



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

# Public Notice

Applicant: City of Waco

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Project No.: SWF-2017-00047

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Date: July 17, 2019

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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: Frederick Land

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Phone Number: (817) 886-1729

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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 associated with the proposed Waco Landfill (Site 50), located on an approximately 502.5 acre property near the community of Axtell, in McLennan and Limestone Counties, Texas.

**APPLICANT:** City of Waco  
P.O. Box 2570  
Waco, Texas 76702

**APPLICATION NUMBER:** SWF-2017-00047

**DATE ISSUED:** July 17, 2019

**LOCATION:** The Waco Landfill (Site 50) would be located on an approximately 502.5 acre property near the community of Axtell, in McLennan and Limestone Counties, Texas, southeast of State Highway 31 (TX 31) and east of TK Parkway (FM 939), at latitude 31.70703° and longitude -96.92380°. The site is mapped on the 7.5-minute USGS quadrangle map (**Figure 3 of 6**), Axtell, Texas. The site is in the Williams Creek, Middle Brazos-Bosque drainage basin, USGS Hydrologic Unit 120602020705 (**Figure 1 of 6**).

**OTHER AGENCY AUTHORIZATIONS:** Section 401 State Water Quality Certification; State Municipal Solid Waste Permit for a Type 1 Landfill.

**PROJECT DESCRIPTION:** The Applicant proposed to discharge approximately 333 cubic yards of dredged and fill material into approximately 0.19 acres of waters of the United States, including 2,007 linear feet of stream in conjunction with the construction of the Waco Landfill (Site 50), a proposed Municipal Solid Waste, Type 1 Landfill. Direct, permanent impacts would include 1,909 linear feet (0.11 acre) of ephemeral stream, 98 linear feet (0.01 acre) of intermittent stream, and 0.07 acre of open water impoundment (**Figure 2 of 6**).

**INTRODUCTION:** The project consists of the development of a new landfill, owned by the City of Waco (City). The proposed landfill design includes two waste disposal areas, a small complex of administrative buildings, and connective roadways. The overall tract containing the development totals approximately 502.5 acres in size. However, the waste disposal areas, buildings, roadways, and other ancillary features associated with the activity, total approximately 351 acres. The Applicant's stated proposed purpose is for the development of and access to two disposal areas for use as a solid waste landfill for the City of Waco and the surrounding areas. The existing City landfill is nearing full capacity and the City will need a new landfill to service the City and surrounding

counties with disposal capacity (**Figure 3 of 6**).

## **EXISTING CONDITIONS:**

**Physiography and Hydrology:** Eastern McLennan and western Limestone Counties are located in eastern Central Texas, close to the common junction of 3 physiographic provinces – the Lampasas Cut Plain, the Edwards Plateau, and the Blackland Prairie. The Blackland Prairie is an area of low topographic relief and poor drainage in which water often ponds after rainstorms and streams flow at very gentle gradients. The Edwards Plateau and Balcones Escarpment are associated with a great fault system that arcs across Texas to form a distinct boundary between uplands composed primarily of limestone bedrock and lower plains composed mostly of softer rocks. In places, this boundary is marked by an abrupt scarp (the Balcones Escarpment) and in others by a more gradational ramp, but the entire length of this transition zone is a major ecotone in terms of topography, bedrock, hydrology, soil, vegetation, and animal life.

The Lampasas Cut Plain is a roughly triangular area of rolling hill country in central and north-central Texas situated between the Brazos and Colorado rivers ranging in elevation from 754.6 to 1,312.3 feet above mean sea level. The Lampasas Cut Plain forms a limestone upland that has been dissected by the Brazos River and its tributaries, resulting in landforms characterized by generally rounded uplands cut by moderately broad, shallow valleys. Soil is thin to absent on the bedrock and supports a mixed savanna flora, whereas soil is moderately deep in valley floors, where it supports mixed riparian woodlands and forests. Karst features include sinks, caves, and rockshelters, but such are neither common nor extensive.

Hydrologically, the proposed project is situated within the Middle Brazos-Bosque drainage basin. It is drained to the southeast by Horse Creek, which joins Williams Creek a short distance south of the proposed project. Williams Creek flows to the southwest, joining Tehuacana Creek approximately 11.6 miles (18.7 km) southwest of the Project Area. Tehuacana Creek also flows to the southwest, joining the Brazos River east of Waco, approximately 14.2 miles southwest of the proposed project. The Brazos River, in turn, flows southeastward across the Blackland Prairie and Gulf Coastal Plain, ultimately discharging into the Gulf of Mexico a short distance northeast of East Matagorda Bay.

Topographically, the proposed project is situated over a series of slightly undulating hills dissected by Horse Creek and its drainages. Elevations across the boundaries of the proposed project vary from approximately 520.0 to 580.0 feet above mean sea level, with the higher elevations located on the upland ridges on opposing sides of Horse Creek and the lower elevations along the terraces bordering the creek channel.

**Flora and Fauna:** The native vegetation appears to have been cleared in the past. Scattered mesquite, hackberry, post oak, escarpment live oak, Ashe juniper, greenbrier, pencil cholla, and various grasses (i.e., Bermudagrass, Bahiagrass, little bluestem), and forbs (i.e., broomweed, horsenettle) are now prevalent across the site.

The proposed project is in the southwestern portion of the Texan biotic province. Some species reach the limits of their ecological range within the Texan province. The fauna associated with this region are represented by a mixture of species from the Austroriparian, Tamaulipan, Chihuahuan, Kansan, Balconian, and Texan biotic provinces. Common mammalian species include white-tailed deer, opossum, eastern cottontail rabbit, raccoon, striped skunk, hispid cotton rat, white-footed mouse, nine-banded armadillo, and fox squirrel. Common bird species include northern bobwhite,

eastern meadowlark, mourning dove, killdeer, field sparrow, red-tailed hawk, turkey vulture, belted kingfisher, and mockingbird. Reptile and amphibian species common to this biotic zone include six-lined racerunner, rat snake, eastern hognose snake, Gulf Coast toad, Texas spiny lizard, rough green snake, copperhead, western diamondback rattlesnake, green treefrog, Blanchard's cricket frog, diamondback water snake, and green anole. Although small herds of bison and antelope were common during the late prehistoric and early historic periods, these species are no longer common to this region.

**SOILS:** A total of 7 soil types within the boundaries of the project. These soils are presented in Table 1.

Table 1. Soils

Soil Name	Soil Type	Soil Depth (inches)	Setting
Axtell fine sandy loam, 1 to 3% slopes (AxB)	Fine sandy loam	0 to 8: Very fine sandy loam 8 to 21: Clay loam 21 to 29: Clay 29 to 80: Clay loam	Treads and risers on stream terraces
Crockett loam, 3 to 5% slopes (CrB)	Loam	0 to 8: Fine sandy loam 8 to 57: Clay 57 to 80: Clay loam	Broad ridges on the dissected plains
Ferris clay, 5 to 15% slopes (FeD2)	Clay	0 to 80: Clay	Broad ridges on the dissected plains
Ferris-Heiden complex, 2 to 5% slopes, eroded (FhC2)	<u>Ferris</u> Clay  <u>Heiden</u> Clay	<u>Ferris</u> 0 to 80: Clay  <u>Heiden</u> 0 to 70: Clay	<u>Ferris</u> Broad ridges on the dissected plains  <u>Heiden</u> Footslopes of base slopes, shoulders of interfluves, and backslopes of side slopes of ridges
Heiden clay, 1 to 3% slopes (Heb)	Clay	0 to 70: Clay	Footslopes of base slopes, shoulders of interfluves, and backslopes of side slopes of ridges
Tinn clay, 0 to 1% slopes, frequently flooded (To)	Clay	0 to 80: Clay	Floodplains
Wilson clay loam, 0 to 2% slopes (WnA)	Clay loam	0 to 5: Silt loam 5 to 80: Silty clay	Treads of stream terraces

**ALTERNATIVES:** An analysis of the alternatives has been completed by the Applicant, using a stepwise progression of practicability (i.e. feasibility), beginning with off-site alternatives and concluding with on-site alternatives. The focus of this screening process lies in logistical reasons, as either costs, logistics, or technology alone can determine whether or not a project is practicable. The USACE has not completed an evaluation of the applicant's alternatives analysis.

**Off-site Alternatives:** Off-site alternatives considered include Technological Alternatives and Alternative Geographic Locations.

Technological alternatives include the following:

- Assessing alternative waste management technologies;
- Expanding the City's recycling programs;
- Developing a landfill for construction and demolition waste; and,
- Diversion of wood waste.

Alternative geographic locations include the following:

- Hauling waste to other existing landfills; and,
- Assessment of alternative sites for developing a landfill.

**Assessing Alternative Waste Management Technologies:** Alternative technologies such as waste-to-energy, anaerobic digestion, gasification, plasma arc, and pyrolysis are being implemented at pilot-scale and commercial-scale at various locations. Through discussions with developers and research conducted by the City and by SCS Engineers, the City has considered various technologies as alternatives to land disposal. To assess the applicability of waste-to-energy technologies, the City of Waco issued a request for proposals (RFP) in 2010. There was only 1 respondent to this RFP, which was considered inadequate for meeting the City's needs for various reasons, including the following: (1) excessive financial participation required from the City and (2) requirement for continued operation of the City's landfill. Also, the City issued an RFP to alternative technology providers in 2012. Though there were 5 respondents to this RFP, none was selected, for various reasons including the following: (1) the proposed technology was considered experimental, (2) excessive financial participation required from the City and (3) requirement for continued operation of the City's landfill.

The following issues were considered in the City's assessment of alternative waste management technologies:

- Excessive capital and operating costs relative to landfill capital and operating costs;
- Residuals and bypassed materials from such technologies would require proper landfill disposal; as such, a landfill would still be required; and,
- These technologies are continuing to develop and are considered "experimental" by many regulatory agencies, including the TCEQ, thereby complicating the permitting process and increasing the risk to the City.

In view of the above, these alternative technologies were eliminated from further consideration by the City as alternatives to the development of a new landfill for the City.

**Expanding the City's Recycling Programs:** The City of Waco has operated recycling programs for over 20 years. The City's continued expansion of its recycling program has resulted in residential recycling services with a 41% participation rate. The City has achieved this rate on a voluntary basis that results in a diversion of over 3,000 tons of solid waste per year from the landfill. According to the City, the cost of the recycling program is approximately \$1.3 million per year.

The City has conducted various outreach and related programs in an effort to continue improving the quality and quantity of recycled materials diverted from the landfill. In prior years, the City has considered mandatory recycling for residential units. However, in view of the cost of such a program (i.e., additional collection trucks, staff, and carts at a capital cost in excess of \$3.5million), and the inadequate local resources to process the collected materials, such a program is not considered feasible at this time. With the severe restrictions imposed by the Chinese in 2018 on imports of recycled material, the costs of recycling have notably increased while opportunities for increased diversion have been reduced.

In view of the quantity of materials diverted for recycling, which represent approximately 1% of the waste tonnage received at the landfill, a notable increase in the recycling rate would not have a material impact on the need for the City to develop a new landfill. As such, while the City plans to continue assessing recycling alternatives, such recycling programs would not have a material impact on the need for a new landfill.

**Developing a Landfill for Disposal of Construction and Demolition (C&D) Waste:** As part of a solid waste planning project for the City in 2016, SCS Engineers conducted an assessment of a new Type IV landfill for C&D waste, to be located at the closed City-owned landfill (Site 1419), approximately 14 miles from the City's active landfill (Site 948A). The average C&D waste tonnage disposed of at Site 948A for the period 2012 through 2018 was approximately 41,235 tons per year as compared to the 286,173 tons disposed at Site 948A in FY 2018.

The capital and operational costs of a separate Type IV landfill would be less than a Type I MSW landfill, due to reduced costs for liners and cover frequency. However, the City's assessment determined that developing and operating a separate Type IV landfill would not be justified due to the following reasons:

- Relatively low volume of C&D waste available for disposal within the Waco metropolitan area;
- Distance between the City's 2 landfills would require additional operating personnel, including an additional Landfill Manager, as well as additional landfill equipment and operators;
- Cost and challenges of permitting a new Type IV landfill;
- Challenges and related cost to control groundwater at Site 1419;
- Additional cost to acquire property and perform a site characterization on this property and adjacent property;
- Impacts to jurisdictional waters, and challenges and costs associated with obtaining a 404 permit from the Army Corps of Engineers (COE), including mitigation;
- Additional capital cost to start-up a new landfill, such as entrance facilities, roads, etc; and,
- Limited benefit of a Type IV landfill. The associated increase in operating life of Site 948A does not justify the costs to develop a Type IV landfill.

In view of these considerations, further evaluation of this alternative was not considered warranted by the City.

**Diversion of Wood Waste:** The City separately collects wood waste from residences. Also, the City's Parks and Recreation Department delivers wood waste directly to the City's landfill. Wood waste is managed at the landfill separately; on a routine basis, the City contracts with a wood waste grinder for grinding the wood waste to produce a usable mulch, which is diverted from the landfill. For the period 2012 to 2018, wood waste (recorded as "brush" in the annual report to the TCEQ) represented approximately 5% of the tonnage received at Site 948A. From 2015 through 2018, all wood waste was diverted from disposal at the landfill for beneficial use. The impact of the diversion of wood waste from landfill disposal is estimated to increase the remaining operating life of Site 948A by less than a year, which is reflected in the current site life estimate. As such, while wood waste diversion and associated utilization will continue to be practiced by the City, the beneficial impact on the life of the City's landfill is not a substantial consideration in the need for the City to develop a new landfill.

**Hauling of Waste to other Existing Landfills:** The existing City of Waco Landfill is 1 of 4 active landfills serving the 6-county planning area administered by the Heart of Texas Council of Governments (HOTCOG). The other landfills in the HOTCOG region are the Lacy Lakeview Landfill (operated by Waste Management, Inc.) and Itasca Landfill and Mexia Landfill (both operated by Republic Services). The Lacy Lakeview Landfill has a limited remaining life, i.e., less than 6 years. As such, since this landfill's capacity is scheduled to be exhausted at the time when the City of Waco will require disposal capacity, this landfill is not considered an alternative for the City. Itasca Landfill and Mexia Landfill are approximately 50 miles from the center of Waco, distances that would substantially add to transportation costs for the City. For these reasons, these landfills are not considered viable alternatives by the City.

The City of Temple Landfill is in a different planning area administered by the Central Texas Council of Governments (CTCOG). For the City of Waco to utilize this landfill, the CTCOG Regional Solid Waste Management Plan would need to be revised. Challenges associated with this revision may be substantial. Also, of note, the City of Temple Landfill is located 36 miles from the center of Waco. According to the 2018 annual report to the TCEQ, this landfill has only 9 years of remaining life remaining. As such, since this landfill's capacity is scheduled to be exhausted shortly after the time when the City of Waco will require disposal capacity, this landfill is not considered a viable alternative by the City.

Landfills located greater than approximately 30 miles from the City of Waco would require permitting and development of a solid waste transfer station to reduce transportation costs. Even with the substantial capital cost to develop a transfer station, the distance traveled between the City and the Temple, Itasca, or Mexia Landfills would entail substantial annual operating costs as well as the environmental impacts associated with the fuel consumption. The following landfills were excluded by the City: Republic Itasca Landfill, Republic Mexia Landfill, Lacy Lakeview Landfill, and City of Temple Landfill due to distance or remaining capacity.

**Assessment of Alternative Sites for Developing a Landfill:** The City of Waco also assessed various alternative sites. The City's program included implementing a siting study conducted by SCS Engineers (SCS), a national environmental engineering firm that specializes in technical services, including siting studies, for solid waste management clients. The study conducted by SCS included

an area within a 6-county region. The program for assessing sites included consideration of the following:

The landfill location restrictions of the TCEQ (as prescribed under Title 30 of the Texas Administrative Code (30 TAC), Chapter 330 Municipal Solid Waste, Subchapter M Location Restrictions), including:

- Wetlands and waters of the U.S.;
- Floodplains;
- Distance to airports;
- Seismic impact zones;
- Geologic faults; and,
- Unstable areas.

Project-specific siting criteria:

- Distance to residential neighborhoods; and,
- Property Size and Geometry (minimum of 250 acres with dimensions suitable for landfill development).

Following the initial screening using the above criteria, selected sites were further considered by applying the following aspects:

- Site development feasibility considerations including consideration of power lines and other utility/roadway easements;
- Potential impact on waters of the U.S. and related challenges and costs associated with the 404 permitting program administered by the COE, including mitigation;
- Assessment of potential habitat for threatened and endangered species;
- Assessment of the usable area;
- Adequacy of transportation infrastructure, including haul route distance;
- Geologic and hydrogeologic conditions;
- Availability for purchase and purchase price of property; and,
- Consistency with the City's Comprehensive Plan, including location within the city's extraterritorial jurisdiction.

In implementing this approach to the siting study, over 100 properties were reviewed. Out of those properties, based on these rating considerations, 2 were considered for more in-depth study (**Figure 5 of 6**):

- Old Lorena Road (OLR) Site, a 290-acre property located adjacent to Old Lorena Road.
- Site 50, a 502.5-acre parcel, located near Highway 31 and TK Parkway.

The Old Lorena Road (OLR) Site had an initial estimate of over 9,000 linear feet of intermittent and ephemeral stream impact, more than 4 acres of emergent wetland impacts, more than 0.4 acre of forested wetland impacts, and more than 7 acre of impoundment impacts.

The above siting criteria were weighted in the comparison of these properties. Because there would be substantially fewer impacts to waters of the U.S. for Site 50, Site 50 was selected for landfill development.



**On-site Alternatives:**

Once Site 50 was selected, the following on-site alternatives, both of which avoid any fill in the floodplains, were evaluated as part of this analysis. An alternative that would maximize disturbance of the site was never seriously considered by the City; rather, the City focused on alternatives to avoid and minimize impacts to jurisdictional waters.

**Alternative 1: Avoidance of Ephemeral Tributaries:** Alternative 1 would totally avoid the 2 tributaries and 2937 square feet (0.07 acre) of open water pond. However, this would result in a decrease in the landfill footprint and associated landfill capacity to such an extent that the consequences of reduced operating life and reduced return on investment were deemed unacceptable by the City.

**Alternative 2: Impact of Ephemeral Tributaries:** Under Alternative 2, the proposed landfill design restricts the impacted length to 1,909 linear feet (0.11 acre) of ephemeral stream, 98 linear feet (0.01 acre) of intermittent stream, and 0.07 acre of pond. Since the open water pond is upstream of a reach of one of the tributaries to be impacted, impact to the 2937 square feet (0.07 acre) of open water pond is unavoidable under Alternative 2. Alternative 2 represents the minimum impact to the ephemeral tributaries that would still enable the development of a landfill footprint that provides an acreage of sufficient size to justify the City's capital investment in the development of this landfill **(Figures 1, 2, 3, and 6 of 6)**.

According to the Applicant, this alternative would fulfill the purpose of the project of providing the landfill capacity needed by the City to replace the City's current landfill, as currently proposed in the permit application pending before the TCEQ. The loss of the length of ephemeral tributary and the small pond would be compensated for by purchase of mitigation credits from approved mitigation banks in accordance with the 2008 Rule: Compensatory Mitigation for Losses of Aquatic Resources.

After conducting an evaluation of the available practicable alternatives, it has been determined that Site 50, Alternative 2, as described above, meets the project purpose and need. The Applicant has stated that the previously described off-site alternatives are not practicable due to excessive costs and time and related uncertainties for locating and permitting a new facility. In addition, finding another landfill site of sufficient size in the region is likely impracticable due to the expanding urban growth and related activities in the area. While Site 50, Alternative 2, results in a substantial loss of potential landfill capacity and reduction in the lifespan of the landfill (as compared to an alternative that does not seek to avoid or minimize impacts to jurisdictional waters), it is considered acceptable to the City. The Applicant also stated that Alternative 2, coupled with appropriate compensation for the loss of the aquatic resource, results in the least environmentally damaging practicable alternative.

**MITIGATION:** Mitigation credits are anticipated to be purchased from an approved Fort Worth District Mitigation Bank in accordance with the appropriate Mitigation Banking Instrument (MBI).

**FIGURES ATTACHED**

1. Vicinity Map
2. Site Plan and Impact Analysis Map
3. Topographic Map
4. Jurisdictional Delineation Map
5. Off-site Alternative Map
6. Development Plan

**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 would result in a direct impact of greater than three acres of waters of the state or 1,500 linear feet of streams (or a combination of the two is above the threshold), and as such would not fulfill Tier I criteria for the project. 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 TCEQ may conduct a public meeting to consider all comments concerning water quality if requested in writing. A request for a public meeting 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 McLennan and Limestone Counties, Texas, where the golden-cheeked warbler (*Dendroica chrysoparia*), whooping crane (*Grus americana*), interior least tern (*Sterna antillarum*), red knot (*Calidris canutus rufa*), piping plover (*Charadrius melodus*), and Navasota ladies'-tresses (*Spiranthes parksii*) are known to occur or may occur as migrants. The golden-cheeked warbler, whooping crane, interior least tern, and Navasota ladies'-tresses are listed as an endangered species. The piping plover and red knot are listed as 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:** In accordance with 36 CFR 800 and 33 CFR 325 (Appendix C), the District Engineer has consulted the latest version of the National Register of Historic Places. There are no historic properties recorded within the area of the proposed project. A cultural resource survey of the proposed project was performed and failed to identify any historic properties. No additional work to identify historic properties will be requested.

**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 16, 2019, 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-DE-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



**RECEIVED**  
 JUL 03 2019  
 By \_\_\_\_\_


**Legend**

Property

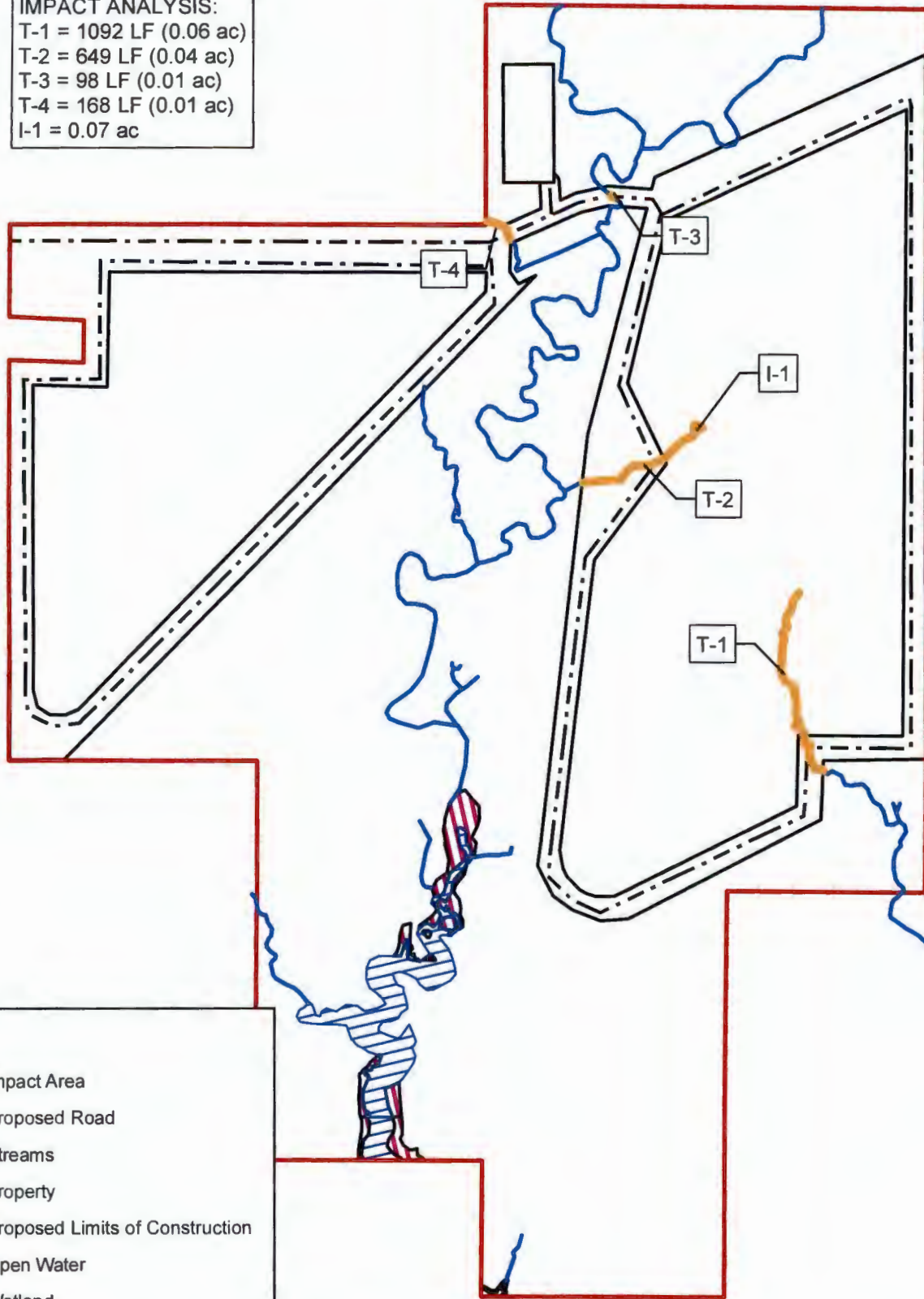
**Horizon**  
 Environmental Services, Inc.

Date:	06/14/2019
Drawn:	TED
HJN NO:	150184.003 PA
Source:	OSM, 2019

**Figure 1 of 6**  
 Vicinity Map  
 SWF-2017-0047  
 Waco Landfill - Site 50  
 Axtell, McLennan & Limestone Counties, TX

  
 0 1,500 3,000  
 Feet

**IMPACT ANALYSIS:**  
 T-1 = 1092 LF (0.06 ac)  
 T-2 = 649 LF (0.04 ac)  
 T-3 = 98 LF (0.01 ac)  
 T-4 = 168 LF (0.01 ac)  
 I-1 = 0.07 ac



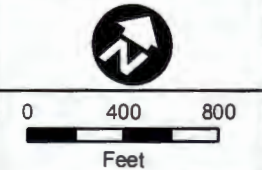
**Legend**

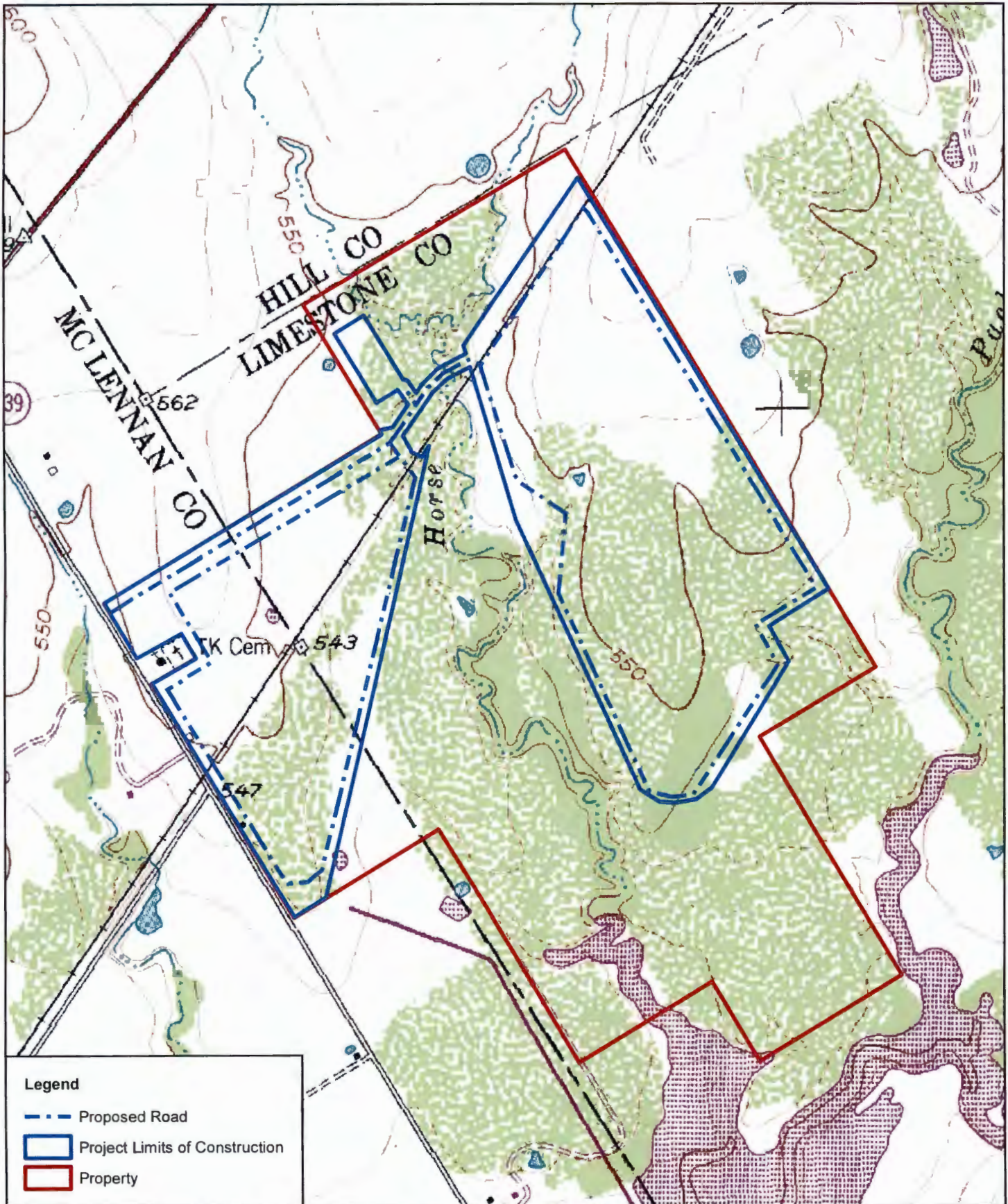
-  Impact Area
-  Proposed Road
-  Streams
-  Property
-  Proposed Limits of Construction
-  Open Water
-  Wetland



Date:	06/14/2019
Drawn:	SBF
HJN NO:	150184.003 PA
Source:	

**Figure 2 of 6**  
 Site Plan and Impact Analysis Map  
 SWF-2017-0047  
 Waco Landfill - Site 50  
 Axtell, McLennan & Limestone Counties, TX

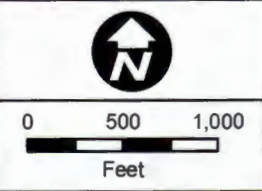


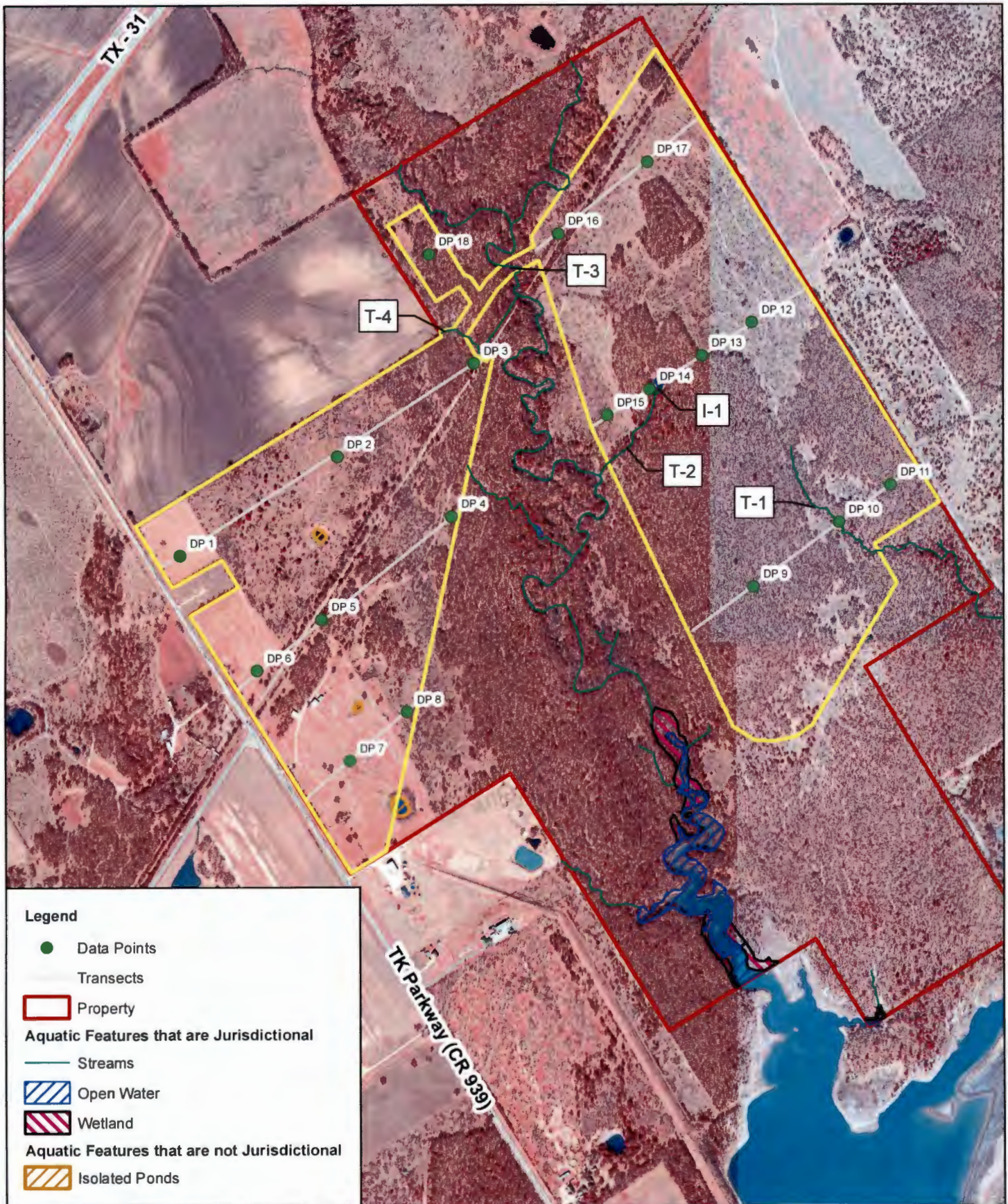


**Horizon**  
Environmental Services, Inc.

Date:	06/14/2019
Drawn:	TED
HJN NO:	150184.003 PA
Source:	USGS, 1978

**Figure 3 of 6**  
Topographic Map  
SWF-2017-0047  
Waco Landfill - Site 50  
Axtell, McLennan & Limestone Counties, TX





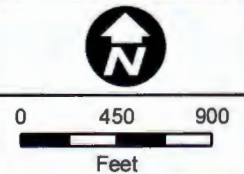
**Legend**

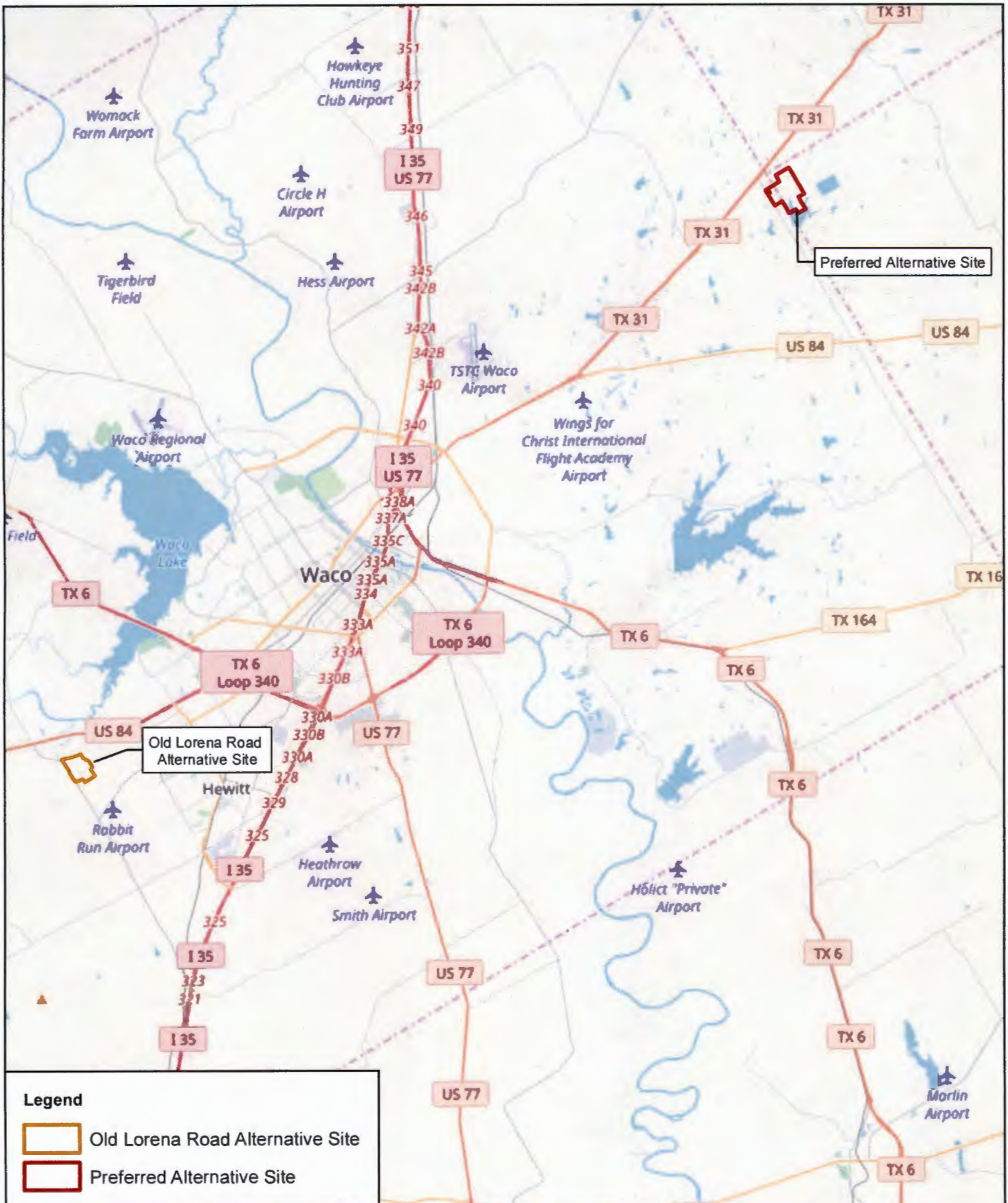
- Data Points
- Transects
- ▭ Property
- Aquatic Features that are Jurisdictional**
- Streams
- ▨ Open Water
- ▨ Wetland
- Aquatic Features that are not Jurisdictional**
- ▨ Isolated Ponds

**Horizon**  
Environmental Services, Inc.

Date:	06/14/2019
Drawn:	TED
HJN NO:	150184.003 PA
Source:	USDA, 2018

**Figure 4 of 6**  
Jurisdictional Delineation Map  
SWF-2017-0047  
Waco Landfill - Site 50  
Axtell, McLennan & Limestone Counties, TX





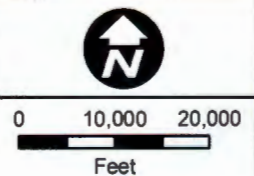
**Legend**

- Old Lorena Road Alternative Site
- Preferred Alternative Site

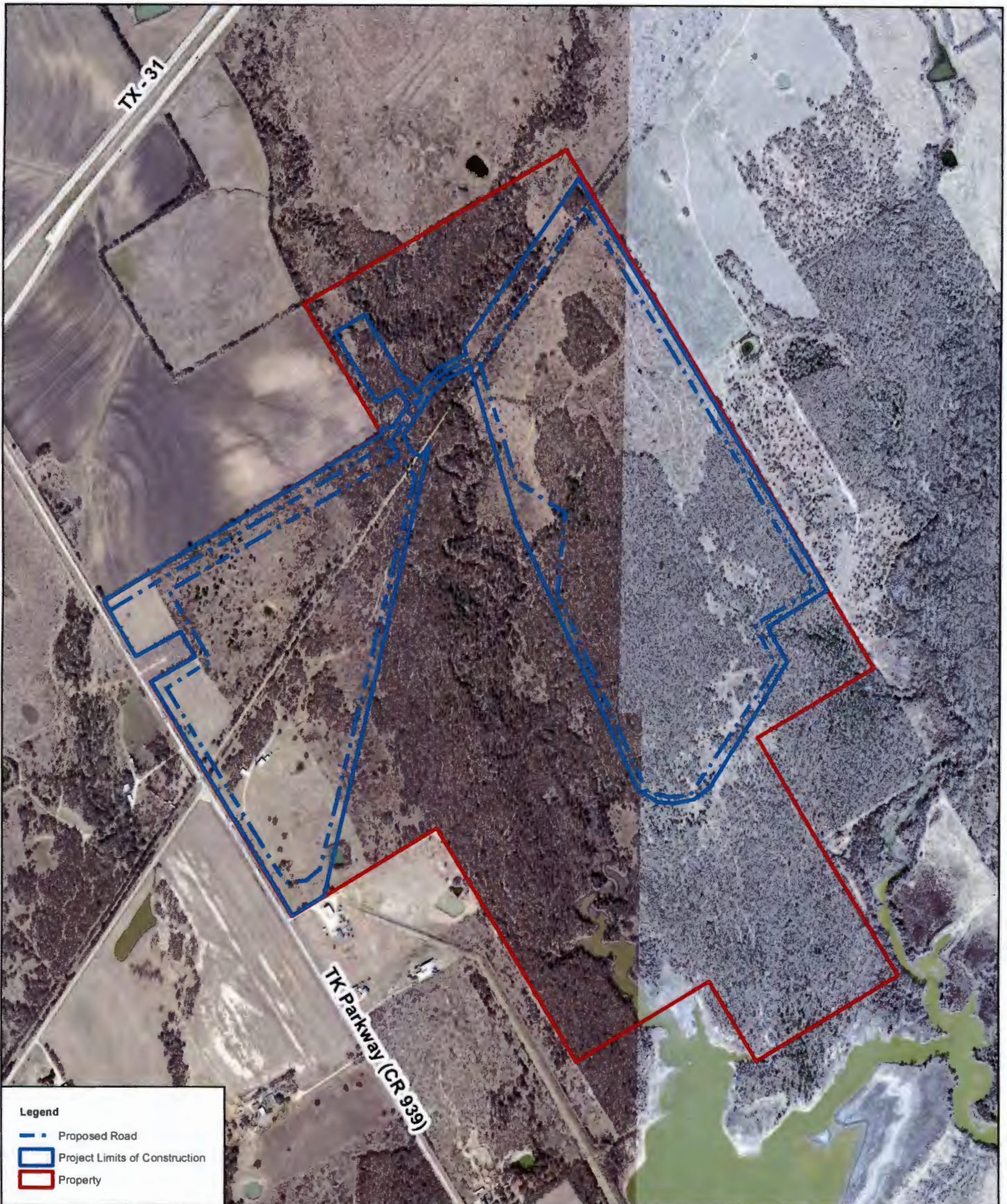
**Horizon**  
Environmental Services, Inc.

Date:	06/14/2019
Drawn:	TED
HJN NO:	150184.003 PA
Source:	OSM, 2019

**Figure 5 of 6**  
Off-site Alternatives Map  
SWF-2017-0047  
Waco Landfill - Site 50  
Axtell, McLennan & Limestone Counties, TX








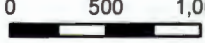
**Legend**

- - - Proposed Road
- Project Limits of Construction
- Property

**Horizon**  
Environmental Services, Inc.

Date:	06/14/2019
Drawn:	TED
HJN NO:	150184.003 PA
Source:	Stratmap, 2018

**Figure 6 of 6**  
Development Plan  
SWF-2017-0047  
Waco Landfill - Site 50  
Axtell, McLennan & Limestone Counties, TX

  
 0      500      1,000  
  
 Feet