



**US Army Corps
of Engineers** ®
Fort Worth District

Public Notice

Applicant: City of Fort Worth

Project No.: SWF-2010-00470

Date: February 24, 2016

The purpose of this public notice is to inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. We hope you will participate in this process.

Regulatory Program

Since its early history, the U.S. Army Corps of Engineers has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce. An important part of our mission today is the protection of the nation's waterways through the administration of the U.S. Army Corps of Engineers Regulatory Program.

Section 10

The U.S. Army Corps of Engineers is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate *all work or structures in or affecting the course, condition or capacity of navigable waters of the United States*. The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

Section 404

The U.S. Army Corps of Engineers is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the *discharge of dredged and fill material into all waters of the United States, including wetlands*. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.

Contact

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JOINT PUBLIC NOTICE

U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT

AND

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUBJECT: Application for a Department of the Army Permit under Section 404 of the Clean Water Act (CWA) and for water quality certification under Section 401 of the CWA to discharge dredged and fill material into waters of the United States (WOUS) associated with the Lebow Channel improvements proposed by the City of Fort Worth (City) to reduce flooding and according to the City, improve the quality of the tributary channel.

APPLICANT: City of Fort Worth
1000 Throckmorton Street
Fort Worth, Texas 76102
Attn: Mr. Michael Owen

APPLICATION NUMBER: SWF-2010-00470

DATE ISSUED: February 24, 2016

LOCATION: The proposed channel improvements would be located along approximately 13,313 linear feet (3.37 acres) of intermittent tributary (the Lebow Channel) and 684 linear feet (0.06 acre) of ephemeral tributaries in Tarrant County, Texas (Figure 1). The center of the proposed project is approximately at E Long Avenue at the Lebow Channel which is at latitude 32.8058 and longitude -97.3299 on the Haltom City 7.5-minute USGS quadrangle map in the USGS Hydrologic Unit 12030102.

OTHER AGENCY AUTHORIZATIONS: State Water Quality Certification

BACKGROUND: On October 15, 2010, the U.S. Army Corps of Engineers (USACE) received a pre-application meeting request from the City's agent. USACE conducted a site visit with the City in January 2011 to discuss the overall project (over the following years, the City considered project alternatives, and discussed these alternatives with our office). During a site visit in 2013 at the Dewey Street bridge replacement project, it became apparent that work conducted in the Lebow Channel at this location was more than the minimum necessary to construct and/or protect the new Dewey Street Bridge and USACE believed it to be closely associated with the Lebow Channel improvement project. Accordingly, it was determined the work conducted was a violation of Section 301(a) of the Clean Water Act unless authorized by a Department of the Army permit issued under Section 404 of that Act. On July 21, 2015, USACE received an individual permit application by the City's consultant which encompasses the channel work at

the Dewey Street Bridge location in addition to other work within the Lebow Channel designed to reduce flooding. On September 15, 2015, USACE sent an official Notice of Violation letter to the City along with a Tolling Agreement. The Tolling Agreement was executed on February 5, 2016. Tolling agreements “toll” or stop the statute of limitations and are required to be executed prior to after-the-fact permit evaluation.

PROJECT DESCRIPTION: The City is proposing to discharge approximately 6,556 cubic yards of clean fill material associated with mechanized grading into the Lebow Channel and associated ephemeral tributaries within the project area. Total proposed and current unauthorized impacts to WOUS would total approximately 3.96 acres, including 3.37 acres of Lebow Channel (intermittent tributary), 0.06 acre of ephemeral tributaries, and 0.54 acre of forested wetlands.

I. INTRODUCTION: The City is proposing to conduct channel improvements to the Lebow Channel with the stated purpose of reducing flooding of roads, reducing property damage, and reducing the safety issues that have occurred during flood events, while, according to the City, would also provide environmental benefits within the less urbanized segment (lower Lebow). The Lebow Channel is the main drainage feature throughout this sub-watershed basin that conveys a significant amount of water during large storm events. However, this channel does not convey the 100-year storm event within the channel; thereby resulting in a larger floodplain through this urban area. According to the City, many residences and commercial structures become inundated during large storm events, and the loss of life has occurred on two occasions.

II. EXISTING CONDITIONS: As previously stated, the proposed project site contains an unauthorized discharge of fill material for approximately 600 linear feet that occurred in early 2013 during the Dewey Street bridge replacement.

The general topography within the proposed project area slopes to the south and ranges from approximately 660 to 550 feet above sea level.

According to the Soil Survey of Tarrant County, six soil series are located within the proposed project area: Bastil urban land complex (0 to 5 percent slopes), Frio urban land complex, Aledo-Bolar urban land complex (3 to 20 percent slopes), Sanger clay (1 to 3 percent slopes), Sanger urban land complex (1 to 5 percent slopes), and Urban land. None of these soils are listed on the National Hydric Soils list prepared by the National Technical Committee for Hydric Soils (revision April 2014).

The FEMA Flood Insurance Rate Map (FIRM) shows the majority within the project area classified as Zone AE (Floodway areas in Zone AE). These are special flood hazard areas inundated by 100-year flood with base flood elevations determined. The project area contains minimal amounts of Zone AE, Zone A, and Shaded Zone X.

III. ADVERSE IMPACTS to WOUS: The project area contains approximately 17,955 linear feet of intermittent tributary (Lebow Channel), 684 linear feet of ephemeral tributaries, and 0.54 acre of forested wetlands. Grading activities would occur to approximately 13,313 linear feet of

intermittent tributary (Lebow Channel), 684 linear feet of ephemeral tributaries, and 0.54 acre of forested wetlands. Approximately 4,642 linear feet of intermittent tributary (Lebow Channel) would not be graded; therefore, avoided. For the purpose of discussing the project, Lebow Channel has been divided into two sections, Upper and Lower Lebow. According to the City, the improvements associated with Lower Lebow favor more natural and earthen improvements, while the Upper Lebow favors more traditional channel widening and structural improvements. The Lower and Upper sections are discussed below:

LOWER LEBOW: As stated, the Lower Lebow channel improvements favor a more natural floodplain due to the reduced density of structures. These improvements would include wider benched areas, flatter banks, and a more meander of the corridor. The channel improvements would consist of expanding channel capacity by excavating a 30 – 50-foot earthen channel with 50 – 75-foot wide banks and a low-flow channel in the bottom. Additionally, there would be two bypass/overflow channels constructed to aid in reducing the floodplain. Several drop structures have been proposed to reduce the flow line slope, which would maintain channel capacity and reduce velocities. After construction, native trees and grasses would be planted along the stream bank.

UPPER LEBOW: The Upper Lebow channel consists of a higher density residential lots than the Lower Lebow. Substantial structural improvements and additional channel capacity area required to reduce the flood risk to these structures. The proposed channel consists of hard armoring along the stream banks and a widened, lowered, natural channel bottom averaging 40-foot wide. This section would also include a storm water detention facility north of Long Avenue with the capacity to offset the loss of valley storage associated with the proposed upstream improvements. In addition to impacting the Upper Lebow, the detention facility would also impact 684 linear feet of an ephemeral tributary and 0.54 acre of forested wetlands.

IV. ALTERNATIVES: The City has provided an alternatives analysis that includes the no build alternative and various other design alternatives that could be considered separate or in combination.

Project constraints identified by the City include the following:

- Nearly the entire watershed and floodplain of Lebow Channel has been urbanized for more than 50 years. When this watershed was developed, there was little concern of flooding or floodplains as demonstrated by the density of structures adjacent to the channel.
- As the area developed, the road network was constructed in a grid pattern resulting in numerous road crossings. Project alternatives have considered the appropriate sizing of existing culverts, potential for bridging, and potential for removing unnecessary roads.
- A significant constraint is the existing culverted section of Lebow Channel under the railroad line and Long Avenue, which due to the grade constraints of rail lines, would be

a significant cost to redesign and reconstruct. Accordingly, the alternatives analysis considered ways to accommodate the existing culvert structure.

- There are numerous utilities, both private and public, that service the area. The alternatives analysis considered the potential impacts or avoidance associated with the utilities for both cost of relocation and safety of construction.
- There is a significant cost to correct the flooding issue adjacent to Lebow Channel. The City of Fort Worth is funding the work through their stormwater fund, as such, the project would be staged over numerous years. The project alternatives were developed in a manner so that the project can be segmented into manageable sub-projects to accommodate limited funding. According to the City, the segments would be sequenced to provide a positive or neutral benefit to local flooding.

A brief overview of the City's alternatives are below:

No Build Alternative

The No Build Alternative would have no impact to WOUS, however, not performing any improvements to the watershed would, according to the City, result in the continued health and human safety concerns.

Floodplain Restoration

Under this Alternative, the City would construct a new, reduced floodplain, through over-bank excavation. This would require the purchase of some structures, but not all structures, within the existing 100-year floodplain. This approach would reduce impacts to the creek, improves the floodplain connectivity associated with a bankfull discharge and restores floodplain functions. If conducted in the Lower Lebow Channel, this alternative would have some residential relocations. This alternative could be conducted to accommodate the removal of roadway flood hazards. This minimizes the need for separate valley storage mitigation. However, if conducted in the Upper Lebow Channel, there could be a significant number of residential relocations required. To effectively accommodate this alternative, property acquisition for some parts of the project would need to be accomplished on both sides of the channel which increases cost in the densely populated Upper section.

No Grading, Remove Structures from Floodplain

Under this alternative, the City would purchase all structures in the existing floodplain, which would remove the flooding hazard associated with houses and businesses. There would be no disruptions to the existing creek functions and no need for separate valley storage. There would be significant cost, public opinion, and social/economic impact to the local area as there are hundreds of structures in the floodplain. As the creek has been encroached upon, this alternative does not have a benefit for restoring the natural channel design and function. Without

reconstruction of the roadways, his alternative would still result in the roadways being inundated by floods.

Bypass Channels

Under this alternative, the City would construct parallel channels that add conveyance and storage of water that the existing channel does not provide. This alternative would reduce impacts to the existing tributary as only grading within the channel is associated with the bypass channel entrance and exit. This would require the bypass channel be located near the existing creek to avoid construction against the grade. Numerous structures would have to be purchased and existing roadways would be redesigned and relocated. This design alternative cannot be segmented and would be cost prohibitive.

Bypass Culverts

Under this alternative, the City would make subterranean conduits to assist in conveying floodwaters. Culverting the floodplain flows could be accomplished with beneficial land use such as roads (i.e., the culvert system could be built under an existing road). This would reduce impacts to the existing creek as the only grading within the channel is associated with the bypass culvert entrance and exit. This alternative does not address valley storage; detention would need to be accommodated within the project. There are very few locations where there is symbiotic land use (i.e., there are no roadways that parallel the creek that accommodate the grades). There would be a loss of natural ecological floodplain functions. The City states this design alternative cannot be segmented and would be cost prohibitive.

Creek Channelization

Under this alternative, the City would utilize the existing creek alignment and a new creek channel would be excavated wider and deeper. This alternative would have the least impacts to the local population as there would be very little relocation. This design could be conducted to accommodate the removal of roadway flood hazards and the design could be segmented. However, channelization would be the most disruptive to the tributaries existing functions. The space limitations would require bank protection, does not address valley storage and a detention would need to be accommodated within the project area.

V. MITIGATION: The City has proposed permittee responsible mitigation on-site within the project area to offset unavoidable impacts to WOUS. They have stated that this approach to the compensatory mitigation would result in cumulative beneficial effects for environmental conditions of the Lebow Channel drainage area (e.g., wildlife habitat); the adjacent properties, structures and roadways; and for water quality for the West Fork Trinity River watershed. That determination by the City is based on the Fort Worth District Regulatory Division of the USACE, Texas Rapid Assessment Method (TxRAM) conditional assessment conducted by the City's consultant. Ultimately, the City would create 1.12 acres of non-forested wetlands, restore 13,511

linear feet of intermittent tributary (Lebow Channel), and restore 627 linear feet of ephemeral tributary.

VI. SHEETS

Figure 1: General Location Map

Figure 2: Water Features Identified within the Project Area

Figure 3: Typical cross-sections

Figure 4: Project overview map (Lower Lebow) *

Figure 5: Project overview map (Upper Lebow) *

Figure 6: Proposed on-site compensatory mitigation areas (Lower Lebow)

Figure 7: Proposed on-site compensatory mitigation areas (Upper Lebow)

***Please follow the link below to view the segmented schematic plans identified in Figure 4 and Figure 5.**

http://www.swf.usace.army.mil/portals/47/docs/regulatory/publicnotices/2016/schematic_plan_figures.pdf

PUBLIC INTEREST REVIEW FACTORS: This application will be reviewed in accordance with 33 CFR 320-332, the Regulatory Program of the U. S. Army Corps of Engineers (USACE), and other pertinent laws, regulations, and executive orders. Our evaluation will also follow the guidelines published by the U. S. Environmental Protection Agency pursuant to Section 404(b)(1) of the CWA. The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impact, of the proposed activity on the public interest. That decision will reflect the national concerns for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including its cumulative effects. Among the factors addressed are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

The USACE is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the USACE in determining whether to issue, issue with modifications, or conditions, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

STATE WATER QUALITY CERTIFICATION: This project is submitted after-the-fact and as such would not fulfill Tier I criteria. Therefore, Texas Commission on Environmental Quality (TCEQ) certification is required. Concurrent with USACE processing of this Department of the Army application, the TCEQ is reviewing this application under Section 401 of the Clean Water Act, and Title 30, Texas Administrative Code Section 279.1-13 to determine if the work would comply with State water quality standards. By virtue of an agreement between the USACE and the TCEQ, this public notice is also issued for the purpose of advising all known interested persons that there is pending before the TCEQ a decision on water quality certification under such act. **Any comments concerning this application may be submitted to the Texas Commission on Environmental Quality, 401 Coordinator, MSC-150, P.O. Box 13087, Austin, Texas 78711-3087.** The public comment period extends 30 days from the date of publication of this notice. A copy of the public notice with a description of the work is made available for review in the TCEQ's Austin Office. The complete application may be reviewed in the USACE's office. The TCEQ may conduct a public hearing to consider all comments concerning water quality if requested in writing. A request for a public hearing must contain the following information: the name, mailing address, application number, or other recognizable reference to the application; a brief description of the interest of the requestor, or of persons represented by the requestor; and a brief description of how the application, if granted, would adversely affect such interest.

ENDANGERED AND THREATENED SPECIES: The USACE has reviewed the U.S. Fish and Wildlife Service's latest published version of endangered and threatened species to determine if any may occur in the project area. The proposed project would be located in Tarrant County where the whooping crane (*Grus americana*), least tern (*Sterna antillarum*), red knot (*Calidris canutus rufa*), and piping plover (*Charadrius melodus*) are known to occur or may occur as migrants. The whooping crane and least tern are endangered species and the piping plover and red knot are threatened species. Our initial review indicates that the proposed work would have no effect on federally-listed endangered or threatened species.

NATIONAL REGISTER OF HISTORIC PLACES: The Lebow Drainage Improvement Project covers an area previously impacted by channel development, residential development, and roads. Under the Antiquities Code of Texas, a survey of the project area for cultural resources was reviewed by the Texas State Historic Preservation Office. Four historic age sites (41TR279-41TR282) were recorded within the proposed project as mid-twentieth century residential sites. Due to the extensive disturbance and removal of all standing structures, the four historic sites were determined as not eligible for listing to the National Register of Historic Places. An additional three National Register Districts and one National Register Property are located within a mile of the proposed work. There is no standing architecture within the APE. The drainage improvement construction involves shallow soil impacts and vegetation clearing along a right-of-way that is disturbed from previous developments.

FLOODPLAIN MANAGEMENT: The USACE is sending a copy of this public notice to the local floodplain administrator. In accordance with 44 CFR part 60 (Flood Plain Management

Regulations Criteria for Land Management and Use), the floodplain administrators of participating communities are required to review all proposed development to determine if a floodplain development permit is required and maintain records of such review.

SOLICITATION OF COMMENTS: The public notice is being distributed to all known interested persons in order to assist in developing fact upon which a decision by the USACE may be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

PUBLIC HEARING: Prior to the close of the comment period any person may make a written request for a public hearing setting forth the particular reasons for the request. The District Engineer will determine whether the issues raised are substantial and should be considered in his permit decision. If a public hearing is warranted, all known interested persons will be notified of the time, date, and location.

CLOSE OF COMMENT PERIOD: All comments pertaining to this Public Notice must reach this office on or before **March 25, 2016**, which is the close of the comment period. Extensions of the comment period may be granted for valid reasons provided a written request is received by the limiting date. If no comments are received by that date, it will be considered that there are no objections. Comments and requests for additional information should be submitted to ; Regulatory Division, CESWF-DE-R; U. S. Army Corps of Engineers; Post Office Box 17300; Fort Worth, Texas 76102-0300. You may visit the Regulatory Division in Room 3A37 of the Federal Building at 819 Taylor Street in Fort Worth between 8:00 A.M. and 3:30 P.M., Monday through Friday. Telephone inquiries should be directed to (817) 886-1743. Please note that names and addresses of those who submit comments in response to this public notice may be made publicly available.

DISTRICT ENGINEER
FORT WORTH DISTRICT
CORPS OF ENGINEERS

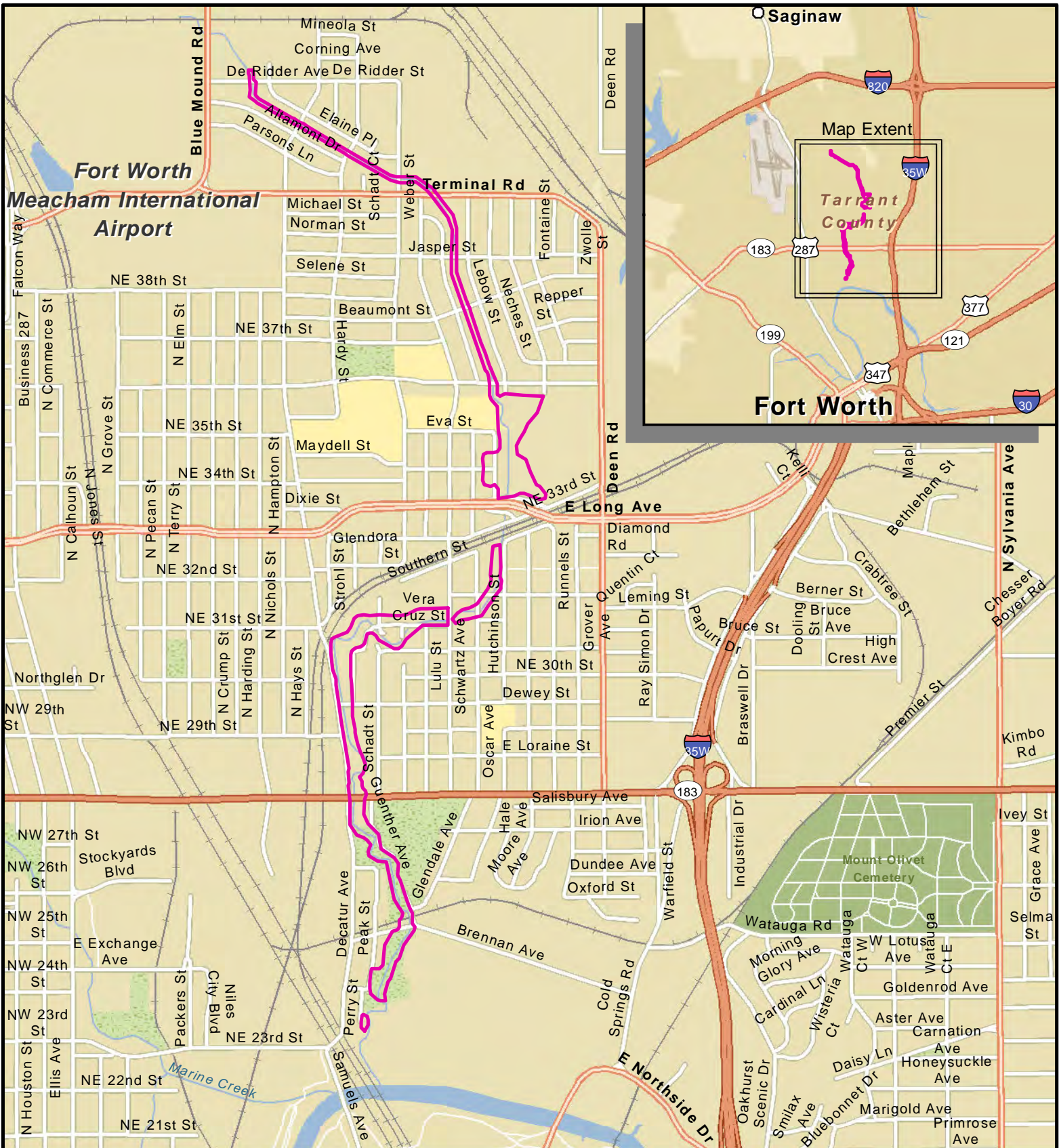


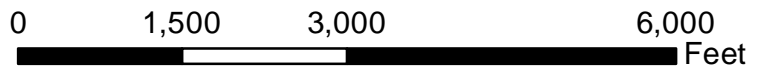
Figure 1
General Location Map

State: Texas
 County: Tarrant
 USACE Project # SWF-2010-00470
 Date Map Created: 5/26/2011
 Source: ESRI 10 Streetmap North America

 Limits of Project Improvements



1 inch = 1,750 feet



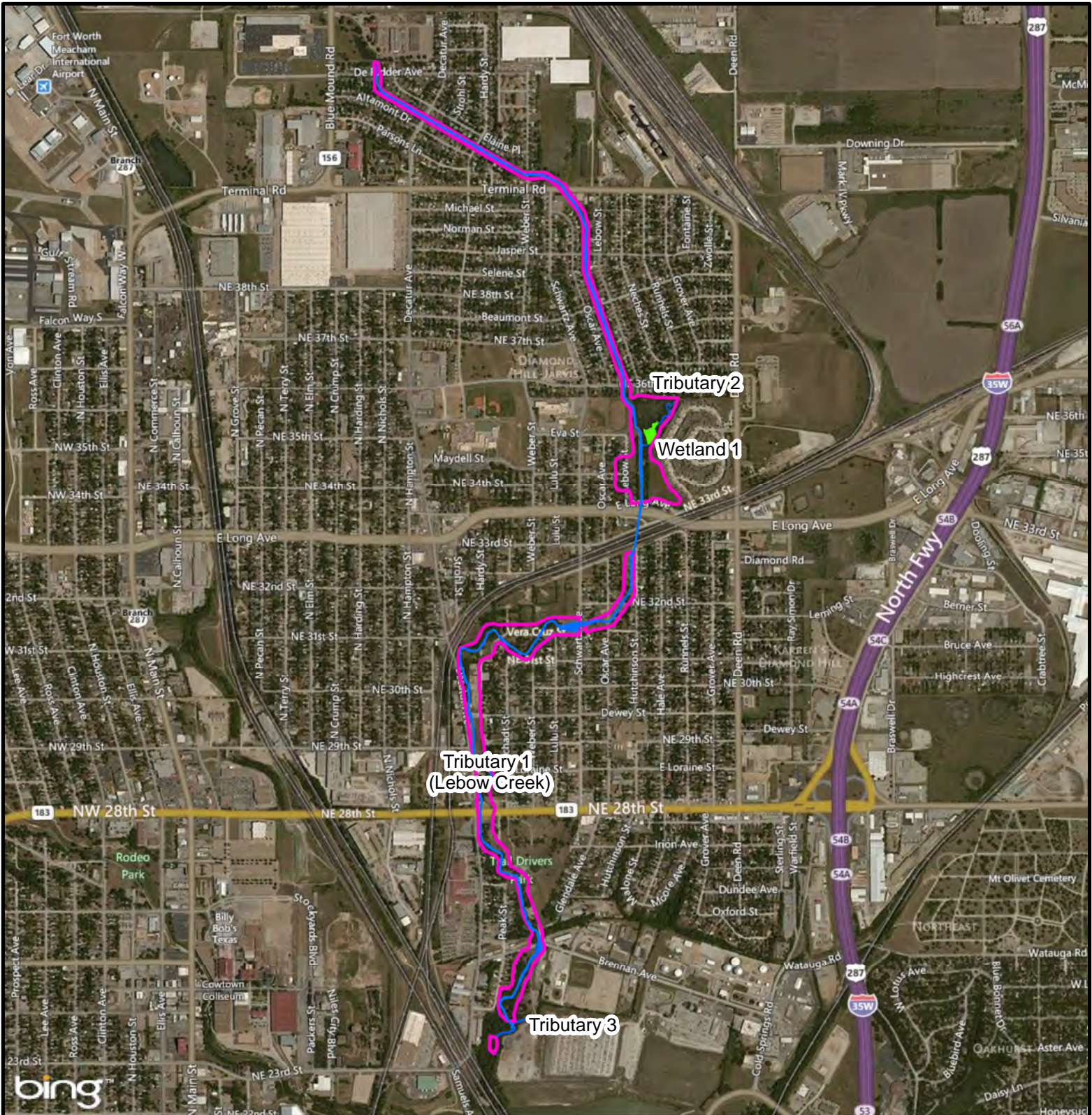


Figure 2
Water Features within
Project Area

 Project Area

Features that meet a definition of a waters of the United States

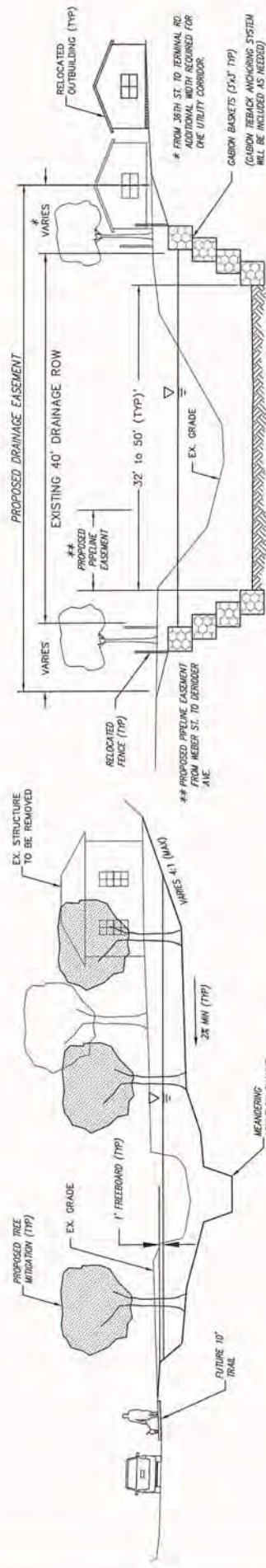
 Tributary

 Wetland

County: Tarrant
State: Texas
USACE Project # SFW-2010-00470
Date map created: 06/11/2015
Source: ESRI 10 Aerial with Lables

1 inch = 1,750 feet





SCHEMATIC
STREAM RESTORATION CHANNEL SECTION
(LOWER LEBOW)
NTS

SCHEMATIC
GABION CHANNEL SECTION
(UPPER LEBOW)
NTS

| NO. | REVISION | BY | DATE |
|-----|----------|----|------|
| | | | |
| | | | |
| | | | |



SCALE
HORIZ N/A
DATE JUNE 2010



TEAGUE NALL AND PERKINS
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Fort Worth, Texas 76102
Phone: (817) 336-8773 + Fax: (817) 336-2813
www.tnp-online.com

This document is for information only and is not intended for construction, bidding or permit purposes.
DATE: _____ P.E. DATE: _____
TX REG # 99378

Figure 3
Typical Cross-Sections - Drainage Improvements
Lebow Channel Watershed City of Fort Worth, Texas
USACE Project No SWF-2010-00470

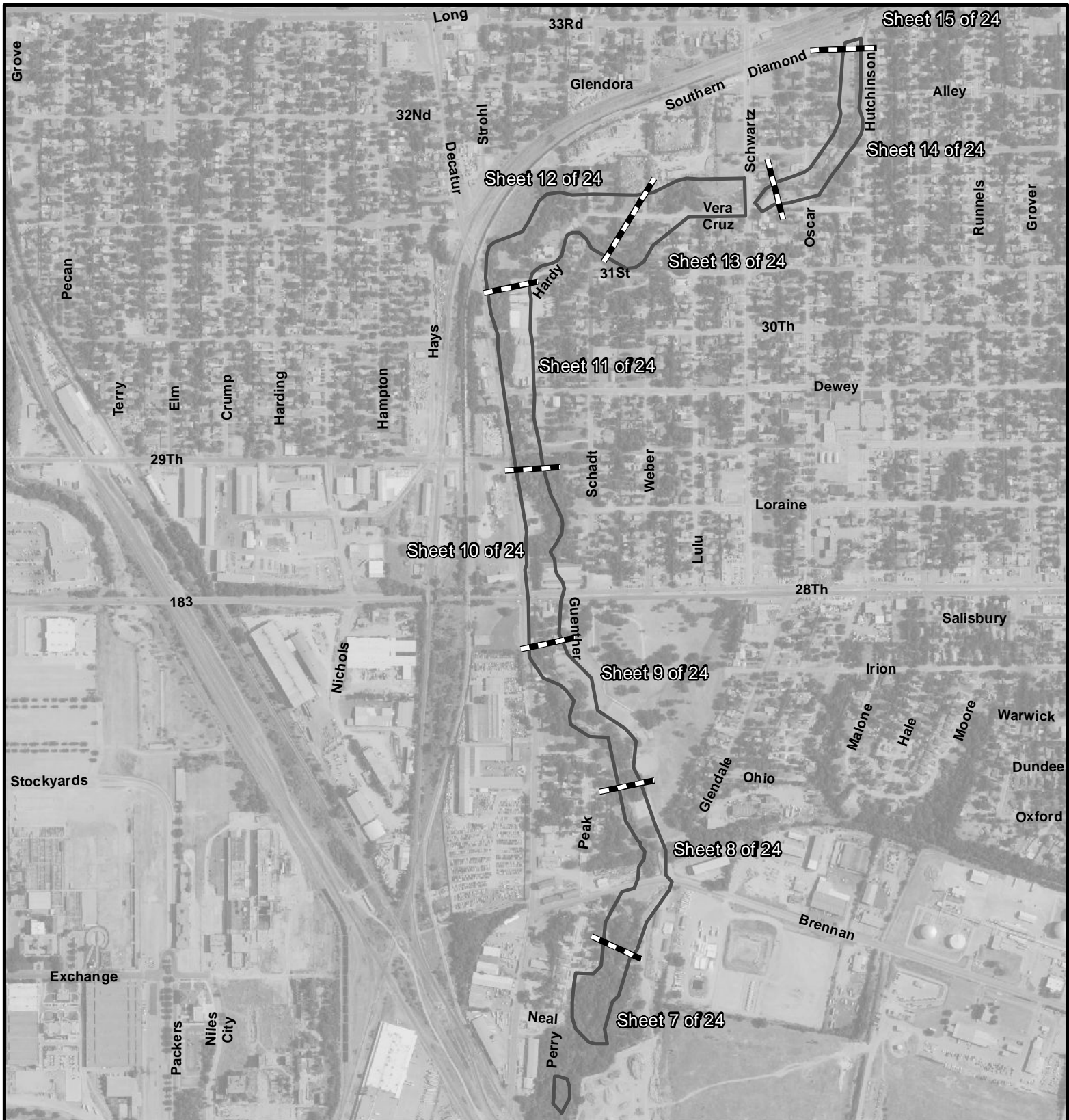




Figure 4
Project Overview Map

State: Texas
 County: Tarrant
 USACE Project # SWF-2010-00470
 Date Map Created: 5/26/2011
 Source: 2008 USDA FSA TOP Aerial
 Photography; ESRI 10 Streetmap NA

-  Limits of Project Improvements
-  Sheet Match Lines



1 inch = 800 feet

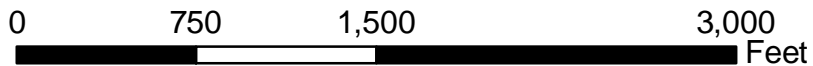







Figure 6
Proposed On-Site Compensatory Mitigation Areas

State: Texas
 County: Tarrant
 USACE Project # SWF-2010-00470
 Date Map Created: 5/25/2011
 Source: 2008 USDA FSA TOP Aerial Photography; ESRI 10 Streetmap NA

-  Limits of Project Improvements
- On-Site Compensatory Mitigation Areas**
-  Riparian Area Enhancements
-  Stream Channel Improvements



1 inch = 800 feet

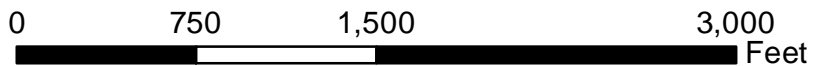




Figure 7
Proposed On-Site
Compensatory Mitigation Areas

State: Texas
 County: Tarrant
 USACE Project # SWF-2010-00470
 Date Map Created: 5/26/2011
 Source: 2008 USDA FSA TOP Aerial
 Photography; ESRI 10 Streetmap NA

-  Limits of Project Improvements
- On-Site Compensatory Mitigation Areas**
-  Native Grass Plantings
-  Deep Emergent Wetland
-  Shallow Emergent Wetland
-  Riparian Area Enhancements
-  Stream Channel Improvements



1 inch = 800 feet

