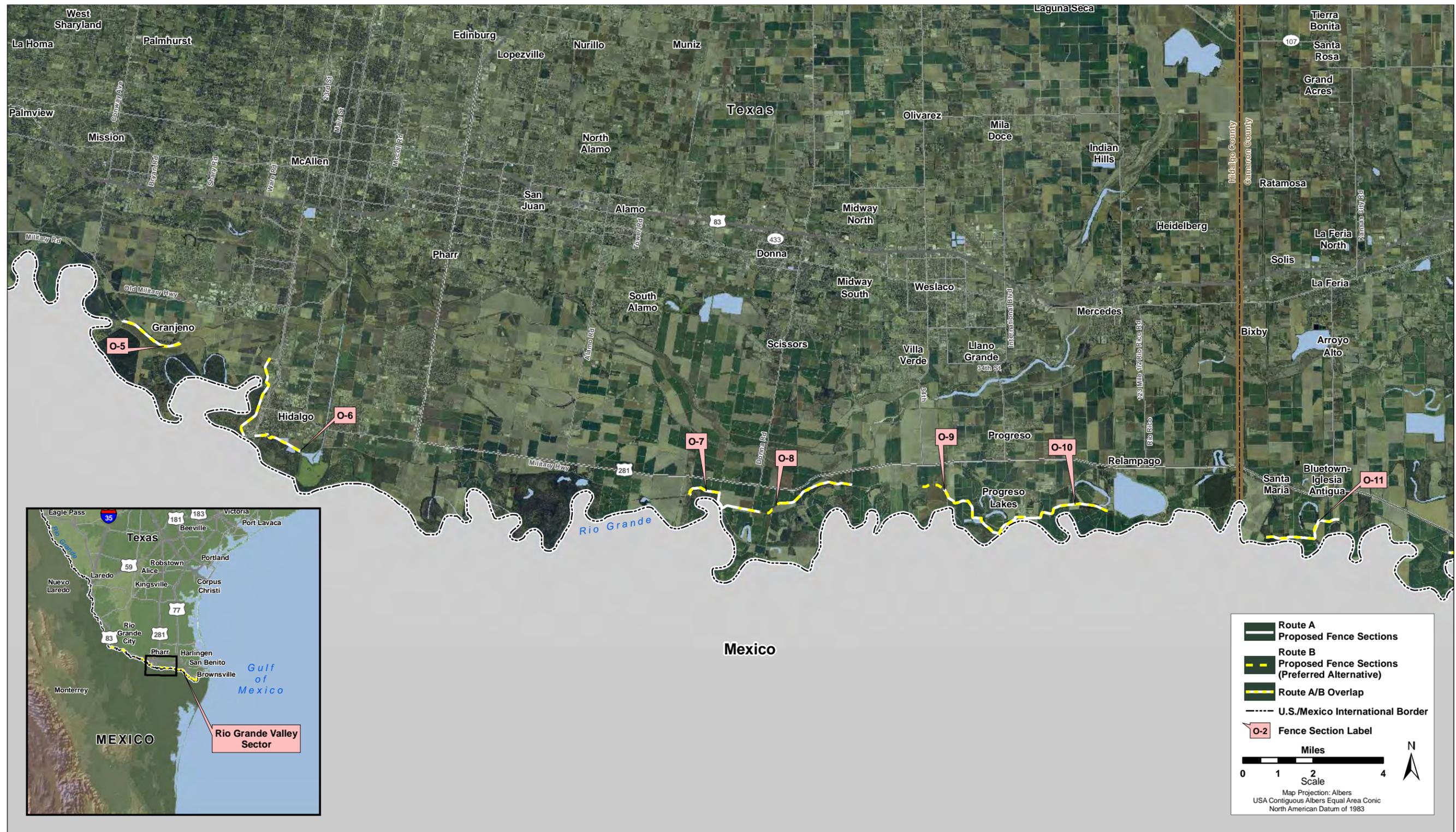


Source of Aerial Photography: NAIP 2005

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Figure 2-1. Locations of the Proposed Rio Grande Valley Sector Tactical Infrastructure (Map 1 of 3)



Source of Aerial Photography: NAIP 2005

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Figure 2-2. Locations of the Proposed Rio Grande Valley Sector Tactical Infrastructure (Map 2 of 3)



Source of Aerial Photography: NAIP 2005

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2

Figure 2-3. Locations of the Proposed Rio Grande Valley Sector Tactical Infrastructure (Map 3 of 3)

1 **Table 2-1. Proposed Fence Sections Under the Proposed Action**

Fence Section Number	Associated Border Patrol Station	General Location	Length of Fence Section (in miles)	
			Route A	Route B
O-1	Rio Grande City	Near Roma POE	5.26	3.75
O-2	Rio Grande City	Near RGC POE	7.30	8.74
O-3	McAllen	Los Ebanos POE	1.86	1.90
O-4	McAllen	From Penitas to Abram	4.35	4.35
O-5	McAllen	Future Anzalduas POE	1.73	1.76
O-6	McAllen	Hidalgo POE	3.86	3.85
O-7	Weslaco	Proposed Donna POE	2.43	0.90
O-8	Weslaco	Retamal Dam	2.05	3.25
O-9	Weslaco	West Progreso POE	3.02	3.87
O-10	Weslaco	East Progreso POE	2.43	2.33
O-11	Harlingen	Joe's Bar - Nemo Road	2.33	2.31
O-12	Harlingen	Weaver's Mountain	0.96	0.92
O-13	Harlingen	West Los Indios POE	1.58	1.58
O-14	Harlingen	East Los Indios POE	3.07	3.59
O-15	Harlingen	Triangle - La Paloma	1.93	1.93
O-16	Harlingen	Ho Chi Minh - Estero	2.97	2.97
O-17	Brownsville	Proposed Carmen Road Freight Train Bridge	1.63	1.61
O-18	Brownsville	Proposed Flor De Mayo POE to Garden Park	3.58	3.58
O-19	Brownsville	Brownsville/Matamoros (B&M) POE to Los Tomates	3.33	3.37
O-20	Brownsville	Los Tomates to Veterans International Bridge	0.91	0.93
O-21	Fort Brown	Veterans International Bridge to Sea Shell Inn	13.30	12.99
Total			69.87	69.84

2
3 Design criteria that have been established based on USBP operational needs
4 specify that, at a minimum, any fencing must meet the following requirements:

- 5 • Built 15 to 18 feet high and extend below ground
6 • Capable of withstanding vandalism, cutting, or various types of penetration

- 1 • Semi-transparent, as dictated by operational need
- 2 • Designed to survive extreme climate changes
- 3 • Designed to reduce or minimize impacts on small animal movements
- 4 • Engineered to not impede the natural flow of surface water
- 5 • Aesthetically pleasing to the extent possible.

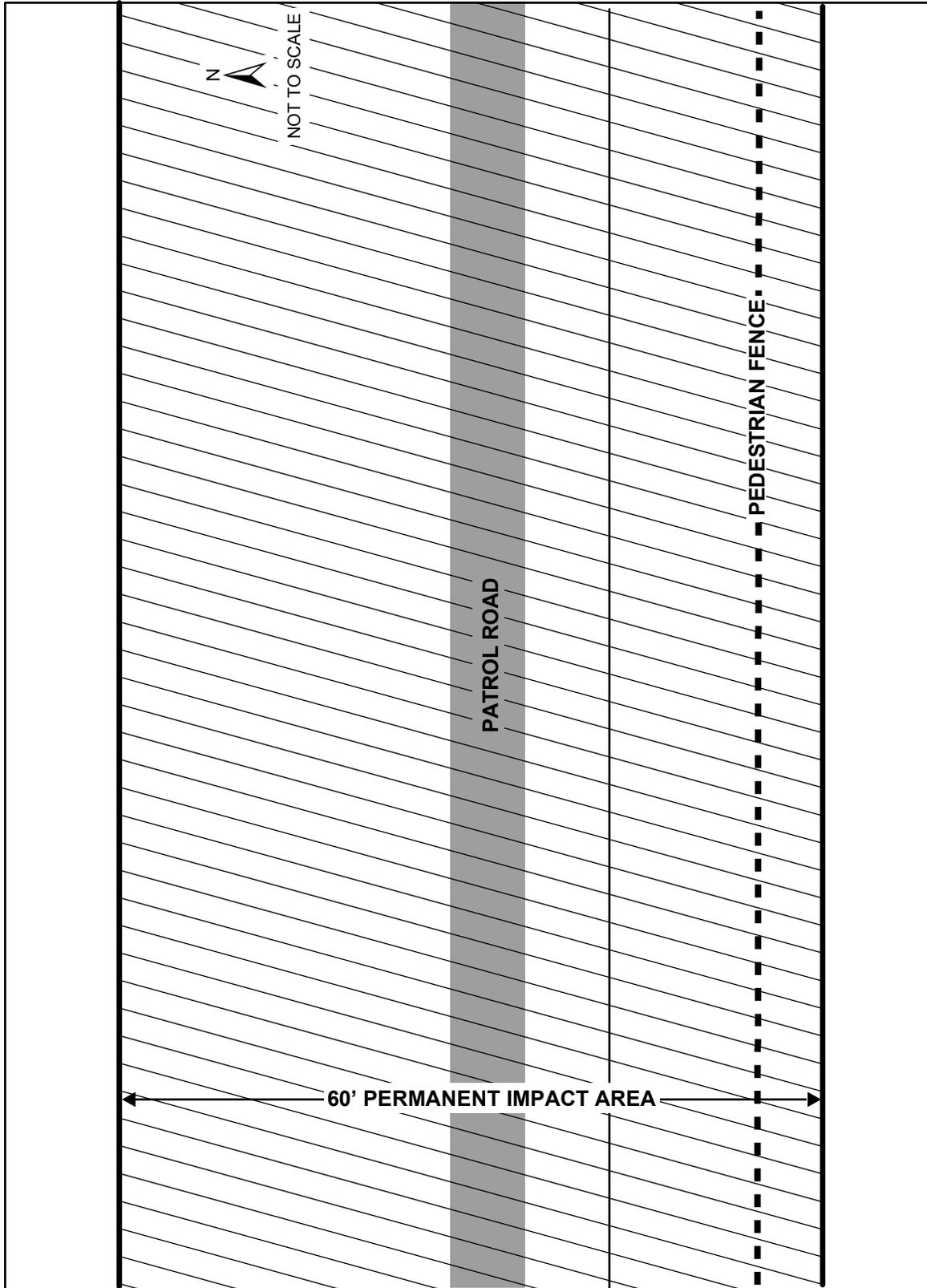
6 Typical pedestrian fence designs that could be used are included in **Appendix E**.
7 The combined preliminary estimate to construct the proposed individual tactical
8 infrastructure sections is approximately \$210 million.

9 Two alternatives for the alignment of the infrastructure (Route A and B) are being
10 considered under Alternative 2. Route A is the route initially identified by the
11 USBP Rio Grande Valley Sector as meeting its operational requirements. Route
12 B was developed through coordination with Federal and state agencies and
13 incorporates input received through the public scoping period. The Route B
14 alignment continues to meet current operational requirements with less
15 environmental impact, and is USBP's Preferred Alternative. Differences between
16 Routes A and B are shown in **Figures 2-1** through **2-3** and are presented in
17 detail in **Appendices D** and **F**.

18 Routes A and B would follow the IBWC levee system associated with the Rio
19 Grande along Sections O-4 through O-21. In most cases, the proposed section
20 alignments along the IBWC levee would be placed approximately 30 feet from
21 the toe of the levee (i.e., lowest point of the base of the structure facing away
22 from the Rio Grande). This configuration would allow the proposed infrastructure
23 to be placed in an existing levee ROW without disturbing current IBWC
24 operations or USBP patrol roads. However, several proposed locations along
25 the levee ROW would require the relocation of private residences or other
26 structures that encroach upon the levee ROW.

27 Under both route alternatives, the tactical infrastructure within several of the 21
28 sections would also encroach on multiple privately owned land parcels. Some
29 proposed fence sections could also encroach upon portions of the LRGVNR
30 and Texas state parks in the Rio Grande Valley.

31 The proposed project corridor would impact an approximate 60-foot-wide
32 corridor. This corridor would include fences and patrol roads. Vegetation would
33 be cleared and grading would occur where needed. The area that would be
34 permanently impacted by the construction of tactical infrastructure (both Routes
35 A and B) would total approximately 508 acres. Unavoidable impacts on
36 jurisdictional waters of the United States, including wetlands, would be mitigated.
37 Wherever possible, existing roads and previously disturbed areas would be used
38 for construction access and staging areas. **Figure 2-4** shows a schematic of
39 typical impact areas for tactical infrastructure for both Route A and B.



1

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Figure 2-4. Schematic of Proposed Project Corridor – Alternative 2

1 Rio Grande Valley Sector activities routinely adapt to operational requirements,
2 and would continue to do so under this alternative. Overall, the Rio Grande
3 Valley Sector operations would retain the same flexibility to most effectively
4 provide a law enforcement resolution to illegal cross-border activity.

5 USBP is working closely with local landowners and others potentially affected by
6 the proposed infrastructure. For both Route Alternatives, gates would be
7 constructed to allow USBP personnel and landowners access to land, the Rio
8 Grande and other water resources, and infrastructure. Route B would include
9 the construction of approximately 90 secure access gates (see **Appendix D**). In
10 agricultural areas, gates would be wide enough to allow access for necessary
11 farming equipment. In other cases, gates would be situated to provide access to
12 existing recreational amenities; water resources, including pump houses and
13 related infrastructure; grazing areas; existing parks; and other areas. On a case-
14 by-case basis, the USACE might purchase the land between the fence and the
15 Rio Grande on behalf of USBP, if operationally necessary.

16 If approved, construction of the proposed tactical infrastructure would begin in
17 Spring 2008 and continue through December 2008.

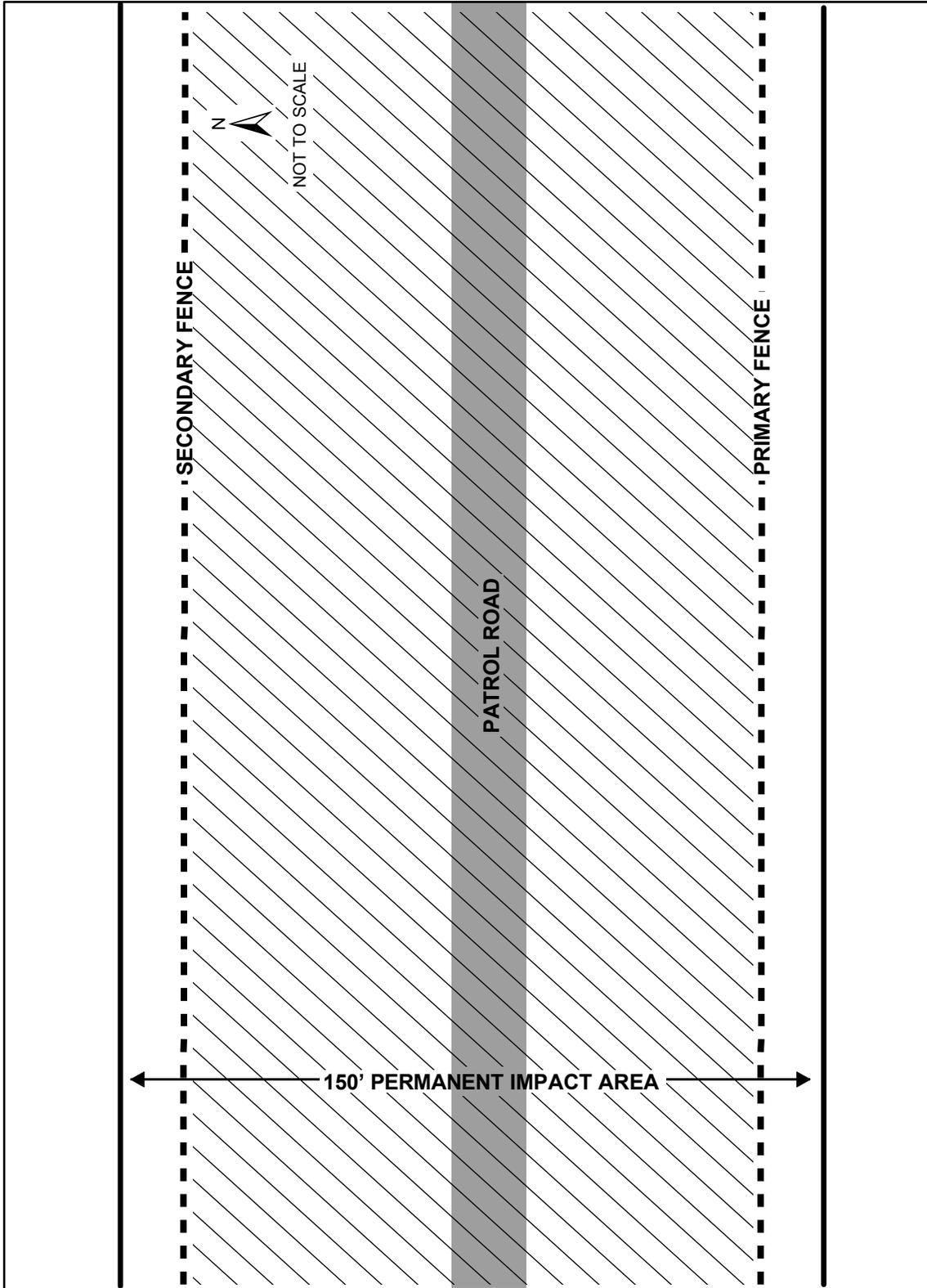
18 To the extent that additional actions in the study area are known, they are
19 discussed in this EIS in **Section 5**, Cumulative Impacts. Both Routes A and B
20 under Alternative 2 are viable and are carried forward for detailed analysis in this
21 EIS.

22 2.2.3 Alternative 3: Secure Fence Act Alignment Alternative

23 In addition to Routes A and B described above, an alternative of two layers of
24 fence, known as primary and secondary fence, is analyzed in this EIS. Under
25 this alternative, the two layers of fence would be constructed approximately 130
26 feet apart along the same alignment as Route B and would be most closely
27 aligned with the fence description in the Secure Fence Act of 2006, P.L. 109-367,
28 120 Stat. 2638, codified at 8 U.S.C. 1701. This alternative would also include
29 construction and maintenance of access and patrol roads. The patrol road would
30 be between the primary and secondary fences.

31 **Figure 2-5** shows a schematic of typical project corridor areas for this alternative.
32 The design of the tactical infrastructure for this alternative would be similar to that
33 of Alternative 2.

34 Construction of the proposed tactical infrastructure would impact an approximate
35 150-foot wide corridor for 70 miles along the 21 fence sections. This construction
36 corridor would accommodate fencing and patrol and access roads. Vegetation
37 would be cleared and grading would occur where needed. Unavoidable impacts
38 on jurisdictional waters of the United States, including wetlands, would be
39 mitigated. Wherever possible, existing roads would be used for construction
40



1

2

Figure 2-5. Schematic of Proposed Project Corridor – Alternative 3

1 access. This is a viable alternative and is carried forward for detailed analysis in
2 this EIS.

3 2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER 4 DETAILED ANALYSIS

5 USBP evaluated possible alternatives to be considered for the Proposed Action.
6 This section addresses options that were reviewed but not carried forward for
7 detailed analysis.

8 2.3.1 Additional USBP Agents in Lieu of Tactical Infrastructure

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

18 This alternative was determined not to meet the screening criteria of USBP
19 operational requirements. The physical presence of an increased number of
20 agents could provide an enhanced level of deterrence against illegal entry into
21 the United States, but the use of additional agents alone, in lieu of the proposed
22 tactical infrastructure, would not provide a practical solution to achieving effective
23 control of the border in the Rio Grande Valley Sector. The use of physical
24 barriers has been demonstrated to slow cross-border violators and provide USBP
25 agents with additional time to make apprehensions (USACE 2000).

26 A Congressional Research Service (CRS) report (CRS 2006) concluded that
27 USBP border security initiatives such as the 1994 "Operation Gatekeeper"
28 required a 150 percent increase in USBP manpower, lighting, and other
29 equipment. The report states that "It soon became apparent to immigration
30 officials and lawmakers that the USBP needed, among other things, a 'rigid'
31 enforcement system that could integrate infrastructure (i.e., multi-tiered fence
32 and roads), manpower, and new technologies to further control the border
33 region" (CRS 2006).

34 Tactical infrastructure, such as a pedestrian fence, is a force multiplier to allow
35 USBP to deploy agents efficiently and effectively. As tactical infrastructure is
36 built, some agents would be redeployed to other areas of the border within the
37 sector. Increased patrols would aid in interdiction activities, but not to the extent
38 anticipated by the Proposed Action. As such, this alternative is not practical in
39 the USBP Rio Grande Valley Sector and will not be carried forward for further
40 detailed analysis.

1 2.3.2 Technology in Lieu of Tactical Infrastructure

2 USBP would use various forms of technology to identify cross-border violators.
3 The use of technology in certain sparsely populated areas is a critical component
4 of *SBlnet* and an effective force multiplier that allows USBP to monitor large
5 areas and deploy agents to where they will be most effective. However, the
6 apprehension of cross-border violators is still performed by USBP agents and
7 other law enforcement agents. In the more densely populated areas within the
8 Rio Grande Valley Sector, physical barriers represent the most effective means
9 to control illegal entry into the United States, as noted above. The use of
10 technology alone would not provide a practical solution to achieving effective
11 control of the border in the Rio Grande Valley Sector. Therefore, this alternative
12 would not meet the purpose and need as described in **Section 1.2** and will not
13 be carried forward for further detailed analysis.

14 2.3.3 Native Thorny Scrub Hedge in Lieu of Tactical Infrastructure

15 During the public scoping process, an alternative was proposed to maintain a
16 200- to 300-yard-wide mowed area outside the Rio Grande floodplain and plant a
17 100-yard-wide hedge of dense, short native thorny scrub brush (a hedge row)
18 within the mowed area. This alternative would also incorporate technology such
19 as sensors, cameras, and lights pointed towards the Rio Grande from the cleared
20 area. The primary benefit associated with this alternative would be its ability to
21 provide suitable habitat for the endangered ocelot (*Leopardus (=Felis) pardalis*)
22 and jaguarundi (*Herpailurus (=Felis) yaguarondi*), which would find suitable
23 habitat along the riverbank travel corridor and within the hedge. The hedge could
24 also serve to connect the LRGVNR units into a larger habitat area.

25 The primary deficiency with this alternative is that a hedge would not be as
26 durable as a fence (pathways could be cut or burned through or under the
27 hedge), it would be relatively slow to grow, and it might require more
28 maintenance than a fence. USBP experience indicates that cross-border
29 violators are willing to traverse dangerous terrain to avoid being caught. A 100-
30 yard-wide hedge could become a haven where they could hide. If a cross-border
31 violinator was to become injured and trapped in the hedge, USBP agents would
32 likely have to cut through the hedge to rescue the person, damaging or
33 destroying the hedge in the process. For these reasons, this alternative was
34 determined to not meet the screening criteria of USBP operational requirements,
35 is not a viable alternative, and was not carried forward for further detailed
36 analysis.

37 2.3.4 Fence Within the Rio Grande

38 During the public scoping process, an alternative was proposed to construct a
39 fence in the middle of the Rio Grande. This alternative would consist of installing
40 poles in the river with cables stretched between the poles. A screen fence could
41 be suspended from the cables and anchored to the river bottom. This alternative

1 was not considered in detail due to multiple concerns, including technical
2 uncertainty, regulatory and permitting challenges, cost considerations, the
3 likelihood of significantly altering the natural flow of the river and impacting
4 additional aquatic resources, and the potential to cause violations of international
5 treaty obligations. Therefore, this alternative would not meet the screening
6 criteria of USBP operational requirements and will not be carried forward for
7 additional analysis.

8 2.3.5 Brownsville Weir and Reservoir Project in Lieu of Tactical 9 Infrastructure

10 During the public scoping process, the proposed Brownsville Weir and Reservoir
11 Project was identified as an alternative in lieu of portions of the proposed tactical
12 infrastructure. The Public Utilities Board of Brownsville, Texas, is proposing to
13 construct a weir and reservoir system on the Rio Grande as a water conservation
14 project. Under this alternative, it was suggested that the resulting reservoir
15 would create a body of water large enough that it would serve as an effective
16 deterrent to cross-border violators.

17 The Brownsville Weir and Reservoir Project (Department of Army Permit Number
18 21977) would not create a permanent body of water large enough to serve as an
19 effective deterrent to illegal border crossing. The reservoir was designed as a
20 temporary retention basin, not a permanent detention basin. It would only fill with
21 water during localized heavy rain events or during upstream releases from the
22 Falcon or Amistad Reservoirs, which are further up the Rio Grande basin. The
23 temporal nature of this option means it would only exist during wet years, and be
24 nonexistent during drought conditions. Even when full, the reservoir project
25 would not significantly increase the river width and would represent only a 100-
26 yard obstacle at its widest point when full of water. This alternative also might
27 flood sabal palm groves, flood the riparian vegetation along more than a dozen
28 miles of the river, disturb the movements of the jaguarundi and ocelot along the
29 river, and disturb a key estuary where the Rio Grande enters the Gulf of Mexico.
30 In addition, a larger water barrier might not deter cross-border violators but rather
31 only lead to a potentially larger numbers of drownings. For these reasons, this
32 alternative was determined not to meet the screening criteria of USBP
33 operational requirements, was not considered a viable alternative, and will not be
34 carried forward for further detailed analysis.

35 2.3.6 Raising Levees in Lieu of Tactical Infrastructure

36 During the public scoping process, an alternative was proposed to reconstruct
37 river levees as 18-foot-high reinforced earthen barriers. USBP considered an
38 alternative of constructing concrete barriers into the levees and installing an
39 additional fence on top of those concrete barriers. There are numerous legal
40 obstacles to this alternative, such as concerns over levee ownership and
41 maintenance, which were identified by the U.S. Section of the IBWC during
42 coordination. The U.S. Section of the IBWC also informed USBP that it would

1 not support any construction near the international boundary that increases,
 2 concentrates, or relocates overland drainage flows into Mexico or the United
 3 States. Therefore, because of legal and infrastructure uncertainties, this
 4 alternative did not meet the screening criteria of USBP operational requirements,
 5 was not considered a viable alternative, and will not be not carried forward for
 6 further detailed analysis.

7 **2.4 SUMMARY COMPARISON OF ACTION ALTERNATIVES**

8 **Table 2-2** presents a summary comparison of the action alternatives carried
 9 forward for analysis in the EIS.

10 **Table 2-2. Comparison of Action Alternatives**

	Alternative 2		Alternative 3: Secure Fence Act Alignment Alternative
	Route A	Route B	
Description	21 individual tactical infrastructure sections comprised of pedestrian fence, patrol roads, and access roads	21 individual tactical infrastructure sections comprised of pedestrian fence, patrol roads, and access roads	21 individual tactical infrastructure sections comprised of primary and secondary pedestrian fence constructed 130 feet apart, patrol roads between fences, and access roads
Proposed Total Route Length	69.87 miles	69.84 miles	69.84 miles
Proposed Project Corridor	60 feet	60 feet	150 feet
Acreage of Proposed Project Corridor	508 acres	508 acres	1,270 acres

11 **2.5 IDENTIFICATION OF THE PREFERRED, LEAST-DAMAGING**
 12 **PRACTICABLE ALTERNATIVE**

13 CEQ’s implementing regulation 40 CFR 1502.14(c) instructs EIS preparers to
 14 “Identify the agency’s preferred alternative or alternatives, if one or more exists,
 15 in the draft statement and identify such alternative in the final statement unless
 16 another law prohibits the expression of such a preference.” USBP has identified
 17 the environmentally preferred, least-damaging practicable alternative as
 18 Alternative 2, Route B.

1 Implementation of Alternative 2, Route B would meet USBP's purpose and need
2 described in **Section 1.2**. The No Action Alternative would not meet USBP's
3 purpose and need. Alternative 2, Route A would meet the purpose and need
4 described in **Section 1.2**, but it would cause environmental impacts greater than
5 the impacts identified for Alternative 2, Route B. Alternative 3 would meet
6 USBP's purpose and need described in **Section 1.2** but would have greater
7 environmental impacts compared to the Preferred Alternative. USBP might need
8 to implement this alternative at some point in the future depending on future
9 USBP operational requirements. While USBP believes that this level of tactical
10 infrastructure is not required at this time it is a viable alternative and will be
11 carried forward for detailed analysis.

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