



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

# Public Notice

Applicant: Denton Independent School District

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Project No.: SWF-2014-00116

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Date: April 29, 2014

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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**

Name: Mr. Frederick Land

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Phone Number: (817) 886-1729

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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 or fill material into waters of the United States associated with the construction of the proposed Denton High School #4 in the Town of Little Elm, Denton County, Texas.

APPLICANT: Denton Independent School District  
c/o Mr. Glen Martin  
1307 N. Locust Street  
Denton, Texas 76201

APPLICATION NUMBER: SWF-2014-00116

DATE ISSUED: April 29, 2014

LOCATION: The proposed high school would be located southeast of the intersection of Navo Road and U.S. Highway 380 in the Town of Little Elm, Denton County, Texas (Figure 1 of 8) at Latitude 33.21819, Longitude -96.92273. The project would be located in the Denton East, Texas, 7.5-minute USGS quadrangle maps (Figure 2 of 8) and would be within the USGS Hydrologic Unit 1203010, Elm Fork Trinity, Texas.

OTHER AGENCY AUTHORIZATIONS: None

PROJECT DESCRIPTION: The applicant proposes to discharge approximately 9,923 cubic yards of dredged and fill material into 1.65 acre of waters of the United States, including 0.94 acre emergent wetland, and 0.71 acre of an impoundment in conjunction with the construction of Denton High School Number 4. The discharge of dredged and fill material into waters of the U.S. would be for overflow parking, drainage grading, athletic fields, and stormwater detention (Figure 6, 7, and 8 of 8). The applicant's project purpose is to provide a High School in this area of Denton Independent School District.

INTRODUCTION: The applicant, Denton Independent School District, proposes to construct a high school, athletic fields, surface and overflow parking, associated infrastructure, and other attendant features located in the Town of Little Elm, Denton County, Texas.

EXISTING CONDITIONS: The project site was characterized as having two plant communities - a grassland community and a forested upland community. The grassland community was the dominant vegetation community across the project site. The dominant vegetation associated with the grassland community included Bermudagrass (*Cynodon dactylon*), western ragweed (*Ambrosia psilostachya*), goldenrod (*Solidago canadensis*),

Johnsongrass (*Sorghum halepense*), Illinois bundleflower (*Desmanthus illinoensis*), common sunflower (*Helianthus annuus*), and spreading hedgeparsley (*Torilis arvensis*). The grassland community in the western portion of the project site was plowed at the time of the evaluation while the eastern portion remained fallow with grassland vegetation grown to 100 percent coverage from one to two feet in height. The forested upland community was dominated by sugarberry (*Celtis laevigata*), cedar elm (*Ulmus crassifolia*), Osage orange (*Maclura pomifera*), eastern red cedar (*Juniperus virginiana*), and honey locust (*Gleditsia triacanthos*). The forested upland community was predominantly located along the fence line of the project site boundary and along an additional fence line located in the western portion of the site.

The topography of the site was gently sloping to the south and west. The unnamed tributary within the project site flows directly into Lewisville Lake which is a reservoir of Elm Fork Trinity River, which then flows into the Trinity River, a Traditionally Navigable Water (TNW). Four potentially jurisdictional waters, one tributary, one pond, and two wetlands were located within the project site (Figure 5 of 8).

Tributary 1a begins north of the project site and flowed south into the project site, and ultimately flowed into an impoundment, Pond 1. Tributary 1a was identified on the USGS topographic map, FEMA FIRM (Figure 4 of 8), and *Soil Survey for Denton County, Texas* (Figure 3 of 8). The limits of this tributary were identified and delineated at the ordinary high water mark (OHWM) in the field based on the presence of a defined bed and bank, waterline, and the destruction of terrestrial vegetation.

Tributary 1b is located down slope of and abutting Wetland 2, starting at the inlet of a culvert and continuing south to the southern limits of the project site. Tributary 1b was identified as the continuation of Tributary 1a on the USGS topographic map, FEMA FIRM, and *Soil Survey for Denton County, Texas*.

Wetland 1 is an herbaceous wetland identified abutting Pond 1 along the pond's northern edge, west of Tributary 1a. Wetland 1 receives hydrology from direct rainfall and backflow inundation from Pond 1. The wetland is dominated by hydrophytic vegetation including spikerush (*Eleocharis palustris*), yellow nutsedge (*Cyperus odoratus*), vine mesquite (*Panicum obtusum*), sumpweed (*Iva annua*), curly dock (*Rumex crispus*), and aster (*Aster subulatus*). Primary hydrological indicators present during the surveys included saturated soils and oxidized rhizospheres on living roots with secondary hydrological indicators including drainage patterns. Hydric soil indicators included a low chroma soil matrix of 10YR 3/2 with 5YR 4/6 redoximorphic concentrations within the matrix. The areas outside the wetland area were composed of upland vegetation, previously used for hay production.

Wetland 2 is downslope of Pond 1. Wetland 2 receives hydrology from direct rainfall, overflow from Pond 1, and near surface seepage from Pond 1. The wetland is dominated by hydrophytic vegetation identical to Wetland 1, but also included black willow (*Salix nigra*) and cottonwood (*Populus deltoides*) with common sunflower (*Helianthus annuum*).

and giant ragweed (*Ambrosia trifida*) on the fringe of the wetland area. Primary hydrological indicators present during the surveys included drift deposits and water stained leaves with secondary hydrological indicators including surface soil cracks, sparsely vegetated concave surface, crayfish burrows, and drainage patterns. Hydric soil indicators included a low chroma soil matrix of 10YR 3/2 with 5YR 4/6 redoximorphic concentrations within the matrix.

The wetland areas was likely an ephemeral stream prior to cultivation and the construction of the impoundment and still serves as a functional replacement of the original, natural drainage course.

Pond 1 was identified as an impoundment of Tributary 1a, and a source of hydrology for Wetlands 1 and 2. The vegetation surrounding the pond was similar to that found along Tributary 1a and within Wetlands 1 and 2. The pond's OHWM was identified and delineated by natural shelving, water line, and a wetland edge. The pond is illustrated on the FEMA FIRM as an impoundment of what the FEMA FIRM illustrated as Salt Branch, a tributary that flows directly into Lake Lewisville.

**ALTERNATIVES:** The applicant considered various alternatives in an effort to avoid and minimize adverse impacts to waters of the U.S.

Denton ISD currently maintains three general high schools and one alternative high school with an overall student population of 6,556 as of School Year 2012/2013. The short range planning through the School Year 2022/2023 indicates a high school population of 9,695 students, which is an annual average growth rate of 4.8 percent. Given this rate of growth and the capacity of the existing schools, Denton ISD determined that an additional high school was necessary to meet the needs of the projected population. Denton ISD explored multiple sites based on the projected areas of population growth as determined through new residential developments and rate of residential house closings by quarter. It was determined that the US 380 corridor in the far eastern side of the District was the area that would most need a new high school.

Currently, high school students along the far east US 380 corridor must travel in excess of 10 miles to reach Denton High School along US 380, which is a minimum travel time of 15 to 30 minutes. The section of the District in close proximity to Frisco and Prosper is experiencing a high level of residential growth. This growth and the distance to the existing high school indicate a great need for a high school located within this sector of the District. Denton ISD explored two site locations for a new high school development. The project site is the current preferred and designed location; an alternative location was evaluated on Farm-to-Market Road (FM) 720 at McCormick in Oak Point. The FM 720 location was determined not to meet the needs of the District due primarily to the limited site access and concerns over future traffic congestion. No delineation of water features was performed on the site, though it appears from aerial photography and the U.S. Geological Survey (USGS) topographic map that the site contains at least two ponds with potential connection to tributary features. Additionally, the topography of the site did not lend itself to the needs of

the school and attendant features without substantial grading and balancing of cut-and-fill. The current project site was determined to better meet the needs of the District since it was located off a major thoroughfare in the heart of the area of most need.

Site layout alternatives were evaluated to determine the most efficient layout for the school and associated infrastructure. An alternative was identified that would avoid all waters of the United States; however, that alternative would severely limit the associated infrastructure that the high school would need to function as a self-contained unit into the future. To avoid all water features on the site and provide for on-site detention, a number of athletic fields would need to be removed from the plans and one of the planned detention basins would have to be relocated, which would further impact the athletic facilities that could be developed within the site. As such, the full avoidance alternative was determined by the applicant to be infeasible.

Additionally, it was also determined infeasible to further minimize impacts to water features on the site due to the location of the water features along the eastern property boundary and the indirect effects associated with the relocated drainage system. The need to relocate the drainage around the site infrastructure would have caused the loss of hydrology to the existing features, which would have been a secondary impact. As such, to maximize the site usage, it was determined that site drainage would be rerouted and removing the water features. In addition, the purchase of additional acreage would have divided the site into two halves, which is not conducive to the overall site goals and objectives.

As such, the District is proposing the preferred alternative, which includes the high school building, associated surface parking and overflow parking, tennis courts, baseball field, softball field, practice fields, track and stadium, and field events area, along with associated field houses and maintenance areas. Site drainage is being conveyed through a realigned earthen drainage channel with on-site detention basins to attenuate flow from the project site. The preferred alternative would remove all emergent wetlands and the on-channel impoundment, while avoiding impacts to the unimpacted portion of the tributary to the northeast of the project site.

## FIGURES

1. General Location Map
2. USGS Topographic Map
3. Soils Map
4. FEMA FIRM Map
5. Water Features Map
6. Site Plan Drawings
7. Proposed Impacts Map
8. Channel Typical Section Drawing

**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 will receive 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 such species occur in the project area. The proposed project would be located in Denton County where the whooping crane (*Grus americana*), least tern (*Sterna antillarum*), 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 is a 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 area of the proposed development has never been formally surveyed for the presence of historic or prehistoric cultural resources. Currently, there are no sites eligible for the National Register of Historic Places on the property. A review of maps and records for the area indicate a few standing structures associated with the agricultural use of the property have been removed. Several small prehistoric sites are known to have been recorded south of the project area along Little Elm Creek. Based on this information, it is unlikely that any cultural resources are present within the proposed development and no additional work to identify them is being planned.

**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 May 29, 2014, 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-PER-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) 886-1731. 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

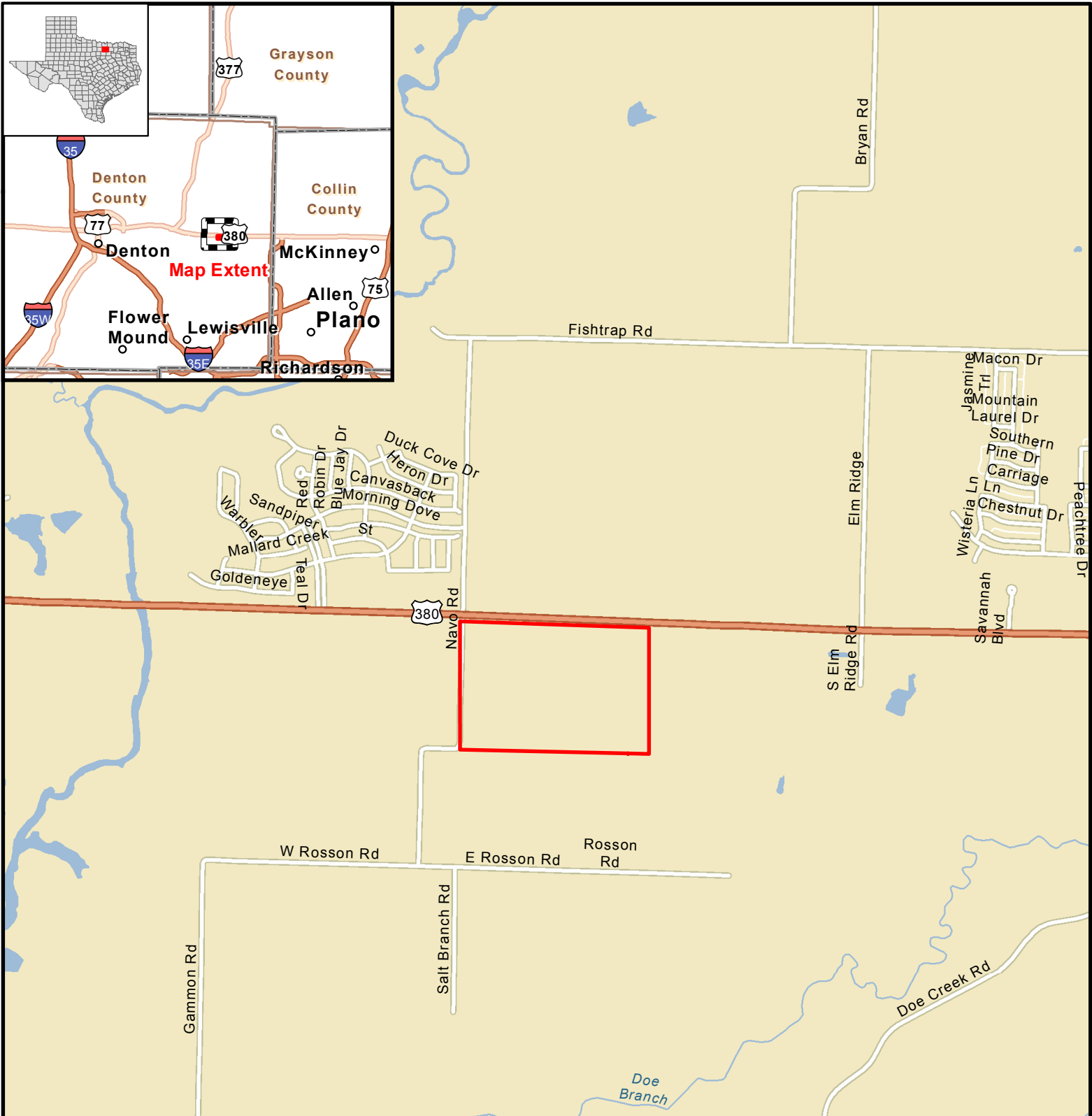
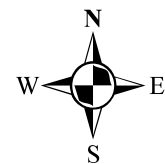
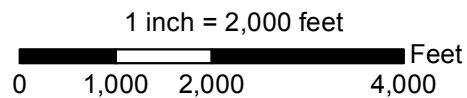


Figure 1  
General Location Map  
(SWF-2014-00116)

 Project Site



County: Denton  
State: Texas  
Date map created: 04/22/2014  
Source: ESRI 10 Streetmap  
North America





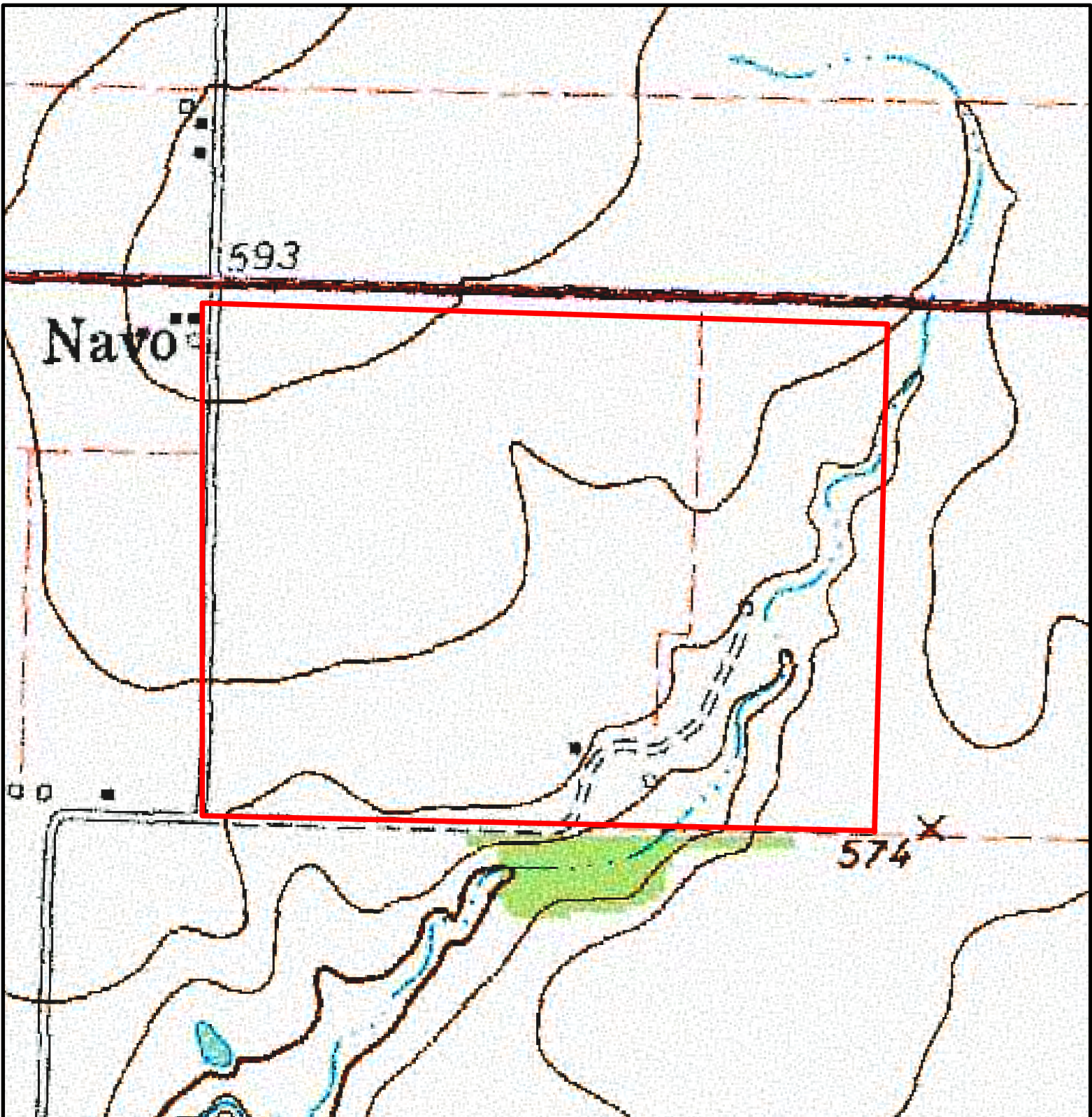
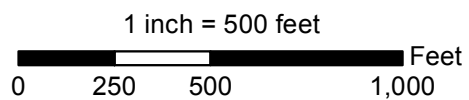


Figure 2  
U.S. Geological Survey  
Topographic Map  
(SWF-2014-00116)

 Project Site



County: Denton  
State: Texas  
Date map created: 04/22/2014  
Source: USGS Topographic Map  
Little Elm 7.5' Quadrangle, 1969





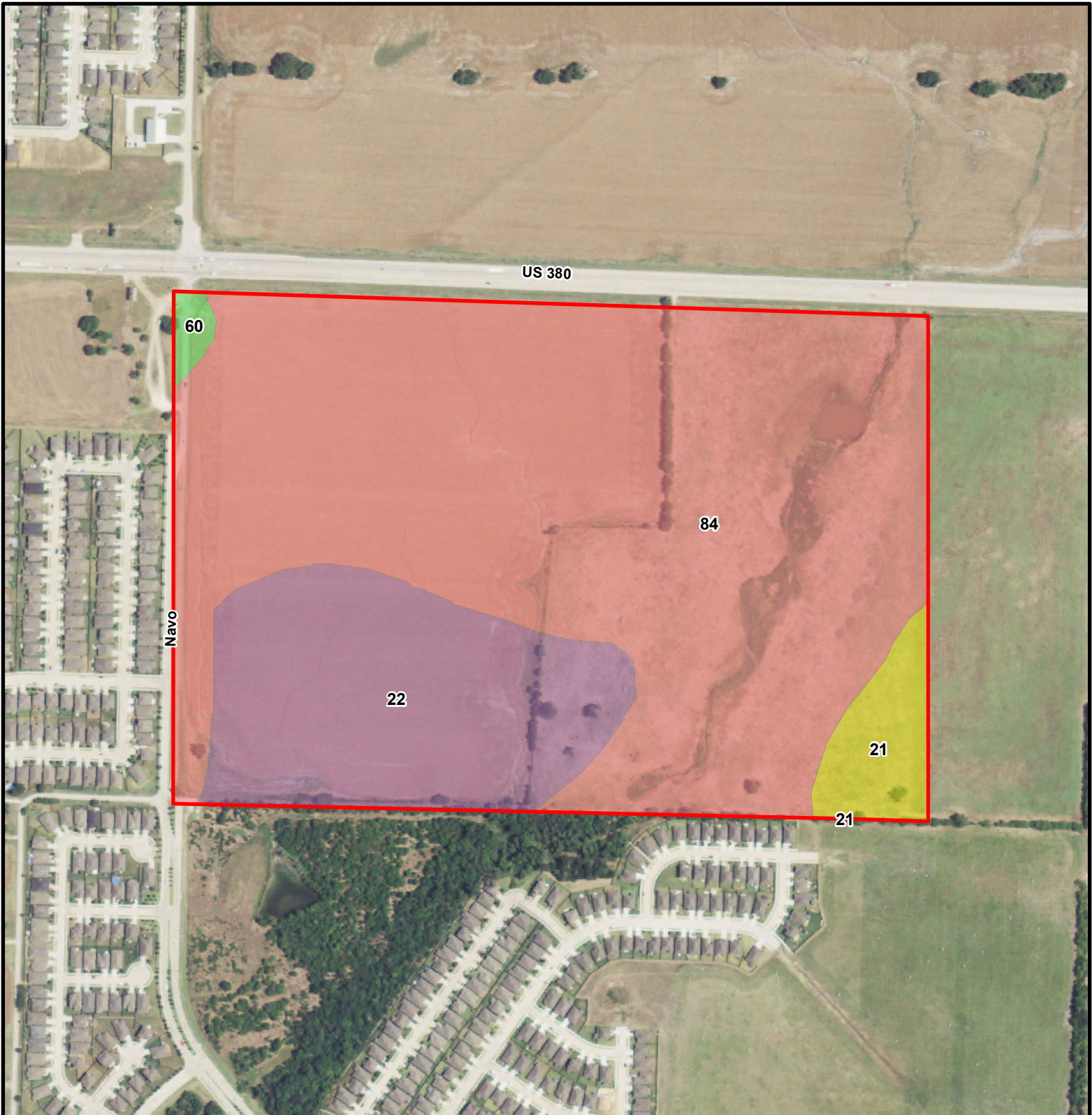






Figure 3  
Soils Map  
(SWF-2014-00116)

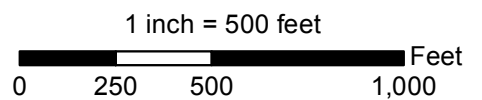
 Project Site

**Soil Series**

-  84 - Wilson clay loam, 1 to 3 percent slopes
-  60 - Navo clay loam, 1 to 3 percent slopes
-  22 - Burleson clay, 0 to 1 percent slopes
-  21 - Burleson clay, 1 to 3 percent slopes



County: Denton  
State: Texas  
Date map created: 04/22/2014  
Source: 2012 USDA FSA TOP  
Aerial Photography; 2007 USDA  
NRCS Digital Soils Database



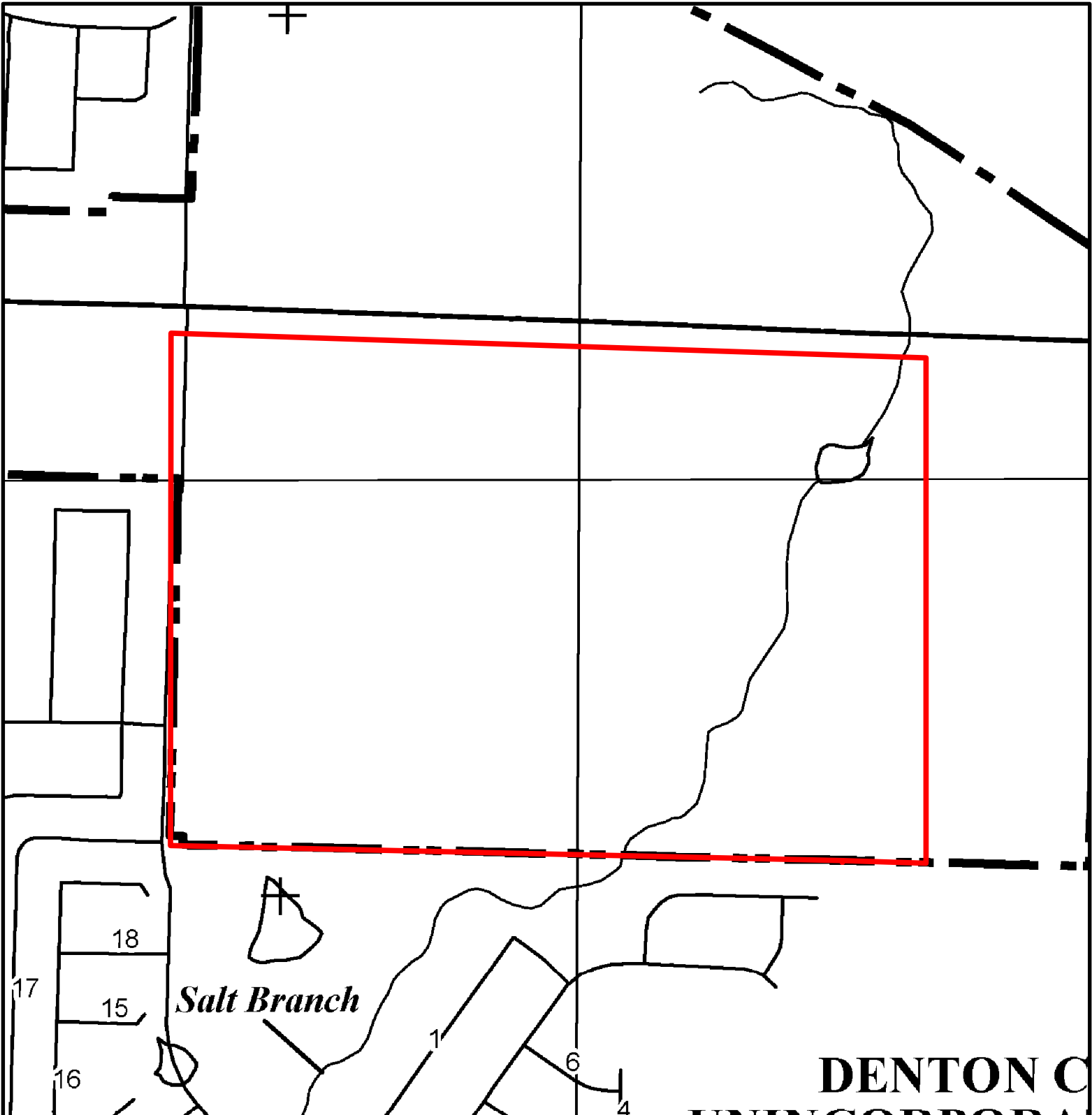



Figure 4  
 Federal Emergency  
 Management Agency  
 Flood Insurance Rate Map  
 (SWF-2014-00116)

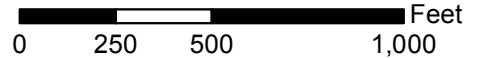
 Project Site

**FEMA FIRM Zone Descriptions**

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



County: Denton  
 State: Texas  
 Date map created: 04/22/2014  
 Source: Federal Emergency  
 Management Agency Flood  
 Insurance Rate Map Panel,  
 48121C0410G  
 Effective Date: 04/18/2011

1 inch = 500 feet  
 Feet



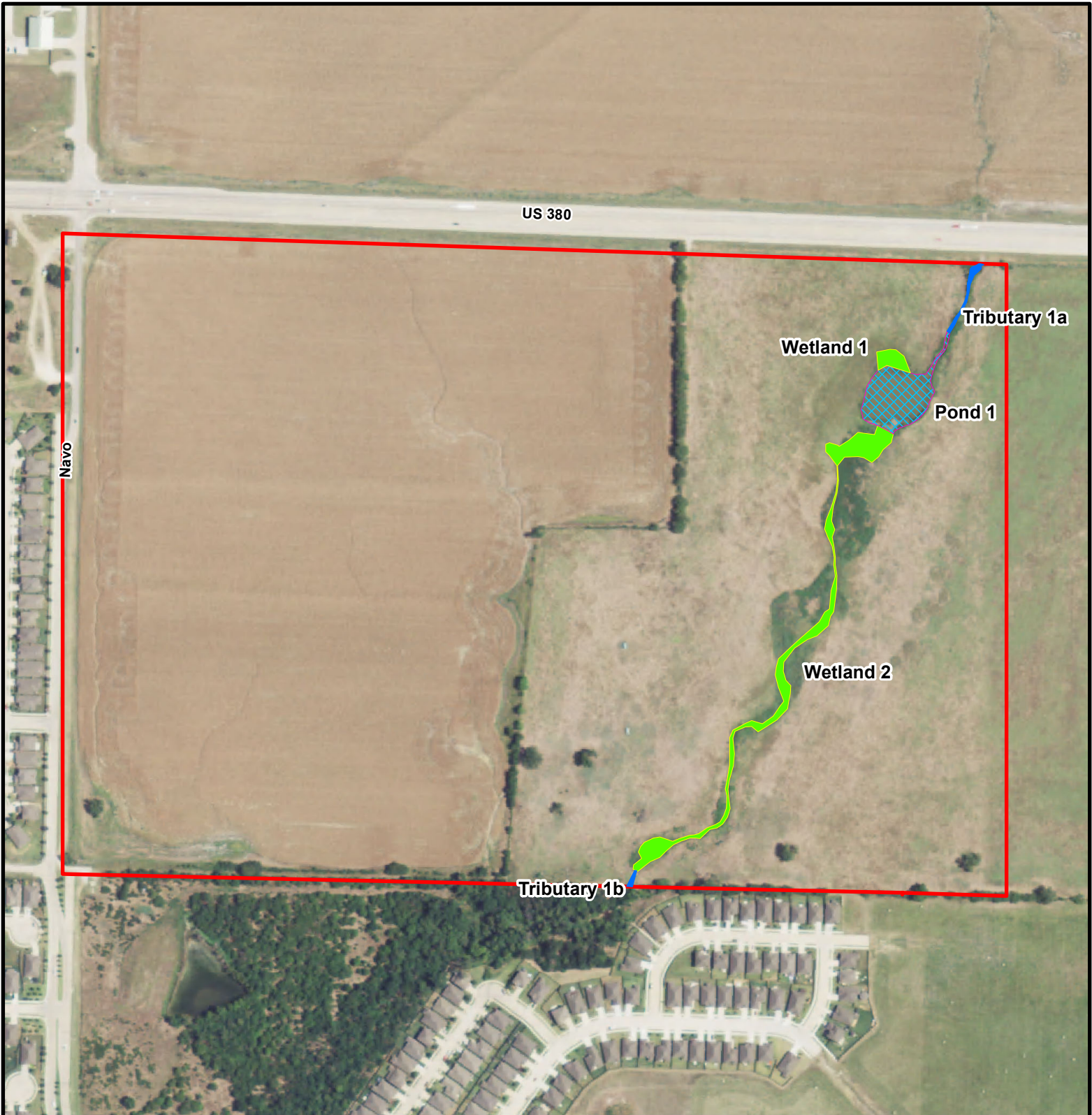


Figure 5  
Water Features identified  
within the Project Site  
(SWF-2014-00116)

 Project Site

**Features that meet a definition of a water of the United States**

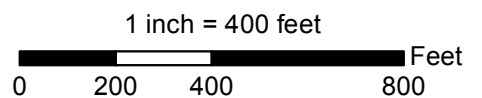
 Herbaceous Wetland

 Pond

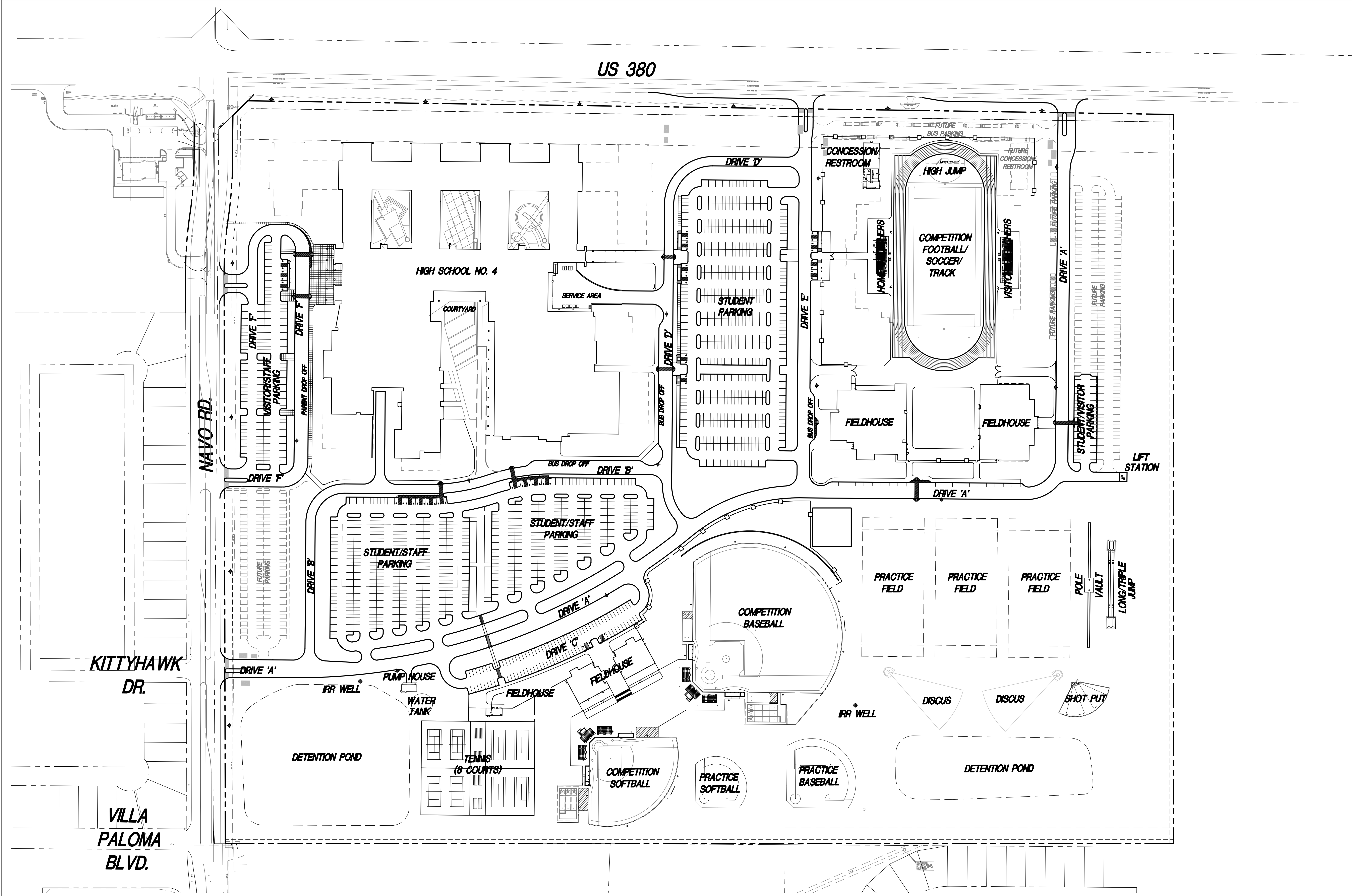
 Tributary



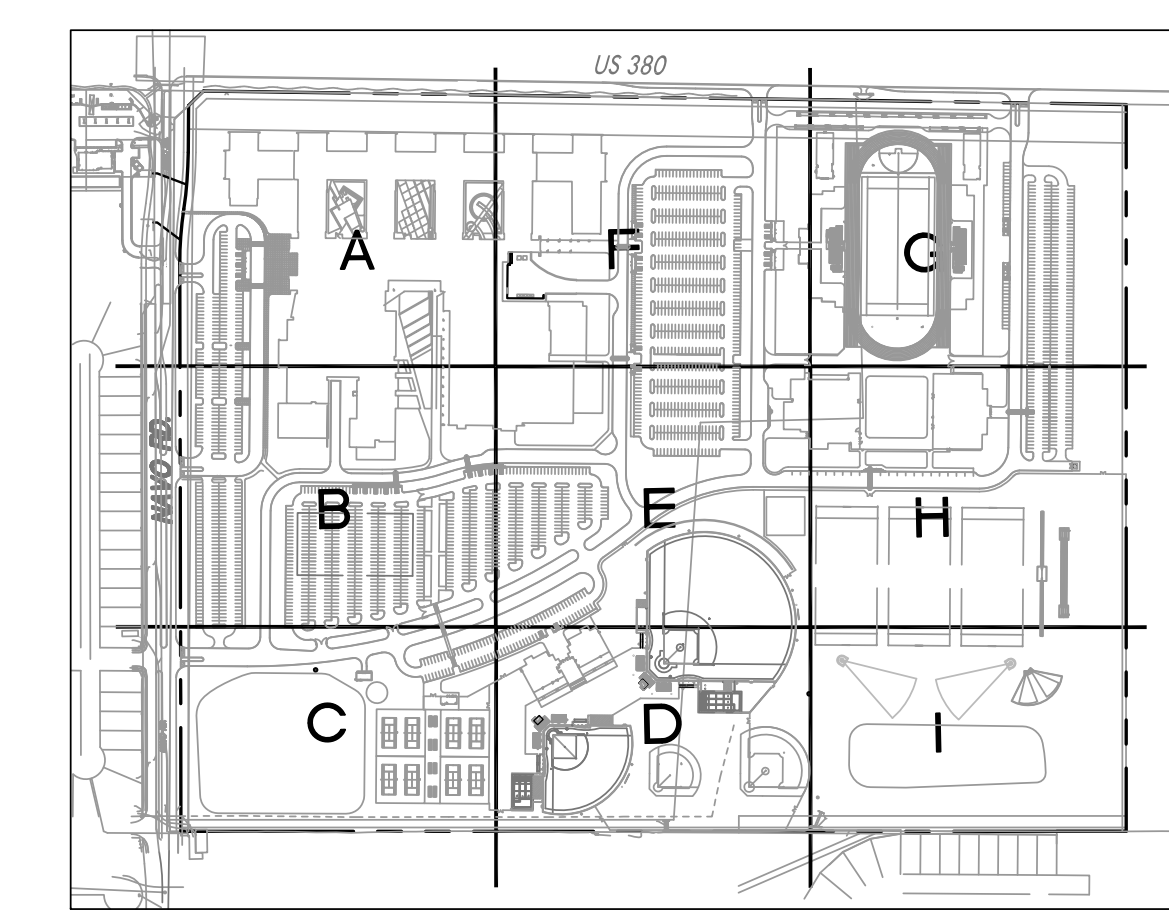
County: Denton  
State: Texas  
Date map created: 04/22/2014  
Source: 2012 USDA FSA TOP  
Aerial Photography







**SITE PLAN  
 FOR  
 COMPREHENSIVE HIGH SCHOOL NO. 4  
 DENTON INDEPENDENT SCHOOL DISTRICT  
 CITY OF LITTLE ELM, DENTON COUNTY,  
 TEXAS**



**KEYPLAN**  
 SCALE 1"=500'

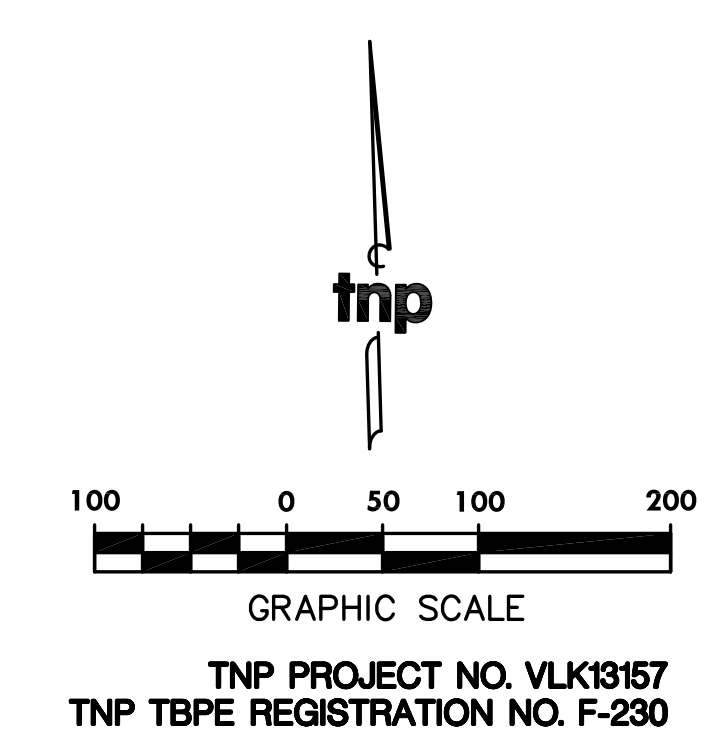


Figure 6.  
 Proposed Site Plan  
 (SWF-2014-00116)  
 County: Denton  
 State: Texas  
 Date: 04/22/2014

100% DESIGN  
 DEVELOPMENT

ISSUED: DECEMBER 23, 2013

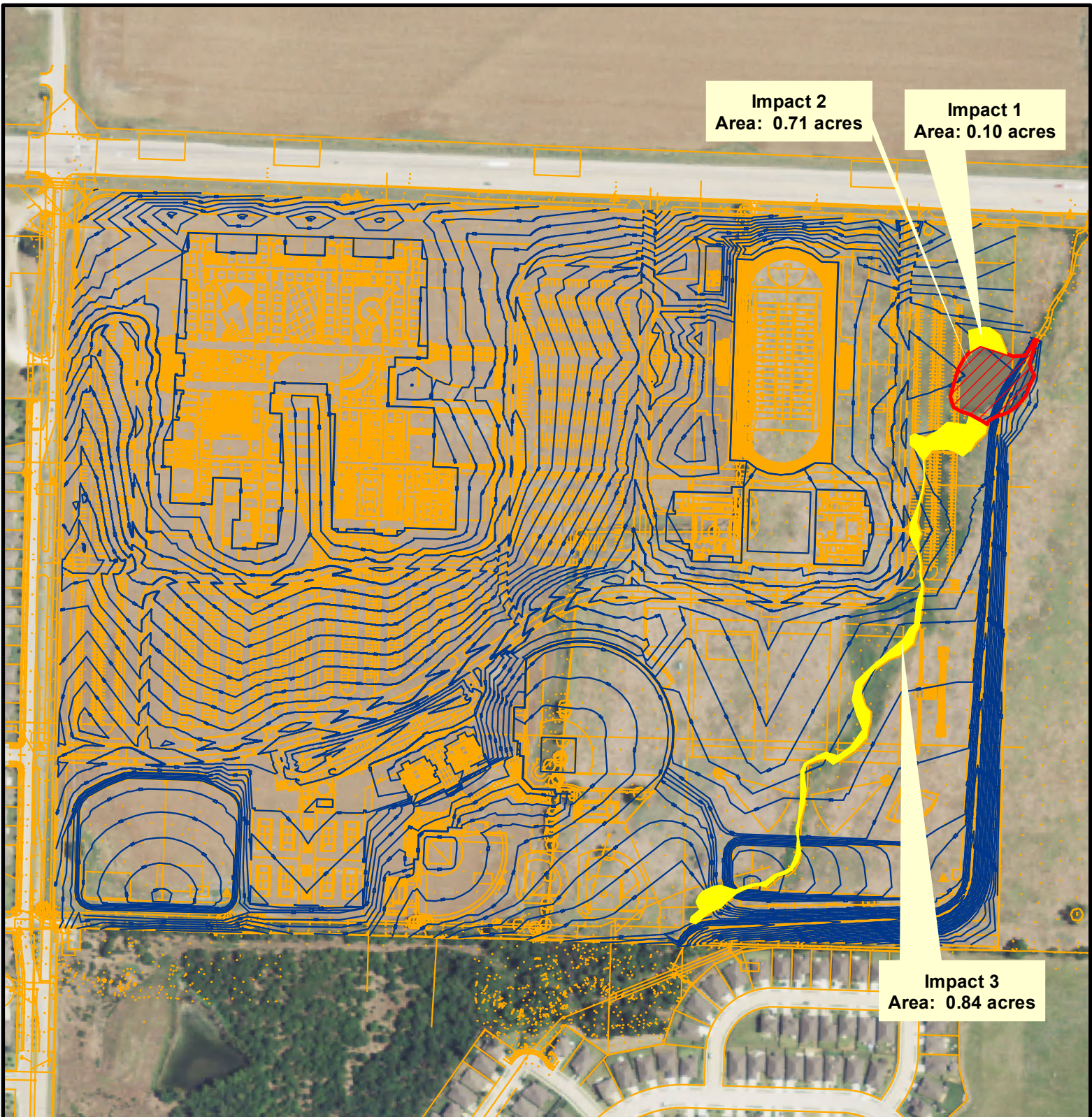
REVISIONS
Revision No.

Director	Drawn By
LGW	TNP
Designer	Quality Control
JPB	DAS
Proj. Arch.	
JSH	

PROJECT NO.
2855.00
SHEET TITLE
OVERALL SITE PLAN
SHEET NO.

**C1.02**





**Impact 2**  
Area: 0.71 acres

**Impact 1**  
Area: 0.10 acres

**Impact 3**  
Area: 0.84 acres

**Figure 7**  
Impacts to  
Waters of the United States  
(SWF-2014-00116)

- Proposed Grading
- Proposed Site Plan

**Proposed impacts to waters of the United States**

- Herbaceous Wetland
- Pond



County: Denton  
State: Texas  
Date map created: 04/22/2014  
Source: 2012 USDA FSA TOP  
Aerial Photography



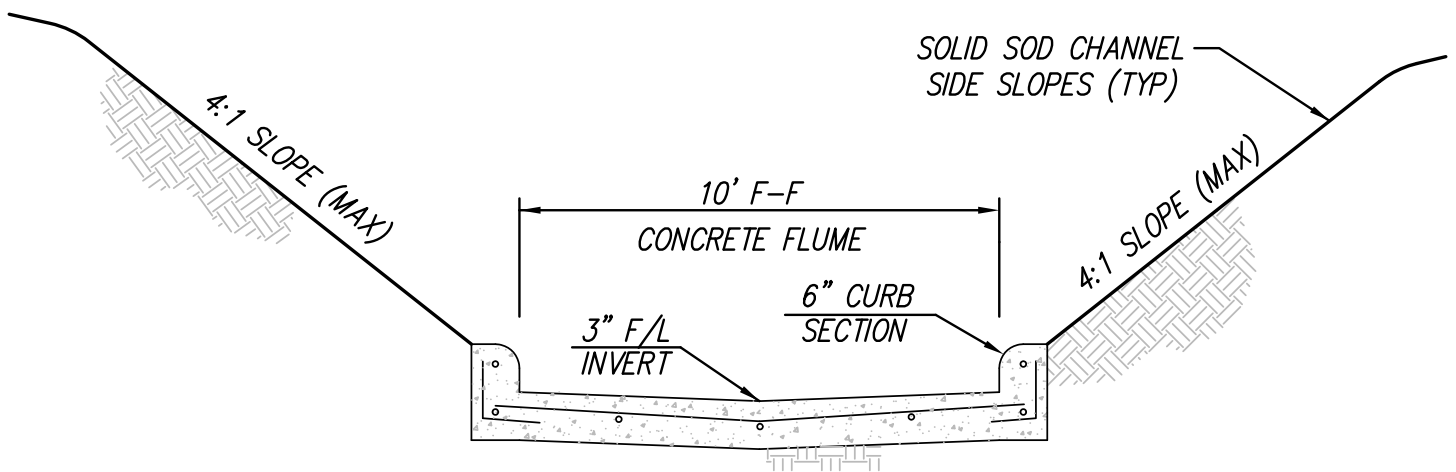


Figure 8.  
**CHANNEL TYPICAL SECTION**

N.T.S.  
 (SWF-2014-00116)



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 TBPE Registration No. F-230  
[www.tnpinc.com](http://www.tnpinc.com)