US Army Corps of Engineers ®
Fort Worth District

Public Notice

Applicant: City of Grapevine

Project No.: SWF-2012-00514

Date: July 17, 2013

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 (USACE) 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

Name: Mr. Frederick Land

Phone Number: (817) 886-1729

PUBLIC NOTICE

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

SUBJECT: Application for a Department of the Army Permit under Section 404 of the Clean Water Act (CWA) to discharge dredged and fill material into waters of the United States associated with the Rustic Drive Drainage Improvements located in the City of Grapevine, Tarrant County, Texas.

APPLICANT: Mr. John Robertson
City of Grapevine
Development, Engineering, and Construction Manager
P.O. Box 95104
Grapevine, Texas 76099

APPLICATION NUMBER: SWF-2012-00514

DATE ISSUED: July 17, 2013

LOCATION: The proposed drainage improvements would be located on an intermittent tributary to an intermittent tributary to Little Bear Creek in the City of Grapevine, Tarrant County, Texas. The proposed project would be located approximately at Latitude 32.88849 and Longitude -97.11647 on the Grapevine, Texas, 7.5-minute USGS quadrangle map in the USGS Hydrologic Unit 12030102.

OTHER AGENCY AUTHORIZATIONS: None

PROJECT DESCRIPTION: The applicant proposed to discharge approximately 308 cubic yards (CY) of dredged and fill material into approximately 0.19 acres (917 linear feet (LF)) of waters of the United States in conjunction with the construction of the Rustic Drive Drainage Improvements by placing a box culvert in the floodway of the tributary.

INTRODUCTION: The proposed project would place a previously channelized intermittent stream channel into an underground concrete culvert system, establishing earthen cover over the culvert, and restore property limits of the residences abutting the channel. The proposed project would eliminate erosion, side slope failure and sloughing, loss of property, and improve residential safety. The proposed project would also reduce flooding.

PROJECT PURPOSE: The purpose of the proposed project is to improve the drainage conditions at the project location. The project area is between two residential neighborhoods with houses closely abutting either side of the channel. The current drainage channel was designed to convey the 25-year storm event. This has created flooding hazards during high flow events. The area is highly urbanized and flooding causes various human safety hazards and property damage. Based on the City of Grapevine requirements, the new designs must convey the 100-year storm event, which would help to reduce flooding into residential lots and homes. In addition, the current channel banks are eroding into the residential lots causing property damage including damage to the adjacent utilities, loss of

fences, and other personal property. The current condition also includes safety issues with a large drop-off at the northern end of the project and safety issues associated with flooding of the channel. Maintenance access to the channel is impracticable with appropriate equipment.

EXISTING CONDITIONS: The project area consists of approximately 917 LF of channelized, intermittent stream with variable 3:1 - 2:1 side slopes. The first 135 LF and the last 65 LF are concrete lined. The approximate 717 LF of stream channel between the existing concrete structures is mostly earthen with occasional areas of concrete bank or bed stabilization. The water source of the stream appears to be urban runoff with some potential for groundwater influence. Small, minnow-like fishes were observed during the site visit.

The maintained, graminoid-forb (grass and wildflower) lined side slopes are largely vegetated with typical urban, fallow vegetation such as bermudagrass (*Cynodon dactylon*), dallisgrass (*Paspalum dilatatum*), bur-clover (*Medicago polymorpha*), Johnson grass (*Sorghum halepense*), and dandelion (*Taraxacum officinale*). Other plants observed included poison ivy (*Toxicodendron radicans*), cattails (*Typha latifolia*), sugar hackberry (*Celtis laevigata*), black willow (*Salix nigra*), Hercules club (*Zanthoxylum clava-herculis*), and live oak (*Quercus virginiana*).

ALTERNATIVES: The applicant considered various alternatives to the project including: 4:1 vegetated slopes; 4:1 armored slopes; 3:1 vegetated slopes; 3:1 armored slopes; vertical walls with a natural bottom; vertical walls and armored bottom; and the no build alternative. The applicant has determined that none of these alternatives were feasible and practicable from engineering and health and safety perspectives. Because the proposed project need is site specific, no off-site alternatives were evaluated.

MITIGATION: The applicant proposes to mitigate for unavoidable adverse impacts to the aquatic environment by purchasing the appropriate number and type of mitigation credits from a USACE, Fort Worth District approved mitigation bank having a service area encompassing the project site.

FIGURES AND ATTACHMENTS:

Attachment A

1. General Location Map
2. USGS 7.5' Topographic Map
3. Soil Series Map
4. FEMA FIRM Map
5. Water Features Map
6. Plan and Typical Cross Section

Attachment B

1. Photograph looking south from street at northern end of project.
2. Photograph looking north at northern end of project.
3. Photograph looking south at southern end of northern concrete.
4. Photograph looking north at midpoint of project.
5. Photograph looking south at midpoint of project.
6. Photograph looking south near northern end of southern concrete.
7. Photograph looking north at southern end of project.
8. Photograph looking south at southern end of project.

PUBLIC INTEREST REVIEW FACTORS: This application will be reviewed in accordance with 33 CFR 320-332, the Regulatory Program of the 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 incorporates the requirements necessary to comply with the Texas Commission on Environmental Quality's (TCEQ) Tier I project criteria. Tier I projects are those that result in a direct impact of three acres or less of waters of the State or 1,500 linear feet of streams (or a combination of the two is below the threshold) for which the applicant has incorporated best management practices (BMPs) and other provisions designed to safeguard water quality. The USACE has received a completed checklist and signed statement

fulfilling Tier I criteria for the project. Accordingly, a request for 401 certification is not necessary and there will be no additional TCEQ review.

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 a county where the whooping crane (*Grus americana*) and least tern (*Sterna antillarum*) are known to occur or may occur as migrants. The whooping crane and least tern are endangered 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 USACE has reviewed the latest complete published version of the National Register of Historic Places and found no listed properties to be in the project area. However, presently unknown scientific, archaeological, cultural or architectural data may be lost or destroyed by the proposed work under the requested permit.

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 August 1, 2013, 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 Branch, CESWF-PER-R; U. S. Army Corps of Engineers; Post Office Box 17300; Fort Worth, Texas 76102-0300. You may visit the Regulatory Branch 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) 886-1731. 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

ATTACHMENT A

Figure 1
General Location Map

Survey Area

N
W E
S

SWF-2012-514

County: Tarrant
State: Texas
Date map created: 3/15/213
Source: ESRI 0 Streetmap North America

1 inch = 850 feet

0 650 1,300 2,600 Feet

ATTACHMENT A

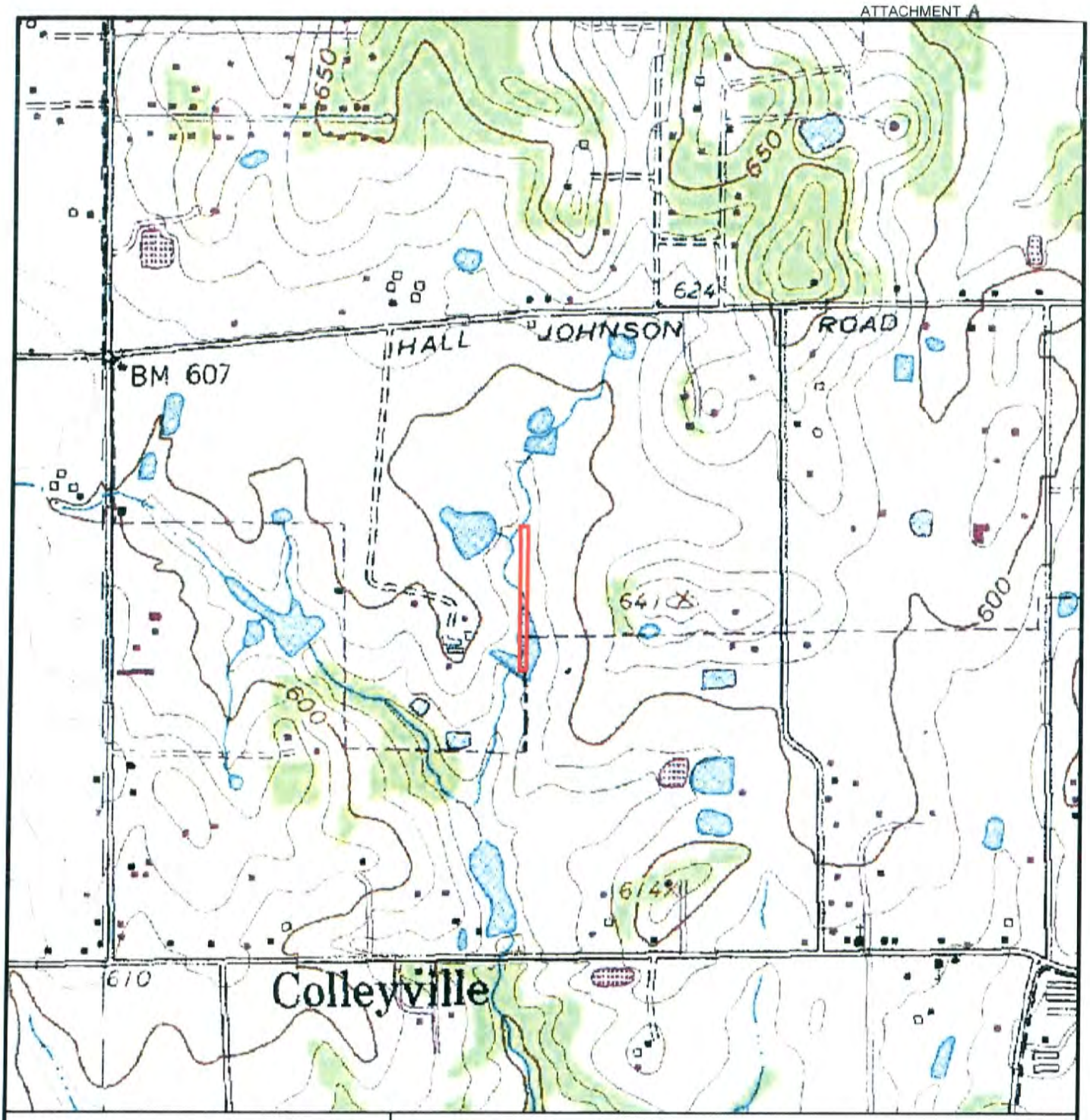


Figure 2
Topography of the
Project Area

County: Tarrant
State: Texas
Date map created: 3/15/213
Source: USGS Topographic Map
Grapevine 7.5' Quadrangle, 1982

Project Area

N
W E
S

SWF-2012-514

1 inch = 850 feet

0 650 1,300 2,600 Feet

ATTACHMENT A

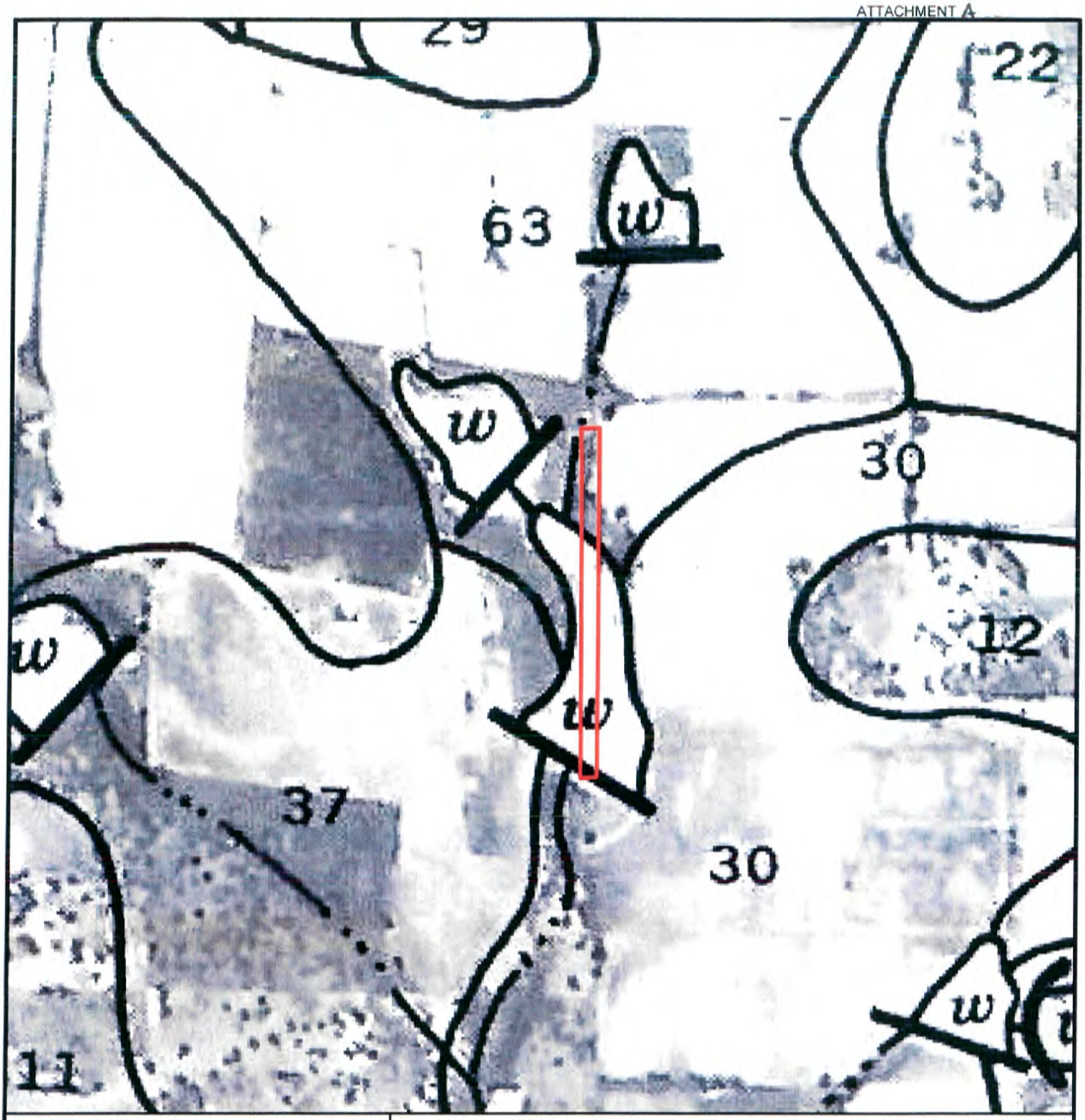


Figure 3
Soil Series located within and adjacent to the Project Area

County: Tarrant
State: Texas
Date map created: 3/15/213
Source: Tarrant County Soil Survey, 1981

Project Area

30- Gasil fine sandy loam, 3 to 8 percent slopes
37 - Konsil fine sandy loam, 1 to 5 percent slopes
63 - Rader fine sandy loam, 0 to 3 percent slopes
W - Water

N
W E
S

SWF-2012-514

1 inch = 350 feet

0 270 540 1,080 Feet

ATTACHMENT A

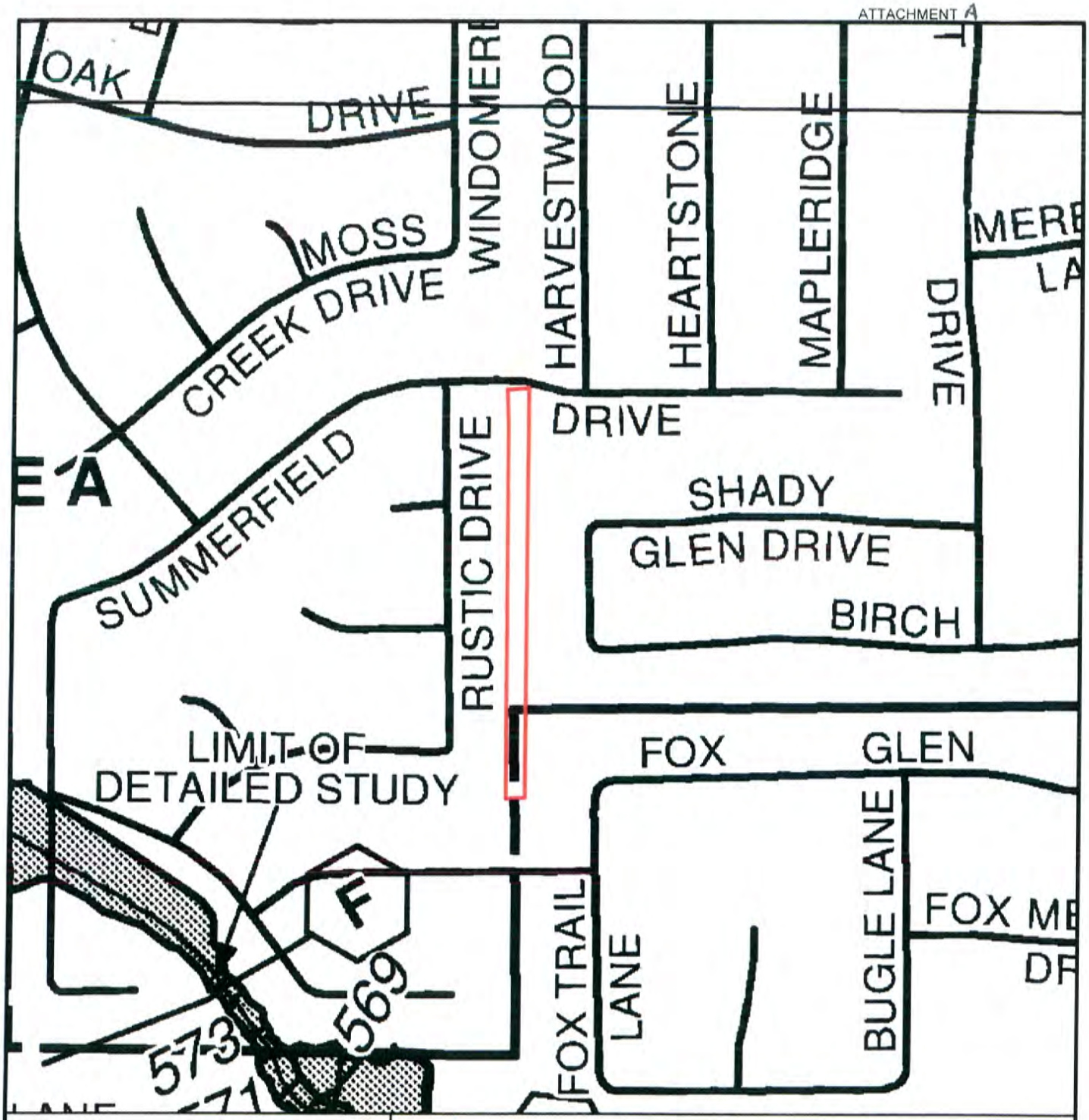


Figure 4
FEMA FIRM of the
Project Area

County: Tarrant
State: Texas
Date map created: 3/15/213
Source: Federal Emergency Management Agency Flood Insurance Map Panel 4839C0115K

Project Area

Zone X - Areas determined to be outside the 0.2% annual chance floodplain

SWF-2012-514

N W E S

1 inch = 300 feet

0 230 460 920 Feet

ATTACHMENT A

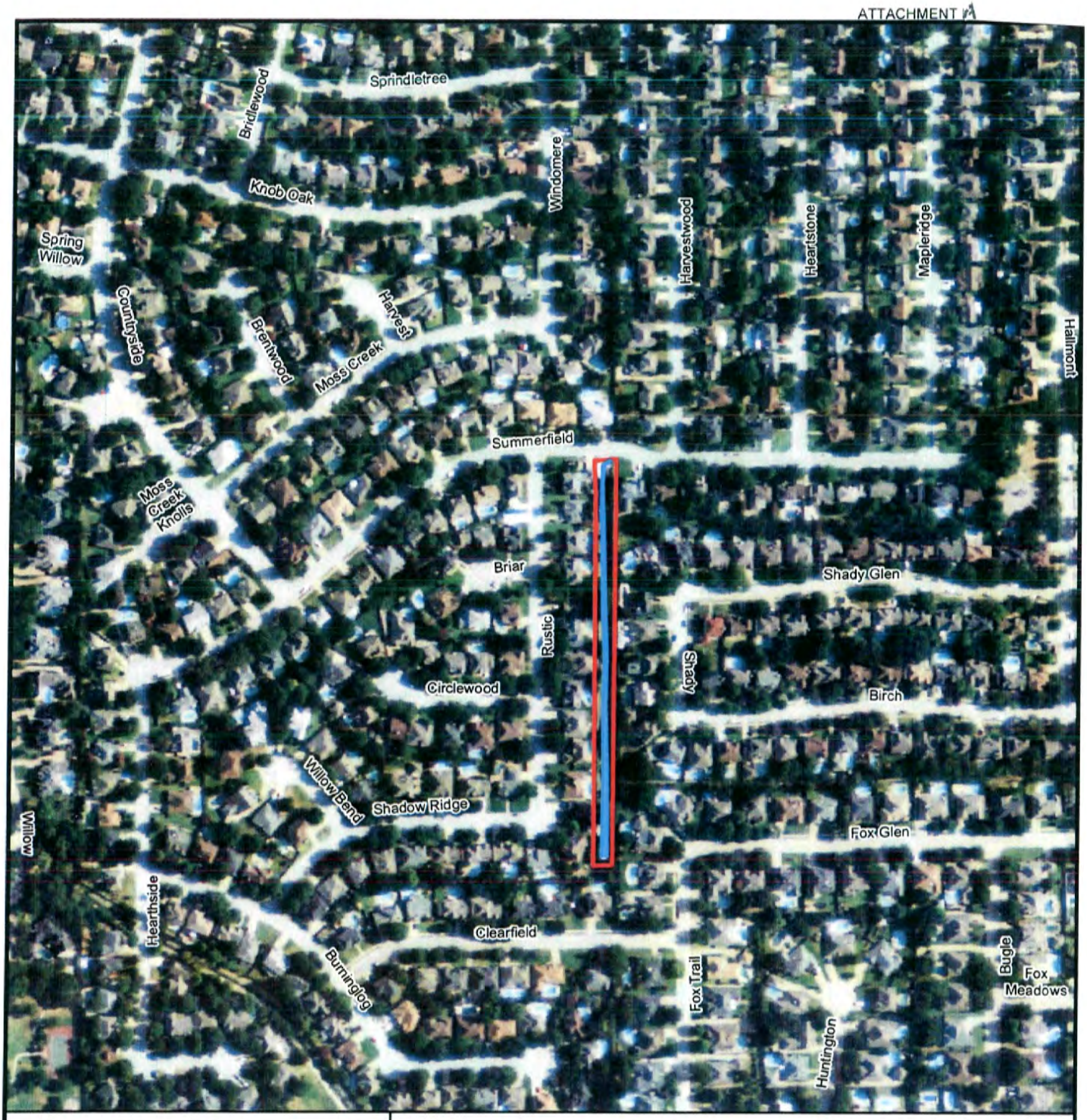


Figure 5
Water Features located within the Project Area

Project Area

Intermittent Tributary

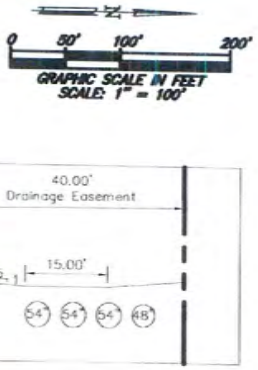
County: Tarrant
State: Texas
Date map created: 3/18/213
Source: 2012 USDA Aerial Photography

SWF-2012-514

N
W E
S

1 inch = 300 feet

0 230 460 920 Feet



Typical Section

Figure 6

Rustic Drive Channel Improvements

GRAPEVINE, TEXAS

City of Grapevine
Public Works Department

SWF-2012-514

Photograph 1

Photograph 2

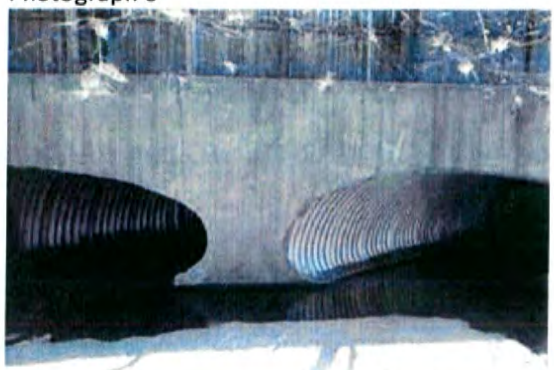
Photograph 3

Photograph 4

Photograph 5

Photograph 6

Photograph 7



Photograph 8

SWF-2012-514