WATERENGINEERS, INC.
WATER & WASTEWATER TREATMENT CONSULTANTS
17230 HUFFMEISTER ROAD, SUITE A~CYPRESS, TEXAS 77429-1643
TEL: 281-373-0500 FAX: 281-373-1113

Overnight by UPS

June 21, 2022

Executive Director
Water Quality Applications Team (MC 148)
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Re: Macedonia Asset LLC
Application for a New TPDES Permit
Woodside Manor Wastewater Treatment Plant

Dear Sir/Ms:

Enclosed please find the original and four copies of the Application for a New Texas Pollution Discharge Elimination System Permit for the proposed Woodside Manor Wastewater Treatment Plant in Waller County.

Please contact Shelley Young, P.E. at 281-373-0500 or at syoung@waterengineers.com if there are any questions related to the material presented in the application.

Sincerely,
WATERENGINEERS, INC.

Shelley Young

Shelley Young, P.E.

Encl: As noted

APPLICATION FOR A NEW
TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM
PERMIT

FOR

WOODSIDE MANOR
WASTEWATER TREATMENT PLANT

MACEDONIA ASSET LLC
6315-B FM 1488 ROAD, #192
MAGNOLIA, TEXAS 77354

PREPARED BY:

WATERENGINEERS, INC.
WATER & WASTEWATER TREATMENT CONSULTANTS
17230 HUFFMEISTER ROAD, SUITE A, CYPRESS, TEXAS 77429
TEL: 281-373-0500 FAX: 281-373-1113

JUNE 2022

APPLICATION FOR A NEW TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT

FOR

WOODSIDE MANOR

WASTEWATER TREATMENT PLANT

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT: Macedonia Asset LLC

PERMIT NUMBER: NEW

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

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

For TCEQ Use Only

Segment Number _____ County _____
Expiration Date _____ Region _____
Permit Number _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

APPLICATION FOR A DOMESTIC WASTEWATER PERMIT ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 29)

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

Flow	New/Major Amendment	Renewal
<0.05 MGD	$350.00 ☐	$315.00 ☐
≥0.05 but <0.10 MGD	$550.00 ☒	$515.00 ☐
≥0.10 but <0.25 MGD	$850.00 ☐	$815.00 ☐
≥0.25 but <0.50 MGD	$1,250.00 ☐	$1,215.00 ☐
≥0.50 but <1.0 MGD	$1,650.00 ☐	$1,615.00 ☐
≥1.0 MGD	$2,050.00 ☐	$2,015.00 ☐

Minor Amendment (for any flow) $150.00 ☐

Payment Information:

Mailed — Check/Money Order Number: 7818

Check/Money Order Amount: $550.00

Name Printed on Check: WaterEngineers, Inc.

EPAY — Voucher Number:

Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 29)

☒ New TPDES

☐ Major Amendment *with* Renewal

☐ Major Amendment *without* Renewal

☐ Renewal without changes

☐ New TLAP

☐ Minor Amendment *with* Renewal

☐ Minor Amendment *without* Renewal

☐ Minor Modification of permit

For amendments or modifications, describe the proposed changes:

For existing permits:

Permit Number: WQ00NEW

EPA I.D. (TPDES only): TXNEW

Expiration Date: N/A

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

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

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

Macedonia Asset LLC

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

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

CN: NEW

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

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

First and Last Name: Josh Milne

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

Title: Managing Partner

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

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

N/A

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

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

CN:

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

Prefix (Mr., Ms., Miss):

First and Last Name:

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

Title:

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

C. Core Data Form

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

Attachment: TECH.03

Section 4. Application Contact Information (Instructions Page 30)

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

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

First and Last Name: Shelley Young

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

Title: Engineer

Organization Name: WaterEngineers, Inc.

Mailing Address: 17230 Huffmeister Road, Suite A

City, State, Zip Code: Cypress, Texas 77429

Phone No.: 281-373-0500 Ext.: Fax No.: 281-373-1113

E-mail Address: syoung@waterengineers.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

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

First and Last Name:

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

Title:

Organization Name:

Mailing Address:

City, State, Zip Code:

Phone No.: Ext.: Fax No.:

E-mail Address:

Check one or both: ☐ Administrative Contact ☐ Technical Contact

Section 5. Permit Contact Information (Instructions Page 30)

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

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

First and Last Name: Josh Milne

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

Title: Managing Member

Organization Name: Macedonia Asset LLC

Mailing Address: 6315-B FM 1488 Road, #192

City, State, Zip Code: Magnolia, Texas 77354

Phone No.: 832-443-6455 Ext.: Fax No.:

E-mail Address: milnejosh1@gmail.com

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

First and Last Name: Linh Rivera

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

Title: Assistant

Organization Name: Macedonia Asset LLC

Mailing Address: 6315-B FM 1488 Road, #192

City, State, Zip Code: Magnolia, Texas 77354

Phone No.: 281-636-4525 Ext.: Fax No.:

E-mail Address: rivera.terratexasland@gmail.com

Section 6. Billing Information (Instructions Page 30)

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

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

First and Last Name: Dawn Milne

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

Title:

Organization Name:

Mailing Address: 6315-B FM 1488 Road, #192

City, State, Zip Code: Magnolia, Texas77354

Phone No.: 832-691-3750 Ext.: Fax No.:

E-mail Address: dawn@dawncpa.com

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

Provide the name and complete mailing address of the person delegated to receive and submit

Discharge Monitoring Reports (EPA 3320-1) or maintain Monthly Effluent Reports.

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

First and Last Name: Linh Rivera

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

Title: Assistant

Organization Name: Macedonia Asset LLC

Mailing Address: 6315-B FM 1488 Road, #192

City, State, Zip Code: Magnolia, Texas 77354

Phone No.: 281-636-4525 Ext.: Fax No.:

E-mail Address: rivera.terratexasland@gmail.com

DMR data is required to be submitted electronically. Create an account at: https://www.tceq.texas.gov/permitting/netdmr/netdmr.html.

Section 8. Public Notice Information (Instructions Page 31)

A. Individual Publishing the Notices

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

First and Last Name: Shelley Young

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

Title: Engineer

Organization Name: WaterEngineers, Inc.

Mailing Address: 17230 Huffmeister Road, Suite A

City, State, Zip Code: Cypress, Texas 77429

Phone No.: 281-373-0500 Ext.: Fax No.: 281-373-1113

E-mail Address: syoung@waterengineers.com

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

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

☒ E-mail Address

☐ Fax

☐ Regular Mail

C. Contact person to be listed in the Notices

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

First and Last Name: Shelley Young

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

Title: Engineer

Organization Name: WaterEngineers, Inc.

Phone No.: 281-373-0500 Ext.:

E-mail: syoung@waterengineers.com

D. Public Viewing Information

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

Public building name: Waller County Library-Hempstead Branch

Location within the building: Reference Desk

Physical Address of Building: 2331 11th Street

City: Hempstead County: Waller

Contact Name:

Phone No.: 979-826-7658 Ext.:

E. Bilingual Notice Requirements:

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

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

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

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

   ☒ Yes ☐ No

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

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

   ☒ Yes ☐ No

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

   ☐ Yes ☒ No

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

   ☐ Yes ☒ No

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

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

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

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

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

Woodside Manor WWTP

C. Owner of treatment facility: Macedonia Asset LLC

Ownership of Facility: ☐ Public ☒ Private ☐ Both ☐ Federal

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

Prefix (Mr., Ms., Miss): Macedonia Asset LLC

First and Last Name:

Mailing Address: 6315-B FM 1488 Road, #192

City, State, Zip Code: Magnolia, Texas 77354

Phone No.: 832-443-6455 E-mail Address: milnejosh1@gmail.com

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

Attachment:

E. Owner of effluent disposal site:

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

First and Last Name:

Mailing Address:

City, State, Zip Code:

Phone No.: E-mail Address:

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

Attachment:

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

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

First and Last Name:

Mailing Address:

City, State, Zip Code:

Phone No.: E-mail Address:

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

Attachment:

Section 10. TPDES Discharge Information (Instructions Page 34)

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

☐ Yes ☐ No

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

24895 Macedonia, Hockley, Waller County

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

☐ Yes ☐ No

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

From the plant site via pipeline to Threemile Creek, thence to Brushy Creek; thence to Spring Creek in Segment No. 1008 of the San Jacinto River Basin.

City nearest the outfall(s): Hockley

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

Outfall Latitude: 30.127697 Longitude: -95.824764

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

☐ Yes ☒ No

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

☐ Authorization granted ☐ Authorization pending

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

Attachment:

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

N/A

Section 11. TLAP Disposal Information (Instructions Page 36)

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

☐ Yes ☐ No

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

B. City nearest the disposal site:

C. County in which the disposal site is located:

D. Disposal Site Latitude: Longitude:

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

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

Section 12. Miscellaneous Information (Instructions Page 37)

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

☐ Yes ☒ No

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

☐ Yes ☐ No ☒ Not Applicable

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

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

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

☐ Yes ☒ No

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

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If **yes**, provide the following information:

Account number: Amount past due:

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If **yes**, please provide the following information:

Enforcement order number: Amount past due:

Section 13. Attachments (Instructions Page 38)

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

☐ Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.

☒ Original full-size USGS Topographic Map with the following information:

- Applicant's property boundary
- Treatment facility boundary
- Labeled point of discharge for each discharge point (TPDES only)
- Highlighted discharge route for each discharge point (TPDES only)
- Onsite sewage sludge disposal site (if applicable)
- Effluent disposal site boundaries (TLAP only)
- New and future construction (if applicable)
- 1 mile radius information

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

☐ Attachment 1 for Individuals as co-applicants

☒ Other Attachments. Please specify: Proof of Payment, Core Data Form

Section 14. Signature Page (Instructions Page 39)

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

Permit Number: New

Applicant: Macedonia Asset LLC

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code § 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory name (typed or printed): Josh Milne

Signatory title: Managing Partner

Signature: _____ Date: 6/15/22

(Use blue ink)

Subscribed and Sworn to before me by the said JOSH MILNE

on this 15TH day of JUNE, 20 22.

My commission expires on the 12TH day of JANUARY, 20 23.

_____

Notary Public

LINH RIVERA
Notary ID #125152047
My Commission Expires
January 12, 2023

[SEAL]

Montgomery

County, Texas

DOMESTIC ADMINISTRATIVE REPORT 1.1

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 41)

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

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

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

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

☒ Readable/Writeable CD ☐ Four sets of labels

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

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

☐ Yes ☒ No

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

Section 2. Original Photographs (Instructions Page 44)

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

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

Section 3. Buffer Zone Map (Instructions Page 44)

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

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

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

- ☒ Ownership
- ☐ Restrictive easement
- ☐ Nuisance odor control
- ☐ Variance

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

☒ Yes ☐ No

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____Renewal ____Major Amendment ____Minor Amendment ____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

_____ Texas Historical Commission _____ U.S. Fish and Wildlife

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

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

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

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

The following applies to all applications:

1. Permittee: Macedonia Asset LLC

   Permit No. WQ00 New EPA ID No. TX New

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

   24895 Macedonia Road, Waller County

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

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

First and Last Name: Josh Milne

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

Title: Managing Partner

Mailing Address: 6315-B FM 1488 Road, #192

City, State, Zip Code: Magnolia, Texas 77354

Phone No.: 832-443-6455 Ext.: Fax No.:

E-mail Address: milnejosh1@gmail.com

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

N/A

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

From the plant site via pipeline to Threemile Creek, thence to Brushy Creek; thence to Spring Creek in Segment No. 1008 of the San Jacinto River Basin.

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

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

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

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

☐ Disturbance of vegetation or wetlands

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

Approximately 6000 square feet, approximately 10-15' deep in some areas.

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

Land is partially wooded and partially open, and does not currently have any structures on it.

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:

None

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

See No. 7 above

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): 0.080

2-Hr Peak Flow (MGD): 0.320

Estimated construction start date: 03/2023

Estimated waste disposal start date: 9/2023

B. Interim II Phase

Design Flow (MGD):

2-Hr Peak Flow (MGD):

Estimated construction start date:

Estimated waste disposal start date:

C. Final Phase

Design Flow (MGD): 0.080

2-Hr Peak Flow (MGD): 0.320

Estimated construction start date: 03/2023

Estimated waste disposal start date: 9/2023

D. Current operating phase: N/A new

Provide the startup date of the facility: N/A new

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:

Flow will enter the activated sludge with nitrification plant through a bar screen into the anoxic zone, thence to the aeration basin, thence to the clarifier, thence to the chlorine contact basin for disinfection and discharge. Sludge from the bottom of the clarifier will either be returned to the anoxic zone or wasted to the digester.

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

B. Treatment Units

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

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
Anoxic/Selector Zone	1	103 sq. ft. x 10.5 ft. SWD
Aeration Basins	2	321 sq. ft. x 10.25 ft. SWD (each)
Clarifier	1	21 ft. diam. x 10.25 ft. SWD
Digesters	2	210 sq. ft. x 10.5 ft. SWD (each)
Chlorine Contact	1	82 sq. ft. x 9 ft. SWD

C. Process flow diagrams

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

Attachment: TECH.02

Section 3. Site Drawing (Instructions Page 52)

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

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

Attachment: TECH.03

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

Woodside Manor - rental mobile home park

Section 4. Unbuilt Phases (Instructions Page 52)

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

Yes ☐ No ☒

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

Yes ☐ No ☐

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

Section 5. Closure Plans (Instructions Page 53)

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

Yes ☐ No ☒

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

Yes ☐ No ☐

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

Section 6. Permit Specific Requirements (Instructions Page 53)

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

A. Summary transmittal

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

Yes ☐ No ☒

If yes, provide the date(s) of approval for each phase:

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

B. Buffer zones

Have the buffer zone requirements been met?

Yes ☒ No ☐

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

relevant to maintaining the buffer zones.

C. Other actions required by the current permit

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

Yes ☐ No ☒

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

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

Yes ☐ No ☒

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

2. Grit and grease processing

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

3. Grit disposal

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

Yes ☐ No ☐

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

Describe the method of grit disposal.

4. Grease and decanted liquid disposal

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

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

E. Stormwater management

1. Applicability

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

Yes ☐ No ☒

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

Yes ☐ No ☒

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

2. MSGP coverage

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

Yes ☐ No ☐

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

TXR05 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.

5. Zero stormwater discharge

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

Yes ☐ No ☐

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

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

6. Request for coverage in individual permit

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

Yes ☐ No ☐

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

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?
Yes ☒ No ☐

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

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

1. Acceptance of sludge from other WWTPs

Does the facility accept or will it accept sludge from other treatment plants at the facility site?
Yes ☐ No ☒

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

In addition, provide the date that the plant started accepting sludge or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the sludge, and the design BOD_5 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 BOD_5 concentration of the septic waste, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

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

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

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

Yes ☐ No ☒

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

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

Is the facility in operation?

Yes ☐ No ☒

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

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

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

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

Pollutant	**Average Conc.**	**Max Conc.**	**No. of Samples**	**Sample Type**	**Sample Date/Time**
$CBOD_5$, mg/l					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					
Total Kjeldahl Nitrogen, mg/l					
Sulfate, mg/l					
Chloride, mg/l					
Total Phosphorus, mg/l					
pH, standard units					
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l					
E.coli (CFU/100ml) freshwater					
Entercocci (CFU/100ml)					

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
saltwater					
Total Dissolved Solids, mg/l					
Electrical Conductivity, µmohs/cm, †					
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: Precision Utility

Facility Operator's License Classification and Level: C or higher

Facility Operator's License Number: OC0000250

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

A. Sludge disposal method

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

following list. Check all that apply.

- ☐ Permitted landfill
- ☐ Permitted or Registered land application site for beneficial use
- ☐ Land application for beneficial use authorized in the wastewater permit
- ☐ Permitted sludge processing facility
- ☐ Marketing and distribution as authorized in the wastewater permit
- ☐ Composting as authorized in the wastewater permit
- ☐ Permitted surface disposal site (sludge monofill)
- ☐ Surface disposal site (sludge monofill) authorized in the wastewater permit
- ☒ Transported to another permitted wastewater treatment plant or permitted sludge processing facility. If you selected this method, a written statement or contractual agreement from the wastewater treatment plant or permitted sludge processing facility accepting the sludge must be included with this application.
- ☐ Other:

B. Sludge disposal site

Disposal site name: Mt. Houston Road MUD WWTP

TCEQ permit or registration number: WQ0011154001

County where disposal site is located: Harris

C. Sludge transportation method

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

Name of the hauler: Magna-Flow Environmental Services

Hauler registration number: 21484

Sludge is transported as a:

Liquid ☐ semi-liquid ☒ semi-solid ☐ solid ☐

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

A. Beneficial use authorization

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

Yes ☐ No ☒

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

Yes ☐ No ☐

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

Yes ☐ No ☐

B. Sludge processing authorization

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

Sludge Composting	Yes ☐	No ☒
Marketing and Distribution of sludge	Yes ☐	No ☒
Sludge Surface Disposal or Sludge Monofill	Yes ☐	No ☒
Temporary storage in sludge lagoons	Yes ☐	No ☒

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

Yes ☐ No ☐

Section 11. Sewage Sludge Lagoons (Instructions Page 61)

Does this facility include sewage sludge lagoons?

Yes ☐ No ☒

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

A. Location information

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

- Original General Highway (County) Map:

  Attachment:
- USDA Natural Resources Conservation Service Soil Map:

  Attachment:
- Federal Emergency Management Map:

  Attachment:
- Site map:

  Attachment:

Discuss in a description if any of the following exist within the lagoon area. Check all that apply.

- ☐ Overlap a designated 100-year frequency flood plain
- ☐ Soils with flooding classification
- ☐ Overlap an unstable area
- ☐ Wetlands
- ☐ Located less than 60 meters from a fault
- ☐ None of the above

Attachment:

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

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg:

Total Kjeldahl Nitrogen, mg/kg:

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

Phosphorus, mg/kg:

Potassium, mg/kg:

pH, standard units:

Ammonia Nitrogen mg/kg:

Arsenic:

Cadmium:

Chromium:

Copper:

Lead:

Mercury:

Molybdenum:

Nickel:

Selenium:

Zinc:

Total PCBs:

Provide the following information:

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

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

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

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec?

Yes ☐ No ☐

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

D. Site development plan

Provide a detailed description of the methods used to deposit sludge in the

lagoon(s):

Attach the following documents to the application.

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

  Attachment:

- Copy of the closure plan

  Attachment:

- Copy of deed recordation for the site

  Attachment:

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

  Attachment:

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

  Attachment:

- Procedures to prevent the occurrence of nuisance conditions

  Attachment:

E. Groundwater monitoring

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

Yes ☐ No ☐

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

Attachment:

Section 12. Authorizations/Compliance/Enforcement

(Instructions Page 63)

A. Additional authorizations

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

Yes ☐ No ☒

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

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

Yes ☐ No ☒

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

Yes ☐ No ☒

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

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

A. RCRA hazardous wastes

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

Yes ☐ No ☒

B. Remediation activity wastewater

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

Yes ☐ No ☒

C. Details about wastes received

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

Attachment:

Section 14. Laboratory Accreditation (Instructions Page 64)

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

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

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

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

CERTIFICATION:

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

Printed Name: N/A-New Permit Not in Operation

Title:

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.

Applicant is proposing to build a 293-space rental mobile home community.

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:

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:

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

Attachment:

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

Yes ☐ No ☐

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

Attachment:

Section 2. Organic Loading (Instructions Page 67)

Is this facility in operation?

Yes ☐ No ☒

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

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

A. Current organic loading

Facility Design Flow (flow being requested in application):

Average Influent Organic Strength or BOD_5 Concentration in mg/l:

Average Influent Loading (lbs/day = total average flow X average BOD_5 conc. X 8.34):

Provide the source of the average organic strength or BOD_5 concentration.

B. Proposed organic loading

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

Table 1.1(1) – Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD_5 Concentration (mg/l)
Municipality		
Subdivision		
Trailer park – transient		
Mobile home park	0.080	300
School with cafeteria and showers		
School with cafeteria,		

Source	Total Average Flow (MGD)	Influent BOD_5 Concentration (mg/l)
no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources	0.080	
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: 10

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 6

Other: E. coli: 126 mpn/100 ml

B. Interim II Phase Design Effluent Quality

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

Total Suspended Solids, mg/l:

Ammonia Nitrogen, mg/l:

Total Phosphorus, mg/l:

Dissolved Oxygen, mg/l:

Other:

C. Final Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 6

Other: 126 mpn/100 ml

D. Disinfection Method

Identify the proposed method of disinfection.

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

Dechlorination process:

☐ Ultraviolet Light: seconds contact time at peak flow

☐ Other:

Section 4. Design Calculations (Instructions Page 68)

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

Attachment: TECH.01

Section 5. Facility Site (Instructions Page 68)

A. 100-year floodplain

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

Yes ☒ No ☐

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

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

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

Yes ☐ No ☒

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

Yes ☐ No ☐

If yes, provide the permit number:

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

B. Wind rose

Attach a wind rose. **Attachment**: TECH.03

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

A. Beneficial use authorization

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

Yes ☐ No ☒

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

Attachment:

B. Sludge processing authorization

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

☐ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

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

Attachment:

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

Attach a solids management plan to the application.

Attachment: TECH.04

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

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

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

DOMESTIC TECHNICAL REPORT WORKSHEET 2.0

RECEIVING WATERS

The following is required for all TPDES permit applications

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

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

Yes ☐ No ☒

If yes, provide the following:
Owner of the drinking water supply:

Distance and direction to the intake:

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

Attachment:

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

Does the facility discharge into tidally affected waters?

Yes ☐ No ☒

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

A. Receiving water outfall

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

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

Yes ☐ No ☐

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

C. Sea grasses

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

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: Threemile Creek

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.

Brushy 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.

E. Normal dry weather characteristics

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

Water is slightly turbid. Stream is surrounded by native grasses, trees and other vegetation.

Date and time of observation: 6/14/2022 @ 08:45

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
- ☐ Upstream discharges
- ☐ Septic tanks
- ☐ Urban runoff
- ☒ Agricultural runoff
- ☐ Other(s), specify

B. Waterbody uses

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

- ☐ Livestock watering
- ☐ Irrigation withdrawal
- ☐ Fishing
- ☐ Contact recreation
- ☐ Non-contact recreation
- ☐ Navigation

☐ Domestic water supply ☐ Industrial water supply

☐ Park activities ☒ Other(s), specify unknown

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: 6/14/2022 Time of study: 0845

Stream name: Threemile Creek

Location: Stream crossing at Macedonia Road

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: survey could not be performed

Number of stream bends that are moderately defined: due to stream

Number of stream bends that are poorly defined: crossing private property

Number of riffles:

Evidence of flow fluctuations (check one):

☐ Minor ☐ moderate ☐ severe

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

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.	Point of Discharge	15	0.33, 0.5, 0.5, 0.5, 0.33, 0.208
Choose an item.	No other transects could be surveyed due to		
Choose an item.	stream crossing private property		
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: See previous page regarding stream survey

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

Length of stream evaluated, in feet:

Number of lateral transects made:

Average stream width, in feet:

Average stream depth, in feet:

Average stream velocity, in feet/second:

Instantaneous stream flow, in cubic feet/second:

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

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

Maximum pool depth, in feet:

ATTACHMENT ADMIN.01

USGS Topographic Map

(Reference Administrative Report 1.0, Page 11, Question 13)

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

The National Map US Topo

MAGNOLIA WEST QUADRANGLE
TEXAS
7.5-MINUTE SERIES

-95.8750° 30.2500° -95.7500° 30.2500°

GRIMES CO
WALLER CO
MONTGOMERY CO

Old Sanders Cem
Kachel Lake
Magnolia
Woodland Lake
Club Lakeview Lake
Log Gully

Birch Cr
Walnut Cr
Brushy Cr
Mink Br
Mill Cr
Arnolds Br
Threemile Cr

APPLICANT PROPERTY BOUNDARY
1 MILE RADIUS
3 MILES DOWNSTREAM

Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 15R

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery	NAIP,	September 2016 - November 2016
Roads	U.S. Census Bureau,	2015
Names	GNIS,	1979 - 2018
Hydrography	National Hydrography Dataset,	2003 - 2018
Contours	National Elevation Dataset,	2010
Boundaries	Multiple sources; see metadata file	2016 - 2017
Wetlands	FWS National Wetlands Inventory	1993

MN GN 2°34" 46 MILS 1°25" 25 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
TP
Grid Zone Designation
15R

SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

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

TEXAS
QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

ADJOINING QUADRANGLES
1 Stoneham
2 Plantersville
3 Keenan
4 Waller NW
5 Magnolia East
6 Waller
7 Hockley
8 Rose Hill

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

MAGNOLIA WEST, TX
2019

LEGEND
1. APPLICANT'S WASTEWATER TREATMENT PLANT
2. POINT OF DISCHARGE
3. COMMERCIAL DEVELOPMENT
4. HOUSING DEVELOPMENT
5. INDUSTRIAL SITE
6. PARK
7. SCHOOLS
8. RECREATIONAL AREA
9. PUBLIC WATER WELL
10. EXISTING WWTP (OWNED BY OTHERS)

WATERENGINEERS, INC.
Water & Wastewater Treatment Consultants
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066
17230 HUFFMEISTER ROAD
CYPRESS, TEXAS 77429
TEL: 281-373-0500
FAX: 281-373-1113

MACEDONIA ASSET, LLC - APPLICANT
WOODSIDE MANOR WWTP
APPLICATION FOR A NEW TPDES PERMIT

USGS MAP

DRAWN BY: BIR
APPROVED BY: SBY
SCALE: AS NOTED
DATE: 6/16/2022
JOB No.: 5743-22120
DWG. NO.: ADMIN.01

ISBN. 9 763016 397146

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ATTACHMENT ADMIN.02

Proof of Payment

(Reference Administrative Report 1.0, Page 11, Question 13)

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:** New

1. Check or Money Order Number: 7818
2. Check or Money Order Amount: $550.00
3. Date of Check or Money Order: 6/14/2022
4. Name on Check or Money Order: WaterEngineers, Inc.
5. APPLICATION INFORMATION

   Name of Project or Site: Woodside Manor

   Physical Address of Project or Site: 24895 Macedonia, Hockley, Tx

   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

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER AND ORIGINAL DOCUMENT SECURITY SCREEN ON BACK WITH PADLOCK SECURITY ICON.

WATERENGINEERS, INC.
17230 HUFFMEISTER RD., SUITE A
CYPRESS, TEXAS 77429
281-373-0500

AMEGY BANK N.A.
P.O. BOX 27459
HOUSTON, TX 77227-7459

35-1125/1130
78

7818

6/14/2022

PAY TO THE ORDER OF TCEQ

$ **550.00

Five Hundred Fifty and 00/100********** DOLLARS

Security features included. Details on back.

TCEQ
12100 PARK 35 CIRCLE
MC-214
AUSTIN, TX 78753-1808

MEMO Macedonia Asset LLC

AUTHORIZED SIGNATURE

⑈007818⑈ ⑆113011258⑆ 0003164349⑈

ATTACHMENT ADMIN.03

Core Data Form

(Reference Administrative Report 1.0, Page 4, Section 3C)

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.)*

☒ New Permit, Registration or Authorization *(Core Data Form should be submitted with the program application.)*

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN		RN

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

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:*
Macedonia Asset LLC	

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0804474929	32083437718		

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other ☐ Sole Proprietorship ☒ Other: limited liability company

12. Number of Employees	13. Independently Owned and Operated?
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☐ Yes ☐ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following:*

☒ Owner ☐ Operator ☐ Owner & Operator

☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address:	6315-B F.M. 1488 Road, #192						
	City	Magnolia	State	TX	ZIP	77354	ZIP + 4

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*
	milnejosh1@gmail.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(832) 443-6455		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected below this form should be accompanied by a permit application)*

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity 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.)*

Woodside Manor Wastewater Treatment Plant

23. Street Address of the Regulated Entity: *(No PO Boxes)*	24895 Macedonia Road							
	City	Hockley	**State**	TX	**ZIP**	77447	**ZIP + 4**	
24. County	Waller							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**
Hockley			TX		77447
27. Latitude (N) In Decimal:	30.135894		**28. Longitude (W) In Decimal:**	95.831256	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	08	09.22	-95	49	52.52

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)
6515		531190	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Mobile Home Park

34. Mailing Address:	**6315-B FM 1488, #192**							
	City	**Magnolia**	**State**	**TX**	**ZIP**	**77354**	**ZIP + 4**	
35. E-Mail Address:	**milnejosh1@gmail.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(832) 443-6455		( ) -

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.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	New			

SECTION IV: Preparer Information

40. Name:	Shelley Young	**41. Title:**	Consulting Engineer
42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(281) 373-0500		(281) 373-1113	syoung@waterengineers.com

SECTION V: Authorized Signature

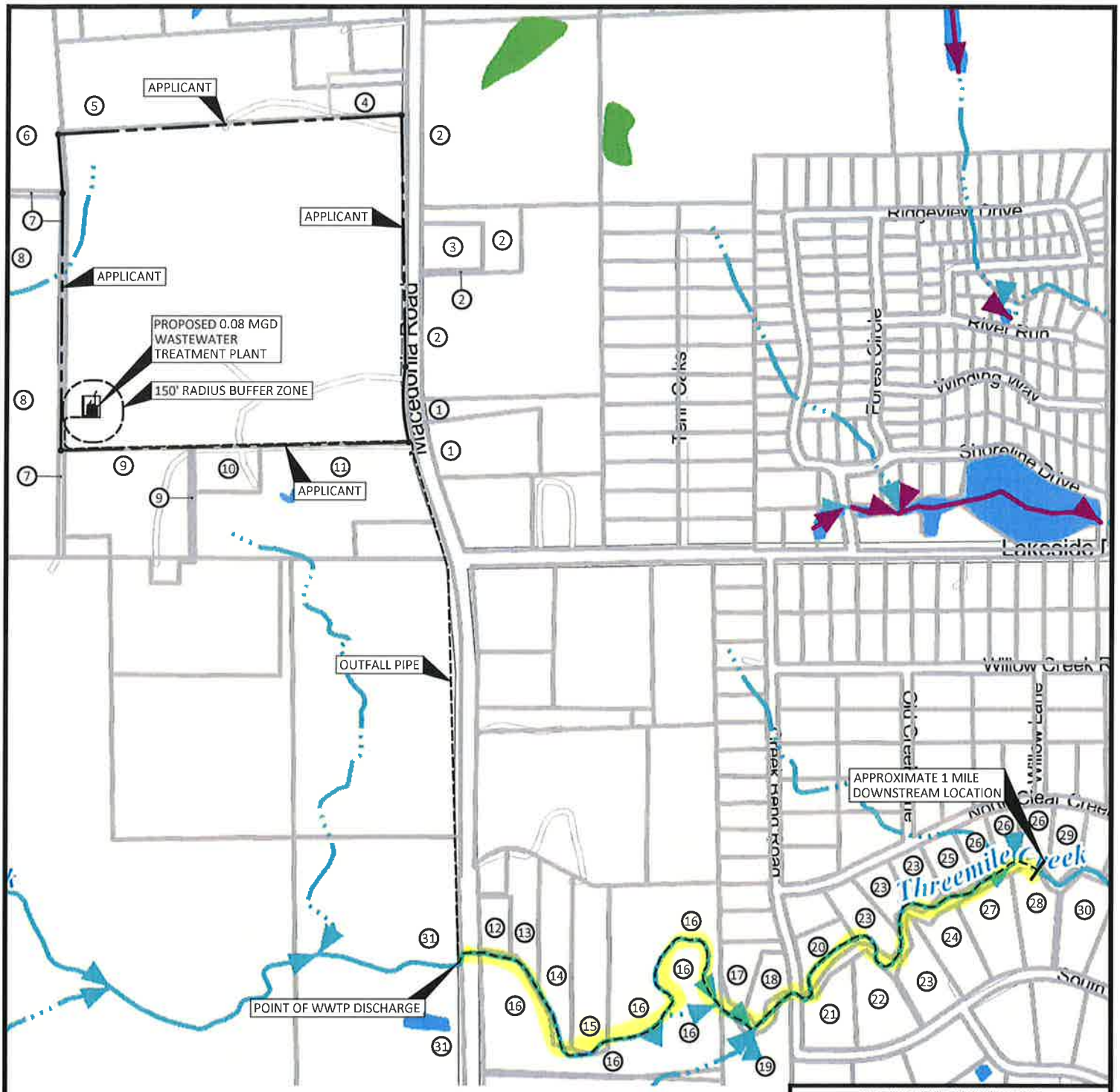
46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified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

Company:	WaterEngineers, Inc.	**Job Title:**	Engineer
Name(*In Print*) **:**	Shelley Young, P.E.	**Phone:**	(281) 373-0500
Signature:	Shelley Young	**Date:**	6/15/2022

ATTACHMENT ADMIN.04

Affected Landowner Map and List

(Reference Administrative Report 1.1, Page 13, Section 1)



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CYPRESS, TEXAS 77429
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FAX: 281-373-1113

MACEDONIA ASSET, LLC - APPLICANT
WOODSIDE MANOR WWTP
APPLICATION FOR A NEW TPDES PERMIT

DOWNSTREAM & ADJACENT LANDOWNERS MAP

LEGEND

(1) DENOTES LANDOWNER
SEE ATTACHED TABLE FOR LANDOWNERS

NOTE:
SEE ATTACHED TABLE FOR LANDOWNER INFORMATION

DEPICTS SERVICE AREA BOUNDARY

N

0 400 800

SCALE:1" = 400'-0" (24"x36")
1" = 800'-0" (11"x17" 8.5"x11")

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	
SCALE: AS NOTED	**ADMIN.04**
DATE: 6/16/2022	66
JOB No.: 5743-22120	

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TABLE "ADMIN.04"

MACEDONIA ASSET LLC
Woodside Manor
Wastewater Treatment Plant

Adjacent & Downstream Land Ownership Table
Source: Waller County Appraisal District

Tract No. (See Attachment "ADMIN.04" Map)	Title Owner & Address
1	MARY GOSCH 11338 TWAIN STREET MONTGOMERY TX 77356
2	ADOLFO & ANGELA GUTIERREZ 25450 MACEDONIA ROAD HOCKLEY TX 77447
3	CARRIE CARLSON 25098 MACEDONIA ROAD HOCKLEY TX 77447
4	RICHARD MITCHELL JR 22718 BRAMBLEVINE DRIVE MAGNOLIA TX 77355
5	PHILIP BOLOM 25329 MACEDONIA ROAD HOCKLEY TX 77447
6	BILLY & JOYCE BAKER 25600 SNOW ROAD HOCKLEY TX 77447
7	RAB RANCH INVESTMENTS LLC 19310 SAN SOLOMON SPRINGS CT CYPRESS TX 7433
8	PATRICK CHAPMAN 25140 SNOW ROAD HOCKLEY TX 77447
9	ANNETTE CROFT 24809 MACEDONIA ROAD HOCKLEY TX 77447
10	TIM & CYNTHIA MCCULLOUGH 24891 MACEDONIA ROAD HOCKLEY TX 77447
11	JO ANN NAPIER & KAREN BECERRA 24883 MACEDONIA ROAD HOCKLEY TX 77447
12	JORDAN DAVIS 24394 MACEDONIA ROAD HOCKLEY TX 77447

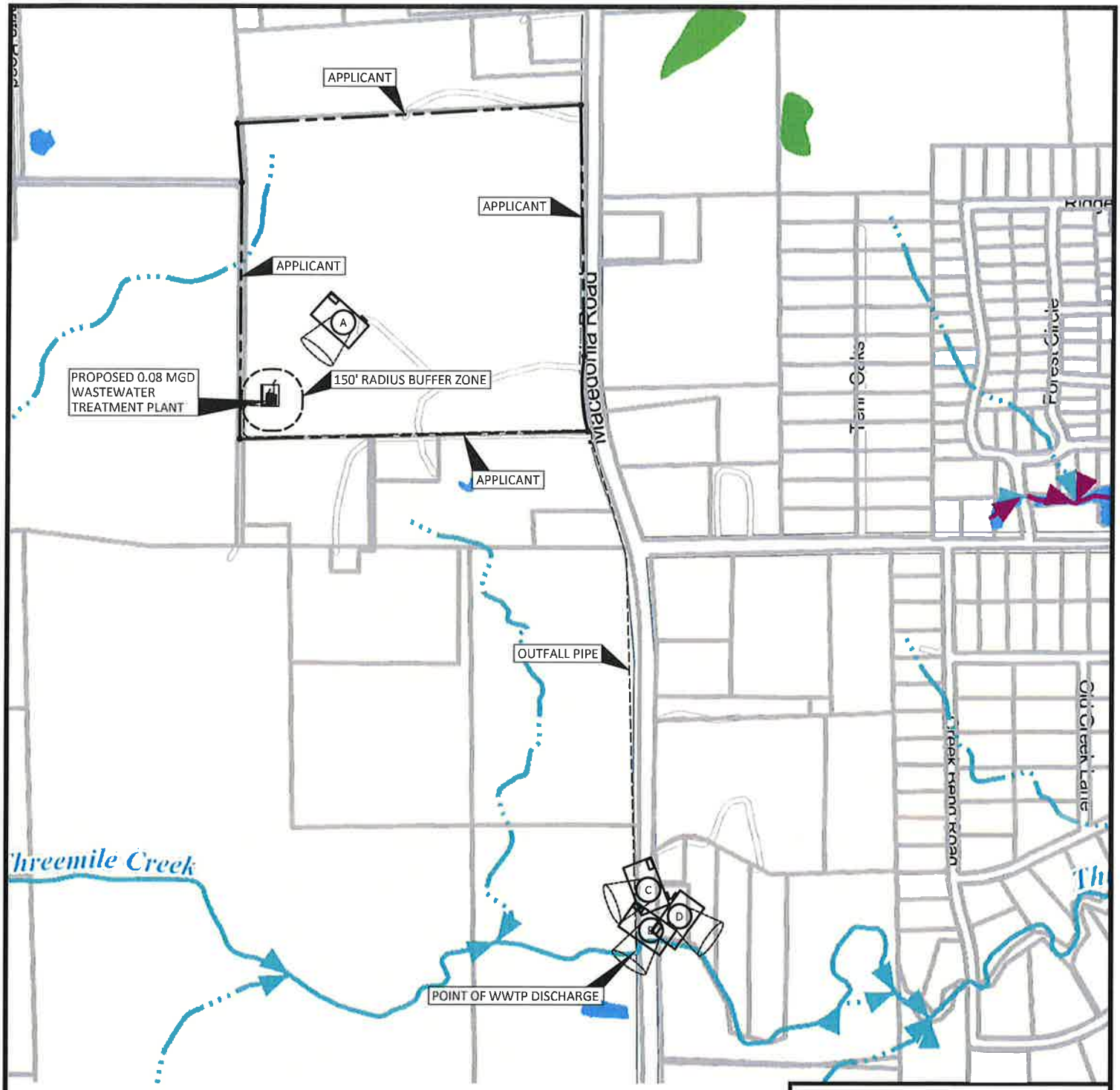
13	GREGORY & KRISTEN CAVANAUGH 24434 MACEDONIA ROAD HOCKLEY TX 77447
14	DOUG & LISA SWONKE 4802 WINDY BROOK LANE KATY TX 77449
15	WILLIAM MANZON 24440 WILLIAM & KARISSA PETERSON 6902 DARTFORD CT SPRING TX 77379
16	WILLIAM & KARISSA PETERSON 6902 DARTFORD CT SPRING TX 77379
17	KERFEGAR & SUZANNE BILIMORIA 24421 CREEK BEND ROAD HOCKLEY TX 77447
18	THOMAS MONTGOMERY 2614 DAUGHERTY ST WALLER TX 77484
19	THOMAS & MARY SHARON 25519 S CLEAR CREEK ROAD HOCKLEY TX 77447
20	C3 US INVESTMENTS LLC 17203 INGHRAM LANE CYPRESS TX 77433
21	MONTE & PAMELA PERKINS 25400 S CLEAR CREEK ROAD HOCKLEY TX 77447
22	DAVID & TERESA GARCIA 4054 BOLIN ROAD HOUSTON TX 77092
23	KIMBERLY GENTRY 25356 S CLEAR CREEK ROAD HOCKLEY TX 77447
24	JAMES ROLAND 2422 TALL SHIPS FRIENDSWOOD TX 77546
25	PATRICIA SHELBY 3319 HONEY CREEK HOUSTON TX 77082
26	JOSEPH SHENTELLE 1925 ANVIL DRIVE HOUSTON TX 77090
27	CHRISTOPHER & PERLA TOWNSEND 25272 S CLEAR CREEK ROAD HOCKLEY TX 77447
28	JOHN & TARI WELLMAN 25234 S CLEAR CREEK ROAD HOCKLEY TX 77447

29	DAVID & LILLIAN POWERS 25173 N CLEAR CREEK ROAD HOCKLEY TX 77447
30	EMILIO CAPITAN 25180 S CLEAR CREEK ROAD HOCKLEY TX 77447
31	KAY MATTHEWS PO BOX 73192 HOUSTON TX 77273-3192

ATTACHMENT ADMIN.05

Photographs

(Reference Administrative Report 1.1, Page 14, Section 2)



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17230 HUFFMEISTER ROAD
CYPRESS, TEXAS 77429
TEL: 281-373-0500
FAX: 281-373-1113

MACEDONIA ASSET, LLC - APPLICANT
WOODSIDE MANOR WWTP
APPLICATION FOR A NEW TPDES PERMIT

SITE PHOTOGRAPH LOCATIONS

LEGEND

A — DENOTES LOCATION FROM WHICH PHOTOGRAPHS WERE TAKEN
SEE ATTACHMENT ADMIN.05 FOR SITE PHOTOGRAPHS

N

0 100 200

SCALE:1" = 100'-0" (24"x36")
1" = 200'-0" (11"x17" 8.5"x11")

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	
SCALE: AS NOTED	**ADMIN.05-1**
DATE: 6/16/2022	71
JOB No.: 5743-22120	

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PROPOSED WASTEWATER TREATMENT PLANT SITE

POINT OF DISCHARGE TO THREE MILE CREEK

UPSTREAM OF POINT OF DISCHARGE TO THREE MILE CREEK

** SEE ADMIN.05-1 FOR LOCATION IN WHICH PHOTOGRAPHS WERE TAKEN

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TEL: 281-373-0500
FAX: 281-373-1113

MACEDONIA ASSET, LLC - APPLICANT
WOODSIDE MANOR WWTP
APPLICATION FOR A NEW TPDES PERMIT

SITE PHOTOGRAPHS

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**ADMIN.05-2**
SCALE: AS NOTED	
DATE: 6/16/2022	
JOB No.: 5743-22120	72

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DOWNSTREAM FROM POINT OF DISCHARGE TO THREE MILE CREEK

** SEE ADMIN.05-1 FOR LOCATION IN WHICH PHOTOGRAPHS WERE TAKEN

THIS DRAWING CONTAINS CONFIDENTIAL PROPRIETARY INFORMATION AND MAY NOT BE TRANSFERRED, REPRODUCED, OR USED TO CONSTRUCT ANY PROJECT OTHER THAN THAT FOR WHICH IT WAS ISSUED WITHOUT PRIOR PERMISSION FROM WATERENGINEERS,INC

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17230 HUFFMEISTER ROAD
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TEL: 281-373-0500
FAX: 281-373-1113

MACEDONIA ASSET, LLC - APPLICANT
WOODSIDE MANOR WWTP
APPLICATION FOR A NEW TPDES PERMIT

SITE PHOTOGRAPHS

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	
SCALE: AS NOTED	**ADMIN.05-3**
DATE: 6/16/2022	
JOB No.: 5743-22120	73

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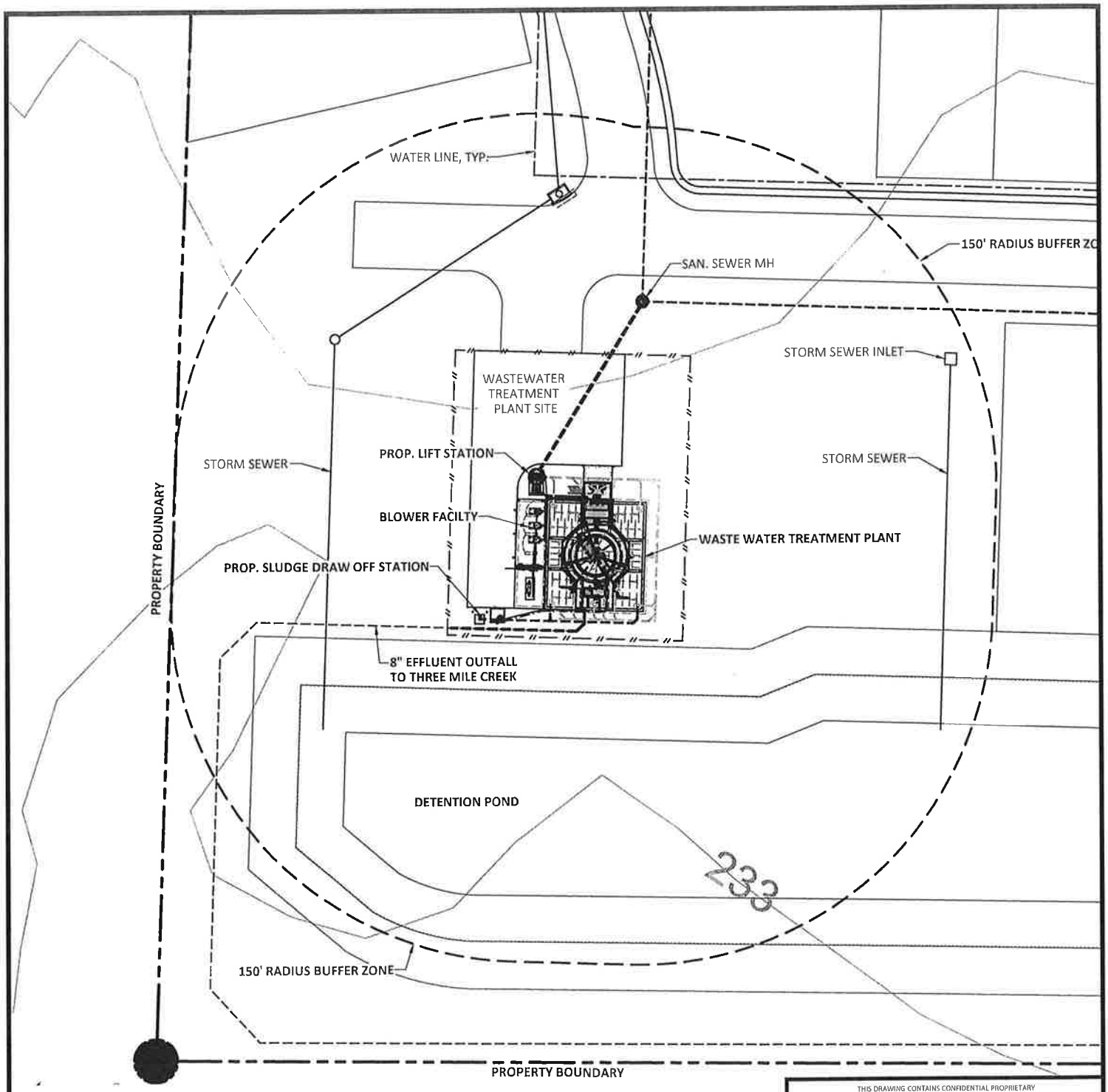
ATTACHMENT ADMIN.06

Buffer Zone Map

(Reference Administrative Report 1.1, Page 14, Section 3A)



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TEL: 281-373-0500
FAX: 281-373-1113

MACEDONIA ASSET, LLC - APPLICANT
WOODSIDE MANOR WWTP
APPLICATION FOR A NEW TPDES PERMIT

BUFFER ZONE MAP

N

0 30 60

SCALE:1" = 30'-0" (24"x36")
1" = 60'-0" (11"x17" 8.5"x11")

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**ADMIN.06**
SCALE: AS NOTED	
DATE: 6/16/2022	
JOB No.: 5743-22120	

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ATTACHMENT SPIF.01

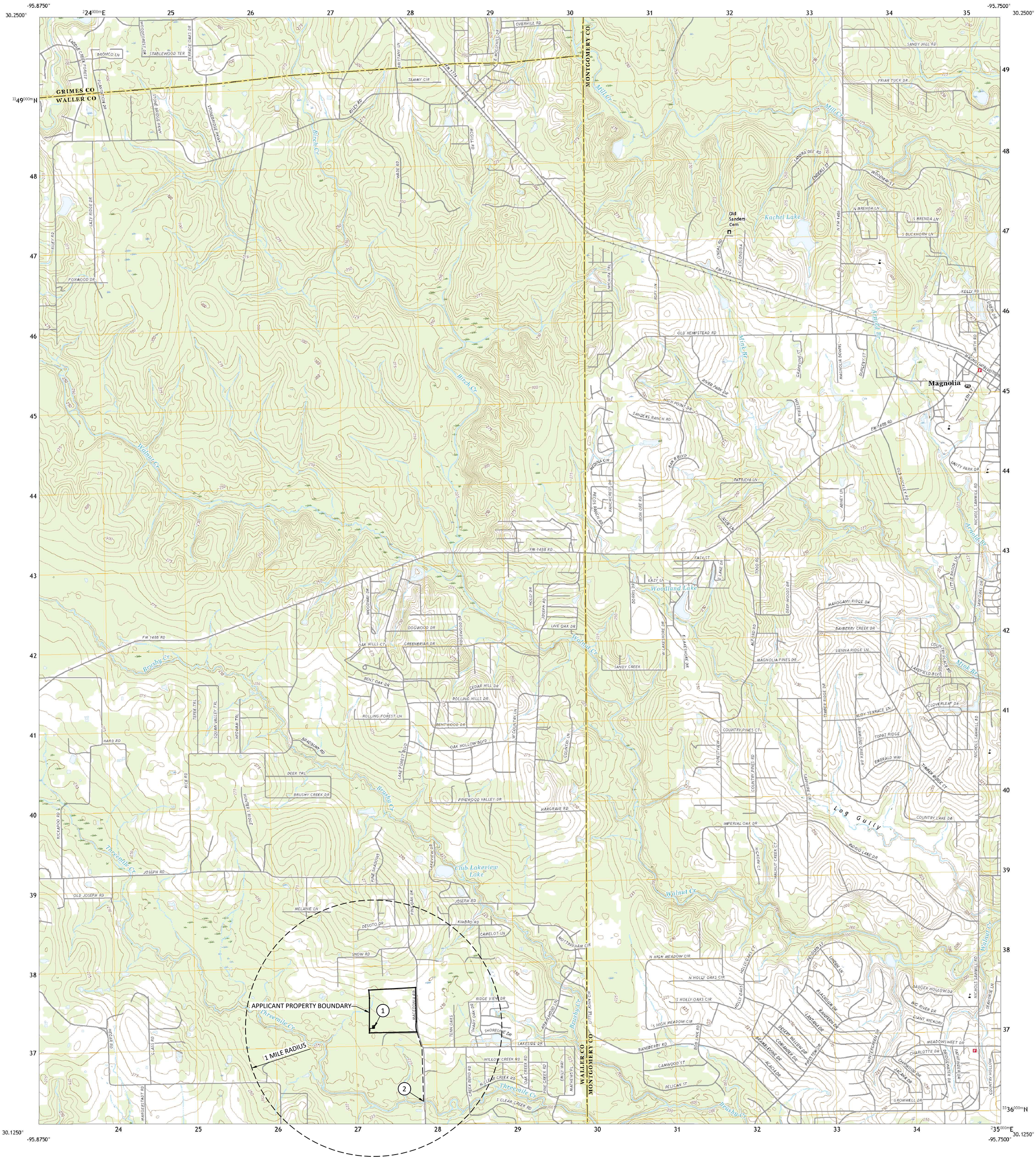
USGS Topographic Map

(Reference Supplemental Permit Information Form, Pg 16, Question 5)

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

The National Map US Topo

MAGNOLIA WEST QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 15R

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015
Names.....GNIS, 1979 - 2018
Hydrography.....National Hydrography Dataset, 2003 - 2018
Contours.....National Elevation Dataset, 2010
Boundaries.....Multiple sources; see metadata file 2016 - 2017

Wetlands.....FWS National Wetlands Inventory 1993

MN
GN
2°34'
46 MILS
1°25'
25 MILS
UTM GRID AND 2019 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
TP
Grid Zone Designation
15R

SCALE 1:24 000
1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

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

TEXAS
QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

ADJOINING QUADRANGLES
1 Stoneham
2 Plantersville
3 Keenan
4 Waller NW
5 Magnolia East
6 Waller
7 Hockley
8 Rose Hill

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

NSN 7643016391746

MAGNOLIA WEST, TX
2019

LEGEND
1. APPLICANT'S WASTEWATER TREATMENT PLANT
2. POINT OF DISCHARGE
3. COMMERCIAL DEVELOPMENT
4. HOUSING DEVELOPMENT
5. INDUSTRIAL SITE
6. PARK
7. SCHOOLS
8. RECREATIONAL AREA
9. PUBLIC WATER WELL
10. EXISTING WWTP (OWNED BY OTHERS)

WATERENGINEERS, INC.
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1486 ASSET, LLC - APPLICANT
1486 ASSET WWTP
APPLICATION FOR A NEW TPDES PERMIT

USGS MAP

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	SPIF.01
SCALE: AS NOTED	
DATE: 6/16/2022	
JOB No.: 5743-20064	

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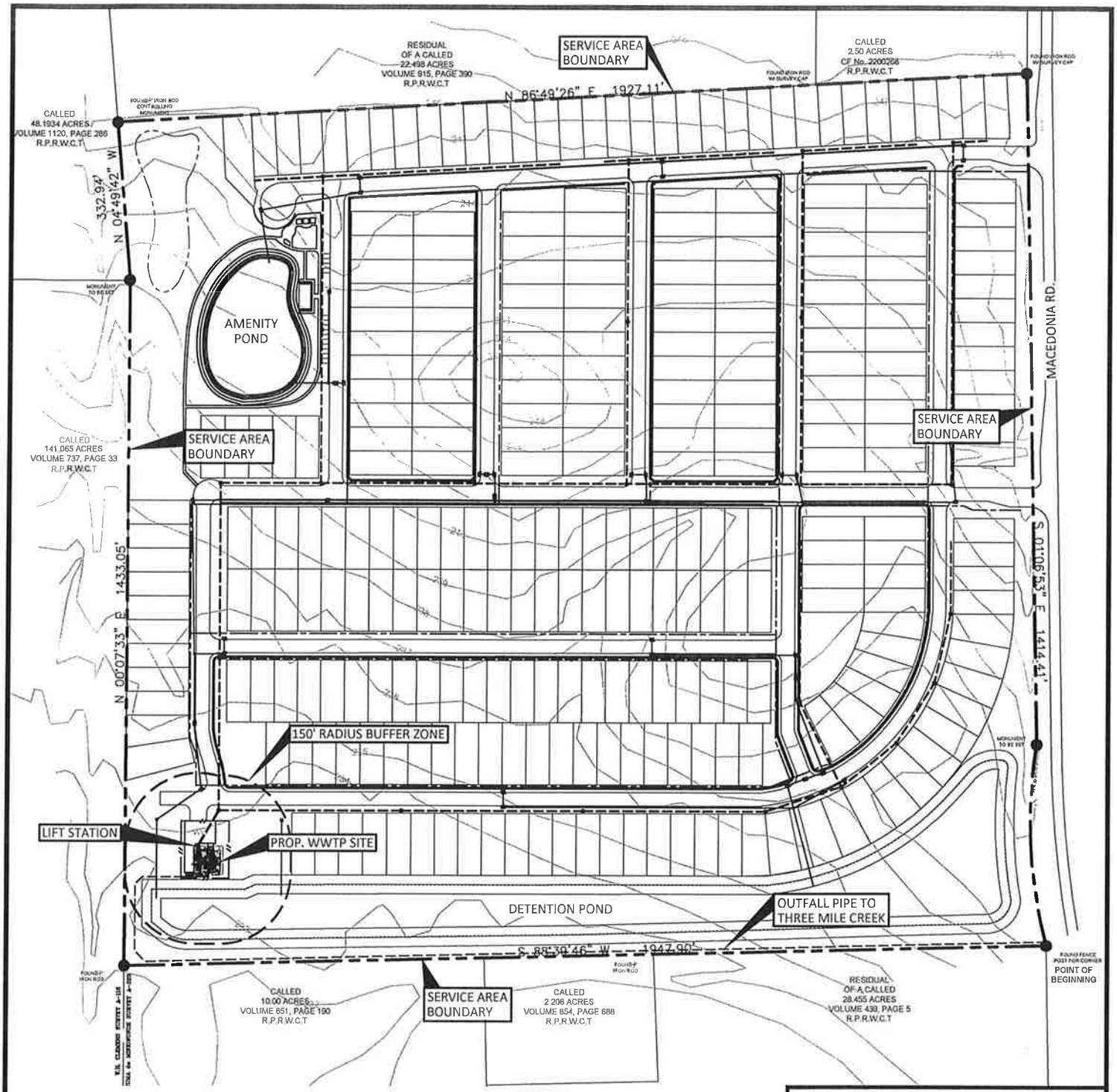
ATTACHMENT SPIF.02

Site Drawing

(Reference Supplemental Permit Information Form, Pg 16, Question 5)



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MACEDONIA ASSET, LLC - APPLICANT
WOODSIDE MANOR WWTP
APPLICATION FOR A NEW TPDES PERMIT

SERVICE AREA & SITE PLAN

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APPROVED BY: SBY	
SCALE: AS NOTED	**SPIF.02**
DATE: 6/16/2022	
JOB No.: 5743-22120	

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ATTACHMENT TECH.01

Design & Loading Criteria Table

And Design Features for Reliability

(Reference Technical Report Page 2, Question 2b)

ATTACHMENT TECH.01
DESIGN & LOADING CRITERIA
WOODSIDE MANOR WWTP
80,000 GPD CAPACITY (4Q)

INFLUENT CONDITIONS	
Average Daily Flow, mgd	0.080
Ratio Average/Peak Flow	4.00
Peak 2-Hour Flow, mgd	0.320
BOD, mg/l	300
BOD, lb/day	200
TREATMENT UNITS	
Tank Wall Height, ft	12
Tank Freeboard, ft	1.5
Side Water Depth, ft	10.5
ACTIVATED SLUDGE PLANT	
Anoxic/Selector Zone	
Design Detention, hrs	2
Required Volume, cu ft	891
Required Volume, Gallons	6,667
Anoxic Basin Depth, ft	10.5
Required Anoxic Basin Surface Area, sq ft	85
Actual Anoxic Basin Surface Area, sq ft	103
Actual Anoxic Basin Volume, cu ft	1,082
Detention, hours	2.43
Air Supply, scfm/1000 cu ft	20
Air Supply, scfm	22
Aeration Basin Oxic Zones	
Aeration Basin Loading, lb BOD/1000 cu ft	30
Aeration Basin Volume, cu ft	6,672
Aeration Basin Depth, ft	10.25
Req'd Aeration Basin Surface Area, sq ft	650.9
Actual Aeration Basin Surface Area, sq ft	642.0
Actual Aeration Basin Volume, cu ft	6,580.5
Total Aerated Volume (Anoxic + Aerobic), cu ft	7,662
Aeration Basin Loading, # BOD/1000 cf	26.1
Detention, hours	17.19
O2 Req'd @ 2.2 # O2/lb BOD	440
Correction Factor	0.45
Air Diffuser Submergence, ft	9.50
Air Diffuser Efficiency, %/ ft sub	0.017
Air Diffuser eff., %	16.2%
Required Aeration Basin Air Flow Rate, scfm	222
Mixed Liquor Temperrature, deg C	30
Air Supply Temperature Correction Factor	1.268
Corrected Air Supply Rate, scfm	282
No. of Tube Diffuser Membranes (36.4" long)	23
Active membrane surface area/diffuser, sq ft	2.54
Diffuser air flow, scfm/SF of membrane	4.82
Air Supply, scfm/1000 cf	34
R.S. Airlift Air, scfm	14
Skimmer Airlift Air, scfm	5
Clarifier	
Selected Internal Diameter, ft	21
Side Water Depth, ft	10.25
Total Area sq ft	346
Total Volume, cu ft	3,550
Avg. SOR, gpd/sq ft	231
Peak SOR, gpd/sq ft	924
Avg. Detention, hr	7.97
Peak Detention, hr	1.99
Max Qr @ 400 mgd/sf, gpd	0.139
Max Qp + Qr, mgd	0.459
CHLORINATION	
Min. Detention, min.	22
Side Water Depth, ft	9.00
Minimum Volume, cu ft	654
Min. Surface Area, sq ft	73
Actual Surface Area, sq ft	82
Actual Volume, cu ft	738
Detention @ Qp, minutes	24.8
Air Supply @ 10 scfm/1000 cf	7
AEROBIC DIGESTION	
Req'd Loading, cu ft/# BOD	22
Required Volume, cu ft	4,404
Basin Depth, ft	10.5
Min. Surface Area, sq ft	419
Actual Surface Area, sq ft	420.8
Total Actual Volume, cu ft	4,419
Loading, cu ft/# BOD	22.1
Air Supply Rate, scfm/1000 cu ft	20
Total Air Supply, cfm	88
No. diffuser membranes	8
Active diffuser surface area/membrane, sq ft	2.54
Airflow/diffuser, scfm/sq ft	4.35
AIR BLOWERS	
Anoxic Basin, scfm	22
Oxic Basins, scfm	282
RAS Airlift, scfm	14
Scum Airlift, scfm	5
Chlorine Contact Basin, scfm	7
Aerobic Digester Basin, scfm	88
Total Air Supply Required, scfm	419
No. of Blowers	2
Capacity, scfm	498
Firm Capacity, scfm	498
Blower Op Pressure, psi	5.36

DESIGN FEATURES FOR RELIABILITY

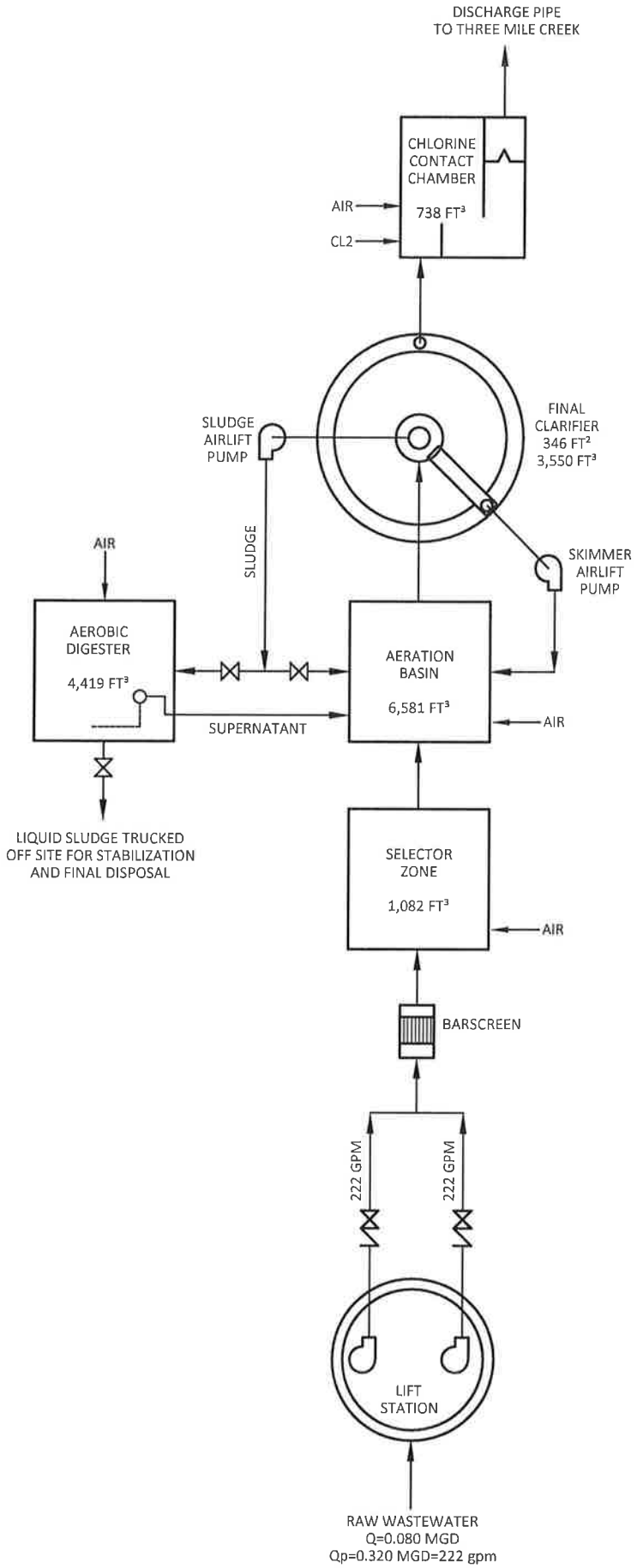
The Woodside Manor Wastewater Treatment Plant facilities will be designed to provide a high degree of mechanical reliability consistent with TCEQ Design Criteria. The following describe design features that will be incorporated at the facilities to prevent bypassing or overflows of untreated wastewater:

A. No infiltration/inflow is anticipated since the collection system will be new and not subject to the effects of age and deterioration at this time.
B. The electrical service that will serve the Woodside Manor WWTP is reliable with most outages lasting less than 2-4 hours. However, Macedonia Asset LLC plans to purchase a generator to operate necessary plant components during extended outages.
C. All mechanical units, such as influent pumps, blowers and chemical feed pumps will be installed with spare units in the event a piece of equipment is out of service for repairs.
D. Plant units will be maintained per TCEQ standards and repaired as quickly as possible should failure occur.
E. The facilities will include an auto-dialer that will call the operator in case of power outages, blower malfunctions, lift station malfunctions or high water alarm situations.

ATTACHMENT TECH.02

Process Flow Diagram

(Reference Technical Report Page 2, Question 2c)



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MACEDONIA ASSET, LLC - APPLICANT
WOODSIDE MANOR WWTP
APPLICATION FOR A NEW TPDES PERMIT

FLOW SCHEMATIC

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SCALE: AS NOTED	
DATE: 6/16/2022	
JOB No.: 5743-22120	

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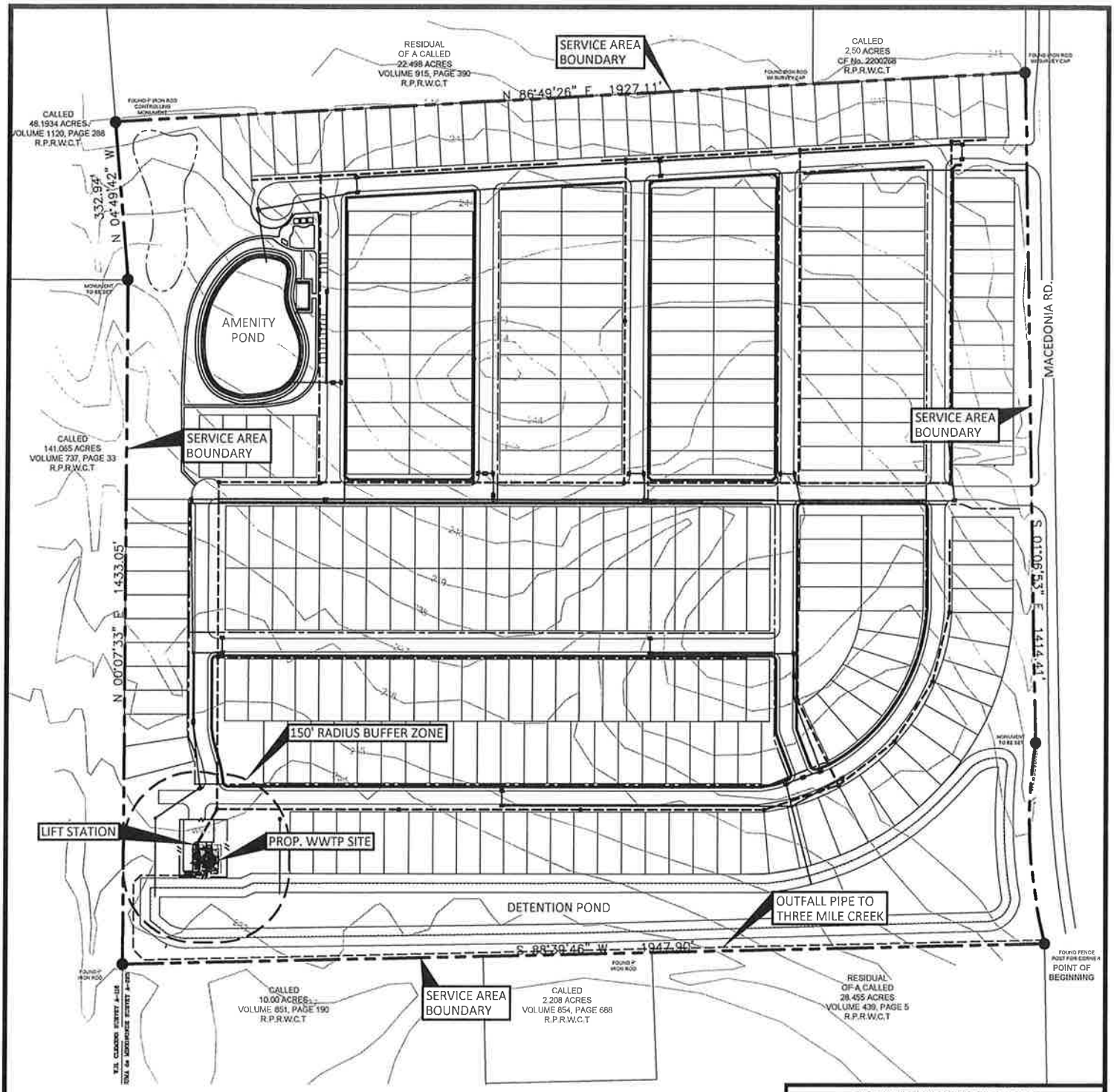
ATTACHMENT TECH.03

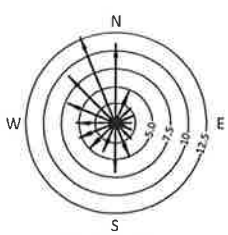
Site Drawing

(Reference Technical Report Page 3, Question 3)

(Including Wind Rose)

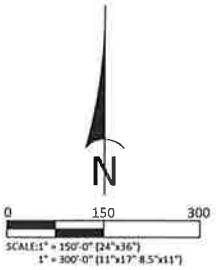
(Reference Technical Report Page 24, Question 5B)





WIND ROSE

DEPICTING % OF TIME WIND BLOWS IN INDICATED DIRECTION. BASED ON DATA AT HOUSTON INTERCONTINENTAL AIRPORT.



LEGEND

SERVICE AREA BOUNDARY

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MACEDONIA ASSET, LLC - APPLICANT
WOODSIDE MANOR WWTP
APPLICATION FOR A NEW TPDES PERMIT

SERVICE AREA & SITE PLAN

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SCALE: AS NOTED	
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JOB No.: 5743-22120	

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ATTACHMENT TECH.04

Solids Management Plan

(Reference Technical Report Page 24, Question 7)

ATTACHMENT TECH.04
SLUDGE MANAGEMENT PLAN

1. Type of Wastewater Treatment Process Used

The Woodside Manor Wastewater Treatment Plant (WWTP) will use the activated sludge with nitrification process. Solids analyses have been made based upon a spreadsheet calculation set up using sludge kinetic calculations developed by Dr. Ross McKinney and published in *Notes on Activated Sludge*, 1971, by Brian L. Goodman. Table TECH.04-01 shows the process design and sludge generation calculations for the design flow of 80,000 gpd.

2. Dimensions and Capacities

The treatment facility will have dual digesters with a total volume of 4,419 cu. ft., a surface area of 421 sq. ft. and a 10.5 ft. side water depth. The digester will provide a total design flow loading of 22.1 cu. ft./1b BOD.

3. Sludge Generation Calculations

Sludge generation calculations showing the amount of solids generated at 100%, 75%, 50% and 25% of design flow is included in Attachments TECH.04. These are the solids that must be wasted from the activated sludge process and that must be stabilized in the aerobic digester. The results are summarized in the following table:

Phase	Solids @ 100% Qavg, lb/day	Solids @ 75% Qavg, lb/day	Solids @ 50% Qavg, lb/day	Solids @ 25% Qavg, lb/day
Phase I	137	102	68	34

4. Operating Range of Mixed Liquor Suspended Solids

The calculations that predict the mixed liquor suspended solids in the activated sludge process are located in the following table:

	Predicted Solids @100% Flow		Predicted Solids @75% Flow		Predicted Solids @50% Flow		Predicted Solids @25% Flow	
	sludge age, days	MLSS mg/l	sludge age, days	MLSS mg/l	sludge age, days	MLS S mg/l	sludge age, days	MLSS mg/l
Phase I	12	3,548	16	3,550	24	3,551	50	3,553

5. Solids Removal Procedures

The removal of waste activated sludge from the activated sludge process is achieved by wasting sludge from the bottom of the clarifier into the aerobic digester using the waste sludge airlift pump. In order to thicken solids prior to putting them into the digester, the air lift is turned off for approximately one hour prior to wasting. Periodically (two to three times a week) the air supply to the aerobic digester is shut off, allowing solids to settle to the bottom of the digester. Then the supernatant liquor is decanted with an adjustable decant airlift pump and returned to the aeration basin. After a sufficient period of digestion and/or the digester is full, sludge is removed from the digester by a vacuum truck by hooking the truck hose to the piping connection and opening the shut off valve.

6. Quantity of Solids to Be Removed and Solids Removal Schedule

The quantity of solids to be removed at the various plant loadings are presented in the following table. These quantities shown in the tabulation are *monthly* quantities based upon an influent BOD of 300 mg/l and TSS of 200 mg/l. If the strength of the influent wastewater varies significantly, solids removal quantities will be different.

	@ 100 % Flow Capacity		@ 75 % Flow Capacity		@ 50 % Flow Capacity		@ 25 % Flow Capacity	
Phase	% Solids	Gal/ Month	% Solids	Gal/ Month	% Solids	Gal/ Month	% Solids	Gal/ Month
Phase I	2.0	19,5276	2.0	14,651	2.0	9,771	2.0	4,887

7. Identification of Disposal Site

The disposal of sludge from the WWTP is contracted to sludge management and disposal contractor, Magna-Flow Environmental., who transports liquid sludge from the digester to other wastewater treatment facilities for further processing. Solids documentation is assured by measuring the volume of each sludge withdrawal and measuring the sludge solids concentrations. All required data is included in the annual sludge report to the TCEQ.

ATTACHMENT TECH.04-01

PROCESS DESIGN AND SLUDGE GENERATION CALCULATIONS
80,000 GPD CAPACITY (4Q)
WOODSIDE MANOR WWTP

INFLUENT CONDITIONS			
Design Flow Rate, mgd	0.08	Aeration Vol, cu ft	7,662
Infl. BOD, mg/l	300	Clarifier Diameter, ft	21
Infl. TSS, mg/l	200	Clarifier Side Wall Depth, ft	10.33
Infl. VSS, mg/l	160	Clarifier Surface Area, sq ft	346
BOD Loading, lb/day	200	Clarifier Volume, cu ft	3,550
BOD Load, #/1000 cu ft	26.1	Temperature, deg C	20

Actual Plant Loading, %	1	0.75	0.5	0.25
Actual Flow Rate, mgd	0.08	0.06	0.04	0.02
BOD Loading, #/Day	200	150	100	50
Ret. Sludge Rate, gpd/sq ft	250	250	250	250
Ret. Sludge Flow, mgd	0.09	0.09	0.09	0.09
t = Aeration Time, days	0.72	0.96	1.43	2.87
ts = Sludge Age, Days	12	16	24	48
Km = BOD Removal Metabolic Factor	360	360	360	360
Ks = Synthesis Factor	250	250	250	250
Ke = Endogenous Metabolism Factor	0.200	0.150	0.100	0.050
F = Effl Soluble BOD	1.159	0.870	0.580	0.291
Ma = Active Mass	1,022	1,023	1,024	1,025
Me = Endogenous Mass	589	589	590	591
Mi = Inert Organic Mass	938	938	938	938
Mii = Inert Inorganic Mass	999	999	999	999
Mt = Total Mass, mg/l	3,548	3,550	3,551	3,553
Total Mass in Aeration Basin, lb	1,696	1,697	1,698	1,698
Lb BOD/Lb MLSS/Day	0.118	0.088	0.059	0.029
Effl TSS, mg/l	7.1	7.1	7.1	7.1
Effl BOD, mg/l	2.5	2.2	1.9	1.6
Sludge Accumulation, lb/day	141	106	71	35
TSS Lost In Effluent, lb/day	5	4	2	1
Waste Sludge, lb/day	137	102	68	34
Return Sludge Conc, mg/l	6,826	6,009	5,192	4,374
Waste Sludge Conc, mg/l	6,826	6,009	5,192	4,374
Waste Sludge Flow, gpd	2,399	2,045	1,579	937
AEROBIC DIGESTER				
Volume, cu ft	4,419			
Design Loading, cu ft/lb BOD	22	29	44	88
Incoming Sludge Conc, mg/l	6,826	6,009	5,192	4,374
Thick Sludge Conc, mg/l	20,000	20,000	20,000	20,000
Detention, Days	40	54	81	161
Infl Total Solids, lb/day	137	102	68	34
Infl Active Mass, lb/day	39	30	20	10
Effl Active Mass, lb/Day	4	3	2	1
Active Mass Red., lb/day	28	21	14	7
Digester Effl Solids, lb/day	109	81	54	27
Sludge Disposed, lb/mg	1,357	1,358	1,358	1,359
Sludge Disposed, tons/mg	0.68	0.68	0.68	0.68
Sludge Hauled, gal/day	651	488	326	163
Sludge Hauled, gal/month	19,527	14,651	9,771	4,887