## **TPDES Permit New Application Submittal**

#### Submitted to:

Texas Commission on Environmental Quality
Application Review & Processing Team (MC-148)
P.O. Box 13087
Austin, Texas 78711-3087

#### For:

OurCalling, Inc.
OurCommunity-Ferris WWTP
231 Wickliffe Rd
Ferris, TX 75125

#### Owner:

OurCalling, Inc. P.O. Box 140428 Dallas, Texas 75215

Issue Date: December 9, 2022



## consulting **environmental** engineers, inc.

150 n. harbin drive — suite 408 ● stephenville, tx 76401 phone: (254) 968-8130 fax: (254) 968-8134 email: ceeinc@ceeinc.org registered firm: #F-2323

## OurCommunity-Ferris WWTP Exhibit Cross Reference

Exhibit I.D.	<u>Description</u>	Reference
I	Core Data Form 10400	Section 3 (C) page 4 of 21
II	Topographic Map	Item 13, page 11 of 20
III	Affected Landowners Map	Item 1 (a), page 13 of 20
IV	Affected Landowners Cross Reference	Item 1 (b), page 13 of 20
V	Affected Landowners USB Drive	Item 1 (c), page 13 of 20
VI VI(a)	Photographs Photograph Location map	Item 2, page 14 of 20
VII	Buffer Zone Map	Item 3 (a), page 14 of 20
VIII	SPIF Topographic Map	Item 5, page 16 of 20
IX	Flow Diagram	Item 2 (c), page 2 of 79
Χ	Site Drawing	Item 3, page 3 of 79
XI	Close Proximity WWTP Data	Item 3, page 22 of 79
XII	Design Calculations	Item 4, page 24 of 79
XIII	Flood Plain Map	Item 5 (a), page 25 of 79
XIV	Wind Rose	Item 5 (b), page 25 of 79
XV	Sewage Sludge Solids Management	Item 7, page 26 of 79
XVI	Copy of Check	
XVII	Domestic Administrative Report Form 100	53
XVIII	Domestic Technical Report Form 10054	





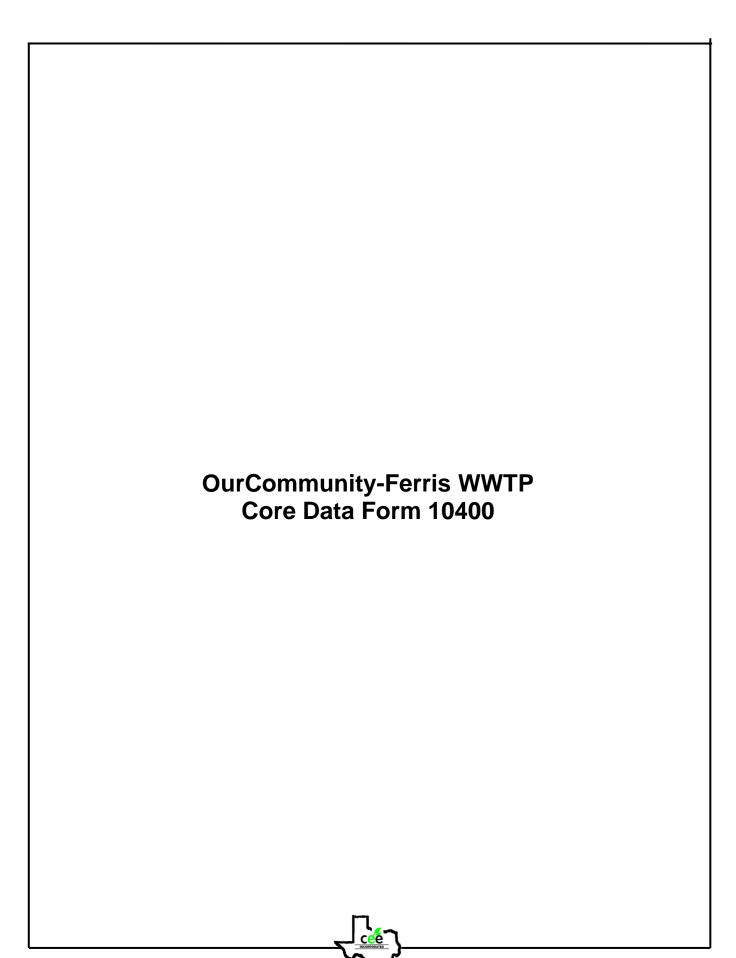
## consulting environmental engineers, inc.

150 n. harbin drive – suite 408 ● stephenville, tx 76401 phone: (254) 968-8130 fax: (254) 968-8134 email: ceeinc@ceeinc.org registered firm: #F-2323

#### PROJECT SUMMARY

OurCalling, Inc is submitting this application for a new TPDES permit to service the OurCommunity-Ferris Assisted Living Community. The system will provide waste water treatment for up to 640 homes, 8 maintenance buildings, one cafeteria, several multiuse buildings, one church and will require an approximate 90,000 gallon per day wastewater treatment facility. The adjacent property to the north is Wickliffe Rd, across from which is pasture land, and to the south is undeveloped land. To the west of the proposed plant is Wickliffe Rd across from which are several residential properties, and to the east is pasture land.

The proposed system is not located within the boundaries of any CCNs, and no wastewater plants were found within three miles of the proposed system.





TCEQ Use Only	

## **TCEQ Core Data Form**

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

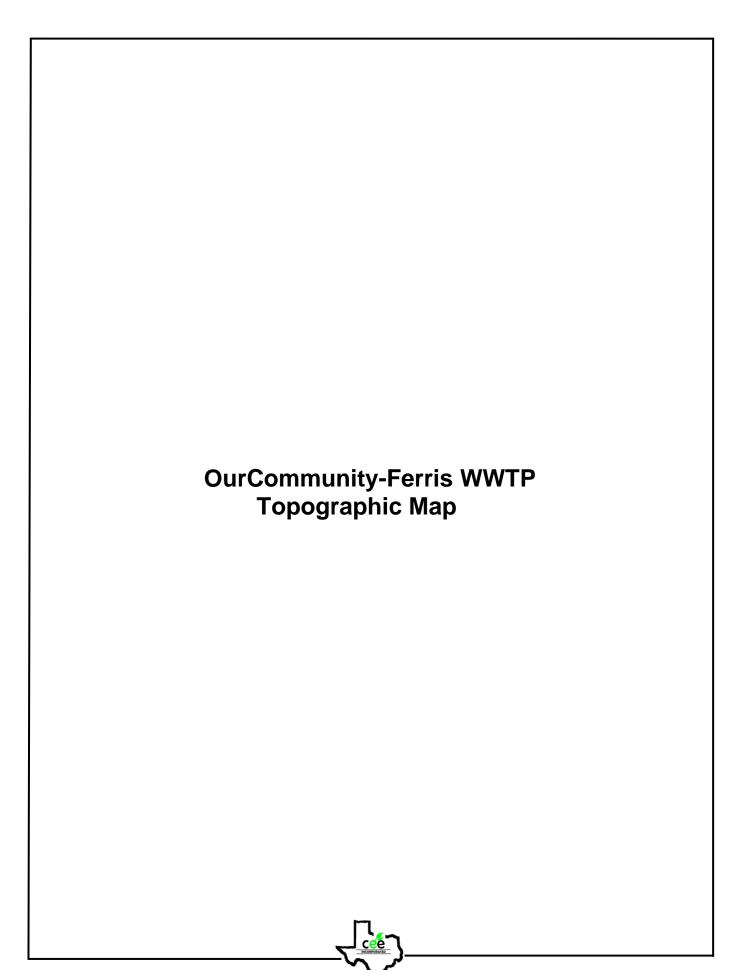
SECTION I: General Information	n
--------------------------------	---

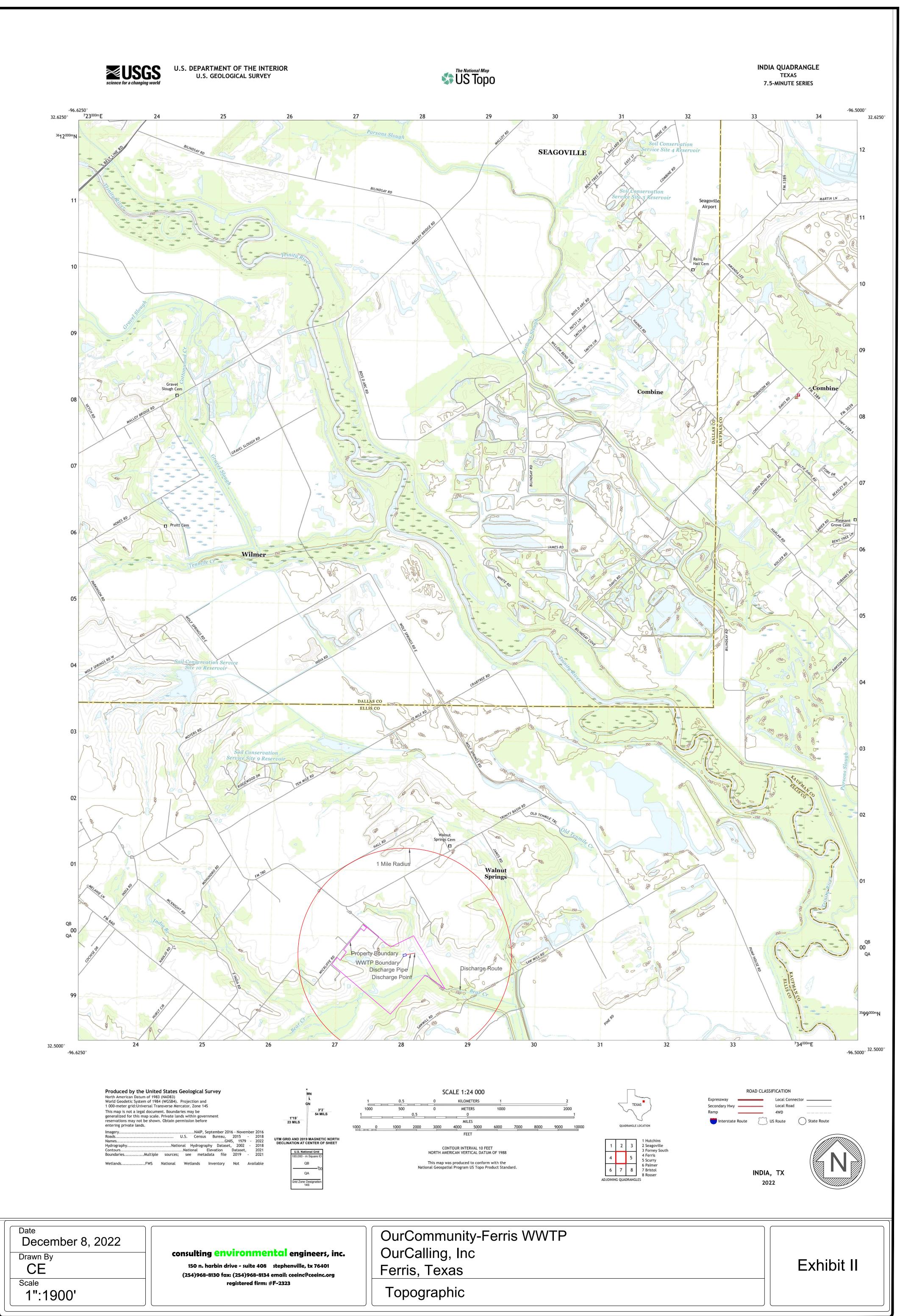
1. Reason for Submission (If other is checked please describe in space provided.)											
New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)											
Renewal (Core Data Form should be submitted with the renewal form)											
2. Customer Reference Number (if issued) Follow this link to search 3. Regulated Entity Reference Number (if issued)											
CN for CN or RN numbers in Central Registry** RN											
SECTION II: Customer Information											
4. General Customer Information 5. Effective Date for Customer Information Updates (mm/dd/yyyy) 11/25/2022											
New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership ☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)											
									<u>`</u>	rent and	active with the
		State (SOS)	-	•			•				
6. Customer	Legal Nar	ne (If an individual	, print last name fi	irst: eg: Doe,	John)		<u> </u>	f new Cu	stomer, enter previ	ous Custome	er below:
OurCallin	g, Inc.										
7. TX SOS/CI	•	Number	8. TX State Ta	ax ID (11 digit	s)		(	9. Federa	al Tax ID (9 digits)	10. DUN	S Number (if applicable)
32038968	049		080109097	72				-			
11. Type of C	ustomer:		on		Individ	ual		Pa	rtnership: 🗌 Gener	al 🔲 Limited	
Government:	City (	County  Federal	State  Other		Sole P	roprieto	rship	。	Other:		
<b>12. Number o</b>	of Employ 21-100	ees 101-250	<u> 251-500</u>	☐ 501 ar	nd high	er		13. Inder ⊠ Yes	pendently Owned	and Opera	ted?
14. Custome	r Role (Pro	posed or Actual) –	as it relates to the	e Regulated	Entity li	isted on	this fo	orm. Pleas	se check one of the	following	
⊠Owner		Operat	or	O	wner &	Opera	tor				
Occupation	nal Licens	ee 🗌 Respo	nsible Party	□ Vo	oluntar	y Clear	up A	pplicant	☐Other:		
45 Mailina											
15. Mailing Address:	P.O. B	ox 140428			ı						
City Dallas				State	TX		<b>ZIP</b> 75124		ZIP + 4		
16. Country Mailing Information (if outside USA) 17.						17. E	17. E-Mail Address (if applicable)				
carolyn@ourcalling.org											
18. Telephon	19. Extension or Code				20. Fax Number (if applicable)						
( 214 ) 444-8796											
SECTION III: Regulated Entity Information											
					y" is se	elected	belo	w this for	m should be acco	mpanied by	a permit application)
⊠ New Regu	ulated Enti	ty 🔲 Update	to Regulated En	ntity Name		Update	to R	egulated	Entity Information		
_		•	•	•	ed in	order	to n	neet TC	CEQ Agency D	ata Stano	lards (removal
		ndings such									
	22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)										
OurCommunity-Ferris											

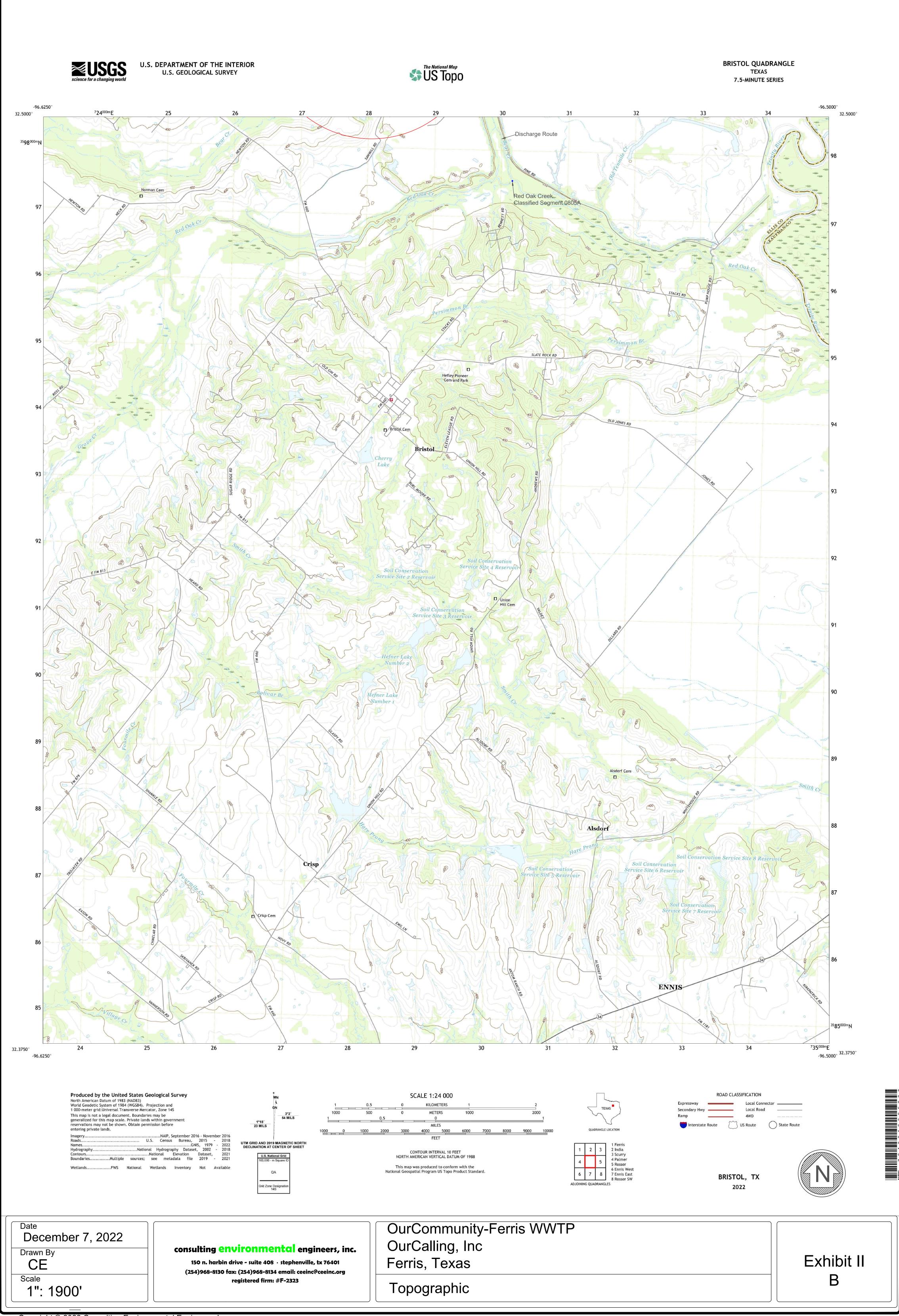
23. Street Address of									
the Regulated Entity:	231 Wi	ckliffe Rd		79					
(No PO Boxes)	City	y Ferris State TX ZI		ZIP	P 75125		ZIP + 4		
24. County	Ellis			1					
	E	Enter Physical Lo	ocation Descript	tion if no stre	eet addre	ss is provid	led.		
25. Description to Physical Location:		*	+						
26. Nearest City						State		Near	rest ZIP Code
Ferris						TX		751	25
27. Latitude (N) In Deci	mal:	32.512257		28. Le	ongitude	(W) In Deci	mal:	-96.57302	27
Degrees	Minutes	S	Seconds	Degree	es	Mi	nutes		Seconds
32		30	42		-96		3	4	20
29. Primary SIC Code (4	digits) 30.	. Secondary SIC	Code (4 digits)	31. Primar	-	Code	<b>32. Se</b> (5 or 6 d	econdary NAI	CS Code
4952				221320	/			,	0
33. What is the Primary	Business	of this entity?	Do not repeat the SIG		eription.)				
Provide wastewate									
10 vide waste wate	Berviee	to the ource.							
34. Mailing	P.O. Box 140428								
Address:	City	City Dallas State		TX	ZIP	ZIP 75124		ZIP + 4	
35. E-Mail Address	3:	21	Was a second was a second	caroly	n@ourcal	lling.org		1	
36. Teleph	one Numbe	r	37. Extensi				Fax Nun	nber (if appli	cable)
(214)	444-8796			-			(	) -	
TCEQ Programs and I				ermits/registrat	ion number	s that will be	affected l	by the updates	submitted on this
Dam Safety							A!-		
	☐ Distric	:ts	☐ Edwards Aq	uifer	☐ Emiss	sions Invento	ry Air	I Industrial	Hazardous Wast
	☐ Distric	ets	L Edwards Aq	uifer	☐ Emiss	sions Invento	ry Air	Industrial	Hazardous Wast
☐ Municipal Solid Waste		Source Review Air	OSSF	uifer		sions Invento		☐ Industrial	Hazardous Was
·	☐ New S	Source Review Air	OSSF	uifer	☐ Petro			☐ PWS	Hazardous Was
Municipal Solid Waste	☐ New S			uifer					Hazardous Was
] Sludge	☐ New S	Source Review Air Water	OSSF		☐ Petro	leum Storage		PWS Used Oil	Hazardous Was
·	☐ New S	Source Review Air Water  Water	OSSF		☐ Petro	leum Storage		☐ PWS	Hazardous Was
☐ Voluntary Cleanup	☐ New S ☐ Storm ☐ Waste New W	Source Review Air Water  Water WTP	OSSF		☐ Petro	leum Storage		PWS Used Oil	Hazardous Was
Sludge  Voluntary Cleanup  ECTION IV: Pro	□ New S □ Storm □ Waste New W	Source Review Air Water  Water WTP	OSSF		☐ Petro ☐ Tires ☐ Water	leum Storage		PWS Used Oil	Hazardous Was
Sludge  Voluntary Cleanup  ECTION IV: Pro  Charles Gill	□ New S □ Storm □ Waste New W eparer In	Source Review Air Water Water WTP nformation	OSSF	Agriculture 41. Title:	☐ Petro ☐ Tires ☐ Wate	r Rights		PWS Used Oil	Hazardous Was
Sludge  Voluntary Cleanup  ECTION IV: Pro Charles Gill	□ New S □ Storm □ Waste New W	Source Review Air Water Water WTP nformation	OSSF Title V Air Wastewater	Agriculture  41. Title:  45. E-Ma	☐ Petro ☐ Tires ☐ Water	r Rights		PWS Used Oil	Hazardous Was

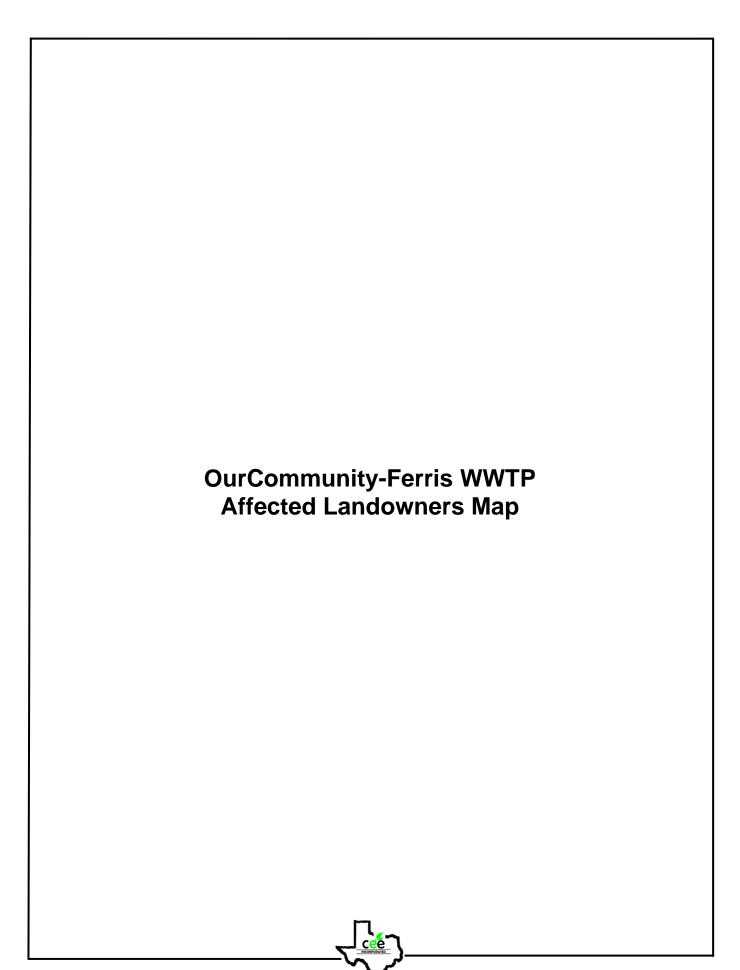
identified in field 39.

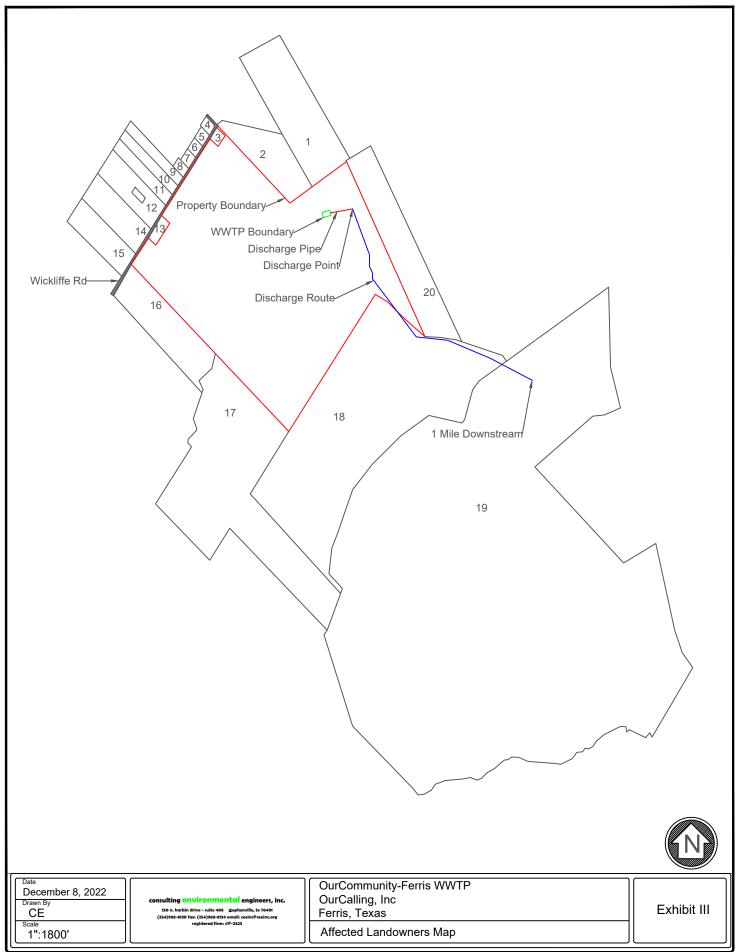
Company:	Consulting Environmental Engineers, Inc.	Presiden	ent		
Name (In Print):	Charles Gillespie			Phone:	( 254 ) 968- 8130
Signature:	Chals Allayor			Date:	12-8-22

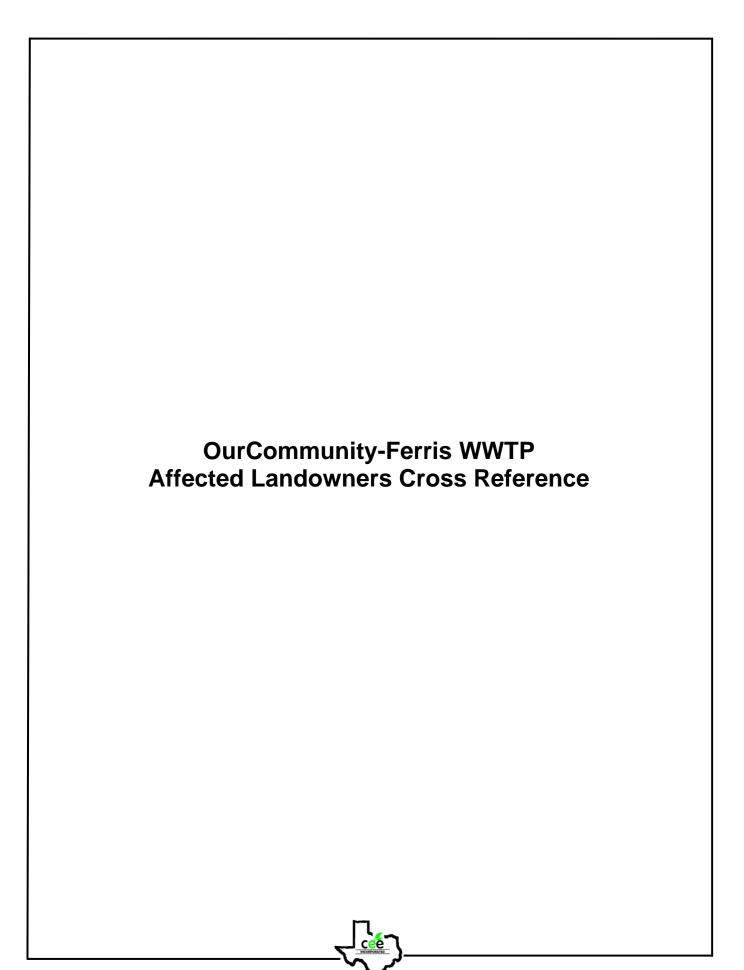












#### Our Community Ferris WWTP Wastewater Permit Application Affected Landowners Cross Reference Exhibit IV

- 1. Dye Joshua D & Kelsey M 3100 FM 780 Ferris, TX, 75125
- 2. Way Broadcasting Operating LLC 40 Exchange PL FL 10 New York, NY, 10005
- 3. Vasquez Elias & Cecilia 211 Wickliffe Rd Ferris, TX, 75125
- 4. Lopez-Garcia Servando Etal 107 Highway 89 S Mayflower, AR, 72106
- 5. Mendoza Luis 210 Wickliffe Rd Ferris, TX, 75125
- 6. Duran Henry & Teresa 220 Wickliffe Rd Ferris, TX, 75125
- 7. Martinez Nemesio & Martha 230 Wickliffe Rd Ferris, TX, 75125
- Gallardo Emigdio & Maria D 250 Wickliffe Rd Ferris, TX, 75125
- 9. Lopez Laura Ivonne & Octavio Melendez Hernandez 260 Wickliffe Rd Ferris, TX, 75125
- 10. Gallardo Jesenia I 250 Wickliffe Rd Ferris, TX, 75125
- 11. Gallardo Jesenia I 250 Wickliffe Rd Ferris, TX, 75125

12. Rosas Cano R 300 Wickliffe Rd Ferris, TX, 75125

#### 13. Diaz Humberto O & Joann Perez 116 Oak Hollow Dr Red Oak, TX, 75154

14. Van Wey Rex A & Martha 400 Wickliffe Rd Ferris, TX, 75125

15. Van Wey Rex A & Martha 400 Wickliffe Rd Ferris, TX, 75125

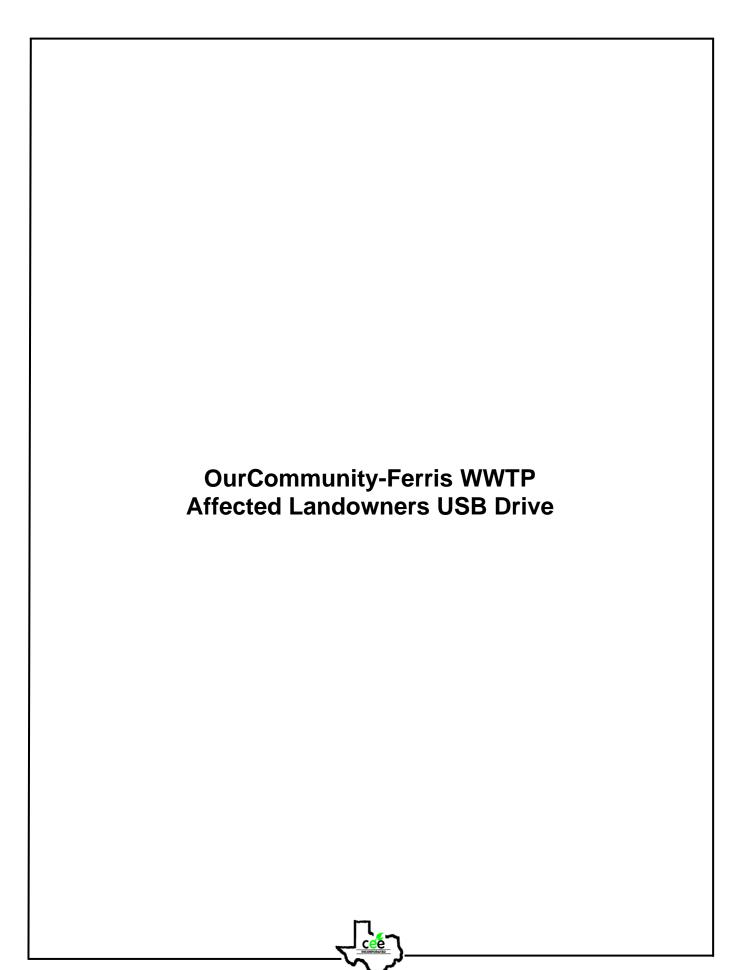
16. Provost Daniel P 3824 Royal Ln Dallas, TX, 75229

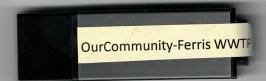
17. MC Fadden Edward & Francesca M 573 Sawmill Rd Ferris, TX, 75125

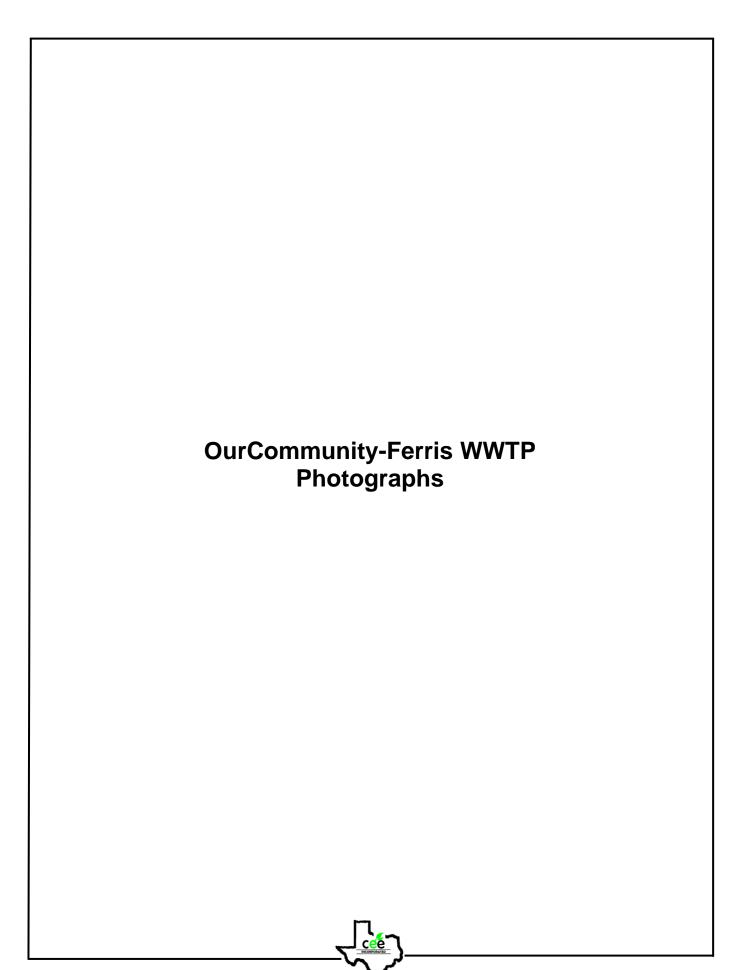
18. Toomey Trinity Springs LLC 116 Magnolia Ferris, TX, 75240

19. Toomey Trinity Springs LLC 116 Magnolia Ferris, TX, 75240

20. Van Wey Rex A & Martha 400 Wickliffe Rd Ferris, TX, 75125









Discharge Point

Date
December 7, 2022
Drawn By
CE
Scale

consulting environmental engineers, inc. 150 n. harbin drive - suite 408 \_dephenville, bz 76401 (254)968-6130 fax (254)968-8134 emails ceeinceeeinc.org registered firm: #F-23233 OurCommunity-Ferris WWTP OurCalling, Inc Ferris, Texas WWTP Discharge Point Photo

Sheet VI



Site Location From the Sky Looking Upstream



# Site Location From the Sky Looking Downstream

Date
November 29, 2022
Drawn By
CE
Scale
NTS

consulting environmental engineers, inc.

150 n. harbin drive - suite 408 - stephenville, tx 76401
(254)968-6130 fax: (254)968-6134 email: ceeinc@ceeinc.org
registered firm: #F-2323

OurCommunity-Ferris WWTP OurCalling, Inc Ferris, Texas

Photos 2 - 3

Exhibit VI

000019



**Looking Downstream** 



**Looking Upstream** 

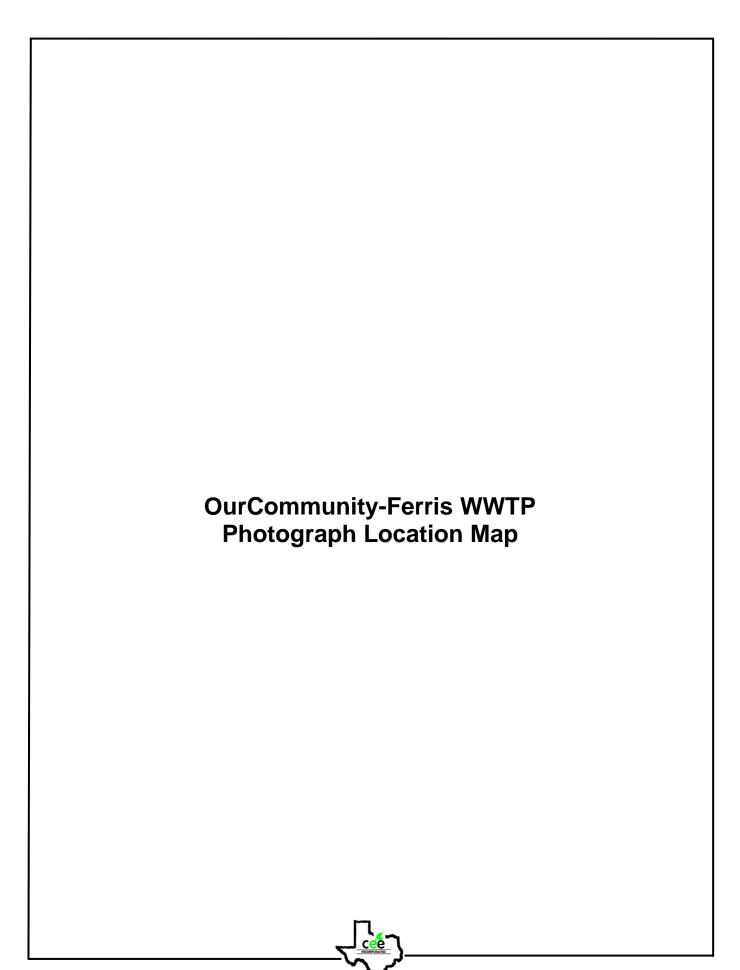
Date
November 29, 2022
Drawn By
CE
Scale

consulting environmental engineers, inc. 150 n. harbin drive - suite 408 - stephenville, tx 76401 (254)968-8130 fax: (254)968-8134 emails ceeint@ceeinc.org resultated firm: #F-2332 OurCommunity-Ferris WWTP OurCalling, Inc Ferris, Texas

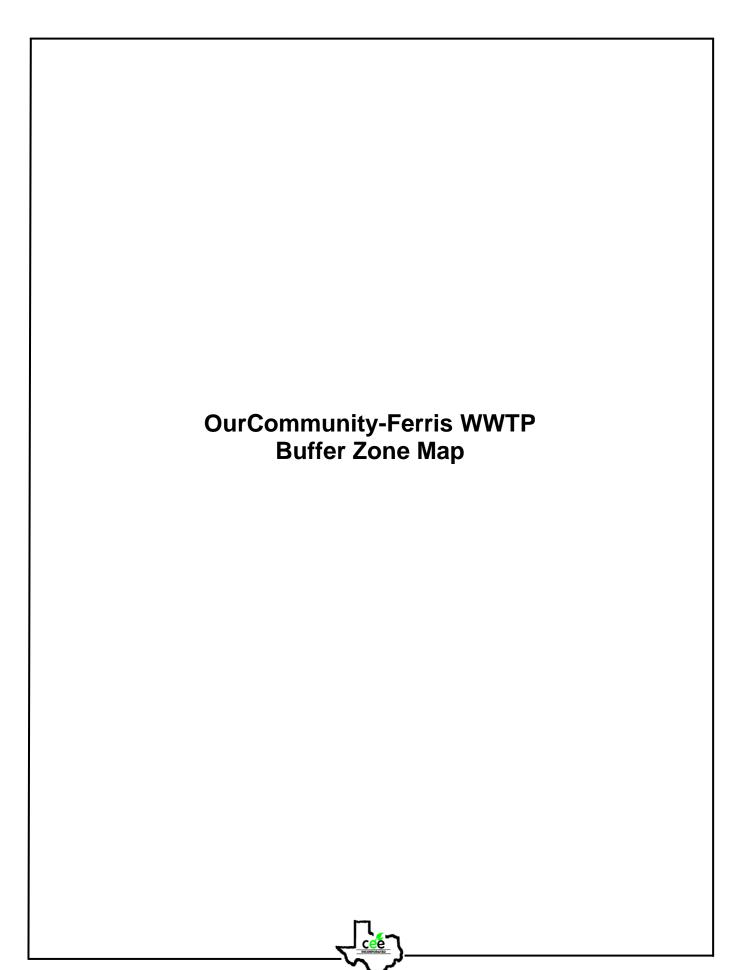
Photos 4 - 5

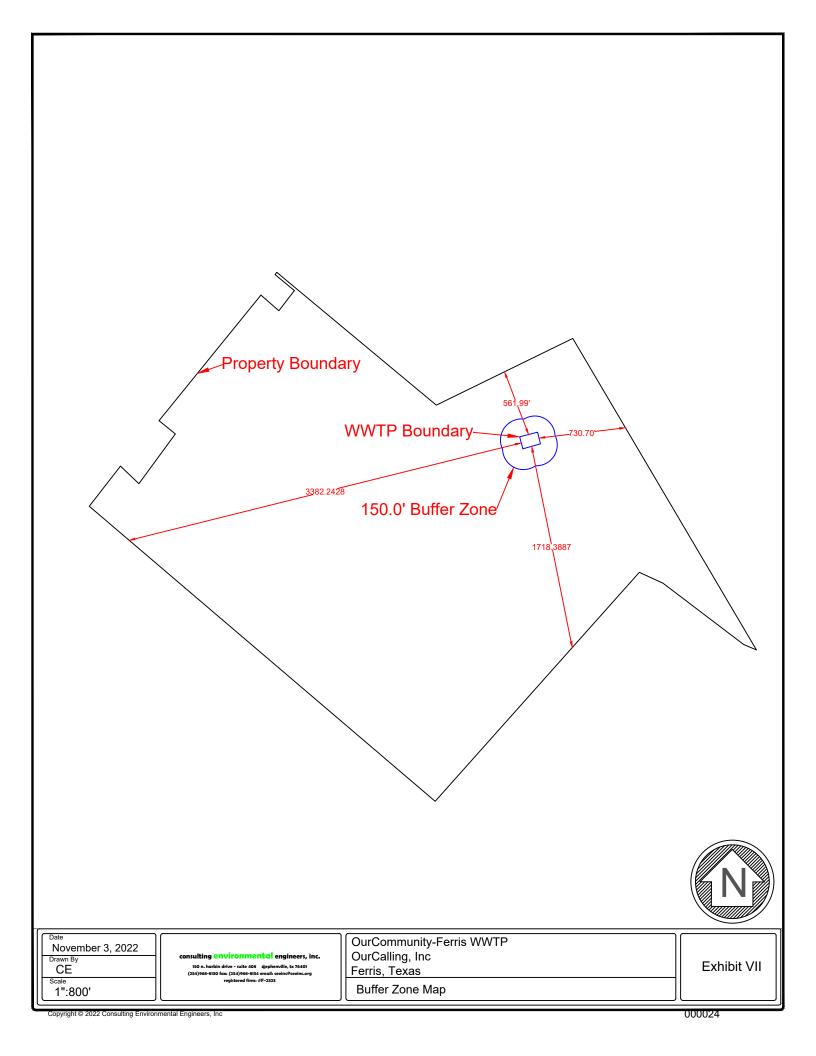
Exhibit VI

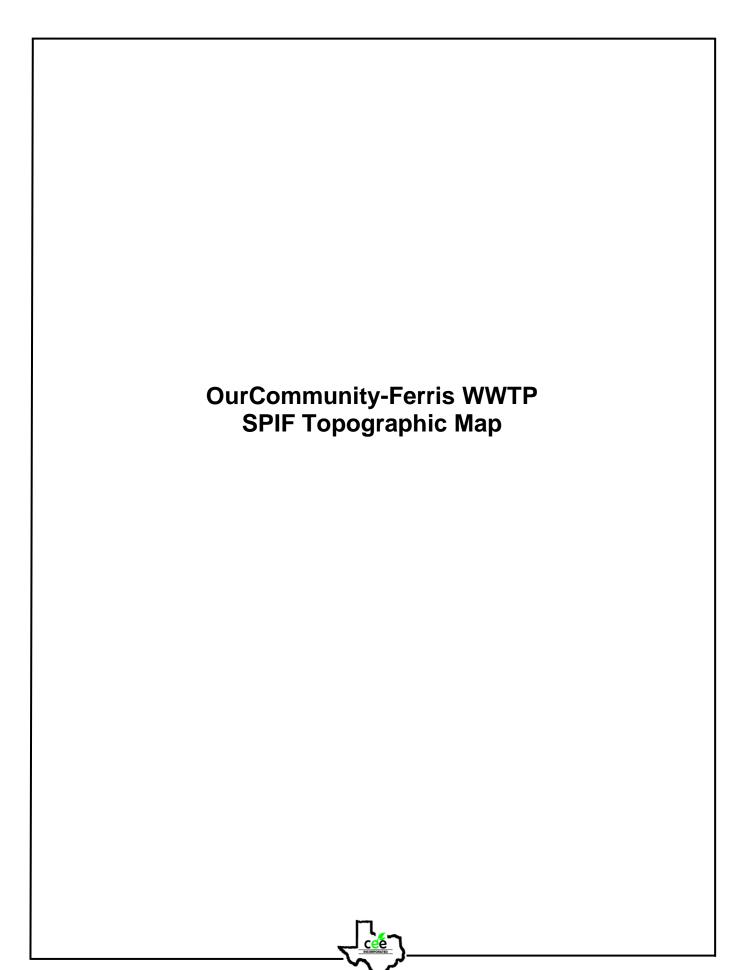
000020

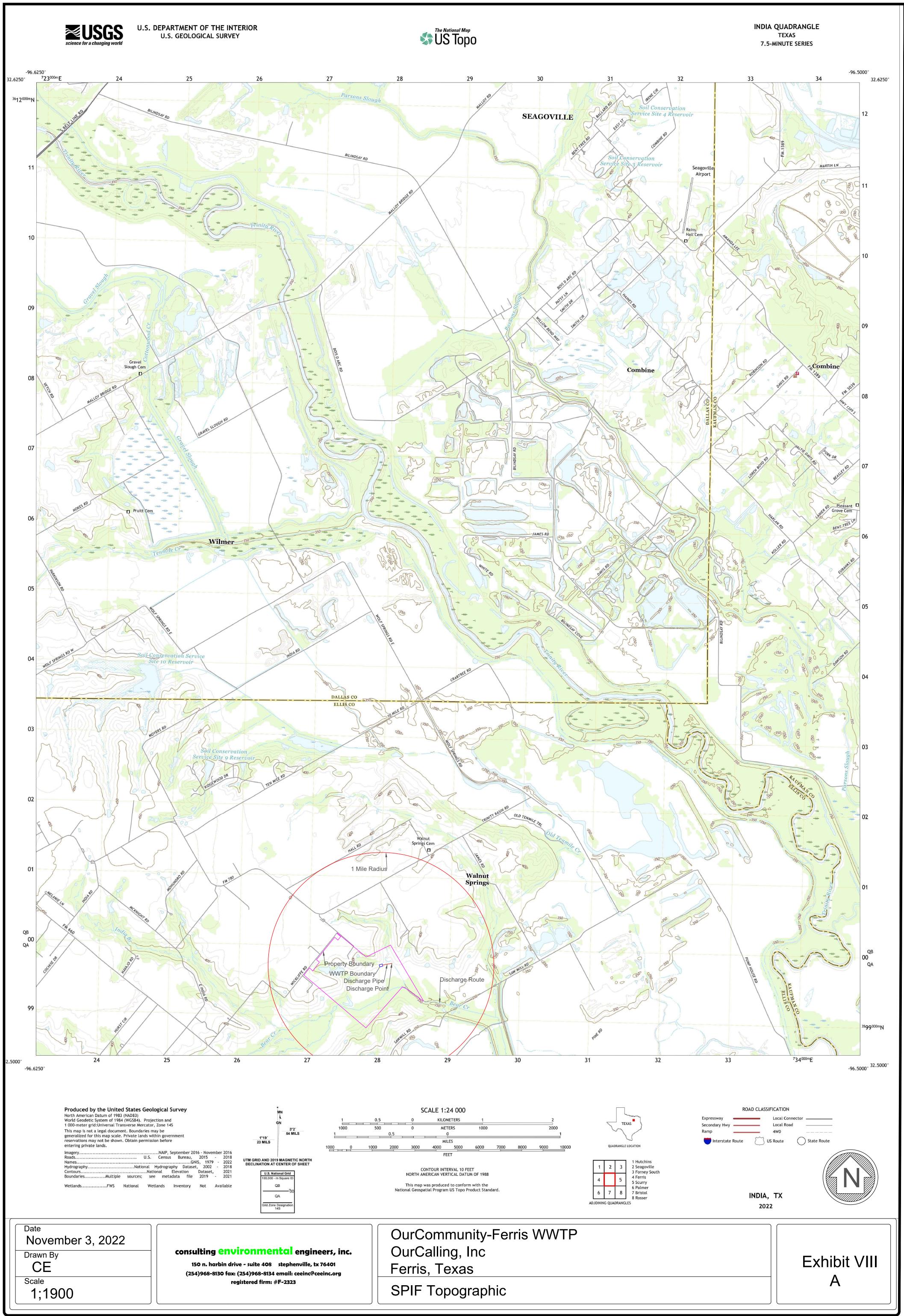


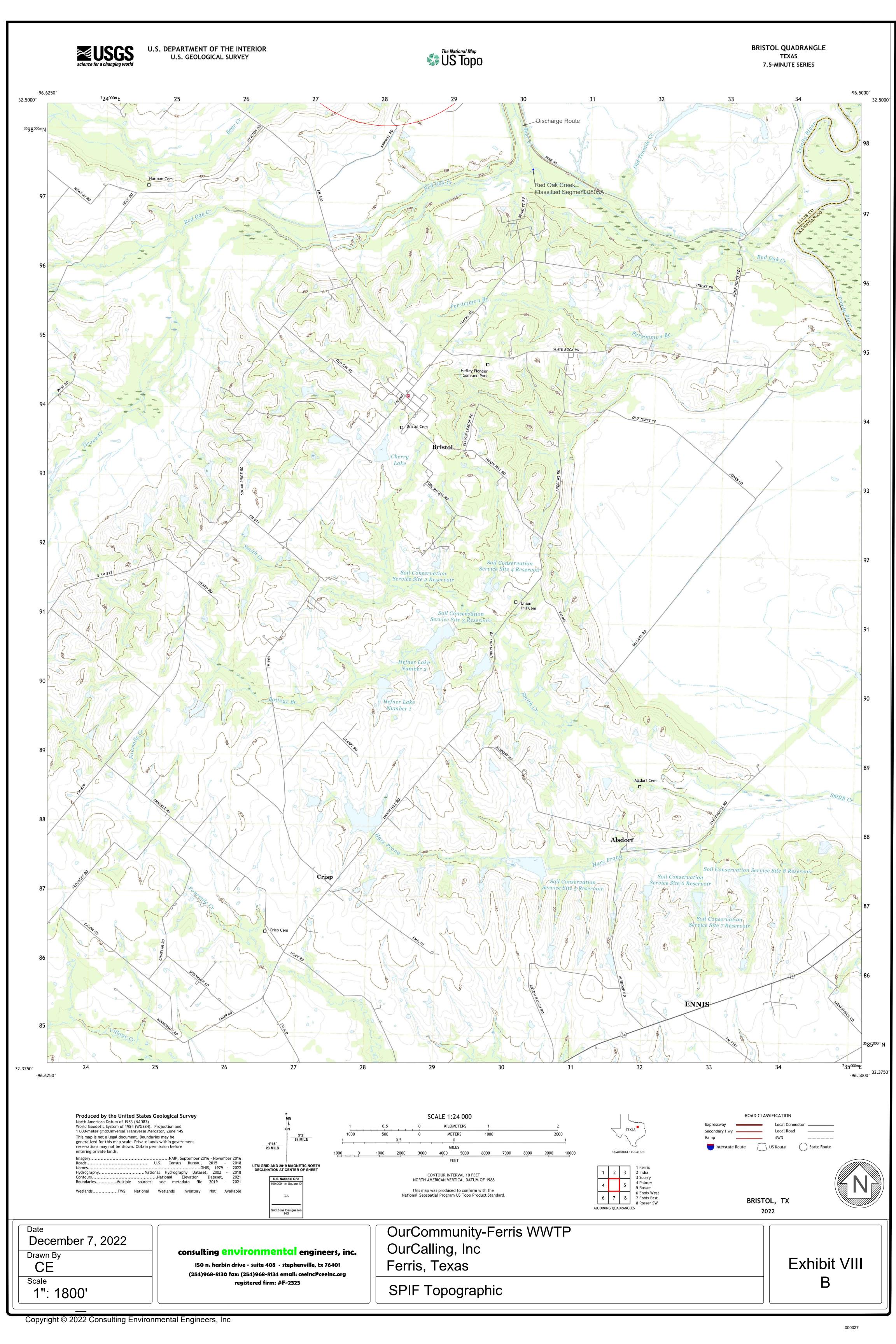


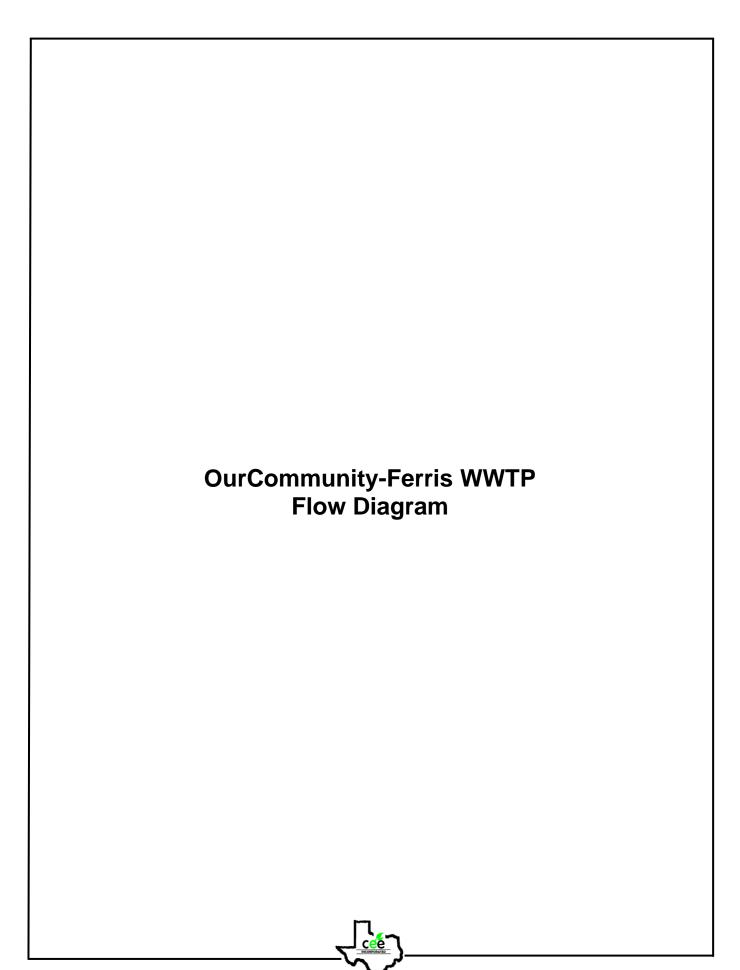


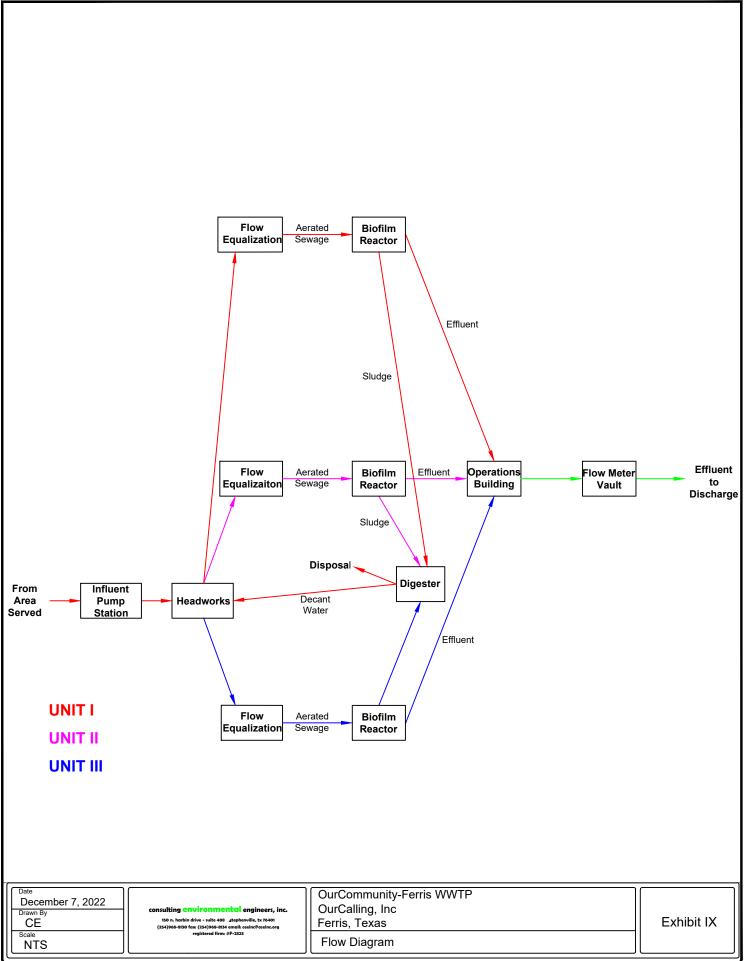


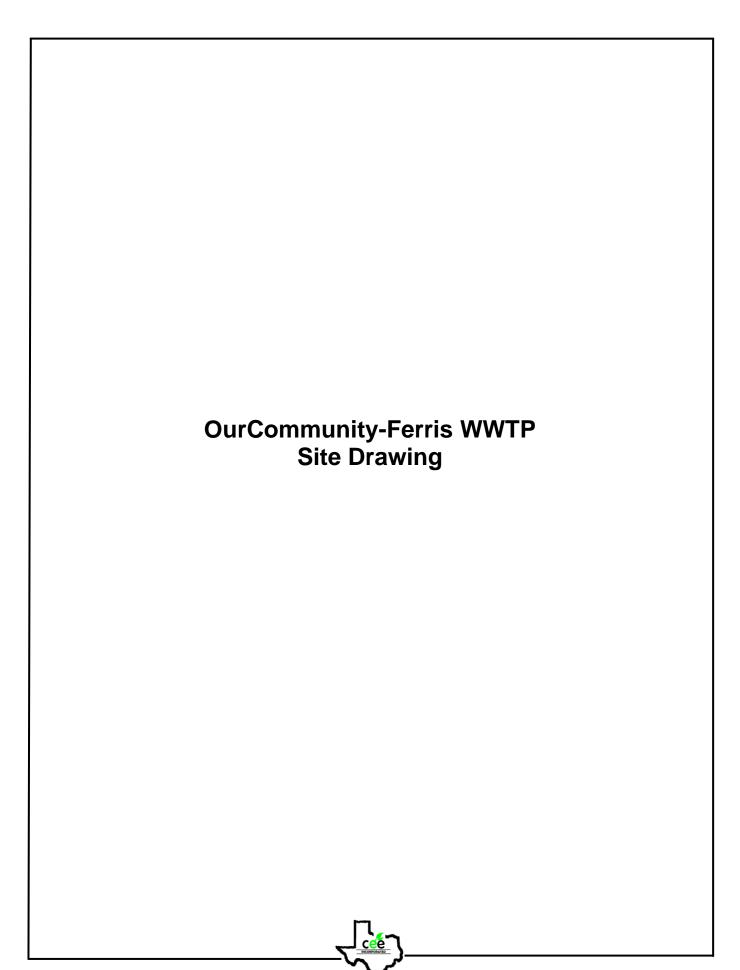


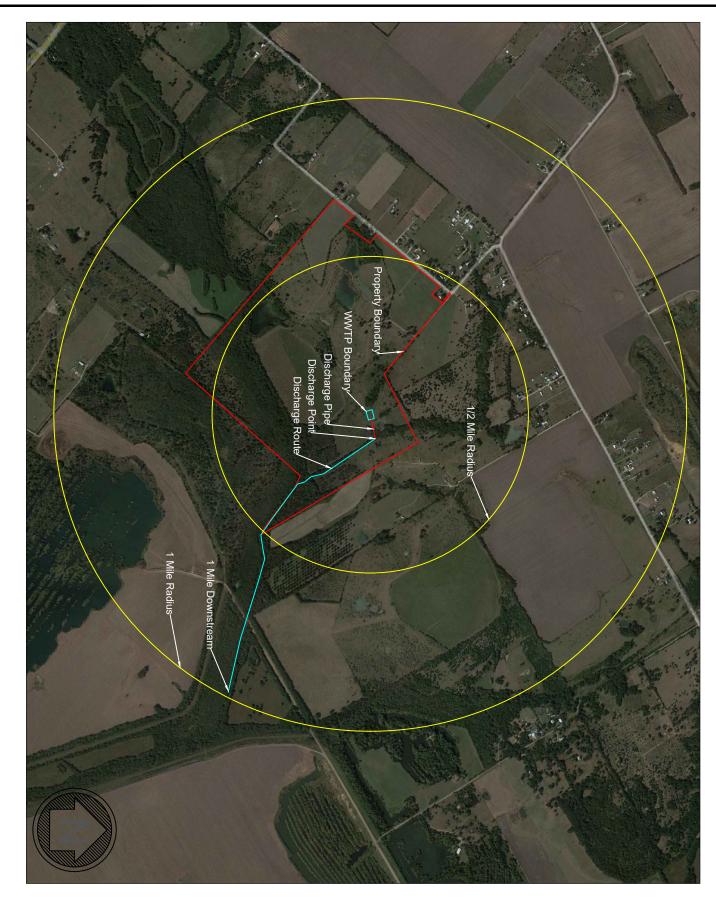










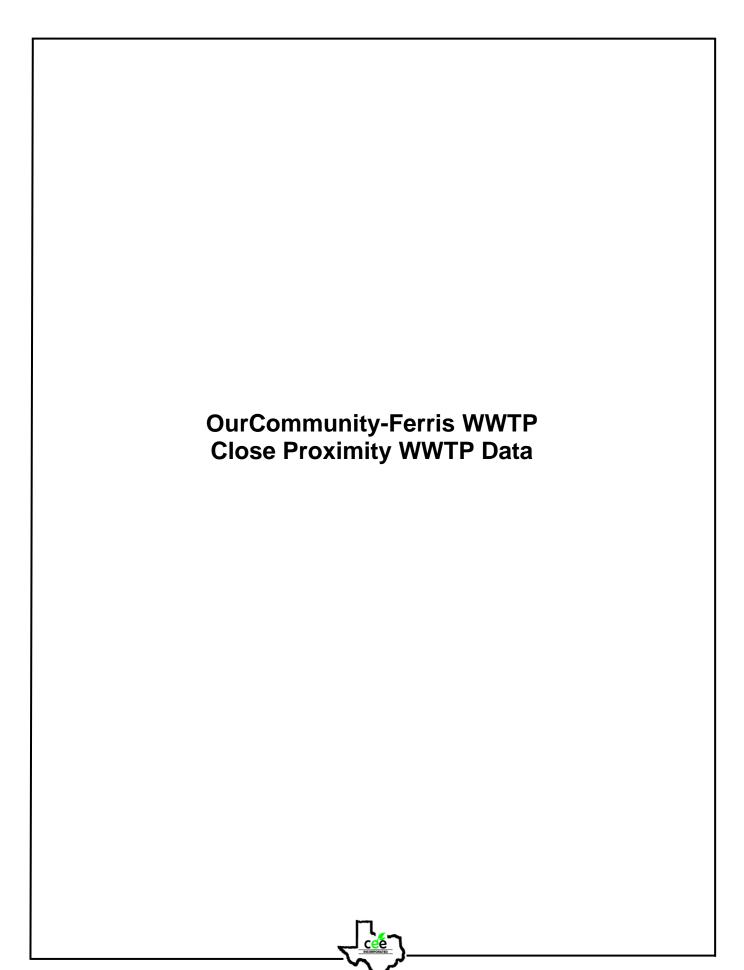


Date
November 3, 2022

Drawn By
CE
Scale
1":600'

consulting environmental engineers, inc. 150 n. harbin drive - suite 408 ptephenville, tx 76401 (254)968-9300 fax: (254)968-9334 email: ceeinc@ceeinc.org registered firm: #F-2323 OurCommunity-Ferris WWTP
OurCalling, Inc
Ferris, TX
Site Drawing

Exhibit X



## consulting environmental engineers, inc.



email: ceeinc@ceeinc.org registered firm: #F-2323

150 n. harbin drive — suite 408 • stephenville, tx 76401 phone: (254) 968-8130 fax: (254) 968-8134

### **LIST OF SEWER UTILITIES WITHIN 3 MILES** OF THE PROPOSED SERVICE AREA BOUNDARY

None

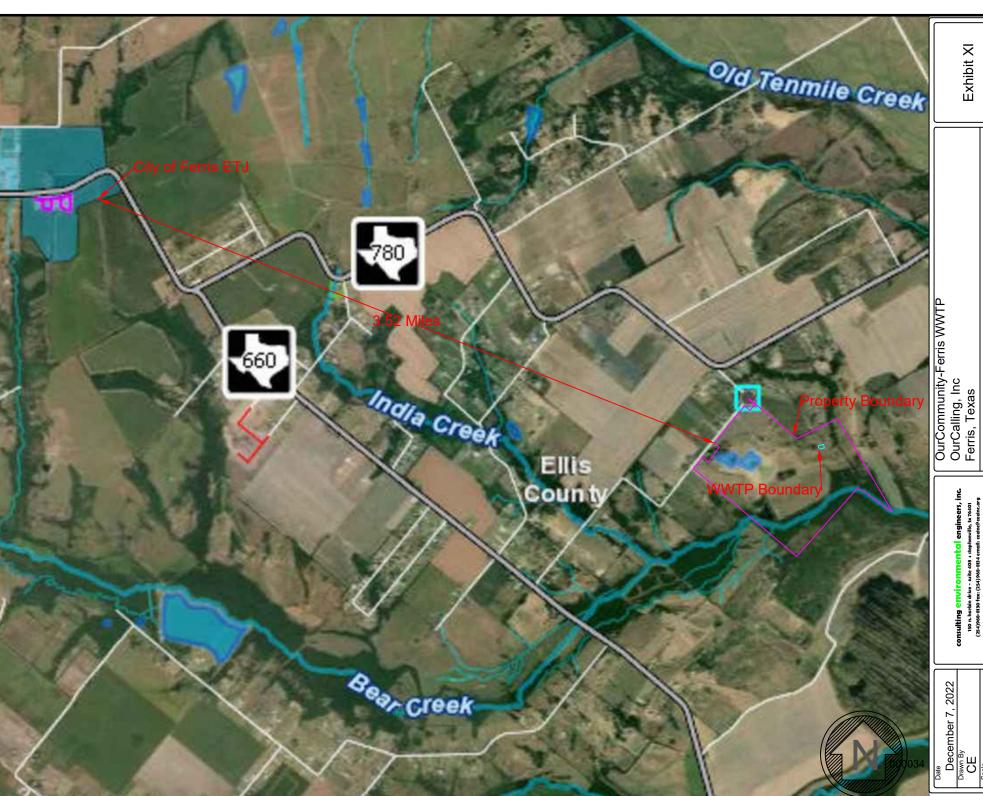
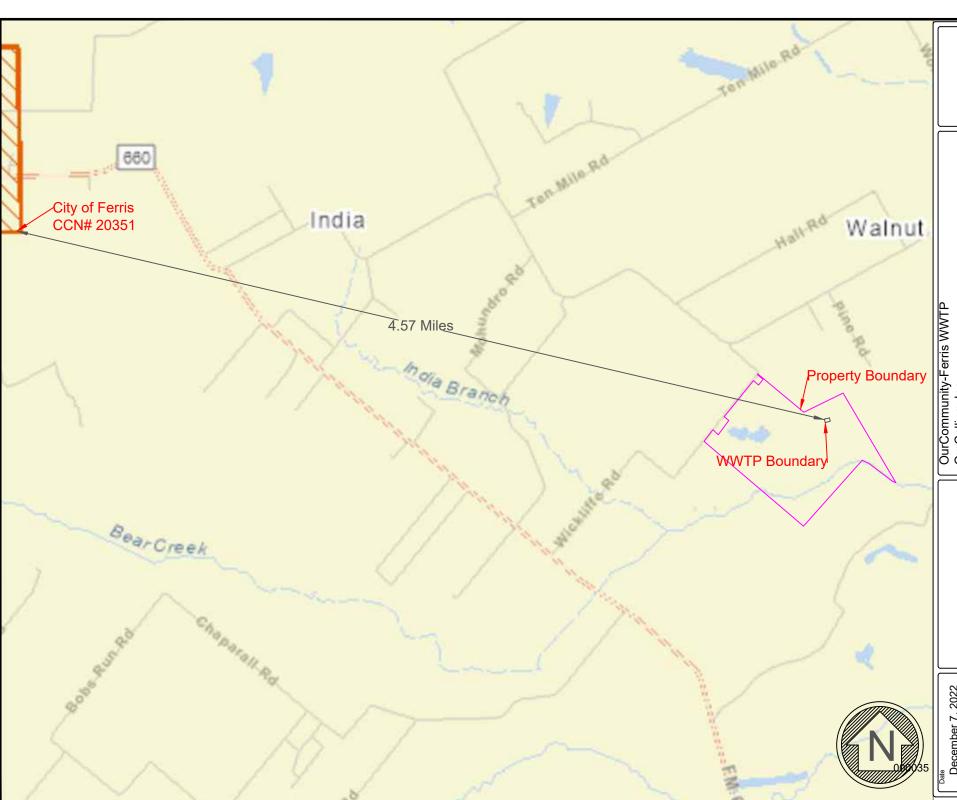


Exhibit XI

**NEARBY ETJ** 

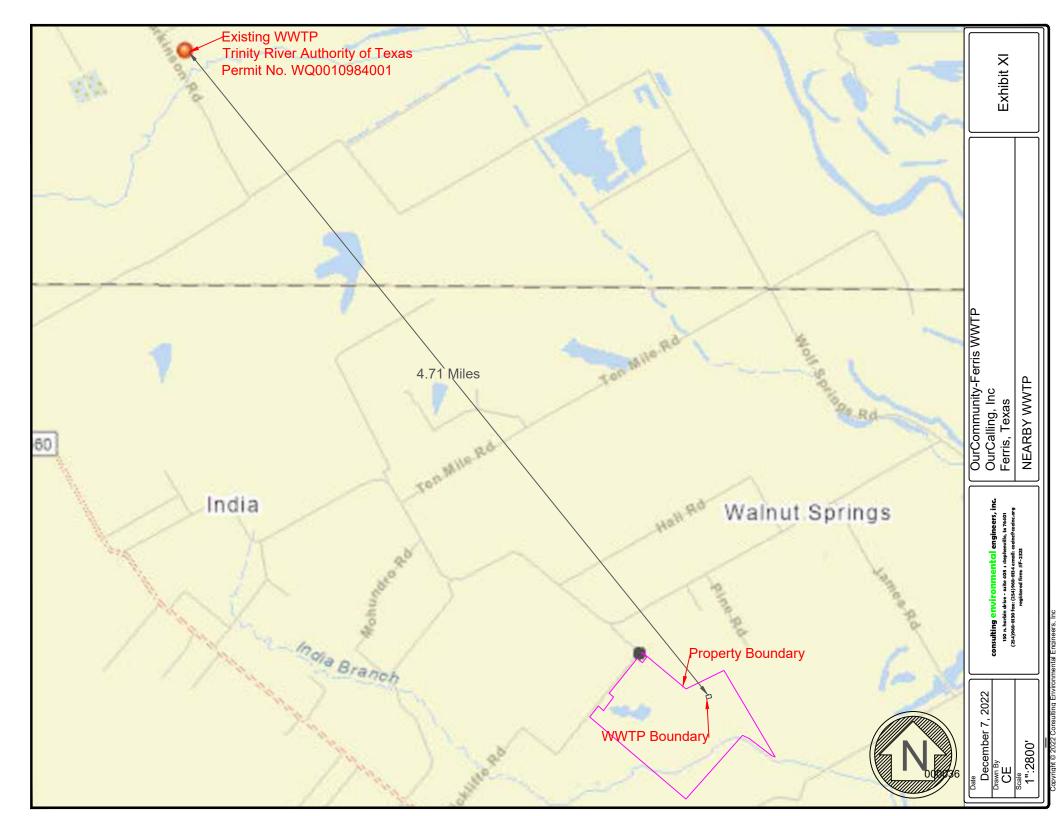
Date
December 7, 2022
Drawn By
CE
Scale
1":2800'

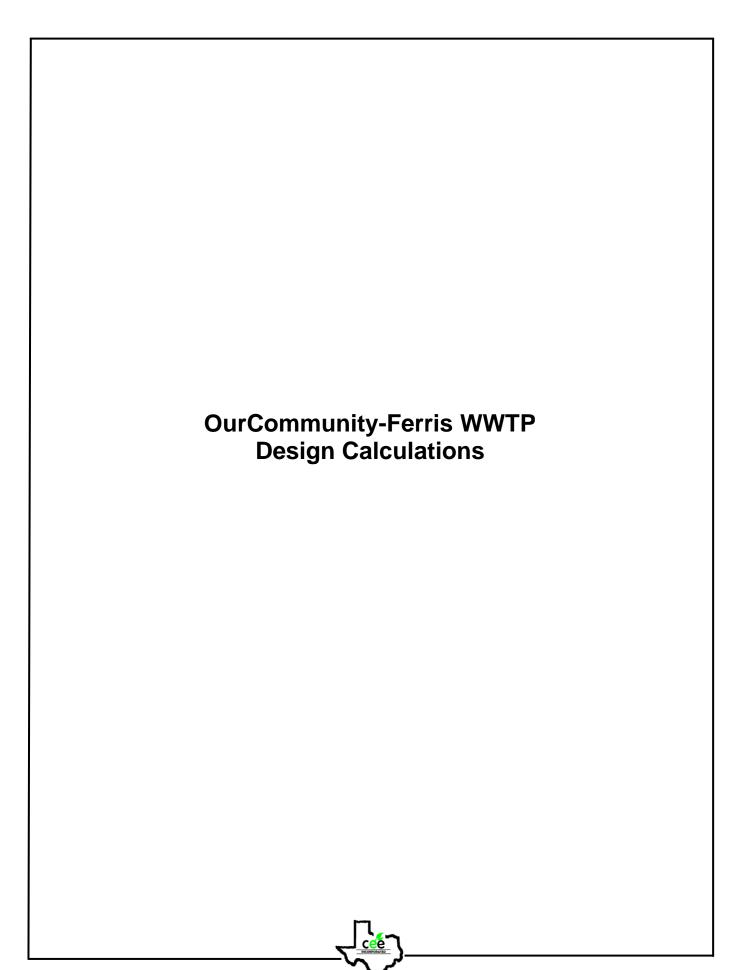


OurCommunity-Ferris WWTP OurCalling, Inc Ferris, Texas NEARBY CCN

Exhibit XI

Date
December 7, 2022
Drawn By
CE
Scale
1":2900'





#### consulting environmental engineers, inc.



150 n. harbin drive – suite 408 • stephenville, tx 76401 phone: (254) 968-8130 fax: (254) 968-8134 email: ceeinc@ceeinc.org

registered firm: #F-2323

#### Flow and BOD Calculations

Homes: 20 one person x 75 gpd + 12 two person x  $150 = 3300 \times 20 \text{ cells}$ 

= 66,000 gpd @ 300 BOD

Maintenance: 8 x 20 gpd = 160 gpd @ 300 BOD

1200 x 7 gpd = 8,400 gpd @ 1,000 BOD Cafeteria:

630 x 20 gpd = 12,600 gpd @ 300BOD Multiuse:

Church:  $710 \times 4 \text{ gpd} = 2,840 \text{ gpd} @ 300 \text{ BOD}$ 

**Total GPD:** 66,000 + 160 + 8,400 + 12,600 + 2,840 = 90,000 gpd

**Total BOD:**  $(300 \times 0.91 + 0.09 \times 1000) / 1 = 363 BOD$ 

> Total Flow: 90,000 gpd Total BOD: 363 BOD



## Wastewater Treatment Process Design Calculations

**Project Name: OurCommunity - Ferris** 

City or County: Ellis
State or Country: TX

Project Type: Domestic/Muncipal

Project Number: 22008

Date: 11/30/2022

Designed By: MJM

#### **Wastewater Treatment System Data Input Sheet** Project Name: Proposal/Project #: Designed by: OurCommunity - Ferris 22008 City/County: Project Notes: State/Country: Date: 11/30/22 Project Type: Domestic/Muncipal INSTRUCTION: Input Design Information into the following cells based upon data ght green fill indicates process calculation supplied by the consultant or other sources. Refer to data sheets and attached green fill indicates final calculation printout for final design recommendations. orange fill requires engineer evaluation Note: Red Text represents notes and instructions **Wastewater Influent Characterization** Influent Flow Rate (ADF): 90.000 GPD 340.69 Note: 1 cubic meter = 264.17 gallons M<sup>3</sup>/day 123.67 **Influent BOD** 363 mg/l lbs/day Kg/d Influent TSS 300 mg/l 102.21 225.32 lbs/day Kg/d Influent TKN 75 25.55 56.33 lbs/day mg/l Kg/d Influent Pa 12 mg/l 4.09 Kg/d 9.01 Ibs/day Influent FOG: mg/l 1.70 Kg/d 3.76 lbs/day Influent Alkalinity: 505 lbs/day mg/l 172.05 Kg/d 379.30 Influent pH: 7.50 **Project Site Elevation** 1000 (elevation above Mean Sea Level) Average Annual Air Temp: 50 °F or 10.00 °C 35.00 °C Maximum Air Temp: 95 °F or °C Minimum Air Temp: 10 °F or -12.22 **Treatment System Design Effluent Requirements** Effluent BOD: lbs/day mg/l 3.41 7.51 Kg/d Effluent TSS: mg/l 3.41 Kg/d 7.51 lbs/day **Effluent Ammonia** mg/l 3.41 Kg/d 7.51 lbs/day Effluent P: lbs/day mg/l 0.68 Kg/d Effluent FOG: 1.70 3.76 lbs/day mg/l Kg/d Effluent Alkalinity: 75 mg/l 25.55 Kg/d 56.33 lbs/day Effluent pH: Effl. Dissolved Oxygen: 6.00 mg/l 125 **Effluent Pathogen Limit:** N /100 ml **Preliminary Treatment System Sizing Input Parameters** Vessel Diameter/Type: Input # of Treatment Trains: Average Water Depth: 9.50 Is Disinfection Required? 77.58333333 Disinfection Type? UV **Water Section Area:** Ft<sup>2</sup> Chord @ Water Surface: 8.166666667 Influent Screening Proposed? **Depth Above Diffusers:** 9.00 Select Power Supply: 460 Volt 3-Phase Segment Area: 40 Chamber Type or Function: Calc Length, Ft HRT, Hours Selected Chamber Lengths Selected by the Engineer Autocalculated Entered by Engineer 0.00% % of ADF 0.00 Input Size of Primary Clarifier/Trash Tank: 0.00 0.00 Ft 100.00% % of ADE 155.09 24.00 156.00 Ft Input Size of Flow Equalization: 0.00% % of ADF 0.00 Input Size of Anoxic Bioreactor: 0.00 0.00 Ft Input Size of Aerobic Bioreactor: 40.00% % of ADF 62.03 9.60 63.00 Ft Input Secondary Clarifier HRT: Hours 25.85 4.00 48.99 Ft 4.80 Input Size of Sludge Digester: 20.00% % of ADF 31.02 30.00 Ft % of ADF Input Secondary Water Storage/Clearwell: 0.00 0.00 Ft Input Chlorine Tank Contact Time: Minutes 0.00 0.00 Theoretical Preliminary WWTP Length: 273.99 **Initial Design Length:** 309.99 References:

Metcalf & Eddy, Wastewater Engineering Treatment and Reuse, 4th Edition

Water & Wastewater Calculations Manual, Lin

WEF: Design of Municipal Wastewater Treatment Plants, Volume 2: Liquid Treatment Process, 5th Edition

WEF: Nutrient Removal

GLUMRB/10-States Standards (Lastest Edition)

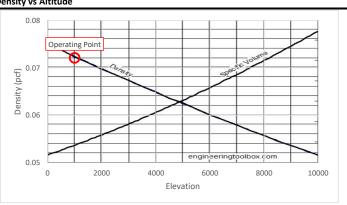
Sewage Collection and Treatment Regulations, VDH, Latest Edition

	В	ioreact	or Desi	gn		
Project Name:	OurCommunity - Ferris	Proposal/Proje	ect #:	22008	Designed by:	MJM
City/County:	Ellis	Project Notes:	Raw wastewate	er will be pumpe	ed to the WWTP	Facility and will discharge to a Side Hill
State/Country:	TX	Screening Syste	em to remove tr	rash and debris.	The Bioreactor	influent loading concentrations reflect
Date:	11/30/2022	anticipated inf	luent loading AF	FTER screening.		_
Project Type:	Domestic/Muncipal		_	_		
	Input # of Treatment Trains	: 3	Automatically	Entered from Bo	sic Data Sheet	
	Influent Daily Flow, per train		GPD or	113.56	M <sup>3</sup> /day	
	Total Market		tment Removal			
	Treatment Method		_			
	TSS Removal	75%	+			
	BOD Removal		+			
	N Removal P Removal	: 0%	+			
	WAS Pumped to the PC?		+			
	Average WAS as Q		<del>-</del>			
	Average WAS as Q		GPM			
	Average WAS hate	0.00	Igun			
	Influent BOD 272.25 mg/l	Bioreactor I	Influent Data:	68.16	lbs/day	(per train, from Data Input Sheet)
	Influent TSS 75 mg/l	8.52	Kg/d	18.78	lbs/day	(per train, from Data Input Sheet)
	Influent TKN 75.00 mg/l	8.52	Kg/d Kg/d	18.78	lbs/day	(per train, from Data Input Sheet)
	Influent P 12.00 mg/l	1.36	Kg/d Kg/d	3.00	lbs/day	(per train, from Data Input Sheet)
	Influent Alkalinity 505 mg/l	57.35	Kg/d Kg/d	126.43	lbs/day	(per train, from Data Input Sheet)
	Elevation above Sea Level		Feet	120.43	ibs/uay	(per train, from Data input Sileet)
			F			
	Avg Ambient Air Temperature		-	63.00		
	Initial Aerobic Bioreactor Tank Volume	40.00%	% ADF or	63.00	ft	
		Nutrient Ra	tio Evaluation			
	Req'd Nutrient Ratio	: <b>100:5:1</b>				
	Input BOD Ratio	100.00				
	Input N Ratio	5.00				
	Input P Ratio	1.00				
	Bioreactor Influent BOD	272.25	mg/l			
	Minimum Req'd Influent N	13.61	mg/l	Sufficient Niti	ogenDesign is	OK
	Minimum Req'd Phosphorous	2.72	mg/l	Sufficient Pho	sphorousDesi	gn is OK
		Target Effluen	nt Requirements	<b>.</b>		
	Efflluent BOD	_	mg/l	(from Data In	out Sheet)	
	Effluent TSS		mg/l	(from Data In		
	Effluent Ammonia		mg/l	(from Data In	•	
	Effluent F		mg/l	(from Data In	•	
	Effluent Alkalinity		mg/l	(from Data In		
			_		put onect)	
Chan 1. Calanta		ctor Aeration &		irements		
Step 1: Calculate	the total Oxygen required for complete BOD Remove 68.16   Ibs BOD x	<u>11 &amp; Nitrification:</u> 1.1	lbs of $O_2$ =	74.98	lbs of O <sub>2</sub>	
			-			
	18.78   lbs N x	4.57	lbs of $O_2$ =	85.81	lbs of O <sub>2</sub>	
	the Alkalinity Consumed during the Nitrification proc		T 11 81	424.07	Un a Allen Berlin in e	((0)
7.14	lbs Alkalinity (as CaCO <sub>3</sub> ) x	18.78	lbs N =	134.07	lbs Alkalinity (	as CaCO <sub>3</sub> )
	he total Oxygen recovered during the Denitrification					
	itrification, the falcultative biomass will cleave Nitra					
2.86	lbs of $O_2$ x	53.70		imed in the Ano	xic reactor	
	the Alkalinity recovered during Denitrification & Alka				Un a Allen Berlin in d	((0)
3.57	lbs Alkalinity (as CaCO <sub>3</sub> ) x lculated Residual Effluent Alkalinity: 59.40	18.78	lbs N =	67.03	lbs Alkalinity (	as CaCO <sub>3</sub> )
Ca		lbs Alkalinity (a				
	or 237.25	mg/l	Design is OK			
ī						

#### **Bioreactor Design** Aeration System Design Site Elevation: 1000 Peaking Factor for Aeration: from Basic Input Data Sheet Air Density at Design Elevation: 0.0721 lbs/Ft<sup>3</sup> (from Chart Below) OTE Increase Factor for MBBR: 1.00 Percentage of Oxygen by Weight in Air: 21.00% (from Metcalf & Eddy) (from diffuser manufacturer charts) Oxygen Transfer Efficiency: 7.71% Fouling Factor: 0.90 (from diffuser manufacturer) 7.71% Calculated OTE: Theoretical Air = Pounds of $O_2$ / (Weight of Air x Percentage of $O_2$ in Air) Iteration Solver Ratio: 1.00 **BOD** removal **BOD removal & Nitrification BOD removal & Denitrification** Ft<sup>3</sup> / Day 4,955.01 Ft<sup>3</sup> / Day 10,626.04 Ft<sup>3</sup> / Day 7,076.99 3.44 CFM 7.38 4.91 CFM <u> Step 5: Calculate air required at the noted Oxygen Transfer Efficiency & Fouling Factor</u> 70.86 CFM 49.61 CFM 106.39 CFM Step 6: Calculate Air required with a Peaking Factor BOD removal BOD removal & Nitrification BOD removal & Denitrification Air = 86.82 CFM Air = 186.18 Air = 124.00

#### Air Density vs Altitude

Elevation	Density	S.V.
ft	lbs/Ft <sup>3</sup>	Ft <sup>3/</sup> lb
0	0.075	13.4
1000	0.072	13.85
2000	0.0695	14.4
3000	0.067	14.9
4000	0.065	15.5
5000	0.063	16
6000	0.06	16.7
7000	0.058	17.3
8000	0.0555	18
9000	0.0535	18.7
10000	0.0515	19.4



	Diffuser Selec	tion and Design			
Select Removal Required:	BOD removal &	Nitrification			
Airflow Requirement:		CFM			_
Select Diffuser:	MaxAir 12" SS V	N/ Deflector			
Est. # of Diffusers Req'd:	24				
Selected # of Diffusers:	36	Within Operating R	ange		<u> </u>
Flow per Diffuser:	5.17	CFM	Minimum:	3.0	Maximum: 18.0
	MBBR	Design			
Input Desired MBBR HRT:	12.00	hours			
Minimum Chamber Length:	25.85	ft			
Input Desired Chamber Length:	63	ft			<u>_</u>
Calculated Chamber Volume:	36560	gallons	or	29.25	hours HRT
MBBR Protected Surface Area	370.00	$m^2/m^3$			_
Input Desired BOD <sub>5</sub> Loading Rate:	3.00	g/m²-d			
Required media volume for BOD removal:	27.85	m <sup>3</sup>			
Calculated TKN SALR rate:	0.83	g/m²-d			
Corresponding fixed film media volume:	983.24	ft <sup>3</sup>	or	20.12%	Fill Fraction for Bioreactor
MBBR media liquid displacement value:	0.0725				_
Net liquid fill volume with media fill:	36027	gallons			
F/M Ratio and Sludge Wa	sting/Managen	nent Plan (Activated	Sludge Syste	em ONLY)	
Input Operational MLSS Concentration:	3000	mg/L			
Ratio of MLVSS to MLSS:	0.75				
MLVSS Concentration:	2250.00	mg/L			
Lbs MLVSS in Bioreactor:	686.06	lbs			

F/M Ratio:

Input Desired MCRT:

Input Operational Secondary Sludge Concentration:

Time to Fill Sludge Digester @ 100% ADF:

WAS Wasting Rate:

WAS Wasting Rate:

Sludge Storage Volume:

0.10

25

27.44

7500

17409.70

39.68

days

lbs/day

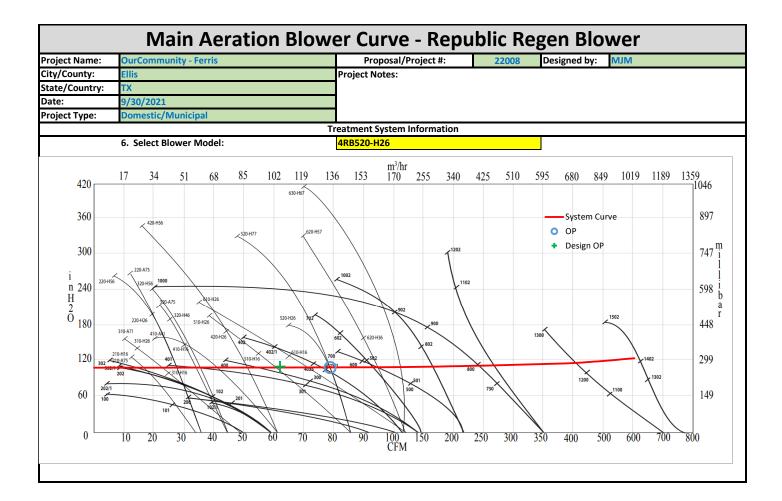
mg/L

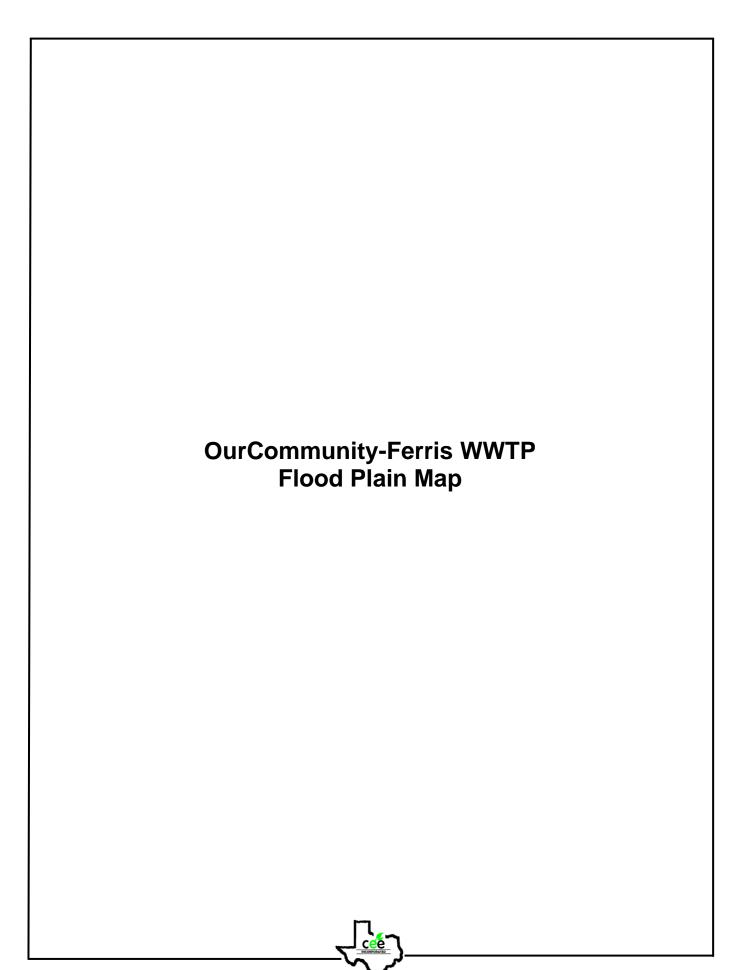
gallons

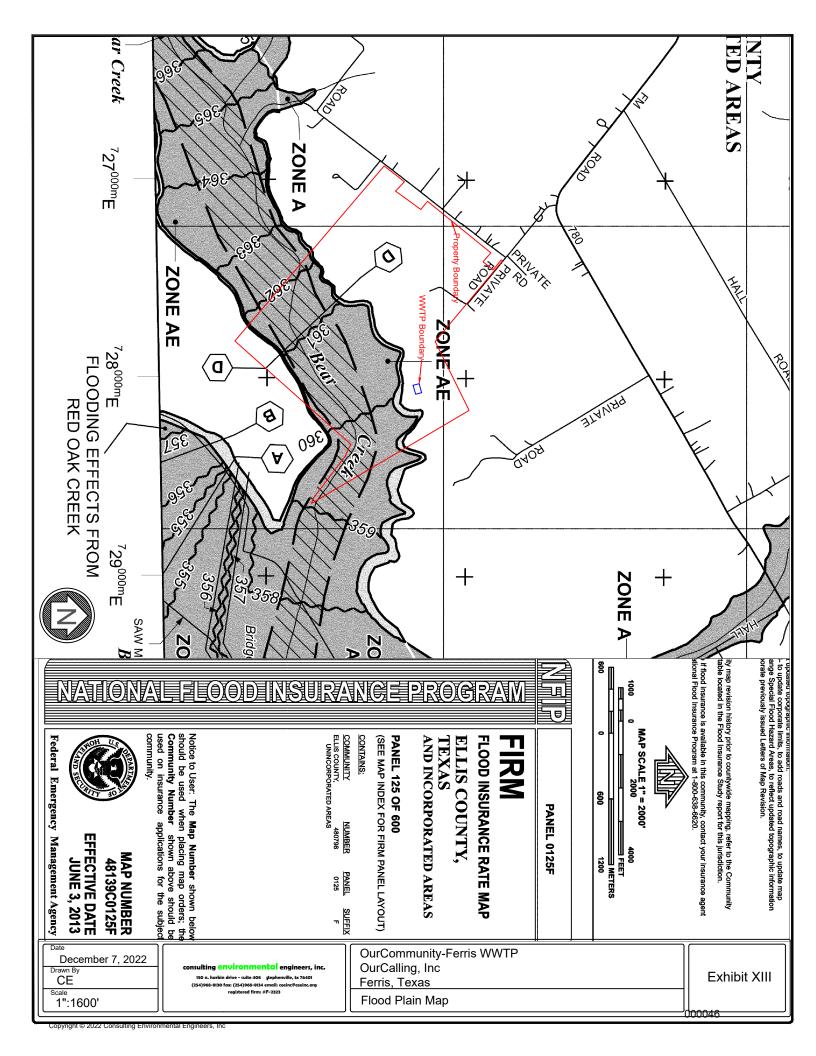
gpd

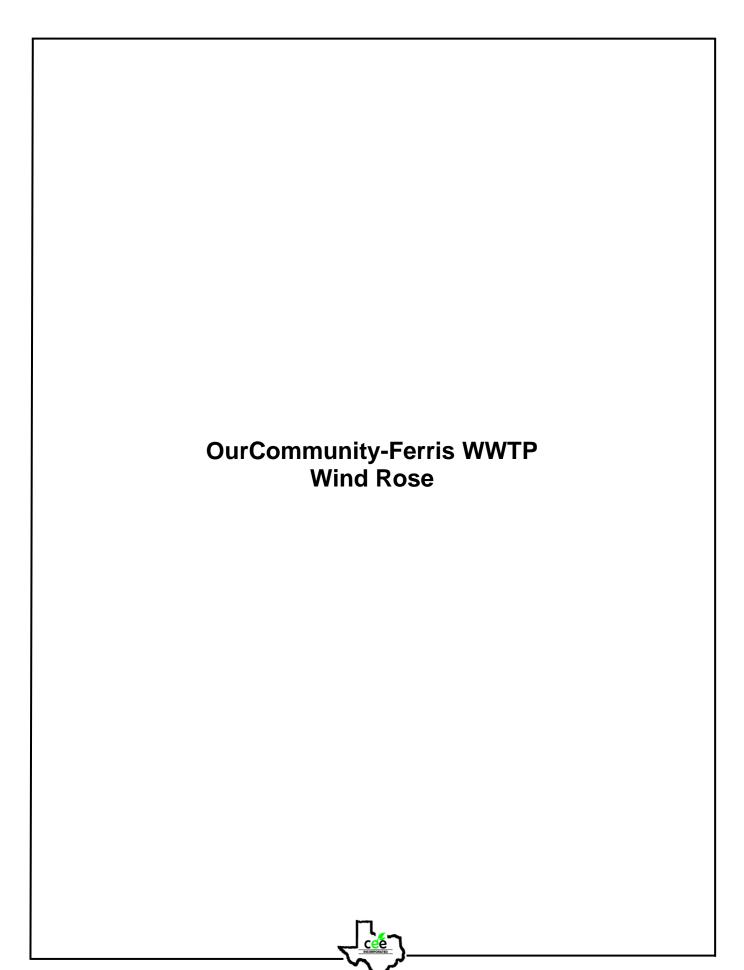
days

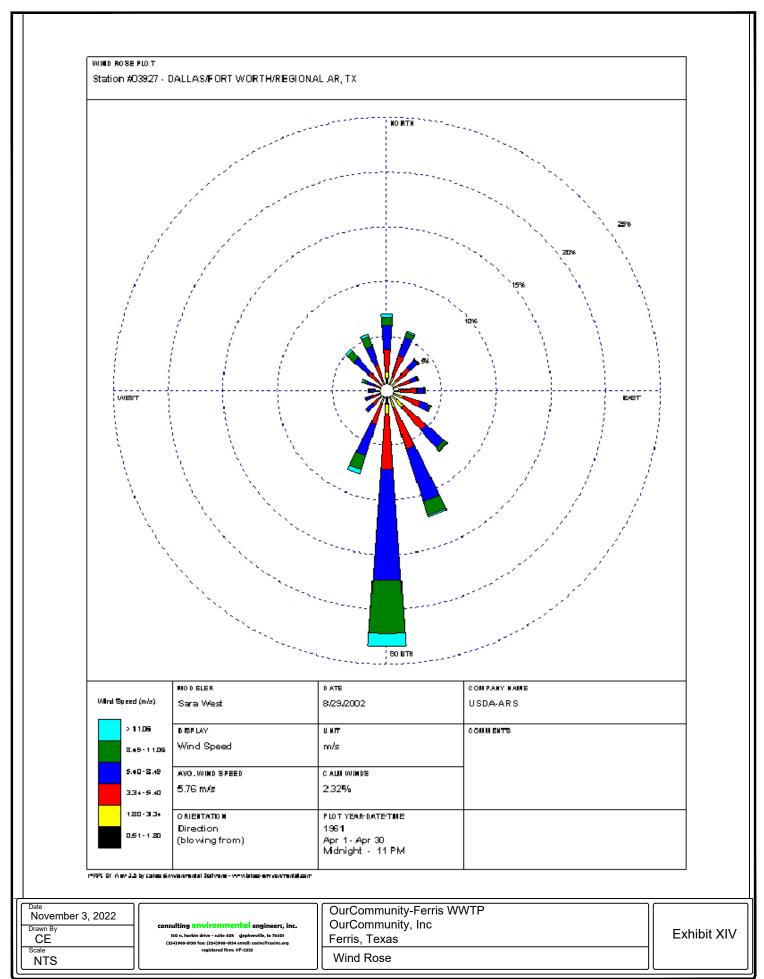
Rio	reactor A	aratio	n Syste	m Cur	νο Δna	lycic &	Fauin	mont 9	Salactic	'n
Dioi	eactor A	Ciatio	ii Syste	iii Cui	ve Alla	ilysis &	Lquip	ment 3	PEIECUIC	<b>/</b> 11
Project Name:	OurCommunity - F	erris		Proposal/Pro	iect #:	22008	Designed By:	MJM		
City/County:	Ellis			Project Notes						
State/Country:	TX			.,						
Date:	11/30/2022									
Project Type:	Domestic/Muncipa	al								
1. Input Aeration F	Piping System Geor	netry			2. Input Air a	nd Pipe Proper	ties			
Input	: Aeration Pipe Dia:	4	inches					•		
	Aeration Pipe Dia:	0.33	ft			Air Density	0.002373	slugs/ft <sup>3</sup>		
A	Aeration Pipe Area:	0.0873	ft <sup>2</sup>		Air	Fluid Viscosity	0.000000375	lbs-s/ft <sup>2</sup>		
Input Ae	ration Pipe Length:	50	ft		Pipe I	Roughness, <b>e</b> =	0.0005	ft		
Diff	fuser Water Depth:	108.00	inches		ļ					
	Selected Diffuser:									
	Flow Requirement:	186.18	CFM							
Sele	cted # of Diffusers:	36								
	Flow per Diffuser:	5.17	CFM							
	Diffuser Headloss:	1.62	inches							
	Auxiliary Air Flow:	0	CFM							
Total	Air Flow Required:	186.18	CFM							
3. Aeration Systen	o Curve Matrix				L					
3. Aciation system	I cui ve iviati ix		<u> </u>	Transition	Repeat calc		1			
		Friction	Revnolds	Region	of f using	Repeat again	Frictional	Frictional	Diffuser	System
Air Flow Q (CFM)	Velocity (FPS)	Factor, f =	number, R <sub>e</sub> =	Friction	new value of	if necessary:	Head Loss, h	Pressure	Headloss	Pressure
				Factor, f:	f:	necessary.		Drop, <b>DP</b> <sub>f</sub>	(inches H <sub>2</sub> 0)	(inches H <sub>2</sub> 0)
0	0.00	0.02170	4	0.6374	21.6505	0.3289	0.0	0.00	0.48	108.48
19	3.63	0.02170	7,654	0.0376	0.0349	0.0352	1.1	0.00	0.57	108.59
39	7.45	0.02170	15,712	0.0313	0.0301	0.0302	3.9	0.00	0.67	108.73
58	11.08	0.02170	23,366	0.0288	0.0281	0.0281	8.1	0.00	0.77	108.89
78	14.90	0.02170	31,423	0.0273	0.0268	0.0269	13.9	0.01	0.88	109.09
97	18.53	0.02170	39,078	0.0264	0.0261	0.0261	20.9	0.01	1.00	109.31
117	22.35	0.02170	47,135	0.0258	0.0255	0.0255	29.7	0.02	1.13	109.56
136	25.97	0.02170	54,790	0.0253	0.0251	0.0251	39.4	0.02	1.25	109.83
156	29.79	0.02170	62,847	0.0249	0.0247	0.0247	51.1	0.03	1.39	110.14
175	33.42	0.02170	70,501	0.0246	0.0244	0.0244	63.6	0.03	1.53	110.47
194	37.05	0.02170	78,156	0.0243	0.0242	0.0242	77.5	0.04	1.68	110.82
214	40.87	0.02170	86,213	0.0241	0.0240	0.0240	93.5	0.05	1.84	111.21
233	44.50	0.02170	93,868	0.0239	0.0238	0.0238	110.1	0.06	1.99	111.61
253	48.32	0.02170	101,925	0.0238	0.0237	0.0237	129.0	0.07	2.17	112.06
272	51.95	0.02170	109,579	0.0237	0.0236	0.0236	148.4	0.08	2.34	112.52
292	55.77	0.02170	117,637	0.0235	0.0235	0.0235	170.2	0.09	2.52	113.03
311	59.40	0.02170	125,291	0.0234	0.0234	0.0234	192.3	0.10	2.71	113.53
330	63.03	0.02170	132,945	0.0233	0.0233	0.0233	215.7	0.11	2.90	114.07
350	66.85	0.02170	141,003	0.0233	0.0232	0.0232	241.8	0.13	3.10	114.66
369	70.48	0.02170	148,657	0.0232	0.0231	0.0231	267.9	0.14	3.31	115.24
389	74.30	0.02170	156,714	0.0231	0.0231	0.0231	296.9	0.16	3.53	115.89
408	77.92	0.02170	164,369	0.0231	0.0230	0.0230	325.8	0.17	3.74	116.53
428	81.74	0.02170	172,426	0.0230	0.0230	0.0230	357.7	0.19	3.97	117.23
447	85.37	0.02170	180,081	0.0229	0.0229	0.0229	389.3	0.21	4.20	117.92
467	89.19	0.02170	188,138	0.0229	0.0229	0.0229	424.1	0.22	4.45	118.68
486 505	92.82	0.02170	195,792	0.0229 0.0228	0.0228 0.0228	0.0228	458.5 494.2	0.24	4.69 4.94	119.43 120.20
505	96.45	0.02170	203,447	0.0000	0.0007	0.0228	500.0	0.00	F 20	404.04
525	100.27	0.02170	211,504	0.0228	0.0227	0.0227	533.2	0.28	5.20	121.04
564	103.90	0.02170	219,138	0.0227	0.0227	0.0227	613.6	0.30	5.74	122.76
583	111.35	0.02170	234,870	0.0227	0.0227	0.0227	654.8	0.35	6.01	123.64
603	115.17	0.02170	242,928	0.0227	0.0226	0.0226	699.6	0.37	6.31	124.59
4. Design Air Flow										
Q (CFM)	Vel (FPS)	f	R <sub>e</sub>	f	f	f	hL	dP <sub>f</sub>		Pressure
186.18	35.56	0.02170	75,005	0.0244	0.0243	0.0243	71.6	0.04	1.62	110.67
					•					
5. Select a Blower	capable of		62.06	cfm @	110.67	In of H₂O		System Pro	essure is OK	
	(based upon numb	er of blowers b	elow)							
				Blow	er Selection					
6. Select Blower Ty	ype:		Republic Rege	n						
6. Select Blower N			4RB520-H26			N	Nax HP Rating:	3.41	HP	
7. Blower Quantity			1		8. Standby Bl	ower Required	1?	Yes		
9. Actual Operatin	g Point with Select	ed Blower(s):								
Q (CFM)	Vel (FPS)	f	R <sub>e</sub>	f	f	f	hL	dP <sub>f</sub>		Pressure
78.79	15.05	0.02170	31,742	0.0273	0.0268	0.0268	14.2	0.01	0.89	109.10
10. Check aeration				1						
	Operating	g Point with Se		78.79	CFM	Diffuser Air Fl	ow (less Aux Fl	ow)	78.79	CFM
			eded Diffusers:	12		Company of				
_	- 6 - 6 - 7 - 1		w per Diffuser:	6.57	CFM	Within Opera	ting Range		1	
OTE	for Selected # of D		_	7.84%						
			Fouling Factor:	0.90	CENA	adiust-Jr -	TEander "	Foots:		
			gen Provided:	5.56	CFM	adjusted for O	TE and Fouling	ractor		
			gen Required:	7.38	CFM	Docinad Dr. 1:	+ Mot		1	
Peaking Factor Provided:				0.75	J	Desired PF No	riviet		J	

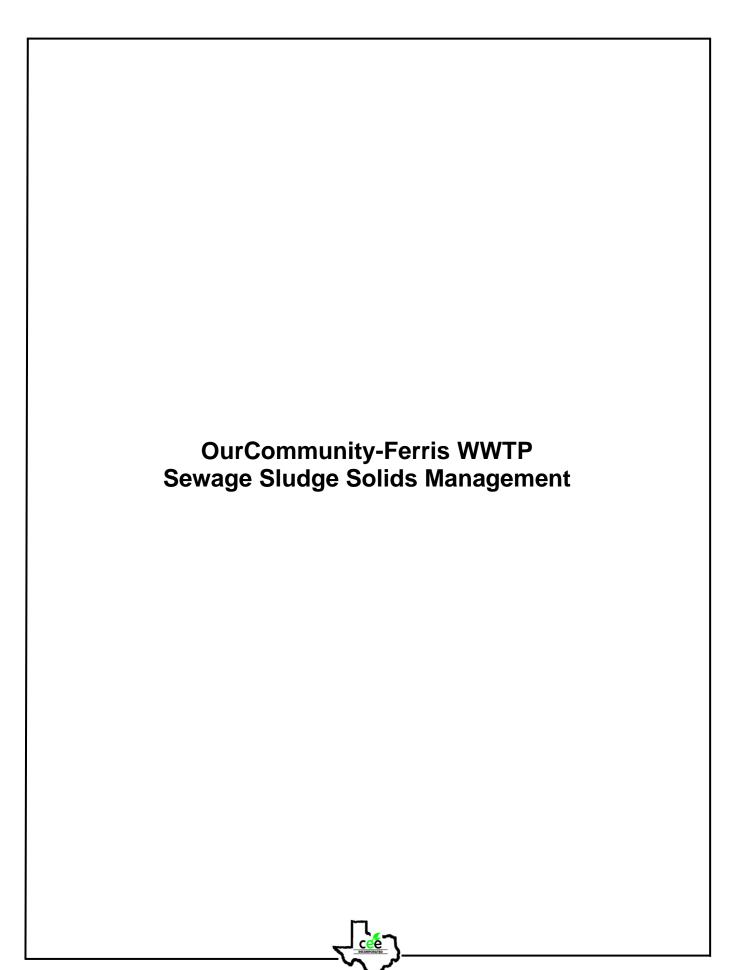






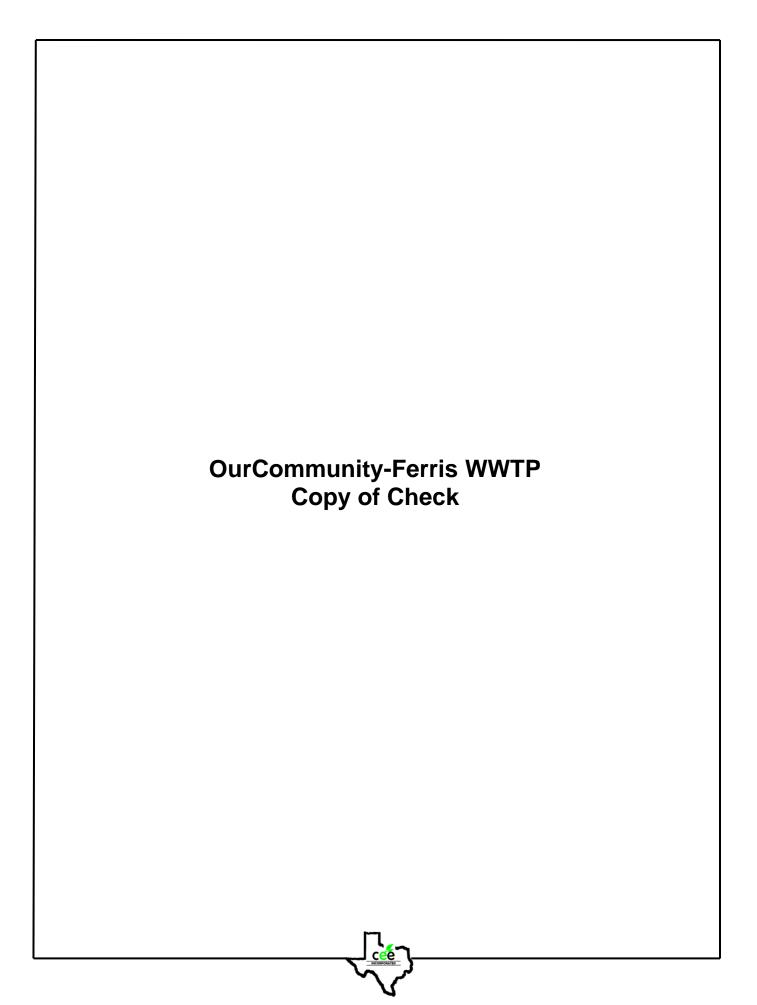




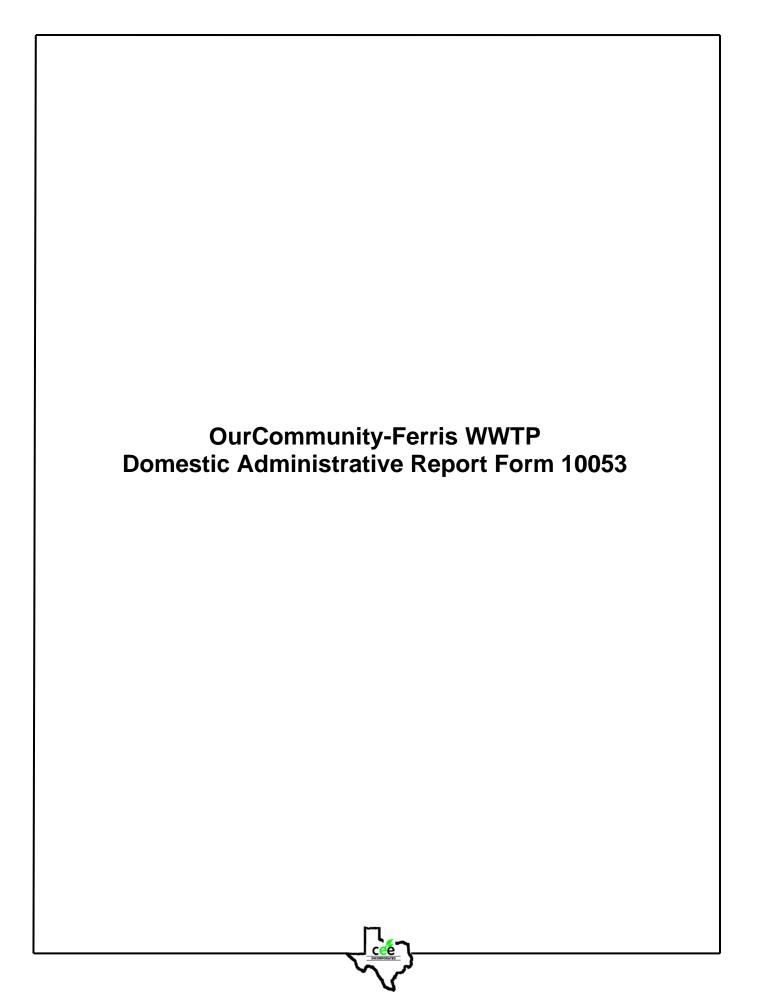


Project Name:	OurCommunity - Ferris		Proposal/Proj	ect #:	22008	Designed by:	MJM
City/County:	Ellis		Project Notes:				
State/Country:	TX						
Date:	11/30/2022						
roject Type:	Domestic/Muncipal						
	Input # of Tre	atment Trains:	3	Automatically I	Entered from Ba	sic Data Sheet	
	Influent Daily	Flow, per train:	30,000	GPD or	113.56	M <sup>3</sup> /day	
				ment Plan (Activ	ated Sludge Sys	tem ONLY)	
	Input Operational MLSS			mg/L			
		ALVSS to MLSS:					
		Concentration:		mg/L			
	Lbs MLVS	S in Bioreactor:		lbs			
		F/M Ratio:		<u>.</u>			
		Desired MCRT:		days			
		Wasting Rate:		lbs/day			
Input Operational Secondary Sludge Concentration: WAS Wasting Rate:			mg/L				
		orage Volume:		gpd			
	Time to Fill Sludge Digeste	-		gallons days			
	Time to thi Sladge Digeste	1 @ 10070 ADI .	33.08	uays			
	Solids Generated	100% flow	75% flow	50% flow	25% flow		
	Pounds Influent BOD5	78.41	58.80	39.20	19.60		
Pou	nds of Digested Dry Sludge produced	27.44	20.58	13.72	6.86		
	Pounds of Wet Sludge Produced	1372.11	1029.08	686.06	343.03	assume 2% solid	ds concentration in digester
	Gallons of Wet Sludge produced	438.72	329.04	219.36	109.68		_
	Days between slo	udge removal (	assuming regul	ar decanting and	thickening of s	ludge to 5% solids	<u>s)</u>
		100% flow	75% flow	50% flow	25% flow		

Days Between Sludge Removal







# TCFO

### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT: <u>OurCalling, Inc</u>
PERMIT NUMBER: <u>New Permit</u>

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

	$\mathbf{Y}$	N		$\mathbf{Y}$	N
Administrative Report 1.0			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		
Technical Report 1.0	$\boxtimes$		Flow Diagram		
Technical Report 1.1	$\boxtimes$		Site Drawing		
Worksheet 2.0	$\boxtimes$		Original Photographs		
Worksheet 2.1		$\boxtimes$	Design Calculations	$\boxtimes$	
Worksheet 3.0		$\boxtimes$	Solids Management Plan		
Worksheet 3.1		$\boxtimes$	Water Balance		$\boxtimes$
Worksheet 3.2					
Worksheet 3.3					
Worksheet 4.0					
Worksheet 5.0					
Worksheet 6.0		$\boxtimes$			
Worksheet 7.0		$\boxtimes$			

For TCEQ Use Only		
Segment Number	County	
Expiration Date	Region	
Permit Number		



#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## APPLICATION FOR A DOMESTIC WASTEWATER PERMIT ADMINISTRATIVE REPORT 1.0

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

#### Section 1. Application Fees (Instructions Page 29)

Section 1. Application F	ees (instructions	Page 29)					
Indicate the amount submitted for the application fee (check only one).							
Flow	New/Major Amendı	nent Renewal					
<0.05 MGD	\$350.00 □	\$315.00 □					
≥0.05 but <0.10 MGD	\$550.00	\$515.00 □					
≥0.10 but <0.25 MGD ≥0.25 but <0.50 MGD	\$850.00	\$815.00 □					
≥0.25 but <0.50 MGD ≥0.50 but <1.0 MGD	\$1,250.00 □ \$1,650.00 □	\$1,215.00 □ \$1,615.00 □					
≥1.0 MGD	\$2,050.00	\$2,015.00					
Minor Amendment (for any flow	v) \$150.00 □						
Payment Information:							
Mailed Check/Mor	ney Order Number: <u>387</u>	<u>4</u>					
Check/Mor	ney Order Amount: <u>\$55</u>	0.00					
Name Print	ed on Check: <u>Authers l</u>	Building Group LLC					
EPAY Voucher N	umber: Mick here to en	ter text.					
Copy of Payment Vouch	er enclosed?	Yes □					
Section 2. Type of Appl	ication (Instructio	ons Page 29)					
		New TLAP					
☐ Major Amendment <u>with</u> Re	newal $\square$	Minor Amendment with Renewal					
☐ Major Amendment <u>without</u>	Renewal	Minor Amendment without Renewal					
☐ Renewal without changes		Minor Modification of permit					
For amendments or modification	ons, describe the propo	sed changes:					
For existing permits:							
Permit Number: WQ00							
EPA I.D. (TPDES only): TX	nere 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	le bermit.
-------------------------------------------------	------------

What is the	Legal Name	of the e	ntity (apr	olicant) an	nlving for	this i	nermit?
Wilde 15 tile	Legai Maine	or the c	παίν (αρί	meant) up			permit.

OurCalling, Inc

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

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

CN: Click here to enter tex

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

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

First and Last Name: Wayne Walker

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

Title: CEO & Pastor

**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?

(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: <a href="http://www15.tceq.texas.gov/crpub/">http://www15.tceq.texas.gov/crpub/</a>

CN: Click here to enter tex

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):

First and Last Name:

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

Title: Click here

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: I

### 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.

Α.	Prefix (Mr., Ms., Miss): <u>Ms.</u>
	First and Last Name: <u>Victoria Lahr</u>
	Credential (P.E, P.G., Ph.D., etc.):
	Title: Project Manager
	Organization Name: <u>Authers Building Group</u>
	Mailing Address: 500 Industry Way
	City, State, Zip Code: Prosper, TX 75078
	Phone No.: <u>714-215-0149</u> Ext.: Fax No.:
	E-mail Address: victoria@authersbuildinggroup.com
	Check one or both: $oxdot$ Administrative Contact $oxdot$ Technical Contact
В.	Prefix (Mr., Ms., Miss): Mr.
	First and Last Name: Charles Gillespie
	Credential (P.E, P.G., Ph.D., etc.):
	Title: President
	Organization Name: Consulting Environmental Engineers, Inc
	Mailing Address: 150 N Harbin Dr., Suite 408
	City, State, Zip Code: <u>Stephenville, TX 76401</u>
	Phone No.: <u>254-968-8130</u> Ext.: Fax No.:
	E-mail Address: <u>ceeinc@ceeinc.org</u>
	Check one or both: ☐ Administrative Contact ☒ Technical Contact

#### Section 5. Permit Contact Information (Instructions Page 30)

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

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

First and Last Name: Wayne Walker

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

Title: CEO & Pastor

Organization Name: <u>OurCalling, Inc</u> Mailing Address: <u>P.O. Box 140428</u>

City, State, Zip Code: <u>Dallas, TX 75214</u>

Phone No.: 214-444-8796 Ext.: Fax No.:

E-mail Address:

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

First and Last Name: Carolyn Walker

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

Title: <u>Chief Administrative Officer</u> Organization Name: <u>OurCalling, Inc.</u> Mailing Address: <u>P.O. Box 140428</u>

City, State, Zip Code: <u>Dallas, TX 75214</u>

Phone No.: 214-444-8796 Ext.: Fax No.:

E-mail Address: carolyn@ourcalling.org

#### 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): Ms.

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

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

Title: CFO

Organization Name: <u>OurCalling, Inc.</u>
Mailing Address: <u>P.O. Box 140428</u>
City, State, Zip Code: Dallas, TX 75124

Phone No.: 214-444-8796 Ext.: Fax No.:

E-mail Address: carolyn@ourcalling.org

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

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

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

First and Last Name: <u>Martin Evans</u>
Credential (P.E, P.G., Ph.D., etc.):
Title: Click here to enter text.
Organization Name: <u>OurCalling, Inc.</u>
Mailing Address: P.O. Box 140428
City, State, Zip Code: <u>Dallas, TX 75124</u>
Phone No.: <u>469-458-2531</u> Ext.: Fax No.:
E-mail Address:
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: <u>Charles Gillespie</u>
Credential (P.E, P.G., Ph.D., etc.):
Title: <u>President</u>
Organization Name: Consulting Environmental Engineers, Inc.
Mailing Address: <u>150 N. Harbin Dr., Suite 408</u>
City, State, Zip Code: <u>Stephenville, TX 76401</u>
Phone No.: <u>254-968-8130</u> Ext.: Fax No.:
E-mail Address: <u>ceeinc@ceeinc.org</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:
□ Fax
□ Regular Mail
C. Contact person to be listed in the Notices
Prefix (Mr., Ms., Miss): <u>Ms.</u>
First and Last Name: <u>Victoria Lahr</u>
Credential (P.E, P.G., Ph.D., etc.):

Title: Project Manager Organization Name: Authers Building Group, LLC Phone No.: 714-215-0149 Ext.: E-mail: victoria@authersbuildinggroup.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: Ferris Public Library Location within the building: Front Desk Physical Address of Building: 301 E 10th St, Ferris, TX 75125 City: Ferris County: Ellis Contact Name: Kathy Harrington Phone No.: 972-544-2110 Ext.: 9 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?  $\square$ No Yes 3. Do the students at these schools attend a bilingual education program at another

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)?

No

location?

Yes

	□ Yes ⊠ No	
	5. If the answer is yes to question 1, 2, 3, or 4, public notices in an alternative language ar required. Which language is required by the bilingual program? Spanish	e
Se	ection 9. Regulated Entity and Permitted Site Information (Instructions	
	Page 33)	
Α.	. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. <b>RN</b>	ì
	Search the TCEQ's Central Registry at <a href="http://www15.tceq.texas.gov/crpub/">http://www15.tceq.texas.gov/crpub/</a> to determine if the site is currently regulated by TCEQ.	
B.	Name of project or site (the name known by the community where located):	
	<u>OurCommunity-Ferris</u>	
C.	Owner of treatment facility: <u>OurCalling, Inc.</u>	
	Ownership of Facility: $\square$ Public $\boxtimes$ Private $\square$ Both $\square$ Federal	
D.	. Owner of land where treatment facility is or will be:	
	Prefix (Mr., Ms., Miss):	
	First and Last Name: <u>OurCalling, Inc</u>	
	Mailing Address: P.O. Box 140428	
	City, State, Zip Code: <u>Dallas, TX 75124</u>	
	Phone No.: <u>214-444-8796</u> E-mail Address: <u>carolyn@ourcalling.org</u>	
	If the landowner is not the same person as the facility owner or co-applicant, attach a least agreement or deed recorded easement. See instructions.	Ĵ
	Attachment:	
Е.	Owner of effluent disposal site:	
	Prefix (Mr., Ms., Miss):	
	First and Last Name:	
	Mailing Address:	
	City, State, Zip Code:	
	Phone No.: E-mail Address:	
	If the landowner is not the same person as the facility owner or co-applicant, attach a least agreement or deed recorded easement. See instructions.	<u> </u>
	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):
	First and Last Name: Make the remaining the state of the
	Mailing Address: Makhamanan Mailing Address:
	City, State, Zip Code:
	Phone No.: E-mail Address:
	If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.
	Attachment: Click here to enter text
Se	ection 10. TPDES Discharge Information (Instructions Page 34)
	Is the wastewater treatment facility location in the existing permit accurate?
	□ Yes ⊠ No
	If <b>no</b> , <b>or a new permit application</b> , please give an accurate description:
	New Permit: 231 Wickliffe Rd, Ferris, TX 75125
B.	Are the point(s) of discharge and the discharge route(s) in the existing permit correct?
	□ Yes ⊠ No
	If <b>no</b> , <b>or a new or amendment permit application</b> , 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:
	New Permit: The effluent travels through a pipe into an unnamed tributary, thence to
	Bear Creek, thence to Red Oak Creek Classified Segment 0805A.
	City nearest the outfall(s): <u>Ferris</u>
	County in which the outfalls(s) is/are located: Ellis
	Outfall Latitude: <u>32.512257</u> Longitude: <u>-96.573027</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 <b>yes</b> , indicate by a check mark if:
	$\square$ Authorization granted $\square$ Authorization pending
	For <b>new and amendment</b> applications, provide copies of letters that show proof of contact
	and the approval letter upon receipt.
	Attachment: Mak here to enter text
D.	For all applications involving an average daily discharge of 5 MGD or more, provide the

	discharge.				
	Click here to enter text.				
Se	ection 11. TLAP Disposal Information (Instructions Page 36)				
A.	For TLAPs, is the location of the effluent disposal site in the existing permit accurate?				
	□ Yes □ No				
	If <b>no, or a new or amendment permit application</b> , provide an accurate description of the disposal site location:				
	Click here to enter text.				
B.	City nearest the disposal site:				
C.	County in which the disposal site is located:				
D.	Disposal Site Latitude: Longitude: Longitude:				
E. For TLAPs, describe the routing of effluent from the treatment facility to the dispos					
	Click here to enter text.				
F.	For <b>TLAPs</b> , please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained:				
	Click here to enter text.				
Se	ection 12. Miscellaneous Information (Instructions Page 37)				
Α.	Is the facility located on or does the treated effluent cross American Indian Land?				
	□ Yes ⊠ No				
В.	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				
	L 165 L NO 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.	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:					
	Click here to enter text.					
D.	Do you owe any fees to the TCEQ?					
	□ Yes ⊠ No					
	If <b>yes</b> , provide the following information:					
	Account number: Amount past due:					
F	Do you owe any penalties to the TCEQ?					
L.						
	□ Yes ⊠ No					
	If <b>yes</b> , 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:
Applicant: OurCalling, Inc
Certification:
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
I further certify that I am authorized under 30 Texas Administrative Code § 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.
Signatory name (typed or printed): Wayne Walker
Signatory title: CEO & Pastor
Signature: Date: 1/-/4-22 (Use blue ink)
Subscribed and Sworn to before me by the said Wayne Walker
on this 14th day of November, 2022.  My commission expires on the 28th day of February, 2024.
My commission expires on the 28th day of tehrnary, 2024.
Molyn Walker Notary Public [SEAL]
Dallas  CAROLYN WALKER  Notary Public, State of Texas



County, Texas



Comm. Expires 02-28-2024



#### Section 15. Plain Language Summary (Instructions Page 40)

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

If you are subject to the alternative language notice requirements in 30 Texas Administrative Code §39.426, you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package. For your convenience, a Spanish template has been provided below.

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

#### DOMESTIC WASTEWATER

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

Ourcalling, Inc (2. Enter Customer Number here (i.e., CN6#######).) proposes to operate Ourcommunity Ferris WWTP 5. Enter Regulated Entity Number here (i.e., RN1######). a membrane bioreactor WWTP . The facility will be located at 231 Wickliffe Rd, in Ferris, Ellis County, Texas 75124.

This application is for a new permit to discharge at a daily average flow of 90,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to containfive-day carbonaceous biochemical oxygen demand  $(CBOD_5)$ , total suspended solids (TSS), and Escherichia coli. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the application package .Domestic wastewater will be treated by a mixed bed biofilm reactor (MBBR) wastewater treatment system, and the treatment units will include, an influent pump station, headworks, flow equalization, secondary treatment, an operations building, a flow meter vault, and a sludge digester.

#### Section 15. Plain Language Summary (Instructions Page 40)

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

If you are subject to the alternative language notice requirements in <u>30 Texas Administrative Code</u> <u>\$39.426</u>, <u>you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package</u>. For your convenience, a Spanish template has been provided below.

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

#### **DOMESTIC WASTEWATER**

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application. Ourcalling, Inc (CN606086395) proposes to operate Ourcommunity Ferris WWTP RN111617692. a membrane bioreactor WWTP. The facility will be located at 231 Wickliffe Rd, in Ferris, Ellis County, Texas 75124.

This application is for a new permit to discharge at a daily average flow of 90,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to containfive-day carbonaceous biochemical oxygen demand  $(CBOD_5)$ , total suspended solids (TSS), and Escherichia coli. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the application package .Domestic wastewater will be treated by a mixed bed biofilm reactor (MBBR) wastewater treatment system, and the treatment units will include, an influent pump station, headworks, flow equalization, secondary treatment, an operations building, a flow meter vault, and a sludge digester.

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

#### AGUAS RESIDUALES DOMÉSTICAS

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

Ourcalling, Inc propone operar la planta de tratamiento de aguas residuales de Ourcommunity Ferris. una PTAR de biorreactor de membrana. La biofilm planta estará ubicada en 231 Wickliffe Rd, en Ferris, condado de Ellis, Texas 75124.

Esta aplicación es para un nuevo prophesta para descargar a una corriente diario de 90,000 galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la contengan demanda de oxígeno bioquímico carbonoso (CBOD5) de cinco días, sólidos suspendidos totales (TSS) y Escherichia coli. Los contaminantes potenciales adicionales se incluyen en el reporte técnico doméstico 1.0, Sección 7. Análisis de contaminantes de efluentes tratados en el paquete de aplicación. Las aguas residuales domésticas serán tratadas por una sistema de tratamiento de aguas residuales de biorreactor de membrana biofilm (MBBR), y las unidades de tratamiento incluirán, estación de bombeo de afluentes, obras de cabecera, igualación de corrientes, tratamiento secundario, edificio de operaciones, bóveda de caudalímetros y digestor de lodos.

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

#### AGUAS RESIDUALES DOMÉSTICAS

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

Ourcalling, Inc (CN606086395) propone operar la planta de tratamiento de aguas residuales de Ourcommunity Ferris (RN111617692). una PTAR de biorreactor de membrana. La biofilm planta estará ubicada en 231 Wickliffe Rd, en Ferris, condado de Ellis, Texas 75124.

Esta aplicación es para un nuevo prophesta para descargar a una corriente diario de 90,000 galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la contengan demanda de oxígeno bioquímico carbonoso (CBOD5) de cinco días, sólidos suspendidos totales (TSS) y Escherichia coli. Los contaminantes potenciales adicionales se incluyen en el reporte técnico doméstico 1.0, Sección 7. Análisis de contaminantes de efluentes tratados en el paquete de aplicación. Las aguas residuales domésticas serán tratadas por una sistema de tratamiento de aguas residuales de biorreactor de membrana biofilm (MBBR), y las unidades de tratamiento incluirán, estación de bombeo de afluentes, obras de cabecera, igualación de corrientes, tratamiento secundario, edificio de operaciones, bóveda de caudalímetros y digestor de lodos.

#### **DOMESTIC ADMINISTRATIVE REPORT 1.1**

The following information is required for new and amendment applications.

A.

B.

C.

D.

E.

# Section 1. Affected Landowner Information (Instructions Page 41)

	cate by a check mark that the landowners map or drawing, with scale, includes the wing information, as applicable:
$\boxtimes$	The applicant's property boundaries
$\boxtimes$	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
⊠ addı	Indicate by a check mark that a separate list with the landowners' names and mailing resses cross-referenced to the landowner's map has been provided.
Indi	cate by a check mark in which format the landowners list is submitted:
	☐ USB Drive ☐ Four sets of labels
Prov	ide the source of the landowners' names and mailing addresses: Ellis County CAD
	equired by $Texas\ Water\ Code\ \S\ 5.115$ , is any permanent school fund land affected by this ication?
-	l Ves ⊠ No

	If <b>ye</b> land	s, provide the location and foreseeable impacts and effects this application has on the (s):	
	Clic	k here to enter text	
Se	ectio	on 2. Original Photographs (Instructions Page 44)	
Provide original ground level photographs. Indicate with checkmarks that the following information is provided.			
	$\boxtimes$	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	
	$\boxtimes$	A plot plan or map showing the location and direction of each photograph	
Se	ectio	on 3. Buffer Zone Map (Instructions Page 44)	
		er zone map. Provide a buffer zone map on $8.5 \times 11$ -inch paper with all of the following mation. The applicant's property line and the buffer zone line may be distinguished by g 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.	
В.		er zone compliance method. Indicate how the buffer zone requirements will be met. k all that apply.	
		Ownership	
		Restrictive easement	
		Nuisance odor control	
		l Variance	
C.		uitable site characteristics. Does the facility comply with the requirements regarding itable site characteristic found in 30 TAC § 309.13(a) through (d)?	
		Yes □ No	

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

## FOR AGENCIES REVIEWING DOMESTIC TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:
Application type:RenewalMajor AmendmentMinor AmendmentNew
County: Segment Number:
Admin Complete Date:
Agency Receiving SPIF:
Texas Historical Commission U.S. Fish and Wildlife
Texas Parks and Wildlife Department U.S. Army Corps of Engineers
This form applies to TPDES permit applications only. (Instructions, Page 53)
The SPIF must be completed as a separate document. The TCEQ will mail a copy of the SPIF to each agency as required by the TCEQ agreement with EPA. If any of the items are not completely addressed or further information is needed, you will be contacted to provide the information before the permit is issued. Each item must be completely addressed.
<b>Do not refer to a response of any item in the permit application form</b> . 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>OurCalling, Inc.</u>
Permit No. WQ00 EPA ID No. TX
Address of the project (or a location description that includes street/highway, city/vicinity, and county):
231 Wickliffe Rd, Ferris, TX 75125

	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>Ms.</u>
	First and Last Name: <u>Victoria Lahr</u>
	Credential (P.E, P.G., Ph.D., etc.):
	Title: <u>Project Manager</u>
	Mailing Address: 500 Industry Way, Suite 500
	City, State, Zip Code: <u>Prosper, TX 75078</u>
	Phone No.: <u>714-215-0149</u> Ext.: Fax No.:
	E-mail Address: victoria@authersbuildinggroup.org
2.	List the county in which the facility is located: Ellis
3.	If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.
	Click here to enter text.
4.	Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of
	discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.
	The effluent travels through a pipe into an unnamed tributary, thence to Bear Creek, thence
	to Red Oak Creek Classified Segment 0805A
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).
	route from the point of discharge for a distance of one mile downstream. (This map is
	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).
	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.
	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.
	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
	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

6.	List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):
	N/A
7.	Describe existing disturbances, vegetation, and land use:
	It is currently a pasture.
	E FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR IENDMENTS TO TPDES PERMITS
8.	List construction dates of all buildings and structures on the property:
	N/A
9.	Provide a brief history of the property, and name of the architect/builder, if known.
	N/A

Disturbance of vegetation or wetlands

#### WATER QUALITY PERMIT

#### PAYMENT SUBMITTAL FORM

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

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

#### Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality Texas Commission on Environmental Quality

Financial Administration Division Financial Administration Division

Cashier's Office, MC-214 Cashier's Office, MC-214

P.O. Box 13088 12100 Park 35 Circle

Austin, Texas 78711-3088 Austin, Texas 78753

Fee Code: WQP Waste Permit No: New Permit

1. Check or Money Order Number: <u>3874</u>

2. Check or Money Order Amount: \$550.00

3. Date of Check or Money Order: 11/21/2022

4. Name on Check or Money Order: Authers Building Group LLC

5. APPLICATION INFORMATION

Name of Project or Site: OurCommunity-Ferris WWTP

Physical Address of Project or Site: 231 Wickliffe Rd, Ferris, TX 75125

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

#### Staple Check or Money Order in This Space

## THIS PAGE INTENTIONALLY LEFT BLANK

#### ATTACHMENT 1

#### INDIVIDUAL INFORMATION

## Section 1. Individual Information (Instructions Page 50)

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

	Prefix (Mr., Ms., Miss):
	Full legal name (first, middle, last):
	Driver's License or State Identification Number:
	Date of Birth:
	Mailing Address:
	City, State, and Zip Code:
	Phone Number: Fax Number:
	E-mail Address: Wick home to enter text
	CN: Click here to enter text.
F	or Commission Use Only:
C	ustomer Number:
R	legulated Entity Number:
р	ermit Number

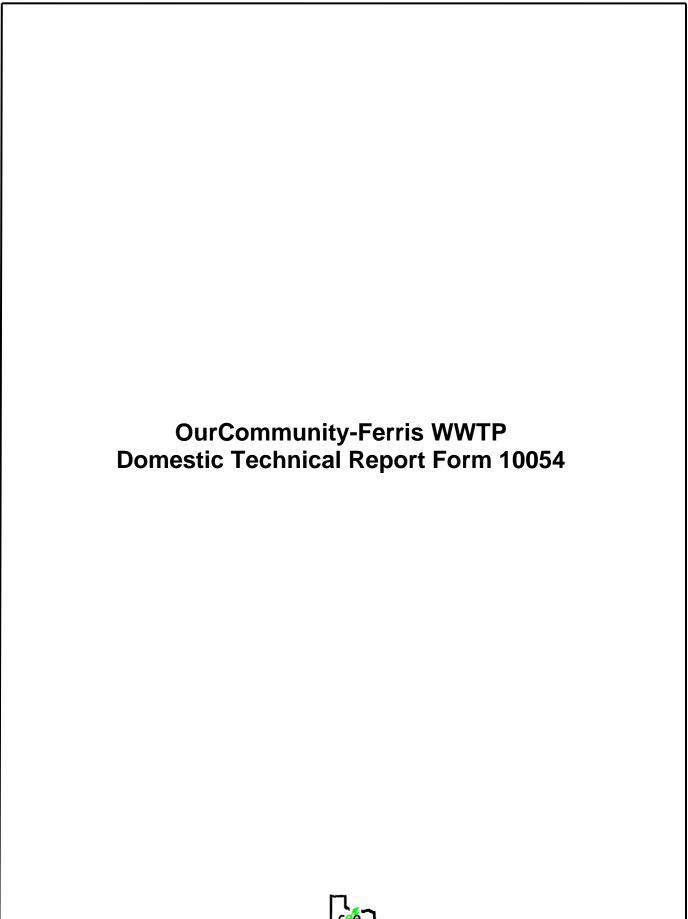
#### CHECKLIST OF COMMON DEFICIENCIES

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

anti the items below have been addressed.				
Core Data Form (TCEQ Form No. 10400) (Required for all applications types. Must be completed in its entirety and signed. Note: Form may be signed by applicant representative.)				
Correct and Current Industrial Wastewater Permit Application Forms (TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)				
Water Quality Permit Payment Submittal Form (Page 19) (Original payment sent to TCEQ Revenue Section. See instructions for mailing address.)				Yes
7.5 Minute USGS Quadrangle Topographic Map Attached (Full–size map if seeking "New" permit. 8½ x 11 acceptable for Renewals and Amendments)				
Current/Non-Expired, Executed Lease Agreement or Easement Attached 🛛 N/A				
Landowners Map (See instructions for landowner requirements)				
<ul> <li>Things to Know:</li> <li>All the items shown on the map must be labeled.</li> <li>The applicant's complete property boundaries must be delineated boundaries of contiguous property owned by the applicant.</li> </ul>	d wh	ich incl	ludes	

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

Landowners Cross Reference List (See instructions for landowner requirements)		N/A	$\boxtimes$	Yes
Landowners Labels or USB Drive attached (See instructions for landowner requirements)		N/A	$\boxtimes$	Yes
Original signature per 30 TAC § 305.44 – Blue Ink Preferred (If signature page is not signed by an elected official or principle executive of a copy of signature authority/delegation letter must be attached)	fficer,	,		Yes





# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY DOMESTIC WASTEWATER PERMIT APPLICATION

#### DOMESTIC TECHNICAL REPORT 1.0

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

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

#### A. Existing/Interim I Phase

Design Flow (MGD): 0.03

2-Hr Peak Flow (MGD): <u>0.12</u>

Estimated construction start date: 1/15/24 Estimated waste disposal start date: 1/20/24

#### B. Interim II Phase

Design Flow (MGD): 0.06

2-Hr Peak Flow (MGD): <u>0.24</u>

Estimated construction start date: <u>05/15/24</u> Estimated waste disposal start date: <u>05/20/24</u>

#### C. Final Phase

Design Flow (MGD): <u>0.09</u>

2-Hr Peak Flow (MGD): <u>0.36</u>

Estimated construction start date: <u>09/15/24</u> Estimated waste disposal start date: <u>09/20/24</u>

## D. Current operating phase: Proposed

Provide the startup date of the facility: 1/20/24

## Section 2. Treatment Process (Instructions Page 51)

### A. Treatment process description

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

The type of treatment process proposed here is multi-staged involving primary, secondary, and tertiary treatment with disinfection. The gravity sanitary sewer discharges into a lift station which pumps to a headworks facility. This facility separates screenable solids and splits flows to downstream parallel treatment trains. Three identical treatment trains are proposed which will be installed in three distinct phases. Each phase consists of two buried tanks in series. The first is a flow equalization tank capable of up to 30,000 gallons of storage. This stage is aerated, and time-dosed pumps deliver screened flow to the second tank. The second is a biological treatment stage which incorporates a mixed bed biofilm reactor (MBBR) chamber followed by a two-stage clarifier system with effluent filtration. This tank also has an on-board sludge digestion volume. A pump chamber at the end of the tank delivers secondary effluent to an operations building which houses tertiary filtration and UV disinfection units. Final treated effluent discharges back to a volume in the second tank which serves as a post-aeration volume prior to discharge to the receiving stream. A flow meter vault combines flow from all three phases and serves as flow measurement for reporting purposes. Treated, metered effluent then flows through an 8" gravity pipe to the point of discharge. A separate sludge digestion and thickening tank receives pumped flow from the on-board sludge digestion chambers of the three biological treatment tanks. Operation is automatic with few daily tasks.

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

#### **B.** Treatment Units

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

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Influent Pump Station	1	7' x 7' x 20'
Headworks	1	20' x 5' x 4'
Flow Equalization	3	52' x 10.5' x 10.5'
Secondary Treatment	3	52' x 10.5' x 10.5'
Operations Building	1	40' x 8.5' x 9'
Flow Meter Vault	1	5.5' x 5.5' x 8'

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Sludge Digester	1	38' x 8.5' x 7'

#### C. Process flow diagrams

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

Attachment: IX

## 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: X

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

The OurCommunity-Ferris WWTP will provide service to the OurCommunity-
<u>Ferris project.</u>

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

Is the	application	for a renewa	l of a permit	that contains	an unbuilt p	ohase or
phase	s?					

Yes	No	$\boxtimes$

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

Yes	No	
	- 10	

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?  Yes □ No ☒
If yes, was a closure plan submitted to the TCEQ?
Yes □ No □
If yes, provide a brief description of the closure and the date of plan approval.
Section 6. Permit Specific Requirements (Instructions Page 53)
For applicants with an existing permit, check the <i>Other Requirements</i> or <i>Special Provisions</i> of the permit.
A. Summary transmittal
Have plans and specifications been approved for the existing facilities and each proposed phase?  Yes □ No ⊠
If yes, provide the date(s) of approval for each phase:
Provide information, including dates, on any actions taken to meet a requirement or provision pertaining to the submission of a summary transmittal letter. Provide a copy of an approval letter from the TCEQ, if applicable.

Click here to enter text
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.
<u>Ownership</u>
C. Other actions required by the current permit
Does the <i>Other Requirements</i> or <i>Special Provisions</i> 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 $\square$ No $\boxtimes$
<b>If yes</b> , provide information below on the status of any actions taken to meet the conditions of an <i>Other Requirement</i> or <i>Special Provision</i> .
Click here to enter text
D. Grit and grease treatment
1. Acceptance of grit and grease waste
Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment? $Yes \ \square \qquad No \ \boxtimes$

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.
Click here to enter text.
3. Grit disposal
Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?  Yes  No  No
<b>If No</b> , 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.
Click here to enter text
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.
Click here to enter text.

## 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 □ № П **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: or TXRNE TXR05 **If no.** do you intend to seek coverage under TXR050000? Yes □ No □ 3. Conditional exclusion Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)? Yes □ No □ If yes, please explain below then proceed to Subsection F, Other Wastes Received:

4. Existing coverage in individual permit

E. Stormwater management

Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit? Yes $\square$ No $\square$
<b>If yes</b> , provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.
Click here to enter text.
5. Zero stormwater discharge
Do you intend to have no discharge of stormwater via use of evaporation or other means? Yes $\square$ No $\boxtimes$
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  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

state.
Click here to enter text.
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 $\square$ No $\boxtimes$
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 $\mathrm{BOD}_5$
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.

Click here to enter text
Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.
2. Acceptance of septic waste
Is the facility accepting or will it accept septic waste?
Yes □ No ⊠
If yes, does the facility have a Type V processing unit?
Yes □ No □
If yes, does the unit have a Municipal Solid Waste permit?
Yes □ No □
If yes to any of the above, provide a the date that the plant started accepting septic waste, or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the 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.
Nata Devenita that a court also dee from a theorem to the devent also to
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 $\square$ No $\boxtimes$
<b>If yes</b> , 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

880000

	is of flas fi	ot change	ed since the	e iast peri	int action.
Section 7. Pollutant Anal Page 58)	lysis of T	reated	Effluent (	(Instruct	tions
Is the facility in operation?  Yes □ No ⊠					
If no, this section is not appli	cable. Pro	ceed to Se	ection 8.		
<b>If yes</b> , provide effluent analyst reatment facilities complete discharging filter backwash whote: The sample date must be Table 1.0(2) - Pollutan	Table 1.00 vater, compose within 1	(2). <b>Wate</b> rplete Tab	r treatmen le 1.0(3). application	t facilitie. submissi	on.
Pollutant	Average	Max	No. of	Sample	Sample
ronutant	Conc.	Conc.	Samples	Type	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					
E.coli (CFU/100ml) freshwater					

Pollutant	Average	Max	No. of	Sample	Sample
ronutant	Conc.	Conc.	Samples	Type	Date/Time
Entercocci (CFU/100ml)					
saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity,					
μmohs/cm, †					
Oil & Grease, mg/l					
Alkalinity (CaCO <sub>3</sub> )*, mg/l					

<sup>\*</sup>TPDES permits only

†TLAP permits only

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

Pollutant	Average	Max	No. of	Sample	Sample
Pollutalit	Conc.	Conc.	Samples	Type	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>Licensed</u>	<b>Operator</b>	will be	determined	<u>upon</u>	<u>permit</u>
approval							

Facility Operator's License Classification and Level:	Click here to enter text

Facility Operator's License Number:

## 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.

$\boxtimes$	Permitted landfill
$\boxtimes$	Permitted or Registered land application site for beneficial use
	Land application for beneficial use authorized in the wastewater permit
	Permitted sludge processing facility
	Marketing and distribution as authorized in the wastewater permit
	Composting as authorized in the wastewater permit
	Permitted surface disposal site (sludge monofill)
	Surface disposal site (sludge monofill) authorized in the wastewater
	permit
	Transported to another permitted wastewater treatment plant or permitted sludge processing facility. If you selected this method, a written statement or contractual agreement from the wastewater treatment plant or permitted sludge processing facility accepting the sludge must be included with this application.
	Other: Click here to enter text
В. 5	Sludge disposal site
Dispos	al site name: <u>To be determined upon permit approval</u>
TCEQ ]	permit or registration number:
County	where disposal site is located:
C. S	Sludge transportation method
Metho	d of transportation (truck, train, pipe, other): To be determined upon permit approval
Name	of the hauler: Click here to enter text.
Hauler	registration number:

Sludge is transporte	ed as a:			
Liquid □	semi-liquid $oxtimes$	semi-solid □	solid $\square$	
Section 10.	Permit Authoriza	tion for Sewag	e Sludge Disposa	al
(Instruction			S. R	
A. Beneficial us	e authorization			
Does the existing persuadge for beneficial Yes No 🗵	ermit include author ll use?	ization for land a	application of sewag	e
<b>If yes</b> , are you requestudge for beneficiate Yes □ No □	esting to continue th d use?	nis authorization	to land apply sewag	e
	eted <b>Application for EQ Form No. 10451</b> details)?			(see
B. Sludge proce	ssing authorization			
0 1	ermit include author or disposal options?	•	f the following sludg	ge .
Sludge Compos		Yes □	No ⊠	
Marketing and l	Distribution of sludg	e Yes □	No ⊠	
Sludge Surface	Disposal or Sludge M	Ionofill Yes □	No ⊠	
Temporary stor	age in sludge lagoon	s Yes □	No □	
continue this autho	above sludge option rization, is the comp ge Sludge Technical mit application?	oleted <b>Domestic</b> V	Wastewater Permit	
Section 11.	Sewage Sludge La	goons (Instruc	tions Page 61)	
	y include sewage slu	dge lagoons?		
Yes □ No ⊠	0.2	·		0
if yes, complete	the remainder of th	is section. If no, p	proceed to Section 1	۷.

#### 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: Click here to enter text

USDA Natural Resources Conservation Service Soil Map: Attachment: • Federal Emergency Management Map: Attachment: • Site map: Attachment: Discuss in a description if any of the following exist within the lagoon area. Check all that apply. Overlap a designated 100-year frequency flood plain Soils with flooding classification Overlap an unstable area Wetlands Located less than 60 meters from a fault None of the above Attachment:

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

## **B.** Temporary storage information

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

Nitrate Nitrogen, mg/kg:

Total Kjeldahl Nitrogen, mg/kg:
Total Nitrogen (=nitrate nitrogen + TKN), mg/kg:
Phosphorus, mg/kg:
Potassium, mg/kg:
pH, standard units:
Ammonia Nitrogen mg/kg:
Arsenic: Mak here to enter text
Cadmium: Thek here to enter text
Chromium: Thek here to enter text
Copper: Hick here to enter text
Lead: Mick here to enter text.
Mercury:
Molybdenum:
Nickel: Mak here to enter text
Selenium: Hick here to enter text
Zinc: Click here to enter text
Total PCBs: Tick here to enter text
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:
enter text
Total dry tons stored in the lagoons(s) over the life of the unit:
enter text
C. Liner information
Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec? Yes $\square$ No $\square$
If yes, describe the liner below. Please note that a liner is required.

Click here to enter text.
D. Site development plan
Provide a detailed description of the methods used to deposit sludge in the
lagoon(s):
Click here to enter text.
Attach the following documents to the application.
<ul> <li>Plan view and cross-section of the sludge lagoon(s)</li> </ul>
Attachment: Click here to enter text
• Copy of the closure plan
Attachment: Click here to enter text
<ul> <li>Copy of deed recordation for the site</li> </ul>
Attachment: Makhare to enter text.
<ul> <li>Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons</li> </ul>
Attachment: lick here to enter text.
<ul> <li>Description of the method of controlling infiltration of groundwater and surface water from entering the site</li> </ul>
Attachment: lick here to enter text.
<ul> <li>Procedures to prevent the occurrence of nuisance conditions</li> </ul>
Attachment: Click here to enter text.
E. Groundwater monitoring
Is groundwater monitoring currently conducted at this site, or are any wells available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?  Yes  No
If groundwater monitoring data are available, provide a copy. Provide a profile of soil types encountered down to the groundwater table and the depth to the shallowest groundwater as a separate attachment.

Attachment:
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 $\square$ No $\boxtimes$
<b>If yes</b> , provide the TCEQ authorization number and description of the authorization:
Click here to enter text.
B. Permittee enforcement status
Is the permittee currently under enforcement for this facility? Yes $\square$ No $\boxtimes$
Is the permittee required to meet an implementation schedule for compliance or enforcement? Yes $\square$ No $\square$
<b>If yes</b> to either question, provide a brief summary of the enforcement, the implementation schedule, and the current status:
Click here to enter text.
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?

## B. Remediation activity wastewater

Yes □ No ⊠

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 $\square$ No $\boxtimes$
C. Details about wastes received
<b>If yes</b> to either Subsection A or B above, provide detailed information concerning these wastes with the application.
Attachment: Click here to enter text

## 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:
  - o 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: Wayne Walker

Title: CEO & Pastor

Signature:

Date: 11-14-2

Page 20 of 80

TCEQ-10054 (06/01/2017)
Domestic Wastewater Permit Application, Technical Reports

#### DOMESTIC TECHNICAL REPORT 1.1

The following is required for new and amendment applications

## Section 1. Justification for Permit (Instructions Page 66)

#### A. Justification of permit need

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

The proposed 259 acre development of the OurCommunity-Ferris Project will contain approximately 640 homes, 8 maintenance buildings, one cafeteria, several multiuse buildings, and one church. Assuming full capacity of the project an estimated 90,000 GPD was calculated. The property does not have access to a municipal treatment system, and septic systems are not an economically and ecologically sound alternative. Construction on the development is proposed to begin in 2023

#### B. Regionalization of facilities

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

## 1. Municipally incorporated areas

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

Is any portion of the proposed service area located in an incorporated city?
Yes □ No ⊠ Not Applicable □
If yes, within the city limits of:
If yes, attach correspondence from the city.
Attachment:

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

Attachment:			

## 2. Utility CCN areas

CCN area?		proposed service area located inside another utility's
Yes		
of expend	itures that	ication for the proposed facility and a cost analysis includes the cost of connecting to the CCN facilities e proposed facility or expansion.
Atta	chment:	lick here to enter text.
3. Nearby	WWTPs o	r collection systems
collection facility?	=	tic permitted wastewater treatment facilities or cated within a three-mile radius of the proposed
	_	_
		f these facilities that includes the permittee's name and an area map showing the location of these
Atta	chment:	lick here to enter text.
		of your certified letters to these facilities <b>and</b> their cerning connection with their system.
Atta	chment:	lick here to enter text.
system loo have the c	cated withi apacity to ater propo	mestic wastewater treatment facility or a collection in three (3) miles of the proposed facility currently accept or is willing to expand to accept the volume sed in this application?
permitted	wastewate	ysis of expenditures required to connect to a r treatment facility or collection system located s the cost of the proposed facility or expansion.
Atta	chment:	lick here to enter text.
Section 2 Org	ranic Loa	ding (Instructions Page 67)
Is this facility		
	_	_
Yes	□ No	

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

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

# A. Current organic loading Facility Design Flow (flow being requested in application): Average Influent Organic Strength or 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	tne sc	ource c	or the	average	organic	strengtn	or RO	D <sub>5</sub> co	ncentra	tion.
Clialah	ono to	antan	+037+							

## B. Proposed organic loading

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

Table 1.1(1) - Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD <sub>5</sub> Concentration (mg/l)
Municipality		
Subdivision	0.066	300
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria,		

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	0.0084	1000
Hospital		
Nursing home		
Other	0.0156	300
TOTAL FLOW from all sources	0.09	
AVERAGE BOD <sub>5</sub> from all sources		363

# 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:  $\underline{20}$ 

Total Suspended Solids, mg/l: 20

Ammonia Nitrogen, mg/l:  $\underline{N/A}$ 

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l:  $\underline{2}$ 

Other: N/A				
B. Interim II Phase Design Effluent Quality				
Biochemical Oxygen Demand (5-day), mg/l: <u>20</u>				
Total Suspended Solids, mg/l: <u>20</u>				
Ammonia Nitrogen, mg/l: <u>N/A</u>				
Total Phosphorus, mg/l: $N/A$				
Dissolved Oxygen, mg/l: <u>2</u>				
Other: Click here to enter text				
C. Final Phase Design Effluent Quality				
Biochemical Oxygen Demand (5-day), mg/l: <u>20</u>				
Total Suspended Solids, mg/l: <u>20</u>				
Ammonia Nitrogen, mg/l: <u>N/A</u>				
Total Phosphorus, mg/l: $N/A$				
Dissolved Oxygen, mg/l: <u>2</u>				
Other: <u>N/A</u>				
<ul><li>D. Disinfection Method</li><li>Identify the proposed method of disinfection.</li></ul>				
☐ Chlorine: mg/l after minutes detention time at peak flow				
Dechlorination process:				
$oxed{oxed}$ Ultraviolet Light: $\underline{20}$ seconds contact time at peak flow				
□ Other: Click here to enter text				

## 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:  $\underline{XII}$ 

## Section 5. Facility Site (Instructions Page 68)

## A. 100-year floodplain Will the proposed facilities be located above the 100-year frequency flood level? Yes ⊠ No □ **If no.** describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures. Provide the source(s) used to determine 100-year frequency flood plain. Fema Map 48139C0125F 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**: XIV

# 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?

<b>T</b> 7	$\overline{}$	NT.	
Yes	ш	No	

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

Attachment:

#### B. Sludge processing authorization

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

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

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

Attachment:

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

Attach a solids management plan to the application.

Attachment: XV

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: Click here to enter text						
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).						
Click here to enter text.						

C. Sea grasses	
Are there any sea grasses within the vicinity of the point o	f discharge?
Yes □ No □	
If yes, provide the distance and direction from the outfall(	s).
Click here to enter text	
Section 3. Classified Segments (Instructions Page 73	3)
Is the discharge directly into (or within 300 feet of) a classified	
Yes □ No ⊠	
If yes, this Worksheet is complete.	
If <b>no</b> , complete Sections 4 and 5 of this Worksheet.	
Section 4. Description of Immediate Receiving Water (Instructions Page 75)  Name of the immediate receiving waters: Unnamed Tributa	
A. Receiving water type	
Identify the appropriate description of the receiving water	S.
⊠ Stream	
☐ Freshwater Swamp or Marsh	
□ Lake or Pond	
Surface area, in acres:	
Average depth of the entire water body, in feet:	here to enter
Average depth of water body within a 500-foot radiu point, in feet:	is of discharge
☐ Man-made Channel or Ditch	

	Open Bay
	Tidal Stream, Bayou, or Marsh
	Other, specify: Mak here to enter text
B. Fl	ow characteristics
followin characte	am, man-made channel or ditch was checked above, provide the ag. For existing discharges, check one of the following that best erizes the area <i>upstream</i> of the discharge. For new discharges, erize the area <i>downstream</i> 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
	he method used to characterize the area upstream (or downstream for chargers). USGS flow records
	Historical observation by adjacent landowners
$\boxtimes$	Personal observation
	Other, specify: Make here to enter text
C. D	ownstream perennial confluences
List the	names of all perennial streams that join the receiving water within iles downstream of the discharge point.
<u>Bea</u>	r Creek, Red Oak Creek Classified Segment 0805A
D. D	ownstream characteristics
	receiving water characteristics change within three miles downstream of harge (e.g., natural or man-made dams, ponds, reservoirs, etc.)?  Yes  No  No
If yes, d	liscuss how.

Click	here to enter text.		
E. N	Normal dry weather charac	cteristi	cs
	e general observations of th		r body during normal dry weather
The tr	ributary is usually dry with	occasio	onal pools.
Date ar	nd time of observation: <u>11/</u>	17/22	at 12:31pm
Was th	e water body influenced by	storm	water runoff during observations?
	Yes ⊠ No □		
	on 5. General Character Page 74)	istics	of the Waterbody (Instructions
A. U	Jpstream influences		
	<u> </u>	-	m of the discharge or proposed ollowing? Check all that apply.
	Oil field activities		Urban runoff
	Upstream discharges		Agricultural runoff
	Septic tanks		Other(s), specify
tex			
B. V	Waterbody uses		
Observ	ed or evidences of the follo	wing u	ises. Check all that apply.
	Livestock watering		Contact recreation
	Irrigation withdrawal		Non-contact recreation
	Fishing		Navigation

	Domestic water supply		Industrial water supply
	Park activities	$\boxtimes$	Other(s), specify <u>None</u>
C. V	Vaterbody aesthetics		
	eck one of the following that leiving water and the surround		describes the aesthetics of the area.
	Wilderness: outstanding nat area; water clarity exceptio		beauty; usually wooded or unpastured
$\boxtimes$	•		e vegetation; some development dwellings); water clarity discolored
	Common Setting: not offens be colored or turbid	sive;	developed but uncluttered; water may
	Offensive: stream does not developed; dumping areas;		nce aesthetics; cluttered; highly er discolored

## Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

Section 1. Preliminary Screening

section it i reminiary serecting				
☑ New Permit or Registration Application				
☐ New Activity - modification, registration, amendment, facility, etc. (see instructions)				
	, a Public Involvement Plan is not necessary. Ining sections not required.			
Section 2. Secondary Screening				
☑ Requires public notice,				
$\square$ Considered to have significant public interest				
$\square$ Located within any of the following geograph	phical locations:			
Austin     San Antonio				
• Dallas • West Texas				
• Fort Worth • Texas Panhandl	le			
Houston     Along the Texas	s/Mexico Border			
Other geographical locations should be	e decided on a case-by-case basis			
·	Public Involvement Plan is not necessary. Stop Section 2.			
$\square$ Public Involvement Plan not applicable to the	nis application. Provide <b>brief</b> explanation.			
This application is for a standard TPDES	permit in a rural location. There is no available			
treatment facilities in close proximity. CN#	<sup>!</sup> 606086395 RN# 111617692			
Section 3. Application Information				
Type of Application (check all that apply):				
Air □ Initial □ Federal □ Amendment	$\square$ Standard Permit $\square$ Title V			
Waste □ Municipal Solid Waste	☐ Industrial and Hazardous Waste			
☐ Radioactive Materials Licensing	☐ Underground Injection Controls			

Water Quality  □ Texas Pollutant Discharge Elimination System (TPDES)  □ Texas Land Application Permit (TLAP)  □ State Only Concentrated Animal Feeding Operation (CAFO)  □ Water Treatment Plant Residuals Disposal Permit  □ Class B Biosolids Land Application Permit  □ Domestic Septage Land Application Registration
Water Rights New Permit  □ New Appropriation of Water □ New or existing reservoir
Amendment to an Existing Water Right  ☐ Add a New Appropriation of Water  ☐ Add a New or Existing Reservoir  ☐ Major Amendment that could affect other water rights or the environment
Section 4. Plain Language Summary
Provide a brief description of planned activities.
Section 5. Community and Demographic Information
Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.
Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.
(City)
(County)

(Census Tract)
Please indicate which of these three is the level used for gathering the following information.
□ City
☐ County ☐ Census Tract
(a) Percent of people over 25 years of age who at least graduated from high school
(b) Per capita income for population near the specified location
(a) Depart of minority population and paragraph of population by many within the appointed
(c) Percent of minority population and percent of population by race within the specified location
(d) Percent of Linguistically Isolated Households by language within the specified location
(e) Languages commonly spoken in area by percentage
(f) Community and/or Stakeholder Groups
(g) Historic public interest or involvement
Section 6. Planned Public Outreach Activities
Section 6. Planned Public Outreach Activities  (a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?
(a) Is this application subject to the public participation requirements of Title 30 Texas
(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?
<ul> <li>(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?</li> <li>□ Yes □ No</li> <li>(b) If yes, do you intend at this time to provide public outreach other than what is required</li> </ul>
<ul> <li>(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?</li> <li>□ Yes □ No</li> <li>(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?</li> </ul>
<ul> <li>(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?</li> <li>□ Yes □ No</li> <li>(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?</li> <li>□ Yes □ No</li> </ul>
<ul> <li>(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?</li> <li>□ Yes □ No</li> <li>(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?</li> <li>□ Yes □ No</li> </ul>
<ul> <li>(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?</li> <li>□ Yes □ No</li> <li>(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?</li> <li>□ Yes □ No</li> <li>If Yes, please describe.</li> <li>If you answered "yes" that this application is subject to 30 TAC Chapter 39,</li> </ul>
<ul> <li>(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?</li> <li>□ Yes □ No</li> <li>(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?</li> <li>□ Yes □ No</li> <li>If Yes, please describe.</li> <li>If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.</li> </ul>
<ul> <li>(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?</li> <li>□ Yes □ No</li> <li>(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?</li> <li>□ Yes □ No</li> <li>If Yes, please describe.</li> <li>If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.</li> <li>(c) Will you provide notice of this application in alternative languages?</li> </ul>
<ul> <li>(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?</li> <li>□ Yes □ No</li> <li>(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?</li> <li>□ Yes □ No</li> <li>If Yes, please describe.</li> <li>If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.</li> <li>(c) Will you provide notice of this application in alternative languages?</li> <li>□ Yes □ No</li> <li>Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the</li> </ul>
<ul> <li>(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?  ☐ Yes ☐ No  (b) If yes, do you intend at this time to provide public outreach other than what is required by rule?  ☐ Yes ☐ No  If Yes, please describe.  If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.</li> <li>(c) Will you provide notice of this application in alternative languages?  ☐ Yes ☐ No  Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.</li> </ul>

☐ Mailed by TCEQ's Office of the Chief Clerk
□ Other (specify)
(d) Is there an opportunity for some type of public meeting, including after notice?
□ Yes □ No
(e) If a public meeting is held, will a translator be provided if requested?
□ Yes □ No
(f) Hard copies of the application will be available at the following (check all that apply):
□ TCEQ Regional Office
□ TCEQ Central Office
☐ Public Place (specify)
Section 7. Voluntary Submittal
For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.
Will you provide notice of this application, including notice in alternative languages?
□ Yes □ No
What types of notice will be provided?
□ Publish in alternative language newspaper
$\square$ Posted on Commissioner's Integrated Database Website
☐ Mailed by TCEQ's Office of the Chief Clerk
□ Other (specify)