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, el Aviso de Recepción de Solicitud e Intención de Obtener un Permiso)
   - Inglés
   - Idioma alternativo (español)
3. Solicitud original

QUIDDITY

3100 Alvin Devane Blvd, Suite 150
Austin, Texas 78741
Tel: 512.441.9493
www.quiddity.com

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

Riley Road (Houston) SPV, LLC proposes to operate the Riley Road wastewater treatment plant, an activated sludge process plant operated in the complete mix mode. The facility will be located approximately 0.80 miles southeast of the intersection of Riley Road and Stone Bridge Parkway, in Waller County, Texas 77484.

This application is for a new application to discharge at a daily average flow of 450,000 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 will include a bar screen, aeration basins, final clarifiers, sludge digesters, and chlorine contact chambers.

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

Riley Road (Houston) SPV, LLC propone operar la planta de tratamiento de aguas residuales de Riley Road, una planta de procesamiento de lodos activados que funciona en modo de mezcla completa. La instalación estará ubicada aproximadamente a 0,80 millas al sureste de la intersección de Riley Road y Stone Bridge Parkway, en el condado de Waller, Texas 77484.

Esta solicitud es para una nueva aplicación para descargar un caudal promedio diario de 450,000 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 (CBOD5), sólidos suspendidos totales (TSS), nitrógeno amoniaco (NH3-N) y Escherichia coli. Se incluyen otros contaminantes potenciales en el Informe Técnico Doméstico 1.0, Sección 7. Análisis de contaminantes del efluente tratado en el paquete de solicitud de permiso. Las aguas residuales domésticas serán tratadas mediante una planta de procesamiento de lodos activados y las unidades de tratamiento incluirán una rejilla de rejilla, cuencas de aireación, clarificadores finales, digestores de lodos y cámaras de contacto con cloro.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PROPOSED PERMIT NO. WQ0016634001

APPLICATION. Riley Road (Houston) Spv, LLC, 211 East 7th Street, Suite 620, Austin, Texas 78701, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016634001 (EPA I.D. No. TX0146684) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 450,000 gallons per day. The domestic wastewater treatment facility will be located approximately 0.8 miles southeast of the intersection of Riley Road and Stonebridge Parkway, near the city of Magnolia, in Waller County, Texas 77484. The discharge route will be from the plant site to a man-made pond; thence to Birch Creek; thence to Walnut Creek; thence to Spring Creek. TCEQ received this application on September 25, 2024. The permit application will be available for viewing and copying at Malanee Smith Memorial Library, 1018 Saunders Street, Waller, 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=-95.83833,30.229444&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 Riley Road (Houston) Spv, LLC at the address stated above or by calling Mr. Jonathan Nguyen, Permitting Specialist, Quiddity Engineering, at 512-685-5156.

Issuance Date: October 25, 2024

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. WQ0016634001

SOLICITUD. Riley Road (Houston) Spv, LLC, 211 East 7th Street, Suite 620, Austin, Texas 78701 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016634001 (EPA I.D. No. TX0146684) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 450,000 galones por día. La planta está ubicada 0.8 millas al sureste de la intersección de Riley Road y Stonebridge Parkway, cerca de la ciudad de Magnolia en el Condado de Waller, Texas 77484. La ruta de descarga es del sitio de la planta a un estanque artificial, de allí a Birch Creek, de allí a Walnut Creek, de allí a Spring Creek. La TCEQ recibió esta solicitud el 25 de septiembre de 2024. La solicitud para el permiso está disponible para leerla y copiarla en Malanee Smith Memorial Library, 1018 Saunders Street, Waller, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página 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=-95.83833,30.229444&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 DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. 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. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional del Riley Road (Houston) Spv, LLC a la dirección indicada arriba o llamando a Sr. Jonathan Nguyen al 512-685-5156.

Fecha de emisión 25 de octubre de 2024

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 25, 2024

Re: Confirmation of Submission of the New Private Domestic Wastewater Individual Permit Application

Dear Applicant:

This is an acknowledgement that you have successfully completed Private Domestic Wastewater Individual Permit Application.

ER Account Number: ER094863
Application Reference Number: 665233
Authorization Number: WQ0016634001
Site Name: Riley Road Wastewater Treatment Facility
Regulated Entity: RN112053038 - RILEY ROAD WASTEWATER TREATMENT FACILITY
Customer(s): CN606308807 - Riley Road (Houston) Spv, LLC

Please be aware that TCEQ staff may contact your designated contact for any additional information.

If you have any questions, you may contact the Applications Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by telephone at (512) 239-4671.

Sincerely,
Applications Review and Processing Team
Water Quality Division

Texas Commission on Environmental Quality

New Domestic or Industrial Individual Permit

Site Information (Regulated Entity)

What is the name of the site to be authorized?	Riley Road Wastewater Treatment Facility
Does the site have a physical address?	No
Because there is no physical address, describe how to locate this site:	approximately 0.80 miles southeast of the intersection of Riley Rd and Stone Bridge Pkwy
City	Magnolia
State	TX
ZIP	77363
County	WALLER
Latitude (N) (##.######)	30.22931
Longitude (W) (-###.######)	-95.838456
Primary SIC Code	4952
Secondary SIC Code	
Primary NAICS Code	221320
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	
What is the name of the Regulated Entity (RE)?	Riley Road Wastewater Treatment Facility
Does the RE site have a physical address?	No
Because there is no physical address, describe how to locate this site:	approximately 0.80 miles southeast of the intersection of Riley Rd and Stone Bridge Pkwy
City	Magnolia
State	TX
ZIP	77363
County	WALLER
Latitude (N) (##.######)	30.22931
Longitude (W) (-###.######)	-95.838456
Facility NAICS Code	221320
What is the primary business of this entity?	treatment of domestic wastewater

Riley R-Customer (Applicant) Information (Owner Operator)

How is this applicant associated with this site?	Owner Operator
What is the applicant's Customer Number (CN)?	
Type of Customer	Corporation
Full legal name of the applicant:	
Legal Name	Riley Road (Houston) SPV, LLC
Texas SOS Filing Number	805572866
Federal Tax ID	
State Franchise Tax ID	
State Sales Tax ID	
Local Tax ID	
DUNS Number	
Number of Employees	0-20
Independently Owned and Operated?	Yes
I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.	Yes
Responsible Authority Contact	
Organization Name	Riley Road (Houston) SPV, LLC
Prefix	MR
First	Marvin
Middle	
Last	Shapiro
Suffix	
Credentials	
Title	President
Responsible Authority Mailing Address	
Enter new address or copy one from list:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	211 E 7TH ST STE 620
Routing (such as Mail Code, Dept., or Attn:)	
City	AUSTIN
State	TX
ZIP	78701
Phone (###-###-####)	4076288488
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	mshapiro@avantiprop.com

Billing Contact

Responsible contact for receiving billing statements:	
Select the permittee that is responsible for payment of the annual fee.	Riley Road (Houston) SPV, LLC
Organization Name	Riley Road (Houston) SPV, LLC
Prefix	MISS
First	Bernadette
Middle	
Last	Sostillio
Suffix	
Credentials	
Title	Controller
Enter new address or copy one from list:	Riley Road (Houston) SPV, LLC
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	211 E 7TH ST STE 620
Routing (such as Mail Code, Dept., or Attn:)	
City	AUSTIN
State	TX
ZIP	78701
Phone (###-###-####)	3213972855
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	bsostillio@avantiprop.com

Application Contact

Person TCEQ should contact for questions about this application:	
Same as another contact?	
Organization Name	Quiddity Engineering
Prefix	
First	Huan
Middle	Jonathan
Last	Nguyen
Suffix	

Credentials	
Title	Permitting Specialist
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	3100 ALVIN DEVANE BLVD STE 150
Routing (such as Mail Code, Dept., or Attn:)	
City	AUSTIN
State	TX
ZIP	78741
Phone (###-###-####)	5126855156
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	jnguyen@quiddity.com

Technical Contact

Person TCEQ should contact for questions about this application:	
Same as another contact?	Application Contact
Organization Name	Quiddity Engineering
Prefix	MR
First	Huan
Middle	Jonathan
Last	Nguyen
Suffix	
Credentials	
Title	Permitting Specialist
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	3100 ALVIN DEVANE BLVD STE 150
Routing (such as Mail Code, Dept., or Attn:)	
City	AUSTIN
State	TX
ZIP	78741
Phone (###-###-####)	5126855156

Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	jnguyen@quiddity.com

DMR Contact

Person responsible for submitting Discharge Monitoring Report Forms:	
Same as another contact?	Riley Road (Houston) SPV, LLC
Organization Name	Riley Road (Houston) SPV, LLC
Prefix	MR
First	Andrew
Middle	
Last	Dubill
Suffix	
Credentials	
Title	Vice President
Enter new address or copy one from list:	
Mailing Address:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	211 E 7TH ST STE 620
Routing (such as Mail Code, Dept., or Attn:)	
City	AUSTIN
State	TX
ZIP	78701
Phone (###-###-####)	4076288488
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	adubill@avantiprop.com

Section 1# Permit Contact

Permit Contact#: 1

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	Riley Road (Houston) SPV, LLC
2) Organization Name	Riley Road (Houston) SPV, LLC

3) Prefix	MR
4) First	Marvin
5) Middle	
6) Last	Shapiro
7) Suffix	
8) Credentials	
9) Title	President
Mailing Address	
10) Enter new address or copy one from list	Riley Road (Houston) SPV, LLC
11) Address Type	Domestic
11.1) Mailing Address (include Suite or Bldg. here, if applicable)	211 E 7TH ST STE 620
11.2) Routing (such as Mail Code, Dept., or Attn:)	
11.3) City	AUSTIN
11.4) State	TX
11.5) ZIP	78701
12) Phone (###-###-####)	4076288488
13) Extension	
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	mshapiro@avantiprop.com

Section 2# Permit Contact

Permit Contact#: 2

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	DMR Contact
2) Organization Name	Riley Road (Houston) SPV, LLC
3) Prefix	MR
4) First	Andrew
5) Middle	
6) Last	Dubill
7) Suffix	
8) Credentials	
9) Title	Vice President
Mailing Address	
10) Enter new address or copy one from list	
11) Address Type	Domestic

11.1) Mailing Address (include Suite or Bldg. here, if applicable)	211 E 7TH ST STE 620
11.2) Routing (such as Mail Code, Dept., or Attn:)	
11.3) City	AUSTIN
11.4) State	TX
11.5) ZIP	78701
12) Phone (###-###-####)	4076288488
13) Extension	
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	adubill@avantiprop.com

Public Notice Information

Individual Publishing the Notices	
1) Prefix	
2) First and Last Name	Jonathan Nguyen
3) Credential	
4) Title	Permitting Specialist
5) Organization Name	Quiddity Engineering
6) Mailing Address	3100 ALVIN DEVANE BLVD
7) Address Line 2	Suite 150
8) City	AUSTIN
9) State	TX
10) Zip Code	78741
11) Phone (###-###-####)	5126855156
12) Extension	
13) Fax (###-###-####)	
14) Email	jnguyen@quiddity.com
Contact person to be listed in the Notices	
15) Prefix	
16) First and Last Name	Jonathan Nguyen
17) Credential	
18) Title	
19) Organization Name	Quiddity Engineering
20) Phone (###-###-####)	5126855156
21) Fax (###-###-####)	
22) Email	jnguyen@quiddity.com

Bilingual Notice Requirements

23) 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
23.1) Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?	Yes
23.2) Do the students at these schools attend a bilingual education program at another location?	No
23.3) Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC 89.1205(g)?	No
23.4) Which language is required by the bilingual program?	Spanish

Section 1# Public Viewing Information

County#: 1

1) County	WALLER
2) Public building name	Melanee Smith Memorial Library
3) Location within the building	
4) Physical Address of Building	1018 Saunders Street
5) City	Waller
6) Contact Name	
7) Phone (###-###-####)	9363723961
8) Extension	
9) Is the location open to the public?	Yes

Owner Information

Owner of Treatment Facility

1) Prefix	
2) First and Last Name	
3) Organization Name	Riley Road Houston SPV LLC
4) Mailing Address	211 East 7th Street, Suite 620
5) City	Austin
6) State	TX
7) Zip Code	78701
8) Phone (###-###-####)	4076288488
9) Extension	
10) Email	mshapiro@avantiprop.com
11) What is ownership of the treatment facility?	Private

Owner of Land (where treatment facility is or will be)

12) Prefix	
13) First and Last Name	
14) Organization Name	Riley Road Houston SPV LLC
15) Mailing Address	211 East 7th Street, Suite 620
16) City	Austin
17) State	TX
18) Zip Code	78701
19) Phone (###-###-####)	4076288488
20) Extension	
21) Email	mshapiro@avantiprop.com
22) Is the landowner the same person as the facility owner or co-applicant?	Yes

Admin General Information

1) Is the facility located on or does the treated effluent cross American Indian Land?	No
2) What is the authorization type that you are seeking?	Private Domestic Wastewater
2.1) Is the facility previously authorized under a Water Quality individual permit?	No
2.2) What is the proposed total flow in MGD discharged at the facility?	0.45
2.3) Select the applicable fee	>=0.25 MGD but < 0.50 MGD - $1,250
3) What is your facility operational status?	Inactive
4) What is the classification for your authorization?	TPDES
4.1) City nearest the outfall(s):	Magnolia
4.2) County where the outfalls are located:	WALLER
4.3) Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?	No
4.4) Is the daily average discharge at your facility of 5 MGD or more?	No
5) Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?	Yes
5.1) List each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application:	Jonathan Nguyen

Plain Language

1) Plain Language	
[File Properties]	
File Name	LANG_Attachment A - PLS.pdf
Hash	71CECF732CCF7F00F3BEDC57F4C5FC6E332D8322D925933FB04599789B94664A

MIME-Type	application/pdf

Supplemental Permit Information Form

1) Supplemental Permit Information Form (SPIF)	
[File Properties]	
File Name	SPIF_Attachment B - SPIF.pdf
Hash	20B45D6E88BAE744163564C908D09C79B537F3CB0949DFB48BEB4EFFDBF99491
MIME-Type	application/pdf

Domestic Attachments

1) Have you clearly outlined and labeled the required information on the original full size USGS Topographic Map?	Yes
1.1) I certify that I have clearly outlined and labeled the required information on the Topographic map and attached here.	
[File Properties]	
File Name	MAP_Riley Road USGS Map Reduced.pdf
Hash	D803E59797C9A732FA7001C08AFD8640F781105A47A3DEB5B483E99134ECADAF
MIME-Type	application/pdf
2) Public Involvement Plan attachment (TCEQ Form 20960)	
[File Properties]	
File Name	PIP_Attachment D - PIP.pdf
Hash	956F87B18039A46831CAA481FFA8D285DC8994C3C960DABCB88765CEE3B53BE9
MIME-Type	application/pdf
3) Administrative Report 1.1	
[File Properties]	
File Name	ARPT_Attachment E - Admin 1.1.pdf
Hash	7507B99C48CE805C5B03C6726827EB2D2AE009ACD17953B41730291F43D3098F
MIME-Type	application/pdf
4) I confirm that all required sections of Technical Report 1.0 are complete and will be included in the Technical Attachment.	Yes
4.1) I confirm that Technical Report 1.1 is complete and included in the Technical Attachment.	Yes
4.2) I confirm that Worksheet 2.0 (Receiving Waters) is complete and included in the Technical Attachment.	Yes

4.3) Are you planning to include Worksheet 2.1 (Stream Physical Characteristics) in the Technical Attachment?	No
4.4) Are you planning to include Worksheet 4.0 (Pollutant Analyses Requirements) in the Technical Attachment?	No
4.5) Are you planning to include Worksheet 5.0 (Toxicity Testing Requirements) in the Technical Attachment?	No
4.6) Are you planning to include Worksheet 7.0 (Class V Injection Well Inventory/Authorization Form) in the Technical Attachment?	No
4.7) Technical Attachment	
[File Properties]	
File Name	TECH_Attachment F - Technical Report 1.0-1.1-2.0.pdf
Hash	D5DB61500ED24608BB53D16F1427CB8D6F4779F422EDFF41814D3E032DA2F6EC
MIME-Type	application/pdf
5) Affected Landowners Map	
[File Properties]	
File Name	LANDMP_Attachment G - Affected Landowners.pdf
Hash	7519B324740AA7C96A433416CBC34AC27310B960020DBFCCB4D2B1DAA7BE0AB9
MIME-Type	application/pdf
6) Landowners Cross Reference List	
[File Properties]	
File Name	LANDCRL_Attachment G - Affected Landowners.pdf
Hash	7519B324740AA7C96A433416CBC34AC27310B960020DBFCCB4D2B1DAA7BE0AB9
MIME-Type	application/pdf
7) Landowner Avery Template	
[File Properties]	
File Name	LANDAT_Riley Road Mailing Labels.docx
Hash	4225AD32C0C2AABE072A45207B3EF977D4557553FE1DD0A41E2D04BBC3F548BD
MIME-Type	application/vnd.openxmlformats-officedocument.wordprocessingml.document
8) Buffer Zone Map	
[File Properties]	
File Name	BUFF_ZM_Attachment H - Buffer Zone.pdf
Hash	D8E1173033C2B5874C96DEAB7FE44B7988F9C29B2A49F724B4ACBA13552C79B3
MIME-Type	application/pdf

9) Flow Diagram

[File Properties]

File Name	FLDIA_Attachment I - Flow Schematics.pdf
Hash	E21FB00A4C8DE47765C26927BA2E6AA756A7B24CEABB92FD81B50EABE45BF1ED
MIME-Type	application/pdf

10) Site Drawing

[File Properties]

File Name	SITEDR_Attachment J - Service Area.pdf
Hash	DF49A7515330361D48046E337E1408517BAF29C636ECD7CC1E272184EF37751D
MIME-Type	application/pdf

11) Original Photographs

[File Properties]

File Name	ORIGPH_Attachment K - Photos.pdf
Hash	A98F1A0330528C0947992C1EA5D4B1546BD75EB6C69301A2925456151D019E83
MIME-Type	application/pdf

12) Design Calculations

[File Properties]

File Name	DES_CAL_Attachment L - Supplemental Tech Report.pdf
Hash	B3F2F92C1A7F2C068118E87E66817A5ED97394D4BD148E0EE9AC1366F9DEDB55
MIME-Type	application/pdf

13) Solids Management Plan

[File Properties]

File Name	SMP_Attachment M - Sludge Management Plan.pdf
Hash	9C76770274737CE7D0EFC74903A570F649639F44CE8CB40C4359F8E4FDA39260
MIME-Type	application/pdf

14) Water Balance

[File Properties]

File Name	WB_Water Balance Not Required.pdf
Hash	FCD19FDE22D04C6BC104477F3F83DC1A2DD15BD0FD02F02F7CF5EFD5570729D1
MIME-Type	application/pdf

15) Other Attachments

[File Properties]

File Name	OTHER_Attachment N - Justification.pdf
Hash	A2AF6CDD44410AE91FCC2EC4CB432B50C18B717DE56D0B4E31178E9F21401338
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_Attachment P - Regionalization.pdf
Hash	29CEC8394DC608D65F0DD87D433C3D2E1DA035BA55A2C7AA099309403D8B364D
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_Attachment Q - Water Wells.pdf
Hash	FC44727D29CA34D7D85311F1D5A5CD67DB6122E5AC4F410E790C1E4E368A695A
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_Attachment R - Wetlands.pdf
Hash	AB473F637A3154773BC46C6468F39A522D8071DD6A8C8B5B385221E23F6A5FBF
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_Attachment S - Floodplain.pdf
Hash	B6A78AF4A6C47633E7585832768EE05738908AEB21DA5402879CE267BC9CEA70
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_Attachment T - Windrose.pdf
Hash	1D24744D6521F68375F579C5CD6D4BDD9A527A4A010B6803AE11BB38F1FCAA73
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_Attachment O - Core Data Form.pdf
Hash	AB15879DC15CBAA5FC9AC557ED129E4CFEE7BA978A3524BABA52A2DF87BD5B66
MIME-Type	application/pdf

Certification

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

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.

1. I am Andrew Dubill, the owner of the STEERS account ER107989.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing New Domestic or Industrial Individual Permit.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OWNER OPERATOR Signature: Andrew Dubill OWNER OPERATOR

Customer Number:	
Legal Name:	Riley Road (Houston) SPV, LLC
Account Number:	ER107989
Signature IP Address:	71.46.254.90
Signature Date:	2024-09-24
Signature Hash:	224F56E4F101B7020EC27C7B99372A702FF5588B6D48A549AA34F18A5FF0B428
Form Hash Code at time of Signature:	9F9C53322BE0A7BA2E75C9E65075FD7C26A1401D1872B7D5422209A40ED41B3A

Fee Payment

Transaction by:	The application fee payment transaction was made by ER107989/Andrew Dubill
Paid by:	The application fee was paid by ANDREW DUBILL
Fee Amount:	$1200.00
Paid Date:	The application fee was paid on 2024-09-24
Transaction/Voucher number:	The transaction number is 582EA000626682 and the voucher number is 722683

Submission

Reference Number:	The application reference number is 665233
Submitted by:	The application was submitted by ER094863/Huan J Nguyen
Submitted Timestamp:	The application was submitted on 2024-09-25 at 07:31:19 CDT
Submitted From:	The application was submitted from IP address 98.6.39.114

Confirmation Number:	The confirmation number is 565976
Steers Version:	The STEERS version is 6.82

Additional Information

Application Creator: This account was created by Huan J Nguyen

ATTACHMENT E

ADMINISTRATIVE REPORT 1.1

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

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: Waller CAD

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):

N/A

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

ATTACHMENT O

CORE DATA FORM

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

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

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

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

SECTION II: Customer Information

4. General Customer Information	**5. Effective Date for Customer Information Updates** (mm/dd/yyyy)	5/31/2024

☒ 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:*

Riley Road (Houston) SPV, 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)*
0805572866	32095321785		

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

Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ 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 ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:							
211 E. 7th Street							
STE 620							
City	Austin	**State**	TX	**ZIP**	78701	**ZIP + 4**	

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

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(407) 628-8488		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☒ 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 Core 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.)*

Riley Road Wastewater Treatment Facility

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	City		**State**		**ZIP**		**ZIP + 4**	
24. County	Waller							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	0.8 miles southeast of the intersection of Riley Road and Stone Bridge Pkwy				
26. Nearest City			**State**	**Nearest ZIP Code**	
Magnolia			TX	77484	

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	30.22931		**28. Longitude (W) In Decimal:**	-95.838456	
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		221320	

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

treatment of municipal wastewater

34. Mailing Address:	**211 East 7th Street**							
	Suite 620							
	City	**Austin**	**State**	**TX**	**ZIP**	**78701**	**ZIP + 4**	**3218**

35. E-Mail Address:	**mshapiro@avantiprop.com**

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(407) 628-8488		**( ) -**

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	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Jonathan Nguyen	**41. Title:**	Permitting Specialist

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512 **)** 685-5156		**( )** -	jnguyen@quiddity.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:	Riley Road (Houston) SPV, LLC	**Job Title:**	President	
Name *(In Print):*	Marvin Shapiro		**Phone:**	**(** 407 **)** 628- **8488**
Signature:			**Date:**	

ATTACHMENT N

JUSTIFICATION

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

QUIDDITY

3100 Alvin Devane Blvd, Suite 150
Austin, Texas 78741
Tel: 512.441.9493
www.quiddity.com

JUSTIFICATION FOR PLANT CONSTRUCTION
RILEY ROAD (HOUSTON) SPV, LLC

The Riley Road Wastewater Treatment Plant will serve a residential subdivision located near the intersection of Riley Road and Stone Bridge Parkway, in Waller County, Texas. At build out, there will be 1,300 residential connections and 200 commercial connections. For design purposes, the wastewater flow for residential and commercial connections is 300 gallons per day per connection.

Following is the connection and flow projection to complete build out:

Month / yr	**Single family residential**		**Commercial**		**Total**	
	connections	**flow (gpd)**	**connections**	**flow (gpd)**	**connections**	**flow (gpd)**
Jan-27	15	4,500	-	-	15	4,500
Jan-28	195	58,500	-	-	195	58,500
Jan-29	375	112,500	-	-	375	112,500
Jan-30	570	171,000	50	15,000	620	186,000
Jan-31	750	225,000	100	30,000	850	255,000
Jan-32	930	279,000	100	30,000	1,030	309,000
Jan-33	1,110	333,000	150	45,000	1,260	378,000
Jan-34	1,300	390,000	200	60,000	1,500	450,000

Following is the construction schedule for the current and final plant phases:

Proposed flow	Interim I	Interim II	Final
Design Flow (MGD)	0.10	0.20	0.45
2-Hr Peak Flow (MGD)	0.40	0.80	1.80
Date construction to commence	3/2026	10/2027	4/2029
Date construction completed and discharge begins	1/2027	8/2028	1/2030

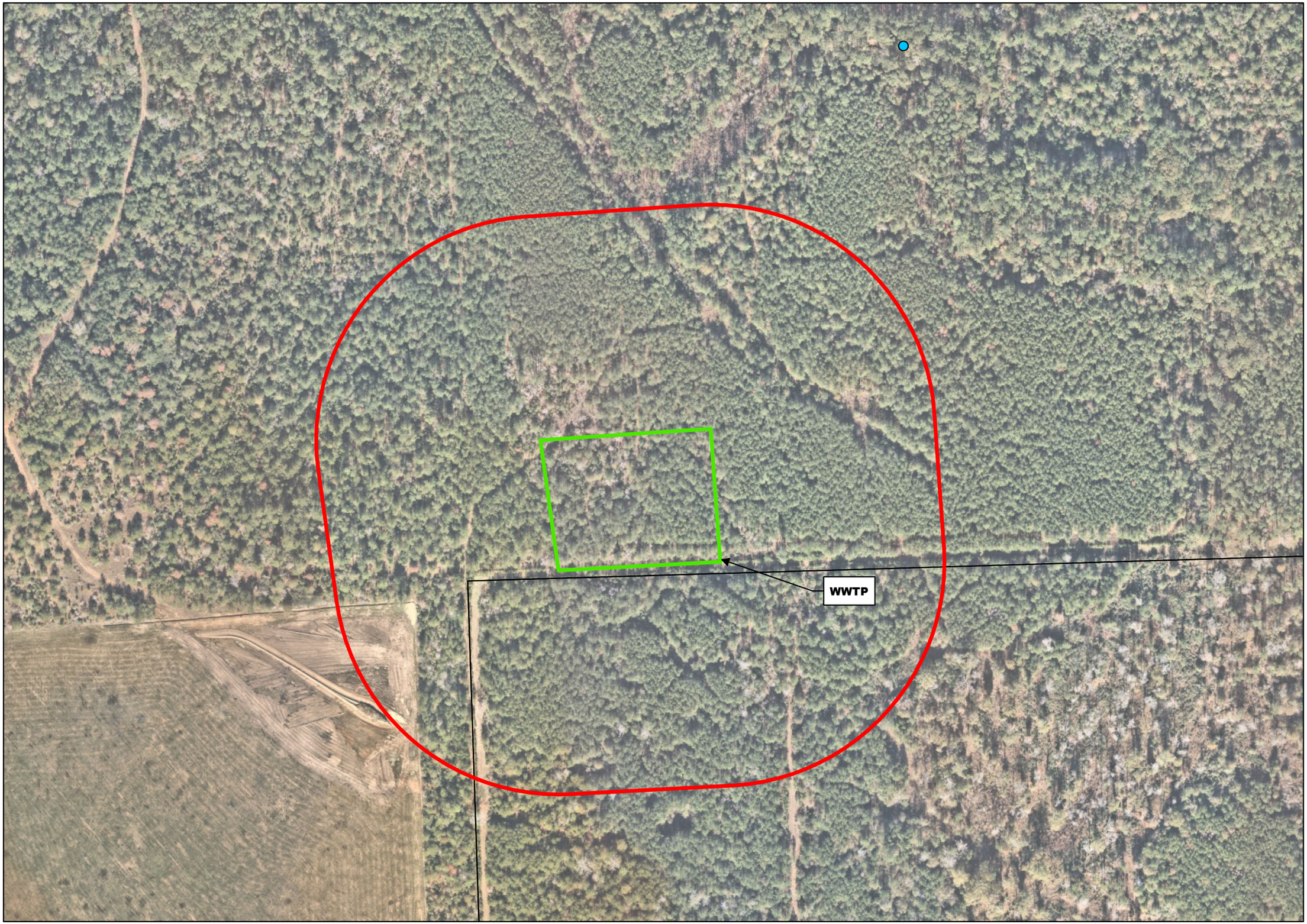
ATTACHMENT Q

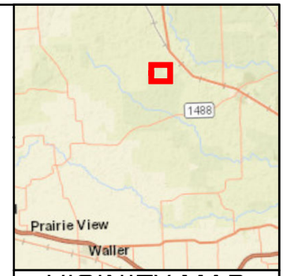
WATER WELLS MAP

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337





VICINITY MAP
1 INCH = 10 MILES

LEGEND

- Existing Water Wells
- 500 ft Radius
- WWTP
- WCAD Parcels

NO WATER WELLS WITHIN 500 FEET OF THE PLANT

WATER WELLS EXHIBIT

Riley Road Tract
WALLER COUNTY, TEXAS

N W E S

0 200
1 INCH : 200 FEET
IMAGERY PROVIDED BY NEARMAP

QUIDDITY
Texas Board of Professional Engineers Registration No. F-23290

Path: V:\Practice Workspace\Corporate Services\GIS\Projects\0_Individuals\J_Nguyen\Riley Road\Water_Wells_Map_11x17.mxd Project Number: 25254-0002-01.100 Date: 7/8/2024 User Name: jnguyen

ATTACHMENT P

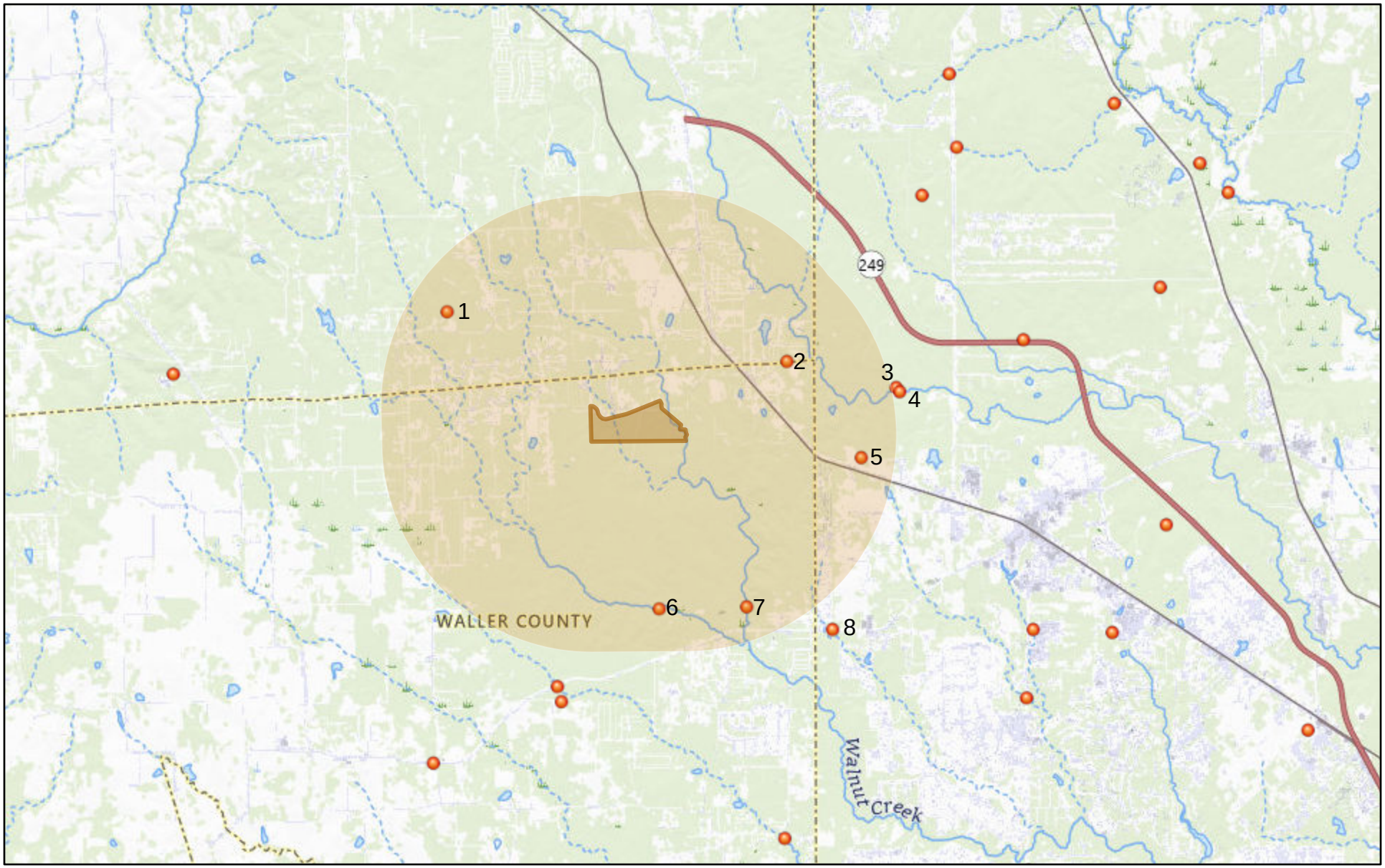
REGIONALIZATION

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

Riley Road Nearby Wastewater Treatment Facilities



6/24/2024, 9:03:24 AM

1:144,448

0 1 2 4 mi

0 1.75 3.5 7 km

Wastewater Outfalls

TCEQ, USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National

Web AppBuilder for ArcGIS

1. Grimes Co. Water Reclamation LLC, WQ0015032001
2. MTR Mattern Ranch, LLC, WQ0016233001 – PENDING PERMIT 6/24/2024
3. MGW Development Company, WQ0016050001
4. Magnolia M3 Ranch LP, WQ0016324001
5. Magnolia M3 Ranch LP, WQ0015877001
6. North Catch 1488 LLC, WQ0016358001 – PENDING PERMIT 6/24/2024
7. Woodhaven Interest LLC, WQ0015829001
8. Utilities Investment Company, WQ0014133001

WASTEWATER TREATMENT CAPACITY
AVAILABILITY SURVEY

District or Company Name Grimes County Water Reclamation - WQ0015032001

Riley Road (Houston) SPV, LLC is seeking to determine if there are any wastewater treatment plants within three (3) miles that have capacity or are willing to expand to provide capacity for the ultimate needs of the development. Following is the projected flow.

Month/Year	Flow (gpd)
January 2027	4,500
January 2028	58,500
January 2029	112,500
January 2030	186,000
January 2031	255,000
January 2032	309,000
January 2033	378,000
January 2034	450,000

	Yes	No
1. Do you currently have wastewater treatment plant capacity available to serve the ultimate needs of the development?	☐	☒
2. Are you willing to expand your wastewater treatment plant to provide capacity to serve the ultimate needs of the development?	☐	☒
3. If you are willing to expand your wastewater treatment plant provide capacity to serve the ultimate needs of the development, can you meet the time constraints outlined in the above table?	☐	☐

Shelley Young
Signature

7/1/2024
Date

Shelley Young, P.E.
Print Name

Engineer for Grimes County Water Reclamation.
Title

281-373-0500
Phone Number

WASTEWATER TREATMENT CAPACITY
AVAILABILITY SURVEY

District or Company Name MGW Development Company

Riley Road (Houston) SPV, LLC is seeking to determine if there are any wastewater treatment plants within three (3) miles that have capacity or are willing to expand to provide capacity for the ultimate needs of the development. Following is the projected flow.

Month/Year	Flow (gpd)
January 2027	4,500
January 2028	58,500
January 2029	112,500
January 2030	186,000
January 2031	255,000
January 2032	309,000
January 2033	378,000
January 2034	450,000

	Yes	No
1. Do you currently have wastewater treatment plant capacity available to serve the ultimate needs of the development?	☐	☒
2. Are you willing to expand your wastewater treatment plant to provide capacity to serve the ultimate needs of the development?	☐	☒
3. If you are willing to expand your wastewater treatment plant provide capacity to serve the ultimate needs of the development, can you meet the time constraints outlined in the above table?	☐	☒

Katherine D. Hallaway
Signature

7/10/24
Date

Katherine Hallaway
Print Name

Senior Project Manager
Title

713-449-7835
Phone Number

QUIDDITY

3100 Alvin Devane Blvd, Suite 150
Austin, Texas 78741
Tel: 512.441.9493
www.quiddity.com

June 24, 2024

Magnolia M3 Ranch LP
601 Sonterra Blvd.
San Antonio, TX 78258

Re: Wastewater Treatment Plant Regionalization Inquiry
Riley Road (Houston) SPV, LLC
Waller County, Texas

Riley Road (Houston) SPV, LLC is applying for a TPDES permit and is seeking to determine if Magnolia M3 Ranch LP has capacity or is willing to expand to provide capacity for the ultimate needs of the Riley Road Development. You have been identified as operating a wastewater collection system and possibly a wastewater treatment plant within three (3) miles of the Riley Road Development. It would be greatly appreciated if you could complete the attached survey and either fax, e-mail (jnguyen@quiddity.com) or mail this questionnaire to me no later than July 29, 2024.

Please feel free to contact me should you have any questions.

Sincerely,

Jonathan Nguyen

HJN
Attachment
K:\29234\29234-0002-01 Riley Road TPDES Permit\2 Design Phase\001 - TPDES Permit\01 - Submit Application\Attachment S - Regionalization Surveys\CapacitySurvCvr - Template.docx

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Magnolia M3 Ranch
601 Sonterra Blvd.
San Antonio, TX 78258

9590 9402 8878 4005 5917 82

2. Article Number *(Transfer from service label)*

9589 0710 5270 1461 9095 33

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent
☐ Addressee

B. Received by *(Printed Name)*

C. Date of Delivery

6/28

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ il
- ☐ il Restricted Delivery
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

QUIDDITY

3100 Alvin Devane Blvd, Suite 150
Austin, Texas 78741
Tel: 512.441.9493
www.quiddity.com

June 24, 2024

Bob Wempe, PE
Pape-Dawson Engineers
24445 Tomball Pkwy, Suite 200
Tomball, TX 77375-4269

Re: Wastewater Treatment Plant Regionalization Inquiry
Riley Road (Houston) SPV, LLC
Waller County, Texas

Riley Road (Houston) SPV, LLC is applying for a TPDES permit and is seeking to determine if Magnolia M3 Ranch LP has capacity or is willing to expand to provide capacity for the ultimate needs of the Riley Road Development. You have been identified as operating a wastewater collection system and possibly a wastewater treatment plant within three (3) miles of the Riley Road Development. It would be greatly appreciated if you could complete the attached survey and either fax, e-mail (jnguyen@quiddity.com) or mail this questionnaire to me no later than July 29, 2024.

Please feel free to contact me should you have any questions.

Sincerely,

Jonathan Nguyen

HJN
Attachment
K:\29234\29234-0002-01 Riley Road TPDES Permit\2 Design Phase\001 - TPDES Permit\01 - Submit Application\Attachment S - Regionalization Surveys\CapacitySurvCvr - Template.docx

QUIDDITY
ENGINEERING

3100 Alvin Devane Boulevard, Suite 150
Austin, TX 78741

CERTIFIED MAIL®

9589 0710 5270 1461 9095 40

$8.69 0
US POSTAGE
FIRST-CLASS
062S0013161361
FROM 78741

Bob Wempe, PE
Pape-Dawson Engineers
24445 Tomball Pkwy, Suite 200
Tomball, Tx

6/28
Notf

NIXIE 773 DE 1 0007/25/24
RETURN TO SENDER
UNCLAIMED
UNABLE TO FORWARD
BC: 78741740925 *2510-01358-26-42

UNC

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Bob Wempe PE
Pape-Dawson
24445 Tomball Pkwy Suite 200
Tomball, Tx 77375-4269

9590 9402 8877 4005 7423 69

9589 0710 5270 1461 9095 40

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☑ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery (over $500)
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

WASTEWATER TREATMENT CAPACITY
AVAILABILITY SURVEY Woodhaven

District or Company Name Quiddity Engineering (Engineer for Waller County MUD No. 20)

Riley Road (Houston) SPV, LLC is seeking to determine if there are any wastewater treatment plants within three (3) miles that have capacity or are willing to expand to provide capacity for the ultimate needs of the development. Following is the projected flow.

Month/Year	Flow (gpd)
January 2027	4,500
January 2028	58,500
January 2029	112,500
January 2030	186,000
January 2031	255,000
January 2032	309,000
January 2033	378,000
January 2034	450,000

	Yes	No
1. Do you currently have wastewater treatment plant capacity available to serve the ultimate needs of the development?	☐	☒
2. Are you willing to expand your wastewater treatment plant to provide capacity to serve the ultimate needs of the development?	☐	☒
3. If you are willing to expand your wastewater treatment plant provide capacity to serve the ultimate needs of the development, can you meet the time constraints outlined in the above table?	☐	☒

C M. Miller
Signature

8/26/24
Date

Cameron M. Miller
Print Name

Cameron M. Miller
Project Manager
Title

832-913-4032
Phone Number

WASTEWATER TREATMENT CAPACITY
AVAILABILITY SURVEY

District or Company Name Utilities Investment Co., Inc. - WQ0014133001

Riley Road (Houston) SPV, LLC is seeking to determine if there are any wastewater treatment plants within three (3) miles that have capacity or are willing to expand to provide capacity for the ultimate needs of the development. Following is the projected flow.

Month/Year	Flow (gpd)
January 2027	4,500
January 2028	58,500
January 2029	112,500
January 2030	186,000
January 2031	255,000
January 2032	309,000
January 2033	378,000
January 2034	450,000

	Yes	No
1. Do you currently have wastewater treatment plant capacity available to serve the ultimate needs of the development?	☐	☒
2. Are you willing to expand your wastewater treatment plant to provide capacity to serve the ultimate needs of the development?	☐	☒
3. If you are willing to expand your wastewater treatment plant provide capacity to serve the ultimate needs of the development, can you meet the time constraints outlined in the above table?	☐	☐

Shelley Young
Signature

7/1/2024
Date

Shelley Young, P.E.
Print Name

Engineer for Utilities Investment Co., Inc.
Title

281-373-0500
Phone Number

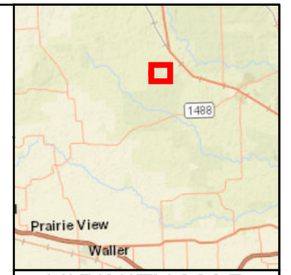
ATTACHMENT R

WETLANDS MAP

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337



VICINITY MAP
1 INCH = 10 MILES

LEGEND
- WWTP
- WCAD Parcels
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

NO WETLANDS ON SITE

WETLANDS EXHIBIT

Riley Road Tract
WALLER COUNTY, TEXAS

N W E S

0 200
1 INCH : 200 FEET
IMAGERY PROVIDED BY NEARMAP

QUIDDITY
Texas Board of Professional Engineers Registration No. F-23290

Path: V:\Practice Work\Projects\Corporate Services\GIS\Projects\0_Individuals\J_Nguyen\Riley Road\Wetlands_Map_1x17.mxd Project Number: 28234-0002-00100 Date: 7/12/2024 User Name: asal

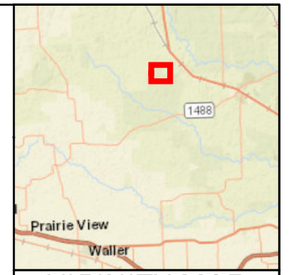
ATTACHMENT S

FLOODPLAIN MAP

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337



VICINITY MAP
1 INCH = 10 MILES

LEGEND

- WWTP
- WCAD Parcels
- Floodway
- 100 Year
- 500 Year

FLOODPLAIN EXHIBIT

Riley Road Tract
WALLER COUNTY, TEXAS

N W E S

0 200

1 INCH : 200 FEET

IMAGERY PROVIDED BY NEARMAP

QUIDDITY
Texas Board of Professional Engineers Registration No. F-23290

Project Number: 25234-0002-01100 Date: 7/12/2024

Path: V:\Practice Workspace\Corporate Services\25xx Projects\00_Individuals\J_Nguyen\Riley Road\Floodplain_Map_11x17.mxd User Name: adal

ATTACHMENT T

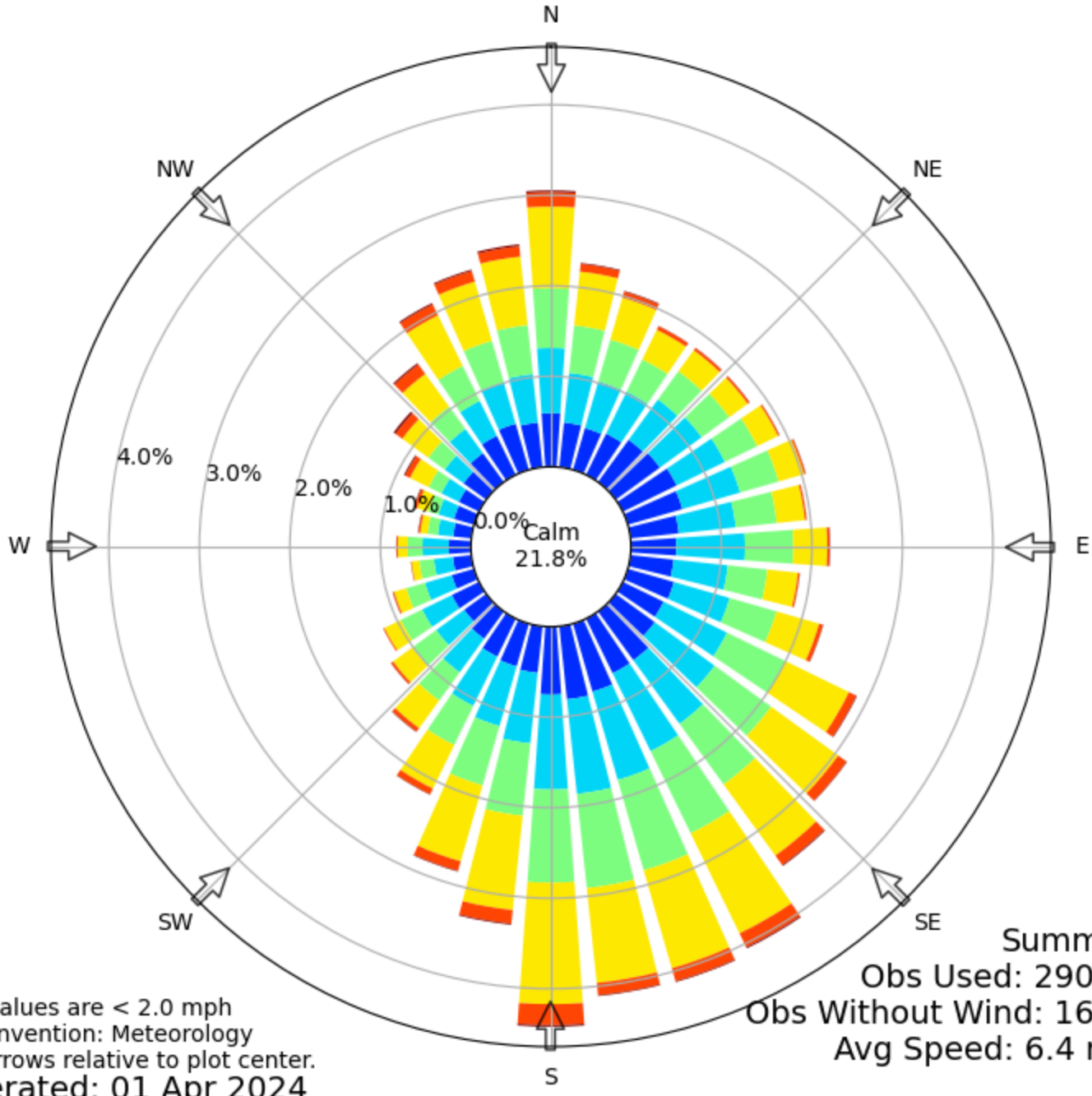
WINDROSE

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

Windrose Plot for [DWH] HOUSTON/D.W. HOOKS
Obs Between: 16 Sep 1986 10:00 AM - 01 Apr 2024 03:53 AM America/Chicago



Summary
Obs Used: 290565
Obs Without Wind: 16708
Avg Speed: 6.4 mph

Calm values are < 2.0 mph
Bar Convention: Meteorology
Flow arrows relative to plot center.
Generated: 01 Apr 2024

Wind Speed [mph]
2 - 4.9 | 5 - 6.9 | 7 - 9.9 | 10 - 14.9 | 15 - 19.9 | 20+

ATTACHMENT A

PLAIN LANGUAGE SUMMARY

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

QUIDDITY

3100 Alvin Devane Blvd, Suite 150
Austin, Texas 78741
Tel: 512.441.9493
www.quiddity.com

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

Riley Road (Houston) SPV, LLC proposes to operate the Riley Road wastewater treatment plant, an activated sludge process plant operated in the complete mix mode. The facility will be located approximately 0.80 miles southeast of the intersection of Riley Road and Stone Bridge Parkway, in Waller County, Texas 77484.

This application is for a new application to discharge at a daily average flow of 450,000 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 will include a bar screen, aeration basins, final clarifiers, sludge digesters, and chlorine contact chambers.

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

Riley Road (Houston) SPV, LLC propone operar la planta de tratamiento de aguas residuales de Riley Road, una planta de procesamiento de lodos activados que funciona en modo de mezcla completa. La instalación estará ubicada aproximadamente a 0,80 millas al sureste de la intersección de Riley Road y Stone Bridge Parkway, en el condado de Waller, Texas 77484.

Esta solicitud es para una nueva aplicación para descargar un caudal promedio diario de 450,000 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 (CBOD5), sólidos suspendidos totales (TSS), nitrógeno amoniaco (NH3-N) y Escherichia coli. Se incluyen otros contaminantes potenciales en el Informe Técnico Doméstico 1.0, Sección 7. Análisis de contaminantes del efluente tratado en el paquete de solicitud de permiso. Las aguas residuales domésticas serán tratadas mediante una planta de procesamiento de lodos activados y las unidades de tratamiento incluirán una rejilla de rejilla, cuencas de aireación, clarificadores finales, digestores de lodos y cámaras de contacto con cloro.

ATTACHMENT D

PUBLIC INVOLVEMENT PLAN

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

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.

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.

Riley Road (Houston) SPV, LLC proposes to operate the Riley Road wastewater treatment plant, an activated sludge process plant operated in the complete mix mode. The facility will be located approximately 0.80 miles southeast of the intersection of Riley Road and Stone Bridge Parkway, in Waller County, Texas 77484.
This application is for a new application to discharge at a daily average flow of 450,000 gallons per day of treated domestic wastewater.
Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-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 will include a bar screen, aeration basins, final clarifiers, sludge digesters, and chlorine contact chambers.

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.

Magnolia

(City)

Waller

(County)

48473680602

(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

35%

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

$71,543

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

1% African American, 25% Hispanic

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

82% English only, 16% Spanish

(e) Languages commonly spoken in area by percentage

English, Spanish

(f) Community and/or Stakeholder Groups

N/A

(g) Historic public interest or involvement

N/A

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) Melanee Smith Memorial Library

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)

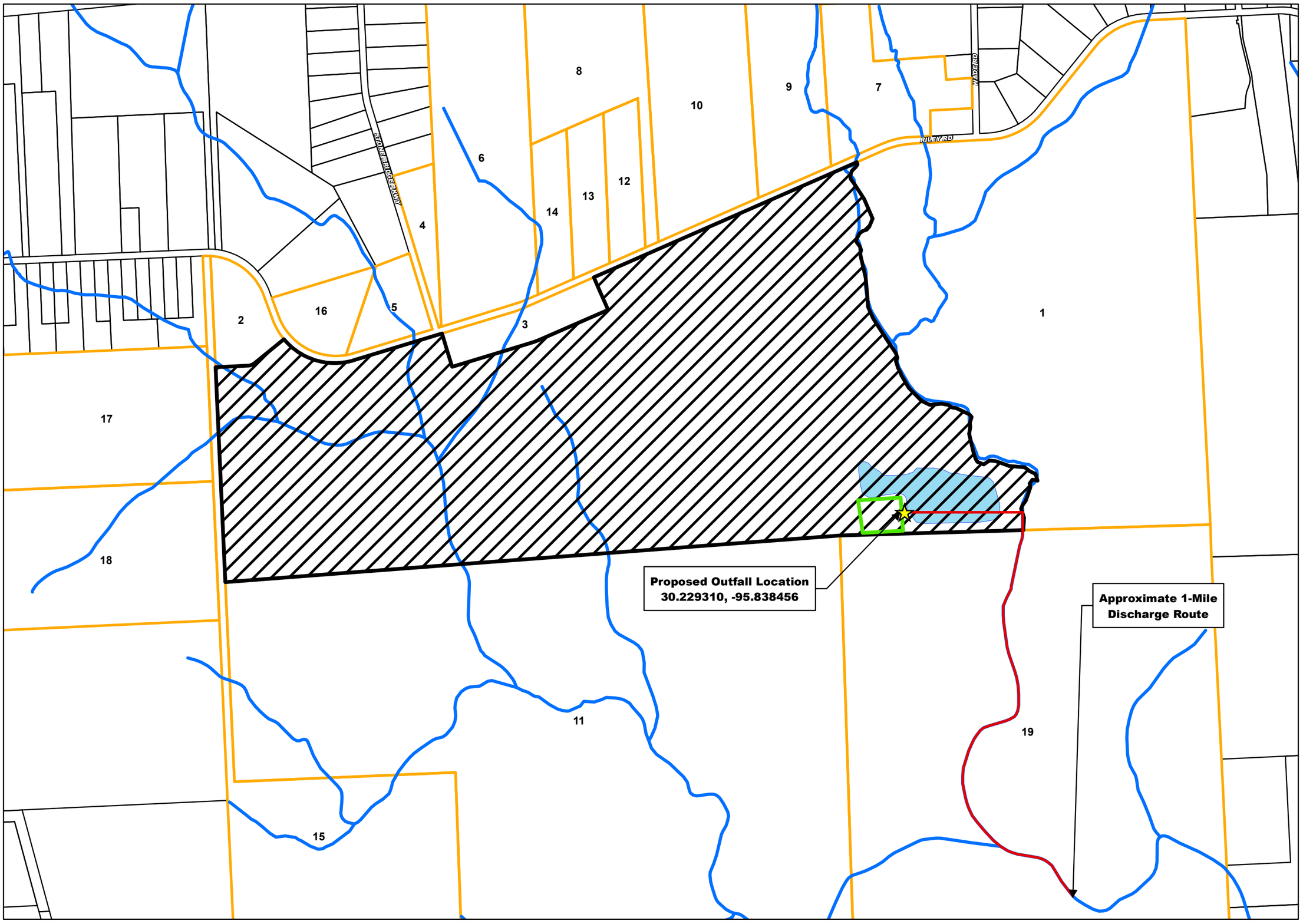
ATTACHMENT G

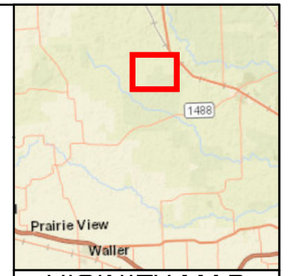
AFFECTED LANDOWNERS MAP, LIST, AND MAILING LABELS

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337





VICINITY MAP
1 INCH = 10 MILES

LEGEND

- Outfall
- Discharge Route
- Streams
- Proposed Detention Pond
- WWTP
- Applicant Property Boundary
- Affected Landowners
- WCAD Parcels

AFFECTED LANDOWNERS MAP

Riley Road Tract
WALLER COUNTY, TEXAS

N W E S

0 800
1 INCH : 800 FEET
IMAGERY PROVIDED BY NEARMAP

QUIDDITY
Texas Board of Professional Engineers Registration No. F-23290

Path: V:\Practice Workspace\Corporate Services\GIS\Projects\D_Individuals\J_Nguyen\Riley Road\Affected_Landowners_Map_11x17.mxd Project Number: 292534-0002-01100 Date: 7/19/2024 User Name: adel

QUIDDITY

3100 Alvin Devane Blvd, Suite 150
Austin, Texas 78741
Tel: 512.441.9493
www.quiddity.com

Object ID	Owner	Mailing Address
1	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
2	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
3	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
4	MUSGROVE JEFFERY & CECILIA	31300 STONEBRIDGE PKWY WALLER, TX 77484
5	WILEY HULEN H & MABEL T	26400 RILEY ROAD WALLER, TX 77484
6	RILEY REAL PROPERTIES LLC	26250 RILEY RD WALLER, TX 77484
7	BURKETT JAMES R JR & CYNTHIA A	25542 RILEY RD PLANTERSVILLE, TX 77363
8	ESMAY JAY ROBERT & LETICIA	5923 UBSAT DR SPRING, TX 77389
9	RAMIREZ JOSEFINA AMBER	13710 CHAMPIONS CENTER DR HOUSTON, TX 77069
10	WILCOX VICTOR T SR & DEBORAH K & HENSON ALEXANDER & NIKI D	25904 IRON HORSE LN PLANTERSVILLE, TX 77363
11	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
12	GRIFFITH VERONICA MUNOZ	26042 RILEY RD WALLER, TX 77484
13	SIGNOR DANIEL K	26074 RILEY ROAD WALLER, TX 77484
14	BANKS MAX S & PAMELA S	26106 RILEY RD WALLER, TX 77484
15	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
16	MCGREW MICKEY E & BRANDI B	26594 RILEY RD WALLER, TX 77484
17	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
18	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
19	THOMAS WALTER BLAKE TRUST BILL D PATTERSON MANAGING TR	1115 BARKDULL STE A HOUSTON, TX 77006

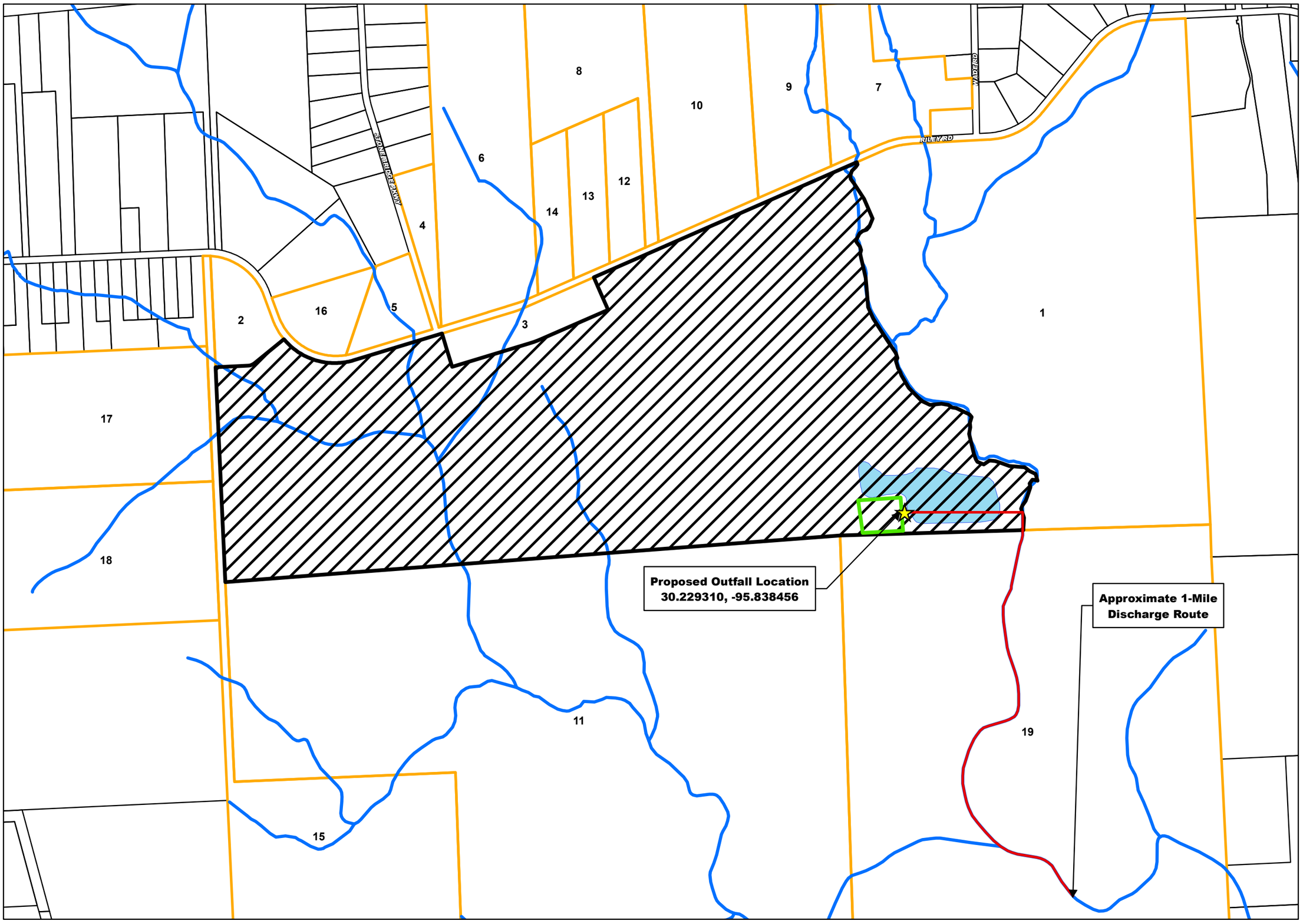
ATTACHMENT G

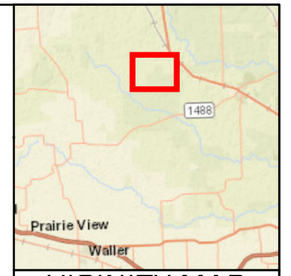
AFFECTED LANDOWNERS MAP, LIST, AND MAILING LABELS

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337





VICINITY MAP
1 INCH = 10 MILES

LEGEND

- Outfall
- Discharge Route
- Streams
- Proposed Detention Pond
- WWTP
- Applicant Property Boundary
- Affected Landowners
- WCAD Parcels

AFFECTED LANDOWNERS MAP

Riley Road Tract
WALLER COUNTY, TEXAS

N W E S

0 800
1 INCH : 800 FEET
IMAGERY PROVIDED BY NEARMAP

QUIDDITY
Texas Board of Professional Engineers Registration No. F-23290

Path: V:\Practice Workspace\Corporate Services\GIS\Projects\D_Individuals\J_Nguyen\Riley Road\Affected_Landowners_Map_11x17.mxd Project Number: 292534-0002-01100 Date: 7/19/2024 User Name: adel

QUIDDITY

3100 Alvin Devane Blvd, Suite 150
Austin, Texas 78741
Tel: 512.441.9493
www.quiddity.com

Object ID	Owner	Mailing Address
1	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
2	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
3	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
4	MUSGROVE JEFFERY & CECILIA	31300 STONEBRIDGE PKWY WALLER, TX 77484
5	WILEY HULEN H & MABEL T	26400 RILEY ROAD WALLER, TX 77484
6	RILEY REAL PROPERTIES LLC	26250 RILEY RD WALLER, TX 77484
7	BURKETT JAMES R JR & CYNTHIA A	25542 RILEY RD PLANTERSVILLE, TX 77363
8	ESMAY JAY ROBERT & LETICIA	5923 UBSAT DR SPRING, TX 77389
9	RAMIREZ JOSEFINA AMBER	13710 CHAMPIONS CENTER DR HOUSTON, TX 77069
10	WILCOX VICTOR T SR & DEBORAH K & HENSON ALEXANDER & NIKI D	25904 IRON HORSE LN PLANTERSVILLE, TX 77363
11	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
12	GRIFFITH VERONICA MUNOZ	26042 RILEY RD WALLER, TX 77484
13	SIGNOR DANIEL K	26074 RILEY ROAD WALLER, TX 77484
14	BANKS MAX S & PAMELA S	26106 RILEY RD WALLER, TX 77484
15	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
16	MCGREW MICKEY E & BRANDI B	26594 RILEY RD WALLER, TX 77484
17	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
18	DDSMK LTD	6602 SPRING CYPRESS ROAD SPRING, TX 77379
19	THOMAS WALTER BLAKE TRUST BILL D PATTERSON MANAGING TR	1115 BARKDULL STE A HOUSTON, TX 77006

BANKS MAX S & PAMELA S
26106 RILEY RD
WALLER TX 77484

BURKETT JAMES R JR & CYNTHIA A
25542 RILEY RD
PLANTERSVILLE TX 77363

DDSMK LTD
6602 SPRING CYPRESS ROAD
SPRING TX 77379

ESMAY JAY ROBERT & LETICIA
5923 UBSAT DR
SPRING TX 77389

GRIFFITH VERONICA MUNOZ
26042 RILEY RD
WALLER TX 77484

MCGREW MICKEY E & BRANDI B
26594 RILEY RD
WALLER TX 77484

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1115 BARKDULL STE A
HOUSTON TX 77006

WILCOX VICTOR T SR & DEBORAH K & HENSON ALEXANDER & NIKI D
25904 IRON HORSE LN
PLANTERSVILLE TX 77363

WILEY HULEN H & MABEL T
26400 RILEY ROAD
WALLER TX 77484

ATTACHMENT K

ORIGINAL PHOTOGRAPHS

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
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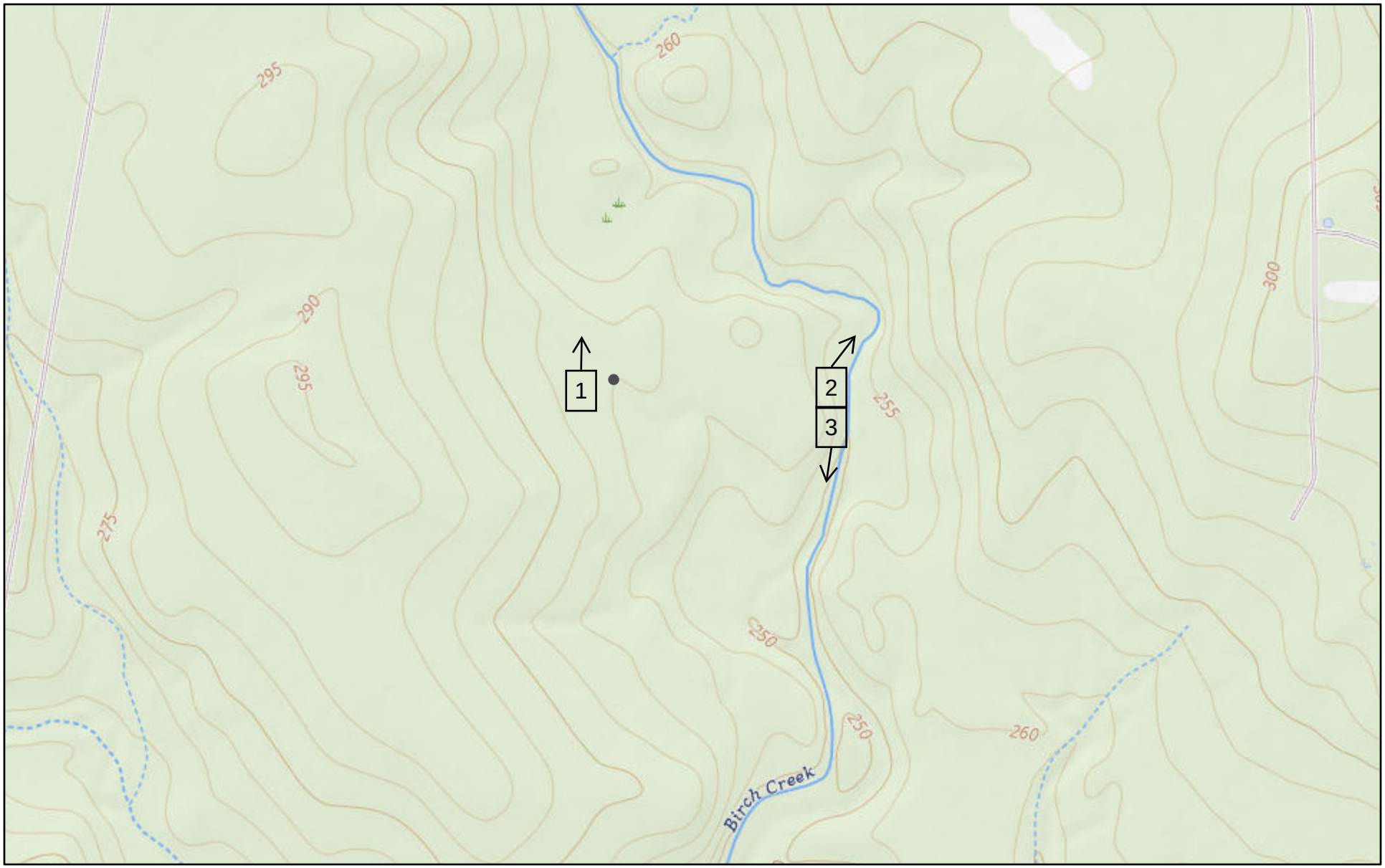
Riley Road - Photo Plot Map



8/27/2024, 8:03:49 AM

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

TCEQ, USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National

Web AppBuilder for ArcGIS

Photo 1 - Proposed Plant Site, Facing North

Photo 2 - Birch Creek, Upstream

Photo 3 - Birch Creek, Downstream

ATTACHMENT B

SPIF

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

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: Riley Road (Houston) SPV, LLC

   Permit No. WQ00 New Permit EPA ID No. TX New Permit

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

   0.80 miles southeast of the intersection of Riley Road and Stone Bridge Parkway, in Waller County, Texas 77484.

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

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

   First and Last Name: Jonathan Nguyen

   Credential (P.E, P.G., Ph.D., etc.): Click here to enter text.

Title: Permitting Specialist

Mailing Address: 3100 Alvin Devane Blvd, Suite 150

City, State, Zip Code: Austin, TX 78741

Phone No.: 512-685-5156 Ext.: Click here to enter text. Fax No.: Click here to enter text.

E-mail Address: jnguyen@quiddity.com

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

Property owner is the permittee.

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.

To a man-made pond, then to Birch Creek, then to Walnut Creek, then 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):

No caves or karst features will be affected.

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

Existing land use is agriculture.

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:

No existing structures on site.

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

No existing structures on site.

ATTACHMENT H

BUFFER ZONE MAPS

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
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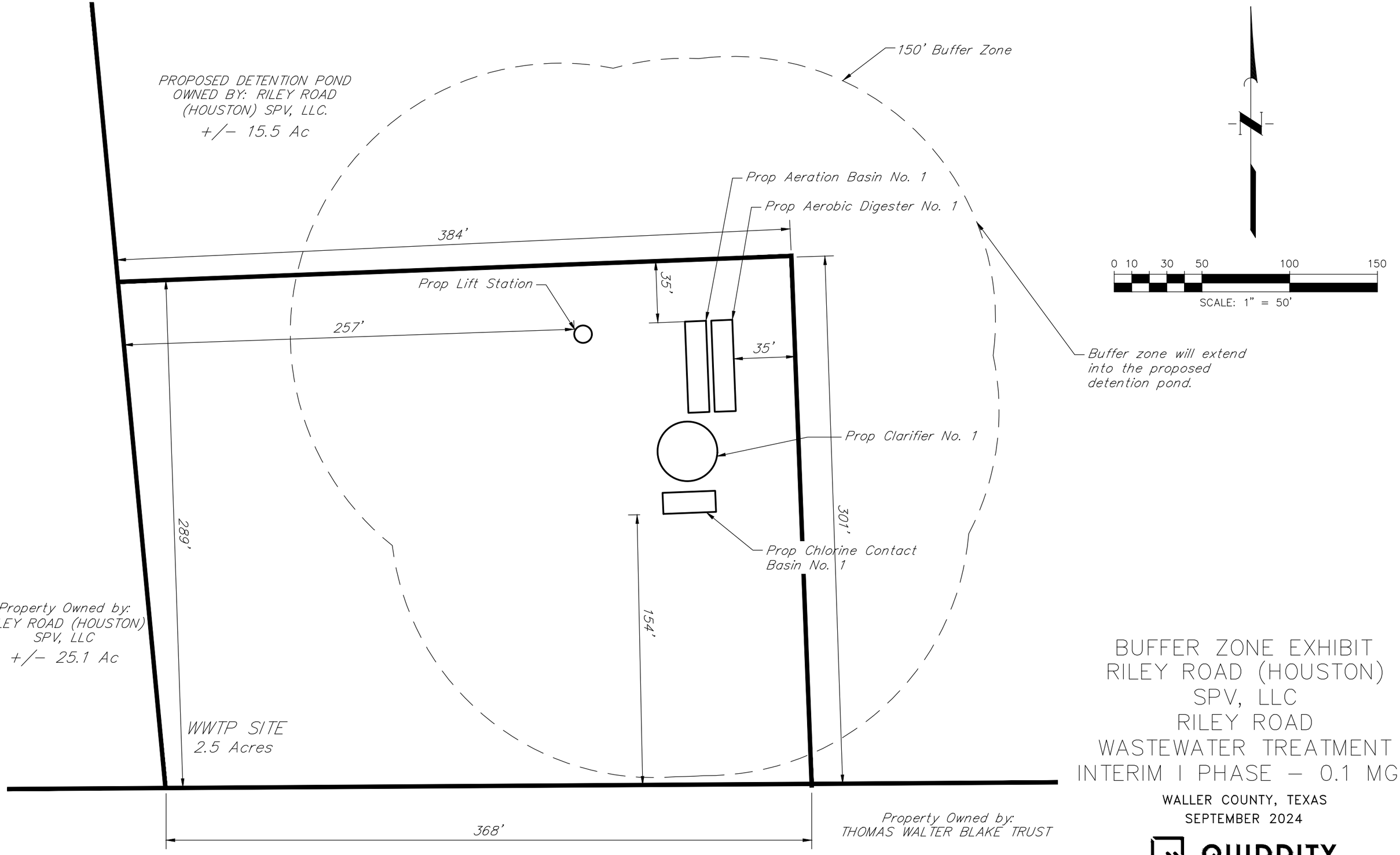

BUFFER ZONE EXHIBIT
RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT
INTERIM I PHASE – 0.1 MGD

WALLER COUNTY, TEXAS
SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Reg. No. F-23290
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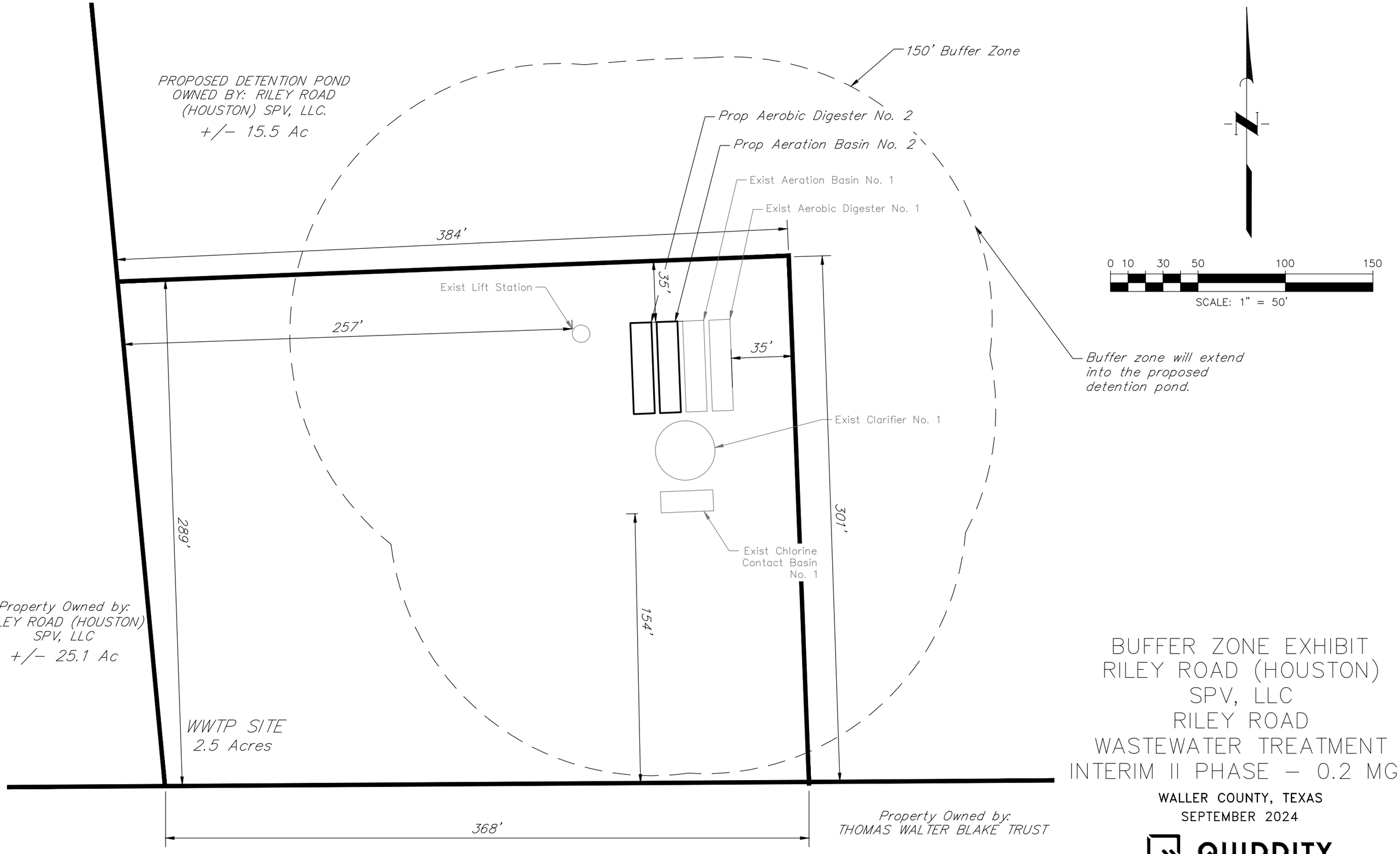
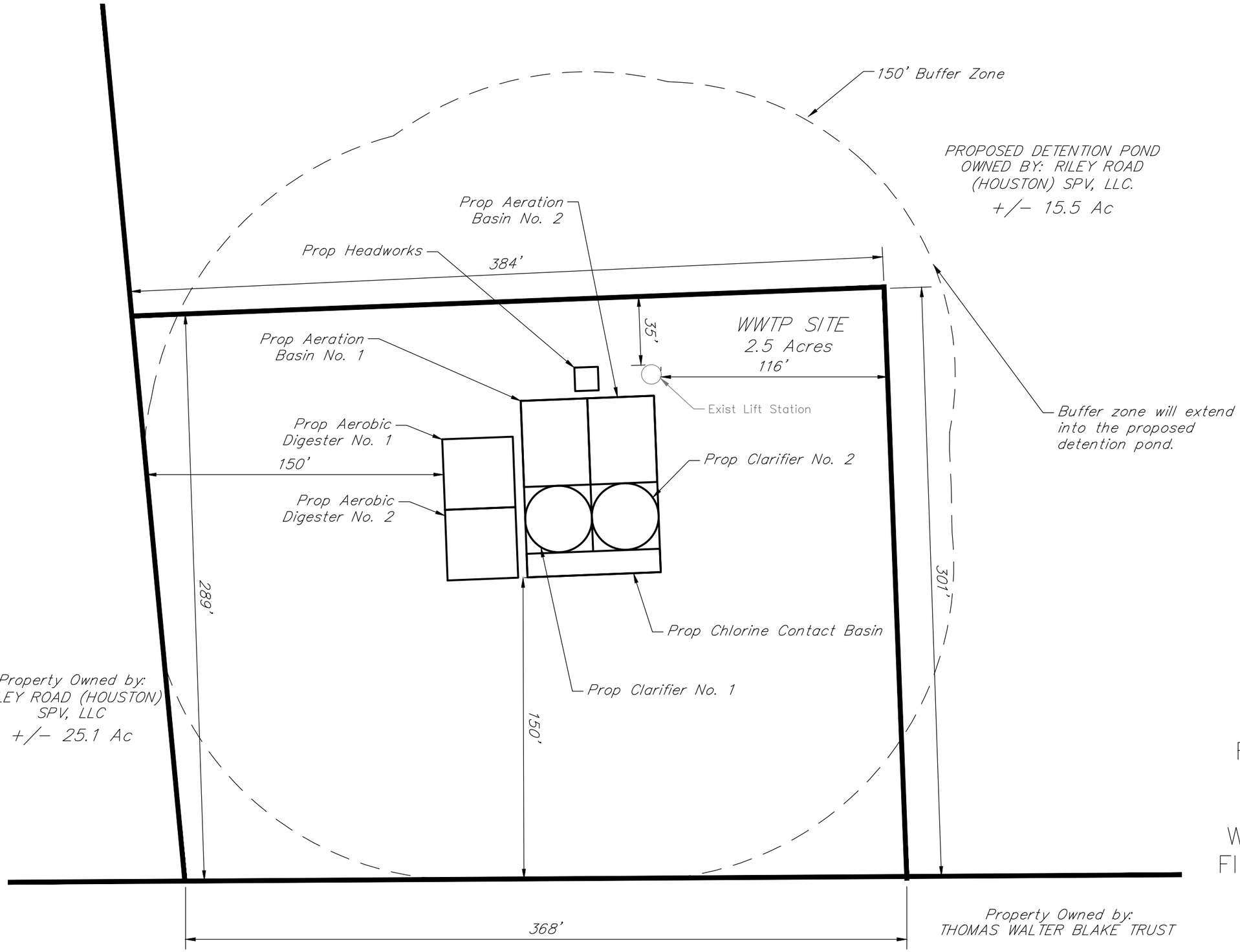
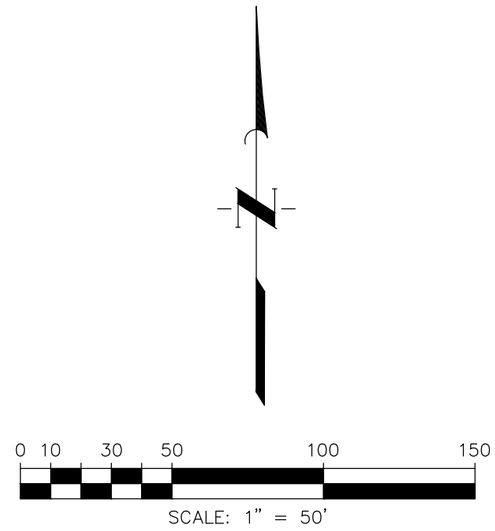


BUFFER ZONE EXHIBIT
RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT
INTERIM II PHASE – 0.2 MGD

WALLER COUNTY, TEXAS
SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Reg. No. F-23290
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337





BUFFER ZONE EXHIBIT
RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT
FINAL PHASE – 0.45 MGD

WALLER COUNTY, TEXAS
SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Reg. No. F-23290
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

ATTACHMENT F

DOMESTIC TECHNICAL REPORT 1.0-1.1-2.0

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

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): 0.10

2-Hr Peak Flow (MGD): 0.40

Estimated construction start date: 3/2026

Estimated waste disposal start date: 1/2027

B. Interim II Phase

Design Flow (MGD): 0.20

2-Hr Peak Flow (MGD): 0.80

Estimated construction start date: 10/2027

Estimated waste disposal start date: 8/2028

C. Final Phase

Design Flow (MGD): 0.45

2-Hr Peak Flow (MGD): 1.80

Estimated construction start date: 4/2029

Estimated waste disposal start date: 1/2030

D. Current Operating Phase

Provide the startup date of the facility: not constructed – new permit

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**.

See Attachment L – Supplemental Technical Report

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 Attachment L		

C. Process Flow Diagram

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

Attachment: Attachment I

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

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

- Latitude: 30.229310
- Longitude: -95.838456

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: Attachment J

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

The facility will serve a residential subdivision near the intersection of Riley Road and Stone Bridge Pkwy, in Waller County, Texas.

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
Riley Road	Riley Road (Houston) SPV, LLC	Privately Owned	1,500 connections

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**.

N/A

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.

N/A

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**.

Will be approved prior to construction.

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.

The buffer zone will extend beyond the plant boundary into the proposed detention pond.

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*.

N/A

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.

N/A

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.

N/A

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.

N/A

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 **N/A** or TXRNE **N/A**

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:

N/A

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.

N/A

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.

N/A

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.

N/A

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.
Attachment M

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.

N/A

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.

N/A

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.

N/A

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). **W*ater 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	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids, mg/l	N/A	N/A	N/A	N/A	N/A
Ammonia Nitrogen, mg/l	N/A	N/A	N/A	N/A	N/A
Nitrate Nitrogen, mg/l	N/A	N/A	N/A	N/A	N/A
Total Kjeldahl Nitrogen, mg/l	N/A	N/A	N/A	N/A	N/A
Sulfate, mg/l	N/A	N/A	N/A	N/A	N/A
Chloride, mg/l	N/A	N/A	N/A	N/A	N/A
Total Phosphorus, mg/l	N/A	N/A	N/A	N/A	N/A
pH, standard units	N/A	N/A	N/A	N/A	N/A
Dissolved Oxygen*, mg/l	N/A	N/A	N/A	N/A	N/A
Chlorine Residual, mg/l	N/A	N/A	N/A	N/A	N/A
E.coli (CFU/100ml) freshwater	N/A	N/A	N/A	N/A	N/A
Entercocci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity, µmohs/cm, †	N/A	N/A	N/A	N/A	N/A
Oil & Grease, mg/l	N/A	N/A	N/A	N/A	N/A
Alkalinity ($CaCO_3$)*, mg/l	N/A	N/A	N/A	N/A	N/A

*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	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	N/A	N/A	N/A	N/A	N/A
pH, standard units	N/A	N/A	N/A	N/A	N/A
Fluoride, mg/l	N/A	N/A	N/A	N/A	N/A
Aluminum, mg/l	N/A	N/A	N/A	N/A	N/A
Alkalinity ($CaCO_3$), mg/l	N/A	N/A	N/A	N/A	N/A

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: will be selected prior to discharge

Facility Operator's License Classification and Level: will be selected prior to discharge

Facility Operator's License Number: will be selected prior to discharge

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: Click to enter text.

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
Disposal in Landfill	Off-site Third-Party Handler or Preparer	Bulk		Choose an item.	Choose an item.

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): N/A

D. Disposal site

Disposal site name: will be selected prior to discharge

TCEQ permit or registration number: will be selected prior to discharge

County where disposal site is located: will be selected prior to discharge

E. Transportation method

Method of transportation (truck, train, pipe, other): will be selected prior to discharge

Name of the hauler: will be selected prior to discharge

Hauler registration number: will be selected prior to discharge

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: N/A
- USDA Natural Resources Conservation Service Soil Map:

  Attachment: N/A
- Federal Emergency Management Map:

  Attachment: N/A
- Site map:

  Attachment: N/A

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: N/A

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:

N/A

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: N/A

Total Kjeldahl Nitrogen, mg/kg: N/A

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

Phosphorus, mg/kg: N/A

Potassium, mg/kg: N/A

pH, standard units: N/A

Ammonia Nitrogen mg/kg: N/A

Arsenic: N/A

Cadmium: N/A

Chromium: N/A

Copper: N/A

Lead: N/A

Mercury: N/A

Molybdenum: N/A

Nickel: N/A

Selenium: N/A

Zinc: N/A

Total PCBs: N/A

Provide the following information:

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

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

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

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.

N/A

D. Site development plan

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

N/A

Attach the following documents to the application.

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

  Attachment: **N/A**

- Copy of the closure plan

  Attachment: **N/A**

- Copy of deed recordation for the site

  Attachment: **N/A**

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

  Attachment: **N/A**

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

  Attachment: **N/A**

- Procedures to prevent the occurrence of nuisance conditions

  Attachment: **N/A**

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: N/A

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:

N/A

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:

N/A

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: N/A

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: Click to enter text.

Title: Click to enter text.

Signature: _____

Date: _____

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.

See Attachment N - Justification

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: **N/A**

If yes, attach correspondence from the city.

Attachment: N/A

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: N/A

2. *Utility CCN areas*

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

☐ Yes ☒ No

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

Attachment: **N/A**

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

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: Attachment P

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: Attachment P

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): **N/A**

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

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

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

N/A

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	0.45	325

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
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	0.45	---
AVERAGE BOD_5 from all sources	---	325

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: 4.0

Other: N/A

B. Interim II 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: 4.0

Other: N/A

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: 4.0

Other: N/A

D. Disinfection Method

Identify the proposed method of disinfection.

☒ Chlorine: 1.0 mg/l after 4.0 minutes detention time at peak flow

Dechlorination process: N/A

☐ Ultraviolet Light: N/A seconds contact time at peak flow

☐ Other: N/A

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: Attachment L

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.

N/A

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

See Attachment S – Floodplain Map

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: N/A

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

B. Wind rose

Attach a wind rose: Attachment T

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)**: N/A

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)**: N/A

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

Attach a solids management plan to the application.

Attachment: Attachment M

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: proposed detention pond which will be routed to Birch Creek

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☒ Lake or Pond

Surface area, in acres: 13

Average depth of the entire water body, in feet: 6

Average depth of water body within a 500-foot radius of discharge point, in feet: 6

☐ 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.

Birch 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.

N/A

E. Normal dry weather characteristics

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

Detention pond not yet constructed. Birch Creek had clear water with low velocity flow.

Date and time of observation: 8/14/2024 @ 9:53 am

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
☐ Contact recreation
☐ Irrigation withdrawal
☒ Non-contact recreation
☐ Fishing
☐ Navigation
☐ Domestic water supply
☐ Industrial water supply
☐ Park activities
☐ Other(s), specify: Click to enter text.

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

ATTACHMENT L

SUPPLEMENTAL TECHNICAL REPORT

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

SUPPLEMENTAL TECHNICAL REPORT

FOR THE WASTEWATER TREATMENT PLANT

DOMESTIC WASTEWATER PERMIT

FOR

RILEY ROAD (HOUSTON) SPV, LLC.

RILEY ROAD WASTEWATER TREATMENT PLANT

IN

WALLER COUNTY, TEXAS

SEPTEMBER 2024
QE Job No. 29234-0002-01

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Reg. No. F-23290
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337

I. INTRODUCTION

The purpose of this report is to provide additional information pertaining to items in the Domestic Administrative Report and The Domestic Technical Report for the permit application to the Riley Road Wastewater Treatment Facility within Waller County, Texas. This facility will be constructed in three phases. The first two interim phases will treat 0.10 million gallons per day (MGD) and 0.20 MGD, respectively, and the final phase will treat 0.45 MGD.

II. LOCATION INFORMATION

The facility will be located approximately 0.80 miles southeast of the intersection of Riley Road and Stone Bridge Parkway, in Waller County, Texas, 77423. The discharge flows into a detention pond, then to Birch Creek, then to Walnut Creek in Segment No. 1008.

III. TREATMENT UNITS

(For Section 2 of Technical Report 1.0)

The proposed Phase I facility will be constructed with a design flow of 0.1 MGD. A detailed description of the treatment process is presented below:

The proposed Interim I Phase plant will consist of package plant facilities that are designed and constructed to treat 0.10 MGD and operate as a suspended growth activated sludge process in a single-stage nitrification mode. An influent force main flows from the on-site lift station to the headworks passing through a manual bar screen. The influent then mixes with return activated sludge to create mixed liquor and flows through one (1) aeration basin operated in the single-stage nitrification mode to consume organics and breakdown ammonia. From the aeration basin, the mixed liquor flows to the secondary clarifier for clarification. After clarification, the treated effluent flows to the chlorine contact basin for disinfection. The effluent then flows over a weir for flow measurement and into the receiving stream. Additional facilities include blowers, a non-potable water system, a sodium hypochlorite disinfection system, and a stand-by generator. The WAS is pumped to a multi-stage aerobic digester and is then wet hauled to another facility for further processing.

The proposed Interim II Phase plant will consist of package plant facilities that are designed and constructed to treat 0.20 MGD and operate as a suspended growth activated sludge process in a single-stage nitrification mode. This phase includes one (1) existing aeration basin, one (1) existing clarifier, one (1) existing multi-stage aerobic digester, one (1) existing chlorine contact basin, three (3) existing centrifugal blowers, an existing non-potable water system, and an existing chlorine disinfection system. Interim II Phase construction will include one (1) aeration basin, one (1) multi-stage aerobic digester, two (2) centrifugal blowers, a non-potable water system and sodium hypochlorite chemical disinfection system.

The proposed Final Phase plant will consist of permanent plant facilities that are designed and constructed to treat 0.45 MGD and operate as a suspended growth activated sludge process in a single-stage nitrification mode. Final Phase construction includes one (1) elevated headworks with mechanical bar screen and flow splitting weirs, two (2) aeration basins, two (2) secondary clarifiers, two (2) multi-stage aerobic digesters, one (1) chlorine contact basin, four (4) centrifugal blowers, a non-potable water system and sodium hypochlorite chemical disinfection system.

IV. DESIGN CALCULATIONS AND FEATURES
(For Section 2 of Technical Report 1.0 & Section 4 of Technical Report 1.1)

Design calculations are provided as part of this report on the following pages for all phases of construction.

The proposed facilities will be equipped with design features to prevent overflows and bypassing of untreated wastewater. A backup diesel generator will be installed onsite with an automatic transfer switch to provide power to essential equipment in the event of a main power failure. The entire facility will have an automatic telephone dialer that notifies the operator of pump failures, main power failures, and high basin levels. The onsite lift station will maintain a redundant pump to protect against overflows in the event of a pump failure.

INTERIM I PHASE – 0.10 MGD

I. SCOPE

The proposed Interim I phase plant will consist of facilities that are designed and constructed to treat 0.10 MGD and operate as suspended growth activated sludge process in a single-stage nitrification mode. The Interim I Phase construction will include one (1) elevated headworks box with manual bar screen, one (1) aeration basin, one (1) clarifier, one (1) multi-stage aerobic digester, one (1) chlorine contact basin, and two (2) centrifugal blowers.

II. PROPOSED WASTEWATER TREATMENT PLANT DESIGN

A. DESIGN CRITERIA

1. Proposed Effluent Limits.

   a. BOD_5 = 10 mg/l (daily average)

   b. TSS = 15 mg/l (daily average)

   c. NH_3-N = 3 mg/l (daily average)

   d. *E. coli* = 126 CFU

   e. DO = 4 mg/l (weekly grab)

2. Process Criteria. The process criteria are taken from 30 TAC § 217, Design Criteria for Domestic Wastewater Systems.

   a. Maximum Aeration Basin Organic Loading ($lb\ BOD_5/day/1{,}000\ ft^3$) = 35

   b. Maximum Clarifier Surface Loading at Peak Flow ($gal/day/ft^2$) = 1,200

   c. Minimum Clarifier Detention Time (hours) = 1.8

   d. Maximum Clarifier Weir Loading at Peak Flow (gal/day/ft) = 20,000

   e. Minimum Chlorine Contact Detention Time at Peak Flow (minutes) = 20

   f. Mean Cell Residence Time in Aerobic Digester* (days) = 28*

   g. Minimum Air Required for Digester ($scfm/1{,}000\ ft^3$) = 20

*28-day SRT utilized instead of a 40-day SRT for use of a multi-stage digester per EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge."

B. PROPOSED TREATMENT FACILITIES

1. Flow.

a.	Average (Design)	=	1.0Q	=	100,000 gpd	=	69 gpm
b.	Peak (2 hour)	=	4.0Q	=	400,000 gpd	=	278 gpm

2. Influent Composition.

The following influent wastewater compositions are based on wastewater influent analysis.

BOD_5	=	250 mg/L
TSS	=	250 mg/L
NH_3-N	=	40 mg/L

3. Organic Loadings.

BOD_5	=	(0.10 MGD)(8.34)(250 mg/L)	=	209 lbs BOD_5/day
TSS	=	(0.10 MGD)(8.34)(250 mg/L)	=	209 lbs TSS/day
NH_3-N	=	(0.10 MGD)(8.34)(40 mg/L)	=	33 lbs NH_3-N/day

4. Process Equipment.

a. Aeration Basin. The proposed Interim I Phase plant will consist of one (1) proposed aeration basin, sized at 12' wide by 52' long. The average water depth is assumed at 11.5'.

i. Total Required Volume

Required Volume Using Traditional Design Method (30 TAC §217 Guidelines)
(0.10 MGD)(8.34)(250 mg/L)/(35 lb BOD_5/1,000 ft^3)
= 5,957 ft^3

ii. Proposed Volume

1. Proposed Volume – Phase I
(1)(12 ft)(52 ft)(11.5 ft) = 7,176 ft^3

iii. Actual Organic Loading
(209 lb BOD_5/day)/(7,176 ft^3/1,000 ft^3) = 29.1 lb BOD_5/ day/1,000 ft^3

b. Secondary Clarifier. The proposed Interim I Phase plant will consist of one (1) clarifier, sized at 34' diameter to accommodate Phase I and II. The side water depth is 10'.

i. Required Surface Area at Peak Flow
(400,000 gpd)/(1,200 gpd/ ft^2) = 333 ft^2

ii. Proposed Surface Area

1. Proposed Surface Area – Interim I Phase
(π/4)(34 ft)^2 = 908 ft^2

iii. Surface Loading

1. At Design Flow
(100,000 gpd)/(908 ft^2) = 110 gpd/ft^2

2. At Peak Flow
(400,000 gpd)/(908 ft^2) = 441 gpd/ft^2

iv. Proposed Clarifier Weir Length

1. Proposed – Interim I Phase
(π)(34 ft – 2 ft) = 101 ft

v. Proposed Weir Loading at Peak Flow
(400,000 gpd)/(101 ft) = 3,979 gpd/ft

vi. Proposed Clarifier Side Water Depth (to top of grout)

1. Proposed Clarifier Side Water Depth = 10 ft

vii. Hydraulic Detention Times at Peak Flow

1. Proposed Hydraulic Detention Time at Peak Flow – Interim I Phase
(908 ft^2)(10 ft)(7.48 gal/ft^3)/(278 gal/min)
= 244 minutes
= 4.07 hours

c. Aerobic Digesters. The proposed Interim I Phase plant will consist of one (1) proposed multi-stage digester, sized at 12' wide by 52' long. The average water depth is assumed at 11.5'.

Assume one (1) pound of solids produced per pound of BOD_5 applied; solids are 70% volatile organics; 30% of the volatiles are destroyed during digestion; 15,000 mg/l MLSS concentration in the digester on average.

i. Digester Sizing

1. Solids Production
(209 lb BOD_5 /day)/(1 lb solids/1 lb BOD_5) = 209 lb solids/day

2. Digested Solids Production
(209 lb solid/day)(1-(0.3)(0.7)) = 165 lb solids/day

3. Average Solids in Digester
(209 lb solids/day + 165 lb solids/day)/2 = 187 lb solids/day

4. Total Solids in Digester for 28-day SRT*
(187 lb solids/day)(28 days) = 5,236 lb solids

ii. Required Volume
(187 lb solids)(10^6)/((8.34)(15,000 mg/l MLSS in digester)(7.48))

= 5,584 ft^3

iii. Proposed Volume

1. Proposed Volume – Interim I Phase
(12 ft)(52 ft)(11.5 ft) = 7,176 ft^3

*28-day SRT utilized instead of 40-day SRT for use of a multi-stage digester per EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge."

d. Chlorine Contact Basin. The proposed Interim I Phase plant will consist of one (1) proposed chlorine contact basin, sized at 12' wide by 30' long and is sized for Interim I Phase and Interim II Phase. The maximum water depth is assumed to be 9 ft.

i. Required Volume at Peak Flow
(278 gpm)(20 min)/(7.48) = 743 ft^3

ii. Proposed Volume

1. Proposed Volume – Interim I Phase
(12 ft)(30 ft)(9.0 ft) = 3,240 ft^3

iii. Actual Detention Time at Peak Flow
(3,240 ft^3)(7.48)/(278 gpm) = 87.2 minutes

e. Air Requirements.

i. The proposed Interim I Phase plant will utilize coarse bubble aeration.

1. Air Required for Treatment

$$\frac{(1.2)(250\ mg/l\ BOD_5) + (4.3)(40\ mg/l\ NH_3\text{-}N)}{(250\ mg/l\ BOD_5)} = 1.9\ lb\ O_2/lb\ BOD_5$$

* 2.2 lb O_2/lb BOD_5 used instead per TCEQ minimum oxygen requirement for systems intended to nitrify.

2. Coarse Bubble Requirements

$$\frac{(250\ mg/l\ BOD_5)(8.34)(0.10\ MGD)(2.2\ lb\ O_2/\ lb\ BOD_5)(1.42)^{**}}{(0.0507^{*})(0.23)(0.075)(1440)} = 517\ scfm$$

* TCEQ Wastewater Oxygen Transfer Efficiency for Coarse Bubble aeration (0.65%/ft x (12) ft of submergence)
** TCEQ Chapter 217 Table F.5 Submergence Correction Factor

ii. Aerobic Digester
$(7{,}176\ ft^3)(20\ scfm/1000\ ft^3) = 144\ scfm$

iii. Chlorine Contact Basin
$(3{,}240\ ft^3)(20\ scfm/1000\ ft^3) = 65\ scfm$

iv. Miscellaneous Air Lifts
$(2)(50\ scfm) = 100\ scfm$

v. Total Air Requirements (Coarse Bubble)
$517\ scfm + 144\ scfm + 65\ scfm + 100\ scfm = 826\ scfm$

f. Blower Capacities. The proposed Interim I Phase plant will include two (2) proposed centrifugal blowers. The capacity is calculated at 5.5 psig discharge pressure at 100°F, 80% RH, and 14.64 psia inlet conditions.

i. Proposed Blower Capacity – Interim I Phase
$(2)(1{,}000\ scfm) = 2{,}000\ scfm$

ii. Firm Blower Capacity with Largest Unit out of Service
$(1)(1{,}000\ scfm) = 1{,}000\ scfm$

g. Bleach Equipment.

i. Dosage Capacity – Calculations are for 10% trade strength bleach (NaOCl) with a specific gravity of 1.159, 9% available chlorine by weight, and a density of 9.7 pounds per gallon.

1. Chlorine Dosage Rate = 8 mg/l

2. NaOCl Solution Feed Rate at Average Daily Flow

$$\frac{(8\ mg/l)(8.34)(0.1\ MGD)}{((9\%)/1.159)(9.7\ lbs/gal)} = 9\ gal/day$$

3. NaOCl Solution Feed Rate at Peak Daily Flow

$$\frac{(8\ mg/l)(8.34)(0.4\ MGD)}{((9\%)/1.159)(9.7\ lbs/gal)} = 35\ gal/day$$

ii. Maximum Bleach Storage
(Covered Storage)
(15 days)(9 gal/day) = 135 gal

iii. Proposed Bleach Storage
(1)(125 gal) = 125 gal

One (1) 125-gallon bulk storage tank will be provided.

INTERIM II PHASE – 0.20 MGD

I. SCOPE

The proposed Interim II Phase plant will consist of facilities that are designed and constructed to treat 0.20 MGD and operate as suspended growth activated sludge process in a single-stage nitrification mode. Interim II Phase construction will include one (1) aeration basin, one (1) multi-stage aerobic digester, one (1) centrifugal blower, a non-potable water system and a sodium hypochlorite chemical disinfection system.

II. PROPOSED WASTEWATER TREATMENT PLANT DESIGN

A. DESIGN CRITERIA

1. Proposed Effluent Limits.

   a. BOD_5 = 10 mg/l (daily average)

   b. TSS = 15 mg/l (daily average)

   c. NH_3-N = 3 mg/l (daily average)

   d. *E. coli* = 126 CFU

   e. DO = 4 mg/l (weekly grab)

2. Process Criteria. The process criteria are taken from 30 TAC § 217, Design Criteria for Domestic Wastewater Systems.

   a. Maximum Aeration Basin Organic Loading ($lb\ BOD_5/day/1{,}000\ ft^3$) = 35

   b. Maximum Clarifier Surface Loading at Peak Flow ($gal/day/ft^2$) = 1,200

   c. Minimum Clarifier Detention Time (hours) = 1.8

   d. Maximum Clarifier Weir Loading at Peak Flow (gal/day/ft) = 20,000

   e. Minimum Chlorine Contact Detention Time at Peak Flow (minutes) = 20

   f. Mean Cell Residence Time in Aerobic Digester* (days) = 28*

g. Minimum Air Required for Digester
(scfm/1,000 ft^3) = 20

*28-day SRT utilized instead of a 40-day SRT for use of a multi-stage digester per EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge."

B. PROPOSED TREATMENT FACILITIES

1. Flow.

a. Average (Design) = 1.0Q = 200,000 gpd = 139 gpm

b. Peak (2 hour) = 4.0Q = 800,000 gpd = 556 gpm

2. Influent Composition

The following influent wastewater compositions are based on wastewater influent analysis.

BOD_5 = 250 mg/L

TSS = 250 mg/L

NH_3-N = 40 mg/L

3. Organic Loadings.

BOD_5 = (0.20 MGD)(8.34)(250 mg/L) = 417 lbs BOD_5/day

TSS = (0.20 MGD)(8.34)(250 mg/L) = 417 lbs TSS/day

NH_3-N = (0.20 MGD)(8.34)(40 mg/L) = 67 lbs NH_3-N/day

4. Process Equipment.

a. Aeration Basin. The proposed Interim II Phase plant will consist of one (1) existing aeration basin and one (1) proposed aeration basin, sized at 12' wide by 52' long. The average water depth is assumed at 11.5'.

i. Total Required Volume

Required Volume Using Traditional Design Method (30 TAC §217 Guidelines)
(0.20 MGD)(8.34)(250 mg/L)/(35 lb BOD_5/1,000 ft^3)
= 11,914 ft^3

ii. Proposed Volume

1. Existing Volume – Interim I Phase
(1)(12 ft)(52 ft)(11.5 ft) = 7,176 ft^3

2. Proposed Volume – Interim II Phase
(1)(12 ft)(52 ft)(11.5 ft) = 7,176 ft^3

3. Total Volume = 14,352 ft^3

iii. Actual Organic Loading
(417 lb BOD_5/day)/(14,352 ft^3/1,000 ft^3) = 29.1 lb BOD_5/ day/1,000 ft^3

b. Secondary Clarifier. The proposed Interim II Phase plant will consist of one (1) existing clarifier sized at 34' diameter constructed in Interim I Phase. The side water depth is 10'.

i. Required Surface Area at Peak Flow
(400,000 gpd)/(1,200 gpd/ ft^2) = 667 ft^2

ii. Existing Surface Area = 908 ft^2

iii. Existing Surface Loading

1. At Design Flow
(100,000 gpd)/(908 ft^2) = 110 gpd/ft^2

2. At Peak Flow
(400,000 gpd)/(908 ft^2) = 441 gpd/ft^2

iv. Existing Clarifier Weir Length
(π)(34 ft – 2 ft) = 101 ft

v. Existing Weir Loading at Peak Flow
(400,000 gpd)/(101 ft) = 3,979 gpd/ft

vi. Existing Clarifier Side Water Depth (to top of grout)

1. Proposed Clarifier Side Water Depth = 10 ft

vii. Hydraulic Detention Times at Peak Flow

1. Proposed Hydraulic Detention Time at Peak Flow – Interim II Phase
(1,152 ft^2)(10 ft)(7.48 gal/ft^3)/(556 gal/min)
= 122 minutes
= 2.04 hours

c. Aerobic Digesters. The proposed Interim II Phase plant will consist of one (1) existing multi-stage digester and one (1) proposed multi-stage digester, both sized at 12' wide by 52' long. The average water depth for both digesters is assumed at 11.5'.

Assume one (1) pound of solids produced per pound of BOD_5 applied; solids are 70% volatile organics; 30% of the volatiles are destroyed during digestion; 15,000 mg/l MLSS concentration in the digester on average.

i. Digester Sizing

1. Solids Production
(417 lb BOD_5 /day)/(1 lb solids/1 lb BOD_5) = 417 lb solids/day

2. Digested Solids Production
(417 lb solid/day)(1-(0.3)(0.7)) = 329 lb solids/day

3. Average Solids in Digester
(329 lb solids/day + 417 lb solids/day)/2 = 373 lb solids/day

4. Total Solids in Digester for 28-day SRT*
(373 lb solids/day)(28 days) = 10,444 lb solids

ii. Required Volume
(10,444 lb solids)(10^6)/((8.34)(15,000 mg/l MLSS in digester)(7.48))

= 11,161 ft^3

iii. Proposed Volume

1. Existing Volume – Interim I Phase
(1)(12 ft)(52 ft)(11.5 ft) = 7,176 ft^3

2. Proposed Volume – Interim II Phase
(1)(12 ft)(52 ft)(11.5 ft) = 7,176 ft^3

3. Total Volume = 14,352 ft^3

*28-day SRT utilized instead of 40-day SRT for use of a multi-stage digester per EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge."

d. Chlorine Contact Basin. The proposed Interim II Phase plant will consist of one (1) existing chlorine contact basin, sized at 12' wide by 36' long. The maximum water depth is assumed to be 9 ft.

i. Required Volume at Peak Flow
(556 gpm)(20 min)/(7.48) = 1,485 ft^3

ii. Existing Volume
(12 ft)(30 ft)(9.0 ft) = 3,240 ft^3

iii. Actual Detention Time at Peak Flow
(3,240 ft^3)(7.48)/(556 gpm) = 43.6 minutes

e. Air Requirements.

i. The proposed Interim II Phase plant will utilize coarse bubble aeration.

1. Air Required for Treatment

$$\frac{(1.2)(250 \text{ mg/l } BOD_5) + (4.3)(40 \text{ mg/l } NH_3\text{-N})}{(250 \text{ mg/l } BOD_5)} = 1.9 \text{ lb } O_2/\text{lb } BOD_5$$

* 2.2 lb O_2/lb BOD_5 used instead per TCEQ minimum oxygen requirement for systems intended to nitrify.

2. Coarse Bubble Requirements

$$\frac{(250 \text{ mg/l } BOD_5)(8.34)(0.20 \text{ MGD})(2.2 \text{ lb } O_2/\text{ lb } BOD_5)(1.42)^{**}}{(0.0507^{*})(0.23)(0.075)(1440)} = 1{,}034 \text{ scfm}$$

* TCEQ Wastewater Oxygen Transfer Efficiency for Coarse Bubble aeration (0.65%/ft x (12) ft of submergence)
** TCEQ Chapter 217 Table F.5 Submergence Correction Factor

ii. Aerobic Digester
(14,352 ft^3)(20 scfm/1000 ft^3) = 287 scfm

iii. Chlorine Contact Basin
(3,240 ft^3)(20 scfm/1000 ft^3) = 65 scfm

iv. Miscellaneous Air Lifts
(3)(50 scfm) = 150 scfm

v. Total Air Requirements (Coarse Bubble)
1,034 scfm + 287 scfm + 65 scfm + 150 scfm = 1,536 scfm

f. Blower Capacities. The proposed Phase II plant will include two (2) existing centrifugal blowers and one (1) proposed centrifugal blower. The capacity is calculated at 5.5 psig discharge pressure at 100°F, 80% RH, and 14.64 psia inlet.

i. Existing Blower Capacity – Interim I Phase
(2)(1,000 scfm) = 2,000 scfm

ii. Proposed Blower Capacity – Interim II Phase
(1)(1,000 scfm) = 1,000 scfm

iii. Total Blower Capacity = 3,000 scfm

iv. Firm Blower Capacity with Largest Unit out of Service
(2)(1,000 scfm) = 2,000 scfm

g. Bleach Equipment.

i. Dosage Capacity – Calculations are for 10% trade strength bleach (NaOCl) with a specific gravity of 1.159, 9% available chlorine by weight, and a density of 9.7 pounds per gallon.

1. Chlorine Dosage Rate = 8 mg/l

2. NaOCl Solution Feed Rate at Average Daily Flow

$$\frac{(8\ mg/l)(8.34)(0.2\ MGD)}{((9\%)/1.159)(9.7\ lbs/gal)} = 18\ gal/day$$

3. NaOCl Solution Feed Rate at Peak Daily Flow

$$\frac{(8\ mg/l)(8.34)(0.8\ MGD)}{((9\%)/1.159)(9.7\ lbs/gal)} = 71\ gal/day$$

ii. Maximum Bleach Storage
(Covered Storage)
(15 days)(18 gal/day) = 266 gal

iii. Existing Bleach Storage
(1)(125 gal) = 125 gal

iv. Proposed Bleach Storage
(1)(125 gal) = 125 gal

v. Total Bleach Storage
125 gal + 125 gal = 250 gal

FINAL PHASE III– 0.45 MGD

I. SCOPE

The proposed Phase III will consist of facilities that are designed and constructed to treat 0.45 MGD and operate as suspended growth activated sludge process in a single-stage nitrification mode. Final Phase construction includes one (1) elevated headworks with mechanical bar screen, two (2) aeration basins, two (2) secondary clarifiers, two (2) multi-stage aerobic digesters, one (1) chlorine contact basin, three (3) centrifugal blowers, a non-potable water system and a sodium hypochlorite chemical disinfection system.

II. PROPOSED WASTEWATER TREATMENT PLANT DESIGN

A. DESIGN CRITERIA

1. Proposed Effluent Limits.

   a. BOD_5 = 10 mg/l (daily average)

   b. TSS = 15 mg/l (daily average)

   c. NH_3-N = 3 mg/l (daily average)

   d. *E. coli* = 126 CFU

   e. DO = 4 mg/l (weekly grab)

2. Process Criteria. The process criteria are taken from 30 TAC § 217, Design Criteria for Domestic Wastewater Systems.

   a. Maximum Aeration Basin Organic Loading (lb BOD_5/day/1,000 ft^3) = 35

   b. Maximum Clarifier Surface Loading at Peak Flow (gal/day/ft^2) = 1,200

   c. Minimum Clarifier Detention Time (hours) = 1.8

   d. Maximum Clarifier Weir Loading at Peak Flow (gal/day/ft) = 20,000

   e. Minimum Chlorine Contact Detention Time at Peak Flow (minutes) = 20

   f. Mean Cell Residence Time in Aerobic Digester* (days) = 28*

g. Minimum Air Required for Digester
(scfm/1,000 ft^3) = 20

*28-day SRT utilized instead of a 40-day SRT for use of a multi-stage digester per EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge."

B. PROPOSED TREATMENT FACILITIES

1. Flow.

a. Average (Design) = 1.0Q = 450,000 gpd = 313 gpm

b. Peak (2 hour) = 4.0Q = 1,800,000 gpd = 1,250 gpm

2. Influent Composition

The following influent wastewater compositions are based on wastewater influent analysis.

BOD_5 = 325 mg/L

TSS = 300 mg/L

NH_3-N = 60 mg/L

3. Organic Loadings.

BOD_5 = (0.45 MGD)(8.34)(325 mg/L) = 1,220 lbs BOD_5/day

TSS = (0.45 MGD)(8.34)(300 mg/L) = 1,126 lbs TSS/day

NH_3-N = (0.45 MGD)(8.34)(60 mg/L) = 225 lbs NH_3-N/day

4. Process Equipment.

a. Elevated Headworks Screening. The proposed Final Phase plant will consist of the construction of an elevated headworks with a mechanical bar screen capable of screening a peak flow of 1.8 MGD.

b. Aeration Basin. The proposed Final Phase plant will consist of two (2) proposed aeration basins. The average water depth is assumed at 16.0'.

i. Total Required Volume

Required Volume Using Traditional Design Method (30 TAC § 217 Guidelines)
(0.45 MGD)(8.34)(1,220 mg/L)/(35 lb BOD_5/1,000 ft^3)
= 34,849 ft^3

ii. Proposed Volume
(2)(16 ft)(34 ft)(44 ft) = 47,872 ft^3

iii. Actual Organic Loading
(1,220 lb BOD_5/day)/(47,872 ft^3/1,000 ft^3) = 25.5 lb BOD_5/ day/1,000 ft^3

c. Secondary Clarifier. The proposed Final Phase plant will consist of two (2) proposed clarifiers, sized at 34' diameter. The side water depth is 14.5'.

i. Required Surface Area at Peak Flow
(1,800,000 gpd)/(1,200 gpd/ ft^2) = 1,500 ft^2

ii. Proposed Surface Area
(2)(π/4)(34 ft)^2 = 1,816 ft^2

iii. Surface Loading

1. At Design Flow
(450,000 gpd)/(1,816 ft^2) = 248 gpd/ft^2

2. At Peak Flow
(1,800,000 gpd)/(1,816 ft^2) = 991 gpd/ft^2

iv. Proposed Clarifier Weir Length
(2)(π)(34 ft – 2 ft) = 201 ft

v. Proposed Weir Loading at Peak Flow
(1,800,000 gpd)/(201 ft) = 4,476 gpd/ft

vi. Proposed Clarifier Side Water Depth (to top of grout)

1. Proposed Clarifier Side Water Depth = 14.5 ft

vii. Hydraulic Detention Times at Peak Flow

1. Proposed Hydraulic Detention Time at Peak Flow – Final Phase
(1,816 ft^2)(14.5 ft)(7.48 gal/ft^3)/(1,499 gal/min)
= 131 minutes
= 2.19 hours

d. Aerobic Digesters. The proposed Final Phase plant will consist of two (2) proposed multi-stage digesters sized at 36' wide by 36' long. The average water depth is assumed at 16'.

Assume one (1) pound of solids produced per pound of BOD_5 applied; solids are 70% volatile organics; 30% of the volatiles are destroyed during digestion; 15,000 mg/l MLSS concentration in the digester on average.

i. Digester Sizing

1. Solids Production
(1,220 lb BOD_5 /day)/(1 lb solids/1 lb BOD_5) = 1,220 lb solids/day

2. Digested Solids Production
(1,220 lb solid/day)(1-(0.3)(0.7)) = 964 lb solids/day

3. Average Solids in Digester
(964 lb solids/day + 1,220 lb solids/day)/2 = 1,092 lb solids/day

4. Total Solids in Digester for 28-day SRT*
(1,092 lb solids/day)(28 days) = 30,576 lb solids

ii. Required Volume
(30,576 lb solids)(10^6)/((8.34)(15,000 mg/l MLSS in digester)(7.48))

= 32,665 ft^3

iii. Proposed Volume
(2)(16 ft)(36 ft)(36 ft) = 41,472 ft^3

*28-day SRT utilized instead of 40-day SRT for use of a multi-stage digester per EPA publication "Control of Pathogens and Vector Attraction in Sewage Sludge."

e. Chlorine Contact Basin. The proposed Final Phase plant will consist of one (1) proposed chlorine contact basin, all sized at 12' wide by 68' long. The maximum water depth is assumed to be 10 ft.

i. Required Volume at Peak Flow
(1,250 gpm)(20 min)/(7.48) = 3,342 ft^3

ii. Proposed Volume
(10 ft)(68 ft)(12 ft) = 8,160 ft^3

iii. Actual Detention Time at Peak Flow
(8,160 ft^3)(7.48)/(1,250 gpm) = 48.8 minutes

f. Air Requirements.

i. The proposed Final Phase plant will utilize coarse bubble aeration.

1. Air Required for Treatment

$$\frac{(1.2)(325 \text{ mg/l } BOD_5) + (4.3)(60 \text{ mg/l } NH_3\text{-}N)}{(325 \text{ mg/l } BOD_5)} = 2.0 \text{ lb } O_2/\text{lb } BOD_5*$$

* 2.2 lb O_2/lb BOD_5 used instead per TCEQ minimum oxygen requirement for systems intended to nitrify.

2. Coarse Bubble Requirements

$$\frac{(325\ mg/l\ BOD_5)(8.34)(0.45\ MGD)(2.2\ lb\ O_2/\ lb\ BOD_5)(1.00^{**})}{(0.0508^{*})(0.23)(0.075)(1440)} = 1{,}939\ scfm$$

* TCEQ Wastewater Oxygen Transfer Efficiency for Coarse Bubble aeration (0.65%/ft x (12) ft of submergence)

** TCEQ Chapter 217 Table F.5 Submergence Correction Factor

ii. Aerobic Digester
(41,472 ft^3)(20 scfm/1000 ft^3) = 829 scfm

iii. Chlorine Contact Basin
(8,160 ft^3)(20 scfm/1000 ft^3) = 163 scfm

iv. Miscellaneous Air Lifts
(3)(50 scfm) = 150 scfm

v. Total Air Requirements (Coarse Bubble)
1,939 scfm + 829 scfm + 163 scfm + 150 scfm = 3,081 scfm

g. Blower Capacities. The proposed Final Phase plant will include three (3) proposed centrifugal blowers. The capacity is calculated at 5.5 psig discharge pressure at 100°F, 80% RH, and 14.64 psia inlet conditions.

i. Proposed Blower Capacity – Final Phase
(3)(2,000 scfm) = 6,000 scfm

ii. Firm Blower Capacity with Largest Unit out of Service
(2)(2,000 scfm) = 4,000 scfm

h. Bleach Equipment.

i. Dosage Capacity – Calculations are for 10% trade strength bleach (NaOCl) with a specific gravity of 1.159, 9% available chlorine by weight, and a density of 9.7 pounds per gallon.

1. Chlorine Dosage Rate = 8 mg/l

2. NaOCl Solution Feed Rate at Average Daily Flow

$$\frac{(8\ mg/l)(8.34)(0.45\ MGD)}{((9\%)/1.159)(9.7\ lbs/gal)} = 40\ gal/day$$

3. NaOCl Solution Feed Rate at Peak Daily Flow

$$\frac{(8\ mg/l)(8.34)(1.8\ MGD)}{((9\%)/1.159)(9.7\ lbs/gal)} = 160\ gal/day$$

ii. Maximum Bleach Storage
(Covered Storage)
(15 days)(40 gal/day) = 600 gal

iii. Proposed Bleach Storage
(1)(550 gal) = 550 gal

A total of one (1) 550-gallon bulk storage tank will be provided.

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

The National Map US Topo

MAGNOLIA WEST QUADRANGLE
TEXAS
7.5-MINUTE SERIES

PERMITTEE PROPERTY BOUNDARY

PROPOSED DETENTION POND

ONE MILE RADIUS

PROPOSED OUTFALL (30.22931, -95.838456)

PROPOSED WASTEWATER TREATMENT FACILITY (~2.5 ACRES)

APPROXIMATE 3-MILES DOWNSTREAM

Plant Location: Approximately 0.80 miles southeast of the intersection of Riley Road and Stone Bridge Parkway, in Waller County, TX 77484.

Discharge Route: From the plant to a detention pond, then to Birch Creek, then to Walnut Creek, then to Spring Creek in Segment No. 1008 of the San Jacinto River Basin

USGS MAP

RILEY ROAD (HOUSTON) SPV, LLC

RILEY ROAD WASTEWATER TREATMENT FACILITY

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

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

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

Wetlands.....FWS National Wetlands Inventory 1993

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

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

SCALE 1:24 000

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

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

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

TEXAS
QUADRANGLE LOCATION

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

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

MAGNOLIA WEST, TX
2019

76430163971460
NSN. 7643016397146
NGA REF NO. USGSX24K27250

ATTACHMENT M

SLUDGE MANAGEMENT PLAN

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

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SLUDGE MANAGEMENT PLAN
RILEY ROAD (HOUSTON) SPV, LLC
TPDES PERMIT

INTRODUCTION

This sludge management and disposal plan is being submitted as an attachment to the TPDES permit application for Riley Road (Houston) SPV, LLC. The Riley Road Wastewater Treatment Plant will be a 0.10 million gallons per day (MGD) single stage nitrification activated sludge plant, with proposed future phases of 0.20 MGD and 0.45 MGD.

DIMENSIONS AND CAPACITIES

Excess solids generated from the activated plant will be wasted to an aerobic digester for further treatment. The digester will have a volume of 7,176 ft^3 in the Interim I phase. The Interim II and Final phases will have digester volumes of 14,352 ft^3 and 41,472 ft^3, respectively. The dewatered stabilized sludge will then be hauled away to a TCEQ permitted land application site for disposal by a licensed sludge hauler.

SOLIDS GENERATION

Solids to be wasted from the activated sludge process are based on 1.0 pounds of TSS produced per pound of BOD applied. The design influent BOD concentration for the Interim I and Interim II phases is 250 mg/l. The design influent BOD concentration for the Final phase is 325 mg/l. Following is the amount of solids generated by the wastewater treatment plant at design flow and at 75 percent, 50 percent and 25 percent of design flow:

Interim I Phase – 0.10 MGD		
Percent of Design Flow	Flow (MGD)	Solids Generated (lb/day)
25	0.03	52
50	0.05	104
75	0.08	156
100	0.10	209

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Interim II Phase – 0.20 MGD		
Percent of Design Flow	Flow (MGD)	Solids Generated (lb/day)
25	0.05	104
50	0.10	209
75	0.15	313
100	0.20	417

Final Phase – 0.45 MGD		
Percent of Design Flow	Flow (MGD)	Solids Generated (lb/day)
25	0.11	305
50	0.23	610
75	0.34	915
100	0.45	1,220

OPERATING PARAMETERS

The single stage nitrification activated sludge process works best between mixed liquor suspended solids (MLSS) concentrations of 2,000 – 6,000 mg/l. The operator will determine the mixed liquor concentration that produces the highest quality effluent taking into consideration factors such as hydraulic and organic loading, available air capacity, and solids handling. Field testing and laboratory analysis will be done to monitor the MLSS and maintain the appropriate solids concentration.

SOLIDS REMOVAL PROCEDURE

Laboratory analysis and field testing will be conducted to determine the solids concentration in the aeration basin. To maintain an appropriate solids inventory, the amount of solids to be wasted per day is equal to the amount of solids generated per day. This amount is stated in the SOLIDS GENERATION section of this plan. Excess solids will then be wasted from the bottom of the clarifier directly to the aerobic digester to maintain the appropriate solids concentration in the aeration basin.

SOLIDS REMOVAL SCHEDULE

It is assumed that 70% of the solids wasted to the digester are volatile solids and the volatile solids reduction is 30%. For every pound of solids wasted to the digester, 0.79 pounds of solids will need to be disposed of by land application. In addition, it is assumed that the solids can be thickened to 15,000 mg/l in the digester.

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At this concentration, a 7,176 ft^3 digester will hold 6,715 pounds of solids in the Interim I phase. In the Interim II phase, a 14,352 ft^3 digester will hold 13,430 pounds of solids. In the Final phase, a 41,472 ft^3 digester will hold 38,807 pounds of solids. The capacity of the digester divided by the pounds per day of solids to be disposed of will give the sludge hauling schedule.

Interim I Phase – 0.10 MGD		
Percent of Design Flow	Solids Disposed (lb/day)	Hauling Schedule (days)
25	41	163
50	82	82
75	124	54
100	165	41

Interim II Phase – 0.20 MGD		
Percent of Design Flow	Solids Disposed (lb/day)	Hauling Schedule (days)
25	82	163
50	165	82
75	247	54
100	329	41

Final Phase – 0.45 MGD		
Percent of Design Flow	Solids Disposed (lb/day)	Hauling Schedule (days)
25	241	161
50	482	81
75	723	54
100	964	40

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ULTIMATE SLUDGE DISPOSAL

Sludge will be liquid hauled from the plant by a TCEQ registered sludge transporter to a TCEQ permitted land application site or another wastewater treatment plant.

A manifest will be issued with each load of sludge that is hauled from the plant. The following information will be on the manifest to document ultimate disposal of the sludge:

1. Date of sludge hauling
2. Generator Name
3. Generator's address
4. Volume of sludge hauled
5. Name of transporter
6. TCEQ transporter registration number
7. Driver's name
8. Name of disposal site
9. TCEQ Site permit number
10. Date of disposal
11. Volume of sludge disposed

This information, along with laboratory and field data will be used to determine the amount of solids disposed of in dry weight form.

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Water Balance Not Required

ATTACHMENT I

FLOW SCHEMATICS

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

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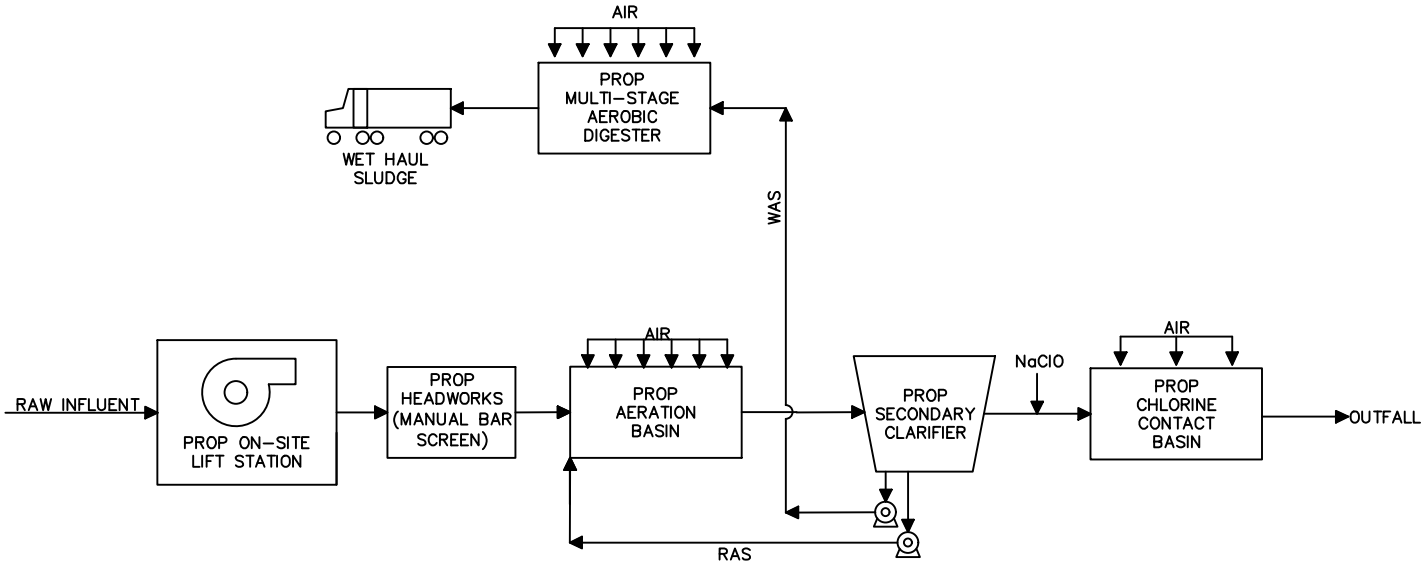

LEGEND

	Air Lift
	Mechanical Pump
RAS	Return Activated Sludge
WAS	Waste Activated Sludge
NaClO	Sodium Hypochlorite

FLOW SCHEMATIC
RILEY ROAD
WASTEWATER TREATMENT PLANT
INTERIM I PHASE – 0.10 MGD
SEPTEMBER 2024

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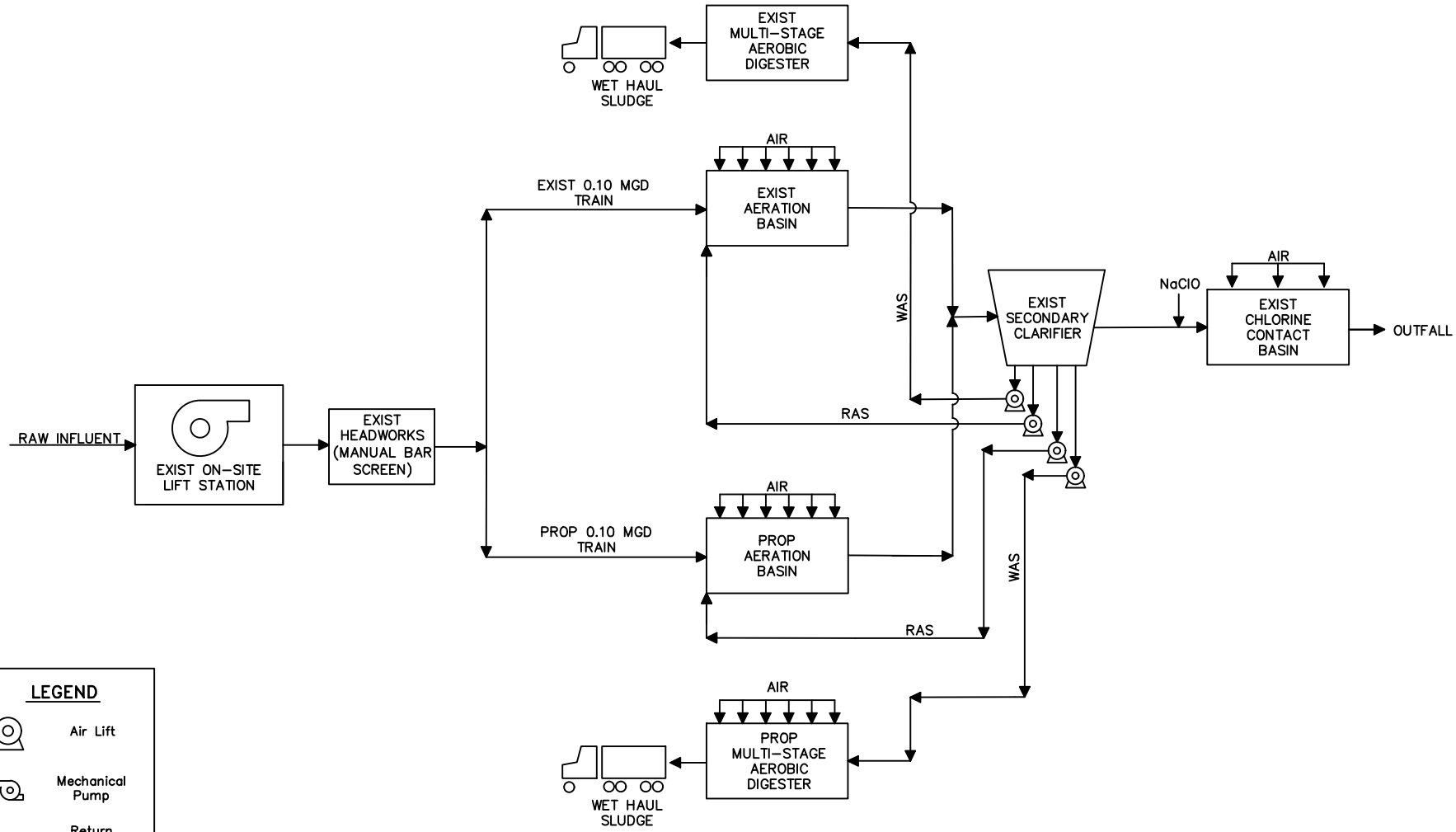

LEGEND

	Air Lift
	Mechanical Pump
RAS	Return Activated Sludge
WAS	Waste Activated Sludge
NaClO	Sodium Hypochlorite

FLOW SCHEMATIC
RILEY ROAD
WASTEWATER TREATMENT PLANT
INTERIM II PHASE – 0.20 MGD
SEPTEMBER 2024

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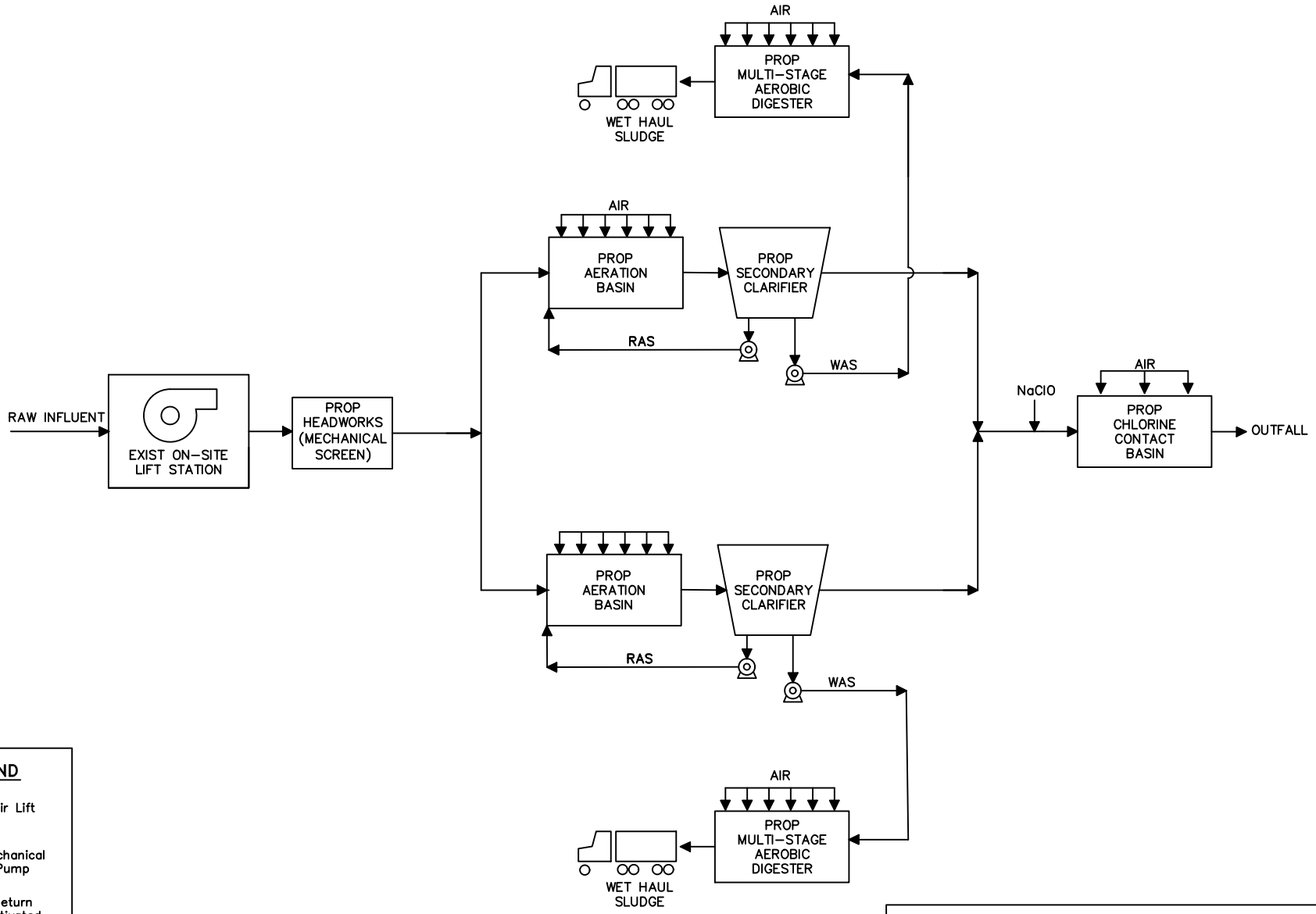

FLOW SCHEMATIC
RILEY ROAD
WASTEWATER TREATMENT PLANT
FINAL PHASE – 0.45 MGD
SEPTEMBER 2024

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ATTACHMENT J

SERVICE AREA MAP

RILEY ROAD (HOUSTON) SPV, LLC
RILEY ROAD WASTEWATER TREATMENT PLANT

SEPTEMBER 2024

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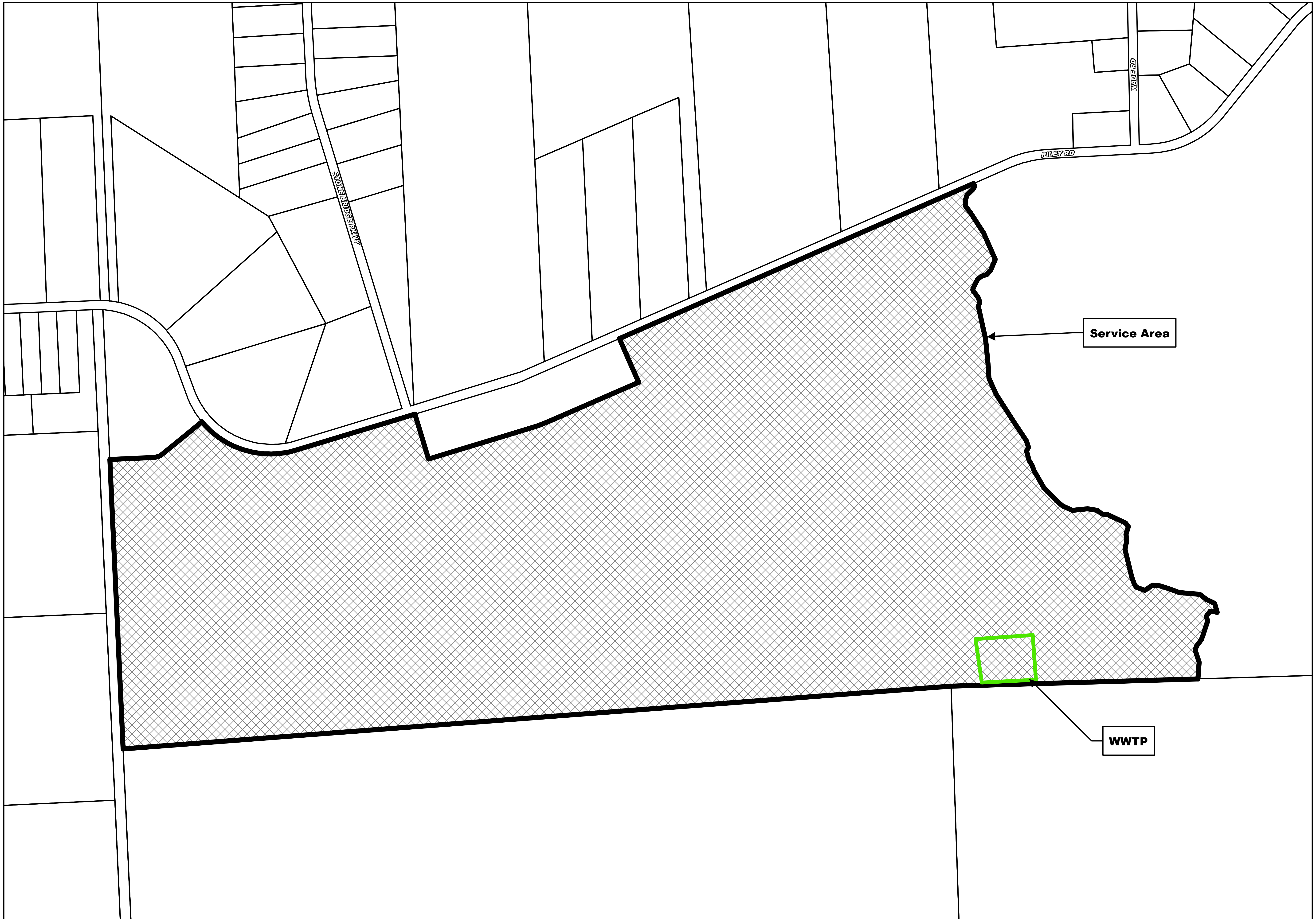

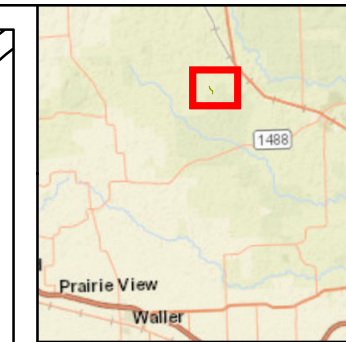

VICINITY MAP
1 INCH = 10 MILES

LEGEND

- WWTP
- Service Area
- WCAD Parcels

SERVICE AREA EXHIBIT

Riley Road Tract
WALLER COUNTY, TEXAS

N W E S

0 600

1 INCH : 600 FEET

IMAGERY PROVIDED BY NEARMAP

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Path: V:\Practice Workspace\Corporate Services\GIS\Projects\0_Individuals\J_Nguyen\Riley Road\Service_Area_Map_11x17.mxd Project Number: 29234-0002-01.100 Date: 7/16/2024 User Name: ada1

Rachel Ellis

From: Jonathan Nguyen <jnguyen@quiddity.com>
Sent: Tuesday, October 8, 2024 10:23 AM
To: Rachel Ellis
Subject: Re: Application for New Permit No. WQ0016634001-Riley Road (Houston) Spv, LLC - Notice of Deficiency Letter
Attachments: Riley Road Spanish NORI.docx; wq0016634001-nod1.pdf

Good morning Rachel,

Attached is the Spanish NORI for this application. After review item number 2 in the NOD, we agree that the zip code is 77484, not 77363. The NORI statement in the NOD is also good to go once the discharge route is filled in. A hard copy of the application is being sent today. I will let you know the status as soon as I receive the tracking number.

Let me know if you have any additional questions for this application.

Thank you!

Jonathan Nguyen
Permitting Specialist

QUIDDITY

jnguyen@quiddity.com

(512) 685-5156

3100 Alvin Devane Boulevard, Suite 150 , Austin , Texas , 78741 , United States

www.quiddity.com

From: Rachel Ellis <Rachel.Ellis@tceq.texas.gov>
Sent: Monday, October 7, 2024 1:16 PM
To: Jonathan Nguyen <jnguyen@quiddity.com>
Subject: Application for New Permit No. WQ0016634001-Riley Road (Houston) Spv, LLC - Notice of Deficiency Letter

Dear Mr. Nguyen,

The attached Notice of Deficiency letter sent on October 7, 2024, requests additional information needed to declare the application administratively complete. Please send the complete response to my attention by October 21, 2024.

Thank you,

Rachel Ellis
Texas Commission on Environmental Quality
Water Quality Division
Application Review & Processing Team
Rachel.Ellis@tceq.texas.gov