



PERMIT NUMBER:

	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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>			

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: 1013
Check/Money Order Amount: \$1,650
Name Printed on Check: Guefen Development Partners, LLC

EPAY Voucher Number:

Copy of Payment Voucher enclosed? Yes ☒

Section 2. Type of Application (Instructions Page 29)

- | | |
|---|---|
| <input checked="" 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 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:

For existing permits:

Permit Number:

EPA I.D. (TPDES only): TX

Expiration Date: [REDACTED]

Section 3. Facility Owner (Applicant) and Co-Applciant 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?

Preserve Hutto, LLC

(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:

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: Richard Owen

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

Title: Authorized Signatory

B. Co-applciant 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-applciant applying for this permit?

[REDACTED]

(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-applciant 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: [REDACTED]

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): [REDACTED]

First and Last Name: [REDACTED]

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

Title: [REDACTED]

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

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: A

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: Jerry Ince

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

Title: Senior Project Engineer

Organization Name: Ward Getz and Associates

Mailing Address: 2500 Tanglewilde, Suite 120

City, State, Zip Code: Houston, Tx 77063

Phone No.: 832-344-6604 Ext.:

Fax No.:

E-mail Address: jince@wga-llp.com

Check one or both: ☒ Administrative Contact

☒ Technical Contact

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

First and Last Name: Richard Owen

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

Title: Authorized Signatory

Organization Name: Preserve Hutto, LLC,

Mailing Address: 3200 Southwest Freeway, Suite 1870

City, State, Zip Code: Houston, Tx 77027

Phone No.: 713-350-2775 Ext.:

Fax No.:

E-mail Address: Rowen@guefen.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: Jerry Ince

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

Title: Senior Project Engineer

Organization Name: Ward Getz and Associates

Mailing Address: 2500 Tanglewilde, Suite 120

City, State, Zip Code: Houston, Tx 77063

Phone No.: 832-344-6604 Ext.: [REDACTED]

Fax No.: [REDACTED]

E-mail Address: jince@wga-llp.com

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

First and Last Name: Richard Owen

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

Title: Authorized Signatory

Organization Name: Preserve Hutto, LLC,

Mailing Address: 3200 Southwest Freeway, Suite 1870

City, State, Zip Code: Houston, Tx 77027

Phone No.: 713-350-2775 Ext.: [REDACTED]

Fax No.: [REDACTED]

E-mail Address: Rowen@guefen.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: Richard Owen

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

Title: Authorized Signatory

Organization Name: Preserve Hutto, LLC,

Mailing Address: 3200 Southwest Freeway, Suite 1870

City, State, Zip Code: Houston, Tx 77027

Phone No.: 713-350-2775 Ext.: [REDACTED]

Fax No.: [REDACTED]

E-mail Address: Rowen@guefen.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: Richard Owen

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

Title: Authorized Signatory

Organization Name: Preserve Hutto, LLC,

Mailing Address: 3200 Southwest Freeway, Suite 1870

City, State, Zip Code: Houston, Tx 77027

Phone No.: 713-350-2775 Ext.: [REDACTED]

Fax No.: [REDACTED]

E-mail Address: Rowen@guefen.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: Jerry Ince

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

Title: Senior Project Engineer

Organization Name: Ward Getz and Associates

Mailing Address: 2500 Tanglewilde, Suite 120

City, State, Zip Code: Houston, Tx 77063

Phone No.: 832-344-6604 Ext.: [REDACTED]

Fax No.: [REDACTED]

E-mail Address: jince@wga-llp.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: Jerry Ince

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

Title: Senior Project Engineer

Organization Name: Ward Getz and Associates

Phone No.: 832-344-6604 Ext.: [REDACTED]

E-mail: jince@wga-llp.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: Hutto City Hall

Location within the building: Public Notice Viewing Area

Physical Address of Building: 500 W. Live Oak Street

City: Hutto, Tx 78634

County: Travis

Contact Name: Angela Walton

Phone No.: (512) 759-4839 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. **RN** [REDACTED]

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):**

Preserve Hutto, LLC, LLC

- C. Owner of treatment facility: **Preserve Hutto, LLC,**

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: Preserve Hutto, LLC.

Mailing Address: 3200 Southwest Freeway, Suite 1870

City, State, Zip Code: Houston, Tx 77027

Phone No.: 713-350-2775

E-mail Address: Rowen@guefen.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:

- E. Owner of effluent disposal site:

Prefix (Mr., Ms., Miss):

First and Last Name:

Mailing Address:

City, State, Zip Code:

Phone No.:

E-mail Address:

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:

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

Title: Senior Project Engineer

Organization Name: Ward Getz and Associates

Phone No.: 832-344-6604 Ext.: [REDACTED]

E-mail: jince@wga-llp.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: North Village Branch, Austin Public Library

Location within the building: Reference section

Physical Address of Building: 2505 Steck Ave

City: Austin, Texas 78757

County: Travis

Contact Name: Betsey Elche

Phone No.: 512-974-7400 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)?

- 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.

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:

- B. City nearest the disposal site:

- C. County in which the disposal site is located:

- D. Disposal Site Latitude: Longitude:

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

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

Section 12. Miscellaneous Information (Instructions Page 37)

- 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.

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:

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Account number:

Amount past due:

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, please provide the following information:

Enforcement order number:

Amount past due:

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:

ORIGINAL

Section 14. Signature Page (Instructions Page 39)

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

Permit Number: [REDACTED]

Applicant: Preserve Hutto, LLC

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 § 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory name (typed or printed): Richard Owen

Signatory title: Authorized Signatory

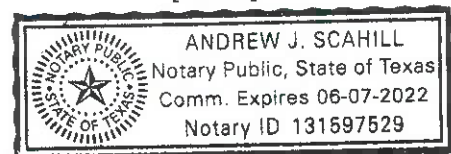
Signature: [Signature] Date: 3/20/2022
(Use blue ink)

Subscribed and Sworn to before me by the said RICHARD OWEN, AUTHORIZED SIGNATORY
on this 28th day of MARCH, 2022.
My commission expires on the 6th day of JUNE, 2022.

[Signature]
Notary Public

Harris
County, Texas

[SEAL]



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: Travis County 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: Preserve Hutto, LLC

Permit No. WQ00 _____

EPA ID No. TX _____

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

4428 Priem Lane, Hutto Texas 78634 in Travis County.

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: Jerry Ince

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

Title: Senior Project Engineer

Mailing Address: 2500 Tanglewilde, Suite 120

City, State, Zip Code: Houston, Tx 77063

Phone No.: 832-344-6604 Ext.:

Fax No.:

E-mail Address: jince@wga-llp.com

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

NA

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.

Discharge into a dry bottom detention pond for 700, then in a pipe for 100 feet to a ditch, then for 680 feet to unnamed tributary, then for 4800 feet in the unnamed tributary of Wilbarger Creek

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):

The proposed construction will be public housing, parking, access and all other items needed to support such a facility.

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

Current residential and some woods.

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:

Residential structures built since the seventies

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

Individual houses built since the seventies. Nothing shows up on aerials in the fifties.

ORIGINAL
WATER QUALITY PERMIT
PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if the mailing the payment.

- Complete items 1 through 5 below.
- Staple the check or money order in the space provided at the bottom of this document.
- **Do not mail this form with the application form.**
- Do not mail this form to the same address as the application.
- Do not submit a copy of the application with this form as it could cause duplicate permit entries.

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, Texas 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, Texas 78753

Fee Code: WQP Waste Permit No:

1. Check or Money Order Number: 1013
2. Check or Money Order Amount: 1,650
3. Date of Check or Money Order: 3/28/2022
4. Name on Check or Money Order: Guefen Development Partners, LLC
5. APPLICATION INFORMATION

Name of Project or Site: Preserve Hutto, LLC

Physical Address of Project or Site: 4428 Priem Lane, Hutto Texas 78634

If the check is for more than one application, attach a list which includes the name of each Project or Site (RE) and Physical Address, exactly as provided on the application.

Staple Check or Money Order in This Space

GUEFEN DEVELOPMENT PARTNERS, LLC
3200 Southwest Freeway Suite 1870
Houston, TX 77027



3/28/2022

PAY TO THE ORDER OF Texas Commission on Environmental Quality

\$ **1,650.00

One Thousand Six Hundred Fifty and 00/100 ***** DOLLARS

Texas Commission on Environmental Quality
PO Box 13089
Austin TX 78711-3089



AUTHORIZED SIGNATURE

MEMO

Preserve Hutto

00019

11111069491 1837068611

THIS PAGE INTENTIONALLY LEFT BLANK

ATTACHMENT 1

INDIVIDUAL INFORMATION

Section 1. Individual Information (Instructions Page 50)

Complete this attachment if the facility applicant or co-applicant is an individual. Make additional copies of this attachment if both are individuals.

Prefix (Mr., Ms., Miss): [REDACTED]

Full legal name (first, middle, last): [REDACTED]

Driver's License or State Identification Number: [REDACTED]

Date of Birth: [REDACTED]

Mailing Address: [REDACTED]

City, State, and Zip Code: [REDACTED]

Phone Number: [REDACTED] Fax Number: [REDACTED]

E-mail Address: [REDACTED]

CN: [REDACTED]

For Commission Use Only:

Customer Number:

Regulated Entity Number:

Permit Number:

CHECKLIST OF COMMON DEFICIENCIES

Below is a list of common deficiencies found during the administrative review of domestic wastewater permit applications. To ensure the timely processing of this application, please review the items below and indicate by checking Yes that each item is complete and in accordance applicable rules at 30 TAC Chapters 21, 281, and 305. If an item is not required this application, indicate by checking N/A where appropriate. Please do not submit the application until the items below have been addressed.

Core Data Form (TCEQ Form No. 10400) (Required for all applications types. Must be completed in its entirety and signed. Note: Form may be signed by applicant representative.)	<input checked="" type="checkbox"/>	Yes
Correct and Current Industrial Wastewater Permit Application Forms (TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)	<input checked="" type="checkbox"/>	Yes
Water Quality Permit Payment Submittal Form (Page 19) (Original payment sent to TCEQ Revenue Section. See instructions for mailing address.)	<input checked="" type="checkbox"/>	Yes
7.5 Minute USGS Quadrangle Topographic Map Attached (Full-size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)	<input checked="" type="checkbox"/>	Yes
Current/Non-Expired, Executed Lease Agreement or Easement Attached	<input checked="" type="checkbox"/> N/A <input type="checkbox"/>	Yes
Landowners Map (See instructions for landowner requirements)	<input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Yes

Things to Know:

- All the items shown on the map must be labeled.
- The applicant's complete property boundaries must be delineated which includes boundaries of contiguous property owned by the applicant.
- The applicant cannot be its own adjacent landowner. You must identify the landowners immediately adjacent to their property, regardless of how far they are from the actual facility.
- If the applicant's property is adjacent to a road, creek, or stream, the landowners on the opposite side must be identified. Although the properties are not adjacent to applicant's property boundary, they are considered potentially affected landowners. If the adjacent road is a divided highway as identified on the USGS topographic map, the applicant does not have to identify the landowners on the opposite side of the highway.

Landowners Cross Reference List (See instructions for landowner requirements)	<input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Yes
Landowners Labels or CD-RW attached (See instructions for landowner requirements)	<input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Yes
Original signature per 30 TAC § 305.44 – Blue Ink Preferred (If signature page is not signed by an elected official or principle executive officer, a copy of signature authority/delegation letter must be attached)	<input checked="" type="checkbox"/>	Yes



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): 0.048

2-Hr Peak Flow (MGD): .192

Estimated construction start date: 12-30-2022

Estimated waste disposal start date: 7-15-2023

B. Interim II Phase

Design Flow (MGD):

2-Hr Peak Flow (MGD):

Estimated construction start date:

Estimated waste disposal start date:

C. Final Phase

Design Flow (MGD): 0.048

2-Hr Peak Flow (MGD): 0.192

Estimated construction start date: 12-30-2022

Estimated waste disposal start date: 7-15-2023

D. Current operating phase:

Provide the startup date of the facility:

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:

Treatment plant process utilizes an onsite lift station to pump the influent to the wastewater treatment plant. The influent enters the wastewater treatment plant through a bar screen, then into the aeration basin, where the influent and return are mixed together. Flow pushes the process into the clarifier where effluent overflows the weir to chlorination and discharge. One digester tank is used for wasting and solids concentration.

Port or pipe diameter at the discharge point, in inches: 6

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)
Clarifier	1	18' Diameter
Aeration Basin	2	12' x 16' x 10.3'
Digester	2	12' x 10' x 10.3'
CL2 Basin	1	6' x 10' x 8'

C. Process flow diagrams

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

Attachment: Appendix F

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: Appendix G

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

The plant will serve the residential development (apartment complex) for this property called Haven at Treeline, LLC.

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.

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:

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.

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.

The facility will be located to meet the buffer zone by ownership.

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*.

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.

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.

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.

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 [REDACTED] or TXRNE [REDACTED]

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:

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.

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.

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 waste

1. Acceptance of sludge from other WWTPs

Does the facility accept or will it accept sludge from other treatment plants at the facility site?

Yes ☐ No ☒

If yes, attach sewage sludge solids management plan. See Example 5 of the instructions.

In addition, provide the date that the plant started accepting sludge or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the sludge, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

Note: Permits that accept sludge from other wastewater treatment plants

may be required to have influent flow and organic loading monitoring.

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

Yes ☐ No ☒

If yes, does the facility have a Type V processing unit?

Yes ☐ No ☐

If yes, does the unit have a Municipal Solid Waste permit?

Yes ☐ No ☐

If yes to any of the above, provide a the date that the plant started accepting septic waste, or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the septic waste, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

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					
Total Suspended Solids, 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					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
<i>E.coli</i> (CFU/100ml) freshwater					
Enterococci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, μ mohs/cm, †					

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Oil & Grease, mg/l					
Alkalinity (CaCO ₃)*, mg/l					

*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: TBD

Facility Operator's License Classification and Level: TBD

Facility Operator's License Number: TBD

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 following list. Check all that apply.

- ☐ Permitted landfill
- ☐ Permitted or Registered land application site for beneficial use

- ☐ Land application for beneficial use authorized in the wastewater permit
- ☐ Permitted sludge processing facility
- ☐ Marketing and distribution as authorized in the wastewater permit
- ☐ Composting as authorized in the wastewater permit
- ☐ Permitted surface disposal site (sludge monofill)
- ☐ Surface disposal site (sludge monofill) authorized in the wastewater permit
- ☒ Transported to another permitted wastewater treatment plant or 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:

B. Sludge disposal site

Disposal site name: Mount Houston Road Municipal Utility District

TCEQ permit or registration number: WQ0011154001

County where disposal site is located: Harris

C. Sludge transportation method

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

Name of the hauler: Magna Flow Environmental

Hauler registration number: 21484

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 ☐ No ☒

Marketing and Distribution of sludge Yes ☐ No ☒

Sludge Surface Disposal or Sludge Monofill Yes ☐ No ☒

Temporary storage in sludge lagoons Yes ☐ No ☒

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: [REDACTED]

- Site map:

Attachment: [REDACTED]

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: [REDACTED]

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: [REDACTED]

Total Kjeldahl Nitrogen, mg/kg: [REDACTED]

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

Phosphorus, mg/kg: [REDACTED]

Potassium, mg/kg: [REDACTED]

pH, standard units: [REDACTED]

Ammonia Nitrogen mg/kg: [REDACTED]

Arsenic: [REDACTED]

Cadmium: [REDACTED]

Chromium: [REDACTED]

Copper: [REDACTED]

Lead: [REDACTED]

Mercury: [REDACTED]

Molybdenum: [REDACTED]

Nickel: [REDACTED]

Selenium: [REDACTED]

Zinc: [REDACTED]

Total PCBs: [REDACTED]

Provide the following information:

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

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

[REDACTED]

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

[REDACTED]

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.

[REDACTED]

D. Site development plan

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

[REDACTED]

Attach the following documents to the application.

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

Attachment: [REDACTED]

- Copy of the closure plan

Attachment: [REDACTED]

- Copy of deed recordation for the site

Attachment: [REDACTED]

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

Attachment: [REDACTED]

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

Attachment: [REDACTED]

- Procedures to prevent the occurrence of nuisance conditions

Attachment: [REDACTED]

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: [REDACTED]

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:

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:

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.

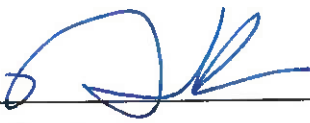
The following certification statement shall be signed and submitted with every application. See the *Signature Page* section in the Instructions, for a list of designated representatives who may sign the certification.

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: Richard Owen

Title: Authorized Signatory

Signature: _____

Date: 3/20/2022_____

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.

The current site is not serviced by any facilities and there are no WWTP within 3 miles which can serve our site. The site will begin construct around December 2022 and begin discharging around July 2023. The site will be constructing an apartment complex which consist of 310 units and don't expect any future growth.

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: Appendix H

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

Attachment: [REDACTED]

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):

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

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

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

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		

Source	Total Average Flow (MGD)	Influent BOD₅ Concentration (mg/l)
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other	0.048	300
TOTAL FLOW from all sources	0.048	
AVERAGE BOD₅ from all sources		300

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: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

Total Phosphorus, mg/l: 3

Dissolved Oxygen, mg/l: 4

Other:

B. Interim II Phase Design Effluent Quality

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

Total Suspended Solids, mg/l:

Ammonia Nitrogen, mg/l:

Total Phosphorus, mg/l:

Dissolved Oxygen, mg/l:

Other:

C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

Total Phosphorus, mg/l: 3

Dissolved Oxygen, mg/l: 4

Other:

D. Disinfection Method

Identify the proposed method of disinfection.

☒ Chlorine: 1-4 mg/l after 20 minutes detention time at peak flow

Dechlorination process:

☐ Ultraviolet Light: 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.

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 48201 C0240 M

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: Appendix I

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:

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:

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

Attach a solids management plan to the application.

Attachment: Attachment K

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:

Distance and direction to the intake:

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

Attachment: Appendix L

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:

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).

<div></div>

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).

--

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: Detention Pond

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☒ Lake or Pond

Surface area, in acres: 5

Average depth of the entire water body, in feet: 8

Average depth of water body within a 500-foot radius of discharge point, in feet: 8

☐ 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.

Wilbarger Creek

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.

Went from pond, to pipe to ditch to pipe to stream

E. Normal dry weather characteristics

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

Pond is wet bottom.

Date and time of observation: 3-28-2022 @ 12:00 pm.

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

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

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 WORKSHEET 2.1

STREAM PHYSICAL CHARACTERISTICS

Required for new applications, major facilities, and applications adding an outfall

Worksheet 2.1 is not required for discharges to intermittent streams or discharges directly to (or within 300 feet of) a classified segment.

Section 1. General Information (Instructions Page 75)

Date of study: Time of study:

Stream name:

Location:

Type of stream upstream of existing discharge or downstream of proposed discharge (check one).

☐ Perennial

☐ Intermittent with perennial pools

Section 2. Data Collection (Instructions Page 75)

Number of stream bends that are well defined:

Number of stream bends that are moderately defined:

Number of stream bends that are poorly defined:

Number of riffles:

Evidence of flow fluctuations (check one):

☐ Minor

☐ moderate

☐ severe

Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.

<input type="text"/>

Stream transects

In the table below, provide the following information for each transect downstream of the existing or proposed discharges. Use a separate row for each transect.

Table 2.1(1) - Stream Transect Records

Stream type at transect Select riffle, run, glide, or pool. See Instructions, Definitions section.	Transect location	Water surface width (ft)	Stream depths (ft) at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			

Section 3. Summarize Measurements (Instructions Page 76)

Streambed slope of entire reach, from USGS map in feet/feet:

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles):

Length of stream evaluated, in feet:

Number of lateral transects made:

Average stream width, in feet:

Average stream depth, in feet:

Average stream velocity, in feet/second:

Instantaneous stream flow, in cubic feet/second:

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.):

Size of pools (large, small, moderate, none):

Maximum pool depth, in feet:

DOMESTIC WORKSHEET 3.0

LAND DISPOSAL OF EFFLUENT

The following is required for all permit applications
Renewal, New, and Amendments

Section 1. Type of Disposal System (Instructions Page 77)

Identify the method of land disposal:

- | | |
|--|--|
| <input type="checkbox"/> Surface application | <input type="checkbox"/> Subsurface application |
| <input type="checkbox"/> Irrigation | <input type="checkbox"/> Subsurface soils absorption |
| <input type="checkbox"/> Drip irrigation system | <input type="checkbox"/> Subsurface area drip dispersal system |
| <input type="checkbox"/> Evaporation | |
| <input type="checkbox"/> Evapotranspiration beds | |
| <input type="checkbox"/> Other (describe in detail): | |

NOTE: All applicants without authorization or proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0.

For existing authorizations, provide Registration Number:

Section 2. Land Application Site(s) (Instructions Page 77)

In table 3.0(1), provide the requested information for the land application sites. Include the agricultural or cover crop type (wheat, cotton, alfalfa, bermuda grass, native grasses, etc.), land use (golf course, hayland, pastureland, park, row crop, etc.), irrigation area, amount of effluent applied, and whether or not the public has access to the area. Specify the amount of land area and the amount of effluent that will be allotted to each agricultural or cover crop, if more than one crop will be used.

Table 3.0(1) - Land Application Site Crops

Crop Type & Land Use	Irrigation Area (acres)	Effluent Application (GPD)	Public Access? Y/N

Crop Type & Land Use	Irrigation Area (acres)	Effluent Application (GPD)	Public Access? Y/N

Section 3. Storage and Evaporation Lagoons/Ponds (Instructions Page 77)

Table 3.0(2) – Storage and Evaporation Ponds

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type

Attach a copy of a liner certification that was prepared, signed, and sealed by a Texas licensed professional engineer for each pond.

Attachment: [REDACTED]

Section 4. Flood and Runoff Protection (Instructions Page 77)

Is the land application site within the 100-year frequency flood level?

Yes ☐

No ☐

If yes, describe how the site will be protected from inundation.

Provide the source used to determine the 100-year frequency flood level:

Provide a description of tailwater controls and rainfall run-on controls used for the land application site.

Section 5. Annual Cropping Plan (Instructions Page 77)

Attach an Annual Cropping Plan which includes a discussion of each of the following items. If not applicable, provide a detailed explanation indicating why.

Attachment:

- Soils map with crops
- Cool and warm season plant species
- Crop yield goals
- Crop growing season
- Crop nutrient requirements
- Additional fertilizer requirements
- Minimum/maximum harvest height (for grass crops)
- Supplemental watering requirements
- Crop salt tolerances
- Harvesting method/number of harvests
- Justification for not removing existing vegetation to be irrigated

Section 6. Well and Map Information (Instructions Page 78)

Attach a USGS map with the following information shown and labeled. If not applicable, provide a detailed explanation (on a separate page) indicating why.

Attachment:

- The boundaries of the land application site(s)
- Waste disposal or treatment facility site(s)

- On-site buildings
- Buffer zones
- Effluent storage and tailwater control facilities
- All water wells within 1 mile of the disposal site or property boundaries
- All springs and seeps onsite and within 500 feet of the property boundaries
- All surface waters in the state onsite and within 500 feet of the property boundaries
- All faults and sinkholes onsite and within 500 feet of the property

List and cross reference all water wells shown on the USGS map in the following table. Attach additional pages as necessary to include all of the wells.

Table 3.0(3) – Water Well Data

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
			Choose an item.	
			Choose an item.	
			Choose an item.	
			Choose an item.	
			Choose an item.	

If water quality data or well log information is available please include the information in an attachment listed by Well ID.

Attachment:

Section 7. Groundwater Quality (Instructions Page 79)

Attach a Groundwater Quality Technical Report which assesses the impact of the wastewater disposal system on groundwater. This report shall include an evaluation of the water wells (including the information in the well table provided in Item 6. above), the wastewater application rate, and pond liners.

Indicate by a check mark that this report is provided.

Attachment: ☐

Are groundwater monitoring wells available onsite? Yes ☐ No ☐

Do you plan to install ground water monitoring wells or lysimeters around the land application site? Yes ☐ No ☐

If yes, then provide the proposed location of the monitoring wells or lysimeters on a site map.

Attachment: ☐

Section 8. Soil Map and Soil Analyses (Instructions Page 79)

A. Soil map

Attach a USDA Soil Survey map that shows the area to be used for effluent disposal.

Attachment: ☐

B. Soil analyses

Attach the laboratory results sheets from the soil analyses. **Note:** for renewal applications, the current annual soil analyses required by the permit are acceptable as long as the test date is less than one year prior to the submission of the application.

Attachment: ☐

List all USDA designated soil series on the proposed land application site. Attach additional pages as necessary.

Table 3.0(4) - Soil Data

Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number

Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number

Section 9. Effluent Monitoring Data (Instructions Page 80)

Is the facility in operation?

Yes ☐ No ☐

If no, this section is not applicable and the worksheet is complete.

If yes, provide the effluent monitoring data for the parameters regulated in the existing permit. If a parameter is not regulated in the existing permit, enter N/A.

Table 3.0(5) - Effluent Monitoring Data

Date	30 Day Avg Flow MGD	BOD ₅ mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated

Date	30 Day Avg Flow MGD	BOD₅ mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated

Provide a discussion of all persistent excursions above the permitted limits and any corrective actions taken.

DOMESTIC WORKSHEET 3.1

SURFACE LAND DISPOSAL OF EFFLUENT

The following is required for new and major amendment applications.

Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

Section 1. Surface Disposal (Instructions Page 81)

Complete the item that applies for the method of disposal being used.

A. Irrigation

Area under irrigation, in acres:

Design application frequency:

hours/day And days/week

Land grade (slope):

average percent (%):

maximum percent (%):

Design application rate in acre-feet/acre/year:

Design total nitrogen loading rate, in lbs N/acre/year:

Soil conductivity (mmhos/cm):

Method of application:

Attach a separate engineering report with the water balance and storage volume calculations, method of application, irrigation efficiency, and nitrogen balance.

Attachment:

B. Evaporation ponds

Daily average effluent flow into ponds, in gallons per day:

Attach a separate engineering report with the water balance and storage volume calculations.

Attachment: [REDACTED]

C. Evapotranspiration beds

Number of beds: [REDACTED]

Area of bed(s), in acres: [REDACTED]

Depth of bed(s), in feet: [REDACTED]

Void ratio of soil in the beds: [REDACTED]

Storage volume within the beds, in acre-feet: [REDACTED]

Attach a separate engineering report with the water balance and storage volume calculations, and a description of the lining.

Attachment: [REDACTED]

D. Overland flow

Area used for application, in acres: [REDACTED]

Slopes for application area, percent (%): [REDACTED]

Design application rate, in gpm/foot of slope width: [REDACTED]

Slope length, in feet: [REDACTED]

Design BOD₅ loading rate, in lbs BOD₅/acre/day: [REDACTED]

Design application frequency:

hours/day: [REDACTED] And days/week: [REDACTED]

[REDACTED]

Attach a separate engineering report with the method of application and design requirements according to *30 TAC Chapter 217*.

Attachment: [REDACTED]

Section 2. Edwards Aquifer (Instructions Page 82)

Is the facility subject to *30 TAC Chapter 213*, Edwards Aquifer Rules?

Yes ☐

No ☐

If yes, attach a report concerning the recharge zone.

Attachment: 

DOMESTIC WORKSHEET 3.2

SUBSURFACE LAND DISPOSAL OF EFFLUENT

The following is required for new and major amendment applications. Renewal and minor amendments may require the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that does not meet the definition of a subsurface area drip dispersal system as defined in 30 TAC Chapter 222, Subsurface Area Drip Dispersal System.

Section 1. Subsurface Application (Instructions Page 83)

Identify the type of system:

- ☐ Conventional Gravity Drainfield, Beds, or Trenches (new systems must be less than 5,000 GPD)
- ☐ Low Pressure Dosing
- ☐ Other, specify: _____

Application area, in acres: _____

Area of drainfield, in square feet: _____

Application rate, in gal/square foot/day: _____

Depth to groundwater, in feet: _____

Area of trench, in square feet: _____

Dosing duration per area, in hours: _____

Number of beds: _____

Dosing amount per area, in inches/day: _____

Infiltration rate, in inches/hour: _____

Storage volume, in gallons: _____

Area of bed(s), in square feet: _____

Soil Classification:

Attach a separate engineering report with the information required in 30 TAC § 309.20, excluding the requirements of § 309.20 b(3)(A) and (B) design analysis which may be asked for on a case by case basis. Include a description of the schedule of dosing basin rotation.

Attachment:

Section 2. Edwards Aquifer (Instructions Page 83)

Is the subsurface system located on the Edwards Aquifer Recharge Zone as mapped by the TCEQ?

Yes ☐ No ☐

Is the subsurface system located on the Edwards Aquifer Transition Zone as mapped by the TCEQ?

Yes ☐ No ☐

If yes to either question, the subsurface system may be prohibited by 30 TAC §213.8. Please call the Municipal Permits Team, at 512-239-4671, to schedule a pre-application meeting.

DOMESTIC WORKSHEET 3.3

SUBSURFACE AREA DRIP DISPERSAL SYSTEM (SADDS) LAND DISPOSAL OF EFFLUENT

The following is required for new and major amendment subsurface area drip dispersal system applications. Renewal and minor amendments may require the worksheet on a case by case basis.

NOTE: All applicants proposing new or amended subsurface disposal **MUST** complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that meets the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System*.

Section 1. Administrative Information (Instructions Page 84)

- A. Provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the treatment facility.

- B. Is the owner of the land where the treatment facility is located the same as the owner of the treatment facility?

Yes ☐ No ☐

If **no**, provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the land where the treatment facility is located.

- C. Owner of the subsurface area drip dispersal system:

- D. Is the owner of the subsurface area drip dispersal system the same as the owner of the wastewater treatment facility or the site where the wastewater treatment facility is located?

Yes ☐ No ☐

If **no**, identify the names of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in Item 1.C.

- E. Owner of the land where the subsurface area drip dispersal system is located:

- F. Is the owner of the land where the subsurface area drip dispersal system is located the same as owner of the wastewater treatment facility, the site where the wastewater treatment facility is located, or the owner of the subsurface area drip dispersal system?

Yes ☐ No ☐

If **no**, identify the name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in item 1.E.

Section 2. Subsurface Area Drip Dispersal System (Instructions Page 84)

A. Type of system

☐ Subsurface Drip Irrigation

☐ Surface Drip Irrigation

☐ Other, specify:

B. Irrigation operations

Application area, in acres:

Infiltration Rate, in inches/hour:

Average slope of the application area, percent (%):

Maximum slope of the application area, percent (%):

Storage volume, in gallons:

Major soil series:

Depth to groundwater, in feet:

C. Application rate

Is the facility located **west** of the boundary shown in 30 TAC § 222.83 and also using a vegetative cover of non-native grasses over seeded with cool

season grasses during the winter months (October-March)?

Yes ☐ No ☐

If **yes**, then the facility may propose a hydraulic application rate not to exceed 0.1 gal/square foot/day.

Is the facility located **east** of the boundary shown in 30 TAC § 222.83 or in any part of the state when the vegetative cover is any crop other than non-native grasses?

Yes ☐ No ☐

If **yes**, the facility must use the formula in 30 TAC §222.83 to calculate the maximum hydraulic application rate.

Do you plan to submit an alternative method to calculate the hydraulic application rate for approval by the executive director?

Yes ☐ No ☐

Hydraulic application rate, in gal/square foot/day:

Nitrogen application rate, in lbs/gal/day:

D. Dosing information

Number of doses per day:

Dosing duration per area, in hours:

Rest period between doses, in hours:

Dosing amount per area, in inches/day:

Number of zones:

Does the proposed subsurface drip irrigation system use tree vegetative cover as a crop?

Yes ☐ No ☐

If **yes**, provide a vegetation survey by a certified arborist. Please call the Water Quality Assessment Team at (512) 239-4671 to schedule a pre-application meeting.

Attachment:

Section 3. Required Plans (Instructions Page 84)

A. Recharge feature plan

Attach a Recharge Feature Plan with all information required in *30 TAC §222.79*.

Attachment: 

B. Soil evaluation

Attach a Soil Evaluation with all information required in *30 TAC §222.73*.

Attachment: 

C. Site preparation plan

Attach a Site Preparation Plan with all information required in *30 TAC §222.75*.

Attachment: 

D. Soil sampling/testing

Attach soil sampling and testing that includes all information required in *30 TAC §222.157*.

Attachment: 

Section 4. Floodway Designation (Instructions Page 85)

A. Site location

Is the existing/proposed land application site within a designated floodway?

Yes ☐

No ☐

B. Flood map

Attach either the FEMA flood map or alternate information used to determine the floodway.

Attachment: 

Section 5. Surface Waters in the State (Instructions Page 85)

A. Buffer Map

Attach a map showing appropriate buffers on surface waters in the state, water wells, and springs/seeps.

Attachment: [REDACTED]

B. Buffer variance request

Do you plan to request a buffer variance from water wells or waters in the state?

Yes ☐ No ☐

If yes, then attach the additional information required in *30 TAC § 222.81(c)*.

Attachment: [REDACTED]

Section 6. Edwards Aquifer (Instructions Page 85)

A. Is the SADDs located on the Edwards Aquifer Recharge Zone as mapped by the TCEQ?

Yes ☐ No ☐

B. Is the SADDs located on the Edwards Aquifer Transition Zone as mapped by the TCEQ?

Yes ☐ No ☐

If yes to either question, then the SADDs may be prohibited by *30 TAC §213.8*. Please call the Municipal Permits Team at 512-239-4671 to schedule a pre-application meeting.

DOMESTIC WORKSHEET 4.0

POLLUTANT ANALYSES REQUIREMENTS*

The following is required for facilities with a permitted or proposed flow of 1.0 MGD or greater, facilities with an approved pretreatment program, or facilities classified as a major facility. See instructions for further details.

This worksheet is not required for minor amendments without renewal

Section 1. Toxic Pollutants (Instructions Page 87)

For pollutants identified in Table 4.0(1), indicate the type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected:

Table 4.0(1) - Toxics Analysis

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrylonitrile				50
Aldrin				0.01
Aluminum				2.5
Anthracene				10
Antimony				5
Arsenic				0.5
Barium				3
Benzene				10
Benzidine				50
Benzo(a)anthracene				5

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Benzo(a)pyrene				5
Bis(2-chloroethyl)ether				10
Bis(2-ethylhexyl)phthalate				10
Bromodichloromethane				10
Bromoform				10
Cadmium				1
Carbon Tetrachloride				2
Carbaryl				5
Chlordane*				0.2
Chlorobenzene				10
Chlorodibromomethane				10
Chloroform				10
Chlorpyrifos				0.05
Chromium (Total)				3
Chromium (Tri) (*1)				N/A
Chromium (Hex)				3
Copper				2
Chrysene				5
p-Chloro-m-Cresol				10
4,6-Dinitro-o-Cresol				50
p-Cresol				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Cyanide (*2)				10
4,4'- DDD				0.1
4,4'- DDE				0.1
4,4'- DDT				0.02
2,4-D				0.7
Demeton (O and S)				0.20
Diazinon				0.5/0.1
1,2-Dibromoethane				10
m-Dichlorobenzene				10
o-Dichlorobenzene				10
p-Dichlorobenzene				10
3,3'-Dichlorobenzidine				5
1,2-Dichloroethane				10
1,1-Dichloroethylene				10
Dichloromethane				20
1,2-Dichloropropane				10
1,3-Dichloropropene				10
Dicofol				1
Dieldrin				0.02
2,4-Dimethylphenol				10
Di-n-Butyl Phthalate				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Diuron				0.09
Endosulfan I (alpha)				0.01
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Ethylbenzene				10
Fluoride				500
Guthion				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclohexane (alpha)				0.05
Hexachlorocyclohexane (beta)				0.05
gamma-Hexachlorocyclohexane (Lindane)				0.05
Hexachlorocyclopentadiene				10
Hexachloroethane				20
Hexachlorophene				10
Lead				0.5
Malathion				0.1

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Mercury				0.005
Methoxychlor				2
Methyl Ethyl Ketone				50
Mirex				0.02
Nickel				2
Nitrate-Nitrogen				100
Nitrobenzene				10
N-Nitrosodiethylamine				20
N-Nitroso-di-n-Butylamine				20
Nonylphenol				333
Parathion (ethyl)				0.1
Pentachlorobenzene				20
Pentachlorophenol				5
Phenanthrene				10
Polychlorinated Biphenyls (PCB's) (*3)				0.2
Pyridine				20
Selenium				5
Silver				0.5
1,2,4,5-Tetrachlorobenzene				20
1,1,2,2-Tetrachloroethane				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Tetrachloroethylene				10
Thallium				0.5
Toluene				10
Toxaphene				0.3
2,4,5-TP (Silvex)				0.3
Tributyltin (see instructions for explanation)				0.01
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane				10
Trichloroethylene				10
2,4,5-Trichlorophenol				50
TTHM (Total Trihalomethanes)				10
Vinyl Chloride				10
Zinc				5

(*1) Determined by subtracting hexavalent Cr from total Cr.

(*2) Cyanide, amenable to chlorination or weak-acid dissociable.

(*3) The sum of seven PCB congeners 1242, 1254, 1221, 1232, 1248, 1260, and 1016.

Section 2. Priority Pollutants

For pollutants identified in Tables 4.0(2)A-E, indicate type of sample.

Grab ☐

Composite ☐

Date and time sample(s) collected:

Table 4.0(2)A – Metals, Cyanide, Phenols

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Antimony				5
Arsenic				0.5
Beryllium				0.5
Cadmium				1
Chromium (Total)				3
Chromium (Hex)				3
Chromium (Tri) (*1)				N/A
Copper				2
Lead				0.5
Mercury				0.005
Nickel				2
Selenium				5
Silver				0.5
Thallium				0.5
Zinc				5
Cyanide (*2)				10
Phenols, Total				10

(*1) Determined by subtracting hexavalent Cr from total Cr.

(*2) Cyanide, amenable to chlorination or weak-acid dissociable

Table 4.0(2)B – Volatile Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrolein				50
Acrylonitrile				50
Benzene				10
Bromoform				10
Carbon Tetrachloride				2
Chlorobenzene				10
Chlorodibromomethane				10
Chloroethane				50
2-Chloroethylvinyl Ether				10
Chloroform				10
Dichlorobromomethane [Bromodichloromethane]				10
1,1-Dichloroethane				10
1,2-Dichloroethane				10
1,1-Dichloroethylene				10
1,2-Dichloropropane				10
1,3-Dichloropropylene [1,3-Dichloropropene]				10
1,2-Trans-Dichloroethylene				10
Ethylbenzene				10
Methyl Bromide				50
Methyl Chloride				50
Methylene Chloride				20
1,1,2,2-Tetrachloroethane				10
Tetrachloroethylene				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Toluene				10
1,1,1-Trichloroethane				10
1,1,2-Trichloroethane				10
Trichloroethylene				10
Vinyl Chloride				10

Table 4.0(2)C - Acid Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
2-Chlorophenol				10
2,4-Dichlorophenol				10
2,4-Dimethylphenol				10
4,6-Dinitro-o-Cresol				50
2,4-Dinitrophenol				50
2-Nitrophenol				20
4-Nitrophenol				50
P-Chloro-m-Cresol				10
Pentalchlorophenol				5
Phenol				10
2,4,6-Trichlorophenol				10

Table 4.0(2)D - Base/Neutral Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acenaphthene				10
Acenaphthylene				10
Anthracene				10
Benzidine				50
Benzo(a)Anthracene				5
Benzo(a)Pyrene				5
3,4-Benzofluoranthene				10
Benzo(ghi)Perylene				20
Benzo(k)Fluoranthene				5
Bis(2-Chloroethoxy)Methane				10
Bis(2-Chloroethyl)Ether				10
Bis(2-Chloroisopropyl)Ether				10
Bis(2-Ethylhexyl)Phthalate				10
4-Bromophenyl Phenyl Ether				10
Butyl benzyl Phthalate				10
2-Chloronaphthalene				10
4-Chlorophenyl phenyl ether				10
Chrysene				5
Dibenzo(a,h)Anthracene				5
1,2-(o)Dichlorobenzene				10
1,3-(m)Dichlorobenzene				10
1,4-(p)Dichlorobenzene				10
3,3-Dichlorobenzidine				5
Diethyl Phthalate				10
Dimethyl Phthalate				10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Di-n-Butyl Phthalate				10
2,4-Dinitrotoluene				10
2,6-Dinitrotoluene				10
Di-n-Octyl Phthalate				10
1,2-Diphenylhydrazine (as Azo- benzene)				20
Fluoranthene				10
Fluorene				10
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclo-pentadiene				10
Hexachloroethane				20
Indeno(1,2,3-cd)pyrene				5
Isophorone				10
Naphthalene				10
Nitrobenzene				10
N-Nitrosodimethylamine				50
N-Nitrosodi-n-Propylamine				20
N-Nitrosodiphenylamine				20
Phenanthrene				10
Pyrene				10
1,2,4-Trichlorobenzene				10

Table 4.0(2)E - Pesticides

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Aldrin				0.01
alpha-BHC (Hexachlorocyclohexane)				0.05
beta-BHC (Hexachlorocyclohexane)				0.05
gamma-BHC (Hexachlorocyclohexane)				0.05
delta-BHC (Hexachlorocyclohexane)				0.05
Chlordane				0.2
4,4-DDT				0.02
4,4-DDE				0.1
4,4,-DDD				0.1
Dieldrin				0.02
Endosulfan I (alpha)				0.01
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Endrin Aldehyde				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
PCB-1242				0.2
PCB-1254				0.2
PCB-1221				0.2
PCB-1232				0.2

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
PCB-1248				0.2
PCB-1260				0.2
PCB-1016				0.2
Toxaphene				0.3

* For PCBs, if all are non-detects, enter the highest non-detect preceded by a "<".

Section 3. Dioxin/Furan Compounds

A. Indicate which of the following compounds from may be present in the influent from a contributing industrial user or significant industrial user. Check all that apply.

- ☐ 2,4,5-trichlorophenoxy acetic acid
Common Name 2,4,5-T, CASRN 93-76-5
- ☐ 2-(2,4,5-trichlorophenoxy) propanoic acid
Common Name Silvex or 2,4,5-TP, CASRN 93-72-1
- ☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate
Common Name Erbon, CASRN 136-25-4
- ☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate
Common Name Ronnel, CASRN 299-84-3
- ☐ 2,4,5-trichlorophenol
Common Name TCP, CASRN 95-95-4
- ☐ hexachlorophene
Common Name HCP, CASRN 70-30-4

For each compound identified, provide a brief description of the conditions of its/their presence at the facility.

B. Do you know or have any reason to believe that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) or any congeners of TCDD may be present in your effluent?

Yes ☐ No ☐

If **yes**, provide a brief description of the conditions for its presence.

If any of the compounds in Subsection A **or** B are present, complete Table 4.0(2)F.

For pollutants identified in Table 4.0(2)F, indicate the type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected:

TABLE 4.0(2)F - DIOXIN/FURAN COMPOUNDS

Compound	Toxic Equivalency Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
2,3,7,8 TCDD	1					10
1,2,3,7,8	0.5					50
2,3,7,8 HxCDDs	0.1					50
1,2,3,4,6,7,8 HpCDD	0.01					50
2,3,7,8 TCDF	0.1					10
1,2,3,7,8 PeCDF	0.05					50
2,3,4,7,8 PeCDF	0.5					50
2,3,7,8 HxCDFs	0.1					50
2,3,4,7,8	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					0.5
PCB 81	0.0003					0.5

Compound	Toxic Equivalency Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
PCB 126	0.1					0.5
PCB 169	0.03					0.5
Total						

DOMESTIC WORKSHEET 5.0

TOXICITY TESTING REQUIREMENTS

The following is required for facilities with a currently-operating design flow greater than or equal to 1.0 MGD, with an EPA-approved pretreatment program (or those that are required to have one under 40 CFR Part 403), or are required by the TCEQ to perform Whole Effluent Toxicity testing. This worksheet is not required for minor amendments without renewal.

Section 1. Required Tests (Instructions Page 97)

Indicate the number of 7-day chronic or 48-hour acute Whole Effluent Toxicity (WET) tests performed in the four and one-half years prior to submission of the application.

7-day Chronic:

48-hour Acute:

Section 2. Toxicity Reduction Evaluations (TREs)

Has this facility completed a TRE in the past four and a half years? Or is the facility currently performing a TRE?

Yes ☐ No ☐

If yes, describe the progress to date, if applicable, in identifying and confirming the toxicant.

Section 3. Summary of WET Tests

If the required biomonitoring test information has not been previously submitted via both the Discharge Monitoring Reports (DMRs) and the Table 1 (as found in the permit), provide a summary of the testing results for all valid and invalid tests performed over the past four and one-half years. Make additional copies of this table as needed.

Table 5.0(1) - Summary of WET Tests

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal

DOMESTIC WORKSHEET 6.0

INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works (POTWs)

Section 1. All POTWs (Instructions Page 99)

A. Industrial users

Provide the number of each of the following types of industrial users (IUs) that discharge to your POTW and the daily flows from each user. See the Instructions for definitions of Categorical IUs, Significant IUs - non-categorical, and Other IUs.

If there are no users, enter 0 (zero).

Categorical IUs:

Number of IUs:

Average Daily Flows, in MGD:

Significant IUs - non-categorical:

Number of IUs:

Average Daily Flows, in MGD:

Other IUs:

Number of IUs:

Average Daily Flows, in MGD:

B. Treatment plant interference

In the past three years, has your POTW experienced treatment plant interference (see instructions)?

Yes ☐ No ☐

If yes, identify the dates, duration, description of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IUs that may have caused the interference.

<div></div>

C. Treatment plant pass through

In the past three years, has your POTW experienced pass through (see instructions)?

Yes ☐

No ☐

If **yes**, identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.

D. Pretreatment program

Does your POTW have an approved pretreatment program?

Yes ☐

No ☐

If **yes**, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

Yes ☐

No ☐

If **yes**, complete Section 2.c. and 2.d. only, and skip Section 3.

If **no to either question above**, skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 100)

A. Substantial modifications

Have there been any **substantial modifications** to the approved pretreatment program that have not been submitted to the TCEQ for approval according to 40 CFR §403.18?

Yes ☐

No ☐

If **yes**, identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.

B. Non-substantial modifications

Have there been any **non-substantial modifications** to the approved pretreatment program that have not been submitted to TCEQ for review and acceptance?

Yes ☐

No ☐

If yes, identify all non-substantial modifications that have not been submitted to TCEQ, including the purpose of the modification.

C. Effluent parameters above the MAL

In Table 6.0(1), list all parameters measured above the MAL in the POTW's effluent monitoring during the last three years. Submit an attachment if necessary.

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions

Has any SIU, CIU, or other IU caused or contributed to any problems (excluding interferences or pass throughs) at your POTW in the past three years?

Yes ☐

No ☐

If yes, identify the industry, describe each episode, including dates, duration, description of the problems, and probable pollutants.

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 100)

A. General information

Company Name:

SIC Code:

Telephone number: Fax number:

Contact name:

Address:

City, State, and Zip Code:

B. Process information

Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).

C. Product and service information

Provide a description of the principal product(s) or services performed.

D. Flow rate information

See the Instructions for definitions of “process” and “non-process wastewater.”

Process Wastewater:

Discharge, in gallons/day:

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day:

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the instructions?

Yes ☐ No ☐

Is the SIU or CIU subject to categorical pretreatment standards found in *40 CFR Parts 405-471*?

Yes ☐ No ☐

If subject to categorical pretreatment standards, indicate the applicable category and subcategory for each categorical process.

Category:
Subcategories:

Category:
Subcategories:

Category:
Subcategories:

Category:
Subcategories:

Category:
Subcategories:

F. Industrial user interruptions

Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?

Yes ☐

No ☐

If yes, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

<div></div>

WORKSHEET 7.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit to:
TCEQ
IUC Permits Team
Radioactive Materials Division
MC-233
PO Box 13087
Austin, Texas 78711-3087
512-239-6466

For TCEQ Use Only

Reg. No. _____

Date Received _____

Date Authorized _____

Section 1. General Information (Instructions Page 102)

1. TCEQ Program Area

Program Area (PST, VCP, IHW, etc.): _____

Program ID: _____

Contact Name: _____

Phone Number: _____

2. Agent/Consultant Contact Information

Contact Name: _____

Address: _____

City, State, and Zip Code: _____

Phone Number: _____

3. Owner/Operator Contact Information

Owner ☐

Operator ☐

Owner/Operator Name: _____

Contact Name: _____

Address: _____

City, State, and Zip Code: _____

Phone Number: _____

4. Facility Contact Information

Facility Name: _____

Address: [REDACTED]

City, State, and Zip Code: [REDACTED]

Location description (if no address is available): [REDACTED]

Facility Contact Person: [REDACTED]

Phone Number: [REDACTED]

5. Latitude and Longitude, in degrees-minutes-seconds

Latitude: [REDACTED] Longitude: [REDACTED]

Method of determination (GPS, TOPO, etc.): [REDACTED]

Attach topographic quadrangle map as attachment A.

6. Well Information

Type of Well Construction, select one:

- ☐ Vertical Injection
- ☐ Subsurface Fluid Distribution System
- ☐ Infiltration Gallery
- ☐ Temporary Injection Points
- ☐ Other, Specify: [REDACTED]

Number of Injection Wells: [REDACTED]

7. Purpose

Detailed Description regarding purpose of Injection System:

[REDACTED]

Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.)

8. Water Well Driller/Installer

Water Well Driller/Installer Name: [REDACTED]

City, State, and Zip Code: [REDACTED]

Phone Number: [REDACTED]

License Number: [REDACTED]

Section 2. Proposed Down Hole Design

Attach a diagram signed and sealed by a licensed engineer as Attachment C.

Table 7.0(1) -Down Hole Design Table

Name of String	Size	Setting Depth	Sacks Cement/Grout - Slurry Volume - Top of Cement	Hole Size	Weight (lbs/ft) PVC/Steel
Casing					
Tubing					
Screen					

Section 3. Proposed Trench System, Subsurface Fluid Distribution System, or Infiltration Gallery

Attach a diagram signed and sealed by a licensed engineer as Attachment D.

System(s) Dimensions: [REDACTED]

System(s) Construction: [REDACTED]

Section 4. Site Hydrogeological and Injection Zone Data

1. Name of Contaminated Aquifer: [REDACTED]
2. Receiving Formation Name of Injection Zone: [REDACTED]
3. Well/Trench Total Depth: [REDACTED]
4. Surface Elevation: [REDACTED]
5. Depth to Ground Water: [REDACTED]
6. Injection Zone Depth: [REDACTED]
7. Injection Zone vertically isolated geologically? Yes ☐ No ☐

Impervious Strata between Injection Zone and nearest Underground

Source of Drinking Water:

Name: [REDACTED]

Thickness: [REDACTED]

8. Provide a list of contaminants and the levels (ppm) in contaminated aquifer

Attach as Attachment E.

9. Horizontal and Vertical extent of contamination and injection plume

Attach as Attachment F.

10. Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc.

Attach as Attachment G.

11. Injection Fluid Chemistry in PPM at point of injection

Attach as Attachment H.

12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: [REDACTED]

13. Maximum injection Rate/Volume/Pressure: [REDACTED]

14. Water wells within 1/4 mile radius (attach map as Attachment I): [REDACTED]

15. Injection wells within 1/4 mile radius (attach map as Attachment J): [REDACTED]

16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): [REDACTED]

17. Sampling frequency: [REDACTED]

18. Known hazardous components in injection fluid: [REDACTED]

Section 5. Site History

1. Type of Facility: [REDACTED]

2. Contamination Dates: [REDACTED]

3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations (attach as Attachment L): [REDACTED]

4. Previous Remediation: [REDACTED]

Attach results of any previous remediation as attachment M

NOTE: Authorization Form should be completed in detail and authorization given by the TCEQ before construction, operation, and/or conversion can

begin. Attach additional pages as necessary.

Class V Injection Well Designations

- 5A07 Heat Pump/AC return (IW used for groundwater to heat and/or cool buildings)
- 5A19 Industrial Cooling Water Return Flow (IW used to cool industrial process equipment)
- 5B22 Salt Water Intrusion Barrier (IW used to inject fluids to prevent the intrusion of salt water into an aquifer)
- 5D02 Storm Water Drainage (IW designed for the disposal of rain water)
- 5D04 Industrial Stormwater Drainage Wells (IW designed for the disposal of rain water associated with industrial facilities)
- 5F01 Agricultural Drainage (IW that receive agricultural runoff)
- 5R21 Aquifer Recharge (IW used to inject fluids to recharge an aquifer)
- 5S23 Subsidence Control Wells (IW used to control land subsidence caused by ground water withdrawal)
- 5W09 Untreated Sewage
- 5W10 Large Capacity Cesspools (Cesspools that are designed for 5,000 gpd or greater)
- 5W11 Large Capacity Septic systems (Septic systems designed for 5,000 gpd or greater)
- 5W12 WTP disposal
- 5W20 Industrial Process Waste Disposal Wells
- 5W31 Septic System (Well Disposal method)
- 5W32 Septic System Drainfield Disposal
- 5X13 Mine Backfill (IW used to control subsidence, dispose of mining byproducts, and/or fill sections of a mine)
- 5X25 Experimental Wells (Pilot Test) (IW used to test new technologies or tracer dye studies)
- 5X26 Aquifer Remediation (IW used to clean up, treat, or prevent contamination of a USDW)
- 5X27 Other Wells
- 5X28 Motor Vehicle Waste Disposal Wells (IW used to dispose of waste from a motor vehicle site - These are currently banned)
- 5X29 Abandoned Drinking Water Wells (waste disposal)

Appendix A

Core Data Form



ORIGINAL

TCEQ Core Data Form

TCEQ Use Only

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)		<input type="checkbox"/> Other
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)	
<input checked="" type="checkbox"/> New Customer <input type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership			
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)			
The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).			
6. Customer Legal Name (If an individual, print last name first: e.g.: Doe, John)		If new Customer, enter previous Customer below:	
Preserve Hutto, LLC			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
0804182421	32080489373	87-2782994	
11. Type of Customer: <input type="checkbox"/> Corporation <input type="checkbox"/> Individual		Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited	
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship <input checked="" type="checkbox"/> Other: Limited Liability Company	
12. Number of Employees		13. Independently Owned and Operated?	
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) - as it relates to the Regulated Entity listed on this form. Please check one of the following:			
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Owner & Operator			
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> Voluntary Cleanup Applicant <input type="checkbox"/> Other:			
15. Mailing Address:	3200 Southwest Freeway, Suite 1870		
	City	State	ZIP
	Houston	TX	77027
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
		rowen@guefen.com	
18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)	
(202) 285 - 4357		() -	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)	
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information	
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.)	
Preserve at Star Ranch	

ORIGINAL

23. Street Address of the Regulated Entity: (No PO Boxes)	4428 Priem Lane						
	City	Hutto	State	TX	ZIP	78634	ZIP + 4
24. County							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	Starting at the intersection of South HWY 685 and Gattis School Road proceeding approximately 0.7 miles on Gattis School Road. Until you reach Priem Lane located on the left hand side. Once on Priem Lane you will reach the site within .08 miles on the left hand side.						
26. Nearest City	Hutto			State	TX	Nearest ZIP Code	78634
27. Latitude (N) In Decimal:			28. Longitude (W) In Decimal:				
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
30	29	43.45	97	35	30.62		
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)		
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)							
Leasing Development							
34. Mailing Address:	3200 Southwest Freeway, Suite 1870						
	City	Houston	State	TX	ZIP	77027	ZIP + 4
35. E-Mail Address:	rowen@guefen.com						
36. Telephone Number		37. Extension or Code		38. Fax Number (if applicable)			
202-285-4357				() -			

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.

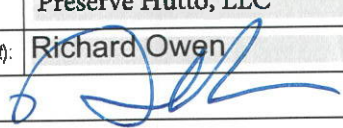
<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review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

SECTION IV: Preparer Information

40. Name:	Paul Tilly		41. Title:	Project Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(713) 234 - 6093		() -	PTilly@wga-llp.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:	Preserve Hutto, LLC	Job Title:	Authorized Signatory
Name (In Print):	Richard Owen	Phone:	(202) 283 - 4357
Signature:		Date:	3/28/2022

Appendix B

Original USGS Map



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



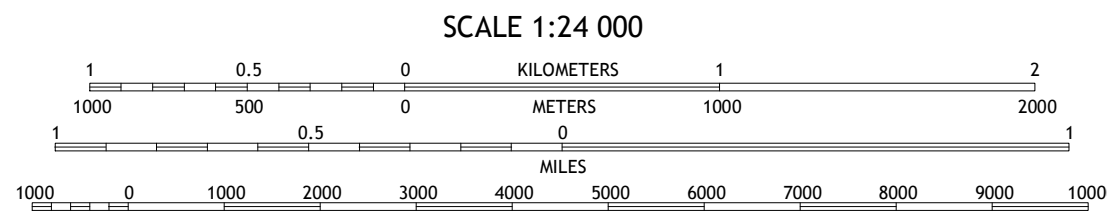
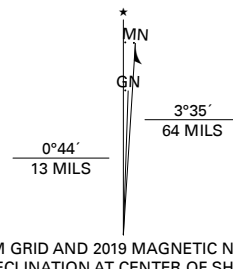
HUTTO QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid/Universal Transverse Mercator, Zone 14R.
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

ImageryNAIP, September 2016 - November 2016
RoadsU.S. Census Bureau, 2015
NamesGNIS, 2000 - 2018
HydrographyNational Hydrography Dataset, 2002 - 2016
ContoursNational Elevation Dataset, 2002
BoundariesMultiple sources; see metadata file 2016 - 2017
WetlandsFWS National Wetlands Inventory 1982



1	2	3
4	5	6
7	8	9

1 Georgetown
2 Weir
3 Granger
4 Round Rock
5 Taylor
6 Pflugerville West
7 Pflugerville East
8 Coupland

ROAD CLASSIFICATION	
Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
	State Route

HUTTO, TX
2019

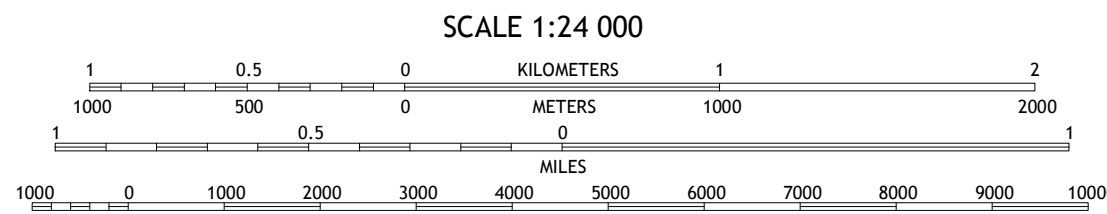
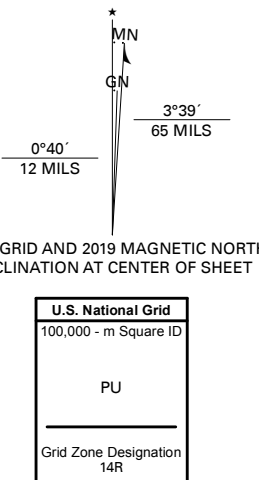




Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid/Universal Transverse Mercator, Zone 14R
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015
Names.....GNIS, 1979 - 2018
Hydrography.....National Hydrography Dataset, 2000 - 2018
Contours.....National Elevation Dataset, 2002
Boundaries.....Multiple sources; see metadata file 2016 - 2017
Wetlands.....FWS National Wetlands Inventory 1982



CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18



1	2	3
4	5	6
7	8	9

- 1 Leander
- 2 Round Rock
- 3 Hutto
- 4 Jollyville
- 5 Pflugerville East
- 6 Austin West
- 7 Austin East
- 8 Manor

ROAD CLASSIFICATION		
Expressway	Local Connector	
Secondary Hwy	Local Road	
Ramp	4WD	
Interstate Route	US Route	State Route

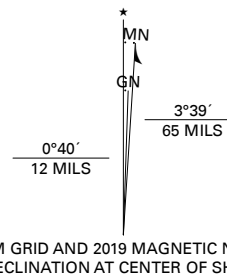




Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84) Projection and
1 000 meter grid/Universal Transverse Mercator, Zone 14R
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015
Names.....GNS, 1979 - 2018
Hydrography.....National Hydrography Dataset, 2002 - 2011
Contours.....National Elevation Dataset, 2002 - 2004
Boundaries.....Multiple sources; see metadata file 2016 - 2017
Wetlands.....FWS National Wetlands Inventory 1982



CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18



1	2	3
4	5	6
7	8	9

1 Leander NE
2 Georgetown
3 Weir
4 Leander
5 Hutto
6 Jollyville
7 Pflugerville West
8 Pflugerville East

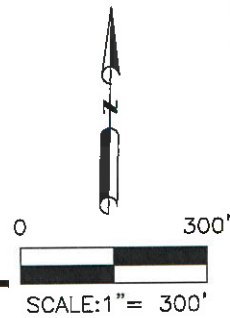
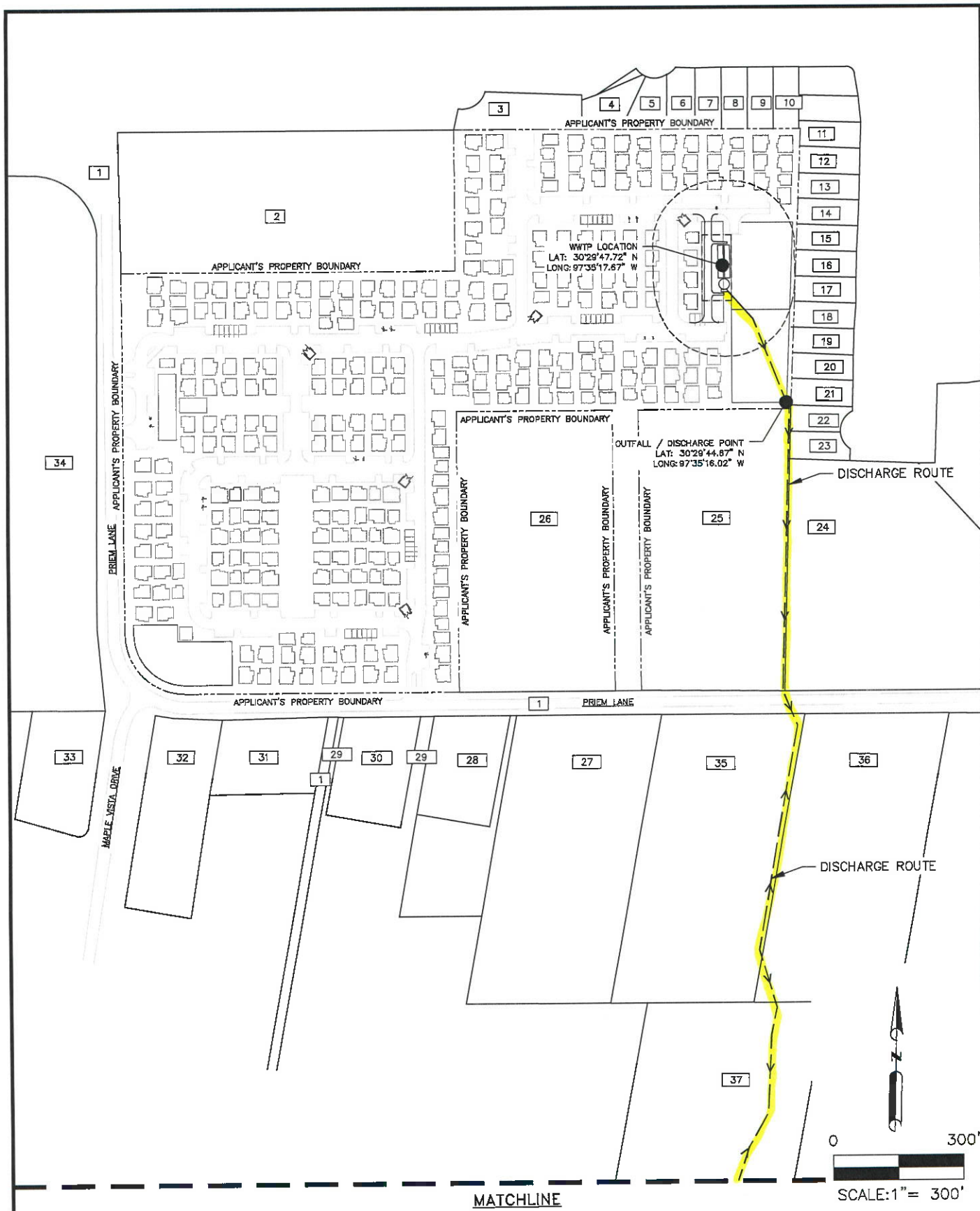
ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Interstate Route
Local Connector
Local Road
4WD
US Route
State Route

ROUND ROCK, TX
2019




Appendix C

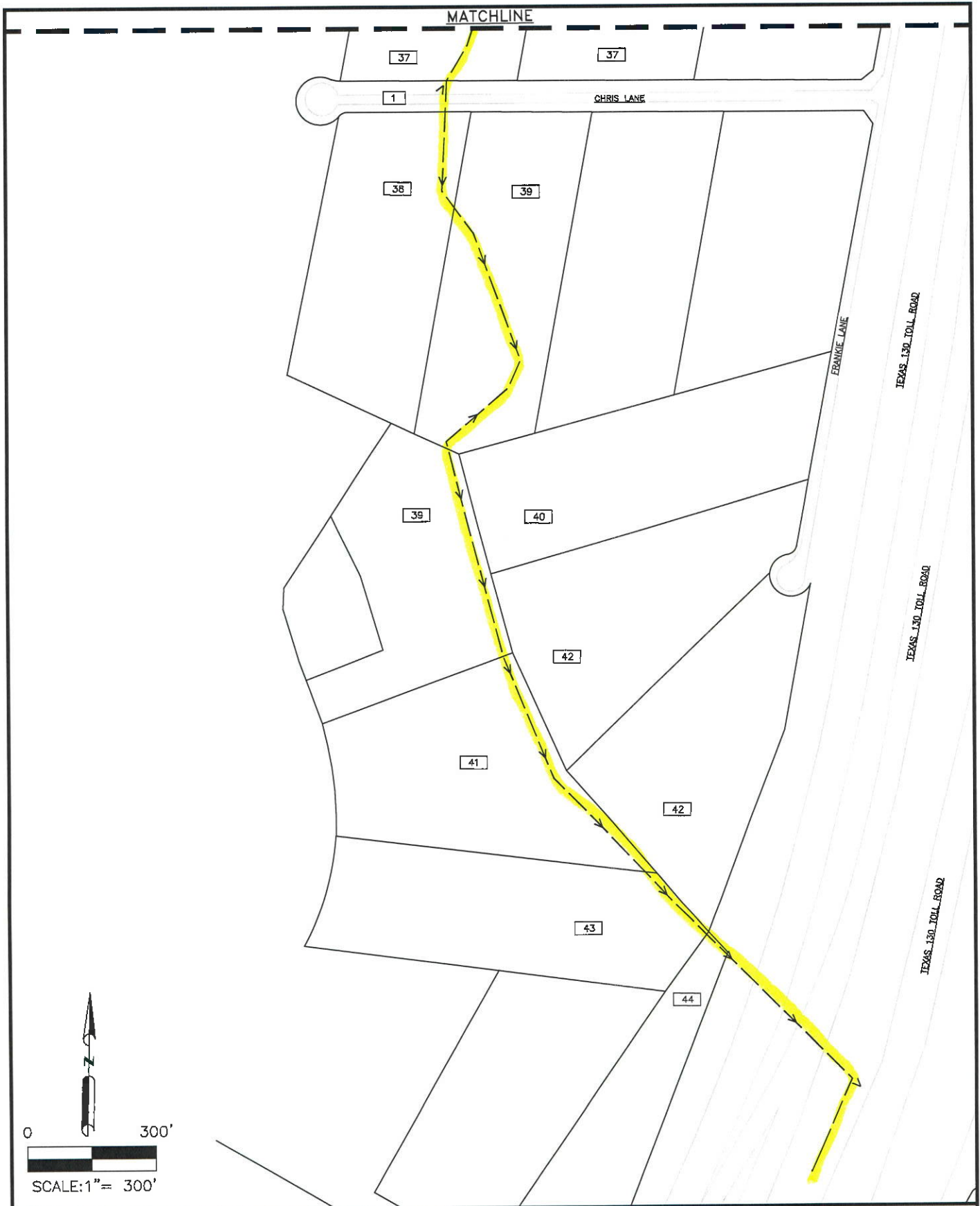
Landowners Map and Cross-Referenced List



MATCHLINE

PRESERVE AT STAR RANCH	APRIL 2022	 <p>TEXAS REGISTERED ENGINEERING FIRM F-9766 2000 Tangentwilde, Suite 120 Houston, Texas 77055 713.789.1900</p>
LANDOWNER MAP I	JOB No. 40009-414-02	
	DRAWN BY: EC	

00110



PRESERVE AT STAR RANCH

LANDOWNER MAP II

APRIL 2022

JOB No.
40009-414-02

DRAWN BY: EC

WGA
CONSULTING ENGINEERS
TEXAS REGISTERED ENGINEERING FIRM F-9766
2500 Tangentville, Suite 120
Houston, Texas 77063
713.789.1500

00111

Cross-references Landowner List

1. STATE OF TEXAS
7600 WASHINGTON AVE
HOUSTON TEXAS 77007
2. A-A-A STORAGE GATTIS SCHOOL LLC
4203 SPINNAKER CV
AUSTIN TEXAS 78731
3. MINCHEW BOB & ANITA
1401 MEADOWILD CV
ROUND ROCK TEXAS 78664
4. ADKINS BARRY S & BRANDI B
921 BETHPAGE DR
HUTTO TEXAS 78634
5. NULL
6. JAISWAL ANUJ & PREM L SHARMA
4010 BISON BND
CEDAR PARK TEXAS 78613
7. WHEELER ERIK M & ANGELA N
1005 BETHPAGE DR
HUTTO TEXAS 78634
8. HAGEN CARRIE L & BRENT C
1009 BETHPAGE DR
HUTTO TEXAS 78634
9. VAN DYKE IAN M & ROSITA A
1013 BETHPAGE DR
HUTTO TEXAS 78634
10. THORNTON KEVIN M
1017 BETHPAGE DR
HUTTO TEXAS 78634
11. ROWRY SHEDRACH
20928 PRESTWICK DR
HUTTO TEXAS 78634
12. WATSON WILLIE JR
20924 PRESTWICK DR
HUTTO TEXAS 78634
13. BRILL DOYLE L & CARLA C DIXON
20920 PRESTWICK DR
HUTTO TEXAS 78634

14. TURNER TRINITY
20916 PRESTWICK DR
HUTTO TEXAS 78634
15. OBRIEN CANDY THERESE
20912 PRESTWICK DR
HUTTO TEXAS 78634
16. PALACIOS ABNER & JANETH S CORDERO LOPEZ
20908 PRESTWICK DR
HUTTO TEXAS 78634
17. HARRIS CLARENCE J & EDITH R
20904 PRESTWICK DR
HUTTO TEXAS 78634
18. HEILMANN CHERI R & CHARLES K
20900 PRESTWICK DR
HUTTO TEXAS 78634
19. WHITE KEISHA
20816 PRESTWICK DR
HUTTO TEXAS 78634
20. JOHNSON A
20812 PRESTWICK DR
HUTTO TEXAS 78634
21. NICHOLS RYAN JAY
20808 PRESTWICK DR
HUTTO TEXAS 78634
22. FRANZ WALTER W & CAROLYN
20804 PRESTWICK DR
HUTTO TEXAS 78634
23. RODRIGUEZ RAMIRO RAMIREZ
20800 PRESTWICK DR
HUTTO TEXAS 78634
24. WILLIAMSON COUNTY WATER
100 CONGRESS AVE STE 1300
AUSTIN TEXAS 78701
25. PARTH CAPITAL GROUP LLC
12320 ALAMEDA TRACE CIR APT 1308
AUSTIN TEXAS 78727
26. ESTES JOHNNY F & CAROL ANN
4632 PRIEM LANE
PFLUGERVILLE TEXAS 78660
27. 4629 PRIEM LANE PROPERTIES LLC
4629 PRIEM LANE
PFLUGERVILLE TEXAS 78660

28. JETT JUSTIN & CARRIE
4617 PRIEM LANE
PFLUGERVILLE TEXAS 78660
29. SHIN FRED S
PO BOX 130
ROUND ROCK TEXAS 78680
30. EDV LLC
19605 MALLARD POND TRL
PFLUGERVILLE TEXAS 78660
31. BATES CYNTHIA LYNN
32 BAUERVILLE ROAD
ART TEXAS 76820
32. BERMUDEZ CESAR
3108 JAZZ ST
ROUND ROCK TEXAS 78664
33. BERMUDEZ JESUS
3720 APPLE VISTA CIR
PFLUGERVILLE TEXAS 78660
34. PFLUGERVILLE ISD
1401 PECAN ST W
PFLUGERVILLE TEXAS 78660

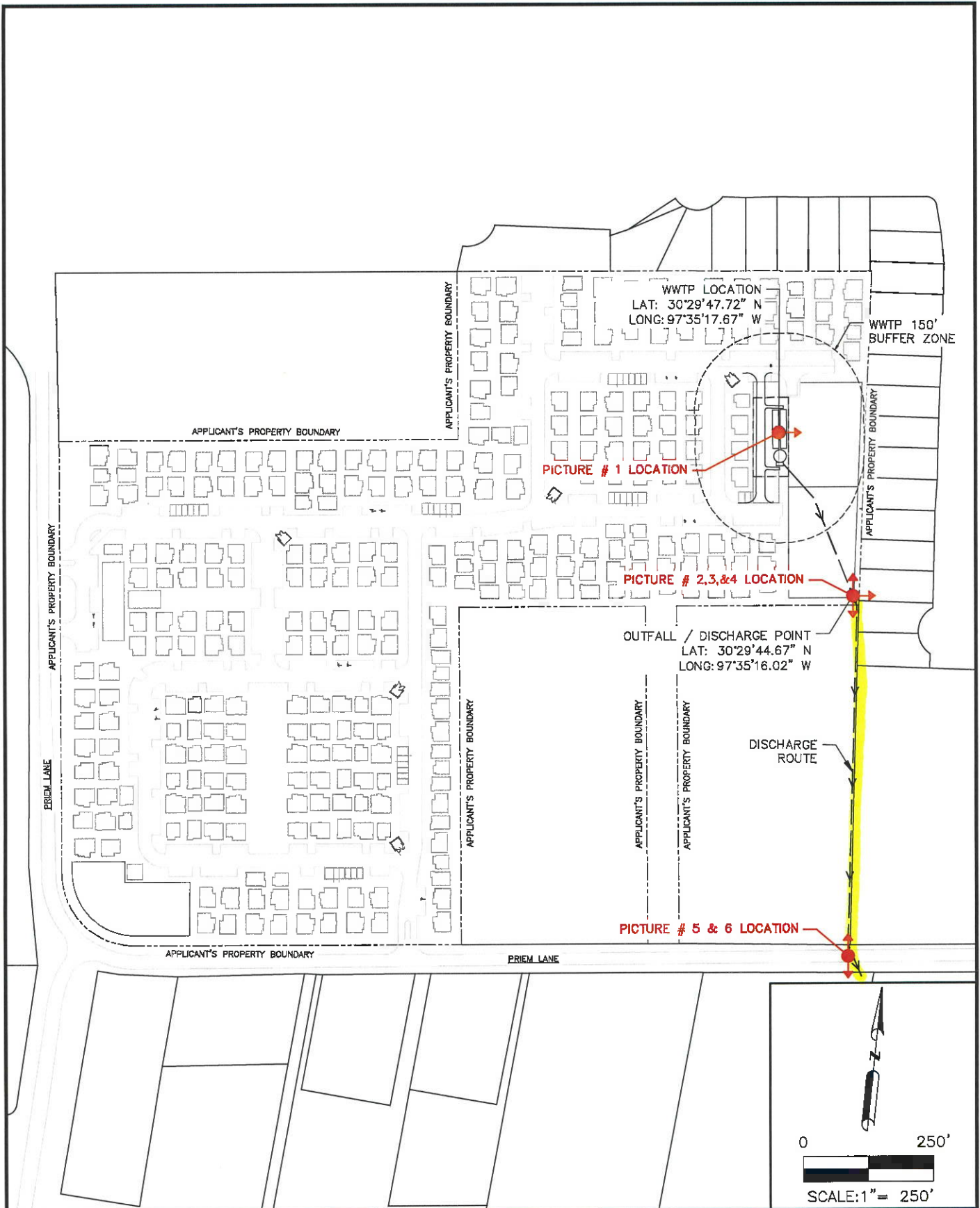
DOWN STREAM LANDOWNERS

35. DECK RYAN
PO BOX 6055
ROUND ROCK TEXAS 78683
36. LONGHORN CROSSING LLC
457 RIVIERA DR
CANYON LAKE TEXAS 78133
37. ESTATE OF MARVIN C HEINTZE
2108 MAPLE VISTA DR
PFLUGERVILLE TEXAS 78660
38. MAAS FRED E & DOROTHY J
PO BOX 832
PFLUGERVILLE TEXAS 78691
39. KUEHNER C E JR & SUE
20103 PANTHER DR
PFLUGERVILLE TEXAS 78660
40. RRC PROPERTY GROUP LLC
2400 SILENT BROOK TRL
ROUND ROCK TEXAS 78665

- 41. FUNEZ NEYLA & ALEXANDER
20105 PANTHER DR
PFLUGERVILLE TEXAS 78660
- 42. CRZ DEVELOPMENT LLC
20304 FRANKIE LANE
PFLUGERVILLE TEXAS 78660
- 43. NORWOOD GREGORY P & NELDA
20009 PANTHER DR
PFLUGERVILLE TEXAS 78660
- 44. MOORE REAGAN DOYLE
1512 PANTHER LOOP
PFLUGERVILLE TEXAS 78660

Appendix D

Original Photographs



PRESERVE AT STAR RANCH
ORIGINAL PHOTOGRAPHS
PLOT PLAN

APRIL 2022

JOB No.
40009-414-02

DRAWN BY: EC

WGA
CONSULTING ENGINEERS
TEXAS REGISTERED ENGINEERING FIRM F-9756
 2600 Tangleville, Suite 120
 Houston, Texas 77063
 713.786.1900

00117



PICTURE # 1



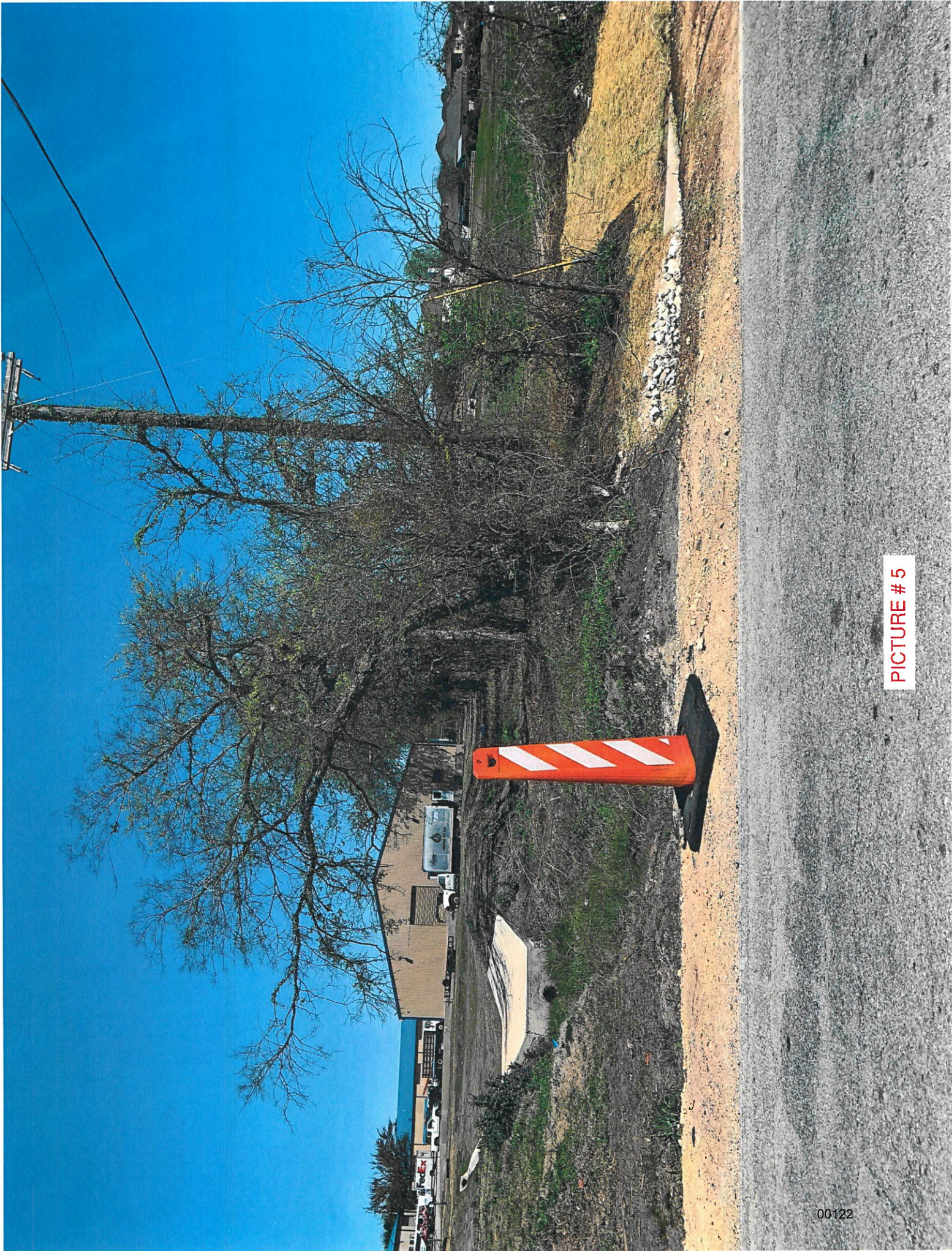
PICTURE # 2



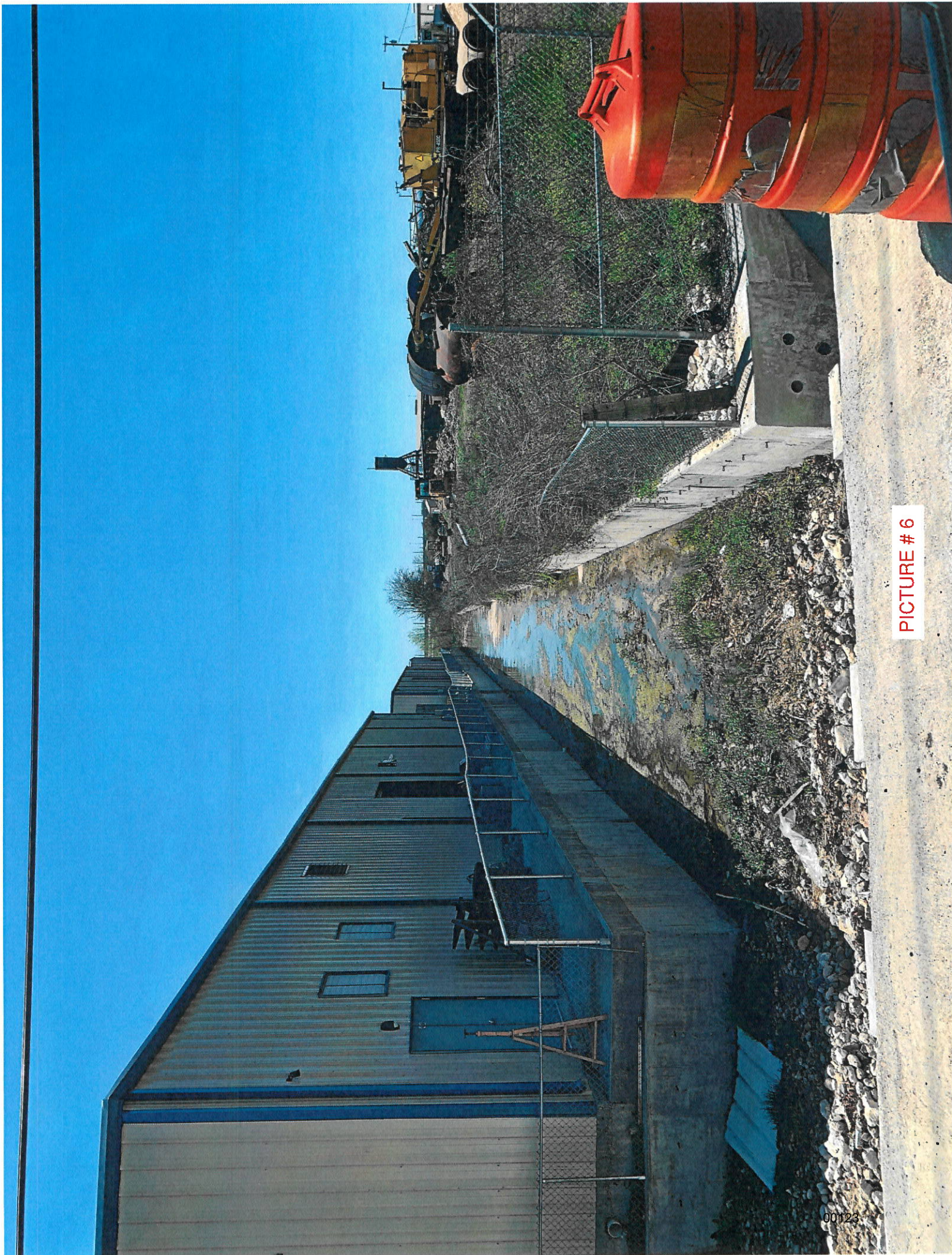
PICTURE # 3



PICTURE # 4



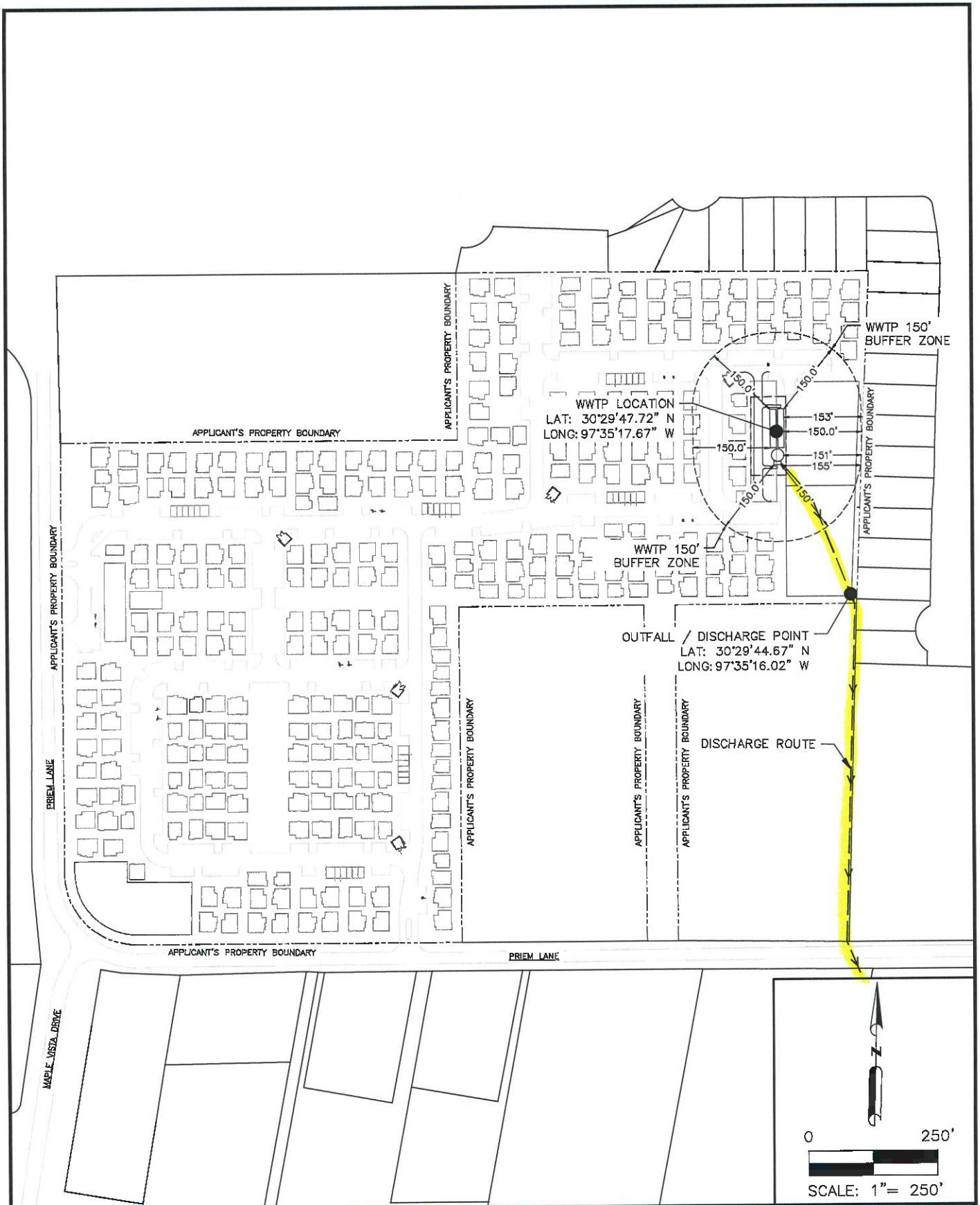
PICTURE # 5



PICTURE # 6

Appendix E

Buffer Zone Map



PRESERVE AT STAR RANCH

BUFFER ZONE MAP

APRIL 2022

JOB No.
40009-414-02

DRAWN BY: EC

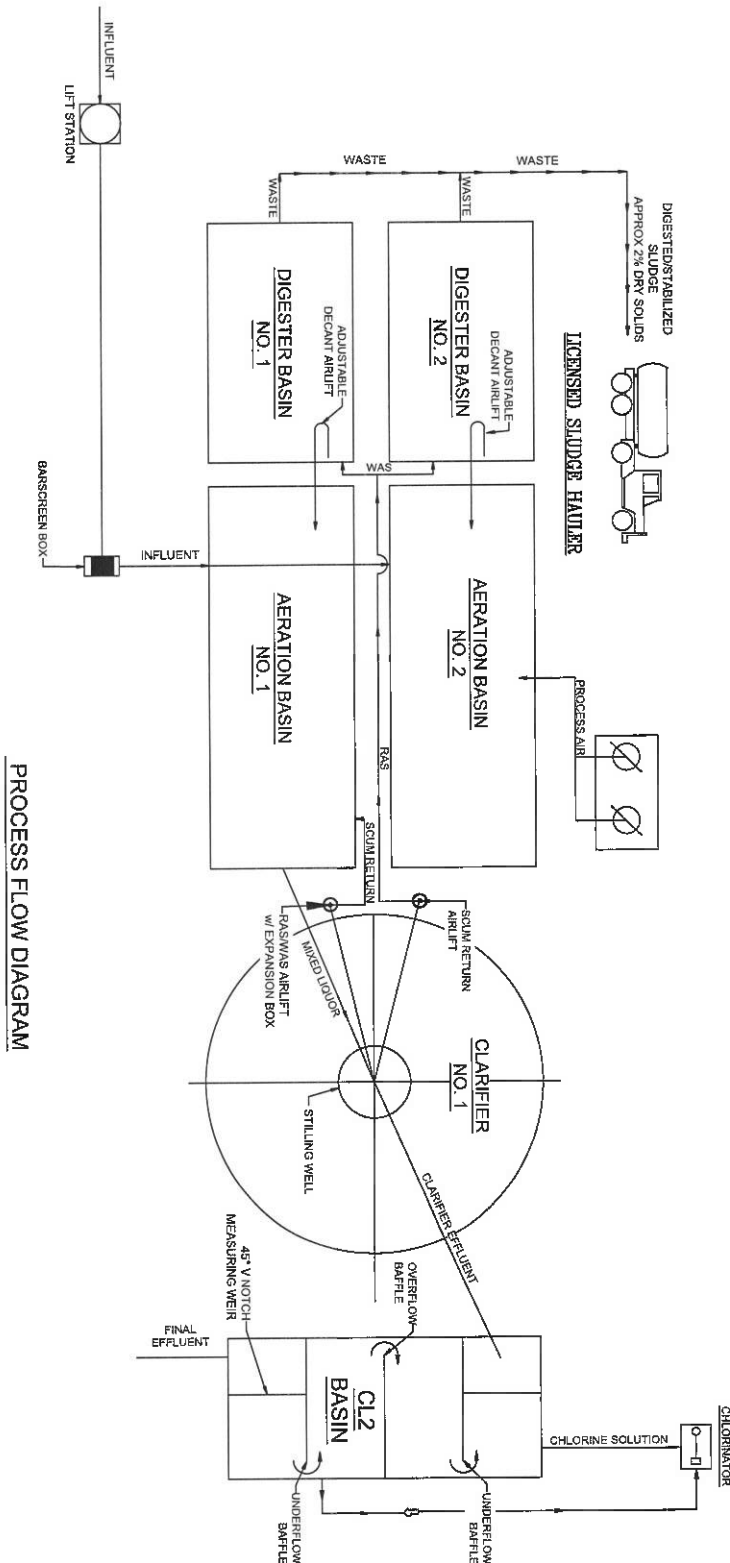
WGA
CONSULTING ENGINEERS

TEXAS REGISTERED ENGINEERING FIRM F-9756
2500 Tanglewilde, Suite 120
Houston, Texas 77063
713.789.1000

00125

Appendix F

Flow Diagram



PRESERVE AT STAR RANCH

**FINAL WASTEWATER TREATMENT FLOW
DIAGRAM (0.09 MGD)**

APRIL 2022

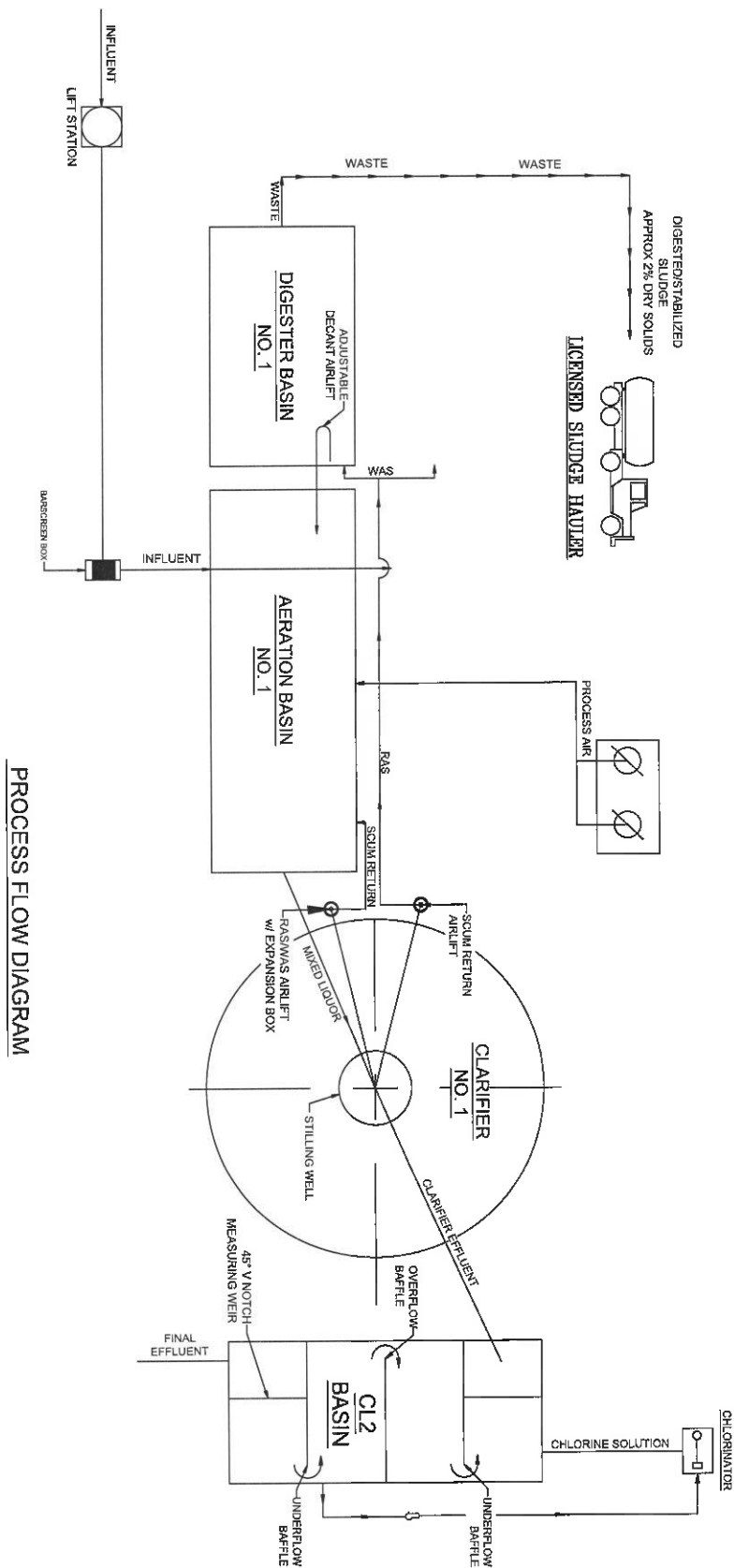
JOB No.
40009-414-02

DRAWN BY: EC

WGA
CONSULTING ENGINEERS

TEXAS REGISTERED ENGINEERING FIRM F-9766
2000 Tenmileville, Suite 120
Houston, Texas 77063
713.789.1000

00127



PRESERVE AT STAR RANCH

**INTERIM PHASE I WASTEWATER
TREATMENT FLOW DIAGRAM (0.045 MGD)**

APRIL 2022

JOB No.
40009-414-02

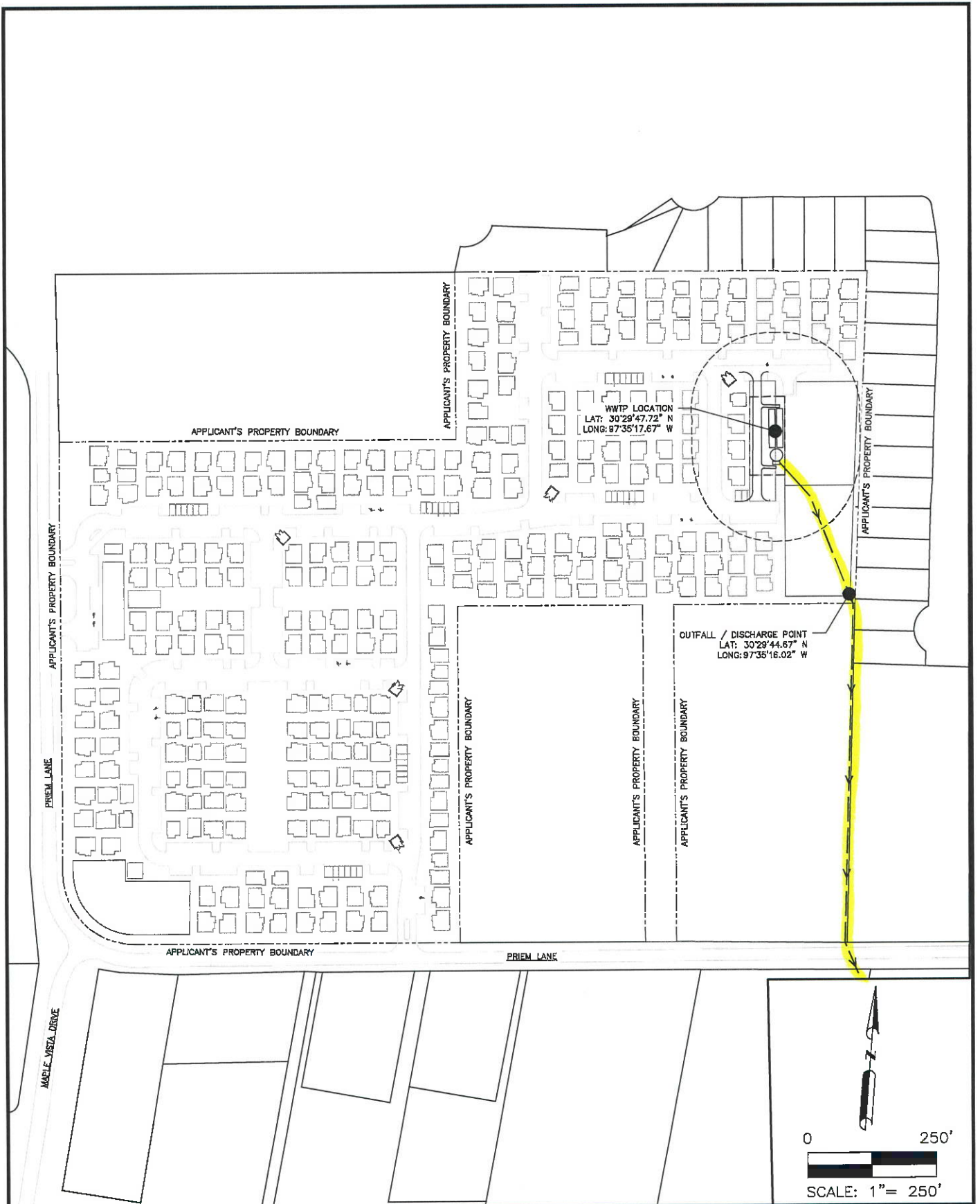
DRAWN BY: EC

WGA
CONSULTING ENGINEERS
TEXAS REGISTERED ENGINEERING FIRM F-9788
2509 Tangleville, Suite 120
Houston, Texas 77063
713.789.1900

00128

Appendix G

Site Drawing



PRESERVE AT STAR RANCH

SITE MAP

APRIL 2022

JOB No.
40009-414-02

DRAWN BY: EC

WGA
CONSULTING ENGINEERS

TEXAS REGISTERED ENGINEERING FIRM F-9756
2500 Telegraphia, Suite 120
Houston, Texas 77063
713.789.1800

00130

Appendix H

Nearby WTPs and Letters



March 31, 2022

To: Travis County MUD 15
700 Lavaca Street, 5TH Floor, Suite 540
Austin, Texas 78701

Greetings,

Preserve at Star Ranch located at 4428 Priem Lane Hutto, Texas 78634, in Williamson County has applied with the State of Texas for permission to install a sewage treatment plant to serve the proposed Preserve at Star Ranch development estimated to need about 60,000 gallons per day of sewer capacity.

In order to be in compliance with the Texas Administrative Code, Preserve at Star Ranch must contact all sewage treatment plants within a 3-mile radius to investigate interest/ability to receive the waste generated from this domestic site.

Your facility with a NPDES number WQ0011845002 located in Travis County, Texas was found to be within 3-miles from the proposed development.

Please respond to Ward, Getz, and Associates, PLLC at the address below to inform us of

_____ Yes, you can take the effluent of 60,000 gpd

_____ No, you don't have the ability to take the effluent of 60,000 gpd

Thank you for your participation in these efforts.

Sincerely,

A handwritten signature in blue ink, appearing to read "E. Chatman", written over a horizontal line.

Evan Chatman

E: echatman@wga-llp.com

P: (254) 249 - 3131

Ward, Getz & Associates, PLLC



March 31, 2022

To: Williamson County Water Sewer Irrigation and Drainage District 3
710 South Main Street
Georgetown Texas 78626

Greetings,

Preserve at Star Ranch located at 4428 Priem Lane Hutto, Texas 78634, in Williamson County has applied with the State of Texas for permission to install a sewage treatment plant to serve the proposed Preserve at Star Ranch development estimated to need about 60,000 gallons per day of sewer capacity.

In order to be in compliance with the Texas Administrative Code, Preserve at Star Ranch must contact all sewage treatment plants within a 3-mile radius to investigate interest/ability to receive the waste generated from this domestic site.

Your facility with a NPDES number WQ0013866001 located in Travis and Williamson County, Texas was found to be within 3-miles from the proposed development.

Please respond to Ward, Getz, and Associates, PLLC at the address below to inform us of

_____ Yes, you can take the effluent of 60,000 gpd

_____ No, you don't have the ability to take the effluent of 60,000 gpd

Thank you for your participation in these efforts.

Sincerely,

A handwritten signature in blue ink, appearing to read "E. Chatman", written over a horizontal line.

Evan Chatman

E: echatman@wga-llp.com

P: (254) 249 - 3131

Ward, Getz & Associates, PLLC



March 31, 2022

To: Williamson County MUD 22
c/o Crossroads Utility Services
2601 Forest Creek Drive
Round Rock, Texas 78665

Greetings,

Preserve at Star Ranch located at 4428 Priem Lane Hutto, Texas 78634, in Williamson County has applied with the State of Texas for permission to install a sewage treatment plant to serve the proposed Preserve at Star Ranch development estimated to need about 60,000 gallons per day of sewer capacity.

In order to be in compliance with the Texas Administrative Code, Preserve at Star Ranch must contact all sewage treatment plants within a 3-mile radius to investigate interest/ability to receive the waste generated from this domestic site.

Your facility with a NPDES number WQ0013866001 located in Travis and Williamson County, Texas was found to be within 3-miles from the proposed development.

Please respond to Ward, Getz, and Associates, PLLC at the address below to inform us of

_____ Yes, you can take the effluent of 60,000 gpd

_____ No, you don't have the ability to take the effluent of 60,000 gpd

Thank you for your participation in these efforts.

Sincerely,

A handwritten signature in blue ink, appearing to read "E. Chatman", written over a horizontal line.

Evan Chatman
E: echatman@wga-llp.com
P: (254) 249 - 3131
Ward, Getz & Associates, PLLC



March 31, 2022

To: City of Hutto
401 West Front Street
Hutto, Texas 78634

Greetings,

Preserve at Star Ranch located at 4428 Priem Lane Hutto, Texas 78634, in Williamson County has applied with the State of Texas for permission to install a sewage treatment plant to serve the proposed Preserve at Star Ranch development estimated to need about 60,000 gallons per day of sewer capacity.

In order to be in compliance with the Texas Administrative Code, Preserve at Star Ranch must contact all sewage treatment plants within a 3-mile radius to investigate interest/ability to receive the waste generated from this domestic site.

Your facility with a NPDES number WQ0011324001 located 1,300 feet east of Farm-to-Market 1660 and 1,500 feet south of State Highway 79, in Hutto in Williamson County, Texas was found to be within 3-miles from the proposed development.

Please respond to Ward, Getz, and Associates, PLLC at the address below to inform us of

_____ Yes, you can take the effluent of 60,000 gpd

_____ No, you don't have the ability to take the effluent of 60,000 gpd

Thank you for your participation in these efforts.

Sincerely,

A handwritten signature in blue ink, appearing to read "EChatman", written over a horizontal line.

Evan Chatman
E: echatman@wga-llp.com
P: (254) 249 - 3131
Ward, Getz & Associates, PLLC



March 31, 2022

To: Kelly Lane Utility Co Inc
205 East 43rd Street
Austin, Texas 78751

Greetings,

Preserve at Star Ranch located at 4428 Priem Lane Hutto, Texas 78634, in Williamson County has applied with the State of Texas for permission to install a sewage treatment plant to serve the proposed Preserve at Star Ranch development estimated to need about 60,000 gallons per day of sewer capacity.

In order to be in compliance with the Texas Administrative Code, Preserve at Star Ranch must contact all sewage treatment plants within a 3-mile radius to investigate interest/ability to receive the waste generated from this domestic site.

Your facility with a NPDES number WQ0013219001 located 1,300 feet east of Farm-to-Market 1660 and 1,500 feet south of State Highway 79, in Hutto in Williamson County, Texas was found to be within 3-miles from the proposed development.

Please respond to Ward, Getz, and Associates, PLLC at the address below to inform us of

_____ Yes, you can take the effluent of 60,000 gpd

_____ No, you don't have the ability to take the effluent of 60,000 gpd

Thank you for your participation in these efforts.

Sincerely,

A handwritten signature in blue ink, appearing to read "E. Chatman", written over a horizontal line.

Evan Chatman
E: echatman@wga-llp.com
P: (254) 249 - 3131
Ward, Getz & Associates, PLLC



March 31, 2022

To: Lakeside WCID #2A, B, C & D
C/O Lloyd Grosslink Rochelle & Townsend
816 Congress Ave. Suite 1900
Austin, Texas 78701

Greetings,

Preserve at Star Ranch located at 4428 Priem Lane Hutto, Texas 78634, in Williamson County has applied with the State of Texas for permission to install a sewage treatment plant to serve the proposed Preserve at Star Ranch development estimated to need about 60,000 gallons per day of sewer capacity.

In order to be in compliance with the Texas Administrative Code, Preserve at Star Ranch must contact all sewage treatment plants within a 3-mile radius to investigate interest/ability to receive the waste generated from this domestic site.

Your facility with a NPDES number WQ0011485 located in Travis and Williamson County, Texas was found to be within 3-miles from the proposed development.

Please respond to Ward, Getz, and Associates, PLLC at the address below to inform us of

_____ Yes, you can take the effluent of 60,000 gpd

_____ No, you don't have the ability to take the effluent of 60,000 gpd

Thank you for your participation in these efforts.

Sincerely,

A handwritten signature in blue ink, appearing to read "E. Chatman", written over a horizontal line.

Evan Chatman

E: echatman@wga-llp.com

P: (254) 249 - 3131

Ward, Getz & Associates, PLLC



March 30, 2022

To: SWWC Utilities
9511 North FM 620
Austin, Texas 78726

Greetings,

Preserve at Star Ranch located at 4428 Priem Lane Hutto, Texas 78634, in Williamson County has applied with the State of Texas for permission to install a sewage treatment plant to serve the proposed Preserve at Star Ranch development estimated to need about 60,000 gallons per day of sewer capacity.

In order to be in compliance with the Texas Administrative Code, Preserve at Star Ranch must contact all sewage treatment plants within a 3-mile radius to investigate interest/ability to receive the waste generated from this domestic site.

Your facility with a NPDES number WQ0013866001 located at Muirfield Bend Drive Hutto, in Williamson County, Texas was found to be within 3-miles from the proposed development.

Please respond to Ward, Getz, and Associates, PLLC at the address below to inform us of

_____ Yes, you can take the effluent of 60,000 gpd

_____ No, you don't have the ability to take the effluent of 60,000 gpd

Thank you for your participation in these efforts.

Sincerely,

A handwritten signature in blue ink, appearing to read "E. Chatman", written over a horizontal line.

Evan Chatman

E: echatman@wga-llp.com

P: (254) 249 - 3131

Ward, Getz & Associates, PLLC



March 30, 2022

To: City of Round Rock, City of Cedar Park, and City of Austin
212 East Main Street
Round Rock, Texas 78664

Greetings,

Preserve at Star Ranch located at 4428 Priem Lane Hutto, Texas 78634, in Williamson County has applied with the State of Texas for permission to install a sewage treatment plant to serve the proposed Preserve at Star Ranch development estimated to need about 60,000 gallons per day of sewer capacity.

In order to be in compliance with the Texas Administrative Code, Preserve at Star Ranch must contact all sewage treatment plants within a 3-mile radius to investigate interest/ability to receive the waste generated from this domestic site.

Your facility with a NPDES number WQ0010264002 located at 3939 Palm Valley Boulevard, adjacent to and south of State Highway 79, approximately 4 miles east of the Intersection of State Highway 79 and Interstate Highway 35 in the City of Round Rock, Williamson County, Texas 78665 was found to be within 3-miles from the proposed development.

Please respond to Ward, Getz, and Associates, PLLC at the address below to inform us of

_____ Yes, you can take the effluent of 60,000 gpd

_____ No, you don't have the ability to take the effluent of 60,000 gpd

Thank you for your participation in these efforts.

Sincerely,

A handwritten signature in blue ink, appearing to read "E. Chatman", written over a horizontal line.

Evan Chatman

E: echatman@wga-llp.com

P: (254) 249 - 3131

Ward, Getz & Associates, PLLC

7021 2720 0002 9862 1847

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com™.

OFFICIAL USE

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postmark
Here

Postage

\$

City of Round Rock, City of Cedar
Park, & City of Austin
212 East Main Street
Round Rock, TX 78664

40009-414-02
3/30/22 EC

See Reverse for Instructions

7021 2720 0002 9862 1830

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com™.

OFFICIAL USE

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postmark
Here

Postage

\$

SWWC Utilities
9511 North FM 260
Austin, TX 78726

3/30/22 EC

40009-414-02

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

7021 2720 0002 9882 1922

U.S. Postal Service
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only
For delivery information, visit our website at www.usps.com®.**OFFICIAL USE**

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

- ☐ Return Receipt (hardcopy) \$
- ☐ Return Receipt (electronic) \$
- ☐ Certified Mail Restricted Delivery \$
- ☐ Adult Signature Required \$
- ☐ Adult Signature Restricted Delivery \$

Postmark
Here

Postage

\$

Williamson County Water Sewer
Irrigation and Drainage District 3
710 South Main Street
Georgetown, TX 78626

3/31/22 EC
40009-414-02
U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only
For delivery information, visit our website at www.usps.com®.**OFFICIAL USE**

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

- ☐ Return Receipt (hardcopy) \$
- ☐ Return Receipt (electronic) \$
- ☐ Certified Mail Restricted Delivery \$
- ☐ Adult Signature Required \$
- ☐ Adult Signature Restricted Delivery \$

Postmark
Here

Postage

\$

City of Hutto
401 West Front Street
Hutto, TX 78634

3/31/22 EC
40009-414-02

7021 2720 0002 9882 1908

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only
For delivery information, visit our website at www.usps.com®.**OFFICIAL USE**

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

- ☐ Return Receipt (hardcopy) \$
- ☐ Return Receipt (electronic) \$
- ☐ Certified Mail Restricted Delivery \$
- ☐ Adult Signature Required \$
- ☐ Adult Signature Restricted Delivery \$

Postmark
Here

Postage

\$

Lakeside WCID #2A, B, C & D
c/o Lloyd, Grosslink, Rochelle &
Townsend
816 Congress Ave, Suite 1900
Austin, TX 78701

40009-414-02
3/31/22 EC

7021 2720 0002 9882 1885

7021 2720 0002 9882 1939

U.S. Postal Service
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only
For delivery information, visit our website at www.usps.com®.**OFFICIAL USE**

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

- ☐ Return Receipt (hardcopy) \$
- ☐ Return Receipt (electronic) \$
- ☐ Certified Mail Restricted Delivery \$
- ☐ Adult Signature Required \$
- ☐ Adult Signature Restricted Delivery \$

Postmark
Here

Postage

\$

Travis County MUD 15
700 Lavaca St., 5th Floor, Suite 540
Austin, TX 78701

3/31/22 EC
40009-414-02

7021 2720 0002 9882 1915

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only
For delivery information, visit our website at www.usps.com®.**OFFICIAL USE**

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

- ☐ Return Receipt (hardcopy) \$
- ☐ Return Receipt (electronic) \$
- ☐ Certified Mail Restricted Delivery \$
- ☐ Adult Signature Required \$
- ☐ Adult Signature Restricted Delivery \$

Postmark
Here

Postage

\$

Williamson County MUD 22
c/o Crossroads Utility Services
2601 Forest Creek Drive
Round Rock, Texas 78665

3/31/22 EC

7021 2720 0002 9882 1892

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only
For delivery information, visit our website at www.usps.com®.**OFFICIAL USE**

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

- ☐ Return Receipt (hardcopy) \$
- ☐ Return Receipt (electronic) \$
- ☐ Certified Mail Restricted Delivery \$
- ☐ Adult Signature Required \$
- ☐ Adult Signature Restricted Delivery \$

Postmark
Here

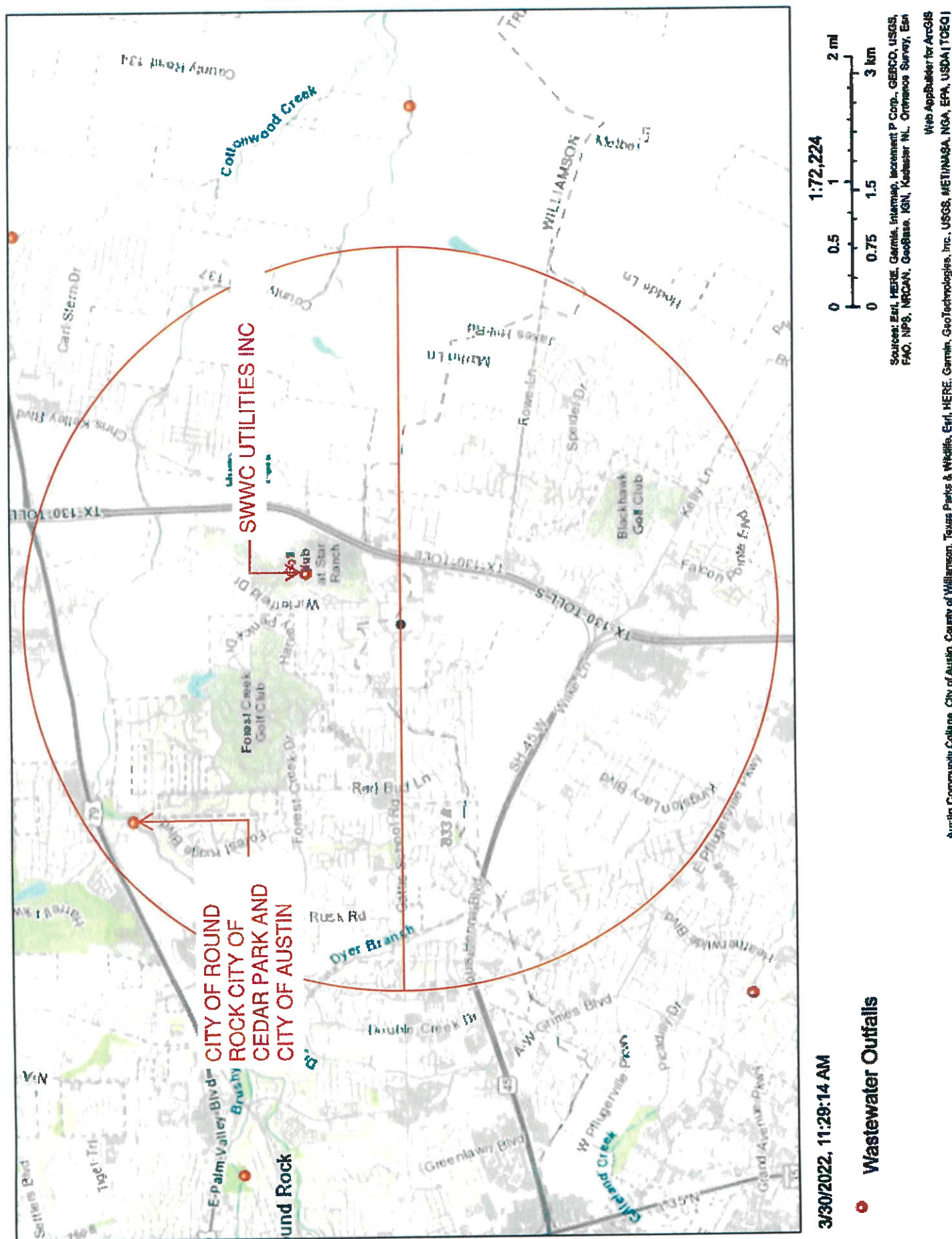
Postage

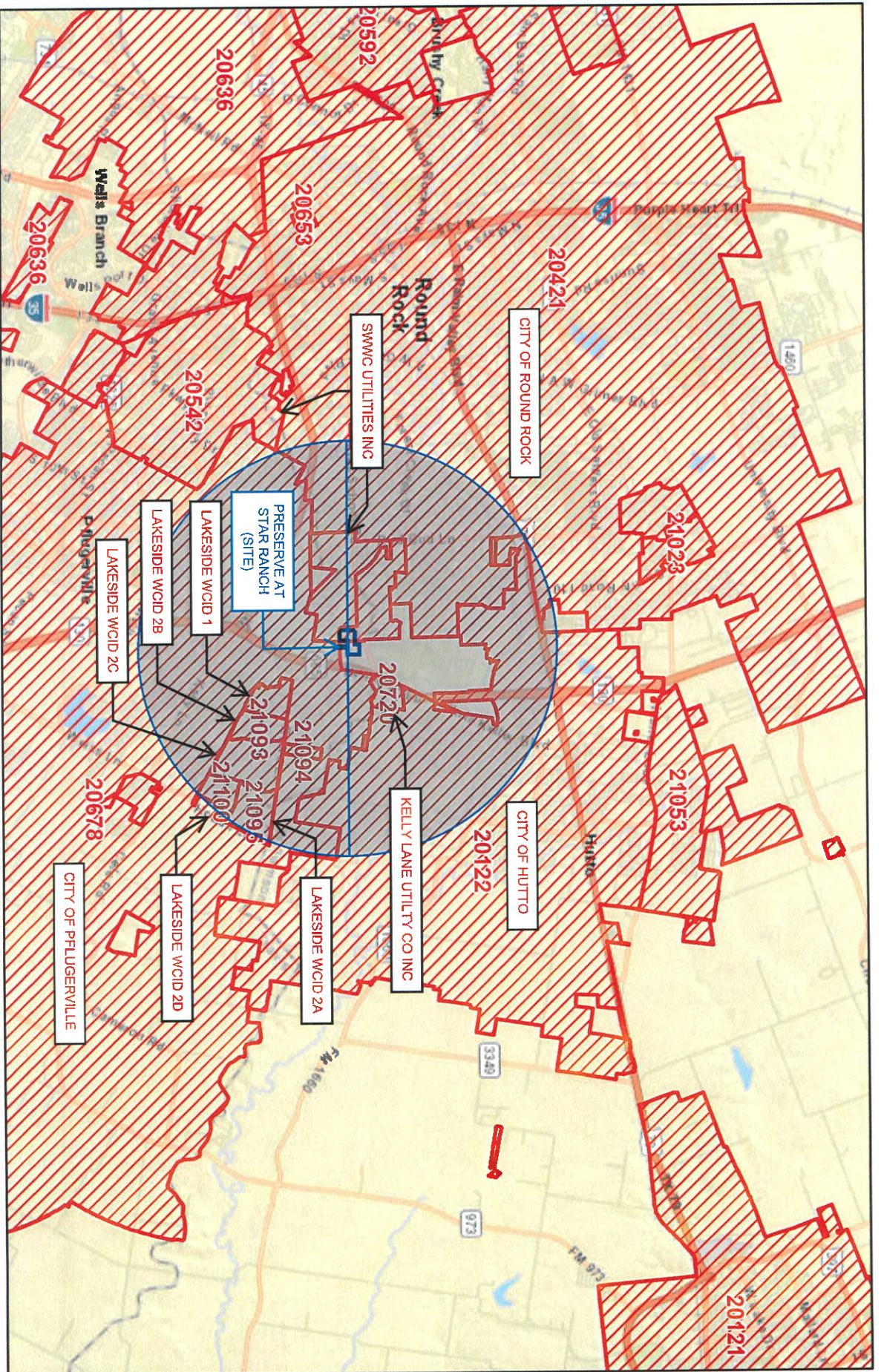
\$

Kelly Lane Utility Co. Inc.
205 East 43rd Street
Austin, TX 78751

3/31/22 EC
40009-414-02

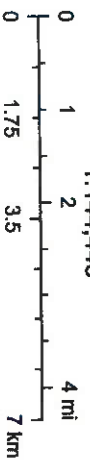
Wastewater Outfalls in Texas (TCEQ) Custom Print





March 31, 2022

1:144,448



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Appendix I

Design Calculations

ACTIVATED SLUDGE DESIGN		
WASTEWATER CHARACTERISTICS		
Description	Value	Unit
Influent BOD ₅	300.0	mg/L
Influent TSS	300.0	mg/L
Influent NH ₃	40.0	mg/L
Daily Flow (Q _{AVE})	60,000	gpd
Daily Flow (Q _{AVE})	41.7	gpm
Daily Flow (Q _{AVE})	0.093	cfs
2-hr Peak Flow (Q _{PK})	240,000	gpd
2-hr Peak Flow (Q _{PK})	166.7	gpm
2-hr Peak Flow (Q _{PK})	0.372	cfs
NH ₃	20.1	lbs/day
BOD ₅	150.5	lbs/day
TSS	150.5	lbs/day
AERATION BASIN		
Description	Value	Unit
TCEQ Max Loading	35.0	lbs/day/ft ³
Width	12.0	ft
Length	44.0	ft
Depth	10.3	ft
Total Volume	4,934	ft ³
Organic Loading	30.5	lbs/day/1000 ft ³
Design Within TCEQ Limits?	YES	-
CLARIFIER		
Description	Value	Unit
TCEQ Max Surface Loading (Q _{ave})	600	gal/day/ft ²
TCEQ Max Surface Loading (Q _{PK})	1,200	gal/day/ft ²
TCEQ Min Detention Time (Q _{AVE})	3.0	hours
TCEQ Min Detention Time (Q _{PK})	1.8	hours
TCEQ Max Weir Loading Q _(PK)	20,000	gal/day/ft
Diameter	24.0	ft
Depth	10.0	ft
Weir Length	73.8	ft
Weir Diameter	23.5	ft
Clarifier Surface Area	452.4	ft ²
Clarifier Volume	4,524.0	ft ³
Clarifier Volume	33,839.9	gal
Stilling Well Diameter	4.0	ft
Stilling Well Area	12.6	ft ²
Stilling Well Velocity	0.060	fps
Clarifier Wall to Weir Area	18.654	ft ²
TCEQ Max Upflow Velocity	0.1000	fps
Upflow Velocity at Q _{PK}	0.020	fps
Design Within TCEQ Limits?	YES	-
Design Surface Loading (Q _{AVE})	132.6	gal/day/ft ²
Design Within TCEQ Limits?	YES	-
Design Surface Loading (Q _{PK})	530.5	gal/day/ft ²
Design Within TCEQ Limits?	YES	-

ACTIVATED SLUDGE DESIGN		
WASTEWATER CHARACTERISTICS		
Description	Value	Unit
Detention Time (Q_{AVE})	13.5	hours
Design Within TCEQ Limits?	YES	-
Detention Time (Q_{PK})	3.4	hours
Design Within TCEQ Limits?	YES	-
Weir Flow	3,250.7	gal/day/ft
Design Within TCEQ Limits?	YES	-
CHLORINE CONTACT CHAMBER		
Description	Value	Unit
TCEQ Min Detention Time (Q_{PK})	20.0	min
TCEQ Min Volume	445.6	ft ³
TCEQ Min Volume	3,333.3	gal
Width	6.0	ft
Length	14.0	ft
Depth	8.00	ft
Chamber Volume	672.0	ft ³
Chamber Volume	5,026.6	gal
Design Within TCEQ Limits?	YES	-
Detention Time	30.2	min
Design Within TCEQ Limits?	YES	-
AEROBIC DIGESTER		
Description	Value	Unit
TCEQ Min Design Volume	20.0	ft ³ /lb-BOD/day
TCEQ Min Design Volume	3,009.6	ft ³
TCEQ Min Sludge Retention Time	15.0	days
Width	12.0	ft
Length	32.0	ft
Depth	10.3	ft
Digester Volume	3,955	ft ³
Digester Loading	26.3	ft ³ /lb
Diameter	0.0	ft
Depth	0.0	ft
Circular Volume	0.0	ft ³
Digester Volume	3,955	ft ³
Design Within TCEQ Limits?	YES	-
Digester Sludge Retention Time @ 1.2%	26.3	days
Design Within TCEQ Limits?	YES	-
AIR REQUIREMENTS		
AIR LIFTS		
Description	Value	Unit
RAS - Min Requirements @ 200 GPD/ft ²	62.8	gpm
SCFM @ R = 0.7 from charts (min 20)	20.0	scfm
Pipe Size	3.0	in
Velocity	2.9	fps
RAS - Max Requirements @ 400 GPD/ft ²	125.7	gpm
SCFM @ R = 0.7 from charts (min 20)	26.0	scfm
RAS - Pipe Size	6.0	in
Velocity	1.4	fps
WAS Percent Used	50.0	%
WAS - Min Requirements @ 200 GPD/ft ²	31.4	gpm
SCFM @ R = 0.7 from charts (min 20)	20.0	scfm

ACTIVATED SLUDGE DESIGN		
WASTEWATER CHARACTERISTICS		
Description	Value	Unit
Pipe Size	3.0	in
Velocity	1.4	fps
WAS - Max Requirements @ 400 GPD/ft ²	62.8	gpm
SCFM @ R = 0.7 from charts (min 20)	20.0	scfm
Pipe Size	3.0	in
Velocity	2.9	fps
SCUM - Min Requirements @ 200 GPD/ft ²	22.8	gpm
SCFM @ R = 0.7 from charts	20.0	scfm
Pipe Size	3.0	in
Velocity	1.0	fps
SCUM - Max Requirements @ 400 GPD/ft ²	45.7	gpm
SCFM @ R = 0.7 from charts	20.0	scfm
Pipe Size	3.0	in
Velocity	2.1	fps
Total Air Lifts SCFM @ 200 GPD/ft ²	60.0	scfm
Total Air Lifts SCFM @ 400 GPD/ft ²	66.0	scfm
Process Air Required @ 3200 scfm/day/lb-BOD	334.4	scfm/day/lb-BOD
Digester Air @ 30 scfm/1000 ft ³	118.7	scfm/ft3
Initial Mixing	20.0	
Post Aeration @ 20 scfm/1000	13.4	CL2
Total Air Required	552.5	scfm
HYDRAULIC CALCULATIONS		
CHLORINE CONTACT		
Description	Value	Unit
V _{NOTCH} Q _{AVG}	0.27	ft
V _{NOTCH} Q _{PK}	0.47	ft
Depth of V _{NOTCH}	12.0	in
Static Elevation of V _{NOTCH}	8.00	ft
W.S. Elevation @ Q _{AVG}	8.27	ft
W.S. Elevation @ Q _{PK}	8.47	ft
CLARIFIER		
Description	Value	Unit
Total (Use 2 x 90° V _{NOTCH} per foot of weir)	147.7	ft
Elevation at Q _{AVG}	0.0364	ft
Flow per notch	0.0006	cfs
Elevation at Q _{PK}	0.0633	ft
Flow per notch	0.0025	cfs
LAUNDER		
Description	Value	Unit
Split Peaks	83.3	cfs
Width	8.0	in
Depth	3.10	in
Aeration Zone		
RAS + Q _{PK} + SCUM	338.0	gpm
Pipe Size	10.0	in
Pipe Velocity	1.4	fps
Less than 2 fps?	YES	-

**ENGINEERING DESIGN SUMMARY FOR THE PRESERVE AT STAR
RANCH WWTP
(60,000 GPD)**

PURPOSE The purpose of this report is to present the basis of design and summary of unit sizing and hydraulic calculations for the proposed Wastewater Treatment Plant.

INFLUENT QUALITY CHARACTERISTICS The influent wastewater quality characteristics used for design are estimates based on State Design Criteria and are as follows:

<u>PARAMETER</u>	<u>CONCENTRATION</u>
BOD ₅	300 mg/l
TSS	300 mg/l
NH ₃	40 mg/l

INFLUENT FLOW CHARACTERISTICS

The plant process and hydraulic design are based on the following flows:

Average Daily Flow (Qav)	60,000 GPD	41.7 GPM
Peak 2-Hr. Flow (Qpk)	240,000 GPD	166.7 GPM

EFFLUENT QUALITY CHARACTERISTICS The design is of the activated sludge type based on Single Stage Nitrification to produce the following effluent quality characteristics:

<u>PARAMETER</u>	<u>CONCENTRATION</u>
BOD ₅	10 mg/l
TSS	15 mg/l
NH ₃	3 mg/l
DO	4 mg/l

The chlorine residual shall be 1-4 mg/l.

Organic Loading - 60,000 GPD

Influent Conditions

	GPD	GPM	CFS
1 Average Daily Flow (Qav)	60,000	41.7	0.093
2 2 hr. Peak Flow (Qpk)	240,000	166.7	0.372

3 Weir Length	73.8 ft
4 Maximum Weir loading at Qpk	20,000 GPD/ft
5 Weir Loading at Qpk	3,250.7 GPD/ft
6 Clarifier Wall to Weir Area	18.7 sf
7 Maximum Upflow Velocity	0.1 ft/sec
8 Upflow Velocity at Qpk	0.02 ft/sec

Disinfection Chamber

1 Disinfection Volume Required	445.6 cf
2 Volume Available (c.f.)	672 cf
3 Volume Available (gal.)	5,026.6 gal
4 Minimum TCEQ Detention Time	20 min
5 Actual Detention Time @ Qpk	30.2 min

Digester

1 Total Volume Required	3,009.6 cf
2 Digester Loadings	26.3 cf/lb
3 Retention Time for Solids Concentration of 1.2 Percent	26.3 days
4 Digester Provided	3,955 cf

Air Requirements

<u>Air Lifts</u>	<u>200 GPD/sqft</u>			<u>400 GPD/sqft</u>		
	GPM	SCFM	DIA	GPM	SCFM	DIA
1 Return Activated Sludge (RAS)	62.8	20	3 in	125.7	26	6 in
2 Waste Activated Sludge (WAS)	31.4	20	3 in	62.8	20	3 in
3 Scum	22.8	20	3 in	45.7	20	3 in
Total Air Lifts		60.0 scfm			66.0 scfm	

Air Requirements

1	Process: 3200 scfm/day per lb. BOD5	334.4	scfm
2	Digester: 30 scfm per 1,000 cf	118.7	scfm
3	Total Air Lifts	66.6	scfm
4	Initial Mixing	20	scfm
5	Post Aeration: 20 scfm per 1,000 cf	13.4	scfm
6	Total Air Required	552.5	scfm
7	Air Provided	Provide three positive displacement blowers at 280 scfm each per unit with a spot reserved for a fourth to be added if needed.	

Note: The process calculation is based on a clean water oxygen transfer efficiency of 0.85% per foot of submergence. The submergence is 10 foot and the correction factor is 1.56.

Other Air Lifts

		GPM	SCFM	DIA
1	One (1) Digester Decant Airlifts (3 feet within 2 hours)	60	20	3 in

Note: Decanting does not occur as air is used in the digesters, so the air numbers are not included in the total air required.

Hydraulic Calculations

I. FLOW

Qavg =	41.7 GPM	60,000 GPD	0.093 CFS
Qpk =	166.7 GPM	240,000 GPD	0.372 CFS

II. DISINFECTION CHAMBER

90° "V" Notch

$$H_{avg} = 0.27 \text{ ft}$$

$$H_{pk} = 0.47 \text{ ft}$$

Depth of "V" notch weir =	12 inches
Static Elevation in Disinfection Chamber =	8.00 ft
W.S. Elevation @ Qavg =	8.27 ft
W.S. Elevation @ Qpk =	8.47 ft

III. CLARIFIER

Weir Diameter = 23.5 ft

Weir Length = 73.8 ft

Use two (2) 90° "V" notches per foot

1 Elevation @ Qavg
Flow per Notch = 0.0006 CFS

$$H_{avg} = 0.0364 \text{ ft}$$

2 Elevation @ Qpk
Flow per Notch = 0.0025 CFS

$$H_{pk} = 0.0633 \text{ ft}$$

3 Minimum Depth of Wide Launder @ Qpk
Launder splits flow = $Q_{pk} \div 2 =$ 83.3 CFS
Launder Width = 8 inches
Depth = $0.65(GPM \div \text{width})^{2/3} =$ 3.1 inches

IV. AERATION ZONE

Combined Flow Mix Liquor Transfer to Centerwell at Qpk

Return Activated Sludge RAS = 125.7 GPM

SCUM = 45.7 GPM

Qpk + RAS + SCUM = 338.0 GPM

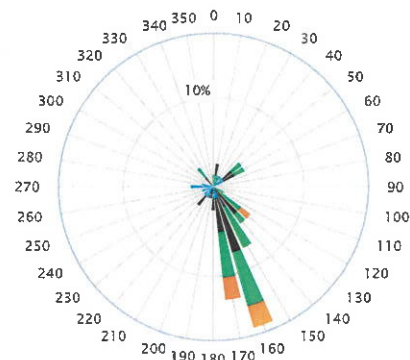
Select pipe size to provide less than 2.0 ft/sec velocity 10"

Appendix J

Wind Rose

AUSTIN BERGSTROM INTL AP, TX

Percent of winds blowing from the indicated direction
Date range: 2022-04-01 through 2022-04-04



Wind speed (miles/hr)

- ≤5
- 5 to 10
- 10 to 15
- 15 to 20
- 20 to 25
- 25 to 30
- 30 to 35
- 35 to 40
- 40 to 45
- >45

Powered by ACIS

AUSTIN BERGSTROM INTL AP, TX Wind Frequency Table (percent)

Wind Direction (degrees)	≤5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	>45	All speeds	Average speed
0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	10.4
10	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	6.4
20	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	10.4
30	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	3.5
40	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	12.7
50	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	8.8
60	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	6.9
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
120	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	13.8
130	0.0	0.0	3.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	5.1	13.5
140	0.0	3.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	8.1
150	0.0	2.5	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	10.4
160	1.3	6.3	6.3	2.5	0.0	0.0	0.0	0.0	0.0	0.0	16.5	10.5
170	1.3	3.8	5.1	2.5	0.0	0.0	0.0	0.0	0.0	0.0	12.7	11.1
180	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	5.2
190	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	6.9
200	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	8.1
210	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	4.6
220	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	4.7
230	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	3.5
240	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
250	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	4.6
260	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
270	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	3.5
280	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	3.5
290	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
310	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
320	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	9.3
330	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
340	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
350	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Vrb	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	5.8
Calm	-	-	-	-	-	-	-	-	-	-	15.2	-

Based on a total of 79 hourly observations; 17 missing.

Date range: 2022-04-01 through 2022-04-04.

Wind speed bins (miles/hr) include values greater than the lower end of the interval range and less than or equal to the upper end.

Appendix K

Solids Management Plan

SLUDGE MANAGEMENT PLANS (60K)

I. PARAMETERS

% CAPACITIES	100	75	50	25
A. AVG. FLOW (MGD)	0.06	0.045	0.0225	0.005625
B. VOL OF PROPOSED AERATION BASIN			36,906 GAL =	4,934 CU FT
C. BOD	300 mg/l			
D. Digester Volume		3,955 Cu. Ft =	29,583 Gal	

II. DAILY SLUDGE PRODUCTIONS

A. # BOD REMOVED 300 X 8.34 X 0.06	150	113	75	38
B. # DRY SLUDGE PRODUCED	53	35	24	12
C. # WET SLUDGE PRODUCE (ASSUME 2.0 % SOLIDS)	2627	1970	1314	657
D. VOL WET SLUDGE PRODUCE (GAL/ DAY)	315	236	158	79
Removal Schedule	100%	75%	50%	25%
Days between sludge removal	11	15	23	45

Sludge will be removed from digester when digester is full of thickened solids. Sludge will be removed by a resistered transporter and hauled to a permitted disposal site.

MCRT for the digester storage of 29,583 gal equals 94 days at 100% capacity.

Appendix L

SPIF

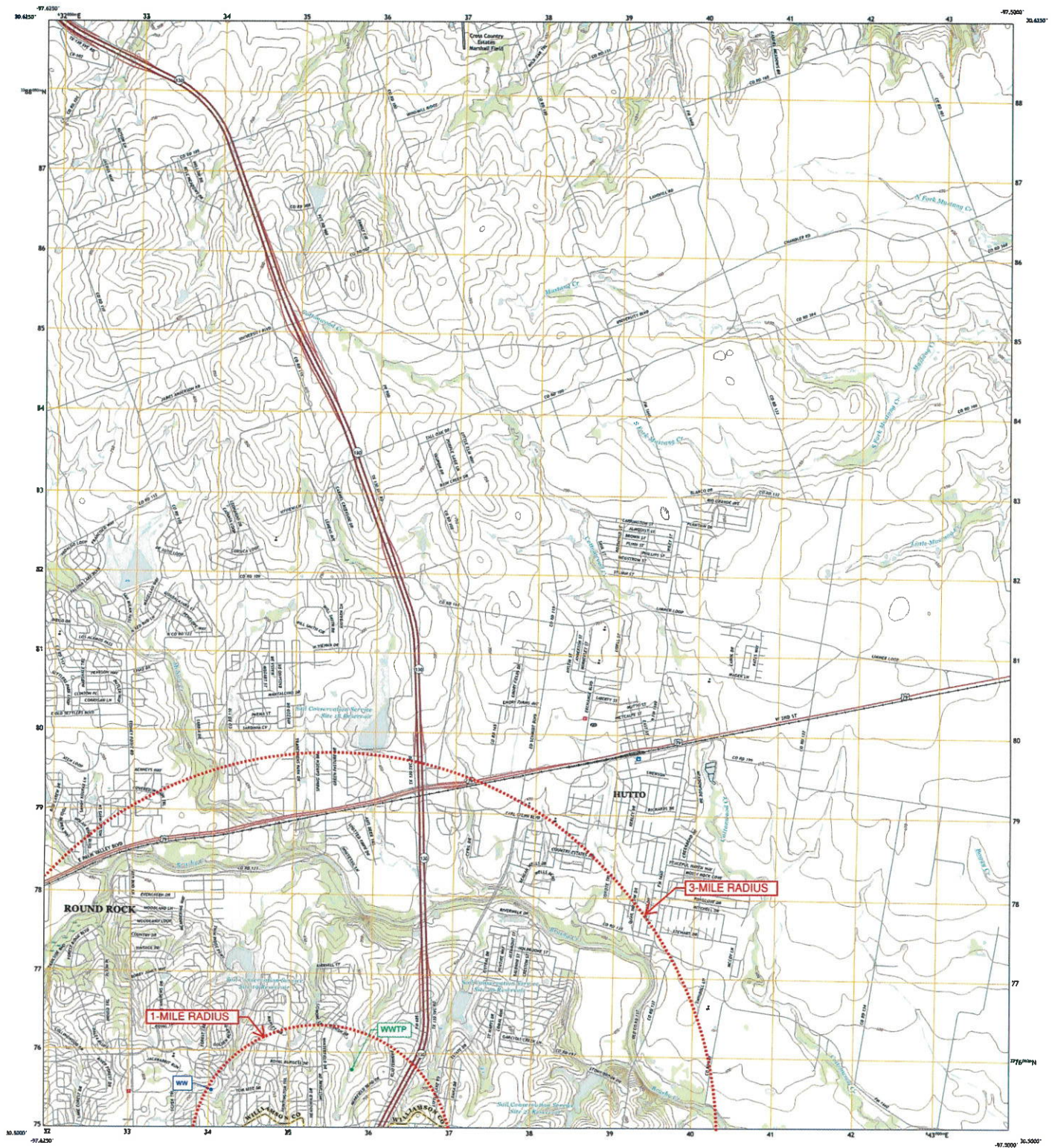




U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



HUTTO QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection used
is UTM (Universal Transverse Mercator). Zone 14N.
This map is not a legal document. Boundary lines are
generalized for this map scale. Actual land within government
jurisdiction may not be shown. Obtain permission before
reproducing this map.

Source: NAD83, September 2014; November 2014
Data: U.S. Census Bureau, 2010
Hydrography: National Hydrography Dataset, 2010
Contour: National Hydrography Dataset, 2010
Boundary: National Hydrography Dataset, 2010
Boundary: National Hydrography Dataset, 2010

Product: PMS Product: MGS Product: Boundary Product: PMS



CONTOUR INTERVAL: 10 FEET
NORTH ARROW: NORTH, DATUM: NAD83
This map was produced by the USGS under
National Geographic Program US Topographic Series, 2014.
A revision of this map was produced by the USGS under
National Geographic Program US Topographic Series, 2014.



ROAD CLASSIFICATION
Expressway
Secondary road
Local road
Bypass
Interstate
State Route

HUTTO, TX
2019

00158