#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



#### DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT: LVTP Holdings, LLC

PERMIT NUMBER: WQ0015964001

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

	Y	Ν		Y
Administrative Report 1.0	$\boxtimes$		Original USGS Map	$\boxtimes$
Administrative Report 1.1	$\boxtimes$		Affected Landowners Map	$\boxtimes$
SPIF	$\boxtimes$		Landowner Disk or Labels	$\boxtimes$
Core Data Form	$\boxtimes$		Buffer Zone Map	$\boxtimes$
Technical Report 1.0	$\boxtimes$		Flow Diagram	$\boxtimes$
Technical Report 1.1	$\boxtimes$		Site Drawing	$\boxtimes$
Worksheet 2.0	$\boxtimes$		Original Photographs	$\boxtimes$
Worksheet 2.1		$\boxtimes$	Design Calculations	$\boxtimes$
Worksheet 3.0		$\boxtimes$	Solids Management Plan	$\boxtimes$
Worksheet 3.1		$\boxtimes$	Water Balance	
Worksheet 3.2		$\boxtimes$		
Worksheet 3.3		$\boxtimes$		
Worksheet 4.0		$\boxtimes$		
Worksheet 5.0		$\boxtimes$		
Worksheet 6.0	$\boxtimes$			
Worksheet 7.0		$\boxtimes$		

# For TCEQ Use Only Segment Number \_\_\_\_\_\_ County \_\_\_\_\_ Expiration Date \_\_\_\_\_\_ Region \_\_\_\_\_\_ Permit Number \_\_\_\_\_\_

Ν

 $\boxtimes$ 



#### 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 <0.05  MGD $\ge 0.05 \text{ but } <0.10 \text{ MGD}$ $\ge 0.10 \text{ but } <0.25 \text{ MGD}$ $\ge 0.25 \text{ but } <0.50 \text{ MGD}$ $\ge 0.50 \text{ but } <1.0 \text{ MGD}$ Minor Amendment (for any flow	New/Major Ameno \$350.00 □ \$550.00 □ \$850.00 □ \$1,250.00 □ \$1,650.00 □ \$2,050.00 ⊠	Imment       Renewal         \$315.00                  \$515.00                  \$815.00                  \$1,215.00                  \$1,615.00                  \$2,015.00
Payment Information:	() \$150.00 <b>L</b>	
•	ley Order Number: 27	30
,		
	ey Order Amount: <u>\$2</u>	
	ed on Check: <u>Finch FI</u>	
EPAY Voucher Nu		
Copy of Payment Vouche	r enclosed?	Yes 🗖
Section 2. Type of Appli	cation (Instructi	ons Page 29)
☑ New TPDES		New TLAP
□ Major Amendment <u>with</u> Rep	newal 🗆	Minor Amendment <u>with</u> Renewal
Major Amendment <u>without</u>	Renewal	Minor Amendment <u>without</u> Renewal
Renewal without changes		Minor Modification of permit
For amendments or modificatio	ns, describe the prop	osed changes:
For existing permits:		
Permit Number: WQ00	e to enter text.	
EPA I.D. (TPDES only): TX	lere to enter text.	
Expiration Date:	enter text	

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

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

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

#### LVTP Holdings, 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 <u>http://www15.tceq.texas.gov/crpub/</u>

CN: <u>N/A</u>

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): <u>Mr.</u>

First and Last Name: Brian Finch

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

Title: <u>Manager</u>

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

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

N/A

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

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

CN: <u>N/A</u>

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): <u>N/A</u> First and Last Name: <u>N/A</u> Credential (P.E, P.G., Ph.D., etc.): <u>N/A</u> Title: <u>N/A</u> 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:

#### 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): <u>Mr.</u>		
	First and Last Name: <u>Mark D. Hill</u>		
	Credential (P.E, P.G., Ph.D., etc.): <u>PE</u>		
	Title: <u>Engineer</u>		
	Organization Name: Freeman-Millican, Inc		
	Mailing Address: <u>1216 Abrams Rd, Suite 508</u>		
	City, State, Zip Code: <u>Dallas, TX, 75243</u>		
	Phone No.: <u>214-503-0555</u> Ext.: <u>115</u> Fax No.:	ext.	
	E-mail Address: <u>mdhill@fmi-dallas.com</u>		
	Check one or both: 🛛 Administrative Contact	$\boxtimes$	Technical Contact
B.	Prefix (Mr., Ms., Miss):		
	First and Last Name:		
	Credential (P.E, P.G., Ph.D., etc.):		
	Title: Tick here to enter text		
	Organization Name:		
	Mailing Address:		
	City, State, Zip Code:		
	Phone No.: Ext.:	Fax 1	No.: Click here to enter
	E-mail Address:		
	Check one or both:	$\boxtimes$	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): <u>Mr.</u>

First and Last Name: Brian Finch

	Credential (P.E, P.G., Ph.D., etc.):	
	Title: <u>Manager</u>	
	Organization Name: <u>LVTP Holdings, LLC</u>	
	Mailing Address: <u>4242 LOMO ALTO DR APT N62 DALI</u>	<u>AS, TX 75219-1504</u>
	City, State, Zip Code: <u>Dallas, TX, 75219</u>	
	Phone No.: <u>214-334-9120</u> Ext.:	Fax No.: Click here to enter text
	E-mail Address: <u>bfinch1@gmail.com</u>	
B.	Prefix (Mr., Ms., Miss): <u>Mr.</u>	
	First and Last Name: <u>Nathan Thompson</u>	
	Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u>	
	Title: <u>Associate Principal</u>	
	Organization Name: Peloton Land Solutions	
	Mailing Address: <u>11000 Frisco, TX, 75033</u>	
	City, State, Zip Code: <u>Frisco, TX, 75033</u>	
	Phone No.: <u>469-213-1800</u> Ext.:	Fax No.:
	E-mail Address: <u>nathan.thompson@pelotonland.com</u>	

#### 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): <u>Mr.</u>
First and Last Name: <u>Brian Finch</u>
Credential (P.E, P.G., Ph.D., etc.):
Title: <u>Manager</u>
Organization Name: <u>LVTP Holdings, LLC</u>
Mailing Address: <u>4242 LOMO ALTO DR APT N62 DALLAS, TX 75219-1504</u>
City, State, Zip Code: <u>Dallas, TX, 75219</u>
Phone No.: <u>214-334-9120</u> Ext.: Fax No.:
E-mail Address: <u>bfinch1@gmail.com</u>

#### 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): <u>Mr.</u>

First and Last Name: <u>Brian Finch</u>

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

Title:

Organization Name: <u>LVTP Holdings, LLC</u>

Mailing Address: 4242 LOMO ALTO DR APT N62 DALLAS, TX 75219-1504

City, State, Zip Code: Dallas, TX, 75219

Phone No.: <u>214-334-9120</u> Ext.:

E-mail Address: <u>bfinch1@gmail.com</u>

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): <u>Mr.</u>

First and Last Name: Nathan Thompson

Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u>

Title: <u>Associate Principal</u>

Organization Name: Peloton Land Solutions

Mailing Address: <u>11000 Frisco St, Ste 400</u>

City, State, Zip Code: Frisco, TX 75033

Phone No.: <u>469-213-1800</u> Ext.:

Fax No.:

Fax No.:

E-mail Address: <u>nathan.thompson@pelotonland.com</u>

# 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): <u>Mr.</u>

First and Last Name: Nathan Thompson

Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u>

Title: Associate Principal

Organization Name: Peloton Land Solutions

Phone No.: <u>469-213-1800</u> Ext.:

E-mail: nathan.thompson@pelotonland.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: <u>Nicholas P. Sims Library</u>

Location within the building:

Physical Address of Building: 515 W. Main Street

City: <u>Waxahachie</u> County: <u>Ellis</u>

Contact Name:

Phone No.: <u>972-937-2671</u> Ext.:

#### 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? <u>Spanish</u>

# 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**<u>111192340</u>

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

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

#### Lakeview MUD WWTP

**C.** Owner of treatment facility: <u>LVTP Holdings, LLC</u>

	Ownership of Facility:	l Public	$\boxtimes$	Private	Both	Federal
D.	Owner of land where trea	atment facility	is or	will be:		
	Prefix (Mr., Ms., Miss):			xt.		

First and Last Name: <u>LVTP Holdings, LLC</u>

Mailing Address: 4242 LOMO ALTO DR N62 DALLAS, TX 75219-1504

City, State, Zip Code: Dallas, TX, 75219

Phone No.: <u>214-334-9120</u> E-mail Address: <u>bfinch1@gmail.com</u>

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):	enter text.
First and Last Name:	iter text.
Mailing Address:	Text
City, State, Zip Code:	iter text.
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):

Prefix (Mr., Ms., Miss):	nter text
First and Last Name:	ter text
Mailing Address:	
City, State, Zip Code:	iter text.
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:

#### Section 10. TPDES Discharge Information (Instructions Page 34)

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

Yes	No

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

<u>Located approximately 4,800 feet west of FM 664 (Ovilla Rd), approximately 1,400 feet</u> <u>north of 2081 Black Champ Rd and approximately 1,620 feet south of 7885 Little Branch</u> <u>Rd</u>

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

🗆 Yes 🗆 No

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

Discharge to an unnamed tributary; thence to impounded Long Branch; thence to Long Branch; thence to another impoundment on Long Branch; thence to Long Branch; thence to Waxahachie Creek; thence to Bardwell Reservoir.

City nearest the outfall(s): <u>Waxahachie, TX</u>

County in which the outfalls(s) is/are located: <u>Ellis</u>

Outfall Latitude: <u>32.46405</u>

Longitude: <u>-96.89256</u>

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

🗆 Yes 🖾 No

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

Authorization granted

on granted 🛛 🗖 Authorization pending

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

Attachment:

**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.

<u>N/A</u>

#### Section 11. TLAP Disposal Information (Instructions Page 36)

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

□ 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:
	County in which the disposal site is located:
	Disposal Site Latitude: Longitude:
	For <b>TLAPs</b> , 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.

Click here to enter text.		

- **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:

#### Section 14. Signature Page (Instructions Page 39)

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

Permit Number: WQ0015964001

Applicant: LVTP Holdings, 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): Brian Finch

Signatory title: Manager

Signature:	Bar 7	2L	Date:	4/5/2021	
(U	se blue ink)				
Subscribed and	Sworn to before	me by the s	aid Brian Fis	sch	
on this	5	day of	April	, 20, 21	
My commission	expires on the		day of Februar	<u>и</u> , 20 <u>2</u> 2	
ADD AUU Notary Rublic	14-		X	JOAN LAWYER My Notary ID # 128172 Expires February 11, 2 (SEAL)	
Dal 125 County, Texas					RECEIVED APR 1 5 2021 Water Quality Applications Team

#### 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:
  - $\boxtimes$  Readable/Writeable CD  $\square$  Four sets of labels
- **D.** Provide the source of the landowners' names and mailing addresses: <u>Ellis County Appraisal</u> <u>District</u>
- **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):

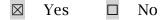
#### Section 2. Original Photographs (Instructions Page 44)

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)?



#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

#### SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

TCEQ USE ONLY:	
Application type:RenewalMajor	AmendmentNinor AmendmentNew
County:	Segment Number:
Admin Complete Date:	
Agency Receiving SPIF:	
Texas Historical Commission	U.S. Fish and Wildlife
Texas Parks and Wildlife Departme	nt 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: <u>LVTP Holdings, LLC</u>

Permit No. WQ00 <u>WQ0015964001</u>

EPA ID No. TX <u>0141046</u>

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

Located approximately 4,800 feet west of FM 664 (Ovilla Rd), approximately 1,400 feet north of 2081 Black Champ Rd and approximately 1,620 feet south of 7885 Little Branch Rd, Ellis County, TX. 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): <u>Mr.</u>

First and Last Name: <u>Nathan Thompson</u>

Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u>

Title: <u>Associate Principal</u>

Mailing Address: <u>110000 Frisco St., Suite 400</u>

City, State, Zip Code: Frisco, TX 75033

Phone No.: <u>469-213-1800</u> Ext.:

Fax No.:

E-mail Address: <u>nathan.thompson@pelotonland.com</u>

- 2. List the county in which the facility is located: <u>Ellis</u>
- 3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.
- 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 to an unnamed tributary; thence to impounded Long Branch; thence to Long Branch; thence to another impoundment on Long Branch; thence to Long Branch; thence to Waxahachie Creek; thence to Bardwell Reservoir.

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 existing field will be disturbed by construction activities.

7. Describe existing disturbances, vegetation, and land use: Existing field used as pasture. No disturbances.

## 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:

<u>None</u>

9. Provide a brief history of the property, and name of the architect/builder, if known. <u>Property used for farming/ranching</u>



### **TCEQ Core Data Form**

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

#### **SECTION I: General Information**

			lation										
1. Reason for Submission (If other is checked please describe in space provided.)													
New Per	New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)												
Renewal (Core Data Form should be submitted with the renewal form)					Other								
2. Customer Reference Number (if issued) Follow this link to sear				3. Re	gulated	Entity Reference	e Number <i>(i</i>	if issued)					
CN 605858901					RN	1111	92340						
<b>ECTION</b>	II: Cu	stomer Info	ormation										
4. General C	ustomer li	nformation	5. Effective	e Date f	or Cus	stome	r Infor	mation	Updat	es (mm/dd/yyyy)			
New Cust		me (Verifiable wit		Update Secretar					roller of	Change in Dublic Accounts)	•	Entity Ownership	
		,			•					,		active with the	е
		f State (SOS)	•	•				•					
	•	me (If an individual								stomer, enter previ	ious Custom	er below:	
LVTP Ho	ldings, I	LLC											
7. TX SOS/CI	PA Filing	Number	8. TX State	Tax ID	Tax ID (11 digits)			9.	9. Federal Tax ID (9 digits)			S Number (if applicat	ble)
08038692	61		3207706	3892			8	86-1580982					
11. Type of C	Customer:	Corporati	ion		$\boxtimes$	Individ	lual	al Partnership: 🗌 General 🗌 Limited					
Government:	City 🗌 🤇	County 🔲 Federal 🗌	] State 🗌 Othe	r		Sole F	roprie	torship		Other:			
12. Number of	of Employ	ees						13. Independently Owned and Operated?					
⊠ 0-20 □	21-100	101-250	251-500		501 ar	nd high	ler	Yes No					
14. Custome	r Role (Pro	pposed or Actual) -	- as it relates to	the Reg	gulated	Entity I	isted or	n this foi	m. Plea	se check one of the	following		
Owner		Operat				wner 8	•						
	nal Licens	ee 🗌 Respo	onsible Party			oluntar	y Clea	inup Ap	plicant	Other:			
	4173 I	Lomita Ln											
15. Mailing Address:													
Addiess.	City	Dallas		S	tate	TX		ZIP	7522	20	ZIP + 4		
16. Country I	Mailing In	formation (if outsi	ide USA)			1	17. E	E-Mail /	Addres	<b>S</b> (if applicable)			
,							bfinch1@gmail.com						
18. Telephon	e Number	r		19. Ex	xtensi	on or (			2	20. Fax Numbe	r (if applicat	ble)	
(214)33	4-9120							( ) -					

#### **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)

 ☑ New Regulated Entity
 □ Update to Regulated Entity Name

 □ Update to 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.)

Lakeview MUD WWTP

23. Street Address of the Regulated Entity:									
(No PO Boxes)	City		State		ZIP			ZIP + 4	
24. County	Ellis			•					
		Enter Physical Lo	ocation Descript	ion if no s	street addres	s is provid	ed.		
25. Description to Physical Location:		d app. 4,800 f Rd and app.				<b>. .</b> .		north of 20	81 Black
26. Nearest City State Nearest ZIP Code						rest ZIP Code			
Waxahachie						TX		75	165
27. Latitude (N) In Decim	nal:	32.46346		28	Longitude (	W) In Decir	nal:	-96.8936	6
Degrees	Minutes	5	Seconds	Deç	rees	Min	utes		Seconds
32		27	48		96			53	37
29. Primary SIC Code (4	digits) 30	). Secondary SIC	Code (4 digits)	<b>31. Prin</b> (5 or 6 di	nary NAICS C	ode	<b>32. S</b> (5 or 6	econdary NA digits)	ICS Code
4952	N	lone		22132	0		Nor	e	
33. What is the Primary	Business	of this entity?	(Do not repeat the SIC	C or NAICS d	escription.)				
Wastewater Treatm	ent for ]	Residential De	evelopment						
				41	73 Lomita Ln	1			
34. Mailing Address:									
Address.	City	Dallas	State	ТХ	ZIP	752	220	ZIP + 4	
35. E-Mail Address:			l	bf	inch1@gmai	l.com			
36. Telepho	one Numb	er	37. Extensio	e	e 38. Fax Number (if applicable)				
( 214 ) 3	34-9120						(	) -	
<b>D. TCEQ Programs and ID</b> rm. See the Core Data Form i		Ų		ermits/regis	tration numbers	s that will be a	affected	l by the updates	submitted on this
Dam Safety	🗌 Distri	cts	Edwards Aqu	uifer	Emissi	Emissions Inventory Air		Industrial Hazardous Waste	
Municipal Solid Waste	□ New	Source Review Air	OSSF		Petrole	eum Storage	Tank	PWS	
Sludge	Storr	n Water	Title V Air		Tires			Used Oi	
Voluntary Cleanup	Wast	e Water	Wastewater	Aariculture	U Water	Rights		Other:	
		15964001		- igniculture		тауна			
ECTION IV. D			<u> </u>		<u> </u>			1	
ECTION IV: Pre	parer	information							

40. Name: Mark D. Hill, P.E.				41. Title:	Partner
42. Telep	hone Number	43. Ext./Code	44. Fax Number	45. E-Mail	Address
(214)5	503-0555	115	() -	mdhill@	fmi-dallas.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.

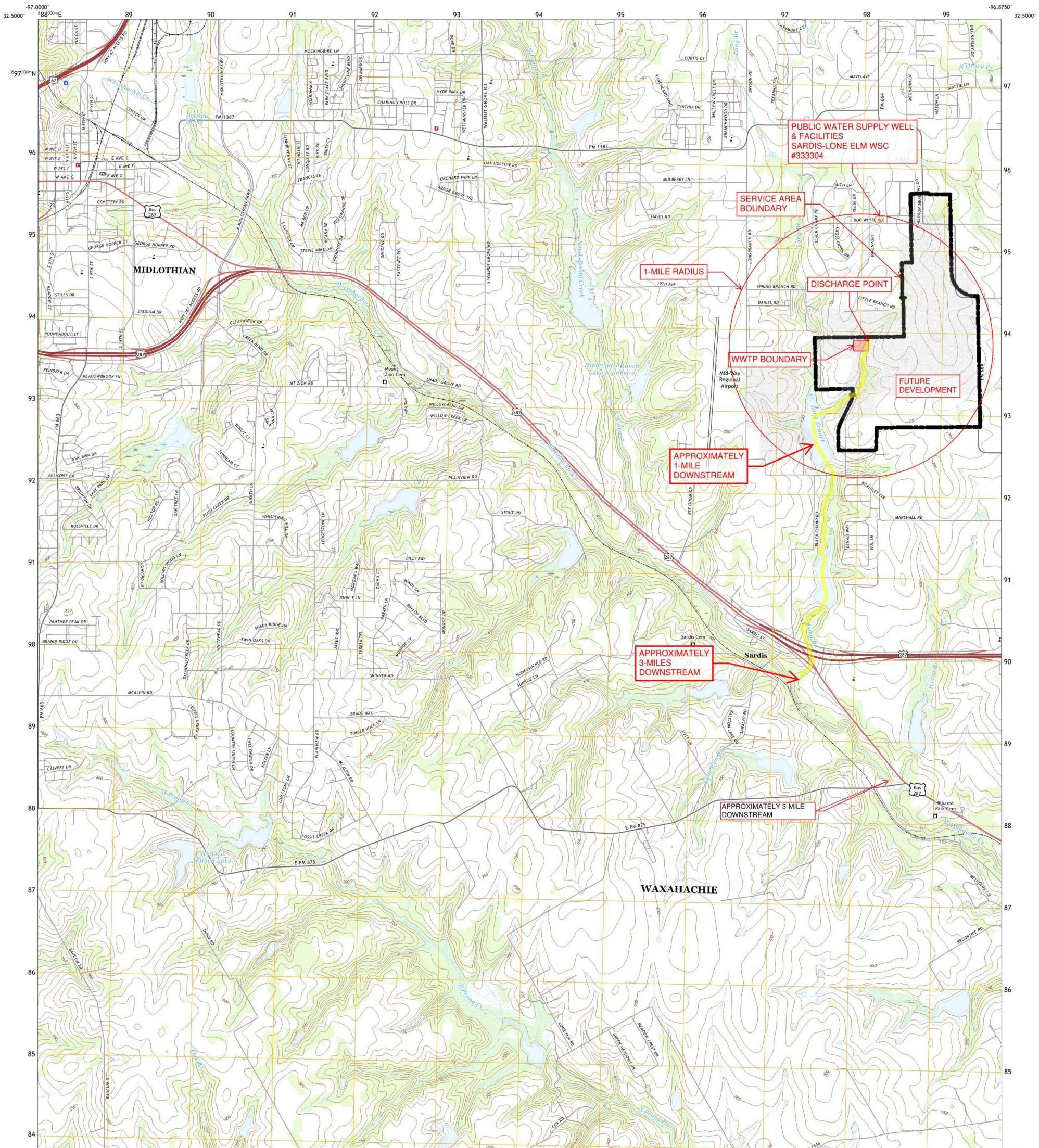
Company:	Freeman-Millican, Inc.	Job Title:	Partner		
Name (In Print):	Print): Mark D. Hill, P.E.			Phone:	( 214 ) 503- <b>0555</b>
Signature:	Mark D. Hill. PR			Date:	15 JUN 22



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



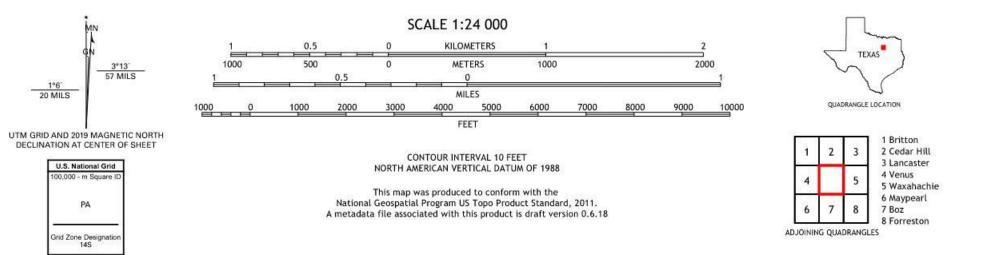
MIDLOTHIAN QUADRANGLE TEXAS - ELLIS COUNTY 7.5-MINUTE SERIES





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 14S 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 2016RoadsU.S.CensusBureau,2015 · 2018NamesGNIS, 1979 · 2018HydrographyNationalHydrographyDataset,2000 · 2018ContoursNationalElevationDataset,2003 · 2004BoundariesMultiplesources;seemetadatafile2016 · 2017WetlandsFWSNationalWetlandsInventory1982

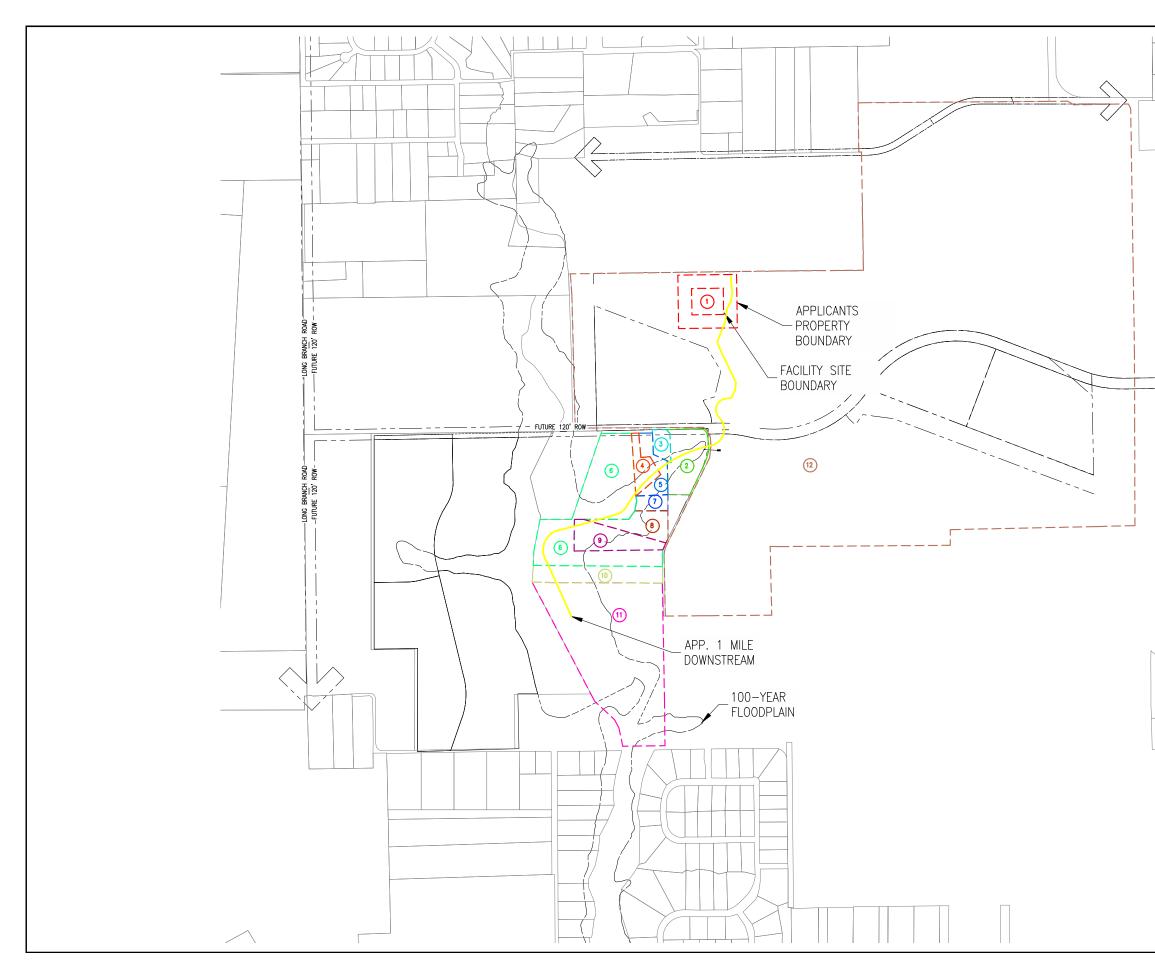




MIDLOTHIAN, TX

2019





	Annual By
	REVISION EERS - ARCHITECTS BULLS. N 7820 PR. PLUELOS
0 500 1000 Feet	
<ul> <li>PROPERTY OWNERS</li> <li>IVTP HOLDINGS INC (APPLICANT)</li> <li>XOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>KOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>KOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>CAROLINE D 2051 BLACK CHAMP RD</li> <li>KOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>KOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>KOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>KOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>KOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>KOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>KOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>KOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>KOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>CARROLL RCHAMP RD</li> <li>KOCIAN JAMES E &amp; MELINDA J 2241 BLACK CHAMP RD</li> <li>CHAMBERS MICHAEL &amp; JANICE 2291 BLACK CHAMP RD</li> <li>CARROLL RCHARD A D 2345 BLACK CHAMP RD</li> <li>CARROLL RCHARD A D 2345 BLACK CHAMP RD</li> <li>MAXAHACHE, TX 75167</li> <li>CARROLL RCHARD A D 2345 BLACK CHAMP RD</li> <li>MAXAHACHE, TX 75167</li> <li>FINCH FP LTD 4242 LOWO ALTO N-62 DALLAS, TX 75219</li> </ul>	LAKEVIEW MUD DISTRICT LVTP HOLDINGS TPDES LANDOWNERS MAP
	PERMIT PERMIT PROJECT IS IN 11'M12' PROJECT NO. 20019 DESIGNED: ### DRAWN: ### CHECKED: ### CHECKED: ### SHEET ADMIN 1.0-1 SHEET ### OF ###

#### LVPT Holdings - 0022

Landowner's Names & Mailing Address LVTP Holdings, LLC

TRACT	OWNER
1	LVTP HOLDINGS INC (APPLICANT)
	KOCIAN JAMES E & MELINDA J
2	2241 BLACK CHAMP RD
	WAXAHACHIE, TX 75167
	KOCIAN JAMES E & MELINDA J
3	2241 BLACK CHAMP RD
	WAXAHACHIE, TX 75167
	TAYLOR CHRISTOPHER
4	CAROLINE D 2051 BLACK CHAMP RD
	WAXAHACHIE, TX 75167
	KOCIAN JAMES E & MELINDA J
5	2241 BLACK CHAMP RD
	WAXAHACHIE, TX 75167
	ARWINE ROBERT L & BETTY D
6	2041 BLACK CHAMP RD
	WAXAHACHIE, TX 75167
	KOCIAN JAMES E & MELINDA J
7	2241 BLACK CHAMP RD
	WAXAHACHIE, TX 75167
	KOCIAN JAMES E & MELINDA J
8	2241 BLACK CHAMP RD
	WAXAHACHIE, TX 75167
	CHAMBERS MICHAEL & JANICE
9	2291 BLACK CHAMP RD
	WAXAHACHIE, TX 75167
	CARROLL RICHARD & ROBIN
10	2345 BLACK CHAMP RD
	WAXAHACHIE, TX 75167
	ARBORS DEVELOPMENT LLC
11	1612 ARBORCREEK TRL
	MANSFIELD, TX 76063
	FINCH FP LTD
12	4242 LOMO ALTO N-62
	DALLAS, TX 75219

#### SPECIAL WARRANTY DEED (Wastewater Treatment Plant Site)

0000

THE STATE OF TEXAS

#### COUNTY OF ELLIS

KNOW ALL MEN BY THESE PRESENTS:

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

THAT Finch FP, Ltd., a Texas limited partnership (hereinafter designated "Grantor"), for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration cash in hand paid by LVTP Holdings, LLC, a Texas limited liability company (hereinafter designated "Grantee") having an address of 4242 Lomo Alto Drive No. 62, Dallas, Texas 75219, the receipt of which is hereby acknowledged, has granted, sold and conveyed, and by these presents does hereby grant, sell and convey unto Grantee the real property in Ellis County, Texas, described in Exhibit "A" which is attached hereto and made a part hereof for all purposes (the "Tract").

The Tract shall be used by Grantee solely for the purposes of placing, constructing, operating, repairing, maintaining, rebuilding, and replacing a wastewater treatment plant and related facilities and appurtenances upon the Tract. The Tract shall not be used for purposes unrelated to those stated herein, said purposes including particularly the placement, construction, or operating of a wastewater treatment plant.

This Deed and conveyance is expressly made subject to all liens, encumbrances, conditions and other exceptions appearing of record in the office of the County Clerk of Ellis County, Texas, and applicable matters to such property.

016903.000001\4831-1502-8706.v1

APR 1 5 2021

Water Quality Applications Team

LVPT Holdings - 0024

TO HAVE AND TO HOLD the above-described premises, together with all and singular the rights and appurtenances thereto in anywise belonging, unto the Grantee, its heirs and assigns, forever; and Grantor does hereby bind itself and its successors, to Warrant and Forever Defend all and singular the premises unto the said Grantee, its heirs and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through or under Grantor, but not otherwise.

 $(\cdot)$ 

#### REMAINDER OF PAGE LEFT INTENTIONALLY BLANK

#### EXECUTED as of the <u>lo</u> day of <u>March</u> . 2021.

#### **GRANTOR**:

Finch FP. Ltd., a Texas limited partnership

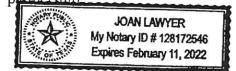
By: Finch FP Management Company, LLC, Its General Partner

By: <u>Cliffien 11</u> Hindh. Eleanor M. Finch. President

Date: 3/16/21

#### STATE OF TEXAS S 50 50 COUNTY OF Dallas

This instrument was acknowledged before me on the <u>10</u> day of <u>March</u>, 2021 by Eleanor M. Finch, President of Finch FP Management Company, LLC, a Texas limited liability company. General Partner of Finch FP. Ltd., a Texas limited partnership, on behalf of said partnershin



(NOTARY SEAL)

Notary Public in and for the State of Texas



APR 1 5 2021

Water Quality Applications Team

#### **GRANTEE**:

LVTP Holdings, LLC, a Texas limited liability

By: \_ Brian Edward Finch, Manager 10/21 3 Date:

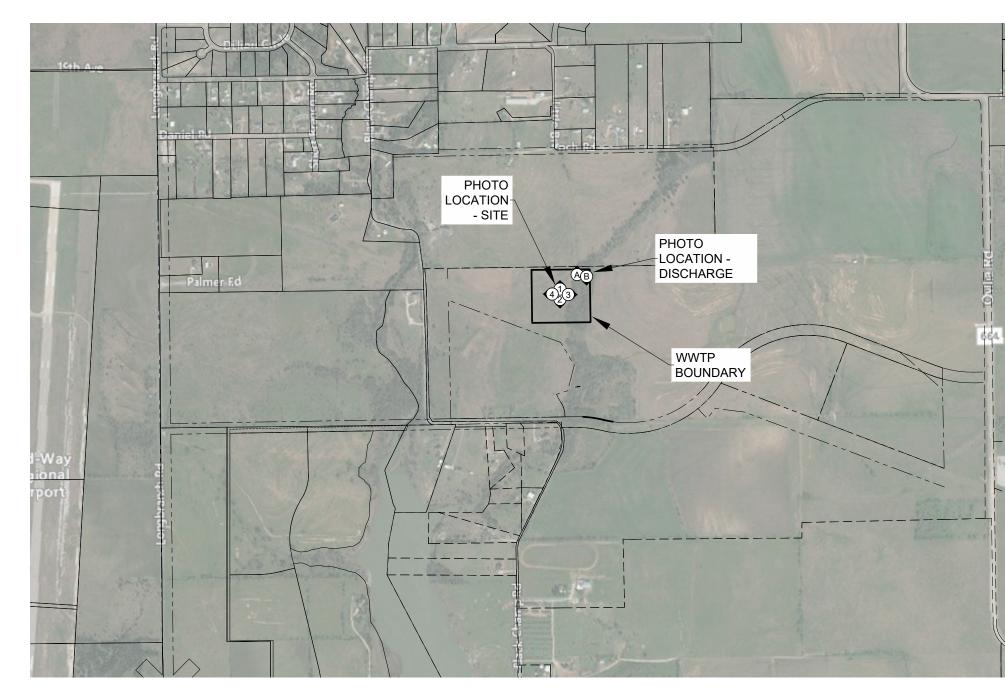
# STATE OF TEXAS

This instrument was acknowledged before me on the <u>10</u> day of <u>March</u>. 2021 by Brian Edward Finch. Manager of LVTP Holdings. LLC. a Texas limited liability company, on <u>behalf of said company</u>.

JOAN LAWYER My Notary ID # 128172546 Expires February 11, 2022

(NOTARY SEAL)

Notary Public in and for the State of Texas



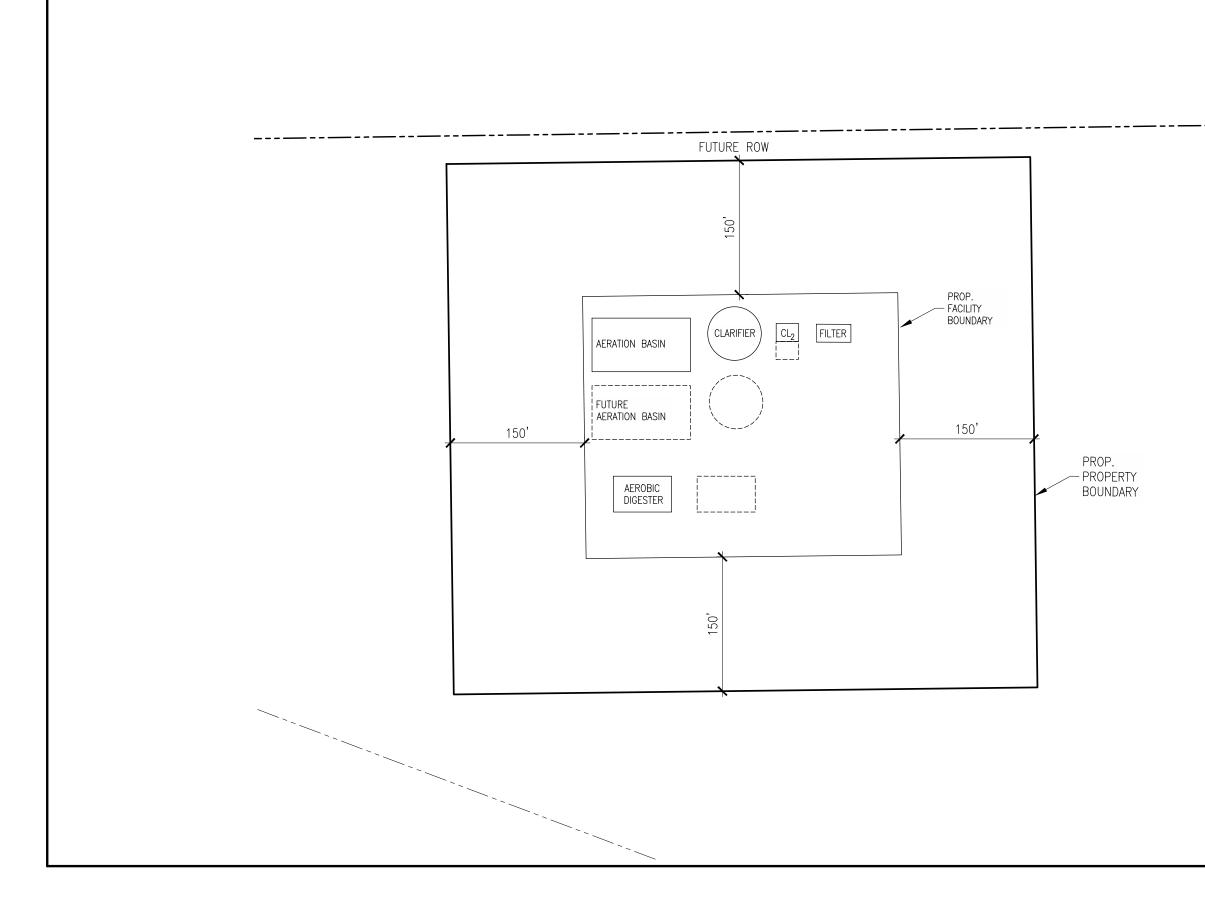
 0 1000 500 Feet	No.         DATE         REVISION         BY           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·	Find Freeman-Milllicen, Inc. Engineers - Architects - Planners 2000 Aboue 50. 51E. 30 July 17 533 Price Boof Part 7207
	LAKEVIEW MUD DISTRICT LVTP HOLDINGS TPDES	PHOTO LOCATION MAP
	PROJECT I DESIGNED: DRAWN: CHECKED: SH	IN 11"x17" MINGS ARE AT TED SOLL No. 20019 ### ### ### EET V 1.1-2

ΡΗΟΤΟ Α

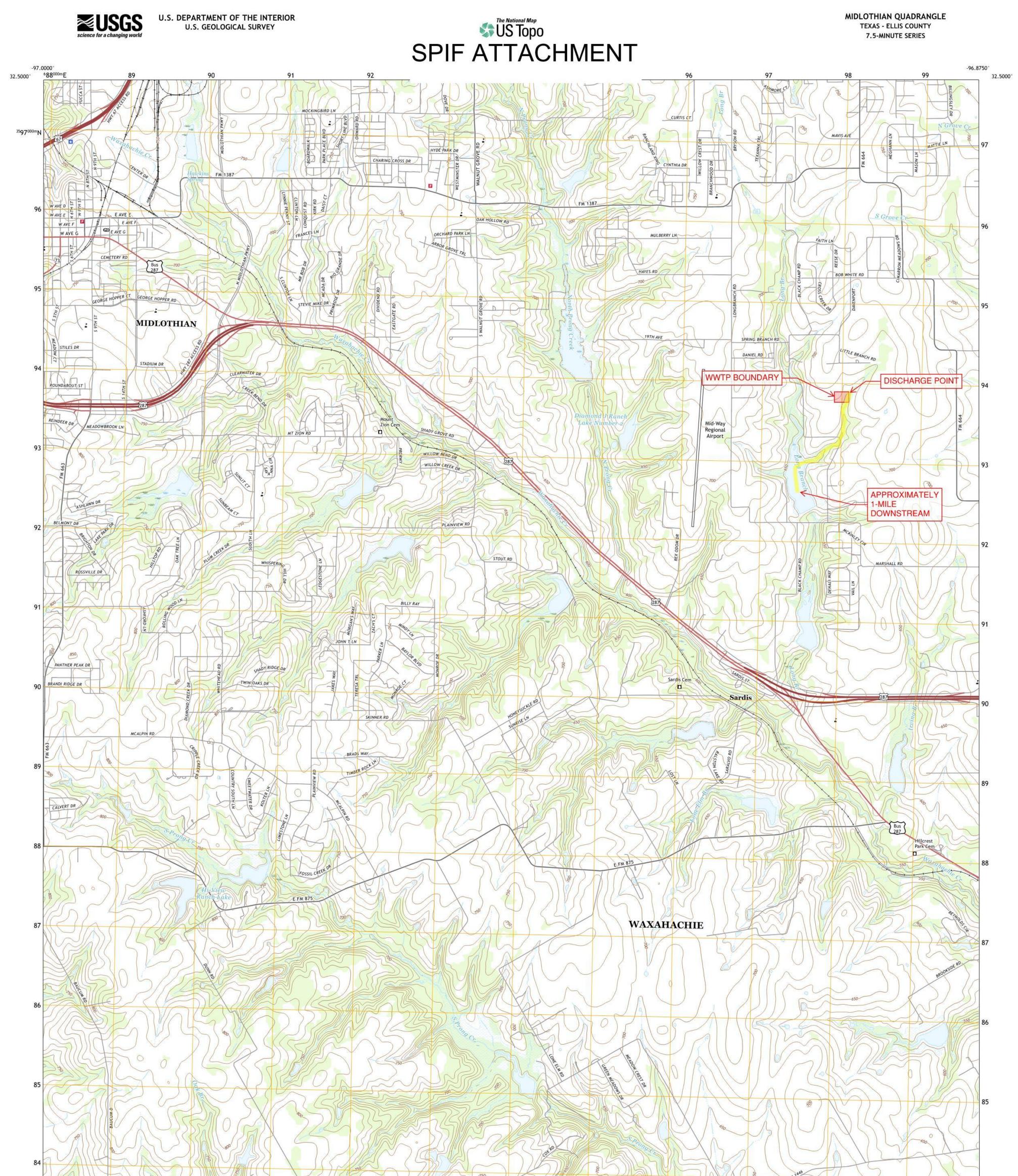


РНОТО В





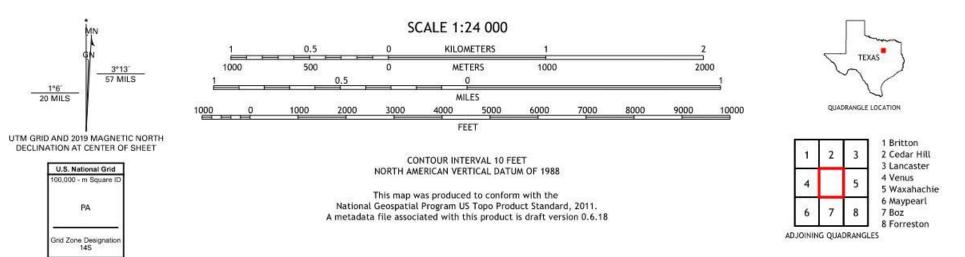
No.         DATE         REVISION         BY           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·         ·	The Freeman-Multican, Inc. engineers - Architects - Planners Tronador Berger - Dulary Trad Handlood Treeder Frent-2007
LAKEVIEW MUD DISTRICT LVTP HOLDINGS TPDES	BUFFER ZONE
PER	RMIT
PROJECT I DESIGNED: DRAWN: CHECKED: SHI	###





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 14S 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 2016RoadsU.S.CensusBureau,2015 · 2018NamesGNIS, 1979 · 2018HydrographyNationalHydrographyDataset,2000 · 2018ContoursNationalElevationDataset,2003 · 2004BoundariesMultiplesources;seemetadatafile2016 · 2017WetlandsFWSNationalWetlandsInventory1982



ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Interstate Route
US Route
State Route

MIDLOTHIAN, TX

2019





### 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): 0.55
2-Hr Peak Flow (MGD): 2.2
Estimated construction start date: TBD
Estimated waste disposal start date: TBD

#### **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): <u>1.2</u> 2-Hr Peak Flow (MGD): <u>3.1</u> Estimated construction start date: <u>TBD</u> Estimated waste disposal start date: <u>TBD</u>

**D. Current operating phase:** <u>Interim I</u> 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

Page 1 of 78

**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:

-INTERIM I PHASE: Unit will be an activated sludge package treatment plant, operating in the Extended Aeration Mode. Units will include bar screen, aeration basin, clarifier, chlorine contact basin, cloth media filter and aerobic digester. -FINAL PHASE: Unit will be an activated sludge package treatment plant, operating in the Extended Aeration Mode. Units will include bar screen, aeration basin, clarifier, chlorine contact basin, cloth media filter and aerobic digester.

Port or pipe diameter at the discharge point, in inches:  $\underline{12}$ 

#### **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**.

Treatment Unit Type	Number of	Dimensions (L x W x D)
	Units	
Aeration Basin	1	60' X 110' X12' (INTERIM I PHASE)
	1	60' X 110' X12' (FINAL PHASE)
Clarifier	1	60' Dia X 12' (INTERIM I PHASE)
	1	60' Dia X 12' (FINAL PHASE)
Chlorine Contact Basin	1	20' X 25' X 9' (INTERIM I PHASE)
	1	20' X 25' X 9' (FINAL PHASE)
Cloth Media Filters	1	65"x93"x93" (5 disks) (INTERIM I PHASE)
	1	65"x93"x93" (10 disks) (FINAL PHASE)
Aerobic Digester	1	40' X 65' X 12' (INTERIM I PHASE)
	1	40' X 65' X 12' (FINAL PHASE)

Table 1.0(1) – Treatment Units

Page 2 of 80

#### C. Process flow diagrams

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

Attachment: TECH 1.0 - 2.C

#### 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: TECH 1.0 - 3

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

Lakeview MUD

#### Section 4. Unbuilt Phases (Instructions Page 52)

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

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

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.

Click here to enter text.	

#### 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? No 🖂

Yes 🗆

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.

CHER HEIC TO CHIEF TEAG			

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 TCEO, if applicable.

Page 4 of 78

## **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.

Buffer zone met 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 🖂

Page 5 of 78

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  $\Box$  No  $\boxtimes$ 

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

## 2. MSGP coverage

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

Yes 🗆 🛛 No 🖂

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

TXR05 or TXRNE

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

Yes 🖂 🛛 No 🗆

# 3. Conditional exclusion

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

Yes 🗆 🛛 No 🗆

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

Received:

<u>N/A</u>

# 4. Existing coverage in individual permit

Is your stormwater discharge currently permitted through this individual

Page 7 of 78

TPDES or TLAP permit?Yes $\square$ No $\boxtimes$ 

**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.

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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  $\square$  No  $\boxtimes$ 

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 BOD<sub>5</sub>

concentration of the sludge, and the design BOD<sub>5</sub> 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

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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 BOD<sub>5</sub> concentration of the septic waste, and the design BOD<sub>5</sub> 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.

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

Is the facility in operation? Yes  $\square$  No  $\boxtimes$ 

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) - Pollutan	Average	Max	No. of	Sample	Sample
Pollutant	Conc.	Conc.	Samples	Туре	Date/Time
CBOD <sub>5</sub> , 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					
Entercocci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, µmohs/cm, †					
Oil & Grease, mg/l					

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

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Pollutant	Average	Max	No. of	Sample	Sample
	Conc.	Conc.	Samples	Type	Date/Time
Alkalinity (CaCO <sub>3</sub> )*, mg/l					

\*TPDES permits only

†TLAP permits only

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

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

## Section 8. Facility Operator (Instructions Page 60)

Facility Operator Name: <u>TBD</u>

Facility Operator's License Classification and Level: <u>TBD</u>

Facility Operator's License Number: <u>TBD</u>

# 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

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	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: Tick here to enter text
B.	Sludge disposal site

Disposal site name: <u>TBD</u> TCEQ permit or registration number: <u>TBD</u> County where disposal site is located: <u>TBD</u>

#### C. Sludge transportation method

Method of transportation (truck, train, pipe, other): <u>Truck</u>

Name of the hauler: <u>TBD</u>

Hauler registration number: <u>TBD</u>

Sludge is transported as a:

Liquid 🗆

semi-liquid	
Schin Inquiu	

semi-solid 🖂

solid  $\Box$ 

# 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 🗆

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**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:

• Site map:

Attachment:

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

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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
- $\Box$  None of the above

#### Attachment:

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

#### **B.** Temporary storage information

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

Nitrate Nitrogen, mg/kg:

Total Kjeldahl Nitrogen, mg/kg:

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

Phosphorus, mg/kg:

Potassium, mg/kg:

pH, standard units:

Ammonia Nitrogen mg/kg:

Arsenic:

Cadmium:

Chromium:

Copper:

Lead:

Mercury:

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Molybdenum:
Nickel:
Selenium:
Zinc: Click here to enter text.
Total PCBs:

Provide the following information:

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

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

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

#### C. Liner information

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

Yes 🗆 🛛 No 🗆

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

#### D. Site development plan

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

Attach the following documents to the application.

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

Attachment:

• Copy of the closure plan

Attachment:

• Copy of deed recordation for the site

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Attachment:

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

Attachment:

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

Attachment:

• Procedures to prevent the occurrence of nuisance conditions

Attachment:

#### 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:

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

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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:

Title: Click here to enter text

Signature:			

Date:	

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# 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.

Please see attached justification of permit need.

#### **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  $\Box$  No  $\boxtimes$  Not Applicable  $\Box$ 

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

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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:

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  $\Box$  No  $\boxtimes$ 

**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:

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

Attachment:

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:

## Section 2. Organic Loading (Instructions Page 67)

Is this facility in operation?

Yes  $\Box$  No  $\boxtimes$ 

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

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

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#### Loading

#### A. Current organic loading

Facility Design Flow (flow being requested in application):

Average Influent Organic Strength or BOD<sub>5</sub> Concentration in mg/l:

Average Influent Loading (lbs/day = total average flow X average BOD<sub>5</sub> conc. X 8.34):

Provide the source of the average organic strength or BOD<sub>5</sub> 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.

Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/l)
Municipality		
Subdivision	0.75	250
Trailer park – transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park,		

 Table 1.1(1) - Design Organic Loading

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Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/l)
no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or		
factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all	0.75	
sources		
AVERAGE BOD <sub>5</sub> from all		250
sources		

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

## A. Existing/Interim I Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: <u>10</u>

Ammonia Nitrogen, mg/l: <u>1.2</u>

Total Phosphorus, mg/l:

Dissolved Oxygen, mg/l: <u>6.0</u>

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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:

# C. Final Phase Design Effluent Quality Biochemical Oxygen Demand (5-day), mg/l: 5 Total Suspended Solids, mg/l: 10 Ammonia Nitrogen, mg/l: 1.1 Total Phosphorus, mg/l: Dissolved Oxygen, mg/l: 6.0

#### D. Disinfection Method

Identify the proposed method of disinfection.

- Chlorine: <u>1.0</u> mg/l after <u>20</u> minutes detention time at peak flow
   Dechlorination process:
- Ultraviolet Light: seconds contact time at peak flow
- $\Box$  Other:

## Section 4. Design Calculations (Instructions Page 68)

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

#### Attachment: <u>TECH 1.1-4.0</u>

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**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.

FIRM 48139C0175F

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: <u>TECH 1.1-5B</u>

### 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:

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#### **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: <u>TECH 1.1 – 6.0</u>

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:

# 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).

#### C. Sea grasses

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

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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: Unnamed tributary

#### A. Receiving water type

Identify the appropriate description of the receiving waters.

- ⊠ Stream
- □ Freshwater Swamp or Marsh
- $\Box$  Lake or Pond

Surface area, in acres:

Average depth of the entire water body, in feet:

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

- □ Man-made Channel or Ditch
- □ Open Bay
- □ Tidal Stream, Bayou, or Marsh

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Open	Bay
1	

□ 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).

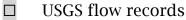
Intermittent - dry for at least one week during most years

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).



Historical observation by adjacent landowners

- ☑ Personal observation
- $\Box$  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.

Waxahachie 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.)?

If yes, discuss how.

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The unnamed tributary discharges into a pond (Ellis-Prairie Soil and Water Conservation District (EPSWCD)). The depth 125' upstream of the spillway is app. 18' in depth. The spillway structure is app. 2,900 feet from the unnamed tributary

## E. Normal dry weather characteristics

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

No flow during dry weather

Date and time of observation: October 4, 2021, 10:00 am

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

 $\Box$  Other(s), specify

## **B.** Waterbody uses

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



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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: 10/4/21 Time of study: 11:00 am

Stream name: <u>Waxahachie Creek</u>

Location: <u>Ellis County</u>

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: <u>0</u>

Number of stream bends that are moderately defined: 5

Number of stream bends that are poorly defined:  $\underline{0}$ 

Number of riffles:<u>0</u>

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.

<u>No flow.</u>		

#### 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.

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

### Table 2.1(1) - Stream Transect Records

## Section 3. Summarize Measurements (Instructions Page 76)

Streambed slope of entire reach, from USGS map in feet/feet: <u>7.86x10-3</u>

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): <u>3.96</u>

Length of stream evaluated, in feet: 500

Number of lateral transects made: <u>5</u>

Average stream width, in feet:  $\underline{0}$ 

Average stream depth, in feet: <u>0</u>

Average stream velocity, in feet/second:  $\underline{0}$ 

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Instantaneous stream flow, in cubic feet/second:  $\underline{0}$ 

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.):  $\underline{\rm N/A}$ 

Size of pools (large, small, moderate, none): N/A

Maximum pool depth, in feet:  $\underline{N/A}$ 

# **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: 0

Average Daily Flows, in MGD: <u>0</u>

Significant IUs – non-categorical:

Number of IUs: <u>0</u>

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs:0

Average Daily Flows, in MGD: <u>0</u>

## **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.

<u>N/A</u>

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#### C. Treatment plant pass through

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

> No 🗆 Yes □

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.

N/A

## **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 TCEO for approval according to 40 ČFR §403.18?

> Yes 🗆 No 🗆

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

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N/A

#### **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.

N/A

#### 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.

Pollutant	Concentration	MAL	Units	Date

Table 6.0(1) - Parameters Above the MAL

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#### 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.

<u>N/A</u>

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

### A. General information

Company Name: N/ASIC Code: N/ATelephone number: N/A Fax number: N/AContact name: N/AAddress: N/ACity, State, and Zip Code: N/A

#### **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).

<u>N/A</u>

## C. Product and service information

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

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N/A

#### D. Flow rate information

See the Instructions for definitions of "process" and "non-process wastewater." Process Wastewater:

Discharge, in gallons/day: <u>N/A</u>					
Discharge Type: $\Box$ Continuous $\Box$	Batch		Intermittent		
Non-Process Wastewater:					
Discharge, in gallons/day: <u>N/A</u>					
Discharge Type: 🛛 🛛 Continuous 🗖	Batch	$\boxtimes$	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  $\Box$  No  $\boxtimes$ 

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

Category: <u>N/A</u> Subcategories: <u>N/A</u>

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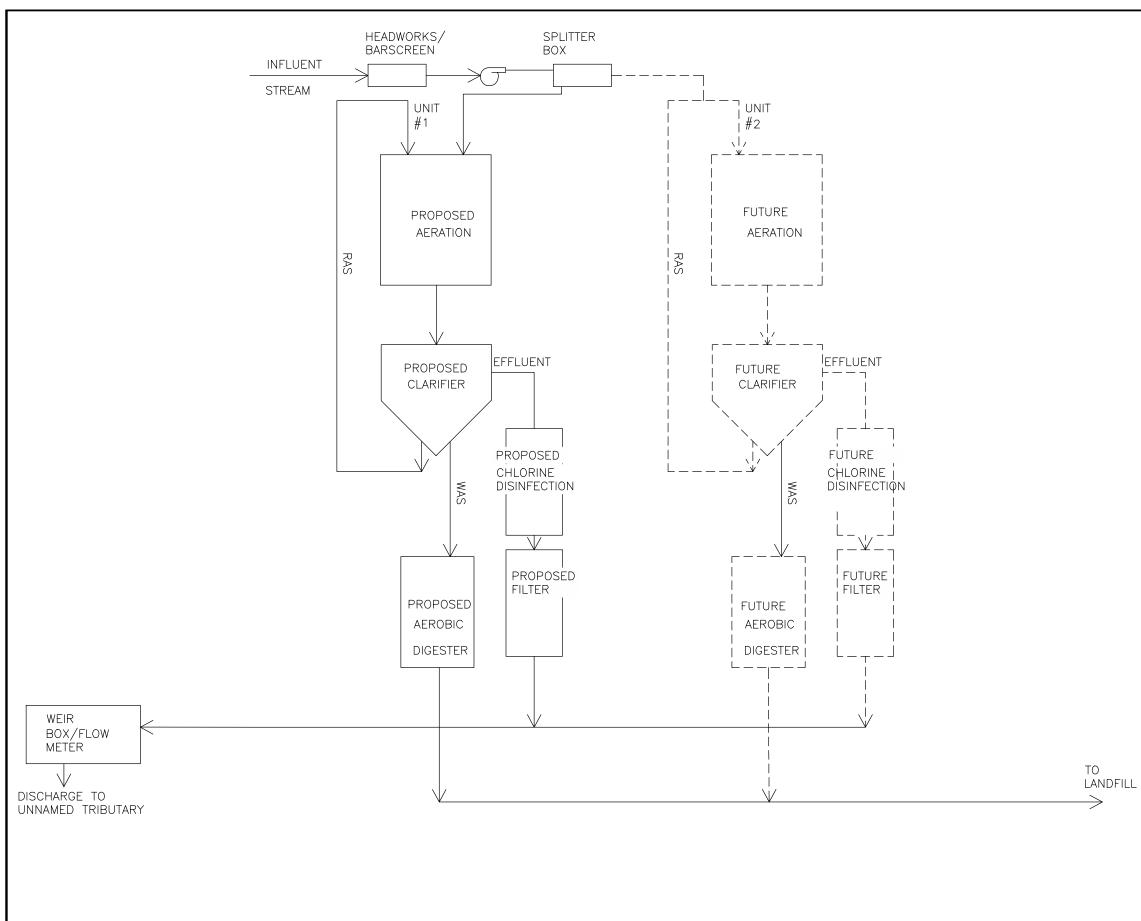
#### F. Industrial user interruptions

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?

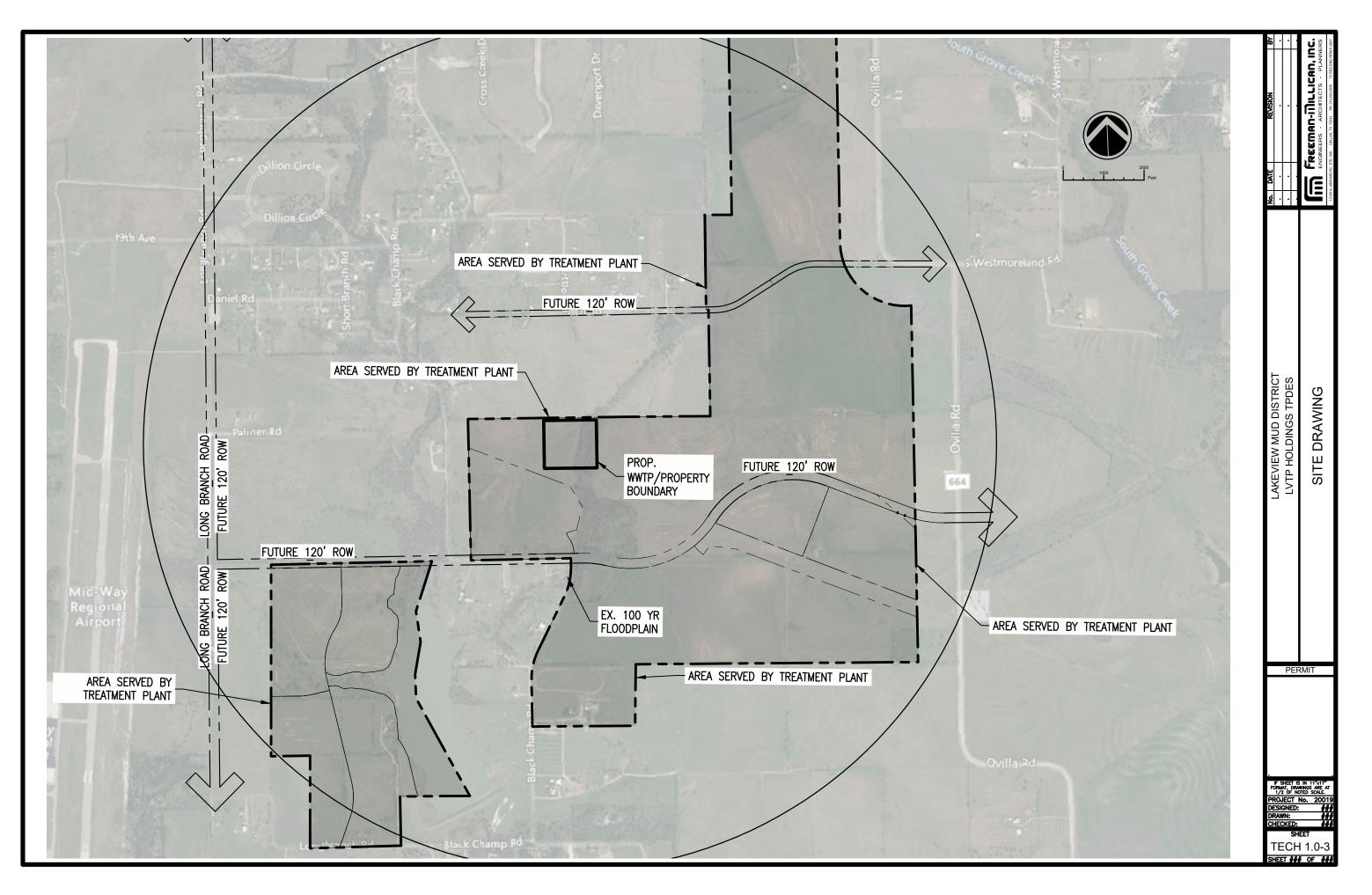
Yes 🗆 🛛 No 🗆

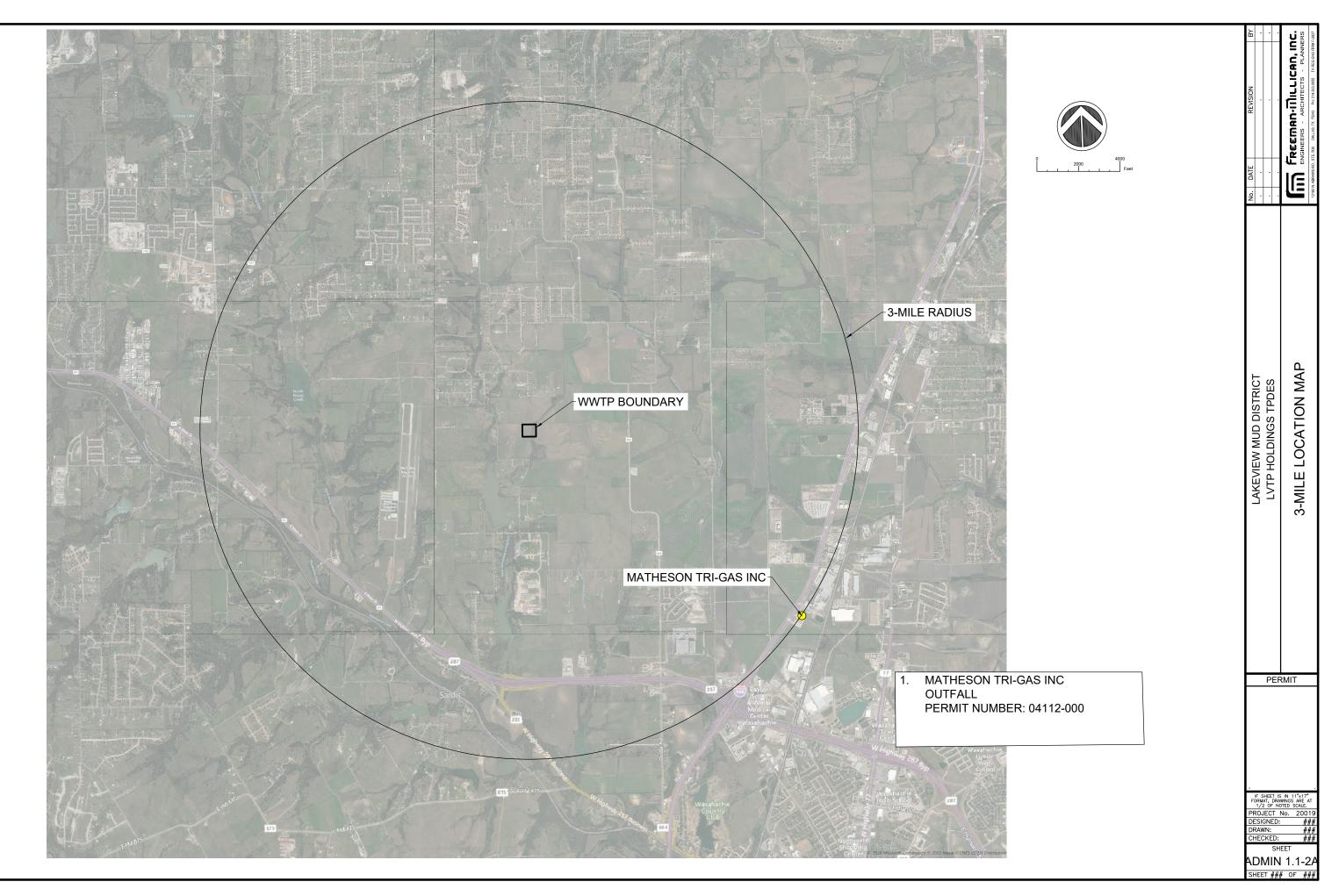
**If yes**, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

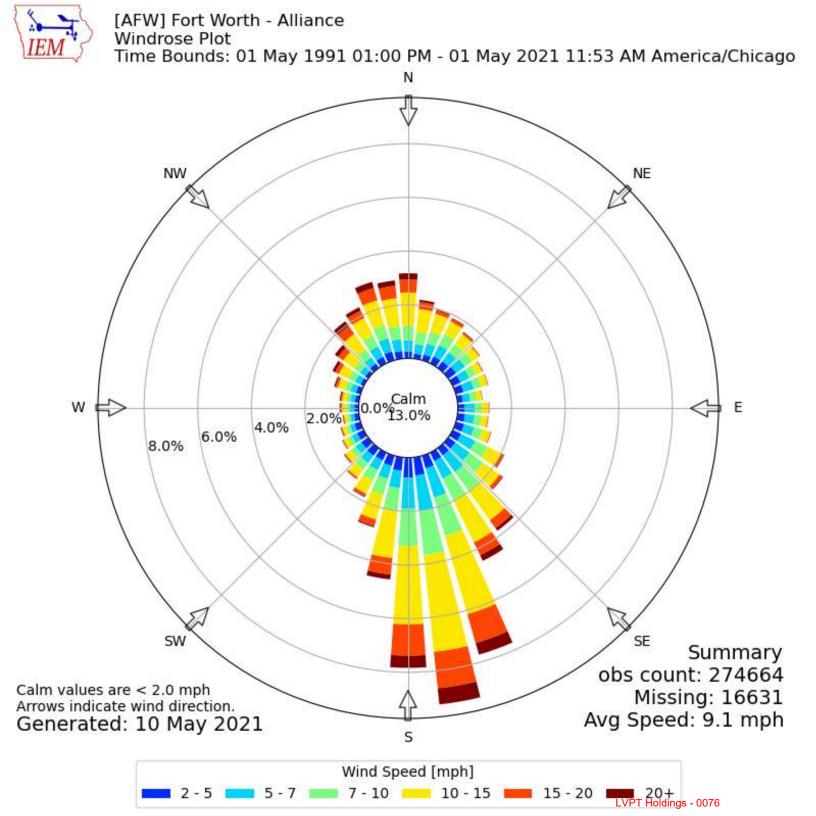
<u>N/A</u>



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## JUSTIFICATION OF PERMIT NEED

The wastewater treatment plant will serve a 1,228 acres tract in Ellis County, TX which consists of residential dwelling units. The plant is needed in order to provide sewer service for approximately 5500 residential and commercial lots to be constructed in phases. The initial phase will serve approximately 2750 residential lots (2 person/lot x 100 gal/day) and consists of an initial average capacity of 0.55 MGD and a peak flow of 2.2 MGD. The initial phase units include:

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Aeration Basin	1	60' X 110' X12' (INTERIM PHASE)
Clarifier	1	60' Dia. X 12' (INTERIM PHASE)
Chlorine Contact Basin	1	20' X 25' X 9' (INTERIM PHASE)
Aerobic Digester	1	40' X65' X 12' (INTERIM PHASE)

The final phase will serve an additional 0.55 MGD. The additional units needed for the final phase consists of:

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Aeration Basin	1	60' X 110' X12' (FINAL PHASE)
Clarifier	1	60' Dia. X 12' (FINAL PHASE)
Chlorine Contact Basin	1	20' X 25' X 9' (FINAL PHASE))
Aerobic Digester	1	40' X 65' X 12' (FINAL PHASE)

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FEB 11 2021 Water Quality Division Application Team DESIGN CALCULATIONS Attachment T1.1-4 WAXAHACHIE WWTP ELLIS COUNTY, TEXAS

#### DESIGN DATA

Interim I Phase:

Average Flow= 0.55 MGD = 382 gpm Peak Flow = 2.2 MGD = 1527.8 gpm

#### Parameter

**Concentration** 

Influent BOD <sub>5</sub>	
Influent TSS	
Influent NH <sub>3</sub> N	

250 mg/l = 1146.75 lb/day 250 mg/l = 1146.75 lb/day 30 mg/l = 1146.75 lb/day

### Proposed Effluent Requirements

Effluent  $BOD_5 = 5 mg/l$ Effluent TSS = 5 mg/l Effluent NH<sub>3</sub>N = 2 mg/l

#### UNIT FLOW CALCULATIONS

One (1) 0.55 MGD treatment unit.

#### AERATION BASIN

For Extended Aeration Activated Sludge, Organic Loading = 15 lb BOD<sub>5</sub>/day/1000 ft<sup>3</sup> (1146.75 lb BOD<sub>5</sub>/day)/(15 lb BOD<sub>5</sub>/day/1000 ft<sup>3</sup>) = 76,450 ft<sup>3</sup> For SWD = 12', Area =  $(76,450 \text{ ft}^3)/(12') = 6,370.83 \text{ ft}^2$ 

## For rectangular unit phase 1 – Use 60' Wide X 110' Length X 12' SWD

#### SECONDARY CLARIFIER

Requirements for Extended Air Enhanced Secondary Maximum Surface Loading – 800 gal/day/ft<sup>2</sup> at peak flow Minimum Detention Time – 2.2 hrs at peak flow RECEIVED

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Area for Peak Surface Loading =  $(0.55 \text{ MGD})/(0.0008 \text{ MGD/day/ft}^2) = 2750 \text{ ft}^2$ Volume for Peak Detention Time (2.2 hrs)(0.55 MGD) (day/24 hours) (10^6)= 201,667 gal = 26,960.8 ft<sup>3</sup>

For 12' SWD, Area = (26,960.8)/(12') = 2,246.73 ft<sup>2</sup>

And, 2246.73 ft<sup>2</sup><2750 ft<sup>2</sup>

Therefore, Surface Loading Prevails

For circular basin – Use 60' diameter X 12' SWD

## CHLORINE CONTACT BASIN

Required 20 min detention @ peak flow.

(20 minutes) \*(1528 gpm) = 30,555 gal = 4,085 ft<sup>3</sup> For 9' SWD - (4,085 ft<sup>3</sup>)/(9' SWD) = 454 ft<sup>2</sup>

## For rectangular unit - Use 20' Wide X 25' Length X 9' SWD

#### AEROBIC DIGESTER

For an accumulation rate of 0.11 lb/capita/day and a 35% solids reduction:

Accumulated Daily Loading = (550,000 gpd) (0.1105 lb/capita/day) / (100 gal/capita/day) = 607.75 lb Solids/day

Total required detention time = 40 days Assumed thickened solids concentration = 1.0% in the tank Volume =  $(607.75 \text{ lb/day})(40 \text{ days})/(0.01)(8.34 \text{ lb/gal}) = 291,486.8 \text{ gal} = 38,968.8 \text{ ft}^3$ For 12' SWD, Area =  $(38,968.8)/(12 \text{ ft}) = 3,247.4 \text{ ft}^2$ 

## For rectangular unit – Use 50' Wide X 65' Length X 12' SWD

#### AERATION REQUIREMENTS

Total Process Air Required = 2,548.33 SCFM

<u>PROPOSED AERATION REQUIREMENTS</u> Average Flow = 0.55 MGD Process Aeration Oxygen Required = 2.2 lb O<sub>2</sub>/lb BOD<sub>5</sub> (Nitrification) Minimum Air Required = 3200 SCF/lb BOD<sub>5</sub> For aeration unit

OxygenRequired = (1147 lb BOD<sub>5</sub>/day) (2.2 lb O<sub>2</sub>/lb BOD<sub>5</sub>) = 2522.85 lb O<sub>2</sub>/day AirFlowRate = (2522.85 lbO<sub>2</sub>/day)/((0.65)(0.1)(0.23)(0.075)(1440) = 1562.52 SCFM MinimumAirRequired = ((1,562.52 SCFM/lbBOD<sub>5</sub>)(235 lbBOD<sub>5</sub>/day))/1400 min/day =2548.333 SCFM

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Application Team

Attachment T1.1-4

Page 2 of 3

## PLANT DESIGN FEATURES

#### A. STANDBY POWER SYSTEM

The system will be equipped with connections for a portable generator to operate the plant and lift station.

### B. ALARM FEATURES

The plant will be equipped with a dial-up alarm system for notification of alarms. Alarms will actuate, at a minimum, on the following alarm conditions:

- 1. Power Outage
- 2. Lift Station High Level
- 3. Aeration Basin High Level
- 4. Final Clarifier Torque Overload
- 5. Chlorine Room Alarm
- 6. Intruder Alarms
- 7. Other Equipment Failure Modes

C. Design Features for Reliability and Operating Flexibility

Flow to the plant site will be by one (1) gravity sanitary sewer line and one (1) force main. Storage capacity in the gravity line, off-site lift station and on-site lift station will have a minimum detention time of 60 minutes at peak flow. This will allow for plant shut down for repairs and/or maintenance. Equipment is retrievable from the top of the units to minimize the need for draining basins.

## D. EQUIPMENT DUPLICITY

#### 1. LIFT STATION

Three (3) lift station pumps are to be installed with two (2) required to meet peak flow conditions. Level switches will automatically start the additional pump if the other pumps do not keep up or if one pump fails to come on line.

#### 2. BLOWERS

Two blowers will be installed with one (1) required to meet design aeration rate. Backup operation for these units is manual.

## E. OVERFLOW PREVENTION

The plant lift station will be equipped with capability for back-up power to prevent overflow. Units are designed with free board which will allow time for eliminating any line blockage problem. In addition, alarms for high water levels will notify the operators of a potential overflow situation.

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## DESIGN CALCULATIONS Attachment T1.1-4 WAXAHACHIE WWTP ELLIS COUNTY, TEXAS

#### **DESIGN DATA**

Final Phase:

Average Flow= 1.1 MGD = 763.9 gpm Peak Flow = 4.4 MGD = 3055.6 gpm

#### Parameter Concentration

Influent BOD₅	250 mg/l = 1146.75 lb/day
Influent TSS	250 mg/l = 1146.75 lb/day
Influent NH <sub>3</sub> N	30 mg/l = 1146.75 lb/day

#### Proposed Effluent Requirements

Effluent  $BOD_5 = 5 mg/l$ Effluent TSS = 5 mg/l Effluent NH<sub>3</sub>N = 2 mg/l

#### UNIT FLOW CALCULATIONS

One (1) 0.55 MGD treatment unit.

#### **AERATION BASIN**

For Extended Aeration Activated Sludge, Organic Loading = 15 lb BOD<sub>5</sub>/day/1000 ft<sup>3</sup> (1146.75 lb BOD<sub>5</sub>/day)/(15 lb BOD<sub>5</sub>/day/1000 ft<sup>3</sup>) = 76,450 ft<sup>3</sup> For SWD = 12', Area =  $(76,450 \text{ ft}^3)/(12') = 6,370.83 \text{ ft}^2$ 

#### For rectangular unit phase 1 – Use 60' Wide X 110' Length X 12' SWD

#### SECONDARY CLARIFIER

Requirements for Extended Air Enhanced Secondary Maximum Surface Loading – 800 gal/day/ft<sup>2</sup> at peak flow Minimum Detention Time – 2.2 hrs at peak flow RECEIVED

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Area for Peak Surface Loading =  $(0.55 \text{ MGD})/(0.0008 \text{ MGD/day/ft}^2) = 2750 \text{ ft}^2$ Volume for Peak Detention Time (2.2 hrs)(0.55 MGD) (day/24 hours) (10^6)= 201,667 gal = 26,960.8 ft<sup>3</sup>

Page 1 of 3

## For 12' SWD, Area = (26,960.8)/(12') = 2,246.73 ft<sup>2</sup>

And, 2246.73 ft<sup>2</sup><2750 ft<sup>2</sup>

Therefore, Surface Loading Prevails

For circular basin – Use 60' diameter X 12' SWD

## CHLORINE CONTACT BASIN

Required 20 min detention @ peak flow.

(20 minutes) \*(1528 gpm) = 30,555 gal = 4,085 ft<sup>3</sup> For 9' SWD – (4,085 ft<sup>3</sup>)/(9' SWD) = 454 ft<sup>2</sup>

## For rectangular unit – Use 20' Wide X 25' Length X 9' SWD

## AEROBIC DIGESTER

For an accumulation rate of 0.11 lb/capita/day and a 35% solids reduction:

Accumulated Daily Loading = (550,000 gpd) (0.1105 lb/capita/day) / (100 gal/capita/day) = 607.75 lb Solids/day

Total required detention time = 40 days Assumed thickened solids concentration = 1.0% in the tank Volume =  $(607.75 \text{ lb/day})(40 \text{ days})/(0.01)(8.34 \text{ lb/gal}) = 291,486.8 \text{ gal} = 38,968.8 \text{ ft}^3$ For 12' SWD, Area =  $(38,968.8)/(12 \text{ ft}) = 3,247.4 \text{ ft}^2$ 

## For rectangular unit – Use 50' Wide X 65' Length X 12' SWD

## **AERATION REQUIREMENTS**

PROPOSED AERATION REQUIREMENTS Average Flow = 0.55 MGD Process Aeration Oxygen Required = 2.2 lb O<sub>2</sub>/lb BOD<sub>5</sub> (Nitrification) Minimum Air Required = 3200 SCF/lb BOD<sub>5</sub> For aeration unit

OxygenRequired = (1147 lb BOD<sub>5</sub>/day) (2.2 lb O<sub>2</sub>/lb BOD<sub>5</sub>) = 2522.85 lb O<sub>2</sub>/day AirFlowRate = (2522.85 lbO<sub>2</sub>/day)/((0.65)(0.1)(0.23)(0.075)(1440) = 1562.52 SCFM MinimumAirRequired = ((1,562.52 SCFM/lbBOD<sub>5</sub>)(235 lbBOD<sub>5</sub>/day))/1400 min/day =2548.333 SCFM

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Total Process Air Required = 2,548.33 SCFM

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Water Quality Division Application Team

Attachment T1.1-4

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## PLANT DESIGN FEATURES

#### A. STANDBY POWER SYSTEM

The system will be equipped with connections for a portable generator to operate the plant and lift station.

#### **B. ALARM FEATURES**

The plant will be equipped with a dial-up alarm system for notification of alarms. Alarms will actuate, at a minimum, on the following alarm conditions:

- 1. Power Outage
- 2. Lift Station High Level
- 3. Aeration Basin High Level
- 4. Final Clarifier Torque Overload
- 5. Chlorine Room Alarm
- 6. Intruder Alarms
- 7. Other Equipment Failure Modes

C. Design Features for Reliability and Operating Flexibility

Flow to the plant site will be by one (1) gravity sanitary sewer line and one (1) force main. Storage capacity in the gravity line, off-site lift station and on-site lift station will have a minimum detention time of 60 minutes at peak flow. This will allow for plant shut down for repairs and/or maintenance. Equipment is retrievable from the top of the units to minimize the need for draining basins.

#### D. EQUIPMENT DUPLICITY

#### 1. LIFT STATION

Three (3) lift station pumps are to be installed with two (2) required to meet peak flow conditions. Level switches will automatically start the additional pump if the other pumps do not keep up or if one pump fails to come on line.

#### 2. BLOWERS

Two blowers will be installed with one (1) required to meet design aeration rate. Backup operation for these units is manual.

#### E. OVERFLOW PREVENTION

The plant lift station will be equipped with capability for back-up power to prevent overflow. Units are designed with free board which will allow time for eliminating any line blockage problem. In addition, alarms for high water levels will notify the operators of a potential overflow situation.

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## Solids Management Plan Interim I Attachment T1.1-6.0a LVTP HOLDINGS TPDES PERMIT ELLIS COUNTY, TEXAS

Sludge disposal site:

TCEQ minimum sludge retention time=40 days Digester volume = 38,968.8 cubic feet (64 cubic feet/lb BOD<sub>5</sub>/day)

Digester dimension = 50 feet X 65 feet X 12 feet Digester sludge retention time 40 days

CBOD5 removal influent concentration = 250 mg/l Effluent concentration = 5 mg/l Net removal = 245 mg/l

Flow (0.55 MGD)				
Solids Generated	100% flow	75% flow	50% flow	25% flow
Pounds Influent BOD <sub>5</sub> /day removed	1100.9	825.66	550.44	275.22
Pounds of digested dry sludge produced*	346.8	260.08	173.39	86.69
Pounds of wet sludge produced**	23118.5	17338.86	11559.24	5779.62
Volume of wet sludge produced	2772.0	2079.00	1386.00	693.00

# \*Assuming 0.315 pounds of digested dry sludge produced per pound of CBOD<sub>5</sub> removed.

#### \*\*Assuming 1.5% solids.

MLSS operating range = 2,500 - 3,500 mg/l

Sludge will stay in the digester; clear liquor will be decanted and returned to the headworks. Sludge is wasted from the final clarifiers to the aerobic digester. Some sludge from the clarifier is also returned to the aeration basin as return sludge.

Flow (0.55 MGD)				
Removal Schedule (days)	100% flow	75% flow	50% flow	25% flow
Days between Sludge Removal	51	68	102	205

Sludge will be removed from the digester when it is full of thickened solids and dewatered for transportation to a landfill.

Page 1 of 1

## Solids Management Plan Final Phase Attachment T1.1-6.0a LVTP HOLDINGS TPDES PERMIT ELLIS COUNTY, TEXAS

Sludge disposal site:

TCEQ minimum sludge retention time=40 days Digester volume = 38,968.8 cubic feet (64 cubic feet/lb BOD<sub>5</sub>/day)

Digester dimension = (2)-50 feet X 65 feet X 12 feet Digester sludge retention time 40 days

CBOD5 removal influent concentration = 250 mg/l Effluent concentration = 5 mg/l Net removal = 245 mg/l

Flow (1.1 MGD)				
Solids Generated	100% flow	75% flow	50% flow	25% flow
Pounds Influent BOD <sub>5</sub> /day removed	2201.8	1651.32	1100.88	550.44
Pounds of digested dry sludge produced*	693.6	520.17	346.78	173.39
Pounds of wet sludge produced**	46237.0	34677.72	23118.48	11559.24
Volume of wet sludge produced	5544.0	4158.00	2772.00	1386.00

# \*Assuming 0.315 pounds of digested dry sludge produced per pound of CBOD<sub>5</sub> removed.

\*\*Assuming 1.5% solids.

MLSS operating range = 2,500 - 3,500 mg/l

Sludge will stay in the digester; clear liquor will be decanted and returned to the headworks. Sludge is wasted from the final clarifiers to the aerobic digester. Some sludge from the clarifier is also returned to the aeration basin as return sludge.

Flow (4.4 MGD)				
Removal Schedule (days)	100% flow	75% flow	50% flow	25% flow
Days between Sludge Removal	51	68	102	205

Sludge will be removed from the digester when it is full of thickened solids and dewatered for transportation to a landfill.

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