



Draft

Environmental Assessment

Supporting the Eagle Pass South
Checkpoint Renovation and Expansion

Maverick County, Texas



April

2016



Abbreviations and Acronyms

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter	ppm	parts per million
ACM	asbestos-containing materials	RCRA	Resources Conservation and Recovery Act
AST	aboveground storage tank		
BMP	best management practice	SAL	State Antiquities Landmark
CBP	Customs and Border Protection	SO ₂	sulfur dioxide
CEQ	Council on Environmental Quality	tpy	tons per year
CFR	Code of Federal Regulations	TSCA	Toxic Substances Control Act
CO	carbon monoxide	TXDOT	Texas Department of Transportation
CO ₂	carbon dioxide		
CWA	Clean Water Act	U.S.C.	United States Code
dba	A-weighted decibel(s)	USBP	U.S. Border Patrol
DHS	Department of Homeland Security	USEPA	U.S. Environmental Protection Agency
EA	Environmental Assessment		
EIS	Environmental Impact Statement	USFWS	U.S. Fish and Wildlife Service
EO	Executive Order	VOC	volatile organic compounds
ESA	Endangered Species Act		
ESCP	erosion-and-sediment control plan		
FONSI	Finding of No Significant Impact		
FPPA	Farmland Protection Policy Act		
FR	Federal Register		
GHG	greenhouse gas		
Hwy	Highway		
LBP	lead-based paint		
mg/m^3	Milligrams per cubic meter		
NAAQS	National Ambient Air Quality Standards		
NEPA	National Environmental Policy Act		
NHPA	National Historic Preservation Act		
NO _x	nitrogen oxide		
NO ₂	nitrogen dioxide		
NPDES	National Pollutant Discharge Elimination System		
NRHP	National Register of Historic Places		
O ₃	ozone		
OSHA	Occupational Safety and Health Administration		
P.L.	Public Law		
Pb	lead		
PCBs	polychlorinated biphenyls		
PM _{2.5}	Aerodynamic size less than or equal to 2.5 microns		
PM ₁₀	Aerodynamic size less than or equal to 10 microns		
PMO	Program Management Office		
PPE	personal protective equipment		
ppb	parts per billion		

1 **Cover Sheet**

2 **Preliminary Draft Environmental Assessment**
3 **Supporting the Eagle Pass South Checkpoint Renovation and Expansion**
4 **Maverick County, Texas**

5 **Responsible Agencies:** Department of Homeland Security, U.S. Customs and Border
6 Protection.

7 **Affected Location:** Eagle Pass South Checkpoint, Maverick County, Texas.

8 **Report Designation:** Preliminary Draft Environmental Assessment (EA).

9 **Abstract:** The Department of Homeland Security and the Border Patrol Facilities &
10 Tactical Infrastructure Program Management Office within U.S. Customs and Border
11 Protection propose to renovate and expand the existing Eagle Pass South Checkpoint
12 located in Maverick County, Texas. Infrastructure improvements would include the
13 construction of one to three acceleration/deceleration lanes, new signage, booths, canopy,
14 lighting, and structure updates. The existing checkpoint and inspection station currently
15 occupy approximately 0.25 acre along U.S. Highway 57 in Texas, 10 miles northeast of
16 the city of Eagle Pass at the southern end of the U.S. Border Patrol Del Rio Sector.
17 Renovation and expansion of the checkpoint would include acquiring 5 acres of land
18 adjacent to the existing checkpoint to construct proper acceleration and deceleration
19 lanes. During construction and renovation, 2 additional acres of land would be
20 temporarily acquired to provide construction staging and access areas.

21 The EA analyzes and documents potential environmental consequences associated with
22 the Proposed Action. The analyses presented in the EA indicate that implementation of
23 the Proposed Action would not result in significant environmental impacts, and a Finding
24 of No Significant Impact is appropriate.

25 Status updates for the EA may be obtained via the CBP EA website at <http://www.cbp.gov/about/environmental-cultural-stewardship/cbp-environmental-documents> or by
26 emailing joseph.zidron@cbp.dhs.gov. Comments on the EA or information requests may
27 be submitted to Eagle Pass EA, c/o Mr. Joseph Zidron, U.S. Customs and Border
28 Protection, 24000 Avila Road Suite 5020, Laguna Niguel, CA 92677; or by email at
29 joseph.zidron@cbp.dhs.gov.
30

31 **Privacy Advisory**

32 Your comments on this document are requested. Letters or other written comments
33 provided may be published in the EA. Comments will normally be addressed in the EA
34 and made available to the public. Any personal information provided will be used only to
35 identify your desire to make a statement during the public comment period or to fulfill
36 requests for copies of the EA or associated documents. Private addresses will be
37 compiled to develop a mailing list for those requesting copies of the EA. However, only
38 the names of the private citizens making comments and specific comments will be
39 disclosed; personal home addresses and telephone numbers will not be published in the
40 EA.

THIS PAGE INTENTIONALLY LEFT BLANK

Preliminary Draft

**ENVIRONMENTAL ASSESSMENT
SUPPORTING THE EAGLE PASS SOUTH CHECKPOINT
RENOVATION AND EXPANSION
MAVERICK COUNTY, TEXAS**

**DEPARTMENT OF HOMELAND SECURITY
U.S. CUSTOMS AND BORDER PROTECTION
Border Patrol Facilities and Tactical Infrastructure
24000 Avila Road, Suite 5020
Laguna Niguel, CA 92677**

APRIL 2016

Table of Contents

Acronyms and Abbreviations	Inside Front Cover
1. Introduction	1-1
1.1 BACKGROUND	1-1
1.2 PURPOSE OF AND NEED FOR THE PROPOSED ACTION	1-3
1.3 FRAMEWORK FOR ANALYSIS	1-3
1.4 PUBLIC INVOLVEMENT	1-4
2. Proposed Action and Alternatives.....	2-1
2.1 INTRODUCTION.....	2-1
2.2 ALTERNATIVE 1: PROPOSED ACTION.....	2-1
2.3 ALTERNATIVE 2: NO ACTION ALTERNATIVE.....	2-1
2.4 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DETAILED ANALYSIS	2-2
3. Affected Environment and Environmental Consequences.....	3-1
3.1 PRELIMINARY IMPACT SCOPING	3-2
3.1.1 Aesthetics and Visual Resources	3-2
3.1.2 Land Use	3-2
3.1.3 Environmental Justice.....	3-2
3.2 NOISE	3-3
3.2.1 Definition of the Resource	3-3
3.2.2 Affected Environment.....	3-4
3.2.3 Environmental Consequences	3-5
3.3 AIR QUALITY	3-6
3.3.1 Definition of the Resource	3-6
3.3.2 Affected Environment.....	3-7
3.3.3 Environmental Consequences	3-8
3.4 GEOLOGICAL RESOURCES	3-10
3.4.1 Definition of the Resource	3-10
3.4.2 Affected Environment.....	3-10
3.4.3 Environmental Consequences	3-11
3.5 BIOLOGICAL RESOURCES	3-12
3.5.1 Definition of the Resource	3-12
3.5.2 Affected Environment.....	3-12
3.5.3 Environmental Consequences	3-18
3.6 CULTURAL RESOURCES.....	3-20

3.6.1	Definition of the Resource	3-20
3.6.2	Affected Environment.....	3-20
3.6.3	Environmental Consequences.....	3-21
3.7	WATER RESOURCES	3-22
3.7.1	Definition of the Resource	3-22
3.7.2	Affected Environment.....	3-23
3.7.3	Environmental Consequences.....	3-23
3.8	HAZARDOUS MATERIALS AND WASTES	3-24
3.8.1	Definition of the Resource	3-24
3.8.2	Affected Environment.....	3-25
3.8.3	Environmental Consequences.....	3-26
3.9	HEALTH AND SAFETY.....	3-27
3.9.1	Definition of the Resource	3-27
3.9.2	Affected Environment.....	3-27
3.9.3	Environmental Consequences.....	3-28
3.10	ROADWAYS AND TRAFFIC	3-29
3.10.1	Definition of the Resource	3-29
3.10.2	Affected Environment.....	3-29
3.10.3	Environmental Consequences.....	3-29
3.11	INFRASTRUCTURE AND UTILITIES.....	3-30
3.11.1	Definition of the Resource	3-30
3.11.2	Affected Environment.....	3-30
3.11.3	Environmental Consequences.....	3-31
3.12	SOCIOECONOMICS	3-32
3.12.1	Definition of the Resource	3-32
3.12.2	Affected Environment.....	3-33
3.12.3	Environmental Consequences.....	3-34
4.	Cumulative and Other Adverse Effects.....	4-1
4.1	PAST, PRESENT AND FUTURE ACTIONS NEAR THE EAGLE PASS SOUTH CHECKPOINT	4-1
4.2	CUMULATIVE IMPACTS ANALYSIS OF THE PROPOSED ACTION	4-1
5.	References.....	5-1
6.	List of Preparers	6-1

Appendices

- A: Applicable Laws, Regulations, Policies, and Planning Criteria
- B: Public Involvement and Agency Coordination
- C: State Listed Species that are Unlikely to Occur in the Project Area
- D: Air Quality Calculations

Figures

- 1-1. Location of Eagle Pass South CBP Checkpoint 1-2
- 3-1. Buffelgrass Dominated Herbaceous Layer 3-14
- 3-2. Forb Dominated Herbaceous Layer 3-14

Tables

- 3-1. Sound Levels and Human Response 3-3
- 3-2. Estimated Noise Levels for Construction Equipment 3-4
- 3-3. Predicted Additive Noise Levels from Construction..... 3-5
- 3-4. National Ambient Air Quality Standards 3-7
- 3-5. Summary of Renovation and Expansion Emissions..... 3-9
- 3-6. State-Listed Species Known to Occur or Have the Potential to Occur in the
Project Area 3-15
- 3-7. Population Counts and Estimates for Spatial Levels in 2000, 2010 and 2014..... 3-33
- 3-8. Employment Characteristics by Industry for 2010 to 2014..... 3-34

THIS PAGE INTENTIONALLY LEFT BLANK

1. Introduction

The Department of Homeland Security (DHS) and the Border Patrol Facilities & Tactical Infrastructure Program Management Office (PMO) within U.S. Customs and Border Protection (CBP) propose to renovate and expand the existing Eagle Pass South Checkpoint located in Maverick County, Texas. The infrastructure proposed to be constructed and renovated would include one to three acceleration/deceleration lanes, new signage, booths, canopy, lighting, and structure updates. The existing checkpoint and inspection station currently occupy approximately 0.25 acre along U.S. Highway (Hwy) 57 in Texas, 10 miles northeast of the city of Eagle Pass at the southern end of the U.S. Border Patrol (USBP) Del Rio Sector (see **Figure 1-1**). Renovation and expansion of the checkpoint would include acquiring 5 acres of land adjacent to the existing checkpoint to construct proper acceleration and deceleration lanes. During construction and renovation, 2 additional acres of land would be temporarily acquired to provide construction staging and access areas. Hwy 57 is managed by the Texas Department of Transportation (TXDOT), and the land proposed for acquisition is privately owned. This Environmental Assessment (EA) analyzes the environmental impacts from the renovation and expansion of the Eagle Pass South Checkpoint station.

This EA is organized into six sections plus appendices. **Section 1** provides background information on the existing Eagle Pass South Checkpoint, identifies the purpose of and need for the Proposed Action, describes the area in which the Proposed Action would occur, and explains the public involvement process. **Section 2** provides a detailed description of the Proposed Action and alternatives including the No Action Alternative. **Section 3** describes existing environmental conditions in the area where the Proposed Action would occur, and identifies potential environmental impacts that could occur within each resource area. **Section 4** contains an analysis of the cumulative impacts that this project combined with other projects in the area may have on the environment. **Section 5** is a list of references used to develop the EA. **Section 6** is a list of preparers who helped develop the EA. Finally, the appendices include other information pertinent to the development of this EA.

1.1 Background

The Eagle Pass South Checkpoint is overseen by the Eagle Pass South Border Patrol Station located in southeast Eagle Pass. The Eagle Pass South Border Patrol Station is responsible for approximately 630 square miles of patrol area, which includes approximately 21 miles of U.S./Mexico international border (CBP 2016).

The Eagle Pass South Checkpoint is located on Hwy 57, a two-lane paved road that runs from the U.S./Mexico international border through Eagle Pass to its northeastern terminus in Moore, Texas. The checkpoint is approximately 10 miles northeast of Eagle Pass, and approximately 32 miles southwest of the town of La Pryor, Texas. The checkpoint helps maintain effective control of the immediate border area, including a direct conduit from the U.S./Mexico international border via Hwy 57. The checkpoint is currently operated and maintained by four to five USBP agents. **Figure 1-1** provides an aerial view of the existing footprint for the checkpoint.



1

2 Figure 1-1. Location of Eagle Pass South CBP Checkpoint

1 Infrastructure for the Eagle Pass South Checkpoint currently occupies approximately 0.25
2 acre adjacent to the northbound lane along the south side of Hwy 57. The current
3 checkpoint building is a 19-year-old elevated modular metal structure with a pre-
4 engineered metal canopy. The structure serves as an inspection station that houses USBP
5 personnel and includes processing areas and holding cells. The building is listed in fair
6 condition and exhibits various signs of interior and exterior deterioration. Deficiencies
7 include required replacement or repair of interior finishes and replacing poor exterior
8 metal wall panel connections, bent exterior stair treads, and deteriorated exterior door
9 weather stripping.

10 Over the past 4 years, Hwy 57 and the Eagle Pass South Checkpoint have seen a
11 considerable increase in the amount of traffic generated from the Eagle Ford Shale oil
12 and natural gas boom. The Eagle Ford Shale is a geological formation located in
13 southwestern Texas that contains a significant amount of oil and natural gas. The
14 formation is approximately 50 miles wide, 400 miles long, and an average of 250 feet
15 thick. As a result of advances in fracking technology, oil and natural gas leases related to
16 the Eagle Ford Shale have grown 6,300 percent and 3,600 percent from 2009 to 2013,
17 respectively (StateImpact 2015).

18 **1.2 Purpose of and Need for the Proposed Action**

19 The purpose of the Proposed Action is to renovate the Eagle Pass South Checkpoint to
20 ensure that it is able to safely accommodate CBP agents, the public, and the increasing
21 traffic so that the checkpoint can continue to function as intended. USBP checkpoints are
22 a critical enforcement tool for securing the nation's borders against threats by restricting
23 the ability of criminal organizations to exploit roadways traveling away from the border.
24 USBP is committed to ensuring that these checkpoints stay as safe, efficient, and in
25 accordance with existing design guide standards as possible.

26 The Proposed Action is needed in order to maintain the level of border security provided
27 by the checkpoint, which has become compromised from the increased traffic demand
28 related to the Eagle Ford Shale. Renovation and construction would ensure USBP agent
29 and public safety by securing the nation's borders while minimizing potential vehicular
30 accidents and reducing wait times.

31 **1.3 Framework for Analysis**

32 The National Environmental Policy Act of 1969 (NEPA) is a federal statute requiring the
33 identification and analysis of potential environmental impacts of proposed federal actions
34 before those actions are taken. The Council on Environmental Quality (CEQ) is the
35 principal federal agency responsible for the administration of NEPA. CEQ regulations
36 mandate that all federal agencies use a systematic, interdisciplinary approach to
37 environmental planning and the evaluation of actions that might affect the environment.
38 This process evaluates potential environmental consequences associated with a proposed
39 action and considers alternative courses of action. The intent of NEPA is to protect,
40 restore, or enhance the environment through well-informed federal decisions.

1 The process for implementing NEPA is codified in 40 Code of Federal Regulations
2 (CFR) §§ 1500–1508, *Regulations for Implementing the Procedural Provisions of the*
3 *National Environmental Policy Act*. CEQ was established under NEPA to implement and
4 oversee federal policy in this process. CEQ regulations specify that an EA may be
5 prepared for the following reasons:

- 6 · Briefly provide evidence and analysis for determining whether to prepare a
7 Finding of No Significant Impact (FONSI) or an Environmental Impact Statement
8 (EIS).
- 9 · Aid in an agency’s compliance with NEPA when an EIS is unnecessary.
- 10 · Facilitate preparation of an EIS when one is necessary.

11 Within DHS and CBP, NEPA is implemented using DHS Directive 023-01,
12 *Environmental Planning Program*, and CBP policies and procedures.

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

22 Within the framework of environmental impact analysis under NEPA, additional
23 authorities that might be applicable include the Clean Air Act, Clean Water Act (CWA)
24 (including a National Pollutant Discharge Elimination System [NPDES] storm water
25 discharge permit or Section 404 permit), Noise Control Act, Endangered Species Act
26 (ESA), Migratory Bird Treaty Act, National Historic Preservation Act (NHPA),
27 Archaeological Resources Protection Act, Resource Conservation and Recovery Act
28 (RCRA), Toxic Substances Control Act (TSCA), and various Executive Orders (EOs). A
29 summary of laws, regulations, and EOs that might be applicable to the Proposed Action is
30 presented in **Appendix A**.

31 **1.4 Public Involvement**

32 Agency and public involvement in the NEPA process promotes open communication
33 between the public and the government and enhances the decision-making process. All
34 persons or organizations having a potential interest in the Proposed Action are
35 encouraged to submit input into the decision-making process.

36 NEPA and implementing regulations from CEQ direct agencies to make their NEPA
37 documents available to the public during the decision-making process and prior to actions
38 being taken. The premise of NEPA is that the quality of federal decisions will be
39 enhanced if proponents provide information to the public and involve the public in the
40 planning process.

1 Through the public involvement process, CBP will notify relevant federal, state, and local
2 agencies of the Proposed Action and request input on environmental concerns they might
3 have regarding the Proposed Action. The public involvement process provides CBP with
4 the opportunity to cooperate with and consider state and local views in its decision
5 regarding implementing this federal proposal.

6 A Notice of Availability for the EA and Draft FONSI will be published in *The News*
7 *Gram* (in Eagle Pass) and the *San Antonio Express News*. This is done to solicit
8 comments on the Proposed Action and alternatives and involve the local community in
9 the decision-making process. Comments received from tribal, state, and federal agencies
10 will be incorporated into the Final EA. Comment letters will be included in **Appendix B**.

11 Hard copies of the Draft EA will be made available at the following library: *Eagle Pass*
12 *Public Library, 243 Bliss St., Eagle Pass, TX 78852*. Throughout the NEPA process, the
13 public can obtain information concerning the status and progress of the EA via the project
14 Web site at [http://www.cbp.gov/about/environmental-cultural-stewardship/cbp-](http://www.cbp.gov/about/environmental-cultural-stewardship/cbp-environmental-documents)
15 *environmental-documents*.

THIS PAGE INTENTIONALLY LEFT BLANK

2. Proposed Action and Alternatives

2.1 Introduction

This section describes the Proposed Action to renovate and expand the existing Eagle Pass South Checkpoint in Maverick County, Texas. As discussed in **Section 1.3**, the NEPA process evaluates potential environmental consequences associated with a proposed action and considers the No Action Alternative. Because there are no feasible alternatives for the Proposed Action, no other alternatives are evaluated in this EA. CEQ regulations specify the inclusion of a No Action Alternative against which potential effects can be compared. While the No Action Alternative would not satisfy the purpose of or need for the Proposed Action, it is analyzed in detail in accordance with CEQ regulations.

2.2 Alternative 1: Proposed Action

CBP intends to renovate and expand the existing Eagle Pass South Checkpoint in Maverick County, Texas. The checkpoint is currently outdated and unable to efficiently accommodate the volume of traffic using Hwy 57.

Expansion would consist of acquiring 5 acres of private land south of Hwy 57, which would be used to construct proper acceleration and deceleration lanes. Along with the 5 acres of land being permanently acquired by CBP, an additional 2 acres of land would be temporarily acquired to act as construction staging and access areas. The new checkpoint building and associated infrastructure would cover approximately 1 acre within the 5 acres of land to be acquired by CBP. The new checkpoint building would be approximately 2,260 square feet and would contain an expanded observation space, weapons storage, four holding rooms, an interview room, evidence and equipment storage, and a metal detection vestibule. Security cameras would be placed strategically on the interior and exterior of the structure. In order to renovate the existing checkpoint, new signage, booths, canopy, lighting, and structure would also be required. In addition to new signage, booths, canopy, and lighting; supplemental, portable light stands may also be deployed at the checkpoint as necessary. Land site improvements would include approximately 1 acre of impervious surface.

Additionally, operation and ongoing maintenance and repair are included under the Proposed Action. Daily operations of the updated checkpoint would be similar to current operations and would include providing shelter for USBP personnel, surveillance monitoring, and checkpoint vehicle inspections. Maintenance and repair would occur as needed at the checkpoint and would include updates to any fencing, building infrastructure, electrical equipment, road repair, and vegetation clearing.

2.3 Alternative 2: No Action Alternative

The No Action Alternative would maintain the status quo. Under the No Action Alternative, CBP would continue to operate the Eagle Pass South Checkpoint as described in **Section 1**. No expansion or renovation would occur under the No Action

1 Alternative. The checkpoint would continue to be exposed to heavy volumes of traffic
2 that could leave CBP agents and the public vulnerable.

3 **2.4 Alternatives Considered But Eliminated From Further**
4 **Detailed Analysis**

5 Current operational requirements preclude relocation of the existing checkpoint.
6 Upgrades to the checkpoint must occur to meet CBP mission requirements. Therefore, no
7 other alternative locations or site alterations are considered in this analysis.

3. Affected Environment and Environmental Consequences

This section provides a characterization of the affected environment and an analysis of the potential direct and indirect effects each alternative would have on the affected environment. Each alternative was evaluated for its potential to affect physical, biological, and socioeconomic resources. Cumulative and other effects are discussed in **Section 4**. All potentially relevant resource areas were considered in this EA. General descriptions of the eliminated resource areas and the basis for elimination are described in **Section 3.1**.

The following discussion elaborates on the characteristics that might relate to impacts on resources:

- *Short-term or long-term.* These characteristics are determined on a case-by-case basis and do not refer to any rigid time period. In general, short-term effects are those that would occur only with respect to a particular activity or for a finite period or only during the time required for construction. Long-term effects are those that are more likely to be persistent and chronic.
- *Direct or indirect.* A direct effect is caused by and occurs contemporaneously at or near the location of the action. An indirect effect is caused by a proposed action and might occur later in time or be farther removed in distance but still be a reasonably foreseeable outcome of the action. For example, a direct effect of erosion on a stream might include sediment-laden waters in the vicinity of the action, whereas an indirect effect of the same erosion might lead to lack of spawning and result in lowered reproduction rates of indigenous fish downstream.
- *Negligible, minor, moderate, or major.* These relative terms are used to characterize the magnitude or intensity of an impact. Negligible effects are generally those that might be perceptible but are at a lower level of detection. A minor effect is slight but detectable. A moderate effect is readily apparent. A major effect is one that is severely adverse or exceptionally beneficial.
- *Adverse or beneficial.* An adverse effect is one having unfavorable, or undesirable outcomes on the man-made or natural environment. A beneficial effect is one having positive outcomes on the man-made or natural environment. A single act might result in adverse effects on one environmental resource and beneficial effects on another resource.
- *Significance.* Significant effects are those that, in their context and due to their intensity (severity), meet the thresholds for significance set forth in CEQ regulations (40 CFR § 1508.27).
- *Context.* The context of an effect can be localized or more widespread (e.g., regional).
- *Intensity.* The intensity of an effect is determined through consideration of several factors, including whether an alternative might have an adverse impact on the

1 unique characteristics of an area (e.g., historical resources or ecologically critical
2 areas), public health or safety, or endangered or threatened species or designated
3 critical habitat. Intensity of effects are also considered in terms of their potential
4 for violation of federal, state, or local environmental law; their controversial
5 nature; the degree of uncertainty or unknown effects, or unique or unknown risks;
6 if there are precedent-setting effects; and their cumulative effects (see **Section 4**).

7 **3.1 Preliminary Impact Scoping**

8 In accordance with NEPA, CEQ regulations, and DHS Directive 023-01, the following
9 evaluation of environmental impacts focuses on those resources and conditions
10 potentially subject to effects and potentially significant environmental issues deserving of
11 study, and deemphasizes insignificant issues. Some environmental resources and issues
12 that are often analyzed in an EA have been omitted from detailed analysis in this EA,
13 specifically aesthetics and visual resources, land use, and environmental justice. The
14 following provides the basis for such exclusions.

15 **3.1.1 Aesthetics and Visual Resources**

16 The Proposed Action would not have a significant impact on aesthetics or visual
17 resources. While a small percentage of natural space would be lost to development of the
18 new facility and associated infrastructure, the majority of natural space and aesthetics
19 would remain undisturbed. Therefore, no impacts on aesthetic and visual resources would
20 be anticipated.

21 **3.1.2 Land Use**

22 Maverick County, Texas, does not have specific land use classifications for the proposed
23 project area. Eagle Pass South Checkpoint infrastructure includes buildings and a paved
24 area used for vehicle parking. Additionally, portions of this part of the project area are
25 covered by an abandoned road grade.

26 The remaining 5 acres east of the current infrastructure is private ranchland. There were
27 no indications that the property has been used for agricultural purposes, including
28 grazing, within the last 5 to 10 years. Upon acquisition of the property, some open areas
29 would be converted to paved asphalt; however, the conversion of open space would be
30 minimal and would not require changes in land use designations. As a result, no impacts
31 on land use would be expected.

32 **3.1.3 Environmental Justice**

33 The Proposed Action would not have disproportionate impacts on low-income, minority,
34 or child (under 18 years old) populations. The existing checkpoint would be renovated in
35 an area that is approximately 10 miles from the nearest city and would only expand into a
36 portion of ranchland that has no housing structures. No populations of individuals would
37 be impacted. As a result, environmental justice and the protection of children are not
38 discussed further.

1 **3.2 Noise**

2 **3.2.1 Definition of the Resource**

3 Noise is defined as any undesirable sound that interferes with communication, poses a
4 threat to human health, or is irritating. Noise can be intermittent or continuous, steady or
5 impulsive, and can involve any number of sources and frequencies. It can be readily
6 identifiable or generally nondescript. Human response to increased sound levels varies
7 according to the source type, characteristics of the sound source, distance between source
8 and receptor, receptor sensitivity, and time of day. Affected receptors are specific (e.g.,
9 schools, churches, or hospitals) or broad (e.g., nature preserves or designated districts)
10 areas in which occasional or persistent sensitivity to noise above ambient levels exists.

11 **Noise Metrics and Federal Regulations.** Although human response to noise varies,
12 measurements can be calculated with instruments that record instantaneous sound levels
13 in decibels. A-weighted decibel (dBA) is used to characterize sound levels that can be
14 sensed by the human ear. “A-weighted” denotes the adjustment of the frequency range to
15 what the average human ear can sense when experiencing an audible event. The threshold
16 of audibility is generally within the range of 10 to 25 dBA for normal hearing. The
17 threshold of pain occurs at the upper boundary of audibility, which is normally
18 approximately 135 dBA. **Table 3-1** compares common sounds and shows how they rank
19 in terms of the effects of hearing. As shown, a whisper is normally 30 dBA and
20 considered to be very quiet, while an air conditioning unit 20 feet away is considered an
21 intrusive noise at 60 dBA. Noise levels can become annoying at 80 dBA and very
22 annoying at 90 dBA. To the human ear, each 10 dBA increase seems twice as loud
23 (USEPA 1981).

24 **Table 3-1. Sound Levels and Human Response**

Noise Level (dBA)	Common Sounds	Effect
10	Just audible	Negligible*
30	Soft whisper (15 feet)	Very quiet
50	Light auto traffic (100 feet)	Quiet
60	Air conditioning unit (20 feet)	Intrusive
70	Noisy restaurant or freeway traffic	Telephone use difficult
80	Alarm clock (2 feet)	Annoying
90	Heavy truck (50 feet) or city traffic	Very annoying; hearing damage (8 hours)
100	Garbage truck	Very annoying*
110	Pile drivers	Strained vocal effort*
120	Jet takeoff (200 feet) or auto horn (3 feet)	Maximum vocal effort
140	Carrier deck jet operation	Painfully loud

Source: FICON 1992. Note: * HDR interpolation

1 Under the Noise Control Act of 1972, the Occupational Safety and Health Administration
 2 (OSHA) established workplace standards for noise. The minimum requirement states that
 3 constant noise exposure must not exceed 90 dBA over an 8-hour period. The highest
 4 allowable sound level to which workers can be constantly exposed is 115 dBA, and
 5 exposure to this level must not exceed 15 minutes within an 8-hour period. The standards
 6 limit instantaneous exposure, such as impact noise, to 140 dBA. If noise levels exceed
 7 these standards, employers are required to provide hearing protection equipment that will
 8 reduce sound levels to acceptable limits.

9 **Construction Noise.** The noise levels caused by construction have the potential to
 10 quickly surpass ambient sound levels. The type and intensity of the sound is dependent
 11 upon the type of construction or demolition activity taking place. **Table 3-2** lists noise
 12 levels associated with common types of construction equipment.

13 **Table 3-2. Estimated Noise Levels for Construction Equipment**

Construction Category and Equipment	Predicted Noise Level at 50 feet (dBA)
Clearing and Grading	
Bulldozer	80
Grader	80–93
Truck	83–94
Roller	73–75
Excavation	
Backhoe	72–93
Jackhammer	81–98
Building Construction	
Concrete mixer	74–88
Welding generator	71–82
Pile driver	91–105
Crane	75–87
Paver	86–88

Source: USEPA 1971

14 **3.2.2 Affected Environment**

15 The existing sound environment for the Eagle Pass South Checkpoint is typical of any
 16 rural area and is mainly affected by noise from vehicular traffic using Hwy 57. The Eagle
 17 Pass South Checkpoint is in a semi-arid area with sparse vegetation and no nearby
 18 residential properties. The nearest population center to the checkpoint is Eagle Pass,
 19 Texas, which is approximately 10 miles southwest of the checkpoint. There are no
 20 sensitive noise receptors within 0.5 mile of the checkpoint.

1 **3.2.3 Environmental Consequences**

2 Noise impact analyses typically evaluate potential changes to the existing noise
3 environment that would result from implementation of a proposed action. Potential
4 changes in the acoustical environment can be beneficial (i.e., if they reduce the number of
5 sensitive receptors exposed to unacceptable noise levels or reduce the ambient sound
6 level), negligible (i.e., if the total number of sensitive receptors exposed to unacceptable
7 noise levels is essentially unchanged), or adverse (i.e., if they result in increased sound
8 exposure to unacceptable noise levels or ultimately increase the ambient sound level).

9 **3.2.3.1 Proposed Action**

10 Impacts on the existing noise environment at the Eagle Pass Checkpoint would be short
11 term, negligible, and adverse. Impacts would result from noise generated from demolition
12 and construction of the renovated checkpoint. Typically, construction involves use of
13 more than one piece of equipment simultaneously (e.g., paver, haul truck). Examples of
14 expected additive demolition and construction noise levels that could be heard at specific
15 distances during daytime hours are shown in **Table 3-3**.

16 **Table 3-3. Predicted Additive Noise Levels from Construction**

Distance from Noise Source	Predicted Noise Level
50 feet	92 dBA
300 feet	76 dBA
500 feet	72 dBA
1,000 feet	66 dBA
3,000 feet	56 dBA

17 The proposed demolition and construction would be expected to generate similar
18 comparable noise levels to those found in **Table 3-3**. Noise generated from heavy
19 equipment during demolition and construction would likely be higher than noise
20 generated from vehicular traffic on Hwy 57; however, demolition and construction would
21 be temporary.

22 No impacts on the existing noise environment would be expected from operation of the
23 renovated checkpoint because the checkpoint would continue to operate at current levels
24 and no new noise sources would be created.

25 **3.2.3.2 No Action Alternative**

26 Under the No Action Alternative, CBP would not renovate the checkpoint along Hwy 57,
27 and the checkpoint in its current condition would continue to operate as is. No impacts
28 from construction on the existing noise environment would be expected under the No
29 Action Alternative.

1 3.3 Air Quality

2 3.3.1 Definition of the Resource

3 Air quality is measured by the concentration of criteria pollutants in the atmosphere. The
4 air quality in a region is a result not only of the types and quantities of atmospheric
5 pollutants and pollutant sources in an area, but also surface topography, the size of the
6 topological “air basin,” and the prevailing meteorological conditions in that region.

7 **National Ambient Air Quality Standards (NAAQS).** The Clean Air Act, as amended,
8 requires the U.S. Environmental Protection Agency (USEPA) to set NAAQS for
9 pollutants considered harmful to public health and the environment. USEPA
10 characterizes ambient air quality in terms of compliance with the primary and secondary
11 NAAQS. Primary NAAQS provide public health protection, including protecting the
12 health of “sensitive” populations such as asthmatics, children, and the elderly. Secondary
13 NAAQS provide public welfare protection, including protection against decreased
14 visibility and damage to animals, crops, vegetation, and buildings.

15 USEPA established NAAQS for six criteria pollutants:

- 16 · Carbon monoxide (CO)
- 17 · Lead (Pb)
- 18 · Nitrogen dioxide (NO₂)
- 19 · Ozone (O₃), which results from the presence of nitrogen oxides [NO_x] and volatile
20 organic compounds [VOC] in the atmosphere
- 21 · Sulfur dioxide (SO₂)
- 22 · Particulate matter (with an aerodynamic size less than or equal to 10 microns
23 [PM₁₀] and with an aerodynamic size less than or equal to 2.5 microns [PM_{2.5}]).

24 States may either adopt the NAAQS or establish their own more stringent standards. No
25 additional ambient air quality standards have been adopted by the State of Texas. **Table**
26 **3-4** provides the primary and secondary NAAQS.

27 **Attainment Versus Nonattainment.** USEPA classifies the air quality in a region
28 according to whether the concentrations of criteria pollutants in ambient air exceed the
29 NAAQS. Areas are therefore designated as either “attainment,” “nonattainment,”
30 “maintenance,” or “unclassified” for each of the six criteria pollutants. Attainment means
31 that the air quality is better than the NAAQS; nonattainment indicates that criteria
32 pollutant levels exceed NAAQS; maintenance indicates that an area was previously
33 designated nonattainment but is now attainment; and an unclassified air quality
34 designation means that there is not enough information to appropriately classify an area,
35 so the area is considered attainment.

36 **Greenhouse Gas (GHG) Emissions.** GHGs are gaseous emissions that trap heat in the
37 atmosphere. These emissions occur from natural processes and human activities. Human-
38 caused GHGs are primarily produced by the burning of fossil fuels and through industrial

1 **Table 3-4. National Ambient Air Quality Standards**

Pollutant	Averaging Time	Primary Standard	Secondary Standard
CO	8-hour ⁽¹⁾	9 ppm (10 mg/m ³)	None
	1-hour ⁽¹⁾	35 ppm (40 mg/m ³)	None
Pb	Rolling 3-Month Average ⁽²⁾	0.15 µg/m ³ ⁽³⁾	Same as Primary
NO₂	Annual ⁽⁴⁾	53 ppb ⁽⁵⁾	Same as Primary
	1-hour ⁽⁶⁾	100 ppb	None
PM₁₀	24-hour ⁽⁷⁾	150 µg/m ³	Same as Primary
PM_{2.5}	Annual ⁽⁸⁾	12 µg/m ³	15 µg/m ³
	24-hour ⁽⁶⁾	35 µg/m ³	Same as Primary
O₃	8-hour ⁽⁹⁾	0.070 ppm ⁽¹⁰⁾	Same as Primary
SO₂	1-hour ⁽¹¹⁾	75 ppb ⁽¹²⁾	None
	3-hour ⁽¹⁾	None	0.5 ppm

Sources: USEPA 2016

Notes: Parenthetical values are approximate equivalent concentrations.

1. Not to be exceeded more than once per year.
2. Not to be exceeded.
3. Final rule signed October 15, 2008. The 1978 standard for Pb (1.5 µg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved. The USEPA designated areas for the new 2008 standard on November 8, 2011.
4. Annual mean.
5. The official level of the annual NO₂ standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of cleaner comparison to the 1-hour standard.
6. 98th percentile, averaged over 3 years.
7. Not to be exceeded more than once per year on average over 3 years.
8. Annual mean, averaged over 3 years.
9. Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years.
10. Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O₃ standards additionally remain in effect in some areas. Revocation of the previous (2008) O₃ standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards.
11. 99th percentile of 1-hour daily maximum concentrations, averaged over 3 years.
12. Final rule signed June 2, 2010. The 1971 annual (0.3 ppm) and 24-hour (0.14 ppm) SO₂ standards were revoked in that same rulemaking. However, these standards remain in effect until 1 year after an area is designated for the 2010 standard, except in areas designated nonattainment for the 1971 standards, where the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standard are approved.
13. Not to be above this level more than twice in a consecutive 7-day period.

Key: ppm = parts per million; ppb = parts per billion; mg/m³ = milligrams per cubic meter; µg/m³ = micrograms per cubic meter

2 and biological processes. The most common GHGs emitted from human activities
3 include carbon dioxide (CO₂), methane, and nitrous oxide.

4 3.3.2 Affected Environment

5 The Eagle Pass South Checkpoint is located in Maverick County, Texas, which is
6 designated by USEPA as attainment for all criteria pollutants (USEPA 2015).

1 There is only one stationary source of air emissions at the Eagle Pass South Checkpoint:
2 a 36-kilowatt emergency generator, which is only operated when needed and was
3 refurbished in October 2015 (HDR 2016). Mobile sources of air emissions include traffic
4 on Hwy 57, vehicles that are queued at the checkpoint, and CBP vehicles and equipment
5 performing everyday functions.

6 **3.3.3 Environmental Consequences**

7 Impacts on local and regional air quality conditions from a proposed federal action are
8 determined based upon the increases or decreases in regulated air pollutant emissions and
9 upon existing conditions and ambient air quality. The evaluation criteria for impacts are
10 dependent on whether the proposed action is located in an attainment, nonattainment, or
11 maintenance area for criteria pollutants.

12 For attainment areas, a proposed action would be considered significant if the net
13 increases in pollutant emissions would result in any one of the following scenarios:

- 14 · Cause or contribute to a violation of any national or state ambient air quality
15 standard.
- 16 · Expose sensitive receptors to substantially increased pollutant concentrations.
- 17 · Exceed any evaluation criteria established by a state implementation plan.
- 18 · Cause an increase of 250 tons per year (tpy) of any attainment criteria pollutant
19 from construction-related emissions.

20 Although the 250 tpy increase identified above is not a regulatory-driven threshold, it is
21 being applied as a conservative measure of significance in attainment areas. The rationale
22 for applying this conservative threshold is that it is consistent with the threshold for a
23 Prevention of Significant Deterioration major source (i.e., stationary source) in
24 attainment areas.

25 Because the General Conformity Rule applies only to significant federal actions in
26 nonattainment or maintenance areas, it is not applicable to this air quality analysis.
27 Therefore, neither an applicability analysis nor a conformity determination is required.

28 There are no regulatory thresholds of significance for GHG emissions; however, CEQ
29 released the *Draft NEPA Guidance on Consideration of the Effects of Climate Change
30 and Greenhouse Gas Emissions*, which suggests that 25,000 metric tpy of CO₂-equivalent
31 is a meaningful reference point for when to consider GHG emissions in NEPA
32 documentation. CO₂ emissions are provided in this EA for information and comparison
33 purposes.

34 **3.3.3.1 Proposed Action**

35 Short-term, negligible, adverse effects on air quality would occur from the proposed
36 renovation and expansion of the Eagle Pass South Checkpoint. The proposed demolition
37 and construction would generate air pollutant emissions from site-disturbing and the
38 operation of construction equipment. Demolition and construction would also generate
39 particulate matter emissions as fugitive dust from ground-disturbing activities and from

1 the combustion of fuels in construction equipment. Construction workers commuting
 2 daily to and from the job site in their personal vehicles would also generate regulated
 3 pollutant air emissions. Emissions from demolition and construction would be produced
 4 only for the duration of demolition and construction which, for the purposes of this air
 5 quality analysis, is conservatively assumed to be 12 calendar months or 240 workdays.

6 Demolition and construction activities would incorporate best management practices
 7 (BMPs) to minimize fugitive particulate matter emissions. Work vehicles would be well
 8 maintained and could use diesel particulate filters to reduce particulate matter emissions.

9 Demolition and construction would directly contribute to emissions of GHGs from the
 10 combustion of fossil fuels. The estimated emission of CO₂ from demolition and
 11 construction is estimated to be 676.1 metric tpy, which is approximately 2.8 percent of
 12 the 25,000 metric tpy of CO₂-equivalent meaningful assessment reference point
 13 established by CEQ. Because CO₂ represents the overwhelming majority of GHGs from
 14 motor vehicle fuel combustion, an estimate of methane and nitrous oxide emissions
 15 converted to CO₂-equivalent is unnecessary.

16 An air emissions analysis containing detailed calculations and assumptions was
 17 conducted for the proposed demolition and construction, which is summarized in **Table**
 18 **3-5** and shown in detail in **Appendix D**. In summary, the increase in air emissions from
 19 demolition and construction is below the applicable significance criteria.

20 **Table 3-5. Summary of Renovation and Expansion Emissions**

	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO₂ (tpy)	PM₁₀ (tpy)	PM_{2.5} (tpy)	CO₂ (metric tpy)
Air Emissions							
Combustion	5.142	0.476	2.253	0.409	0.366	0.355	585.367
Fugitive Dust	N/A	N/A	N/A	N/A	11.547	1.155	N/A
Haul Truck On-Road	0.050	0.005	0.027	0.000	0.002	0.002	11.721
Construction Commuter	0.116	0.119	1.148	0.002	0.013	0.009	149.863
Total Renovation and Expansion Emissions	5.308	0.600	3.427	0.410	11.928	1.520	692.512
Significance Criteria Threshold for Construction Emissions							
Attainment Area Significance Criteria	250	250	250	250	250	250	25,000

Key: N/A = Not Applicable

21 The construction of the proposed acceleration and deceleration lanes on Hwy 57 would
 22 allow up to two vehicles to be processed simultaneously and consequently reduce wait
 23 times. Fast processing would reduce the number of vehicles queuing and, in turn, slightly
 24 reduce air emissions from idling vehicles. The number of CBP personnel assigned to the
 25 renovated checkpoint may increase slightly under the Proposed Action; however, no new
 26 vehicles or equipment to perform everyday functions would be added.

1 **3.3.3.2 No Action Alternative**

2 No impacts on air quality would occur under the No Action Alternative. Under this
3 alternative, CBP would not renovate and expand the checkpoint and would continue to
4 operate the existing checkpoint as is. The existing 36-kilowatt backup generator would
5 remain in service.

6 **3.4 Geological Resources**

7 **3.4.1 Definition of the Resource**

8 Geological resources consist of the Earth's surface and subsurface materials. Within a
9 given physiographic province, these resources are typically described in terms of
10 topography and physiography, geology, soils, and, where applicable, geologic hazards
11 and paleontology. Topography and physiography pertain to the general shape and
12 arrangement of a land surface, including its height and the position of its natural and
13 human-made features. Geology is the study of the Earth's composition and provides
14 information on the structure and configuration of surface and subsurface features. Such
15 information derives from field analysis based on observations of the surface and borings
16 to identify subsurface composition.

17 Soils are the unconsolidated materials overlying bedrock or other parent material. Soils
18 typically are described in terms of their complex type, slope, and physical characteristics.
19 Differences among soil types in terms of their structure, elasticity, strength, shrink-swell
20 potential, and erosion potential affect their abilities to support certain applications or
21 uses. In appropriate cases, soil properties must be examined for their compatibility with
22 particular construction or types of land use.

23 Prime farmland is protected under the Farmland Protection Policy Act (FPPA) of 1981.
24 Prime farmland is defined as land that has the best combination of physical and chemical
25 characteristics for producing food, feed, forage, fiber, and oilseed crops, and that is also
26 available for these uses. The implementing procedures of the FPPA require federal
27 agencies to evaluate the adverse effects of their activities on prime and unique farmland,
28 and farmland of statewide and local importance, and to consider alternative actions that
29 could avoid adverse effects. The Natural Resources Conservation Service is responsible
30 for overseeing compliance with the FPPA.

31 **3.4.2 Affected Environment**

32 **Regional Geography.** The Eagle Pass South Checkpoint lies within the Interior Coastal
33 Plains subprovince of the Gulf Coastal Plains physiographic province of Texas. The
34 Interior Coastal Plain of Texas is comprised of belts of uncemented sands among shales
35 that erode into sandy ridges. In addition, silts, and clays erode to flat grasslands that form
36 slopes to the southeast. Two fault systems within the subprovince trend parallel to the
37 coastline (UT at Austin 1996).

38 **Topography.** The majority of the project area is relatively flat due to its proximity to
39 Hwy 57 and the level terrain associated with the existing Eagle Pass South Checkpoint.
40 The project area sits at approximately 850 feet above mean sea level (USGS 2014a).

1 **Soils.** Approximately 88 percent of the soils in the project area are made up of the Dant
2 association, gently undulating, and 12 percent are covered by the Pryor association,
3 undulating. Soils in the Dant association consist of loamy soils formed over calcareous
4 clay with slopes from 0 to 3 percent. Dant association soils are well drained and are
5 slowly permeable, with slow to moderate runoff and a moderate hazard of erosion. Pryor
6 association soils are formed in calcareous, loamy and clayey material over shale. Slopes
7 within this soil range from 0 to 5 percent, but are typically approximately 2 percent.
8 Pryor association soils are well drained with slow permeability and medium runoff.
9 Additionally, this soil type has a slight to moderate hazard of erosion (USDA 2011,
10 NRCS 2016).

11 **Prime Farmland.** There are no prime farmland soils identified within the project area.
12 Therefore, prime farmland is removed from further analysis.

13 **Geologic Hazards.** The 2014 Texas Seismic Hazard Map shows that the seismic hazard
14 for the Proposed Action ranges from 2 to 4 percent of the force of gravity. This indicates
15 that seismic events are uncommon and in the event of a seismic activity, little damage
16 would be expected to occur (USGS 2014b).

17 **3.4.3 Environmental Consequences**

18 Protection of unique geological features, minimization of soil erosion, and the siting of
19 facilities in relation to potential geologic hazards are considered when evaluating
20 potential effects of a proposed action on geological resources. Generally, adverse effects
21 can be avoided or minimized if proper construction techniques, erosion control measures,
22 and structural engineering design are incorporated into project development.

23 Effects on geology and soils would be significant if they would alter the lithology (i.e.,
24 the character of a rock formation), stratigraphy (i.e., the layering of sedimentary rocks),
25 and geological structures such that groundwater quality, distribution of aquifers and
26 confining beds, and groundwater availability are substantially altered; or substantially
27 change the soil composition, structure, or function within the environment.

28 **3.4.3.1 Proposed Action**

29 **Regional Geography.** No impacts on regional geography would be anticipated from
30 implementation of the Proposed Action.

31 **Topography.** Long-term, negligible to minor, adverse impacts would be expected on
32 topography from implementation of the Proposed Action. The existing Eagle Pass South
33 Checkpoint area has already been previously developed and graded however, because
34 the footprint for the new checkpoint building would be larger than the existing
35 checkpoint, additional previously ungraded land would require appropriate grading. In
36 addition, use of ground moving equipment and staging areas would result in alteration of
37 existing topography, resulting in negligible to minor impacts.

38 **Soils.** Short-term, negligible, adverse impacts to soils would be expected from the
39 implementation of the Proposed Action. Soils would become disturbed or compacted
40 during demolition and construction activities which would leave soil susceptible to water
41 and wind erosion. An erosion and sediment control plan would be developed and

1 implemented during demolition and construction activities to contain soil and runoff
2 onsite through use of measures such as silt curtains, and reduce potential for adverse
3 effects associated with erosion, sedimentation, and transport of sediments in runoff.

4 **Geologic Hazards.** Earthquakes within the project area are unlikely. A 3.5 magnitude
5 earthquake was recorded in 2005, approximately 10 miles from the project area; however,
6 it was the first earthquake recorded in the surrounding area. The seismic hazard rating for
7 the Proposed Action area is very low (Frohlich 2012, USGS 2014b, USGS 2015). No
8 impacts on geologic hazards would be expected from the Proposed Action.

9 3.4.3.2 No Action Alternative

10 Under the No Action Alternative, CBP would not renovate the checkpoint along Hwy 57,
11 and the checkpoint in its current condition would continue to operate as is. No impacts on
12 geological resources would be expected under the No Action Alternative.

13 3.5 Biological Resources

14 3.5.1 Definition of the Resource

15 Biological resources include native or naturalized plants and animals and the habitats
16 (e.g., grasslands, forests, and wetlands) in which they exist. Protected and sensitive
17 biological resources include listed (threatened or endangered) and proposed species under
18 the ESA as designated by the U.S. Fish and Wildlife Service (USFWS), state-listed
19 threatened or endangered species, and migratory birds.

20 Sensitive habitats include those areas designated by USFWS as critical habitat protected
21 by the ESA and sensitive ecological areas as designated by state or federal rulings.
22 Critical habitat is designated if USFWS determines that it is essential to a threatened or
23 endangered species' conservation. Federal agencies are required to ensure that their
24 activities do not adversely modify or destroy critical habitat to the point that it will no
25 longer aid in the species' recovery. Sensitive habitats also include wetlands, plant
26 communities that are unusual or of limited distribution, and important seasonal use areas
27 for wildlife (e.g., migration routes, breeding areas, crucial summer and winter habitats).

28 3.5.2 Affected Environment

29 **Vegetation.** The project occurs in the South Texas Plains ecoregion, the northern extent
30 of the Tamaulipan biotic province. This province includes south Texas and portions of
31 the states of Coahuila, Nuevo Leon, and Tamaulipas in Mexico. The native vegetation
32 covering much of northeastern Mexico and parts of south Texas is mesquite (*Prosopis*
33 *glandulosa*) dominated thornscrub and grasslands. The Tamaulipan province extends
34 south of the Texas/Mexico border for almost 200 miles between the Gulf Coast and the
35 deciduous woodlands on the slopes of the Sierra Madre Oriental. The Tamaulipan
36 thornscrub, a subtropical, semi-arid vegetation type, occurs on either side of the Rio
37 Grande. Spiny shrubs and trees dominate this thornscrub, but grasses, forbs, and
38 succulents are also prominent (GDET 2006).

39 A field vegetative species survey was conducted in January 2016 within the
40 approximately 7-acre project area (see **Figure 1-1**). Survey results showed that the

1 majority of the perennial or woody plants in the project area are dominated by mesquite,
2 twisted acacia (*Acacia schaffneri*), and desert hackberry (*Celtic pallida*), and the habitat
3 can most accurately be classified as the Tamaulipan Mixed Deciduous Thornscrub
4 Vegetation Alliance (NatureServe2016). Other commonly observed shrub and tree
5 species include lotebush (*Ziziphus obtusifolia*), whitebrush (*Aloysia gratissima*),
6 guayacan (*Guaiacum angustifolia*), Christmas cactus (*Opuntia leptocaulis*), brushland
7 shrubverbena (*Lantana achyranthifolia*), and false broomweed (*Xylothamia palmeri*).
8 Other shrub species observed infrequently include desert yaupon (*Schaefferia cuneifolia*),
9 prickly pear (*Opuntia engelmannii*), blackbrush acacia (*Acacia rigidula*), Texas swamp-
10 privet (*Forestiera angustifolia*), retama (*Parkinsonia obsoleta*), and leather stem
11 (*Jatropha dioica*). This tree and shrub species layer is absent in large areas and,
12 combined, makes up approximately 25 percent of canopy cover throughout the project
13 area. While certain areas consist of mesquite and shrub stands, the project area generally
14 has an open canopy layer.

15 Herbaceous vegetation within the project area consists of a combination of perennial and
16 annual forbs and grasses. In total, the herbaceous cover is approximately 90 percent with
17 a low percentage of barren soil. Dominant herbaceous plant species include King Ranch
18 bluestem (*Bothriocloa ischaemum* var. *songarica*), buffelgrass (*Pennisetum ciliare*),
19 ragweed (*Ambrosia psilostachya*), and American wild carrot (*Daucus pusillus*).
20 Representative photographs of vegetation in the project area can be seen in **Figures 3-1**
21 **and 3-2**.

22 In addition to the Tamaulipan Mixed Deciduous Thornscrub, approximately 0.15 acre of
23 the project area is maintained grassland along the eastern boundary and the Hwy 57
24 roadside shoulder. This frequently mowed area consists of forbs and grass species. The
25 remaining 0.25 acre consists of existing infrastructure, parking, and roadway for the
26 Eagle Pass South Checkpoint and is not vegetated. Additionally, electrical distribution
27 lines cut through the project area in an east to west direction. One electrical line occurs
28 along the southern boundary of the project area, while the other line bisects the project
29 area. Russian thistle (*Salsola kali*), an introduced plant species that can become invasive,
30 was observed in relative abundance adjacent to these distribution lines. This plant species
31 was likely introduced as a result of distribution line installation or maintenance.

32 **Wildlife.** Wildlife species were documented by visual observation, vocalization, or sign
33 (e.g., tracks, nests/burrows, and scat). The most abundant wildlife species observations
34 were avian species and inactive avian nests. Avian species observed include crested
35 caracara (*Caracara cheriway*), turkey vulture (*Cathartes aura*), northern mockingbird
36 (*Mimus polyglottos*), sparrow (*Amphispiza* sp.), Chihuahuan raven (*Corvus cryptoleucus*),
37 golden-fronted woodpecker (*Melanerpes aurifrons*), meadowlark (*Sturnella* sp.), and
38 mourning dove (*Zenaida macroura*). Additionally, numerous inactive nests were
39 observed within the project area, most of which were constructed by great-tailed grackles
40 (*Quiscalus mexicanus*) and doves (*Zenaida* sp. or *Columbina* sp.).

41



1
2

Figure 3-1. Buffelgrass Dominated Herbaceous Layer



3
4

Figure 3-2. Forb Dominated Herbaceous Layer

1 **Special Status Species.** Six federally listed animal species occur or have the potential to
 2 occur in Maverick County. These species are the least tern (interior population) (*Sterna*
 3 *antillarum*), the piping plover (*Charadrius melodus*), rufa red knot (*Calidris canutus*
 4 *rufa*), Sprague’s pipit (*Anthus spragueii*), Gulf Coast jaguarondi (*Herpailurus*
 5 *yagouaroundi*), and ocelot (*Leopardus pardalis*). Based on the habitat descriptions and
 6 survey results described previously, none of these species are likely to occur within the
 7 project area, and none of these species were observed during the qualitative assessment of
 8 the project area. **Appendix C** provides habitat and range descriptions for each of these
 9 species and provides justification for the conclusion that they are unlikely to occur.

10 Of the 36 state-listed species known to occur or have the potential to occur in Maverick
 11 County, Texas, 25 species do not occur or are unlikely to occur in the project area. This
 12 determination is based on these species ranges and habitat associations along with the
 13 project area settings and field and desktop analysis. These species and their associated
 14 habitats and distribution are listed in **Appendix C**.

15 The remaining 11 species (5 reptile, 3 mammal, 2 bird, and 1 insect) may occur within or
 16 near the project area. These species are summarized in **Table 3-6**. Five of those species
 17 are listed by Texas Parks and Wildlife Department as state threatened: the white-nosed
 18 coati (*Nasua narica*), reticulate collared lizard (*Crotaphytus reticulatus*), Texas horned
 19 lizard (*Phrynosoma cornutum*), Texas indigo snake (*Drymarchon melanurus erebennus*),
 20 and Texas tortoise (*Gopherus berlandieri*). The six remaining species are listed as rare
 21 species by the Texas Parks and Wildlife Department: Baird’s sparrow (*Ammodramus*
 22 *bairdii*), subspecies of Audobon’s oriole (*Icterus graduacauda audubonii*), neojunvenile
 23 tiger beetle (*Cicindela obsoleta neojunivilis*), Carrizo Springs pocket gopher (*Geomys*
 24 *personatus streckeri*), cave myotis (*Myotis velifer*), and spot-tailed earless lizard
 25 (*Holbrookia obsoleta*).

26 **Table 3-6. State-Listed Species Known to Occur or Have the Potential to Occur in**
 27 **the Project Area**

Species	Listing Status	Habitat*	Likelihood of Occurrence/ Determination	
Birds				
Baird’s sparrow	<i>Ammodramus bairdii</i>	R	Short-grass prairie with scattered shrubs.	Short-to long-term, negligible to minor, adverse impacts may occur.
Audobon’s oriole	<i>Icterus graduacauda audubonii</i>	R	Scrub, mesquite; nests in dense trees, or thickets, usually along water courses.	Short-to long-term, negligible to minor, adverse impacts may occur.
Insects				
Neojunvenile tiger beetle	<i>Cicindela obsoleta neojunivilis</i>	R	Bare or sparsely vegetated, dry, hard-packed soil; typically in previously disturbed areas.	Short-to long-term, negligible to minor, adverse impacts may occur..

Species		Listing Status	Habitat*	Likelihood of Occurrence/ Determination
Mammals				
Carrizo Springs pocket gopher	<i>Geomys personatus streckeri</i>	R	Underground burrows of deep, sandy soils; feed mostly on vegetation.	Short-to long-term, negligible to minor, adverse impacts may occur. May occur. Long-term negligible direct and indirect adverse impacts. Short-term minor to no direct and indirect adverse impacts.
Cave Myotis	<i>Myotis velifer</i>	R	Roosts in caves and tunnels.	Short-to long-term, negligible to minor, adverse impacts may occur.
White-nosed coati	<i>Nasua narica</i>	T	Woodlands, riparian corridors and canyons.	Short-to long-term, negligible to minor, adverse impacts may occur.
Reptiles				
Reticulate collared lizard	<i>Crotaphytus reticulatus</i>	T	Open brush-grasslands; thorn-scrub vegetation, usually on well-drained rolling terrain of shallow gravel, caliche, or sandy soils; often on scattered flat rocks below escarpments or isolated rock outcrops among scattered clumps of prickly pear and mesquite.	Short-to long-term, negligible to minor, adverse impacts may occur.
Spot-tailed earless lizard	<i>Holbrookia lacerata</i>	R	Moderately open prairie-brushland; fairly flat areas free of vegetation or other obstructions, including disturbed areas.	Short-to long-term negligible to minor, adverse impacts may occur. May occur. Long-term negligible direct and indirect adverse impacts. Short-term minor to no direct and indirect adverse impacts.
Texas horned lizard	<i>Phrynosoma cornutum</i>	T	Arid and semi-arid regions with sparse vegetation, including shrubs, grasses, and cacti.	Short-to long-term, negligible to minor, adverse impacts may occur. May occur. Long-term negligible direct and indirect adverse impacts. Short-term minor to no direct and indirect adverse impacts.

Species		Listing Status	Habitat*	Likelihood of Occurrence/ Determination
Texas indigo snake	<i>Drymarchon melanurus erebennus</i>	T	Thornbush-chaparral woodlands of south Texas, in particular dense riparian corridors; requires moist microhabitats, such as rodent burrows, for shelter.	Short-to long-term, negligible to minor, adverse impacts may occur. May occur. Long-term negligible direct and indirect adverse impacts. Short-term minor to no direct and indirect adverse impacts.
Texas tortoise	<i>Gopherus berlandieri</i>	T	Scrub and brushlands with sandy, well-draining soils.	Short-to long-term, negligible to minor, adverse impacts may occur. May occur. Long-term negligible direct and indirect adverse impacts. Short-term minor to no direct and indirect adverse impacts.

Key: R = State Rare and Wildlife Rare; T = State Threatened

*Source: TPWD 2015

Note: Hooded orioles were observed within the project area; however, a subspecies was not determined.

1 Of the two state-listed bird species that could occur in the project area, the Audobon's
 2 oriole subspecies is a year-round resident of south Texas, while the Baird's sparrow is a
 3 rare to very rare winter resident in far west Texas (Lockwood and Freeman 2014). The
 4 Audobon's oriole nests in dense trees or thickets usually occurring along water courses.
 5 While ideal nesting habitat does not occur for the Audobon's oriole subspecies, nor is the
 6 project area within the currently known range, the potential of nesting within the project
 7 area cannot be discounted.

8 Baird's sparrows are rare migrants through the western High Plains of Texas south
 9 through Val Verde County. They are considered very rare farther east, including
 10 Maverick County, through the remainder of the panhandle and south through Edward's
 11 Plateau. Fall migrants have been recorded from late August to late October, whereas
 12 spring migrants have been found from late March through late May (Lockwood and
 13 Freeman 2014).

14 Of the three mammals that could occur in the project area, the cave myotis and white-
 15 nosed coati would likely only use the project area temporarily for food or en route to
 16 more suitable habitat. The habitat around the project area is not ideal for either of these
 17 species to become residents. The Carrizo Springs pocket gopher also could occur in the
 18 project area; however, no signs of gophers such as burrows were observed during the
 19 survey.

20 While habitat within the project area is suitable for all 5 reptiles that could occur in the
 21 project area, no reptiles were observed during the survey. However, the surveys were
 22 conducted during overcast conditions with temperatures around 55 degrees Fahrenheit,
 23 which are not ideal conditions for reptile activity. All three lizards occupy well-drained

1 and open to moderately open shrublands (TPWD 2015). During the surveys, harvester
2 ants (*Pogonomyrmex* sp.) were documented within the project area. These insects are a
3 primary food source for the Texas horned lizard, and their presence indicates a high
4 probability of Texas horned lizards occupying the area (TPWD 2015). The Texas indigo
5 snake prefers dense riparian areas (TPWD 2015); due to proximity to an unnamed arroyo
6 (discussed further in **Section 3.7.2**), it is possible that this snake could occur occasionally
7 in the project area. The project area conditions are suitable for tortoise burrowing, but
8 signs indicating the presence of Texas tortoise were not observed during the survey.

9 The neojuvvenile tiger beetle occurs in bare or sparsely vegetated dry, hard-packed soil,
10 typically in disturbed sites (TPWD 2015). The tiger beetle was not identified during the
11 field survey; however, project area conditions and previous disturbance make this area
12 potentially suitable for this insect.

13 **3.5.3 Environmental Consequences**

14 Ground disturbance and noise associated with construction have the potential to cause
15 direct or indirect adverse effects on biological resources. Effects can include disturbance,
16 injury, or mortality of individual plants or animals, as well as habitat removal, damage, or
17 degradation. The context and intensity of the effects to determine whether they were
18 significant were evaluated based on the nature and location of activities relative to
19 important biological resources, the magnitude of the effects, the number of species or
20 individuals involved, amount of habitat affected relative to the total available habitat
21 within the region and the type of stressors involved.

22 **3.5.3.1 Proposed Action**

23 Short- and long-term, negligible to minor, adverse impacts on vegetation would be
24 expected from the temporary disturbances during construction and demolition
25 (e.g., trampling, crushing, and removal) and from the permanent removal of vegetation
26 due to the construction of a new checkpoint facility and supporting infrastructure.
27 However, adverse impacts on vegetation would be minimized through the use of
28 appropriate BMPs.

29 Nonnative vegetation occurs throughout the project area. Disturbances to the canopy or
30 ground surface in the shrubland habitat could also allow opportunities for nonnative and
31 invasive species to establish or spread within shrubland habitat. BMPs such as the
32 following would be implemented during and following construction and demolition to
33 prevent the establishment or spread of nonnative species:

- 34 · Inspect and clean construction equipment to remove soil, plants, and seeds.
- 35 · Stage equipment in areas free of nonnative plant species.
- 36 · Use certified weed-free materials (e.g., grass seed, mulch, gravel, sand).

37 In addition, disturbed sites could be promptly revegetated with native plant species.

38 Short- and long-term, negligible to minor, direct and indirect, adverse effects on wildlife
39 would occur from the Proposed Action. Temporary impacts on wildlife would be
40 expected due to noise disturbances from construction and demolition, which include

1 heavy equipment use. Loud noise events could cause wildlife to engage in escape or
2 avoidance behaviors; however, these effects would be temporary. Short-term increases in
3 noise levels from construction can reduce communication, inhibit predator detection, and
4 increase energy expenditures in wildlife species. Noise can also distort or mask bird
5 communications signals (e.g., songs, warning calls, fledgling begging calls) and their
6 ability to find prey or detect predators. If noise persists in a particular area, animals could
7 leave their habitat and avoid it permanently. Most wildlife species would be expected to
8 recover quickly from noise disturbance once the construction activities have ceased for
9 the day and after the construction and demolition period is complete. Noises associated
10 with construction and demolition would only be expected to affect individual animals
11 within close proximity to the noise sources. As a result, population-level impacts would
12 not be expected to occur.

13 Habitat removed under the Proposed Action is classified as the Tamaulipan Mixed
14 Deciduous Thornscrub Vegetation Alliance and dominated by mesquite. However, the
15 vast majority of available habitat in the surrounding area would not be affected by the
16 Proposed Action. Wildlife would be able to relocate to adjacent habitat. As a result,
17 impacts on wildlife habitat would be negligible.

18 No federally threatened or endangered species have been identified in or adjacent to the
19 project area; therefore, no effects on federally listed threatened or endangered species
20 would be expected from the Proposed Action. Temporary impacts on special status state-
21 listed species could occur from noise and ground disturbing activities associated with
22 construction and demolition. The contribution of noise disturbances from construction
23 and demolition activities under the Proposed Action to the ambient noise environment
24 would be negligible and temporary. Habitat removal would be minor and would not
25 preclude the use of habitat by any rare, threatened or endangered species. Although very
26 unlikely, if a population of state-listed species were discovered within the project area, it
27 would be protected from disturbance to the greatest extent practicable. Excavations
28 created on site during construction should not be left open overnight in order to prevent
29 wildlife from potentially being trapped. If excavated holes or trenches must be left
30 unfilled at the end of the work day, they should either be covered, have escape ramps
31 placed in them, or fenced off with an exclusion fence. Any holes or trenches left open
32 overnight should be inspected the following morning for wildlife that may have been
33 trapped. If any state-listed species are trapped in trenches, they should be removed by
34 personnel permitted by the TPWD to handle state-listed species. If encountered, state-
35 listed wildlife should be allowed to flee the construction site on their own.

36 Several migratory birds were documented during the project area survey and inactive
37 great-tailed grackle nests were documented; all of the avian species observed are
38 protected by the Migratory Bird Treaty Act. In order to avoid disturbing this species or
39 any other migratory bird that could use the project area, it is recommended that any
40 project land clearing take place outside of bird breeding season. While some species can
41 breed year-round in south Texas, the bird breeding season is considered March 15 to
42 September 15. If construction cannot be avoided during this window, a survey could be
43 conducted to identify migratory bird nests to avoid any active nests and unintentional
44 take of migratory birds during construction. In the event that clearing must occur during
45 the nesting season and active nests are observed during surveys, a 150-foot buffer of

1 vegetation would remain around the nests until the young have fledged or the nest is
2 abandoned.

3 **3.5.3.2 No Action Alternative**

4 Under the No Action Alternative, CBP would not renovate and expand the Eagle Pass
5 South Checkpoint. Vegetation adjacent to the current station would not be removed and
6 no impacts on biological resources would be expected.

7 **3.6 Cultural Resources**

8 **3.6.1 Definition of the Resource**

9 “Cultural resources” is an umbrella term for many heritage-related resources defined in
10 several federal laws and EOs, including the NHPA, Archeological and Historic
11 Preservation Act, American Indian Religious Freedom Act, Archaeological Resources
12 Protection Act, and Native American Graves Protection and Repatriation Act. The NHPA
13 focuses on cultural resources such as prehistoric and historic sites, buildings and
14 structures, districts, or other physical evidence of human activity considered important to
15 a culture, subculture, or community for scientific, traditional, religious, or other reasons.
16 Such resources might provide insight into the cultural practices of previous civilizations
17 or retain cultural and religious significance to modern groups. Resources judged
18 important under criteria established in the NHPA are considered eligible for listing in the
19 National Register of Historic Places (NRHP). These resources are termed “historic
20 properties” and are protected under the NHPA.

21 The Native American Graves Protection and Repatriation Act requires consultation with
22 culturally affiliated Native American tribes for the disposition of Native American human
23 remains, burial goods, and cultural items recovered from federally owned or controlled
24 lands. Typically, cultural resources are subdivided into archaeological sites (prehistoric or
25 historic sites containing physical evidence of human activity but no standing structures);
26 architectural sites (buildings or other structures or groups of structures, or designed
27 landscapes that are of historic or aesthetic significance); and sites of traditional, religious,
28 or cultural significance to Native American tribes.

29 Archaeological resources comprise areas where human activity has measurably altered
30 the earth or deposits of physical remains are found (i.e., artifacts). Architectural resources
31 include standing buildings, bridges, dams, and other structures of historic or aesthetic
32 significance. Generally, architectural resources must be more than 50 years old to warrant
33 consideration for the NRHP. More recent structures, such as Cold War-era resources,
34 might warrant protection if they are of exceptional importance or have the potential to
35 gain significance in the future. Resources of traditional, religious, or cultural significance
36 to Native American tribes can include archaeological resources, sacred sites, structures,
37 neighborhoods, prominent topographic features, habitats, plants, animals, and minerals
38 that Native Americans consider essential for the preservation of their traditional culture.

39 **3.6.2 Affected Environment**

40 **Site Records.** Numerous cultural resources investigations, including survey, testing, and
41 data recovery, have been conducted within Maverick County and have shown that this

1 part of Texas has been inhabited by human populations since approximately 9,500 years
2 before present.

3 A review of the Texas Historical Commission's Archeological Sites Atlas indicates that,
4 within a one-mile buffer zone of the project area, there have been two archaeological
5 surveys conducted and one archaeological site (41MV118) recorded. The first survey
6 (Object ID: 37760) was conducted by Northland Research, Inc., in 2012 for CBP, and the
7 second survey (Object ID: 1539) was conducted in 1995 for the Federal Highway
8 Administration. No further information on these surveys was available via the Atlas
9 (THC 2015).

10 Site 41MV118, located along Hwy 57 approximately 0.88 mile southwest of the project
11 area, consists of a lithic quarry and surface scatter site recorded in 1995. Archaeological
12 materials found at the site included a primary flake, three tested cobbles, a biface, a core,
13 and a bifacial, edge-modified flake all observed along the edge of the Hwy 57 right-of-
14 way. The site has been almost completely destroyed by the original highway construction
15 and associated maintenance. It was recommended not eligible for NRHP inclusion or for
16 listing as a State Antiquities Landmark (SAL).

17 No Official Texas Historical Markers, Recorded Texas Historic Landmarks, SALs,
18 cemeteries, or NRHP-eligible or listed resources or districts are within 1 mile of the
19 project area and will not be discussed further (THC 2015).

20 **Area History.** Historic patterns of occupation and land use around the project area are
21 very similar to those documented elsewhere in southwestern Texas. In general, early
22 Maverick County was rural and served as the gateway into Texas along the Camino Real
23 (Old San Antonio Road) as the early Spanish explorers began to venture across the Rio
24 Grande River (Ochoa 2010). Trade was limited by the primitive modes and avenues of
25 transportation; most early settlers strived for self-sufficiency and grew a variety of crops
26 to meet the basic needs of their families.

27 A cultural resources survey was conducted in the project area in January 2016 to
28 determine the presence/absence of archaeological resources (per 36 CFR § 800.4) and to
29 evaluate identified resources for their eligibility for inclusion in the NRHP, as per Section
30 106 (36 CFR § 800) of the National Historic Preservation Act of 1966, as amended, or as
31 a designated SAL under the Antiquities Code of Texas (13 Texas Administrative Code
32 26.12). Disturbances related to Hwy 57 were noted, and scattered limestone and chert
33 pebbles and cobbles were found on the surface throughout the project area, but none
34 exhibited evidence of cultural modification. No archaeological sites were identified
35 during the investigation. In accordance with 36 CFR § 800 and 13 Texas Administration
36 Code 26, no further archaeological investigations are recommended.

37 **3.6.3 Environmental Consequences**

38 Adverse effects on cultural resources can include physically altering, damaging, or
39 destroying all or part of a resource; altering characteristics of the surrounding
40 environment that contribute to the resource's significance; introducing visual or audible
41 elements that are out of character with the property or that alter its setting; neglecting the
42 resource to the extent that it deteriorates or is destroyed; or the sale, transfer, or lease of
43 the property out of federal agency ownership (or control) without adequate legally

1 enforceable restrictions or conditions to ensure preservation of the property’s historic
2 significance.

3 **3.6.3.1 Proposed Action**

4 No impacts on cultural resources would be expected from implementation of the
5 Proposed Action. Archaeological site 41MV118 is 0.88 mile from the project area and
6 would not be expected to be impacted because of its distance from the project area.
7 Additionally, no NRHP sites exist within a 1-mile radius of the project area. Therefore, it
8 is unlikely that the proposed renovation of the Eagle Pass South Checkpoint within the
9 approximately 7-acre project area would affect cultural resources in the project area.
10 Therefore, no effect on cultural resources would be expected. CBP received concurrence
11 from the Texas State Historic Preservation Office on February 24, 2016 that no historic
12 properties are affected.

13 **3.6.3.2 No Action Alternative**

14 No impacts on cultural resources would be expected under the No Action Alternative.
15 Under the No Action Alternative, CBP would not renovate and expand the checkpoint
16 along Hwy 57 and would continue to operate the existing checkpoint.

17 **3.7 Water Resources**

18 **3.7.1 Definition of the Resource**

19 Groundwater is a subsurface hydrologic resource. It functions to recharge surface water
20 and is used for drinking, irrigation, and industrial processes. Groundwater can typically
21 be described in terms of its depth from the surface, aquifer or well capacity, water
22 quality, recharge rate, and surrounding geologic formations. The project area is located
23 within a Groundwater Management Area as designated by the Texas Water Development
24 Board. Groundwater Management Areas provide for the “conservation, preservation,
25 protection, recharging, and prevention of waste” of groundwater (TWDB 2016).

26 Surface water resources generally consist of wetlands, lakes, rivers, and streams. Surface
27 water is important for its contributions to the economic, ecological, recreational, and
28 human health of a community or locale. Waters of the United States are defined under
29 Section 404 of the CWA, as amended, as (1) traditional navigable waters, (2) wetlands
30 adjacent to navigable waters, (3) nonnavigable tributaries of traditional navigable waters
31 that are relatively permanent where the tributaries typically flow perennially or have
32 continuous flow at least seasonally (e.g., typically 3 months), and (4) wetlands that
33 directly abut such tributaries. Waters of the United States are regulated by USEPA and
34 the U.S. Army Corps of Engineers.

35 The CWA (33 United States Code [U.S.C.] Section 1251 et seq., as amended) establishes
36 federal limits, through the NPDES program, on the amounts of specific pollutants that
37 can be discharged into surface waters to restore and maintain the chemical, physical, and
38 biological integrity of the water. The NPDES program regulates the discharge of point
39 (i.e., end of pipe) and nonpoint sources (i.e., storm water) of water pollution. The State of
40 Texas assumed the authority to administer the NPDES program in Texas on September
41 14, 1998. The Texas Commission on Environmental Quality Texas Pollutant Discharge

1 Elimination System program now has federal regulatory authority over most discharges
2 of pollutants to Texas surface water.

3 No wetlands or floodplains exist within or directly adjacent to the project area and are not
4 discussed further (FEMA 2011).

5 **3.7.2 Affected Environment**

6 **Groundwater.** The project area is located between the Rio Grande Alluvium and the
7 Carrizo-Wilcox aquifers. Groundwater at the project area most likely drains to the east
8 towards the Carrizo-Wilcox aquifer (TWDB 2011). The alluvial aquifer of the Rio
9 Grande Alluvium consists of terrace, flood-plain and delta deposits of the Rio Grande.
10 These deposits are made up of unconsolidated gravel, sand, silt and clay (USGS
11 Undated). The Carrizo-Wilcox aquifer reaches 3,000 feet in thickness and primarily
12 consists of sand locally interbedded with gravel, silt, clay, and lignite (TWDB 2011). The
13 depth to the water table for the Dant and Pryor association soils (described in **Section**
14 **3.4.2.**) is more than 80 inches (NRCS 2016).

15 **Surface Water.** The project area generally drains in a southeastern direction and is in the
16 Turkey Sub-basin of the Nueces River Basin. A substantial portion of the Nueces River
17 and its tributaries enter fractured and cavernous limestone formations of the Edwards
18 Aquifer Balcones Fault Zone, north (upstream on the Nueces River) of the project area.
19 As a result, stream flows in the Nueces River Basin downstream from the recharge zone
20 consists almost entirely of storm water (TCEQ 2016). At its closest distance, the project
21 area is approximately 140 feet northwest of an unnamed arroyo that drains into Colorado
22 Tank, an approximately 3-acre pond located on private property.

23 **3.7.3 Environmental Consequences**

24 A proposed action would be considered to cause a significant, adverse impact on water
25 resources if it were to substantially affect water quality; substantially reduce water
26 availability or supply to existing users; threaten or damage hydrologic characteristics; or
27 violate established Federal, state, or local laws and regulations.

28 **3.7.3.1 Proposed Action**

29 **Groundwater.** Long-term, negligible, adverse impacts on groundwater could occur under
30 the Proposed Action from increased sedimentation from runoff due to construction and
31 creation of new impervious surfaces in groundwater recharge areas. Distribution of
32 groundwater recharge across the project area could change (e.g., recharge would become
33 slightly more concentrated in infiltration areas); however, these changes in drainage
34 would be highly localized, site-specific, and negligible. All construction equipment
35 would be maintained according to the manufacturer's specifications and all fuels and
36 other potentially hazardous materials would be contained and stored appropriately to
37 avoid spills. In the event of a spill, procedures outlined in CBP's spill protection plan
38 would be followed to quickly contain and clean up a spill. BMPs outlined in the spill
39 protection plan would be enacted and CBP would comply with the Spill Prevention,
40 Control, and Countermeasures Rule (40 CFR § 112) and existing groundwater protection
41 protocols as required under the Safe Drinking Water Act.

1 **Surface Water.** Short- and long-term, negligible, adverse impacts on surface water would
2 be expected from vegetation removal, construction, and resulting increase in impervious
3 surfaces. Construction and demolition could cause the deposition of fill materials or
4 increased sedimentation into the unnamed arroyo that drains into Colorado Tank;
5 however, erosion-control BMPs, such as placing fabric filters, sandbag enclosures, or
6 other capture devices around the work area, would be implemented to maintain runoff on
7 site and would minimize the potential for adverse effects on downstream water quality.
8 Pertinent local, state, and federal permits would be obtained for any work. No impacts on
9 water resources would be expected from operation of the updated checkpoint.

10 3.7.3.2 No Action Alternative

11 Under the No Action Alternative, renovations and expansion of the Eagle Pass South
12 Checkpoint would not occur. Land would not be disturbed, and water resources would
13 remain as described in **Section 3.7.2**. No impacts on water resource would occur.

14 3.8 Hazardous Materials and Wastes

15 3.8.1 Definition of the Resource

16 Hazardous materials are defined by 49 CFR § 171.8 as “hazardous substances, hazardous
17 wastes, marine pollutants, elevated temperature materials, materials designated as
18 hazardous in the Hazardous Materials Table (49 CFR § 172.101), and materials that meet
19 the defining criteria for hazard classes and divisions” in 49 CFR § 173. Transportation of
20 hazardous materials is regulated by the U.S. Department of Transportation regulations
21 within 49 CFR § 105–180.

22 Hazardous waste is defined by the RCRA at 42 U.S.C. § 6903(5), as amended by the
23 Hazardous and Solid Waste Amendments, as “a solid waste, or combination of solid
24 wastes, which because of its quantity, concentration, or physical, chemical, or infectious
25 characteristics may (A) cause, or significantly contribute to an increase in mortality or an
26 increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a
27 substantial present or potential hazard to human health or the environment when
28 improperly treated, stored, transported, or disposed of, or otherwise managed.” Certain
29 types of hazardous wastes are subject to special management provisions intended to ease
30 the management burden and facilitate the recycling of such materials. These are called
31 universal wastes and their associated regulatory requirements are specified in 40 CFR §
32 273.

33 Special hazards are those substances that might pose a risk to human health and are
34 addressed separately from other hazardous substances. Special hazards include asbestos-
35 containing materials (ACM), lead-based paint (LBP), and polychlorinated biphenyls
36 (PCBs). USEPA is given authority to regulate these special hazard substances by the
37 Toxic Substances Control Act, Title 15 U.S.C. Chapter 53. USEPA has established
38 regulations regarding asbestos abatement and worker safety under 40 CFR § 763 with
39 additional regulation concerning emissions (40 CFR § 61). Whether from lead abatement
40 or other activities, depending on the quantity or concentration, the disposal of the LBP
41 waste is potentially regulated by the RCRA at 40 CFR § 260. The disposal of PCBs is
42 addressed in 40 CFR §§ 750 and 761.

1 Evaluation of hazardous materials and wastes focuses on underground storage tanks;
2 aboveground storage tanks (ASTs); and the presence, storage, transport, handling, and
3 use of pesticides, herbicides, fuels, solvents, oils, lubricants, ACMs, PCBs, and LBP. The
4 evaluation also extends to the generation, storage, transportation, and disposal of
5 hazardous wastes when such activity occurs at or near the site of a proposed action. In
6 addition to being a threat to humans, the improper release of hazardous materials and
7 wastes can threaten the health and well-being of wildlife species, botanical habitats, soil
8 systems, and water resources. In the event of a release of hazardous materials or wastes,
9 the extent of contamination varies based on the contaminant and the type of soil,
10 topography, and water resources.

11 **3.8.2 Affected Environment**

12 ***Hazardous Materials, Hazardous Wastes, and Petroleum Products.*** No bulk quantities
13 of hazardous materials, hazardous wastes, or petroleum products are associated with the
14 checkpoint. Minimal quantities of hazardous materials (e.g., cleaning products) are used
15 and minimal quantities of hazardous wastes are generated at the checkpoint from
16 everyday functions. Petroleum products (i.e., diesel fuel) are limited to the checkpoint's
17 backup electrical generator, an outdoor heater, a flood light, and four 5-gallon storage
18 containers.

19 ***Asbestos-Containing Material.*** Asbestos is regulated by USEPA under the Clean Air
20 Act, TSCA, and Comprehensive Environmental Response, Compensation, and Liability
21 Act. USEPA has established that any material containing more than 1 percent asbestos by
22 weight is considered an ACM. Common ACMs include siding, ceiling tiles, floor tiles,
23 floor tile mastic, roofing materials, joint compound, wallboard, thermal system
24 insulation, boiler gaskets, paint, and other materials. ACMs were used in construction
25 materials until the early 1980s; use since then is uncommon.

26 ***Lead-Based Paint.*** Lead is a heavy, ductile metal commonly found simply as metallic
27 lead or in association with organic compounds, oxides, and salts. It was commonly used
28 in paint until the federal government banned the use of most LBP in 1978. Therefore, it is
29 assumed that all structures constructed prior to 1978 contain LBP. The existing Eagle
30 Pass South Checkpoint was constructed approximately 19 years ago; therefore, LBP is
31 unlikely to be present.

32 ***Polychlorinated Biphenyls.*** Chemicals classified as PCBs were widely manufactured and
33 used in electronic equipment in the United States throughout the 1950s and 1960s;
34 however, production of PCBs was banned in the United States in 1979. The existing Eagle
35 Pass South Checkpoint is approximately 19 years old; therefore, PCB-containing
36 equipment is unlikely to be present.

37 ***Contamination.*** Concurrent with this EA, CBP has prepared a Phase I Environmental
38 Site Assessment on the Eagle Pass South Checkpoint to identify potential areas of
39 contamination. The Phase I ESA did not identify any known or suspected areas of
40 contamination at or adjacent to the checkpoint with exception of scattered ground surface
41 stains estimated to be covering an area of approximately 30 square feet on the paved surface
42 to the northeast and southwest of the checkpoint trailer on existing checkpoint property.
43 These stains appeared to be the result of drips from equipment and vehicles. Additional

1 staining was observed under the hydraulic lift control panel and under four 5-gallon diesel
2 storage containers. Based on the limited size of the stains, they are considered to be *de*
3 *minimis* and do not represent an environmental threat to the property.

4 3.8.3 Environmental Consequences

5 Impacts on hazardous materials management would be considered significant if a
6 proposed action resulted in worker, resident, or visitor exposure to these materials above
7 established exposure thresholds. Impacts on hazardous materials management would be
8 considered significant if the federal action resulted in noncompliance with applicable
9 federal and respective state regulations, or increased the amounts generated or procured
10 beyond current CBP hazardous materials management procedures and capacities.

11 3.8.3.1 Proposed Action

12 ***Hazardous Materials, Hazardous Wastes, and Petroleum Products.*** Short-term,
13 negligible, adverse impacts would occur from the use of hazardous materials and
14 petroleum products and the generation of hazardous wastes during construction.
15 Construction would require the delivery and use of minimal amounts of hazardous
16 materials and petroleum products and would generate minimal amounts of hazardous
17 wastes. Contractors would be responsible for the management of hazardous materials,
18 hazardous wastes, and petroleum products during construction. These products would be
19 handled in accordance with federal, state, and local regulations and would not be
20 expected to increase the risks of exposure to workers and the public.

21 Long-term, minor, beneficial impacts on hazardous materials, hazardous wastes, and
22 petroleum products would occur from the operation of the renovated and expanded
23 checkpoint. Similar types and quantities of hazardous materials and petroleum products
24 would be stored and used at the renovated checkpoint as current conditions; however,
25 secondary containment would be used to store the four 5-gallon diesel storage containers,
26 thus reducing the risk of spills. Similar types and quantities of hazardous wastes would
27 also be generated at the renovated checkpoint as current conditions.

28 ***Asbestos-Containing Material, Lead-Based Paint, and Polychlorinated Biphenyls.*** No
29 impacts from ACMs, LBP, and PCBs would be expected. These materials are unlikely to
30 be present at the existing checkpoint and, therefore, would not be encountered during
31 renovation and expansion. These materials would not be used in new construction.

32 ***Contamination.*** No impacts from environmental contamination would occur because no
33 known or suspected areas of contamination have been identified at the checkpoint or
34 adjacent properties.

35 3.8.3.2 No Action Alternative

36 No impacts on hazardous materials and wastes would be expected under the No Action
37 Alternative. Under the No Action Alternative, CBP would not renovate and expand the
38 Eagle Pass South Checkpoint and would continue to operate the existing checkpoint.

1 **3.9 Health and Safety**

2 **3.9.1 Definition of the Resource**

3 A safe environment is one in which there is no, or an optimally reduced, potential for
4 death, serious bodily injury or illness, or property damage. Human health and safety
5 addresses workers' and the public's health and safety during construction activities and
6 subsequent operation of the newly constructed facilities.

7 Construction site safety requires adherence to regulatory requirements imposed for the
8 benefit of employees. It includes implementation of engineering and administrative
9 practices that aim to reduce risks of illness, injury, death, and property damage. The
10 health and safety of onsite workers and personnel are safeguarded by numerous
11 regulations designed to comply with standards issued by OSHA, USEPA, and state
12 occupational safety and health agencies. These standards specify health and safety
13 requirements, the amount and type of training required for workers, the use of personal
14 protective equipment (PPE), administrative controls, engineering controls, and
15 permissible exposure limits for workplace stressors.

16 Health and safety hazards can often be identified and reduced or eliminated. Necessary
17 elements for an accident-prone situation or environment include the presence of the
18 hazard itself together with the exposed (and possibly susceptible) population. The degree
19 of exposure depends primarily on the proximity of the hazard to the population. Hazards
20 include transportation, maintenance, and repair, and the creation of noisy environments.

21 **3.9.2 Affected Environment**

22 ***Contractor Safety.*** All contractors performing demolition or construction activities are
23 responsible for following ground safety and OSHA regulations, and are required to
24 conduct construction activities in a manner that does not increase risk to workers or the
25 public. The Texas Department of Insurance, Division of Workers' Compensation
26 provides safety and health resources to employers, employees, and other organizations
27 that support the Texas workforce. In addition, OSHA also provides safety and health
28 resources to employees and employers working in Texas.

29 Occupational safety and health programs address health and safety of people at work.
30 OSHA regulations cover potential exposure to a wide range of chemical, physical,
31 biological, and ergonomic stressors. The regulations are designed to control these hazards
32 by eliminating exposure to hazards via administrative or engineering controls,
33 substitution, or use of PPE. Occupational safety and health is the responsibility of each
34 employer, as applicable.

35 ***USBP Personnel Safety.*** USBP personnel are responsible for complying with the OSHA
36 and DHS safety and health requirements. DHS Directive 066-01, *Safety and Health*
37 *Programs*, establishes the DHS's policies, responsibilities, and requirements regarding
38 safety and health programs. The purpose of DHS safety and health programs are to
39 prevent or minimize the loss of DHS resources and to protect employees, contractors, and
40 the visiting public from accidental death, injury, or illness by managing risks through
41 implementation of the tenets of operational risk management and response plans.

1 **Public Safety.** Fire department and emergency medical services are provided to the Eagle
2 Pass South Checkpoint from the City of Eagle Pass Fire Station #2. The fire station
3 consists of approximately four full-time firefighters and one fire truck, one pumper truck,
4 one ambulance, and one rescue unit. The department responds to approximately 1,400
5 calls per year (approximately four calls per day). Police department services are provided
6 both by the Eagle Pass Police Department and the Maverick County Sheriff. The police
7 department, sheriff's stations and fire department are located within the city of Eagle
8 Pass, which is approximately 10 miles from the Eagle Pass South Checkpoint

9 **3.9.3 Environmental Consequences**

10 If implementation of the Proposed Action were to increase risks associated with the
11 safety of construction personnel, contractors, USBP personnel, or the local community,
12 or hinder the ability to respond to an emergency, it would represent an adverse effect. An
13 effect would be significant if implementation of the Proposed Action were to
14 substantially increase these risks or introduce a new health or safety risk for which the
15 checkpoint is not prepared or does not have adequate management and response plans in
16 place.

17 **3.9.3.1 Proposed Action**

18 **Contractor Safety.** Short-term, negligible, adverse impacts on contractor safety would be
19 expected during construction of the Proposed Action. Construction would pose an
20 increased risk of construction-related accidents; however, adherence to established
21 federal and state safety regulations would reduce this risk. Workers would be required to
22 wear PPE such as ear protection, steel-toed boots, hard hats, gloves, and other appropriate
23 safety products. Employer responsibilities would include assessing potential hazardous
24 workplace conditions; monitor employee exposure to workplace chemicals, physical, and
25 biological agents, and ergonomic stressors; recommend and evaluate controls to ensure
26 exposure to personnel is eliminated or adequately controlled; and ensure a health and
27 safety program is in place to perform occupational health physicals for those workers
28 subject to the use of respiratory protection, or engaged in hazardous waste, or other work
29 requiring medical monitoring. Construction areas would be fenced and appropriately
30 marked with signs to prevent trespassing. Construction equipment and associated trucks
31 transporting material to and from the project sites would use Hwy 57. All equipment
32 operators would be required to be fully trained and licensed for their assigned jobs.

33 **USBP Personnel Safety.** Impacts on USBP personnel safety would be long-term, minor,
34 and beneficial. The Proposed Action would provide a new facility with modern and safe
35 working conditions to accommodate the current and projected staff, vehicles, and
36 equipment at the Eagle Pass South Checkpoint. Anti-terrorism/force protection would be
37 incorporated into the facility design.

38 **Public Safety.** Construction would not pose a safety risk to the public as the work site
39 would be fenced and appropriate signs would be posted to further reduce safety risks to
40 the public. Therefore, renovation of the checkpoint would not be expected to have
41 adverse impacts on public safety. Long-term, beneficial impacts could occur as a result of
42 improving law enforcement efficiency with the U.S./Mexico international border area.

1 **3.9.3.2 No Action Alternative**

2 Under the No Action Alternative the existing Eagle Pass South Checkpoint would not be
3 demolished and a new, more modern checkpoint facility would not be constructed. The
4 No Action Alternative would be expected to have long-term, minor, adverse impacts on
5 the safety of USBP personnel and the public because the checkpoint would continue to be
6 exposed to increased traffic and would not have the adequate and necessary facilities to
7 accommodate such an increase.

8 **3.10 Roadways and Traffic**

9 **3.10.1 Definition of the Resource**

10 The transportation resource is defined as the system of roadways and highways that are in
11 the vicinity of a proposed action and could reasonably be affected by a proposed action.
12 Traffic relates to changes in the number of vehicles on roadways and highways as a result
13 of a proposed action.

14 **3.10.2 Affected Environment**

15 The Eagle Pass South Checkpoint occurs along Hwy 57, which extends southwest from
16 the checkpoint toward Eagle Pass and the U.S./Mexico international border, and northeast
17 toward Moore, Texas. Hwy 57 is a two-lane U.S. highway route with an average speed
18 limit of 75 miles per hour. As a result of the booming oil/gas industry related to the Eagle
19 Shale, Hwy 57 has seen an increase in the amount of daily traffic. The annual average
20 daily traffic for Hwy 57 has increased by approximately 7 percent between 2013 and
21 2014. Approximately 31 percent of the traffic on Hwy 57 during a 24-hour period is
22 comprised of trucks. There is a single-lane, unimproved farm road northeast of the
23 checkpoint that runs northwest-southeast, which is outside the project area (TXDOT
24 2014, TXDOT 2016).

25 **3.10.3 Environmental Consequences**

26 Impacts on traffic and transportation are evaluated by how well existing roadways can
27 accommodate changes in traffic. Significant adverse effects would occur if drivers
28 experience high delays as a result of a proposed action altering traffic patterns beyond
29 existing roadway capacity.

30 **3.10.3.1 Proposed Action**

31 Impacts on traffic and transportation from renovation of the Eagle Pass South Checkpoint
32 would be short-term, minor, and adverse. Renovation of the checkpoint would
33 temporarily increase the number of trucks and cars on Hwy 57 associated with
34 construction. The added traffic would compose a small percentage of the total existing
35 traffic on Hwy 57.

36 Long-term, minor, beneficial impacts on traffic and transportation would be expected
37 from the operation of the renovated Eagle Pass South Checkpoint. With the addition of
38 one to three new acceleration and deceleration lanes, traffic would be expected to flow
39 more efficiently along Hwy 57 because CBP would be able to more efficiently conduct
40 vehicle traffic inspections.

1 **3.10.3.2 No Action Alternative**

2 Under the No Action Alternative, the existing Eagle Pass South Checkpoint would not be
3 demolished and a new, more modern checkpoint facility would not be constructed.
4 Traffic conditions would continue to worsen, and CBP resources would continue to be
5 exposed to increased traffic and would not have the adequate and necessary facilities to
6 accommodate such an increase.

7 **3.11 Infrastructure and Utilities**

8 **3.11.1 Definition of the Resource**

9 Infrastructure consists of the systems and physical structures that enable a population in a
10 specified area to function. Infrastructure is wholly human-made, with a high correlation
11 between the type and extent of infrastructure and the degree to which an area is
12 characterized as “urban” or developed. The availability of infrastructure and its capacity
13 to support growth are generally regarded as essential to the economic growth of an area.

14 **3.11.2 Affected Environment**

15 Utilities potentially affected by the Proposed Action include electrical supply, water
16 supply, wastewater service, and storm water management. Because natural gas service is
17 not available to the checkpoint and the Proposed Action would not appreciably affect
18 telecommunications and solid waste management, an analysis of these utilities is not
19 necessary. This infrastructure analysis also considers the impacts of the Proposed Action
20 on the nation’s border security infrastructure.

21 **Electrical Supply.** Electricity is provided to the checkpoint by the Rio Grande Electric
22 Cooperative. A 36-kilowatt generator provides a secondary source for electricity during
23 power outages. The generator was refurbished in October 2015 and is maintained by
24 USBP Facilities Management & Engineering mechanics.

25 **Water Supply.** The checkpoint is not supplied with municipal water and does not use a
26 private groundwater well. Potable water is delivered to the checkpoint in 5-gallon
27 containers from commercial suppliers. Non-potable water, which is used only in sinks
28 and lavatories, is stored in two, 1,600-gallon, mobile ASTs located northeast of the
29 building. These ASTs are taken to the USBP station in Eagle Pass and refilled every 2 to
30 3 days. Aboveground water piping connects the building to the water storage tanks.

31 **Wastewater Service.** Wastewater generated at the checkpoint is disposed of via a septic
32 system. The drainage field for the septic system is immediately east of the checkpoint on
33 the adjacent property, per an agreement with the landowner, which CBP would acquire
34 under the Proposed Action. Wastewater is generated only in the sinks and lavatories of
35 the checkpoint.

36 **Storm Water Management.** No man-made storm water infrastructure is associated with
37 the checkpoint. Storm water generally drains via overland flow to the east away from the
38 checkpoint.

1 **Border Security Infrastructure.** The Eagle Pass South Checkpoint itself is part of a
2 network of infrastructure that CBP uses to secure the nation's borders against threats. The
3 deficiencies of the checkpoint compromise the effectiveness of CBP to meet its
4 objectives to secure the borders. The most prominent deficiency of the checkpoint is the
5 limited processing abilities, which can result in long wait times during periods of heavy
6 traffic and introduce safety concerns to agents and civilians.

7 **3.11.3 Environmental Consequences**

8 Effects on infrastructure are evaluated for their potential to disrupt or improve existing
9 levels of service and create additional needs for utilities. For example, effects might arise
10 from energy needs created by either direct or indirect workforce and population changes
11 related to activities. An impact could be significant if the Proposed Action resulted in any
12 of the following:

- 13 · Exceeded capacity of a utility
- 14 · Long-term interruption of the utility
- 15 · Violation of a permit condition
- 16 · Violation of an approved plan for that utility.

17 **3.11.3.1 Proposed Action**

18 **Electrical Supply.** Short-term, negligible, adverse effects on electrical supply would
19 occur during the construction of the renovated checkpoint. Temporary electrical service
20 interruptions might be experienced when service is disconnected from the existing
21 checkpoint and connected to the renovated checkpoint. Any electrical service
22 interruptions would be temporary and coordinated with users prior to the occurrence.
23 Construction of the renovated checkpoint would result in a negligible, temporary increase
24 in electrical demand because of the electricity needed to power the construction
25 equipment.

26 Long-term, minor, beneficial effects on electrical supply would occur following the
27 proposed renovation and expansion activities. No appreciable changes in electricity
28 demand would occur following renovation because the number of staff assigned to the
29 renovated checkpoint and the overall size of the facility would be similar to existing
30 conditions. Additionally, portable light stands could be deployed in order to provide
31 supplemental light to the checkpoint. Because the existing generator was recently
32 refurbished, the reliability of the checkpoint's backup power supply would remain stable.

33 **Water Supply.** Short-term, negligible, adverse effects on water supply would occur
34 during construction of the renovated checkpoint. Construction would require minimal
35 amounts of water, primarily for dust suppression. Construction contractors would deliver
36 water to the project site in trucks.

37 Long-term, minor, beneficial effects on water supply would occur following the proposed
38 renovation and expansion activities. Demand for potable and non-potable water at the
39 checkpoint would not change following renovation however, CBP may install a new
40 water well if it is determined that a water well would be more efficient than trucking

1 water to the checkpoint. A new water well system would include construction of the
2 associated infrastructure including piping. If a water well is not installed the non-potable
3 water supply piping between the checkpoint and the two mobile ASTs would be
4 upgraded by burying the pipes. This upgrade would reduce the potential for the pipes to
5 break. Use of more efficient potable water infrastructure in the new checkpoint facility
6 would also be beneficial.

7 **Wastewater Service.** No effects on wastewater service would occur. The renovated
8 checkpoint would include plans to either renovate the existing septic system or to replace
9 the system, as necessary, in order to accommodate expanded facilities. No changes to the
10 amounts of wastewater generated are anticipated.

11 **Storm Water Management.** Short-term, minor, adverse effects on storm water drainage
12 would occur during construction of the renovated checkpoint. Ground disturbance would
13 temporarily increase the potential for soil erosion and sediment transport during rain
14 events. Soil erosion and sediment production would be minimized during construction by
15 developing and implementing an erosion and sediment control plan, Storm Water
16 Pollution Prevention Plan, and Section 438 of the Energy Independence and Security Act,
17 which requires use of low-impact development such as permeable pavement. CBP would
18 obtain any applicable storm water discharge permits. BMPs would also be implemented
19 to minimize ground surface disturbance and provide adequate, temporary storm water-
20 handling methods.

21 Long-term, negligible to minor, adverse effects on storm water drainage would occur
22 following construction. The renovated and expanded checkpoint would increase the
23 amount of impervious surface; therefore, the amount of area available for storm water to
24 permeate into the ground would be reduced, thereby resulting in a slight increase in storm
25 water runoff. Appropriate long-term storm water-control measures, including a storm
26 water detention basin, may be incorporated into the final design of the renovated
27 checkpoint to reduce, limit, and control storm water runoff to preconstruction rates.

28 **Border Security Infrastructure.** Long-term, minor, beneficial effects on border security
29 infrastructure would occur following the proposed checkpoint renovation and expansion.
30 CBP's ability to quickly, safely, and accurately process vehicles would improve with the
31 renovated checkpoint. Construction of the additional checkpoint lanes on Hwy 57 would
32 allow vehicles to be processed simultaneously and consequently reduce wait times.

33 3.11.3.2 No Action Alternative

34 No impacts on infrastructure and utilities would be expected under the No Action
35 Alternative. Under the No Action Alternative, CBP would not renovate and expand the
36 checkpoint along Hwy 57 and would continue to operate the existing checkpoint. The
37 existing infrastructure and utilities at the checkpoint would remain in service.

38 3.12 Socioeconomics

39 3.12.1 Definition of the Resource

40 Socioeconomics is defined as the basic attributes and resources associated with the
41 human environment, particularly characteristics of population and economic activity.

1 Demographics, employment characteristics, and housing occupancy status data provide
2 key insights into socioeconomic conditions that might be affected by a proposed action.

3 **3.12.2 Affected Environment**

4 For the purposes of this socioeconomic analysis, four different spatial levels were used:
5 (1) Census Tract 9507 in which the Proposed Action occurs, (2) Maverick County, (3) the
6 State of Texas and (4) the United States. The selected spatial levels illustrate the
7 socioeconomic characteristics for the areas adjacent to the Eagle Pass South Checkpoint
8 where the most impacts from the Proposed Action would be expected to occur. Census
9 tract data represent the immediate area in which the Proposed Action would occur while
10 Maverick County, Texas and the United States data is used as a baseline level for
11 comparison.

12 **Demographics.** Population data for the analyzed spatial levels in 2000 and 2010 are
13 presented in **Table 3-7**. Five-year estimates from 2010 to 2014 are provided to offer a
14 more precise estimate of current conditions. In 2000, the Eagle Pass South Checkpoint
15 was located within Census Tract 9501; however, between 2000 and 2010 the Census
16 Tracts for Maverick County were redrawn, and the checkpoint is now located within
17 Census Tract 9507. Therefore, the percent change in the population from 2000 to 2014
18 does not provide the analysis with accurate information on the population surrounding the
19 checkpoint between those years. Maverick County saw an increase in population between
20 2000 and 2010 (14.7 percent change) as well as between 2000 and 2014 (18.0 percent
21 change), less than Texas but greater than the United States as a whole (USCB 2000,
22 USCB 2010, USCB 2014a).

23 **Table 3-7. Population Counts and Estimates for Spatial Levels in 2000, 2010 and**
24 **2014**

Location	2000	2010	2014 ^b	Percent Change 2000 to 2010	Percent Change 2000 to 2014 ^b
Census Tract 9507	N/A ^a	9,412	10,086	N/A	N/A
Maverick County	47,297	54,258	55,821	14.7	18.0
Texas	20,851,820	25,145,561	26,092,033	20.6	25.1
United States	281,421,906	308,745,538	314,107,084	9.7	11.6

Sources: USCB 2000, USCB 2010, USCB 2014a

^a The Eagle Pass South Checkpoint was located in Census Tract 9501 in 2000

^b 2014 data represent 5-year estimates from 2010 to 2014 and are meant to provide a more precise estimate of current conditions across all spatial levels.

25 **Employment Characteristics.** The total workforce within Maverick County is 20,043
26 people. As of 2014, approximately one quarter of the Census Tract 9507 workforce was
27 employed within the education, health, and social services industry, which was the most
28 common occupational industry in Maverick County, Texas, and the United States. The
29 agriculture, forestry, fishing and hunting and mining industry in Census Tract 9507

1 represented approximately 19 percent of the workforce and was the highest of all the
 2 spatial levels for that specific industry. **Table 3-8** presents information regarding
 3 employment by industry from 2010 to 2014 for all the spatial levels (USCB 2014c).

4 **Table 3-8. Employment Characteristics by Industry for 2010 to 2014**

Industry	Census Tract 9507	Maverick County	Texas	United States
Percentage of civilian population 16 years old and over in the labor force	52.8	58.0	64.4	63.5
Percentage of employed persons in the Armed Forces	0.0	0.0	0.5	0.4
Agriculture, forestry, fishing and hunting and mining	19.1	9.5	3.3	2.0
Construction	3.3	6.4	7.8	6.2
Manufacturing	1.3	4.2	9.3	10.4
Wholesale trade	2.7	2.3	3.0	2.7
Retail trade	10.9	11.3	11.6	11.6
Transportation and warehousing, and utilities	7.7	6.3	5.4	4.9
Information	0.5	0.6	1.8	2.1
Finance, insurance, real estate, and rental and leasing	2.8	4.3	6.6	6.6
Professional, scientific, management, administrative, and waste management services	2.2	3.2	10.9	10.9
Education, health, and social services	25.3	29.2	21.8	23.2
Arts, entertainment, recreation, accommodation, and food services	7.6	9.1	8.8	9.5
Other services (except public administration)	3.2	3.1	5.4	5.0
Public administration	13.4	10.6	4.4	4.9

Sources: USCB 2014c

Note: 2014 data represent 5-year estimates from 2010 to 2014.

5 **3.12.3 Environmental Consequences**

6 The significance of socioeconomic effects is assessed in terms of direct and indirect
 7 effects on the local economy and related effects on other socioeconomic resources (e.g.,
 8 income, housing, and employment). The magnitude of potential effects can vary greatly,

1 depending on the location of a proposed action. For example, implementation of an
2 action that creates 10 employment positions might be unnoticed in an urban area, but
3 could have substantial effects in a rural community.

4 **3.12.3.1 Proposed Action**

5 Impacts on socioeconomics as a result of the Proposed Action would be short-term,
6 negligible, and beneficial. Impacts from demolition and construction would stimulate the
7 local economy through increases in payroll taxes, sales receipts, and the indirect purchase
8 of goods and services. Construction workers could come from within Maverick County
9 because the demolition and construction would not require specialized workers and, as of
10 2014, approximately 1,283 people (6.4 percent) work in the construction industry in
11 Maverick County and would easily be able to meet demand. Negligible, beneficial
12 impacts on employment could occur from a potential increase in USBP personnel at the
13 checkpoint. However, any increase in personnel would likely represent only a small
14 fraction of the available workforce within Maverick County.

15 **3.12.3.2 No Action Alternative**

16 No impacts on socioeconomics would be expected under the No Action Alternative. CBP
17 would not renovate and expand the checkpoint along Hwy 57 and would continue to
18 operate the existing checkpoint. The existing socioeconomic conditions would remain as
19 they are described in **Section 3.12.2**.

THIS PAGE INTENTIONALLY LEFT BLANK

4. Cumulative and Other Adverse Effects

Cumulative impacts can result from individually minor but collectively significant past, present, and foreseeable future actions. For the purposes of the analysis in this section, consideration was given to cumulative impacts of all projects identified within a reasonable distance to the project area dependent on the resource. In this instance, the isolated area surrounding the project is unlikely to be subjected to the compounding activity of other entities, particularly because such activities take place on an infrequent basis. The geographic scope of the analysis varies by resource area. Cumulative impacts on air quality; noise; geological, biological, cultural, and water resources; hazardous materials and wastes; human health and safety; roadways and traffic; and infrastructure and utilities would occur within the construction footprint of the Proposed Action. Cumulative impacts on noise and geological, biological, and water resources could occur beyond the construction footprint but would be limited to the area immediately surrounding the area (approximately 1 mile). Cumulative impacts on utilities and air quality could occur beyond the project area; however, no long-term appreciable change in utilities would be expected, and impacts on air quality would not likely exceed attainment area significance criteria.

4.1 Past, Present and Future Actions near the Eagle Pass South Checkpoint

Past and present actions are those actions that occurred within the geographic scope of cumulative effects prior to the development of this EA or are concurrently being undertaken in the geographic area of the proposed project area. Past actions have shaped the current environmental conditions in close proximity (i.e., within several miles) to the existing Eagle Pass South Checkpoint. Therefore, the effects of past actions are now part of the existing environment and are generally included in the affected environment described in **Section 3**. Present actions consist of current maintenance of the checkpoint and continued use of ranchland, or updates to Hwy 57 and future actions would consist of maintenance of Hwy 57 or any changes to nearby ranchland. CBP is considering renovating other checkpoints in the state of Texas; however, they are outside the geographic scope of this project.

4.2 Cumulative Impacts Analysis of the Proposed Action

Implementation of the Proposed Action would result in the demolition of existing infrastructure and construction of new facilities and associated infrastructure. However, given the remote location of the proposed project area, implementation of the Proposed Action would not be expected to result in significant adverse cumulative effects. Any potential actions within the city of Eagle Pass would occur at least 10 miles from the project area. Conversion of ranchland for use for the checkpoint is addressed in **Section 3.1.2**. In 2017, TXDOT plans to resurface Hwy 57 with a seal coat starting at the Hwy 57 and U.S. Highway 277 intersection in Eagle Pass to 2.9 miles east of the Hwy 57 and County Road 481, which is approximately 6 miles northeast of the Eagle Pass South Checkpoint (TXDOT 2016). However, considering the distance from the project area and

- 1 the temporary nature of the work and that measures that would ensure the projects do not
- 2 conflict with one another be put in place, no cumulative impacts on any resource area
- 3 would be expected.

5. References

- CBP 2016 U.S Customs and Border Protection (CBP). 2016. “Eagle Pass South Station.” Available online: <<http://www.cbp.gov/border-security/along-us-borders/border-patrol-sector>>. Accessed 23 February 2016.
- FEMA 2011 Federal Emergency Management Agency (FEMA). 2011. Flood Insurance Rate Maps 48323C0350D and 48323C0375D. 4 April 2011.
- FICON 1992 Federal Interagency Committee on Noise (FICON). 1992. *Federal Agency Review of Selected Airport Noise Analysis*. August 1992.
- Frohlich 2012 Frohlich, Cliff. 2012. *Final Technical Report for Induced or Triggered Earthquakes in Texas: Assessment of Current Knowledge and Suggestions for Future Research*.
- GDET 2006 Gobeirno Del Estado De Tamaulipas. 2006. The Great Tamaulipan Natural Province. Palacia de Gobierno, Ciudad Victoria, Tamaulipas.
- HDR 2016 HDR, Inc. 2016. *Draft Phase I Environmental Site Assessment for the Renovation and Expansion of the Eagle Pass South Traffic Check point*. February 2016.
- Lockwood and Freeman 2014 Lockwood, Mark W. and Freeman, Brush. 2014. Texas Ornithological Society: Handbook of Texas Birds. Second edition, revised.
- NatureServe 2016 NatureServe Explorer. 2016. An Online Encyclopedia of Life: Ecological System Comprehensive Report on Tamaulipan Mixed Deciduous Thornscrub. Available online: <<http://explorer.natureserve.org/servlet/NatureServe?init=Ecol>>. Accessed on 17 February 2016.
- NRCS 2016 Natural Resources Conservation Service (NRCS). 2016. “Web Soil Survey.” Available online < <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>>. Accessed February 2016.
- Ochoa 2010 Ochoa, R. E. 2010. “Maverick County.” Handbook of Texas Online. Available Online: <<http://www.tshaonline.org/handbook/online/articles/hcm06>>. Accessed 12 February 2016.
- StateImpact 2015 StateImpact. 2015. “What is the Eagle Ford Shale.” Available online: <<https://stateimpact.npr.org/texas/tag/eagle-ford-shale/>>. Accessed 18 February 2016.

- TCEQ 2016 Texas Commission on Environmental Quality (TCEQ). 2015. “Basin 21 Nueces River”. Available online: <http://www.tceq.state.tx.us/assets/public/comm_exec/pubs/sfr/050_00/vol3_basin21.pdf>. Accessed 9 February 2016.
- THC 2015 Texas Historical Commission (THC). 2015. Texas Historic Sites Atlas.
- TPWD 2015 Texas Parks and Wildlife (TPWD). 2015. “Nongame and Rare Species Program.” Available online: <https://tpwd.texas.gov/huntwild/wild/wildlife_diversity/nongame/listed-species/>. Accessed 9 February 2016.
- TWDB 2011 Texas Water Development Board (TWDB). 2011. *Aquifers of Texas*. Report 380. July 2011.
- TWDB 2016 TWDB. 2016. “Groundwater Management Areas.” Available online <http://www.twdb.texas.gov/groundwater/management_areas/>. Accessed March 2016.
- TXDOT 2014 Texas Department of Transportation (TXDOT). 2014. 2014 Laredo District Traffic Map.
- TXDOT 2016 TXDOT. 2016. “Statewide Planning Map.” Available online <http://www.txdot.gov/apps/statewide_mapping/StatewidePlanningMap.html>. Accessed March 2016.
- UT at Austin 1996 University of Texas (UT) at Austin. 1996. *Physiographic Map of Texas*. Bureau of Economic Geology. 1996.
- USCB 2000 United States Census Bureau (USCB). 2000. “Table P001 Total Population [1] Universe: Total Population Census 2000 Summary File 1 (SF 1) 100-Percent.” Available online: <<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>>. Accessed 9 February 2016.
- USCB 2010 USCB. 2010. “Table P1 Total Population Universe: Total Population 2010 Census Summary File 1.” Available online: <<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>>. Accessed 9 February 2016.
- USCB 2014a USCB. 2014. “Table B01003 Total Population, Universe: Total Population, 2010-2014 American Community Survey 5-Year Estimates” Available online: <<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>>. Accessed 9 February 2016.

- USCB 2014b USCB. 2014. "Table B25002 Occupancy Status, Universe: Housing units, 2010-2014 American Community Survey 5-Year Estimates." Available online <<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>>. Accessed 9 February 2016.
- USCB 2014c USCB. 2014. "Table DP03 Selected Economic Characteristics 2010-2014 American Community Survey 5-Year Estimates." Available online: <<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>>. Accessed 9 February 2016.
- USDA 2011 U.S. Department of Agriculture (USDA). 2011. "Official Series Description – DAB Series." Available Online: <https://soilseries.sc.egov.usda.gov/OSD_Docs/D/DAB.html>. Accessed 15 February 2016.
- USEPA 1971 U.S. Environmental Protection Agency (USEPA). 1971. *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*. 31 December 1971.
- USEPA 1981 USEPA. 1981. *Noise and its Measurement*. January 1981.
- USEPA 2015 USEPA. 2015. Texas Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants. Last updated 30 January 2015. Available online: <http://www.epa.gov/airquality/greenbook/anayo_tx.html>. Accessed on 8 February 2016.
- USEPA 2016 USEPA. 2016. "National Ambient Air Quality Standards (NAAQS)." Last updated January 2016. Available online: <<http://www3.epa.gov/ttn/naaqs/criteria.html>>. Accessed on 8 February 2016.
- USFWS 2010a U. S. Fish and Wildlife Service (USFWS). 2010. Sprague's Pipit (*Anthus spragueii*) Conservation Plan. USFWS, Region 6. Denver, Co.
- USFWS 2010b USFWS. 2010. Draft Ocelot (*Leopardus pardalis*) Recovery Plan, First Revision. U.S. Fish and Wildlife Service, Southwest Region, Albuquerque, New Mexico.
- USFWS 2013a USFWS. 2013. Endangered and Threatened Wildlife and Plants; Proposed Threatened Status for the Rufa Red Knot (*Calidris canutus rufa*); Proposed Rule. 78 FR 60023 60098.
- USFWS 2013b USFWS. 2013. Gulf Coast Jaguarundi (*Puma yagouarondi cacomitli*) Recovery Plan, First Revision. USFWS, Southwest Region. Albuquerque, NM

- USFWS 2015 USFWS. 2015. "Piping Plover Fact Sheet." Available online:
<<http://www.fws.gov/midwest/endangered/pipingplover/pipingpl.html>>.
Accessed 8 February 2016.
- USGS
undated U.S. Geological Survey (USGS). Undated. "Alluvium in Rio Grande,
subdivided into areas predominantly of sand." Available Online:
<<http://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=TXQas%3B0>>. Accessed 24 February 2016.
- USGS 2014a USGS. 2014. Deadman's Hill and Indian Tank Quadrangles Texas 7.5-
Minute Series.
- USGS 2014b USGS. 2014. "2014 Seismic Hazard Map." Available online:
<<http://earthquake.usgs.gov/earthquakes/states/texas/hazards.php>>.
Accessed 15 February 2016.
- USGS 2015 USGS. 2015. "Seismicity Map - 1973 to January 31, 2015." Available
online: <<http://earthquake.usgs.gov/earthquakes/states/texas/images/Texas-seis.pdf>>. Accessed 15 February 2016.

6. List of Preparers

This EA has been prepared under the direction of CBP. The individuals that assisted in resolving and providing agency guidance for this document are listed as follows:

Joseph Zidron (CBP)

Environmental Protection Specialist
Border Patrol Facilities and Tactical Infrastructure
Program Management Office
Facilities Management and Engineering

This EA has been prepared by HDR under the direction of CBP. The individual contractor personnel that contributed to the preparation of this document are listed as follows:

Stephen Armstrong

B.S. Environmental Science
Years of Experience: 4

David Boyes, REM, CHMM

M.S. Natural Resources
B.S. Applied Biology
Years of Experience: 38

Nicolas Frederick

M.S. Biology
B.S. Psychology
Years of Experience: 7

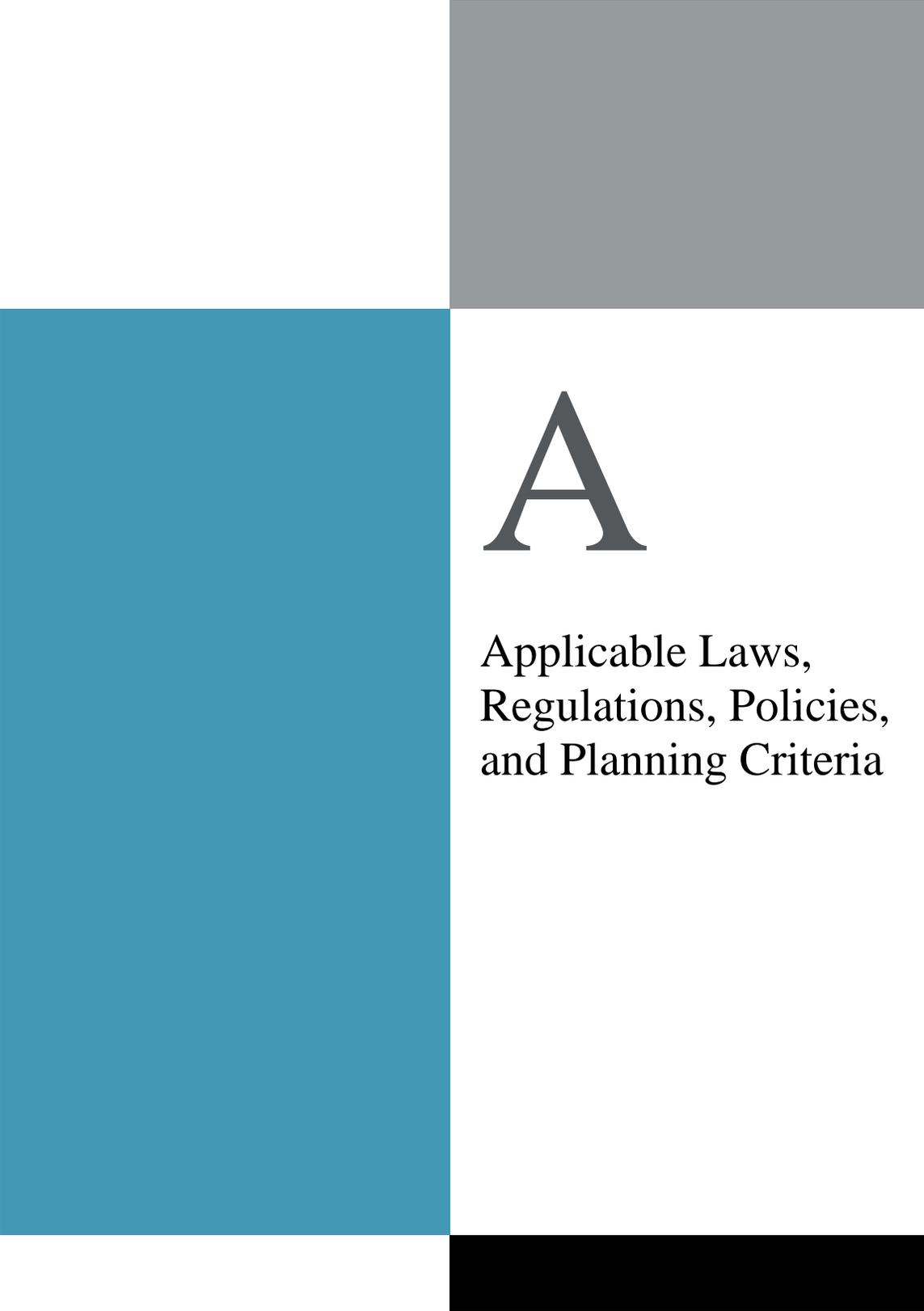
Morgan Shelby

B.S. Environmental Studies
Years of Experience: 1

Patrick Solomon, CEP

M.S. Geography
B.A. Geography
Years of Experience: 22

THIS PAGE INTENTIONALLY LEFT BLANK



A

Applicable Laws,
Regulations, Policies,
and Planning Criteria

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A: APPLICABLE LAWS AND EXECUTIVE ORDERS

Table A-1. Applicable Laws and Executive Orders¹

Title, Citation	Summary
Archaeological and Historical Preservation Act, 16 United States Code (U.S.C.) 469	Protects and preserves historical and archaeological data. Requires federal agencies to identify and recover data from archaeological sites threatened by a proposed action(s).
Clean Air Act, 42 U.S.C. 7401–7671q, as amended	Establishes federal standards for air pollutants. Prevents significant deterioration in areas of the country where air quality fails to meet Federal standards.
Clean Water Act, 33 U.S.C. 1251–1387 (also known as the Federal Water Pollution Control Act)	Comprehensively restores and maintains the chemical, physical, and biological integrity of the nation’s waters. Implemented and enforced by the U.S. Environmental Protection Agency (USEPA).
Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9601–9675 (also known as “Superfund”)	Provides for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and cleanup of inactive hazardous substance disposal sites. Establishes a fund financed by hazardous waste generators to support cleanup and response actions.
Endangered Species Act of 1973, 16 U.S.C. 1531–1543, as amended	Protects threatened, endangered, and candidate species of fish, wildlife, and plants and their designated critical habitats. Prohibits Federal action that jeopardizes the continued existence of endangered or threatened species. Requires consultation with the U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration Fisheries and a biological assessment when such species are present in an area affected by federal government activities.
Fish and Wildlife Coordination Act, 16 U.S.C. 661–667e, as amended	Authorizes the Secretaries of the Interior and Commerce to provide assistance to and cooperate with federal and state agencies to protect, rear, stock, and increase the supply of game and fur-bearing animals, as well as to study the effects of domestic sewage, trade wastes, and other polluting substances on wildlife. The 1946 amendments require consultation with USFWS and the state fish and wildlife agencies involving any water bodies that are proposed or authorized, permitted, or licensed to be impounded, diverted, or otherwise controlled or modified by any agency under a federal permit or license.
Migratory Bird Treaty Act, 16 U.S.C. 703–712	Implements various treaties for protecting migratory birds; the taking, killing, or possession of migratory birds is unlawful.
National Environmental Policy Act of 1969, 42 U.S.C. 4321–4370e, as amended	Requires federal agencies to use a systematic approach when assessing environmental impacts of government activities. Proposes an interdisciplinary approach in a decision-making process designed to identify unacceptable or unnecessary impacts to the environment.

National Historic Preservation Act, 54 U.S.C. § 300101 et seq	Requires federal agencies to consider the effect of any federally assisted undertaking or licensing on any district, site, building, structure, or object eligible for inclusion, or listed in the National Register of Historic Places (NRHP). Provides for the nomination, identification (through NRHP listing), and protection of significant historical and cultural properties.
Noise Control Act of 1972, 42 U.S.C. 4901–4918	Establishes a national policy to promote an environment free from noise that jeopardizes health and welfare. Authorizes the establishment of federal noise emissions standards and provides relevant information to the public.
Occupational Safety and Health Act of 1970, 29 U.S.C. 651–678	Establishes standards to protect workers, including standards on industrial safety, noise, and health standards.
Resource Conservation and Recovery Act, 42 U.S.C. 6901–6992k	Establishes requirements for safely managing and disposing of solid and hazardous waste and underground storage tanks.
Executive Order (EO) 12372, <i>Intergovernmental Review of Federal Programs</i> , July 14, 1982, 47 Federal Register (FR) 30959 (6/16/82), as supplemented	Requires federal agencies to consult with state and local governments when proposed federal financial assistance or direct federal development impacts interstate metropolitan urban centers or other interstate areas.
EO 12898, <i>Environmental Justice</i> , February 11, 1994, 59 FR 7629 (2/16/94), as amended	Requires certain federal agencies, to the greatest extent practicable permitted by law, to make environmental justice part of their missions by identifying and addressing disproportionately high and adverse health or environmental effects on minority and low-income populations.
EO 13693, <i>Planning for Federal Sustainability in the Next Decade</i>	Directs federal agencies to reduce direct greenhouse gas emissions by at least 40 percent over the next decade while at the same time fostering innovation, reducing spending, and strengthening the communities in which federal facilities operate. It is also designed to promote building energy conservation, efficiency, and management; ensure that percentages of building electrical energy and thermal energy will be clean (renewable and alternative) energy; ensure that the total building energy consumed by the agency incorporates renewable energy; and to incorporate renewable energy guidelines where feasible.
EO 13175, <i>Consultation and Coordination with Indian Tribal Governments</i> , November 6, 2000, 65 FR 67249 (11/09/00)	Requires federal agencies to establish an accountable process that ensures meaningful and timely input from tribal officials in developing policies that have tribal implications.

EO 13186, <i>Responsibilities of Federal Agencies to Protect Migratory Birds</i> , January 10, 2001, 66 FR 3853 (1/17/01)	Requires each agency to ensure that environmental analyses of federal actions (required by the National Environmental Policy Act or other established environmental review processes) evaluate the effects of actions and agency plans on migratory birds, emphasizing species of concern. Agencies must support the conservation intent of migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities, and by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions.
EO 11593, <i>Protection and Enhancement of the Cultural Environment</i> , May 13, 1971, 36 FR 8921 (5/15/71)	Requires all federal agencies to locate, identify, and record all cultural resources, including significant archeological, historical, or architectural sites.

Note:

1. This table only reflects those laws and EOs that might reasonably be expected to apply to the Proposed Action and alternatives addressed in this EA.

Other laws and EOs evaluated for this EA include, but are not limited to, the following:

- American Indian Religious Freedom Act, 42 U.S.C. 1996, et seq.
- Antiquities Act, 16 U.S.C. 433, et seq.; Archeological Resources Protection Act, 16 U.S.C. 470 aa-ll, et seq.
- Architectural Barriers Act, 42 U.S.C. 4151, et seq.
- Community Environmental Response Facilitation Act, 42 U.S.C. 9620, et seq.
- Department of Transportation Act, Public Law (P.L.) 89-670, 49 U.S.C. 303, Section 4(f), et seq.
- Emergency Planning and Community Right-to-Know Act, 42 U.S.C. 11001–11050, et seq.
- Environmental Quality Improvement Act, P.L. 98-581, 42 U.S.C. 4371, et seq.
- Farmlands Protection Policy Act, P.L. 97-98, 7 U.S.C. 4201, et seq.
- Federal Insecticide, Fungicide, and Rodenticide Act, P.L. 86-139, 7 U.S.C. 135, et seq.
- Federal Records Act, 44 U.S.C. 2101-3324, et seq.
- Fish and Wildlife Act of 1956, P.L. 85-888, 16 U.S.C. 742, et seq.
- Native American Graves Protection and Repatriation Act, 25 U.S.C. 3001, et seq.
- Pollution Prevention Act of 1990, 42 U.S.C. 13101-13109, et seq.
- Safe Drinking Water Act, P.L. 93-523, 42, U.S.C. 201, et seq.
- Toxic Substances Control Act, 7 U.S.C. 136, et seq.
- Wild and Scenic Rivers Act, P.L. 90-542, 16 U.S.C. 1271, et seq.

- EO 12114, dated January 9, 1979, *Environmental Effects Abroad of Major Federal Actions*, 44 FR 1957
- EO 12088, dated October 13, 1978, *Federal Compliance with Pollution Control Standards*, 43 FR 47707, as amended by EO 12580, dated January 23, 1987, and revoked (in part) by EO 13148, dated April 21, 2000
- EO 13132, dated August 4, 1999, *Federalism*, 64 FR 43255
- EO 13007, dated May 24, 1996, *Historic Sites Act*, 16 U.S.C. 46, et seq.; Indian Sacred Sites, 61 FR 26771
- EO 13112, dated February 3, 1999, *Invasive Species*, 64 FR 6183, as amended by EO 13286, February 28, 2003, 68 FR 10619
- EO 11514, dated March 5, 1970, *Protection and Enhancement of Environmental Quality*, 35 FR 4247, as amended by EO 11541, July 1, 1970, 35 FR 10737 and EO 11991, May 24, 1977, 42 FR 26967
- EO 13045, dated April 21, 1997, *Protection of Children from Environmental Health and Safety Risks*, 62 FR 19885, as amended by EO 13229, October 9, 2001, 66 FR 52013 and EO 13296, April 18, 2003, 68 FR 19931
- EO 11990, dated May 24, 1977, *Protection of Wetlands*, 42 FR 26961, as amended by EO 12608, September 9, 1987, 52 FR 34617.



B

Public Involvement
and Agency
Coordination

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX B: PUBLIC INVOLVEMENT AND AGENCY COORDINATION

Interested Party List

Copies of the Coordination Letter with instructions for accessing the Draft EA were sent to the following agencies and interested parties during the Draft EA public review period:

FEDERAL AGENCY CONTACTS

Mr. John Blevins
Division Director
U.S. Environmental Protection Agency,
Region 6

Ms. Cathy Gilmore
Section Chief
U.S. Environmental Protection Agency

Mr. Jose A. Nunez
Principal Engineer
International Boundary and Water
Commission

Mr. Mike Snyder
Regional Director
National Park Service

Ms. Mary Orms
U.S. Fish and Wildlife Service

Mr. Adam Zerrenner
Field Supervisor
U.S. Fish and Wildlife Service

STATE AGENCY CONTACTS

Mr. James M. Bass
Executive Director
Texas Dept. of Transportation

Mr. Archie Clouse
Regional Director
Texas Commission on Environmental
Quality

Ms. Lorinda Gardner
Regional Director
Texas Commission on Environmental
Quality

Mr. Jaime A. Garza
Regional Director
Texas Commission on Environmental
Quality

Ms. Jody Henneke
Deputy Commissioner
Texas General Land Office

Mr. John Howard
Environmental Policy Director
Governor's Policy Office

Mr. F. Lawrence Oaks
State Historic Preservation Officer
Texas Historical Commission

Mr. David A. Ramirez
Area Director
Texas Commission on Environmental
Quality

Mr. Carlos Rubinstein
Area Director
Texas Commission on Environmental
Quality

Mr. Carter Smith
Executive Director
Texas Parks and Wildlife

Mr. Mark Wolfe
State Historic Preservation Officer
Texas Historical Commission

Environmental Policy Director
Governor's Policy Office

LOCAL CONTACTS

The Honorable Ramsey English Cantu
Mayor
City of Eagle Pass

Hector Chavez
City Manager
City of Eagle Pass

The Honorable David Saucedo
County Judge
Maverick County

TRIBAL CONTACTS

The Honorable Wallace Coffey
Chairman
Comanche Nation

The Honorable Juan Garza Jr.
Chairman
Kickapoo Traditional Tribe of Texas

The Honorable Ron Twohatchet
Chairman
Kiowa Tribe of Oklahoma

COMANCHE NATION



U.S. Customs and Border Protection
Attn: Joseph Zidron
1300 Pennsylvania Ave. NW
District of Columbia 20229

March 1, 2016

Re: Section 106 Consultation for U.S. Customs and Border Protection ,U.S.
Border Patrol , Del Rio Sector, Eagle Pass South Traffic Checkpoint
Renovation and Expansion near Eagle Pass, Texas

Dear Mr. Zidron:

In response to your request, the above reference project has been reviewed by staff of this office to identify areas that may potentially contain prehistoric or historic archeological materials. The location of your project has been cross referenced with the Comanche Nation site files, an Comanche Nation "*Concur*" with your finding.

Please contact this office at (580) 595-9960/9618 if you require additional information on this project.

This review is performed in order to identify and preserve the Comanche Nation and State cultural heritage, in conjunction with the State Historic Preservation Office.

Regards

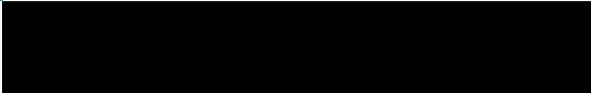
Comanche Nation Historic Preservation Office
Theodore E. Villicana ,Resource Technician
#6 SW "D" Avenue , Suite C
Lawton, OK. 73502

COMANCHE NATION P.O. BOX 908 / LAWTON, OK 73502
PHONE: 580-492-4988 TOLL FREE: 1-877-492-4988



C

State-Listed Species
Unlikely to Occur in
the Project Area



THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX C: STATE-LISTED SPECIES UNLIKELY TO OCCUR IN THE PROJECT AREA

Table C-1. Federally Listed Species that Occur in Maverick County

Species		Status		Habitat Associations*/Likelihood of Occurrence in Project Area
Common Name	Scientific Name	Federal	State	
Birds				
Least tern (Interior Population)	<i>Sterna antillarum</i>	E	E	Nest on barren to sparsely vegetated sandbars along rivers, sand and gravel pits, lake and reservoir shorelines, and occasionally gravel rooftops. Habitat not present. Unlikely to occur. No effect.
Piping plover	<i>Charadrius melodus</i>	T	T	Winter populations associated with sparsely vegetated tidal sand flats, or algal flats. Habitat not present. Unlikely to occur. No effect.
Rufa red knot	<i>Calidris canutus rufa</i>	T	-	Migratory stopover habitat is generally coastal marine and estuarine with large areas of exposed intertidal sediments. In North America, this includes sandy, gravel, or cobble beaches, tidal mudflats, salt marshes, shallow coastal impoundments and lagoons, and peat banks. Habitat not present. Unlikely to occur. No effect.
Sprague's pipit	<i>Anthus spragueii</i>	C	-	Winter habitats consist of large grassland areas that may or may not primarily consist of native grass. Habitat not present. Unlikely to occur. No effect.
Mammals				
Gulf Coast jaguarundi	<i>Herpailurus yagouaroundi</i>	E	E	Tamaulipan Biotic Province, where it uses dense, natural, and undisturbed thorny shrublands or woodlands and tall dense bunchgrass pastures adjacent to dense brush or woody cover. Habitat not present. Unlikely to occur. No effect.
Ocelot	<i>Leopardus (=felis) pardalis</i>	E	E	Tamaulipan Biotic Province which includes several variations of subtropical thornscrub brush. Ocelots prefer dense thornscrub habitats with greater than 95 percent canopy cover. Habitat not present. Unlikely to occur. No effect.

*Sources: USFWS 2010a, USFWS 2010b, USFWS 2013a, USFWS 2013b, USFWS 2015a, USFWS 2015b

Key: E = Endangered, T = Threatened, C = Candidate

Table C-2. State-Listed Species Unlikely to Occur in the Project Area

Species	Listing Status	Habitat*	Likelihood of Occurrence/ Determination	
Birds				
Baird's sparrow	<i>Ammodramus bairdii</i>	R	Short-grass prairie with scattered shrubs.	Short-to long-term, negligible to minor, adverse impacts would be unlikely to occur.
Mountain plover	<i>Charadrius montanus</i>	R	Short-grass prairie, but occasionally in cropland or barren ground.	Short-to long-term, negligible to minor, adverse impacts would be unlikely to occur.
Western burrowing owl	<i>Athene cunicularia hypugaea</i>	R	Open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows.	Short-to long-term, negligible to minor, adverse impacts would be unlikely to occur.
Mammals				
Black bear	<i>Ursus americanus</i>	T	Large tracts of bottomland hardwood forests.	Short-to long-term, negligible to minor, adverse impacts would be unlikely to occur.
Plants				
Mexican mud-plantain	<i>Heteranthera mexicana</i>	R	Wet clayey soils of resacas and ephemeral wetlands; flowering June-December.	Short-to long-term, negligible to minor, adverse impacts would be unlikely to occur.
Shinner's sunflower	<i>Helianthus occidentalis</i> sp <i>plantagineus</i>	R	Mostly in prairies on the Coastal Plain, with several slightly disjunct populations in the Pineywoods and South Texas Brush Country.	Short-to long-term, negligible to minor, adverse impacts would be unlikely to occur.

*Source: TPWD 2015



D

Air Quality
Calculations

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX D: AIR QUALITY CALCULATIONS

Combustion Emissions

Combustion Emissions of VOC, NO_x, SO₂, CO, PM_{2.5}, PM₁₀, and CO₂ due to Construction and Demolition

General Construction Activities	Area Disturbed	Source and Assumptions
1.) Demolish Existing Checkpoint	2,500 ft ²	Google Earth Estimate
2.) Construct New Checkpoint Building	2,500 ft ²	Estimate from conceptual drawings
3.) Construct Kennel	375 ft ²	Estimate from conceptual drawings
4.) Construct Canopy (includes booths and median under canopy)	5,000 ft ²	Estimate from conceptual drawings
6.) Construct Vehicle Lift Area	375 ft ²	Estimate from conceptual drawings
8.) Construct new pavement area for checkpoint. All buildings are modular and assumed to be on top of pavement	87,647 ft ²	GIS Data
9.) Total Ground Disturbance (checkpoint footprint and construction staging areas)	335,130 ft ²	GIS Data
Total Building Construction Area:	8,250 ft ²	
	0.189 acres	
Total Building Demolition Area:	2,500 ft ²	
	0.057 acres	
New Roadway Construction Area	87,647 ft ²	
	2.012 acres	
Total Disturbed Area:	335,130 ft ²	
	7.694 acres	
Construction Duration:	12 months	
Annual Construction Activity:	240 days	Assumes 4 weeks per month, 5 days per week of work.

Emission Factors Used for Construction Equipment

References: Guide to Air Quality Assessment, SMAQMD, 2004; and U.S. EPA NONROAD Emissions Model, Version 2005.0.0
 Emission factors are taken from the NONROAD model and were provided to HDR by Larry Landman of the Air Quality and Modeling Center (Landman.Larry@epamail.epa.gov) on 12/14/07. Factors provided are for the weighted average US fleet for CY2007.
 Assumptions regarding the type and number of equipment are from SMAQMD Table 3-1 unless otherwise noted.

Grading

Equipment	No. Req ^d per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Bulldozer	1	13.597	0.957	5.502	1.017	0.895	0.868	1456.904
Motor Grader	1	9.689	0.726	3.203	0.797	0.655	0.635	1141.647
Water Truck	1	18.356	0.894	7.004	1.635	0.996	0.966	2342.975
Total per 10 acres of activity	3	41.641	2.577	15.710	3.449	2.546	2.469	4941.526

Paving

Equipment	No. Req ^d per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Paver	1	3.831	0.374	2.055	0.281	0.350	0.340	401.932
Roller	1	4.825	0.443	2.514	0.374	0.434	0.421	536.074
Truck	2	36.712	1.788	14.009	3.271	1.992	1.932	4685.951
Total per 10 acres of activity	4	45.367	2.606	18.578	3.926	2.776	2.693	5623.957

Demolition

Equipment	No. Req ^d per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Loader	1	13.452	0.992	5.579	0.949	0.927	0.899	1360.098
Haul Truck	1	18.356	0.894	7.004	1.635	0.996	0.966	2342.975
Total per 10 acres of activity	2	31.808	1.886	12.584	2.585	1.923	1.865	3703.074

Building Construction

Equipment ^d	No. Req ^d per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Stationary								
Generator Set	1	2.381	0.317	1.183	0.149	0.227	0.220	213.059
Industrial Saw	1	2.618	0.316	1.966	0.204	0.325	0.315	291.920
Welder	1	1.124	0.378	1.504	0.078	0.227	0.220	112.393
Mobile (non-road)								
Truck	1	18.356	0.894	7.004	1.635	0.996	0.966	2342.975
Forklift	1	5.342	0.560	3.332	0.399	0.554	0.537	572.235
Crane	1	9.575	0.665	2.393	0.651	0.500	0.485	931.929
Total per 10 acres of activity	6	39.396	3.130	17.382	3.116	2.829	2.744	4464.512

Note: Footnotes for tables are on following page

Architectural Coatings

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Air Compressor	1	3.574	0.373	1.565	0.251	0.309	0.300	359.773
Total per 10 acres of activity	1	3.574	0.373	1.565	0.251	0.309	0.300	359.773

- a) The SMAQMD 2004 guidance suggests a default equipment fleet for each activity, assuming 10 acres of that activity, (e.g., 10 acres of grading, 10 acres of paving, etc.). The default equipment fleet is increased for each 10 acre increment in the size of the construction project. That is, a 26 acre project would round to 30 acres and the fleet size would be three times the default fleet for a 10 acre project.
- b) The SMAQMD 2004 reference lists emission factors for reactive organic gas (ROG). For the purposes of this worksheet ROG = VOC. The NONROAD model contains emissions factors for total HC and for VOC. The factors used here are the VOC factors.
- c) The NONROAD emission factors assume that the average fuel burned in nonroad trucks is 1100 ppm sulfur. Trucks that would be used for the Proposed Action would be fueled by diesel fuel which cannot exceed 15 ppm sulfur. These estimates therefore over-estimate SO₂ emissions by more than a factor of 73.
- d) Typical equipment fleet for building construction was not itemized in SMAQMD 2004 guidance. The equipment list above was assumed based on SMAQMD 1994 guidance.

PROJECT-SPECIFIC EMISSION FACTOR SUMMARY

Source	Equipment Multiplier*	Project-Specific Emission Factors (lb/day)						
		NO _x	VOC	CO	SO ₂ **	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	1	41.641	2.577	15.710	3.449	2.546	2.469	4941.526
Paving Equipment	1	45.367	2.606	18.578	3.926	2.776	2.693	5623.957
Demolition Equipment	1	31.808	1.886	12.584	2.585	1.923	1.865	3703.074
Building Construction	1	39.396	3.130	17.382	3.116	2.829	2.744	4464.512
Air Compressor for Architectural Coating	1	3.574	0.373	1.565	0.251	0.309	0.300	359.773
Architectural Coating**			7.403					

*The equipment multiplier is an integer that represents units of 10 acres for purposes of estimating the number of equipment required for the project.

**Emission factor is from the evaporation of solvents during painting, per "Air Quality Thresholds of Significance", SMAQMD, 1994

Example: SMAQMD Emission Factor for Grading Equipment NO_x = (Total Grading NO_x per 10 acre)*(Equipment Multiplier)

Summary of Input Parameters

	Total Area (ft ²)	Total Area (acres)	Total Days	
Grading:	335,130	7.694	5	(from "Grading" worksheet)
Paving:	87,647	2.012	10	
Demolition:	2,500	0.057	3	
Building Construction:	8,250	0.189	240	
Architectural Coating	8,250	0.189	20	(per SMAQMD "Air Quality of Thresholds of Significance", 1994)

NOTE: The 'Total Days' estimate for paving is calculated by dividing the total number of acres by 0.21 acres/day, which is a factor derived from the 2005 MEANS Heavy Construction Cost Data, 19th Edition, for 'Asphaltic Concrete Pavement, Lots and Driveways - 6" stone base', which provides an estimate of square feet paved per day. There is also an estimate for 'Plain Cement Concrete Pavement', however the estimate for asphalt is used because it is more conservative. The 'Total Days' estimate for demolition is calculated by dividing the total number of acres by 0.02 acres/day, which is a factor also derived from the 2005 MEANS reference. This is calculated by averaging the demolition estimates from 'Building Demolition - Small Buildings, Concrete', assuming a height of 30 feet for a two-story building; from 'Building Footings and Foundations Demolition - 6" Thick, Plain Concrete'; and from 'Demolish, Remove Pavement and Curb - Concrete to 6" thick, rod reinforced'. The 'Total Days' estimate for building construction is assumed to be 240 days.

Total Project Emissions by Activity (lbs)

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	208.206	12.885	78.549	17.247	12.728	12.346	24,707.632
Paving	453.673	26.057	185.784	39.257	27.761	26.928	56,239.569
Demolition	95.423	5.657	37.751	7.755	5.770	5.596	11,109.221
Building Construction	9,455.116	751.154	4,171.754	747.924	678.970	658.601	1,071,482.802
Architectural Coatings	71.481	155.516	31.308	5.023	6.186	6.001	7,195.467
Total Emissions (lbs):	10,283.899	951.269	4,505.148	817.205	731.415	709.472	1,170,734.690

Results: Total Project Annual Emission Rates

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Total Project Emissions (lbs)	10,283.899	951.269	4,505.148	817.205	731.415	709.472	1,170,734.690
Total Project Emissions (tons)	5.142	0.476	2.253	0.409	0.366	0.355	585.367