

South Central Water Company

PO Box 570177
Houston, Texas 77257-0177
713-783-6611 – (fax) 713-783-6321

July 25, 2018

Executive Director
Texas Commission on Environmental Quality
Attn: Water Quality Division
Wastewater Permits Section/Application Team (MC 148)
P.O. Box 13087
Austin, Texas 78711-3087

To Whom It May Concern:

Please find enclosed one original application and three copies for a Major Amendment to a Domestic Wastewater Discharge Permit Application according to the following:

Type of Application: **Major Amendment to a Domestic Wastewater Discharge Permit**
Applicant: **South Central Water Company**
Permit Number: **WQ0014988-001**
Name of the Facility: **Cibolo Valley WWTP**

An application fee of \$1,650.00 has been sent under separate cover to the revenue section as required.

Thank you,



Jeff Goebel
713-724-9321

**APPLICATION FOR A MAJOR AMENDMENT TO A
DOMESTIC WASTEWATER DISCHARGE PERMIT**

Permit No. : WQ0014988-001

*Cibolo Valley
Wastewater Treatment Facility*

Submitted to:

**Executive Director
Texas Commission on Environmental Quality
Attn: Water Quality Division
Wastewater Permits Section/Application Team (MC 148)
P.O. Box 13087
Austin, Texas 78711-3087**

Submitted by:

**South Central Water Company
PO Box 570177
Houston Texas 77257**



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

Complete and submit this checklist with the application.

APPLICANT: South Central Water Company

PERMIT NUMBER: WQ0014988001

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

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

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

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

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

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

South Central Water Company

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

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

CN: 602602179

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.

First/Last Name: Malcolm Bailey

Title/Prefix: President

Credential: [REDACTED]

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

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

NA

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

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

CN: [REDACTED]

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

First and Last Name: [REDACTED]

Title/Prefix: [REDACTED]

Credential: [REDACTED]

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

[REDACTED]

C. Core Data Form

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

Section 4. Application Contact Information (Instructions Page 30)

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

A. First and Last Name: Jeff Goebel Credential: [REDACTED]
Organization Name: South Central Water Company Title/Prefix: Vice President
Mailing Address: 32002 Pattys Landing
City: Magnolia State: Texas ZIP Code: 77354
Phone No.: 713-724-9321 Ext.: [REDACTED] Fax No.: [REDACTED]
E-mail Address: texaswater@sbcglobal.net
Check one or both: Administrative Contact Technical Contact

B. First and Last Name: [REDACTED] Credential: [REDACTED]
Organization Name: [REDACTED] Title/Prefix: [REDACTED]
Mailing Address: [REDACTED]
City: [REDACTED] State: [REDACTED] ZIP Code: [REDACTED]
Phone No.: [REDACTED] Ext.: [REDACTED]
Fax No.: [REDACTED]
E-mail Address: [REDACTED]
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. First and Last Name: Jeff Goebel Credential: [REDACTED]
Organization Name: South Central Water Company Title/Prefix: Vice President
Mailing Address: PO Box 570177
City: Houston State: Texas ZIP Code: 77257
Phone No.: 713-724-9321 Ext.: [REDACTED] Fax No.: [REDACTED]
E-mail Address: texaswater@sbcglobal.net

B. First and Last Name: Malcolm Bailey Credential: [REDACTED]
Organization Name: South Central Water Company Title/Prefix: President
Mailing Address: PO Box 570177
City: Houston State: Texas ZIP Code: 77257
Phone No.: 713-783-6611 Ext.: [REDACTED] Fax No.: [REDACTED]
E-mail Address: [REDACTED]

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).

First and Last Name: Malcolm Bailey Credential: [REDACTED]
Organization Name: South Central Water Company Title/Prefix: President
Mailing Address: PO Box 570177
City: Houston State: Texas ZIP Code: 77257
Phone No.: 713-783-6611 Ext.: [REDACTED] Fax No.: [REDACTED]
E-mail Address: [REDACTED]

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.

First and Last Name: Malcolm Bailey Credential: [REDACTED]
Organization Name: South Central Water Company Title/Prefix: President
Mailing Address: PO Box 570177
City: Houston State: Texas ZIP Code: 77257
Phone No.: 713-783-6611 Ext.: [REDACTED] Fax No.: [REDACTED]
E-mail Address: [REDACTED]

You can submit DMR data on the TCEQ website at <https://www.tceq.texas.gov/field/netdmr/netdmr.html>. Establish an electronic reporting account with the permit number.

Section 8. Public Notice Information (Instructions Page 31)

A. Individual Publishing the Notices

First and Last Name: Jeff Goebel

Credential: [REDACTED]

Organization Name: South Central Water Company Title/Prefix: Vice President

Mailing Address: 32002 Pattys Landing

City: Magnolia

State: Texas

ZIP Code: 77354

Phone No.: 713-724-9321

Ext.: [REDACTED]

Fax No.: [REDACTED]

E-mail Address: texaswater@sbcglobal.net

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

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

E-mail Address:

Fax No.:

Regular Mail:

Mailing Address: [REDACTED]

City: [REDACTED]

State: [REDACTED]

ZIP Code: [REDACTED]

Phone No.: [REDACTED]

Ext.: [REDACTED]

Fax: [REDACTED]

C. Contact person to be listed in the Notices

First and Last Name: Jeff Goebel

Credential: [REDACTED]

Organization Name: [REDACTED]

Title/Prefix: Consultant

Phone No.: 713-724-9321

Ext.: [REDACTED]

E-mail:

texaswater@sbcglobal.net

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: Bulverde/Spring Branch Library

Location within the building: [REDACTED]

Physical Address of Building: 131 Bulverde Crossing Rd

City: Bulverde

County: Comal

Contact Name: [REDACTED]

Phone No.: 830-438-4864

Ext.: [REDACTED]

E. Bilingual Notice Requirements:

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

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

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

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

Yes No

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

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

Yes No

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

Yes No

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

Yes No

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

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

Search the TCEQ's Central Registry at

<http://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=regent.RNSearch> to determine the RN.

If the site is found, provide the assigned Regulated Entity Number and provide the information for the site to be authorized through this application below.

TCEQ issued Regulated Entity Number (RN): RN 105921738

A. State/TPDES Permit No.: WQ0014988001

Expiration Date: 3/1/2020

EPA Identification No. (TPDES Permits only): TX 0132837

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

If the facility is located in Bexar, Comal, Hays, Kinney, Medina, Travis, Uvalde, or Williamson County, additional information concerning protection of the Edwards Aquifer may be required.

C. Owner of treatment facility: South Central Water Company

Ownership of Facility: Public Private Both Federal

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

First and Last Name: South Central Water Company

Mailing Address: PO 570177

City: Houston

State: Texas

ZIP Code: 77257

Phone No.: 713-783-6611

E-mail Address: [REDACTED]

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: [REDACTED]

E. Owner of effluent disposal site:

First and Last Name: [REDACTED]

Mailing Address: [REDACTED]

City: [REDACTED]

State: [REDACTED]

ZIP Code: [REDACTED]

Phone No.: [REDACTED]

E-mail Address: [REDACTED]

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: [REDACTED]

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

First/Last Name: [REDACTED]

Mailing Address: [REDACTED]

City: [REDACTED]

State: [REDACTED]

ZIP Code: [REDACTED]

Phone No.: [REDACTED]

E-mail Address: [REDACTED]

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: [REDACTED]

Section 11. TLAP Disposal Information (Instructions Page 36)

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

Yes No

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

Not TLAP Application

B. City nearest the disposal site: [REDACTED]

C. County in which the disposal site is located: [REDACTED]

D. Disposal Site Latitude: [REDACTED] Longitude: [REDACTED]

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

[REDACTED]

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

[REDACTED]

Section 12. Miscellaneous Information (Instructions Page 37)

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

Yes No

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

Yes No Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.

[REDACTED]

C. Did any person formerly employed by the TCEQ represent your company and get paid for

service regarding this application?

Yes No

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

D. Do you owe any fees to the TCEQ?

Yes No

If yes, provide the following information:

Account number: [REDACTED]

Amount past due: [REDACTED]

E. Do you owe any penalties to the TCEQ?

Yes No

If yes, please provide the following information:

Enforcement order number: [REDACTED]

Amount past due: [REDACTED]

Section 13. Attachments (Instructions Page 38)

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

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

Other Attachments. Please specify: [REDACTED]

Section 14. Signature Page (Instructions Page 39)

Permit Number: W00014988001

Applicant: South Central Water Company

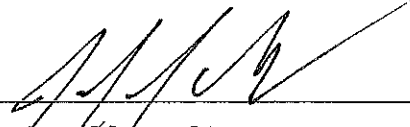
Certification:

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.

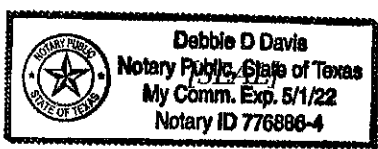
Signatory name (typed or printed): Jeff Goebel

Signatory title: Vice President

Signature:  Date: 7-25-18
(Use blue ink)

Subscribed and Sworn to before me by the said Jeff Goebel
on this 25th day of July, 2018.
My commission expires on the 1st day of May, 2017.

Debbie D. Davis
Notary Public



Harris
County, Texas

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

DOMESTIC ADMINISTRATIVE REPORT 1.1

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 41)

A. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:

- The applicant's property boundaries
- The facility site boundaries within the applicant's property boundaries
- The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
- The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
- The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
- The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
- The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
- The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
- The property boundaries of all landowners surrounding the effluent disposal site
- The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
- The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located

B. Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowners map has been provided.

C. Indicate by a check mark in which format the landowners list is submitted:

- Readable/Writeable CD Four sets of labels

D. Provide the source of the landowners' names and mailing addresses: County Appraisal District

E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?

- Yes No

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

No foreseeable impact

Section 2. Original Photographs (Instructions Page 44)

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

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

Section 3. Buffer Zone Map (Instructions Page 44)

- A. Buffer zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels.
- The applicant's property boundary;
 - The required buffer zone; and
 - Each treatment unit; and
 - The distance from each treatment unit to the property boundaries.
- B. Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.
- Ownership
 - Restrictive easement
 - Nuisance odor control
 - Variance
- C. Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?
- Yes No

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

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

TCEQ USE ONLY:

Application type: Renewal Major Amendment Minor Amendment New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

Texas Historical Commission U.S. Fish and Wildlife

Texas Parks and Wildlife Department U.S. Army Corps of Engineers

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

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

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

The following applies to all applications:

1. Permittee: South Central Water Company

Permit No. WQ00 14988001

EPA ID No. TX 0132837

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

The facility will is located 1,600' SE of the intersection of 281 and 1863

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

First and Last Name: Jeff Goebel

Credential: [REDACTED]

Organization Name: South Central Water Company

Title/Prefix: Vice President

Mailing Address: 32002 Pattys Landing

City: Magnolia

State: Texas

ZIP Code: 77354

Phone No.: 713-724-9321

Ext.: [REDACTED]

Fax No.: [REDACTED]

E-mail Address: texaswater@sbcglobal.net

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

Same as applicant

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.

From the facility thence to an unnamed ditch; thence to an unnamed trib; thence to Cibolo Creek

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

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

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

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

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

None known, Wastewater treatment plant is above ground

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

Wastewater treatment facility

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

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

Wastewater treatment plant constructed in 2016

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

Not known

WATER QUALITY PERMIT
PAYMENT SUBMITTAL FORM

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

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

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

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

BY OVERNIGHT/EXPRESS MAIL

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

Fee Code: WQP Waste Permit No: WQ0014988001

1. Check or Money Order Number: .

10. Check or Money Order Amount: \$1,650

11. Date of Check or Money Order: .

12. Name on Check or Money Order: South Central Water Company

13. APPLICATION INFORMATION

Name of Project or Site: Cibolo Valley WWTP

Physical Address of Project or Site: No address

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

ATTACHMENT 1

INDIVIDUAL INFORMATION

Section 1. Individual Information (Instructions Page 50)

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

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

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

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

Date of Birth: [REDACTED]

Mailing Address: [REDACTED]

City, State, and Zip Code: [REDACTED]

Phone Number: [REDACTED]

Fax Number: [REDACTED]

E-mail Address: [REDACTED]

CN: [REDACTED]

For Commission Use Only:

Customer Number:

Regulated Entity Number:

Permit Number:

Attachment A-1



TCEQ Core Data Form

TCEQ Use Only

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

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)		<input checked="" type="checkbox"/> Other
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 602602179		RN 105921738

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)	
<input type="checkbox"/> New Customer		<input checked="" type="checkbox"/> Update to Customer Information	
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)		<input type="checkbox"/> Change in Regulated Entity Ownership	
The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).			
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)		If new Customer, enter previous Customer below:	
South Central Water Company			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
0161296200	17606670101	NA	N/A
11. Type of Customer:	<input checked="" type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other:	
12. Number of Employees	13. Independently Owned and Operated?		
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following:			
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Owner & Operator			
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> Voluntary Cleanup Applicant <input type="checkbox"/> Other:			
15. Mailing Address:	PO Box 570177		
	City	State	ZIP
	Houston	TX	77257
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
		malcolmbailey@comcast.net	
18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)	
(713) 783-6611		() -	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)	
<input type="checkbox"/> New Regulated Entity <input checked="" type="checkbox"/> Update to Regulated Entity Name <input checked="" type="checkbox"/> Update to Regulated Entity Information	
The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC.)	
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)	
Cibolo Valley WWTP	

23. Street Address of the Regulated Entity: (No PO Boxes)	None						
	City	Angleton	State	TX	ZIP	77515	ZIP + 4
24. County							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	1,600' SE of the intersection of 281 and 1863							
26. Nearest City	Bulverde				State	TX	Nearest ZIP Code	78163
27. Latitude (N) In Decimal:	Degrees			Minutes			Seconds	
	29	44	16	28. Longitude (W) In Decimal:				
				Degrees			Minutes	
				98	25			48
29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)			
4952								
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)								
Wastewater Utiliti								
34. Mailing Address:	PO Box 570177							
	City	Houston	State	TX	ZIP	77257	ZIP + 4	
35. E-Mail Address:		malcolmbailey@concast.net						
36. Telephone Number			37. Extension or Code		38. Fax Number (if applicable)			
(713) 783-6611			() -		() -			

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

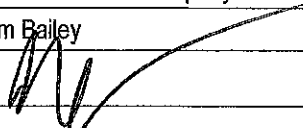
<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review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

SECTION IV: Preparer Information

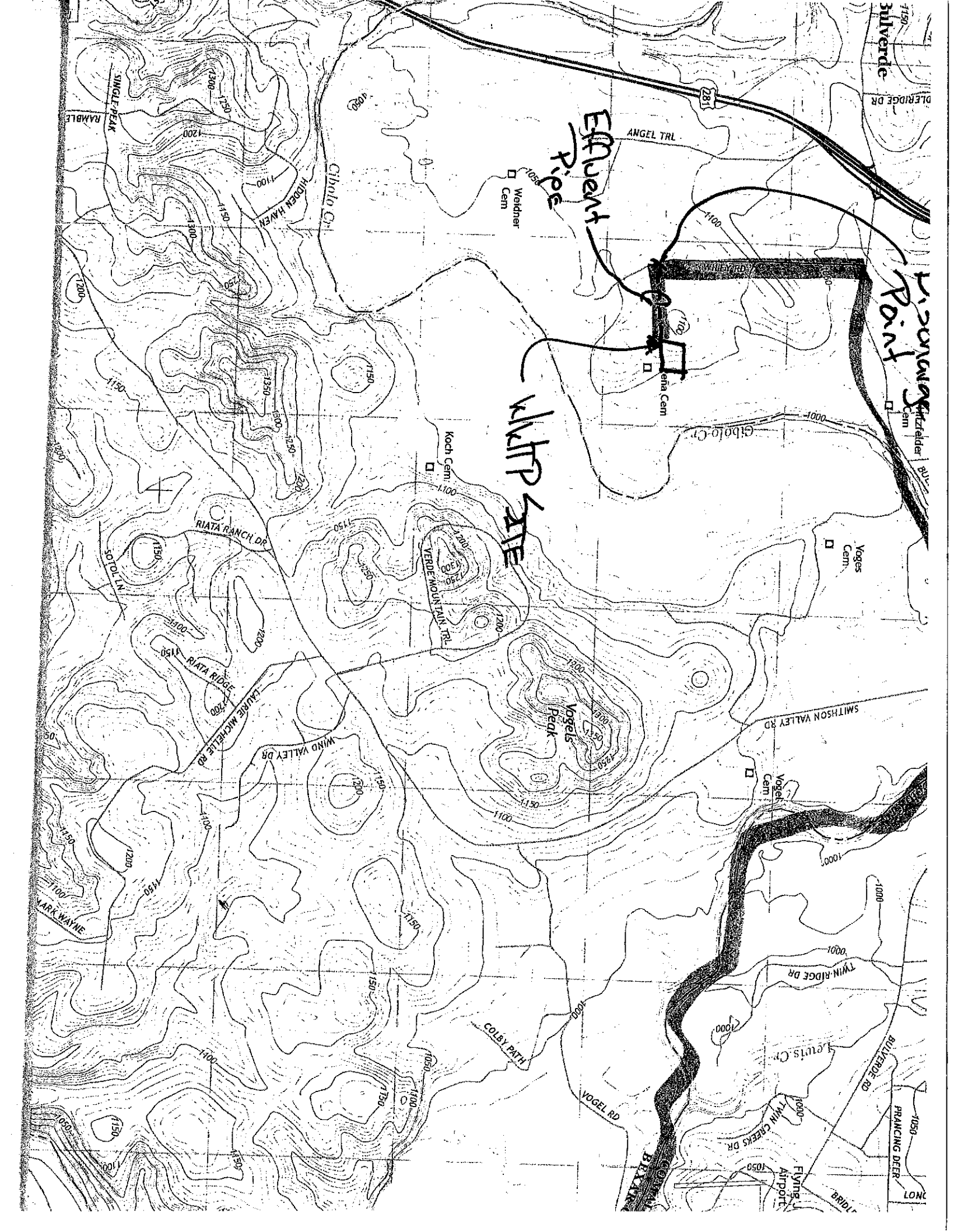
40. Name:	Jeff Goebel	41. Title:	Vice President
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(713) 724-9321		() -	texaswater@sbcglobal.net

SECTION V: Authorized Signature

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

Company:	South Central Water Company	Job Title:	President
Name (In Print):	Malcolm Bailey	Phone:	(713) 783-6611
Signature:		Date:	

Attachment A-2



Efluent Pipe

WHTP SITE

Pisciculture Pond

Silverde

ANGEL TRL

Wetherer Cem

Leifer Cem

Koch Cem

Vogel Cem

Vogel Peak

Vogel Cem

Flying Airport

281

Cibola Cr.

Cibola Cr.

SMITHSON VALLEY RD

VOGEL RD

Leifer's Cr.

TWIN RIDGE DR

PRANCING DEER

LONG

SINGL-PEAR RAMBLE

HIDDEN HAVEN

RIATA RANCH DR

VERDE MOUN RAIN TRL

WIND VALLEY DR

LAURE MICHELLE RD

RIATA RIDGE

COLBY PATH

MARK WAYNE

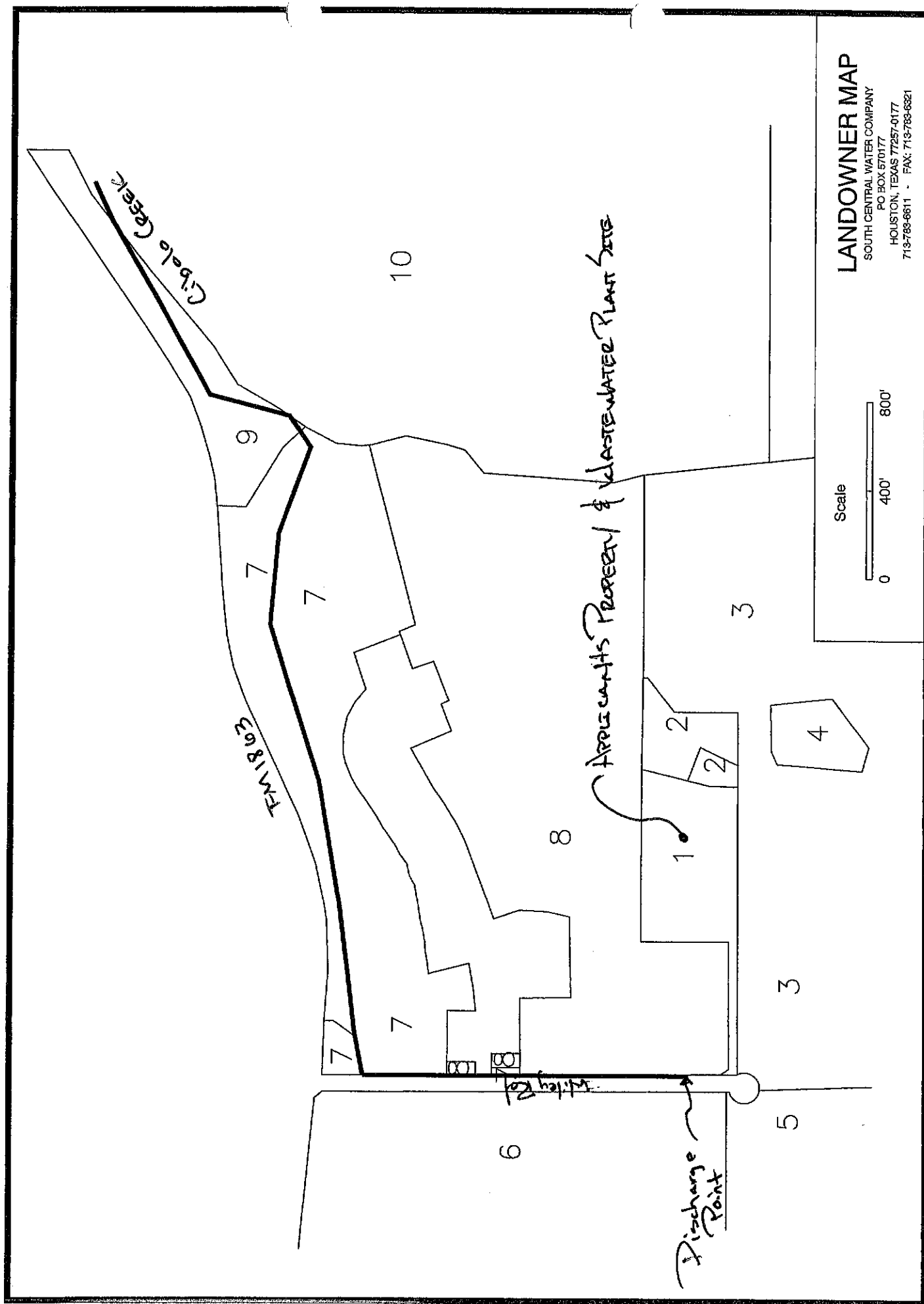
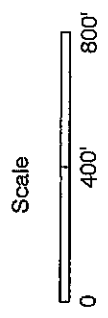
BULLRIDGE RD

TWIN CREEKS DR

DRIVE

Attachment A-3

LANDOWNER MAP
SOUTH CENTRAL WATER COMPANY
PO BOX 570177
HOUSTON, TEXAS 77257-0177
713-783-6611 • FAX: 713-783-6321



Surrounding and Downstream Landowners

1. South Central Water Company
PO Box 570177
Houston Texas 77257
2. Bulverde Area Human Society Inc
PO Box 50
Bulverde, Texas 78163
3. Cibolo Valley Investments
10003 NW Military Hwy
Ste 2201
San Antonio Texas 78221
4. Moreno Juan & Maria
3306 FM 1863
Bulverde TX 78163
5. Cibolo Valley Partners LLC
250 W Nottingham Dr
Ste 410
San Antonio Texas 78209
6. M2G FM 1863
250 W Nottingham Dr
Ste 410
San Antonio Texas 78209
7. Edgebrook Residential Community Inc
12500 San Pedro Ave
Ste 325
San Antonio Texas 78216
8. KB Home Lone Star Inc
4800 Fredericksburg Rd
San Antonio Texas 78229

Surrounding and Downstream Landowners

9. Mayer James H Family Trust

Mayer Lillian Trustee

3780 FM 1863

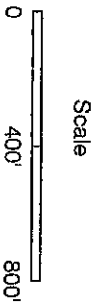
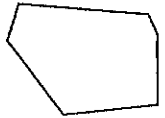
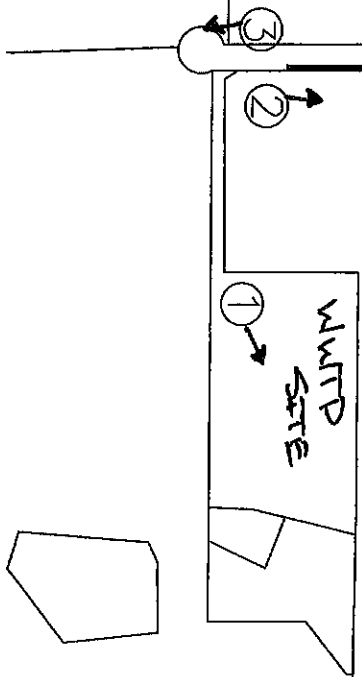
Bulverde, Texas 78163

10. Maynard Beverly

3780 FM 1863 #1

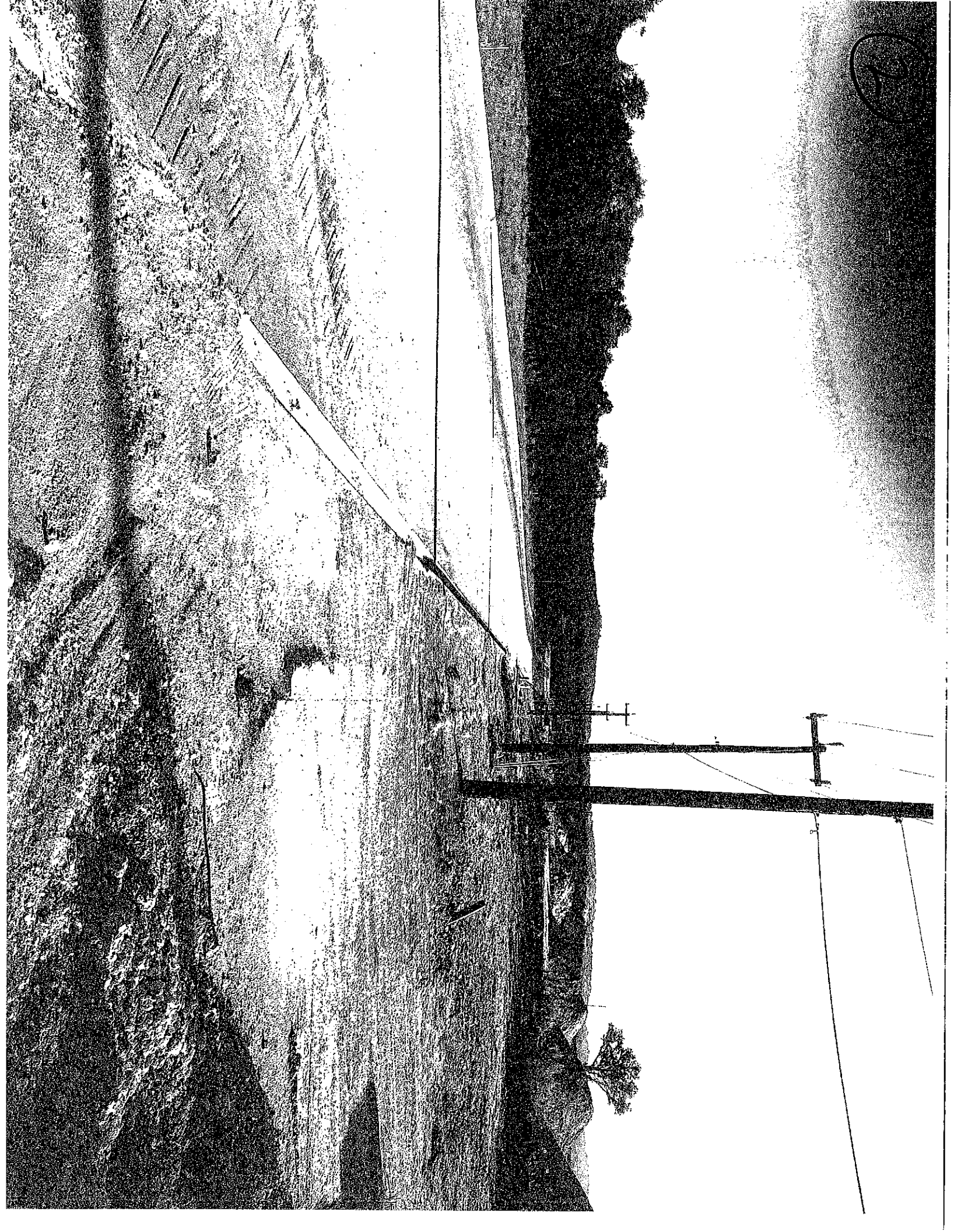
Bulverde Texas 78163

Attachment A-4

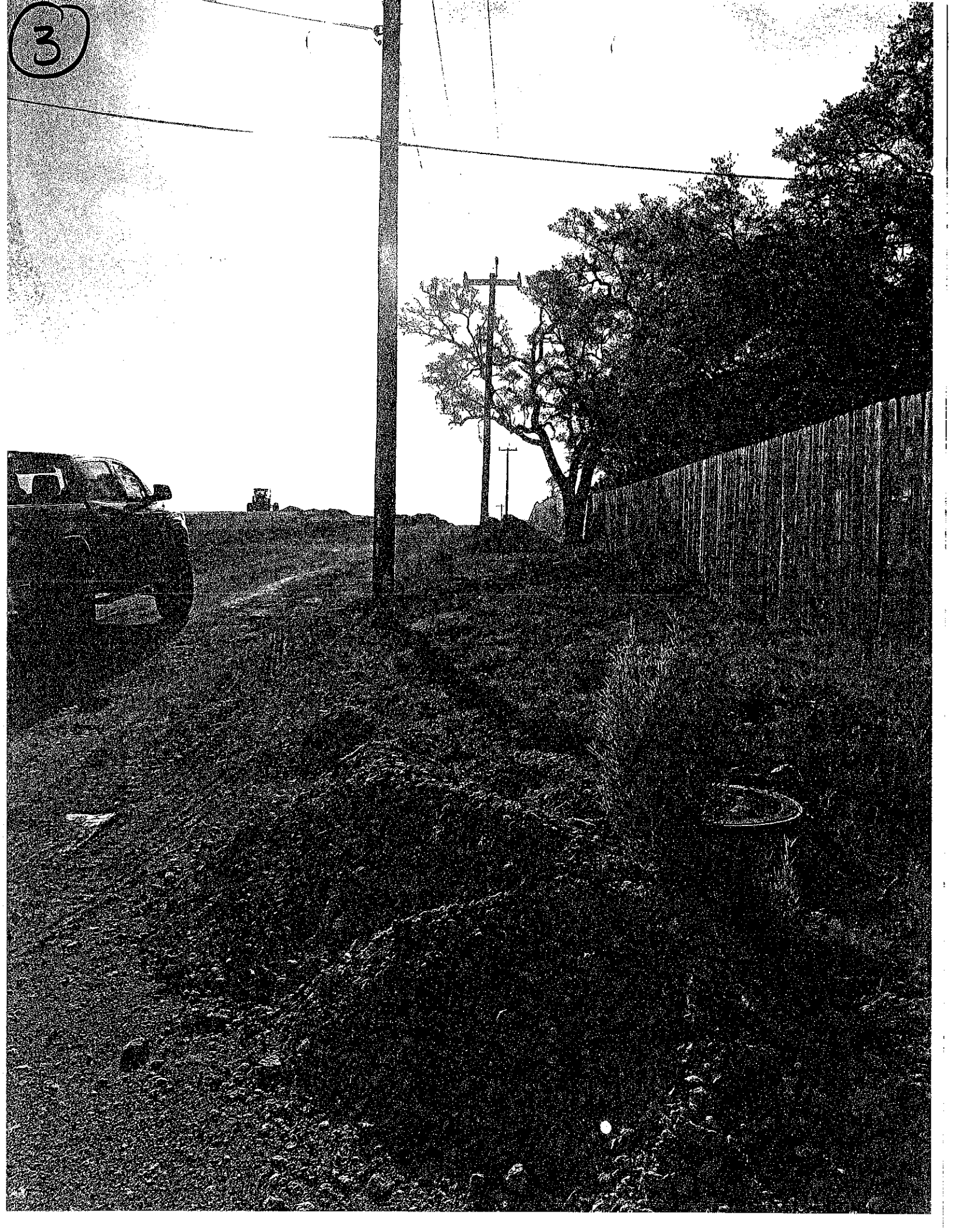


PICTURE LOCATION MAP

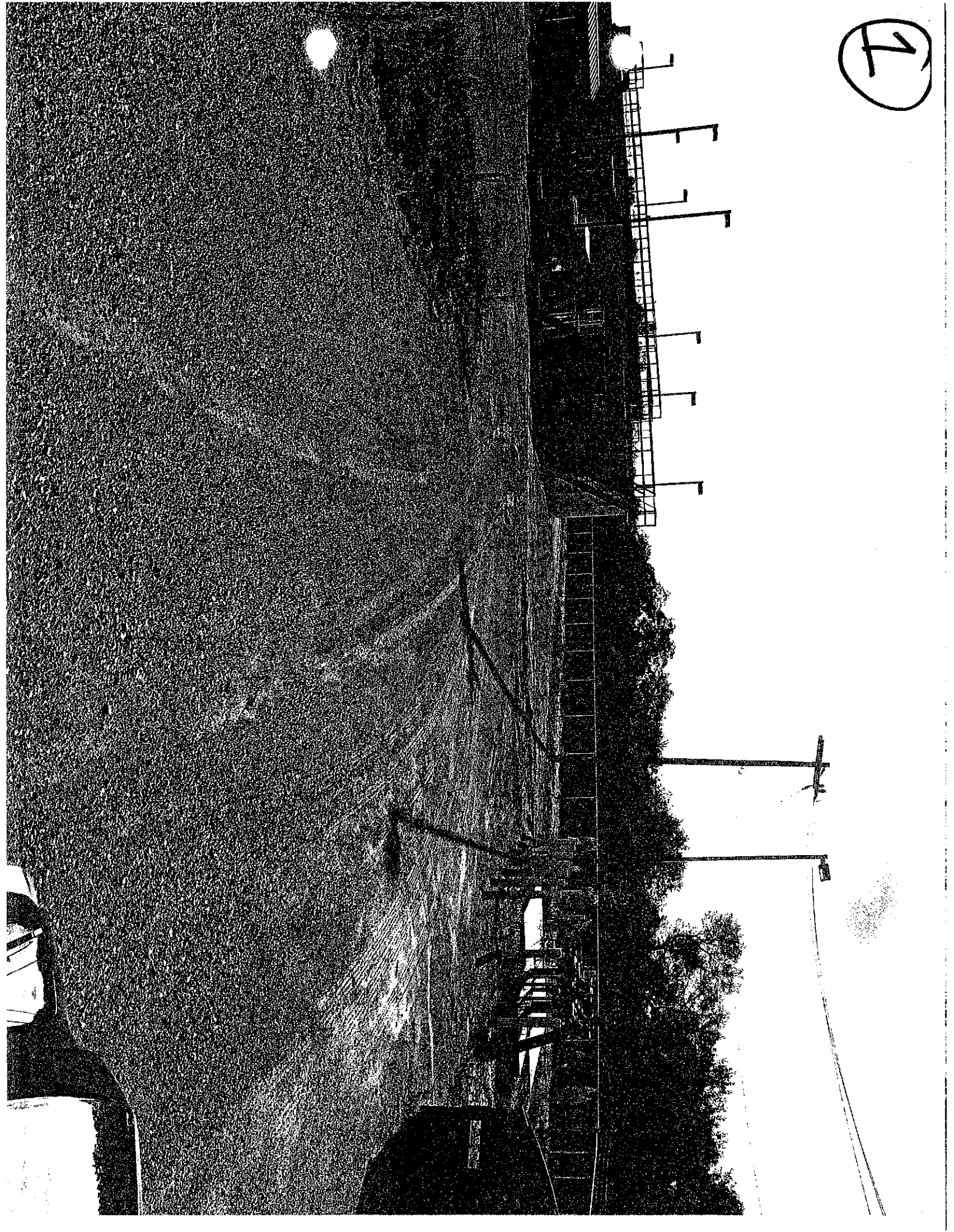
SOUTH CENTRAL WATER COMPANY
PO BOX 570177
HOUSTON, TEXAS 77257-0177
713-783-9611 - FAX: 713-789-9321



3

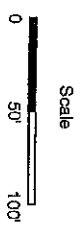
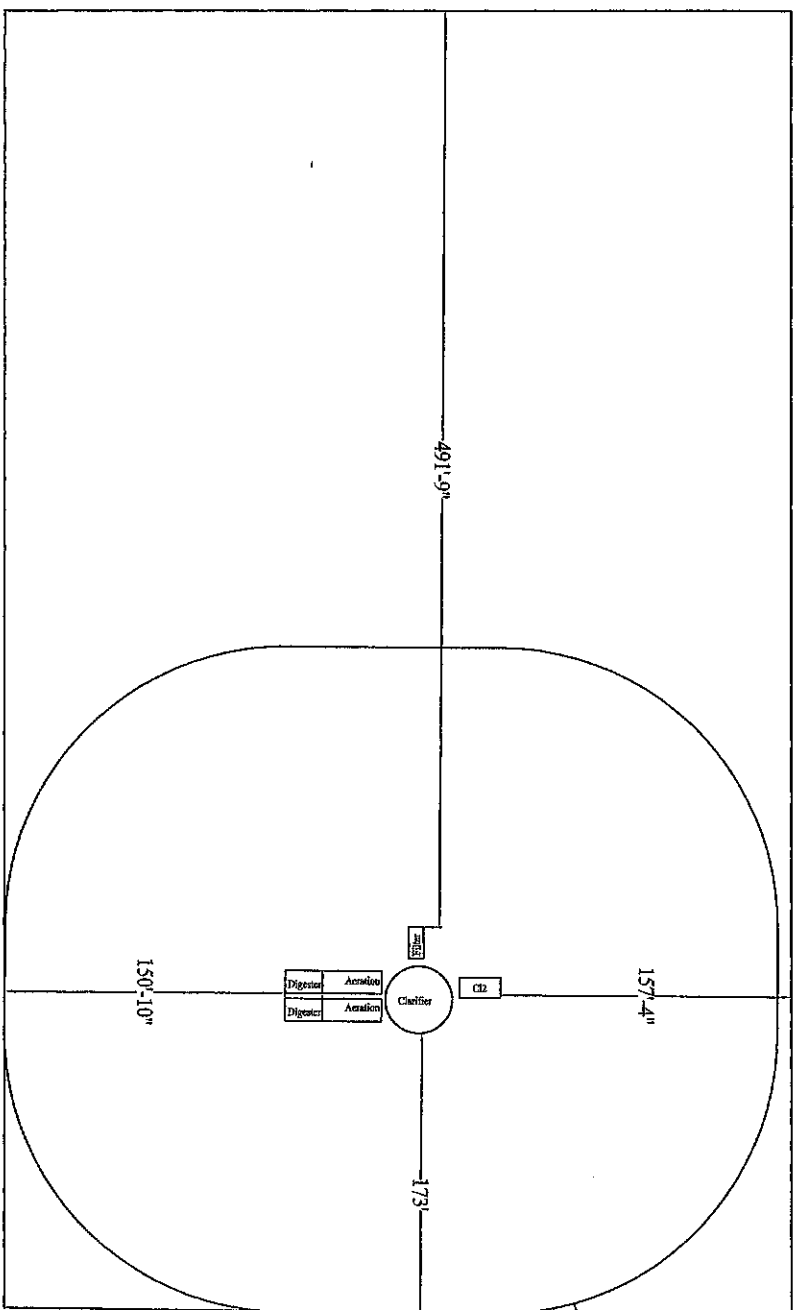


7



Attachment A-5

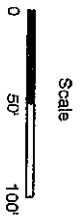
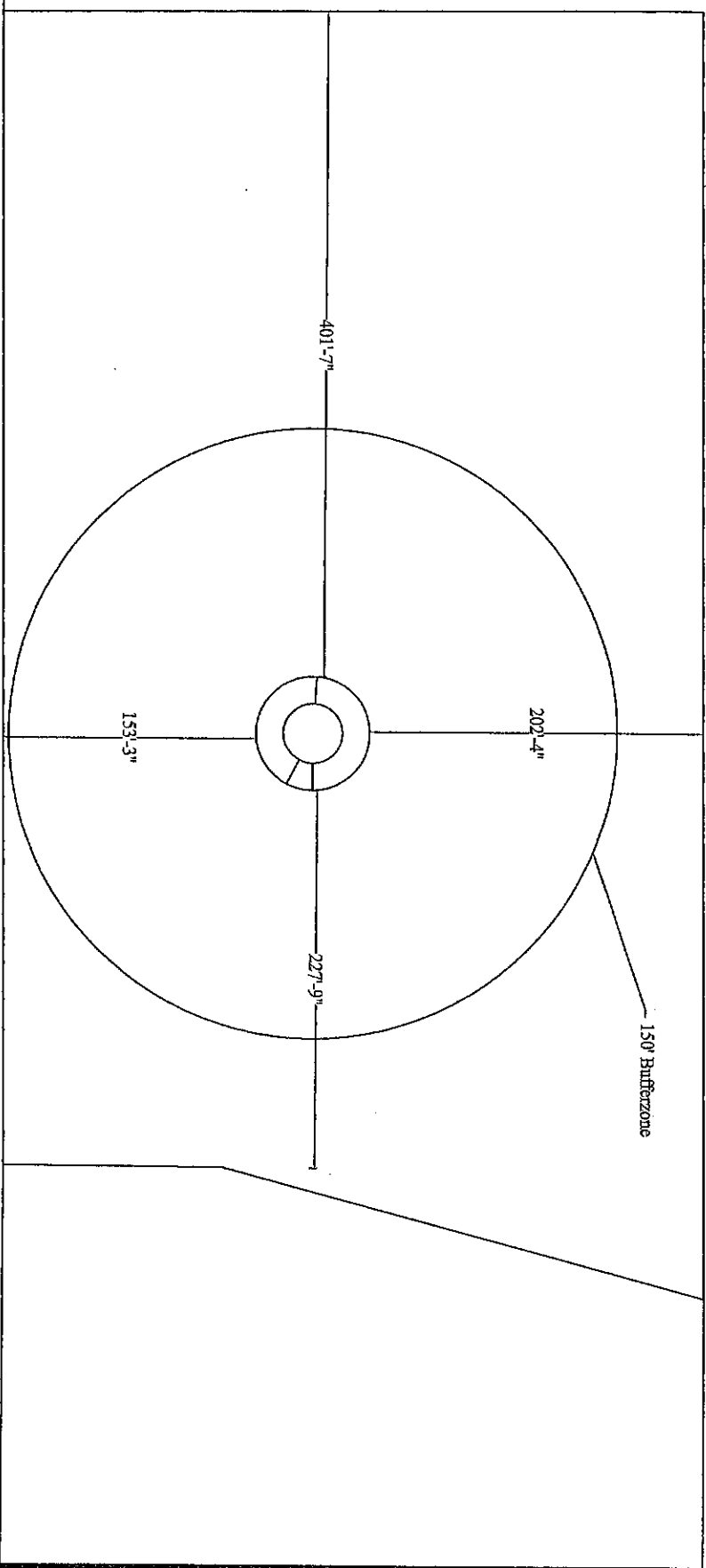
Property Boundaries



BUFFERZONE MAP PHASE I

SOUTH CENTRAL WATER COMPANY
PO BOX 670177
HOUSTON, TEXAS 77267-0177
713/782-8011 FAX: 713/782-8261

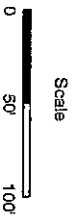
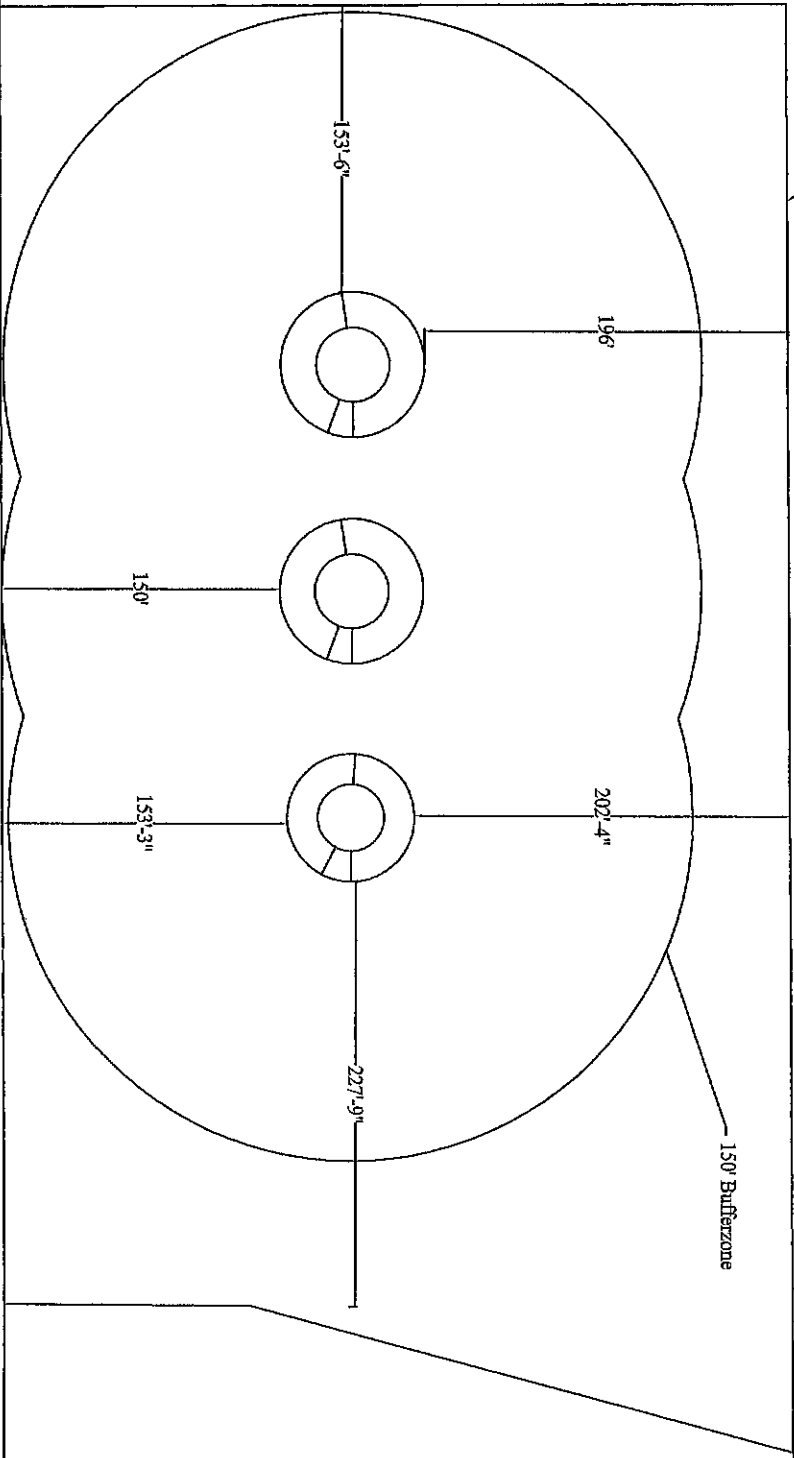
Property Boundaries



BUFFERZONE MAP PHASE II

SOUTH CENTRAL WATER COMPANY
PO BOX 57077
HOUSTON, TEXAS 77257-4177
713/788-8811 - FAX 713/788-8821

Property Boundaries



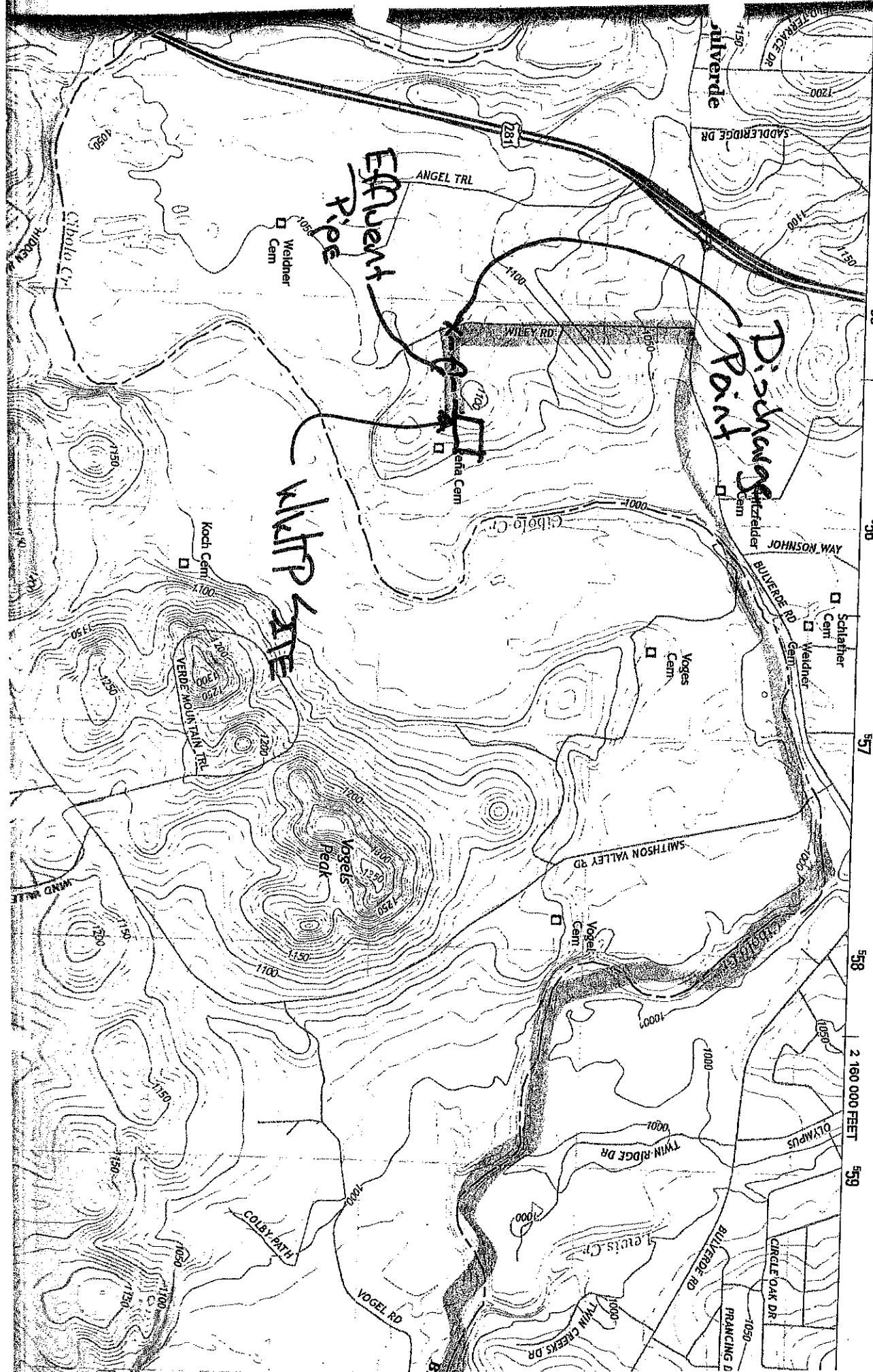
BUFFERZONE MAP PHASE III

SOUTH CENTRAL WATER COMPANY
2105 BOULEVARD
HOUSTON, TEXAS 77057-0177
713-786-4811 - FAX 713-786-4821

Attachment A-6

954 955 956 26' 957 958 959

BULVERDE Q
TEX
7.5-MINUT



Discharge Point

Effluent Pipe

WTP SITE



Attachment A-7

South Central Water Company

PO Box 570177
Houston, Texas 77257
713-783-6611

July 25, 2018

Texas Commission on Environmental Quality
Attn: Revenues Section (MC 214)
P.O. Box 13088
Austin, Texas 78711-3088

To Whom It May Concern:

Please find enclosed a check for \$1,650.00 for the processing of an application according to the following.

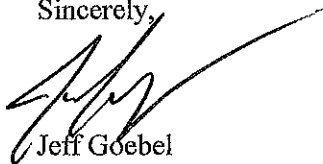
Type of Application: **Major Amendment to a Wastewater Discharge Permit**

Applicant: **South Central Water Company**

Application Number: **WQ0014988-001**

Name of the Subdivision: **Cibolo Valley Wastewater Treatment Facility**

Sincerely,



Jeff Goebel
713-724-9321



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): 0.075

2-Hr Peak Flow (MGD): 0.3

Estimated construction start date: 2016

Estimated waste disposal start date: 2018

B. Interim II Phase

Design Flow (MGD): 0.250

2-Hr Peak Flow (MGD): 1.0

Estimated construction start date: 2020

Estimated waste disposal start date: 2020

C. Final Phase

Design Flow (MGD): 0.950

2-Hr Peak Flow (MGD): 3.8

Estimated construction start date: 2022

Estimated waste disposal start date: 2022

D. Current operating phase: Not in Operation

Provide the startup date of the facility: April 2018

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:

Please see attachment 'T1'

Port or pipe diameter at the discharge point, in inches: 12

B. Treatment Units

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

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Please see attachment 'T1'		

C. Process flow diagrams

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

Attachment: T2

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: T3

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

Cibolo Valley

Section 4. Unbuilt Phases (Instructions Page 52)

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

Yes No

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

Yes No

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

A new developer has acquired additional property that South Central Water Company has under CCN that will require service

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.

Click here to auto-text

Section 6. Permit Specific Requirements (Instructions Page 53)

For applicants with an existing permit, check the *Other Requirements* or *Special Provisions* of the permit.

A. Summary transmittal

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

Yes No

If yes, provide the date(s) of approval for each phase: 9/22/2016 WWPR Log No 0716/031

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 insert 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.

Bufferzone requirements will be met by ownership

C. Other actions required by the current permit

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

Yes No

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

Click here to insert text.

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

Yes No

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

2. Grit and grease processing

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

3. Grit disposal

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

Yes No

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

Describe the method of grit disposal.

4. Grease and decanted liquid disposal

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

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

E. Stormwater management

1. Applicability

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

Yes No

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

Yes No

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

2. MSGP coverage

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

Yes No

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

TXR05 or TXRNE

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

Yes No

3. Conditional exclusion

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

Yes No

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

4. Existing coverage in individual permit

Is your stormwater discharge currently permitted through this individual

TPDES or TLAP permit?

Yes No

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

~~Click here to insert text.~~

5. Zero stormwater discharge

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

Yes No

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

~~Click here to insert text.~~

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

6. Request for coverage in individual permit

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

Yes No

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

████████████████████

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

Yes No

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

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

1. Acceptance of sludge from other WWTPs

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

Yes No

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

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

████████████████████

Note: Permits that accept sludge from other wastewater treatment plants

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

Yes No

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

Yes No

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

Yes No

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

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.

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

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

Yes No

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

Click here to enter text.

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

Is the facility in operation?

Yes

No

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

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
<i>E.coli</i> (CFU/100ml) freshwater					
Enterococci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, µmohs/cm, †					

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

*TPDES permits only

†TLAP permits only

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

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

Section 8. Facility Operator (Instructions Page 60)

Facility Operator Name: Contract Operations

Facility Operator's License Classification and Level: Contract Operations

Facility Operator's License Number: Contract Operations

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

A. Sludge disposal method

Identify the current or anticipated sludge disposal method or methods from the following list. Check all that apply.

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

Yes No

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

Yes No

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

Yes No

B. Sludge processing authorization

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

Sludge Composting Yes No

Marketing and Distribution of sludge Yes No

Sludge Surface Disposal or Sludge Monofill Yes No

Temporary storage in sludge lagoons Yes No

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

Yes No

Section 11. Sewage Sludge Lagoons (Instructions Page 61)

Does this facility include sewage sludge lagoons?

Yes No

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

A. Location information

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

- Original General Highway (County) Map:

Attachment:

- USDA Natural Resources Conservation Service Soil Map:

Attachment:

- Federal Emergency Management Map:

Attachment: [Click here to enter text.](#)

- Site map:

Attachment: [Click here to enter text.](#)

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: [Click here to enter text.](#)

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:

[Click here to enter text.](#)

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: [Click here to enter text.](#)

Total Kjeldahl Nitrogen, mg/kg: [Click here to enter text.](#)

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: [Click here to enter text.](#)

Phosphorus, mg/kg: [Click here to enter text.](#)

Potassium, mg/kg: [Click here to enter text.](#)

pH, standard units: [Click here to enter text.](#)

Ammonia Nitrogen mg/kg: [Click here to enter text.](#)

Arsenic: [Click here to enter text.](#)

Cadmium: [Click here to enter text.](#)

Chromium: [Click here to enter text](#)

Copper: [Click here to enter text](#)

Lead: [Click here to enter text](#)

Mercury: [Click here to enter text](#)

Molybdenum: [Click here to enter text](#)

Nickel: [Click here to enter text](#)

Selenium: [Click here to enter text](#)

Zinc: [Click here to enter text](#)

Total PCBs: [Click here to enter text](#)

Provide the following information:

Volume and frequency of sludge to the lagoon(s): [Click here to enter text](#)

Total dry tons stored in the lagoons(s) per 365-day period: [Click here to](#)

[enter text](#)

Total dry tons stored in the lagoons(s) over the life of the unit: [Click here to](#)

[enter text](#)

C. Liner information

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

Yes

No

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

[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.

- Plan view and cross-section of the sludge lagoon(s)
Attachment: [Click here to enter text.](#)
- Copy of the closure plan
Attachment: [Click here to enter text.](#)
- Copy of deed recordation for the site
Attachment: [Click here to enter text.](#)
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons
Attachment: [Click here to enter text.](#)
- Description of the method of controlling infiltration of groundwater and surface water from entering the site
Attachment: [Click here to enter text.](#)
- Procedures to prevent the occurrence of nuisance conditions
Attachment: [Click here to enter text.](#)

E. Groundwater monitoring

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

Yes No

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

Attachment: [Click here to enter text.](#)

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

A. Additional authorizations

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

Yes No

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

[Click here to enter text](#)

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

Yes No

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

Yes No

If yes to either question, provide a brief summary of the enforcement, the implementation schedule, and the current status:

[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?

Yes No

B. Remediation activity wastewater

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

Yes No

C. Details about wastes received

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

Attachment: [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:
 - 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: Malcolm Bailey

Title: President

Signature: _____

Date: _____

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.

South Central Water Company has been approved for additional acreage purchased by the current developer. This acreage is under our current sewer CCN. In order to serve this area additional capacity in the wastewater treatment system will be needed.

B. Regionalization of facilities

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

1. Municipally incorporated areas

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

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

Yes No Not Applicable

If yes, within the city limits of:

If yes, attach correspondence from the city.

Attachment:

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

Attachment:

2. Utility CCN areas

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

Yes No

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

Attachment: [Click here to enter text.](#)

3. *Nearby WWTPs or collection systems*

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

Yes No

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

Attachment: T-6

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

Attachment: [Click here to enter text.](#)

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

Yes No

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

Attachment: [Click here to enter text.](#)

Section 2. Organic Loading (Instructions Page 67)

Is this facility in operation?

Yes No

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

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

A. Current organic loading

Facility Design Flow (flow being requested in application): 0.075

Average Influent Organic Strength or BOD₅ Concentration in mg/l: 300

Average Influent Loading (lbs/day = total average flow X average BOD₅ conc. X 8.34): 187.65

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

<u>TCEQ</u>

B. Proposed organic loading

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

Table 1.1(1) - Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD ₅ Concentration (mg/l)
Municipality		
Subdivision	0.95	300
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park,		

Source	Total Average Flow (MGD)	Influent BOD ₅ Concentration (mg/l)
overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources	0.95	
AVERAGE BOD ₅ from all sources		300

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

A. Existing/Interim I Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 5

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: 0.5

Dissolved Oxygen, mg/l: 4.0

Other: ~~Circle here to enter text~~

B. Interim II Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 5

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: 0.5

Dissolved Oxygen, mg/l: 4.0

Other: [Click here to enter text.](#)

C. Final Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 5

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: 0.5

Dissolved Oxygen, mg/l: 4.0

Other: [Click here to enter text.](#)

D. Disinfection Method

Identify the proposed method of disinfection.

- Chlorine: 1 mg/l after 20 minutes detention time at peak flow
Dechlorination process: [Click here to enter text.](#)
- Ultraviolet Light: [Click here to enter text.](#) 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: T-7

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.

[Click here to enter text](#)

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

FIRM Maps

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: [Click here to enter text](#)

If **no**, provide the approximate date you anticipate submitting your application to the Corps: [Click here to enter text](#)

B. Wind rose

Attach a wind rose. Attachment: [Click here to enter text](#)

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

A. Beneficial use authorization

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

Yes No

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

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

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: [Click here to enter text](#)

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

Attach a solids management plan to the application.

Attachment: T-9

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

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

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

DOMESTIC TECHNICAL REPORT WORKSHEET 2.0

RECEIVING WATERS

The following is required for all TPDES permit applications

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

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

Yes No

If yes, provide the following:

Owner of the drinking water supply:

Distance and direction to the intake:

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

Attachment:

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

Does the facility discharge into tidally affected waters?

Yes No

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

A. Receiving water outfall

Width of the receiving water at the outfall, in feet:

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

Yes No

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

<input type="text"/>

C. Sea grasses

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

Yes No

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

Section 3. Classified Segments (Instructions Page 73)

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

Yes No

If yes, this Worksheet is complete.

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

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

Name of the immediate receiving waters:

A. Receiving water type

Identify the appropriate description of the receiving waters.

- Stream
- Freshwater Swamp or Marsh
- Lake or Pond

Surface area, in acres:

Average depth of the entire water body, in feet:

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

Man-made Channel or Ditch

Open Bay

Tidal Stream, Bayou, or Marsh

Other, specify:

B. Flow characteristics

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

Intermittent - dry for at least one week during most years

Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses

Perennial - normally flowing

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

USGS flow records

Historical observation by adjacent landowners

Personal observation

Other, specify:

C. Downstream perennial confluences

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

Cibolo Creek

D. Downstream characteristics

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

Yes No

If yes, discuss how.

Change to Cibolo Creek

E. Normal dry weather characteristics

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

Dry

Date and time of observation: 7/19/18 8:30 am

Was the water body influenced by stormwater runoff during observations?

Yes

No

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

A. Upstream influences

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



Oil field activities



Urban runoff



Upstream discharges



Agricultural runoff



Septic tanks



Other(s), specify Cibola Water Center



B. Waterbody uses

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



Livestock watering



Contact recreation



Irrigation withdrawal



Non-contact recreation



Fishing



Navigation

Domestic water supply

Industrial water supply

Park activities

Other(s), specify Drainage

C. Waterbody aesthetics

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

Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional

Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored

Common Setting: not offensive; developed but uncluttered; water may be colored or turbid

Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC WORKSHEET 2.1

STREAM PHYSICAL CHARACTERISTICS

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

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

Section 1. General Information (Instructions Page 75)

Date of study: 7/19/18 Time of study: 8:30

Stream name: Unnamed Ditch

Location: Discharge Point

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



Perennial



Intermittent with perennial pools

Section 2. Data Collection (Instructions Page 75)

Number of stream bends that are well defined: 0

Number of stream bends that are moderately defined: 0

Number of stream bends that are poorly defined: 0

Number of riffles: 0

Evidence of flow fluctuations (check one):



Minor



moderate



severe

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

Dry roadside ditch

Stream transects

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

Table 2.1(1) - Stream Transect Records

Stream type at transect Select riffle, run, glide, or pool. See Instructions, Definitions section.	Transect location	Water surface width (ft)	Stream depths (ft) at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.
Choose an item.	None - Dry		
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			
Choose an item.			

Section 3. Summarize Measurements (Instructions Page 76)

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

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): [Click here to enter text](#)

Length of stream evaluated, in feet: [Click here to enter text](#)

Number of lateral transects made: [Click here to enter text](#)

Average stream width, in feet: [Click here to enter text](#)

Average stream depth, in feet: [Click here to enter text](#)

Average stream velocity, in feet/second: [Click here to enter text](#)

Instantaneous stream flow, in cubic feet/second: [Click here to enter text](#)

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): [Click here to enter text](#)

Size of pools (large, small, moderate, none): [Click here to enter text](#)

Maximum pool depth, in feet: [Click here to enter text](#)

DOMESTIC WORKSHEET 3.0

LAND DISPOSAL OF EFFLUENT

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

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

Identify the method of land disposal:

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

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

For existing authorizations, provide Registration Number:



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

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

Table 3.0(1) - Land Application Site Crops

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

Attachment T-1

Facility Dimensions & Facility Features

The facility will employ the complete mix variation of the activated sludge process designed for single stage nitrification - From the lift station the wastewater will travel through a coarse barscreen then to the complete mix basin; from the basin the mix-liquor will be transferred to the clarifier where solids will be settled out and clear water will flow over the weirs then into the chlorine contact basin. It will then be filtered through a filter. The settled solids will either be transferred to the digester or returned to the headworks. The solids from the digester will be taken to another WWTP for processing.

Phase I

<u>Unit</u>	<u>Length</u>	<u>Width</u>	<u>Height</u>
Clarifier		36' Diameter	12'
Chlorine Contact	11'	22	10.67'
Aeration 2@	32'	12'	12'
Digester 2@	20'	12'	12'

Phase II

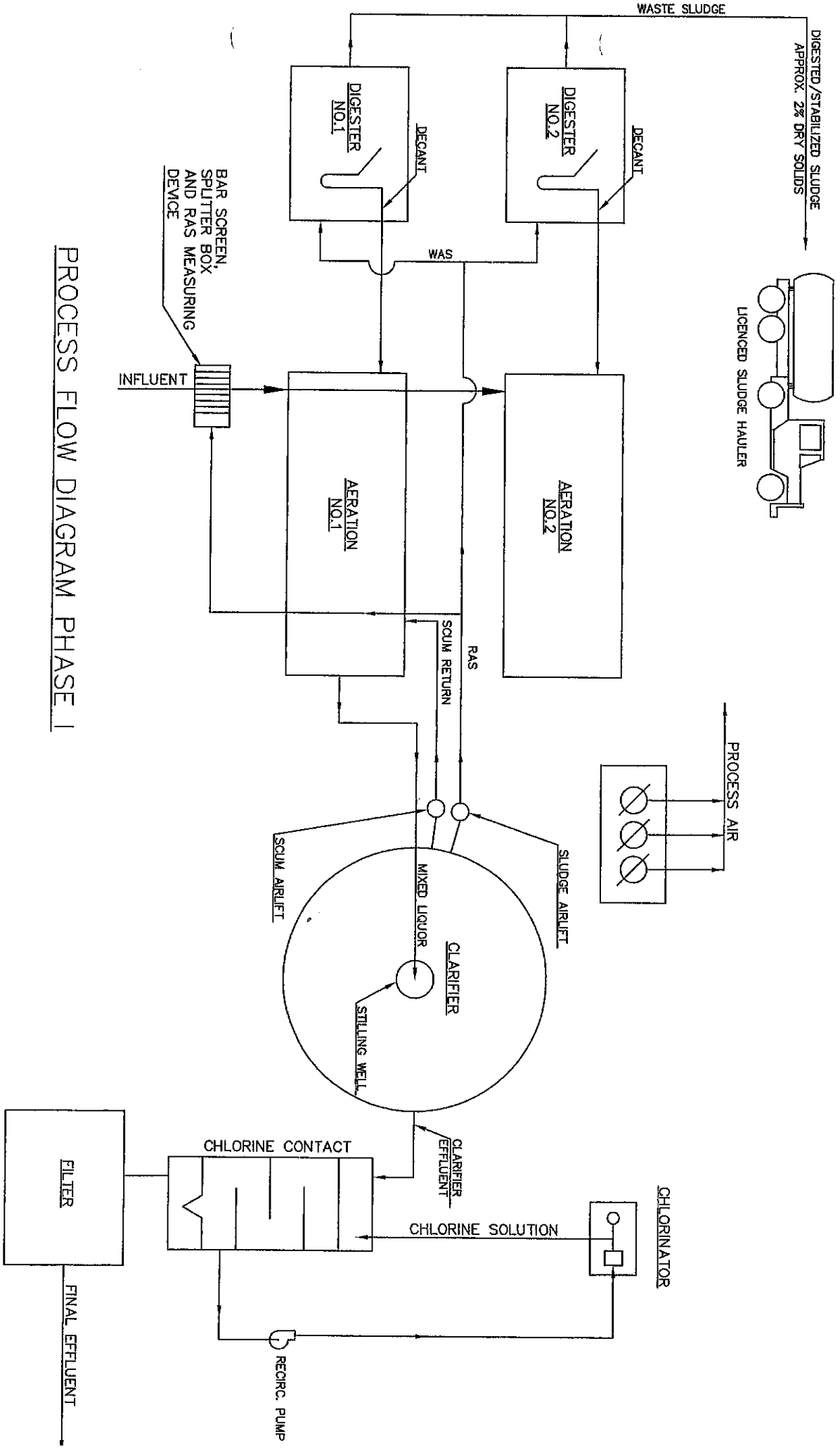
<u>Unit</u>	<u>Length</u>	<u>Width</u>	<u>Height</u>
Clarifier		36' Diameter	16.5'
Chlorine Contact	2,200	cuft	16.5'
Aeration	20,000	cuft	16.5'
Digester	17,000	cuft	16.5'

Phase III – In addition to Phase II

<u>Unit</u>	<u>Length</u>	<u>Width</u>	<u>Height</u>
Clarifier 2@		40' Diameter	16.5'
CL2 3@	2,900	cuft	16.5'
Aeration 2@	27,000	cuft	16.5'
Digester 2@	21,500	cuft	16.5'

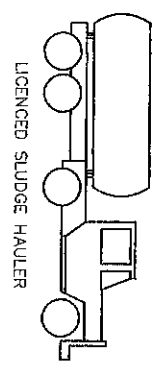
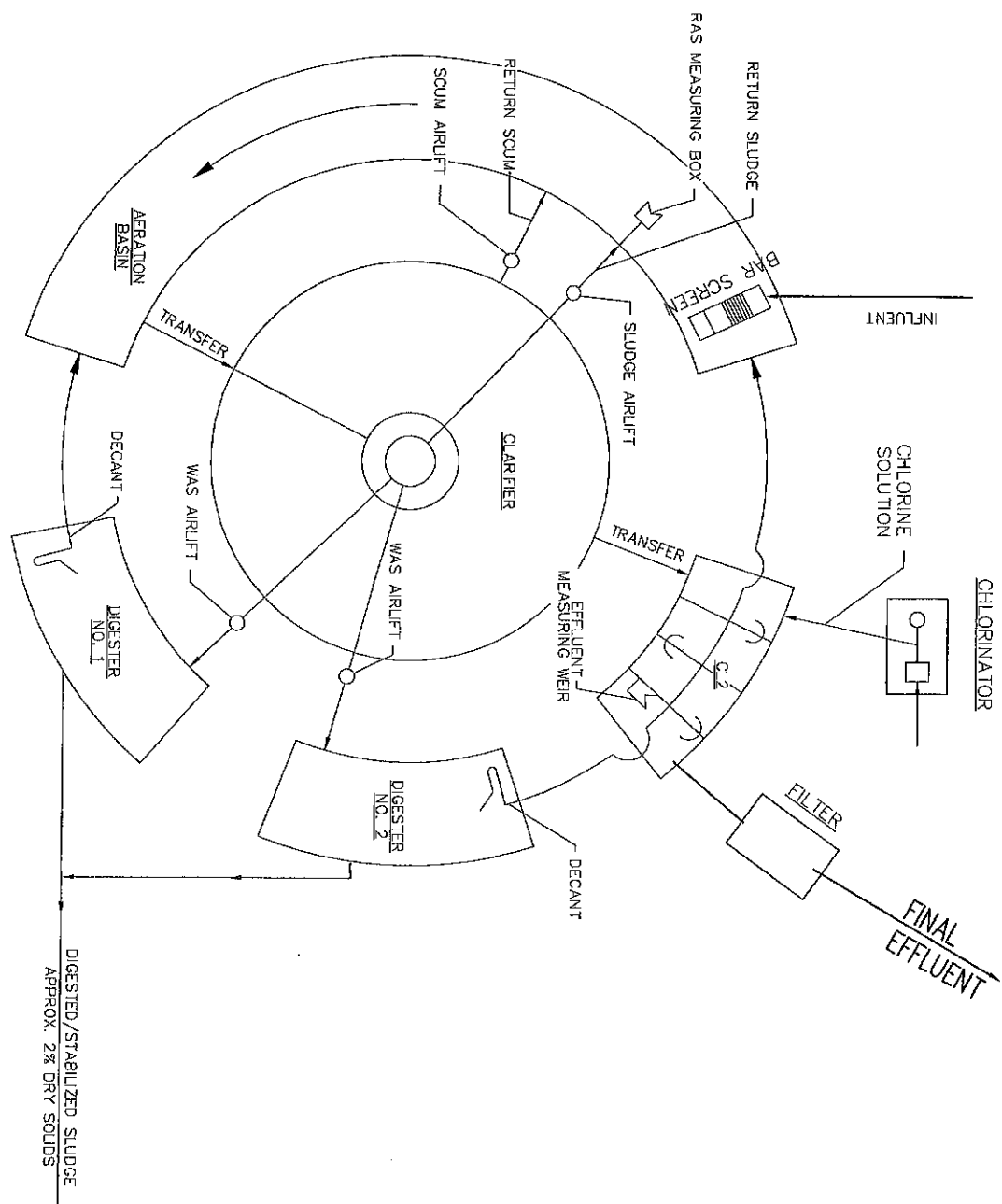
- An Autodialer will be installed to detect power outages; equipment failure (i.e. clarifier drive and blowers) .The Autodialer will incorporate high lever sensors on the wastewater treatment plant units as well as the effluent storage facility. Once a problem is detected the Autodialer will call preprogrammed numbers to notify the operator of the situation. Once this notification is answered, the operation company will dispatch an operator to the facility.
- An onsite generator will be made available for extended power failure.
- The plant features stand-by blowers.
- The collection system will be new, and minimum infiltration is anticipated.
- The plant is to be maintained and operated by personnel licensed by the State of Texas.
- The plant is designed to be maintained without bypassing. Replacement or repair of the interior coating system is the only maintenance item that would necessitate bypassing and the epoxy system should last 25-30 years.
- An intruder resistant fence is located around the facility.

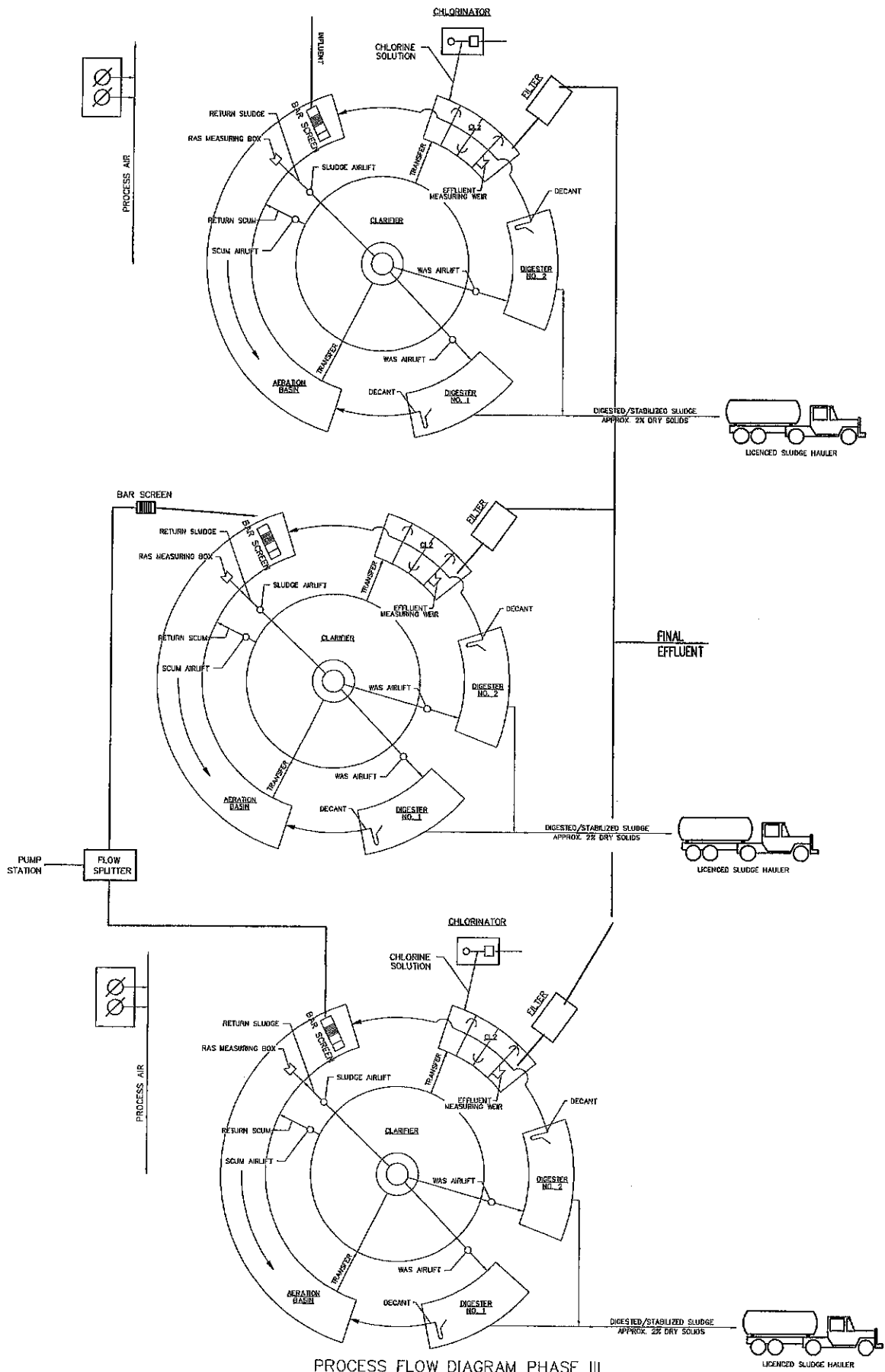
Attachment T-2



PROCESS FLOW DIAGRAM PHASE I

PROCESS FLOW DIAGRAM PHASE II

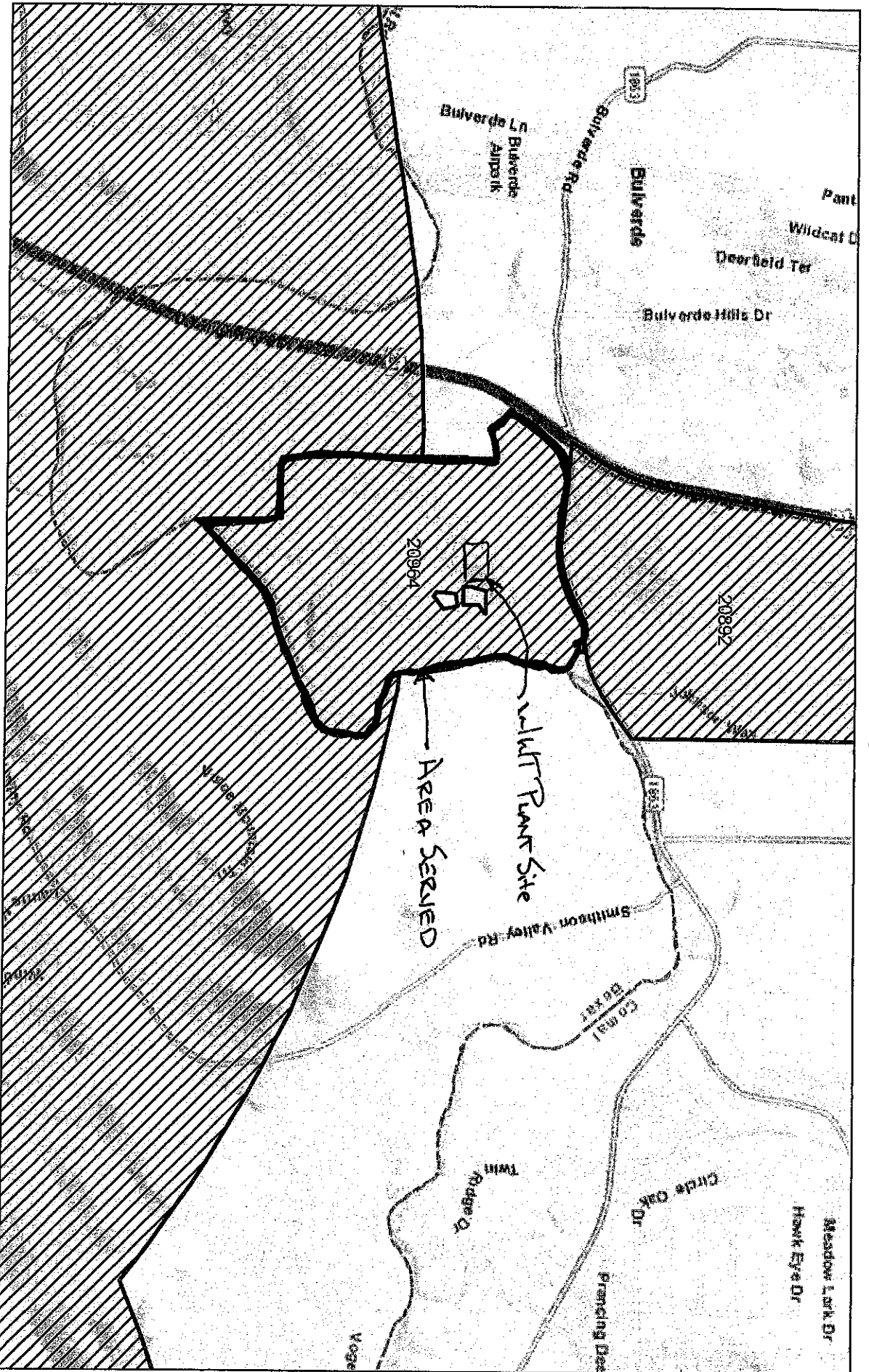




PROCESS FLOW DIAGRAM PHASE III

Attachment T-3

Site Map



July 21, 2018

1:36,112
0 0.28 0.55 1.1 mi
0 0.42 0.85 1.7 km
BCAD, Comal County, Est. HERE, Garmin, INCREMENT P, NGA, USGS

PENDING

Attachment T-4

Attachment T-5

MICRO DIRT DBA TEXAS ORGANIC RECOVERY.
15500 GOFORTH ROAD
CREEDMOOR, TX 78610
TELEPHONE (512) 243-9365


Plant: South Central Water Company
TCEQ Permit #: WQ0014988-001

To Whom It May Concern:

Micro Dirt, Inc DBA Texas Organic Recovery operates a Compost Facility (Permit #42016) located at 15500 Goforth Road, Creedmoor, TX 78610.

Magna Flow Environmental and Micro Dirt, Inc DBA Texas Organic Recovery have entered into an agreement, where Magna Flow Environmental (T.C.E.Q. Permit # 21484) will transport liquid sewage sludge from various Waste Water Treatment Plants for composting purposes. Micro Dirt, Inc DBA Texas Organic Recovery has the capacity to accept sludge from the above mentioned plant.

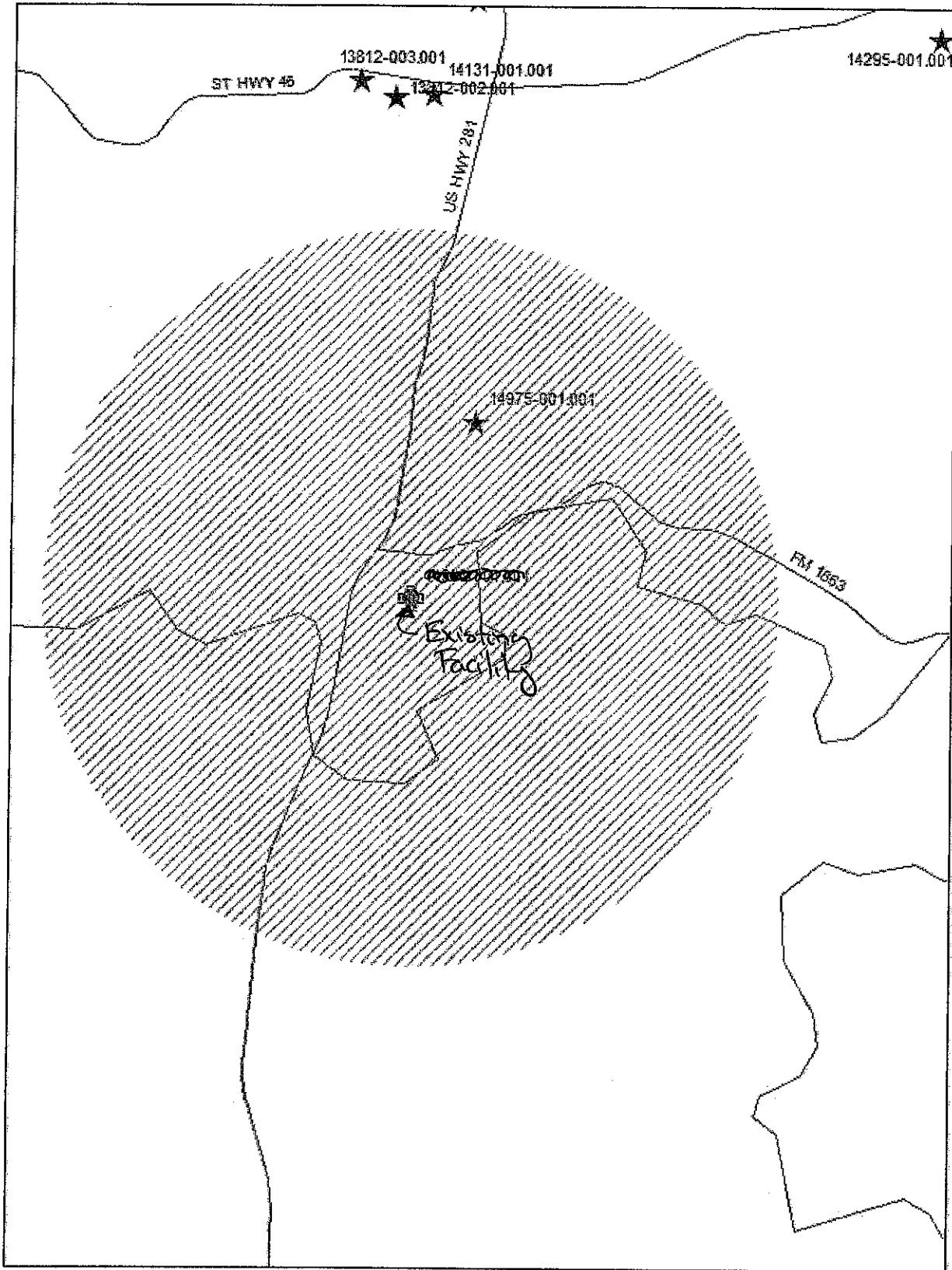
Micro Dirt, Inc DBA Texas Organic Recovery and Magna Flow Environmental agree to accept and be responsible for the sludge composted at the facility located at 15500 Goforth Road, Creedmor, TX 78610. We will maintain responsibility for the life of the permit (at least five years).



Victor Sanchez
Magna-Flow Environmental

Attachment T-6

3 Mile Radius
14988-001 9/11/2012



0 0.5 1 2 Miles



1:75,125

This map was generated by the Water Quality Division of the Texas Commission on Environmental Quality. This map was not generated by a licensed surveyor, and is intended for illustrative purposes only. No claims are made to the accuracy or completeness of the data or to its suitability for a particular use. This map contains locations for permitted municipal and industrial wastewater outfalls and land application permits. For more information concerning this map, contact the Water Quality Division at 236-4671. Base Map(s): ORG: DOQQ.

Attachment T-7

TECHNICAL DESIGN REPORT

FOR

Cibolo Valley WWTP

1. **PURPOSE** The purpose of this report is to present the basis of design and summary of unit sizing and hydraulic calculations for the Sewage Treatment Plant.
2. **DESCRIPTION OF PROPERTY** The project under development is a residential community
3. **POPULATION SERVED** The location of the proposed facility is shown on Sheet One of the Plans. The population flow is based on 100 gallons per capita per day.
4. **INFLUENT QUALITY CHARACTERISTICS** The raw sewage quality characteristics used for design are estimates based on past experience and on State Design Criteria and are as follows:

<u>PARAMETER</u>	<u>CONCENTRATION - MG/L</u>
BOD ₅	300
TSS	300

5. **INFLUENT FLOW CHARACTERISTICS** The hydraulic design of the plant must be conservative to insure that the plant will operate under the most extreme conditions anticipated. Future enlargement to the plant will be based on actual influent flow data. The plant process and hydraulic design for this phase are based on the following flows:

First Phase		
Average Daily Flow (Qav)	75,000 GPD	52 GPM
Peak 2-Hr. Flow (Qpk) 4	300,000 GPD	208 GPM
Second Phase		
Average Daily Flow (Qav)	250,000 GPD	174 GPM
Peak 2-Hr. Flow (Qpk) 4	1,000,000 GPD	694 GPM
Third Phase		
Average Daily Flow (Qav)	950,000 GPD	660 GPM
Peak 2-Hr. Flow (Qpk) 4	3,800,000 GPD	2639 GPM

Refer to Attachment "A" - Process Design Calculations, Hydraulic Profile Calculations, Process Flow Diagrams, and Plant Discharge relationship for the 100 year flood.

6. **PROCESS DESIGN** The Sewage Treatment Plant has been designed to produce an effluent in compliance with permitted parameters of: BOD₅ = 5 mg/l, TSS = 5 mg/l, and Chlorine

Residual = 1mg/l after 20 minutes contact
Additional Filtes will be installed to bring the effluent limits to 5 BOD5
5 TSS, 2 Amminia Nitrogen, 1 Total Phosphorus
Compressed air will be supplied to the process units by multiple blowers.

7. **FLOOD HAZARD ANALYSIS** The 100 Year Flood Elevation is ____ feet and is confined to the flood control and drainage, which has a bank elevation of ____ feet. The plant is capable of discharging at peak flow against the 100 year flood elevation.

8. **SLUDGE DISPOSAL**

Digester..... Aerobic
Transportation..... Contract Hauler
Final Disposition To be Determined by Contract Hauler

Proposed Organic Loading

<u>Influent Conditions</u>	First Phase		Second Phase		Third Phase	
	GPD	GPM	GPD	GPM	GPD	GPM
Average Daily Flow - Qav	75,000	52	250,000	174	950,000	660
2hr. Peak Flow (Qpk)	300,000	208	1,000,000	694	3,800,000	2639
BOD ₅ (lbs/day)@.1668 lb/capita	187.65		625.5		2376.9	
2 hr Average Flow (Qav) cf/sec	0.12		0.39		1.47	
2 hr Peak Flow (Qpk) cf/sec	0.46		1.55		5.88	
<u>Influent (30 Day Average)</u>						
BOD ₅ (mg/l)	300					
TSS (mg/l)	300					
<u>Process Loadings</u>						
MLSS (mg/l)	3000					
RASS (mg/l)	6000					
<u>Aeration</u>						
Total Aeration Vol. Available	8400 cf		20000 cf		75000 cf	
Organic Loading (lbs/day/1000cu ft)	22.3 lbs		31.3 lbs		31.7 lbs	
TCEQ Maximum Organic Loading lbs/day/1000cu ft	35 lbs		35 lbs		35 lbs	
<u>Digester</u>						
Total Volume Available	5265.6 cf		17000 cf		60000 cf	
Digester Loadings (Vol.) / (lbs BOD ₅)	28.1 cf/lb		27.2 cf/lb		25.2 cf/lb	
TCEQ Minimum Volume for Organic Loading	20 cf/lb		20 cf/lb		20 cf/lb	
Retention Time (Vol) / (BOD ₅)(1.1355)	24.7 days		23.9 days		22.2 days	
<u>Clarifier</u>						
Diameter	36 ft		36 ft		36 ft (Dia "A") 40 ft (Dia "B") 40 ft (Dia "C")	
Area	1017.9 sf		1017.9 sf		3531.1 sf	
TCEQ Maximum Surface Loading @ Qav	1,200 GPD/sf		1,200 GPD/sf		1,200 GPD/sf	
Surface Loading @ Qpk	295 GPD/sf		982 GPD/sf		1,076.14 GPD/sf	
<u>Chlorine Contact Chamber</u>						
Volume Required by TCEQ	557.0		1,856.8		7,055.9	
Volume Furnished of Volume gal	2219.14 cf 16,599.2 gal		2200.00 cf 16,456.0 gal		8000.00 cf 59,840.0 gal	

Attachment T-8

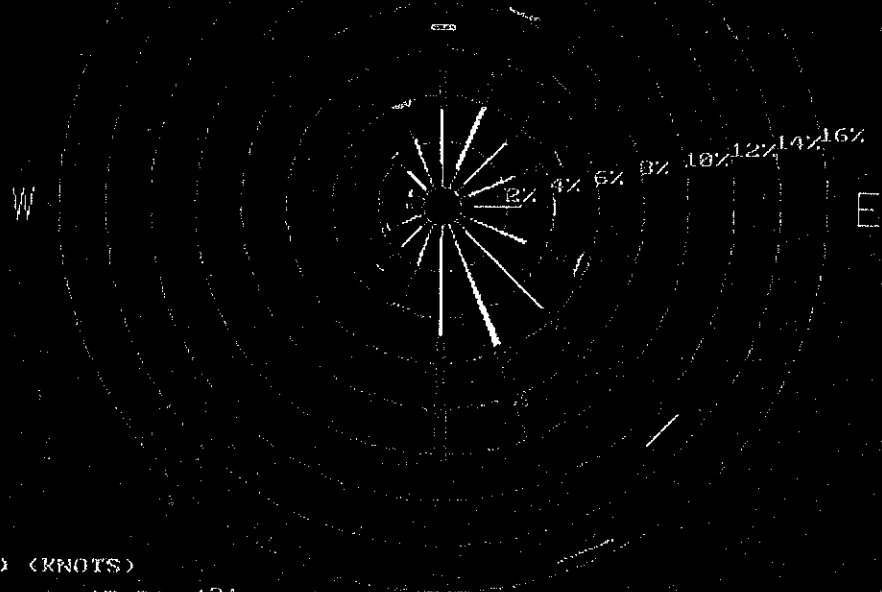
SAT Annual 84-92

January 1

December 31

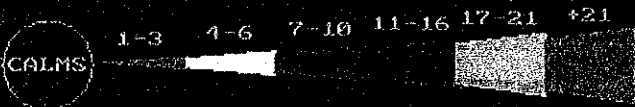
Midnight-11 PM

NOTE: Frequencies
indicate direction
from which the
wind is blowing.



CALM WINDS 6.37%

WIND SPEED (KNOTS)



Attachment T-9

SLUDGE PRODUCTION RATES

	Phase I			
	Avg. Daily Flow (MGD) =			
		Percent Capacity		
	<u>100%</u>	<u>75%</u>	<u>50%</u>	<u>25%</u>
<u>I. PARAMETERS</u>				
Average Daily Flows (MGD)	0.075	0.05625	0.0375	0.01875
Dimensions & Volume of Digester				
	Volume =	5,266	cu.ft. =	39,387 gal
CBOD ₅ Removal				
		Influent Concentration =	300	mg/l
		Effluent Concentration =	10	mg/l
		Net Removal =	<u>290</u>	mg/l

II. DAILY SLUDGE PRODUCTION

Lbs. BOD ₅ /day Removal	181	136	91	45
Lbs. of Dry Sludge (using sludge age =30days at 20°C, 0.315 lbs. Sludge/lb.BOD ₅ removed)	57	43	29	14
Lbs of Wet Sludge Produced (assume 1.5% solids, lbs.dry/0.015)	3,809	2,857	1,905	952
Volume of Wet Sludge Produced (gal/day)'= lbs. wet /8.34 lbs/gal	457	343	228	114

III. REMOVAL SCHEDULE

Digester (gal) / Vol wet sludge produced = days between empties	86	115	172	345
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Process Loadings

MLSS (mg/l) = 3000

Sludge will stay in the digester, clear liquor will be decanted off the digester and returned to the process to thicken the wasted solids.

Once the digester is full of thickened solids, the contents will be hauled by **the contracted sludge hauler** to one of the approved land application sites.

The sludge hauler will supply sludge hauling manifests showing volumes and concentration of sludge removed from the plant.