Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
   - English
   - Alternative Language (Spanish)
2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
   - English
   - Alternative Language (Spanish)
3. Application materials

Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

1. Resumen en lenguaje sencillo (PLS, por sus siglas en inglés) de la actividad propuesta
   - Inglés
   - Idioma alternativo (español)
2. Primer aviso (NORI, por sus siglas en inglés)
   - Inglés
   - Idioma alternativo (español)
3. Solicitud original

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

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

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS
Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER
The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Grimes Co. Water Reclamation LLC (CN 604046821) operates the Grimes Co. Water Reclamation Wastewater Treatment Plant (RN 106353626), an activated sludge process with nitrification operated in the complete mix mode. The facility will be located at 7063 Clark Road , in near Plantersville, Grimes County, Texas 77363. This application is for a major amendment with renewal application to discharge a daily average flow of 395,000 gallons per day of treated domestic wastewater..

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen (NH_3-N), and *Escherichia coli.* Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater will be treated by an activated sludge process plant and the treatment units include a screening facility, primary settling/flow equalization tanks, aeration basins, final clarifiers, sludge digesters, and chlorine contact chamber.

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

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí **/AGUAS PLUVIALES**

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

Grimes Co. Water Reclamation LLC (CN 604046821)) opera la Planta de Tratamiento de Aguas Residuales de Grimes Co. Water Reclamation (RN 106353626), un proceso de lodos activados con nitrificación operado en el modo de mezcla completa. La instalación estará ubicada en 7063 Camino de Clark, en Plantersville, Condado de Grimes, Texas 77363. Esta solicitud es para una enmienda importante con renovación aplicación para descargar a un flujo promedio diario de 395,000 galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso de cinco días ($CBOD_5$), solidos totalmente suspendidos (TSS), nitrógeno amoniacal (NH_4-N), y *Escherichia coli*. Los contaminantes potenciales adicionales se incluyen en el Informe Técnico Domésticas 1.0, Seccion 7 Análisis de Contaminantes de Efluente Tratado en el paquete de solicitud de permisos.. Las aguas residuales domésticas. estará tratado por una planta de proceso de lodos activados y las unidades de tratamiento incluirán una instalación de pantalla, tanques primarios de sedimentación/ecualización, balsas de aireación, clarificadores finale, digestores de lodos, y cámara de contacto de cloro.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT AMENDMENT

PERMIT NO. WQ0015032001

APPLICATION. Grimes Co. Water Reclamation, LLC, 7063 Clark Road, Plantersville, Texas 77363, has applied to the Texas Commission on Environmental Quality (TCEQ) to amend Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015032001 (EPA I.D. No. TX0141852) to authorize an increase in the discharge of treated wastewater to a volume not to exceed a daily average flow of 395,000 gallons per day**.** The domestic wastewater treatment facility is located at 7063 Clark Road, near the city of Todd Misson, in Grimes County, Texas 77363. The discharge route is from the plant site to an unnamed drainage ditch; thence to an unnamed tributary of Walnut Creek; thence to Walnut Creek; thence to Spring Creek. TCEQ received this application on December 23, 2024. The permit application will be available for viewing and copying at Navasota Public Library, reference desk, 1411 East Washington Avenue, Navasota, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.892777,30.252222&level=18

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After technical review of the application is complete, the Executive Director may prepare a draft permit and will issue a preliminary decision on the application. **Notice of the Application and Preliminary Decision will be published and mailed to those who are on the county-wide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.**

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. **Unless the application is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing.** A contested case hearing is a legal proceeding similar to a civil trial in state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number; applicant's name and proposed permit number; the location and distance of your property/activities relative to the proposed facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; a list of all disputed issues of fact that you submit during the comment period and, the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are relevant to the group's purpose.

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period.**

MAILING LIST. If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county. If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

INFORMATION AVAILABLE ONLINE. For details about the status of the application, visit the Commissioners' Integrated Database at www.tceq.texas.gov/goto/cid. Search the database using the permit number for this application, which is provided at the top of this notice.

AGENCY CONTACTS AND INFORMATION. All public comments and requests must be submitted either electronically at **https://www14.tceq.texas.gov/epic/eComment/**, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit

application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Grimes Co. Water Reclamation, LLC at the address stated above or by calling Ms. Shelley Young, P.E., WaterEngineers, Inc., at 281-373-0500.

Issuance Date: March 13, 2025

Comisión de Calidad Ambiental del Estado de Texas

AVISO DE RECIBO DE LA SOLICITUD Y
EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA
MODIFICACION

PERMISO NO. WQ0015032001

SOLICITUD. Grimes Co. Water Reclamation, LLC. 7063 Camino Clark, Plantersville, Tejas 77363, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para enmendar Permiso No. WQ0015032001 (EPA I.D. No. TX0141852) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar aumento del vertidode aguas residuales depuradas hasta un volumen que no supere un caudal medio diario de 395,000 galones por dia. La planta está ubicada 7063 Camino Clark, cerca la ciudad de Todd Mission, en el Condado de Grimes, Tejas 77363. La ruta de descarga es del sitio de la planta a zanja de drenaje sin nombre, de ahí a tributario sin nombre de Walnut Creek; de ahí a Walnut Creek; de ahí a Spring Creek. La TCEQ recibió esta solicitud el 23 de deciembre de 2024. La solicitud para el permiso está disponible para leerla y copiarla en Biblioteca Publica de Navasota, 1411 Avenida de Washington Este, Navasota, Tejas antes de la fecha de publicación de este aviso en el periódico. La solicitud, incluidas las actualizaciones y los avisos asociados, stan disponibles electrónicamente en la siguiente pagina web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.892777,30.252222&level=18

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.**

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

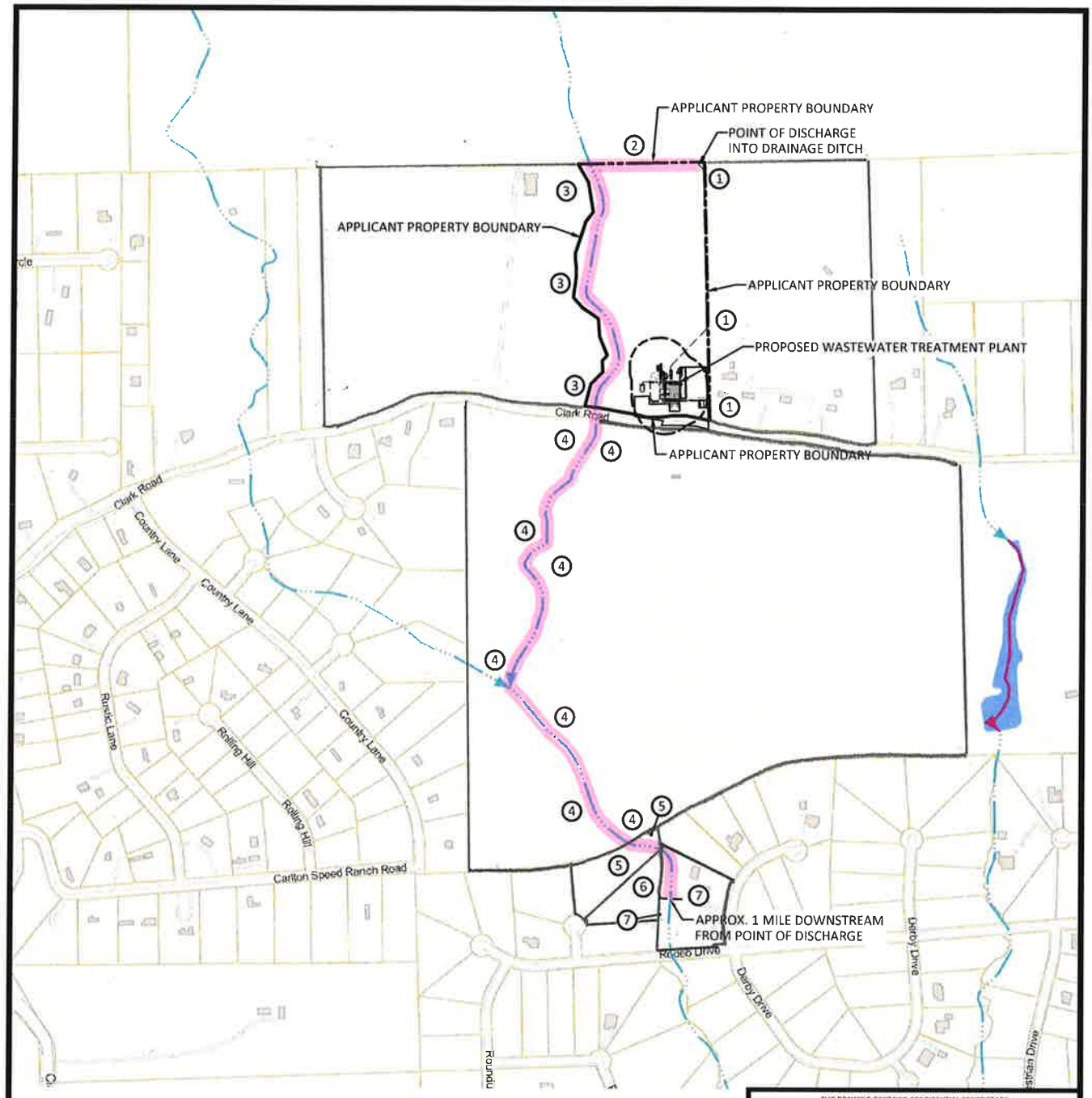
Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía http://www14.tceq.texas.gov/epic/eComment/ o por escrito dirigidos a la Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del Grimes Co. Water Reclamation, LLC, a la dirección indicada arriba o llamando a Ms. Shelley Young, P.E., WaterEngineers, Inc., al 281-373-0500.

Fecha de emisión 13 de marzo de 2025



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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0015032001

DOWN STREAM & ADJACENT LAND OWNERS MAP

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	
SCALE: AS NOTED	**ADMIN.06**
DATE: 12/18/2024	
JOB No.: 5127-24117	

N

0 400 800

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

\\server\we\current jobs\5127 gcwr tpdes major amendment '24\tech03 spil02.dwg

DELVIS D YATES SR
7091 CLARK ROAD
PLANTERSVILLE TX 77363

BARRIER RANCH PROPERTIES LTD
4815 HOLT STREET
BELLAIRE TX 77401

FRANK W ALLEN III & ROBERT L ALLEN
7063 CLARK ROAD
PLANTERSVILLE TX 77363

ROSEMARY K SPELLACY LYKOS REV TRUST
10011 DOLIVER
HOUSTON TX 77042

CRISELITA ALVAREZ
3600 KATY FREEWAY
HOUSTON TX 77007

ZACHARY & KIMBERLY MENARD
17663 SPUR CT
WALLER TX 77484

CLAUDIO & VERONICA RIBEIRO
17676 DERBY DR
WALLER TX 77484

Comisión de Calidad Ambiental del Estado de Texas

AVISO DE RECIBO DE LA SOLICITUD Y
EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA

PERMISO PROPUESTO NO. WQ00_____

SOLICITUD. Grimes Co. Water Reclamation, LLC. 7063 Camino Clark, Plantersville, Tejas 77363, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para enmendar Permiso No. WQ0015032001 (EPA I.D. No. TX0141852) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar aumento del vertidode aguas residuales depuradas hasta un volumen que no supere un caudal medio diario de 395000 galones por dia. La planta está ubicada 7063 Camino Clark, cerca la ciudad de Todd Mission, en el Condado de Grimes, Tejas 77363. La ruta de descarga es del sitio de la planta a zanja de drenaje sin nombre, de ahí a tributario sin nombre de Walnut Creek; de ahí a Walnut Creek; de ahí a Spring Creek. La TCEQ recibió esta solicitud el 23 de diciembre de 2024. La solicitud para el permiso está disponible para leerla y copiarla en Biblioteca Publica de Navasota, 1411 Avenida de Washington Este, Navasota, en Condado de Grimes, Tejas antes de la fecha de publicación de este aviso en el periódico. La solicitud, incluidas las actualizaciones y los avisos asociados, stan disponibles electrónicamente en la siguiente pagina web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-95.892777,30.252222&level=18

[Include the following non-italicized sentence if the facility is located in the Coastal Management Program boundary. The Coastal Management Program boundary is the area along the Texas Coast of the Gulf of México as depicted on the map in 31 TAC §503.1 and includes part or all of the following counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Jefferson y Orange.] El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la**

lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía http://www14.tceq.texas.gov/epic/eComment/ o por escrito dirigidos a la Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del Grimes Co. Water Reclamation, LLC. a la dirección indicada arriba o llamando a Ms. Shelley Young, P.E., WaterEngineers, Inc., al 281-373-0500.

Fecha de emisión _____ *[Date notice issued]*

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

December 19, 2024

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

Re: Grimes Co. Water Reclamation, LLC
Application for a Major Amendment with Renewal to TPDES Permit WQ0015032001 to Increase the Permitted Flow

Dear Sir/Ms:

Enclosed please find the original and one copy of the Application for a major amendment with renewal to increase the final flow for TPDES WQ0015032001 in Grimes 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 MAJOR AMENDMENT TO
TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM
PERMIT NO. WQ0015032001

FOR

GRIMES CO. WATER RECLAMATION
WASTEWATER TREATMENT PLANT

GRIMES CO. WATER RECLAMATION LLC
7063 CLARK ROAD
PLANTERSVILLE, TEXAS 77363

PREPARED BY:

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

DECEMBER 2024

APPLICATION FOR A MAJOR AMENDMENT WITH RENEWAL TO TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT NO. WQ0015032001

FOR

GRIMES CO. WATER RECLAMATION LLC

WASTEWATER TREATMENT PLANT

TABLE OF CONTENTS

Attachment ADMIN.03 Core Data Form	Administrative Report 1.0 Page 4	 3C
Attachment ADMIN.04 Plain Language Summary	Administrative Report 1.0 Page 7	 8F
Attachment ADMIN.05 Pubic Involvement Plan	Administrative Report 1.0 Page 7	 8G
Attachment ADMIN.06 Affected Landowners Map & Table	Administrative Report 1.1 Page 12	 1 A&B
Attachment ADMIN.07 Photographs	Administrative Report 1.1 Page 13	 2
Attachment ADMIN.08 Buffer Zone Map	Administrative Report 1.1 Page 13	 3A
Attachment ADMIN.09 Supplemental Permit Information Form (SPIF)	Administrative Report Page 14	
Attachment TECH.01 Design Criteria and Features for Reliability	Technical Report Page 2 Page 22	 2B 4
Attachment TECH.02 Process Flow Diagram	Technical Report 1.0 Page 2	 2C
Attachment TECH.03 Site Drawing (Including Wind Rose)	Technical Report Page 2 Page 23	 3 7
Attachment TECH.04 Solids Management Plan	Technical Report Page 8 Page 23	 6F 5B
Attachment TECH.05 Pollutant Analysis of Treated Effluent	Technical Report Page 9	 7

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: Grimes Co. Water Reclamation LLC

PERMIT NUMBER (If new, leave blank): WQ00 15032001

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	☒	☐
Public Involvement Plan Form	☒	☐	Flow Diagram	☒	☐
Technical Report 1.0	☒	☐	Site Drawing	☒	☐
Technical Report 1.1	☒	☐	Original Photographs	☒	☐
Worksheet 2.0	☒	☐	Design Calculations	☒	☐
Worksheet 2.1	☐	☒	Solids Management Plan	☒	☐
Worksheet 3.0	☐	☒	Water Balance	☐	☒
Worksheet 3.1	☐	☒			
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

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

For any questions about this form, please contact the Applications Review and Processing Team at 512-239-4671.

Section 1. Application Fees (Instructions Page 26)

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: 1486

Check/Money Order Amount: $1,250.00

Name Printed on Check: WaterEngineers, Inc.

EPAY — Voucher Number: Click to enter text.

Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 26)

a. Check the box next to the appropriate authorization type.

☐ Publicly-Owned Domestic Wastewater

☒ Privately-Owned Domestic Wastewater

☐ Conventional Wastewater Treatment

b. Check the box next to the appropriate facility status.

☒ Active ☐ Inactive

c. Check the box next to the appropriate permit type.

- ☒ TPDES Permit
- ☐ TLAP
- ☐ TPDES Permit with TLAP component
- ☐ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

- ☐ New
- ☒ Major Amendment *with* Renewal
- ☐ Major Amendment *without* Renewal
- ☐ Renewal without changes
- ☐ Minor Amendment *with* Renewal
- ☐ Minor Amendment *without* Renewal
- ☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: Increase permitted flow

f. **For existing permits**:

Permit Number: WQ00 15032001

EPA I.D. (TPDES only): TX 0141852

Expiration Date: 11/14/2027

Section 3. Facility Owner (Applicant) and Co-Applicant Information (Instructions Page 26)

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

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

Grimes Co. Water Reclamation 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: 604046821

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. Last Name, First Name: Sonsel, Luke

Title: President Credential: Click to enter text.

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: Click to enter text.

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: Click to enter text. Last Name, First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

Provide a brief description of the need for a co-permittee: Click to enter text.

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. ADMIN.03

Section 4. Application Contact Information (Instructions Page 27)

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: Ms. Last Name, First Name: Young, Shelley

Title: Engineer Credential: P.E.

Organization Name: WaterEngineers, Inc.

Mailing Address: 17230 Huffmeister Road, Suite A City, State, Zip Code: Cypress, TX 77429

Phone No.: 281-373-0500 E-mail Address: syoung@waterengineers.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: Click to enter text. Last Name, First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

Organization Name: Click to enter text.

Mailing Address: Click to enter text. City, State, Zip Code: Click to enter text.

Phone No.: Click to enter text. E-mail Address: Click to enter text.

Check one or both: ☐ Administrative Contact ☐ Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

Provide the names and contact information for two individuals that can be contacted throughout the permit term.

A. Prefix: Mr. Last Name, First Name: Capps, Chase

Title: Operations Manager Credential: Click to enter text.

Organization Name: Grimes Co. Water Reclamation LLC

Mailing Address: 7063 Clark Road City, State, Zip Code: Plantersville, TX 77363

Phone No.: 281-766-1238 E-mail Address: gogreen@txgcwr.com

B. Prefix: Mr. Last Name, First Name: Sonsel, Luke

Title: President Credential: Click to enter text.

Organization Name: Grimes Co. Water Reclamation LLC

Mailing Address: 7063 Clark Road City, State, Zip Code: Plantersville, TX 77363

Phone No.: 281-766-1238 E-mail Address: gogreen@txgcwr.com

Section 6. Billing Contact Information (Instructions Page 27)

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. Last Name, First Name: Sonsel, Luke

Title: President Credential: Click to enter text.

Organization Name: Grimes Co. Water Reclamation LLC

Mailing Address: 7063 Clark Road City, State, Zip Code: Plantersville, TX 77363

Phone No.: 281-766-1238 E-mail Address: gogreen@txgcwr.com

Section 7. DMR/MER Contact Information (Instructions Page 27)

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

Prefix: Mr. Last Name, First Name: Capps, Chase

Title: Managing Member Credential: Click to enter text.

Organization Name: Grimes Co. Water Reclamation LLC

Mailing Address: 7063 Clark Road City, State, Zip Code: Plantersville, TX 77363

Phone No.: 281-766-1238 E-mail Address: gogreen@txgcwr.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Ms. Last Name, First Name: Young, Shelley

Title: Engineer Credential: P.E.

Organization Name: WaterEngineers, Inc.

Mailing Address: 17230 Huffmeister Rd, Ste A City, State, Zip Code: Cypress, TX 77429

Phone No.: 281-373-0500 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 permit to be listed in the Notices

Prefix: Ms. Last Name, First Name: Young, Shelley

Title: Engineer Credential: P.E.

Organization Name: WaterEngineers, Inc.

Mailing Address: 17230 Huffmeister Rd, Ste A City, State, Zip Code: Cypress, TX 77429

Phone No.: 281-373-0500 E-mail Address: 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: Navasota Public Library

Location within the building: Reference Desk

Physical Address of Building: 1411 E. Washington Avenue

City: Navasota County: Grimes

Contact (Last Name, First Name): Librarian

Phone No.: 936-825-6744 Ext.: Click to enter text.

E. Bilingual Notice Requirements

This information **is required** for **new, major amendment, minor amendment or minor modification, and renewal** 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

F. Plain Language Summary Template

Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment.

Attachment: ADMIN.04

G. Public Involvement Plan Form

Complete the Public Involvement Plan Form (TCEQ Form 20960) for each application for a **new permit or major amendment to a permit** and include as an attachment.

Attachment: ADMIN.05

Section 9. Regulated Entity and Permitted Site Information (Instructions Page 29)

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. **RN** 106353626

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):

Grimes Co. Water Reclamation WWTP

C. Owner of treatment facility: Grimes Co. Water Reclamation LLC

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

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

Prefix: Click to enter text. Last Name, First Name:

Title: Click to enter text. Credential: Click to enter text.

Organization Name: Grimes Co. Water Reclamation LLC

Mailing Address: 7063 Clark Road City, State, Zip Code: Plantersville, TX 77363

Phone No.: 281-766-1238 E-mail Address: gogreen@txgcwr.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: Click to enter text.

E. Owner of effluent disposal site:

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

Organization Name: Click to enter text.

Mailing Address: Click to enter text. City, State, Zip Code: Click to enter text.

Phone No.: Click to enter text. E-mail Address: Click to enter text.

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

Attachment: Click to enter text.

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

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

Organization Name: Click to enter text.

Mailing Address: Click to enter text. City, State, Zip Code: Click to enter text.

Phone No.: Click to enter text. E-mail Address: Click to enter text.

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

Attachment: Click to enter text.

Section 10. TPDES Discharge Information (Instructions Page 31)

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:

Click to enter text.

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:

Click to enter text.

City nearest the outfall(s): Todd Mission

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

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: Click to enter text.

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: Click to enter text.

Section 11. TLAP Disposal Information (Instructions Page 32)

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:

Click to enter text.

B. City nearest the disposal site: Click to enter text.

C. County in which the disposal site is located: Click to enter text.

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

Click to enter text.

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

Section 12. Miscellaneous Information (Instructions Page 32)

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

☐ Yes ☒ No

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

☐ Yes ☐ No ☒ Not Applicable

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

Click to enter text.

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

☐ Yes ☒ No

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

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

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

Account number: Click to enter text.

Amount past due: Click to enter text.

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

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

Enforcement order number: Click to enter text.

Amount past due: Click to enter text.

Section 13. Attachments (Instructions Page 33)

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: Admin.02-Proof of Application Fee, Admin.03-Core Data Form, Admin.04-Plain Language Summary, Admin.05-Public Involvement Plant, Admin.06-Downstream and Adjacent Landowner Map and List, Admin.07-Photographs, Admin.08-Buffer Zone Map, Admin.09-SPIF

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0015032001

Applicant: Grimes Co. Water Reclamation 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): Luke Sonsel

Signatory title: President

Signature: _____ Date: 12-18-24

(Use blue ink)

Subscribed and Sworn to before me by the said President

on this 18th day of December, 2024.

My commission expires on the 25th day of February, 2026.

Catherine Leavell Tabor

Notary Public

CATHERINE LEAVELL TABOR
MY COMMISSION EXPIRES
FEBRUARY 25, 2026
NOTARY ID: 124132633

[SEAL]

Montgomery

County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

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:

☒ USB Drive ☐ Four sets of labels

D. Provide the source of the landowners' names and mailing addresses: Grimes 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):

Click to enter text.

Section 2. Original Photographs (Instructions Page 38)

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 38)

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

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

This form applies to TPDES permit applications only. Complete and attach the Supplemental Permit information Form (SPIF) (TCEQ Form 20971).

Attachment: Admin.09

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

For any questions about this form, please contact the Domestic Wastewater Permitting Team at 512-239-4671.

The following information is required for all renewal, new, and amendment applications.

Section 1. Permitted or Proposed Flows (Instructions Page 43)

A. Existing/Interim I Phase

Design Flow (MGD): 0.120

2-Hr Peak Flow (MGD): 0.300

Estimated construction start date: existing

Estimated waste disposal start date: existing

B. Interim II Phase

Design Flow (MGD): Click to enter text.

2-Hr Peak Flow (MGD): Click to enter text.

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

C. Final Phase

Design Flow (MGD): 0.395

2-Hr Peak Flow (MGD): 0.9875

Estimated construction start date: Q2 2025

Estimated waste disposal start date: Q1 2026

D. Current Operating Phase

Provide the startup date of the facility: 2015-2016

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

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, a description of *each phase* must be provided.**

Domestic septage waste and sludge is transferred from hauling trucks into the complete mix activated sludge plant. The waste enters the plant into the surge/primary sedimentation basins. The air to the surge/primary sedimentation basins is periodically turned off allowing trash and primary sludge to settle. The clarified liquid is pumped to the flow equalization aeration basin, thence to the aeration basins, thence to the clarifiers, thence to the chlorine contact basin for disinfection and discharge. Sludge and trash from the surge/primary sedimentation basins is pumped to the digester, as is the sludge from the bottom of the clarifiers. Sludge from the digester is dewatered with an onsite dewatering unit and either hauled to landfill or composted on-site. The final phase will add additional surge/primary sedimentation basins, a new large clarifier, and a new larger chlorine contact basin.

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)
See Tech.01		

C. Process Flow Diagram

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

Attachment: TECH.02

Section 3. Site Information and Drawing (Instructions Page 44)

Provide the TPDES discharge outfall latitude and longitude. Enter N/A if not applicable.

- Latitude: 30.255569
- Longitude: -95.892272

Provide the TLAP disposal site latitude and longitude. Enter N/A if not applicable.

- Latitude: N/A
- Longitude: N/A

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.

N/A – Domestic septage waste and sludge is trucked in to the Grimes Co. Water Reclamation WWTP from various locations.

Collection System Information **for wastewater TPDES permits only**: Provide information for each **uniquely owned** collection system, existing and new, served by this facility, including satellite collection systems. **Please see the instructions for a detailed explanation and examples.**

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
N/A-there is no collection system		Choose an item.	
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

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.**

Click to enter text.

Section 5. Closure Plans (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Click to enter text.

Section 6. Permit Specific Requirements (Instructions Page 45)

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: Click to enter text.

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

Click to enter text.

B. Buffer zones

Have the buffer zone requirements been met?

☒ Yes ☐ No

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

Click to enter text.

C. Other actions required by the current permit

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

☐ Yes ☒ No

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

Click to enter text.

D. Grit and grease treatment

1. *Acceptance of grit and grease waste*

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

☐ Yes ☒ 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.

Click to enter text.

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 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

Describe the method of grit disposal.

Click to enter text.

4. ***Grease and decanted liquid disposal***

Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-2335.

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

Click to enter text.

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 Click to enter text. or TXRNE Click to enter text.

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:

Click to enter text.

4. ***Existing coverage in individual permit***

Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?

☐ Yes ☐ No

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

Click to enter text.

5. ***Zero stormwater discharge***

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

☐ Yes ☐ No

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

Click to enter text.

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

6. ***Request for coverage in individual permit***

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

☐ Yes ☐ No

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

intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

Click to enter text.

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☒ Yes ☐ No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions. TECH.04

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

1. *Acceptance of sludge from other WWTPs*

Does or will the facility 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 the plant started 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.

Click to enter text.

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

2. *Acceptance of septic waste*

Is the facility accepting or will it accept septic waste?

☒ Yes ☐ No

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

☐ Yes ☒ No

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

☐ Yes ☐ No

If yes to any of the above, provide the date the plant started 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.

The plant began accepting domestic septage on 10/15/2016. The plant began accepting domestic sludge from wastewater treatment plants earlier this year. The permittee operates a septic hauling business that uses the WWTP for treatment of the domestic septage waste. Currently the plant receives approximately 100,000 gpd, 5 days/week at an estimated BOD5 of 750 mg/l. The WWTP has been specifically designed for this purpose and concentration

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

☐ Yes ☒ No

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

Click to enter text.

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 50)

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). Provide copies of the laboratory results sheets. **These tables are not applicable for a minor amendment without renewal.** See the instructions for guidance.

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

Table1.0(2) – Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l	>8.8	>8.8			
Total Suspended Solids, mg/l	14.3	14.3			
Ammonia Nitrogen, mg/l	47.6	47.6			

Nitrate Nitrogen, mg/l	21.8	21.8			
Total Kjeldahl Nitrogen, mg/l	54.9	54.9			
Sulfate, mg/l	84.9	84.9			
Chloride, mg/l	116.6	116.6			
Total Phosphorus, mg/l	10.2	10.2			
pH, standard units	7.3	7.3			
Dissolved Oxygen*, mg/l	6.1	6.1			
Chlorine Residual, mg/l	1.6	1.6			
E.coli (CFU/100ml) freshwater	<1.0	<1.0			
Entercocci (CFU/100ml) saltwater	N/A	N/A			
Total Dissolved Solids, mg/l	656.0	656.0			
Electrical Conductivity, µmohs/cm, †	N/A	N/A			
Oil & Grease, mg/l	N/A	N/A			
Alkalinity ($CaCO_3$)*, mg/l	226.0	226.0			

*TPDES permits only
†TLAP permits only

Table1.0(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 50)

Facility Operator Name: Chase Capps

Facility Operator's License Classification and Level: C

Facility Operator's License Number: Click to enter text.

Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 51)

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- ☐ Design flow>= 1 MGD
- ☐ Serves >= 10,000 people
- ☐ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ☒ Biosolids generator
- ☐ Biosolids end user - land application (onsite)
- ☐ Biosolids end user - surface disposal (onsite)
- ☐ Biosolids end user - incinerator (onsite)

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- ☒ Aerobic Digestion
- ☐ Air Drying (or sludge drying beds)
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization
- ☐ Higher Temperature Composting
- ☐ Heat Drying
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization
- ☐ Preliminary Operation (e.g. grinding, de-gritting, blending)
- ☒ Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- ☐ Sludge Lagoon
- ☐ Temporary Storage (< 2 years)
- ☐ Long Term Storage (>= 2 years)
- ☐ Methane or Biogas Recovery
- ☒ Other Treatment Process: Composting

C. Biosolids Management

Provide information on the *intended* biosolids management practice. Do not enter every management practice that you want authorized in the permit, as the permit will authorize all biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Other	On-Site Owner or Operator	Bulk		Domestic Septage: pH	Option 12: Septage pH >12 for at least 30 min
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): Click to enter text.

D. Disposal site

Disposal site name: New Earth and Twin Oaks if hauled. Applicant also will begin composting on-site in 2025.

TCEQ permit or registration number: 42041 and 2292, respectively

County where disposal site is located: Waller and Grimes, respectively

E. Transportation method

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

Name of the hauler: Grimes Co. Water Reclamation, LLC

Hauler registration number: 25723

Sludge is transported as a:

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

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 53)

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 53)

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: Click to enter text.
- USDA Natural Resources Conservation Service Soil Map:

  Attachment: Click to enter text.
- Federal Emergency Management Map:

  Attachment: Click to enter text.
- Site map:

  Attachment: Click to enter text.

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

☐ Overlap a designated 100-year frequency flood plain

☐ Soils with flooding classification

☐ Overlap an unstable area

☐ Wetlands

☐ Located less than 60 meters from a fault

☐ None of the above

Attachment: Click to enter text.

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

Click to enter text.

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: Click to enter text.

Total Kjeldahl Nitrogen, mg/kg: Click to enter text.

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

Phosphorus, mg/kg: Click to enter text.

Potassium, mg/kg: Click to enter text.

pH, standard units: Click to enter text.

Ammonia Nitrogen mg/kg: Click to enter text.

Arsenic: Click to enter text.

Cadmium: Click to enter text.

Chromium: Click to enter text.

Copper: Click to enter text.

Lead: Click to enter text.

Mercury: Click to enter text.

Molybdenum: Click to enter text.

Nickel: Click to enter text.

Selenium: Click to enter text.

Zinc: Click to enter text.

Total PCBs: Click to enter text.

Provide the following information:

Volume and frequency of sludge to the lagoon(s): Click to enter text.

Total dry tons stored in the lagoons(s) per 365-day period: Click to enter text.

Total dry tons stored in the lagoons(s) over the life of the unit: Click to enter text.

C. Liner information

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

☐ Yes ☐ No

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

Click to enter text.

D. Site development plan

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

Click to enter text.

Attach the following documents to the application.

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

  Attachment: Click to enter text.
- Copy of the closure plan

  Attachment: Click to enter text.
- Copy of deed recordation for the site

  Attachment: Click to enter text.
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

  Attachment: Click to enter text.
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

  Attachment: Click to enter text.
- Procedures to prevent the occurrence of nuisance conditions

  Attachment: Click to enter text.

E. Groundwater monitoring

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

☐ Yes ☐ No

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

Attachment: Click to enter text.

Section 12. Authorizations/Compliance/Enforcement (Instructions

Page 55)

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:

Reuse Authorizaiton - R15032001 – irrigation of hay fields

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

Click to enter text.

Section 13. RCRA/CERCLA Wastes (Instructions Page 55)

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

Attachment: Click to enter text.

Section 14. Laboratory Accreditation (Instructions Page 56)

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: Luke Sonsel

Title: President

Signature: _____

Date: 12-18-24

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

The following information is required for new and amendment major applications.

Section 1. Justification for Permit (Instructions Page 57)

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.

Grimes Co. Water Reclamation, LLC would like to increase the amount of domestic septage and wastewater treatment plant sludge as the demand for such a service is very high in the Houston Metropolitan area at this time.

B. Regionalization of facilities

For additional guidance, please review TCEQ's Regionalization Policy for Wastewater Treatment[1].

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: Click to enter text.

If yes, attach correspondence from the city.

Attachment: Click to enter text.

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: Click to enter text.

2. *Utility CCN areas*

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

☐ Yes ☒ No

[1] https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater

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

Attachment: Click to enter text.

3. ***Nearby WWTPs or collection systems***

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

☐ Yes ☒ No

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

Attachment: N/A

If yes, attach proof of mailing a request for service to each facility and collection system, the letters requesting service, and correspondence from each facility and collection system.

Attachment: N/A

If the facility or collection system agrees to provide service, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the facility or collection system versus the cost of the proposed facility or expansion.

Attachment: N/A

Section 2. Proposed Organic Loading (Instructions Page 59)

Is this facility in operation?

☒ Yes ☐ No

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

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

A. Current organic loading

Facility Design Flow (flow being requested in application): 0.395 mgd

Average Influent Organic Strength or BOD_5 Concentration in mg/l: 350

Average Influent Loading (lbs/day = total average flow X average BOD_5 conc. X 8.34): 1,153

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

Influent testing

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 BOD5 Concentration (mg/l)
Municipality		
Subdivision	0.120 / 0.395	750 / 750
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, 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	0.120 / 0.395	
AVERAGE BOD_5 from all sources		750 / 750

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 59)

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: 4

Other: E. Coli: 63 mpn/100 ml

B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: Click to enter text.

Total Suspended Solids, mg/l: Click to enter text.

Ammonia Nitrogen, mg/l: Click to enter text.

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

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: 4

Other: E. Coli: 63 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: Click to enter text.

☐ Ultraviolet Light: Click to enter text. seconds contact time at peak flow

☐ Other: Click to enter text.

Section 4. Design Calculations (Instructions Page 59)

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 60)

A. 100-year floodplain

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

☒ Yes ☐ No

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

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

FEMA Flood Map 48185C0475C

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

☐ Yes ☒ No

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

☐ Yes ☐ No

If yes, provide the permit number: Click to enter text.

If no, provide the approximate date you anticipate submitting your application to the Corps: Click to enter text.

B. Wind rose

Attach a wind rose: Included on Attachment TECH.03

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

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):** Click to enter text.

B. Sludge processing authorization

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

☒ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

If any of the above, sludge options are selected, attach the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056):** Click to enter text.

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 61)

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 WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1. Domestic Drinking Water Supply (Instructions Page 64)

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 **no**, proceed it Section 2. **If yes**, provide the following:

Owner of the drinking water supply: Click to enter text.

Distance and direction to the intake: Click to enter text.

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

Attachment: Click to enter text.

Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

If **no**, proceed to Section 3. **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: Click to enter text.

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☐ No

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

Click to enter text.

C. Sea grasses

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

☐ Yes ☐ No

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

Click to enter text.

Section 3. Classified Segments (Instructions Page 64)

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 65)

Name of the immediate receiving waters: unnamed drainage ditch

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: Click to enter text.

Average depth of the entire water body, in feet: Click to enter text.

Average depth of water body within a 500-foot radius of discharge point, in feet: Click to enter text.

☒ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: Click to enter text.

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: Click to enter text.

C. Downstream perennial confluences

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

Walnut 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.

Click to enter text.

E. Normal dry weather characteristics

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

The unnamed drainage ditch is intermittent or dry during normal dry weather conditions.

Date and time of observation: 9/8/2021 @ 13:45

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☒ No

Section 5. General Characteristics of the Waterbody (Instructions Page 66)

A. Upstream influences

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

☐ Oil field activities
☐ Urban runoff
☐ Upstream discharges
☒ Agricultural runoff
☐ Septic tanks
☐ Other(s), specify: Click to enter text.

B. Waterbody uses

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

- ☐ Livestock watering
- ☐ Irrigation withdrawal
- ☐ Fishing
- ☐ Domestic water supply
- ☐ Park activities
- ☐ Contact recreation
- ☐ Non-contact recreation
- ☐ Navigation
- ☐ Industrial water supply
- ☒ 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 WASTEWATER PERMIT APPLICATION:

SEWAGE SLUDGE TECHNICAL REPORT 1.0

GENERAL INFORMATION

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

SECTION 1. TREATMENT PROCESSING INFORMATION

A. Attach the engineering report and/or plans and specifications for the proposed facility which must include the following:

- Description of the type of process facility
- Process flow diagram
- Design calculations, features, and functional arrangements
- Site controls
- Groundwater protection
- Odor, dust, and bio-aerosol management
- Ultimate product

Attachment Number: SLUDGE.01

B. Is the facility located or proposed to be located above the 100-year frequency flood plain? Yes ☒ No ☐

If No, provide a separate site map indicating the location of the sludge units within the 100-year frequency flood plain and a detailed description of the type and size of protective measures.

Click here to enter text.

SECTION 2. SOURCES OF SLUDGE

A. Provide the sources of generation, any water quality or public water supply permit number issued by TCEQ, and the quantity for each source.

Facility Name	Permit Number	Annual Quantity
Grimes Co. Water Reclamation	WQ0015032001	12,480 cubic yards of dry cake

Facility Name	Permit Number	Annual Quantity

B. For each source of sludge, complete Table 1 located at the end of this form.

SECTION 3. PATHOGEN AND VECTOR ATTRACTION REDUCTION

A. For each source of sludge, complete Tables 2 and 3 located at the end of this form.

B. Indicate by a checkmark that all of the following are being followed for Class B land application.

- ☒ Food crop harvesting restrictions
- ☒ Animal grazing restrictions
- ☒ Public access restrictions

SECTION 4. WELL INFORMATION

In the table below, provide information about each well located on-site and within 500 feet of the processing, application, and/or disposal area. Water well information is available from the Texas Water Development Board, 512-936-0837. Oil and gas well information is available from the Texas Railroad Commission, 512-463-6851.

Well Type (Water Well, Oil Well, Injection Well)	Producing or Non-Producing	Open, Cased, or Capped*	Protective Measures**
No wells within	500 feet		

* Casing, capping, and plugging rules are located in 16 TAC Chapter 76.
** The following protective measures are required prior to initial sludge/septage application:

- If the well is producing and cased, no action is needed.
- If the well is producing and not cased, the well must be cased or describe other protective measures.
- If the well is non-producing and cased, the well must be plugged or capped.
- If the well is non-producing and not cased, the well must be plugged.

SECTION 5. ADDITIONAL TECHNICAL REPORTS

Identify which additional technical reports are submitted with this application.

- ☒ Technical Report 2.0, Sewage Sludge Composting
- ☐ Technical Report 3.0, Marketing and Distribution
- ☐ Technical Report 4.0, Sewage Sludge Surface Disposal

SITE OPERATOR SIGNATURE PAGE

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

Permit Number: WQ0015032001

Applicant: Grimes Co. Water Reclamation

I understand that I am responsible for operating the site described in this permit application in accordance with the requirements in 30 TAC Chapter 312, the conditions set forth in this application, and any additional conditions as required by the Texas Commission on Environmental Quality.

I certify, under penalty of law, that all 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, imprisonment for violations, and revocation of this permit.

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: Luke Sonsel

Title: President

Signature (use blue ink): _____ Date: 2/2/24

SUBSCRIBED AND SWORN to before me by the said Lucas Sonsel on this 2 day of February, 20 24

My commission expires on the 24 day of September, 20 24

(Seal) KRISTEN MEARS My Notary ID # 125066122. Expires September 24, 2024

Notary Public

Grimes

County, Texas

ATTACHMENT SLUDGE.01

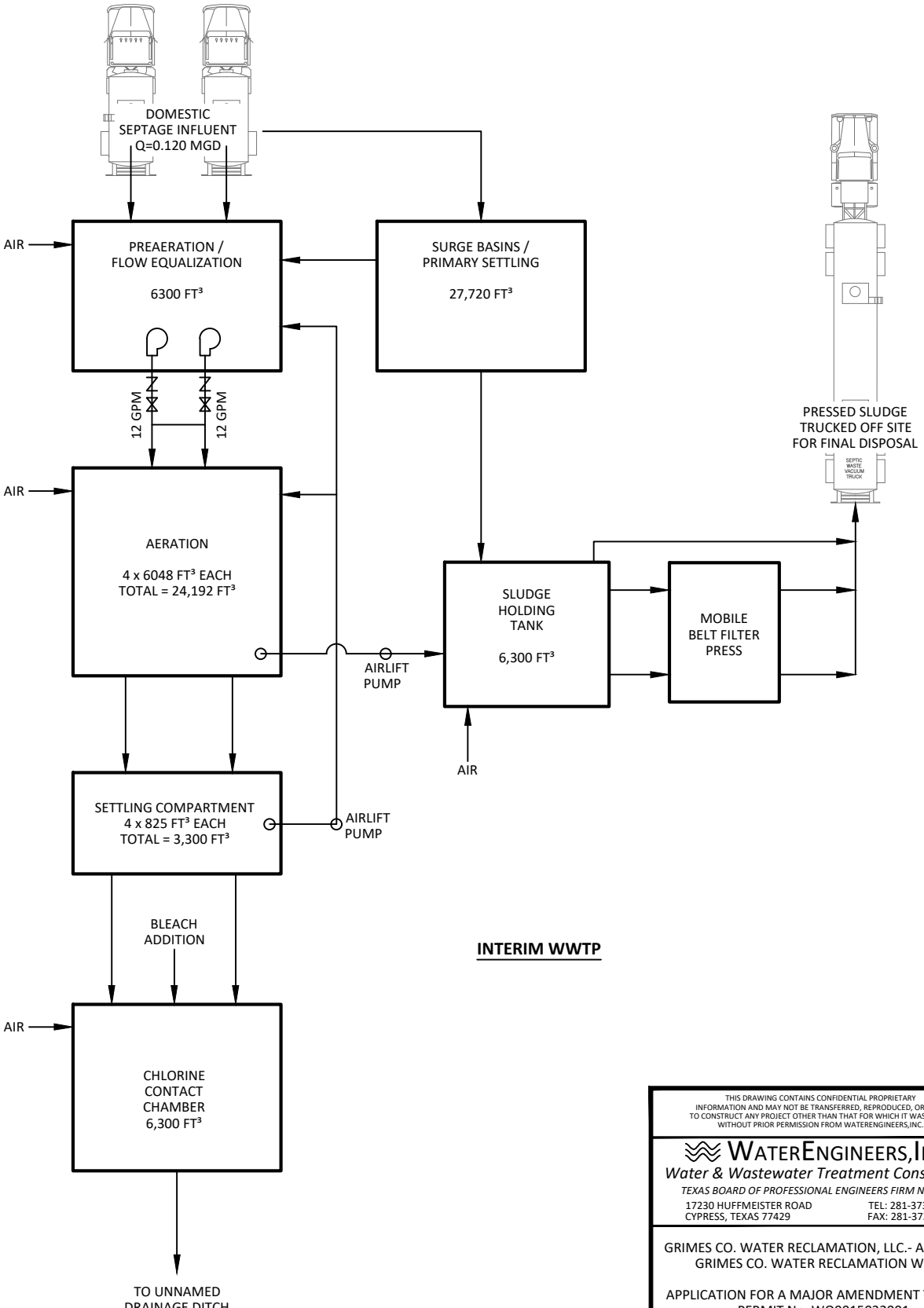
TREATMENT PROCESSING INFORMATION

Grimes County Water Reclamation (GCWR)is applying for a minor amendment to add composting to its current TPDES permit. The following is a description of the treatment process as required by Section 1, Item A of the Domestic Wastewater Permit Application: Sewage Sludge Technical Report 1.0 – General Information

1. **Description of the Process.** Wasted sludge from the process is digested in aerobic digesters. 10-15 truck loads of sludge are also brought in and emptied directly to the digester. Sludge is then dewatered on a belt filter press. Dewatered sludge is currently hauled to a landfill, ***however this submittal is to request that on-site composting be added to the existing permit***.
2. **Process Flow Diagram.** A flow schematic is attached to this attachment. 78,000 gallons per day of septic waste is trucked into the Grimes County Water Reclamation WWTP,. Waste sludge is processed through on on-site belt filter press, resulting in approximately 40 cubic yards of dewatered sludge per day (6 days per week) being produced from plant activities.
3. **Design Calculations.** See the attached Sludge Management Plan. In the event of equipment failure, all incoming wastes will be halted, since all wastes are trucked in.
4. **Site Controls.** Dewatered sludge will be mixed with wood chips/mulch for composting. The windrows will be stored under covered areas to prevent rainfall inundation. Additionally, the entire composting area will be surrounded by a surface water diversion berm.
5. **Set back distance from the facility boundary to the areas for receiving, processing, or storing feedstocks or final product.** There will be 150' setbacks on the north, east and south sides, and 100' setback from the unnamed tributary on the west side.
6. **A plan view of the site showing all the equipment, storage facilities, and sludge management facilities.** See attachment behind this report.
7. **Types of composting prosed.** Windrow process
8. **Description how the facility shall be constructed, maintained, and operated to manage run-on and run-off during a 25-year, 24-hour rainfall event.** Facility will be constructed with a heavy clay and rock base, overhead cover, diversion berm around the facility, and sloped to a storage pond for runoff to be pumped back into the plant for recirculation.
9. **Description of the leachate collection system and the method used for leachate processing and disposal in accordance with applicable requirements and provide the TCEQ permit number for leachate treatment and disposal.** Leachate will flow to a detention pond to be sent back through the Grimes County Water Reclamation wastewater treatment plant for treatment (WQ0015032001).
10. **Description of how the facility will be constructed, maintained, and operated to protect groundwater**. The site will be lined with heavy clay and rock, as well as bermed around to prevent runoff.

February 5, 2024#

11. **Description of a design plan to line all the surfaces used for sewage sludge delivery mixing, composting, curing screening and storing to control seepage**. Surface of the site will be lined with rock. All mixing, curing screening, storage and composting will be conducted on top of the rock.
12. **Design of facility to minimize windblown material, odor and vector control**. Composting area will have a berm around it, as well as having sufficient setback from adjoining properties.



INTERIM WWTP

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

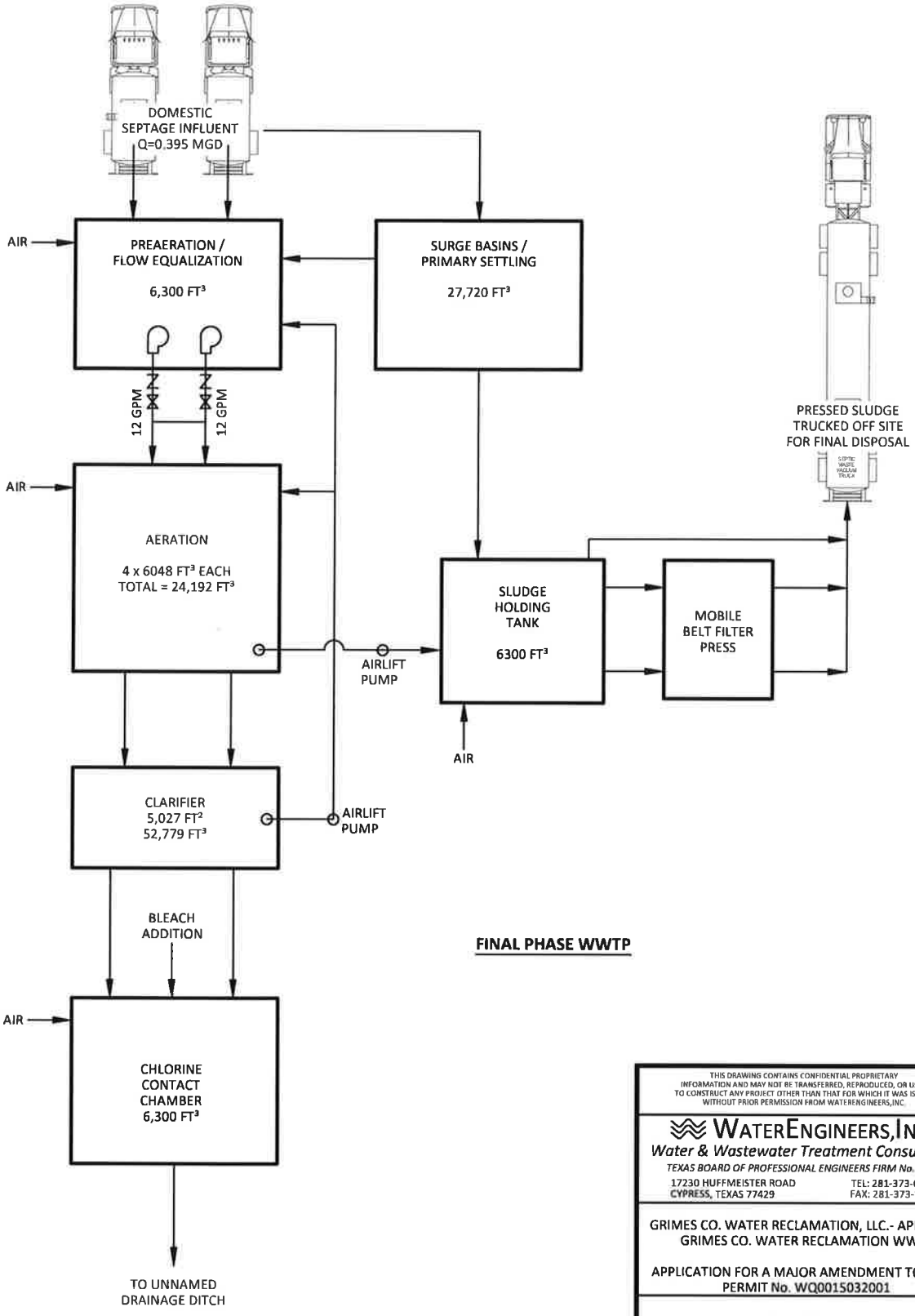
GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES
PERMIT No. WQ0015032001

FLOW SCHEMATIC

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**TECH.02-01**
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	

\\server\wei cad\current jobs\5127 gcwr tpdes major amendment '24\tech\03-spl\02.dwg



FINAL PHASE WWTP

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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0015032001

FLOW SCHEMATIC

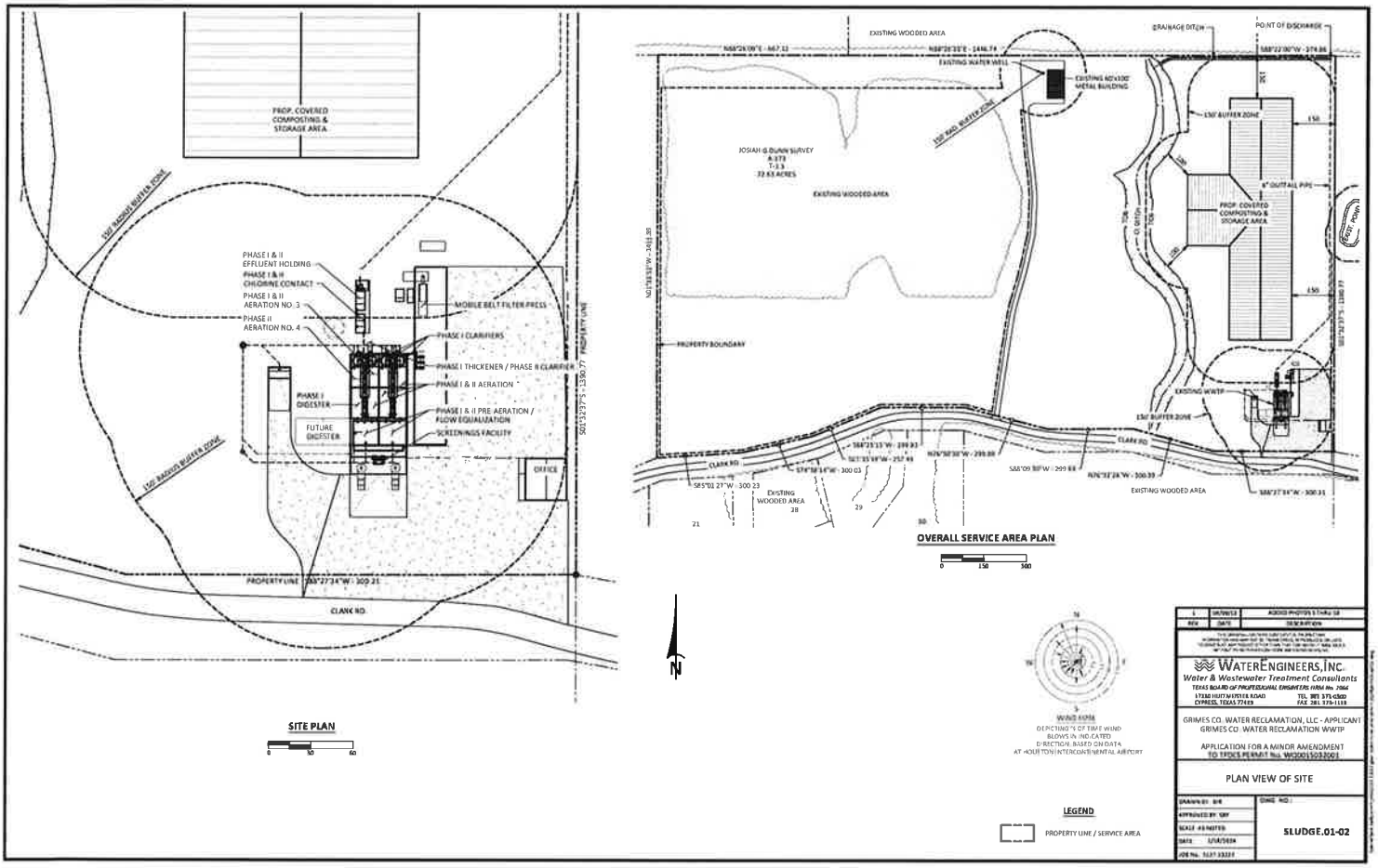
DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**TECH.02-02**
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	

ATTACHMENT TECH.01-01
PROCESS DESIGN & LOADING CRITERIA
GRIMES COUNTY WATER RECLAMATION TREATMENT PLANT
USING FINE BUBBLE AIR DIFFUSERS

Parameter			CLARIFIER	
INFLUENT CONDITIONS			Selected Clarifier Diameter, ft (each)	40
Average Daily Flow, gpd	120000		Sidewater Depth @ Qavg, ft	10.5
Ratio Average/Peak Flow	2.5		Total Area, sq ft, total	5026.5
Peak 2-Hour Flow, gpd	300000		Total Volume, cu ft, total	52778.7
Peak 2-Hour Flow, gpm	208		SOR, gpd/sq ft	59.7
BOD, mg/l	750		Detention Time, hr	31.6
BOD, lb/day	751		Max Qr @ 400 gpd/sf, gpm	1396.3
			Max Qr @ 400 gpd/sf, gpd	2010618
PRIMARY SETTLING			Max Qp + Qr, gpd	2310618
Width, ft (all basins)	24			
Length, ft (2 basins)	25			
Length, ft (2 basins)	30			
Side Water Depth, ft	10.5			
Volume, cf	27,720			
BOD Reduction, %	85%			
FLOW EQUALIZATON				
Width, ft	24			
Length, ft	25			
Side Water Depth, ft	10.5			
Volume, cf	6300			
			CHLORINE CONTACT	
AERATION BASIN (EACH TRAIN)			Peak Flow Detention, min	20
No. of Process Trains	4		Minimum Required Volume, cu ft	557
Flow Per Train, mgd	30000		Width, ft	12
Peak Flow Rate Per Train, mgd	75000		Length, ft	24
BOD per Train, #/day	28		Side Water Depth, ft	6
Design Basin Loading, lb BOD/1000 cu ft	15		Basin Volume, cu ft	1704.24
Design Basin Volume, cu ft	1,877		Basin Volume, gallons	12748
Side Water Depth, ft	10.5		Detention, minutes	61.2
Design Basin Area, sq ft	179		Air Supply (@10 scfm/1000 cf), cfm	17
Length, ft	48		SLUDGE HOLDING TANK	
Width, ft	12		Length, ft	25
Actual Basin Area, sq ft	576		Width, ft	24
Actual Volume, cu ft	6,048		Side Water Depth, ft	10.5
Detention @ Qave, hrs	36.19		Volume, cf	6300
Actual BOD Load, #/1000 cu ft	4.65		Loading, cu ft/# BOD	8.4
O2 Req'd @ 2.2 # O2/# BOD, # O2/day	62		Air Supply Rate, scfm/1000 cu ft	30
Design Diffuser Air Flow/Unit Area, scfm/sf	2		Total Air Supply, scfm	189
Diffuser CW Eff @ Field Conditions, %/Ft Sub	0.0215			
Diffuser Field Submergence, ft.	10		AIR BLOWERS	
Diffuser CW Transfer Efficiency, %	0.215		Aeration Basin Air Supply, scfm (All Trains)	103
AOR/SOR Coefficient (Fine Bubble)	0.45		Aerobic Digester Air Supply, scfm	189
Diffuser Field Transfer Efficiency, %	0.097		Chlorine Basin Air Supply, scfm	17
Total Air Flow Required, scfm	26		Return Sludge Airlift Air Supply, scfm	209
Diffuser active surface area, sf/diffuser	2.54		Skimmer Airlift Air Supply, scfm	3
Diffuser Air Flow Rate, scfm	4.52		Required Air Supply, scfm	522
No. of Diffusers Required	6		No. of Blowers	4
No. of Diffusers Installed	42		Required Capacity, scfm, each	174
Diffuser Air Flow/SF Active Membrane, scfm/sf	0.24		Selected Capacity, scfm, each	319
Air Mixing Rate, scm/1000 cu ft	4.3		Blower Op Pressure, psi	5.58

ATTACHMENT TECH.01-02
PROCESS DESIGN & LOADING CRITERIA
GRIMES COUNTY WATER RECLAMATION TREATMENT PLANT
USING FINE BUBBLE AIR DIFFUSERS

Parameter			CLARIFIER	
INFLUENT CONDITIONS			Selected Clarifier Diameter, ft (each)	40
Average Daily Flow, gpd	395000		Sidewater Depth @ Qavg, ft	10.5
Ratio Average/Peak Flow	2.5		Total Area, sq ft, total	5026.5
Peak 2-Hour Flow, gpd	987500		Total Volume, cu ft, total	52778.7
Peak 2-Hour Flow, gpm	686		SOR, gpd/sq ft	196.5
BOD, mg/l	750		Detention Time, hr	9.6
BOD, lb/day	2,471		Max Qr @ 400 gpd/sf, gpm	1396.3
			Max Qr @ 400 gpd/sf, gpd	2010618
PRIMARY SETTLING			Max Qp + Qr, gpd	2998118
Width, ft (all basins)	24			
Length, ft (2 basins)	25			
Length, ft (2 basins)	30			
Side Water Depth, ft	10.5			
Volume, cf	27,720			
BOD Reduction, %	85%			
FLOW EQUALIZATON				
Width, ft	24			
Length, ft	25			
Side Water Depth, ft	10.5			
Volume, cf	6300			
			CHLORINE CONTACT	
AERATION BASIN (EACH TRAIN)			Peak Flow Detention, min	20
No. of Process Trains	4		Minimum Required Volume, cu ft	1,834
Flow Per Train, mgd	98750		Width, ft	20
Peak Flow Rate Per Train, mgd	246875		Length, ft	25.00
BOD per Train, #/day	93		Side Water Depth, ft	6
Design Basin Loading, lb BOD/1000 cu ft	15		Basin Volume, cu ft	3000
Design Basin Volume, cu ft	6,177		Basin Volume, gallons	22440
Side Water Depth, ft	10.5		Detention, minutes	32.7
Design Basin Area, sq ft	588		Air Supply (@10 scfm/1000 cf), cfm	30
Length, ft	48		SLUDGE HOLDING TANK	
Width, ft	12		Length, ft	25
Actual Basin Area, sq ft	576		Width, ft	24
Actual Volume, cu ft	6,048		Side Water Depth, ft	10.5
Detention @ Qave, hrs	11.00		Volume, cf	6300
Actual BOD Load, #/1000 cu ft	15.32		Loading, cu ft/# BOD	2.5
O2 Req'd @ 2.2 # O2/# BOD, # O2/day	204		Air Supply Rate, scfm/1000 cu ft	30
Design Diffuser Air Flow/Unit Area, scfm/sf	2		Total Air Supply, scfm	189
Diffuser CW Eff @ Field Conditions, %/Ft Sub	0.0215			
Diffuser Field Submergence, ft.	10		AIR BLOWERS	
Diffuser CW Transfer Efficiency, %	0.215		Aeration Basin Air Supply, scfm (All Trains)	339
AOR/SOR Coefficient (Fine Bubble)	0.45		Aerobic Digester Air Supply, scfm	189
Diffuser Field Transfer Efficiency, %	0.097		Chlorine Basin Air Supply, scfm	30
Total Air Flow Required, scfm	85		Return Sludge Airlift Air Supply, scfm	209
Diffuser active surface area, sf/diffuser	2.54		Skimmer Airlift Air Supply, scfm	3
Diffuser Air Flow Rate, scfm	4.52		Required Air Supply, scfm	771
No. of Diffusers Required	19		No. of Blowers	6
No. of Diffusers Installed	42		Required Capacity, scfm, each	154
Diffuser Air Flow/SF Active Membrane, scfm/sf	0.79		Selected Capacity, scfm, each	319
Air Mixing Rate, scm/1000 cu ft	14.0		Blower Op Pressure, psi	5.58


PROP. COVERED COMPOSTING & STORAGE AREA
150' RADIUS BUFFER ZONE
PHASE I & II EFFLUENT HOLDING
PHASE I & II CHLORINE CONTACT
PHASE I & II AERATION NO. 3
PHASE II AERATION NO. 4
MOBILE BELT FILTER PRESS
PHASE I CLARIFIERS
PHASE I THICKENER / PHASE II CLARIFIER
PHASE I & II AERATION
PHASE I DIGESTER
FUTURE DIGESTER
PHASE I & II PRE AERATION / FLOW EQUALIZATION
SCREENINGS FACILITY
OFFICE
PROPERTY LINE
CLARK RD.
SITE PLAN
EXISTING WOODED AREA
DRAINAGE DITCH
POINT OF DISCHARGE
EXISTING WATER WELL
EXISTING 40'x100' METAL BUILDING
JOSIAH G. DUNN SURVEY
A-373
T-1-3
32.63 ACRES
150' RAD. BUFFER ZONE
150' BUFFER ZONE
6" OUTFALL PIPE
PROP. COVERED COMPOSTING & STORAGE AREA
EXISTING WWTP
PROPERTY BOUNDARY
CLARK RD.
EXISTING WOODED AREA
OVERALL SERVICE AREA PLAN
WIND ROSE
DEPICTING % OF TIME WIND BLOWS IN INDICATED DIRECTION, BASED ON DATA AT HOUSTON INTERCONTINENTAL AIRPORT
LEGEND
PROPERTY LINE / SERVICE AREA
WATERENGINEERS, INC.
Water & Wastewater Treatment Consultants
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2966
17330 HUFFMEISTER ROAD
CYPRESS, TEXAS 77429
TEL. 281 370 0300
FAX. 281 370-1130
GRIMES CO. WATER RECLAMATION, LLC - APPLICANT
GRIMES CO. WATER RECLAMATION WWTP
APPLICATION FOR A MINOR AMENDMENT TO TPDES PERMIT No. WQ0015032001
PLAN VIEW OF SITE
SLUDGE.01-02

DOMESTIC WASTEWATER PERMIT APPLICATION:

SEWAGE SLUDGE TECHNICAL REPORT 2.0

SEWAGE SLUDGE COMPOSTING

SECTION 1. RENEWAL OF EXISTING AUTHORIZATION

Provide the following information if you are requesting continued authorization to compost sewage sludge. Complete this section only if composting is currently authorized in the existing permit.

Date operation commenced: Click here to enter text.

Location of operation: Click here to enter text.

Type of bulking agent: Click here to enter text.

Approximate amount of sludge composted: Click here to enter text.

Provide a brief discussion of the composting process and any significant changes since the permit was last issued.

Click here to enter text.

SECTION 2. NEW AUTHORIZATION TO COMPOST SEWAGE SLUDGE

A. Submit an ORIGINAL General Highway (County) Map. See instructions for information that must be displayed on the map.

Attachment Number: SLUDGE.02-01

B. Has sewage sludge/septage previously been composted at this facility?

Yes ☐ No ☒

If Yes, provide a use history of the composting operations.

Click here to enter text.

C. Provide a detailed description of the composting operation. The description must include the following information:

- Amount of sludge originating off-site to be composted;
- Total amount of sludge to be composted and total amount of feedstocks;
- Fecal coliform or Salmonella bacteria analysis (in MPN or CFU);
- Type, origin, and amount of bulking material to be used;
- Set back distances from facility boundaries for receiving, processing, or storing feedstocks or final product;
- Plan view of site;
- Type of composting proposed;
- Construction, maintenance, and operation to manage run-on and run-off during a 25-year, 24-hour rainfall event, including all calculations and sources used;
- Leachate collection system and leachate processing and disposal method;
- Construction, maintenance, and operations for groundwater protection;
- Design plan to line all surfaces used for delivery, mixing, composting, curing, screening, and storage to control seepage; and
- Design to minimize windblown material, odor, and vector control.

Attachment Number: SLUDGE.02-02

D. Does the end product meet the requirements in 30 TAC 332.72(d)(2)(A)-(D)?

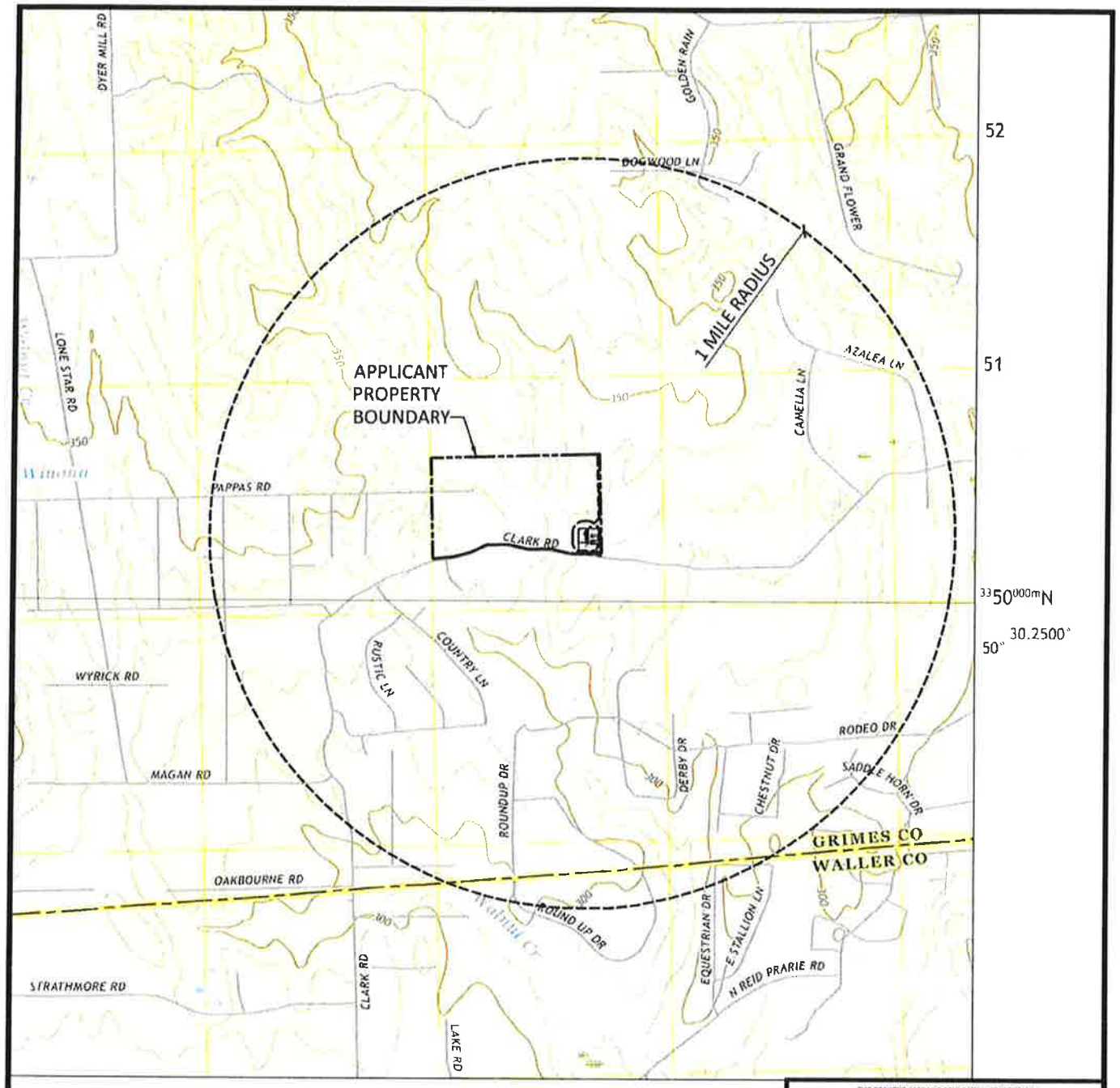
Yes ☒ No ☐

E. Submit a site operating plan which provides guidance from the design engineer to site management and operating personnel in sufficient detail to enable them to conduct day to day operations in a manner consistent with the engineer's design. The plan must include the following information:

- Process description (feedstock identification, tipping process, process, post-processing, product distribution, process diagram);
- Minimum number of personnel and their functions provided by the site operator;
- Minimum equipment;
- Security, site access control, traffic control, and safety;
- Control of the delivery material in designated areas;
- Screening for unprocessable, prohibited, and unauthorized material;
- Fire prevention and suppression plan;
- Control of windblown material;

- Equipment failures;
- Anticipated final grade of materials; and
- Description of handling and/or disposal of materials that doesn't meet 30 TAC Chapter 312.

Attachment Number: SLUDGE.02-03



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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MINOR AMENDMENT
TO TPDES PERMIT No. WQ0015032001

LOCATION MAP

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	
SCALE: AS NOTED	SLUDGE.02-01
DATE: 10/11/2021	
JOB No : 5127-23227	

N

0 1000 2000

SCALE: 1" = 1000'-0" (24"x36")
1" = 2000'-0" (11"x17" & 8.5"x11")

\\terrafaw.ca\Current jobs\5127-23227 grimes\tpdes minor amendment 2021\slude01.dwg

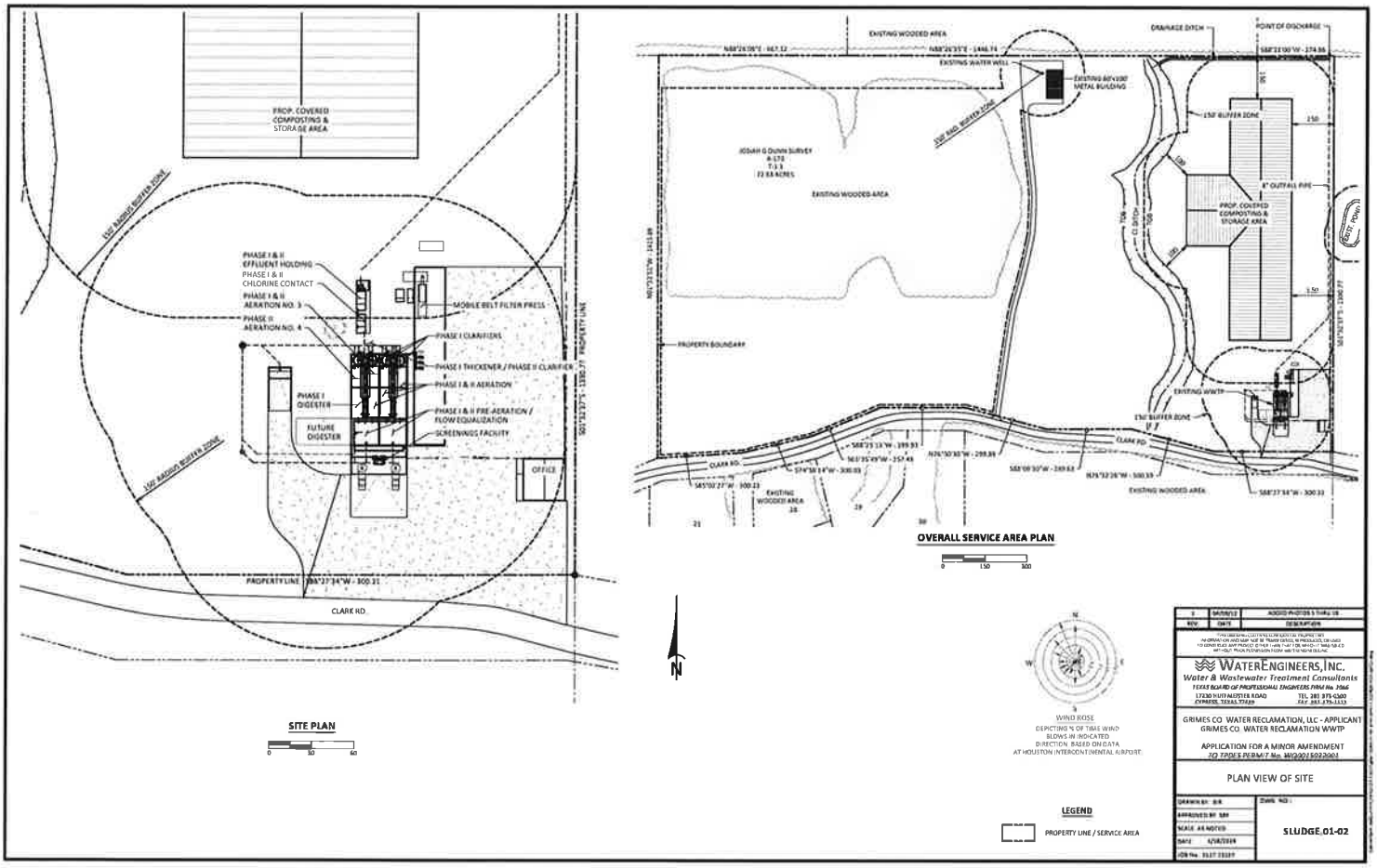
ATTACHMENT SLUDGE.02-02

DESCRIPTION OF COMPOSTING OPERATION

Grimes County Water Reclamation (GCWR) is applying for a minor amendment to add composting to its current TPDES permit. The following is a description of the proposed composting operation as required by Section 2, Item C of the Domestic Wastewater Permit Application: Sewage Sludge Technical Report 2.0 – Sewage Sludge Composting:

1. **Amount of sludge originating off-site to be composted.** GCWR has a mobile belt filter press located at the City of Magnolia WWTP that is used to dewater sludge six days per week. Currently, 20 cubic yards of dewatered sludge is produced each day and hauled to landfill. Once the minor amendment to compost on-site is approved, the dewatered sludge will be brought to the GCWR site for composting.
2. **Total amount of sludge to be composted and total amount of feedstocks.** 40 cubic yards per day of dewatered sludge will be composted. 120 cubic yards of clean wood/mulch material will also be used.
3. **Fecal coliform or Salmonella bacteria analysis (in MPN or CFU).** >199572440 (see attached lab analysis)
4. **Type, origin, and amount of bulking material to be used.** Clean wood chips/mulch from local land clearing companies will be used at an estimated volume of 120 cubic yards per day.
5. **Set back distance from the facility boundary to the areas for receiving, processing, or storing feedstocks or final product.** There will be 150' setbacks on the north, east and south sides, and 100' setback from the unnamed tributary on the west side.
6. **A plan view of the site showing all the equipment, storage facilities, and sludge management facilities.** See Attachment behind this report.
7. **Types of composting proposed.** Windrow process
8. **Description how the facility shall be constructed, maintained, and operated to manage run-on and run-off during a 25-year, 24-hour rainfall event**. Facility will be constructed with a heavy clay and rock base, overhead cover, diversion berm around the facility, and sloped to a storage pond for runoff to be pumped back into the plant for recirculation/treatment.
9. **Description of the leachate collection system and the method used for leachate processing and disposal in accordance with applicable requirements and provide the TCEQ permit number for leachate treatment and disposal**. Leachate will flow to a detention pond to be sent back through the GCWR wastewater treatment plant for treatment (WQ0015032001).
10. **Description of how the facility will be constructed, maintained, and operated to protect groundwater.** The site will be lined with heavy clay and rock, as well as bermed around to prevent runoff.
11. **Description of a design plan to line all the surfaces used for sewage sludge delivery mixing, composting, curing screening and storing to control seepage**. Surface of the site will be lined with rock. All mixing, curing, screening, storage and composting will be conducted on top of the rock and under overhead cover.

February 5, 2024#


PROP. COVERED COMPOSTING & STORAGE AREA
150' RADIUS BUFFER ZONE
PHASE I & II EFFLUENT HOLDING
PHASE I & II CHLORINE CONTACT
PHASE I & II AERATION NO. 3
PHASE II AERATION NO. 4
MOBILE BELT FILTER PRESS
PHASE I CLARIFIERS
PHASE I THICKENER / PHASE II CLARIFIER
PHASE I & II AERATION
PHASE I DIGESTER
FUTURE DIGESTER
PHASE I & II PRE-AERATION / FLOW EQUALIZATION
SCREENINGS FACILITY
OFFICE
PROPERTY LINE
CLARK RD.
SITE PLAN
0
30
60
EXISTING WOODED AREA
DRAINAGE DITCH
POINT OF DISCHARGE
EXISTING WATER WELL
EXISTING 80'x100' METAL BUILDING
JOSIAH G DUNN SURVEY
A-173
7.13
72.53 ACRES
EXISTING WOODED AREA
PROP. COVERED COMPOSTING & STORAGE AREA
8" OUTFALL PIPE
EXISTING WWTP
PROPERTY BOUNDARY
CLARK RD.
EXISTING WOODED AREA
OVERALL SERVICE AREA PLAN
0
150
300
N
WIND ROSE
DEPICTING % OF TIMES WIND BLOWS IN INDICATED DIRECTION. BASED ON DATA AT HOUSTON INTERCONTINENTAL AIRPORT.
LEGEND
PROPERTY LINE / SERVICE AREA
ADDED PHOTOS & THRU 18
DESCRIPTION
WATERENGINEERS, INC.
Water & Wastewater Treatment Consultants
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 7066
17230 HUFFMEISTER ROAD
CYPRESS, TEXAS 77429
TEL: 281 379-0500
FAX: 281 379-1113
GRIMES CO. WATER RECLAMATION, LLC - APPLICANT
GRIMES CO. WATER RECLAMATION WWTP
APPLICATION FOR A MINOR AMENDMENT
TO TPDES PERMIT No. WQ0015023001
PLAN VIEW OF SITE
SCALE: AS NOTED
SLUDGE.01-02

ATTACHMENT SLUDGE.02-03

SITE OPERATING PLAN

Grimes County Water Reclamation (GCWR) is applying for a minor amendment to add composting to its current TPDES permit. The following is a site operating plan as required by Section 2, Item E of the Domestic Wastewater Permit Application: Sewage Sludge Technical Report 2.0 – Sewage Sludge Composting:

1. **Feedstock identification.** Domestic dewatered sludge and assorted mulch are the feedstocks for the proposed composting process. Approximately 40 cubic yards per day of dewatered sludge will be composted. 120 cubic yards per day of clean wood chips/mulch material from various land clearing contractors will also be used. Unauthorized and prohibited materials will be screened out.
2. **Tipping Process.** Waste sludge from GCWR's own facility is pumped to the on-site belt filter press for dewatering. After sludge is processed through the belt filter press and dewatered, it is conveyed via conveyor belt to the composting area where it will be put into windrows and mixed with the wood chip/mulch material. Later, dewatered sludge generated from the City of Magnolia WWTP will be brought directly to the mixing area.
3. **Process.** Dewatered sludge will be mixed with wood chips/mulch and put into windrows. The windrows will be turned approximately twice per week, with moisture being added as necessary. The windrows will be maintained for approximately 45-60 days, at which time the finished product will be given to farmers and hay growers.
4. **Post-Processing.** The post processing process is still being formulated.
5. **Product Distribution.** Product will be distributed to farmers and hay growers in the area, but the specifics are still being formulated.
6. **Personnel.** There will be approximately 4 employees operating the site.
7. **Equipment.** Wheel loaders and front-end loaders will be utilized in the operation.
8. **Security.** Entire facility will be fenced and locked.
9. **Control of Dumping in Designated Area.** Only authorized employees will be allowed within the fenced and locked composting area.
10. **Mechanical and Process Screening.** All screening will be accomplished prior to sludge dewatering, therefore no additional screening should be required.
11. **Fire Prevention and Suppression Plan.** To be determined.
12. **Control of Windblown Material.** The composting area will be covered and surrounded by a berm, as well as having large setbacks from adjacent properties.
13. **Equipment Failure.** Alternative plans are to be determined.
14. **Description of Final Grade of Materials.** To be determined.
15. **Unacceptable Material.** Materials that do no meet the end product requirements will be disposed of in a landfill.

February 5, 2024#

Appendix A
Pollutant Concentrations in Sewage Sludge

Complete this table **for each source** of sludge.

Facility Name: Grimes County Water Reclamation WWTP
TCEQ Authorization Number: WQ0015032001
POLLUTANT/METAL ANALYSIS

Pollutant	Maximum Concentration, mg/kg dry weight	Test Results, mg/kg dry weight	Sample Date	Detection Level for Analysis	Sample Method
Arsenic (As)	75	5.5	12/05/2023	2.5	EPA 6010C
Cadmium (Cd)	85	<2.5	12/05/2023	2.5	EPA 6010C
Chromium (Cr)	3000	31.1	12/05/2023	2.5	EPA 6010C
Copper (Cu)	4300	449.3	12/05/2023	2.5	EPA 6010C
Lead (Pb)	840	24.4	12/05/2023	2.5	EPA 6010C
Mercury (Hg)	57	<1.33	12/05/2023	1.33	EPA 7471 B
Molybdenum (Mo)	75	7.4	12/05/2023	5.0	EPA 6010C
Nickel (Ni)	420	17.4	12/05/2023	2.5	EPA 6010C
Selenium (Se)	100	8.0	12/05/2023	2.5	EPA 6010C
Zinc (Zn)	7500	1342.4	12/05/2023	2.5	EPA 6010C
PCB (ppm)	50.0 ppm	<10.7	12/05/2023	10.7	EPA 8082
Fecal Coliform (MPN)		>199572440 CFU/g/TS	12/05/2023	1	SM 9222 D

Chaparral Laboratories, Inc.

861 State Hwy 19 P.O. Box 1622 Huntsville, TX 77342-1622 www.chaparrallabs.com Phone: 936-291-1881 Fax: 936-295-1731

Certificate of Analysis

B&R Water Well and Septic
Attn: Kristen Mears
7063 Clark Rd.
Plantersville, TX 77363

Customer ID: BRWATER
Sample ID: 23120066
Date Received: 12/05/2023
Date Reported: 01/05/2024

Project: Grimes County Water Reclamation LLC
Location: Grimes County, TX

Analytical Results

Collection Point: Digester
Sample Type: Grab
Collected: 12/05/2023 09:21
Collector: JFL

Parameter	Result	Units	Date/Time	Analyst	Bottle	Method	QC ID	Acrd
Ammonia Nitrogen	498.2	mg/kg	12/20/2023 10:18	JCG	-01	EPA 350.2	QC2312315	NELAP
Arsenic	5.5	mg/kg	12/13/2023 07:29	RS	-01	EPA 6010 C	QC2312140	NELAP
Cadmium	<2.5	mg/kg	12/13/2023 07:29	RS	-01	EPA 6010 C	QC2312141	NELAP
Chromium	31.1	mg/kg	12/13/2023 07:29	RS	-01	EPA 6010 C	QC2312143	NELAP
Copper	449.3	mg/kg	12/13/2023 07:29	RS	-01	EPA 6010 C	QC2312144	NELAP
Lead	24.4	mg/kg	12/13/2023 07:29	RS	-01	EPA 6010 C	QC2312145	NELAP
Mercury	<1.33	mg/kg	01/02/2024 11:27	SA	-01	EPA 7471 B	QC2401075	NELAP
Molybdenum	7.4	mg/kg	12/13/2023 07:29	RS	-01	EPA 6010 C	QC2312147	NELAP
Nickel	17.4	mg/kg	12/13/2023 07:29	RS	-01	EPA 6010 C	QC2312148	NELAP
Phosphorus	18224.7	mg/kg	12/13/2023 07:29	RS	-01	EPA 6010 C	QC2312149	NELAP
Potassium	6525.0	mg/kg	12/13/2023 07:29	RS	-01	EPA 6010 C	QC2312150	NELAP
Selenium	8.0	mg/kg	12/13/2023 07:29	RS	-01	EPA 6010 C	QC2312151	NELAP
Total Kjeldahl Nitrogen	30988	mg/kg	12/20/2023 09:50	JCG	-01	SM 4500-NH3 C	QC2312359	
Total Solids	0.6	%	12/08/2023 13:08	DKH	-01	SM 2540 G	QC2312177	NELAP
Zinc	1342.4	mg/kg	12/13/2023 07:29	RS	-01	EPA 6010 C	QC2312152	NELAP
7 Pt Fecal Geometric Mean	>199572440	CFU/g/TS	12/06/2023 15:51	MHE	-02	Calculation	QC2312197	
Fecal Coliform	>199481348	CFU/g/TS	12/05/2023 16:31	MHE	-02	SM 9222 D	QC2312196	NELAP
Fecal Coliform	>199640647	CFU/g/TS	12/05/2023 16:31	MHE	-03	SM 9222 D	QC2312196	NELAP
Fecal Coliform	>199840128	CFU/g/TS	12/05/2023 16:31	MHE	-04	SM 9222 D	QC2312196	NELAP
Fecal Coliform	>199680511	CFU/g/TS	12/05/2023 16:31	MHE	-05	SM 9222 D	QC2312196	NELAP
Fecal Coliform	>199600798	CFU/g/TS	12/05/2023 16:31	MHE	-06	SM 9222 D	QC2312196	NELAP
Fecal Coliform	>199242877	CFU/g/TS	12/05/2023 16:31	MHE	-07	SM 9222 D	QC2312196	NELAP
Fecal Coliform	>199760288	CFU/g/TS	12/05/2023 16:31	MHE	-08	SM 9222 D	QC2312196	NELAP
Nitrate Nitrogen	6900	mg/kg	12/08/2023 22:11	SA	-09	EPA 9056	QC2312292	NELAP
TCLP	See SPL Report			SA	-09	N/A	QC2312317	NELAP
PCB	See SPL Report			SA	-11	N/A	QC2312290	NELAP
Oxygen Uptake Rate	1.9	mg/g/h	12/05/2023 16:43	MHE	-13	SM 2710 B	QC2312330	

Quality Control

Chaparral Laboratories, Inc.

861 State Hwy 19 P.O. Box 1622 Huntsville, TX 77342-1622 www.chaparrallabs.com Phone: 936-291-1881 Fax: 936-295-1731

Certificate of Analysis

B&R Water Well and Septic
Attn: Kristen Mears
7063 Clark Rd.
Plantersville, TX 77363

Customer ID: BRWATER
Sample ID: 23120066
Date Received: 12/05/2023
Date Reported: 01/05/2024

Project: Grimes County Water Reclamation LLC
Location: Grimes County, TX

QC ID	Param	QC Type	Result	Units	Flag
QC2312140	Arsenic				
		Duplicate %RPD	1.6	%	
		LCS	88.7	%	
		Method Blank	<2.5	mg/kg	
		MS %R	102.5	%	
QC2312141	Cadmium				
		Duplicate %RPD	0	%	
		LCS	84	%	
		Method Blank	<2.5	mg/kg	
		MS %R	104.3	%	
QC2312143	Chromium				
		Duplicate %RPD	2.1	%	
		LCS	86.2	%	
		Method Blank	<2.5	mg/kg	
		MS %R	89.3	%	
QC2312144	Copper				
		Duplicate %RPD	5.6	%	
		LCS	94.8	%	
		Method Blank	<2.5	mg/kg	
		MS %R	103.6	%	
QC2312145	Lead				
		Duplicate %RPD	8.3	%	
		LCS	95.3	%	
		Method Blank	<2.5	mg/kg	
		MS %R	97.2	%	
QC2312147	Molybdenum				
		Duplicate %RPD	0	%	
		LCS	88.2	%	
		Method Blank	<5.0	mg/kg	
		MS %R	101.9	%	

Chaparral Laboratories, Inc.

861 State Hwy 19 P.O. Box 1622 Huntsville, TX 77342-1622 www.chaparrallabs.com Phone: 936-291-1881 Fax: 936-295-1731

Certificate of Analysis

B&R Water Well and Septic
Attn: Kristen Mears
7063 Clark Rd.
Plantersville, TX 77363

Customer ID: BRWATER
Sample ID: 23120066
Date Received: 12/05/2023
Date Reported: 01/05/2024

Project: Grimes County Water Reclamation LLC
Location: Grimes County, TX

QC2312148	Nickel			
		Duplicate %RPD	0.9	%
		LCS	89.2	%
		Method Blank	<2.5	mg/kg
		MS %R	96.3	%
QC2312149	Phosphorus			
		Duplicate %RPD	3.8	%
		Duplicate %RPD outside of QC limits		
		LCS	82.5	%
		Method Blank	<50.0	mg/kg
		MS %R	57.6	%
QC2312150	Potassium			
		Duplicate %RPD	0.3	%
		LCS	93.9	%
		Method Blank	<250.0	mg/kg
		MS %R	105.4	%
QC2312151	Selenium			
		Duplicate %RPD	0	%
		LCS	82.1	%
		Method Blank	<2.5	mg/kg
		MS %R	97.8	%
QC2312152	Zinc			
		Duplicate %RPD	3.9	%
		LCS	90.3	%
		Method Blank	<2.5	mg/kg
		MS %R	79.1	%
QC2312177	Total Solids			
		Duplicate %RPD	0	%
		LCS	102.3	%
		Method Blank	<0.0005	%

Chaparral Laboratories, Inc.

861 State Hwy 19 P.O. Box 1622 Huntsville, TX 77342-1622 www.chaparrallabs.com Phone: 936-291-1881 Fax: 936-295-1731

Certificate of Analysis

B&R Water Well and Septic
Attn: Kristen Mears
7063 Clark Rd.
Plantersville, TX 77363

Customer ID: BRWATER
Sample ID: 23120066
Date Received: 12/05/2023
Date Reported: 01/05/2024

Project: Grimes County Water Reclamation LLC
Location: Grimes County, TX

QC2312196	Fecal Coliform			
		Duplicate %RPD	0.1	%
		Method Blank	<1.0	CFU/g/TS
QC2312292	Nitrate Nitrogen			
		Method Blank		mg/kg
QC2312315	Ammonia Nitrogen			
		Duplicate %RPD	0.2	%
		LCS	90	%
		Method Blank	<22.0	mg/kg
		MS %R	95.2	%
		MSD %R	95.1	%
QC2312330	Oxygen Uptake Rate			
		Duplicate %RPD	10	%
		Method Blank	<0.1	mg/g/h
QC2312359	Total Kjeldahl Nitrogen			
		Duplicate %RPD	0.2	%
		LCS	100.8	%
		Method Blank	<11.0	mg/kg
		MS %R	100.8	%
		MSD %R	100.8	%

Chaparral Laboratories, Inc.

861 State Hwy 19 P.O. Box 1622 Huntsville, TX 77342-1622 www.chaparrallabs.com Phone: 936-291-1881 Fax: 936-295-1731

Certificate of Analysis

B&R Water Well and Septic
Attn: Kristen Mears
7063 Clark Rd.
Plantersville, TX 77363

Customer ID: BRWATER
Sample ID: 23120066
Date Received: 12/05/2023
Date Reported: 01/05/2024

Project: Grimes County Water Reclamation LLC
Location: Grimes County, TX

Notes:

Initials of SA = Subcontract Analysis sent to SPL for testing.

The analytical results in this Certificate of Analysis relate only to the samples tested. This Certificate of Analysis, with its corresponding Chain of Custody, completes the data package. This data package may not be reproduced, except in full, without the written approval of Chaparral Laboratories, Inc.

(<) = Result was below quantitation limits.
(>) = Result was above quantitation limits.
Acceptable = meets Precision Criteria
Unacceptable = does not meet Precision Criteria.
Samples analyzed for Oxygen Uptake Rate are diluted to <2% total solids for analysis.
Results reported as mg/kg, %, or CFU/g/TS are calculated on a dry weight basis, unless otherwise noted.
Precision Criteria for Fecal Coliform, Escherichia coli and Enterococci analyses are calculated according to SM 9020 B 8.5.b.

**Note I: Laboratory Approval by TCEQ*
**Note II: The form TCEQ-10525 (Rev. 05/2023) submitted to Chaparral Laboratories, Inc. is TCEQ's required documentation for all Total Coliform analysis on Drinking Water in the State of Texas. Please refer to the completed form TCEQ-10525 (Rev. 05/2023) for all reporting purposes.*

Approved by David H. Veinotte
Laboratory Director

2600 Dudley Rd. Kilgore, Texas 75662
24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
Office: 903-984-0551 * Fax: 903-984-5914

Project
1086633

CLDV-G

Chaparral Labs
Jessica Collins
861 Hwy 19
Huntsville, TX 77320

Printed 01/05/2024 10:14

TABLE OF CONTENTS

Combine

This report consists of this Table of Contents and the following pages:

Email: Kilgore.projectmanager@spl-inc.com

2600 Dudley Rd. Kilgore, Texas 75662
24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
Office: 903-984-0551 * Fax: 903-984-5914

CLDV-G

Project
1086633

Chaparral Labs
Jessica Collins
861 Hwy 19
Huntsville, TX 77320

Printed: 01/05/2024

Combine

RESULTS

Sample Results

2261467 GCWR 23120066 Received: 12/07/2023

Solid & Chemical Materials | Collected by: Client | Chaparral Labs | PO:
Taken: 12/05/2023 09:21:00

Supplement to Test Report 2258896
Supplement to Test Report 2254303

EPA 7471B 2 Prepared: 1097284 01/02/2024 07:15:00 Analyzed 1097383 01/02/2024 11:27:00 CAS

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Mercury**	**1.12 ***	**mg/kg**	1.33	J	**7439-97-6**	20

* Dry Weight Basis

SM2540 G-1997 /MOD Prepared: 1097837 01/03/2024 15:20:00 Analyzed 1097837 01/03/2024 15:20:00 JK1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Total Solids for Dry Wt Conversi**	**0.717**	**%**	0.010			01

2261468 GCWR 23120066 Received: 12/07/2023

Solid & Chemical Materials | Collected by: Client | Chaparral Labs | PO:
Taken: 12/05/2023 09:21:00

Supplement to Test Report 2254303

EPA 6010C Prepared: 1094566 12/11/2023 10:15:00 Analyzed 1095355 12/14/2023 14:54:00 CAS

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**TCLP Barium**	**<0.0051**	**mg/L**	0.0051		**7440-39-3**	15
NELAC	**TCLP Cadmium**	**<0.007**	**mg/L**	0.007		**7440-43-9**	15
NELAC	**TCLP Chromium**	**<0.00875**	**mg/L**	0.00875		**7440-47-3**	15
NELAC	**TCLP Selenium**	**<0.141**	**mg/L**	0.141		**7782-49-2**	15

EPA 6020A Prepared: 1094566 12/11/2023 10:15:00 Analyzed 1094948 12/12/2023 17:03:00 JC2

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**TCLP Arsenic**	**<0.050**	**mg/L**	0.050		**7440-38-2**	15
NELAC	**TCLP Lead**	**<0.050**	**mg/L**	0.050		**7439-92-1**	15
NELAC	**TCLP Silver**	**<0.050**	**mg/L**	0.050		**7440-22-4**	15

2600 Dudley Rd. Kilgore, Texas 75662
24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
Office: 903-984-0551 * Fax: 903-984-5914

SPL

CLDV-G

Project
1086633

Chaparral Labs
Jessica Collins
861 Hwy 19
Huntsville, TX 77320

Printed: 01/05/2024

2261468 GCWR 23120066

Received: 12/07/2023

Solid & Chemical Materials | Collected by: Client | Chaparral Labs | PO:

Taken: 12/05/2023 09:21:00

Supplement to Test Report 2254303

EPA 7470 A Prepared: 1094508 12/11/2023 09:40:00 Analyzed: 1094582 12/11/2023 13:16:00 CAS

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**TCLP Mercury**	**<0.00113**	**mg/L**	0.00113		**7439-97-6**	14

EPA 8081A Prepared: 1094808 12/12/2023 14:00:00 Analyzed: 1095815 12/16/2023 03:22:00 KLB

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**TCLP Chlordane**	**<0.001**	**mg/L**	0.001		**57-74-9**	17
NELAC	**TCLP Endrin**	**<0.00005**	**mg/L**	0.00005		**72-20-8**	17
NELAC	**TCLP gamma-BHC (Lindane)**	**<0.00005**	**mg/L**	0.00005		**58-89-9**	17
NELAC	**TCLP Heptachlor**	**<0.00005**	**mg/L**	0.00005		**76-44-8**	17
NELAC	**TCLP Heptachlor Epoxide**	**<0.00005**	**mg/L**	0.00005		**1024-57-3**	17
NELAC	**TCLP Methoxychlor**	**<0.00005**	**mg/L**	0.00005		**72-43-5**	17
NELAC	**TCLP Toxaphene**	**<0.001**	**mg/L**	0.001		**8001-35-2**	17

EPA 8082 Prepared: 1094417 12/08/2023 15:12:24 Analyzed: 1094711 12/12/2023 00:56:00 BLF

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**PCB-1016**	**<5900 ***	**ug/kg**	5900	XD	**12674-11-2**	11
NELAC	**PCB-1221**	**<5900 ***	**ug/kg**	5900		**11104-28-2**	11
NELAC	**PCB-1232**	**<5900 ***	**ug/kg**	5900		**11141-16-5**	11
NELAC	**PCB-1242**	**<5900 ***	**ug/kg**	5900		**53469-21-9**	11
NELAC	**PCB-1248**	**<5900 ***	**ug/kg**	5900		**12672-29-6**	11
NELAC	**PCB-1254**	**<5900 ***	**ug/kg**	5900		**11097-69-1**	11
NELAC	**PCB-1260**	**<5900 ***	**ug/kg**	5900	D	**11096-82-5**	11
NELAC	**PCB-1262**	**<10700 ***	**ug/kg**	10700		**37324-23-5**	11
NELAC	**PCB-1268**	**<10700 ***	**ug/kg**	10700		**11100-14-4**	11

* Dry Weight Basis

EPA 8151 Prepared: 1094829 12/12/2023 15:00:00 Analyzed: 1095669 12/14/2023 20:44:00 KAP

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**TCLP 2,4 D**	**<0.500**	**mg/L**	0.500	D	**94-75-7**	19
NELAC	**TCLP 2,4,5-TP (Silvex)**	**<0.300**	**mg/L**	0.300	D	**93-72-1**	19

2600 Dudley Rd, Kilgore, Texas 75662
24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
Office: 903-984-0551 * Fax: 903-984-5914

SPL

CLDV-G

Project
1086633

Chaparral Labs
Jessica Collins
861 Hwy 19
Huntsville, TX 77320

Printed: 01/05/2024

2261468 GCWR 23120066 Received: 12/07/2023

Solid & Chemical Materials Collected by: Client Chaparral Labs PO
Taken: 12/05/2023 09:21:00

Supplement to Test Report 2254303

EPA 8260B Prepared: 1094362 12/08/2023 12:05:00 Analyzed 1095004 12/12/2023 16:05:00 MR1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**TCLP 1,1-Dichloroethene**	**<0.010**	**mg/L**	0.010		**75-35-4**	07
NELAC	**TCLP 1,2-Dichloroethane**	**<0.010**	**mg/L**	0.010		**107-06-2**	07
NELAC	**TCLP 1,4 Dichlorobenzene**	**<0.010**	**mg/L**	0.010		**106-46-7**	07
NELAC	**TCLP Benzene**	**<0.010**	**mg/L**	0.010		**71-43-2**	07
NELAC	**TCLP Carbon tetrachloride**	**<0.010**	**mg/L**	0.010		**56-23-5**	07
NELAC	**TCLP Chlorobenzene**	**<0.010**	**mg/L**	0.010		**108-90-7**	07
NELAC	**TCLP Chloroform**	**<0.010**	**mg/L**	0.010		**67-66-3**	07
NELAC	**TCLP MEK**	**<0.010**	**mg/L**	0.010	X	**78-93-3**	07
NELAC	**TCLP Tetrachloroethylene**	**<0.010**	**mg/L**	0.010		**127-18-4**	07
NELAC	**TCLP Trichloroethylene**	**<0.010**	**mg/L**	0.010		**79-01-6**	07
NELAC	**TCLP Vinyl chloride**	**<0.010**	**mg/L**	0.010		**75-01-4**	07

EPA 8270C Prepared: 1094585 12/11/2023 09:00:00 Analyzed 1095709 12/15/2023 22:58:00 DWL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**TCLP 2,4,5-Trichlorophenol**	**<0.010**	**mg/L**	0.010		**95-95-4**	16
NELAC	**TCLP 2,4,6-Trichlorophenol**	**<0.010**	**mg/L**	0.010		**88-06-2**	16
NELAC	**TCLP 2,4-Dinitrotoluene**	**<0.035**	**mg/L**	0.035		**121-14-2**	16
NELAC	**TCLP 2-Methylphenol (o-Cresol)**	**<0.052**	**mg/L**	0.052	D	**95-48-7**	16
NELAC	**TCLP 3&4-Methylphenol (m&p-Creso**	**<0.062**	**mg/L**	0.062	D	**108-39-4**	16
NELAC	**TCLP Hexachlorobenzene**	**<0.010**	**mg/L**	0.010		**118-74-1**	16
NELAC	**TCLP Hexachlorobutadiene**	**<0.010**	**mg/L**	0.010		**87-68-3**	16
NELAC	**TCLP Hexachloroethane**	**<0.010**	**mg/L**	0.010		**67-72-1**	16
NELAC	**TCLP Nitrobenzene**	**<0.010**	**mg/L**	0.010		**98-95-3**	16
NELAC	**TCLP Pentachlorophenol**	**<0.010**	**mg/L**	0.010		**87-86-5**	16
NELAC	**TCLP Pyridine (Reg. Limit 5)**	**<0.054**	**mg/L**	0.054		**110-86-1**	16

EPA 8270C Prepared: 1094585 12/11/2023 09:00:00 Calculated 1095709 12/19/2023 09:31:57 CAL

	Parameter	Results	Units	RL	Flags	CAS	Bottle
	TCLP Total Cresols (Reg Lim 200)	**<0.062**	**mg/L**	0.062	E	**108-39-4,ect.**	16

EPA 9056 Prepared: 1094325 12/08/2023 10:55:59 Analyzed 1094559 12/08/2023 22:11:00 KAP

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Nitrate-Nitrogen**	**6900 ***	**mg/kg**	155		**14797-55-8**	05

2600 Dudley Rd. Kilgore, Texas 75662
24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
Office: 903-984-0551 * Fax: 903-984-5914

CLDV-G

Chaparral Labs
Jessica Collins
861 Hwy 19
Huntsville, TX 77320

Project
1086633

Printed: 01/05/2024

2261468 GCWR 23120066 Received: 12/07/2023

Solid & Chemical Materials Collected by: Client Chaparral Labs PO:
Taken: 12/05/2023 09:21:00

Supplement to Test Report 2254303
* Dry Weight Basis

SM2540 G-1997 /MOD Prepared: 1095306 12/13/2023 15:00:00 Analyzed 1095306 12/13/2023 15:00:00 RC1

	Parameter	Results	Units	RL	Flags	CAS	Bottle
NELAC	**Total Solids for Dry Wt Conversi**	**0.729**	**%**	0.010			01

Sample Preparation

2261467 GCWR 23120066 Received: 12/07/2023

12/05/2023

EPA 7471B Prepared: 1097284 01/02/2024 07:15:00 Analyzed 1097284 01/02/2024 07:15:00 ALB

NELAC	**Solid Metals Digestion Hg**	**50/0.5237**	**grams**	01

SM 2540 G-1997 Prepared: 1097619 01/03/2024 15:20:00 Analyzed 1097619 01/03/2024 15:20:00 JK1

NELAC	**Total Solids Start Code**	**Started**		

2261468 GCWR 23120066 Received: 12/07/2023

12/05/2023

EPA 3510C Prepared: 1094363 12/08/2023 12:05:00 Analyzed 1094585 12/11/2023 09:00:00 MCC

	TCLP Liquid-Liquid Extract	**1/100**	**ml**	10

EPA 3510C Prepared: 1094363 12/08/2023 12:05:00 Analyzed 1094808 12/12/2023 14:00:00 MCC

	TCLP Liq-Liq Extr. W/Hex Exch.	**10/200**	**ml**	10

Report Page 5 of 25

2600 Dudley Rd. Kilgore, Texas 75662
24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
Office: 903-984-0551 * Fax: 903-984-5914

SPL

CLDV-G

Chaparral Labs
Jessica Collins
861 Hwy 19
Huntsville, TX 77320

Project
1086633

Printed: 01/05/2024

2261468 GCWR 23120066 Received: 12/07/2023

12/05/2023

	EPA 1311	*Prepared:*	*1094363*	*12/08/2023*	*12:05:00*	*Analyzed*	*1094363*	*12/08/2023*	*12:05:00*	*SLF*
NELAC	**TCLP Extraction Non-Volatile**	**SOLID EXT 1**		**ml**						**01**
	EPA 1311ZHE	*Prepared:*	*1094362*	*12/08/2023*	*12:05:00*	*Analyzed*	*1094362*	*12/08/2023*	*12:05:00*	*SLF*
NELAC	**TCLP Extraction ZHE Volatiles**	**100% SOLID**		**ml**						01
	EPA 3005A	*Prepared:*	*1094363*	*12/08/2023*	*12:05:00*	*Analyzed*	*1094566*	*12/11/2023*	*10:15:00*	*TES*
	Metals Digestion TCLP Extract	**50/10**		**ml**						**09**
	EPA 3550B	*Prepared:*	*1094417*	*12/08/2023*	*15:12:24*	*Analyzed*	*1094417*	*12/08/2023*	*15:12:24*	*PFV*
NELAC	**PCB Total Sonic Extr. W/Hex Exch**	**10/2.0**		**grams**						**02**
	EPA 7470A	*Prepared:*	*1094363*	*12/08/2023*	*12:05:00*	*Analyzed*	*1094508*	*12/11/2023*	*09:40:00*	*ALB*
NELAC	**Metals Digestion TCLP 7470**	**50/2.5**		**ml**						**09**
	EPA 8081A	*Prepared:*	*1094808*	*12/12/2023*	*14:00:00*	*Analyzed*	*1095815*	*12/16/2023*	*03:22:00*	*KLB*
NELAC	**GC TCLP Pesticide**	**Entered**								**17**
	EPA 8082	*Prepared:*	*1094417*	*12/08/2023*	*15:12:24*	*Analyzed*	*1094711*	*12/12/2023*	*06:56:00*	*BLT*
NELAC	**Polychlorinated Biphenyls**	**Entered**								**11**

2600 Dudley Rd. Kilgore, Texas 75662
24 Waterway Avenue, Suite 375 The Woodlands, TX 77380
Office: 903-984-0551 * Fax: 903-984-5914

CLDV-G

Project
1086633

Chaparral Labs
Jessica Collins
861 Hwy 19
Huntsville, TX 77320

Printed: 01/05/2024

2261468 **GCWR 23120066** Received: 12/07/2023

12/05/2023

	EPA 8151	*Prepared:*	*1094829*	*12/12/2023*	*15:00:00*	*Analyzed*	*1095669*	*12/14/2023*	*20:44:00*	*KAP*
NELAC	**GC TCLP Herbicide**	**Entered**								19
	EPA 8151A (Prep)	*Prepared:*	*1094363*	*12/08/2023*	*12:05:00*	*Analyzed*	*1094829*	*12/12/2023*	*15:00:00*	*CED*
NELAC	**Esterification of TCLP Extract**	**10/1**	**ml**							10
	EPA 8260B	*Prepared:*	*1094362*	*12/08/2023*	*12:05:00*	*Analyzed*	*1095004*	*12/12/2023*	*16:05:00*	*MR1*
NELAC	**MS TCLP Volatile Analysis**	**Entered**								07
	EPA 8270C	*Prepared:*	*1094585*	*12/11/2023*	*09:00:00*	*Analyzed*	*1095709*	*12/15/2023*	*22:58:00*	*DWL*
NELAC	**MS TCLP Semivolatile Analysis**	**Entered**								16
	EPA 9056	*Prepared:*	*1094325*	*12/08/2023*	*10:55:59*	*Analyzed*	*1094325*	*12/08/2023*	*10:55:59*	*PEV*
	Water Extract-Ion Chromatography	**50/4.99**	**grams**							01
	SM 2540 G-1997	*Prepared:*	*1095077*	*12/13/2023*	*15:00:00*	*Analyzed*	*1095077*	*12/13/2023*	*15:00:00*	*RC1*
NELAC	**Total Solids Start Code**	**Started**								

Appendix B
PATHOGEN REDUCTION REQUIREMENTS

For each source, select the pathogen reduction alternative that will be used prior to land application of sewage sludge. Requirements for each alternative can be found in 30 TAC §312.82.

TCEQ Permit Number	Pathogen Reduction Alternative Used	Fecal Coliform Geometric Mean (cfu/gram total solids)*	Fecal Test Date*	Is PSRP Certification Attached?** (Yes/No/NA)
Example WQ11280-001	Option 1: Density of Fecal Coliform	300,000 cfu/g	12/2/98	NA
N/A-Sludge will not be land applied	Choose an item.			
	Choose an item.			
	Choose an item.			
	Choose an item.			
	Choose an item.			
	Choose an item.			
	Choose an item.			
	Choose an item.			
	Choose an item.			
	Choose an item.			
	Choose an item.			
	Choose an item.			

*Applicable to Option 1 only.
**Applicable to Option 2a - f.

If Other or PFRP Equivalent is selected as the Alternative Used, please explain:

Appendix C
VECTOR ATTRACTION REDUCTION REQUIREMENTS

For each source, provide the vector attraction reduction option that will be used prior to or after land application of sewage sludge/septage. Requirements for each alternative can be found in 30 TAC §312.83.

TCEQ Permit Number	Vector Attraction Reduction Alternative Used*	Monitoring Criteria and results needed for alternative
Example WQ11280-001	Option 10: Incorporate within 6 hrs	Visual inspection of area after tilling
Example WQ13450-003	Option 4: SOUR <=1.5 mg 02/hr/g total solids at 20C (<2% solids)	Aerobically digested, 2.0% solids, SOUR=1.3 mg/g
N/A-sludge will not be land applied	Choose an item.	
	Choose an item.	
	Choose an item.	
	Choose an item.	
	Choose an item.	
	Choose an item.	
	Choose an item.	
	Choose an item.	
	Choose an item.	
	Choose an item.	

*Options 1-8 are sludge treatment alternatives. Options 9-10 are onsite alternatives. Option 12 is for domestic septage only.

ATTACHMENT ADMIN.01

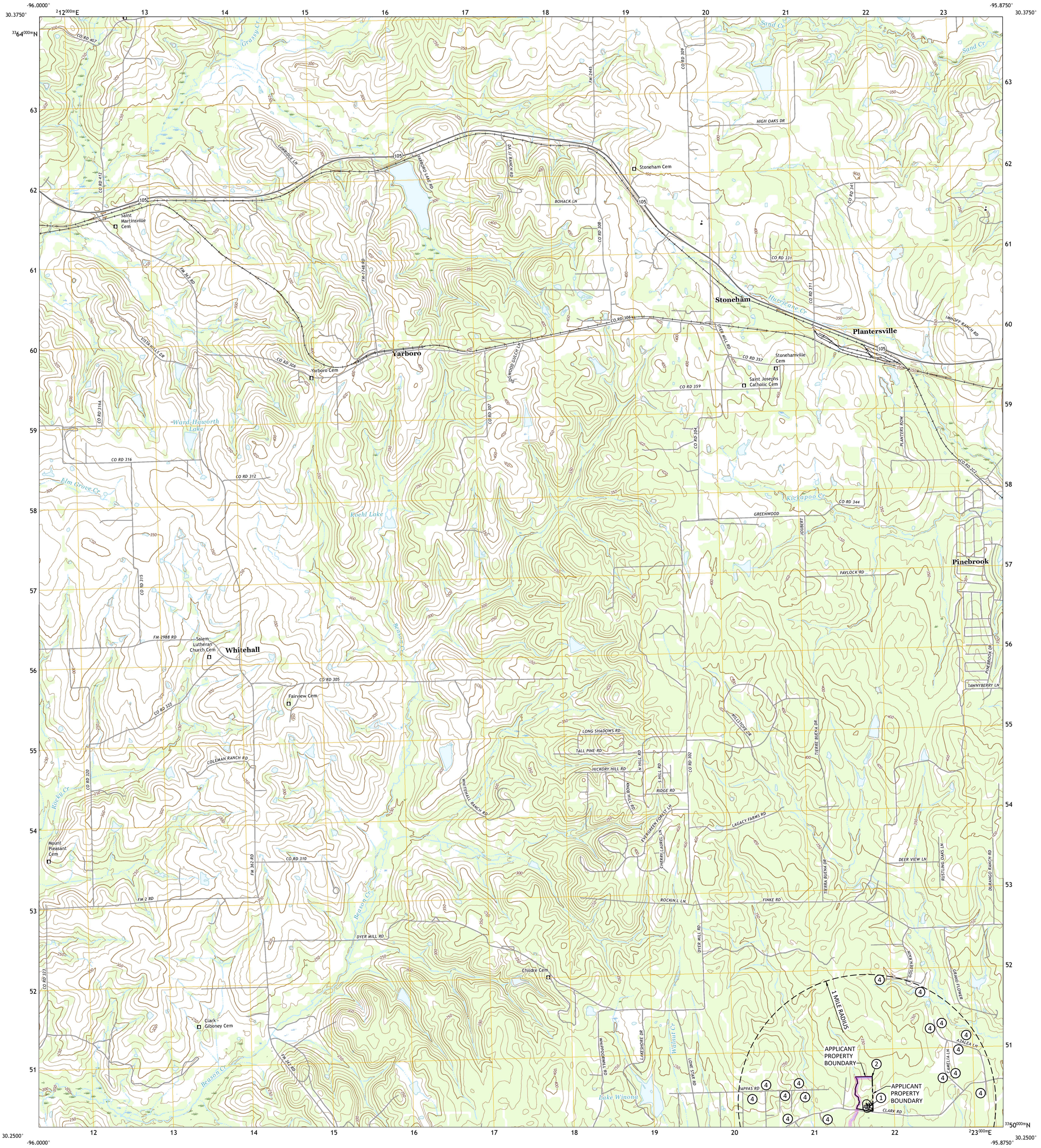
USGS Topographic Map

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

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

The National Map US Topo

STONEHAM QUADRANGLE
TEXAS - GRIMES COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R\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 - 2022
Hydrography.....National Hydrography Dataset, 2003 - 2018
Contours.....National Elevation Dataset, 2019
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
QU | TP
96°W
Grid Zone Designation
14R | 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 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

1 Navasota
2 Anderson
3 Dacus
4 Courtney
5 Plantersville
6 Howth
7 Waller NW
8 Magnolia West

ADJOINING QUADRANGLES

ROAD CLASSIFICATION

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

STONEHAM, TX
2022

LEGEND

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

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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0015032001

USGS MAP

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	ADMIN.01-1
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	

\\server\wea\Current Jobs\5127 grimes\tpdes major amendment 24\admin\01 admin\08-1.dwg

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

The National Map US Topo

WALLER NW QUADRANGLE
TEXAS
7.5-MINUTE SERIES

-96.0000° 30.2500° -95.8750° 30.2500°
$^{2}12^{000m}$E 13 14 15 16 17 18 19 20 21 22 23
$^{33}50^{000m}$N 49 48 47 46 45 44 43 42 41 40 39 38 37
30.1250° -96.0000° 11 12 13 14 15 16 17 18 19 20 21 22 $^{2}23^{000m}$E 30.1250° -95.8750°

CO RD 325
CO RD 324
HAAS LN
Rosenau Cem
COURTNEY RD
FM 2979 RD
LYNNWOOD LAKES LN
JEFF SMITH RD
MELLMAN RD
S BODHI RD
WALKER RD
FM 1736
LANEVIEW RD
MUCHOW RD
TOMPKINS RD
MITCHELL RD
OLD MITCHELL RD
Kirby Chapel Cem
FM 1488
NELSON RD
GRIMES CO
WALLER CO
DOGWOOD TRL
DEER RUN RD
FM 362 RD
WHIPPOORWILL RD
WYRICK RD
MAGAN RD
WILLOWBEND LN
PINE TREE LN
WILLOW BEND RD
CHRIS RD
FOREST HILLS LN
STRATHMORE RD
EL INDIO RD
CLARK RD
LAKE RD
ROYAL OAK RD
N REIDS PRAIRIE RD
TEXAS OAK RD
REIDS PRAIRIE RD
COOK RD
BUCKEYE RD
SUMAC RD
LONESTAR BLVD
PINYON RD
THOMPSON RD
NEWLAND RD
WALNUT RIDGE RD
RILEY RD
BROOKS RD
GEORGE RD
CURTIS RD
KYLE RD
KARSTETER RD
PHLYING RD
HOWELL RD
WALLER GLADDISH RD
RGIBNSON RD
WINTERS RD
KEILANI FARM LN
BRUNER RD
GIBONEY RD
SPARKS HILL RD
RACE KING WILSON RD
SCROGGINS LN
MURPHY RD
SHEFFIELD RD
ROBINWOOD DR
WESTBROOK DR
Fields Store Cem
BUNTING RD
JONESVILLE RD
CROSS CREEK RD
JOSEPH RD
Jones Cem
HEGAR RD
FIELDS STORE RD
OLD KICKAPOO RD
KICKAPOO RD
BOWLER RD
HARRIS CO
FM 1736 RD
Moria Meadow Airport
MAYER RD
STANFORD PL
Lynch Lake
Japhet Lake
Cedar Cr
Threemile Cr
Gladish Cr
Spring Cr
Brushy Cr
Walnut Cr
Peoples Cr
Clear Cr
1 MILE RADIUS
APPROXIMATE 3 MILE
RUSTIC LN
COUNTRY LN
CARLTON SPEED RANCH RD
RODEO DR
DERBY DR
CHESTNUT DR
PALOMINO DR
ROUNDUP DR
WALNUT CREEK DR
ROUND UP DR
EQUESTRIAN DR
E STALLION LN
SADDLE HORN DR
N REID PRAIRIE RD

Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R\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, Not Available
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2010
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

MN
GN
1°29′ 26 MILS
2°41′ 48 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
QU | TP
96 W
Grid Zone Designation
14R | 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 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

TEXAS
QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

1 Courtney
2 Stoneham
3 Plantersville
4 Howth
5 Magnolia West
6 Hempstead
7 Waller
8 Hockley
ADJOINING QUADRANGLES

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

WALLER NW, TX
2022

LEGEND

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

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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0015032001

USGS MAP

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**ADMIN.01-2**
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	

\\server\wea\Current Jobs\5127 grw\tpdes major amendment 24\admin\01-admin-02-1.dwg

ATTACHMENT ADMIN.02

Proof of Payment

(Reference Administrative Report 1.0, Page 12, Question 13)

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 Major Amendment with Renewal

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 604046821		RN 106353626

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:*

Grimes Co.Water Reclamation, 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)*
0801542882	32046799360	454417858	

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

Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?
☐ 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: 7063 Clark Road

City	State	ZIP	ZIP + 4
Plantersville	TX	77363	

16. Country Mailing Information *(if outside USA)*

17. E-Mail Address *(if applicable)*

gogreen@txgcwr.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(281) 766 - 1238		( ) -

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.)*

Grimes Co. Water Reclamation Wastewater Treatment Plant

23. Street Address of the Regulated Entity: *(No PO Boxes)*	7063 Clark Road							
	City	Plantersville	**State**	TX	**ZIP**	77363	**ZIP + 4**	
24. County	Grimes							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:					
26. Nearest City			**State**	**Nearest ZIP Code**	
Todd Mission			TX	77363	
27. Latitude (N) In Decimal:	30.2542		**28. Longitude (W) In Decimal:**	95.8929	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4952	4959	221320	

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

Treatment and disposal of domestic septage

34. Mailing Address:	7063 Clark Road							
	City	Plantersville	**State**	TX	**ZIP**	77363	**ZIP + 4**	
35. E-Mail Address:	gogreen@txgcwr.com							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(281)766- 1238		( ) -

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:
	WQ0015032001			

SECTION IV: Preparer Information

40. Name:	Shelley Young	**41. Title:**	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	**Phone:**	(281)373 0500
Signature:	Shelley Young	**Date:**	12/19/2024

ATTACHMENT ADMIN.04

Plain Language Summary

(Reference Administrative Report 1.0, Page 7, Section 8F)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

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

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS
Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER
The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Grimes Co. Water Reclamation LLC (CN 604046821) operates the Grimes Co. Water Reclamation Wastewater Treatment Plant (RN 106353626), an activated sludge process with nitrification operated in the complete mix mode. The facility will be located at 7063 Clark Road , in near Plantersville, Grimes County, Texas 77363. This application is for a major amendment with renewal application to discharge a daily average flow of 395,000 gallons per day of treated domestic wastewater..

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen (NH_3-N), and *Escherichia coli.* Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater will be treated by an activated sludge process plant and the treatment units include a screening facility, primary settling/flow equalization tanks, aeration basins, final clarifiers, sludge digesters, and chlorine contact chamber.

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

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

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

Grimes Co. Water Reclamation LLC (CN 604046821)) opera la Planta de Tratamiento de Aguas Residuales de Grimes Co. Water Reclamation (RN 106353626), un proceso de lodos activados con nitrificación operado en el modo de mezcla completa. La instalación estará ubicada en 7063 Camino de Clark, en Plantersville, Condado de Grimes, Texas 77363. Esta solicitud es para una enmienda importante con renovación aplicación para descargar a un flujo promedio diario de 395,000 galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso de cinco días ($CBOD_5$), solidos totalmente suspendidos (TSS), nitrógeno amoniacal (NH_c-N), y *Escherichia coli.* Los contaminantes potenciales adicionales se incluyen en el Informe Técnico Domésticas 1.0, Seccion 7 Análisis de Contaminantes de Efluente Tratado en el paquete de solicitud de permisos.. Las aguas residuales domésticas. estará tratado por una planta de proceso de lodos activados y las unidades de tratamiento incluirán una instalación de pantalla, tanques primarios de sedimentación/ecualización, balsas de aireación, clarificadores finale, digestores de lodos, y cámara de contacto de cloro.

ATTACHMENT ADMIN.05

Public Involvement Plan

(Reference Administrative Report 1.0, Page 7, Section 8G)

WQ0015032001
Grimes County Water Reclamation LLC
Grimes County Water Reclamation WWTP

Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

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

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

Section 1. Preliminary Screening

☒ New Permit or Registration Application
☐ New Activity – modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.

Section 2. Secondary Screening

☒ Requires public notice,
☐ Considered to have significant public interest, **and**
☒ Located within any of the following geographical locations:

- Austin
- Dallas
- Fort Worth
- Houston
- San Antonio
- West Texas
- Texas Panhandle
- Along the Texas/Mexico Border
- Other geographical locations should be decided on a case-by-case basis

If all the above boxes are not checked, a Public Involvement Plan is not necessary. Stop after Section 2 and submit the form.

☒ Public Involvement Plan not applicable to this application. Provide **brief** explanation.

The area affected by this permit action is not environmentally highly sensitive and, to the best of my knowledge, not been part of any other contested permit action.

Section 3. Application Information

Type of Application (check all that apply):

Air ☐ Initial ☐ Federal ☐ Amendment ☐ Standard Permit ☐ Title V

Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste ☐ Scrap Tire
☐ Radioactive Material Licensing ☐ Underground Injection Control

Water Quality

☐ Texas Pollutant Discharge Elimination System (TPDES)

- ☐ Texas Land Application Permit (TLAP)
- ☐ State Only Concentrated Animal Feeding Operation (CAFO)
- ☐ Water Treatment Plant Residuals Disposal Permit

☐ Class B Biosolids Land Application Permit

☐ Domestic Septage Land Application Registration

Water Rights New Permit

☐ New Appropriation of Water

☐ New or existing reservoir

Amendment to an Existing Water Right

☐ Add a New Appropriation of Water

☐ Add a New or Existing Reservoir

☐ Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Section 5. Community and Demographic Information

Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.

Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.

(City)

(County)

(Census Tract)
Please indicate which of these three is the level used for gathering the following information.

☐ City ☐ County ☐ Census Tract

(a) Percent of people over 25 years of age who at least graduated from high school

(b) Per capita income for population near the specified location

(c) Percent of minority population and percent of population by race within the specified location

(d) Percent of Linguistically Isolated Households by language within the specified location

(e) Languages commonly spoken in area by percentage

(f) Community and/or Stakeholder Groups

(g) Historic public interest or involvement

Section 6. Planned Public Outreach Activities

(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?

☐ Yes ☐ No

(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?

☐ Yes ☐ No

If Yes, please describe.

If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.

(c) Will you provide notice of this application in alternative languages?

☐ Yes ☐ No

Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.

If yes, how will you provide notice in alternative languages?

☐ Publish in alternative language newspaper

☐ Posted on Commissioner's Integrated Database Website

☐ Mailed by TCEQ's Office of the Chief Clerk

☐ Other (specify)

(d) Is there an opportunity for some type of public meeting, including after notice?

☐ Yes ☐ No

(e) If a public meeting is held, will a translator be provided if requested?

☐ Yes ☐ No

(f) Hard copies of the application will be available at the following (check all that apply):

☐ TCEQ Regional Office ☐ TCEQ Central Office

☐ Public Place (specify)

Section 7. Voluntary Submittal

For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.

Will you provide notice of this application, including notice in alternative languages?

☐ Yes ☐ No

What types of notice will be provided?

☐ Publish in alternative language newspaper

☐ Posted on Commissioner's Integrated Database Website

☐ Mailed by TCEQ's Office of the Chief Clerk

☐ Other (specify)

ATTACHMENT ADMIN.06

Affected Landowners Map and Table

(Reference Administrative Report 1.1, Page 12, Section 1A&B)

TABLE "ADMIN.06"

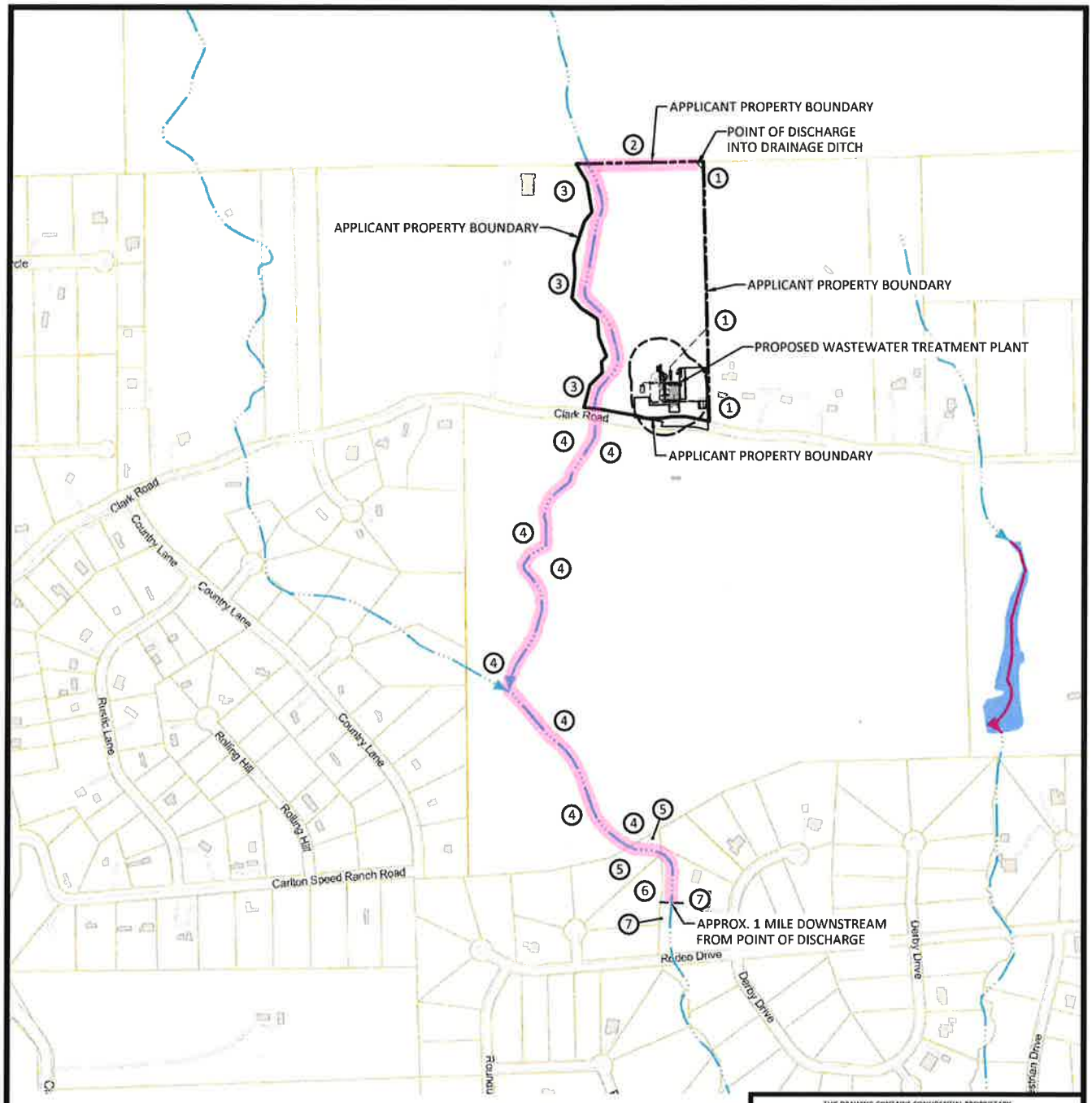
GRIMES CO. WATER RECLAMATION LLC

Grimes Co. Water Reclamation Wastewater Treatment Plant

Adjacent & Downstream Land Ownership Table

Source: Grimes County Appraisal District

Tract No. (See Attachment "ADMIN.04" Map)	**Title Owner & Address**
1	DELVIS D YATES SR 7091 CLARK ROAD PLANTERSVILLE TX 77363
2	BARRIER RANCH PROPERTIES LTD 4815 HOLD STREET BELLAIRE TX 77401
3	FRANK W ALLEN III & ROBERT L ALLEN 7063 CLARK ROAD PLANTERSVILLE TX 77363
4	ROSEMARY K SPELLACY LYKOS REV TRUST 10011 DOLIVER HOUSTON TX 77042
5	CRISELITA ALVAREZ 3600 KATY FREEWAY HOUSTON TX 77007
6	ZACHARY & KIMBERLY MENARD 17663 SPUR CT WALLER TX 77484
7	CLAUDIO & VERONICA RIBEIRO 17676 DERBY DR WALLER TX 77484



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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0015032001

DOWN STREAM & ADJACENT LAND OWNERS MAP

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**ADMIN.06**
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	

N

0 400 800

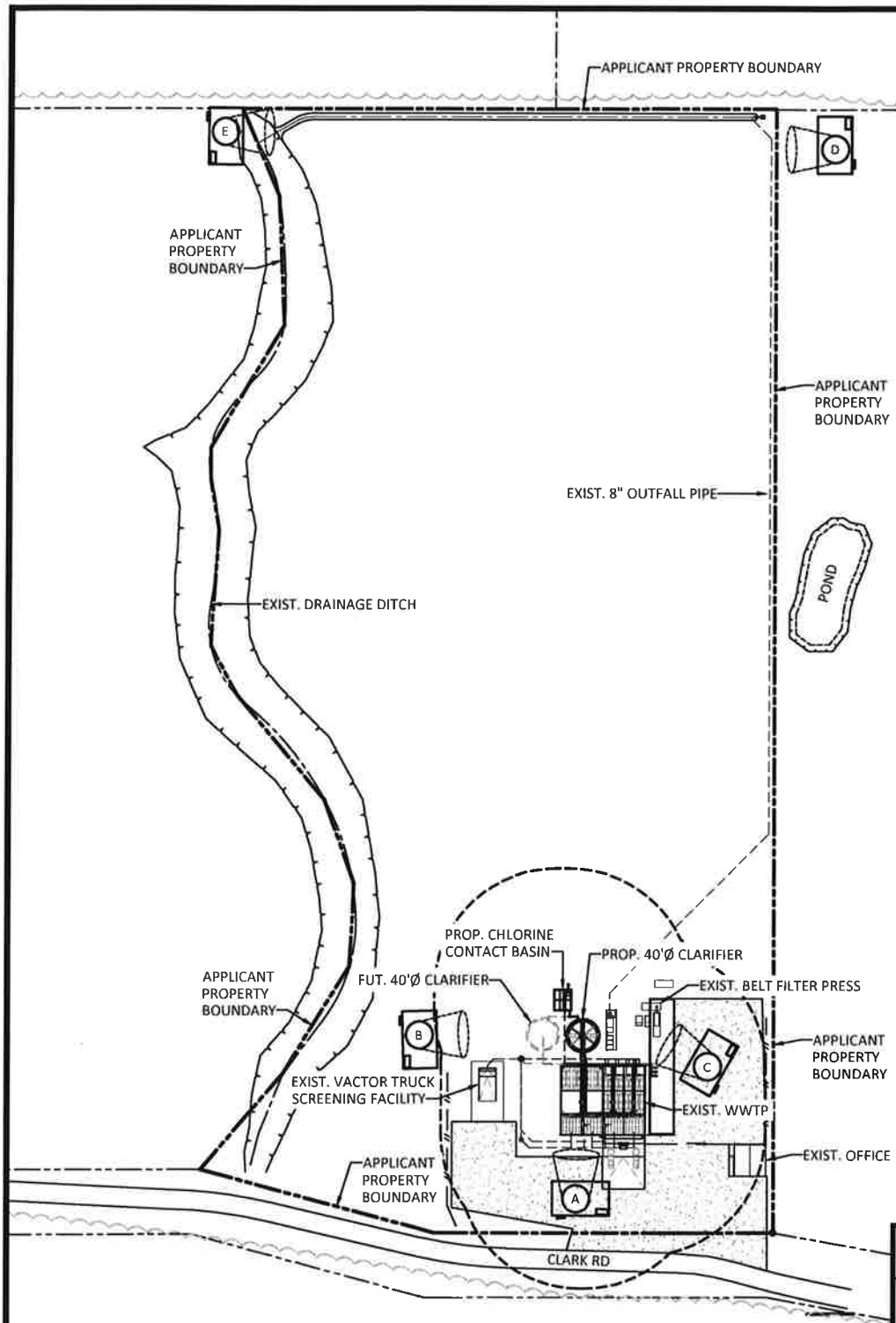
SCALE:1" = 400'-0" (24"x36")
1" = 800'-0" (11"x17" & 8.5"x11")

\\Serverlaws\cad\current\job\5127 grow\tpdes major amendment 24\dwg\5203 sp502.dwg

ATTACHMENT ADMIN.07

Photographs

(Reference Administrative Report 1.1, Page 13, Section 2)



LEGEND

A — DENOTES LOCATION FROM WHICH PHOTOGRAPHS WERE TAKEN
SEE ATTACHMENT ADMIN.07-2 FOR SITE PHOTOGRAPHS

DEPICTS APPLICANT PROPERTY BOUNDARY

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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES
PERMIT No. WQ0015032001

SITE PHOTOGRAPH LOCATIONS

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**ADMIN.07-1**
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	

\\serverlwei.cad\current jobs\5127 gcwr tpdes major amendment 24\tech03-sp002.dwg

WASTEWATER TREATMENT PLANT 1

A

WASTEWATER TREATMENT PLANT 2

B

WASTEWATER TREATMENT PLANT 3

A

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

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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0015032001

SITE PHOTOGRAPHS

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**ADMIN.07-2**
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	

\\server\wec\Laurent_jobs\5127 grow\tpdes major amendment 24\tech03-sp002.dwg

POINT OF DISCHARGE INTO PROPOSED DRAINAGE DITCH

D

PROPOSED DRAINAGE DITCH TO UNNAMED TRIBUTARY TO WALNUT CREEK

E

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

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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0015032001

SITE PHOTOGRAPHS

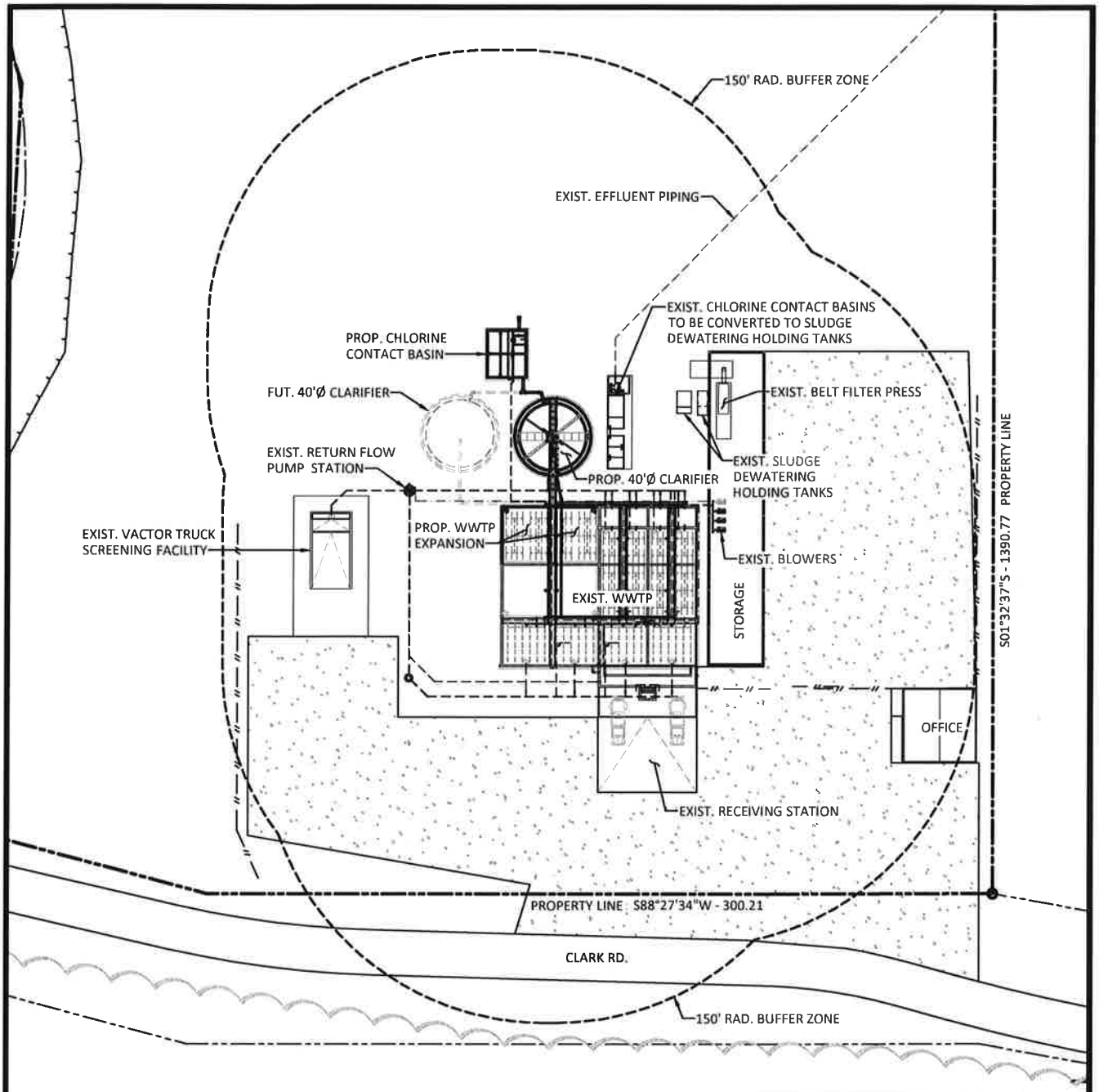
DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**ADMIN.07-3**
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	

\\server\wec cad\current jobs\5127 grcwr tpdes major amendment 24\5127-sp002.dwg

ATTACHMENT ADMIN.08

Buffer Zone Map

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



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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0015032001

BUFFER ZONE MAP

N

0 40 80
SCALE:1" = 40'-0" (24"x36")
1" = 80'-0" (11"x17" 8.5"x11")

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**ADMIN.08**
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	

\\server\wes cad\current jobs\5127 grow ij\tpdes major amendment 24\dwg\03-sp002.dwg

ATTACHMENT ADMIN.09

Supplemental Permit Information Form and USGS Map

(Reference Administrative Report Page 14)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL 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)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

Do not refer to your response to any item in the permit application form. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: Grimes Co. Water Reclamation LLC

   Permit No. WQ00 15032001 EPA ID No. TX 0141852

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

   7063 Clark Road, Plantersville, Grimes 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): Ms.

First and Last Name: Shelley Young

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

Title: Engineer

Mailing Address: 17230 Huffmeister Road, Suite A

City, State, Zip Code: Cypress, TX 77429

Phone No.: 281-373-0500 Ext.: Click here to enter text. Fax No.: 281-373-1113

E-mail Address: syoung@waterengineers.com

2. List the county in which the facility is located: Grimes
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 to an unnamed drainage ditch, thence to an unnamed tributary of Walnut Creek, thence to Walnut 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

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

The plant site is existing. New tankage will be constructed for the expanded flow capacity.

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

The plant site is existing consisting of the current 0.120 mgd WWTP.

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

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

2015-2016

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

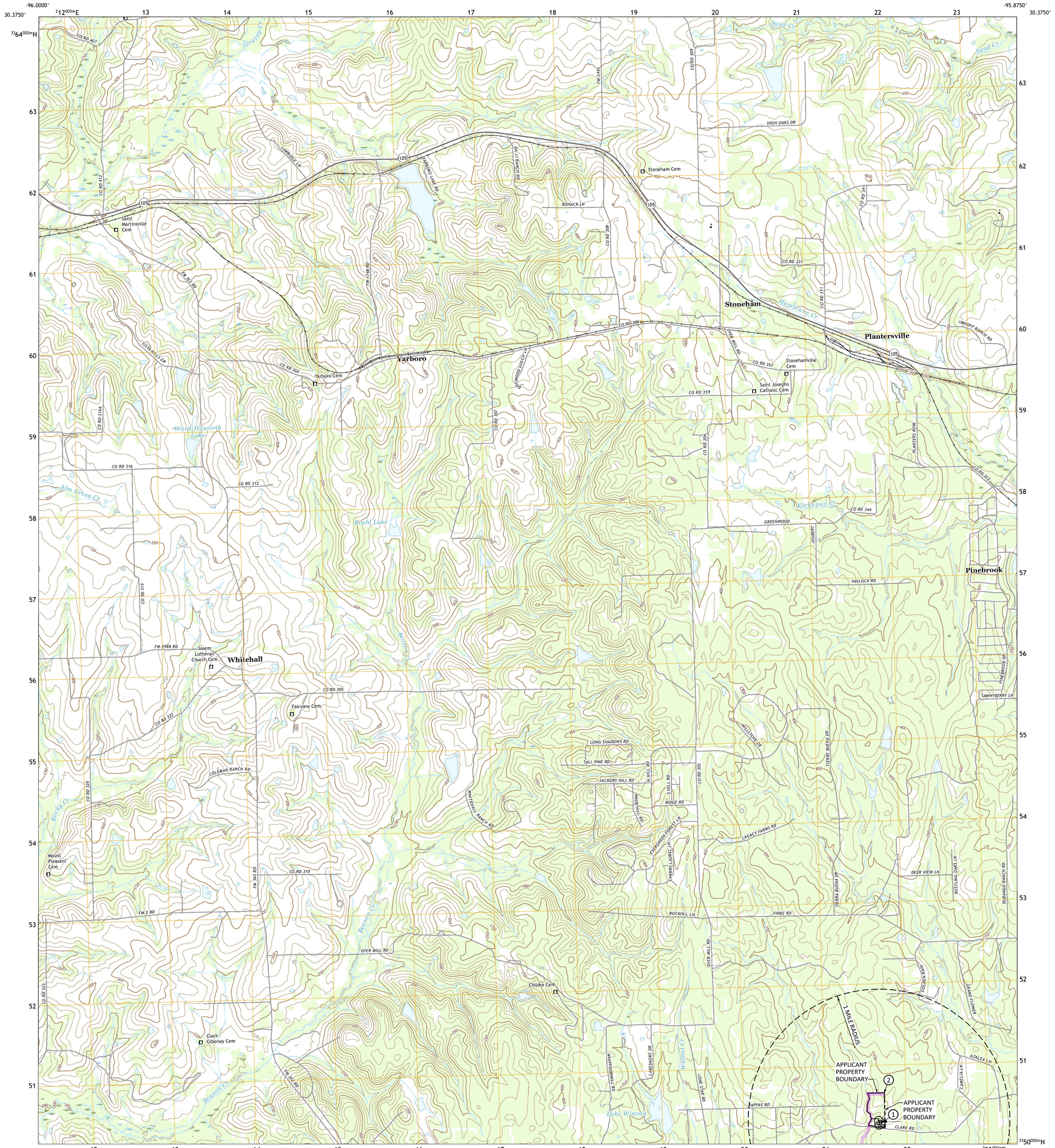
Prior to WWTP being built on-site, the property was agriculturally used.

USGS science for a changing world

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

The National Map US Topo

STONEHAM QUADRANGLE
TEXAS - GRIMES COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R\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 - 2022
Hydrography.....National Hydrography Dataset, 2003 - 2018
Contours.....National Elevation Dataset, 2019
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

MN
GN
1°29'
26 MILS
2°41'
48 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
QU | TP
96 W
Grid Zone Designation
14R | 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 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

TEXAS
QUADRANGLE LOCATION

1 Navasota
2 Anderson
3 Dacus
4 Courtney
5 Plantersville
6 Howth
7 Waller NW
8 Magnolia West
ADJOINING QUADRANGLES

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

STONEHAM, TX
2022

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

* NOTE: FOR WELL DATA SEE ATTACHMENT TLAP.03

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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0015032001

USGS MAP

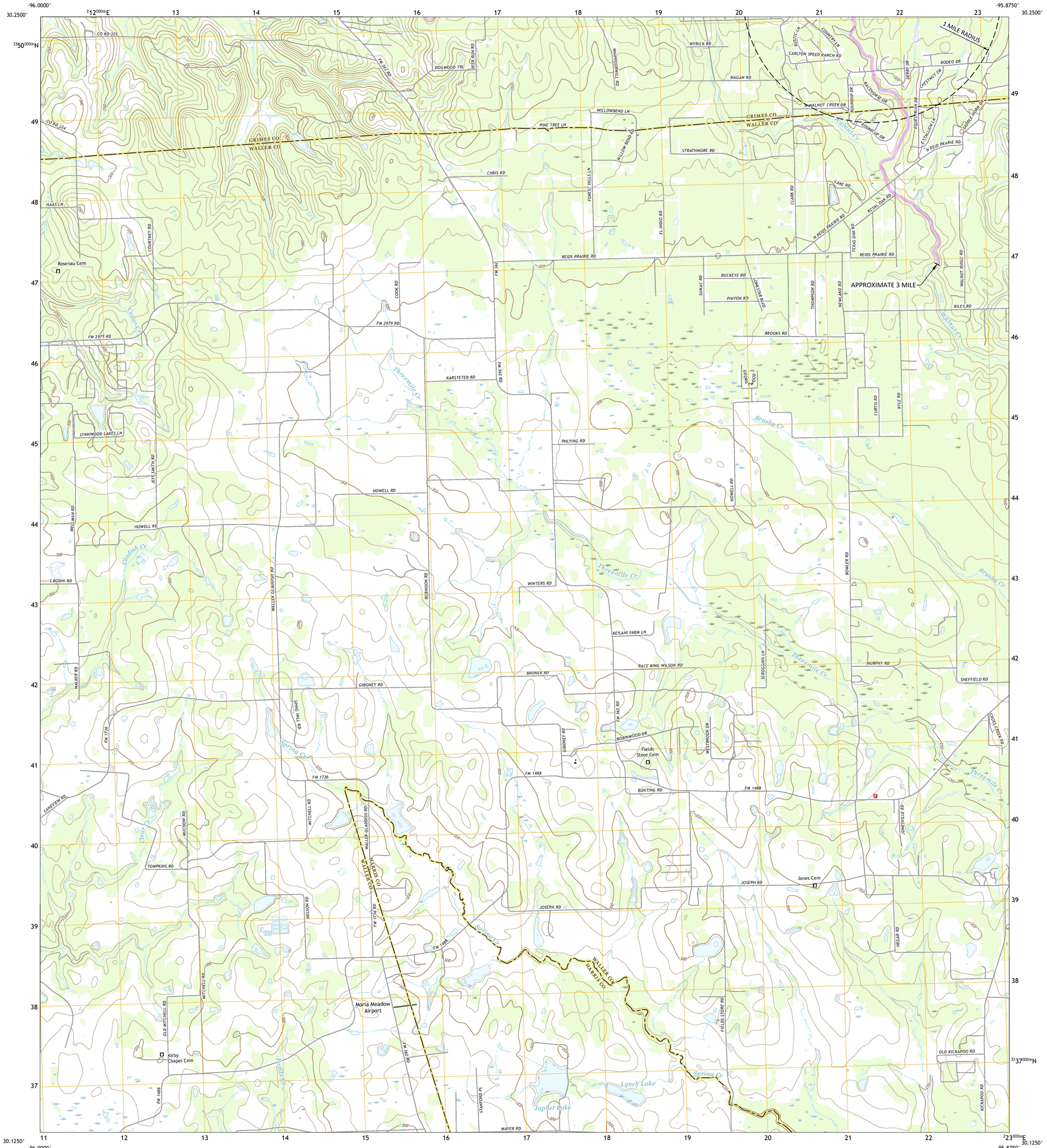
DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	
SCALE: AS NOTED	**ADMIN.09-1**
DATE: 12/18/2024	
JOB No.: 5127-24117	

\\server\shared\current jobs\5127 grimes\tpdes major amendment 24\admin\01-admin-09-1.dwg

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

The National Map
US Topo

WALLER NW QUADRANGLE
TEXAS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R\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, Not Available
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2010
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
QU | TP
96°W
Grid Zone Designation
14R | 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 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

ADJOINING QUADRANGLES
1 Courtney
2 Stoneham
3 Plantersville
4 Howth
5 Magnolia West
6 Hempstead
7 Waller
8 Hockley

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

WALLER NW, TX
2022

LEGEND

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

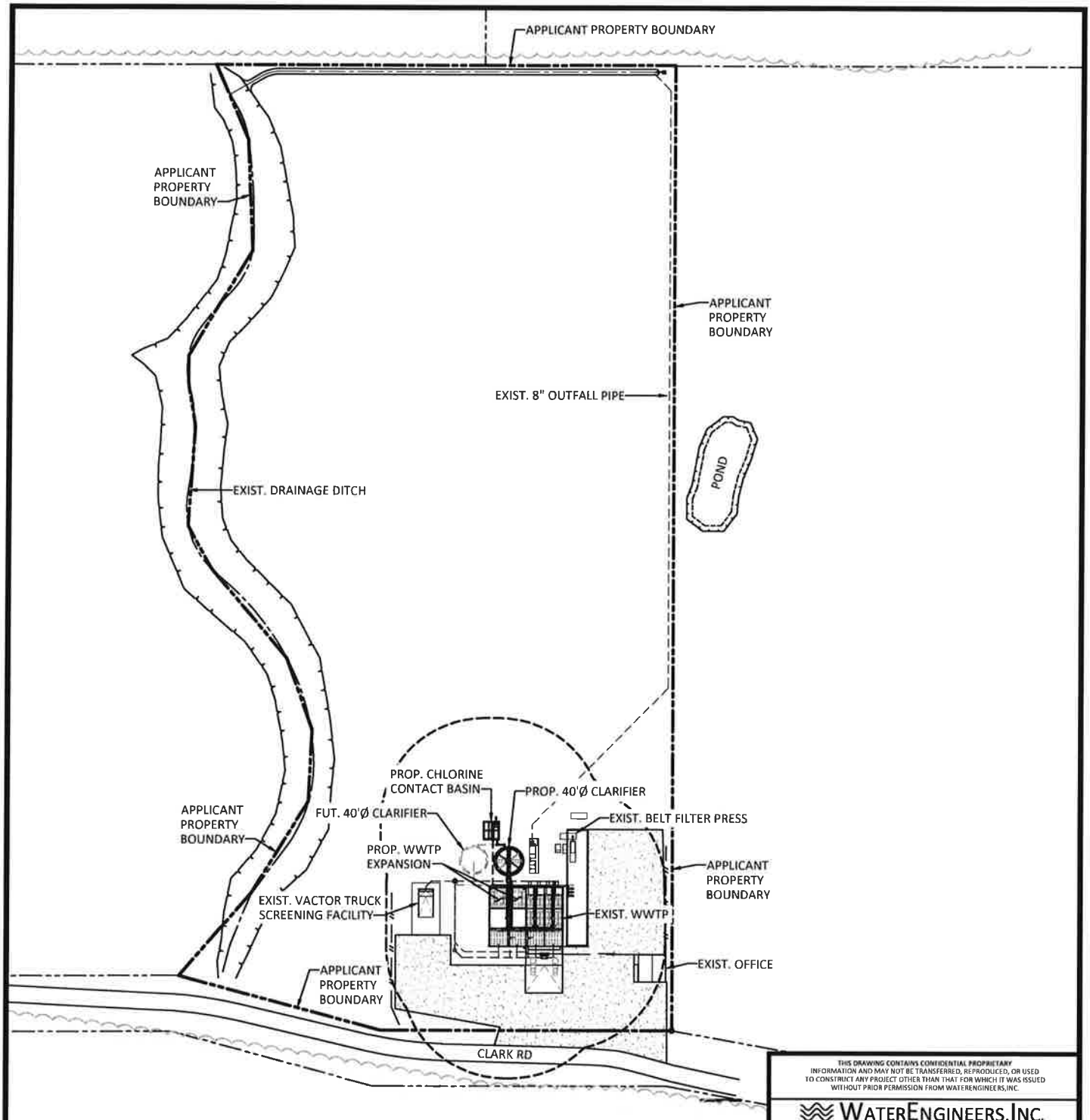
WATERENGINEERS, INC.
Water & Wastewater Treatment Consultants
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066
17230 HUFFMEISTER ROAD
CYPRESS, TEXAS 77429
TEL: 281-373-0500
FAX: 281-373-1113

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0015032001

USGS MAP

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	ADMIN.09-2
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	



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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES
PERMIT No. WQ0015032001

SERVICE AREA & SITE PLAN

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**ADMIN.09-3**
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	

\\Server\wei ca$\current_jobs\5127 gcwr tpdes major amendment '24\tech03-sp#02.dwg

ATTACHMENT TECH.01

Design & Loading Criteria Table

(Reference Technical Report Page 2, Question 2b

and Page 25, Question 4)

ATTACHMENT TECH.01-01
PROCESS DESIGN & LOADING CRITERIA
GRIMES COUNTY WATER RECLAMATION TREATMENT PLANT
USING FINE BUBBLE AIR DIFFUSERS

Parameter			CLARIFIER	
INFLUENT CONDITIONS			Selected Clarifier Diameter, ft (each)	40
Average Daily Flow, gpd	120000		Sidewater Depth @ Qavg, ft	10.5
Ratio Average/Peak Flow	2.5		Total Area, sq ft, total	5026.5
Peak 2-Hour Flow, gpd	300000		Total Volume, cu ft, total	52778.7
Peak 2-Hour Flow, gpm	208		SOR, gpd/sq ft	59.7
BOD, mg/l	750		Detention Time, hr	31.6
BOD, lb/day	751		Max Qr @ 400 gpd/sf, gpm	1396.3
			Max Qr @ 400 gpd/sf, gpd	2010618
PRIMARY SETTLING			Max Qp + Qr, gpd	2310618
Width, ft (all basins)	24			
Length, ft (2 basins)	25			
Length, ft (2 basins)	30			
Side Water Depth, ft	10.5			
Volume, cf	27,720			
BOD Reduction, %	85%			
FLOW EQUALIZATON				
Width, ft	24			
Length, ft	25			
Side Water Depth, ft	10.5			
Volume, cf	6300			
			CHLORINE CONTACT	
AERATION BASIN (EACH TRAIN)			Peak Flow Detention, min	20
No. of Process Trains	4		Minimum Required Volume, cu ft	557
Flow Per Train, mgd	30000		Width, ft	12
Peak Flow Rate Per Train, mgd	75000		Length, ft	24
BOD per Train, #/day	28		Side Water Depth, ft	6
Design Basin Loading, lb BOD/1000 cu ft	15		Basin Volume, cu ft	1704.24
Design Basin Volume, cu ft	1,877		Basin Volume, gallons	12748
Side Water Depth, ft	10.5		Detention, minutes	61.2
Design Basin Area, sq ft	179		Air Supply (@10 scfm/1000 cf), cfm	17
Length, ft	48		SLUDGE HOLDING TANK	
Width, ft	12		Length, ft	25
Actual Basin Area, sq ft	576		Width, ft	24
Actual Volume, cu ft	6,048		Side Water Depth, ft	10.5
Detention @ Qave, hrs	36.19		Volume, cf	6300
Actual BOD Load, #/1000 cu ft	4.65		Loading, cu ft/# BOD	8.4
O2 Req'd @ 2.2 # O2/# BOD, # O2/day	62		Air Supply Rate, scfm/1000 cu ft	30
Design Diffuser Air Flow/Unit Area, scfm/sf	2		Total Air Supply, scfm	189
Diffuser CW Eff @ Field Conditions, %/Ft Sub	0.0215			
Diffuser Field Submergence, ft.	10		AIR BLOWERS	
Diffuser CW Transfer Efficiency, %	0.215		Aeration Basin Air Supply, scfm (All Trains)	103
AOR/SOR Coefficient (Fine Bubble)	0.45		Aerobic Digester Air Supply, scfm	189
Diffuser Field Transfer Efficiency, %	0.097		Chlorine Basin Air Supply, scfm	17
Total Air Flow Required, scfm	26		Return Sludge Airlift Air Supply, scfm	209
Diffuser active surface area, sf/diffuser	2.54		Skimmer Airlift Air Supply, scfm	3
Diffuser Air Flow Rate, scfm	4.52		Required Air Supply, scfm	522
No. of Diffusers Required	6		No. of Blowers	4
No. of Diffusers Installed	42		Required Capacity, scfm, each	174
Diffuser Air Flow/SF Active Membrane, scfm/sf	0.24		Selected Capacity, scfm, each	319
Air Mixing Rate, scm/1000 cu ft	4.3		Blower Op Pressure, psi	5.58

ATTACHMENT TECH.01-02
PROCESS DESIGN & LOADING CRITERIA
GRIMES COUNTY WATER RECLAMATION TREATMENT PLANT
USING FINE BUBBLE AIR DIFFUSERS

Parameter			CLARIFIER	
INFLUENT CONDITIONS			Selected Clarifier Diameter, ft (each)	40
Average Daily Flow, gpd	395000		Sidewater Depth @ Qavg, ft	10.5
Ratio Average/Peak Flow	2.5		Total Area, sq ft, total	5026.5
Peak 2-Hour Flow, gpd	987500		Total Volume, cu ft, total	52778.7
Peak 2-Hour Flow, gpm	686		SOR, gpd/sq ft	196.5
BOD, mg/l	750		Detention Time, hr	9.6
BOD, lb/day	2,471		Max Qr @ 400 gpd/sf, gpm	1396.3
			Max Qr @ 400 gpd/sf, gpd	2010618
PRIMARY SETTLING			Max Qp + Qr, gpd	2998118
Width, ft (all basins)	24			
Length, ft (2 basins)	25			
Length, ft (2 basins)	30			
Side Water Depth, ft	10.5			
Volume, cf	27,720			
BOD Reduction, %	85%			
FLOW EQUALIZATON				
Width, ft	24			
Length, ft	25			
Side Water Depth, ft	10.5			
Volume, cf	6300			
			CHLORINE CONTACT	
AERATION BASIN (EACH TRAIN)			Peak Flow Detention, min	20
No. of Process Trains	4		Minimum Required Volume, cu ft	1,834
Flow Per Train, mgd	98750		Width, ft	20
Peak Flow Rate Per Train, mgd	246875		Length, ft	25.00
BOD per Train, #/day	93		Side Water Depth, ft	6
Design Basin Loading, lb BOD/1000 cu ft	15		Basin Volume, cu ft	3000
Design Basin Volume, cu ft	6,177		Basin Volume, gallons	22440
Side Water Depth, ft	10.5		Detention, minutes	32.7
Design Basin Area, sq ft	588		Air Supply (@10 scfm/1000 cf), cfm	30
Length, ft	48		SLUDGE HOLDING TANK	
Width, ft	12		Length, ft	25
Actual Basin Area, sq ft	576		Width, ft	24
Actual Volume, cu ft	6,048		Side Water Depth, ft	10.5
Detention @ Qave, hrs	11.00		Volume, cf	6300
Actual BOD Load, #/1000 cu ft	15.32		Loading, cu ft/# BOD	2.5
O2 Req'd @ 2.2 # O2/# BOD, # O2/day	204		Air Supply Rate, scfm/1000 cu ft	30
Design Diffuser Air Flow/Unit Area, scfm/sf	2		Total Air Supply, scfm	189
Diffuser CW Eff @ Field Conditions, %/Ft Sub	0.0215			
Diffuser Field Submergence, ft.	10		AIR BLOWERS	
Diffuser CW Transfer Efficiency, %	0.215		Aeration Basin Air Supply, scfm (All Trains)	339
AOR/SOR Coefficient (Fine Bubble)	0.45		Aerobic Digester Air Supply, scfm	189
Diffuser Field Transfer Efficiency, %	0.097		Chlorine Basin Air Supply, scfm	30
Total Air Flow Required, scfm	85		Return Sludge Airlift Air Supply, scfm	209
Diffuser active surface area, sf/diffuser	2.54		Skimmer Airlift Air Supply, scfm	3
Diffuser Air Flow Rate, scfm	4.52		Required Air Supply, scfm	771
No. of Diffusers Required	19		No. of Blowers	6
No. of Diffusers Installed	42		Required Capacity, scfm, each	154
Diffuser Air Flow/SF Active Membrane, scfm/sf	0.79		Selected Capacity, scfm, each	319
Air Mixing Rate, scm/1000 cu ft	14.0		Blower Op Pressure, psi	5.58

DESIGN FEATURES FOR RELIABILITY

The Grimes Co. Water Reclamation Wastewater Treatment Plant facilities are 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:

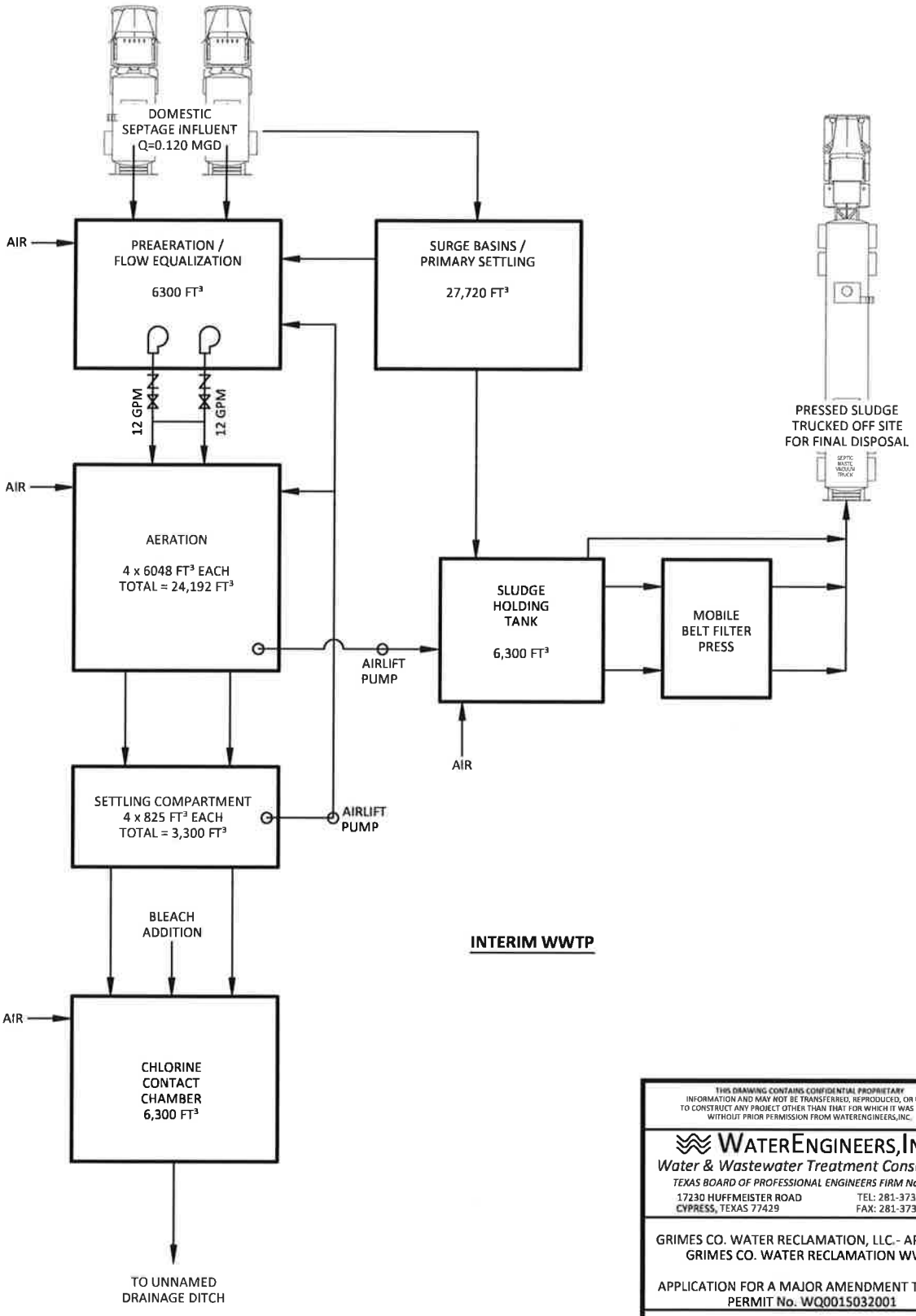
A. The plant has an equalization basin so that high flows will be evened out over longer time periods. No infiltration/inflow can occur as there is no collection system. All flow is trucked in.
B. The electrical service that serves the Grimes Co. Water Reclamation WWTP is reliable with most outages lasting less than 2-4 hours. In the case of an extended outage, Grimes County Water Reclamation, LLC would cease accepting trucked in wastewater.
C. All mechanical units, such as influent pumps, blowers and chemical feed pumps are installed with spare units in the event a piece of equipment is out of service for repairs.
D. Plant units are maintained per TCEQ standards and repaired as quickly as possible should failure occur.

December 19, 2024#

ATTACHMENT TECH.02

Process Flow Diagram

(Reference Technical Report Page 2, Question 2c)



INTERIM WWTP

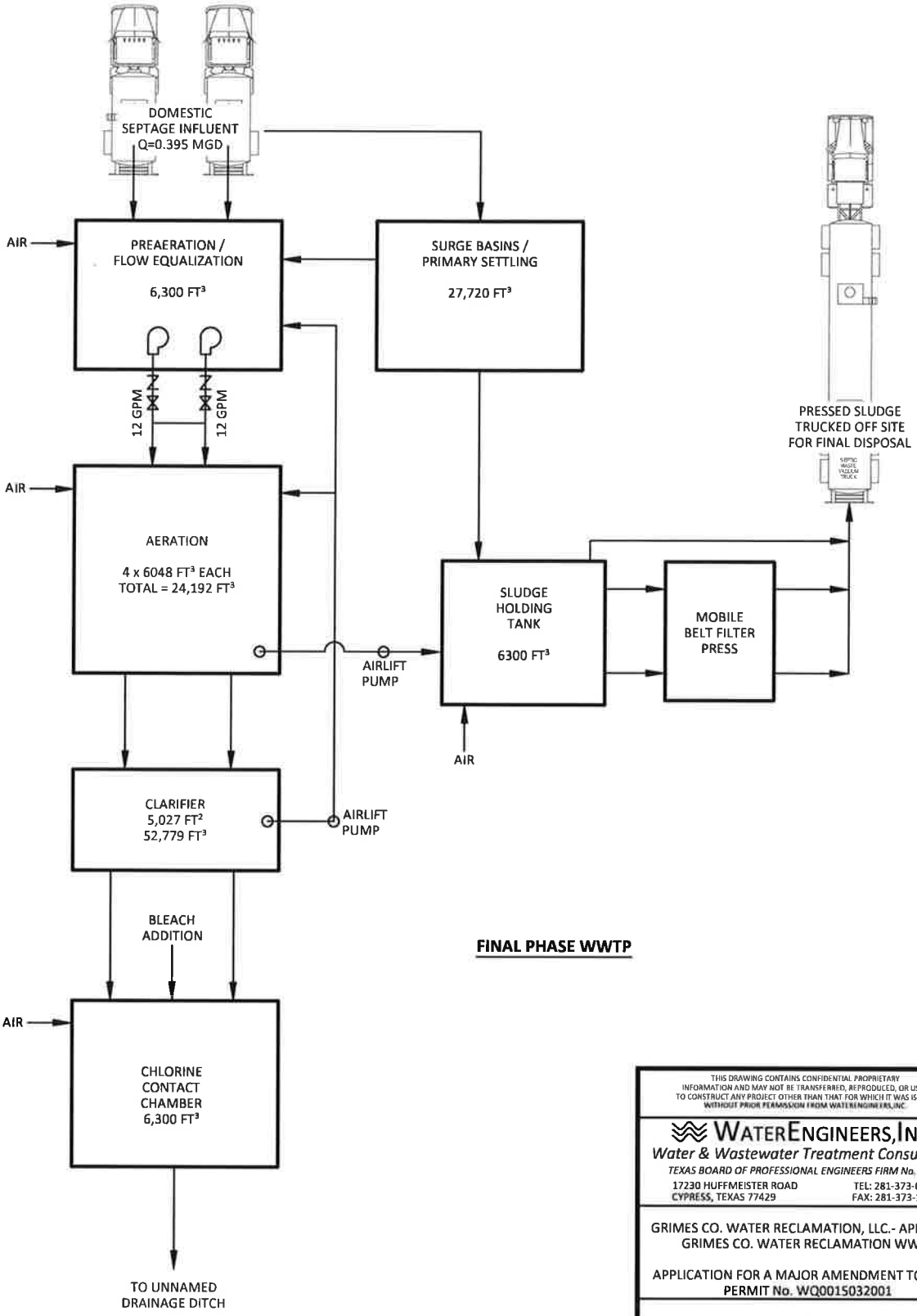
WATERENGINEERS, INC.
Water & Wastewater Treatment Consultants
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM No. 2066
17230 HUFFMEISTER ROAD
CYPRESS, TEXAS 77429
TEL: 281-373-0500
FAX: 281-373-1113

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES
PERMIT No. WQ0015032001

FLOW SCHEMATIC

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**TECH.02-01**
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	



FINAL PHASE WWTP

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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES
PERMIT No. WQ0015032001

FLOW SCHEMATIC

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	**TECH.02-02**
SCALE: AS NOTED	
DATE: 12/18/2024	
JOB No.: 5127-24117	

\\server\wes cad\current jobs\5127 grimes tpdes major amendment 24\tech02-sph02.dwg

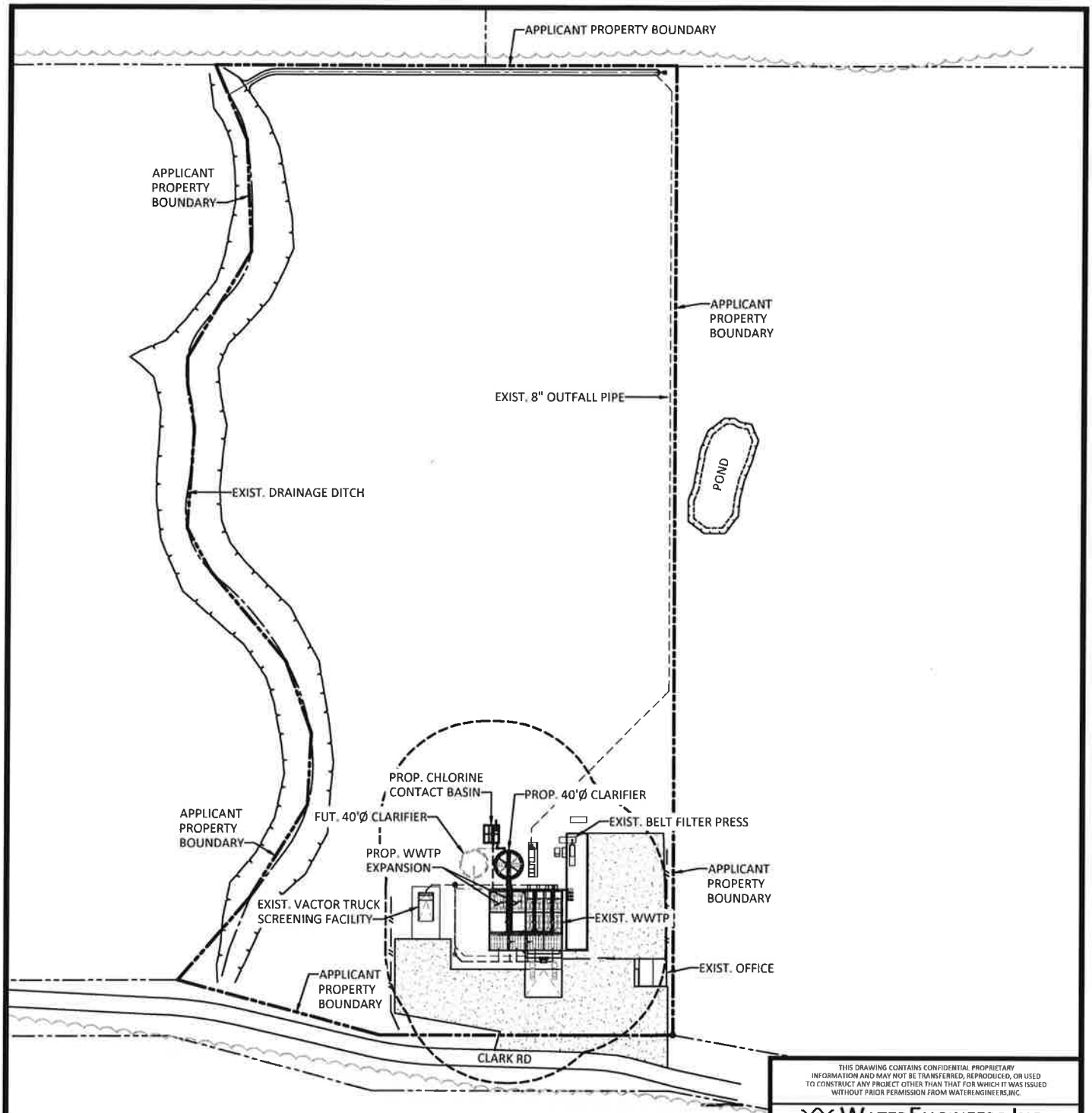
ATTACHMENT TECH.03

Site Drawing

(Reference Technical Report Page 3, Question 3)

(Including Wind Rose)

(Reference Technical Report Page 25, Question 5B)



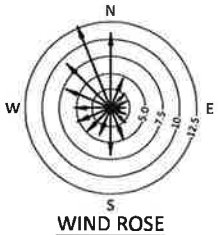
LEGEND

APPLICANT PROPERTY BOUNDARY

N

0 100 200

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



WIND ROSE

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

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

GRIMES CO. WATER RECLAMATION, LLC.- APPLICANT
GRIMES CO. WATER RECLAMATION WWTP

APPLICATION FOR A MAJOR AMENDMENT TO TPDES PERMIT No. WQ0015032001

SERVICE AREA & SITE PLAN

DRAWN BY: BIR	DWG. NO.:
APPROVED BY: SBY	
SCALE: AS NOTED	**TECH.03**
DATE: 12/18/2024	
JOB No.: 5127-24117	

\\server\wei cad\current jobs\5127 grimes\tpdes major amendment 24\tech03 sp002.dwg

ATTACHMENT TECH.04

Solids Management Plan

(Reference Technical Report Page 26, Question 7)

ATTACHMENT TECH.04
SLUDGE MANAGEMENT PLAN

1. Type of Wastewater Treatment Process Used

The Grimes County Water Reclamation 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. Tables TECH.04-01 and TECH.04-02 shows the process design and sludge generation calculations for the design flows of 120,000 gpd and 395,000, respectively.

2. Dimensions and Capacities

The treatment facility has a digester with a total volume of 6,300 cu. ft., a surface area of 600 sq. ft. and a 10.50 ft. side water depth. The digester provides a total design flow loading of 8.4 cu ft/1b BOD in the current phase and 2.5 cu ft/1b BOD in the final phase.

3. Sludge Generation Calculations

Sludge generation calculations showing the volume of solids generated at 100%, 75%, 50% and 25% of design flows are included in Attachments TECH.04-01 and TECH.04-02. 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	789	592	395	197
Final Phase	2,593	1,943	1,298	649

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	6.5	3,427	9	3,559	13	3,428	26	3,429
Final	2	3,466	3	3,901	4	3,470	8	3,471

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 pumping to a belt filter press.

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 750 mg/l and TSS of 1,000 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	Cu Yds/ Month	% Solids	Cu Yds/ Month	% Solids	Cu Yds/ Month	% Solids	Cu Yds/ Month
Phase I	2.5	71	2.5	53	2.5	36	2.5	18
Final	2.5	234	2.5	175	2.5	117	2.5	59

7. Identification of Disposal Site

The disposal of sludge from the WWTP is by the applicant, Grimes County Water Reclamation transports belt pressed sludge cake to a landfill. Grimes County Water Reclamation is currently constructing facilities on site to be able to compost sludge cake. All required data is included in the annual sludge report to the TCEQ.

ATTACHMENT TECH.04-01
SLUDGE GENERATION CALCULATIONS
GRIMES COUNTY WATER RECLAMATION TREATMENT PLANT

INFLUENT CONDITIONS					
Design Flow Rate, mgd	120000				
Infl. BOD, mg/l	750				
Infl. TSS, mg/l	1000				
Infl. VSS, mg/l	800				
BOD Loading, lb/day	751				
BOD Load, #/1000 cu ft	4.65				
Aeration Vol, cu ft	24,192			Temperature, deg C	20

Actual Plant Loading, %	100%	75%	50%	25%
Actual Flow Rate, mgd	0.12	0.09	0.06	0.03
BOD Loading, #/Day	751	563	375	188
t = Aeration Time, days	1.51	2.01	3.02	6.03
ts = Sludge Age, Days	6.5	9	13	26
Km = BOD Removal Metabolic Factor	360	360	360	360
Ks = Synthesis Factor	250	250	250	250
Ke = Endogenous Metabolism Factor	0.37	0.27	0.18	0.09
F = Effl Soluble BOD	1.38	1.03	0.69	0.35
Ma = Active Mass	659	685	660	660
Me = Endogenous Mass	380	394	380	380
Mi = Inert Organic Mass	1,207	1,253	1,207	1,207
Mii = Inert Inorganic Mass	1,181	1,227	1,182	1,182
Mt = Total Mass, mg/l	3,427	3,559	3,428	3,429
Total Mass in Aeration Basin, lb	5,172	5,372	5,174	5,175
Lb BOD/Lb MLSS/Day	0.145	0.105	0.073	0.036
Effl TSS, mg/l	6.85	7.12	6.86	6.86
Effl BOD, mg/l	2.22	1.91	1.53	1.19
Thickened Sludge Conc., mg/l	25,000	25,000	25,000	25,000
Dewatered Solids, mg/l	200,000	200,000	200,000	200,000
Sludge Accumulation, lb/day	796	597	398	199
TSS Lost In Effluent, lb/day	6.86	5.34	3.43	1.72
Waste Sludge, lb/day	789	592	395	197
Sludge Disposed, lb/mg	6,574	6,573	6,576	6,577
Sludge Disposed, tons/mg	3.29	3.29	3.29	3.29
Sludge Hauled, cy/day	2.34	1.76	1.17	0.59
Sludge Hauled, gal/day	3,783	2,837	1,892	946
Sludge Hauled, gal/month	113,504	85,112	56,769	28,389
Dewatered Sludge Hauled, cy/mon	71	53	36	18

ATTACHMENT TECH.04-02
SLUDGE GENERATION CALCULATIONS
GRIMES COUNTY WATER RECLAMATION TREATMENT PLANT

INFLUENT CONDITIONS	
Design Flow Rate, mgd	395000
Infl. BOD, mg/l	750
Infl. TSS, mg/l	1000
Infl. VSS, mg/l	800
BOD Loading, lb/day	2,471
BOD Load, #/1000 cu ft	15.32
Aeration Vol, cu ft	24,192

Temperature, deg C 20

Actual Plant Loading, %	100%	75%	50%	25%
Actual Flow Rate, mgd	0.395	0.29625	0.1975	0.09875
BOD Loading, #/Day	2,471	1,853	1,235	618
t = Aeration Time, days	0.46	0.61	0.92	1.83
ts = Sludge Age, Days	2	3	4	8
Km = BOD Removal Metabolic Factor	360	360	360	360
Ks = Synthesis Factor	250	250	250	250
Ke = Endogenous Metabolism Factor	1.20	0.80	0.60	0.30
F = Effl Soluble BOD	4.52	3.40	2.27	1.14
Ma = Active Mass	665	749	667	668
Me = Endogenous Mass	383	431	384	385
Mi = Inert Organic Mass	1,222	1,375	1,222	1,222
Mii = Inert Inorganic Mass	1,196	1,346	1,197	1,197
Mt = Total Mass, mg/l	3,466	3,901	3,470	3,471
Total Mass in Aeration Basin, lb	5,231	5,888	5,236	5,239
Lb BOD/Lb MLSS/Day	0.472	0.315	0.236	0.118
Effl TSS, mg/l	6.93	7.80	6.94	6.94
Effl BOD, mg/l	5.37	4.35	3.12	1.99
Thickened Sludge Conc., mg/l	25,000	25,000	25,000	25,000
Dewatered Solids, mg/l	200,000	200,000	200,000	200,000
Sludge Accumulation, lb/day	2,616	1,963	1,309	655
TSS Lost In Effluent, lb/day	22.84	19.28	11.43	5.72
Waste Sludge, lb/day	2,593	1,943	1,298	649
Sludge Disposed, lb/mg	6,564	6,560	6,570	6,574
Sludge Disposed, tons/mg	3.28	3.28	3.29	3.29
Sludge Hauled, cy/day	7.69	5.77	3.85	1.93
Sludge Hauled, gal/day	12,435	9,321	6,224	3,113
Sludge Hauled, gal/month	373,053	279,622	186,714	93,404
Dewatered Sludge Hauled, cy/mon	234	175	117	59

ATTACHMENT TECH.05

Pollutant Analysis of

Treated Effluent

(Reference Technical Report Page 9, Question 7)

Chaparral Laboratories, Inc.

861 State Hwy 19 P.O. Box 1622 Huntsville, TX 77342-1622 www.chaparrallabs.com Phone: 936-291-1881 Fax: 936-295-1731

Certificate of Analysis

B&R Water Well and Septic
Attn: Vanessa Sonsel
7063 Clark Rd.
Plantersville, TX 77363

Customer ID: BRWATER
Sample ID: 24091022
Date Received: 09/26/2024
Date Reported: 10/08/2024

Project: Grimes County Water Reclamation LLC
Location: Grimes County, TX

Analytical Results

Collection Point: Effluent **Flow (MGD):** 0.083 **Collected:** 09/26/2024 08:55
Sample Type: Grab **Collector:** MHE

Parameter	Result	Units	Date/Time	Analyst	Bottle	Method	QC ID	Acrd
CBOD5	>8.8	mg/L	09/27/2024 07:49	EIB	-01	SM 5210 B	QC2409534	NELAP
	Calculated value for CBOD5 is 9.9. Reportable result is >8.8.							
TSS	14.3	mg/L	09/27/2024 10:20	JAM	-02	SM 2540 D	QC2409530	NELAP
Ammonia Nitrogen	47.6	mg/L	09/27/2024 11:11	JFL	-03	SM 4500-NH3 D	QC2409524	NELAP
Total Kjeldahl Nitrogen	54.9	mg/L	09/30/2024 07:58	JCG	-03	SM 4500-NH3 C	QC2409556	NELAP
Total Phosphorus	10.2	mg/L	09/27/2024 07:38	JCG	-03	SM 4500-P E	QC2409552	NELAP
Alkalinity	226.0	mg/L CaCO3	09/27/2024 09:00	DKH	-04	SM 2320 B	QC2409508	NELAP
Chloride	116.6	mg/L	09/27/2024 10:03	DKH	-04	EPA 300.0	QC2409547	NELAP
Nitrate Nitrogen	21.8	mg/L	09/27/2024 10:03	DKH	-04	EPA 300.0	QC2409548	NELAP
Sulfate	84.9	mg/L	09/27/2024 10:03	DKH	-04	EPA 300.0	QC2409549	NELAP
Total Dissolved Solids	656.0	mg/L	09/27/2024 14:44	DKH	-04	SM 2540 C	QC2410004	NELAP
Escherichia coli	<1.0	MPN/100mL	09/26/2024 14:40	JCG	-05	SM 9223 B	QC2409509	NELAP
Chlorine, Residual (Total)	1.6	mg/L	09/26/2024 08:58	MHE	-06	SM 4500-Cl F	QC2409505	Field
Dissolved Oxygen	6.1	mg/L	09/26/2024 08:58	MHE	-06	SM 4500-O G	QC2409504	Field
pH	7.3	SU	09/26/2024 08:58	MHE	-06	SM 4500-H+B	QC2409503	Field

Quality Control

QC ID	Param	QC Type	Result	Units	Flag
QC2409503	pH				
		Duplicate %RPD	0	%	
QC2409504	Dissolved Oxygen				
		Duplicate %RPD	0	%	
QC2409505	Chlorine, Residual (Total)				
		Duplicate %RPD	0	%	
		LCS	100	%	
		Method Blank	<0.1	mg/L	

Chaparral Laboratories, Inc.

861 State Hwy 19 P.O. Box 1622 Huntsville, TX 77342-1622 www.chaparrallabs.com Phone: 936-291-1881 Fax: 936-295-1731

Certificate of Analysis

B&R Water Well and Septic
Attn: Vanessa Sonsel
7063 Clark Rd.
Plantersville, TX 77363

Customer ID: BRWATER
Sample ID: 24091022
Date Received: 09/26/2024
Date Reported: 10/08/2024

Project: Grimes County Water Reclamation LLC
Location: Grimes County, TX

QC2409508	Alkalinity			
		Duplicate %RPD	1.3	%
		LCS	100.8	%
		Method Blank	<5.0	mg/L CaCO3
QC2409509	Escherichia coli			
		Method Blank	<1.0	MPN/100mL
		Precision Criteria	Acceptable	
QC2409524	Ammonia Nitrogen			
		LCS	104	%
		Matrix Spike Recovery	98	%
		Matrix Spike Recovery	94	%
		Matrix Spike RPD	0	%
		Matrix Spike RPD	0	%
		Method Blank	<0.1	mg/L
		RPD	0	%
		RPD	0	%
QC2409530	TSS			
		Duplicate %RPD	0	%
		Duplicate %RPD	0	%
		LCS	95	%
		Method Blank	<2.5	mg/L
QC2409534	CBOD5			
		Duplicate %RPD	0	%
		Duplicate %RPD	0	%
		LCS	97.7	%
		Method Blank	0.2	mg/L

Chaparral Laboratories, Inc.

861 State Hwy 19 P.O. Box 1622 Huntsville, TX 77342-1622 www.chaparrallabs.com Phone: 936-291-1881 Fax: 936-295-1731

Certificate of Analysis

B&R Water Well and Septic
Attn: Vanessa Sonsel
7063 Clark Rd.
Plantersville, TX 77363

Customer ID: BRWATER
Sample ID: 24091022
Date Received: 09/26/2024
Date Reported: 10/08/2024

Project: Grimes County Water Reclamation LLC
Location: Grimes County, TX

QC2409547	Chloride			
		Duplicate %RPD	0	%
		LCS	96.3	%
		Method Blank	<0.3	mg/L
		MS %R	96.4	%
		MSD %R	96.4	%
QC2409548	Nitrate Nitrogen			
		Duplicate %RPD	0	%
		LCS	95	%
		Method Blank	<0.1	mg/L
		MS %R	95.3	%
		MSD %R	95.2	%
QC2409549	Sulfate			
		Duplicate %RPD	0	%
		LCS	100.6	%
		Method Blank	<0.3	mg/L
		MS %R	100.8	%
		MSD %R	100.9	%
QC2409552	Total Phosphorus			
		Duplicate %RPD	2.4	%
		LCS	100	%
		Method Blank	<0.01	mg/L
		MS %R	98.5	%
		MSD %R	96.5	%
QC2409556	Total Kjeldahl Nitrogen			
		Duplicate %RPD	0	%
		LCS	101	%
		Method Blank	<1.1	mg/L
		MS %R	95	%
		MSD %R	95	%

Chaparral Laboratories, Inc.

861 State Hwy 19 P.O. Box 1622 Huntsville, TX 77342-1622 www.chaparrallabs.com Phone: 936-291-1881 Fax: 936-295-1731

Certificate of Analysis

B&R Water Well and Septic
Attn: Vanessa Sonsel
7063 Clark Rd.
Plantersville, TX 77363

Customer ID: BRWATER
Sample ID: 24091022
Date Received: 09/26/2024
Date Reported: 10/08/2024

Project: Grimes County Water Reclamation LLC
Location: Grimes County, TX

QC2410004 Total Dissolved Solids

Duplicate %RPD	3.1	%
LCS	103.2	%
Method Blank	<5.0	mg/L

The analytical results in this Certificate of Analysis relate only to the samples tested. This Certificate of Analysis, with its corresponding Chain of Custody, completes the data package. This data package may not be reproduced, except in full, without the written approval of Chaparral Laboratories, Inc.

(<) = Result was below quantitation limits.
(>) = Result was above quantitation limits.
Acceptable = meets Precision Criteria
Unacceptable = does not meet Precision Criteria.
Samples analyzed for Oxygen Uptake Rate are diluted to <2% total solids for analysis.
Results reported as mg/kg, %, or CFU/g/TS are calculated on a dry weight basis, unless otherwise noted.
Precision Criteria for Fecal Coliform, Escherichia coli and Enterococci analyses are calculated according to SM 9020 B 8.5.b.

**Note 1: Laboratory Approval by TCEQ*
**Note II: The form TCEQ-10525 (Rev. 11/2023) submitted to Chaparral Laboratories, Inc. is TCEQ's required documentation for all active PWS Total Coliform analysis on Drinking Water in the State of Texas. Please refer to the completed form TCEQ-10525 (Rev. 11/2023) for all reporting purposes.*

Approved by David H. Veinotte
Laboratory Director

Chaparral Laboratories, Inc.

861 State Hwy 19 P.O. Box 1622 Huntsville, TX. 77342 www.chaparrallabs.com reports@chaparrallabs.com Phone: 936-291-1881 FAX: 936-295-1731

Chain of Custody Record

CLI-727	COC Page 1 of 1	Report to:	Sample Type: Grab, 3 pt. Comp, 6 pt. Comp, 24 Hr Comp, 48 Hr Comp; Matrix Code: D = Drinking Water, NP = Non-Pot Water, S = Solids/Soil	Bottle Code: G = Glass, GA = Glass Amber, P = Plastic, V = VOA, W = Thiowhirlbag	Preservative Code: 1 = <6 °C, 2 = H2SO4 RIL -, 3 = HNO3 RIL -, 4 = NaOH RIL -, 5 = HCl RIL -, 6 = Na2S2O3, 7 = On-Site Analysis, 8 = Other RIL -, 9 = EDA RIL -	Lab remarks:
Client:	B&R Water Well & Septic					
Attn:	Vanessa Sonsel	Invoicing to:				
Address:	7063 Clark Rd.					
City, State, Zip:	Plantersville, TX 77363					
Phone #:	936-894-0781 x 101	PO#				

Project ID:	Grimes County Water Reclamation, LLC - Permit Renewal	Project Address:	7063 Clark Rd., Plantersville, TX 77363 USA	Collection Schedule:	Tuesday
Sampled by:	MW	Key/Combo: 4679	Wier Angle: 45°	Operator Name: Chase Capps	Operator Cell: 832-773-7115

Lab Use Only Sample #	Bottle #	Collection Point	Sample Type	Matrix	Date Collected	Time Collected	Flow (mgd)	Bottle Code	Vol (mls)	Pres. Code	Analysis
24091022	01	EFF	Grab	NP	9.26.24	0855	0.083	P	1000	1	CBOD5, ~~BOD5~~
	02	EFF	Grab	NP				P	1000	1	TSS
	03	EFF	Grab	NP				P	500	1, 2	NH3N, TKN, T-P
	04	EFF	Grab	NP				P	1000	1	Chloride, NO3N, SO4, TDS, Alkalinity
	05	EFF	Grab	NP		0858		P	250	1, 6	E. coli
	06	EFF	Grab	NP						7	pH: 7.3 / 7.3 su @ 22.4 / 24.4 °C D.O.: 6.1 / 8.1 mg/l CL2: 1.62 mg/l

Page 5 of 5

Sample Conditions as Received from Client (in field):
Samples Intact: Y N NA Received on Ice: Y N NA
Temp (Client Therm): _____ °C
Actual Temp (CLI Therm): _____ °C
Corrected Temp (CLI Therm): _____ °C
CLI Thermometer ID: _____

Sample Conditions as Received by Lab:
Samples Intact: Y N NA Received on Ice: Y N NA
Cooler ID #: 239
Actual Temperature: 3.1 °C
Corrected Temperature: 2.9 °C
CLI Thermometer ID: 427

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
MW	9.26.24	1340			
			Ashley Winnicki	9/26/24	1340

Notes: 6 of 6-X total Cl 1.2 mg corrected
BOD5 not analyzed due to laboratory ERROR.

TABLE "ADMIN.04"

GRIMES CO. WATER RECLAMATION LLC

Grimes Co. Water Reclamation Wastewater Treatment Plant

Adjacent & Downstream Land Ownership Table

Source: Grimes County Appraisal District

Tract No. (See Attachment "ADMIN.04" Map)	Title Owner & Address
1	DELVIS D YATES SR 7091 CLARK ROAD PLANTERSVILLE TX 77363
2	~~GMK GRIMES LLC~~ Barrier Ranch Properties, Ltd ~~P O BOX 1285~~ 4615 Holt St. ~~MONTGOMERY TX 77356-1285~~ Bellaire, TX 401
3	OSCAR PEREZ Frank W. Allen III and Robert L. Allen 440 LOUISIANA ST SUITE 200 7063 Clark Rd HOUSTON TX 77002 Plantersville 77363
4	STEPHEN LYNN ~~6608 CLARK ROAD~~ WALLER TX 77484
5	BRENDA BECERRA ~~17017 ALBIN CIRCLE~~ WALLER TX 77484
6	ANTHONY & LUCINDA MARTINEZ ~~6756 CLARK ROAD~~ WALLER TX 77484
7	NORMAN SANDERS ~~6826 CLARK ROAD~~ WALLER TX 77484
8 4	~~JOHN LYKOS JR~~ K Spellacy ~~C/O~~ ROSEMARY LYKOS Rev Trust 10011 DOLIVER HOUSTON TX 77042
8 5	CRISELITA ~~LAVAREZ~~ Alvarez 3600 KATY FREEWAY HOUSTON TX 77007
10 6	~~FABIAN JONES~~ Zachary & Kimberly Nevard ~~6737 UNDERHILL ST~~ 17663 Spur ct. ~~HOUSTON TX 77092~~ Waller 77484
11 7	~~JACK HARPER II~~ Claudio & Veronica Ribeiro 17676 DERBY DR✓ WALLER TX 77484✓