

Decision I.D. # 46804

Service Date: February 22, 2019

Comment Due Date: March 14, 2019

DRAFT ENVIRONMENTAL ASSESSMENT

DOCKET NO. FD 36186

**Texas Railway Exchange
Construction and Operation Exemption
in Galveston County, Texas**



Prepared by:

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SURFACE TRANSPORTATION BOARD

Washington, DC 20423

Office of Environmental Analysis

February 22, 2019

Dear Reader:

The Surface Transportation Board's Office of Environmental Analysis (OEA) is pleased to provide you with the enclosed Draft Environmental Assessment (Draft EA) for the proposal of Texas Railway Exchange, LLC (TREX) to construct and operate approximately 2,800 feet or less of new rail line in the City of Galveston, Galveston County, Texas. The proposed rail line would connect the Texas International Terminals facility (the Terminal) to an existing rail line owned and operated by BNSF Railway Company (BNSF). The Terminal currently receives BNSF traffic only through a reciprocal switching arrangement with Union Pacific Railroad (UP). The proposed rail line would increase the efficiency of rail service at the Terminal by allowing BNSF traffic to access the Terminal directly. In order to implement the TREX project, TREX would need to cross an existing line of the UP.

In deciding whether or not to approve TREX's proposal, the Board must consider the potential environmental impacts of its decision. This Draft EA is the first step in that process. The Draft EA examines the potential environmental impacts of construction and operation of the proposed line related to transportation systems and safety, geological resources, water resources, air quality, vegetation and wildlife, noise and vibration, cultural and historical resources, hazardous materials and wastes, and socioeconomics. The Draft EA also assesses the potential environmental impacts of TREX's planned crossing of an existing UP line because TREX would need to cross the UP line to implement this project. In the Draft EA, OEA recommends mitigation measures that would minimize the potential impacts to the environmental resource areas that were considered. OEA concludes that, if the Board requires TREX to abide by the mitigation measures recommended in the Draft EA, construction and operation of the proposed rail line and the planned crossing of the UP line would not result in any significant environmental impacts to the quality of the natural or human environment.

Public Review and Comment on the Draft EA

OEA has distributed this Draft EA to the parties of record for this docket and to consulting governmental agencies and other appropriate entities. The Draft EA is available for review on the Board's website at www.stb.gov and at the following locations:

Rosenberg Library (Galveston County Library System)
2310 Sealy Street
Galveston TX 77550

Jack K. Williams Library
Texas A&M University at Galveston
Building 3010
200 Seawolf Parkway
Galveston TX 77554

David Glen Hunt Memorial Library
Galveston College
4015 Avenue Q
Galveston TX 77550

Galveston City Hall
823 Rosenberg
Galveston TX 77553

OEA welcomes comments on the Draft EA from interested agencies, organizations, and individuals. Given the facts and circumstances presented by this proceeding, including the short length of the proposed line, no plans to increase the level of train traffic, and the minimal environmental impacts discovered during the preparation of this Draft EA, as well as TREX's request for expedited consideration, a 20-day comment period on this Draft EA to and including March 14, 2019 is appropriate. We encourage you to send us written comments on any aspect of this Draft EA.

OEA will consider and respond to comments submitted during the 20-day comment period in preparing a Final EA. The Final EA also will include OEA's final conclusions on potential impacts that could result from TREX's proposal, as well as OEA's final recommended

mitigation measures. To be considered in the Final EA, comments should be submitted during the 20-day comment period, which ends on March 14, 2019.

Please submit any comments on this Draft EA to the following address:

Joshua Wayland
Surface Transportation Board
395 E Street SW
Washington, DC 20423
Attn: Docket No. FD 36186

Written comments may also be filed electronically on the Board's web site, www.stb.gov, by clicking on the "E-FILING" link. Please refer to Finance Docket No. 36186 in all correspondence, including e-filings, addressed to the Board.

Thank you for your interest and participation in the environmental review process. If you have any questions regarding this Draft EA or would like additional information about the environmental review process, please contact Joshua Wayland, the OEA Project Manager for this case, by phone at (202) 245-0330, fax at (202) 245-0454, or e-mail at joshua.wayland@stb.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria Rutson". The signature is fluid and cursive, with a large initial "V" and a long, sweeping underline.

Victoria Rutson
Director
Office of Environmental Analysis

SUMMARY OF MAJOR CONCLUSIONS IN THIS DRAFT ENVIRONMENTAL ASSESSMENT

The Surface Transportation Board's (the Board's) Office of Environmental Analysis (OEA) has conducted an extensive review of the potential beneficial and adverse environmental impacts that could result from the Texas Railway Exchange (TREX) proposal to construct and operate approximately 2,800 feet of new rail line, including a planned crossing of the existing Union Pacific Railroad Company (UP) rail line, in the City of Galveston, Galveston County, Texas. OEA has reached the following major conclusions based on the information available to date; consultation with local, state, and federal agencies; and OEA's own independent environmental analysis:

- The proposed rail line would extend from an existing rail line operated by BNSF Railway Company (BNSF) to the Texas International Terminals (the Terminal) facility on the Galveston Ship Channel and would provide an alternative rail transportation option for rail traffic that is currently provided through a reciprocal switching service provided by UP.
- TREX intends to file a crossing petition with the Board under 49 U.S.C. § 10901(d) in order to construct a new rail crossing over an existing line of railroad owned and operated by UP. The proposed rail line would also result in the construction of a new at-grade rail crossing of Port Industrial Road, a small public road that provides access to the Terminal and other local industrial facilities.
- OEA estimates that rail traffic on the proposed rail line and the planned crossing of the existing UP rail line would consist of approximately four unit or sub-unit trains per week, on average, including both incoming and outgoing trains. Those trains would carry commodities including crude oil, ethanol, and other refined liquids, along with potash, fertilizers, and other dry bulk material. Rail traffic on the proposed line would be diverted from the existing switching arrangement provided by UP. Therefore, total rail traffic in the project area would not increase as a result of TREX's proposal.
- OEA considered the potential environmental impacts of two alternatives (the Green Alternative and the Blue Alternative) and two potential design options for each alternative (Option A and Option B), as well as the No-Action Alternative. The alignments of the Green and Blue Alternatives would be similar, but the Blue Alternative would require

TREX to obtain access rights to approximately 1,203 feet of UP property, while the Green Alternative would require TREX to obtain access rights across approximately 548 feet of UP property.

- Under both the Green Alternative and the Blue Alternative, the construction footprint of the proposed rail line, including the planned crossing of the existing UP rail line, would be less than four acres in area and would be located in a heavily developed area that is dominated by land used for rail transportation and other industrial activities.
- Because the proposed rail line would increase the efficiency with which trains move into and out of the Terminal, the proposed construction and operation, including construction of the planned crossing over the existing UP rail line, would have a beneficial impact on the local transportation system and on public safety at at-grade road crossings.
- Impacts from the proposed rail line and the planned crossing over the existing UP rail line to geology and soils would be minimal because much of the underlying soil has been previously disturbed and prepared for rail uses as part of past track improvements on adjacent existing rail lines.
- The Green Alternative would require the construction of a new culvert and the extension of an existing culvert to cross two tidal water features, resulting in impacts to 0.415 acres of wetlands and waterways. The Blue Alternative would require the construction of a new culvert to cross one tidal water feature and would impact 0.099 acres of wetlands and waterways.
- Because rail traffic on the proposed rail line and over the planned crossing of the existing UP rail line would be diverted from an existing rail line, the proposed construction and operation would have no negative impact on local air quality. Air emissions could decrease as a result of increased transportation efficiency in the project area.
- Because the project area is industrial, very little vegetation and wildlife habitat exists in the project area and potential impacts to biological resources would be minimal. During field investigations, some habitat was observed in the project area that is suitable for the red knot (*Calidris canutus rufa*), a federally listed threatened bird species. The project area does not include critical habitat for red knot or any other federally listed threatened or endangered species and no individuals of that or other federally protected species were observed during site investigations. Therefore, OEA has concluded that the proposed construction and

operation, including the planned crossing of the existing UP rail line, may affect, but is not likely to adversely affect the red knot.

- During field investigations, some suitable habitat was also observed in the project area for three bird species that are listed as protected by the State of Texas. Those species are the black rail (*Laterallus jamaicensis*), the brown pelican (*Pelecanus occidentalis*), and the white-faced ibis (*Plegadis chihi*). No individuals of those or other protected species were observed during site investigations. Therefore, minor impacts to state listed protected species may occur from the proposed rail line and the planned crossing of the existing UP rail line.
- Because the anticipated level of rail traffic on the proposed rail line and the planned crossing of the existing UP rail line would be less than one train per day, on average, and because there are no sensitive noise receptors in the vicinity of the project footprint, noise and vibration impacts from the proposed construction and operation would be minimal.
- The Texas Historical Commission (the Texas State Historic Preservation Officer or Texas SHPO) has submitted comments stating that no historic properties would be affected by TREX's proposal. Based on site inspections and independent review of available data, OEA concurs with the Texas SHPO and concludes that construction and operation of the proposed rail line and the planned crossing of the existing UP rail line would have no effect on historic or cultural resources.
- Because soil disturbance related to the proposed construction would be minimal and because the volume of hazardous materials transported through the project area would not increase as a result of TREX's proposal, no impacts related to hazardous materials or wastes would occur.
- Based on the information provided from all sources to date and its independent analysis, OEA preliminarily concludes that construction and operation of the proposed rail line and the planned crossing of the existing UP rail line would have no significant environmental impacts if the recommended mitigation measures set forth in the Draft EA are imposed. The two alternative alignments considered in the Draft EA and the two design options associated with each of those alternatives would have similar environmental impacts and none of those impacts would reach the level of significance if OEA's recommended

mitigation measures are imposed. Therefore, the environmental impact statement process is unnecessary in this case.

- OEA welcomes public comment on all aspects of the Draft EA during the 20-day comment period, which ends on March 14, 2019. OEA will respond to comments received; make final recommendations to the Board, including recommendations for mitigation; and issue those recommendations in a Final EA. The Board will then issue its final decision addressing the proposed rail line and imposing any environmental mitigation that the Board determines appropriate.

Table of Contents

Table of Contents	TOC-1
LIST OF ABBREVIATIONS AND ACRONYMS	TOC-5
EXECUTIVE SUMMARY	ES-1
Purpose and Need	ES-1
Description of the Affected Environment	ES-4
Alternatives Considered	ES-10
Synopsis of Environmental Impacts of the Proposed Action	ES-17
Transportation Systems	ES-17
Public Safety.....	ES-18
Geology, Soils, and Climate.....	ES-18
Surface and Ground Water	ES-19
Air Quality.....	ES-19
Biological Resources	ES-20
Noise and Vibration.....	ES-21
Cultural Resources.....	ES-21
Hazardous Materials and Waste Sites	ES-22
Recommendations for Mitigation	ES-22
Preliminary Conclusion	ES-27
Request for Comments.....	ES-27
1.0 PURPOSE AND NEED	1-1
2.0 PROPOSED ACTION AND ALTERNATIVES	2-1
2.1 PROPOSED ACTION	2-1
2.2 CONSTRUCTION	2-1
2.3 OPERATION.....	2-2
2.4 MAINTENANCE	2-2
2.5 ALTERNATIVES	2-3
3.0 AFFECTED ENVIRONMENT	3-1
3.1 TRANSPORTATION	3-1
3.2 PHYSICAL RESOURCES.....	3-1
3.2.1 Geology, Soils, and Climate	3-1
3.2.2 Surface and Ground Water.....	3-2
3.2.3 Air Quality	3-4
3.3 BIOLOGICAL RESOURCES	3-4
3.3.1 Vegetation	3-4
3.3.2 Wetlands and Waters of the United States.....	3-5
3.3.3 Wildlife	3-6
3.3.4 Endangered, Threatened, and Rare Species	3-8

3.4	NOISE	3-12
3.5	CULTURAL RESOURCES.....	3-12
3.6	HAZARDOUS MATERIALS AND WASTE SITES.....	3-12
3.7	SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE	3-13
3.8	LAND USE.....	3-16
4.0	ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION.....	4-1
4.1	TRANSPORTATION AND SAFETY.....	4-1
4.2	PHYSICAL RESOURCES.....	4-2
4.2.1	Geology, Soils, and Climate	4-2
4.2.2	Surface and Ground Water.....	4-3
4.2.3	Air Quality	4-4
4.3	BIOLOGICAL RESOURCES	4-5
4.3.1	Vegetation	4-5
4.3.2	Wetlands and Waters of the United States.....	4-5
4.3.3	Wildlife	4-6
4.3.4	Threatened, Endangered, and Rare Species	4-7
4.4	NOISE	4-8
4.5	CULTURAL RESOURCES.....	4-8
4.6	HAZARDOUS MATERIALS AND WASTE SITES.....	4-10
4.7	SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE.....	4-10
4.8	LAND USE.....	4-11
4.9	CUMULATIVE EFFECTS	4-11
5.0	RECOMMENDATIONS FOR MITIGATION AND REQUEST FOR COMMENTS.....	5-1
5.1	TRANSPORTATION AND SAFETY.....	5-1
5.2	PHYSICAL RESOURCES.....	5-2
5.3	BIOLOGICAL RESOURCES – VEGETATION, WETLANDS, AND WILDLIFE	5-3
5.4	NOISE	5-4
5.5	CULTURAL RESOURCES.....	5-5
5.6	HAZARDOUS MATERIALS AND WASTE SITES.....	5-5
6.0	CONCLUSIONS AND REQUEST FOR COMMENTS.....	6-1
6.1	CONCLUSION.....	6-1
6.2	REQUEST FOR COMMENTS	6-2
7.0	REFERENCES.....	7-1

APPENDICES**A – AGENCY CORRESPONDENCE**

Exhibit 1	Sample Letter of Request for Project-Related Comments
	Project Area Maps
	List of Contacted Agencies
Exhibit 2	Responses from the United States Army Corps of Engineers
Exhibit 3	Response from the National Park Service
Exhibit 4	Response from the Natural Resource Conservation Service
Exhibit 5	Response from the Federal Emergency Management Administration
Exhibit 6	Response from the Texas Parks and Wildlife Department
Exhibit 7	Response from the Texas Commission on Environmental Quality
Exhibit 8	Response from the Texas Railroad Commission
Exhibit 9	Response from the Texas Historical Commission
Exhibit 10	Response from the Galveston Fire Department
Exhibit 11	Response from the Texas Department of Transportation, Rail Division

B – BOARD AND PETITIONER’S CORRESPONDENCE

Exhibit 1	TREX request for waiver of EIS requirements
Exhibit 2	Board’s response to TREX’s request for waiver of EIS requirements
Exhibit 3	TREX’s request for waiver of the six month pre-filing notice and to retain Burns & McDonnell as the third-party consultant
Exhibit 4	Board’s response to TREX’s request for waiver of the six month pre-filing notice and to retain Burns & McDonnell as the third-party consultant

LIST OF TABLES

Table

2-1	Build Alternatives Comparison Data	2-14
3-1	Water Resources Present in the Project Area	3-6
3-2	Common Animal Species in the Project Area	3-7
3-3	Federally and State-listed Species in Galveston County	3-9
3-4	Population Characteristics	3-14
3-5	Projected Population Growth.....	3-14
3-6	Galveston County Unemployment Rates, 1970-2010	3-15
3-7	Employment by Industry for Galveston County, 2017.....	3-15
4-1	Wetland and Waters of the United States Impacts.....	4-6

LIST OF FIGURES

Figure

ES-1	Project Location	ES-5
ES-2	Project Area and Project Footprint	ES-7
ES-3	Green Alternative – Options A & B	ES-13
ES-4	Blue Alternative – Options A & B.....	ES-15
1-1	Texas International Terminals, Galveston, Texas.....	1-2
2-1	Green Alternative – Option A.....	2-5
2-2	Green Alternative – Option B	2-7
2-3	Blue Alternative – Option A.....	2-9
2-4	Blue Alternative – Option B	2-11
2-5	Photo of the area proposed for construction of the new rail line and crossing of the existing UP rail line	2-13

LIST OF ABBREVIATIONS AND ACRONYMS

ADT	Average Daily Traffic
APE	Area of Potential Effects
AQCR	Air Quality Control Region
AREMA	American Railway Engineering and Maintenance of Way Association
BEG	Bureau of Economic Geology
BNSF	BNSF Railway Company
Board	Surface Transportation Board
CEQ	Council on Environmental Quality
CWA	Clean Water Act
CMP	Coastal Management Program
DL	De-Listed (species)
E	Endangered (species)
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FRA	United States Department of Transportation, Federal Railroad Administration
IH	Interstate Highway
IP	Individual Permit
IPaC	Information for Planning and Conservation
LiDAR	Light Detection and Ranging
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NL	Not Listed (species)
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
NWP	Nationwide Permits
OEA	Office of Environmental Analysis
RCRA	Resource Conservation and Recovery Act
SCS	Soil Conservation Service
SGCN	Species of Greatest Conservation Need
SH	State Highway
SHPO	State Historic Preservation Office
STB	Surface Transportation Board
SWPPP	Storm Water Pollution Prevention Plan

T	Threatened (species)
TCEQ	Texas Commission on Environmental Quality
TPWD	Texas Parks and Wildlife Department
TNRIS	Texas Natural Resources Information System
TSHA	Texas State Historical Association
TWDB	Texas Water Development Board
TxDOT	Texas Department of Transportation
TXNDD	Texas Natural Diversity Database
UP	Union Pacific Railroad
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

EXECUTIVE SUMMARY

On November 21, 2018, Texas Railway Exchange, LLC (TREX) filed a petition with the Surface Transportation Board (the Board) pursuant to 49 U.S.C. § 10502 seeking an exemption from the requirements of 49 United States Code (U.S.C.) § 10901 to construct and operate approximately 2,800 feet of new rail line in the City of Galveston, Galveston County, Texas. The proposed rail line would connect the Texas International Terminals facility (the Terminal) to an existing rail line owned and operated by BNSF Railway Company (BNSF) by crossing an existing Union Pacific Railroad (UP) rail line.

The Board's Office of Environmental Analysis (OEA) has prepared this Draft Environmental Assessment (Draft EA) to evaluate the potential environmental impacts of TREX's proposal and is issuing it for public comment. The Board will consider the entire environmental record, comprising this Draft EA, the Final EA, public and agency comments submitted on the Draft EA, and OEA's recommendations for environmental mitigation in making its final decision on TREX's proposal. In that decision, the Board will decide whether to approve, approve with conditions, or deny TREX's proposal.

PURPOSE AND NEED

The proposed action analyzed in this Draft EA includes both the construction of the new rail line and the operation of that rail line by TREX. TREX's proposal would require that TREX construct a new crossing over an existing line of railroad owned and operated by UP. To facilitate the construction of that crossing, TREX intends to file a crossing petition with the Board under 49 U.S.C. § 10901(d). Because TREX could not implement this project without authority from the Board for the planned crossing, this Draft EA also includes an appropriate analysis of the planned crossing.

TREX currently provides short line rail service to Texas International Terminal (the Terminal), a liquid and dry bulk multi-modal facility supporting deep draft vessel, unit train, manifest rail, barge, and truck transport along the Galveston Ship Channel. The purpose of the proposed rail line is to provide TREX and the Terminal with efficient, reliable, direct, and permanent access to an existing BNSF rail line located south of the Terminal. Although TREX currently receives both UP and BNSF traffic, BNSF traffic reaches the Terminal only through an

indirect reciprocal switching service¹ provided by UP. According to TREX, this arrangement results in added expense to shippers, as well as restrictive service and operating rules that contribute to operational inefficiencies and delays. TREX states that the proposed rail line would allow BNSF trains to reach the Terminal directly and without delay, resulting in increased operational efficiencies, improved train service and processing times, reduced locomotive use and switching time, reduced train turnaround times, reduced intersection blockages (rail and public roadway), and improved system function. Because the rail traffic level originating and terminating at the Terminal depends on market demand and the Terminal's on-site capacity, construction of the proposed rail line and the planned crossing of the existing UP rail line would not result in an increase in rail traffic beyond current levels and is expected to increase the efficiency with which trains move into and out of the Terminal.

Construction of the proposed rail line and the planned crossing of the existing UP rail line would require approximately 3.85 acres of new right-of-way or permanent easement. The total estimated length of the proposed rail line is approximately 2,800 feet, with an average right-of-way width of approximately 50 feet to accommodate a new parallel crew access road. TREX would construct the track and rail bed in accordance with standards approved by the American Railway Engineering and Maintenance of Way Association (AREMA) and the U.S. Department of Transportation, Federal Railroad Administration (FRA) for Class 3 railroad operation. During rail operations, TREX would inspect the track regularly, as required by FRA track safety standards. Additional inspections would be conducted as warranted by weather conditions. TREX would implement a program to prevent deterioration of the track and structures consistent with industry and FRA safety standards.

On October 10, 2018, OEA granted TREX's request (Appendix B, Exhibit 4) for a waiver of the preparation of an Environmental Impact Statement (EIS). OEA determined that an EA, rather than an EIS, is appropriate in this case because of the low likelihood that the proposed construction and operation would result in significant environmental impacts. In making that decision, OEA considered the preliminary comments received from various appropriate local,

¹ Reciprocal switching is when a railroad with physical access to a shipper facility switches rail traffic to the facility to another railroad that does not have physical access. The second railroad compensates the railroad that has physical access in the form of a per car switching charge, with the shipper facility gaining access to an additional railroad.

state, and federal agencies, as well as preliminary environmental information submitted by TREX and OEA's inspection of the project area. Specifically, OEA based its decision on the following information:

- The project area is heavily developed to support industrial uses. Very little vegetation or wildlife habitat would be removed or disturbed by construction and operation of the proposed rail line.
- The rail line would require the construction of a second at-grade crossing of Port Industrial Road along the southern border of the Terminal. Because trains operating along this and the existing crossing are moving at very low speeds, there is low potential for impacts to public safety and local transportation systems.
- There would be no diversion of existing freight traffic to or from other transportation systems or modes.
- The total rail traffic entering and leaving the Terminal would not increase as a result of the proposed action.
- The proposed action would not adversely affect or conflict with existing land use plans.
- The proposed action would not affect any existing natural gas or petroleum pipelines or electrical distribution lines.
- The proposed action would not significantly impact local or regional air quality.
- There are no sensitive noise receptors in the project area that could be affected by the proposed action.
- Although the proposed rail line would cross several surface water features, impacts to water resources would be minimized if mitigation measures are implemented.
- There are no wildlife sanctuaries, refuges, national or state parks or forests in or near the project area that would be affected by the proposed action.
- The project area is not a designated critical habitat for any wildlife species.
- There are no known sites of historic or archeological significance in and near the project area.

In preparing this Draft EA, OEA was assisted by Burns & McDonnell, a consulting firm with corporate headquarters in Kansas City, Missouri, acting as OEA's independent third-party consultant. TREX requested that OEA select Burns & McDonnell as its third-party consultant, pursuant to 49 CFR 1105.4(j), and OEA approved that selection based on Burns & McDonnell's knowledge of the project area and expertise in rail line construction projects (Appendix B, Exhibit 3 and 4). As OEA's independent third-party consultant, Burns & McDonnell works

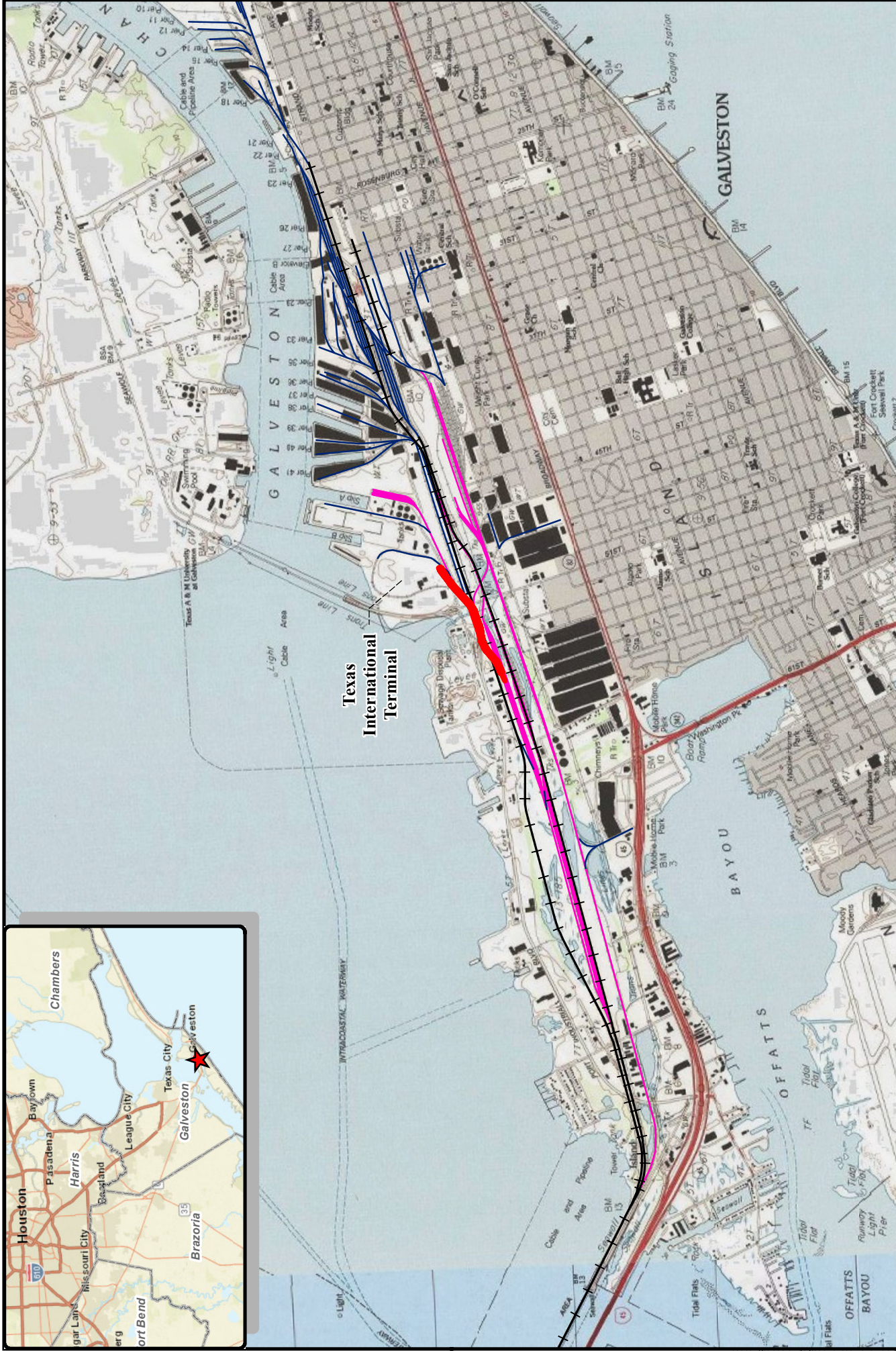
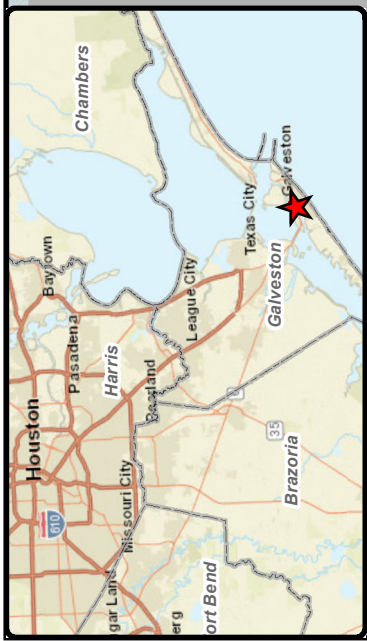
under the sole direction and supervision of OEA, although the consultant fees are paid by TREX. OEA has also relied on environmental data gathered in the field by Spirit Environmental, LLC (Spirit), an environmental consultant retained by TREX. OEA, with the assistance of Burns & McDonnell, has independently reviewed and assessed the data that Spirit provided. To date, no agencies have requested to participate in the environmental review process as cooperating agencies.

DESCRIPTION OF THE AFFECTED ENVIRONMENT

The proposed rail line would be located in Galveston, Galveston County, Texas, and would extend generally southwest from the Terminal's southern border on Port Industrial Road, along existing trackage and under the 51st Street/Pelican Island Causeway and State Highway (SH) 275/Harborside Drive, to its terminus at an existing switch approximately 1,670 feet west-southwest of the intersection of SH 275 and Pelican Island Causeway, as illustrated in Figure ES-1. In this Draft EA, the "project footprint" refers to the geographic area in which proposed construction and related activities would take place, as illustrated in Figure ES-2. The "project area" refers to the area that includes the proposed project footprint, as well as other land in the vicinity of the proposed rail line.

Transportation infrastructure in the project area includes the Terminal, a multi-modal shipping facility; the existing BNSF and UP tracks located south of the Terminal; and several public roadways. The proposed rail line would cross Port Industrial Road, a small at-grade public road that provides access to the Terminal and several other industrial facilities, including the Port of Galveston to the east of the project area. The 51st Street/Pelican Island Causeway and SH 275/Harborside Drive are elevated above the project area with Port Industrial Road and all existing trackage passing under these two roadway structures.

The project area is located within the Gulf Coastal Prairies Physiographic Province of Texas. The Gulf Coastal Prairies begin at the Gulf of Mexico shoreline and are primarily comprised of young, eroded deltaic and alluvial sands, silts, and clays. The topography within the project area is nearly level, at approximately zero to five feet above sea level throughout. The lowest shoreline along the northern edge of the Terminal property. The climate in Galveston County is characterized by long, hot, and humid summers, and warm winters only occasionally interrupted



- Project Location
- Active Main Line
- Active Side Track
- Active Spur Line



Figure ES - 1
Regional Project Location
Texas Railway Exchange
Galveston County, Texas

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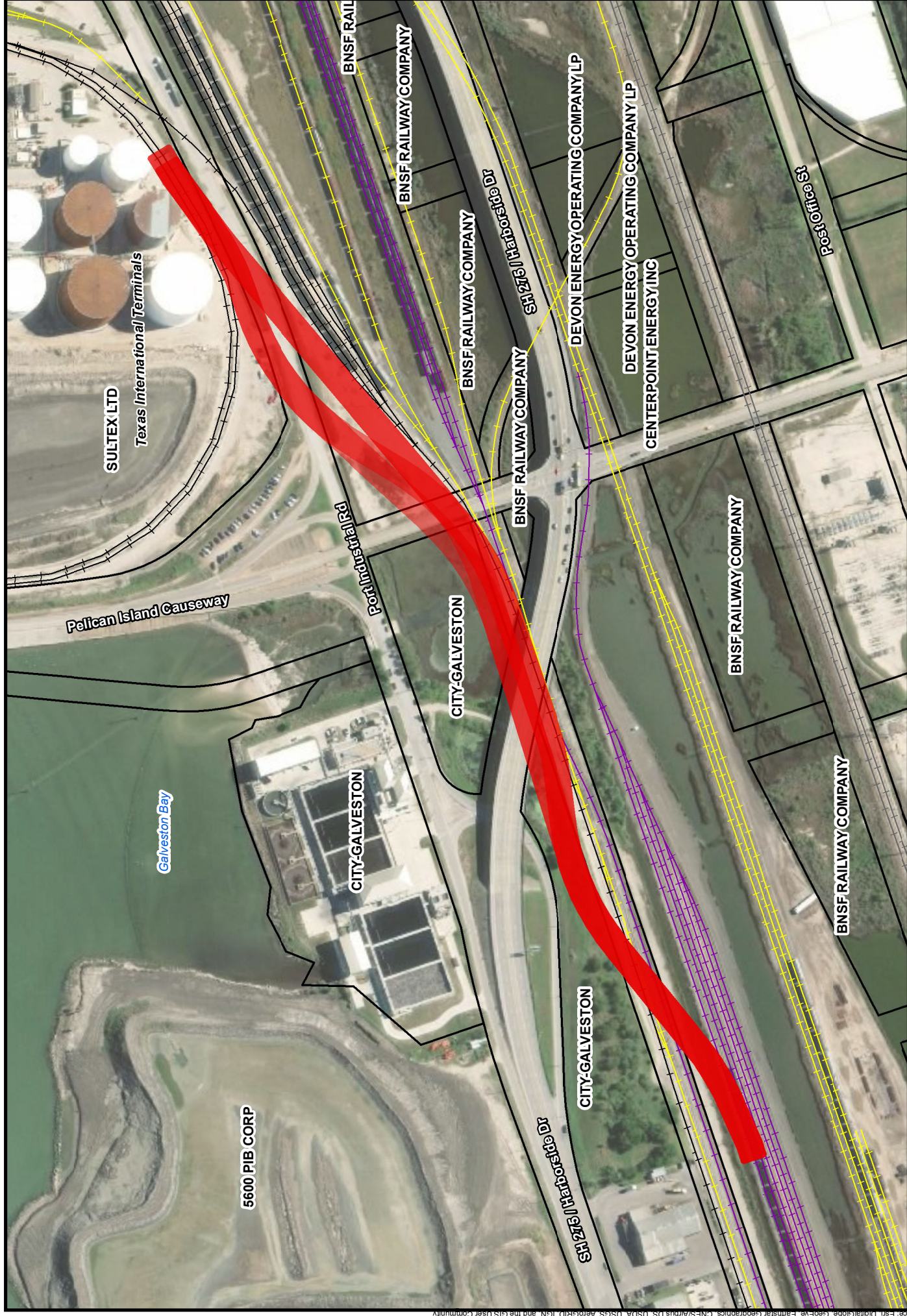


Figure ES-2
Project Area and Footprint
Texas Railway Exchange
Galveston County, Texas

0 100 200 400
Scale in Feet

Project Footprint

UP Track

BNSF Track

TREX Track

Unknown Track

Parcel Boundary

Source: ESRI, FDO UNRA USFWS NWI, FEMA, GCAD, Burns & McDonnell Engineering Company, Inc.

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by cold air incursions from the north. Average precipitation for the year ranges from a low of 2.82 inches in February to 5.69 inches in September, for an annual average of 39.73 to 45.79 inches. The sun shines 60 percent of the time, averaged for all months. The project area is located within an Air Quality Control Region (AQCR) classified by the U.S. Environmental Protection Agency (EPA) as being in attainment for all air quality standards, with the exception of ozone, for which it is in moderate nonattainment.

The project footprint is located approximately 700 feet south of the Galveston Ship Channel, a subarea of Galveston Bay. Galveston Bay is part of the Trinity-San Jacinto Estuary, which also includes Trinity Bay, East and West Bays, and three passes. The Trinity-San Jacinto Estuary is the largest estuary in the state, covering approximately 345,280 acres. The estuary as a whole typically receives 11 million acre-feet of freshwater inflow from two major rivers, Trinity and San Jacinto, as well as Clear Creek, Buffalo Bayou, and general surface runoff. There is a small pond/wetland feature and drainage ditches crossed by the project footprint that are typical of the Galveston Bay coastal area.

The proposed rail line would be located entirely within the City of Galveston, Galveston County, Texas. The 2017 population of Galveston was 50,497; with the 2017 population of Galveston County at 335,036. Galveston is located on Galveston Island along the northern shore of the Gulf of Mexico. The island is connected to the Texas mainland and Houston metropolitan area by I-45 and Texas Highway 6. Galveston's economy has been historically driven by trade as the oldest deepwater port along the Gulf of Mexico west of New Orleans.

Located within a heavily developed industrial area, the proposed rail line would not affect any residential or commercial neighborhoods. The proposed rail line is located within a heavily developed industrial areas, more than 0.5 miles from the closest residential neighborhood. No public facilities are located within the project area. There are no residences within or adjacent to the project area, so no homes or businesses would be displaced and no impacts would occur to low income or minority communities.

Lands within and adjacent to the project area have been cleared and developed for industrial uses. Vegetation is limited to roadside and trackside ditches, portions of public rights-of-way, and maintained commercial and residential landscapes. Common vegetation includes

several types of small trees, shrubs, and forbs indigenous to disturbed areas within the coastal plain.

ALTERNATIVES CONSIDERED

During the environmental review process, OEA considered three alternative alignments that could potentially meet the purpose and need of TREX's proposal. One alternative, the Port Industrial Road Alternative, was eliminated early in the environmental review process and is not examined in detail in this Draft EA. The two remaining alternatives, the Green Alternative and the Blue Alternative, have similar construction footprints and are referred to collectively as the Build Alternatives in this Draft EA. For each of the Build Alternatives, OEA considered two potential design options (Option A and Option B) that differ in terms of the placement of the at-grade crossing of Port Industrial Road. In addition to the Build Alternatives, OEA also considered the potential environmental impacts of the No-Action Alternative. Under the No-Action Alternative, TREX would not construct the proposed rail line. All of the alternatives that OEA considered are described below:

- **Green Alternative (Options A and B)** - This alternative would extend approximately 2,800 feet in a southwesterly direction from the southern end of the Terminal property to the existing BNSF unit train stacking tracks lying south of an existing UP rail line. From its northeastern terminus at the Terminal, the alternative would cross Port Industrial Road at-grade and would travel under the 51st Street/Pelican Island Causeway. It would then cross a tidal water feature and two emergent wetlands and travel under SH 275/Harborside Drive. The Green Alternative would cross the existing UP rail line at-grade and cross a linear ditch (a second tidal water feature) south of the UP tracks before terminating at a connection with the BNSF tracks on the south side of the ditch. The Green Alternative includes construction of a new crew access road north of and parallel to the new track from the crossing under SH 275/Harborside Drive to the existing crew parking area north of the UP tracks near the proposed rail line's western terminus. Design Options A and B under the Green Alternative differ in the alignment east of the 51st Street/Pelican Island Causeway to the Terminal. Green Alternative Option A would cross Port Industrial Road approximately 660 feet west of the existing TREX track crossing of Port Industrial Road. Its construction and operation would require TREX to

obtain access rights across approximately 548 feet of UP property. Green Alternative Option B would cross Port Industrial Road approximately 356 feet west of the existing TREX track crossing of Port Industrial Road. Its construction and operation would require TREX to obtain access rights across approximately 823 feet of UP property.

- **Blue Alternative (Options A and B)** - This alternative would have the same terminus points as the Green Alternative and would follow similar alignments. Unlike the Green Alternative, however, the Blue Alternative would avoid crossing the tidal water and both emergent wetlands to the west of 51st Street/Pelican Island Causeway by veering farther south into UP property to parallel the existing UP rail line. The Blue Alternative would also cross the linear ditch south of the UP tracks before terminating at a connection with the BNSF tracks on the south side of the ditch. Like the Green Alternative, the Blue Alternative would also include a new crew access road. Design Options A and B under the Blue Alternative differ in the alignment east of the 51st Street/Pelican Island Causeway to the Terminal. Blue Alternative Option A would cross Port Industrial Road approximately 660 feet west of the existing TREX track crossing of Port Industrial Road. Its construction and operation would require TREX to obtain access rights across approximately 947 feet of UP property. Blue Alternative Option B would cross Port Industrial Road approximately 356 feet west of the existing TREX track crossing of Port Industrial Road. Its construction and operation would require TREX to obtain access rights across approximately 1,203 feet of UP property.
- **Port Industrial Road Alternative** - This alternative was initially considered by OEA but was not carried forward for detailed analysis. The Port Industrial Road Alternative has the same terminus points as the Green and Blue Alternatives, but would be located farther north, paralleling Port Industrial Road. Such an alignment would require extensive excavation to lower the track bed in order to achieve appropriate vertical clearance under the SH 275/Harborside Drive and 51st Street/Pelican Island Causeway bridges. Because it could result in potential impacts to drainage patterns in the project area, as well as safety and operational issues related to flooding, the Port Industrial Road Alternative was eliminated early in the environmental review process.

- **No-Action Alternative** - If the Board were to deny TREX's petition for construction and operation authority, TREX would not construct the proposed rail line. Environmental impacts related to construction would not occur and impacts related to rail operations would remain the same as under current conditions.

OEA has concluded that both the Green and Blue Alternatives (the Build Alternatives) would meet the purpose and need of the proposed project and are reasonable and feasible from a construction standpoint. A detailed discussion and comparison of the Build Alternatives and the No-Action Alternative is found in Chapter 2, Section 2.5.

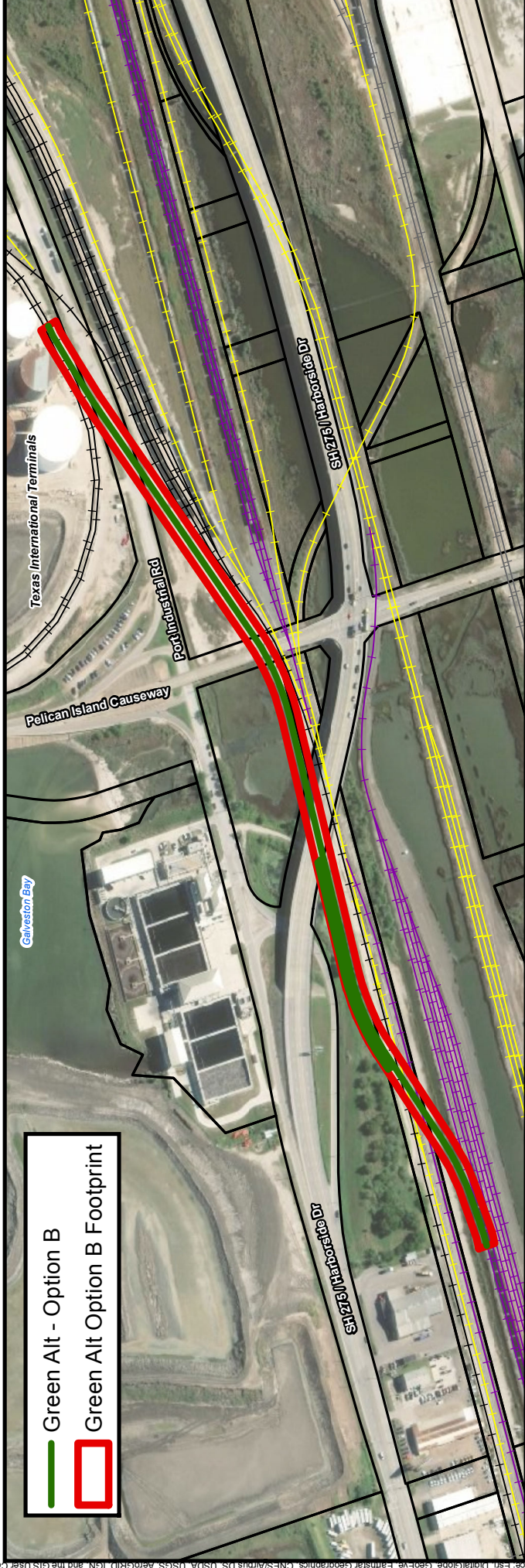
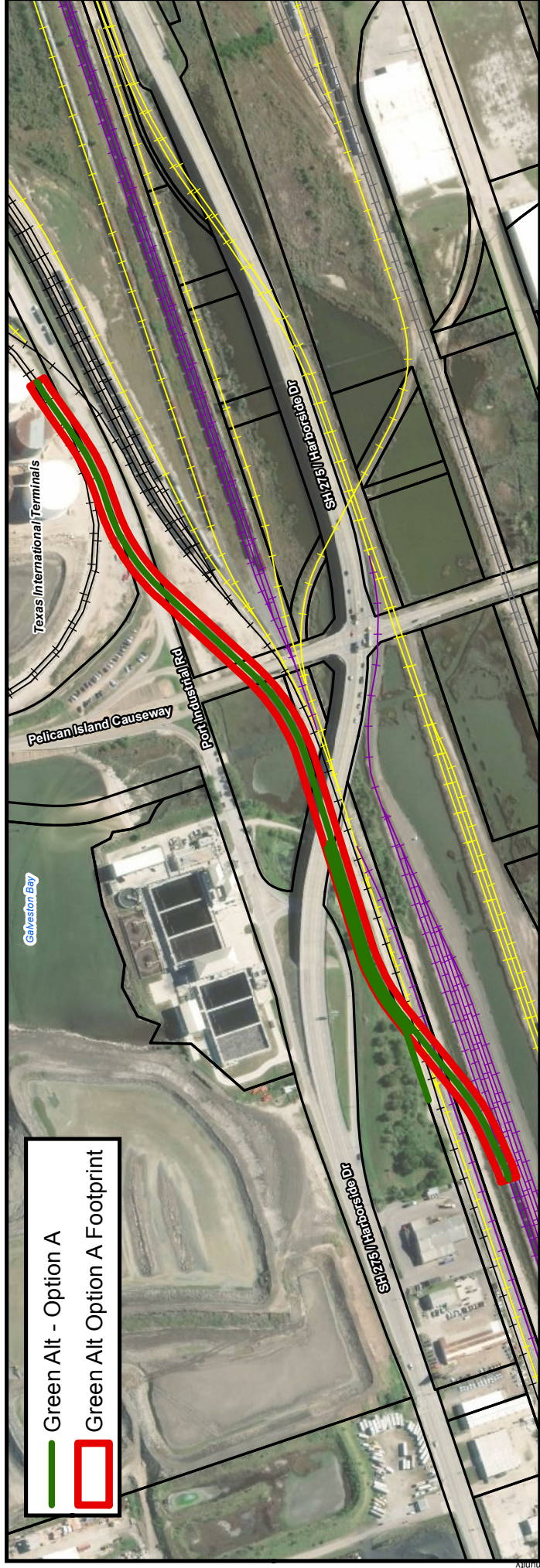


Figure ES-3
Green Alternative
Options A & B
Texas Railway Exchange
Galveston County, Texas

ISSUED: 2/20/2019

Scale in Feet

0 100 200 400

NORTH

BNSF Track

TREX Track

UP Track

Unknown Track

Parcel Boundary

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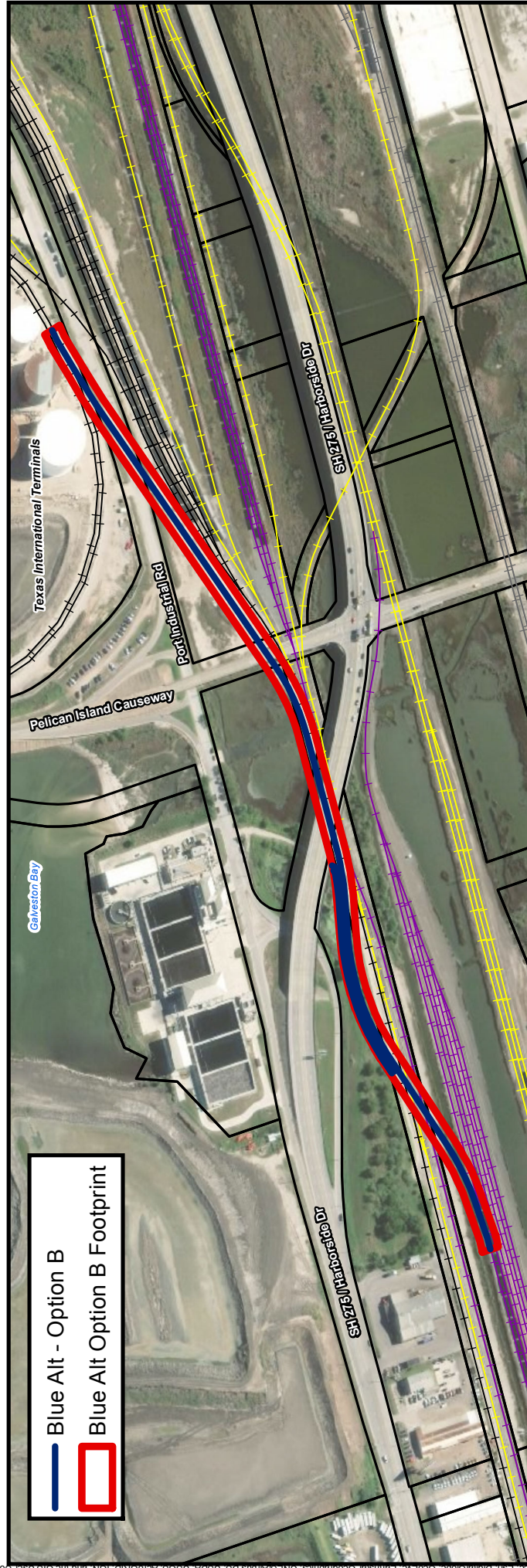
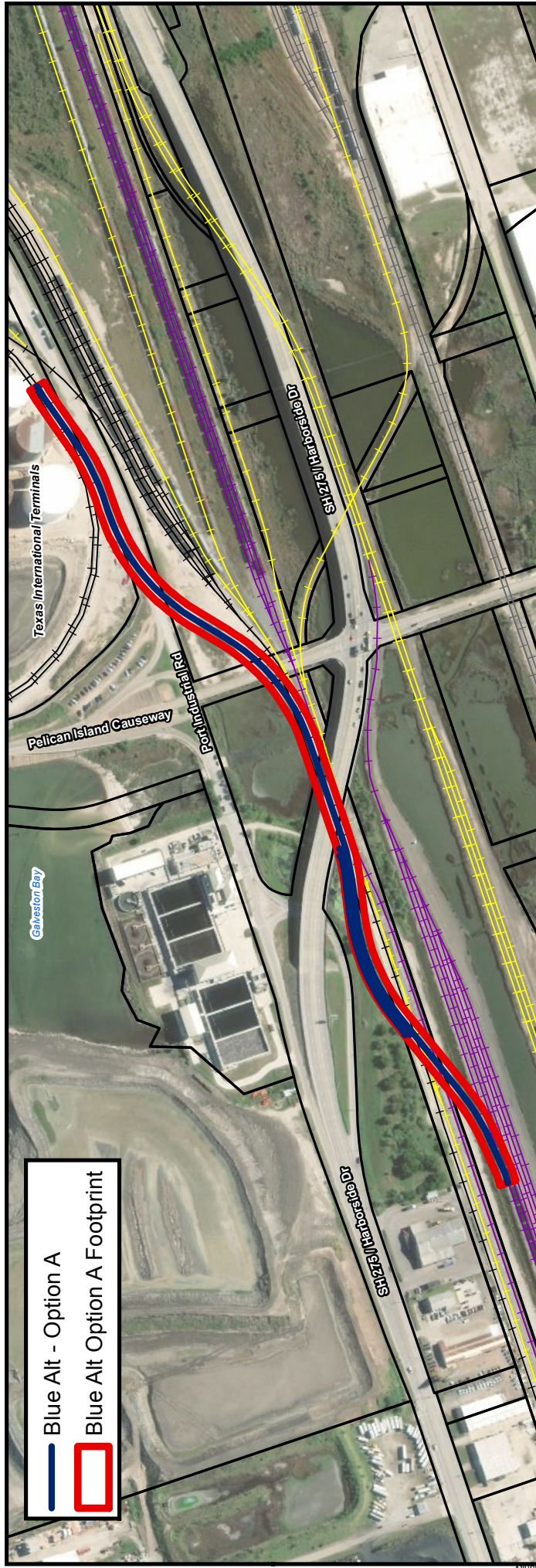
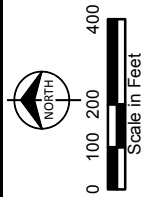


Figure ES-4
Blue Alternative
Options A & B
Texas Railway Exchange
Galveston County, Texas



 BNSF Track
  TREX Track
  UP Track

 Unknown Track
  Parcel Boundary

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SYNOPSIS OF ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

As discussed here and in detail in Chapter 4, the construction and operation of either of the Build Alternatives would not result in significant environmental impacts.

TRANSPORTATION SYSTEMS

The purpose of the proposed rail line and the planned crossing of the existing UP rail line is to provide a direct connection between the Terminal and a BNSF rail line. This connection would allow BNSF traffic to reach the Terminal without the need for the reciprocal switching service currently provided by UP. Therefore, rail traffic on the proposed rail line would be diverted from an existing rail line and the volume of trains would not change from current conditions. OEA estimates that approximately four trains would operate on the proposed rail line per week, on average, including both incoming and outgoing rail traffic.

The proposed rail line would require a new at-grade rail crossing across an existing UP rail line. To facilitate the construction of that crossing, TREX intends to file a crossing petition with the Board under 49 U.S.C. § 10901(d). Because TREX could not implement this project without authority from the Board for the planned crossing, the Draft EA includes an appropriate analysis of the planned crossing. To ensure that impacts of the planned rail crossing to local transportation systems would be minimized, OEA is recommending mitigation that would require TREX to use best management practices for the construction and operation of the new crossing and to coordinate with UP to minimize disruption of rail traffic patterns resulting from the new crossing.

The proposed rail line would also require that a new at-grade road crossing be constructed across Port Industrial Road. The new at-grade road crossing would work independently of the existing at-grade road crossing of Port Industrial Road located to the east. Like the existing crossing, the new crossing would remain unsignalized due to the low volume of train and vehicle traffic. The new crossing would be constructed to AREMA and City of Galveston design standards. Because it would increase the efficiency with which trains are moved into and out of the Terminal, OEA believes that the proposed rail line would have beneficial impacts on local vehicular traffic along Port Industrial Road by reducing the total number of times that the road would be blocked by trains.

Both Build Alternatives would include construction of a new crew access road north of and parallel to the proposed track. The crew access road would be gravel and would connect the existing crew access road under the 51st Street/Pelican Island Causeway and the existing crew parking area located north of the UP tracks near the proposed project's western terminus. Because the proposed rail line would parallel existing trackage underneath SH 275/Harborside Drive and the 51st Street/Pelican Island Causeway, OEA does not anticipate any impacts to either highway bridge structure.

PUBLIC SAFETY

OEA concludes that construction or operation of the proposed rail line and the planned crossing of the existing UP rail line would not result in any adverse impacts to public safety in the project area. Because rail traffic on the proposed rail line would be diverted from an existing rail line, OEA does not expect that the proposed project would result in an increase in the total volume of rail traffic in the project area or in the number of trains crossing Port Industrial Road. Construction of the proposed rail line would result in a temporary and short-term increase in vehicle traffic along Port Industrial Road due to the transport of construction materials, equipment, and workers. TREX would provide signage and flagmen during the construction timeframe to manage vehicular traffic along area roadways.

GEOLOGY, SOILS, AND CLIMATE

Both Build Alternatives would require a right-of-way averaging 50 feet in width across land that has been significantly disturbed and altered by rail and other previous development. The majority of the proposed rail right-of-way has been prepared for rail uses as part of previously completed track improvements on the UP and BNSF rail lines. In those areas, limited ground disturbance would occur under either Build Alternative to support installation of sub-ballast, ballast, ties, rail, and switch components. Soil disturbance would be restricted to those areas necessary for construction of the proposed rail line and the planned crossing of the existing UP rail line.

SURFACE AND GROUND WATER

Two linear tidal waters are present as ditch features within the project footprint (Water 1 and Water 2). The project footprint also crosses two emergent wetlands (one estuarine and one freshwater). The Green Alternative would require construction of a new culvert to cross Water 1 and the extension of an existing culvert to cross Water 2 to accommodate the proposed rail line. The Green Alternative would also require the placement of fill materials within both wetlands to accommodate construction of the new track bed and crew access road. The Blue Alternative would only require construction of a new culvert to cross Water 1 and would avoid impacts to the other identified water features. There are no public drinking water wells or subsurface water features present in the project area. OEA is recommending mitigation measures to require that TREX and its contractors implement best management practices to control erosion, sedimentation, and release of any contaminants during construction and operation of the proposed rail line.

AIR QUALITY

The proposed rail line and the planned crossing of the existing UP rail line would result in minimal impacts to air quality. During construction, impacts would include air emissions from construction vehicles and heavy equipment. The emission of construction-related fugitive dust is also possible and OEA is recommending mitigation requiring TREX to employ appropriate measures, as necessary, to control fugitive dust. Those air quality impacts would cease when construction has been completed. During rail operations, air emissions would include exhaust from locomotives and from motor vehicles used for maintenance and crew change purposes. Because the total amount of rail traffic in the project area would not change due to the construction of the proposed rail line and the planned crossing of the existing UP rail line, OEA expects that air emissions related to rail operations would be similar to those under current conditions. Locomotive emissions may decrease somewhat from current levels due to the increased efficiency of rail service to and from the Terminal. According to TREX, the proposed rail line would also allow TREX to use newer and more fuel-efficient locomotives during rail operations, which would further improve local air quality. All air emissions related to construction and operation of the proposed rail line and the planned crossing of the existing UP rail line would be localized and are not expected to significantly affect regional air quality.

BIOLOGICAL RESOURCES

Because it has been extensively developed for rail and other industrial purposes, little wildlife habitat is present in the project area. Some vegetation would be removed under either of the Build Alternatives and some animals, including birds and small ground-dwelling species, could be displaced by the loss of that habitat. These impacts, however, would be confined to the proposed project footprint. Within two tidal wetland areas, the construction and extension of culverts could potentially affect aquatic vegetation and animal species. During rail operations, birds could be affected by locomotive noise and animals could be killed by collisions with trains. Any such impacts would be small because of the slow train operating speeds within the project area and would not be significant to the overall populations of wildlife in the area.

Although several federally listed threatened and endangered species, including both terrestrial and aquatic species, are known to be present in Galveston County and the adjacent Galveston Bay, there is no suitable habitat for most of these species in the immediate project area. Within the project footprint, there is some habitat suitable for the red knot (*Calidris canutus rufa*), a federally listed threatened bird species, in the project footprint, but no individuals of this species have been observed in the project area during field investigations. Suitable habitat for three state-listed protected bird species is also present in the project footprint, although no populations were observed during field investigations. Those species are the black rail (*Laterallus jamaicensis*), the brown pelican (*Pelecanus occidentalis*), and the white-faced ibis (*Plegadis chihi*). The project area does not include critical habitat for any federally or state-listed protected species.

The West Indian manatee and five sea turtle species that are federally listed as threatened or endangered may occur within Galveston Bay and in deepwater habitats located approximately one-quarter of a mile north of the proposed rail line. Earthen embankments and culverts separate these preferred habitats from the project area, making it physically difficult for these species to access the tidal and emergent wetland areas that the proposed rail line would cross. Because of these existing physical barriers and the lack of deeper bay water habitats in the project area, construction and operation of the proposed rail line and the planned crossing of the existing UP rail line are not likely to affect those species.

Because the proposed rail line would cross a heavily developed corridor, OEA believes that if OEA's recommended mitigation measures are imposed, neither of the Build Alternatives would be likely to adversely affect any federally or state-listed endangered or threatened species. If those mitigation measures are imposed, impacts to biological resources, including plant and animal species, would not be significant.

NOISE AND VIBRATION

Noise levels within the project area would rise temporarily during construction of the proposed rail line and the planned crossing of the existing UP rail line due to the operation of heavy equipment, construction vehicles, and other machinery. The increase in noise during construction would not impact any sensitive noise receptors. The proposed rail line would be located within an industrial area with no residences, schools, churches, hospitals, or other public buildings nearby. Noise during rail operations would not exceed the levels emitted during current switching services and impacts would be minimal due to the built-up and heavy industrial nature of the project area. OEA estimates that TREX would move approximately four unit or subunit trains, on average, along the proposed rail line on a weekly basis including both incoming and outgoing traffic, based on current and proposed traffic data provided by TREX. Therefore, the number of trains per day does not exceed the Board's threshold for requiring a detailed noise analysis. There are no requirements for train horn soundings when crossing Port Industrial Road to enter or leave the Terminal. TREX would continue to provide spotting vehicles and personnel equipped with warning lights to alert oncoming vehicular traffic of trains crossing Port Industrial Road at both the existing and proposed at-grade crossings.

CULTURAL RESOURCES

Based on searches of available databases of archaeological and historical sites, there are no previously recorded archaeological sites or historically significant properties within or adjacent to the project area. The Texas Historical Commission (the Texas State Historic Preservation Office or Texas SHPO) has submitted comments stating that no historic properties would be affected by the construction and operation of the proposed rail line. OEA has reviewed the information available to date and concurs with the Texas SHPO's comments. OEA is recommending a mitigation measure to require TREX to stop work immediately and notify OEA

and the Texas SHPO if any cultural or archaeological resources are inadvertently discovered during construction.

HAZARDOUS MATERIALS AND WASTE SITES

Because the proposed rail line is located within an active industrial area dominated by rail infrastructure and because of the limited amount of soil disturbance that would occur, the potential for impacts related to hazardous materials and known hazardous waste sites during construction of the proposed rail line and the planned crossing of the existing UP rail line is low. The proposed rail right-of-way was previously prepared for rail use as part of previous rail improvement projects. Suitable sub-base and rail base (compacted aggregate) are already in place, so only the ballast, ties, rails, switch components, and culverts would be installed during construction of the proposed rail line. Five properties located along the northside of Port Industrial Road are listed by the EPA as hazardous waste generators under the Resource Conservation and Recovery Act (RCRA). None of those sites pose a potential risk to construction of the proposed rail line or the planned crossing of the existing UP rail line. No Superfund sites are located in the vicinity of the project area. Because the rail traffic on the proposed rail line would be diverted from an existing rail line, the volume of hazardous materials transported by rail through the project area would not change from current conditions.

RECOMMENDATIONS FOR MITIGATION

Based on OEA's independent analysis of the project and the comments received from various agencies consulted with prior to and during the preparation of this Draft EA (see Appendix A), OEA recommends that, if the Board grants TREX authority to construct and operate the proposed rail line and authorizes the planned crossing of the existing UP rail line, such authority should be subject to the mitigation measures identified below.

MM-1. TREX shall schedule construction activities related to the construction of the rail line and the planned crossing of the existing UP rail line so as to minimize the periodic closing of roadways and vehicular traffic delays. TREX shall coordinate with the Texas Department of Transportation (TxDOT) and the City of Galveston regarding the scheduling of construction activities that could result in temporary road closures and shall provide for detours and

associated signage, as appropriate, or maintain at least one open lane of traffic at all times to allow for the passage of emergency and other vehicles.

MM-2. TREX shall, to the extent practicable, confine all traffic related to the construction of the rail line and to the planned crossing of the existing UP rail line to temporary access roads within the rail right-of-way or established public roads. Where traffic cannot be confined to temporary access roads or public roads, TREX shall make necessary arrangements with landowners to gain access. After rail-related construction is completed, TREX shall remove and restore any temporary access roads constructed outside of the rail right-of-way unless otherwise agreed to with the landowners.

MM-3 TREX shall ensure that any activities related to the construction of the rail line and to the planned crossing of the existing UP rail line located within and along existing roadways are consistent with the Manual on Uniform Traffic Control Devices for installation of signs (e.g., regulatory, warning/caution, speed), delineators, and other roadway appurtenances and in compliance with the terms and conditions of any American Association of State Highway and Transportation Officials safety standards.

MM-4. TREX shall consult with appropriate federal, state, and local transportation agencies to determine the final design and other details for the use of road crossing warning signs and devices on Port Industrial Road. Implementation of road crossing warning signs and devices will be subject to the review and approval of the TxDOT and the City of Galveston. TREX shall coordinate with the TxDOT and the City of Galveston to identify the maintenance and repair responsibilities of each party for project-related warning devices used during construction at the at-grade road crossing.

MM-5. During operation of the rail line and the planned crossing of the existing UP rail line, TREX shall comply with the rail safety regulations implemented and enforced by the FRA, including regulations that establish safe speed limits for train operations and regulations that establish procedures for implementing an inspection and maintenance program to minimize the potential for derailments and other rail-related accidents.

MM-6. TREX shall ensure that the planned rail crossing over the existing UP rail line is constructed in accordance with applicable rail safety standards and shall abide by applicable rail safety regulations implemented and enforced by the FRA during operation of the rail crossing.

MM-7. TREX shall, to the extent practicable, consult and coordinate with UP during the construction of the planned rail crossing over the existing UP rail line so as to minimize temporary disruptions to rail traffic along the existing UP rail line.

MM-8. TREX shall, to the extent practicable, limit rail-related construction activities, vegetation clearing, and soil disturbance to the rail right-of-way and immediately surrounding areas to minimize fugitive dust emissions during the construction of the rail line and the planned crossing of the existing UP rail line.

MM-9. TREX shall use water trucks as appropriate to minimize fugitive dust emissions and shall employ best management practices in the control and suppression of fugitive dust emissions during the construction of the rail line and the planned crossing of the existing UP rail line.

MM-10. TREX shall comply with the reasonable requirements of applicable federal, state, and local regulations regarding the control of fugitive dust related to the construction of the rail line and the planned crossing of the existing UP rail line.

MM-11. TREX shall implement soil erosion and sedimentation control measures along surface waters in the project area to minimize impacts from stormwater runoff during construction of the rail line and the planned crossing of the existing UP rail line. TREX shall consider installation and maintenance of sediment control structures that exclude wildlife access to construction areas.

MM-12. TREX shall design and construct the rail line, including culverts, and the planned crossing of the existing UP rail line in such a way as to maintain natural water flow and drainage patterns to the extent practicable.

MM-13. During construction and operation of the rail line and the planned crossing of the existing UP rail line, TREX shall avoid and minimize impacts to waterbodies and wetlands, to the extent practicable. TREX shall obtain from the U.S. Army Corps of Engineers (USACE) any federal permits required under Section 404 of the Clean Water Act before initiating project-related construction activities that would impact wetlands and waterbodies. TREX shall comply

with all reasonable requirements as required by USACE and shall incorporate the stipulations of those permits and authorizations into construction contract specifications. TREX shall work directly with USACE to develop appropriate mitigation for direct wetland impacts as stipulated in the Section 404 permit.

MM-14. TREX shall coordinate with the Texas Commission on Environmental Quality (TCEQ) to obtain all appropriate state permits related to impacts to water resources resulting from construction of the rail line and the planned crossing of the existing UP rail line, including filing the appropriate notices under the Texas Construction General Permit for discharges from construction activities.

MM-15. TREX shall consult with the Coastal Division of the Texas General Land Office (GLO) regarding the consistency of the rail line and the planned crossing of the existing UP rail line with the Texas Coastal Management Program (Texas CMP) before beginning construction activities and shall comply with the reasonable requirements of the Texas CMP.

MM-16. If TREX or its contractors need to apply herbicides for right-of-way maintenance, TREX shall ensure the use of staff or contractors who are properly trained in herbicide application, shall require the following of label directions in herbicide application, and shall limit the amount of herbicide potentially entering waterways. TREX shall require the use only of herbicides regulated for such uses by the EPA and follow all state regulations regarding their use.

MM-17. If migratory bird species are found nesting on or adjacent to the project footprint, TREX shall deal with them in a manner consistent with the Migratory Bird Treaty Act. TREX shall conduct surveys of the project footprint for migratory birds before beginning construction of the rail line and the planned crossing of the existing UP rail line. If nests are observed during surveys, an area of buffer vegetation no less than 15 feet in all directions around the nest shall remain until the young have fledged.

MM-18. TREX shall minimize disturbances to wildlife, to the extent practicable, by restricting activities related to the construction of the rail line and the planned crossing of the existing UP rail line to the rail right-of-way.

MM-19. Before beginning construction of the rail line and the planned crossing of the existing UP rail line, TREX shall consult with USFWS regarding potential impacts to the red knot (*Calidris canutus rufa*) and shall comply with the reasonable recommendations of USFWS.

MM-20. TREX shall notify OEA and USFWS or the Texas Parks and Wildlife Department (TPWD), as appropriate, if any federally or state listed threatened or endangered species are encountered during construction of the rail line and the planned crossing of the existing UP rail line.

MM-21. During construction of the rail line and the planned crossing of the existing UP rail line, TREX shall control temporary noise from construction equipment through the use and maintenance of appropriate muffler systems on machinery.

MM-22. TREX shall comply with FRA regulations that establish decibel limits for train operations and locomotive noise standards during operations along the rail line and the planned crossing of the existing UP rail line.

MM-23. If any cultural resources are discovered or uncovered during construction of the rail line or planned crossing of the existing UP rail line, TREX shall halt all work immediately and notify OEA and the Texas SHPO to identify and implement the required consultation and mitigation.

MM-24. TREX shall ensure that waste materials related to the construction and operation of the rail line and the planned crossing of the existing UP rail line are removed and disposed of promptly at an appropriate waste-disposal site. TREX shall store and dispose of any hazardous waste generated or hazardous materials used in the normal course of construction, operation, and maintenance activities in accordance with applicable local, state, and federal regulations.

MM-25. TREX shall develop a spill prevention plan for handling the release of petroleum products or other hazardous materials during construction and operation of the rail line and the planned crossing of the existing UP rail line. In the event of a spill of such materials, TREX shall comply with its spill prevention plan and applicable local, state, and federal regulations pertaining to spill containment and clean-up.

MM-26. TREX shall comply with applicable U.S. Department of Transportation regulations, policies, and procedures regarding the transportation of hazardous materials should any such materials be transported along the rail line and the planned crossing of the existing UP rail line.

MM-27. If any undocumented hazardous waste sites are discovered or uncovered during construction of the rail line or the planned crossing of the existing UP rail line, TREX shall immediately halt all work and notify the appropriate regulatory agencies.

PRELIMINARY CONCLUSION

Based on available information provided from all sources to date, OEA preliminarily concludes that, if the recommended mitigation measures are imposed, construction and operation of the proposed rail line and the planned crossing of the existing UP rail line would not significantly affect the quality of the natural or human environment. The two Build Alternatives and the two design options associated with those alternatives would have similar environmental impacts and none of those impacts would be significant. Therefore, an EIS is unnecessary in this proceeding.

REQUEST FOR COMMENTS

OEA invites comments on all aspects of this Draft EA, including the scope and adequacy of the recommended mitigation measures, and other reasonable alternatives. Given the facts and circumstances presented by this proceeding, including the short length of the proposed line, no plans to increase the level of train traffic, and the minimal environmental impacts discovered during the preparation of this Draft EA, as well as TREX's request for expedited consideration, a 20-day comment period on this Draft EA is appropriate. The 20-day comment period will end on March 14, 2019 and OEA will respond to all comments submitted by that date in a Final EA, which will also present OEA's final conclusions and final recommended mitigation. The Board will then consider the entire environmental record, including the Draft EA, the Final EA, all environmental comments, and OEA's final recommendations in making its final decision in this proceeding.

Please send any comments on this Draft EA to:

Joshua Wayland
Surface Transportation Board
Patriots Plaza
395 E Street SW
Washington, DC 20423-0001
Attn: Docket No. FD 36186

Environmental comments may also be filed electronically on the Board's website, www.stb.gov, by clicking on the "E-FILING" link. Please refer to Finance Docket No. 36186 in all correspondence, including e-filings, addressed to the Board. If you have any questions regarding this Draft EA, you can contact Joshua Wayland, the OEA Project Manager for this case, by phone at (202)-245-0330, fax at (202) 245-0454, or email at joshua.wayland@stb.gov.

1.0 PURPOSE AND NEED

On November 21, 2018, the Texas Railway Exchange LLC (TREX) filed a petition with the Surface Transportation Board (the Board) under 49 U.S.C. § 10502 requesting an exemption from the requirements of 49 U.S.C. § 10901 to construct and operate approximately 2,800 feet of new rail line in the City of Galveston, Galveston County, Texas. Under 49 U.S.C. § 10502, the Board must exempt the proposed construction and operation of a rail line from the requirements of 49 U.S.C. § 10901 if it finds that regulation of the project: (1) is not necessary to carry out the transportation policy of 49 U.S.C. § 10102; and (2) either: (a) the transaction or service is of limited scope, or (b) the application of a subdivision of subtitle IV of the Interstate Commerce Act as amended by the Interstate Commerce Commission Termination Act of 1995 is not needed to protect shippers from the abuse of market power. When the Board decides whether to authorize the construction and operation of a proposed rail line, it must consider the potential impacts of that decision on the environment, pursuant to the National Environmental Policy Act (NEPA) and related laws. The Board's Office of Environmental Analysis (OEA) is the office tasked with fulfilling the agency's responsibilities under NEPA and has prepared this Draft Environmental Assessment (Draft EA) to examine the potential environmental impacts of TREX's proposal.

This Draft EA analyzes the potential environmental impacts that could occur as a result of the construction and operation of the proposed rail line by TREX. The proposed rail line would require a new crossing over an existing line of railroad owned and operated by Union Pacific Railroad (UP) and TREX intends to file a crossing petition under 49 U.S. Code § 10901(d) to construct that crossing. Therefore, this Draft EA also includes an appropriate analysis of the potential environment impacts of the construction and operation of the planned crossing over the existing UP rail line.

TREX is a political subdivision established under Texas law for the purpose of owning, constructing, and operating railroads in Galveston County. TREX provides short line rail service for the Texas International Terminals (the Terminal) in Galveston. TREX currently receives rail traffic from both UP and BNSF Railway Company (BNSF) rail lines. However, TREX receives BNSF traffic only indirectly, through a reciprocal switching service provided by UP. The purpose of the proposed rail line and planned crossing of the existing UP rail line is to provide a

direct connection between TREX and BNSF rail lines, which would allow BNSF traffic to reach the Terminal without the need for reciprocal switching. According to TREX, the proposed rail line and crossing of the existing UP rail line would increase the efficiency and reliability of rail traffic originating and terminating at the Terminal and decrease costs for shippers. By eliminating the need for reciprocal switching of BNSF trains, the proposed rail line and crossing of the existing UP rail line would reduce the time and locomotive use required to process those trains and could also decrease blockage of rail and roadway intersections.

Rail cargo is transported for processing and storage at the Terminal by way of two onsite loop tracks, totaling 11,000 linear feet, which are operated by TREX. TREX also operates 20,000 feet of unit train landing track and 10,000 feet of off-site manifest car landing track located south of the Terminal. TREX currently handles approximately four incoming unit trains (100 or more cars per train) per week. Based on projected rail traffic provided by TREX, OEA estimates that on average, a total of approximately four trains would operate on the proposed rail line and over the crossing of the existing UP rail line per week including both incoming and outgoing trains. Because rail traffic to and from the Terminal is dependent on market demand and the rail infrastructure within the Terminal, construction and operation of the proposed rail line and crossing of the existing UP rail line would not result in an increase in total rail traffic. Trains on the proposed rail line would transport ethanol, oil products, agricultural inputs, and other products for customers at the Terminal.



Figure 1-1 - Texas International Terminals, Galveston, Texas

In this Draft EA, the ‘project footprint’ refers to the geographical area in which construction and operation activities would occur, while the ‘project area’ refers to the broader geographical setting of the proposed rail line. The project footprint falls entirely within the City of Galveston, which is located on Galveston Island off the southern coast of Texas in Galveston Bay, approximately 50 miles southwest of downtown Houston. The population of the City of Galveston was 50,497 in 2017, according to the Houston-Galveston Area Council. Galveston County, which includes the City of Galveston, had a total population of 335,036 in that year. Businesses in both the city and county support tourism and entertainment, trade, transportation, utilities, industry, and education and health services. The project footprint is located south of the Galveston Ship Channel and southwest of the Port of Galveston in an industrial area that includes several rail lines, rail yards, and a number of port facilities, including the Terminal.

Because the proposed rail line, including the crossing of the existing UP rail line, would be only approximately 2,800 feet in length, would handle low volumes of rail traffic, and would be located in an area that has been substantially altered by development, the potential for environmental impacts to result from TREX’s proposal is low. On October 10, 2018, OEA granted TREX’s request (Appendix B, Exhibit 2) for a waiver of the preparation of an EIS. OEA determined that an EA, rather than an EIS, is appropriate in this case because of the low likelihood that the proposed construction and operation would result in significant environmental impacts. In making that decision, OEA considered the preliminary comments received from various local, state, and federal agencies, as well as preliminary environmental information submitted by TREX and OEA’s inspection of the project area. Specifically, OEA based its decision on the following information:

- The project area is heavily developed to support industrial uses. Very little vegetation or wildlife habitat would be removed or disturbed by construction and operation of the proposed rail line.
- The rail line would require the construction of a second at-grade crossing of Port Industrial Road along the southern border of the Terminal. Because trains operating along this and the existing crossing are moving at very low speeds, there is low potential for impacts to public safety and local transportation systems..
- There would be no diversion of existing freight traffic to or from other transportation systems or modes.

- The total rail traffic entering and leaving the Terminal would not increase as a result of the proposed action.
- The proposed action would not adversely affect or conflict with existing land use plans.
- The proposed action would not affect any existing natural gas or petroleum pipelines or electrical distribution lines.
- The proposed action would not significantly impact local or regional air quality.
- There are no sensitive noise receptors in the project area that could be affected by the proposed action.
- Although the proposed rail line would cross several surface water features, impacts to water resources would be minimized if the mitigation measures included in this Draft EA are implemented.
- There are no wildlife sanctuaries, refuges, national or state parks or forests in or near the project area that would be affected by the proposed action.
- The project area is not a designated critical habitat for any wildlife species.
- There are no known sites of historic or archeological significance in and near the project area.

In producing this Draft EA, OEA was assisted by Burns & McDonnell, a consulting firm with corporate headquarters in Kansas City, Missouri, acting as OEA's independent third-party consultant. TREX requested that OEA select Burns & McDonnell as its independent third-party consultant, pursuant to 49 CFR 1105.4(j), and OEA approved that selection based on Burns & McDonnell's knowledge of the project area and expertise in rail line construction project (Appendix B, Exhibit 3 and 4). As OEA's independent third-party consultant, Burns & McDonnell works under the sole direction and supervision of OEA, although the consultant fees are paid by TREX. OEA has also relied on environmental data gathered in the field by Spirit Environmental, LLC (Spirit), an environmental consultant retained by TREX. OEA, with the assistance of Burns & McDonnell, has independently reviewed and assessed the data that Spirit provided. To date, no agencies have requested to participate in the environmental review process as cooperating agencies.

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The proposed action in this case is TREX's proposal to construct and operate a rail line connecting the Terminal and an existing BNSF rail line. The proposed rail line would provide a direct connection for BNSF trains into the Terminal as an alternative to the reciprocal switching arrangement currently provided by UP. The proposed rail line would extend approximately 2,800 feet in a southwesterly direction from the southern edge of the Terminal property and would cross the existing UP rail line south of the Terminal to connect to the existing BNSF tracks. The proposed rail line would cross Port Industrial Road and would travel under elevated portions of SH 275/Harborside Drive and the 51st Street/Pelican Island Causeway. It would also cross two ditches and two emergent wetlands considered as jurisdictional water and wetland features under Section 404 of the Clean Water Act (see Chapter 3, Section 3.3.2). TREX intends to file a crossing petition under 49 U.S.C. § 10901(d) to cross a UP rail line to implement the proposed action. Accordingly, this Draft EA assesses, as appropriate, the planned crossing and includes mitigation that would apply to construction activities related to the crossing, should the Board authorize it under 49 U.S.C. 10901(d).

2.2 CONSTRUCTION

The entire length of the proposed rail line would involve new construction. The rail right-of-way would be approximately 2,800 feet long and 50 feet wide, including approximately 25 feet on either side of the centerline of the new rail line. A gravel crew access road would be constructed within the proposed right-of-way parallel to the northern side of the new track. The crew access road would be constructed between the existing crew change parking area near the west end of the proposed project and the existing crew access road south of the Port Industrial Road. Although the topography in the project area is very flat and has been previously disturbed by development of the existing rail infrastructure, limited grading and surface preparation could occur during construction. New sub-ballast, ballast, ties, rail, and switch components would be installed within the right-of-way. A new at-grade road crossing would be installed where the proposed rail line would cross Port Industrial Road between 356 feet and 660 feet west of the existing TREX rail line crossing, depending on the Build Alternative selected. The proposed rail line would also cross two tidal waterways and two wetland areas, which could require the

placement of fill materials and culvert structures in those habitats. A portion of an existing gravel parking lot and a section of Port Industrial Road would be removed to accommodate construction of the rail line as it enters the Terminal from the south.

Construction of the track and rail bed would follow methods approved by the American Railway Engineering and Maintenance of Way Association (AREMA) and the Federal Railroad Administration (FRA). If necessary, crash barriers would be constructed at the existing piers supporting the 51st Street/Pelican Island Causeway in accordance with AREMA standards. Disturbed pavement along Port Industrial Road would be replaced.

2.3 OPERATION

The proposed rail line would be used to transport liquid and dry bulk commodities into the Terminal for storage and distribution. The Terminal currently handles between four and five unit trains² per week and could expand that capacity to serve market demand. With existing track infrastructure, the Terminal can accommodate the length of two complete unit trains within its facility. OEA estimates that on average, the proposed rail line and crossing of the existing UP rail line would handle approximately four trains per week including both incoming and outgoing traffic. The proposed rail line and crossing of the existing UP rail line would be operated seven days per week, allowing for improved customer service and train turnaround times. TREX states that the construction of a track with a direct connection to the BNSF track would reduce the number of switching operations, reduce the number of road crossing events, support the use of more modern and fuel-efficient locomotives, and provide efficiencies in train processing times which would improve the overall customer experience and attract business to the Terminal as the market allows.

2.4 MAINTENANCE

TREX would regularly inspect and maintain the proposed rail line and crossing of the existing UP rail line for safety, as required by FRA track standards. Additional inspections would be carried out, as necessary, when warranted by weather or other operating conditions.

² A unit train typically carries all one commodity shipped from one point of origin to the same destination. The unit trains serving the Terminal typically range in length from 100-120 cars.

Inspections would focus on the condition of runoff drainage, vegetation growth, rail line alignment, rail line surface, track gauge, rail and turnouts, cross ties, and culverts.

2.5 ALTERNATIVES

During the environmental review process, OEA considered three alternative alignments that could potentially meet the purpose and need of TREX's proposal. One alternative, the Port Industrial Road Alternative, was eliminated early in the environmental review process and is not examined in detail in this Draft EA. The two remaining alternatives, the Green Alternative and the Blue Alternative are described in detail below and are shown in Figures 2-1 through and Figure 2-4. Because the Green Alternative and the Blue Alternative have similar construction footprints, they are referred to collectively as the Build Alternatives in this Draft EA. For each of the Build Alternatives, OEA considered two potential design options (Option A and Option B) that differ in terms of the placement of a new at-grade rail crossing of Port Industrial Road. In addition to the Build Alternatives, OEA also considered the potential environmental impacts of the No-Action Alternative. Under the No-Action Alternative, TREX would not construct the proposed rail line or the crossing of the existing UP rail line. All of the alternatives that OEA considered are described below:

- **Green Alternative (Options A and B)** - This alternative would extend approximately 2,800 feet in a southwesterly direction from the southern end of the Terminal property to the existing BNSF unit train stacking tracks lying south of an existing UP rail line (see Figures 2-1 and 2-2). From its northeastern terminus at the Terminal, the alternative would cross Port Industrial Road at-grade and would travel under the 51st Street/Pelican Island Causeway. It would then cross a tidal water feature and two emergent wetlands and travel under SH 275/Harborside Drive. The Green Alternative would cross the existing UP rail line at-grade and cross a linear ditch (a second tidal water feature) south of the UP tracks before terminating at a connection with the BNSF tracks on the south side of the ditch. The Green Alternative includes construction of a new crew access road north of and parallel to the new track from the crossing under SH 275/Harborside Drive to the existing crew parking area north of the UP tracks near the proposed rail line's western terminus. Design Options A and B under the Green Alternative differ in the alignment east of the 51st Street/Pelican Island Causeway to the Terminal. Green

Alternative Option A would cross Port Industrial Road approximately 660 feet west of the existing TREX track crossing of Port Industrial Road. Its construction and operation would require TREX to obtain access rights across approximately 548 feet of UP property. Green Alternative Option B would cross Port Industrial Road approximately 356 feet west of the existing TREX track crossing of Port Industrial Road. Its construction and operation would require TREX to obtain access rights across approximately 823 feet of UP property.

- **Blue Alternative (Options A and B)** - This alternative would have the same terminus points as the Green Alternative and would follow similar alignments (see Figures 2-3 and 2-4). Unlike the Green Alternative, however, the Blue Alternative would avoid crossing the tidal water and both emergent wetlands to the west of 51st Street/Pelican Island Causeway by veering farther south into UP property to parallel the existing UP rail line. The Blue Alternative would also cross the linear ditch south of the UP tracks before terminating at a connection with the BNSF tracks on the south side of the ditch. Like the Green Alternative, the Blue Alternative would also include a new crew access road. Design Options A and B under the Blue Alternative differ in the alignment east of the 51st Street/Pelican Island Causeway to the Terminal. Blue Alternative Option A would cross Port Industrial Road approximately 660 feet west of the existing TREX track crossing of Port Industrial Road. Its construction and operation would require TREX to obtain access rights across approximately 947 feet of UP property. Blue Alternative Option B would cross Port Industrial Road approximately 356 feet west of the existing TREX track crossing of Port Industrial Road. Its construction and operation would require TREX to obtain access rights across approximately 1,203 feet of UP property.
- **Port Industrial Road Alternative** - This alternative was initially considered by OEA, but was not carried forward for detailed analysis. The Port Industrial Road Alternative has the same terminus points as the Green and Blue Alternatives, but would be located farther north, paralleling Port Industrial Road. Such an alignment would require extensive excavation to lower the track bed in order to achieve appropriate vertical clearance under the SH 275/Harborside Drive and 51st Street/Pelican Island causeway bridges. Because it could result in potential impacts to drainage patterns in the

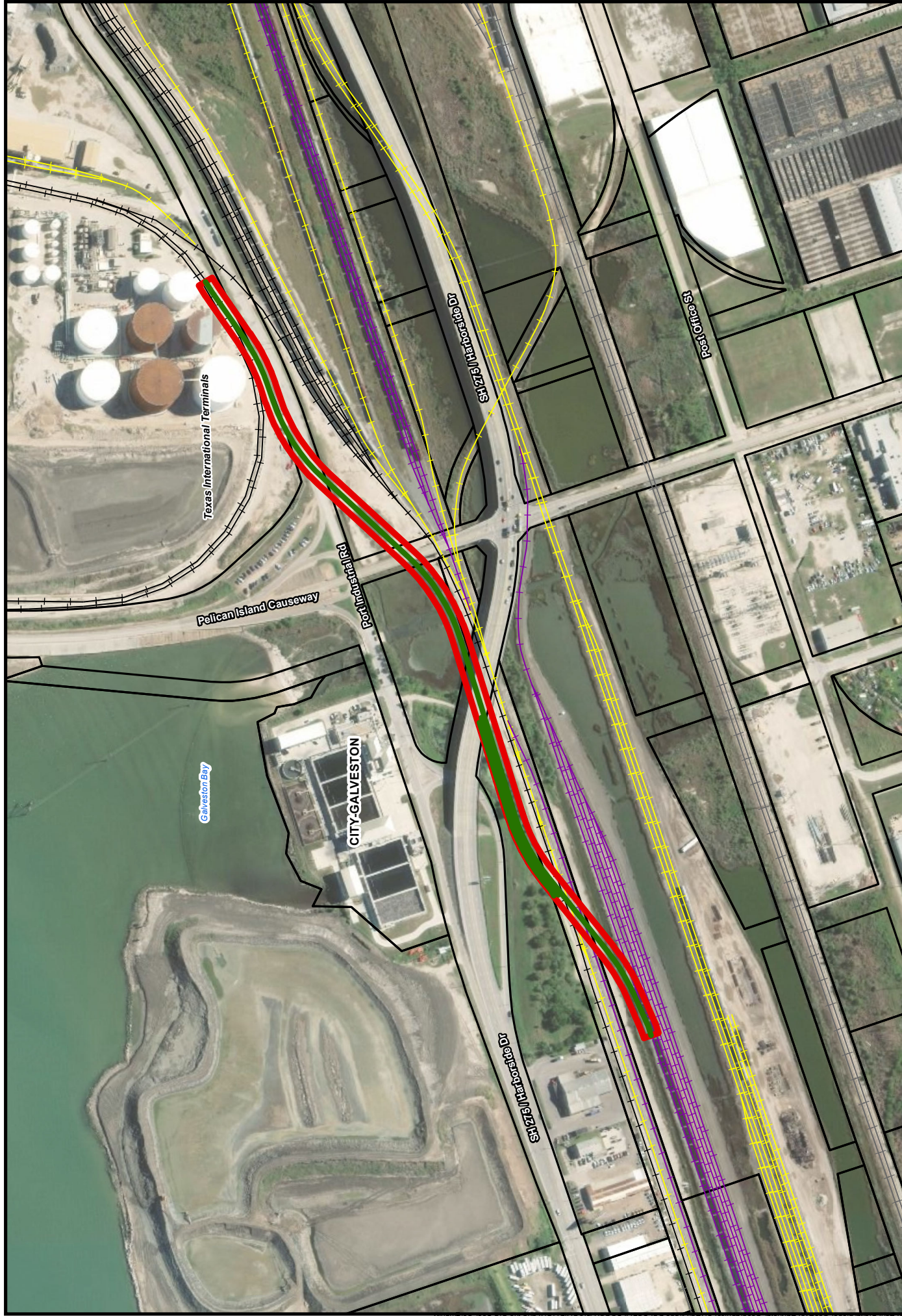
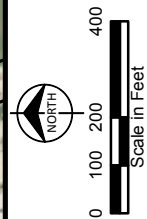
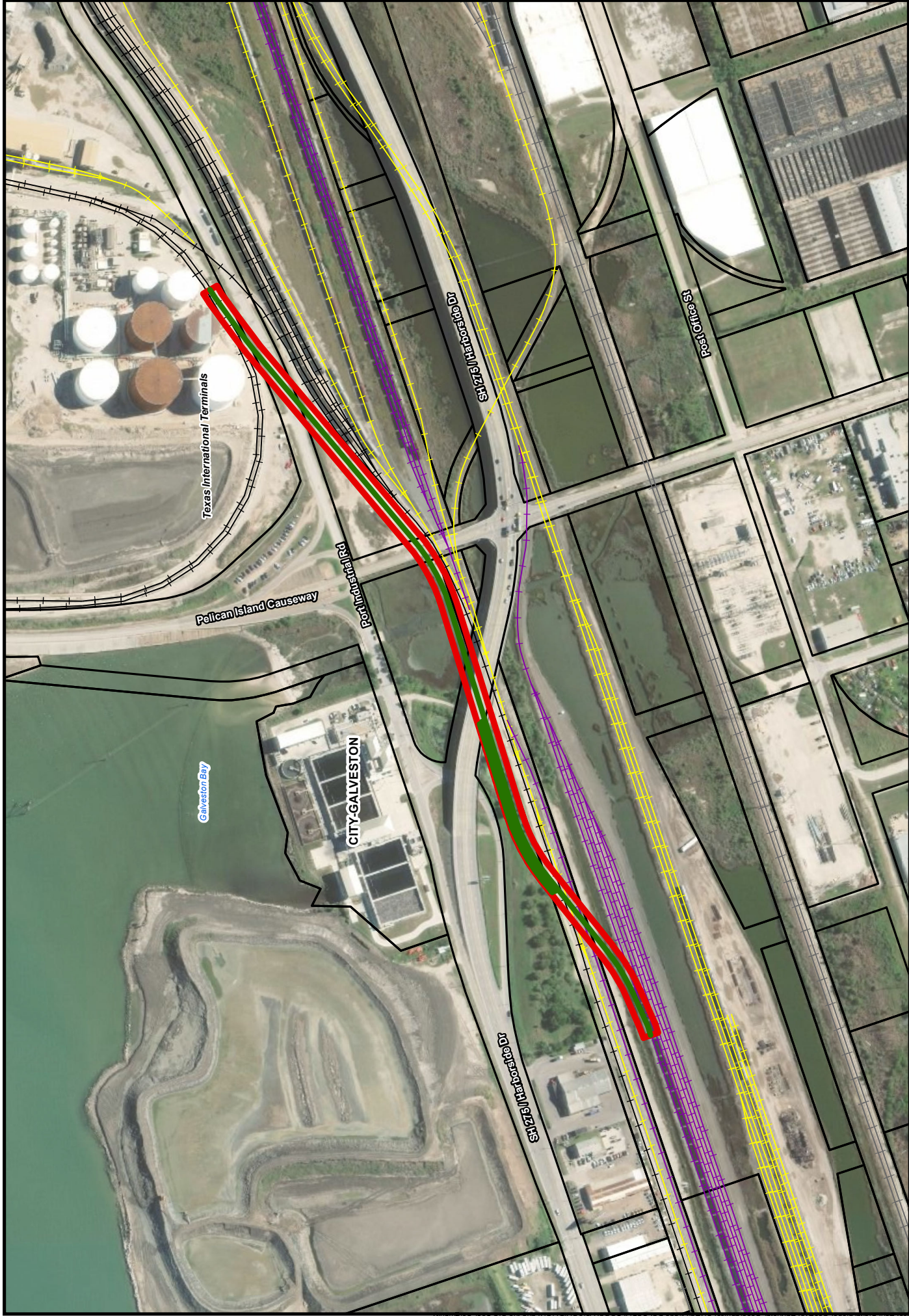


Figure 2-1
Preferred Rail Line Alternatives
Texas Railway Exchange
Galveston County, Texas



 Green Alt - Option A
 Green Alt Option Footprint
 BNSF Track
 TREK Track
 UP Track
 Unknown Track
 Parcel Boundary

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Legend

- Green Alt - Option B
- Green Alt Option B Footprint
- BNSF Track
- TREK Track
- UP Track
- Unknown Track
- Parcel Boundary

Scale in Feet

0 100 200 400

North

Figure 2-2
Preferred Rail Line Alternatives
Texas Railway Exchange
Galveston County, Texas

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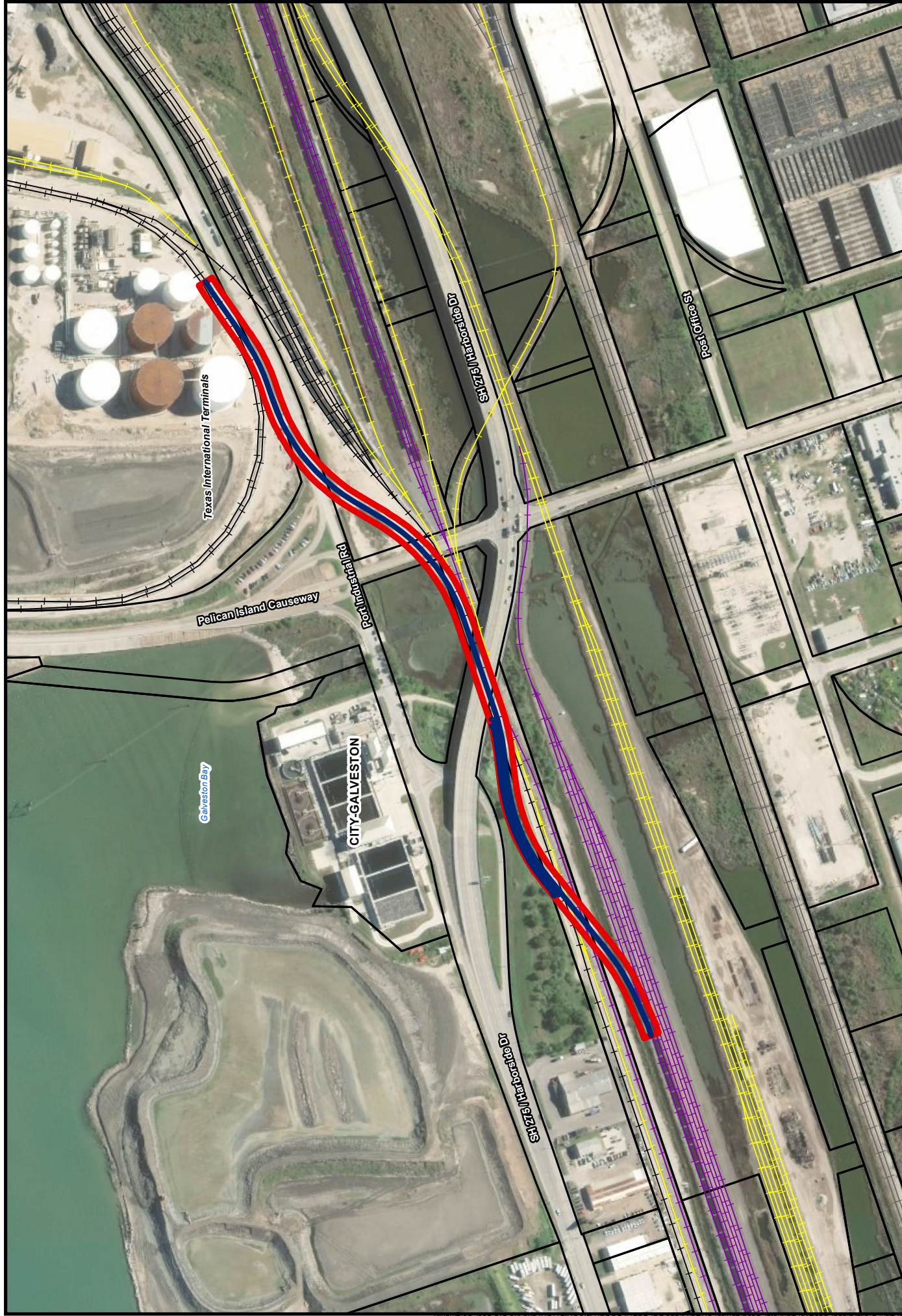
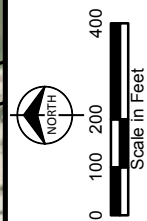


Figure 2-3
Preferred Rail Line Alternatives
Texas Railway Exchange
Galveston County, Texas



Source: ESRI; GLO CNRA; USFWS NWI; FEMA; GCAD; Burns & McDonnell Engineering Company, Inc.

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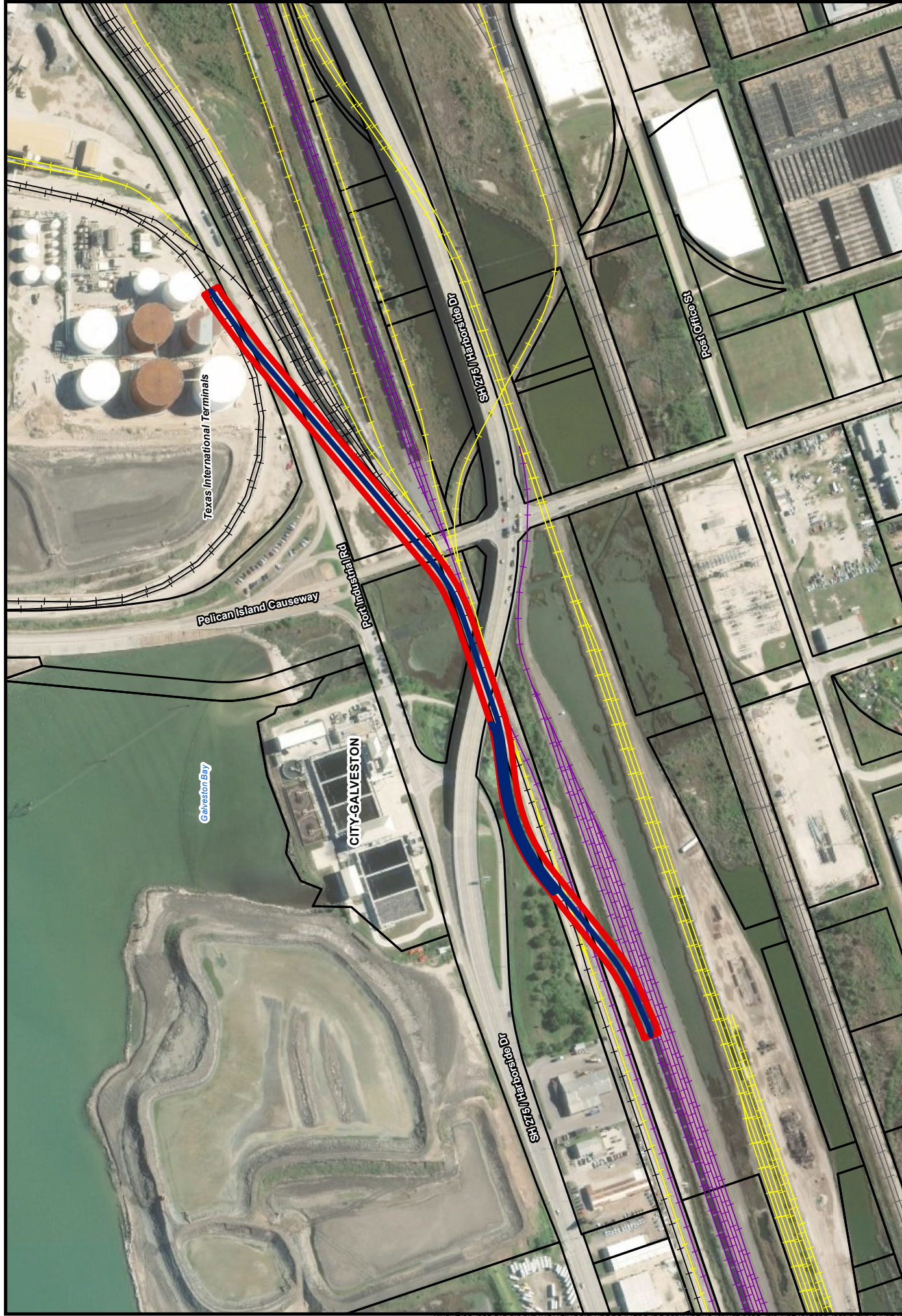
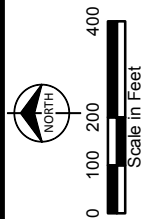


Figure 2-4
Preferred Rail Line Alternatives
Texas Railway Exchange
Galveston County, Texas



Blue Alt - Option B

Blue Alt Option B Footprint

BNSF Track

TREK Track

UP Track

Unknown Track

Parcel Boundary

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project area, as well as safety and operational issues related to flooding, the Port Industrial Road Alternative was eliminated early in the environmental review process.

- **No-Action Alternative** - If the Board were to deny TREX's petition for construction and operation authority, TREX would not construct the proposed rail line. Environmental impacts related to construction would not occur and impacts related to rail operations would remain the same as under current conditions.

Under either of the Build Alternatives, TREX would have to obtain property from the City of Galveston to construct the rail line and would also have to obtain access rights from UP to cross the existing UP rail line. Under the Green Alternative, TREX would also have to obtain property or access rights from UP for a distance of between approximately 548 feet (for Option A) and approximately 823 feet (for Option B) to cross UP property. Under the Blue Alternative, TREX would obtain property rights from UP for a distance of between approximately 947 feet (Option A) and 1,203 feet (Option B). To facilitate the crossing of the UP rail line, TREX intends to file a crossing petition under 49 U.S.C. § 10901(d). OEA has concluded that both Build Alternatives and associated design options would meet the purpose and need of the proposed project and are reasonable and feasible from a construction standpoint.



Figure 2-5: Photo of the area proposed for construction of the new rail line and crossing of the existing UP rail line (SH 275/Harborview Drive bridge [foreground] and 51st Street/Pelican Island Causeway bridge [background] over the project area. Proposed track alignment would be to the left of the tracks shown.)

Although the environmental impacts under the two Build Alternatives would be similar, the Green Alternative would result in greater impacts to wetlands and tidal waters than the Blue Alternative, as shown in Table 2-1.

Table 2-1: Build Alternatives Comparison Data

Feature	Unit	Green Alternative		Blue Alternative	
		Option A	Option B	Option A	Option B
Total Length	Feet	<2,800	<2,800	<2,800	<2,800
Right-of-Way	Acres	3.3	3.2	3.3	3.2
Length of UP property crossed	Feet	548	823	947	1,203
Tidal Waters Crossed	Number	2	2	2	2
Freshwater Streams Crossed	Number	0	0	0	0
Jurisdictional Waters/Wetlands Crossed*	EEM1	0.232	0.232	0.00	0.00
	SWD1	0.024	0.024	0.00	0.00
	Tidal Water 1	0.099	0.099	0.099	0.099
	Tidal Water 2	0.060	0.060	0.00	0.00
	Total Acres	0.415	0.415	0.099	0.099
Length through Floodplain	Feet	<2,800	<2,800	<2,800	<2,800
Woodlands Crossed	Acres	0	0	0	0
Noise-Sensitive Receptors Within 350 Feet	Number	0	0	0	0
Road Crossings	Number	1	1	1	1
Distance between existing TREX Port Industrial Road rail crossing and proposed rail crossing	Feet	660	356	660	356
Cultural Resources within ROW	Number	0	0	0	0
Length of UP trackage rights required	Linear feet	548	823	947	1,203

* Based on field delineation.

Under the No-Action Alternative, TREX would not construct the proposed rail line nor the crossing of the existing UP rail line. The quality of the affected environment would not change from current conditions. Because the No-Action Alternative would not improve the operational efficiency and function of the Terminal's rail service, the No-Action Alternative would not meet the purpose and need for the project. TREX would continue to receive BNSF traffic via the existing reciprocal switching service provided by UP. The operational inefficiencies associated with the existing reciprocal switch service would continue, which would result in increased train processing times, increased train turnaround times, and increased track

and roadway intersection blockages, relative to the Build Alternatives. In addition, diesel emissions from locomotives would be higher under the No-Action Alternative than under the Build Alternatives as a result of the increased number of locomotive and train movements required under the current reciprocal switching arrangement.

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3.0 AFFECTED ENVIRONMENT

This chapter describes the existing environment in the area of the proposed rail line and crossing of the UP rail line.

3.1 TRANSPORTATION

The Terminal serves multi-modal shippers transporting products via deep draft vessels along the Galveston Ship Channel north of the facility; the existing BNSF and UP interchange tracks to the south of the facility; and by way of vehicular traffic along Port Industrial Road, State Highway (SH) 275/Harborside Drive, and 51st Street/Pelican Island Causeway. SH 275/Harborside Drive is a four-lane undivided urban arterial located on viaduct south of the Terminal. The roadway is elevated to cross over the numerous railroad tracks and surface roadways that cross the project area. The 51st Street/Pelican Island Causeway is a two-lane urban arterial which connects development south of Broadway Avenue J in Galveston with the Texas A&M Campus located north of the Galveston Ship Channel. The 51st Street/Pelican Island Causeway is also located on viaduct over the project area. The proposed rail line and crossing of the existing UP rail line would cross Port Industrial Road, a small, two lane road providing access to the Terminal and other nearby industrial facilities. BNSF and UP rail lines south of the Terminal serve other industries located in the Port of Galveston. Those rail lines continue south and west, crossing West Bay and continue north to provide service throughout the Houston area and southeastern Texas.

3.2 PHYSICAL RESOURCES

3.2.1 Geology, Soils, and Climate

The proposed rail line would be located on Galveston Island, a long, narrow sandbar off the coast of Texas. The island is approximately 28 miles long and averages approximately two miles wide, with an average elevation of 15 feet above sea level. It is bordered by West Bay to the west and the Gulf of Mexico to the south and east. To the north is Galveston Bay, a shallow, flat-bottomed depression with low-lying islands and shell reefs (USGS, 1957). Galveston Island falls within Galveston County, which is part of the Gulf Coastal Prairies Physiographic Province of Texas (Bureau of Economic Geology [BEG], 1996). The Gulf Coastal Prairies begin at the Gulf of Mexico shoreline and are comprised of young, eroded deltaic and alluvial sands, silts, and clays. The topography is nearly level, with the point of highest elevation of 40 feet above

sea level located in the northwest portion of the county, and the lowest points being at sea level along the shore (United States Geological Survey [USGS], 1957). The triangular county encompasses 424,961 acres, of which 169,600 is water (Soil Conservation Service [SCS], 1988). Major landforms in the county include Galveston Island, Bolivar Peninsula, and Galveston Bay. The portion of southeastern Texas in which Galveston County is located is also noted for the presence of salt domes—the High Island Dome on the Bolivar Peninsula and the Frio Deep-Seated Salt Dome fields across Galveston, Brazoria, Ford Bend, Harris, and Chambers counties (Texas State Historical Association [TSHA], 2010).

The project footprint crosses an area composed of fill and spoil, material dredged for raising land surfaces above the alluvium and barrier island deposits, and for creating land. Quaternary-period alluvial clay, silt and sand comprise the bayside stretches of the island, and areas of primarily sand, shell fragments, silt, and clay make up the gulf side (BEG, 2018). The project footprint is located in an area considered as urban/built-up. According to the Natural Resource Conservation Service (NRCS), the project footprint does not cross any soils designated as prime or unique farmlands or determined to be of local or statewide importance (NRCS, 2018).

The climate of Galveston County consists of long, hot and humid summers, and warm winters only occasionally interrupted by cold air incursions from the north. Average precipitation for the year ranges from a low of 2.82 inches in February to 5.69 inches in September, for an annual average of 39.73 to 45.79 inches. Sixty percent of the precipitation falls April through September, which corresponds with the growing season for most crops. The average temperature is 47 degrees Fahrenheit in winter, and 83 degrees Fahrenheit in summer. Snowfall is too negligible to be measured in 90 percent of winters but has never been more than two inches in one day. The sun shines 60 percent of the possible time, averaged for all months (SCS, 1988).

3.2.2 Surface and Ground Water

Galveston County is underlain by alternating beds of sand and clay, and the Gulf Coast Aquifer, which parallels the Gulf of Mexico coastline from Louisiana to the Mexico border. The Gulf Coast Aquifer itself is made up of several aquifers, including the Jasper, Evangeline, and Chicot. These are composed of discontinuous sand, silt, clay, and gravel beds, and range from

700 to 1,300 ft in depth. In five gulf coast counties, including Galveston, water level declines of as much as 350 ft have led to land subsidence (Texas Water Development Board [TWDB], 2018).

The geologic formations that contain fresh water in Galveston County are the Lissie formation, the Alta Loma sand and upper parts of the Beaumont clay, beach and dune sands, and coastal marsh deposits. As the water from most wells on Galveston Island is heavily mineralized and has problems with saltwater encroachment, most of the potable water is obtained from the mainland part of the county, specifically around Alta Loma and Texas City. Surface water from the Brazos River, within close proximity of the county, has been used for rice irrigation since 1942 and for industry since 1948 (USGS, 1957).

The Trinity-San Jacinto Estuary is the main surface water feature in Galveston County, other than the Gulf of Mexico. It is the largest estuary in the state, with an area of 345,280 acres, and includes Trinity Bay, Galveston Bay, East and West Bays, and three passes. The project area itself is located south of where the Galveston Ship Channel meets West Bay. The estuary as a whole typically receives 11 million acre-feet of freshwater inflow from two major rivers (Trinity and San Jacinto), Clear Creek, Buffalo Bayou, as well as from other sources of surface runoff (TWDB, 2018).

The Trinity River flows southeastward for 550 miles and drains a basin of 17,913 square miles from 37 counties in Texas. The San Jacinto River, one of the smallest river basins in Texas, flows southeast for 85 miles, draining an area of 3,936 square miles (TWDB, 2018). Clear Creek runs east for 41 miles from the northeast corner of Fort Bend County, forming the northern boundary of Galveston County, to its mouth on Galveston Bay. Buffalo Bayou also begins in northern Fort Bend County, where it flows 65 miles east to the San Jacinto River at Lynchburg and becomes tidal 18 miles from its mouth. Buffalo Bayou has been widened and deepened to form the Turning Basin and Houston Ship Channel (TSHA, 2010).

3.2.3 Air Quality

Galveston County lies within the (EPA designated Air Quality Control Region (AQCR)³ #216, also referred to as the Metropolitan Houston-Galveston Intrastate. According to the TCEQ, the Houston-Galveston-Brazoria Area is in moderate nonattainment of the U.S. National Ambient Air Quality Standards (NAAQS) for ozone and is either unclassifiable or in attainment for all other NAAQS (TCEQ, 2018). “Attainment” means that the concentration of each criteria pollutant is below the concentration designated by EPA for the protection of air quality (EPA 2007). “Moderate nonattainment” means that the concentration of a particular criteria pollutant, in this case ozone, does not meet the concentration designated by the EPA. In addition to ozone, the criteria pollutants for which NAAQS are specified include sulfur dioxide, carbon monoxide, oxides of nitrogen, lead, and particulate matter.

Air emissions in the project area currently include emissions from vehicle traffic on roadways, ship traffic within Galveston Bay and the Gulf of Mexico, and railroad locomotive engines. Industry (e.g., regional manufacturing and processing plants) and recreational activity (e.g., outboard engines from fishing and pleasure boats and personal watercraft on the Gulf) also produce air emissions throughout the year.

3.3 BIOLOGICAL RESOURCES

3.3.1 Vegetation

The immediate project area is characterized by urban development with vegetation limited to occurring within roadside and trackside ditches, portions of public rights-of-way, and maintained commercial and residential landscapes. Common vegetation includes honey mesquite (*Prosopis glandulosa*), Baccharis (*Baccharis* sp.), catclaw acacia (*Acacia greggii*), sugarberry (*Celtis laevigata*), sunflower (*Helianthus* sp.), little bluestem (*Schizachrium scoparium*), switchgrass (*Panicum virgatum*), and marshhay cordgrass (*Spartina patens*). In tidally inundated areas, saline-tolerant species such as sea ox-eye (*Borrchia frutescens*) and glasswort (*Salicornia* spp.) occur. Unvegetated areas occur where vehicle disturbance or salinity and water permanency is unsuitable for salt marsh vegetation to become established.

³ An AQCR is a federally designated area that is required to meet and maintain Federal ambient air quality control standards. Regions may include nearby locations in the same state or nearby states that share common air pollution problems.

3.3.2 Wetlands and Waters of the United States

Waters of the United States, including wetlands, are regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). Waters under USACE jurisdiction are defined as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

To assist in determining jurisdiction of aquatic features, OEA consulted several information sources. These included Federal Emergency Management Agency (FEMA) 100-year floodplain maps; historical imagery of the project area; Texas Natural Resources Information System (TNRIS) light detection and ranging (LiDAR); USGS topographic maps; USFWS National Wetlands Inventory (NWI) data; NRCS soil survey data; and National Oceanic and Atmospheric Administration (NOAA) climate data.

A review of USFWS NWI maps concluded that the project area contains four wetland types, including estuarine and marine wetlands, estuarine and marine deepwater, riverine wetlands, and freshwater emergent wetlands. Spirit, a contractor retained by TREX, conducted a wetland field delineation on August 3, 2018 in accordance with the USACE 1987 Wetland Delineation Manual (1987 Manual) and the USACE 2010 Regional Supplement to the 1987 Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0).

Based on the field delineation, Spirit determined that three features in the project area are jurisdictional waters of the United States under Section 404 (Spirit 2018a). OEA has reviewed Spirit's report and concurs with the conclusions. The jurisdictional and non-jurisdictional water features in the project area are identified in Table 3-1. Based on a map and database review, several small waterbodies are located immediately south of the project area and are connected by a small channel to Galveston Bay near the center of the project area. NWI wetland data show four wetland polygons within the project area, and both NRCS mapped soil units covering the project footprint are classified as hydric soils. Aerial photography from 1987 depicts a depression with aerial signatures indicative of inundation, and the entirety of the project area is located within the FEMA 100-year floodplain.

The field delineation mapped two wetland features (SWD1 and EEM1), totaling 0.256 acres within the footprint of the Green Alternative and 0.038 acres for the Blue Alternative footprint. Those wetland features exhibit both primary and secondary indicators, including surface water, high water table, saturation, algal mats, aquatic fauna, surface soil cracks, geomorphic position, and FAC-Neutral test. Hydrophytic vegetation in the dominant estuarine emergent wetlands include rattlebush (*Sesbania drummondii*), California bulrush (*Schoenoplectus acifornicus*), alligator weed (*Alternanthera philoxeroides*), Texas frogfruit (*Phyla nodiflora*), and climbing hempvine (*Mikania scandens*). Soils were found to contain black and grey sandy loams that matched hydric soil indicators. Two linear tidal waterbodies were mapped within the project footprint, totaling 0.159 acres for the Green Alternative and 0.116 acres for the Blue Alternative.

Table 3-1: Water Resources Present in the Project Area

Feature Name	Feature Type	Recommended Jurisdictional	Description
Water 1	Tidal Water	Yes	Linear tidal waterbody
Water 2	Tidal Water	Yes	Linear tidal waterbody
SWD1	Palustrine emergent wetland	No	Freshwater, no tidal influence, no outlet/inlet; constructed in uplands
EEM1	Estuarine emergent wetland	Yes	Contains saltwater tolerant plants, abuts tidal waters of Galveston Bay

Source: Spirit, 2018a

3.3.3 Wildlife

Much of the project area has been developed, providing few areas of intact native habitats to support resident and migratory species. The proximity of the project area to the Gulf Coast and associated open water habitats influences the types and number of species that are commonly seen in the project area. Some of the more common animal species occurring within the project area are listed in Table 3-2; this list is not all-inclusive.

Table 3-2: Common Animal Species in the Project Area

Common Name	Scientific Name
BIRDS	
American crow	<i>Corvus brachyrhynchos</i>
Barn swallow	<i>Hirundo rustica</i>
Brown-headed cowbird	<i>Molothrus ater</i>
Brown pelican	<i>Pelicanus occidentalis</i>
Carolina wren	<i>Thryothorus ludovicianus</i>
Cattle egret	<i>Bubulcus ibis</i>
European starling	<i>Sturnus vulgaris</i>
Great blue heron	<i>Ardea Herodias</i>
Great-tailed grackle	<i>Quiscalus mexicanus</i>
House sparrow	<i>Passer domesticus</i>
Killdeer	<i>Charadrius vociferous</i>
Least sandpiper	<i>Calidris minutilla</i>
Lesser yellowlegs	<i>Tringa flavipes</i>
Mourning dove	<i>Zenaida macroura</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Ring-billed gull	<i>Larus delawarensis</i>
Savannah sparrow	<i>Passerculus sandwichensis</i>
Scissor-tailed flycatcher	<i>Tyrannus forficatus</i>
Turkey vulture	<i>Cathartes aura</i>
REPTILES & AMPHIBIANS	
Gulf Coast toad	<i>Ollotis nebulifer</i>
Hurter's spadefoot	<i>Scaphiopus hurterii</i>
Southern leopard frog	<i>Lithobates sphenocephalus utricularius</i>
Marbled salamander	<i>Ambystoma opacum</i>
Eastern six-lined racerunner	<i>Aspidoscelis sexlineata</i>
Little brown skink	<i>Scincella lateralis</i>
Cottonmouth	<i>Agkistrodon piscivorus leucostoma</i>
Diamond-backed watersnake	<i>Nerodia rhombifer</i>
Prairie kingsnake	<i>Lampropeltis calligaster</i>
Texas coralsnake	<i>Micrurus tener</i>
Texas ratsnake	<i>Patherophis obsoletus</i>
Red-eared slider	<i>Trachemys scripta elegans</i>
Yellow mud turtle	<i>Kinosternon flavescens</i>
MAMMALS	
White-tailed deer	<i>Odocoileus virginianus</i>
Nine-banded armadillo	<i>Dasypus novemcinctus</i>
Northern raccoon	<i>Procyon lotor</i>

Striped skunk	<i>Mephitis</i>
Brazilian free-tailed bat	<i>Tadarida brasiliensis</i>
Eastern red bat	<i>Lasiurus borealis</i>
Baird's pocket gopher	<i>Geomys breviceps</i>
Cotton mouse	<i>Peromyscus gossypinus</i>
Hispid cotton rat	<i>Sigmodon hispidus</i>
Hispid pocket mouse	<i>Chaetodipus hispidus</i>
White-footed mouse	<i>Peromyscus leucopus</i>
Swamp rabbit	<i>Sylvilagus aquaticus</i>
FISH	
Atlantic croaker	<i>Micropogonias undulates</i>
Bay anchovy	<i>Anchoa mitchilli</i>
Black drum	<i>Pogonias cromis</i>
Crevalle jack	<i>Caranx hippos</i>
Gafftopsail catfish	<i>Bagre marinus</i>
Inland silverside	<i>Menidia beryllina</i>
Naked goby	<i>Gobiosoma bosc</i>
Red drum	<i>Scianops ocellatus</i>
Sand seatrout	<i>Cynoscion arenarius</i>
Sheepshead minnow	<i>Cyprinodon variegatus</i>
Southern flounder	<i>Paralichthys lethostigma</i>
Spot	<i>Leiostomus xanthurus</i>
Spotted seatrout	<i>Cynoscion nebulosus</i>
Striped anchovy	<i>Anchoa hepsetus</i>
Striped mullet	<i>Mugil cephalus</i>
Violet goby	<i>Gobioides broussonettii</i>

Source: BIRDS - Lockwood and Freeman (2014); REPTILES & AMPHIBIANS - Dixon (2013), and Werler and Dixon (2000); MAMMALS - Schmidly (2004); FISH - McKee (2008)

3.3.4 Endangered, Threatened, and Rare Species

To identify federally and state-listed protected species that could be present in the project area, OEA obtained reports from the USFWS' Information for Planning and Conservation (IPaC) system and the Texas Parks and Wildlife Department's (TPWD's) Texas Natural Diversity Database (TXNDD). OEA also reviewed the results of a habitat assessment survey conducted by Spirit in August 2018, toured the proposed rail right-of-way, and reviewed available satellite and aerial imagery of the project area. Table 3-3 presents OEA's conclusions regarding the potential occurrence of protected species in the vicinity of the proposed rail line. Of the 44 protected species known or thought to occur in Galveston County, OEA concluded that four bird species are likely to occur in the project area. Those species are the black rail (*Laterallus jamaicensis*),

the brown pelican (*Pelecanus occidentalis*), the red knot (*Calidris canutus rufa*), and the white-faced ibis (*Plegadis chihi*). The project area does not include critical habitat for those or any other protected species.

Table 3-3: Federally and State-listed Species in Galveston County

Common Name	Scientific Name	Federal Status	State Status	Potential to Occur within the Project Area
BIRDS				
American peregrine falcon	<i>Falco peregrinus anatum</i>	DL	T	Not likely – suitable habitat not present within the project area
Arctic peregrine falcon	<i>Falco peregrinus tundrius</i>	DL	SGCN	Not likely – suitable habitat not present within the project area
Attwater's greater prairie-chicken	<i>Tympanuchus cupido attwateri</i>	E	E	Not likely – suitable habitat not present within the project area
Bald eagle ^b	<i>Haliaeetus leucocephalus</i>	DL	T	Not likely – suitable habitat not present within the project area
Black rail	<i>Laterallus jamaicensis</i>	NL	SGCN	Likely – suitable habitat (saltwater/brackish marshes) occurs with the vicinity of the project along Galveston Bay.
Brown pelican	<i>Pelecanus occidentalis</i>	DL	SGCN	Likely – suitable habitat (coastal and near-shore areas) occurs with the vicinity of the project. Brown pelicans were observed on wharf structures near the Terminal along the shoreline of Galveston Bay.
Eskimo curlew ^c	<i>Numenius borealis</i>	E	E	Not likely – suitable habitat not present within the project area
Henslow's Sparrow	<i>Ammodramus henslowii</i>	NL	SGCN	Not likely – suitable habitat not present within the project area
Mountain plover	<i>Charadrius montanus</i>	NL	SGCN	Not likely – suitable habitat not present within the project area
Peregrine falcon	<i>Falco peregrinus</i>	DL	T	Not likely – suitable habitat not present within the project area
Piping plover	<i>Charadrius melodus</i>	T	T	Not likely – suitable habitat not present within the project area
Red knot	<i>Calidris canutus rufa</i>	T	NL	Likely – suitable habitat (tidal flats) occurs within the vicinity of the project
Reddish egret	<i>Egretta rufescens</i>	NL	T	Not Likely – suitable habitat (brackish marshes and tidal flats) occurs in the vicinity of the project but is not present within the project footprint

Snowy plover	<i>Charadrius alexandrinus</i>	NL	SGCN	Not likely – suitable coastal habitat occurs in the vicinity of the project, potential migrant
Sprague’s pipit	<i>Anthus sprauelli</i>	NL	SGCN	Not likely – suitable habitat not present within the project area
White-faced ibis	<i>Plegadis chihi</i>	NL	T	Not Likely – suitable habitat (brackish marshes and tidal flats) occurs in the vicinity of the project but is not present within the project footprint
White-tailed hawk	<i>Buteo albicaudatus</i>	NL	T	Not likely – suitable habitat not present within the project area
Whooping crane ^b	<i>Grus Americana</i>	E	E	Not likely – suitable habitat not present within the project area
Wood stork	<i>Mycteria Americana</i>	NL	T	Likely – suitable habitat (shallow-standing saltwater) occurs in the vicinity of the project. The project footprint crosses an estuarine emergent wetland.
REPTILES & AMPHIBIANS				
Alligator snapping turtle	<i>Macrochelys temminckii</i>	NL	T	Not likely – suitable habitat including water bodies with mud bottoms occurs within the project area
Atlantic hawksbill sea turtle	<i>Eretmochelys imbricate</i>	E	E	Not likely – suitable habitat occurs in neighboring Galveston Bay, however due to the presence of earthen berms and restrictive culverts between the bay systems and the project area, it is unlikely that individuals of these species would be able access the project area
Green sea turtle	<i>Chelonia mydas</i>	T	E	
Hawksbill sea turtle	<i>Eretmochelys imbricate</i>	E	E	
Kemp’s ridley sea turtle	<i>Lepidochelys kempii</i>	E	E	
Leatherback sea turtle	<i>Dermochelys coriacea</i>	E	E	
Loggerhead sea turtle	<i>Caretta</i>	T	T	
Southern crawfish frog	<i>Lithobates areolatus</i>	NL	SGCN	Not likely – suitable habitat not present within the project area
Texas diamondback terrapin	<i>Malaclemys terrapin littoralis</i>	NL	SGCN	Not likely – suitable habitat occurs in neighboring Galveston Bay, however due to the presence of earthen berms and restrictive culverts between the bay systems and the project area, it is unlikely that individuals would be able access the project area
Texas horned lizard	<i>Phrynosoma cornutum</i>	NL	T	Not likely – suitable habitat not present within the project area
Timber rattlesnake	<i>Crotalus horridus</i>	NL	T	Not likely – suitable habitat not present within the project area
MAMMALS				
Louisiana black bear	<i>Ursus americanus luteolus</i>	DL	T	Does not occur – no suitable habitat

Plains spotted skunk	<i>Spilogale putorius interrupta</i>	NL	SGCN	Does not occur – no suitable habitat
Red wolf ^a	<i>Canis rufus</i>	E	E	Does not occur – no suitable habitat
West Indian manatee	<i>Trichechus manatus</i>	T	E	Not likely – suitable habitat (gulf and bay systems) occur in neighboring areas but access to the project area is restricted due to the presence of earthen berms and culverts
FISH				
American eel	<i>Anguilla rostrate</i>	NL	SGCN	Not likely – suitable habitat (brackish estuaries and coastal waters) may occur in neighboring areas but access to the project area is restricted due to the presence of earthen berms and culverts
Smalltooth sawfish ^b	<i>Pristis pectinate</i>	E	E	Not likely - suitable habitat (waters with muddy/sandy bottoms) may occur in neighboring areas but access to the project area is restricted due to the presence of earthen berms and culverts
PLANTS				
Awnless bluestem	<i>Bothriochloa exaristata</i>	NL	SGCN	Does not occur – no suitable habitat
Coastal gayfeather	<i>Liatris bracteate</i>	NL	SGCN	Does not occur – no suitable habitat
Correll's false dragon-head	<i>Physostegia correllii</i>	NL	SGCN	Does not occur – no suitable habitat
Grand Prairie evening primrose	<i>Oenothera pilosella ssp. sessilis</i>	NL	SGCN	Does not occur – no suitable habitat
Houston daisy	<i>Rayjacksonia aurea</i>	NL	SGCN	Does not occur – no suitable habitat
Texas ladies'-tresses	<i>Spiranthes brevibras var. brevibras</i>	NL	SGCN	Does not occur – no suitable habitat
Texas sunflower	<i>Helianthus praecox ssp. Praecox</i>	NL	SGCN	Does not occur – no suitable habitat
Texas windmill grass	<i>Chloris texensis</i>	NL	SGCN	Not likely – suitable habitat (coastal prairie grassland remnants near roadsides) may occur within the project area
Threeflower broomweed	<i>Thurovia trifloral</i>	NL	SGCN	Does not occur – no suitable habitat
Topeka purple-coneflower	<i>Echinacea atrorubens</i>	NL	SGCN	Does not occur – no suitable habitat

Source: USFWS (2018a) and TPWD (2018a, 2018b)

T = Threatened; E = Endangered; DL = De-Listed; NL = Not Listed; SGCN = Species of Greatest Conservation Need

(a) Not listed by USFWS (2018a) as occurring in Galveston County

(b) Only expected to occur as a migrant/transient or rare vagrant within the project area

(c) Possibly extinct

3.4 NOISE

Primary sources of noise in the project area include rail traffic and train locomotive horn noise along the existing UP and BNSF rail lines, as well as vehicle traffic along Port Industrial Road, 51st Street/Pelican Island Causeway (elevated), and SH 275/Harborside Drive (elevated). The proposed rail line and crossing of the existing UP rail line would be located adjacent to existing rail lines and pass under the bridge structures carrying both of these roadways. No average daily traffic (ADT) volumes are available for Port Industrial Road. Other sources of noise include cargo and cruise ship horns as vessels enter and leave the neighboring ship channel, and noises associated with the loading and processing of materials within the Terminal and other neighboring businesses.

3.5 CULTURAL RESOURCES

Artificial structures within the project area include the Terminal, several existing railroad tracks, two elevated roadways, one ground-level roadway, and a culvert, none of which appear to be historically or culturally significant. Pursuant to Section 106 of the National Historic Preservation Act, OEA conducted record searches of the National Register of Historic Places (the National Register) database and the Texas Archeological Sites Atlas to identify properties that are listed in or eligible for listing in the National Register. Based on the results of those searches, OEA concluded that no known historic properties or previously recorded archeological sites are located within the proposed rail right-of-way or in adjacent areas that could be affected by construction activities (the Area of Potential Effects or APE). OEA also consulted with the Texas Historical Commission (the Texas State Historic Preservation Officer or Texas SHPO) and the Texas SHPO concurred that no historic properties listed in or eligible for listing in the National Register would be affected by the proposed undertaking (Appendix A – Exhibit 9).

3.6 HAZARDOUS MATERIALS AND WASTE SITES

A search on the Environmental Protection Agency's (EPA) website revealed five properties designated as hazardous waste generators under the Resource Conservation and Recovery Act (RCRA) program in the vicinity of the project area, south of the Galveston Ship Channel. Three of the properties are located east of the Terminal and two to the west. All identified properties are accessed from Port Industrial Road.

- Champion Building Products – located at 3902 Port Industrial Road, approximately 2,600 feet east of the proposed rail line crossing of Port Industrial Road; located within the Port of Galveston
- M-I Drilling Fluids Co – located at 4105 Port Industrial Drive, approximately 800 feet west of the Pelican Island Causeway bridge.
- Galveston Main Wastewater Treatment Plant – located at 5200 Port Industrial Road, approximately 500 feet west of the Pelican Island Causeway bridge
- Galveston Bay Biodiesel – located at 4828 Old Port Industrial Road, approximately 500 feet east of the proposed rail line crossing of Port Industrial Road
- Sullivan Enterprises Inc. – located at 4800 Port Industrial Road, approximately 400 feet east of the proposed rail line crossing of Port Industrial Road

North of the Galveston Ship Channel, there are two RCRA sites, one associated with Texas A&M University of Galveston, and the other associated with Pelican Island Inc. (EPA, 2018). No Superfund sites were identified in the vicinity of the project area.

3.7 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

Galveston County encompasses approximately 450 square miles in southeast Texas, just southeast of Houston. It is divided into four different segments: mainland, Galveston Island, the Bolivar Peninsula, and Pelican Island. In addition to the City of Galveston, the county seat, other towns in the county include Texas City, Port Bolivar, Clear Lake Shores, Crystal Beach, Jamaica Beach, Kemah, Hitchcock, Alta Loma, Dickinson, League City, La Marque, Algoa, Arcadia, and Friendswood. The mainland coastline is indented with small bays, inlets, and marshes, and the mainland interior is known for rice farming, oil and gas extraction and processing, cattle ranching, and urban uses. Galveston County is served by a variety of large transportation corridors, including: Interstate (IH) 45, SH 3, SH 6, SH 87, SH 96, SH 108, SH 124, SH 146, SH 275/Harborside Drive, a number of farm-to-market (FM) roads, as well as county, city, and private roads. It is also served by the Gulf Intracoastal Waterway, the Texas City Channel, the Galveston Ship Channel, the Houston Ship Channel, the Galveston Railroad (GVSR), UP, BNSF, the Scholes International Airport, among others.

Over the last several decades, the City of Galveston's population has experienced a decline. During the same period, however, Galveston County's overall population growth has been substantial, although at a slower rate than the growth experienced by the State of Texas

(U.S. Census Bureau 2018a). In 2017, the City of Galveston had a population of 50,497 and the total population of Galveston County was 335,036. The City of Galveston and Galveston County's population characteristics and projected growth in comparison to the state of Texas are shown in Tables 3-4 and 3-5.

Table 3-4: Population Characteristics

Jurisdiction	1980	1990	2000	2010	% Change 1980-2010
City of Galveston	61,902	59,606	57,747	47,743	-22.8
Galveston County	195,940	217,399	250,158	291,309	48.7
State of Texas	14,229,191	16,986,510	20,851,820	25,145,561	76.7

Source: Houston—Galveston Area Council, 2018 (City and County); U.S. Census Bureau, 2018a (State of Texas).

Table 3-5: Projected Population Growth

Jurisdiction	2020	2030	2040	2050	% Change 2020-2050
City of Galveston	51,376	51,359	52,918	NA	8.1
Galveston County	338,520	395,253	453,497	NA	61.1
State of Texas	28,813,282	32,680,217	36,550,595	40,502,749	40.6

Source: Texas Demographic Center, 2018 (state projections); Houston-Galveston Area Council, 2018 (City of Galveston and Galveston County projections)

According to the U.S. Census Bureau (2018b), the City of Galveston's population is classified as 62.5 percent white, 19.2 percent black, and 3.2 percent Asian. Approximately 31 percent of the city's population is classified as Hispanic. The per capita income in Galveston County for 2017 was \$32,756 and the median family income was \$63,064, both of which are higher than the values for Texas as a whole. As the location of the Port of Galveston, the oldest deep-water port west of New Orleans (TSHA, 2010), Galveston County's economy has historically been driven by trade, as an important hub of both land and sea transportation located on the Gulf of Mexico. Although the unemployment rate for Galveston County has fluctuated over the decades (Table 3-6), it has consistently been higher than that of the state average.

Table 3-6: Galveston County Unemployment Rates, 1970-2010

Employment Status	1980	1990	2000	2010
Persons Employed	91,709	105,449	121,875	133,867
Persons Unemployed	4.5	7.0	4.8	9.1

Source: Bureau of Labor Statistics, 2018

In addition to trade, other sectors of importance to the local economy include educational, health, and social services; transportation and utilities; and arts, entertainment, recreation, accommodation, and food service. Professional services, scientific management, administration, waste management services, and construction also contribute to the county's economic development. Table 3-7 shows employment statistics by industry for Galveston County in 2017.

Table 3-7: Employment by Industry for Galveston County, 2017

Industry	Galveston County		State of Texas	
	Number	% of Workforce	Number	% of Workforce
Agriculture, forestry, fishing and hunting, and mining	937	0.9	280,942	2.7
Construction	6,479	6.0	1,020,520	9.6
Manufacturing	6,027	5.6	854,189	8.1
Trade, transportation and utilities	20,467	18.8	2,536,003	23.9
Information	629	0.6	209,061	2.0
Finance, insurance, real estate, and rental and leasing	6,110	5.6	745,021	7.0
Professional, scientific, management, administrative, and waste management services	9,926	9.1	14,043	0.1
Educational, health, and social services	33,290	30.6	2,826,813	26.7
Arts, entertainment, recreation, accommodation and food services	18,959	17.5	1,342,635	12.7
Other services	2,924	2.7	329,718	3.1
Public administration	2,913	2.7	453,419	4.3
Total	108,661	100	10,612,364	100

Source: U.S. Bureau of Labor Statistics (BLS), 2018.

3.8 LAND USE

The project area is urban and built up with the primary land uses including industrial, transport, and processing and storage activities associated with the Port of Galveston. The project area is comprised of several zoning classifications ranging from Heavy Industrial to Commercial-Mixed Use. The project footprint crosses through an area zoned as Heavy Industrial (HI District) by the City of Galveston, which is intended to accommodate the most intense industrial uses plus certain other activities that require careful location to limit risks to public health and safety.

The proposed rail line and crossing of the existing UP rail line would be located immediately south and west of the Terminal, a large liquid and dry bulk multi-modal facility for deep draft vessel, unit train, manifest rail, barge, and trucking along the Galveston Ship Channel (Texas International Terminals, 2015). To the north of the Terminal is the Galveston Ship Channel, which opens to Galveston Bay and the Gulf Intracoastal Waterway. The area approximately 0.5 miles south of the proposed rail line and crossing of the existing UP rail line is dominated by a mixture of commercial and residential uses, separated from the project area by Broadway Avenue J. The closest recreation area to the proposed rail line and crossing of the existing UP rail line is the Wright Cuney Recreation Center/Wright Cuney Park at 41st St and Avenue G, approximately 1,500 feet southeast of the project footprint and is separated from the project area by numerous rail lines and storage tracks. Recreational fishing and boating are popular in Galveston Bay and these activities may occur in the Galveston Ship Channel to the north of the project area.

4.0 ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

This chapter discusses the potential environmental impacts associated with the construction and operation of the proposed rail line, including the proposed crossing of the existing UP rail line. As discussed in Chapter 2, four alternatives were originally considered, including the No-Action Alternative. Two Build Alternatives, the Green Alternative and the Blue Alternative, were carried forward for detail analysis. OEA also considered two potential design options (Option A and Option B) for each of the two Build Alternatives. A third build alternative, the Port Industrial Road Alternative, was eliminated from further study due to potential environmental, engineering, and safety concerns. The characteristics and resources potentially affected by each of the Build Alternatives are summarized and compared in Chapter 2. The environmental impacts of the Build Alternatives differ primarily in the amount of wetland and tidal waters affected and the location of the new at-grade crossing of Port Industrial Road. Both Build Alternatives are located within the 100-year floodplain and would result in the same temporary displacement of wildlife and type and magnitude of construction noise and construction-related stormwater discharges. Neither of the Build Alternatives would result in the relocation of homes or businesses.

4.1 TRANSPORTATION AND SAFETY

Construction and operation of the proposed rail line, including the construction of the planned crossing over the existing UP rail line, would have minimal permanent impacts on transportation in the project area. During construction there may be an increase in local truck and rail traffic due to construction operations and the delivery of construction materials, but these impacts would be temporary and would be implemented using best practices to ensure minimal disruptions to local transportation patterns (see mitigation measures MM-1, MM-2, and MM-3).

In order for the proposed rail line to cross the existing UP rail line, TREX intends to file a crossing petition with the Board under 49 U.S.C. § 10901(d). To ensure that potential disruptions to local rail traffic from that planned crossing would be minimized, OEA is recommending mitigation requiring TREX to implement best management practices related to the operation of the planned rail crossing if it is authorized by the Board (see mitigation measures MM-5, MM-6, and MM-7).

Construction of a second at-grade crossing of Port Industrial Road would occur between approximately 356 feet and 660 feet west of the existing at-grade rail crossing into the Terminal, depending on the Build Alternative selected. TREX would implement a traffic management plan during construction to minimize any emergency vehicle response delays, safety concerns, or vehicle delays resulting during construction (see mitigation measures MM-4 and MM-5). Because development to the west of the Terminal is limited, road traffic along the affected portion of Port Industrial Road is low and the potential for crossing-related delays is minimal.

The volume of projected rail traffic on the proposed rail line and through the proposed crossing of the existing UP rail line is low, less than one train per day on average. Once completed, rail traffic would be split between the two at-grade crossings depending on the train's destination within the Terminal. Because the proposed rail line and crossing of the existing UP rail line would increase the efficiency with which rail traffic enters and leaves the Terminal, OEA anticipates that the total time that vehicular traffic on Port Industrial Road is blocked by train crossings would decrease as a result of the proposed project. Because both SH 275/Harborside Drive and the 51st Street/Pelican Island Causeway are elevated over the proposed rail line and crossing of the existing UP rail line, the proposed project would not affect traffic traveling on either roadway.

4.2 PHYSICAL RESOURCES

4.2.1 Geology, Soils, and Climate

Construction of either of the Build Alternatives and of the planned crossing of the existing UP rail line would affect existing land use only within the proposed rail right-of-way and in staging areas needed for construction. Either Build Alternative would require a construction footprint of approximately 50 feet in width, totaling approximately less than four acres in size. The soils within that footprint have been previously disturbed and the areas proposed for track construction have been prepared during previous track construction projects. TREX would install sub-ballast, ballast, ties, rail, and switch components, which would result in limited ground disturbance. Construction would not require deep excavation or significant regrading.

Under both Build Alternatives, TREX would acquire land for the rail corridor from the City of Galveston and would obtain authority to cross an existing rail line owned and operated by

UP. The construction of the planned rail crossing over the existing UP line would occur within an established rail right-of-way and would not result in any disturbance of the underlying soil. The construction of a new road crossing over Port Industrial Road would also occur within an existing transportation corridor and is not expected to result in significant impacts to soil resources.

Minor construction-related impacts related to soil erosion and sedimentation could occur during construction of either of the Build Alternatives and the planned crossing of the existing UP rail line. To address these impacts, TREX would obtain a Section 401 Water Quality Certification and Section 404 permit from USACE (see mitigation measure MM-13). TREX would also be required to file a Notice of Intent under the Texas Pollution Discharge Elimination System prior to starting construction and would be required to implement a Stormwater Pollution Prevention Plan (SWPPP) during construction (see mitigation measure MM-14).

The proposed rail line would be located in an urban built-up area that does not contain any soils designated as prime or unique farmlands or determined to be of local or statewide importance. Therefore, the provisions of the Farmland Protection Policy Act do not apply to this proposed project. To minimize impacts to geology and soils, OEA is recommending mitigation requiring TREX to limit construction activities, vegetation clearing, and soil disturbance to the right-of-way of the proposed rail line, to the extent practicable (see mitigation measure MM-8).

4.2.2 Surface and Ground Water

Construction of the proposed rail line, including the planned crossing of the existing UP rail line, could affect up to two linear tidal water features and two wetland areas (see Section 4.3.2). Construction of the Green Alternative would affect all four water features. The Blue Alternative would require fill to be placed within Water 1, a tidal ditch, but would avoid all other identified water features. Under both Build Alternatives, existing culverts would be extended where required and additional fill material would be placed to support construction of the proposed rail line features. No drinking water intakes or wellheads would be affected by construction of either of the Build Alternatives. To minimize potential impacts to neighboring tidal water resources, OEA is recommending mitigation requiring TREX to implement best management practices for erosion and sedimentation control during construction of the proposed

rail line and the planned crossing of the existing UP rail line (see mitigation measures MM-11, MM-12, MM-13, MM-14, and MM-15).

4.2.3 Air Quality

Impacts to air quality during construction and operation of the proposed rail line and the planned crossing of the existing UP rail line would be identical under either Build Alternative. Air emissions during construction would be minor and temporary. Air emissions during rail operations would be minor, due to the low anticipated rail traffic volume, and would be less than under the No-Action Alternative, because of the improvements in operational efficiency. With a total projected rail traffic of fewer than one train per day, on average, the proposed rail line would not exceed the Board's threshold for detailed air quality analysis, which is eight trains per day for areas that are in attainment for NAAQS and three trains per day for nonattainment areas. The project area is located approximately 650 miles from Big Bend National Park (TX), 700 miles from Guadalupe Mountains National Park (TX), and approximately 260 miles from the Breton Wilderness Area (LA), all of which are Class 1 Federal lands under the Clean Air Act.⁴ Emissions associated with the proposed rail line are not expected to impact visibility within these Class 1 regions.

Construction of either Build Alternative, including construction of the planned crossing over the existing UP rail line, would result in the emission of diesel exhaust from heavy construction equipment, but these emissions would be temporary and minor relative to the total emissions of vehicles and equipment in the project area. Fugitive dust would also be emitted during construction activities. To minimize the impacts of fugitive dust emissions, OEA is recommending mitigation that would require TREX to limit construction activities to the proposed rail right-of-way to the extent practicable, use water trucks and best management practices for the suppression of fugitive dust emissions as appropriate, and comply with the reasonable requirements of applicable regulations for the control of fugitive dust (see mitigation measures MM-8, MM-9, and MM-10). If those mitigation measures are imposed, emissions from construction equipment and fugitive dust from construction activities would not significantly affect local air quality and would cease after construction is completed.

⁴ Class 1 Federal lands include areas such as national parks, national wilderness areas, and national monuments. These areas are granted special air quality protections under Section 162(a) of the federal Clean Air Act.

During operation of the proposed rail line and the planned crossing of the existing UP rail line, emissions from locomotives would occur, but those emissions would be lower than under the No-Action Alternative. The proposed rail line would reduce the total number of moves required to couple and uncouple trains as they move between the BNSF tracks and the Terminal. Fewer locomotives would be required to handle the existing BNSF traffic and those locomotives would be required to power up and power down fewer times than under the current reciprocal switching arrangement. Therefore, less fuel would be burned under the Build Alternatives than under the No-Action Alternative and fewer air emissions, including carbon dioxide emissions, would occur. In addition, TREX states that it intends to phase in and operate cleaner operating diesel locomotives than are currently used to handle BNSF traffic, which would provide a further reduction in air emissions.

4.3 BIOLOGICAL RESOURCES

4.3.1 Vegetation

Some minor impacts to vegetation would occur during construction of the proposed rail line, including the construction of the planned crossing over the existing UP rail line. The disturbed terrestrial vegetation would include small deciduous trees and shrubs and a variety of grasses and forbs common to previously disturbed areas in Galveston County. To minimize potential impacts to vegetation, OEA is recommending mitigation requiring TREX to limit construction activities to rail right-of-way to the extent practicable and to follow applicable regulations for the use of herbicides for right-of-way maintenance (see mitigation measures MM-15, MM-16, and MM-17).

4.3.2 Wetlands and Waters of the United States

Construction of the proposed rail line, including the construction of the planned crossing over the existing UP rail line, would impact wetlands and waters of the United States under the jurisdiction of USACE. Construction of the Green Alternative would fill approximately 0.415 acres of jurisdictional wetlands and waters of the United States. Construction of the Blue Alternative would result in less than 0.10 acres of fill being placed within jurisdictional wetlands and waters of the United States. If the Board were to approve construction and operation authority and authority for the new crossing over the UP line, TREX would need to obtain a

permit from USACE to authorize the placement of fill material within these jurisdictional waters under Section 404 of the Clean Water Act (see mitigation measure MM-13).

For linear transportation projects in tidal waters, Nationwide Permit (NWP) 14 can be used if the discharge does not cause the loss of more than 0.33 acres of tidal waters. Based on the wetland delineation conducted by Spirit and reviewed by OEA, the Green Alternative would result in the loss of 0.391 acres of tidal waters and 0.024 acres of non-tidal wetlands. The Blue Alternative would result in the loss of 0.099 acres of tidal waters and no loss of non-tidal wetlands or waters (see Table 4-1).

Table 4-1: Wetland and Waters of the United States Impacts

Feature Name	Feature Type	Green Alternative		Blue Alternative	
		Option A	Option B	Option A	Option B
Water 1	Tidal	0.099 ac	0.099 ac	0.099 ac	0.099 ac
Water 2	Tidal	0.060 ac	0.060 ac	0.0 ac	0.0 ac
SWD1	PEM – non-tidal	0.024 ac	0.024 ac	0.0 ac	0.0 ac
EEM1	Tidal	0.232 ac	0.232 ac	0.0 ac	0.0 ac
TOTAL		0.415 ac	0.415 ac	0.099 ac	0.099 ac

Source: Spirit, 2018a

Implementation of the Blue Alternative could be authorized under NWP 14 requiring that a completed Clean Water Act Section 404 permit application be submitted to USACE for the proposed project. No pre-construction notification would be required if impacts would remain below 0.1 acres. Implementation of the Green Alternative would require a Section 404 Individual Permit (IP) because the impacts to tidal waters would exceed the 0.33-acre threshold of NWP 14. TREX would need to submit a pre-construction notification, alternatives analysis, and mitigation plan to USACE along with a complete Section 404 permit application. USACE would require mitigation for the loss of 0.232 estuarine emergent wetlands. If the Green Alternative is constructed, the National Marines Fisheries Service may also require mitigation for the loss of 0.159 acres of tidal waters it causes.

4.3.3 Wildlife

Construction and operation of the proposed rail line, including the construction of a new road crossing over Port Industrial Road and a new rail crossing over the existing UP rail line,

would have minimal effects on resident and migratory wildlife. The total footprint of disturbance for either of the Build Alternatives would be approximately 3.85 acres, most of which is currently used for existing rail lines, roadways, or industrial facilities. Very limited habitat would be disturbed by construction. Affected habitat would include vegetation on former spoil piles adjacent to existing rail lines and emergent vegetation within the wetland and ditch areas along the existing rail lines.

During construction of the proposed rail line and the planned crossing of the existing UP rail line, wildlife within the project area would be exposed to sporadic, temporary disturbance from activities, which would be limited to the proposed right-of-way and the immediate surrounding area (see mitigation measures MM-17 and MM-18). The noise and activity associated with construction may temporarily displace small mammal and bird species, but these disturbances would be temporary and would not cause a permanent redistribution of resident species. Some mortality of small, less-mobile animals, such as various species of snakes, may occur during construction due to the operation of heavy equipment in the area. Operation of the proposed rail line could also cause some mortality of animals due to collisions with train locomotives, although these impacts would be minor due to the slow speed of trains on the proposed rail line. Any loss of wildlife from rail operations would be insignificant relative to the overall populations of potentially affected species in the project area.

Migratory birds, primarily swallow species, may nest under the 51st Street/Pelican Island Causeway and SH 275/Harborside Drive bridges. Because construction activity would be limited to the ground under these structures and because both structures stand more than 20 feet above the ground surface, the proposed rail line would have no direct effect on these species. Because active rail lines are already present under both of those structures, changes to existing conditions would be minor.

4.3.4 Threatened, Endangered, and Rare Species

According to the USFWS and the TPWD, numerous federally-listed threatened or endangered may occur in Galveston County. Several of those, including sea turtles, manatees, and fishes, are marine species common to reef and deep-water habitats in Galveston Bay and adjacent waters. The project footprint is generally bounded by Port Industrial Road and the southern boundary of the Terminal on the north and the existing BNSF rail line on the south.

Marine species would not occur within the project footprint or surrounding area because of the limited salt water and tidal environments and physical barriers (earthen embankments and culverts) that separate the project area from Galveston Bay. The physical features would impede access by these species into the project footprint. Therefore, OEA concludes that the proposed rail line would have no effect on the listed marine species.

Several bird and mammal species are also listed for Galveston County. Among the federally listed species, only the red knot (*Calidris canutus rufa*) may occur in the project area. The limited amount and low quality of suitable habitat would limit the occurrence of the red knot in the project area, although individuals may be temporarily present as transients. Because of the potential for the red knot to occur in the project area, OEA concludes that the proposed action may affect, but is not likely to adversely affect that federally listed threatened species. To minimize the potential for impacts to wildlife, including the red knot, OEA is recommending mitigation requiring TREX to conduct wildlife surveys within the project footprint and adjacent areas prior to initiating and during construction and would notify and consult with OEA and other appropriate agencies if red knot or other federally or state listed protected species are encountered during construction (see mitigation measure MM-19 and MM-20).

4.4 NOISE

During construction of the proposed rail line and the planned crossing of the existing UP rail line, noise levels along the project footprint would increase temporarily as a result of increased truck traffic and use of heavy equipment. Noise generated during construction and operation of the proposed rail line would have minimal, if any, impacts to adjacent land uses. Operations along the proposed rail line would not exceed the Board's train traffic threshold for detailed noise analysis. No sensitive noise receptors are located within or adjacent to the project footprint. To ensure that impacts related to noise from construction and operation, OEA is recommending mitigation that would require TREX to use appropriate muffler systems on construction machinery and to comply with FRA regulations that establish decibel limits for train operations and locomotive noise standards (see mitigation measures MM-21 and MM-22).

4.5 CULTURAL RESOURCES

Section 106 of NHPA requires that federal agencies consider the potential effects of their actions on properties of historical and cultural significance. In this case, OEA concluded that

there are no historically or culturally significant properties within Area of Potential Effects (APE) of the proposed construction and operation, including the planned crossing of the existing UP rail line. During preliminary consultation leading to the production of this Draft EA, the Texas SHPO informed OEA that the proposed construction and operation would have no effect on historic properties (Appendix A – Exhibit 9). Upon review of all information available to date, including databases of known historical properties and OEA’s inspection of the project area, OEA concurs with the Texas SHPO’s opinion. Accordingly, pursuant to Section 106, OEA finds that the proposed construction and operation would have no effect on properties listed in or eligible for listing in the National Register. The documentation for this finding, as specified at 36 C.F.R. § 800.11(d), consists of this Draft EA and all relevant correspondence, which have been provided to the Texas SHPO and made available to the public through posting on the Board’s website at www.stb.gov. The Section 106 process for this case is therefore concluded.

OEA has identified the following federally recognized tribes as potentially having historical connections to or knowledge of the project area:

- Alabama-Coushatta Tribe of Texas
- Alabama-Quassarte Tribal Town
- Apache Tribe of Oklahoma
- Comanche Nation in Oklahoma
- Coushatta Tribe of Louisiana
- Tonkawa Tribe of Louisiana
- Tonkawa Tribe of Indians of Oklahoma
- Wichita and Affiliated Tribes (Wichita, Keechi, Waco & Tawakonie) in Oklahoma

OEA has contacted those tribes to inform them of the availability of this Draft EA and request comments related to potential impacts to cultural resources.

To ensure that the potential for impacts to cultural resources is minimized, OEA is recommending mitigation that would require TREX to halt all construction activities and notify OEA and the Texas SHPO in the event that that unanticipated cultural resources are discovered during construction of the proposed rail line (see mitigation measure MM-23).

4.6 HAZARDOUS MATERIALS AND WASTE SITES

The proposed rail line is located in an active industrial area and along existing rail corridors. Five industries located along Port Industrial Road are designated by TCEQ and EPA as hazardous waste generators under the RCRA. The construction and operation of the proposed rail line, including the planned crossing over the existing UP rail line, would not affect those properties. Under either of the Build Alternatives, construction of the proposed rail line and the planned crossing over the existing UP rail line would occur adjacent to existing rail infrastructure. The sub-base for the project was previously prepared during other projects. Therefore, OEA does not anticipate that deep excavation or soil disturbance below one foot from the existing ground surface would be required during construction, including during construction the planned crossing over the existing UP rail line. To ensure that construction-related impacts involving hazardous materials would be minimized, OEA is recommending mitigation requiring TREX to remove and disposed of all construction-related debris according to local, state, and federal standards (see mitigation measure MM-24, MM-26, and MM-27).

During operation of the proposed rail line and the planned crossing over the existing UP rail line, TREX may transport hazardous materials, including ethanol and crude oil products. Because TREX would use the proposed rail line as an alternative to the existing switching arrangement, the total volume of hazardous material transported through the project area would not increase as a result of the proposed construction and operation. To ensure that impacts related to the transportation of hazardous materials would be minimized, OEA is recommending mitigation requiring TREX to develop and follow safety protocols for transporting and handling hazardous materials, including developing and implementing a hazardous materials spill prevention plan (see mitigation measure MM-25). In the unlikely event of hazardous material spills or leaks, TREX would coordinate with appropriate local, state, and federal agencies to mitigate the effects.

4.7 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

The construction and operation of the proposed rail line, including the planned crossing over the existing UP rail line, would not result in significant changes to the local economy. Construction activities could create opportunities for temporary employment. No residential or commercial displacements would occur and there would be no impacts to low income or

minority communities. Because the proposed rail line would not result in an increase in total rail traffic in the project area, OEA does not expect that the number of permanent jobs would be affected.

4.8 LAND USE

The proposed construction and operation, including the planned crossing over the existing UP rail line, would have no effect on local land uses. The proposed rail line would not cross nor would it be adjacent to any public recreational lands or private residences. None of the recreational opportunities that occur along coastal areas or within Galveston Bay and adjacent waters would be affected by the proposed rail line.

4.9 CUMULATIVE EFFECTS

Cumulative effects are defined as “the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 C.F.R. § 1508.7). The effects of individual minor disturbances and other changes to the environment by humans would accumulate when the frequency of disturbances is so high that the ecosystem or human environment has not fully rebounded before another stressful event is introduced. The spatial and temporal crowding of such disturbances can result in cumulative effects. Council on Environmental Quality (CEQ) guidance states that for cumulative effects analysis to help the decision maker and inform interested parties, it must be limited through scoping to effects that can be meaningfully evaluated. The boundaries for evaluating cumulative effects should be expanded to the point at which the resource is no longer affected significantly or the effects are no longer of interest to affected parties.

As discussed in the preceding sections, OEA has concluded that construction and operation of the proposed rail line and planned crossing of the existing UP line could result in minor negative direct and indirect impacts to water resources, including wetlands/waters of the United States and floodplains, as well as to wildlife, including threatened and endangered species. If the mitigation measures recommended by OEA are imposed, those impacts would be minimized to a level of insignificance. The proposed construction and operation would also result in minor beneficial impacts to transportation systems, public safety, and air quality. During consultation with various appropriate local, state, and federal agencies leading to the production of this Draft

EA, OEA has not been made aware of any recent, ongoing, or planned activities in or near the project footprint that could result in cumulative effects to any of the resource areas that the construction and operation of the proposed rail line and crossing of the existing UP rail line would affect. Therefore, OEA concludes that those resource areas would not be significantly impacted by cumulative effects of incremental actions.

5.0 RECOMMENDATIONS FOR MITIGATION AND REQUEST FOR COMMENTS

Based on OEA's independent analysis of the project and the comments received from various agencies consulted with prior to and during the preparation of this EA (see Appendix A), OEA recommends that, if the Board grants TREX authority to construct and operate the proposed rail line and authorizes the planned crossing of the UP line pursuant to 49 U.S.C. 10901(d), such authority should be subject to the mitigation measures identified below.

5.1 TRANSPORTATION AND SAFETY

MM-1. TREX shall schedule construction activities related to the construction of the rail line and the planned crossing of the existing UP rail line so as to minimize the periodic closing of roadways and vehicular traffic delays. TREX shall coordinate with the Texas Department of Transportation (TxDOT) and the City of Galveston regarding the scheduling of construction activities that could result in temporary road closures and shall provide for detours and associated signage, as appropriate, or maintain at least one open lane of traffic at all times to allow for the passage of emergency and other vehicles.

MM-2. TREX shall, to the extent practicable, confine all traffic related to the construction of the rail line and to the planned crossing of the existing UP rail line to temporary access roads within the rail right-of-way or established public roads. Where traffic cannot be confined to temporary access roads or public roads, TREX shall make necessary arrangements with landowners to gain access. After rail-related construction is completed, TREX shall remove and restore any temporary access roads constructed outside of the rail right-of-way unless otherwise agreed to with the landowners.

MM-3 TREX shall ensure that any activities related to the construction of the rail line and to the planned crossing of the existing UP rail line located within and along existing roadways are consistent with the Manual on Uniform Traffic Control Devices for installation of signs (e.g., regulatory, warning/caution, speed), delineators, and other roadway appurtenances and in compliance with the terms and conditions of any American Association of State Highway and Transportation Officials safety standards.

MM-4. TREX shall consult with appropriate federal, state, and local transportation agencies to determine the final design and other details for the use of road crossing warning signs and

devices on Port Industrial Road. Implementation of road crossing warning signs and devices will be subject to the review and approval of the TxDOT and the City of Galveston. TREX shall coordinate with the TxDOT and the City of Galveston to identify the maintenance and repair responsibilities of each party for project-related warning devices used during construction at the at-grade road crossing.

MM-5. During operation of the rail line and the planned crossing of the existing UP rail line, TREX shall comply with the rail safety regulations implemented and enforced by the FRA, including regulations that establish safe speed limits for train operations and regulations that establish procedures for implementing an inspection and maintenance program to minimize the potential for derailments and other rail-related accidents.

MM-6. TREX shall ensure that the planned rail crossing over the existing UP rail line is constructed in accordance with applicable rail safety standards and shall abide by applicable rail safety regulations implemented and enforced by the FRA during operation of the rail crossing.

MM-7. TREX shall, to the extent practicable, consult and coordinate with UP during the construction of the planned rail crossing over the existing UP rail line so as to minimize temporary disruptions to rail traffic along the existing UP rail line.

5.2 PHYSICAL RESOURCES

MM-8. TREX shall, to the extent practicable, limit rail-related construction activities, vegetation clearing, and soil disturbance to the rail right-of-way and immediately surrounding areas to minimize fugitive dust emissions during the construction of the rail line and the planned crossing of the existing UP rail line.

MM-9. TREX shall use water trucks as appropriate to minimize fugitive dust emissions and shall employ best management practices in the control and suppression of fugitive dust emissions during the construction of the rail line and the planned crossing of the existing UP rail line.

MM-10. TREX shall comply with the reasonable requirements of applicable federal, state, and local regulations regarding the control of fugitive dust related to the construction of the rail line and the planned crossing of the existing UP rail line.

MM-11. TREX shall implement soil erosion and sedimentation control measures along surface waters in the project area to minimize impacts from stormwater runoff during construction of the rail line and the planned crossing of the existing UP rail line. TREX shall consider installation and maintenance of sediment control structures that exclude wildlife access to construction areas.

MM-12. TREX shall design and construct the rail line, including culverts, and the planned crossing of the existing UP rail line in such a way as to maintain natural water flow and drainage patterns to the extent practicable.

MM-13. During construction and operation of the rail line and the planned crossing of the existing UP rail line, TREX shall avoid and minimize impacts to waterbodies and wetlands, to the extent practicable. TREX shall obtain from the U.S. Army Corps of Engineers (USACE) any federal permits required under Section 404 of the Clean Water Act before initiating project-related construction activities that would impact wetlands and waterbodies. TREX shall comply with all reasonable requirements as required by USACE and shall incorporate the stipulations of those permits and authorizations into construction contract specifications. TREX shall work directly with USACE to develop appropriate mitigation for direct wetland impacts as stipulated in the Section 404 permit.

MM-14. TREX shall coordinate with the Texas Commission on Environmental Quality (TCEQ) to obtain all appropriate state permits related to impacts to water resources resulting from construction of the rail line and the planned crossing of the existing UP rail line, including filing the appropriate notices under the Texas Construction General Permit for discharges from construction activities.

MM-15. TREX shall consult with the Coastal Division of the Texas General Land Office (GLO) regarding the consistency of the rail line and the planned crossing of the existing UP rail line with the Texas Coastal Management Program (Texas CMP) before beginning construction activities and shall comply with the reasonable requirements of the Texas CMP.

5.3 BIOLOGICAL RESOURCES – VEGETATION, WETLANDS, AND WILDLIFE

MM-16. If TREX or its contractors need to apply herbicides for right-of-way maintenance, TREX shall ensure the use of staff or contractors who are properly trained in herbicide application, shall require the following of label directions in herbicide application, and shall limit

the amount of herbicide potentially entering waterways. TREX shall require the use only of herbicides regulated for such uses by the EPA and follow all state regulations regarding their use.

MM-17. If migratory bird species are found nesting on or adjacent to the project footprint, TREX shall deal with them in a manner consistent with the Migratory Bird Treaty Act. TREX shall conduct surveys of the project footprint for migratory birds before beginning construction of the rail line and the planned crossing of the existing UP rail line. If nests are observed during surveys, an area of buffer vegetation no less than 15 feet in all directions around the nest shall remain until the young have fledged.

MM-18. TREX shall minimize disturbances to wildlife, to the extent practicable, by restricting activities related to the construction of the rail line and the planned crossing of the existing UP rail line to the rail right-of-way.

MM-19. Before beginning construction of the rail line and the planned crossing of the existing UP rail line, TREX shall consult with USFWS regarding potential impacts to the red knot (*Calidris canutus rufa*) and shall comply with the reasonable recommendations of USFWS.

MM-20. TREX shall notify OEA and USFWS or the Texas Parks and Wildlife Department (TPWD), as appropriate, if any federally or state listed threatened or endangered species are encountered during construction of the rail line and the planned crossing of the existing UP rail line.

5.4 NOISE

MM-21. During construction of the rail line and the planned crossing of the existing UP rail line, TREX shall control temporary noise from construction equipment through the use and maintenance of appropriate muffler systems on machinery.

MM-22. TREX shall comply with FRA regulations that establish decibel limits for train operations and locomotive noise standards during operations along the rail line and the planned crossing of the existing UP rail line.

5.5 CULTURAL RESOURCES

MM-23. If any cultural resources are discovered or uncovered during construction of the rail line or planned crossing of the existing UP rail line, TREX shall halt all work immediately and notify OEA and the Texas SHPO to identify and implement the required consultation and mitigation.

5.6 HAZARDOUS MATERIALS AND WASTE SITES

MM-24. TREX shall ensure that waste materials related to the construction and operation of the rail line and the planned crossing of the existing UP rail line are removed and disposed of promptly at an appropriate waste-disposal site. TREX shall store and dispose of any hazardous waste generated or hazardous materials used in the normal course of construction, operation, and maintenance activities in accordance with applicable local, state, and federal regulations.

MM-25. TREX shall develop a spill prevention plan for handling the release of petroleum products or other hazardous materials during construction and operation of the rail line and the planned crossing of the existing UP rail line. In the event of a spill of such materials, TREX shall comply with its spill prevention plan and applicable local, state, and federal regulations pertaining to spill containment and clean-up.

MM-26. TREX shall comply with applicable U.S. Department of Transportation regulations, policies, and procedures regarding the transportation of hazardous materials should any such materials be transported along the rail line and the planned crossing of the existing UP rail line.

MM-27. If any undocumented hazardous waste sites are discovered or uncovered during construction of the rail line or the planned crossing of the existing UP rail line, TREX shall immediately halt all work and notify the appropriate regulatory agencies.

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6.0 CONCLUSIONS AND REQUEST FOR COMMENTS

6.1 CONCLUSION

This Draft EA identified the potential environmental impacts that could occur as a result of TREX's proposal to construct and operate approximate 2,800 feet of new rail line in the City of Galveston, Galveston County, Texas. The Draft EA also assesses, as appropriate, the planned crossing of an existing UP rail line that would be necessary to implement the proposed action. In preparing this Draft EA, OEA has consulted with appropriate federal, state, and local agencies; conducted site visits to the project area and surroundings; reviewed relevant published reports and literature; and conducted detailed independent technical analysis. OEA's evaluation covered the following wide range of possible impacts to the environment:

- Transportation Systems
- Public Safety
- Geology and Soils
- Surface Water and Ground Water
- Air Quality and Climate
- Biological Resources
- Noise and Vibration
- Cultural Resources
- Hazardous Materials and Hazardous Wastes
- Socioeconomics and Environmental Justice
- Land Use

OEA has determined that construction and operation of the proposed rail line could result in minor impacts to some of those resource areas. OEA also determined that the two Build Alternative and the design options associated with those alternatives would have similar environmental impacts and that none of those impacts would be significant. As specified in Chapter 5, OEA is recommending that the Board impose a number of mitigation measures should it approve TREX's proposal and authorize the planned crossing of the existing UP rail line that would be necessary to implement this project. OEA preliminarily concludes that, if the recommended mitigation measures are imposed, the proposed construction and operation would

not significantly affect the quality of the human environment and, therefore, that the EIS process is unnecessary.

6.2 REQUEST FOR COMMENTS

OEA invites comments on all aspects of this Draft EA, including the scope and adequacy of the recommended mitigation, and other reasonable alternatives. Given all of the facts and circumstances presented in this project, including the short length of the proposed line, no plans to increase rail traffic, the minimal environmental impacts from both the proposed line and the planned crossing of the UP line discovered during the preparation of this Draft EA, and the potential transportation benefits that TREX anticipates would result from the proposed action, a 20-day comment period on this Draft EA is appropriate. Accordingly, OEA will consider all comments submitted in response to the Draft EA by March 14, 2019 in preparing a Final EA, which will respond to all the comments received and present OEA's final conclusions and recommendations to the Board. The Board will consider the entire environmental record, including the Draft EA, Final EA and the environmental comments in making its final decision in this proceeding. Please send any comments on this Draft EA by March 14, 2019, to:

Joshua Wayland
Surface Transportation Board
Patriots Plaza
395 E Street SW
Washington, DC 20423-0001
Attn: Docket No. FD 36186

Environmental comments may also be filed electronically on the Board's website, www.stb.gov, by clicking on the "E-FILING" link. Please refer to Docket No. FD 36186 in all correspondence, including e-filings, addressed to the Board. If you have any questions regarding this Environmental Assessment, please contact Joshua Wayland, the OEA Project Manager for this case, by phone at (202)-245-0330, fax at (202) 245-0454, or email at joshua.wayland@stb.gov.

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