

January 8, 2019  
SCS Project No. 16216088.00

Mr. Eric Clegg  
Municipal Solid Waste Permits Section  
Waste Permits Division (MC-126)  
Texas Commission on Environmental Quality  
12100 Park 35 Circle, Bldg. F  
Austin, TX 78753

Re: Proposed City of Waco Landfill - McLennan and Limestone Counties, Texas  
Municipal Solid Waste - Permit Application No. 2400  
Land-use Compatibility Determination - Notice of Deficiency Response  
Tracking No. 23201563; RN110471307/CN600131940

Dear Mr. Clegg:

On behalf of the City of Waco, SCS Engineers has prepared the following response to the Texas Commission on Environmental Quality's (TCEQ's) November 19, 2018 Land-use Compatibility Determination, Notice-of-Deficiency (NOD) letter, related to a permit application for the proposed City of Waco Landfill, TCEQ Permit No. MSW-2400. Attached to this response letter, we have included one original and two (2) unmarked copies, and one marked copy of all revised pages for use as replacement pages in the permit application. Where possible, with exception to TCEQ forms, we have identified proposed changes from the existing permit application in a redline/strike-out version (i.e., marked version). Additionally, we have included a revision date (January 2019) and revision number (Revision 1) on pages that have been revised as part of this NOD response.

Furthermore, we have attached a signed Part 1 Form, and posted this response on the publically accessible internet website.

For ease of review, we have included your original comment from the November 19, 2018 NOD letter, followed by our response and/or revision in ***bold/italics***.

- T1. The topographic map is required to show all wells within a one-mile radius, but the water well search was only conducted to a 500-ft radius. (Location: Drawings I/II-1, 2, and 4)

***We have updated Appendix I/II-B, related to Water, Oil, and Natural Gas Well Search, to include a water well search within one-mile of the facility boundary. Additionally, we have updated Section 7.2 to include reference to and the results of this search, as well as revisions to Drawings I/II-2 and I/II-4 to include the location of two existing water wells within one-mile of the facility boundary.***

- T2. Address percent ownership of the proposed facility. (Location: Section 15)

***Section 15 has been revised to indicate that the City of Waco is the sole owner of the property proposed for the landfill, as described in the metes and bounds survey included in Section 14, Attachment 14A.***

- T3. Include date of issuance for Permit 948A, as well as the site types for all landfills listed. (Location 16.1)

***This comment has been addressed as requested in Section 16.1, Paragraphs 1 and 2.***

- T4. State whether owner/operator has a direct financial interest in any solid waste sites in other states, territories, or countries. (Location 16.1)

***This comment has been addressed as requested in Section 16.1, Paragraph 3.***

- T5. Submit TXDOT response letter. Please also submit documentation of TXDOT coordination of all proposed public roadway improvements. (Location: Section 8.1 and Appendix I/IIA)

***In response to this comment, we have updated Appendix I/IIA with the following:***

- An August 20, 2018 response letter from TxDOT confirming coordination and 2016 traffic volumes within one-mile of the property boundary. Based on review of the information presented in this letter, the traffic volumes appear to be associated with traffic volumes at a distance greater than one-mile from the property boundary, as presented on TxDOT's 2016 Waco District Traffic Map in Appendix I/IIID. Therefore, based on review of the district traffic map, the current traffic volumes (2016 values) stated in Section 8.1 are considered more accurate due to the closer proximity to the site.***
- A subsequent December 10, 2018 coordination letter to TxDOT documenting projected traffic impacts associated with the proposed landfill, as well as the proposed public roadway improvements documented in Section 8.1. At the time of this response, the City has not received a response letter back from TxDOT on this subsequent coordination letter. Also note, Section 8.1 has been revised to be consistent with the projected traffic impacts provided in this coordination letter.***

***Furthermore, a traffic impact analysis (TIA) is being prepared by Lee Engineering. As such, following completion of this TIA, Parts I/II, Section 8.1 will be updated accordingly and the TIA will be submitted to TCEQ.***

- T6. Submit FAA response letter. (Location: Section 8.2 and Appendix I/IIA)

***Three (3) follow-up coordination letters have been included in Appendix I/IIA, including the final coordination letter dated October 15, 2018, which indicates the FAA has no objection to the proposed Type I landfill. As such, Section 8.2 has been updated with this statement.***

- T7. Provide more detailed discussion of the specific factors used for determination of unstable areas or state that it will be included in Part III. (Location: Section 9.6)

***This comment has been addressed as requested by revisions made to Section 9.6, Paragraph 2. Additional information and documentation will be provided in Part III that further substantiates this determination.***



- T8. Provide complete references. (Location 10.1)

***Section 10.1, Paragraph 3 has been revised to complete the references as requested.***

- T9. Submit TPWD and USFWS response letters. (Location: Section 12, Paragraph 2, and Appendix I/IIA)

***Appendix I/IIA has been updated with the TPWD's response to our coordination letter. Based on their response, the "Wildlife Habitat Assessment Program does not anticipate significant adverse impacts to rare, threatened, or endangered species, or other fish and wildlife resources." As such, we have revised Section 12, Paragraph 1 with this statement.***

***The IPaCs from USFWS were included in the original application. USFWS does not typically provide further responses to "no effects" determinations, so no further response from USFWS is anticipated. If USFWS provides any additional response, we will supplement the application accordingly.***

- T10. Submit THC response letter. (Location: Appendix I/IIA)

***Appendix I/IIA has been updated by adding four (4) subsequent coordination documents, including the following: (1) 8/30/18 email from THC requesting that an archeologic survey of the project area be performed; (2) 11/28/18 transmittal letter of the archeologic survey report prepared by Horizon Environmental Services, Inc, entitled "An Intensive Cultural Resources Survey of the City of Waco's Proposed Site 50 Landfill Project in McLennan and Limestone Counties, Texas"; (3) 11/28/18 email from THC indicating receipt of the archeologic survey report; and (4) 12/12/18 THC comment letter, related to the archeologic survey report.***

***Based on the archeologic survey report, the development of the proposed landfill will not pose adverse effects to significant cultural resources. However, this report does recommend that a 25-foot construction buffer be maintained around the modern day cemetery boundaries (property boundary with TK Cemetery) in order to protect any unmarked graves that could potentially be present outside of modern day cemetery boundaries. As such, in anticipation of approval of this survey by THC, Drawings I/II-2, 4, and 5 have been revised to include reference to this 25-foot construction buffer. Further information and requirements will also be included in Part IV – Site Operating Plan.***

***Subsequent coordination with the THC, including Horizon's response to THC's 12/12/18 comment letter and approval of the survey report, will be added to Appendix I/IIA once received. Additionally, if requested, the City will provide TCEQ with a copy of the Horizon archeological survey report or include the report in the application.***

- T11. Submit HOTCOG response letter. (Location: Section 2.4, and Appendix I/IIA)

***The HOTCOGs response letter to the initial coordination letter has been added to Appendix I/IIA. Based on this response, the HOTCOG Board of Directors found the City of Waco Landfill project to be consistent with regional plans, policies, and HOTCOG review criteria, which is consistent with the statement in Section 2.1, Paragraph 2.***

- T12. Submit an up-to-date guaranteed drawing showing all easements. (Location: Section 3, Paragraph 3 and Section 14, Attachment 14A)

***Section 14, Attachment 14A, related to the metes and bounds survey, has been revised. Specifically, the Surveyor's Notes, Paragraph 4, last sentence has been revised to state "The easement information shown hereon is based on the easements identified in Schedule "B" to clarify how the depicted easements were identified.***

- T13. Contours shown on Drawings I/II-2 & 5 are not referenced on the map or legend as being topographic. (Location: Drawings I/II-5)

***The legend on both Drawings I/II-2 and I/II-5 have been revised to change the call-out "Existing Contours" to "Existing Topographic Contours."***

- T14. Discuss why the facility will not be completely encompassed by a perimeter fence. (Location: Drawing I/II-5).

***As you know, Horse Creek runs north and south through the center of the property that drain to the down-gradient Soil Conservation Services (SCS), Reservoir 19 on the south side of the property. This reservoir has a normal pool elevation, based on the primary outlet structure of 520.2 ft MSL (NAVD 27). As such, this reservoir will provide a natural barrier to access in accordance with §330.131, related to access control, which will be more specifically defined in Part IV – Site Operating Plan.***

***Therefore, in response to this comment and the statement above, we have revised Drawing I/II-5 to reflect a revised fence alignment, including an elevation of 520 ft MSL for terminating the fence near the confluence of Horse Creek and SCS, Reservoir 19.***

- T15. Include all dimensions for Sectors 7 and 8. (Location: Drawing I/II-5)

***Note, based on subsequent analysis of the disposal footprints in preparation of Part III, we have modified the layout of sectors within each disposal area, as reflected on the revised Drawing I/II-5. In addition to these revisions, we have included all dimensions for each sector, including Sectors 8 and 9 (formerly Sectors 7 and 8).***

- T16. Submit USACOE response letter. (Location: Appendix I/II-E, Figure 5)

***At the time of preparing this response, a response letter from the USACOE has not been received. However, the City is currently preparing an application for an individual permit for disturbance of two small ephemeral tributaries associated with the East Disposal Area and one minor disturbance of an ephemeral tributary associated with the West Disposal Area. As such, SCS will update Parts I/II with this individual permit application and USACOE's response once these documents are acquired.***

- T17. Provide more detailed discussion of the specific factors used for determination of unstable areas or state that it will be included in Part III. (Location: Section 9.6, Paragraph 2)

***This appears to be a repeat comment. See Comment T7 and associated response.***

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***Also note, the City has purchased additional properties adjacent to the proposed landfill property boundary. Therefore, Section 5, Table 5-1, related to landowners list, has been revised to reflect the additional properties that are now owned by the City of Waco.***

We trust that our responses will assist you in the completion of your administrative review. If you have any questions or need additional information, please do not hesitate to contact Ryan Kuntz, P.E. at (817) 358-6117.

Sincerely,



Ryan Kuntz, P.E.  
Vice President/Project Director  
SCS Engineers  
TBPE Registration No. F-3407



Kevin D. Yard, P.E., BCEE  
Vice President/Office Director  
SCS Engineers

Attachments: as described herein

cc: Mr. Charles Dowdell, City of Waco  
Mr. Jeffrey Reed, Lloyd Gosselink Rochelle & Townsend, P.C.

**TCEQ PART 1 FORM FOR NEW PERMIT FOR A MSW FACILITY (TCEQ-0650)**

Facility Name: City of Waco Landfill  
Permittee/Registrant Name: City of Waco  
MSW Authorization #:2400  
Initial Submittal Date: 8/7/2018  
Revision Date: 1/08/2019



**Texas Commission on Environmental Quality**  
**Part I Form for New Permit/Registration and**  
**Amendment Applications for an MSW Facility**

**1. Reason for Submittal**

☒ Initial Submittal                      ☐ Notice of Deficiency (NOD) Response

**2. Authorization Type**

☒ Permit                                      ☐ Registration

**3. Application Type**

☒ New    ☐ Major Amendment  
☐ Major Amendment (Limited Scope)

**4. Application Fees**

☐ Pay by Check                              ☒ Online Payment

If paid online, e-Pay Confirmation Number: **582EA000311862**

**5. Application URL**

Is the application submitted for Type I Arid Exempt (AE) and/or Type IV AE facility?

☐ Yes                                      ☒ No

If the answer is "No", provide the URL address of a publicly accessible internet web site where the application and all revisions to that application will be posted.  
<http://http://www.waco-texas.com/landfill-application-process.asp>

**6. Application Publishing**

Party Responsible for Publishing Notice:

☐ Applicant                              ☐ Agent in Service                      ☒ Consultant

Contact Name: **Ryan R. Kuntz, P.E.**  
**Director**

Title: **Vice President /Project**

## 7. Alternative Language Notice

Is an alternative language notice required for this application? (For determination refer to Alternative Language Checklist on the Public Notice Verification Form TCEQ-20244-Waste)

☐ Yes ☒ No

## 8. Public Place Location of Application

Name of the Public Place: **Waco-McLennan County Central Library**

Physical Address: **1717 Austin Avenue**

City: **Waco** County: **McLennan** State: **TX** Zip Code: **76701**

(Area code) Telephone Number: **254.750.5941**

## 9. Consolidated Permit Processing

Is this submittal part of a consolidated permit processing request, in accordance with 30 TAC Chapter 33?

☐ Yes ☒ No ☐ Not Applicable

If "Yes", state the other TCEQ program authorizations requested:

## 10. Confidential Documents

Does the application contain confidential documents?

☐ Yes ☒ No

If "Yes", cross-reference the confidential documents throughout the application and submit as a separate attachment in a binder clearly marked "CONFIDENTIAL."

## 11. Permits and Construction Approvals

Permit or Approval	Received	Pending	Not Applicable
Hazardous Waste Management Program under the Texas Solid Waste Disposal Act	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Underground Injection Control Program under the Texas Injection Well Act	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
National Pollutant Discharge Elimination System Program under the Clean Water Act and Waste Discharge Program under Texas Water Code, Chapter 26	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Prevention of Significant Deterioration Program under the Federal Clean Air Act (FCAA). Nonattainment Program under the FCAA	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
National Emission Standards for Hazardous Air Pollutants Preconstruction Approval under the FCAA	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ocean Dumping Permits under the Marine Protection Research and Sanctuaries Act	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Permit or Approval	Received	Pending	Not Applicable
Dredge or Fill Permits under the CWA	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Licenses under the Texas Radiation Control Act	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other (describe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (describe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (describe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (describe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 12. General Facility Information

Facility Name: **City of Waco Landfill**

Contact Name: **Charles Dowdell**

Title: **Director of Public**

**Works**

MSW Authorization No. (if available): **2400**

Regulated Entity Reference No. (if issued)\*: **RN110471307**

Physical or Street Address (if available): **4730 T K Parkway**

City: **Axtell** County: **McLennan & Limestone** State: **TX** Zip Code: **76624**

(Area Code) Telephone Number: **(254) 750-1601**

Latitude (Degrees, Minutes Seconds): **N 31° 42' 05.31"**

Longitude (Degrees, Minutes Seconds): **W 96° 55' 52.07"**

Benchmark Elevation (above mean sea level):                      ft.

Provide a description of the location of the facility with respect to known or easily identifiable landmarks: **approximately 0.4 mile south of the intersection of TK Parkway and State Highway 31 in McLennan County**

Detail access routes from the nearest United States or state highway to the facility: **approximately 0.4 mile south of the intersection of TK Parkway and State Highway 31 in McLennan County**

\*If this number has not been issued for the facility, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Facility as the Regulated Entity.

## 13. Facility Type(s)

☒ Type I

☐ Type IV

☐ Type V

☐ Type I AE

☐ Type IV AE

☐ Type VI

## 14. Activities Conducted at the Facility

☐ Storage

☐ Processing

☒ Disposal

### 15. Facility Waste Management Unit(s)

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Landfill Unit(s) | <input type="checkbox"/> Incinerator(s)                   |
| <input type="checkbox"/> Class 1 Landfill Unit(s)    | <input type="checkbox"/> Autoclave(s)                     |
| <input type="checkbox"/> Process Tank(s)             | <input type="checkbox"/> Refrigeration Unit(s)            |
| <input type="checkbox"/> Storage Tank(s)             | <input type="checkbox"/> Mobile Processing Unit(s)        |
| <input type="checkbox"/> Tipping Floor               | <input type="checkbox"/> Type VI Demonstration Unit       |
| <input type="checkbox"/> Storage Area                | <input type="checkbox"/> Compost Pile(s) and/or Vessel(s) |
| <input type="checkbox"/> Container(s)                | <input type="checkbox"/> Other (Specify)                  |
| <input type="checkbox"/> Roll-off Boxes              | <input type="checkbox"/> Other (Specify)                  |
| <input type="checkbox"/> Surface Impoundment         | <input type="checkbox"/> Other (Specify)                  |

### 16. Description of Proposed Facility or Changes to Existing Facility

Provide a brief description of the proposed activities if application is for a new facility, or the proposed changes to an existing facility or permit conditions if the application is for an amendment.

**Proposed Type I Municipal Solid Waste Landfill located on 502.5 acres of land in McLennan and Limestone Counties, designed in accordance with Title 30, Texas Administrative Code, Chapter 330. The primary purpose of this landfill is to serve as a replacement for the current City of Waco landfill (MSW Permit No. 948A). The landfill will provide disposal capacity for residences, businesses, and industries primarily in the communities of McLennan and Limestone Counties and other nearby counties. The landfill will provide disposal of household waste, yard waste, commercial waste, Class 2 and Class 3 non-hazardous industrial wastes, construction-demolition waste, and special wastes authorized by TCEQ. Includes responses to TCEQ's November 19, 2018 Land-use Compatibility Determination, Notice-of-Deficiency letter.**

### 17. Facility Contact Information

**Site Operator (Permittee/Registrant) Name: City of Waco**

Customer Reference No. (if issued)\*: **CN600131940**

Contact Name: **Charles Dowdell**

Title: **Director of Public Works**

Mailing Address: **401 Franklin Avenue**

City: **Waco** County: **McLennan** State: **TX** Zip Code: **76701**

(Area Code) Telephone Number: **(254) 750-1601**

Email Address: **charlesd@ci.waco.tx.us**

TX Secretary of State (SOS) Filing Number:

\*If the Site Operator (Permittee/Registrant) does not have this number, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Site Operator (Permittee/Registrant) as the Customer.



Facility Name: City of Waco Landfill  
MSW Authorization #: 2400

Initial Submittal Date: 8/7/2018  
Revision Date: 1/08/2019

**Operator Name<sup>1</sup>: same as Permittee**

Customer Reference No. (if issued)\*:

Contact Name:

Title:

Mailing Address:

City:

County:

State:

Zip Code:

(Area Code) Telephone Number:

Email Address:

TX SOS Filing Number:

<sup>1</sup>If the Operator is the same as Site Operator/Permittee type "Same as "Site Operator (Permittee/Registrant)".

\*If the Operator does not have this number, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Operator as the customer.

**Consultant Name (if applicable): SCS Engineers, TBPE Registration No. F-3407**

Texas Board of Professional Engineers Firm Registration Number:

Contact Name: **Ryan R. Kuntz, P.E.**

Title: **Vice Pres., Pr. Director**

Mailing Address: **1901 Central Drive, Suite 550**

City: **Bedford** County: **Tarrant** State: **TX** Zip Code: **76021**

(Area Code) Telephone Number: **817.358.6117**

E-Mail Address: **rkuntz@scseng.com**

**Agent in Service Name (required only for out-of-state):**

Mailing Address:

City:

County:

State:

Zip Code:

(Area Code) Telephone Number:

E-Mail Address:

**18. Facility Supervisor's License**

Select the Type of License that the Solid Waste Facility Supervisor, as defined in 30 TAC Chapter 30, Occupational Licenses and Registrations, will obtain prior to commencing facility operations.

☒ Class A

☐ Class B

**19. Ownership Status of the Facility**

☐ Corporation

☐ Limited Partnership

☐ Federal Government

☐ Individual

☒ City Government

☐ Other Government

☐ Sole Proprietorship

☐ County Government

☐ Military

☐ General Partnership

☐ State Government

☐ Other (Specify):

Does the Site Operator (Permittee/Registrant) own all the facility units and all the facility property?

☒ Yes ☐ No

If "No", provide the information requested below for any additional ownership.

**Owner Name:**

Street or P.O. Box:

City: County: State: Zip Code:

(Area Code) Telephone Number:

Email Address (optional):

**20. Other Governmental Entities Information**

**Texas Department of Transportation District: Waco**

District Engineer's Name: **Stanley Swiatek, P.E.**

Street Address or P.O. Box: **100 S. Loop Drive**

City: **Waco** County: **McLennan** State: **TX** Zip Code: **76704-2858**

(Area Code) Telephone Number: **(254) 867-2700**

E-Mail Address (optional):

**The Local Governmental Authority Responsible for Road Maintenance (if applicable): N.A.**

Contact Person's Name:

Street Address or P.O. Box:

City: County: State: Zip Code:

(Area Code) Telephone Number:

E-Mail Address (optional):

**City Mayor Information**

City Mayor's Name: **Kyle Deaver**

Office Address: **300 Austin Ave**

City: **Waco** County: **McLennan** State: **TX** Zip Code: **76702**

(Area Code) Telephone Number: **(254) 750-5750**

E-Mail Address (optional): **kyle.deaver@wcotx.gov**

**City Health Authority:**

Contact Person's Name: **Sherry Williams, RNC, WHNP**

Street Address or P.O. Box: **225 W. Waco Drive**

City: **Waco** County: **McLennan** State: **TX** Zip Code: **76707**

(Area Code) Telephone Number: **(254) 750-5450**

E-Mail Address (optional):

**County Judge Information**

County Judge's Name: **Scott M. Felton**

Street Address or P.O. Box: **501 Washington Ave, Room 214**

City: **Waco** County: **McLennan** State: **TX** Zip Code: **76701**

(Area Code) Telephone Number: **(254) 757-5049**

E-Mail Address (optional):

**County Health Authority: Waco-McLennan Health District**

Contact Person's Name: **Sherry Williams, RNC, WHNP**

Street Address or P.O. Box: **225 W. Waco Drive**

City: **Waco** County: **McLennan** State: **TX** Zip Code: **76707**

(Area Code) Telephone Number: **(254) 750-5450**

E-Mail Address (optional):

**State Representative Information**

District Number: **12**

State Representative's Name: **Kyle Kacal**

District Office Address: **3000 Briarcrest Dr., Ste 203**

City: **Bryan** County: **Brazos** State: **TX** Zip Code: **77802**

(Area Code) Telephone Number: **979-774-7276**

E-Mail Address (optional):

**State Senator Information**

District Number: **22**

State Senator's Name: **The Honorable Brian Birdwell**

District Office Address: **900 Austin Ave, Suite 500**

City: **Waco** County: **McLennan** State: **TX** Zip Code: **76701**

(Area Code) Telephone Number: **(254) 772-6225**

E-Mail Address (optional):

**Council of Government (COG) Name: Heart of Texas**

COG Representative's Name: **Falen Bohannon**

COG Representative's Title: **Solid Waste Program Manager**

Street Address or P.O. Box: **1514 S. New Road**

City: **Waco** County: **McLennan** State: **TX** Zip Code: **76711**

(Area Code) Telephone Number: **(254)292-1800**

E-Mail Address (optional): **Falen.Bohannon@hotmail.com**

**County Judge Information**

County Judge's Name: **Limestone County Judge: Honorable Richard Duncan**

Street Address or P.O. Box: **200 W. Slate ST., Ste 101**

City: **Groesbeck** County: **Limestone** State: **TX** Zip Code: **76642**

(Area Code) Telephone Number: **254-729-3810**

E-Mail Address (optional):

**County Health Authority: Limestone Medical Center**

Contact Person's Name: **Dr. Jeffrey Rettig**

Street Address or P.O. Box: **204 W. Trinity Street**

City: **Groesbeck** County: **Limestone** State: **TX** Zip Code: **76642**

(Area Code) Telephone Number: **254-729-3740**

E-Mail Address (optional):

**State Representative Information**

District Number: **12**

State Representative's Name: **Kyle Kacal**

District Office Address: **3000 Briarcrest Dr., Ste 203**

City: **Bryan** County: **Brazos** State: **TX** Zip Code: **77802**

(Area Code) Telephone Number: **979-774-7276**

E-Mail Address (optional):

**State Senator Information**

District Number: **5**

State Senator's Name: **Charles Schwertner**

District Office Address: **3000 Briarcrest Drive, Suite 202**

City: **Bryan** County: **Brazos** State: **TX** Zip Code: **77802**

(Area Code) Telephone Number: **979-776-0222**

E-Mail Address (optional):

**Council of Government (COG) Name: Heart of Texas**

COG Representative's Name: **Falen Bohannon**

COG Representative's Title: **Solid Waste Program Manager**

Street Address or P.O. Box: **1514 S. New Road**

City: **Waco** County: **McLennan** State: **TX** Zip Code: **76711**

(Area Code) Telephone Number: **(254)292-1800**

E-Mail Address (optional): **Falen.Bohannon@hotmail.com**

**River Basin Authority Name: Brazos River Authority**

Contact Person's Name: **Phil Ford**

Watershed Sub-Basin Name:

Street Address or P.O. Box: **4600 Cobbs Drive**

City: **Waco** County: **McLennan** State: **TX** Zip Code: **76710**

(Area Code) Telephone Number: **(888) 922-6272**

E-Mail Address (optional):

**Coastal Management Program**

Is the facility within the Coastal Management Program boundary?

☐ Yes ☒ No

**U.S. Army Corps of Engineers**

The facility is located in the following District of the U.S. Army Corps of Engineers:

☐ Albuquerque, NM ☐ Galveston, TX  
☒ Ft. Worth, TX ☐ Tulsa, OK

**Local Government Jurisdiction**

Within City Limits of:

Within Extraterritorial Jurisdiction of:

Is the facility located in an area in which the governing body of the municipality or county has prohibited the storage, processing or disposal of municipal or industrial solid waste?

☐ Yes ☒ No

(If "Yes", provide a copy of the ordinance or order as an attachment):

## Signature Page

I, Wiley Stem III, \_\_\_\_\_ City Manager,  
(Site Operator (Permittee/Registrant)'s Authorized Signatory) (Title)

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: *Wiley Stem III* Date: 1-8-19

TO BE COMPLETED BY THE OPERATOR IF THE APPLICATION IS SIGNED BY AN AUTHORIZED REPRESENTATIVE FOR THE OPERATOR

I, \_\_\_\_\_, hereby designate \_\_\_\_\_  
(Print or Type Operator Name) (Print or Type Representative Name)

as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative in support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

Printed or Typed Name of Operator or Principal Executive Officer

Signature

SUBSCRIBED AND SWORN to before me by the said Wiley Stem III

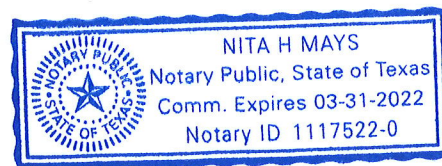
On this 8th day of January, 2019

My commission expires on the 3/31 day of March, 2022

Nita H Mays  
Notary Public in and for

McLennan County, Texas

(Note: Application Must Bear Signature & Seal of Notary Public)



## Part I Attachments

(See Instructions for P.E. seal requirements.)

<b>Required Attachments</b>	<b>Attachment No.</b>
Supplementary Technical Report	X
Property Legal Description	X
Property Metes and Bounds Description	X
Facility Legal Description	X
Facility Metes and Bounds Description	X
Metes and Bounds Drawings	X
On-Site Easements Drawing	X
Land Ownership Map	X
Land Ownership List	X
Electronic List or Mailing Labels	X
Texas Department of Transportation (TxDOT) County Map	X
General Location Map	X
General Topographic Map	X
Verification of Legal Status	X
Property Owner Affidavit	X
Evidence of Competency	X
<b>Additional Attachments as Applicable- Select all those apply and add as necessary</b>	
<input checked="" type="checkbox"/> TCEQ Core Data Form(s)	X
<input checked="" type="checkbox"/> Signatory Authority Delegation	X
<input checked="" type="checkbox"/> Fee Payment Receipt	X
<input type="checkbox"/> Confidential Documents	
<input type="checkbox"/> Waste Storage, Processing and Disposal Ordinances	
<input type="checkbox"/> Final Plat Record of Property	
<input type="checkbox"/> Certificate of Fact (Certificate of Incorporation)	
<input type="checkbox"/> Assumed Name Certificate	



**MARKED VERSION**

**CITY OF WACO LANDFILL  
TCEQ PERMIT NO. MSW-2400  
McLENNAN AND LIMESTONE COUNTIES, TEXAS**

**PARTS I/II  
GENERAL APPLICATION REQUIREMENTS**

**Prepared for:**

**CITY OF WACO**



Public Works Department  
401 Franklin Avenue  
Waco, TX 76701

**Prepared by:**

**SCS ENGINEERS**

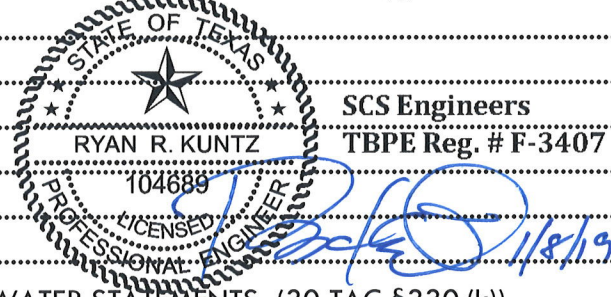
**Texas Board of Professional Engineers, Reg. No. F-3407**  
Dallas/Fort Worth Office  
1901 Central Drive, Suite 550  
Bedford, Texas 76021  
817/571-2288



Revision 0 - August 2018, September 2018 (Admin NOD #1)  
Administrative NOD #1—September 2018  
Revision 1 – January 2019  
SCS Project No. 16216088.00

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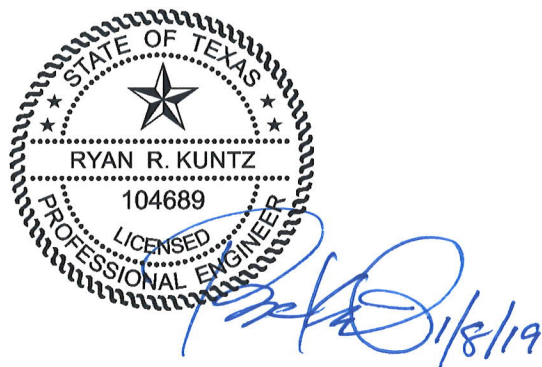
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## Drawings

Drawing I/II-1: Site Location Map  
Drawing I/II-2: General Topographic Map (includes Wind Rose)  
Drawing I/II-3: Landowner's Map  
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Drawing I/II-7: Seismic Impact Map

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I/IIA Demonstration of Coordination  
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I/IIC Land-Use Analysis  
I/IID TxDOT Waco District Traffic Map  
I/IIIE Section 404 Jurisdictional Determination  
I/IIF Certified City Charter



**SCS Engineers**  
**TBPE Reg. # F-3407**

## 5 LANDOWNERS' MAP AND LIST

In accordance with 30 TAC §330.59(c)(3)(B) and §305.45(a)(6)(D), the landowners' list presents the names and mailing addresses of the landowners of property within one-quarter (1/4) mile of the Site, as provided in Table 5-1. The numbering in the landowners list corresponds to the numbers on Drawing I/II-3, which depicts the locations of the landowners. The landowners' list and map are based on the McLennan, Limestone, and Hill County Appraisal Districts' property records, as of April 2018. Additionally, mineral interest owners shown in Table 5-2 were identified in the real property records for McLennan and Limestone Counties as provided by the Title company. Neither McLennan nor Limestone Counties identify mineral interests in their real property appraisal records.

**Table 5-1 Landowners**

1.	City of Waco 300 Austin Avenue Waco, TX 76702	7.	Te Kay Ranch*	13.	Baugh Connally E 4396 TK Pkwy Axtell, TX 76624
2.	<del>City of Waco 300 Austin Avenue Waco, TX 76702 Milton Capital LLC 3119 Milton Ave Dallas, TX 75205</del>	8.	Lee Mike Rex et al 3096 Happy Swaner Ln Axtell, TX 76624	14.	Griffin Kids Collectables 201 N 38 <sup>th</sup> St Waco, TX 76710
3.	Dunlap Billie J 536 St Hwy 31 Mt. Calm, TX 76673	9.	Swaner Fred Lee Jr 4351 TK Pkwy Axtell, TX 76624	15.	Reed David L 3444 TK Pkwy Axtell, TX 76624
4.	Dunlap Joe W & Cynthia 211 State Hwy 31 Mt. Calm, TX 76673	10.	Swaner Troy Don 3132 Lovers Ln Dallas, TX 75225	16.	Jameson Mary Jo Grubbs Trustee et al 1910 Channing Park Dr Arlington TX 76013
5.	Trayler James F 796 LCR 114 Waco, TX 76705	11.	<del>City of Waco 300 Austin Avenue Waco, TX 76702</del> Hayes <del>Matthew A &amp; Ferdie 4550 TK Parkway Axtell, TX 76624</del>	17.	Coggin Mary Ruth 532 LCR 112 Axtell, TX 76624
6.	Unknown Ownership*	12.	Foster Jayme L 4418 TK Pkwy Axtell, TX 76624		

\*No information available per Kevin Fikes at the McLennan County Appraisal District



## 7 LAND-USE AND IMPACT ON SURROUNDING AREA (30 TAC §330.61(G) & (H))

### 7.1 LAND USE ANALYSIS (30 TAC §330.61(G) & (H)(1)-(4))

See report by John Worrall Consulting LLC in Appendix I/IIC, which addresses the TCEQ regulations listed above.

### 7.2 WATER WELLS WITHIN 500 FEET (30 TAC §330.61(H)(5)) AND ONE-MILE (30 TAC 305.45(A)(6)(A))

A water well search was performed by Atlas Environmental Research for water wells located within 500 feet and one-mile of the property. This water well search indicates no known water wells within 500 feet of the permit boundary, and. ~~Additionally~~, no known in use water wells exist within the property boundary. There are two existing water wells within one-mile of the property boundary, one located approximately 1,900 feet northwest and one located approximately 1,150 feet northeast of the property boundary. The locations of both water wells are depicted on Drawings I/II-2 and I/II-4. This water well reports isare provided in Appendix I/IIB.

### 7.3 ABANDONED OIL AND WATER WELLS (30 TAC §330.61(L))

There are no known existing or abandoned water wells situated within the permit boundary. If water wells are discovered on the Site, the City of Waco will provide the TCEQ with written certification within 30 days of discovery that these wells have been properly capped, plugged, and closed in accordance with all applicable rules and regulations of the commission or other state agency.

Atlas Environmental Research also performed a search for existing or abandoned oil and natural gas wells within the property boundary. Based on this search, there are no known existing or abandoned on-site crude oil or natural gas wells, or other wells associated with mineral recovery that are under the jurisdiction of the Railroad Commission of Texas. This well report is also provided in Appendix I/IIB.

If any oil or natural gas wells are discovered within the permit boundary, the City of Waco will provide written notification to TCEQ of their location. If any discovered well is within the waste disposal footprint or may impact operations of the landfill, the City of Waco will provide the TCEQ with written certification within 30 days of discovery that these wells have been properly capped, plugged, and closed in accordance with all applicable rules and regulations of the Railroad Commission of Texas.

## 8 TRANSPORTATION (30 TAC §330.61(i))

### 8.1 TRAFFIC INFORMATION

The proposed landfill will be located on FM 939, also known as T K Parkway. The primary access route to the landfill will be via State Highway (SH) 31 and FM 939. Currently, FM 939 is a two-lane asphalt-paved road. SH 31 is a concrete-paved four-lane divided highway that connects the City of Waco to FM 939. The landfill entrance will be located approximately 0.4 mile south of the intersection of SH 31 and FM 939. These existing roadways provide adequate access to the proposed landfill. The proposed access roads for the landfill within a one-mile radius are depicted on Drawing I/II-1 – Site Location Map. Confirmation of coordination with the Texas Department of Transportation (TxDOT), Waco District, is included in Appendix I/IIA.

According to the 2016 Waco District Traffic Map, the traffic counts on FM 939 adjacent to the proposed landfill entrance were 607 vehicles per day. Additionally, according to the same traffic map, traffic counts for SH 31 were 6,063 vehicles per day near the intersection of FM 939 and SH 31, approximately 0.4 mile north of the proposed landfill entrance. The 2016 Waco District Traffic Map is provided in Appendix I/IIID.

The maximum initial increase in vehicle traffic on FM 939 and SH 31 associated with the landfill is estimated to be conservatively 250-450 vehicles per day, based on the initial waste acceptance rate described in Section 2.2.1. Assuming that the waste inflow volume will continue to increase in accordance with growth trends in McLennan County (i.e., 1.25% as provided in Appendix I/IIC), the total vehicle traffic on FM 939 and SH 31 associated with the landfill is estimated to increase to 400-680 vehicles per day over the life of the landfill. This may include transfer trucks, collection trucks and small vehicles, as well as landfill employee vehicles. This estimated increase in traffic is dependent on the method of waste transport (i.e., direct haul vs. use of transfer trailers), the use of the landfill by small vehicles, as well as market dynamics of the waste collection and hauling business.

Based on available information, the existing access roadways are considered to be adequate to handle the estimated increased traffic volumes associated with the proposed landfill. Nevertheless, to provide for enhanced efficiency of vehicle movement, the City is planning to improve the section of FM 939 between SH 31 and the landfill entrance. These proposed improvements include the following:

- a structural overlay on the two-lane road;
- adding eight-foot shoulders on both sides of the road; and
- adding a turning lane for the southbound vehicles entering the landfill.

### 8.2 AIRPORTS (30 TAC §330.619(C)(8) & §330.545)

There are no airports located within a six mile radius of the landfill, as depicted on Drawing I/II-1. Coordination with the FAA is included in Appendix I/IIA. Based on the FAA's response to this coordination, the FAA has no objection to the proposed Type I landfill (see Appendix I/IIA).

## 9.6 UNSTABLE AREAS

The location restriction criteria in 30 TAC §330.559 require engineering measures to be incorporated into the design of a disposal unit located in an unstable area to ensure that the integrity of the structural components of the disposal unit will not be disrupted. Unstable areas, by definition, are areas susceptible to natural or human-induced events or forces that are capable of impairing the integrity of some or all structural components (i.e., liners, leachate collection systems, final covers, etc.) of a disposal unit. Unstable areas can include poor foundation conditions, areas susceptible to mass movement, salt domes, or karst terrain.

Based on information from existing geological and geotechnical data (reference: Bureau of Economic Geology, University of Texas at Austin), unstable areas due to poor foundation conditions, areas susceptible to mass movement, salt domes, or karst terrain do not exist at, or immediately adjacent to the Site. Therefore, additional engineering measures for unstable areas do not need to be incorporated into the design of the landfill. This determination was made based on (1) none of the geological or geotechnical literature reviewed stated that the Wolfe City formation creates unstable areas, and (2) field observations made by experienced, certified professionals did not indicate the existence of unstable areas within the Site. Further information and documentation related to unstable areas will be provided in Part III of the application that further substantiates this determination.



## 10 GROUNDWATER AND SURFACE WATER STATEMENTS (30 TAC §330.(k))

### 10.1 GROUNDWATER STATEMENT

The Trinity Aquifer is the defined major aquifer in this region, which is also located at or near the Site. This aquifer underlies an area of approximately 41,000 square miles. The Trinity Aquifer is composed primarily of Cretaceous sandstone, sand, silt, clay, shale, conglomerate, and carbonates. The stratigraphic units that make up the Trinity Aquifer are generally the basal Hosston and Sligo Formations, and the overlying Travis Peak, Glen Rose, and Paluxy Formations (U.S.G.S., 1996).

The beds of the Trinity Aquifer dip gently to the south-southeast, towards the Gulf, and aquifer thickness increases in that direction. Groundwater gradient is to the southeast except where affected by local pumping, which has created water-level declines of up to 400 feet in the Waco area. The transmissivity of the Trinity Aquifer varies widely due to lithology changes, from about 80 to 5,700 square feet per day (ft<sup>2</sup>/d), and the storage coefficient ranges from about 0.00002 to 0.026. Recharge to the Trinity Aquifer is primarily from precipitation falling in the outcrop areas, approximately 40 miles west of the Site.

The basal Walnut Clay of the Fredericksburg Group functions as the regional upper confining unit to the underlying Trinity Aquifer (Baker, B., G. Duffin, R. Flores, and T. Lynch, 1990. Evaluation of Water Resources in Part of North-Central Texas. Report 318, Texas Water Development Board, Austin, Texas~~Baker et al., 1990~~). The Walnut Clay is approximately 125 to 175 feet thick in the vicinity of the Site (Barnes, V. E., 1970, Geologic Atlas of Texas, Waco Sheet. Booklet to accompany map. The University of Texas at Austin Bureau of Economic Geology).

Liquids resulting from the operation of the landfill will be disposed of in a manner that will not cause adverse impacts to groundwater~~contamination~~.

The proposed landfill is not located over the recharge zone of the Edwards Aquifer as delineated on maps maintained by TCEQ. Therefore, the proposed landfill is not subject to 30 TAC §330.213.

### 10.2 SURFACE WATER STATEMENT

As shown on Drawing I/II-2, the proposed landfill will be located within the drainage basin of the Brazos River. Surface water generally drains southeast from the western portion of the property towards Horse Creek and generally drains south/southwest from the eastern portion of the property towards Horse Creek and Packwood Creek (see Section 3, related to Existing Conditions Summary).

Stormwater runoff from the developed landfill will be conveyed through perimeter drainage channels that discharge into detention basins prior to discharging offsite as overland flow. The

surface water drainage system for the developed landfill will be designed in accordance with 30 TAC §330.63(c). Stormwater will be conveyed from the landfill property into natural drainage features, including Horse and Packwood Creeks. These creeks are tributaries of Soil Conservation Services Site 19 Reservoir, which discharges into Williams Creek located south of the property and eventually flows into Tehuacana Creek approximately 11 miles southwest of the property. Tehuacana Creek discharges into the Brazos River approximately 15 miles southwest of the property.

Liquids resulting from the operation of the landfill will be disposed of in a manner that will not cause adverse impacts to surface water ~~contamination~~. The landfill is being designed to prevent discharge of pollutants into waters of the State or waters of the United States, as defined by the Texas Water Code and the Federal Clean Water Act, §402, as amended, respectively. Consistent with TCEQ requirements, a Notice of Intent (NOI) will be submitted to the TCEQ and a Stormwater Pollution Prevention Plan will be developed prior to the commencement of landfill operations to obtain coverage under the Texas Pollutant Discharge Elimination System (TPDES) General Permit, TXR050000 for Stormwater Discharges associated with Industrial Activity. In addition, an NOI will be submitted the TCEQ and a Stormwater Pollution Prevention Plan will be developed prior to construction to obtain coverage under the TPDES General Permit, TXR150000 for Stormwater Discharges Associated with Construction Activity.

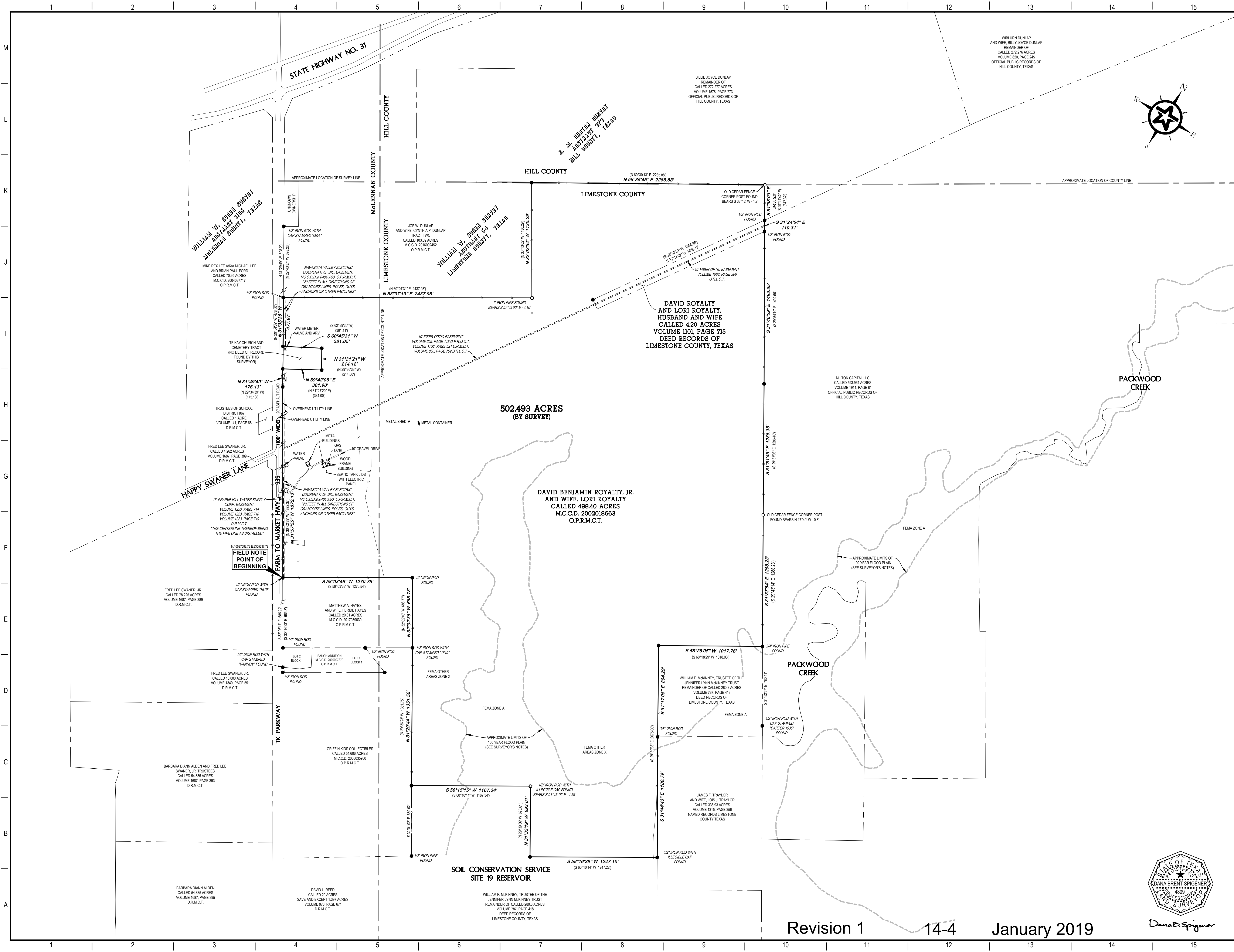
The City will obtain appropriate approvals or permits that may be required by local agencies for connection to a sanitary sewer or installation of an on-site domestic wastewater management system.

## 12 PROTECTION OF ENDANGERED OR THREATENED SPECIES (30 TAC §330.61(n))

See coordination letters to the US Fish and the Texas Parks and Wildlife Department (with attachments) from C. Lee Sherrod of Horizon Environmental Services in Appendix I/IIA. These letters address the TCEQ regulations listed above, noting, “The site is not in an area designated as critical habitat for any listed threatened or endangered species, nor does the site provide suitable habitat for any federally-listed species.” Based on the response from Texas Parks and Wildlife Department (see Appendix I/IIA), the “Wildlife Habitat Assessment Program does not anticipate significant adverse impacts to rare, threatened, or endangered species, or other fish and wildlife resources.”

In view of the above, consistent with 30 TAC §330.61(n), it is concluded that the development and operation of this landfill will not result in the destruction or adverse modification of the critical habitat of endangered or threatened species, or cause or contribute to the taking of threatened or endangered species or result in adverse impact to critical habitat of threatened or endangered species.

**ATTACHMENT 14A**  
**METES AND BOUNDS SURVEY**  
**AND LEGAL DESCRIPTION**



# LEGEND

D.R.M.C.T.	= DEED RECORDS MLENNAN COUNTY, TEXAS
M.C.C.D.	= MLENNAN COUNTY CLERK'S DOCUMENT
O.P.R.M.C.T.	= OFFICIAL PUBLIC RECORDS MLENNAN COUNTY, TEXAS
D.R.L.C.T.	= DEED RECORDS LIMESTONE COUNTY, TEXAS
O.R.L.C.T.	= OFFICIAL RECORDS LIMESTONE COUNTY, TEXAS
( )	= DEED CALLS
○	= 1/2" IRON ROD WITH CAP STAMPED "WALKER PARTNERS" SET
●	= 1/2" IRON ROD WITH CAP STAMPED "4748" FOUND UNLESS LABELED OTHERWISE
—X—	= BARBED WIRE FENCE
W	= WATER VALVE
M	= WATER METER
—○—	= UTILITY POLE
—G—	= GUY WIRE
—E—	= OVERHEAD ELECTRIC LINE

## SURVEYOR'S NOTES

ISSUE DATE: JANUARY 8, 2018

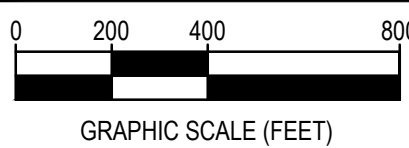
RELEASE DATE: JULY 17, 2018

FIELD NOTES ATTACHED HERETO, MAKE A PART HEREIN. SUBTRACT 1155 IN McLENNAN COUNTY, TEXAS TO THE WILLIAM M. BORNEN SURVEY, ABSTRACT 1155 IN McLENNAN COUNTY, TEXAS AND THE WILLIAM M. BORNEN SURVEY, ABSTRACT 34 IN LAMAR COUNTY, TEXAS.

THE SURVEYOR DID NOT EXAMINE THE SUBJECT TRACT. THIS SURVEY WAS PERFORMED WITH THE BENEFIT OF A TITLE REPORT PROVIDED BY STEWART TITLE GUARANTY COMPANY, FILED # 20070203, WHICH BECAME EFFECTIVE DATE OF DECEMBER 14, 2017.

THE SURVEYOR HAS CONDUCTED A VISUAL INSPECTION OF THE RECORDS OF THE PUBLIC RECORDS RESTRICTIONS ON ENCUMBRANCES EITHER BY RECORD OR NOT BY RECORD WHICH MAY AFFECT THE SUBJECT TRACT. THE EASEMENT INFORMATION SHOWN HEREIN IS BASED ON THE INFORMATION RECORDED IN THE PUBLIC RECORDS.

AFTER THE SURVEYOR HAS CONDUCTED THE VISUAL INSPECTION OF THE RECORDS OF THE PUBLIC RECORDS, THE SURVEYOR HAS DETERMINED THAT THE SURVEYOR HAS THE JURISDICTION OF THE TARRANTIA CREEK WATER CONTROL AND IMPROVEMENT DISTRICT NUMBER (H) OF LEROY, TEXAS AND VOLUME 59 IN PARAGRAPHS 11B, 11C, 11D, 11E, 11F, 11G, 11H, 11I, 11J, 11K, 11L, 11M, 11N, 11O, 11P, 11Q, 11R, 11S, 11T, 11U, 11V, 11W, 11X, 11Y, 11Z, 11AA, 11AB, 11AC, 11AD, 11AE, 11AF, 11AG, 11AH, 11AI, 11AJ, 11AK, 11AL, 11AM, 11AN, 11AO, 11AP, 11AQ, 11AR, 11AS, 11AT, 11AU, 11AV, 11AW, 11AX, 11AY, 11AZ, 11BA, 11BB, 11BC, 11BD, 11BE, 11BF, 11BG, 11BH, 11BI, 11BJ, 11BK, 11BL, 11BM, 11BN, 11BO, 11BP, 11BQ, 11BR, 11BS, 11BT, 11BU, 11BV, 11BW, 11BX, 11BY, 11BZ, 11CA, 11CB, 11CC, 11CD, 11CE, 11CF, 11CG, 11CH, 11CI, 11CJ, 11CK, 11CL, 11CM, 11CN, 11CO, 11CP, 11CQ, 11CR, 11CS, 11CT, 11CU, 11CV, 11CW, 11CX, 11CY, 11CZ, 11DA, 11DB, 11DC, 11DD, 11DE, 11DF, 11DG, 11DH, 11DI, 11DJ, 11DK, 11DL, 11DM, 11DN, 11DO, 11DP, 11DQ, 11DR, 11DS, 11DT, 11DU, 11DV, 11DW, 11DX, 11DY, 11DZ, 11EA, 11EB, 11EC, 11ED, 11EE, 11EF, 11EG, 11EH, 11EI, 11EJ, 11EK, 11EL, 11EM, 11EN, 11EO, 11EP, 11EQ, 11ER, 11ES, 11ET, 11EU, 11EV, 11EW, 11EX, 11EY, 11EZ, 11FA, 11FB, 11FC, 11FD, 11FE, 11FF, 11FG, 11FH, 11FI, 11FJ, 11FK, 11FL, 11FM, 11FN, 11FO, 11FP, 11FQ, 11FR, 11FS, 11FT, 11FU, 11FV, 11FW, 11FX, 11FY, 11FZ, 11GA, 11GB, 11GC, 11GD, 11GE, 11GF, 11GG, 11GH, 11GI, 11GJ, 11GK, 11GL, 11GM, 11GN, 11GO, 11GP, 11GQ, 11GR, 11GS, 11GT, 11GU, 11GV, 11GW, 11GX, 11GY, 11GZ, 11HA, 11HB, 11HC, 11HD, 11HE, 11HF, 11HG, 11HH, 11HI, 11HJ, 11HK, 11HL, 11HM, 11HN, 11HO, 11HP, 11HQ, 11HR, 11HS, 11HT, 11HU, 11HV, 11HW, 11HX, 11HY, 11HZ, 11IA, 11IB, 11IC, 11ID, 11IE, 11IF, 11IG, 11IH, 11II, 11IJ, 11IK, 11IL, 11IM, 11IN, 11IO, 11IP, 11IQ, 11IR, 11IS, 11IT, 11IU, 11IV, 11IW, 11IX, 11IY, 11IZ, 11JA, 11JB, 11JC, 11JD, 11JE, 11JF, 11JG, 11JH, 11JI, 11JJ, 11JK, 11JL, 11JM, 11JN, 11JO, 11JP, 11JQ, 11JR, 11JS, 11JT, 11JU, 11JV, 11JW, 11JX, 11JY, 11JZ, 11KA, 11KB, 11KC, 11KD, 11KE, 11KF, 11KG, 11KH, 11KI, 11KJ, 11KK, 11KL, 11KM, 11KN, 11KO, 11KP, 11KQ, 11KR, 11KS, 11KT, 11KU, 11KV, 11KW, 11KX, 11KY, 11KZ, 11LA, 11LB, 11LC, 11LD, 11LE, 11LF, 11LG, 11LH, 11LI, 11LJ, 11LK, 11LL, 11LM, 11LN, 11LO, 11LP, 11LQ, 11LR, 11LS, 11LT, 11LU, 11LV, 11LW, 11LX, 11LY, 11LZ, 11MA, 11MB, 11MC, 11MD, 11ME, 11MF, 11MG, 11MH, 11MI, 11MJ, 11MK, 11ML, 11MN, 11MO, 11MP, 11MQ, 11MR, 11MS, 11MT, 11MU, 11MV, 11MW, 11MX, 11MY, 11MZ, 11NA, 11NB, 11NC, 11ND, 11NE, 11NF, 11NG, 11NH, 11NI, 11NJ, 11NK, 11NL, 11NM, 11NN, 11NO, 11NP, 11NQ, 11NR, 11NS, 11NT, 11NU, 11NV, 11NW, 11NX, 11NY, 11NZ, 11OA, 11OB, 11OC, 11OD, 11OE, 11OF, 11OG, 11OH, 11OI, 11OJ, 11OK, 11OL, 11OM, 11ON, 11OO, 11OP, 11OQ, 11OR, 11OS, 11OT, 11OU, 11OV, 11OW, 11OX, 11OY, 11OZ, 11PA, 11PB, 11PC, 11PD, 11PE, 11PF, 11PG, 11PH, 11PI, 11PJ, 11PK, 11PL, 11PM, 11PN, 11PO, 11PP, 11PQ, 11PR, 11PS, 11PT, 11PU, 11PV, 11PW, 11PX, 11PY, 11PZ, 11QA, 11QB, 11QC, 11QD, 11QE, 11QF, 11QG, 11QH, 11QI, 11QJ, 11QK, 11QL, 11QM, 11QN, 11QO, 11QP, 11QQ, 11QR, 11QS, 11QT, 11QU, 11QV, 11QW, 11QX, 11QY, 11QZ, 11RA, 11RB, 11RC, 11RD, 11RE, 11RF, 11RG, 11RH, 11RI, 11RJ, 11RK, 11RL, 11RM, 11RN, 11RO, 11RP, 11RQ, 11RR, 11RS, 11RT, 11RU, 11RV, 11RW, 11RX, 11RY, 11RZ, 11SA, 11SB, 11SC, 11SD, 11SE, 11SF, 11SG, 11SH, 11SI, 11SJ, 11SK, 11SL, 11SM, 11SN, 11SO, 11SP, 11SQ, 11SR, 11SS, 11ST, 11SU, 11SV, 11SW, 11SX, 11SY, 11SZ, 11TA, 11TB, 11TC, 11TD, 11TE, 11TF, 11TG, 11TH, 11TI, 11TJ, 11TK, 11TL, 11TM, 11TN, 11TO, 11TP, 11TQ, 11TR, 11TS, 11TT, 11TU, 11TV, 11TW, 11TX, 11TY, 11TZ, 11UA, 11UB, 11UC, 11UD, 11UE, 11UF, 11UG, 11UH, 11UI, 11UJ, 11UK, 11UL, 11UM, 11UN, 11UO, 11UP, 11UQ, 11UR, 11US, 11UT, 11UU, 11UV, 11UW, 11UX, 11UY, 11UZ, 11VA, 11VB, 11VC, 11VD, 11VE, 11VF, 11VG, 11VH, 11VI, 11VJ, 11VK, 11VL, 11VM, 11VN, 11VO, 11VP, 11VQ, 11VR, 11VS, 11VT, 11VU, 11VV, 11VW, 11VX, 11VY, 11VZ, 11WA, 11WB, 11WC, 11WD, 11WE, 11WF, 11WG, 11WH, 11WI, 11WJ, 11WK, 11WL, 11WM, 11WN, 11WO, 11WP, 11WQ, 11WR, 11WS, 11WT, 11WU, 11WV, 11WW, 11WX, 11WY, 11WZ, 11XA, 11XB, 11XC, 11XD, 11XE, 11XF, 11XG, 11XH, 11XI, 11XJ, 11XK, 11XL, 11XM, 11XN, 11XO, 11XP, 11XQ, 11XR, 11XS, 11XT, 11XU, 11XV, 11XW, 11XX, 11XY, 11XZ, 11YA, 11YB, 11YC, 11YD, 11YE, 11YF, 11YG, 11YH, 11YI, 11YJ, 11YK, 11YL, 11YM, 11YN, 11YO, 11YP, 11YQ, 11YR, 11YS, 11YT, 11YU, 11YV, 11YW, 11YX, 11YY, 11YZ, 11ZA, 11ZB, 11ZC, 11ZD, 11ZE, 11ZF, 11ZG, 11ZH, 11ZI, 11ZJ, 11ZK, 11ZL, 11ZM, 11ZN, 11ZO, 11ZP, 11ZQ, 11ZR, 11ZS, 11ZT, 11ZU, 11ZV, 11ZW, 11ZX, 11ZY, 11ZZ, 11AA, 11AB, 11AC, 11AD, 11AE, 11AF, 11AG, 11AH, 11AI, 11AJ, 11AK, 11AL, 11AM, 11AN, 11AO, 11AP, 11AQ, 11AR, 11AS, 11AT, 11AU, 1



2	REVISED TITLE COMMITMENT NOTE	12-18-2018
1	CHANGED TITLE TO "BOUNDARY SURVEY"	08-06-2018
REV.	DESCRIPTION	DATE



**BOUNDARY SURVEY  
502.493 ACRE TRACT**

LOCATED IN THE WILLIAM W. BOREN SURVEY,  
ABSTRACT 1155 IN McLENNAN COUNTY, TEXAS  
AND THE WILLIAM W. BOREN SURVEY,  
ABSTRACT 54 IN LIMESTONE COUNTY, TEXAS,  
AND BEING ALL OF A CALLED 498.40 ACRE  
TRACT DESCRIBED IN A DEED TO DAVID  
BENJAMIN ROYALTY, JR. AND WIFE, LORI  
ROYALTY RECORDED IN McLENNAN COUNTY  
CLERK'S DOCUMENT 2002018663 OF THE  
OFFICIAL PUBLIC RECORDS OF McLENNAN  
COUNTY, TEXAS, AND ALL OF A CALLED 4.20  
ACRE TRACT DESCRIBED IN A DEED TO DAVID  
ROYALTY AND LORI ROYALTY RECORDED IN  
VOLUME 1101, PAGE 715 OF THE DEED  
RECORDS OF LIMESTONE COUNTY, TEXAS

PLAT NUMBER	D1-0439
PROJECT NUMBER	1-03063
DRAWN BY/CHECKED BY	DBS/KRH
FIELD NOTE NO.	FN-01
DRAWING NAME	1-03063BOUNDARY SURVEY.DWG
DRAFT DATE	07/11/2018
SHEET NUMBER	

1 OF 1



Dana B. Spigener

# Revision 1

14-4

# January 2019

## 1.5 LEGAL AUTHORITY (30 TAC §330.59(e))

The applicant, the City of Waco, is an incorporated city in the State of Texas with an estimated population of over 135,000, based on current estimates. A copy of the certified City Charter is provided in Appendix I/IIIF. The City of Waco is the sole owner (100% ownership) of the property proposed for the landfill, as described in the metes and bounds survey included in Section 14, Attachment 14A.

## 16 EVIDENCE OF COMPETENCY (30 TAC §330.59(f))

### 16.1 CITY OF WACO

The applicant, the City of Waco, currently owns and operates a Type 1 MSW Landfill, TCEQ Permit No. MSW-948A (Site 948A). The existing landfill (Site 948A) was initially permitted under MSW Permit No. 948 on July 22, 1977, and subsequently a permit amendment was approved for MSW Permit 948A on September 21, 1987. While Site 948A is the only landfill that the City has operated in the last 10 years, the City previously operated the following MSW landfills, which have been closed in accordance with TCEQ requirements:

- City of Waco Closed Type 1 MSW Landfill, Permit No. 1419 issued on September 3 1981, located on FM 3400 southeast of Waco; stopped accepting waste on June 17, 1986.
- City of Waco Closed Type 1 MSW Landfill, Permit No. 1039 issued on July 22, 1977, located on FM 3400 southeast of Waco; stopped receiving waste on June 24, 1983.

The competency of the City of Waco to operate the proposed landfill is evidenced by the City's operating history, over 20 years of operating Site 948A. The City of Waco has no financial interest in any solid waste facilities in any other states, territories, or countries.

### 16.2 THE CITY OF WACO KEY PERSONNEL

As with Site 948A, the proposed landfill will be administered within the City's Public Works Department. Key personnel include the following: Director of Public Works, Landfill Manager, and Environmental Programs Manager.

- Charles Dowdell, the Director of Public Works for the City, has over 45 years of experience in managing and operating landfills, including nine years with the City of Waco. His pertinent experience includes the following:
  - Two years as landfill manager of Site 948A, responsible for managing landfill staff, equipment maintenance, day-to-day operation of the landfill, regulatory compliance, community relations, and related activities.
  - Seven years as the Director of the Solid Waste Department and more recently as the Director of Public Works. In both positions, he has had the responsibility for the management of the landfill, which includes overseeing the landfill manager, assuring adequate budgets for landfill staff, equipment, and third-party consultants and contractors, and ultimate regulatory compliance for the landfill.
  - Forty years as a consulting engineer, including the design, permitting, construction, monitoring, and operation of landfills. In addition, Mr. Dowdell has a TCEQ MSW Class "A" license, as well as licensed as a Professional Geoscientist.
- David Rydl, Landfill Manager for Site 948A, has over 20 years of experience in managing and operating landfills, including six years with the City of Waco. In the capacity of Landfill Manager for Site 948A, he is responsible for managing landfill staff, equipment maintenance,



day-to-day operation and construction of the landfill consistent with TCEQ requirements, community relations, and related activities. In addition to his experience with the City of Waco, he has over 13 years of similar landfill management experience with other municipal governments. In addition, he has a TCEQ MSW Class “A” license as well as the Manager of Landfill Operations (MOLO) license through the Solid Waste Association of North America (SWANA).

- Anna Dunbar, Environmental Programs Manager for the City of Waco, Public Works Department, has been working with the City for approximately six years. Her prior experience includes the following:
  - Served as TCEQ Waco Regional Office Regional Director for 10 years.
  - Served as the Waste Program Manager in TCEQ Waco Regional Office for one year.
  - Served as an environmental scientist with Nalco Chemical Company over the stormwater, wastewater, and RCRA programs for two years.
  - Served as an Enforcement Coordinator and Assistant Section Chief of Enforcement at the Texas Water Commission in Austin for four years

The City of Waco will ensure that a landfill manager is employed, and serves as the Solid Waste Facility Supervisor as defined in 30 TAC 30.207(2). The landfill manager will have the requisite managerial and technical qualifications to assure that the City’s proposed MSW facilities comply with TCEQ requirements and is trained in the practical aspects of the design, operation, maintenance and supervision of a solid waste facility according to standards, rules or orders established by the TCEQ. These qualifications include the following:

- **Education and/or Experience** – A minimum of five years related experience and/or training, or equivalent combination of education and experience, including a MSW Facility Class A License as a municipal solid waste facility supervisor.
- **Language Skills** – Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence.
- **Mathematical Skills** - Ability to calculate figures and amounts such as area, volume, disposal fees (per TCEQ rules), discounts, interest, and percentages.
- **Problem Solving Skills** - Ability to solve practical problems and deal with a variety of situations where only limited standardization exists.

Additionally, other landfill personnel will include gate attendant, load inspector, equipment operators, and general laborers.

### 16.3 EQUIPMENT TO BE DEDICATED TO THIS LANDFILL

Sufficient equipment will be provided to conduct site operations in accordance with the landfill design and permit conditions. As this landfill is intended to replace the Site 948A, which has a remaining operating life of less than six years, it is assumed that the equipment needs at that time



will be similar to those of Site 948A and will include the following minimum number and types of equipment:

- 2 – Landfill Compactors (Caterpillar 826 or equivalent)
- 2 - Bulldozers (Caterpillar D8 or equivalent)
- 1 - Excavators
- 2 - Off-road dump trucks
- 1 - Motor grader
- 1 - Water truck (minimum 2,000 gallon capacity)

The equipment requirements for this landfill will be based on anticipated solid waste volume and field conditions consistent with 30 TAC §330.127. The Director of Public Works, with input from the Landfill Manager or his designee, will routinely assess the equipment needed to maintain compliance with the TCEQ regulations and make adjustments, as appropriate.

## 16.4 OTHER PERMITS / AUTHORIZATIONS

Consistent with 30 TAC §305.45(a)(7), the following table lists all permits or construction approvals that the City of Waco will apply for related to the proposed landfill.

PERMIT PROGRAM	LANDFILL APPLICABILITY
(A) Hazardous Waste Management Program under the Texas Solid Waste Disposal Act	N.A.
(B) Underground Injection Control Program under the Texas Injection Well Act	N.A.
(C) National Pollutant Discharge Elimination System Program under the Clean Water Act and Waste Discharge Program under Texas Water Code, Chapter 26	See Note 1
(D) Prevention of Significant Deterioration Program under the Federal Clean Air Act (FCAA)	N.A.
(E) Nonattainment Program under the FCAA	N.A.
(F) National emission standards for hazardous air pollutants preconstruction approval under the FCAA	N.A.
(G) Ocean dumping permits under the Marine Protection Research and Sanctuaries Act	N.A.
(H) Dredge or fill permits under the FCAA	N.A.
(I) Licenses under the Texas Radiation Control Act	N.A.
(J) Subsurface area drip dispersal system permits under Texas Water Code, Chapter 32	See Note 2
(K) Other Environmental Permits	See Note 3

**Notes:**

1. See Parts I/II, Section 10, related to compliance with the Texas Water Code and the Federal Clean Water Act.
2. An on-site sanitary sewage system will be developed to serve the employees and visitors of the City's solid waste facilities.
3. At least 120 days prior to commencement of construction of the initial landfill cell, the City will obtain a Standard Air Permit Certification consistent with Chapter 330, Subchapter U. Additionally, The City of Waco will submit an abbreviated Title V application within 90 days of construction and obtain an operating permit consistent with the Title V General Operating Permit prior to the initial acceptance of waste.
4. N.A.: not applicable

## DRAWINGS

- Drawing I/II-1: Site Location Map
- Drawing I/II-2: General Topographic Map (includes Wind Rose)
- Drawing I/II-3: Landowner's Map
- Drawing I/II-4: Aerial Photograph (9 inch X 9 inch)
- Drawing I/II-5: Facility Layout Map
- Drawing I/II-6: Regional Tectonic/Geology Map
- Drawing I/II-7: Seismic Impact Map







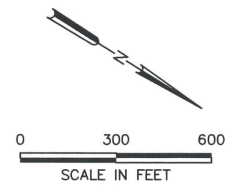






25 CONSTRUCTION BUFFER  
(SEE NOTE 7)

15' PRAIRIE HILL WATER SUPPLY CORP. EASEMENT  
(VOLUME 1223, PAGE 714 D.R.M.C.T.)  
(VOLUME 1223, PAGE 718 D.R.M.C.T.)  
(VOLUME 1223, PAGE 719 D.R.M.C.T.)  
"THE CENTERLINE THEREOF BEING THE PIPE LINE AS INSTALLED"



- NOTES:**

- FOR PERMITTING PURPOSES ONLY**

DRAWING TITLE	FACILITY LAYOUT PLAN
PROJECT TITLE	CITY OF WACO LANDFILL TYPE I MSW - PERMIT APPLICATION

**CLIENT**

NO.	DWN. BY:	Q/A RW BY:	KD
216088.00			

DRAWING NO.

**I/II-5**

**UNMARKED VERSION**



**CITY OF WACO LANDFILL  
TCEQ PERMIT NO. MSW-2400  
McLENNAN AND LIMESTONE COUNTIES, TEXAS**

**PARTS I/II  
GENERAL APPLICATION REQUIREMENTS**

**Prepared for:**

**CITY OF WACO**



Public Works Department  
401 Franklin Avenue  
Waco, TX 76701

**Prepared by:**

**SCS ENGINEERS**

**Texas Board of Professional Engineers, Reg. No. F-3407**  
Dallas/Fort Worth Office  
1901 Central Drive, Suite 550  
Bedford, Texas 76021  
817/571-2288



Revision 0 - August 2018, September 2018 (Admin NOD #1)  
Revision 1 – January 2019  
SCS Project No. 16216088.00



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Drawing I/II-7: Seismic Impact Map

### Appendices

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I/IIC Land-Use Analysis  
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I/IIIE Section 404 Jurisdictional Determination  
I/IIF Certified City Charter



A handwritten signature in blue ink, appearing to read "Ryan R. Kuntz", with the date "1/8/19" written below it.

**SCS Engineers**  
**TBPE Reg. # F-3407**

## 5 LANDOWNERS' MAP AND LIST

In accordance with 30 TAC §330.59(c)(3)(B) and §305.45(a)(6)(D), the landowners' list presents the names and mailing addresses of the landowners of property within one-quarter (1/4) mile of the Site, as provided in Table 5-1. The numbering in the landowners list corresponds to the numbers on Drawing I/II-3, which depicts the locations of the landowners. The landowners' list and map are based on the McLennan, Limestone, and Hill County Appraisal Districts' property records, as of April 2018. Additionally, mineral interest owners shown in Table 5-2 were identified in the real property records for McLennan and Limestone Counties as provided by the Title company. Neither McLennan nor Limestone Counties identify mineral interests in their real property appraisal records.

**Table 5-1 Landowners**

1.	City of Waco 300 Austin Avenue Waco, TX 76702	7.	Te Kay Ranch*	13.	Baugh Connally E 4396 TK Pkwy Axtell, TX 76624
2.	City of Waco 300 Austin Avenue Waco, TX 76702	8.	Lee Mike Rex et al 3096 Happy Swaner Ln Axtell, TX 76624	14.	Griffin Kids Collectables 201 N 38 <sup>th</sup> St Waco, TX 76710
3.	Dunlap Billie J 536 St Hwy 31 Mt. Calm, TX 76673	9.	Swaner Fred Lee Jr 4351 TK Pkwy Axtell, TX 76624	15.	Reed David L 3444 TK Pkwy Axtell, TX 76624
4.	Dunlap Joe W & Cynthia 211 State Hwy 31 Mt. Calm, TX 76673	10.	Swaner Troy Don 3132 Lovers Ln Dallas, TX 75225	16.	Jameson Mary Jo Grubbs Trustee et al 1910 Channing Park Dr Arlington TX 76013
5.	Trayler James F 796 LCR 114 Waco, TX 76705	11.	City of Waco 300 Austin Avenue Waco, TX 76702	17.	Coggin Mary Ruth 532 LCR 112 Axtell, TX 76624
6.	Unknown Ownership*	12.	Foster Jayme L 4418 TK Pkwy Axtell, TX 76624		

\*No information available per Kevin Fikes at the McLennan County Appraisal District

## **7 LAND-USE AND IMPACT ON SURROUNDING AREA (30 TAC §330.61(G) & (H))**

### **7.1 LAND USE ANALYSIS (30 TAC §330.61(G) & (H)(1)-(4))**

See report by John Worrall Consulting LLC in Appendix I/IIC, which addresses the TCEQ regulations listed above.

### **7.2 WATER WELLS WITHIN 500 FEET (30 TAC §330.61(H)(5)) AND ONE-MILE (30 TAC 305.45(A)(6)(A))**

A water well search was performed by Atlas Environmental Research for water wells located within 500 feet and one-mile of the property. This water well search indicates no known water wells within 500 feet of the permit boundary, and no known in use water wells exist within the property boundary. There are two existing water wells within one-mile of the property boundary, one located approximately 1,900 feet northwest and one located approximately 1,150 feet northeast of the property boundary. The locations of both water wells are depicted on Drawings I/II-2 and I/II-4. This water well reports are provided in Appendix I/IIB.

### **7.3 ABANDONED OIL AND WATER WELLS (30 TAC §330.61(L))**

There are no known existing or abandoned water wells situated within the permit boundary. If water wells are discovered on the Site, the City of Waco will provide the TCEQ with written certification within 30 days of discovery that these wells have been properly capped, plugged, and closed in accordance with all applicable rules and regulations of the commission or other state agency.

Atlas Environmental Research also performed a search for existing or abandoned oil and natural gas wells within the property boundary. Based on this search, there are no known existing or abandoned on-site crude oil or natural gas wells, or other wells associated with mineral recovery that are under the jurisdiction of the Railroad Commission of Texas. This well report is also provided in Appendix I/IIB.

If any oil or natural gas wells are discovered within the permit boundary, the City of Waco will provide written notification to TCEQ of their location. If any discovered well is within the waste disposal footprint or may impact operations of the landfill, the City of Waco will provide the TCEQ with written certification within 30 days of discovery that these wells have been properly capped, plugged, and closed in accordance with all applicable rules and regulations of the Railroad Commission of Texas.



## 8 TRANSPORTATION (30 TAC §330.61(i))

### 8.1 TRAFFIC INFORMATION

The proposed landfill will be located on FM 939, also known as T K Parkway. The primary access route to the landfill will be via State Highway (SH) 31 and FM 939. Currently, FM 939 is a two-lane asphalt-paved road. SH 31 is a concrete-paved four-lane divided highway that connects the City of Waco to FM 939. The landfill entrance will be located approximately 0.4 mile south of the intersection of SH 31 and FM 939. These existing roadways provide adequate access to the proposed landfill. The proposed access roads for the landfill within a one-mile radius are depicted on Drawing I/II-1 – Site Location Map. Confirmation of coordination with the Texas Department of Transportation (TxDOT), Waco District, is included in Appendix I/IIA.

According to the 2016 Waco District Traffic Map, the traffic counts on FM 939 adjacent to the proposed landfill entrance were 607 vehicles per day. Additionally, according to the same traffic map, traffic counts for SH 31 were 6,063 vehicles per day near the intersection of FM 939 and SH 31, approximately 0.4 mile north of the proposed landfill entrance. The 2016 Waco District Traffic Map is provided in Appendix I/IIID.

The maximum initial increase in vehicle traffic on FM 939 and SH 31 associated with the landfill is estimated to be conservatively 450 vehicles per day, based on the initial waste acceptance rate described in Section 2.2.1. Assuming that the waste inflow volume will continue to increase in accordance with growth trends in McLennan County (i.e., 1.25% as provided in Appendix I/IIC), the total vehicle traffic on FM 939 and SH 31 associated with the landfill is estimated to increase to 680 vehicles per day over the life of the landfill. This may include transfer trucks, collection trucks and small vehicles, as well as landfill employee vehicles. This estimated increase in traffic is dependent on the method of waste transport (i.e., direct haul vs. use of transfer trailers), the use of the landfill by small vehicles, as well as market dynamics of the waste collection and hauling business.

Based on available information, the existing access roadways are considered to be adequate to handle the estimated increased traffic volumes associated with the proposed landfill. Nevertheless, to provide for enhanced efficiency of vehicle movement, the City is planning to improve the section of FM 939 between SH 31 and the landfill entrance. These proposed improvements include the following:

- a structural overlay on the two-lane road;
- adding eight-foot shoulders on both sides of the road; and
- adding a turning lane for the southbound vehicles entering the landfill.

### 8.2 AIRPORTS (30 TAC §330.619(C)(8) & §330.545)

There are no airports located within a six mile radius of the landfill, as depicted on Drawing I/II-1. Coordination with the FAA is included in Appendix I/IIA. Based on the FAA's response to this coordination, the FAA has no objection to the proposed Type I landfill (see Appendix I/IIA).

## 9.6 UNSTABLE AREAS

The location restriction criteria in 30 TAC §330.559 require engineering measures to be incorporated into the design of a disposal unit located in an unstable area to ensure that the integrity of the structural components of the disposal unit will not be disrupted. Unstable areas, by definition, are areas susceptible to natural or human-induced events or forces that are capable of impairing the integrity of some or all structural components (i.e., liners, leachate collection systems, final covers, etc.) of a disposal unit. Unstable areas can include poor foundation conditions, areas susceptible to mass movement, salt domes, or karst terrain.

Based on information from existing geological and geotechnical data (reference: Bureau of Economic Geology, University of Texas at Austin), unstable areas due to poor foundation conditions, areas susceptible to mass movement, salt domes, or karst terrain do not exist at, or immediately adjacent to the Site. Therefore, additional engineering measures for unstable areas do not need to be incorporated into the design of the landfill. This determination was made based on (1) none of the geological or geotechnical literature reviewed stated that the Wolfe City formation creates unstable areas, and (2) field observations made by experienced, certified professionals did not indicate the existence of unstable areas within the Site. Further information and documentation related to unstable areas will be provided in Part III of the application that further substantiates this determination.

## 10 GROUNDWATER AND SURFACE WATER STATEMENTS (30 TAC §330.(k))

### 10.1 GROUNDWATER STATEMENT

The Trinity Aquifer is the defined major aquifer in this region, which is also located at or near the Site. This aquifer underlies an area of approximately 41,000 square miles. The Trinity Aquifer is composed primarily of Cretaceous sandstone, sand, silt, clay, shale, conglomerate, and carbonates. The stratigraphic units that make up the Trinity Aquifer are generally the basal Hosston and Sligo Formations, and the overlying Travis Peak, Glen Rose, and Paluxy Formations (U.S.G.S., 1996).

The beds of the Trinity Aquifer dip gently to the south-southeast, towards the Gulf, and aquifer thickness increases in that direction. Groundwater gradient is to the southeast except where affected by local pumping, which has created water-level declines of up to 400 feet in the Waco area. The transmissivity of the Trinity Aquifer varies widely due to lithology changes, from about 80 to 5,700 square feet per day (ft<sup>2</sup>/d), and the storage coefficient ranges from about 0.00002 to 0.026. Recharge to the Trinity Aquifer is primarily from precipitation falling in the outcrop areas, approximately 40 miles west of the Site.

The basal Walnut Clay of the Fredericksburg Group functions as the regional upper confining unit to the underlying Trinity Aquifer (Baker, B., G. Duffin, R. Flores, and T. Lynch, 1990. Evaluation of Water Resources in Part of North-Central Texas. Report 318, Texas Water Development Board, Austin, Texas). The Walnut Clay is approximately 125 to 175 feet thick in the vicinity of the Site (Barnes, V. E., 1970, Geologic Atlas of Texas, Waco Sheet. Booklet to accompany map. The University of Texas at Austin Bureau of Economic Geology).

Liquids resulting from the operation of the landfill will be disposed of in a manner that will not cause adverse impacts to groundwater.

The proposed landfill is not located over the recharge zone of the Edwards Aquifer as delineated on maps maintained by TCEQ. Therefore, the proposed landfill is not subject to 30 TAC §330.213.

### 10.2 SURFACE WATER STATEMENT

As shown on Drawing I/II-2, the proposed landfill will be located within the drainage basin of the Brazos River. Surface water generally drains southeast from the western portion of the property towards Horse Creek and generally drains south/southwest from the eastern portion of the property towards Horse Creek and Packwood Creek (see Section 3, related to Existing Conditions Summary).

Stormwater runoff from the developed landfill will be conveyed through perimeter drainage channels that discharge into detention basins prior to discharging offsite as overland flow. The surface water drainage system for the developed landfill will be designed in accordance with 30

TAC §330.63(c). Stormwater will be conveyed from the landfill property into natural drainage features, including Horse and Packwood Creeks. These creeks are tributaries of Soil Conservation Services Site 19 Reservoir, which discharges into Williams Creek located south of the property and eventually flows into Tehuacana Creek approximately 11 miles southwest of the property. Tehuacana Creek discharges into the Brazos River approximately 15 miles southwest of the property.

Liquids resulting from the operation of the landfill will be disposed of in a manner that will not cause adverse impacts to surface water. The landfill is being designed to prevent discharge of pollutants into waters of the State or waters of the United States, as defined by the Texas Water Code and the Federal Clean Water Act, §402, as amended, respectively. Consistent with TCEQ requirements, a Notice of Intent (NOI) will be submitted to the TCEQ and a Stormwater Pollution Prevention Plan will be developed prior to the commencement of landfill operations to obtain coverage under the Texas Pollutant Discharge Elimination System (TPDES) General Permit, TXR050000 for Stormwater Discharges associated with Industrial Activity. In addition, an NOI will be submitted the TCEQ and a Stormwater Pollution Prevention Plan will be developed prior to construction to obtain coverage under the TPDES General Permit, TXR150000 for Stormwater Discharges Associated with Construction Activity.

The City will obtain appropriate approvals or permits that may be required by local agencies for connection to a sanitary sewer or installation of an on-site domestic wastewater management system.

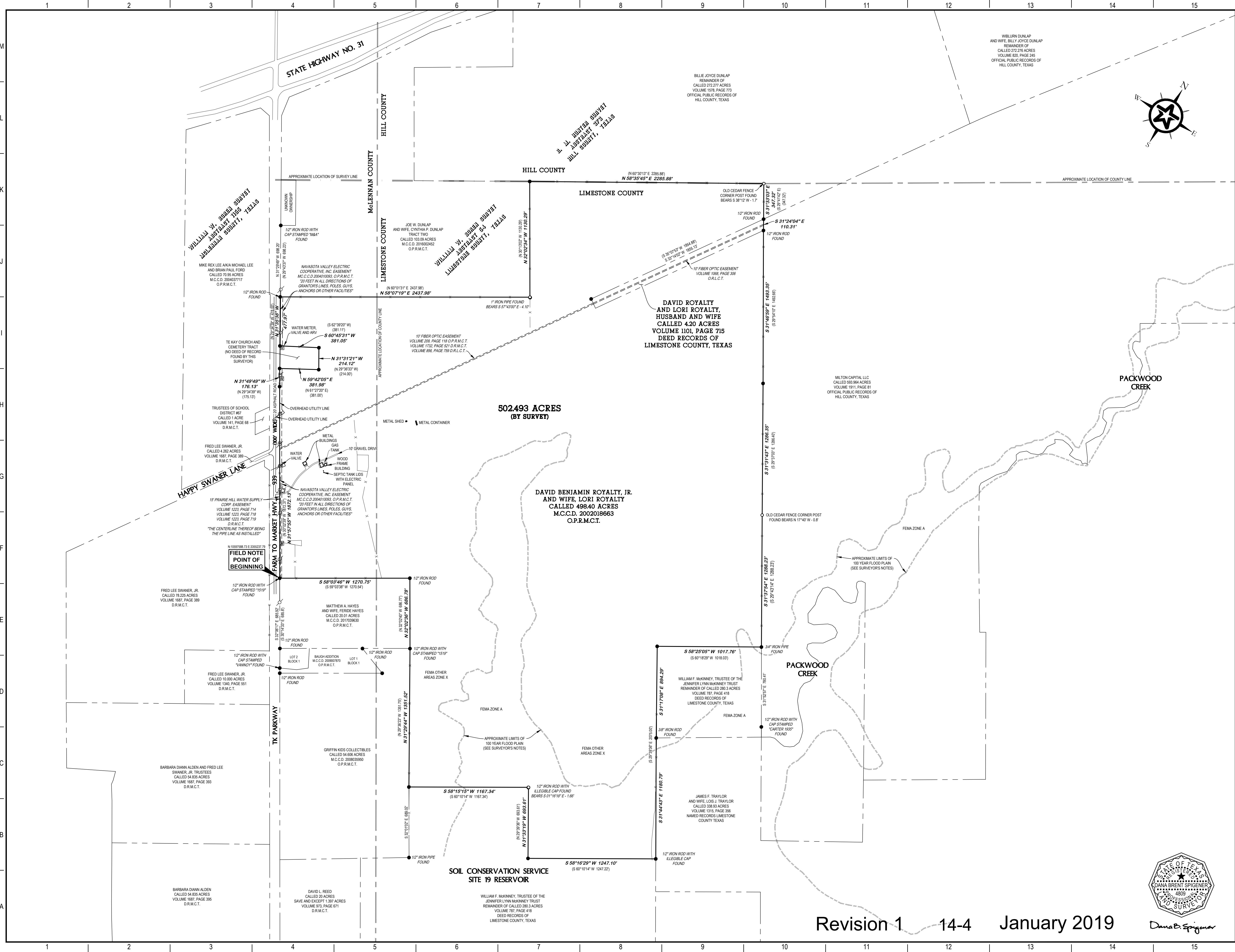


## 12 PROTECTION OF ENDANGERED OR THREATENED SPECIES (30 TAC §330.61(n))

See coordination letters to the US Fish and the Texas Parks and Wildlife Department (with attachments) from C. Lee Sherrod of Horizon Environmental Services in Appendix I/IIA. These letters address the TCEQ regulations listed above, noting, “The site is not in an area designated as critical habitat for any listed threatened or endangered species, nor does the site provide suitable habitat for any federally-listed species.” Based on the response from Texas Parks and Wildlife Department (see Appendix I/IIA), the “Wildlife Habitat Assessment Program does not anticipate significant adverse impacts to rare, threatened, or endangered species, or other fish and wildlife resources.”

In view of the above, consistent with 30 TAC §330.61(n), it is concluded that the development and operation of this landfill will not result in the destruction or adverse modification of the critical habitat of endangered or threatened species, or cause or contribute to the taking of threatened or endangered species or result in adverse impact to critical habitat of threatened or endangered species.

**ATTACHMENT 14A**  
**METES AND BOUNDS SURVEY**  
**AND LEGAL DESCRIPTION**



LEGEND

D.R.M.C.T.

= DEED RECORDS McLENNAN COUNTY, TEXAS

M.C.C.D.

= McLENNAN COUNTY CLERK'S DOCUMENT

O.P.R.M.C.T.

= OFFICIAL PUBLIC RECORDS McLENNAN COUNTY, TEXAS

D.R.L.C.T.

= DEED RECORDS LIMESTONE COUNTY, TEXAS

O.R.L.C.T.

= OFFICIAL RECORDS LIMESTONE COUNTY, TEXAS

( )

= DEED CALLS

○

= 1/2" IRON ROD WITH CAP STAMPED "WALKER PARTNERS" SET

●

= 1/2" IRON ROD WITH CAP STAMPED "4148" FOUND UNLESS LABELED OTHERWISE

—X—

= BARBED WIRE FENCE

⋈

= WATER VALVE

⊠

= WATER METER

—○—

= UTILITY POLE

—

= GUY WIRE

—E—

= OVERHEAD ELECTRIC LINE

SURVEYOR'S NOTES

SURVEY DATE: JANUARY & FEBRUARY, 2018

RELEASE DATE: JULY 18, 2018

FIELD NOTES ATTACHED HERETO, MADE A PART HEREOF AND TITLED:

502.493 ACRES LOCATED IN THE WILLIAM W. BOREN SURVEY, ABSTRACT 1155 IN McLENNAN COUNTY, TEXAS AND THE WILLIAM W. BOREN SURVEY, ABSTRACT 54 IN LIMESTONE COUNTY, TEXAS

THE SURVEYOR DID NOT ABSTRACT THE SUBJECT TRACT. THIS SURVEY WAS PERFORMED WITH THE BENEFIT OF A TITLE REPORT PROVIDED BY STEWART TITLE GUARANTY COMPANY, FILE NO. 20173029, WHICH BEARS AN EFFECTIVE DATE OF DECEMBER 14, 2017. THE EASEMENT INFORMATION SHOWN HEREON IS BASED ON THE EASEMENTS IDENTIFIED IN SCHEDULE "B".

A FLOWAGE EASEMENT EXISTS ON THE SUBJECT PROPERTY THAT IS UNDER THE JURISDICTION OF THE TISHUACANA CREEK WATER CONTROL AND IMPROVEMENT DISTRICT NUMBER ONE (1) OF LEROY, TEXAS RECORDED IN VOLUME 498, PAGE 118, VOLUME 506, PAGE 891, VOLUME 507, PAGE 276, AND VOLUME 509, PAGE 417 OF THE DEED RECORDS OF LIMESTONE COUNTY, TEXAS.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) NOTE: BY GRAPHIC PLOTTING ONLY THIS PROPERTY IS IN FEMA "SPECIAL FLOOD HAZARD AREAS" ZONE A AND FEMA "OTHER AREAS" ZONE X AS SHOWN ON THE FLOOD INSURANCE RATE MAP, LIMESTONE COUNTY, TEXAS, COMMUNITY PANEL: 480101.0001, A, WHICH BEARS AN EFFECTIVE DATE OF JUNE 1, 1987. THIS FLOOD STATEMENT DOES NOT IMPLY THAT THIS TRACT WILL, OR WILL NOT FLOOD, NOR DOES IT CREATE ANY LIABILITY IN SUCH EVENT ON THE PART OF THIS SURVEYOR OR COMPANY.

EXPLANATION OF FEMA ZONES:

FEMA "SPECIAL FLOOD HAZARD AREAS" ZONE A = NO BASE FLOOD ELEVATIONS DETERMINED.

FEMA "OTHER AREAS" ZONE X = AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

THE BEARINGS AND GRID COORDINATES SHOWN HEREON ARE BASED UPON THE TEXAS STATE PLANE COORDINATE SYSTEM, NAD 83, TEXAS CENTRAL ZONE.

0 200 400 800

GRAPHIC SCALE (FEET)

2	REVISED TITLE COMMITMENT NOTE	12-18-2018
1	CHANGED TITLE TO "BOUNDARY SURVEY"	08-06-2018
REV	DESCRIPTION	DATE

☆

Walker Partners

engineers ★ surveyors

320 Washington Avenue • Waco, Texas 76701

Phone: 1-254-774-1402 • T.B.P.E. Registration No. 3055

T.B.P.L.S. Registration No. 10032500

BOUNDARY SURVEY

502.493 ACRE TRACT

LOCATED IN THE WILLIAM W. BOREN SURVEY, ABSTRACT 1155 IN McLENNAN COUNTY, TEXAS AND THE WILLIAM W. BOREN SURVEY, ABSTRACT 54 IN LIMESTONE COUNTY, TEXAS, AND BEING ALL OF A CALLED 498.40 ACRE TRACT DESCRIBED IN A DEED TO DAVID BENJAMIN ROYALTY, JR. AND WIFE, LORI ROYALTY RECORDED IN McLENNAN COUNTY CLERK'S DOCUMENT 2002018663 OF THE OFFICIAL PUBLIC RECORDS OF McLENNAN COUNTY, TEXAS, AND ALL OF A CALLED 4.20 ACRE TRACT DESCRIBED IN A DEED TO DAVID ROYALTY AND LORI ROYALTY RECORDED IN VOLUME 1101, PAGE 715 OF THE DEED RECORDS OF LIMESTONE COUNTY, TEXAS

PLAT NUMBER	D1-0439
PROJECT NUMBER	1-03063
DRAWN BY/CHECKED BY	DBSKRH
FIELD NOTE NO.	FN-01
DRAWING NAME	1-03063BOUNDARY SURVEY.DWG
DRAFT DATE	07/11/2018
SHEET NUMBER	1 OF 1

STATE OF TEXAS

REGISTERED

DANA BRENT SPIGENER

4809

PROFESSIONAL SURVEYOR

Dana B. Spigner

Revision 1 14-4 January 2019

## 1.5 LEGAL AUTHORITY (30 TAC §330.59(e))

The applicant, the City of Waco, is an incorporated city in the State of Texas with an estimated population of over 135,000, based on current estimates. A copy of the certified City Charter is provided in Appendix I/IIIF. The City of Waco is the sole owner (100% ownership) of the property proposed for the landfill, as described in the metes and bounds survey included in Section 14, Attachment 14A.

## 16 EVIDENCE OF COMPETENCY (30 TAC §330.59(f))

### 16.1 CITY OF WACO

The applicant, the City of Waco, currently owns and operates a Type 1 MSW Landfill, TCEQ Permit No. MSW-948A (Site 948A). The existing landfill (Site 948A) was initially permitted under MSW Permit No. 948 on July 22, 1977, and subsequently a permit amendment was approved for MSW Permit 948A on September 21, 1987. While Site 948A is the only landfill that the City has operated in the last 10 years, the City previously operated the following MSW landfills, which have been closed in accordance with TCEQ requirements:

- City of Waco Closed Type 1 MSW Landfill, Permit No. 1419 issued on September 3 1981, located on FM 3400 southeast of Waco; stopped accepting waste on June 17, 1986.
- City of Waco Closed Type 1 MSW Landfill, Permit No. 1039 issued on July 22, 1977, located on FM 3400 southeast of Waco; stopped receiving waste on June 24, 1983.

The competency of the City of Waco to operate the proposed landfill is evidenced by the City's operating history, over 20 years of operating Site 948A. The City of Waco has no financial interest in any solid waste facilities in any other states, territories, or countries.

### 16.2 THE CITY OF WACO KEY PERSONNEL

As with Site 948A, the proposed landfill will be administered within the City's Public Works Department. Key personnel include the following: Director of Public Works, Landfill Manager, and Environmental Programs Manager.

- Charles Dowdell, the Director of Public Works for the City, has over 45 years of experience in managing and operating landfills, including nine years with the City of Waco. His pertinent experience includes the following:
  - Two years as landfill manager of Site 948A, responsible for managing landfill staff, equipment maintenance, day-to-day operation of the landfill, regulatory compliance, community relations, and related activities.
  - Seven years as the Director of the Solid Waste Department and more recently as the Director of Public Works. In both positions, he has had the responsibility for the management of the landfill, which includes overseeing the landfill manager, assuring adequate budgets for landfill staff, equipment, and third-party consultants and contractors, and ultimate regulatory compliance for the landfill.
  - Forty years as a consulting engineer, including the design, permitting, construction, monitoring, and operation of landfills. In addition, Mr. Dowdell has a TCEQ MSW Class "A" license, as well as licensed as a Professional Geoscientist.
- David Rydl, Landfill Manager for Site 948A, has over 20 years of experience in managing and operating landfills, including six years with the City of Waco. In the capacity of Landfill Manager for Site 948A, he is responsible for managing landfill staff, equipment maintenance,

day-to-day operation and construction of the landfill consistent with TCEQ requirements, community relations, and related activities. In addition to his experience with the City of Waco, he has over 13 years of similar landfill management experience with other municipal governments. In addition, he has a TCEQ MSW Class “A” license as well as the Manager of Landfill Operations (MOLO) license through the Solid Waste Association of North America (SWANA).

- Anna Dunbar, Environmental Programs Manager for the City of Waco, Public Works Department, has been working with the City for approximately six years. Her prior experience includes the following:
  - Served as TCEQ Waco Regional Office Regional Director for 10 years.
  - Served as the Waste Program Manager in TCEQ Waco Regional Office for one year.
  - Served as an environmental scientist with Nalco Chemical Company over the stormwater, wastewater, and RCRA programs for two years.
  - Served as an Enforcement Coordinator and Assistant Section Chief of Enforcement at the Texas Water Commission in Austin for four years

The City of Waco will ensure that a landfill manager is employed, and serves as the Solid Waste Facility Supervisor as defined in 30 TAC 30.207(2). The landfill manager will have the requisite managerial and technical qualifications to assure that the City’s proposed MSW facilities comply with TCEQ requirements and is trained in the practical aspects of the design, operation, maintenance and supervision of a solid waste facility according to standards, rules or orders established by the TCEQ. These qualifications include the following:

- **Education and/or Experience** – A minimum of five years related experience and/or training, or equivalent combination of education and experience, including a MSW Facility Class A License as a municipal solid waste facility supervisor.
- **Language Skills** – Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence.
- **Mathematical Skills** - Ability to calculate figures and amounts such as area, volume, disposal fees (per TCEQ rules), discounts, interest, and percentages.
- **Problem Solving Skills** - Ability to solve practical problems and deal with a variety of situations where only limited standardization exists.

Additionally, other landfill personnel will include gate attendant, load inspector, equipment operators, and general laborers.

### 16.3 EQUIPMENT TO BE DEDICATED TO THIS LANDFILL

Sufficient equipment will be provided to conduct site operations in accordance with the landfill design and permit conditions. As this landfill is intended to replace the Site 948A, which has a remaining operating life of less than six years, it is assumed that the equipment needs at that time

will be similar to those of Site 948A and will include the following minimum number and types of equipment:

- 2 – Landfill Compactors (Caterpillar 826 or equivalent)
- 2 - Bulldozers (Caterpillar D8 or equivalent)
- 1 - Excavators
- 2 - Off-road dump trucks
- 1 - Motor grader
- 1 - Water truck (minimum 2,000 gallon capacity)

The equipment requirements for this landfill will be based on anticipated solid waste volume and field conditions consistent with 30 TAC §330.127. The Director of Public Works, with input from the Landfill Manager or his designee, will routinely assess the equipment needed to maintain compliance with the TCEQ regulations and make adjustments, as appropriate.

## 16.4 OTHER PERMITS / AUTHORIZATIONS

Consistent with 30 TAC §305.45(a)(7), the following table lists all permits or construction approvals that the City of Waco will apply for related to the proposed landfill.

PERMIT PROGRAM	LANDFILL APPLICABILITY
(A) Hazardous Waste Management Program under the Texas Solid Waste Disposal Act	N.A.
(B) Underground Injection Control Program under the Texas Injection Well Act	N.A.
(C) National Pollutant Discharge Elimination System Program under the Clean Water Act and Waste Discharge Program under Texas Water Code, Chapter 26	See Note 1
(D) Prevention of Significant Deterioration Program under the Federal Clean Air Act (FCAA)	N.A.
(E) Nonattainment Program under the FCAA	N.A.
(F) National emission standards for hazardous air pollutants preconstruction approval under the FCAA	N.A.
(G) Ocean dumping permits under the Marine Protection Research and Sanctuaries Act	N.A.
(H) Dredge or fill permits under the FCAA	N.A.
(I) Licenses under the Texas Radiation Control Act	N.A.
(J) Subsurface area drip dispersal system permits under Texas Water Code, Chapter 32	See Note 2
(K) Other Environmental Permits	See Note 3

**Notes:**

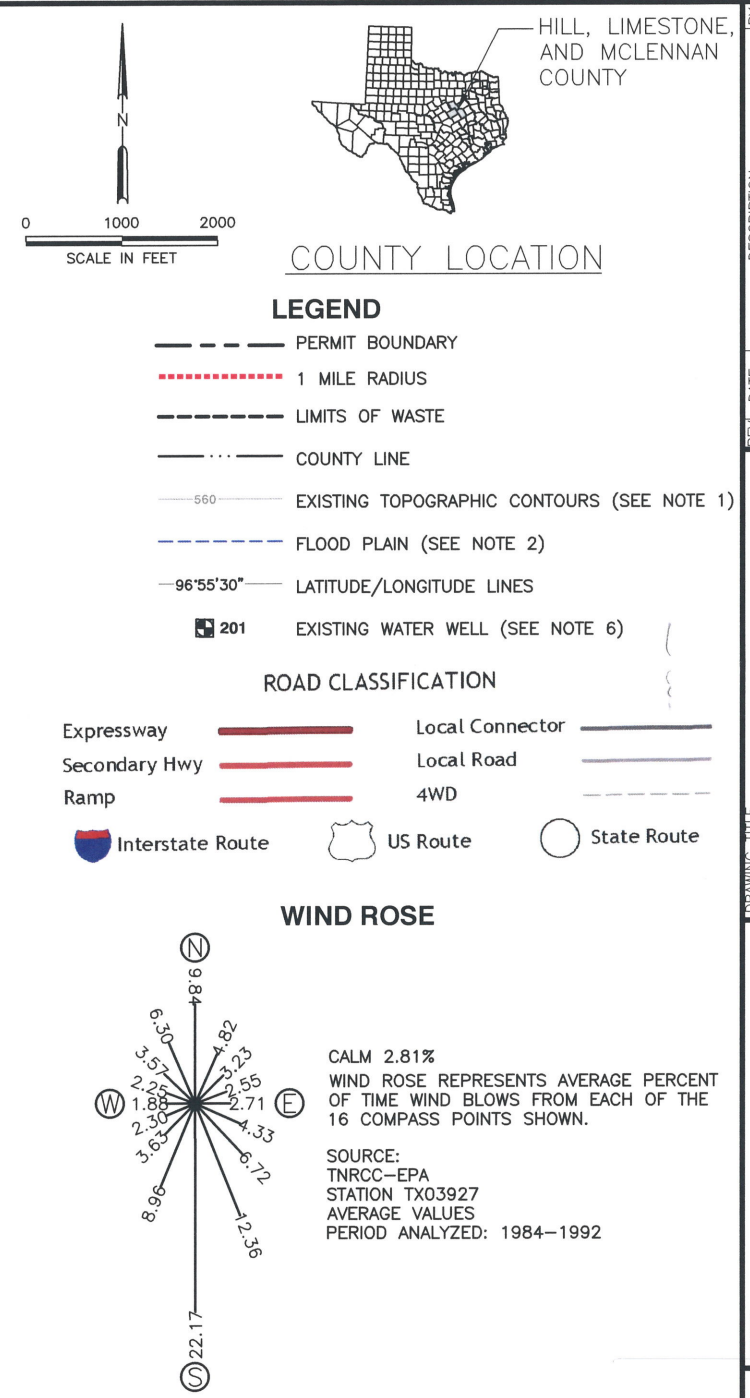
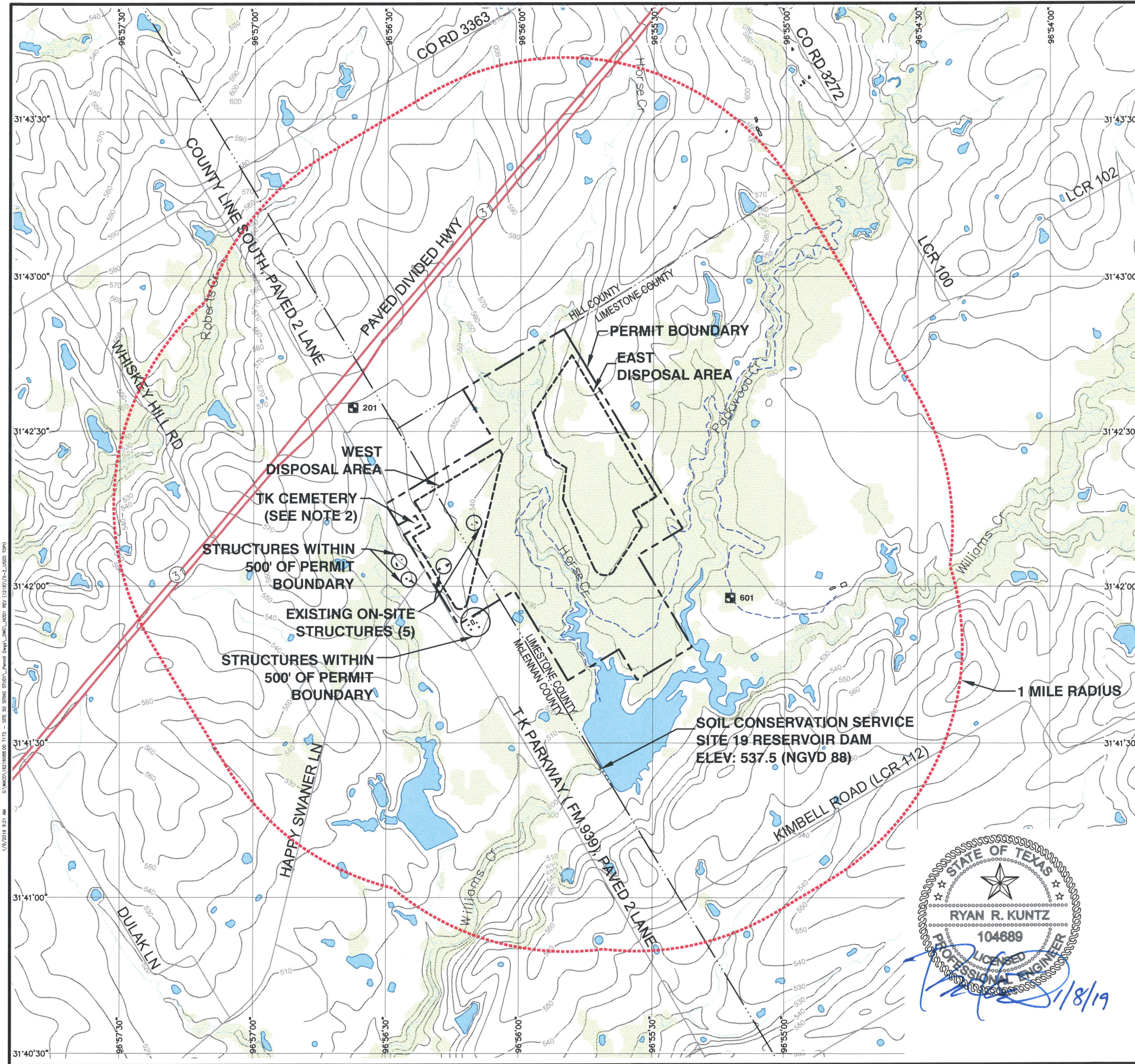
1. See Parts I/II, Section 10, related to compliance with the Texas Water Code and the Federal Clean Water Act.
2. An on-site sanitary sewage system will be developed to serve the employees and visitors of the City's solid waste facilities.
3. At least 120 days prior to commencement of construction of the initial landfill cell, the City will obtain a Standard Air Permit Certification consistent with Chapter 330, Subchapter U. Additionally, The City of Waco will submit an abbreviated Title V application within 90 days of construction and obtain an operating permit consistent with the Title V General Operating Permit prior to the initial acceptance of waste.
4. N.A.: not applicable



## DRAWINGS

- Drawing I/II-1: Site Location Map
- Drawing I/II-2: General Topographic Map (includes Wind Rose)
- Drawing I/II-3: Landowner's Map
- Drawing I/II-4: Aerial Photograph (9 inch X 9 inch)
- Drawing I/II-5: Facility Layout Map
- Drawing I/II-6: Regional Tectonic/Geology Map
- Drawing I/II-7: Seismic Impact Map





- NOTES:**
1. CONTOURS SHOWN ARE FROM THE 24K QUAD MAP FOR AXTELL, TEXAS (2016) PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY.
  2. 100-YEAR FLOOD PLAIN IS DESIGNATED AS ZONE A, BASED ON FIRM PANEL 48293C0125C, DATED 09/16/11.
  3. ALL KNOWN STRUCTURES AND INHABITABLE BUILDINGS WITHIN 500 FEET OF PERMIT BOUNDARY ARE SHOWN.
  4. THERE ARE NO KNOWN WATER WELLS WITHIN 500 FT. OF THE PROPOSED PERMIT BOUNDARY IN ACCORDANCE WITH PARTS 1/I, SECTION 7.2.
  5. BASED ON SCS' SITE INVESTIGATIONS, NO SPRINGS WERE OBSERVED ON THE SITE.
  6. EXISTING WATER WELL WITHIN ONE-MILE OF PERMIT BOUNDARY (SEE ATLAS ENVIRONMENTAL RESEARCH REPORT, APPENDIX 1/IIB).
  7. IN ACCORDANCE WITH "AN INTENSIVE CULTURAL RESOURCES SURVEY OF THE CITY OF WACO'S PROPOSED SITE 50 LANDFILL PROJECT," PREPARED BY HORIZON ENVIRONMENTAL SERVICES, INC., DATED NOVEMBER 2018 (SEE APPENDIX 1/IIA), A 25-FOOT CONSTRUCTION BUFFER WILL BE MAINTAINED AROUND TK CEMETERY TO PROTECT ANY POTENTIAL UNMARKED GRAVES OUTSIDE THE PRESENT MODERN DAY CEMETERY BOUNDARIES AND FENCING.



FOR PERMITTING PURPOSES ONLY

DRAWING TITLE GENERAL TOPOGRAPHIC MAP	REV	DATE	DESCRIPTION	BY
	1	12/2018	REVISION FOR PART 1/I NOD 1	RRK
PROJECT TITLE CITY OF WACO LANDFILL TYPE I MSW - PERMIT APPLICATION	CLIENT CITY OF WACO 501 SHROEDER WACO, TEXAS 76710			
	PROJ. NO.	DWG. BY	CHECK BY	APP. BY
	15216088.00	KDY	KDY	RRK
CADD FILE: 11-2_USGS TOPO				
DATE: 08/2018				
SCALE: AS SHOWN				
DRAWING NO. 1/II-2				

1/7/2018 9:21 AM C:\WACO\15216088.00\_1172 - SITE 50 STING STUDY\Permit\_Dwg\Topo\11-2\_USGS TOPO









HAPPY  
SWANER LN.

25 CONSTRUCTION BUFFER  
(SEE NOTE 7)

15' PRAIRIE HILL WATER SUPPLY CORP. EASEMENT  
(VOLUME 1223, PAGE 714 D.R.M.C.T.)  
(VOLUME 1223, PAGE 718 D.R.M.C.T.)  
(VOLUME 1223, PAGE 719 D.R.M.C.T.)

McLENNAN COUNTY  
LIMESTONE COUNTY

**WEST DISPOSAL AREA**  
**PEAK FINAL COVER ELEV.: 665.3 FT MSL**  
**62.8 ACRES**

TERMINATE FENCE AT  
ELEVATION 520 FT. MSL.

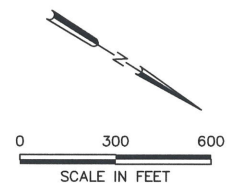
**EAST DISPOSAL AREA -  
PEAK FINAL COVER ELEV.: 704.3 FT MSL  
112.9 ACRES**

(VOLUME 209, PAGE 118 O.P.R.M.C.T.)  
(VOLUME 1732, PAGE 521 D.R.M.C.T.).  
(VOLUME 856, PAGE 759 D.R.L.C.T.)












MAINTENANCE/ADMINISTRATION  
BUILDING

EQUIPMENT STAGING  
AREA = 1.5 ACRES

10' FIBER OPTIC EASEMENT  
(VOLUME 1068, PAGE 306  
O.R.L.C.T.)



—560— EXISTING TOPOGRAPHIC CONTOURS  
(SEE NOTE 1)

-  PERMIT BOUNDARY  
 LIMITS OF WASTE  
 SECTOR BOUNDARY  
 COUNTY LINE  
 100-YEAR FLOOD PLAIN  
 (SEE NOTE 2)  
 LATITUDE/LONGITUDE LINES  
 PERIMETER FENCE  
 8' PRIVACY FENCE  
 ACCESS ROAD  
 GROUNDWATER MONITOR WELL  
 (SEE NOTE 6)  
 SECTOR DESIGNATION  
 (SEE NOTE 5)

1. CONTOURS SHOWN ARE FROM THE 24K QUAD MAP FOR AXTELL, TEXAS (2016) PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY.
2. 100--YEAR FLOOD PLAIN IS DESIGNATED AS ZONE A, BASED ON FIRM PANEL 48293C0125C, DATED 09/16/11.
3. FIBER OPTIC LINE EASEMENT, VOLUME 209, PAGE 118 MCLENNAN CO. RECORDS, IF EXISTING AT TIME OF LANDFILL DEVELOPMENT, WILL BE RELOCATED PRIOR TO CONSTRUCTION OF SECTORS 9 THROUGH 13 AND WILL BE VACATED. IF FIBER LINE IS NOT INSTALLED WITHIN EASEMENT, THEN EASEMENT IS ABANDONED ON ITS OWN TERMS.
4. A FLOWAGE EASEMENT EXISTS ON THE PROPERTY THAT IS UNDER THE JURISDICTION OF THE TECHUACANA CREEK WATER CONTROL AND IMPROVEMENT DISTRICT NUMBER (1) OF LEROY, TEXAS SUBJECT TO THE EASEMENT RECORDED IN VOLUME 498, PAGE 118, VOLUME 506, PAGE 181, VOLUME 507, PAGE 378, AND VOLUME 509, PAGE 417 OF THE DEED RECORDS OF LIMESTONE COUNTY, TEXAS.
5. SECTOR DEVELOPMENT SEQUENCE REPRESENTED BY SECTOR NUMBER, MAY BE DEVELOPED IN SMALLER INCREMENTS (AKA SUBSECTORS OR CELLS) WITH LINER CERTIFICATIONS SUBMITTED SEPARATELY TO TCEQ.
6. SUBJECT TO THE APPROVAL OF THE TCEQ, THE LOCATIONS OF GROUNDWATER MONITORING WELLS WILL BE CONFIRMED OR ADJUSTED BASED ON THE RESULTS OF THE SITE HYDROGEOLOGIC CHARACTERIZATION TO BE INCLUDED IN PART III OF THE PERMIT APPLICATION, CONSISTENT WITH 30 TAC §330.61(D)(3) AND §330.403.
7. IN ACCORDANCE WITH "AN INTENSIVE CULTURAL RESOURCES SURVEY OF THE CITY OF WACO'S PROPOSED SITE 50 LANDFILL PROJECT," PREPARED BY HORIZON ENVIRONMENTAL SERVICES, INC., DATED NOVEMBER 2018 (SEE APPENDIX I/IIA), A 25--FOOT CONSTRUCTION BUFFER WILL BE MAINTAINED AROUND TK CEMETERY TO PROTECT ANY POTENTIAL UNMARKED GRAVES OUTSIDE THE PRESENT MODERN DAY CEMETERY BOUNDARIES AND FENCING.

**FOR PERMITTING PURPOSES ONLY**

SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 190 CENTRAL DRIVE, SUITE 500, BEDFORD, TX 76021 PH (817) 371-2288 FAX NO. (817) 371-2188						CLIENT					
						DRAWING TITLE <b>FACILITY LAYOUT PLAN</b>					
						PROJECT TITLE <b>CITY OF WACO LANDFILL TYPE I MSW - PERMIT APPLICATION</b>					
CADD FILE: N=5-FACILITY LAYOUT						PROJ. NO. 16216083.00					
DATE: 08/2018						DGN. BY: JKY					
SCALE: AS SHOWN						DGN. BY: RPK					
DRAWING NO. <b>I/I-5</b>						CHK. BY: KDY					
						APP. BY: RPK					
						REV. DATE DESCRIPTION					
						A 12/2018 REVISIONS					
						RRK					
						TEXAS BOARD OF PROFESSIONAL ENGINEERS REG. NO. F-3407					

## **APPENDIX I/IIA**

### **DEMONSTRATION OF COORDINATION (30 TAC 330.51(b)(5-10))**

- Coordination with Texas Parks and Wildlife Department
- Coordination with U.S. Department of the Interior, Fish and Wildlife Service
- Coordination with Texas Historic Commission
- Coordination with U.S. Army Corp of Engineers
- Coordination with Texas Department of Transportation
- Coordination with Heart of Texas Council of Governments
- Coordination with Federal Aviation Administration

**COORDINATION WITH TEXAS  
PARKS AND WILDLIFE DEPARTMENT**

## Lee Sherrod

---

**From:** Richard Hanson <Richard.Hanson@tpwd.texas.gov>  
**Sent:** Wednesday, October 10, 2018 7:57 AM  
**To:** Lee Sherrod  
**Subject:** Proposed New Waco Landfill (TPWD# 40806)

Hi Lee,

Thank you for submitting the proposed New Waco Landfill located in McLennan and Limestone Counties for review. Based on a review of the documentation and description provided, the Wildlife Habitat Assessment Program does not anticipate significant adverse impacts to rare, threatened, or endangered species, or other fish and wildlife resources. However, please note it is the responsibility of the project proponent to comply with all federal, state, and local laws that protect fish and wildlife. Provided the project plans do not change, TPWD considers coordination to be complete.

Rick Hanson  
Wildlife Habitat Assessment Program  
Texas Parks and Wildlife Department  
1702 Landmark Lane, Suite 3  
Lubbock, TX 79415  
Office: (806) 761-4936  
Richard.Hanson@tpwd.texas.gov

## **COORDINATION WITH TEXAS HISTORIC COMMISSION**



## Russ Brownlow

---

**From:** noreply@thc.state.tx.us  
**Sent:** Thursday, August 30, 2018 10:57 AM  
**To:** Russ Brownlow; reviews@thc.state.tx.us; james.e.barrera@usace.army.mil  
**Subject:** Project Review: 201812382



**TEXAS HISTORICAL COMMISSION**  
*real places telling real stories*

Re: Project Review under Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas

**201812382**

Proposed City of Waco Site 50 Landfill  
FM 939 and Happy Swaner Lane  
Waco, TX

Dear Russ Brownlow:

Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act and the Antiquities Code of Texas.

The review staff led by Rebecca Shelton and Caitlin Brashear has completed its review and has made the following determinations based on the information submitted for review:

### **Above-Ground Resources**

- THC/SHPO unable to complete review at this time based on insufficient documentation. A supplemental review must be submitted, and the 30-day review period will begin upon receipt of adequate documentation.

### **Archeology Comments**

- An archeological survey of the project area is needed .

**We have the following comments:** Above-ground resources that are 45 years of age and older will need to be identified and assessed in and around the proposed project area. According to our maps, the project area has never been surveyed. We concur that the potential exists for undocumented aboriginal archeological deposits within the boundaries of the study area. An intensive archeological survey of the entire project area should be conducted by a professional archeologist. In addition, archival research of the T K cemetery should be conducted to verify the recommended avoidance buffer is sufficient.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: [rebecca.shelton@thc.texas.gov](mailto:rebecca.shelton@thc.texas.gov),

caitlin.brashear@thc.texas.gov.

Sincerely,

A handwritten signature in cursive script, appearing to read "Rebecca Shelton".

For Mark Wolfe, State Historic Preservation Officer  
Executive Director, Texas Historical Commission

**Please do not respond to this email.**

cc: james.e.barrera@usace.army.mil



Environmental Services, Inc.

28 November 2018

Mr. Mark Wolfe  
Texas Historical Commission  
P.O. Box 12276  
Austin, Texas 78711-2276

**RE: Draft Report Submittal  
City of Waco  
Proposed Site 50 Landfill Project  
McLennan and Limestone Counties, Texas  
Antiquities Code of Texas (City of Waco) - TAC Permit No. 8566  
Section 106 (USACE)  
HJN 150184 AR 003**

Dear Mr. Wolfe:

Please find enclosed for your review a copy of the draft report entitled *An Intensive Cultural Resources Survey of the City of Waco's Proposed Site 50 Landfill Project in McLennan and Limestone Counties, Texas*.

Between 25 and 28 September 2018, Horizon Environmental Services, Inc. (Horizon) conducted an intensive cultural resources survey of the City of Waco's proposed 351.0-acre Site 50 Landfill Project located northeast of Waco in eastern McLennan County and northwestern Limestone County, Texas (Project Area). The currently proposed landfill design plan includes 2 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 noted waste disposal areas, buildings, roadways, and all other ancillary disturbances associated with the undertaking total approximately 351.0 acres within the overall 502.5-acre tract. For purposes of this investigation and report, the 351.0 acres where proposed impacts will occur are considered to be the Project Area.

As the proposed development would be owned by the City of Waco, a political subdivision of the state of Texas, the project would fall under the jurisdiction of the Antiquities Code of Texas (ACT). Additionally, impacts to any "waters of the US" on the tract would fall under the jurisdiction of the US Army Corps of Engineers (USACE) in compliance with Section 404 of the Clean Water Act (CWA). As a result, the portions of the development within the purview of the USACE would also fall under the regulations of Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. At the request of Lloyd Gosselink Rochelle & Townsend, P.C. (LGRT), Horizon conducted the cultural resources survey of the Project Area on behalf of the City of Waco in compliance with the ACT and Section 106 of the NHPA. The

**CORPORATE HEADQUARTERS**

1507 S Interstate 35 ★ Austin, TX 78741-2502 ★ (512) 328-2430 ★ [www.horizon-esi.com](http://www.horizon-esi.com)  
An LJA Company

purpose of the survey was to determine if any significant archeological deposits are located within the Project Area and, if any exist, to determine if the project has the potential to have any adverse effects on sites eligible for formal designation as State Antiquities Landmarks (SALs) or sites listed on or considered eligible for listing on the National Register of Historic Places (NRHP). The cultural resources investigations were conducted under Texas Antiquities Committee (TAC) permit no. 8566.

The cultural resources survey of the Project Area resulted in the documentation of 6 newly recorded archeological sites (41ML324, 41LT481, 41LT482, 41LT483, 41LT484, and 41ML325). Five of the newly recorded sites are historic in nature. These include 2 historic-era farmsteads (41ML324 and 41LT484), a segment of a historic-era railroad grade (41LT481), a historic-era refuse dump (41LT483), and a historic-era corral feature (41ML325). It is Horizon's opinion that none of these 5 sites qualifies for inclusion in the NRHP under Criteria A, B, or C, nor do they qualify for formal designations as SALs. The sixth site, 41LT482, was recorded as a prehistoric campsite. It is Horizon's opinion that this site does not qualify for inclusion in the NRHP under Criterion D, nor does it qualify for formal designation as a SAL.

In addition to the documentation of 6 newly recorded archeological sites, the investigations also resulted in an evaluation of the boundaries of the TK Cemetery that is located immediately adjacent to the western boundary of the Project Area. In order to protect any unmarked graves that could potentially be present outside of modern cemetery boundaries, the Texas Historical Commission (THC) requires a construction buffer measuring at least 25.0 feet (7.6 meters [m]) away from the marked cemetery boundaries. Archival research into the TK Church and Cemetery property indicates that FM 939 has encroached into the original parcel boundary along FM 939, though all other boundaries appear to remain largely unaltered since its dedication in 1930. As a result, it is Horizon's opinion that the required 25.0-foot (7.6-m) construction buffer is adequate to protect any potential unmarked graves that could be present adjacent to the modern cemetery fencing. Horizon recommends that the project design plans include this mandatory construction buffer.

Based on the assessment that sites 41ML324, 41LT481, 41LT482, 41LT483, 41LT484, and 41ML325 are not eligible for inclusion in the NRHP and do not warrant formal designation as SALs, it is Horizon's opinion that the development of the proposed Site 50 Landfill Project will pose no adverse effects to significant cultural resources that are eligible for formal designation as SALs or that are listed on or considered eligible for listing on the NRHP. It is also Horizon's opinion that a 25.0-foot (7.6-m) construction buffer around the TK Cemetery is adequate to ensure the protection of any potential unmarked graves that could be present adjacent to the modern cemetery fencing. Horizon therefore recommends that the undertaking be allowed to proceed relative to the jurisdiction of the ACT, the USACE, and Section 106 of the NHPA. However, in the unlikely event that any cultural materials (including human remains or burial features) are inadvertently discovered at any point during construction, use, or ongoing maintenance within the Project Area, even in previously surveyed areas, all work at the location of the discovery should cease immediately, and the THC should be notified of the discovery.

On behalf of the City of Waco, Horizon is requesting documented consultation with your office in regard to compliance with the ACT and Section 106 of the NHPA. Should you concur with Horizon's findings and recommendations, please sign below and return.

Sincerely,  
For Horizon Environmental Services, Inc.



Russ Brownlow, MA, RPA  
President

---

Concurrence / Date

Enclosures (1)

## **Russ Brownlow**

---

**From:** Info\_Tech@thc.state.tx.us  
**Sent:** Wednesday, November 28, 2018 9:52 AM  
**To:** Russ Brownlow  
**Subject:** Project Review Submission

**Thank you for submitting project:** City of Waco Site 50 Landfill Project

**Tracking Number:** 201902523

**Due Date:** 12/28/2018 9:21:18 AM

**TEXAS HISTORICAL COMMISSION**

# TEXAS HISTORICAL COMMISSION

*real places telling real stories*

December 21, 2018

Russ Brownlow  
Horizon Environmental Services, Inc.  
1507 South IH-35  
Austin, Texas 78741

Re: Project review under Section 106 of the National Historic Preservation Act of 1966 and the Antiquities Code of Texas, Draft Report: *An Intensive Cultural Resources Survey of the City of Waco's Proposed Site 50 Landfill Project in McLennan and Limestone Counties* (USACE, Fort Worth District/City of Waco/THC 201902523)

Dear Mr. Brownlow:

This letter serves as comment on the federal undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), and the state agency responsible for administering the Antiquities Code of Texas.

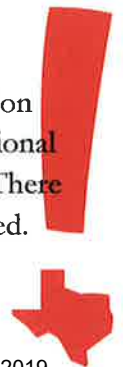
We concur that sites **41ML324, 41LT481, 41LT483, 41LT484** and **41LT325** are **ineligible** for listing on the National Register of Historic Places (NRHP) or as State Antiquities Landmarks (SALs). These sites lack significant deposits of cultural material and do not meet NRHP criteria. No further investigations are required at these sites.

However, in order to complete our review of the draft report, we require additional information. In the Abstract and Introduction, please clarify which portions of the 502.5-acre tract are within the US Army Corps of Engineers (USACE) jurisdictional areas and show these areas on the USGS map.

Please provide additional information on the selective collection strategy utilized. Specifically, please indicate which artifacts were not collected but tabulated, assessed, and photographed in the field. While the artifacts are generally described in the Appendix Shovel Test (ST) Table A-1, it is not clear which artifacts were collected for curation. Please include this information, along with photos of artifacts not collected, in the Appendix.

In Table A-1, the ST associated with site delineation (negative and positive) should be grouped together for clear reference, not in numerical order.

We require additional information to assess the prehistoric site **41LT482**. While the site discussion mentions 6 ST to define the site boundary, and 5 were negative, Figure 6-19 clearly shows additional ST outside of the site boundary. These ST should be considered as part of the site delineation. There are no negative ST north of BS27, or west of FD25, therefore these boundaries are undetermined.



How was the soil evaluated for flora remains? Was flotation utilized? What screening methods were used? In the site discussion under "Horizontal and Vertical Extents of the Cultural Material" please specify which ST had cultural deposits to the 60 cm depth, and describe the proximity of additional shovel tests to this location. Please clarify which ST contained the "possible thermal feature" and at what depth the FCR was located.

The trenches excavated at the site should be shown on Figure 6-19, and clearly referenced in the Appendix Table B-2. BHT2 and BHT3 profiles list a temporary trinomial of 41W-3, please clarify which site these were excavated at. Please describe how much of the soil from the trenches within site 41LT482 was screened, and what selection method was utilized.

For the **TK Cemetery** discussion, please replace Figure 4-11 with a map and/or aerial with the entire cemetery boundary (historic and modern), showing the proposed 25-foot avoidance buffer in relation to the proposed project boundary. Please note that the 25-foot avoidance buffer is specific to the THC Memorandum of Agreement with TxDOT for linear projects. It is through archival research and field investigations that avoidance buffers for development are determined for historic cemeteries.

While the archival research for the TK Cemetery is extensive, there does not appear to be any field investigations to support the proposed avoidance buffer, specifically for the north, south and eastern boundaries. Of the 74 reported/recorded burials, how many headstones or grave markers were identified during the field visit?

Thank you for your cooperation in this federal and state review process, and for your efforts to preserve the irreplaceable heritage of Texas. If you have any questions concerning our review or if we can be of further assistance, please contact **Rebecca Shelton at 512.463.6043 or Rebecca.Shelton@thc.texas.gov.**

Sincerely,



for

Mark Wolfe  
State Historic Preservation Officer  
MW/rls





**COORDINATION WITH  
TEXAS DEPARTMENT OF TRANSPORTATION**



7479 Bagby Ave. | WACO, TEXAS 76645 | (254) 772-2890 | WWW.TXDOT.GOV

August 20, 2018

SCS Engineers  
1901 Central Drive, Ste. 550  
Bedford, TX 76021

Re: SCS Project Number: 16216088.00  
Traffic Information

Dear Mr. Yard & Kuntz:

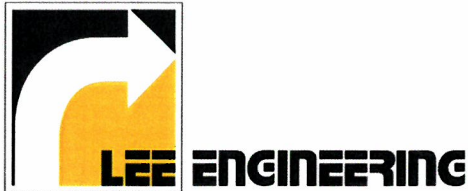
This letter is in response to your request for confirmation of SCS having coordinated with TXDOT for this proposed facility and data on the current volume of traffic on access roads within one mile of proposed property, and this information is listed below.

<u>Roads</u>	<u>Volume</u>	<u>Year</u>
SH 31	5,950	2016
FM 939	757	2016
US 84	4,482	2016
FM 1330	978	2016
FM 2311	1,046	2016
FM 339	827	2016
FM 308	1,392	2016

If you have any questions or concerns, please contact the Texas Department of Transportation at (254) 772-2890.

Sincerely,

Charles Smith  
Area Engineer



ARIZONA  
TEXAS  
NEW MEXICO  
OKLAHOMA

December 10, 2018

Mr. Charles Smith  
Area Engineer  
Texas Department of Transportation  
7479 Bagby Avenue  
Waco, Texas 76745

RE: *Requested Traffic Information – Proposed City of Waco Facility along FM 939*

Dear Mr. Smith:

The purpose of this letter is to provide updated information for the proposed City of Waco facility along FM 939. The projected average daily traffic and heavy vehicle percentage for the facility are presented below:

Year	Average Daily Traffic (Veh)	Heavy Vehicle Percentage	Comment
2024	450	65%	Assumed Site Opening
2059	680	65%	Assumed Site Closure

This daily traffic estimate includes landfill employee vehicles, small vehicles, collection trucks and transfer trucks. The estimated average daily traffic and heavy vehicle percentage is dependent on the method of waste transport (i.e., direct haul vs. use of transfer trailers), the use of the facility by small vehicles, as well as market dynamics of the waste collection and hauling business.

The traffic analysis is ongoing and final recommendations are not available.

The facility entrance is currently proposed to be located along the north side of FM 939 approximately 2,050 feet from the SH 31 intersection. At this time, the City is planning to improve the section of FM 939 between SH 31 and the facility entrance. These proposed improvements include the following:

1. a structural overlay on the two-lane road (to the extent required after future TxDOT improvements along FM 939 are in place);
2. adding eight-foot shoulders on both sides of the road; and
3. adding a southbound left-turn lane for vehicles entering the facility access.

As we are addressing questions from TCEQ, we would appreciate your written response and concurrence with these proposed improvements. If you have any questions, please contact me at (972) 456-9013.

Sincerely,

John P. Denholm III, P.E., PTOE  
Senior Project Manager  
Lee Engineering

3030 Lyndon B Johnson Freeway, Suite 1660, Dallas, TX 75234  
(972) 248-3006 | [www.leeengineering.com](http://www.leeengineering.com) | TBPE F-450



**COORDINATION WITH  
HEART OF TEXAS COUNCIL OF GOVERNMENTS (HOTCOG)**



Judge Scott Felton  
President

Councilmember Alice Rodriguez  
Vice President

Judge Don Pool  
Secretary/Treasurer

Russell Devorsky  
Executive Director

**HEART OF TEXAS  
COUNCIL OF GOVERNMENTS**

November 13, 2018

Chance Goodin, MC 124  
TCEQ  
P.O. Box 13087  
Austin, Texas 78711-3087

RE: City of Waco Disposal Facility

Dear Mr. Goodin,

The City of Waco is applying to the Texas Commission on Environmental Quality (TCEQ) for a permit to establish a new Type IV landfill, City of Waco Disposal Facility.

This letter is to advise you that the Heart of Texas Council of Governments (HOTCOG) staff and Board of Directors have reviewed the City of Waco Disposal Facility application located in McLennan/Limestone County, approximately 0.4 miles of the intersection of SH31 and T.K. Parkway. After considering staff comments, the HOTCOG Board of Directors found the City of Waco Disposal Facility project to be consistent with regional plans, policies, and HOTCOG review criteria.

The HOTCOG Board took this action at its meeting on October 11, 2018. Please contact Falen Bohannon at 254-292-1870 or [falen.bohannon@hot.cog.tx.us](mailto:falen.bohannon@hot.cog.tx.us) if you have any questions or require additional information.

Sincerely,

Russell Devorsky  
Executive Director

*A Voluntary Association of Local Governments*  
1514 South New Road, Waco, Texas 76711 • 254-292-1800 • Fax 254-756-0102



## **COORDINATION WITH FEDERAL AVIATION ADMINISTRATION**



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Federal Aviation Administration  
Southwest Region, Airports Division  
Safety and Standards Branch

10101 Hillwood Parkway  
Fort Worth, Texas 76177

August 29, 2018

Kevin D. Yard, P.E., BCEE  
Vice President/Office Director  
SCS Engineers  
1901 Central Drive Suite 550  
Bedford, TX 76021

**Subject: Airport Location Request  
Proposed City of Waco Landfill  
TCEQ Permit Application - McLennan and Limestone Counties, TX  
FAA File No. 2018-013-TX**

Dear Mr. Yard:

This letter is in response to your August 7, 2018 letter advising us of the application being prepared by SCS Engineers for submittal to TCEQ regarding a proposed landfill to be located on the border of McLennan and Limestone Counties, TX.

In order to process this request, please proceed with electronic filing of FAA Form 7460-1. This form and the instructions for electronic filing can be obtained at: <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>. Please contact this office via email at the address below once FAA Form 7460-1 has been electronically submitted and accepted.

This site has been assigned our file No. 2018-013-TX. Please refer to this number in any future correspondence regarding this site. Thank you for coordinating this project with us. If there are any questions, you can contact me at 817-222-5671 or [gary.loftus@faa.gov](mailto:gary.loftus@faa.gov).

Sincerely,

Gary Joseph Loftus  
Digitally signed by Gary  
Joseph Loftus  
Date: 2018.08.29  
10:19:31 -05'00'

Gary J. Loftus, A.A.E.  
Airports Compliance Program Manager  
Airport Certification Safety Inspector  
FAA Southwest Region Airports Division

cc: Texas Department of Transportation  
Division of Aviation  
125 East 11th Street  
Austin, TX 78701-2483



Mail Processing Center  
Federal Aviation Administration  
Southwest Regional Office  
Obstruction Evaluation Group  
10101 Hillwood Parkway  
Fort Worth, TX 76177

Aeronautical Study No.  
2018-ASW-13879-OE

Issued Date: 09/19/2018

Ryan Kuntz  
SCS Engineers  
1901 Central Drive  
Suite 550  
Bedford, TX 76021

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Landfill City of Waco Landfill TCEQ Permit No.MSW-2400
Location:	Leroy, TX
Latitude:	31-42-26.30N NAD 83
Longitude:	96-55-12.60W
Heights:	554 feet site elevation (SE) 150 feet above ground level (AGL) 704 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

FAA Advisory Circular 150/5200-33B, Hazardous Wildlife Attractants on or Near Airports, identifies this land use as a hazardous wildlife attractant, and provides procedures and conditions to ensure compatibility with safe airport operations. You must contact Gary J Loftus (817-222-6571) before beginning any construction at the site to verify that no potential to attract hazardous wildlife on or near public-use airports exists.

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 03/19/2020 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

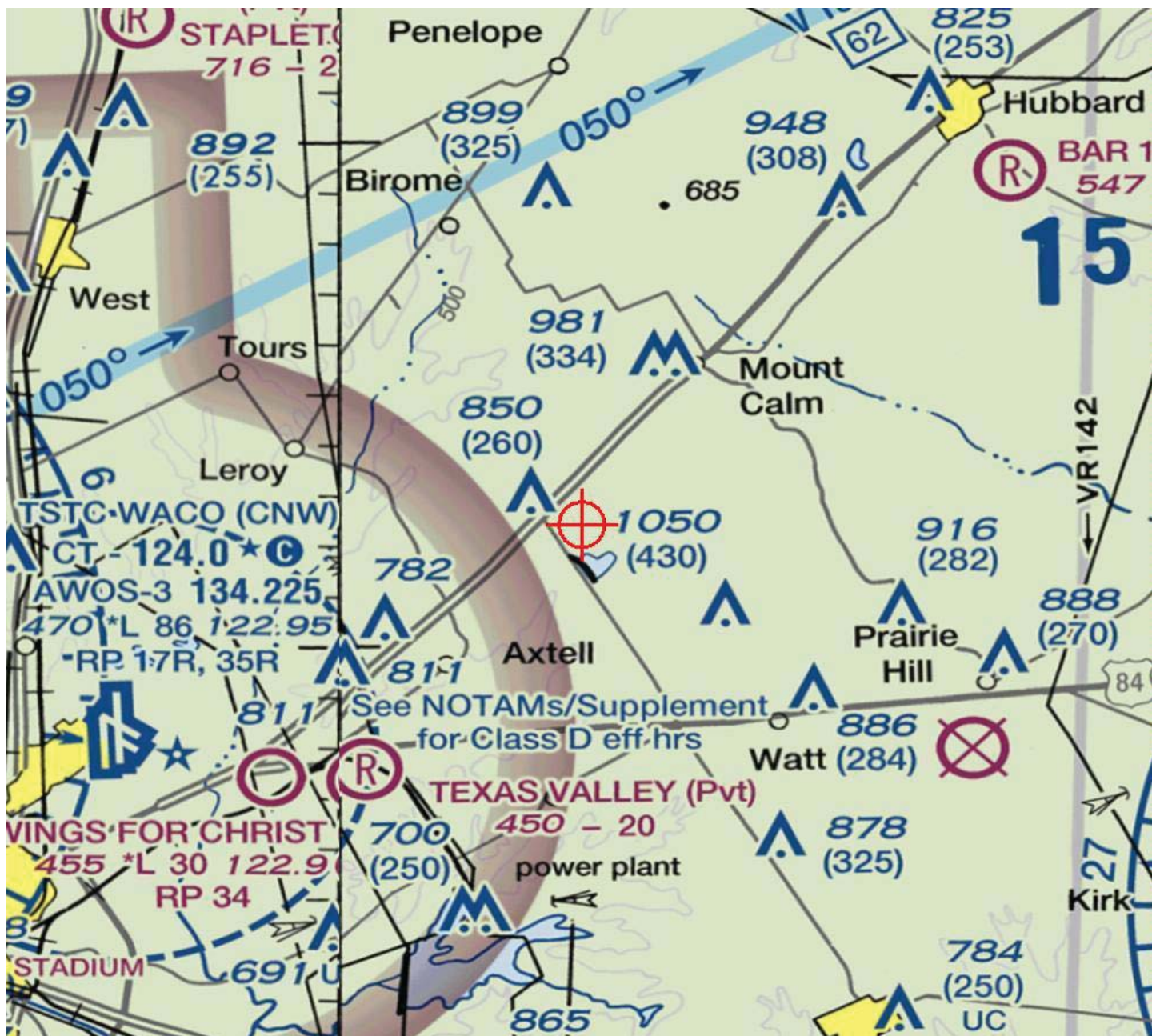
If we can be of further assistance, please contact our office at (817) 222-5929, or [chris.shoulders@faa.gov](mailto:chris.shoulders@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-ASW-13879-OE.

**Signature Control No: 384454990-385513539**

( DNE )

Chris Shoulders  
Specialist

Attachment(s)  
Map(s)







U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Federal Aviation Administration  
Southwest Region, Airports Division  
Safety and Standards Branch

10101 Hillwood Parkway  
Fort Worth, Texas 76177

October 15, 2018

Michael W. Dmyterko, C.M.  
Coffman Associates Airport Consultants  
237 NW Blue Parkway Suite 100  
Lee's Summit, MO 64063

**Subject: Airport Location Request  
Proposed City of Waco Landfill Type I MSWF  
TCEQ Permit Application - McLennan and Limestone Counties, TX  
FAA File No. 2018-013-TX**

Dear Mr. Dmyterko:

This letter is in response to our telephone call of October 15, 2018 regarding the proposed location for a Type I MSW Landfill serving McLennan and Limestone Counties, Texas.

Using coordinates 31 42' 26.30" N and 96 55' 12.60" W, we determined there are no airports within six (6) statute miles of the proposed site. The highest approved geographic location at these coordinates has been evaluated to 704 Ft AMSL.

We have no objection to the proposed Type I Landfill at the aforementioned coordinates. Our position of no objection is based on the application of our guidance for hazardous wildlife attractants on or near airports found in FAA Advisory Circular 150/5200-33B.

This site has been assigned File No. 18-013-TX. Please refer to this number in any future correspondence regarding this site. Thank you for coordinating this project with us. If there are any questions, you can contact me at 817-222-5671 or [gary.loftus@faa.gov](mailto:gary.loftus@faa.gov).

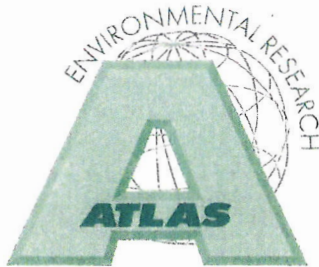
Sincerely,

Gary J. Loftus, A.A.E.  
Airports Compliance Program Manager  
Airport Certification Safety Inspector  
FAA Southwest Region Airports Division

cc: Kevin D. Yard, P.E., BCEE  
Vice President/Office Director  
SCS Engineers  
1901 Central Drive Suite 550  
Bedford, TX 76021

[Bill.macke@txdot.gov](mailto:Bill.macke@txdot.gov)

**APPENDIX I/IIB**  
**WATER, OIL, AND NATURAL GAS WELL SEARCH**



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Assessment, Compliance and Permitting Support

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May 1, 2018

James Lawrence, P.G.  
SCS Engineers  
1901 Central Drive, Suite 550  
Bedford, Texas 76021

Re: One Mile Radial Water Well Search  
Waco Site 50  
Happy Swaner Lane  
Limestone and McLennan Counties  
Atlas Job #18-04-020

Mr. Lawrence:

Atlas Environmental Research has performed a water well search for the above referenced site using the records of the Texas Water Development Board (TWDB) and the Texas Commission on Environmental Quality (TCEQ). Included in this report you will find a complete well listing sorted by the different types of files in the state's water well system. You will also find a map delineating water wells within the area of review and copies of all available drillers logs.

Please do not hesitate to call me at (512) 339-4155 if you have any questions concerning this project or questions concerning Atlas' water well research protocol. Thank you for utilizing Atlas' research services to meet your environmental information needs. I look forward to being of service to you in the future.

Sincerely,

Scott Anderson  
Research Consultant

Enclosures/SA/

---

ATLAS E. R., Inc.

8705 Shoal Creek Blvd., Suite 207 • Austin, Texas 78757  
800.940.0977 • 512.339.4155 • FAX 512.339.4413

# Atlas E.R. Water Well Search

Waco Site 50  
Happy Swaner Lane  
Limestone and McLennan Counties  
Atlas Job #18-04-020

Atlas Environmental Research has located 2 water wells in the area of review.

## Located Water Wells – 2

39-17-201  
39-17-601

## Plotted Water Wells – 0

## Partially Numbered Water Wells – 0

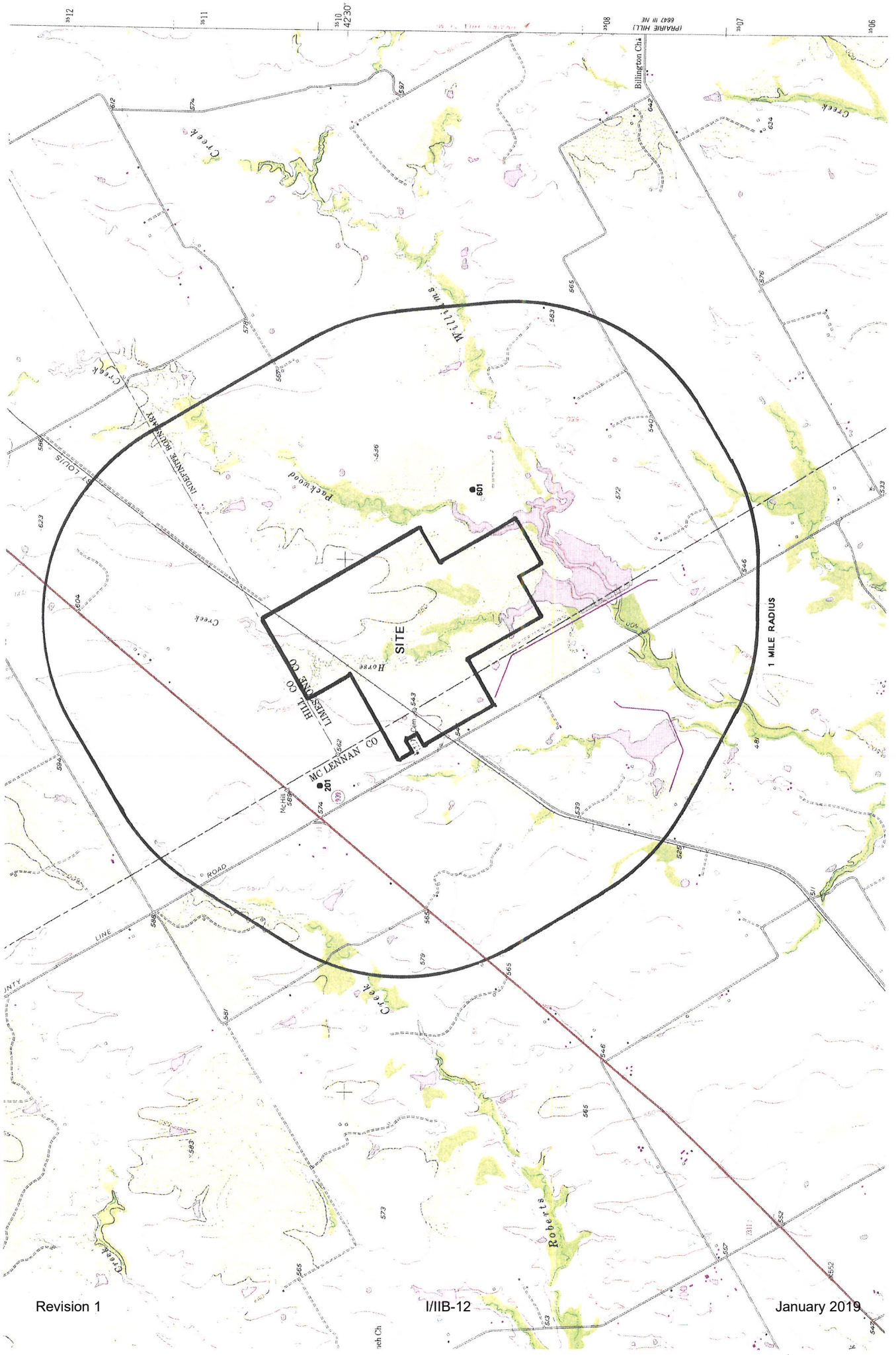
## Unnumbered Water Wells – 0

## Public Water Supply Wells – 0

These wells have been labeled on the attached map with the final portion of the state well number. This portion of the state well number has also been highlighted on the corresponding drillers log. The information for each USGS quadrangle utilized for the well location map is listed below.

<u>Quadrangle</u>	<u>Date</u>	<u>Contours</u>
Axtell, Texas	1956 (Photorevised 1978)	10 Feet

Quadrangle Scale: 1:24000; 1" = 2000'





# CROSS REFERENCE SHEET

Name or Subject	CR-GWTD McLENNAN	Located Well Data ST 39-17-201	Date
Regarding	Electric Log		

**SEE**

Name or Subject	GW-SC ELECTRIC LOG FILE	Q-29
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GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	3917201	Well Type	Oil or Gas
County	McLennan	Well Use	Unused
River Basin	Brazos	Water Level Observation	None
Groundwater Management Area	8	Water Quality Available	No
Regional Water Planning Area	G - Brazos G	Pump	None
Groundwater Conservation District	Southern Trinity GCD	Pump Depth (feet below land surface)	
Latitude (decimal degrees)	31.709723	Power Type	
Latitude (degrees minutes seconds)	31° 42' 35" N	Annular Seal Method	
Longitude (decimal degrees)	-96.935278	Surface Completion	
Longitude (degrees minutes seconds)	096° 56' 07" W	Owner	S. H. Riggs
Coordinate Source	+/- 1 Minute	Driller	Grindstaff No. 1
Aquifer Code	NOT-APPL - Aquifer Code Is Not Applicable to this Well	Other Data Available	
Aquifer	Unassigned	Well Report Tracking Number	
Aquifer Pick Method		Plugging Report Tracking Number	
Land Surface Elevation (feet above sea level)	560	U.S. Geological Survey Site Number	
Land Surface Elevation Method	Interpolated From Topo Map	Texas Commission on Environmental Quality Source Id	
Well Depth (feet below land surface)	2030	Groundwater Conservation District Well Number	
Well Depth Source	Another Government Agency	Owner Well Number	
Drilling Start Date		Other Well Number	
Drilling End Date	0/0/1951	Previous State Well Number	
Drilling Method		Reporting Agency	
Borehole Completion		Created Date	
		Last Update Date	

Remarks

**Casing - No Data**

**Well Tests - No Data**

**Lithology - No Data**

**Annular Seal Range - No Data**

**Borehole - No Data**

**Plugged Back - No Data**

**Filter Pack - No Data**

**Packers - No Data**

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**Water Level Measurements**

No Data Available

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Water Quality Analysis - No Data Available

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# CROSS REFERENCE SHEET

Name or Subject		Located Well Data	Date
CR-GWTD LIMESTONE		SD 39-17-601	

Regarding	Electric Log
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**SEE**

Name or Subject	GW-SC ELECTRIC LOG FILE	Q-143
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GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	3917601	Well Type	Oil or Gas
County	Limestone	Well Use	
River Basin	Brazos	Water Level Observation	None
Groundwater Management Area	8	Water Quality Available	No
Regional Water Planning Area	G - Brazos G	Pump	
Groundwater Conservation District		Pump Depth (feet below land surface)	
Latitude (decimal degrees)	31.700278	Power Type	
Latitude (degrees minutes seconds)	31° 42' 01" N	Annular Seal Method	
Longitude (decimal degrees)	-96.911389	Surface Completion	
Longitude (degrees minutes seconds)	096° 54' 41" W	Owner	Paul Collins No.1
Coordinate Source	+/- 1 Second	Driller	Ralph Spence and Bill Hughes
Aquifer Code	NOT-APPL - Aquifer Code Is Not Applicable to this Well	Other Data Available	
Aquifer	Unassigned	Well Report Tracking Number	
Aquifer Pick Method		Plugging Report Tracking Number	
Land Surface Elevation (feet above sea level)	531	U.S. Geological Survey Site Number	
Land Surface Elevation Method	Interpolated From Topo Map	Texas Commission on Environmental Quality Source Id	
Well Depth (feet below land surface)	3187	Groundwater Conservation District Well Number	
Well Depth Source	Another Government Agency	Owner Well Number	
Drilling Start Date		Other Well Number	
Drilling End Date	0/0/1961	Previous State Well Number	
Drilling Method		Reporting Agency	U.S. Geological Survey
Borehole Completion		Created Date	7/25/1996
		Last Update Date	7/25/1996

Remarks

**Casing - No Data**

**Well Tests - No Data**

**Lithology - No Data**

**Annular Seal Range - No Data**

**Borehole - No Data**

**Plugged Back - No Data**

**Filter Pack - No Data**

**Packers - No Data**

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**Water Level Measurements**

No Data Available

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Water Quality Analysis - No Data Available

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