



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
**DOMESTIC WASTEWATER PERMIT APPLICATION
 CHECKLIST**

Complete and submit this checklist with the application.

APPLICANT: Corix Utilities (Texas) Inc.

PERMIT NUMBER: WQ0013977001

Indicate if each of the following items is included in your application.

	Y	N		Y	N
Administrative Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Original USGS Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Administrative Report 1.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Affected Landowners Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SPIF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Landowner Disk or Labels	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Core Data Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Buffer Zone Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Flow Diagram	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Site Drawing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 2.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Original Photographs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 2.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Design Calculations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 3.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Solids Management Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worksheet 3.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water Balance	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 3.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 3.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 4.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 5.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 6.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Worksheet 7.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>			

For TCEQ Use Only

Segment Number _____ County _____

Expiration Date _____ Region _____

Permit Number _____



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
**APPLICATION FOR A DOMESTIC WASTEWATER PERMIT
 ADMINISTRATIVE REPORT 1.0**

If you have questions about completing this form please contact the Applications Review and Processing Team at 512-239-4671.

Section 1. Application Fees (Instructions Page 29)

Indicate the amount submitted for the application fee (check only one).

Flow	New/Major Amendment	Renewal
<0.05 MGD	\$350.00 <input type="checkbox"/>	\$315.00 <input type="checkbox"/>
≥0.05 but <0.10 MGD	\$550.00 <input type="checkbox"/>	\$515.00 <input type="checkbox"/>
≥0.10 but <0.25 MGD	\$850.00 <input type="checkbox"/>	\$815.00 <input type="checkbox"/>
≥0.25 but <0.50 MGD	\$1,250.00 <input type="checkbox"/>	\$1,215.00 <input type="checkbox"/>
≥0.50 but <1.0 MGD	\$1,650.00 <input checked="" type="checkbox"/>	\$1,615.00 <input type="checkbox"/>
≥1.0 MGD	\$2,050.00 <input type="checkbox"/>	\$2,015.00 <input type="checkbox"/>

Minor Amendment (for any flow) \$150.00

Payment Information:

Mailed Check/Money Order Number:

 Check/Money Order Amount:

 Name Printed on Check:

EPAY Voucher Number: 585667

Copy of Payment Voucher enclosed? Yes

Section 2. Type of Application (Instructions Page 29)

- | | |
|--|---|
| <input type="checkbox"/> New TPDES | <input type="checkbox"/> New TLAP |
| <input type="checkbox"/> Major Amendment <u>with</u> Renewal | <input type="checkbox"/> Minor Amendment <u>with</u> Renewal |
| <input checked="" type="checkbox"/> Major Amendment <u>without</u> Renewal | <input type="checkbox"/> Minor Amendment <u>without</u> Renewal |
| <input type="checkbox"/> Renewal without changes | <input type="checkbox"/> Minor Modification of permit |

For amendments or modifications, describe the proposed changes: Increase design flow to 0.510MGD at final buildout.

For existing permits:

Permit Number: WQ0013977001

EPA I.D. (TPDES only): TX0117609

Expiration Date: October 15th, 2024

Section 3. Facility Owner (Applicant) and Co-Applicant Information (Instructions Page 29)

A. The owner of the facility must apply for the permit.

What is the Legal Name of the entity (applicant) applying for this permit?

Corix Utilities (Texas) Inc.

(The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal documents forming the entity.)

If the applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at <http://www15.tceq.texas.gov/crpub/>

CN: 604520213

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in 30 TAC § 305.44.

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Darrin Barker

Credential (P.E, P.G., Ph.D., etc.):

Title: President

B. Co-applicant information. Complete this section only if another person or entity is required to apply as a co-permittee.

What is the Legal Name of the co-applicant applying for this permit?

N/A

(The legal name must be spelled exactly as filed with the TX SOS, with the County, or in the legal documents forming the entity.)

If the co-applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at:

<http://www15.tceq.texas.gov/crpub/>

CN: N/A

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in 30 TAC § 305.44.

Prefix (Mr., Ms., Miss): N/A

First and Last Name: N/A

Credential (P.E, P.G., Ph.D., etc.): N/A

Title: N/A

Provide a brief description of the need for a co-permittee: N/a

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0.

Attachment: Applicant CDF

Section 4. Application Contact Information (Instructions Page 30)

This is the person(s) TCEQ will contact if additional information is needed about this application. Provide a contact for administrative questions and technical questions.

A. Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Troy Hotchkiss

Credential (P.E, P.G., Ph.D., etc.): P.E.

Title: Sr. Engineering Manager

Organization Name: Integrated Water Services, Inc.

Mailing Address: 4001 N. Valley Drive

City, State, Zip Code: Longmont, CO, 80504

Phone No.: 214-957-1357 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: thotchkiss@integratedwaterservices.com

Check one or both: Administrative Contact Technical Contact

B. Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Robert (Bobby) Hicks

Credential (P.E, P.G., Ph.D., etc.): [REDACTED]

Title: Compliance Manager

Organization Name: Corix Utilities (Texas) Inc.

Mailing Address: 1812 Centre Creek Dr. #100

City, State, Zip Code: Austin, TX 78754

Phone No.: 512-306-4002 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: Bobby.Hicks@corixtexas.com

Check one or both: Administrative Contact Technical Contact

Section 5. Permit Contact Information (Instructions Page 30)

Provide two names of individuals that can be contacted throughout the permit term.

A. Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Scott Ahlstrom

Credential (P.E, P.G., Ph.D., etc.): [REDACTED]

Title: Director, State Operations

Organization Name: Corix Utilities (Texas) Inc.

Mailing Address: 1812 Centre Creek Dr #100

City, State, Zip Code: Austin, TX, 78753

Phone No.: 512-568-0849 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: scott.ahlstrom@corixtexas.com

B. Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Troy Hotchkiss

Credential (P.E, P.G., Ph.D., etc.): P.E.

Title: Sr. Engineering Manager

Organization Name: Integrated Water Services, Inc.

Mailing Address: 4001 N. Valley Drive

City, State, Zip Code: Longmont, CO, 80504

Phone No.: 214-957-1357 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: thotchkiss@integratedwaterservices.com

Section 6. Billing Information (Instructions Page 30)

The permittee is responsible for paying the annual fee. The annual fee will be assessed to permits *in effect on September 1 of each year*. The TCEQ will send a bill to the address provided in this section. The permittee is responsible for terminating the permit when it is no longer needed (using form TCEQ-20029).

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Robert (Bobby) Hicks

Credential (P.E, P.G., Ph.D., etc.): [REDACTED]

Title: Compliance Manager

Organization Name: Corix Utilities (Texas) Inc.

Mailing Address: 1812 Centre Creek Dr. #100

City, State, Zip Code: Austin, TX, 78754

Phone No.: 512-306-4002 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: Bobby.Hicks@corixtexas.com

Section 7. DMR/MER Contact Information (Instructions Page 31)

Provide the name and complete mailing address of the person delegated to receive and submit Discharge Monitoring Reports (EPA 3320-1) or maintain Monthly Effluent Reports.

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Robert (Bobby) Hicks

Credential (P.E, P.G., Ph.D., etc.): [REDACTED]

Title: Compliance Manager

Organization Name: Corix Utilities (Texas) Inc.

Mailing Address: 1812 Centre Creek Dr. #100

City, State, Zip Code: Austin, TX, 78754

Phone No.: 512-306-4002 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: Bobby.Hicks@corixtexas.com

DMR data is required to be submitted electronically. Create an account at:

<https://www.tceq.texas.gov/permitting/netdmr/netdmr.html>.

Section 8. Public Notice Information (Instructions Page 31)

A. Individual Publishing the Notices

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Austin Clements

Credential (P.E, P.G., Ph.D., etc.): P.E.

Title: Process Engineer

Organization Name: Integrated Water Services, Inc.

Mailing Address: 4001 N. Valley Dr.

City, State, Zip Code: Longmont, CO, 80504

Phone No.: 303-960-8187 Ext.: [REDACTED] Fax No.: [REDACTED]

E-mail Address: aclements@integratedwaterservices.com

B. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package

Indicate by a check mark the preferred method for receiving the first notice and instructions:

E-mail Address

Fax

Regular Mail

C. Contact person to be listed in the Notices

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Troy Hotchkiss

Credential (P.E, P.G., Ph.D., etc.): P.E.
Title: Sr. Engineering Manager
Organization Name: Integrated Water Services, Inc.
Phone No.: 214-957-1357 Ext.: [REDACTED]
E-mail: thotchkiss@integratedwaterservices.com

D. Public Viewing Information

If the facility or outfall is located in more than one county, a public viewing place for each county must be provided.

Public building name: Bastrop Public Library
Location within the building: Main Desk
Physical Address of Building: 1100 Church St.
City: Bastrop County: Bastrop
Contact Name: Carmen Serna
Phone No.: 512-332-8880 Ext.: [REDACTED]

E. Bilingual Notice Requirements:

This information **is required** for **new, major amendment, and renewal applications**. It is not required for minor amendment or minor modification applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

Yes No

If **no**, publication of an alternative language notice is not required; **skip to** Section 9 below.

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

Yes No

3. Do the students at these schools attend a bilingual education program at another location?

Yes No

4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?

Yes No

5. If the answer is yes to question 1, 2, 3, or 4, public notices in an alternative language are required. Which language is required by the bilingual program? Spanish

Section 9. Regulated Entity and Permitted Site Information (Instructions Page 33)

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. RN102334893

Search the TCEQ's Central Registry at <http://www15.tceq.texas.gov/crpub/> to determine if the site is currently regulated by TCEQ.

B. Name of project or site (the name known by the community where located):

McKinney Rough WWTP

C. Owner of treatment facility: Corix Utilities (Texas) Inc.

Ownership of Facility: Public Private Both Federal

D. Owner of land where treatment facility is or will be:

Prefix (Mr., Ms., Miss):

First and Last Name: Corix Utilities (Texas) Inc.

Mailing Address: 1812 Centre Creek Dr #100

City, State, Zip Code: Austin, TX, 78754

Phone No.: 512-306-4002

E-mail Address: Bobby.Hicks@corixtexas.com

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

E. Owner of effluent disposal site:

Prefix (Mr., Ms., Miss): N/A

First and Last Name: N/A

Mailing Address: N/A

City, State, Zip Code: N/A

Phone No.: N/A

E-mail Address: N/A

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

F. Owner of sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant):

Prefix (Mr., Ms., Miss): N/a

First and Last Name: N/A

Mailing Address: N/A

City, State, Zip Code: N/A

Phone No.: N/A

E-mail Address: N/A

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

Section 10. TPDES Discharge Information (Instructions Page 34)

A. Is the wastewater treatment facility location in the existing permit accurate?

Yes No

If **no**, or a new permit application, please give an accurate description:

Updated location description: The WWTP is located approximately 1,500 ft northeast of the intersection of SH 71 and Hyatt Lost Pines Rd

B. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

Yes No

If **no**, or a new or amendment permit application, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

City nearest the outfall(s): Cedar Creek, TX

County in which the outfalls(s) is/are located: Bastrop

Outfall Latitude: 30.14157

Longitude: -97.46233

C. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

Yes No

If **yes**, indicate by a check mark if:

Authorization granted Authorization pending

For **new and amendment** applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: [REDACTED]

D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge.

N/A

Section 11. TLAP Disposal Information (Instructions Page 36)

A. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?

- Yes No

If **no**, or a new or amendment permit application, provide an accurate description of the disposal site location:

N/A

B. City nearest the disposal site: N/A

C. County in which the disposal site is located: N/A

D. Disposal Site Latitude: N/A Longitude: N/A

E. For TLAPs, describe the routing of effluent from the treatment facility to the disposal site:

<u>N/A</u>
<u>N/A</u>

Section 12. Miscellaneous Information (Instructions Page 37)

F. For TLAPs, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained:

A. Is the facility located on or does the treated effluent cross American Indian Land?

- Yes No

B. If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?

- Yes No Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit

application, provide an accurate location description of the sewage sludge disposal site.

N/A

C. Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?

- Yes No

If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application:

N/A

D. Do you owe any fees to the TCEQ?

- Yes No

If yes, provide the following information:

Account number: [REDACTED]

Amount past due: [REDACTED]

E. Do you owe any penalties to the TCEQ?

- Yes No

If yes, please provide the following information:

Enforcement order number: [REDACTED]

Amount past due: [REDACTED]

Section 13. Attachments (Instructions Page 38)

Indicate which attachments are included with the Administrative Report. Check all that apply:

- Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.
- Original full-size USGS Topographic Map with the following information:
 - Applicant's property boundary
 - Treatment facility boundary
 - Labeled point of discharge for each discharge point (TPDES only)
 - Highlighted discharge route for each discharge point (TPDES only)
 - Onsite sewage sludge disposal site (if applicable)
 - Effluent disposal site boundaries (TLAP only)
 - New and future construction (if applicable)
 - 1 mile radius information

- 3 miles downstream information (TPDES only)
- All ponds.

Attachment 1 for Individuals as co-applicants

Other Attachments. Please specify: [click here to enter text](#)

Section 14. Signature Page (Instructions Page 39)

If co-applicants are necessary, each entity must submit an original, separate signature page.

Permit Number: WO0013977001

Applicant: Com Utilities (Texas) Inc.

Certification:

I 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.

I further certify that I am authorized under 30 Texas Administrative Code § 305A4 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory name (typed or printed): Darrin Baker

Signatory title: President

Signature: 
(Use blue ink)

Date: 7-17-2011

Subscribed and sworn to before me by the said Darrin Baker [? ... J: ...]
on this 17 of July 2011
My commission expires on the 15 day of February 2011


Notary Public




County, Texas

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS

DOMESTIC WASTEWATER

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

Corix Utilities (Texas) Inc. (CN604520213) operates McKinney Rough WWTP (RN102334893), a cyclically aerated, flow-through activated sludge process. The facility is located approximately 1,500 ft northeast of the intersection of SH 71 and Hyatt Lost Pines Rd, in Cedar Creek, Bastrop County, Texas 78612.

This application is for a major amendment to increase permitted discharge design flow to an annual average flow of 0.510 MGD of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), nitrate nitrogen, total phosphorus, and Escherichia coli. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Domestic wastewater from residential and commercial sources will be treated by activated sludge process and the treatment units include a bar screen, anoxic selectors, secondary aeration chambers, clarification chambers, aerobic digestors, chlorine contact chambers.

**PLANTILLA EN ESPAÑOL PARA SOLICITUDES
NUEVAS/RENOVACIONES/ENMIENDAS TPDES o TLAP**

AGUAS RESIDUALES DOMÉSTICAS

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no son representaciones federales exigibles de la solicitud de permiso.

Corix Utilities (Texas) Inc. (CN604520213) opera McKinney Rough WWTP (RN102334893), un proceso de lodos activados de flujo continuo aireado cíclicamente. La instalación está ubicada aproximadamente a 1,500 pies al noreste de la intersección de SH 71 y Hyatt Lost Pines Rd, en Cedar Creek, condado de Bastrop, Texas 78612.

Esta solicitud es para una enmienda importante para aumentar el flujo de diseño de descarga permitido a un flujo promedio anual de 0.510 MGD de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso de cinco días (CBOD5), sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH3-N), nitrógeno de nitrato, fósforo total y Escherichia coli. Los contaminantes potenciales adicionales se incluyen en el Informe Técnico Nacional 1.0, Sección 7. 15. Aguas residuales domésticas de fuentes residenciales y comerciales serán tratado mediante un proceso de lodos activados y las unidades de tratamiento incluyen una pantalla de barra, selectores anóxicos, cámaras de aireación secundaria, cámaras de clarificación, digestores aerobios, y cámaras de contacto de cloro.

DOMESTIC ADMINISTRATIVE REPORT 1.1

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 41)

- A. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:
- The applicant's property boundaries
 - The facility site boundaries within the applicant's property boundaries
 - The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
 - The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
 - The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
 - The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
 - The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
 - The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
 - The property boundaries of all landowners surrounding the effluent disposal site
 - The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
 - The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located
- B. Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.
- C. Indicate by a check mark in which format the landowners list is submitted:
- Readable/Writeable CD
 - Four sets of labels
- D. Provide the source of the landowners' names and mailing addresses: Bastrop Central Appraisal District
- E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?
- Yes
 - No

If **yes**, provide the location and foreseeable impacts and effects this application has on the land(s):

Section 2. Original Photographs (Instructions Page 44)

Provide original ground level photographs. Indicate with checkmarks that the following information is provided.

- At least one original photograph of the new or expanded treatment unit location
- At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
- At least one photograph of the existing/proposed effluent disposal site
- A plot plan or map showing the location and direction of each photograph

Section 3. Buffer Zone Map (Instructions Page 44)

A. Buffer zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels.

- The applicant's property boundary;
- The required buffer zone; and
- Each treatment unit; and
- The distance from each treatment unit to the property boundaries.

B. Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.

- Ownership
- Restrictive easement
- Nuisance odor control
- Variance

C. Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?

- Yes No

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

**FOR AGENCIES REVIEWING DOMESTIC
TPDES WASTEWATER PERMIT APPLICATIONS**

TCEQ USE ONLY:	
Application type: _____ Renewal _____ Major Amendment _____ Minor Amendment _____ New	
County: _____ Segment Number: _____	
Admin Complete Date: _____	
Agency Receiving SPIF:	
_____ Texas Historical Commission	_____ U.S. Fish and Wildlife
_____ Texas Parks and Wildlife Department	_____ U.S. Army Corps of Engineers

This form applies to TPDES permit applications only. (Instructions, Page 53)

The SPIF must be completed as a separate document. The TCEQ will mail a copy of the SPIF to each agency as required by the TCEQ agreement with EPA. If any of the items are not completely addressed or further information is needed, you will be contacted to provide the information before the permit is issued. Each item must be completely addressed.

Do not refer to a response of any item in the permit application form. Each attachment must be provided with this form separately from the administrative report of the application. The application will not be declared administratively complete without this form being completed in its entirety including all attachments.

The following applies to all applications:

1. Permittee: Corix Utilities (Texas) Inc.

Permit No. WQ00 13977001

EPA ID No. TX 0117609

Address of the project (or a location description that includes street/highway, city/vicinity, and county):

The WWTP is located approximately 1,500 ft northeast of the intersection of SH 71 and Hyatt Lost Pines Rd

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Robert (Bobby) Hicks

Credential (P.E, P.G., Ph.D., etc.):

Title: Compliance Manager

Mailing Address: 1812 Centre Creek Dr. #100

City, State, Zip Code: Austin, Tx, 78754

Phone No.: 512-306-4002 Ext.: Fax No.:

E-mail Address: Bobby.Hicks@corixtexas.com

2. List the county in which the facility is located: Bastrop
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

N/A

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

The effluent is discharged into an unnamed tributary, thence to Colorado River Below Ladybird/Lake Town in Segment No. 1428 of the Colorado River Basin

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property.

Does your project involve any of the following? Check all that apply.

- Proposed access roads, utility lines, construction easements
- Visual effects that could damage or detract from a historic property's integrity
- Vibration effects during construction or as a result of project design
- Additional phases of development that are planned for the future
- Sealing caves, fractures, sinkholes, other karst features

Disturbance of vegetation or wetlands

6. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

N/A

7. Describe existing disturbances, vegetation, and land use:

N/A

THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

8. List construction dates of all buildings and structures on the property:

Construction start date for next Phase = 02/2023

9. Provide a brief history of the property, and name of the architect/builder, if known.

N/A

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The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

McKineey Roughs WWTP

23. Street Address of the Regulated Entity: (fJRFID.Soxu>						
	City	CedarCreek	State	TX	ZIP	18612
24. County						

If

25. Description of Physical Location:	The WWTP is located approximately 1,500 ft northeast of the intersection of SH 71 and Hyatt Lost Pines Rd.					
26. Nearest City	State			Nearest ZIP Code		
Bastrop	TX			78612		
27. Latitude (N) In Decimal:	30.141476		28. Longitude (W) In Decimal:	-97.462485		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)		
4900	4952	220000		2220		
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)						
Wastewater Treatment						
34. Mailing Address:	P.O. Box 140164					
35. E-Mail Address:						
36. Telephone Number		37. Extension or Code		38. Fax Number (if applicable)		
(512) 306-4000				(512) 339-809		

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.


<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> OPWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V t, Jr	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	Other:
	WQ001397700 I			

SECTION IV: Preparer Information

Name: Austin Clements	Title: Process Engineer		
42. Telephone Number	43. Ext/Code	44. Fax Number	45. E-Mail Address
(303) 960-8151		()	thotchkiss@integratedwaterservices.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Corix Utilities (Texas), Inc.	Job Title:	President
Name (In Print):	Darrin Barker	Phone:	(512) 306-4007
Signature:		Date:	7-19-22

Well Reference Numbers

3 mi downstream from Discharge Point

Discharge Point

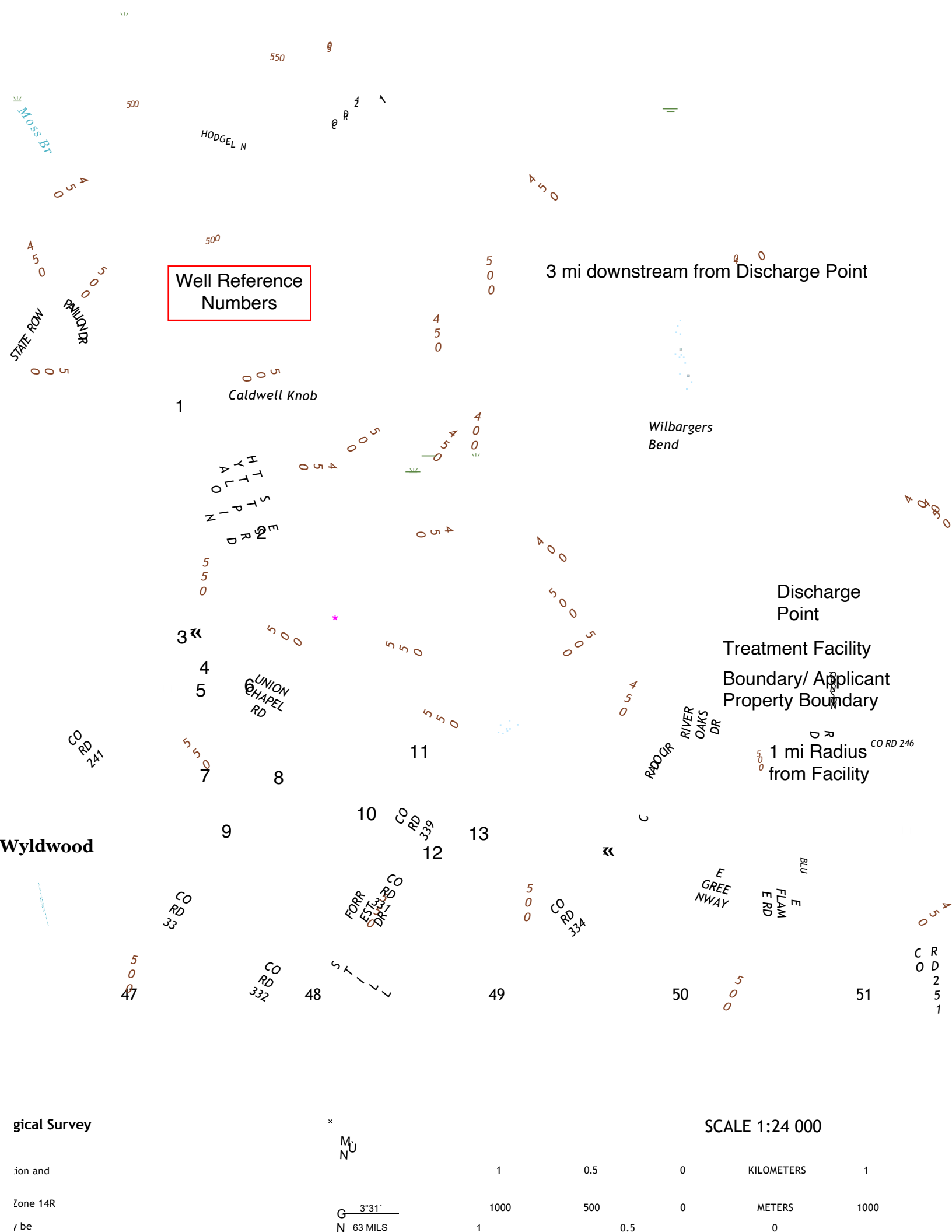
Treatment Facility Boundary/ Applicant Property Boundary

1 mi Radius from Facility

Wyldwood

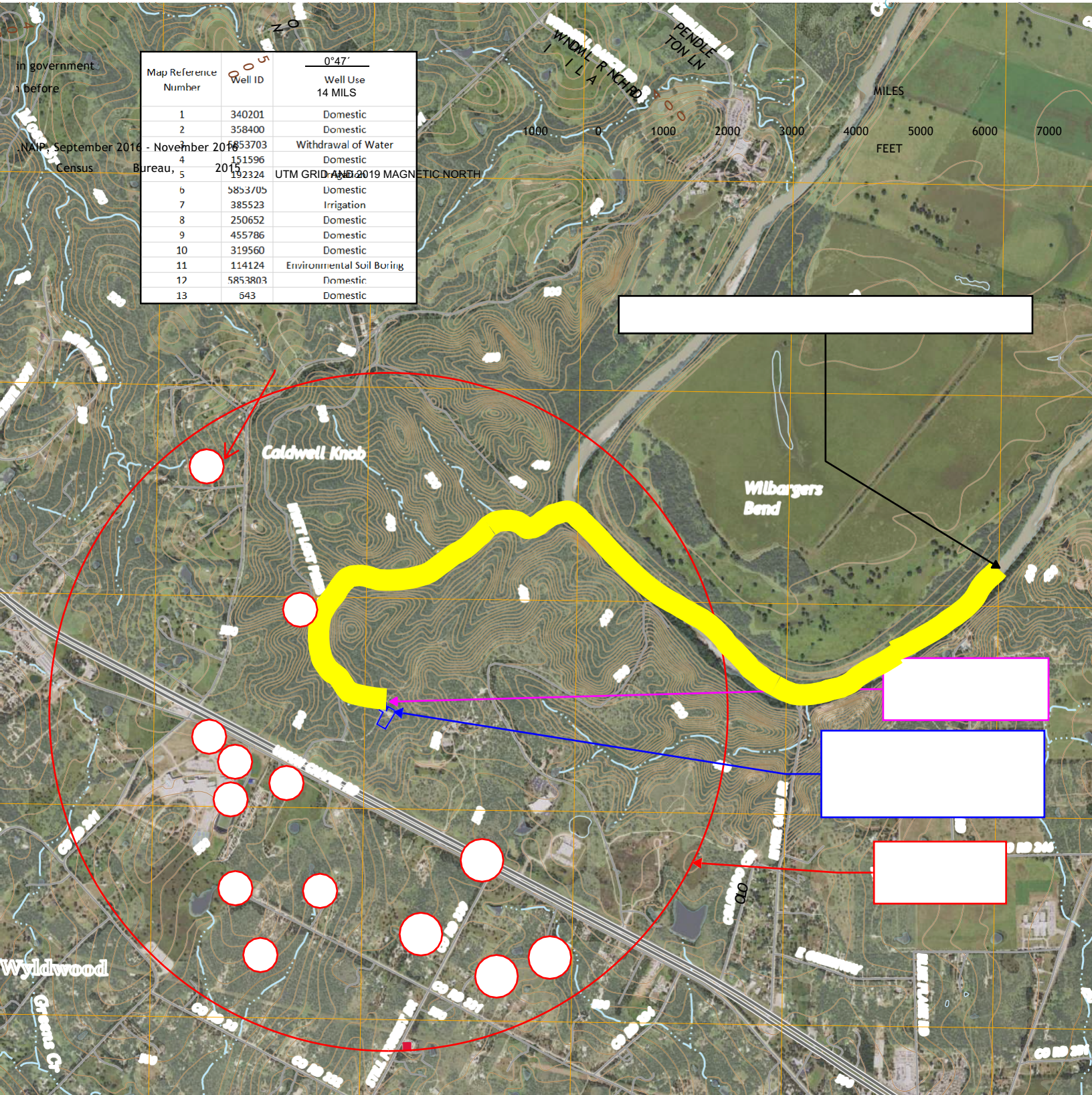
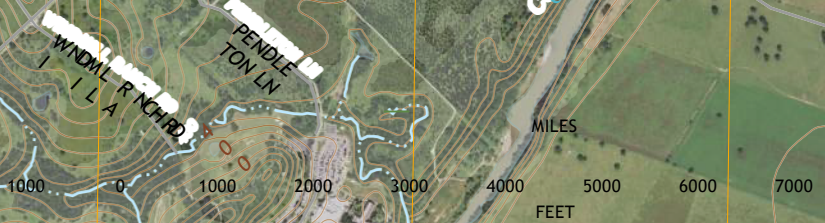
geical Survey

SCALE 1:24 000



in government
before
NAIP, September 2016 - November 2016
Census Bureau, 2015

Map Reference Number	Well ID	Well Use
1	340201	Domestic
2	358400	Domestic
3	53703	Withdrawal of Water
4	151596	Domestic
5	192324	UTM GRID AND 2019 MAGNETIC NORTH
6	5853/05	Domestic
7	385523	Irrigation
8	250652	Domestic
9	455786	Domestic
10	319560	Domestic
11	114124	Environmental Soil Boring
12	5853803	Domestic
13	543	Domestic

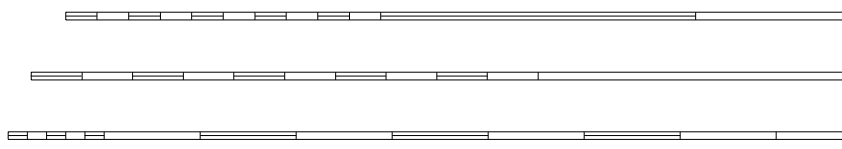


[Redacted]

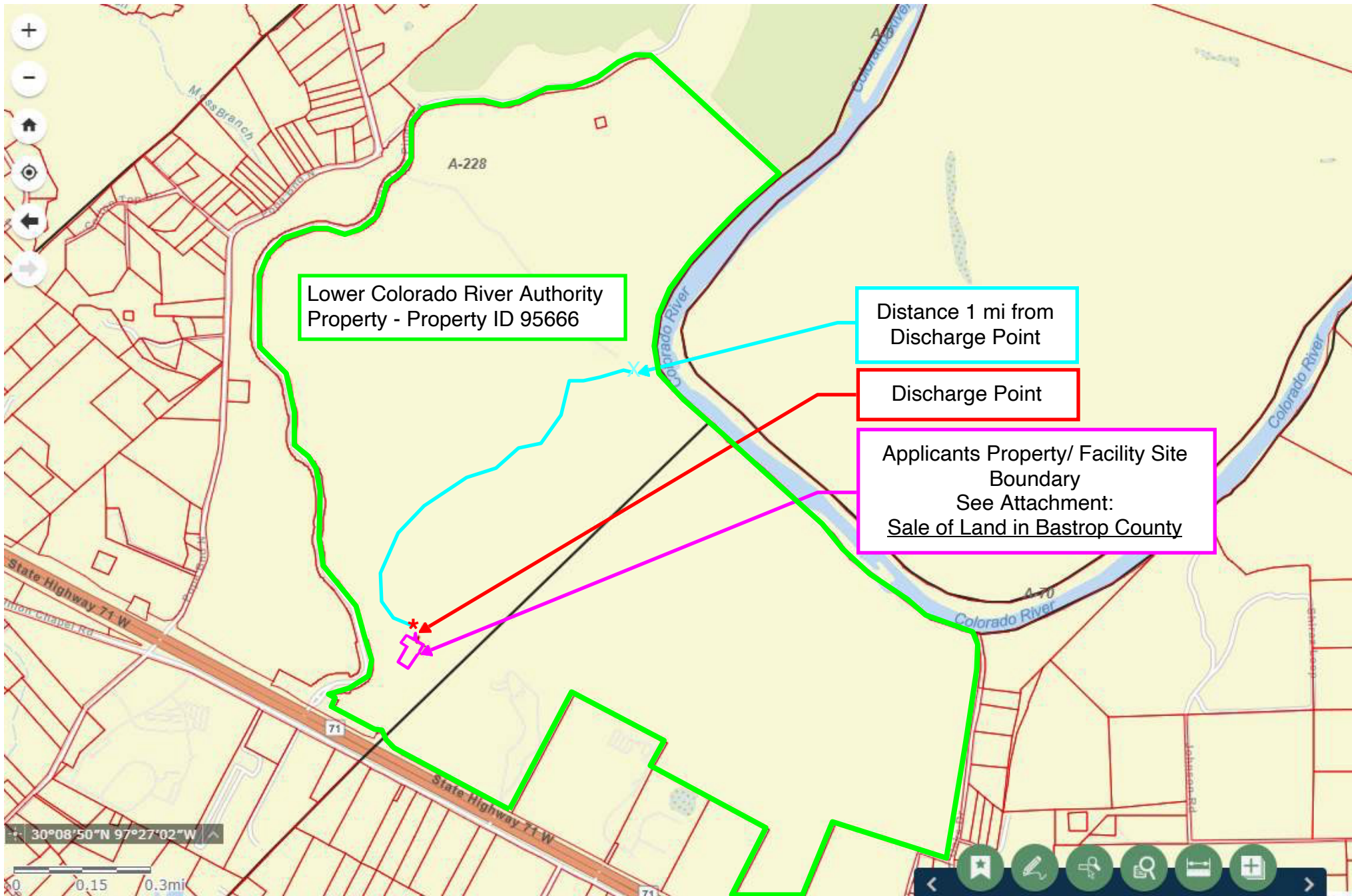
[Redacted]

[Redacted]

[Redacted]



McKinney Roughs WWTP - Affected Landowner Map



LOWER COLORADO RIVER AUTHORITY
P O BOX 220
AUSTIN, TX 78767-0220

LOWER COLORADO RIVER AUTHORITY
P O BOX 220
AUSTIN, TX 78767-0220

LOWER COLORADO RIVER AUTHORITY
P O BOX 220
AUSTIN, TX 78767-0220

LOWER COLORADO RIVER AUTHORITY
P O BOX 220
AUSTIN, TX 78767-0220

This agenda item requires the approval of at least 12 members of the Board.

FOR ACTION (FOR CONSENT)

7. Sale of Land in Bastrop County

Proposed Motion

Declare a 1.95-acre tract of land, being a portion of LCRA Parcel CR-08 in Bastrop County, nonessential, and authorize the general manager or his designee to do all things reasonably necessary to convey the property to Corix Utilities (Texas), Inc. and make the following findings:

1. There is no feasible and prudent alternative to the conveyance of the property nor change in use of the property; and
2. The conveyance and change in use of the land includes all reasonable planning to minimize harm to the land, as a public park, that may result from the land's conveyance and change in use.

Board Consideration

Section 8503.020(b) of the Texas Special District Local Laws Code requires the approval of at least 12 members of the LCRA Board of Directors to convey any interest in real property. LCRA Board Policy 401 – Land Resources requires at least 12 members of the LCRA Board to declare the land no longer necessary or beneficial to the business of LCRA before conveyance. Additionally, Section 8503.020 of the Texas Special District Local Laws Code and LCRA Board Policy 401 require Board approval of the terms of all land sales before conveyance. Chapter 26 of the Texas Parks and Wildlife Code requires that before a political subdivision approves a change in use of publicly owned park land, the governing body must make certain findings related to the change in use of the park land.

Budget Status and Fiscal Impact

The fiscal year 2022 business plan contains the administrative costs associated with the sale of this land. The proceeds of \$68,000 will be credited to the LCRA Public Recreation and Conservation Land Acquisition Fund.

Summary

LCRA in 1995 acquired Parcel CR-08 as the first of eight tracts to be acquired for the McKinney Roughs Nature Park. In 2014, LCRA conveyed to Corix the McKinney Roughs Wastewater Treatment System, including a 0.43-acre tract of land. Corix would like to acquire the additional 1.95-acre tract to expand the current wastewater system. This would allow Corix to accommodate growing needs of existing users, such as Cedar Creek High School, and to fulfill requests from new users, including several commercial businesses in the area.

The appropriate departments within LCRA reviewed the proposed sale of this property and determined the sale would have no adverse impact on LCRA operations. LCRA staff will complete environmental and cultural resource due diligence assessments in accordance with Board Policy 401.403 – Land Disposition before closing. Corix has provided a survey of the approximately 1.95-acre tract.

Valbridge Property Advisors, an independent, licensed and certified third-party appraiser out of San Antonio, appraised the tract. Based on this appraisal, Corix and LCRA have agreed to a price of \$68,000 for the tract.

In accordance with Chapter 26 of the Texas Parks and Wildlife Code – Protection of Public Parks and Recreational Lands, LCRA held a public hearing regarding this sale and will communicate comments from the public to the Board.

The approximately 1.95-acre tract will be sold subject to the following reservations and restrictions:

1. LCRA will reserve all presently held oil, gas and other mineral rights of every kind or character in, on and under the property, provided that LCRA shall not be permitted to drill or excavate for minerals on the surface of the property.
2. LCRA will reserve access through an existing park road.
3. A reversionary clause will allow LCRA to retake ownership of the property if it is not used for a wastewater plant within five years of the sale. The reversion will be at LCRA's election and not automatic.
4. Corix will be responsible for and will indemnify and hold harmless LCRA for any damage caused by the expansion of the wastewater plant and wastewater operations.

Exhibit(s)

A – Vicinity Map

B – Site Map

EXHIBIT A

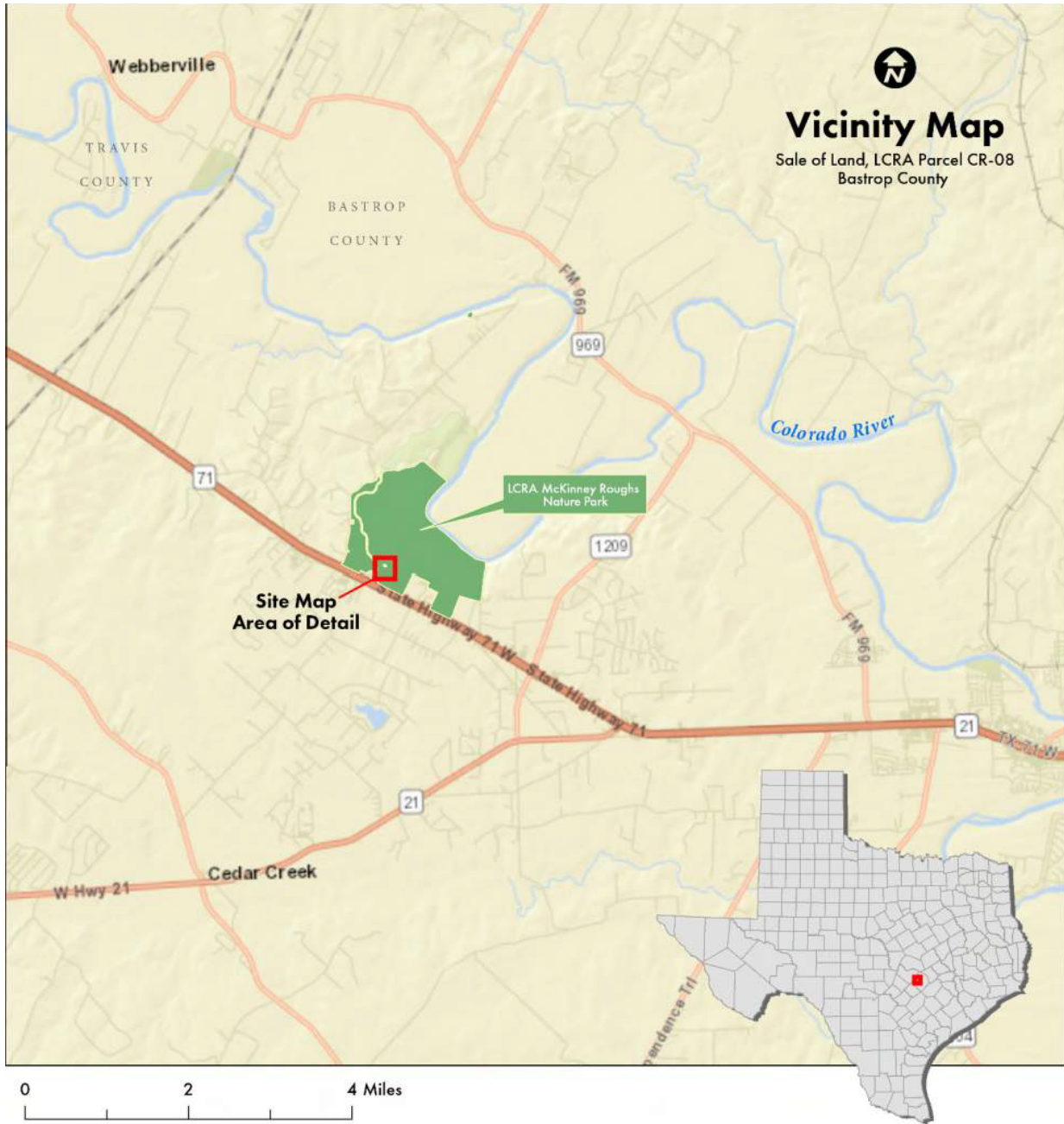


EXHIBIT B



McKinney Roughs WWTP - Original Photograph Map

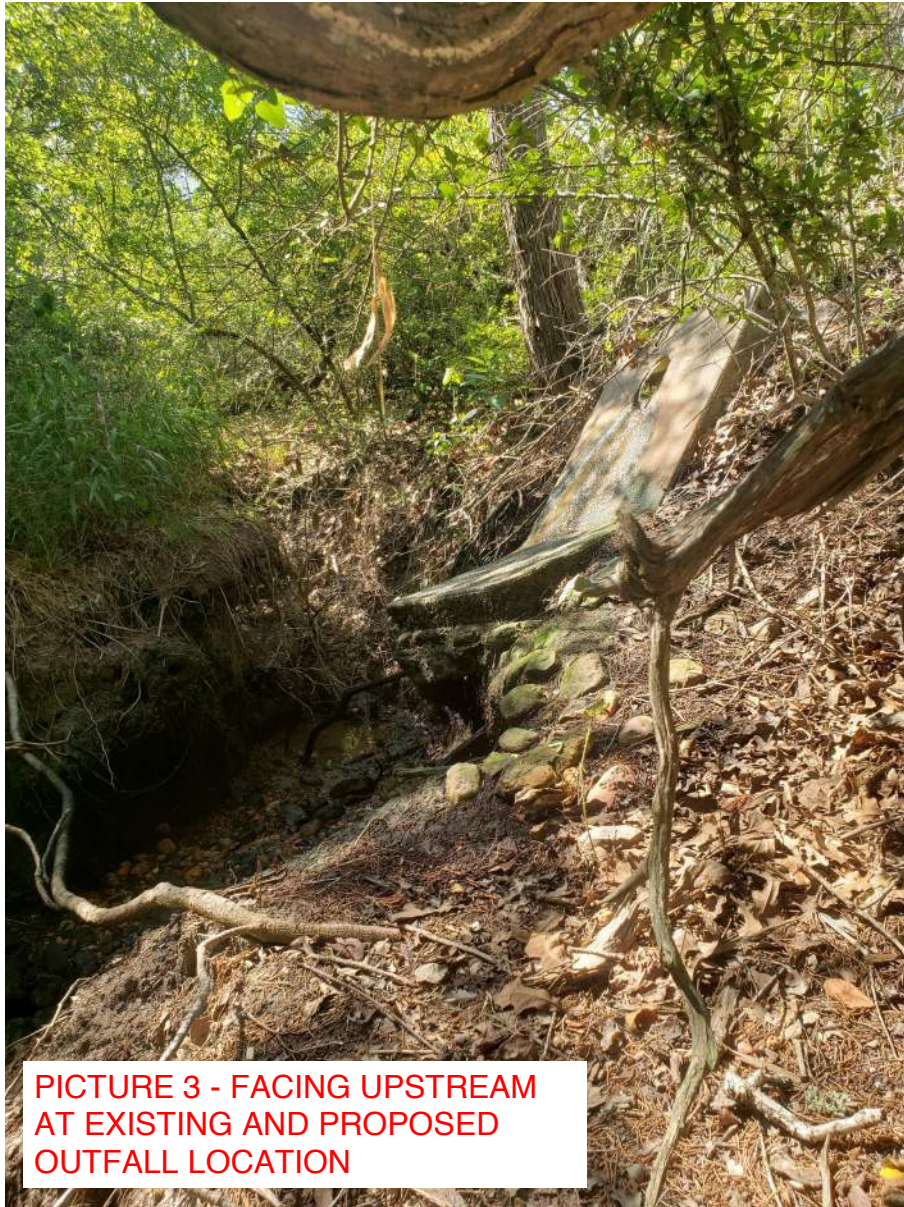


McKinney Roughs WWTP - Original Photographs

Picture 1 - Showing area to be expanded



McKinney Roughs WWTP - Original Photographs



METES AND BOUNDS DESCRIPTION OF:

TRACT 1 - 0.098 ACRES

BEING A 0.098 ACRE (4,280 SQUARE FEET) TRACT OF LAND SITUATED IN THE JOHN LITTON SURVEY, ABSTRACT NO. 228, BASTROP COUNTY, TEXAS; BEING A PORTION OF LOT 1, BLOCK B OF THE MCKINNEY ROUGHS RESUBDIVISION AS SHOWN ON INSTRUMENT RECORDED IN CABINET 4, SLIDES 120B-125A OF THE PLAT RECORDS OF BASTROP COUNTY, TEXAS; AND BEING FURTHER DESCRIBED AS BEING A PORTION OF A CALLED 1348.67 ACRE TRACT OF LAND DESCRIBED TO THE LOWER COLORADO RIVER AUTHORITY AS SHOWN ON INSTRUMENT RECORDED IN VOLUME 752, PAGE 791 OF THE OFFICIAL PUBLIC RECORDS OF BASTROP COUNTY, TEXAS; AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A 1/2 INCH IRON ROD WITH ALUMINUM SURVEYOR'S CAP STAMPED "LCRA" FOUND IN THE EASTERLY PROPERTY LINE OF LOT 1, BLOCK C OF THE MCKINNEY ROUGHS RESUBDIVISION AS SHOWN ON INSTRUMENT RECORDED IN CABINET 4, SLIDES 120B-125A OF THE PLAT RECORDS OF BASTROP COUNTY, TEXAS;

THENCE, OVER AND ACROSS SAID 1348.67 ACRE TRACT THE FOLLOWING SIX (6) COURSES AND DISTANCES:

1. NORTH 89°18'03" EAST, A DISTANCE OF 471.07 FEET TO A 5/8 INCH IRON ROD WITH ALUMINUM SURVEYOR'S CAP STAMPED "LCRA" FOUND AT A NORTH CORNER OF A CALLED 0.43 ACRE TRACT OF LAND DESCRIBED TO CORIX UTILITIES (TEXAS) INC. AS SHOWN ON INSTRUMENT RECORDED IN DOCUMENT NO. 201409271 OF THE OFFICIAL PUBLIC RECORDS OF BASTROP COUNTY, TEXAS: FOR THE **POINT OF BEGINNING** AND THE WEST CORNER OF THIS TRACT;
2. NORTH 30°27'31" EAST, A DISTANCE OF 41.68 FEET TO A 1/2 INCH IRON ROD WITH PLASTIC SURVEYOR'S CAP STAMPED "KHA" SET FOR THE NORTH CORNER OF THIS TRACT;
3. SOUTH 59°32'29" EAST, A DISTANCE OF 100.50 FEET TO A 1/2 INCH IRON ROD WITH PLASTIC SURVEYOR'S CAP STAMPED "KHA" SET IN A WESTERLY LINE OF SAID 0.43 ACRE TRACT, FOR THE NORTHERLY EAST CORNER OF THIS TRACT;
4. SOUTH 02°06'12" WEST, A DISTANCE OF 4.86 FEET TO A 1/2 INCH IRON ROD WITH PLASTIC SURVEYOR'S CAP STAMPED "KHA" SET AT AN ANGLE CORNER OF SAID 0.43 ACRE TRACT, FOR THE SOUTHERLY EAST CORNER OF THIS TRACT;
5. SOUTH 30°27'31" WEST, A DISTANCE OF 37.40 FEET TO A 1/2 INCH IRON ROD WITH PLASTIC SURVEYOR'S CAP STAMPED "LCRA" FOUND AT AN INTERIOR CORNER OF SAID 0.43 ACRE TRACT, FOR THE SOUTH CORNER OF THIS TRACT;
6. NORTH 59° 32'29" WEST, A DISTANCE OF 102.81 FEET TO THE **POINT OF BEGINNING** AND CONTAINING 0.098 ACRES OF LAND, MORE OR LESS, IN BASTROP COUNTY, TEXAS. THIS DOCUMENT WAS PREPARED IN THE OFFICE OF KIMLEY HORN AND ASSOCIATES, INC. IN AUSTIN, TEXAS.

GEODETIC BASIS STATEMENT: THE BEARINGS, DISTANCES, AREAS AND COORDINATES SHOWN HEREON ARE TEXAS STATE COORDINATE SYSTEM GRID, CENTRAL ZONE (FIPS 4203) (NAD'83), AS DETERMINED BY THE GLOBAL POSITIONING SYSTEM (GPS). ALL DISTANCES ARE GRID AND SHOWN IN U.S. SURVEY FEET. A SURVEY BOUNDARY EXHIBIT AND LINE & PROPERTY TABLE OF EVEN SURVEY DATE HEREWITH ACCOMPANIES THIS METES & BOUNDS DESCRIPTION.


THE UNDERSIGNED REGISTERED PROFESSIONAL LAND SURVEYOR HEREBY CERTIFIES THAT THE FOREGOING DESCRIPTION ACCURATELY SETS OUT THE METES AND BOUNDS OF THIS TRACT.



ZACHARY KEITH PETRUS
REGISTERED PROFESSIONAL
LAND SURVEYOR NO. 6769
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PH. (512) 572-6674
ZACH.PETRUS@KIMLEY-HORN.COM



EXHIBIT "A"
BOUNDARY SURVEY
TRACT 1 - 0.098 ACRES
TRACT 2 - 1.852 ACRES
JOHN LITTON SURVEY, ABSTRACT 228
CITY OF CEDAR PARK,
BASTROP COUNTY, TEXAS

	
10814 Jollyville Road Campus IV, Suite 200, Austin, Texas 78759	
Tel. No. (512) 418-1771 www.kimley-horn.com	
Drawn by MCM	Checked by ZKP
NIA	1127/2021
Project No. 069268812	1 OF 4

METES AND BOUNDS DESCRIPTION OF:

TRACT 2 - 1.852 ACRES

BEING A 1.852 ACRE (80,680 SQUARE FEET) TRACT OF LAND SITUATED IN THE JOHN LITTON SURVEY, ABSTRACT NO. 228, BASTROP COUNTY, TEXAS ; BEING A PORTION OF LOT 1, BLOCK B OF THE MCKINNEY ROUGHS RESUBDIVISION AS SHOWN ON INSTRUMENT RECORDED IN CABINET 4, SLIDES 120B-125A OF THE PLAT RECORDS OF BASTROP COUNTY, TEXAS; AND BEING FURTHER DESCRIBED AS BEING A PORTION OF A CALLED 1348.67 ACRE TRACT OF LAND DESCRIBED TO THE LOWER COLORADO RIVER AUTHORITY AS SHOWN ON INSTRUMENT RECORDED IN VOLUME 752, PAGE 791 OF THE OFFICIAL PUBLIC RECORDS OF BASTROP COUNTY, TEXAS; AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A 1/2 INCH IRON ROD WITH ALUMINUM SURVEYOR'S CAP STAMPED "LCRA" FOUND IN THE EASTERLY PROPERTY LINE OF LOT 1, BLOCK C OF THE MCKINNEY ROUGHS RESUBDIVISION AS SHOWN ON INSTRUMENT RECORDED IN CABINET 4, SLIDES 120B-125A OF THE PLAT RECORDS OF BASTROP COUNTY, TEXAS;

THENCE, OVER AND ACROSS SAID 1348.67 ACRE TRACT THE FOLLOWING ELEVEN (11) COURSES AND DISTANCES:

1. SOUTH 46°11'22" EAST, A DISTANCE OF 501.31 FEET TO A 1/2 INCH IRON ROD WITH PLASTIC SURVEYOR'S CAP STAMPED "KHA" SET IN THE EASTERLY LINE OF A 15' ACCESS EASEMENT AS SHOWN ON INSTRUMENT RECORDED IN DOCUMENT NO. 201409271 OF THE OFFICIAL PUBLIC RECORDS OF BASTROP COUNTY, TEXAS ; FOR THE **POINT OF BEGINNING** AND THE WEST CORNER OF THIS TRACT;
2. NORTH 37°21'12" EAST, ALONG THE EASTERLY LINE OF SAID 15' ACCESS EASEMENT , A DISTANCE OF 46.36 FEET TO A 1/2 INCH IRON ROD WITH PLASTIC SURVEYOR'S CAP STAMPED "KHA" SET FOR AN ANGLE CORNER OF THIS TRACT;
3. NORTH 24°47'57" EAST, CONTINUING ALONG THE EASTERLY LINE OF SAID 15' ACCESS EASEMENT , A DISTANCE OF 75.13 FEET TO A 1/2 INCH IRON ROD WITH PLASTIC SURVEYOR'S CAP STAMPED "KHA" SET FOR AN ANGLE CORNER OF THIS TRACT;
4. NORTH 22°38'50" EAST, CONTINUING ALONG THE EASTERLY LINE OF SAID 15' ACCESS EASEMENT , A DISTANCE OF 77.11 FEET TO A 1/2 INCH IRON ROD WITH PLASTIC SURVEYOR'S CAP STAMPED "KHA" SET FOR AN ANGLE CORNER OF THIS TRACT;
5. NORTH 23°04'17" EAST, CONTINUING ALONG THE EASTERLY LINE OF SAID 15' ACCESS EASEMENT , A DISTANCE OF 63.74 FEET TO A 1/2 INCH IRON ROD WITH PLASTIC SURVEYOR'S CAP STAMPED "KHA" SET FOR AN ANGLE CORNER OF THIS TRACT;
6. NORTH 28°36'15" EAST, CONTINUING ALONG THE EASTERLY LINE OF SAID 15' ACCESS EASEMENT , A DISTANCE OF 42.57 FEET TO A 1/2 INCH IRON ROD WITH PLASTIC SURVEYOR'S CAP STAMPED "KHA" SET IN THE SOUTHWEST BOUNDARY LINE OF SAID A 0.43 ACRE TRACT OF LAND DESCRIBED TO CORIX UTILITIES (TEXAS) INC. AS SHOWN ON INSTRUMENT RECORDED IN DOCUMENT NO. 201409271 OF THE OFFICIAL PUBLIC RECORDS OF BASTROP COUNTY, TEXAS, FOR THE WESTERLY NORTH CORNER OF THIS TRACT;
7. SOUTH 59°32'29" EAST, ALONG THE SOUTHWEST BOUNDARY LINE OF SAID 0.43 ACRE TRACT, A DISTANCE OF 163.77 FEET TO A 5/8 INCH IRON ROD WITH ALUMINUM SURVEYOR'S CAP STAMPED "LCRA" FOUND AT THE SOUTH CORNER OF SAID 0.43 ACRE TRACT, FOR AN INTERIOR CORNER OF THIS TRACT;
8. NORTH 30°27'31" EAST, ALONG THE SOUTHEAST BOUNDARY LINE OF SAID 0.43 ACRE TRACT, A DISTANCE OF 98.23 FEET TO A 5/8 INCH IRON ROD WITH ALUMINUM SURVEYOR'S CAP STAMPED "LCRA" FOUND AT THE EAST CORNER OF SAID 0.43 ACRE TRACT, FOR THE EASTERLY NORTH CORNER OF THIS TRACT;
9. SOUTH 59°32'29" EAST, A DISTANCE OF 88.45 FEET TO A 1/2 INCH IRON ROD WITH PLASTIC SURVEYOR'S CAP STAMPED "KHA" SET FOR THE EAST CORNER OF THIS TRACT;
10. SOUTH 30°27'31" WEST, A DISTANCE OF 401.18 FEET TO A 1/2 INCH IRON ROD WITH PLASTIC SURVEYOR'S CAP STAMPED "KHA" SET FOR THE SOUTH CORNER OF THIS TRACT;
11. NORTH 59°32'29" WEST, A DISTANCE OF 230.33 FEET TO THE **POINT OF BEGINNING** AND CONTAINING 1.852 ACRES OF LAND, MORE OR LESS, IN BASTROP COUNTY, TEXAS . THIS DOCUMENT WAS PREPARED IN THE OFFICE OF KIMLEY-HORN AND ASSOCIATES, INC. IN AUSTIN, TEXAS.

GEODETIC BASIS STATEMENT: THE BEARINGS, DISTANCES, AREAS AND COORDINATES SHOWN HEREON ARE TEXAS STATE COORDINATE SYSTEM GRID, CENTRAL ZONE (FIPS 4203) (NAD'83), AS DETERMINED BY THE GLOBAL POSITIONING SYSTEM (GPS). ALL DISTANCES ARE GRID AND SHOWN IN U.S. SURVEY FEET. A SURVEY BOUNDARY EXHIBIT AND LINE & PROPERTY TABLE OF EVEN SURVEY DATE ACCOMPANIES THIS METES & BOUNDS DESCRIPTION.

THE UNDERSIGNED, REGISTERED PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFIES THAT THE FOREGOING DESCRIPTION ACCURATELY SETS OUT THE METES AND BOUNDS OF THIS TRACT.

EXHIBIT "B"
BOUNDARY SURVEY
TRACT 1 - 0.098 ACRES
TRACT 2 - 1.852 ACRES
JOHN LITTON SURVEY, ABSTRACT 228
CITY OF CEDAR PARK,
BASTROP COUNTY, TEXAS

10814 Jollyville Road Campus IV, Suite 200, Austin, Texas 78759	FIRM# 10194624	Tel. No. (512) 418-1771 www.kimley-horn.com
Draw n by	Checked by	Project No.



ZACHARY KEITH PETRUS
REGISTERED PROFESSIONAL
LAND SURVEYOR NO. 6769
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PH. (512) 572-6674
ZACH.PETRUS@KIMLEY-HORN.COM



Kimley»Horn

NOTE: THIS IS A BOUNDARY EXHIBIT BASED ON A FIELD SURVEY BY KIMLEY-HORN PERSONNEL. NO TITLE RESEARCH WAS PROVIDED IN THE PREPARATION OF THIS EXHIBIT. NO IMPROVEMENTS ARE SHOWN. ALL EXISTING EASEMENTS ARE NOT SHOWN. THIS IS NOT A LAND TITLE SURVEY.

P.O.C.

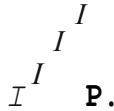
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1/2" IRFC



00

DETAIL "A"

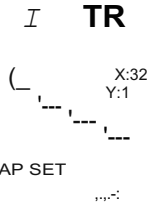
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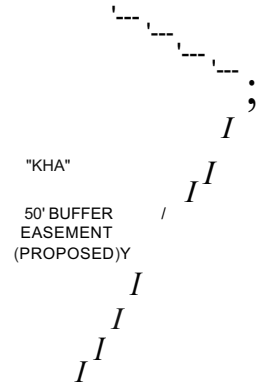
LEGEND:

t = CENTRAL ANGLE
P.O.C. = POINT OF COMMENCING
P.O.B. = POINT OF BEGINNING

IRSC = 1/2" IRON ROD W/ "KHA" CAP SET
IRFC = IRON ROD W/CAP FOUND
IPF = IRON PIPE FOUND
OPRBC = OFFICIAL PUBLIC RECORDS
BASTROP COUNTY
PRBC = PLAT RECORDS
BASTROP COUNTY



EXISTING PLANT



**TRACT A NOT CONVEYED
SEE ODOR MANAGEMENT**

PLAN IN LIEU

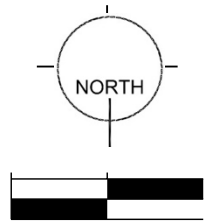
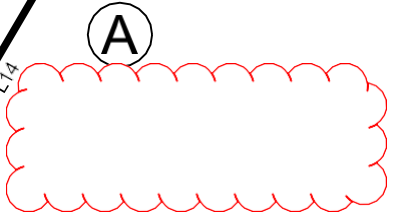
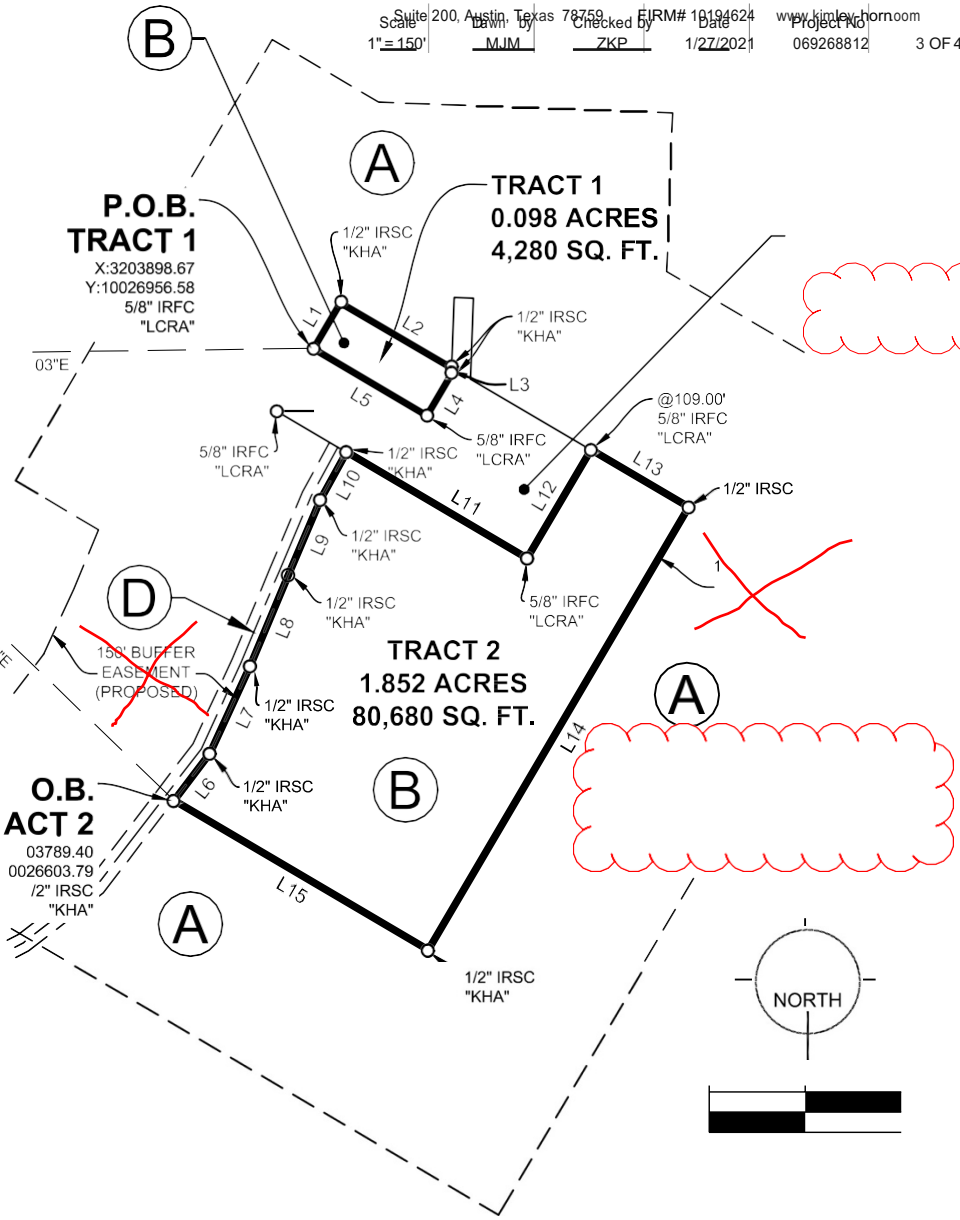
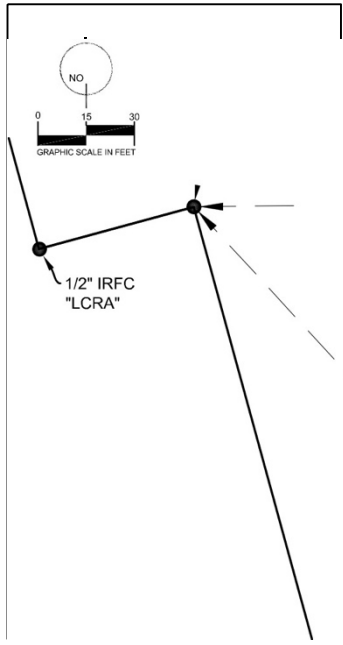
0 75 150

GRAPHIC SCALE IN FEET

GEODETIC BASIS STATEMENT: THE BEARINGS, DISTANCES, AREAS AND COORDINATES SHOWN HEREON ARE TEXAS STATE COORDINATE SYSTEM GRID, CENTRAL ZONE (FIPS 4203) (NAD'83), AS DETERMINED BY THE GLOBAL POSITIONING SYSTEM (GPS). THE UNIT OF LINEAR MEASUREMENT IS U.S. SURVEY FEET. A METES & BOUNDS DESCRIPTION AND LINE & PROPERTY TABLE OF EVEN SURVEY DATE WAS CREATED IN CONJUNCTION WITH THIS BOUNDARY EXHIBIT.

THE UNDERSIGNED, REGISTERED PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFIES THAT THIS BOUNDARY EXHIBIT OF SURVEY ACCURATELY REFLECTS THE METES AND BOUNDS OF THIS TRACT.

EXHIBIT "C"
BOUNDARY SURVEY
TRACT 1 - 0.098 ACRES
TRACT 2 - 1.852 ACRES
JOHN LITTON SURVEY, ABSTRACT 228
CITY OF CEDAR PARK,
BASTROP COUNTY, TEXAS



Zachary K. Petrus

ZACHARY KEITH PETRUS
 REGISTERED PROFESSIONAL
 LAND SURVEYOR NO. 6769
 10814 JOLLYVILLE ROAD
 CAMPUS IV, SUITE 200
 AUSTIN, TEXAS 78759
 PH. (512) 572-6674
 ZACH.PETRUS@KIMLEY-HORN.COM



LINE TABLE		
NO.	BEARING	LENGTH
L1	N30°27'31"E	41.68'
L2	S59°32'29"E	100.50'
L3	s o2°06'12"w	4.86'
L4	S30°27'31"W	37.40'
L5	N59°32'29"W	102.81'
L6	N37 °21'12"E	46.36'
L7	N24°47'57"E	75.13'
L8	N22°38'50"E	77.11'
L9	N23°04'17"E	63.74'
L10	N28°36'15"E	42.57'
L11	S59°32'29"E	163.77'
L12	N30°27'31"E	98.23'
L13	S59°32'29"E	88.45'
L14	S30°27'31"W	401.18'
L15	N59°32'29"W	230.33'

PROPERTY TABLE	
@	LOT 1, BLOCK B MCKINNEY ROUGHS RESUBDIVISION CABINET 4, SLIDES 120B-125A PRBC OWNER: LOWER COLORADO RIVER AUTHORITY VOL. 752, PG. 791 OPRBC (REMAINDER)
@	LOT 1, BLOCK B MCKINNEY ROUGHS RESUBDIVISION CABINET 4, SLIDES 120B-125A PRBC OWNER: LOWER COLORADO RIVER AUTHORITY VOL. 752, PG. 791 OPRBC (PORTION OF)
@	0.43 ACRES OWNER: CORIX UTILITIES (TEXAS) INC. DOC. No. 201409271 OPRBC
@	CENTERLINE OF A 15' ACCESEASEMENT DOC. No. 201409271 OPRBC
@	LOT 1, BLOCK C MCKINNEY ROUGHS RESUBDIVISION CABINET 4, SLIDES 120B-125A PRBC OWNER: WOODBINE/BASTROP LAND, L.P. VOL. 1419, PG. 603 OPRBC

TRACT NOT CONVEYED
SEE ODOR MANAGEMENT
PLAN IN LIEU

GEODETIC BASIS STATEMENT: THE BEARINGS, DISTANCES, AREAS AND COORDINATES SHOWN HEREON ARE TEXAS STATE COORDINATE SYSTEM GRID, CENTRAL ZONE (FIPS 4203) (NAD'83), AS DETERMINED BY THE GLOBAL POSITIONING SYSTEM (GPS). THE UNIT OF LINEAR MEASUREMENT IS U.S. SURVEY FEET . A METES & BOUNDS DESCRIPTION AND BOUNDARY EXHIBIT OF EVEN SURVEY DATE WAS CREATED IN CONJUNCTION WITH THIS LINE & PROPERTY TABLE.

THE UNDERSIGNED, REGISTERED PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFIES THAT THIS LINE & PROPERTY TABLE OF SURVEY ACCURATELY REFLECTS THE METES AND BOUNDS OF THIS TRACT.



ZACHARY KEITH PETRUS
REGISTERED PROFESSIONAL
LAND SURVEYOR NO. 6769
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PH. (512) 572-6674
ZACH.PETRUS@KIMLEY-HORN.COM




EXHIBIT "D"
BOUNDARY SURVEY
TRACT 1 - 0.098 ACRES
TRACT 2 - 1.852 ACRES
JOHN LITTON SURVEY, ABSTRACT 228
CITY OF CEDAR PARK,
BASTROP COUNTY, TEXAS

Kimley»Horn

Suite 200, Austin, Texas 78759 FIRM # 10194624 www.kimley-horn.com

Checked by _____ P. No. _____



Tel. No. (512) 418-1771

ODOR MANAGEMENT PLAN MCKINNEY ROUGH WASTEWATER TREATMENT PLANT LOWER COLORADO RIVER AUTHORITY

INTRODUCTION

The Lower Colorado River Authority (LCRA) owns approximately 1,600 acres in western Bastrop County, known as the McKinney Roughts Tract. LCRA operates an Environmental Learning Center (ELC) at this location to provide an opportunity for area students to participate in educational programs concerning the natural environment present at the site. A wastewater treatment plant has been on the property since 2001 handling the flows from the ELC.

On the south side of Highway 71 across from the LCRA property the Bastrop Independent School District (BISD) is constructing a new high school. BISD has entered into an agreement with LCRA for treatment of the wastewater from that new school. The additional flows will exceed the capacity of the existing treatment system and thus require a plant expansion. As a part of the discharge permit for the plant the LCRA agreed to develop an Odor Management Plan for the facility and update it with any changes to the facility to show that the plant will not cause an odor nuisance.

ODOR POTENTIAL

The primary odor of concern for wastewater facilities is hydrogen sulfide (H₂S), a colorless gas that has a rotten-egg smell. Hydrogen sulfide results from anaerobic decomposition of compounds containing sulfur. In the absence of oxygen (anaerobic conditions), specific groups of bacteria use sulfate in the place of oxygen for metabolic reactions. The anaerobic bacteria reduce the sulfates to sulfides (S²⁻), which in turn form H₂S.

Anaerobic conditions can occur in either the collection system or the treatment plant if the source of available oxygen is depleted. In collection systems, anaerobic conditions can occur in flat, slow moving lines. At wastewater treatment plants, anaerobic treatment processes are sometimes employed to provide treatment.

PROPOSED WASTEWATER SYSTEM

Wastewater collection to the WWTP consists of small diameter (3") forcemain from the ELC and 8" steep gravity main from the high school to a lift station at the WWTP. The use of small-diameter forcemain will limit the potential for odors within the collection system for the following reasons:

- The age of the wastewater will be minimized.

- The pipeline will be pressure-rated, minimizing the potential discharge of foul air from the pipe.

The gravity sewer and lift station will minimize odors by:

- Maintaining movement in the sewer.
- Covered and sealed lift station minimize discharge to the atmosphere of foul air.

The LCRA will use an aerobic activated sludge biological process. Air is continually introduced into the wastewater being treated. This continual supply of air would keep the anaerobic bacteria from generating significant levels of H₂S. The process involves the biological degradation of organic pollutants using microorganisms present in the activated sludge. Effluent is withdrawn from the activated sludge basin then clarified and filtered through cloth filters. This process will continue to achieve the strict effluent limits contained in the permit. The existing WWTP will be used to collect excess activated sludge and through continued aeration without additional food the microorganisms reduce to inert organic material.

The units will all be covered in accordance with the negotiated requirement placed in the discharge permit. The existing WWTP equipment is already covered. Due to the containment of the treatment process the air can be collected for further treatment.

ODOR CONTROL MEASURES

Although significant levels of H₂S are not anticipated, the LCRA intends to provide foul air treatment for the air collected from inside the treatment unit. In accordance with the negotiated permit conditions, exhaust air from the treatment unit will be directed to a carbon canister adsorption control device.

Carbon canister adsorbers generally contain granular activated carbon. If H₂S is present in the air to be treated, it adheres to the granular carbon as it passes through the canister. As H₂S is collected in the canister, the available surface for additional carbon to adhere is reduced. Eventually, the carbon media is dependent upon the concentrations of H₂S and the amount of air passing through the canister.

Adsorbers typically provide reliable, effective odor control and are simple to operate. This is the same technology that was used for the initial phase of this plant.

HYDROGEN SULFIDE MONITORING PLAN

To ensure that odor control measures are adequate, a portable, direct reading hydrogen sulfide monitor will be used to measure gas phase concentrations of hydrogen sulfide. An Arizona Instrument Model 631 (Jerome 631), a hand-held, low range H₂S monitor, will be used. The Jerome 631 is capable of measuring concentrations of H₂S from 1 parts per billion (ppb) to 50 parts per million (ppm) by volume in air. Since the typical human nose can begin recognizing H₂S levels in the range of 10 to 20 ppb, depending on the sensitivity of the individual, the Jerome meter should detect any ambient levels that might pose an odor concern. The monitor will be routinely calibrated and/or rezeroed in accordance with the manufacturer's recommendation to ensure reliable results.

Monitoring will be conducted in five separate locations. The first monitoring point will be located within 50 feet of the wastewater treatment unit. The remaining monitoring points will generally be located at the nearest property lines north, east, south, and west of the treatment unit.

Monitoring events will be conducted quarterly for the first year of operation of the wastewater treatment plant. The first monitoring event will occur during the third month of operation and approximately every third month thereafter for the first year. If H₂S levels above 0.08 ppm are not measured during the first year of operation, the monitoring will be reduced to every six months during the second year of operation. If H₂S continues to be below 0.08 ppm during the second year of operation, the monitoring program will be discontinued.

In order to determine ambient conditions, two initial monitoring events will be conducted prior to the activation of the wastewater treatment plant to establish ambient conditions. These events will be spaced at least one month apart.

CORRECTIVE ACTION PLAN

If at any time, H₂S levels above 80 ppb (0.08 ppm) are measured at the property line, the monitoring instrument will be re-calibrated and an additional monitoring event will be conducted within 24 hours. If this re-test indicates that levels are below the threshold, additional monitoring events will be conducted on a weekly basis for one month. If levels remain below the threshold, the frequency of monitoring will revert to the frequency in place prior to the detection.

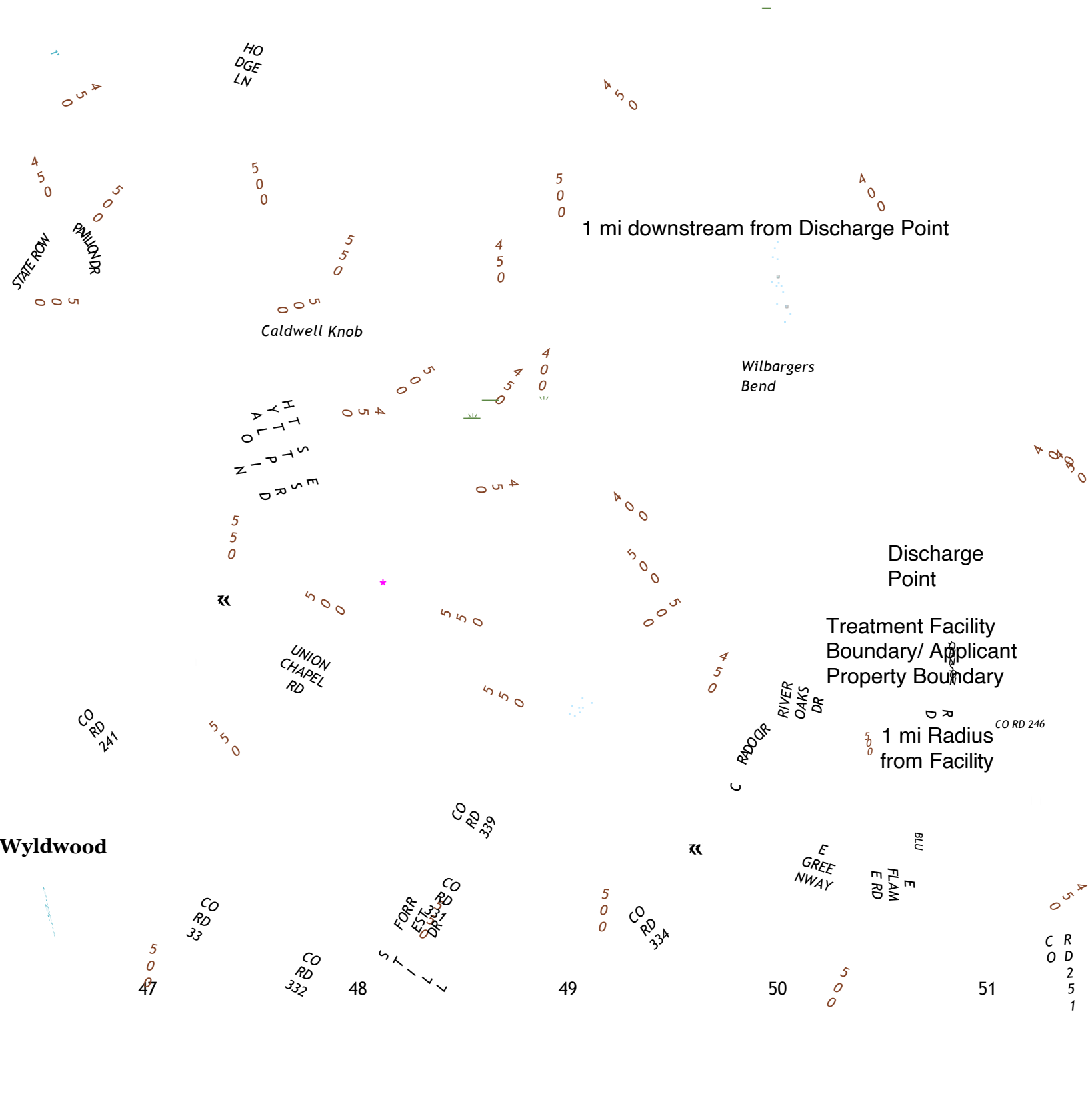
If the re-test indicates that the levels are still above the 0.08 ppm threshold, LCRA will take steps to try to determine and address the source of the H₂S. The H₂S levels will be measured at two additional monitoring points located between the point on the property line where the H₂S exceeded 0.08 ppm and the treatment plant to determine whether the treatment plant might be the source of the H₂S. If these additional monitoring stations indicate that H₂S levels are increasing with their proximity to the treatment plant, the carbon media in the canisters will be replaced and the air monitoring will be repeated within 72 hours.

to verify that replacement of the carbon has dropped the H₂S levels below the 0.08 ppm threshold.

If the re-test taken within 72 hours indicate that the treatment plant might still be emitting H₂S levels that would exceed the threshold at the property line, then the LCAA will initiate a review of the treatment plant operations. This review will include evaluating the waste streams entering the plant, the efficiency of the treatment plant process, the integrity of the treatment plant enclosure, and the air exhaust system.

If the additional monitoring points indicate that H₂S levels are decreasing with their proximity to the treatment plant, the LCRA, to the extent allowable based on access, will perform additional monitoring in an attempt to determine the direction from which the H₂S is emanating. Following the completion of the additional monitoring, the LCRA will notify the TNRCC within 48-hours so that the TNRCC can further investigate the source of the H₂S emissions.

SPIF USGS Map



1 mi downstream from Discharge Point

Discharge Point

Treatment Facility Boundary/
Applicant Property Boundary

1 mi Radius from Facility

Wyldwood

Topographic Survey

SCALE 1:24 000

Projection and

Zone 14R

Authority

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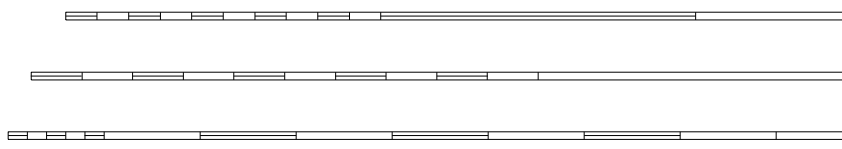
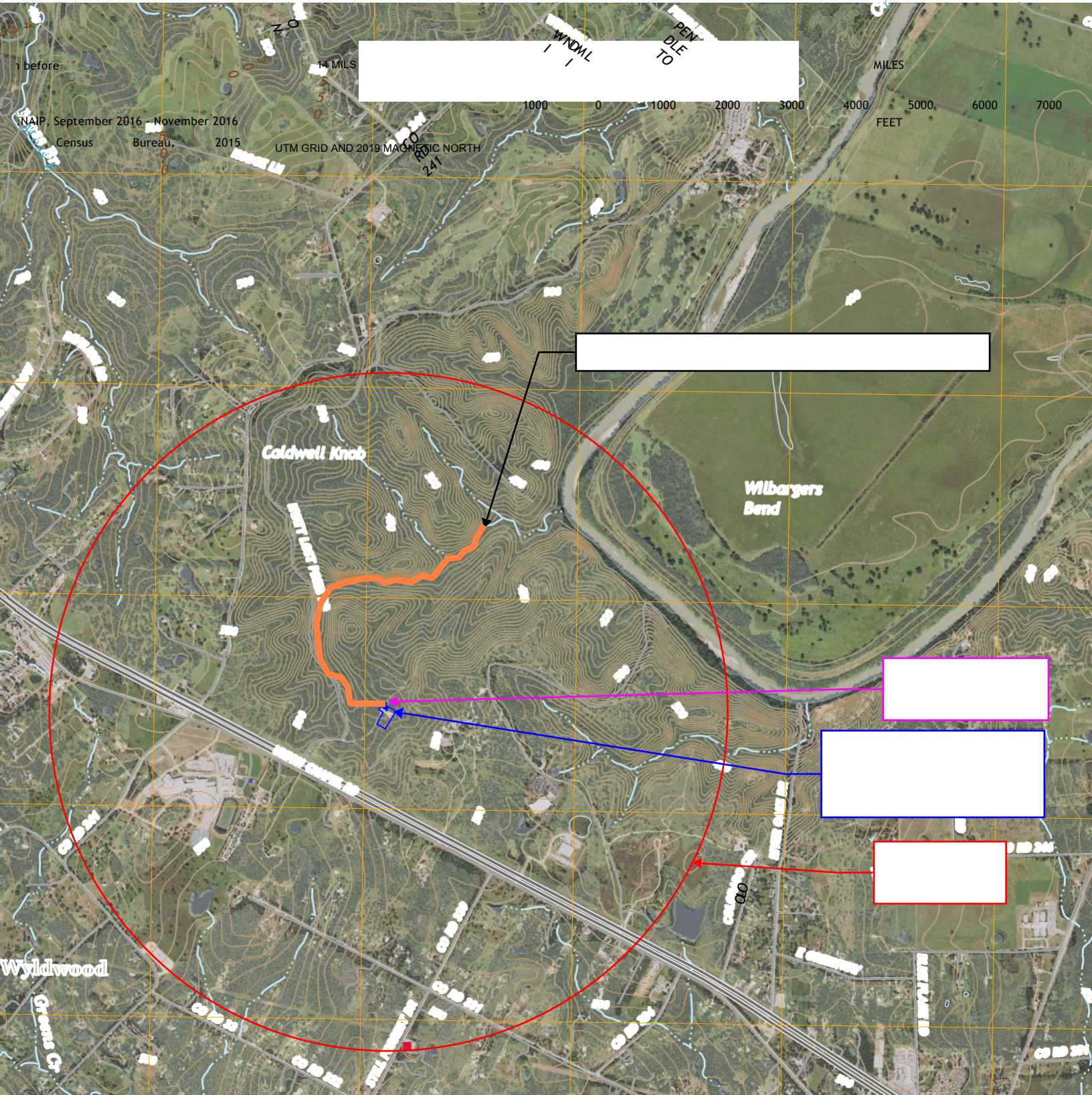
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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
DOMESTIC WASTEWATER PERMIT APPLICATION

DOMESTIC TECHNICAL REPORT 1.0

The Following Is Required For All Applications
Renewal, New, And Amendment

Section 1. Permitted or Proposed Flows (Instructions Page 51)

A. Existing/Interim I Phase

Design Flow (MGD): 0.05

2-Hr Peak Flow (MGD): 0.142

Estimated construction start date: 02/2023

Estimated waste disposal start date: 02/2024

B. Interim II Phase

Design Flow (MGD): 0.250

2-Hr Peak Flow (MGD): 1.360

Estimated construction start date: 02/2024

Estimated waste disposal start date: 02/2025

C. Final Phase

Design Flow (MGD): 0.510

2-Hr Peak Flow (MGD): 2.040

Estimated construction start date: 02/2025

Estimated waste disposal start date: 02/2026

D. Current operating phase: Phase I

Provide the startup date of the facility: 08/02/2010

Section 2. Treatment Process (Instructions Page 51)

A. Treatment process description

Provide a detailed description of the treatment process. **Include the type of**

treatment plant, mode of operation, and all treatment units. Start with the plant's head works and finish with the point of discharge. Include all sludge processing and drying units. **If more than one phase exists or is proposed in the permit, a description of *each phase* must be provided.** Process description:

The New McKinney Rough WWTP is proposed to be constructed in two phases served by a common fine screen headworks and flow equalization tankage. Each phase is proposed to be a membrane bioreactor designed in conformance with 30 TAC 217.157. Each MBR phase will include an anoxic zone ahead of the aerobic zone to provide nitrification. RAS will be recycled at rates up to 500%. Provisions for alkalinity, pH and supplemental carbon chemical feed systems will be included with each MBR. Sludge will be wasted to a separate aerated sludge holding tank to maintain optimal MLSS conditions in the bioreactor. Effluent will be stabilized by UV light per 30 TAC 217 Subchapter L prior to surface

Port or pipe diameter at the discharge point, in inches: 8"

B. Treatment Units

In Table 1.0(1), provide the treatment unit type, the number of units, and dimensions (length, width, depth) **of each treatment unit, accounting for *all* phases of operation.**

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
See <i>Treatment Process Details</i> attached		

Treatment Unit Type	Number of Units	Dimensions (L x W x D)

C. Process flow diagrams

Provide flow diagrams for the existing facilities and **each** proposed phase of construction.

Attachment: Process Flow Diagrams

Section 3. Site Drawing (Instructions Page 52)

Provide a site drawing for the facility that shows the following:

- The boundaries of the treatment facility;
- The boundaries of the area served by the treatment facility;
- If land disposal of effluent, the boundaries of the disposal site and all storage/holding ponds; and
- If sludge disposal is authorized in the permit, the boundaries of the land application or disposal site.

Attachment: Site Drawing

Provide the name and a description of the area served by the treatment facility.

Currently, treatment Facility serves the McKinney Roughs Learning Center and the Bastrop ISD Cedar Creek High School. Facility has been planned to serve the entire service area shown in Service Area exhibit attached.

Section 4. Unbuilt Phases (Instructions Page 52)

Is the application for a renewal of a permit that contains an unbuilt phase or phases?

Yes No

If yes, does the existing permit contain a phase that has not been constructed within five years of being authorized by the TCEQ?

Yes No

If yes, provide a detailed discussion regarding the continued need for the unbuilt phase. Failure to provide sufficient justification may result in the Executive Director recommending denial of the unbuilt phase or phases.

Section 5. Closure Plans (Instructions Page 53)

Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years?

Yes No

If yes, was a closure plan submitted to the TCEQ?

Yes No

If yes, provide a brief description of the closure and the date of plan approval.

Post commissioning of new treatment units, current treatment units will be taken out of service, removed, and ground will be restored to original state. See "Closure Plan" attachment for additional details.

Section 6. Permit Specific Requirements (Instructions Page 53)

For applicants with an existing permit, check the *Other Requirements* or

Special Provisions of the permit.

A. Summary transmittal

Have plans and specifications been approved for the existing facilities and each proposed phase?

Yes No

If yes, provide the date(s) of approval for each phase: 2001 / July 14, 2009

Provide information, including dates, on any actions taken to meet a requirement or provision pertaining to the submission of a summary transmittal letter. Provide a copy of an approval letter from the TCEQ, if applicable.

N/A

B. Buffer zones

Have the buffer zone requirements been met?

Yes No

Provide information below, including dates, on any actions taken to meet the conditions of the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.

See Odor Management Plan

C. Other actions required by the current permit

Does the *Other Requirements* or *Special Provisions* section in the existing permit require submission of any other information or other required actions? Examples include Notification of Completion, progress reports, soil monitoring data, etc.

Yes No

If yes, provide information below on the status of any actions taken to meet the conditions of an *Other Requirement* or *Special Provision*.

Click here to enter text!

D. Grit and grease treatment

1. Acceptance of grit and grease waste

Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?

Yes No

If No, stop here and continue with Subsection E. Stormwater Management.

2. Grit and grease processing

Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.

N/A

3. Grit disposal

Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?

Yes No

If No, contact the TCEQ Municipal Solid Waste team at 512-239-0000. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

Describe the method of grit disposal.

N/A

4. Grease and decanted liquid disposal

Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-0000.

Describe how the decant and grease are treated and disposed of after grit separation.

N/A

E. Stormwater management

1. Applicability

Does the facility have a design flow of 1.0 MGD or greater in any phase?

Yes No

Does the facility have an approved pretreatment program, under 40 CFR Part 403?

Yes No

If no to both of the above, then skip to Subsection F, Other Wastes Received.

2. MSGP coverage

Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?

Yes No

If yes, please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:

TXR05 or TXRNE

If no, do you intend to seek coverage under TXR050000?

Yes

No

3. Conditional exclusion

Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?

Yes

No

If yes, please explain below then proceed to Subsection F, Other Wastes Received:

Click here to enter text.

4. Existing coverage in individual permit

Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?

Yes

No

If yes, provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.

Click here to enter text.

5. Zero stormwater discharge

Do you intend to have no discharge of stormwater via use of evaporation or other means?

Yes

No

If yes, explain below then skip to Subsection F. Other Wastes Received.

Click here to enter text.

Note: If there is a potential to discharge any stormwater to surface water in

the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.

6. Request for coverage in individual permit

Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?

Yes No

If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

Note: Direct stormwater discharges to waters in the state authorized through this individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

Yes No

If yes, a Sewage Sludge Solids Management Plan is required. See Example 5 in the instructions.

G. Other wastes received including sludge from other WWTPs and septic

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

3. Acceptance of other wastes (not including septic, grease, grit, or RCRA, CERCLA or as discharged by IUs listed in Worksheet 6)

Is the facility accepting or will it accept wastes that are not domestic in nature excluding the categories listed above?

Yes No

If **yes**, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 58)

Is the facility in operation?

Yes No

If **no**, this section is not applicable. Proceed to Section 8.

If **yes**, provide effluent analysis data for the listed pollutants. **Wastewater treatment facilities** complete Table 1.0(2). **Water treatment facilities** discharging filter backwash water, complete Table 1.0(3).

Note: The sample date must be within 1 year of application submission.

Table 1.0(2) - Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l	<1		1	Grab	6/22/2022

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
					11:00
Total Suspended Solids, mg/l	7.52		1	Grab	6/22/2022 11:00
Ammonia Nitrogen, mg/l	0.0268		1	Grab	6/22/2022 11:00
Nitrate Nitrogen, mg/l	39.5		2=1	Grab	6/22/2022 11:00
Total Kjeldahl Nitrogen, mg/l	0.552		1	Grab	6/22/2022 11:00
Sulfate, mg/l	379		1	Grab	6/22/2022 11:00
Chloride, mg/l	242		1	Grab	6/22/2022 11:00
Total Phosphorus, mg/l	0.722		1	Grab	6/22/2022 11:00
pH, standard units	8.02		1	Grab	5/11/2022 11:00
Dissolved Oxygen*, mg/l	7.32		1	Grab	5/32/2022 11:00
Chlorine Residual, mg/l	N/A				
<i>E.coli</i> (CFU/100ml) freshwater	<1		1	Grab	6/22/2022 11:00
Enterococci (CFU/100ml) saltwater	N/A				
Total Dissolved Solids, mg/l	1800		1	Grab	6/22/2022 11:00

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Electrical Conductivity, $\mu\text{mohs/cm}$, †	N/A				
Oil & Grease, mg/l	<2.50		1	Grab	6/22/2022 11:00
Alkalinity (CaCO ₃)*, mg/l	504		1	Grab	6/22/2022 11:00

*TPDES permits only

†TLAP permits only

Table 1.0(3) - Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l					
Total Dissolved Solids, mg/l					
pH, standard units					
Fluoride, mg/l					
Aluminum, mg/l					
Alkalinity (CaCO ₃), mg/l					

Section 8. Facility Operator (Instructions Page 60)

Facility Operator Name: Henry Ochoa

Facility Operator's License Classification and Level: A

Facility Operator's License Number: WW0045470

Section 9. Sewage Sludge Management and Disposal (Instructions Page 60)

A. Sludge disposal method

Identify the current or anticipated sludge disposal method or methods from the

permitted sludge processing facility. If you selected this method, a written statement or contractual agreement from the wastewater treatment plant or permitted sludge processing facility accepting the sludge must be included with this application.

Other: Written Statement

B. Sludge disposal site

Disposal site name: Austin Wastewater Processing Facility

TCEQ permit or registration number: MSW 2384

County where disposal site is located: Travis County

C. Sludge transportation method

Method of transportation (truck, train, pipe, other): Truck

Name of the hauler: Wastewater Transport Services

Hauler registration number: Sludge Registration 24343

Sludge is transported as a:

Liquid

semi-liquid

semi-solid

solid

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

A. Beneficial use authorization

Does the existing permit include authorization for land application of sewage sludge for beneficial use?

Yes No

If **yes**, are you requesting to continue this authorization to land apply sewage sludge for beneficial use?

Yes No

If **yes**, is the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)** attached to this permit application (see the instructions for details)?

Yes No

B. Sludge processing authorization

Does the existing permit include authorization for any of the following sludge processing, storage or disposal options?

- | | | |
|--|------------------------------|--|
| Sludge Composting | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Marketing and Distribution of sludge | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Sludge Surface Disposal or Sludge Monofill | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Temporary storage in sludge lagoons | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |

If **yes** to any of the above sludge options and the applicant is requesting to continue this authorization, is the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)** attached to this permit application?

Yes No

Section 11. Sewage Sludge Lagoons (Instructions Page 61)

Does this facility include sewage sludge lagoons?

Yes No

If yes, complete the remainder of this section. If no, proceed to Section 12.

A. Location information

The following maps are required to be submitted as part of the application. For each map, provide the Attachment Number.

- Original General Highway (County) Map:

Attachment:

- USDA Natural Resources Conservation Service Soil Map:

Attachment:

- Federal Emergency Management Map:

Attachment:

- Site map:

Attachment:

Discuss in a description if any of the following exist within the lagoon area.

Check all that apply.

- Overlap a designated 100-year frequency flood plain
- Soils with flooding classification

- Overlap an unstable area
- Wetlands

- Located less than 60 meters from a fault
- None of the above

Attachment:

If a portion of the lagoon(s) is located within the 100-year frequency flood plain, provide the protective measures to be utilized including type and size of protective structures:

B. Temporary storage information

Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in Section 7 of Technical Report 1.0.

Nitrate Nitrogen, mg/kg:

Total Kjeldahl Nitrogen, mg/kg:

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg:

Phosphorus, mg/kg:

Potassium, mg/kg:

pH, standard units:

Ammonia Nitrogen mg/kg:

Arsenic:

Cadmium:

Chromium:

Copper:

Lead:

Mercury:

Molybdenum:

Nickel:

Selenium:

Zinc:

Total PCBs:

Provide the following information:

Volume and frequency of sludge to the lagoon(s):

Total dry tons stored in the lagoons(s) per 365-day period:

Total dry tons stored in the lagoons(s) over the life of the unit:

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of 1×10^{-7} cm/sec?

Yes No

If yes, describe the liner below. Please note that a liner is required.

D. Site development plan

Provide a detailed description of the methods used to deposit sludge in the lagoon(s):

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)

Attachment:

- Copy of the closure plan

Attachment:

- Copy of deed recordation for the site

Attachment:

- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

Attachment:

- Description of the method of controlling infiltration of groundwater and surface water from entering the site

Attachment: [click here to enter text](#)

- Procedures to prevent the occurrence of nuisance conditions

Attachment: [click here to enter text](#)

E. Groundwater monitoring

Is groundwater monitoring currently conducted at this site, or are any wells available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?

Yes No

If groundwater monitoring data are available, provide a copy. Provide a profile of soil types encountered down to the groundwater table and the depth to the shallowest groundwater as a separate attachment.

Attachment: [click here to enter text](#)

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 63)

A. Additional authorizations

Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?

Yes No

If yes, provide the TCEQ authorization number and description of the authorization:

[click here to enter text](#)

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

Yes No

Is the permittee required to meet an implementation schedule for compliance or enforcement?

Yes No

If yes to either question, provide a brief summary of the enforcement, the

implementation schedule, and the current status:

Section 13. RCRA/CERCLA Wastes (Instructions Page 63)

A. RCRA hazardous wastes

Has the facility received in the past three years, does it currently receive, or will it receive RCRA hazardous waste?

Yes No

B. Remediation activity wastewater

Has the facility received in the past three years, does it currently receive, or will it receive CERCLA wastewater, RCRA remediation/corrective action wastewater or other remediation activity wastewater?

Yes No

C. Details about wastes received

If yes to either Subsection A or B above, provide detailed information concerning these wastes with the application.

Attachment: N/A

Section 14. Laboratory Accreditation (Instructions Page 64)

All laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
 - periodically inspected by the TCEQ; or
 - located in another state and is accredited or inspected by that state; or
 - performing work for another company with a unit located in the same site; or
 - performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review *30 TAC Chapter 25* for specific requirements.

The following certification statement shall be signed and submitted with every application. See the *Signature Page* section in the Instructions, for a list of designated representatives who may sign the certification.

CERTIFICATION:

I certify that all laboratory tests submitted with this application meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*.

Printed Name: Robert Hicks

Title: Compliance Manager

Signatur

Date: July 18, 2022

DOMESTIC TECHNICAL REPORT 1.1

The following is required for new and amendment applications

Section 1. Justification for Permit (Instructions Page 66)

A. Justification of permit need

Provide a detailed discussion regarding the need for any phase(s) not currently permitted. Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.

Preliminary plans for the McKinney Roughs expansion is to accommodate approximately 2,082 living unit equivalents (LUE) of mixed use residential and commercial properties. There are two WWTFs within a 3-mile radius of the proposed plant, however neither have the ability take on additional capacity.

B. Regionalization of facilities

Provide the following information concerning the potential for regionalization of domestic wastewater treatment facilities:

1. Municipally incorporated areas

If the applicant is a city, then Item 1 is not applicable. Proceed to Item 2 Utility CCN areas.

Is any portion of the proposed service area located in an incorporated city?

Yes No Not Applicable

If yes, within the city limits of:

If yes, attach correspondence from the city.

Attachment:

If consent to provide service is available from the city, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the city versus the cost of the proposed facility or expansion attached.

Attachment:

2. Utility CCN areas

Is any portion of the proposed service area located inside another utility's CCN area?

Yes No

If yes, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the CCN facilities versus the cost of the proposed facility or expansion.

Attachment: [\[Redacted\]](#)

3. *Nearby WWTPs or collection systems*

Are there any domestic permitted wastewater treatment facilities or collection systems located within a three-mile radius of the proposed facility?

Yes No

If yes, attach a list of these facilities that includes the permittee's name and permit number, and an area map showing the location of these facilities.

Attachment: Nearby WWTP Map

If yes, attach copies of your certified letters to these facilities **and** their response letters concerning connection with their system.

Attachment: Adjacent facilities owned by applicant - no capacity.

Does a permitted domestic wastewater treatment facility or a collection system located within three (3) miles of the proposed facility currently have the capacity to accept or is willing to expand to accept the volume of wastewater proposed in this application?

Yes No

If yes, attach an analysis of expenditures required to connect to a permitted wastewater treatment facility or collection system located within 3 miles versus the cost of the proposed facility or expansion.

Attachment: [\[Redacted\]](#)

Section 2. Organic Loading (Instructions Page 67)

Is this facility in operation?

Yes No

If no, proceed to Item B, Proposed Organic Loading.

If yes, provide organic loading information in Item A, Current Organic Loading

A. Current organic loading

Facility Design Flow (flow being requested in application): 0.510 MGD

Average Influent Organic Strength or BOD₅ Concentration in mg/l: 340

Average Influent Loading (lbs/day = total average flow X average BOD₅ conc. X 8.34): 1446

Provide the source of the average organic strength or BOD₅ concentration.

Grab samples.

B. Proposed organic loading

This table must be completed if this application is for a facility that is not in operation or if this application is to request an increased flow that will impact organic loading.

Table 1.1(1) - Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD ₅ Concentration (mg/l)
Municipality		
Subdivision		
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park,		

Source	Total Average Flow (MGD)	Influent BOD ₅ Concentration (mg/l)
overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources	0.510	
AVERAGE BOD ₅ from all sources		340

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 68)

A. Existing/Interim I Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 5

Total Suspended Solids, mg/l: 5

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: 1

Dissolved Oxygen, mg/l: 6

Other:

B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 5

Total Suspended Solids, mg/l: 5

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: 1

Dissolved Oxygen, mg/l: 6

Other:

C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 5

Total Suspended Solids, mg/l: 5

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: 1

Dissolved Oxygen, mg/l: 6

Other:

D. Disinfection Method

Identify the proposed method of disinfection.

Chlorine: mg/l after minutes detention time at peak flow

Dechlorination process:

Ultraviolet Light: 30 seconds contact time at peak flow

Other:

Section 4. Design Calculations (Instructions Page 68)

Attach design calculations and plant features for each proposed phase. Example 4 of the instructions includes sample design calculations and plant features.

Attachment: Design Calcs

Section 5. Facility Site (Instructions Page 68)

A. 100-year floodplain

Will the proposed facilities be located above the 100-year frequency flood level?

Yes No

If no, describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.

Provide the source(s) used to determine 100-year frequency flood plain.

FEMA Firmette 48021C0190F

For a new or expansion of a facility, will a wetland or part of a wetland be filled?

Yes No

If yes, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?

Yes No

If yes, provide the permit number:

If no, provide the approximate date you anticipate submitting your application to the Corps:

B. Wind rose

Attach a wind rose. **Attachment:** Windrose

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 69)

A. Beneficial use authorization

Are you requesting to include authorization to land apply sewage sludge for beneficial use on property located adjacent to the wastewater treatment facility under the wastewater permit?

Yes

No

If yes, attach the completed Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)

Attachment: [REDACTED]

B. Sludge processing authorization

Identify the sludge processing, storage or disposal options that will be conducted at the wastewater treatment facility:

- Sludge Composting
- Marketing and Distribution of sludge
- Sludge Surface Disposal or Sludge Monofill

If any of the above sludge options are selected, attach a completed DOMESTIC WASTEWATER PERMIT APPLICATION: SEWAGE SLUDGE TECHNICAL REPORT (TCEQ Form No. 10056).

Attachment: [REDACTED]

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 69)

Attach a solids management plan to the application.

Attachment: Solids Management Plan

The sewage sludge solids management plan must contain the following information:

- Treatment units and processes dimensions and capacities
- Solids generated at 100, 75, 50, and 25 percent of design flow
- Mixed liquor suspended solids operating range at design and projected actual flow
- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

An example of a sewage sludge solids management plan has been included as Example 5 of the instructions.

DOMESTIC TECHNICAL REPORT WORKSHEET 2.0

RECEIVING WATERS

The following is required for all TPDES permit applications

Section 1. Domestic Drinking Water Supply (Instructions Page 73)

Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?

Yes No

If yes, provide the following:

Owner of the drinking water supply: N/A

Distance and direction to the intake: N/A

Attach a USGS map that identifies the location of the intake.

Attachment: N/a

Section 2. Discharge into Tidally Affected Waters (Instructions Page 73)

Does the facility discharge into tidally affected waters?

Yes No

If yes, complete the remainder of this section. If no, proceed to Section 3.

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: N/A

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

Yes No

If yes, provide the distance and direction from outfall(s).

N/A

C. Sea grasses

Are there any sea grasses within the vicinity of the point of discharge?

Yes No

If yes, provide the distance and direction from the outfall(s).

N/A

Section 3. Classified Segments (Instructions Page 73)

Is the discharge directly into (or within 300 feet of) a classified segment?

Yes No

If yes, this Worksheet is complete.

If no, complete Sections 4 and 5 of this Worksheet.

Section 4. Description of Immediate Receiving Waters (Instructions Page 75)

Name of the immediate receiving waters:

A. Receiving water type

Identify the appropriate description of the receiving waters.

- Stream
- Freshwater Swamp or Marsh
- Lake or Pond

Surface area, in acres:

Average depth of the entire water body, in feet:

Average depth of water body within a 500-foot radius of discharge point, in feet:

- Man-made Channel or Ditch

- Open Bay
- Tidal Stream, Bayou, or Marsh
- Other, specify:

B. Flow characteristics

If a stream, man-made channel or ditch was checked above, provide the following. For existing discharges, check one of the following that best characterizes the area *upstream* of the discharge. For new discharges, characterize the area *downstream* of the discharge (check one).

- Intermittent - dry for at least one week during most years
- Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses
- Perennial - normally flowing

Check the method used to characterize the area upstream (or downstream for new dischargers).

- USGS flow records
- Historical observation by adjacent landowners
- Personal observation
- Other, specify:

C. Downstream perennial confluences

List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point.

<p><u>N/A</u></p>

D. Downstream characteristics

Do the receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.)?

Yes No

If yes, discuss how.

Intermittent creek enters Colorado River

E. Normal dry weather characteristics

Provide general observations of the water body during normal dry weather conditions.

Creek is normally dry.

Date and time of observation: December 14th, 2018

Was the water body influenced by stormwater runoff during observations?

Yes

No

Section 5. General Characteristics of the Waterbody (Instructions Page 74)

A. Upstream influences

Is the immediate receiving water upstream of the discharge or proposed discharge site influenced by any of the following? Check all that apply.

Oil field activities

Urban runoff

Upstream discharges

Agricultural runoff

Septic tanks

Other(s), specify [click here to enter](#)

B. Waterbody uses

Observed or evidences of the following uses. Check all that apply.

Livestock watering

Contact recreation

Irrigation withdrawal

Non-contact recreation

Fishing

Navigation

Domestic water supply

Industrial water supply

Park activities

Other(s), specify [click here to enter](#)

C. Waterbody aesthetics

Check one of the following that best describes the aesthetics of the receiving water and the surrounding area.

- Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional
- Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored
- Common Setting: not offensive; developed but uncluttered; water may be colored or turbid
- Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

Domestic Technical Report 1.0 – Attachment: Treatment Process Details

Treatment Process Description

Phase I: The overall treatment process for Phase I will incorporate an MBR design with a rated treatment capacity of 0.250 MGD. Influent into the system will first pass through a primary, rotary drum screen before entering an equalization tank (EQ Tank). From the EQ tank, wastewater will be pumped to the MBR process train including an anoxic basin, an aeration basin and separate MBR Cassette tanks.

From the EQ tank, screened wastewater will be pumped through a secondary drum screen located over a mechanically mixed anoxic tank at the front of each MBR process train where it is mixed with return activated sludge from the membrane basins. From the anoxic tank, mixed liquor is pumped into an aeration basin. Mixed liquor will cascade by gravity from the aeration basin into a membrane basin. Wastewater will then be filtered through ultrafiltration membranes. Permeate from the membranes will be treated with UV disinfection before exiting the system at the discharge point.

Waste activated sludge from the system will be cycled through a separate holding tank (Sludge Holding Tank), where it will be intermittently removed and disposed of. All aspects of the MBR system design will comply with TCEQ 30 Chapter 217.157 (Membrane Bioreactor Systems).

The existing 0.05-mgd package plant will be demolished after commissioning of Phase I.

Phase II: The second phase will add another 0.250 MGD MBR process train in parallel with the first. The discharge from the primary screen will be routed through a flow splitter structure to allow controlled flow splitting or isolation of each train.

Additional Facility Features:

- System Redundancy and Reliability
 - Each MBR treatment train contains at least one spare membrane cassette. For all phases of the project, the system can operate at peak flow with one membrane cassette per train out of service.
 - All pumps and blowers used throughout the process will maintain at least a 1.5X redundancy factor during operation.
 - Emergency/back-up power will be supplied by an on-site generator that will be designed to provide continuous and sufficient power to all process equipment (i.e. pumps, blowers, mixers, etc.)
- Overflow prevention.
 - A peaking factor of 4.0 is used to assure adequate hydraulic capacity.
 - Pumping systems have been designed to operate at peak flow with the largest pump out of service.
 - All piping is sized to handle anticipated peak flows.
 - Overflow from open top basins will be caught and redirected to largest holding tank to further prevent any spill incidents.

Treatment Unit Details

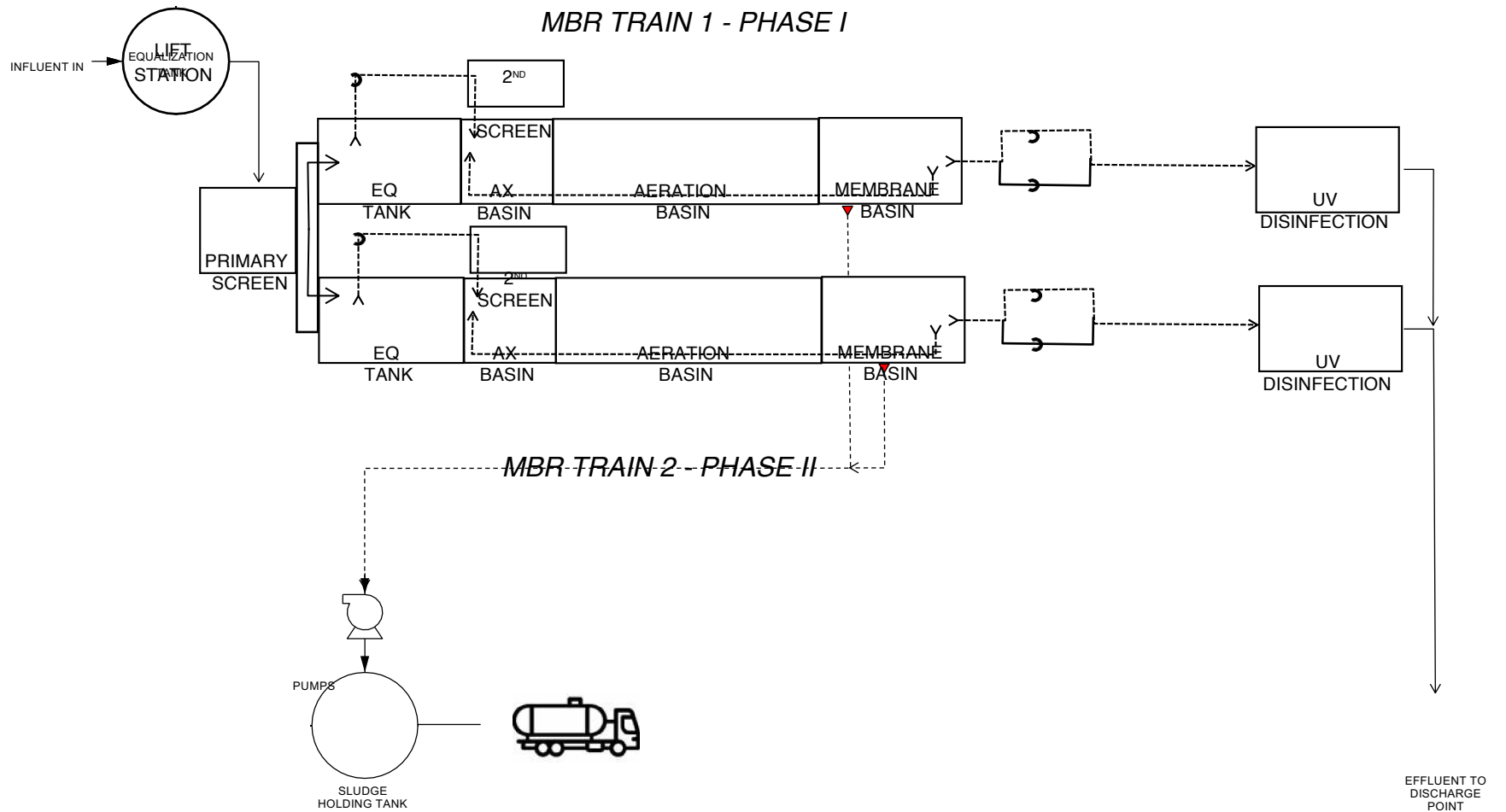
Phase I:

Treatment Unit Type	# of Units	Dimensions	
Headworks	1	21' x 15'	L x W
EQ Tank	1	25.5' x 31.5' x 19'	W x L x SWD
Anoxic Tank	1	25.5' x 11.0' x 19'	W x L x SWD
Aeration Tank	1	25.5' x 34.0' x 19'	W x L x SWD
Aerated MBR Tank	1	25.5' x 18.0' x 19'	W x L x SWD
Sludge Holding Tank	1	15.5' x 15.2'	Dia. x H

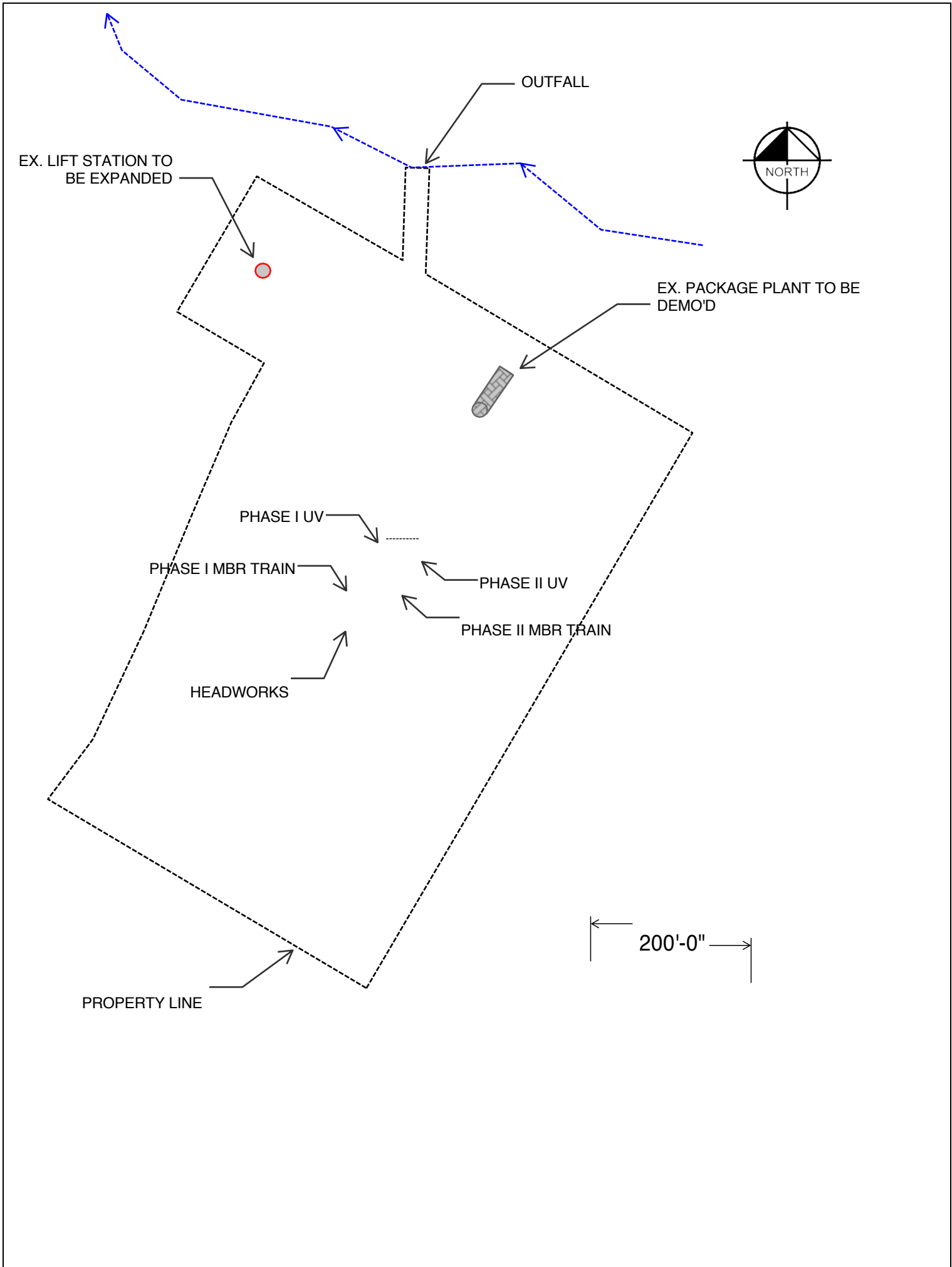
Phase II:

Treatment Unit Type	# of Units	Dimensions	
Headworks	1	21' x 15'	L x W
EQ Tank	2	25.5' x 31.5' x 19'	W x L x SWD
Anoxic Tank	2	25.5' x 11.0' x 19'	W x L x SWD
Aeration Tank	2	25.5' x 34.0' x 19'	W x L x SWD
Aerated MBR Tank	2	25.5' x 18.0' x 19'	W x L x SWD
Sludge Holding Tank	1	15.5' x 15.2'	Dia. x H

MCKINNEY ROUGHS WASTEWATER TREATMENT FACILITY
PROCESS FLOW DIAGRAM
PHASE I AND PHASE II (FINAL)

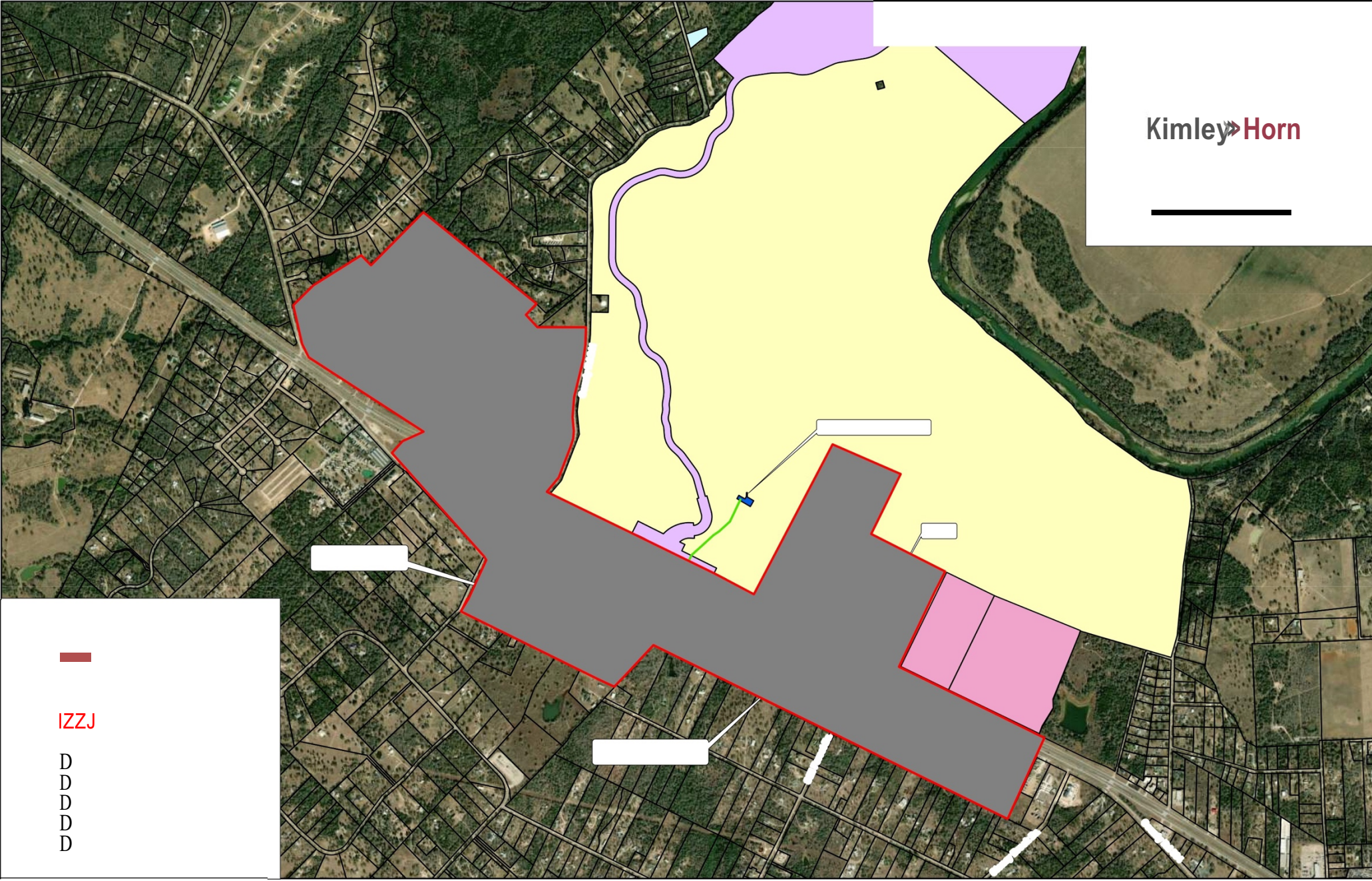


TO CAMP SWIFT WWTP





McKINNEY ROUGHS WWTP
CORIX UTILITIES - TEXAS
SITE PLAN

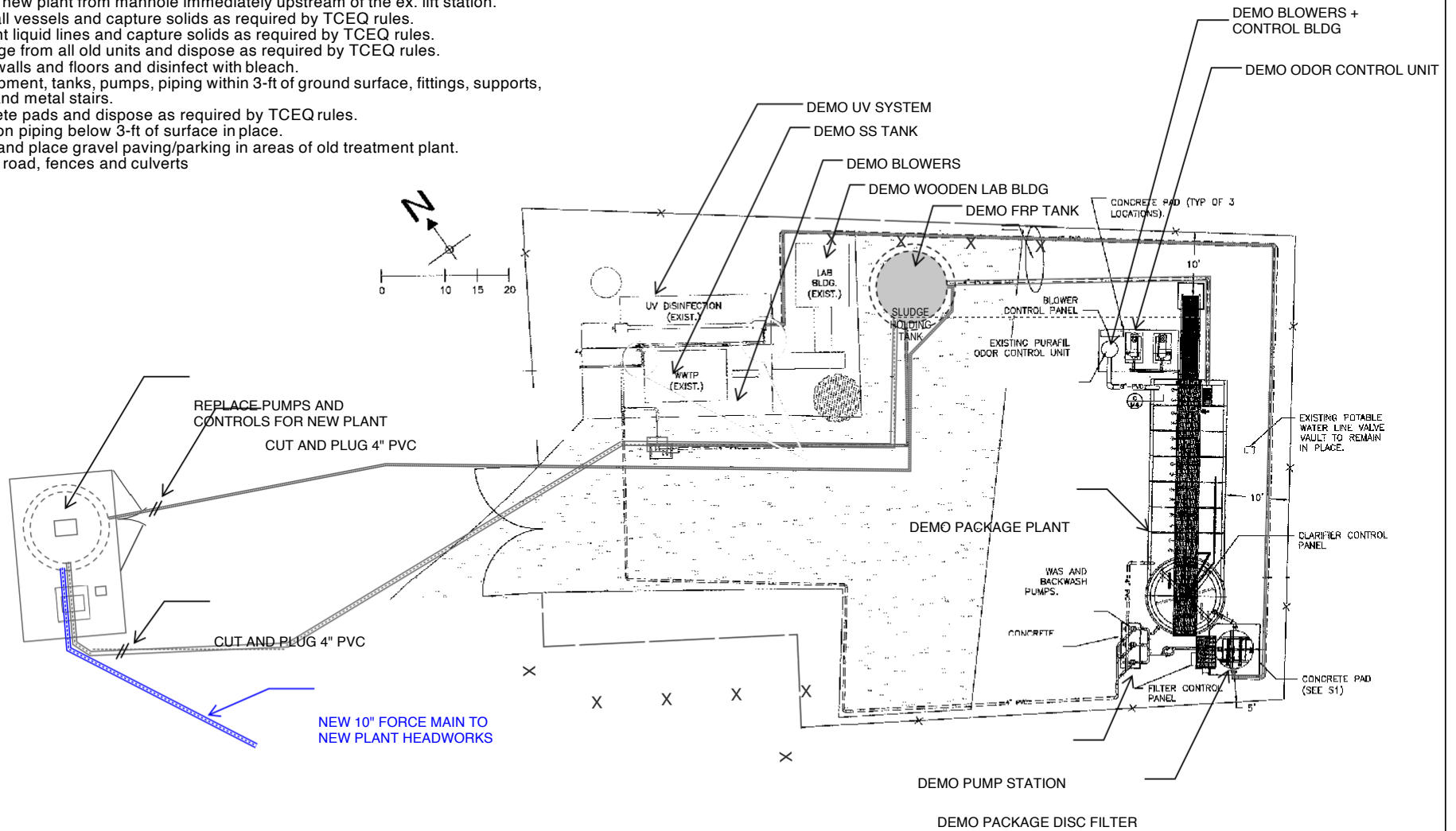


IZZJ

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Closure Plan:

- Construct and commission new treatment facilities while existing package plant remains in service, including new electrical service and new outfall immediately adjacent to existing.
- Bypass pump to new plant from manhole immediately upstream of the ex. lift station.
- Pressure wash all vessels and capture solids as required by TCEQ rules.
- Flush all old plant liquid lines and capture solids as required by TCEQ rules.
- Remove all sludge from all old units and dispose as required by TCEQ rules.
- Pressure wash walls and floors and disinfect with bleach.
- Remove all equipment, tanks, pumps, piping within 3-ft of ground surface, fittings, supports, hatches, ducts and metal stairs.
- Demolish concrete pads and dispose as required by TCEQ rules.
- Plug and abandon piping below 3-ft of surface in place.
- Restore grades and place gravel paving/parking in areas of old treatment plant.
- Restore existing road, fences and culverts



**McKINNEY ROUGHS WWTP
EXISTING PLANT CLOSURE PLAN**

PRELIMINARY SUBMITTAL
This document is released for review purposes only under the authority of Troy R. Hatchkiss, TX PE 83289 of Integrated Water Services, Inc, TBPE F-15238 .
07/12/2022 9:37:42 AM

McKinney Rough Major Amendment
Domestic Technical Report 1.0 - Section 7
Pollutant Analysis of Treated Effluent



LCRA Environmental Laboratory Services
3505 Montopolis Drive
Austin, TX 78744
Phone (512)730-6022
Fax (512)730-6021

July 08, 2022

HALEY NUNN
CORIX
1812 CENTRE CREEK DR.
STE 100
Austin, TX 78754
haley.nunn@corixtexas.com

RE: Final Analytical Report Q2217183
Attn: HALEY NUNN

Enclosed are the analytical results for sample(s) received by LCRA Environmental Laboratory Services. Results reported herein conform to the most current NELAP standards, where applicable, unless otherwise narrated in the body of the report. This final report provides results related only to the sample(s) as received for the above referenced work order.

Thank you for selecting ELS for your analytical needs. If you have any questions regarding this report, please contact us at (512) 730-6022 or environmental.lab@lcra.org. We look forward to assisting you again.

Authorized for release by:

Jason Woods
Account Manager
jason.woods@lcra.org



Enclosures:



LCRA Environmental Laboratory Services
3505 Montopolis Drive
Austin, TX 78744
Phone (512)730-6022
Fax (512)730-6021

Workorder: Q2217183
Workorder Description: CORIXMCKINNEYSUB_06222022
Client: CORIX
Profile: MCKINNEY ROUGHS WEEKLY SUB
Sampled By: HALEY NUNN

Report To: HALEY NUNN
CORIX
1812 CENTRE CREEK DR.
STE 100
Austin, TX 78754

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported
Q2217183001	OUTFALL	AQ	SM5210B CBOD	06/22/2022 11:00	06/22/2022 12:36	1

Report Definitions

MRL - Minimum Reporting Limit
LOD - Limit of Detection
ML - Maximum Limit - Client Specified
MCL - Maximum Contaminant Level
LOQ - Limit of Quantitation - Client Specified
DF - Dilution Factor
(S) - Surrogate Spike
MDL - Method Detection Limit
RPD - Relative Percent Difference

Qualifier Definitions

J - Analyte detected below quantitation limit
R - RPD outside duplicate precision limit
S - Spike recovery outside limit
B - Analyte detected in method blank
N - Not Accredited
M - Analyte Detected Above Maximum Contaminant Level
SL - Spike Recovery Low
SH - Spike Recovery High
H - Analyzed Past Hold Time
CR - Confirmed Result
CH - Result confirmed by historical data



LCRA Environmental Laboratory Services
3505 Montopolis Drive
Austin, TX 78744
Phone (512)730-6022
Fax (512)730-6021

Workorder Summary

Sample Comments

Q2217183001 (OUTFALL) - Paying sample

ANALYTICAL COMMENTS: Q2217183001 (SM5210B CBOD) subcontracted with customer's approval. Data provided in full with the ELS final report.



LCRA Environmental Laboratory Services
 3505 Montopolis Drive
 Austin, TX 78744
 Phone (512)730-6022
 Fax (512)730-6021

Analytical Results

Client ID: CORIX	Date Collected: 06/22/2022 11:00	Matrix: Aqueous
Lab ID: Q2217183001	Date Received: 06/22/2022 12:36	Sample Type: SAMPLE
Sample ID: OUTFALL	Location:	
Project ID: MCKINNEY ROUGHS WEEKLY SUB	Facility:	
	Sample Point:	

Subcontracted (SM5210B CBOD)

Parameter	Results	Units	MRL	LOD	ML	DF	Prepared	By	Analyzed	By	Qualifier
Carbonaceous BOD	<1 mg/L		1.00	1.00		1	06/23/2022 07:45	SUB	06/23/2022 07:45	SUB	

Email information for report date:

7/5/22 13:25

F020779

LCRA

Attn: ELS

envlab@lcra.org

3505 Montopolis
Austin, TX 78744

**ATL has improperly reported the field parameters
pH, Chlorine, and DO as NEL Accredited.**

ATL is accredited for these parameters when they are performed in the lab. These field parameters are now being reported with an ANR, "Accreditation not offered by the State of Texas," indicator.

There is no impact to the result values that have been previously reported. Aqua-Tech values you as a customer and encourages you to speak with our staff at 979-778-3707 or samplingbryan@aquatechlabs.com if you have questions.

Thank you for your business,
June M. Brien
Executive Technical Director

CORPORATE OFFICE
635 Phil Gramm Boulevard
Bryan, TX 77807
Phone: (979) 778-3707
Fax: (979) 778-3193



AUSTIN OFFICE
3512 Montopolis Dr. Suite A
Austin, TX 78744
Phone: (512) 301-9559
Fax: (512) 301-9552

The analyses summarized in this report were performed by Aqua-Tech Laboratories, Inc. unless otherwise noted. Aqua-Tech Laboratories, Inc. holds accreditation from the State of Texas in accordance with TNI and/or through the TCEQ Drinking Water Commercial Laboratory Approval Program.

The following abbreviations indicate certification status:

NEL TNI accredited parameter.
ANR Accreditation not offered by the State of Texas.
DWP Approval through the TCEQ Drinking Water Commercial Laboratory Approval Program.
INF Aqua-Tech Laboratories, Inc. is not accredited for this parameter. It is reported on an informational basis only.

T104704371-21-24



Subcontracted data summarized in this report is indicated by "Sub" in the Lab column.

General Definitions:

NR Not Reported.
RPD Relative Percent Difference.
% R Percent Recovery.
dry Results with the "dry" unit designation are reported on a "dry weight" basis.
SQL The Sample Quantitation Limit is the value below which the parameter cannot reliably be detected. The SQL includes all sample preparations, dilutions and / or concentrations.
Adj MDL The Adjusted Method Detection Limit is the MDL value adjusted for any sample dilutions or concentrations.
MDL The Method Detection Limit is the lowest theoretical value that is statistically different from zero for a specific method, taking into account all preparation steps and instrument settings.

TCEQ DW Lab ID TX 239

All samples are reported on an "as received" basis unless the designation "dry" is added to the reported unit.

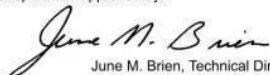
Copies of Aqua-Tech Laboratories, Inc. procedures and individual sampling plans are available upon request. Note that samples are collected by Aqua-Tech Laboratories, Inc. personnel unless otherwise noted in the "Sample Collected" field of this report as "Client" or "CLT".

Samples included in this report were received in acceptable condition according to Aqua-Tech Laboratories, Inc. procedures and 40 CFR, Chapter I, Subchapter D, Part 136.3, TABLE II. - Required containers, preservation techniques, and holding times, unless otherwise noted in this report.

Record Retention:

All reports, raw data, and associated quality control data are kept on file for 10 years before being destroyed. Any client that would like copies of records must contact Aqua-Tech Laboratories, Inc. no later than six months prior to the scheduled disposal. An administrative fee for retrieval and distribution will apply.

This report was approved by:


June M. Brien, Technical Director

The results in this report apply only to the samples analyzed. This analytical report must be reproduced in its entirety unless written permission is granted by Aqua-Tech Laboratories, Inc.

corp@aquatechlabs.com

www.aquatechlabs.com

Page 1 of 4 F020779_1 ATL 031822 FINB_Is 07 05 22 1325

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Analytical Report

LCRA
Report Printed: 7/5/22 13:25
F020779

Lab ID#	Result	Units	Notes	MDL	Adj MDL	SQL	Lab	Analyzed	Method	Batch
LCRA Q2217183001	Collected: 06/22/22 11:00 by CLIENT Received: 06/22/22 14:15 by Mark Asher									
F020779-01										
General Chemistry										
Carbonaceous BOD (5 day)	<1	mg/L		1	1	1	Austin	06/23/22 07:45 HNJ	SM5210 B 2016	M146316

General Chemistry - Quality Control													
Result	Units	Notes	MDL	SQL	Analyzed	Spike Amount	Source Result	%R	%R Limits	RPD	RPD Limit	Batch	
Carbonaceous BOD (5 day) - SM5210 B 2016													
Dln Water Blk	0.20	mg/L	1	1	06/23/22 07:45 HNJ		0.2		< or = 0.2 mg/L			2206293	Austin
GGA	182	mg/L	1	1	06/23/22 07:45 HNJ	198		91.9	84.6 - 115.4			2206293	
GGA	202	mg/L	1	1	06/23/22 07:45 HNJ	198		102	84.6 - 115.4			2206293	
GGA	195	mg/L	1	1	06/23/22 07:45 HNJ	198		98.5	84.6 - 115.4			2206293	
Seed Blank	<1	mg/L	1	1	06/23/22 07:45 HNJ							2206293	
Seed Blank	<1	mg/L	1	1	06/23/22 07:45 HNJ							2206293	
Seed Blank	<1	mg/L	1	1	06/23/22 07:45 HNJ							2206293	
Duplicate	2	mg/L	1	1	06/23/22 07:45 HNJ		1			14.8	40.6	M146316	

Sample Preparation Summary											
Sample	Method	Prepared	Lab	Bottle	Initial	Units	Final	Units	External Dilution Factor	Batch	
F020779-01											
Carbonaceous BOD (5 day)	SM5210 B 2016	6/23/22 7:45 HNJ	Austin	A	300	mL	300	mL	1	M146316	

22-20235A
F020729

LCRA Chain of Custody _____

Document: 45425463

Chain of Custody - Required Limits _____

Document: 45425463

Method	Analyte	LOD	RL	MCL	LOQ Check Standard Required?
SM5210B CBOD	Carbonaceous BOD	1 mg/L	1 mg/L		No

Page 4 of 4 F020779_1_ATL_031822 FINB_Is 07 05 22 1325

Ariana Dean

From: Haley Nunn <Haley.Nunn@corixtexas.com>
Sent: Friday, June 17, 2022 4:09 PM
To: Courtney Alcede; Bhanu Acharya; Ariana Dean
Subject: Late Notice...

CAUTION - EXTERNAL EMAIL
Suspicious Email? [Click the fish!](#)

Hi all!

I know it's late notice. Is there is any way you guys can get me bottle together to grab in about 30 minutes for the follow parameters? I am stopping by. I forgot to have Bobby grab it today.

I can fill in the COC.

CBODs, mg/l
~~TSS, mg/l~~
Ammonia Nitrogen, mg/l ✓
~~Nitrate Nitrogen, mg/l~~
Total Kjeldahl Nitrogen, mg/l ✓
Sulfate, mg/l ✓
Chloride, mg/l ✓
Total Phosphorus, mg/l ✓
E.Coli(CFU/100ml)
Total Dissolved solids, mg/l ✓
Oil & Grease, mg/l ✓
Alkalinity (CaCO₃), mg/l ✓

Thanks,
Haley

Get [Outlook for iOS](#)

LCRA Chain of Custody _____

Document: 45425463

Chain of Custody - Required Limits _____

Document: 45425463

Method	Analyte	LOD	RL	MCL	LOQ Check Standard Required?
SM5210B CBOD	Carbonaceous BOD	1 mg/L	1 mg/L		No

End of Report



LCRA Environmental Laboratory Services
3505 Montopolis Drive
Austin, TX 78744
Phone (512)730-6022
Fax (512)730-6021

July 01, 2022

HALEY NUNN
CORIX
1812 CENTRE CREEK DR.
STE 100
Austin, TX 78754
haley.nunn@corixtexas.com

RE: Final Analytical Report Q2217180
Attn: HALEY NUNN

Enclosed are the analytical results for sample(s) received by LCRA Environmental Laboratory Services. Results reported herein conform to the most current NELAP standards, where applicable, unless otherwise narrated in the body of the report. This final report provides results related only to the sample(s) as received for the above referenced work order.

Thank you for selecting ELS for your analytical needs. If you have any questions regarding this report, please contact us at (512) 730-6022 or environmental.lab@lcra.org. We look forward to assisting you again.

Authorized for release by:

Jason Woods
Account Manager
jason.woods@lcra.org



Enclosures:



LCRA Environmental Laboratory Services
 3505 Montopolis Drive
 Austin, TX 78744
 Phone (512)730-6022
 Fax (512)730-6021

Workorder: Q2217180
Workorder Description: CORIXMCKINNEY_06222022
Client: CORIX
Profile: MCKINNEY ROUGHS WEEKLY NEW
Sampled By: HALEY NUNN

Report To: HALEY NUNN
 CORIX
 1812 CENTRE CREEK DR.
 STE 100
 Austin, TX 78754

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported
Q2217180001	OUTFALL	AQ	E1664A, O and G, Gravimetric	06/22/2022 11:00	06/22/2022 12:36	1
Q2217180001	OUTFALL	AQ	E300.0, Anions	06/22/2022 11:00	06/22/2022 12:36	3
Q2217180001	OUTFALL	AQ	E350.1 NH3-N by SemiAuto Col	06/22/2022 11:00	06/22/2022 12:36	1
Q2217180001	OUTFALL	AQ	E351.2 TKN by SemiAuto Col	06/22/2022 11:00	06/22/2022 12:36	1
Q2217180001	OUTFALL	AQ	E365.4 Phosphorus, Total	06/22/2022 11:00	06/22/2022 12:36	1
Q2217180001	OUTFALL	AQ	SM2320B, Alkalinity	06/22/2022 11:00	06/22/2022 12:36	3
Q2217180001	OUTFALL	AQ	SM2540C, TDS	06/22/2022 11:00	06/22/2022 12:36	1
Q2217180001	OUTFALL	AQ	SM2540D, TSS	06/22/2022 11:00	06/22/2022 12:36	1
Q2217180001	OUTFALL	AQ	SM9223B, IDEXX	06/22/2022 11:00	06/22/2022 12:36	2

Report Definitions

MRL - Minimum Reporting Limit
LOD - Limit of Detection
ML - Maximum Limit - Client Specified
MCL - Maximum Contaminant Level
LOQ - Limit of Quantitation - Client Specified
DF - Dilution Factor
(S) - Surrogate Spike
MDL - Method Detection Limit
RPD - Relative Percent Difference

Qualifier Definitions

J - Analyte detected below quantitation limit
R - RPD outside duplicate precision limit
S - Spike recovery outside limit
B - Analyte detected in method blank
N - Not Accredited
M - Analyte Detected Above Maximum Contaminant Level
SL - Spike Recovery Low
SH - Spike Recovery High
H - Analyzed Past Hold Time
CR - Confirmed Result
CH - Result confirmed by historical data



LCRA Environmental Laboratory Services
3505 Montopolis Drive
Austin, TX 78744
Phone (512)730-6022
Fax (512)730-6021

Workorder Summary

Analysis Results Comments

Lab ID: Q2217180001 Sample ID: OUTFALL

Analytical Results

Client ID: CORIX	Date Collected: 06/22/2022 11:00	Matrix: Aqueous
Lab ID: Q2217180001	Date Received: 06/22/2022 12:36	Sample Type: SAMPLE
Sample ID: OUTFALL	Location:	
Project ID: MCKINNEY ROUGHS WEEKLY NEW	Facility:	
	Sample Point:	

ALKALINITY (SM2320B, Alkalinity)

Parameter	Results	Units	MRL	LOD	ML	DF	Prepared	By	Analyzed	By	Qualifier
Bicarbonate Alkalinity	472	mg/L	0.00	0.00		1	06/29/2022 00:00	MO	06/29/2022 00:00	MO	N
Carbonate Alkalinity	32.0	mg/L	0.00	0.00		1	06/29/2022 00:00	MO	06/29/2022 00:00	MO	N
Total Alkalinity (CaCO3)	504	mg/L	20.0	20.0		1	06/29/2022 00:00	MO	06/29/2022 00:00	MO	

AMMONIA AS N (E350.1 NH3-N by SemiAuto Col)

Parameter	Results	Units	MRL	LOD	ML	DF	Prepared	By	Analyzed	By	Qualifier
Nitrogen, Ammonia (as N)	0.0268	mg/L	0.0200	0.00800	2	1	06/27/2022 00:00	MO	06/27/2022 00:00	MO	

E-COLI by IDEXX (SM9223B, IDEXX)

Parameter	Results	Units	MRL	LOD	ML	DF	Prepared	By	Analyzed	By	Qualifier
Ecoli	<1.00	MPN/100mL	1.00	1.00		1	06/22/2022 14:17	MAB	06/22/2022 14:17	MAB	
Ecoli Holding Time	3.3	HOURS	0.0	0.0			06/22/2022 14:17	MAB	06/22/2022 14:17	MAB	N

INORGANICS (E300.0, Anions)

Parameter	Results	Units	MRL	LOD	ML	DF	Prepared	By	Analyzed	By	Qualifier
Chloride	242	mg/L	10.0	4.00		10	06/22/2022 15:53	ML	06/22/2022 15:53	ML	
Sulfate	379	mg/L	10.0	4.00		10	06/22/2022 15:53	ML	06/22/2022 15:53	ML	

INORGANICS (E300.0, Anions)

Parameter	Results	Units	MRL	LOD	ML	DF	Prepared	By	Analyzed	By	Qualifier
Nitrate (as N)	39.5	mg/L	0.250	0.100		25	06/23/2022 07:26	ML	06/23/2022 07:26	ML	

OIL and GREASE (E1664A, O and G, Gravimetric)

Parameter	Results	Units	MRL	LOD	ML	DF	Prepared	By	Analyzed	By	Qualifier
Oil and Grease	<2.50	mg/L	2.50	2.50			06/23/2022 08:22	AJM	06/23/2022 08:22	AJM	

TOTAL DISSOLVED SOLIDS (SM2540C, TDS)

Parameter	Results	Units	MRL	LOD	ML	DF	Prepared	By	Analyzed	By	Qualifier
Total Dissolved Solids(TDS)	1800	mg/L	125	125		50	06/22/2022 16:20	MAB	06/22/2022 16:20	MAB	

TOTAL KJELDAHL NITROGEN (E351.2 Water Prep/E351.2 TKN by SemiAuto Col)

Parameter	Results	Units	MRL	LOD	ML	DF	Prepared	By	Analyzed	By	Qualifier
Nitrogen, Kjeldahl, Total	0.552	mg/L	0.100	0.0400		1	06/29/2022 09:16	MAB	06/30/2022 00:00	FM	

TOTAL PHOSPHATE AS P (E365.4 Water Prep/E365.4 Phosphorus, Total)

Parameter	Results	Units	MRL	LOD	ML	DF	Prepared	By	Analyzed	By	Qualifier
Phosphorus, Total (As P)	0.722	mg/L	0.0200	0.00800	1	1	06/29/2022 09:21	MAB	06/30/2022 00:00	ML	

Analytical Results

Client ID: CORIX	Date Collected: 06/22/2022 11:00	Matrix: Aqueous
Lab ID: Q2217180001	Date Received: 06/22/2022 12:36	Sample Type: SAMPLE
Sample ID: OUTFALL	Location:	
Project ID: MCKINNEY ROUGHS WEEKLY NEW	Facility:	
	Sample Point:	

TOTAL SUSPENDED SOLIDS (SM2540D, TSS)

Parameter	Results	Units	MRL	LOD	ML	DF	Prepared	By	Analyzed	By	Qualifier
Total Suspended Solids	7.52	mg/L	1.67	1.67	5	1.67	06/24/2022 12:15	ML	06/24/2022 12:15	ML	M



LCRA Environmental Laboratory Services
3505 Montopolis Drive
Austin, TX 78744
Phone (512)730-6022
Fax (512)730-6021

Quality Control Results

Analysis Method: SM9223B, IDEXX

QC Batch: MIC/6780
Preparation Method: SM9223B, IDEXX
Associated Lab IDs: Q2217180001

Duplicate (1762836); Original Q2217129004

Parameter	Units	Original	Duplicate	RPD	RPD Limit	Qualifier
Ecoli	MPN/100mL	72.8	75.7	3.91	50	

Quality Control Results

QC Batch: ORG/10961

Analysis Method: E1664A, O and G, Gravimetric

Preparation Method: E1664A, O and G, Gravimetric

Associated Lab IDs: Q2217180001

Matrix Spike (1763192); Original: Q2216972001

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Oil and Grease	mg/L	39.1	32.4	83.0	78 - 114	

Lab Control Sample (1763190); Lab Control Sample Duplicate (1763191)

Parameter	Units	Spiked Amount	Spike Result	%Spike Recovery	Control Limits %	Duplicate Result	%Duplicate Recovery	RPD	RPD Limit	Qualifier
Oil and Grease	mg/L	40.0	36.0	90.0	78 - 114	37.4	93.5	3.81	18	

Method Blank(1763189)

Parameter	Units	Results	MRL	LOD	Qualifier
Oil and Grease	mg/L	<2.50	2.5	2.5	

Quality Control Results

QC Batch: WET/26639
Preparation Method: E300.0, Anions
Associated Lab IDs: Q2217180001

Analysis Method: E300.0, Anions

Laboratory Fortified Blank (1762717)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Chloride	mg/L	30.0	30.4	101.0	90 - 110	
Nitrate (as N)	mg/L	1.0	0.996	99.6	90 - 110	
Sulfate	mg/L	30.0	30.3	101.0	90 - 110	

Limit of Quantitation Check (1762712)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Chloride	mg/L	5.0	4.22	84.4	70 - 130	
Nitrate (as N)	mg/L	0.02	0.0191	95.5	70 - 130	
Sulfate	mg/L	5.0	4.3	85.9	70 - 130	

Laboratory Reagent Blank(1762716)

Parameter	Units	Results	MRL	LOD	Qualifier
Chloride	mg/L	<1.00	1.0	0.4	
Nitrate (as N)	mg/L	<0.0100	0.01	0.004	
Sulfate	mg/L	<1.00	1.0	0.4	

Method Reporting Limit Check (1762710)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Chloride	mg/L	1.0	0.763	76.3	50 - 150	
Nitrate (as N)	mg/L	0.01	0.0127	127.0	50 - 150	
Sulfate	mg/L	1.0	0.977	97.7	50 - 150	

Laboratory Fortified Matrix (1762718); Lab Fortified Matrix Duplicate (1762719); Original: Q2217116001

Parameter	Units	Spiked Amount	Spike Result	%Spike Recovery	Control Limits %	Duplicate Result	%Duplicate Recovery	RPD	RPD Limit	Qualifier
Chloride	mg/L	20.0	139.0	65.3	80 - 120	139.0	64.4	0.0	20	SL
Nitrate (as N)	mg/L	1.0	1.1	97.5	80 - 120	1.1	97.7	0.0	20	
Sulfate	mg/L	20.0	117.0	70.2	80 - 120	117.0	70.1	0.0	20	SL

Quality Control Results

QC Batch: WET/26642
Preparation Method: SM2540C, TDS
Associated Lab IDs: Q2217180001

Analysis Method: SM2540C, TDS

Duplicate (1762989); Original Q2217037003

Parameter	Units	Original	Duplicate	RPD	RPD Limit	Qualifier
Total Dissolved Solids(TDS)	mg/L	1350.0	1390.0	2.92	20	

Lab Control Sample (1762988)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Total Dissolved Solids(TDS)	mg/L	400.0	376.0	94.0	80 - 120	

Matrix Spike (1762990); Original: Q2217037003

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Total Dissolved Solids(TDS)	mg/L	400.0	1830.0	118.0	70 - 130	

Method Blank(1762987)

Parameter	Units	Results	MRL	LOD	Qualifier
Total Dissolved Solids(TDS)	mg/L	<25.0	25.0	25.0	

Quality Control Results

QC Batch: WET/26650
Preparation Method: SM2320B, Alkalinity
Associated Lab IDs: Q2217180001

Analysis Method: SM2320B, Alkalinity

Method Blank(1764081)

Parameter	Units	Results	MRL	LOD	Qualifier
Total Alkalinity (CaCO ₃)	mg/L	<20.0	20.0	20.0	

Quality Control Results

QC Batch: WET/26657
Preparation Method: SM2540D, TSS
Associated Lab IDs: Q2217180001

Analysis Method: SM2540D, TSS

Lab Control Sample (1764452); Lab Control Sample Duplicate (1764453)

Parameter	Units	Spiked Amount	Spike Result	%Spike Recovery	Control Limits %	Duplicate Result	%Duplicate Recovery	RPD	RPD Limit	Qualifier
Total Suspended Solids	mg/L	100.0	90.0	90.0	80 - 120	90.0	90.0	0.0	20	

Method Blank(1764451)

Parameter	Units	Results	MRL	LOD	Qualifier
Total Suspended Solids	mg/L	<1.00	1.0	1.0	

Duplicate (1764454); Original Q2217227004

Parameter	Units	Original	Duplicate	RPD	RPD Limit	Qualifier
Total Suspended Solids	mg/L	#####	#####	0.0	20	

Quality Control Results

QC Batch: WET/26658
Preparation Method: E350.1 NH3-N by SemiAuto Col
Associated Lab IDs: Q2217180001

Analysis Method: E350.1 NH3-N by SemiAuto Col

Laboratory Reagent Blank(1764683)

Parameter	Units	Results	MRL	LOD	Qualifier
Nitrogen, Ammonia (as N)	mg/L	<0.0200	0.02	0.008	

Laboratory Fortified Blank (1764684); Lab Fortified Blank Duplicate (1764685)

Parameter	Units	Spiked Amount	Spike Result	%Spike Recovery	Control Limits %	Duplicate Result	%Duplicate Recovery	RPD	RPD Limit	Qualifier
Nitrogen, Ammonia (as N)	mg/L	1.0	0.982	98.2	90 - 110	1.02	102.0	3.8	20	

Matrix Spike (1764686); Original: Q2217129003

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Nitrogen, Ammonia (as N)	mg/L	1.0	0.819	81.9	80 - 120	

Limit of Quantitation Check (1764678)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Nitrogen, Ammonia (as N)	mg/L	0.02	0.0144	71.9	70 - 130	

Quality Control Results

Analysis Method: SM2320B, Alkalinity

QC Batch: WET/26675
Preparation Method: SM2320B, Alkalinity
Associated Lab IDs: Q2217180001

Matrix Spike (1766177); Original: Q2217546006

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Total Alkalinity (CaCO ₃)	mg/L	100.0	510.0	-6.0	70 - 130	SL

Lab Control Sample (1766175)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Total Alkalinity (CaCO ₃)	mg/L	100.0	108.0	108.0	90 - 110	

Method Blank(1766178)

Parameter	Units	Results	MRL	LOD	Qualifier
Total Alkalinity (CaCO ₃)	mg/L	<20.0	20.0	20.0	

Limit of Quantitation Check (1766173)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Total Alkalinity (CaCO ₃)	mg/L	20.0	20.0	100.0	70 - 130	

Duplicate (1766176); Original Q2217546006

Parameter	Units	Original	Duplicate	RPD	RPD Limit	Qualifier
Total Alkalinity (CaCO ₃)	mg/L	516.0	504.0	2.35	20	

Method Reporting Limit Check (1766174)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Total Alkalinity (CaCO ₃)	mg/L	20.0	22.0	110.0	50 - 150	

Quality Control Results

QC Batch: WET/26679
Preparation Method: E365.4 Water Prep
Associated Lab IDs: Q2217180001

Analysis Method: E365.4 Phosphorus, Total

Limit of Quantitation Check (1765331)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Phosphorus, Total (As P)	mg/L	0.02	0.0204	102.0	70 - 130	

Lab Control Sample (1765340); Lab Control Sample Duplicate (1765341)

Parameter	Units	Spiked Amount	Spike Result	%Spike Recovery	Control Limits %	Duplicate Result	%Duplicate Recovery	RPD	RPD Limit	Qualifier
Phosphorus, Total (As P)	mg/L	1.0	1.05	105.0	90 - 110	1.06	106.0	0.94 8	20	

Matrix Spike (1765339); Original: Q2217329002

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Phosphorus, Total (As P)	mg/L	1.0	1.01	81.5	80 - 120	

Method Blank(1765342)

Parameter	Units	Results	MRL	LOD	Qualifier
Phosphorus, Total (As P)	mg/L	<0.0200	0.02	0.008	
Phosphorus, Total (As P)	mg/L	<0.0200	0.02	0.008	

Quality Control Results

Analysis Method: E351.2 TKN by SemiAuto Col

QC Batch: WET/26686
Preparation Method: E351.2 Water Prep
Associated Lab IDs: Q2217180001

Method Blank(1765293)

Parameter	Units	Results	MRL	LOD	Qualifier
Nitrogen, Kjeldahl, Total	mg/L	<0.100	0.1	0.04	
Nitrogen, Kjeldahl, Total	mg/L	<0.100	0.1	0.04	

Lab Control Sample (1765291); Lab Control Sample Duplicate (1765292)

Parameter	Units	Spiked Amount	Spike Result	%Spike Recovery	Control Limits %	Duplicate Result	%Duplicate Recovery	RPD	RPD Limit	Qualifier
Nitrogen, Kjeldahl, Total	mg/L	1.0	1.02	102.0	80 - 120	0.971	97.1	4.92	20	

Matrix Spike (1765290); Original: Q2217000001

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Nitrogen, Kjeldahl, Total	mg/L	1.0	1.36	110.0	80 - 120	

Limit of Quantitation Check (1765289)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Nitrogen, Kjeldahl, Total	mg/L	0.2	0.221	111.0	70 - 130	

QC Cross Reference

MIC/6780 - SM9223B, IDEXX

Lab ID	Sample ID	Prep Batch	Prep Method
Q2217180001	OUTFALL		

ORG/10961 - E1664A, O and G, Gravimetric

Q2217180001	OUTFALL		
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WET/26639 - E300.0, Anions

Q2217180001	OUTFALL		
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WET/26642 - SM2540C, TDS

Q2217180001	OUTFALL		
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WET/26657 - SM2540D, TSS

Q2217180001	OUTFALL		
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WET/26658 - E350.1 NH3-N by SemiAuto Col

Q2217180001	OUTFALL		
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WET/26675 - SM2320B, Alkalinity

Q2217180001	OUTFALL		
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WET/26679 - E365.4 Phosphorus, Total

Q2217180001	OUTFALL	WETP/6147	E365.4 Water Prep
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WET/26686 - E351.2 TKN by SemiAuto Col

Q2217180001	OUTFALL	WETP/6146	E351.2 Water Prep
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LCRA Environmental Laboratory Services
Request for Analysis Chain-of-Custody Record



LCRA - Environmental Lab Phone: (512) 730-6022 or 1-800-776-5272
3505 Montopolis Dr. Fax: (512) 730-6021
Austin, TX 78744 www.lcra.org/services/els

Lab ID#: 02217180
Client PO:
Invoice To: Lorix McKinney

Project: McKinney Roughs Client: CORIX Report To: Haley Nunn
Collector: Haley Nunn Contact: Haley Nunn haley.nunn@corixtexas.com
Event#: Phone: 512 4549 9589

LAB USE ONLY	Sample ID *	Collected *		Matrix* AQ = Aqueous S = Solid T = Tissue DW = Drinking Water	Container(s) Type/Preservative/Number *				Requested Analysis *		
		Date*	Time * HH:MM		COMPOSITE Y/N	FILTERED Y/N	1-250/4250L	2-16 HCL		2-DE 16L	1-5000L ICE
1	<u>Outfall</u>	<u>6/22/22</u>	<u>1100</u>	<u>AQ</u>	<u>N</u>	<u>N</u>	<u>K</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>Sec Attached for Analysis</u>
2											
3											
4											
5											
6											
7											
8											
9											
10											

Transfers	Relinquished By	Date/Time	Received By	Date/Time	Cooler Temp (°C)			
1	<u>Haley Nunn</u>	<u>12:36/6/22/22</u>	<u>[Signature]</u>	<u>6/22/22</u>	#	T#	Obs.	Corr.
2				<u>1236</u>	1	1R8	4.0	0.1
3					2		CF=4.1	

Client Special Instructions:
Field DO = 8.32 ug/L (27.9 Temp)
Field pH = 8.17 su
Field Temp = 26.6 °C

Note: Relinquishing sample(s) and signing the COC, client agrees to accept and is bound by the ELS Standard Terms and Conditions. All fields with an asterisk (*) are required to be completed.



Environmental Laboratory Services Standard Terms and Conditions

Effective September 2016

Acceptance of Samples....The Lower Colorado River Authority (LCRA) Environmental Laboratory Services (ELS) will accept samples and perform services in accordance with these terms and conditions. No modifications to these terms and conditions will be valid or binding unless in writing and signed by authorized representatives of both the Customer and ELS.

ELS reserves the right to refuse or revoke receipt of any sample due to insufficient sample volume, improper sample container, unacceptable customer credit, or risk of handling for any health, safety, regulatory, environmental, holding time issues or any other reason, at the discretion of ELS.

ELS also reserves the right to terminate any work being done or work promised on samples accepted for ELS's sole convenience. In the event of such termination, ELS will notify all affected Customers as soon as possible.

Payment & Invoicing....Customer must pay for all services by check or credit card upon delivery of sample to ELS unless other billing arrangements are agreed to by ELS and Customer. Invoices will be issued monthly following the completion of services. All payments are due 30 days from receipt of the invoice. A one percent (1%) per month late fee will be assessed on unpaid invoices after the due date. Customers that have outstanding balances equal to or greater than 90 days must make payment in full at the time of sample delivery.

Quoted Fees....Written quoted fees for all services to be performed by the ELS will be honored for a period of thirty (30) days from the quotation date unless otherwise specified by ELS in writing.

Costs for Compliance....All costs associated with compliance with any subpoena for documents, testimony, or assistance, or for any other purpose relating to work performed by ELS for the Customer, will be paid by the Customer or requesting party. Such costs will include, but not be limited to, hourly charges for each staff member, travel and accommodations, mileage, and any other miscellaneous expenses incurred.

Use of Data....The Customer is solely responsible for determining what actions are required as a result of the data, information, recommendations, interpretations, and opinions provided by ELS. The Customer also assumes sole responsibility for determining whether the nature, type, and quantity of work requested by the Customer is adequate and sufficient for the Customer's intended purpose. **Customer hereby indemnifies and releases ELS from and against any and all liabilities arising out of, related to, or resulting from Customer's incorrect or inappropriate use of any data or opinions provided to it by ELS.**

Reports....ELS will deliver approved final reports and/or electronic data including any Customer-approved subcontract laboratory data by the agreed upon due date. Reports may not be reproduced, except in full, without prior written approval by ELS. Reports or copies of reports will not be provided to any person or representative other than the Customer without the Customer's written authorization, except as may be required by law.

Confidentiality....Strict confidentiality is maintained regarding all Customer transactions and results. Where information is lawfully subpoenaed, must be released to a regulatory or other legal entity with jurisdiction, or disclosure of documents is otherwise required by law, the Customer will be promptly notified.

Confidential, trade secret, and privileged information provided to ELS by Customer, including sample content, analysis, and Reports, is protected from public access by exceptions to the Texas Public Information Act ("PIA") to which LCRA is subject. ELS will assert the appropriate exception to withhold Customer information requested under the PIA. Customer may be asked by ELS to provide assistance in asserting exceptions to the PIA (e.g., explanation of competitive position, treatment of trade secrets, etc.). Customer agrees to assist ELS in protection of Customer's information.

Sample Disclosures....Customer agrees that all samples delivered to the ELS will be accompanied by a properly completed chain-of-custody form disclosing the presence of any contaminated, toxic, or hazardous substances known or suspected to be contained in such samples. ELS shall reject any samples received without a valid chain of custody form.

Analytical Errors....Upon request by the Customer, ELS will reanalyze samples whenever test results are suspect. Should the results of the second analysis substantially agree with those of the first, the Customer will pay for the cost of the second analysis. However, if the result of the second analysis materially differs from the first, then Customer will not be charged for the second analysis.

Holding Times....All samples must be delivered to ELS within one-half of the applicable holding time. ELS shall not assume any responsibility for missed holding times for samples submitted outside this criterion. To meet holding time for subcontract samples, ELS may make arrangements for the Customer to deliver samples directly to the subcontract lab.

Sample Retention & Disposal....Samples are stored for 30 days upon transmitting final analysis results to the Customer. After 30 days, samples are disposed of properly. However, Customer may request additional storage time at a storage fee of \$50 per month per sample.

Hazardous Waste....Any samples found to be or suspected of being hazardous or containing hazardous substances according to state and federal regulations will be disposed of at submitting Customer's expense.

Turnaround Time (TAT)....Turnaround times (TAT) are based on full "working days" which are defined as 8:00 A.M. to 5:00 P.M. Monday through Friday, excluding holidays. Standard TAT is 7 working days from the day starting after sample receipt. However, TAT may be longer depending upon the tests requested and the same matrix. TAT for samples subcontracted to a Customer-approved laboratory is based on the agreed target due date between all parties (i.e., the Customer, the ELS and the subcontract laboratory).

Expedited Service....Expedited service is available upon approval by ELS and written authorization from the Customer. Service charge amounts added to the total cost of service will be applied as follows:

< or = to 24 hrs:	4 X cost of service
2 to 3 days:	3 X cost of service
4 to 6 days:	2 X cost of service

Non-Standard Services....On sample matrices or analytes for which no official or validated test method exists, usage of an accepted method for a different type of sample or analyte or method development, in some situations, may be offered. In such cases, no guarantee of the success of the method or warranty will be provided. The Customer will be notified of the alternate method proposed, and only after its approval, will analyses begin. Approval by the Customer of the alternate method obligates the Customer for payment for that work, regardless of result obtained.

Warranty....Where applicable, ELS will use analytical methodologies in accordance with the U.S. Environmental Protection Agency (EPA), state agency, or other recognized and approved source.

ELS warrants that it possesses and maintains all licenses, accreditations, and certifications that are required to perform services under these terms and conditions, provided that such requirements are documented in writing to ELS prior to sample delivery acceptance. ELS will notify the Customer in writing of any decertification or revocation of any license, or notice of either that affects work in progress.

The foregoing express warranty is exclusive and is given in lieu of all other warranties, whether express, implied, or statutory. The ELS disclaims any other warranties, whether express, implied, or statutory, including a warranty of fitness for particular purpose and warranty of merchantability. The ELS is not responsible for any of the purposes for which the Customer may use ELS test results.

Liability....Customer agrees that the maximum liability of ELS for all claims of any kind whether based on contract, indemnity, warranty, tort (including negligence & strict liability), or otherwise, arising out of, connected with, or resulting from the performance or breach thereof, or from any goods or services covered by or furnished under these terms and conditions or any extension or expansion, is limited to the amounts paid or payable by the Customer for the goods or services giving rise to such claims.

Ariana Dean

From: Haley Nunn <Haley.Nunn@corixtexas.com>
Sent: Friday, June 17, 2022 4:09 PM
To: Courtney Alcede; Bhanu Acharya; Ariana Dean
Subject: Late Notice...

CAUTION - EXTERNAL EMAIL
Suspicious Email? [Click the fish!](#)

Hi all!

I know it's late notice. Is there is any way you guys can get me bottle together to grab in about 30 minutes for the follow parameters? I am stopping by. I forgot to have Bobby grab it today.

I can fill in the COC.

- CBODs, mg/l
- ~~TSS, mg/l~~
- Ammonia Nitrogen, mg/l ✓
- Nitrate Nitrogen, mg/l ✓
- Total Kjeldahl Nitrogen, mg/l ✓
- Sulfate, mg/l ✓
- Chloride, mg/l ✓
- Total Phosphorus, mg/l ✓
- E.Coli(CFU/100ml) ✓
- Total Dissolved solids, mg/l ✓
- Oil & Grease, mg/l ✓
- Alkalinity (CaCO₃), mg/l ✓

Thanks,
Haley

Get [Outlook for iOS](#)

1

Haley

End of Report

McKinney Rough Major Amendment
Domestic Technical Report 1.0 - Section 9
Written Statement



**Wastewater
Residuals
Management, LLC**

Austrn Wastewater Processing Facility
826 Linger Ln
Austin, Texas 78721
(512) 973-8484

WasteStream Acceptance

Wastewater Residuals Management, LLC, an affiliate of Wastewater Transport Services, LLC, owns and operates the Austin Wastewater Processing Facility. This facility has been permitted by the TCEQ and assigned permit number MSW 2384. The disposal facility is expected to be open for at least the next 5 years.

The facility has been permitted as a Centralized Waste Treatment Facility able to receive the following categorical and non-categorical waste streams:

- Wastewater Treatment Plant Sludge
- Water Treatment Plant Sludge
- Leachate
- Septic
- Sanitary Sewer
- Storm Water
- Food Service Grease
- Car Wash Grit Trap
- Other Class II Non-Hazardous Liquid Waste

***Please note that analytical may be required before the waste stream will be accepted.

Wastewater Residuals Management, LLC agrees to accept any of the above waste streams from the below listed generator.

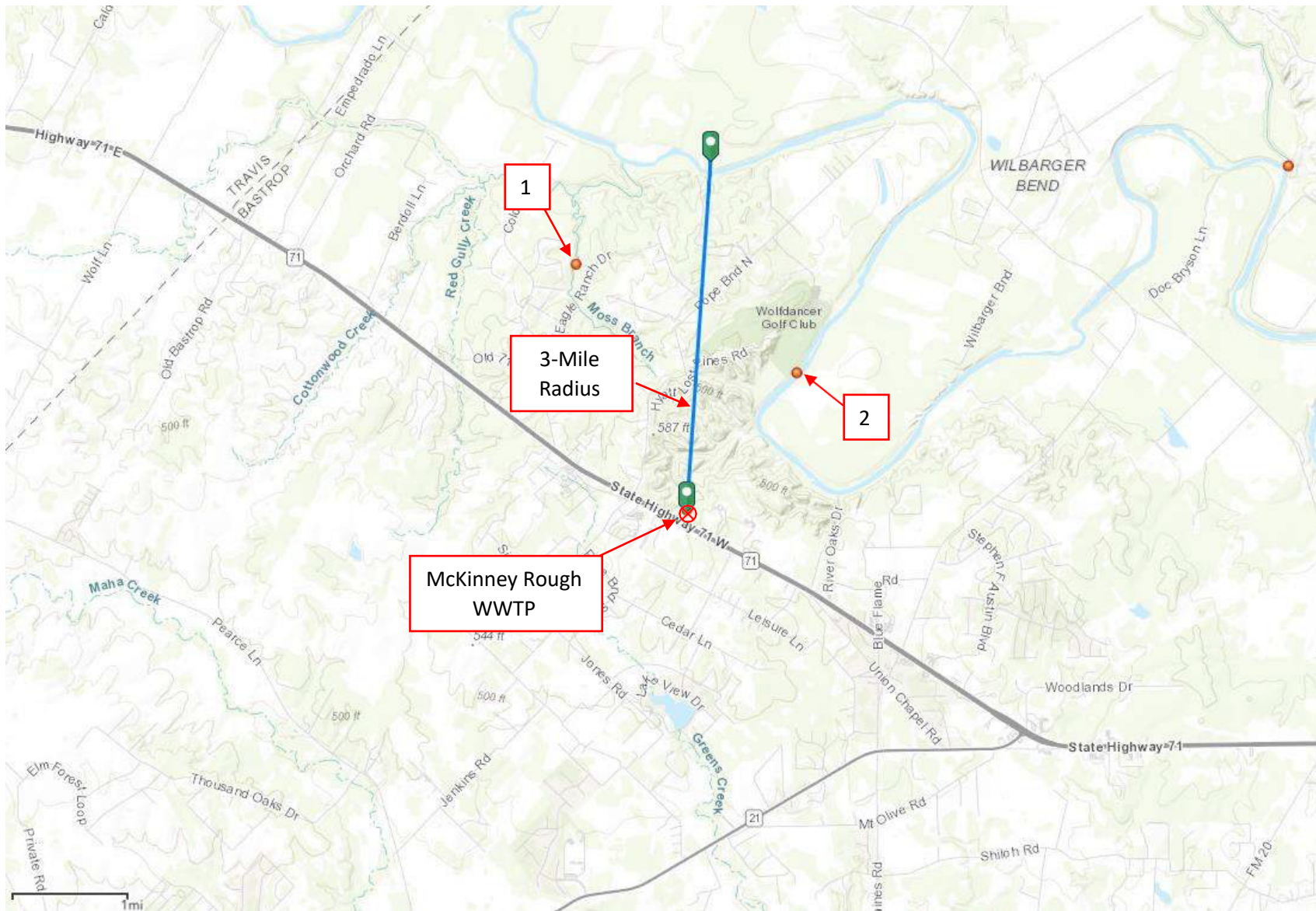
Generator: **McKinney Roughs WWTP**

Identifying Info:

Cory R. Juby
Environmental Compliance

Wastewater Residuals Management reserves the right to discontinue acceptance of the below mentioned waste at any time.

Domestic Technical Report 1.1 – Attachment: Nearby Domestic WWTFs



Map ID#	Plant Name	Permittee	Permit Number
1	DOUBLE EAGLE RANCH WWTF	CORIX UTILITIES TEXAS INC (CN604520213)	WQ0014833-001
2	WINDMILL RANCH WWTF	CORIX UTILITIES TEXAS INC (CN604520213)	WQ0014303-001

McKinney Rough Major Amendment
Domestic Technical Report 1.1 - Section 4
Design Calcs

Domestic Technical Report 1.1 – Attachment: Design Calculations

All phases of the treatment facility will be designed according to the requirements of 30 TAC Chapter 217 (Design Criteria for Domestic Wastewater Systems)

Influent Wastewater Quality Characteristics – The raw sewage characteristics used for design purposes in both Phase I and Final Phase are as follows:

Parameter	Concentration
BOD ₅	300 mg/L
TSS	250 mg/L
TKN	90 mg/L
TP	10 mg/L

Phase I Influent Flow Characteristics – The Phase I facility process and hydraulic design flows are as follows:

Flow	Gallons Per Day	Gallons Per Minute
Average Daily Flow (Q _{avg})	250,000	174
Peak 2-Hour Flow (Q _{pk})	1,000,000	695

Loading	Pounds Per Day
BOD ₅	938
TSS	782

Phase II Influent Flow Characteristics – The Phase II facility process and hydraulic design flows are as follows:

Flow	Gallons Per Day	Gallons Per Minute
Average Daily Flow (Q _{avg})	500,000	344
Peak 2-Hour Flow (Q _{pk})	2,000,000	2,083

Loading	Pounds Per Day
BOD ₅	1,876
TSS	1,564

Process Design – The treatment facility will be designed to produce an effluent quality that complies with the proposed permitted parameters:

Parameter	Concentration
BOD ₅	5 mg/L
TSS	5 mg/L
TKN	2 mg/L
TP	1 mg/L

Treatment Unit Information:

Primary Screen

- Rotating Drum Screen – Perforated Plate (2mm)
- Hydraulic Capacity – 2.0 MGD
- Screen Material – AISI 304 SS

Flow Equalization Basin, each phase

- Concrete Tank; 25.5' x 31.5' x 19'SWD = 114,000-gal (~ 11.0 hrs HDT)

Anoxic Basin, each phase

- Concrete Tank; 25.5' x 11.0' x 19'SWD = 114,000-gal (~ 3.8 hrs HDT)

Aeration Basin, each phase

- Concrete Tank; 25.5' x 34' x 19'SWD = 114,000-gal (~ 11.8 hrs HDT)

Sludge Holding Tank

- FRP Tank
- Dimensions – 15.5' Dia. x 15.2' Height (20,000-gal capacity)

Sludge Press

- Dimensions – 25' Width x 40' Length
- Treatment Capacity – 2 dry tons per day

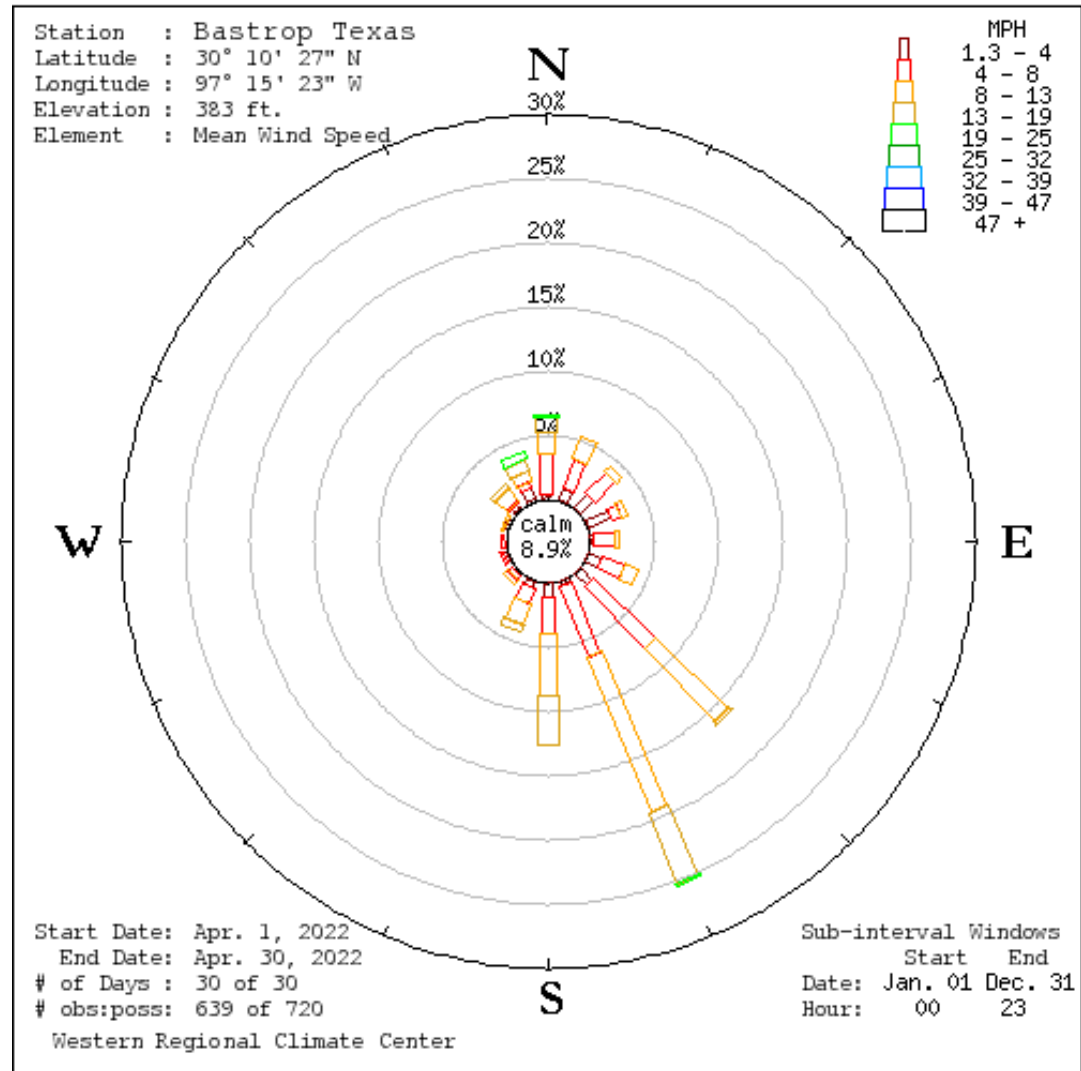
Treatment Unit Type	# of Units	Dimensions	
Headworks	1	21' x 15'	L x W
EQ Tank	2	25.5' x 31.5' x 19'	W x L x SWD
Anoxic Tank	2	25.5' x 11.0' x 19'	W x L x SWD
Aeration Tank	2	25.5' x 34.0' x 19'	W x L x SWD
Aerated MBR Tank	2	25.5' x 18.0' x 19'	W x L x SWD
Sludge Holding Tank	1	15.5' x 15.2'	Dia. x H

Facility Design Features

1. Excessive Inflow
 - a. A peaking factor of 4.0 is used to ensure adequate hydraulic capacity.
 - b. Pumping systems have been designed to operate at peak flow with the largest pump out of service.
 - c. All piping is sized to handle anticipated peak flows.
 - d. Overflow from open top basins will be caught and redirected to largest holding tank to further prevent any spill incidents.
2. Emergency Power Requirements
 - a. Emergency/back-up power will be supplied by an on-site generator that will be designed to provide continuous and sufficient power to all process equipment (i.e. pumps, blowers, mixers, etc.)
3. Equipment Malfunction
 - a. Each MBR train contains two membrane zones that exists as an extension of the pre-aeration (aerobic) zone. For all phases of the project, the system can operate at peak flow with one membrane cassette per train out of service.
 - b. All pumps and blowers used throughout the process will maintain at least a 1.5X redundancy factor during operation.
4. Facility Maintenance and Repair
 - a. Equipment monitoring will take place for all process equipment and will record usage according to the appropriate metrics. Maintenance schedules will be developed per these metrics and manufacturer specifications.

McKinney Rough Major Amendment Domestic Technical Report 1.1 - Section 5 Windrose

Bastrop Texas



Domestic Technical Report 1.1 – Attachment: Sludge Management Plan

- (a) Dimensions and capacities of all sewage sludge handling and treatment units and processes include the following:

For all Phases

Treatment Unit	Number of Units	Dimensions	Capacity
Sludge Holding Tank	1	15.5' x 15.2'SWD	54,000 gal

- (b) The amount of solids generated at expected increments of the design flows is provided in the following table:

Sludge Production (Gal Per Day)				
Phase	100% Flow	75% Flow	50% Flow	25% Flow
Phase I	5,000	3,750	2,500	1,250
Phase II	10,000	7,500	5,000	2,500

- (c) The plant, in all phases, is designed to operate at a mixed liquor suspended solids (MLSS) concentration of 12,000 mg/L. Adjustments will be made to maintain this MLSS concentration at lower flow rates.
- (d) For all phases, wet solids will be removed from the MBR to the holding tank as needed to maintain MLSS and SRT. Wet solids will be hauled and disposed of at the ultimate disposal site.
- (e) The ultimate disposal site will be Austin Wastewater Processing Facility, which is owned and operated by Wastewater Residuals Management LLC. Documentation of disposal will be recorded on a disposed weight basis.