
ANTIQUITIES PERMIT APPLICATION FORM ARCHEOLOGY

GENERAL INFORMATION

I. PROPERTY TYPE AND LOCATION

Project Name (and/or Site Trinomial) Twinwood Parkway Phase 1B
County (ies) Fort Bend
USGS Quadrangle Name and Number Fulshear
UTM Coordinates Zone 15 E 213799 N 3290525
Location Northwest Fort Bend County, between FM 1489 and FM 359
Federal Involvement Yes No
Name of Federal Agency United States Army Corps of Engineers- Galveston District (possibly)
Agency Representative Jerry Androy

II. OWNER (OR CONTROLLING AGENCY)

Owner N/A- private property
Representative _____
Address _____
City/State/Zip _____
Telephone (include area code) _____ Email Address _____

III. PROJECT SPONSOR (IF DIFFERENT FROM OWNER)

Sponsor Fort Bend County
Representative _____
Address _____
City/State/Zip _____
Telephone (include area code) _____ **Email Address** _____

PROJECT INFORMATION

I. PRINCIPAL INVESTIGATOR (ARCHEOLOGIST)

Name Amy M. Goldstein
Affiliation Horizon Environmental Services, Inc.
Address 1507 S Interstate 35
City/State/Zip Austin, TX 78741
Telephone (include area code) 512-439-4779 Email Address agoldstein@horizon-esi.com

ANTIQUITIES PERMIT APPLICATION FORM (CONTINUED)

II. PROJECT DESCRIPTION

Proposed Starting Date of Fieldwork August 3, 2020
Requested Permit Duration 5 Years 0 Months (1 year minimum)
Scope of Work (Provided an Outline of Proposed Work) Horizon archeologists will conduct an intensive cultural resources survey of the 11.4-mile proposed new road right-of-way as well as a proposed 15.8-acre pond and 46.6-acre fill area. Horizon will excavate approximately 275 shovel tests throughout the project area. Backhoe trenching may also be required in portions of the project area.

III. CURATION & REPORT

Temporary Curatorial or Laboratory Facility Horizon Environmental Services office
Permanent Curatorial Facility Texas Archeological Research Laboratory

IV. LAND OWNER'S CERTIFICATION

I, _____, as legal representative of the Land Owner, _____, do certify that I have reviewed the plans and research design, and that no investigations will be performed prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Owner, Sponsor, and Principal Investigator are responsible for completing the terms of the permit.
Signature _____ Date _____

V. SPONSOR'S CERTIFICATION

I, _____, as legal representative of the Sponsor, _____ Fort Bend County, do certify that I have review the plans and research design, and that no investigations will be performed prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Sponsor, Owner, and Principal Investigator are responsible for completing the terms of this permit.
Signature _____ Date _____

VI. INVESTIGATOR'S CERTIFICATION

I, Amy M. Goldstein, as Principal Investigator employed by Horizon Environmental Services, Inc. (Investigative Firm), do certify that I will execute this project according to the submitted plans and research design, and will not conduct any work prior to the issuance of a permit by the Texas Historical Commission. Furthermore, I understand that the Principal Investigator (and the Investigative Firm), as well as the Owner and Sponsor, are responsible for completing the terms of this permit.
Signature _____ Date _____

Principal Investigator must attach a research design, a copy of the USGS quadrangle showing project boundaries, and any additional pertinent information. Curriculum vita must be on file with the Archeology Division.

FOR OFFICIAL USE ONLY

Reviewer _____ Date Permit Issues _____
Permit Number _____ Permit Expiration Date _____
Type of Permit _____ Date Received for Data Entry _____



Environmental Services, Inc.

July 21, 2020

Mr. Mark Wolfe
State Historic Preservation Officer
Texas Historical Commission
1511 Colorado Street
Austin, Texas 78701

**Re: Texas Antiquities Permit Application
Scope of Work for Cultural Resources Inventory and Assessment
Antiquities Code of Texas and National Historic Preservation Act Section 106**

**Twinwood Parkway Phase 1B Project
Fort Bend County, Texas**

Horizon Project No.: 200147

Dear Mr. Wolfe:

Horizon Environmental Services, Inc. (Horizon) has been selected by Berg-Oliver Associates, Inc. (BOA) to conduct a cultural resources inventory survey and assessment for the proposed Twinwood Parkway Phase 1B Project. The proposed project is located in northwest Fort Bend County, between Farm to Market (FM) 1489 and FM 359 (Figures 1-3). The project would consist of new construction of approximately 11.4 miles (18.3 kilometers [km]) of road right-of-way (ROW) and drainage ditches, which would typically measure 100.0 feet (30.5 meters [m]) in width but may be as wide as 230 feet (70.1 m) in some areas. The project would also include a 15.8-acre pond and a 46.6-acre fill area. For purposes of the cultural resources survey, the project area is assumed to consist of the approximately 11.4 miles (18.3 km) of linear ROW plus 62.4 acres of block areas.

The proposed project is currently located on private property that Fort Bend County will ultimately acquire. The project would be sponsored by Fort Bend County, a political subdivision of the state of Texas; as such, the project would fall under the jurisdiction of the Antiquities Code of Texas. In addition, the project may require the use of federal permits issued by the US Army Corps of Engineers (USACE), Galveston District, under Section 404 of the Clean Water Act. As these are federal permits, any portions of the overall project area that fall within the federal permit area would also fall under the jurisdiction of Section 106 of the National Historic Preservation Act (NHPA). As the proposed project represents a publicly sponsored undertaking, the project sponsor is required to provide the applicable federal agencies and the Texas Historical Commission (THC), which serves as the State Historic Preservation Office (SHPO) for the state of Texas, with an opportunity to review and comment on the project's potential to adversely affect historic properties listed on or considered eligible for listing on the National Register of Historic Places (NRHP) and/or for designation as State Antiquities Landmarks (SAL). At this time, no other federal or state jurisdiction has been identified for the project.

The cultural resources study would consist of desktop background research, an intensive archeological field survey, and production of a report suitable for review by the SHPO in accordance with the THC's Rules of Practice and Procedure, Chapter 26, Section 27, and the Council of Texas Archeologists' (CTA) Guidelines for Cultural Resources Management Reports.



Prior to initiating fieldwork, Horizon will perform basic desktop background research using the THC's online Texas Archeological Sites Atlas, the Texas Department of Transportation's (TxDOT) Historic Bridges of Texas and Historic Districts & Properties of Texas online databases, the National Park Service's (NPS's) online National Register Information System (NRIS), the Texas Freedom Colonies Project online atlas, and any other relevant sources for information on previous cultural resources investigations conducted near the project area and previously recorded cultural resource sites and historic properties in and near the project area. Horizon will review the abovementioned archives; historic, geological, and soil maps; and aerial surveys and photographs prior to initiating fieldwork to evaluate the potential for encountering significant cultural resources within the project area.

After acquiring an Antiquities Permit, Horizon proposes to conduct an intensive cultural resources survey of the project area, including surface inspection, subsurface shovel testing, and backhoe trenching, as appropriate. Horizon will conform to the Texas State Minimum Archeological Survey Standards (TSMASS) unless field conditions warrant excavation of more or fewer shovel tests (i.e., more shovel tests due to the presence of culturally sensitive areas or fewer shovel tests due to extensive prior disturbances or cultural low-probability areas). For linear surveys, the TSMASS require 16 shovel tests per mile and one transect per 100 feet (30.5 m) of project width. As the proposed ROW for the linear portion of this project varies in width, one to three transects will be required along the 11.4-mile (18.3-km) ROW. It is expected that approximately 215 shovel tests will be excavated within this portion of the project area.

For area projects, TSMASS require at least 50 shovel tests for the first 25.0 acres plus at least one shovel test for every 5.0 acres over the original 25.0 acres. This equates to a minimum of 33 shovel tests within the 62.4 acres of proposed pond and fill area. Shovel tests will be excavated in sequential 7.9-inch (20-cm) levels to a depth of at least 31.5 inches (80 cm) below surface or until encountering culturally sterile, pre-Holocene subsoil or a restrictive feature such as bedrock. Soil will be screened through quarter-inch hardware mesh and backfilled upon completion. If a shovel test yields evidence of subsurface cultural deposits, additional shovel tests may be necessary to determine the horizontal and vertical extent of the subsurface deposits associated with the cultural resource within the designated project area.

The TSMASS require backhoe trenching in stream terraces and other areas with the potential to contain buried cultural materials that cannot be reached with shovel testing (approximately 3.3 feet [1.0 meter] below surface depending on soil type). Based on the physiographic setting of the project area, it is likely that backhoe trenching will be required within portions of the project area near Bessies Creek. If pedestrian survey and shovel testing confirm that backhoe trenching is necessary, Horizon will conform to the TSMASS for survey level mechanical prospection.

Also, if the project area passes within 25.0 feet (7.6 meters) of the marked boundaries of a cemetery, then mechanical scraping operations may be required to determine whether any unmarked graves are present beyond the marked cemetery boundaries within the proposed project area. Mechanical stripping of surface sediments would be performed in an attempt to identify grave shafts associated with unmarked burials. Accompanying backhoe trenching would be required to verify that soils within the project area are natural sediments that are conducive to identifying soil anomalies indicative of grave shafts.

Field notes will be maintained on terrain, vegetation, soils, landforms, survey methods, shovel test results, and any cultural materials observed. A photographic log will be maintained for all photographs. If cultural resource isolated occurrences, historic or prehistoric archeological sites, or historic structures or objects are identified, Horizon personnel will record, sketch, and/or photograph any cultural resources identified during the survey to a sufficient extent to make preliminary assessments of their eligibility for designation as SALs under the ACT and/or for inclusion in the NRHP under the NHPA, as appropriate. The nature and

extent of the archeological sites will be evaluated via surface inspection, shovel testing, and/or backhoe trenching, as appropriate, up to the edges of the project area's boundaries. New sites will be recorded on standard State of Texas Archeological Data Site Forms and filed with the Texas Archeological Research Laboratory (TARL), and permanent archeological site trinomials will be obtained. State of Texas Archeological Site Update Forms will be completed for any previously recorded archeological sites that are re-located and re-investigated during the survey.

Horizon will employ a non-collection policy to the maximum extent practicable. Diagnostic artifacts (e.g., projectile points, ceramics, historic-age materials with maker's marks) and non-diagnostic artifacts (e.g., lithic debitage, burned rock, historic glass, and metal scrap) will be described and photographed in the field and replaced in the same location in which they were found. If any cultural materials are collected during the survey, they will be temporarily housed at Horizon's laboratory facilities in Austin, Texas, and processed for analysis. Any artifacts collected from public lands during the survey may need to be curated at an approved curational facility according to guidelines of an approved curation facility, such as TARL. Curation includes standardized preparation and labeling of field notes, photographs, and cultural materials.

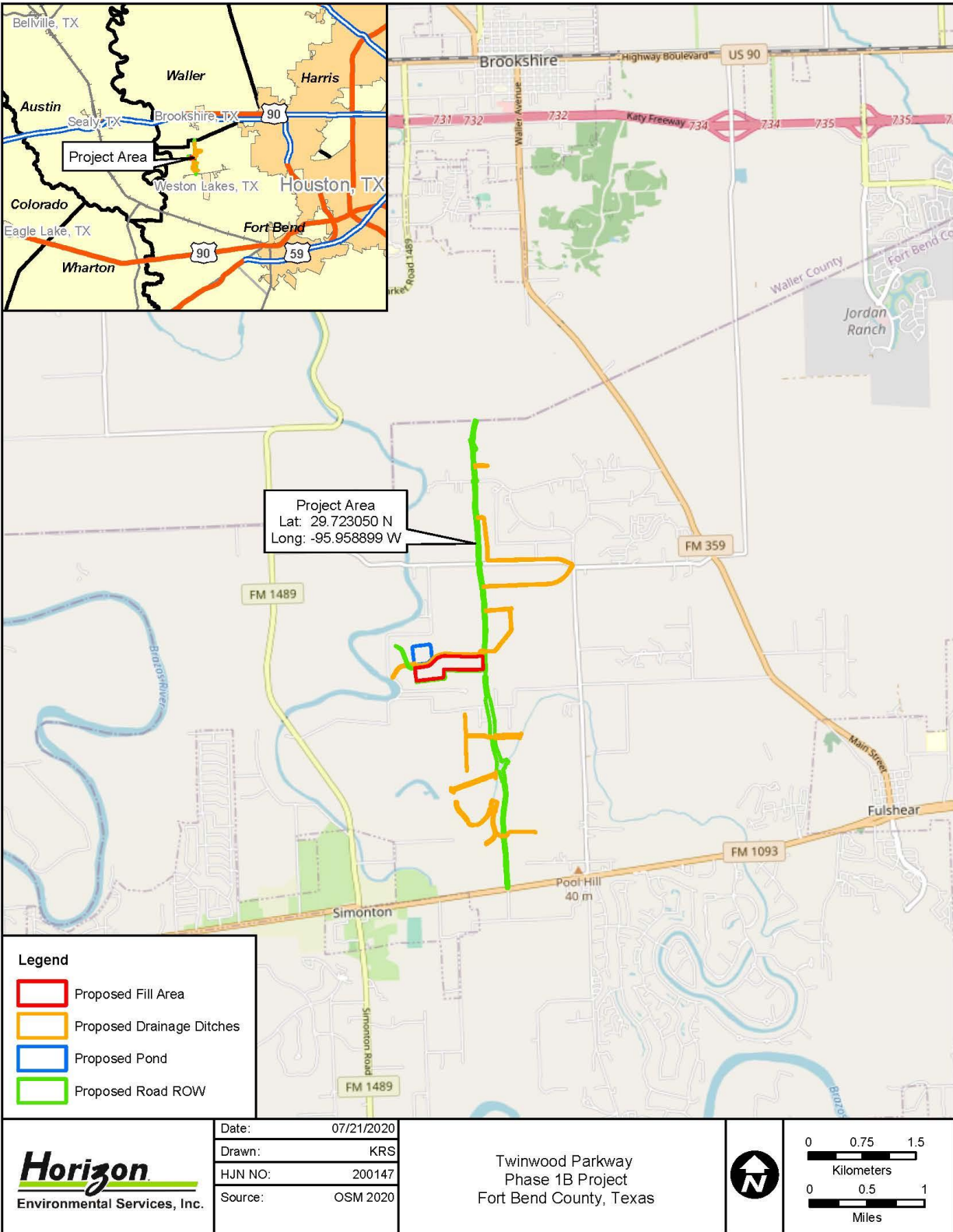
Upon completion of the fieldwork, Horizon will analyze any cultural materials that were collected and develop draft and final technical reports suitable for review by the THC pursuant to the CTA's *Guidelines for Cultural Resources Management Reports*. The technical report will detail the project background, environmental and cultural setting of the project area, research goals and survey methods, survey results, and recommendations for any cultural resources documented during the survey. Recommendations for any archeological sites and historic structures identified will be made in reference to their SAL/NRHP eligibility. Horizon will respond to any comments provided by the THC regarding the draft technical report and submit the required number of copies of the final report to fulfill the conditions of the Texas Antiquities Permit. Following acceptance of the final report by the THC, Horizon will prepare project records for permanent curation at an approved curation facility following the guidelines of the approved facility.

Please feel free to contact me at (512) 439-4779 or at agoldstein@horizon-esi.com if you have any questions or require additional information.

Sincerely,

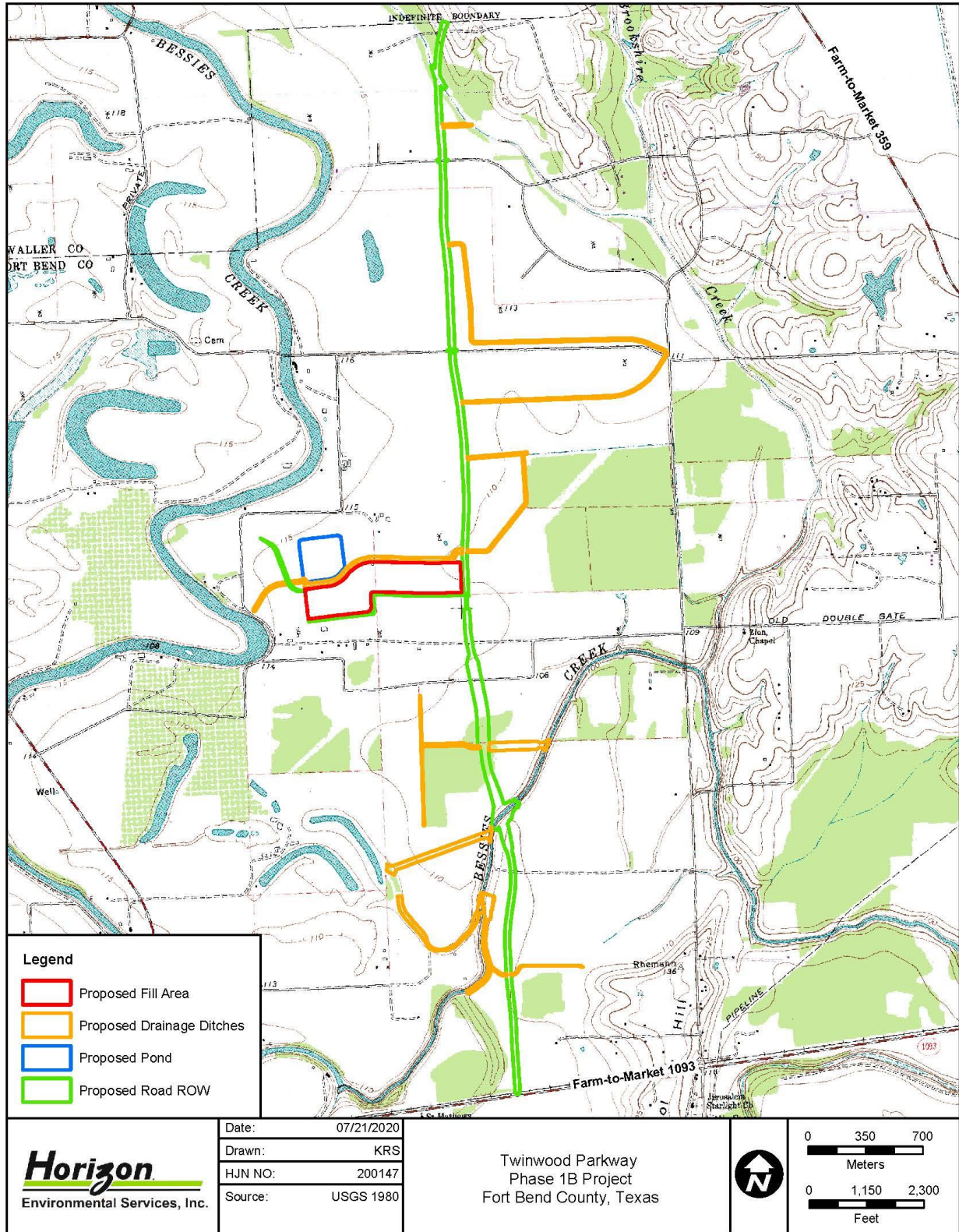


Amy M. Goldstein
Archeological Principal Investigator
Horizon Environmental Services, Inc.



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Figure 1. Project area vicinity map



200147 - Twinwood Parkway Phase 1B\Graphics\200147-01AR_02A_Topo.mxd

Figure 2. Project area depicted on a 7.5-minute USGS topographic map

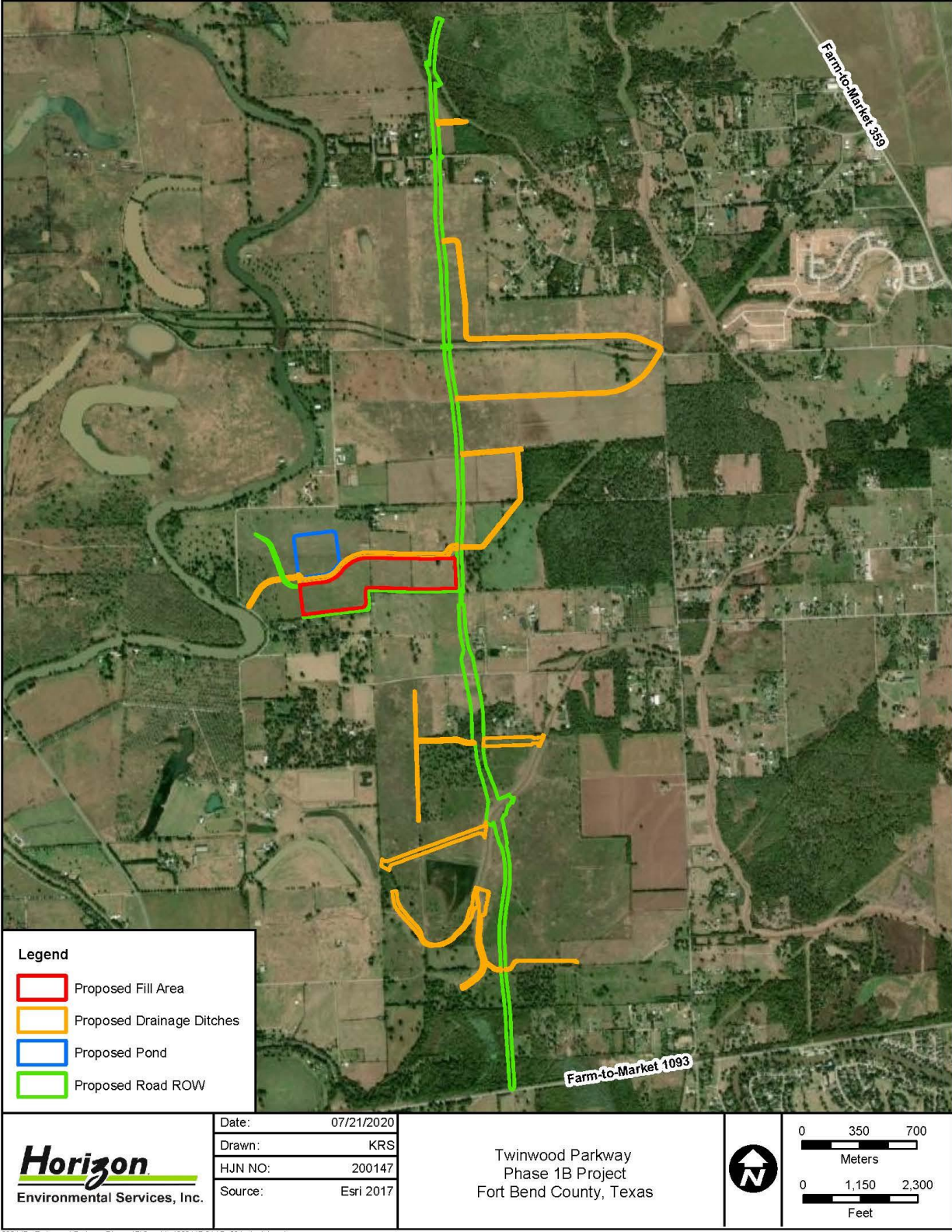


Figure 3. Project area depicted on a recent aerial photograph