



# 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

*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.*

Austin Habitat for the Good, LLC proposes to operate the Brandywine wastewater treatment plant, an activated sludge process plant operated in the extended aeration mode. The facility will be located at 0.76 miles southwest of the intersection of Caldwell Lane and River Timber Drive, in Travis County, Texas 78617.

This application is for a new application to discharge at a daily average flow of 975,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>), total suspended solids (TSS), ammonia nitrogen (NH<sub>3</sub>-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, chlorine contact chambers and a dechlorination chamber.





*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.*

Austin Habitat for the Good, LLC propone operar la planta de tratamiento de aguas residuales de Brandywine, una planta de procesamiento de lodos activados que funciona en modo de aireación extendida. La instalación estará ubicada a 0.76 millas al suroeste de la intersección de Caldwell Lane y River Timber Drive, en el condado de Travis, Texas 78617.

Esta solicitud es para una nueva aplicación para descargar un flujo promedio diario de 975,000 galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso de cinco días (CBOD<sub>5</sub>), sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH<sub>3</sub>-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, cámaras de contacto con cloro y una cámara de decloración.

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

**PROPOSED PERMIT NO. WQ0016661001**

**APPLICATION.** Austin Habitat For The Good, LLC, 5599 San Felipe Street, Suite 1500, Houston, Texas 77056, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016661001 (EPA I.D. No. TX0146935) to authorize the discharge of treated wastewater at a volume not to exceed a daily average flow of 975,000 gallons per day. The domestic wastewater treatment facility will be located approximately 0.76 miles southwest of the intersection of Caldwell Lane and River Timber Drive, near the city of Austin, in Travis County, Texas 78617. The discharge route will be from the plant site directly to Colorado River Below Lady Bird Lake/Town Lake. TCEQ received this application on November 13, 2024. The permit application will be available for viewing and copying at Garfield Public Library, 5121 Albert Brown Drive, Del Valle, 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=-97.547222,30.214722&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](http://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](http://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 Austin Habitat For The Good, LLC at the address stated above or by calling Mr. Louis Mertz, at 832-485-1907.

Issuance Date: December 4, 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. WQ0016661001

**SOLICITUD.** Austin Habitat For The Good, LLC, 5599 San Felipe Street, Suite 1500, Houston, Texas 77056 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016661001 (EPA I.D. No. TX0146935) 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 975,000 galones por día. La planta está ubicada 0.76 millas al suroeste de la intersección de Caldwell Lane y River Timber Drive, cerca de la ciudad de Austin, en el condado de Travis, Texas 78617. La ruta de descarga es del sitio de la planta a directamente al río Colorado debajo del lago Lady Bird. La TCEQ recibió esta solicitud el 13 de noviembre de 2024. La solicitud para el permiso está disponible para leerla y copiarla en Biblioteca Pública de Garfield, 5121 Albert Brown Drive, Del Valle, 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=-97.547222,30.214722&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. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas de 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 específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía 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](http://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](http://www.tceq.texas.gov).

También se puede obtener información adicional del Austin Habitat For The Good, LLC a la dirección indicada arriba o llamando a Sr. Louis Mertz, al 832-485-1907.

Fecha de emisión 4 de diciembre de 2024

Jon Niermann, *Chairman*  
Bobby Janecka, *Commissioner*  
Catarina R. Gonzales, *Commissioner*  
Kelly Keel, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

November 13, 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: 687818

Authorization Number: WQ0016661001

Site Name: Brandywine Wastewater Treatment Facility

Regulated Entity: RN112081807 - BRANDYWINE WASTEWATER TREATMENT FACILITY

Customer(s): CN606324192 - Austin Habitat For The Good, 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](mailto: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?	Brandywine Wastewater Treatment Facility
Does the site have a physical address?	No
Because there is no physical address, describe how to locate this site:	0.76 miles southwest of the intersection of Caldwell Ln and River Timber Dr
City	Austin
State	TX
ZIP	78617
County	TRAVIS
Latitude (N) (##.#####)	30.214681
Longitude (W) (-###.#####)	-97.547165
Primary SIC Code	4952
Secondary SIC Code	
Primary NAICS Code	221320
Secondary NAICS Code	
<b>Regulated Entity Site Information</b>	
What is the Regulated Entity's Number (RN)?	
What is the name of the Regulated Entity (RE)?	Brandywine Wastewater Treatment Facility
Does the RE site have a physical address?	No
Because there is no physical address, describe how to locate this site:	0.76 miles southwest of the intersection of Caldwell Ln and River Timber Dr
City	Austin
State	TX
ZIP	78617
County	TRAVIS
Latitude (N) (##.#####)	30.214681
Longitude (W) (-###.#####)	-97.547165
Facility NAICS Code	221320
What is the primary business of this entity?	treatment of domestic wastewater

## Austin -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
<b>Full legal name of the applicant:</b>	
Legal Name	Austin Habitat for the Good, LLC
Texas SOS Filing Number	805717163
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
<b>Responsible Authority Contact</b>	
Organization Name	Austin Habitat for the Good, LLC
Prefix	MR
First	Louis
Middle	
Last	Mertz
Suffix	
Credentials	
Title	Manager
<b>Responsible Authority Mailing Address</b>	
Enter new address or copy one from list:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	5599 SAN FELIPE ST STE 1500
Routing (such as Mail Code, Dept., or Attn:)	
City	HOUSTON
State	TX
ZIP	77056
Phone (###-###-####)	8324851907
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	lmertz@scipioventures.com

# Billing Contact

<b>Responsible contact for receiving billing statements:</b>	
Select the permittee that is responsible for payment of the annual fee.	
Organization Name	Austin Habitat for the Good, LLC
Prefix	Austin Habitat for the Good, LLC
First	MR
Middle	Louis
Last	
Suffix	Mertz
Credentials	
Title	Manager
Enter new address or copy one from list:	Austin Habitat for the Good, LLC
<b>Mailing Address</b>	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	5599 SAN FELIPE ST
Routing (such as Mail Code, Dept., or Attn:)	Suite 1500
City	HOUSTON
State	TX
ZIP	77056
Phone (###-###-####)	8324851907
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	lmertz@scipioventures.com

# Application Contact

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

Credentials	
Title	Permitting Specialist
Enter new address or copy one from list:	
<b>Mailing Address</b>	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	912 S CAPITAL OF TEXAS HWY STE 300
Routing (such as Mail Code, Dept., or Attn:)	
City	WEST LAKE HILLS
State	TX
ZIP	78746
Phone (###-###-####)	5126855156
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	jnguyen@quiddity.com

## Technical Contact

<b>Person TCEQ should contact for questions about this application:</b>	
Same as another contact?	Application Contact
Organization Name	Quiddity Engineering
Prefix	MR
First	Jonathan
Middle	
Last	Nguyen
Suffix	
Credentials	
Title	Permitting Specialist
Enter new address or copy one from list:	
<b>Mailing Address</b>	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	912 S CAPITAL OF TEXAS HWY STE 300
Routing (such as Mail Code, Dept., or Attn:)	
City	WEST LAKE HILLS
State	TX
ZIP	78746
Phone (###-###-####)	5126855156

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

DMR Contact

<b>Person responsible for submitting Discharge Monitoring Report Forms:</b>	
Same as another contact?	Billing Contact
Organization Name	Austin Habitat for the Good, LLC
Prefix	MR
First	Louis
Middle	
Last	Mertz
Suffix	
Credentials	
Title	Manager
Enter new address or copy one from list:	
<b>Mailing Address:</b>	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	5599 SAN FELIPE ST
Routing (such as Mail Code, Dept., or Attn:)	Suite 1500
City	HOUSTON
State	TX
ZIP	77056
Phone (###-###-####)	8324851907
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	lmertz@scipioventures.com

Section 1# Permit Contact

<b>Permit Contact#: 1</b>	
<b>Person TCEQ should contact throughout the permit term.</b>	
1) Same as another contact?	Billing Contact
2) Organization Name	Austin Habitat for the Good, LLC

3) Prefix	MR
4) First	Louis
5) Middle	
6) Last	Mertz
7) Suffix	
8) Credentials	
9) Title	Manager
<b>Mailing Address</b>	
10) Enter new address or copy one from list	Billing Contact
11) Address Type	Domestic
11.1) Mailing Address (include Suite or Bldg. here, if applicable)	5599 SAN FELIPE ST
11.2) Routing (such as Mail Code, Dept., or Attn:)	Suite 1500
11.3) City	HOUSTON
11.4) State	TX
11.5) ZIP	77056
12) Phone (###-###-####)	8324851907
13) Extension	
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	lmertz@scipioventures.com

## Public Notice Information

<b>Individual Publishing the Notices</b>	
1) Prefix	MR
2) First and Last Name	Jonathan Nguyen
3) Credential	
4) Title	
5) Organization Name	Quiddity Engineering
6) Mailing Address	912 S CAPITAL OF TEXAS HWY
7) Address Line 2	Suite 300
8) City	WEST LAKE HILLS
9) State	TX
10) Zip Code	78746
11) Phone (###-###-####)	5126855156
12) Extension	
13) Fax (###-###-####)	

14) Email

jnguyen@quiddity.com

**Contact person to be listed in the Notices**

15) Prefix

MR

16) First and Last Name

Louis Mertz

17) Credential

18) Title

19) Organization Name

Austin Habitat for the Good LLC

20) Phone (###-###-####)

8324851907

21) Fax (###-###-####)

22) Email

lmertz@scipioventures.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

TRAVIS

2) Public building name

Garfield Public Library

3) Location within the building

4) Physical Address of Building

5121 Albert Brown Dr.

5) City

Del Valle

6) Contact Name

7) Phone (###-###-####)

5122477371

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	Austin Habitat for the Good LLC
4) Mailing Address	5599 San Felipe St., STE 1500
5) City	Houston
6) State	TX
7) Zip Code	77056
8) Phone (###-###-####)	8324871907
9) Extension	
10) Email	lmertz@scipioventures.com
11) What is ownership of the treatment facility?	Private
<b>Owner of Land (where treatment facility is or will be)</b>	
12) Prefix	
13) First and Last Name	
14) Organization Name	Austin Habitat for the Good LLC
15) Mailing Address	5599 San Felipe St., STE 1500
16) City	Houston
17) State	TX
18) Zip Code	77056
19) Phone (###-###-####)	8324851907
20) Extension	
21) Email	lmertz@scipioventures.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?	0.975
2.3) Select the applicable fee	>=0.50 MGD but < 1.0 MGD - \$1,650
3) What is your facility operational status?	Inactive
4) What is the classification for your authorization?	TPDES
4.1) City nearest the outfall(s):	Austin
4.2) County where the outfalls are located:	TRAVIS
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_01 Attachment A - PLS.pdf
Hash	199A32049C01C3393C08B3B86120F7697CCCF23C1EFE859120D22429F9F5BD48
MIME-Type	application/pdf

## Supplemental Permit Information Form

1) Supplemental Permit Information Form (SPIF)	
[File Properties]	
File Name	SPIF_02 Attachment B - SPIF.pdf
Hash	45F2EE5D95C2F3C33BE422204145A4EDD29F0670438F8341F33E35630B1957C0
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_Scipio Caldwell Lane USGS.pdf
Hash	7FC31F5E757E2659E0BA7F19C42A7D54640A52A83255F1FBCD1DFAF1F8CBE7E2
MIME-Type	application/pdf
2) Public Involvement Plan attachment (TCEQ Form 20960)	
[File Properties]	
File Name	PIP_11 Attachment K - PIP.pdf
Hash	96B684359F01647ED657A7D748B0B9A4479BE416C5D20681132A4142B7F34F40
MIME-Type	application/pdf

### 3) Administrative Report 1.1

#### [File Properties]

File Name	ARPT_Brandywine Admin 1.1.pdf
Hash	749B4B2CD45EF3A45423E4E925A66136FDA75B9377019CEC9B3ED9881A2C1229
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_04 Attachment D - Application Technical Report.pdf
Hash	5FA41E0A482565BF54671FC6CB4C6F574BAA1A5C6A159C525E82D8446B56A68D
MIME-Type	application/pdf

### 5) Affected Landowners Map

#### [File Properties]

File Name	LANDMP_12 Attachment L - Affected Landowners.pdf
Hash	11A13C86DE8B80542C551F8E26CAB2A0175EAD646E104B964926635B2FF5101B
MIME-Type	application/pdf

### 6) Landowners Cross Reference List

#### [File Properties]

File Name	LANDCRL_12 Attachment L - Affected Landowners.pdf
Hash	11A13C86DE8B80542C551F8E26CAB2A0175EAD646E104B964926635B2FF5101B
MIME-Type	application/pdf

### 7) Landowner Avery Template

#### [File Properties]

File Name	LANDAT_Brandywine Mailing Labels.docx
Hash	80B99E272619C422682BF52454C7EA1B621E7CE6101551C609ACBB6B314B6E74
MIME-Type	application/vnd.openxmlformats-officedocument.wordprocessingml.document
8) Buffer Zone Map	
[File Properties]	
File Name	BUFF_ZM_05 Attachment E - Buffer Zone Maps.pdf
Hash	5D60EC7EC2538868C8F12D3E3E391F895F4D811333246FAD92A1CE8C08733739
MIME-Type	application/pdf
9) Flow Diagram	
[File Properties]	
File Name	FLDIA_06 Attachment F - Flow Schematics.pdf
Hash	CCDD1CDE8D31898CFF68A7C5FE49446DFD28E65F825F807D0FA1D947A6B4DF43
MIME-Type	application/pdf
10) Site Drawing	
[File Properties]	
File Name	SITEDR_07 Attachment G - Service Area Map.pdf
Hash	9744BF2A50023C76ADEC2F84FC4F9E040D34E193FE19A7418740153A389DEB18
MIME-Type	application/pdf
11) Original Photographs	
[File Properties]	
File Name	ORIGPH_13 Attachment M - Photos.pdf
Hash	70248F1BF7093ECC8206CAD079D858D291D61E23BADE6B10CD06ABE3AC958D0C
MIME-Type	application/pdf
12) Design Calculations	
[File Properties]	
File Name	DES_CAL_08 Attachment H - Supplemental Technical Report.pdf
Hash	19EF0A72521653031AFB26AD4DAF05841AD25E3155F63A59C9CB01336F4AD215
MIME-Type	application/pdf
13) Solids Management Plan	
[File Properties]	
File Name	SMP_09 Attachment I - Sludge Management Plan.pdf

Hash	61AB60E12E90FD73F7FBCAD8ED6CEB772379B5E08988925FC23C6EA515073A6A
MIME-Type	application/pdf
14) Water Balance	
[File Properties]	
File Name	WB_08 Attachment H - Supplemental Technical Report.pdf
Hash	B9B8A66F18D41598721F75F258C58A04BDE03463ECE91CAE97BDD570332B9863
MIME-Type	application/pdf
15) Other Attachments	
[File Properties]	
File Name	OTHER_14 Attachment N - Water Wells.pdf
Hash	BE628C35DF26B5115ACE5D56F16EB3A7AB4E7D02348F880EFAF2FA71642E6486
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_15 Attachment O - Wetlands.pdf
Hash	18F1A133DDEECE3065629D7E3C33BCA13EE58B4E01997D770B0619025629926E
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_16 Attachment P - Justification.pdf
Hash	9E6820E39EBD354CE0BD245D6D3AB0494EFABD4C76742814DE540D2B7327249A
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_18 Attachment R - Floodplain.pdf
Hash	B84343AB989AC0372016E793D53FE63DCE32591B3E8F3B8DEA998458C0538F28
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_19 Attachment S - Windrose.pdf
Hash	3807EE934367E38F9772AD619631A8E9E91DD132BDF3535B05520648C8B26B57
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_17 Attachment Q - Regionalization.pdf
Hash	4E3387952CCBAFFBD1933DED76D2477ED52E0D6B2440DA440DB45678A2853A9

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 Louis Mertz, the owner of the STEERS account ER108982.
- 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: Louis Mertz OWNER OPERATOR

Customer Number:

Legal Name: Austin Habitat for the Good, LLC

Account Number: ER108982

Signature IP Address: 108.73.34.174

Signature Date: 2024-11-13

Signature Hash: 2AA542204E6781DD8943302FBDFADB24B726DB87127307A9649F48D4B0CEE62C

Form Hash Code at time of Signature: EDF3D2CB6F50F61CEB15790BC87816938C85D4EA0E25B9C2C6426F173F7B1D8C

Fee Payment

Transaction by: The application fee payment transaction was made by ER094863/Huan J Nguyen

Paid by: The application fee was paid by JONATHAN NGUYEN

Fee Amount: \$1600.00

Paid Date: The application fee was paid on 2024-11-13

Transaction/Voucher number: The transaction number is 582EA000634057 and the voucher number is 730607

# Submission

Reference Number:	The application reference number is 687818
Submitted by:	The application was submitted by ER094863/Huan J Nguyen
Submitted Timestamp:	The application was submitted on 2024-11-13 at 09:47:03 CST
Submitted From:	The application was submitted from IP address 98.6.100.154
Confirmation Number:	The confirmation number is 579971
Steers Version:	The STEERS version is 6.82

# Additional Information

Application Creator:	This account was created by Huan J Nguyen
----------------------	---

# 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: Travis 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 N**

**AREA WATER WELLS**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**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 = 5 MILES

LEGEND

- Existing Water Wells
- 500-FT Radius
- WWTP Boundary
- TCAD Parcels

WATER WELLS  
MAP

CALDWELL LANE  
TRAVIS COUNTY, TEXAS



Disclaimer: This product is offered for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property, governmental and/or political boundaries or related facilities to said boundary. No express warranties are made by Quiddity Engineering concerning the accuracy, completeness, reliability, or usability of the information included within this exhibit.



QUIDDITY

Texas Board of Professional Engineers Registration No. F-23290



**ATTACHMENT O**

**WETLANDS**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**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 = 5 MILES

LEGEND

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

WETLANDS  
MAP

CALDWELL LANE  
TRAVIS COUNTY, TEXAS



Disclaimer: This product is offered for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property, governmental and/or political boundaries or related facilities to said boundary. No express warranties are made by Quiddity Engineering concerning the accuracy, completeness, reliability, or usability of the information included within this exhibit.



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



**ATTACHMENT P**

**JUSTIFICATION**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**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

**JUSTIFICATION FOR PLANT CONSTRUCTION  
AUSTIN HABITAT FOR THE GOOD, LLC**

The Brandywine Wastewater Treatment Plant will serve a residential subdivision located about 2.0 miles north of Highway 71 in Travis County, Texas.

At build out, there will be 3,250 residential connections. For design purposes, the wastewater flow for residential connections is 300 gallons per day per connection.

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

Month / yr	Single family residential	
	connections	flow (gpd)
Jan-26	50	15,000
Jan-27	375	112,000
Jan-28	675	202,500
Jan-29	975	292,500
Jan-30	1,275	382,500
Jan-31	1,550	465,000
Jan-32	1,850	555,000
Jan-33	2,150	645,000
Jan-34	2,450	735,000
Jan-35	2,750	825,000
Oct-36	3,250	975,000

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

<u>Proposed flow</u>	<u>Interim I</u>	<u>Interim II</u>	<u>Final</u>
Design Flow (MGD)	0.075	0.15	0.975
2-Hr Peak Flow (MGD)	0.30	0.60	3.90
Date construction to commence	6/2025	2/2026	11/2029
Date construction completed and discharge begins	1/2026	8/2026	11/2030

**ATTACHMENT Q**

**REGIONALIZATION EXHIBIT**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**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

## Regionalization List

### Nearby Permitted Outfalls

1. Texas Water Utilities, WQ0013138001
2. City of Austin, WQ0010543012
3. Austin Surf Club Venture, WQ0015418001
4. City of Austin, WQ0010543015
5. Cedar Creek MH LLC, WQ0016303001 – PENDING, SURVEY NOT SENT
6. Bastrop Energy Partners, WQ0004211000 – INDUSTRIAL PERMIT, SURVEY NOT SENT

### CCN

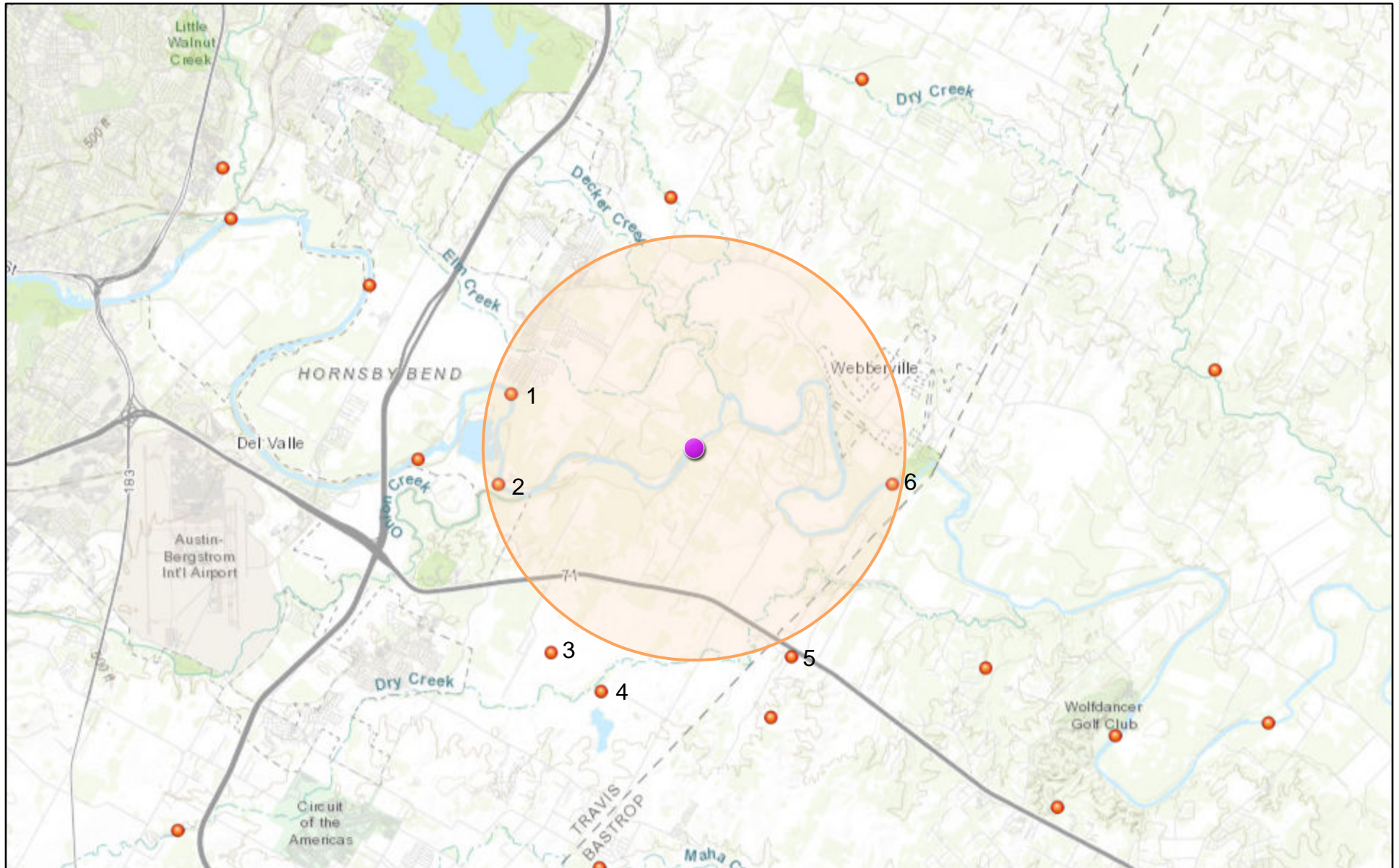
1. City of Austin

### City Limits

1. Not within any city limits

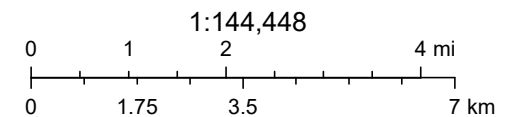


# Brandywine Development



9/18/2024, 2:57:21 PM

● Wastewater Outfalls



Austin Community College, City of Austin, Texas Parks & Wildlife, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS, TCEQ

Web AppBuilder for ArcGIS  
Austin Community College, City of Austin, Texas Parks & Wildlife, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS | TCEQ |

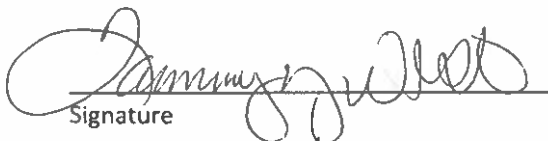
**WASTEWATER TREATMENT CAPACITY  
AVAILABILITY SURVEY**

Scipio Ventures 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 2026	15,000
January 2027	112,500
January 2028	202,500
January 2029	292,500
January 2030	382,500
January 2035	825,000
January 2036	907,500
October 2036	975,000

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? ☐ ☒

  
Signature

11/5/2024  
Date

Tammy West  
Print Name

Wastewater Regulatory Manager  
Title

512-636-1670  
Phone Number

9589 0710 5270 2145 8126 68

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☐ Adult Signature Restricted Delivery \$

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Total Postage and Fees \$

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Street and Apt. No., or PO Box No. *Tammy West City of Austin*

City, State, ZIP+4® *225 East 10th St. Suite 800 Austin, TX 78701*

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 2145 8126 82

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Total Postage and Fees \$

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Street and Apt. No., or PO Box No. *Chuck Berry Texas Water Util. Co.*

City, State, ZIP+4® *18535 Reed Road Sugar Land, TX 77478*

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 2145 8126 75

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Sent To *JN 9/24*

Street and Apt. No., or PO Box No. *Austin Surf Club*

City, State, ZIP+4® *812 San Antonio St. Suite L17 Austin, TX 78701*

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions





3100 Alvin Devane Blvd, Suite 150  
Austin, Texas 78741  
Tel: 512.441.9493  
[www.quiddity.com](http://www.quiddity.com)

September 18, 2024

Mr. Chuck Berry, Environmental H&S Manager  
Texas Water Utilities, LP  
12535 Reed Road  
Sugar Land, TX 77478

Re: Wastewater Treatment Plant Regionalization Inquiry  
Scipio Ventures  
Travis County, Texas

Scipio Ventures is applying for a TPDES permit and is seeking to determine if there are any wastewater treatment plants or collection systems within three (3) miles of the wastewater treatment plant that have capacity or are willing to expand to provide capacity for the ultimate needs of the development. You have been identified as operating a wastewater collection system and possibly a wastewater treatment plant within three (3) miles of the development. It would be greatly appreciated if you could complete the attached survey and either e-mail ([jnguyen@quiddity.com](mailto:jnguyen@quiddity.com)) or mail this questionnaire to me no later than October 24, 2024.

Please feel free to contact should you have any questions.

Sincerely,

Jonathan Nguyen

HJN

Attachment

[K:\17799\17799-0025-02\\_Caldwell\\_Lane\\_Tract\\_TPDES\\_Permit\2\\_Design\\_Phase\001 - TPDES Permit\01 - Submit Application\Attachment U - Regionalization Surveys\CapacitySurvCvr - Template.docx](K:\17799\17799-0025-02_Caldwell_Lane_Tract_TPDES_Permit\2_Design_Phase\001 - TPDES Permit\01 - Submit Application\Attachment U - Regionalization Surveys\CapacitySurvCvr - Template.docx)



3100 Alvin Devane Blvd, Suite 150  
Austin, Texas 78741  
Tel: 512.441.9493  
[www.quiddity.com](http://www.quiddity.com)

September 18, 2024

Austin Surf Club Venture, LP  
812 San Antonio Street, Suite L17  
Austin, TX 78701

Re: Wastewater Treatment Plant Regionalization Inquiry  
Scipio Ventures  
Travis County, Texas

Scipio Ventures is applying for a TPDES permit and is seeking to determine if there are any wastewater treatment plants or collection systems within three (3) miles of the wastewater treatment plant that have capacity or are willing to expand to provide capacity for the ultimate needs of the development. You have been identified as operating a wastewater collection system and possibly a wastewater treatment plant within three (3) miles of the development. It would be greatly appreciated if you could complete the attached survey and either e-mail ([jnguyen@quiddity.com](mailto:jnguyen@quiddity.com)) or mail this questionnaire to me no later than October 24, 2024.

Please feel free to contact should you have any questions.

Sincerely,

Jonathan Nguyen

HJN

Attachment

[K:\17799\17799-0025-02\\_Caldwell\\_Lane\\_Tract\\_TPDES\\_Permit\2\\_Design\\_Phase\001 - TPDES Permit\01 - Submit Application\Attachment U - Regionalization Surveys\CapacitySurvCvr - Template.docx](K:\17799\17799-0025-02_Caldwell_Lane_Tract_TPDES_Permit\2_Design_Phase\001 - TPDES Permit\01 - Submit Application\Attachment U - Regionalization Surveys\CapacitySurvCvr - Template.docx)

**ATTACHMENT R**

**FLOODPLAIN MAP**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**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 = 5 MILES

LEGEND

- Floodway
- 100 Year
- 500 Year
- WWTP Boundary
- TCAD Parcels

FLOODPLAIN  
MAP

CALDWELL LANE  
TRAVIS COUNTY, TEXAS



Disclaimer: This product is offered for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property, governmental and/or political boundaries or related facilities to said boundary. No express warranties are made by Quiddity Engineering concerning the accuracy, completeness, reliability, or usability of the information included within this exhibit.



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



**ATTACHMENT S**

**WINDROSE**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**QUIDDITY**

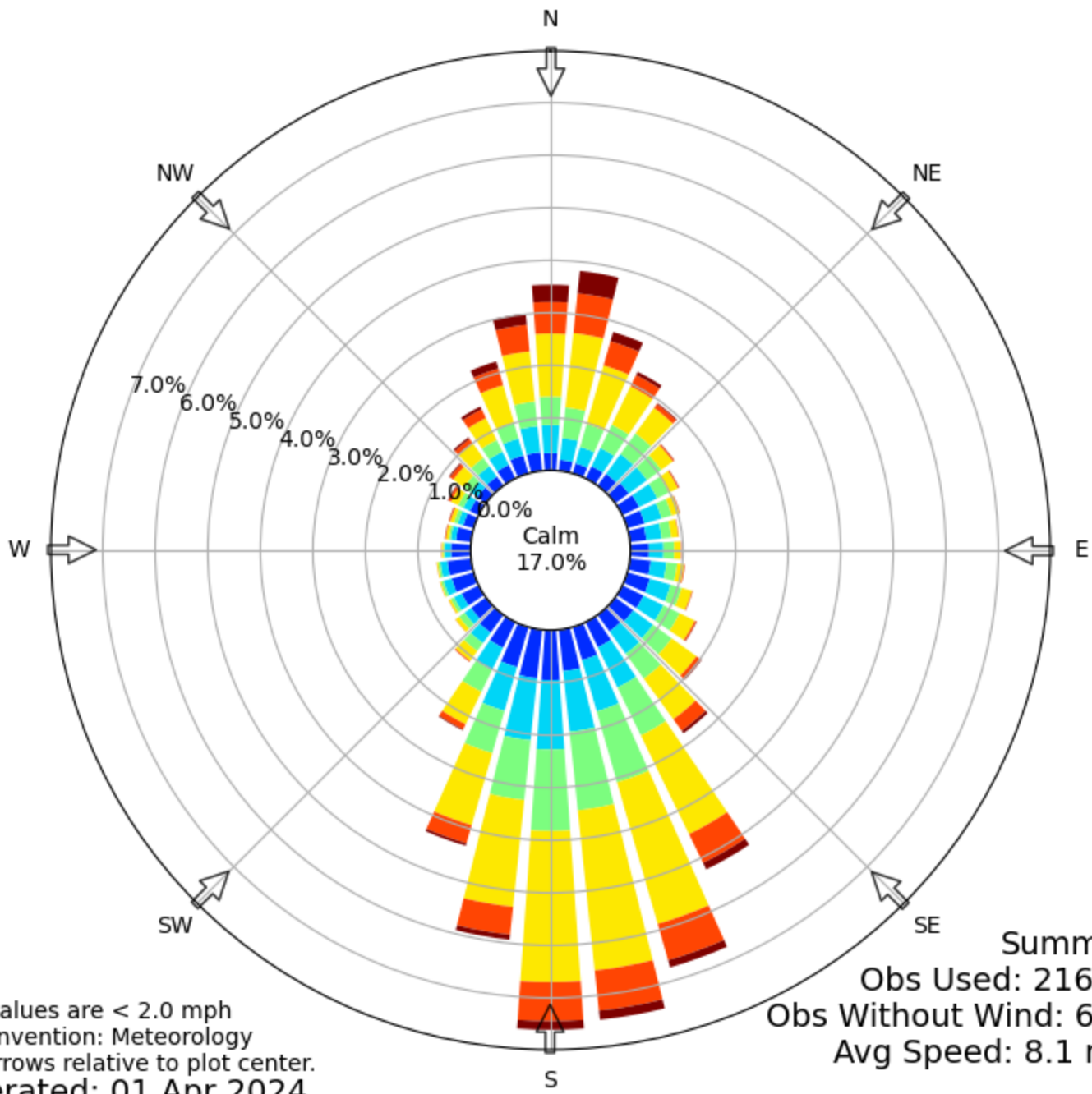
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100  
6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337





# Windrose Plot for [AUS] Austin Bergstrom Intl

Obs Between: 23 May 1999 12:53 AM - 01 Apr 2024 01:53 AM America/Chicago



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

Summary  
Obs Used: 216288  
Obs Without Wind: 6401  
Avg Speed: 8.1 mph



**ATTACHMENT A**

**PLAIN LANGUAGE SUMMARY**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**QUIDDITY**

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

Austin Habitat for the Good, LLC proposes to operate the Brandywine wastewater treatment plant, an activated sludge process plant operated in the extended aeration mode. The facility will be located at 0.76 miles southwest of the intersection of Caldwell Lane and River Timber Drive, in Travis County, Texas 78617.

This application is for a new application to discharge at a daily average flow of 975,000 gallons per day of treated domestic wastewater.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>), total suspended solids (TSS), ammonia nitrogen (NH<sub>3</sub>-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, chlorine contact chambers and a dechlorination chamber.



*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.*

Austin Habitat for the Good, LLC propone operar la planta de tratamiento de aguas residuales de Brandywine, una planta de procesamiento de lodos activados que funciona en modo de aireación extendida. La instalación estará ubicada a 0.76 millas al suroeste de la intersección de Caldwell Lane y River Timber Drive, en el condado de Travis, Texas 78617.

Esta solicitud es para una nueva aplicación para descargar un flujo promedio diario de 975,000 galones por día de aguas residuales domésticas tratadas.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso de cinco días (CBOD<sub>5</sub>), sólidos suspendidos totales (TSS), nitrógeno amoniacal (NH<sub>3</sub>-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, cámaras de contacto con cloro y una cámara de decloración.

**ATTACHMENT K**

**PUBLIC INVOLVEMENT PLAN**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**QUIDDITY**

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

## Section 5. Community and Demographic Information

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

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

(City)

(County)

(Census Tract)

Please indicate which of these three is the level used for gathering the following information.

City

County

Census Tract

- (a) Percent of people over 25 years of age who at least graduated from high school
- (b) Per capita income for population near the specified location
- (c) Percent of minority population and percent of population by race within the specified location
- (d) Percent of Linguistically Isolated Households by language within the specified location
- (e) Languages commonly spoken in area by percentage
- (f) Community and/or Stakeholder Groups
- (g) Historic public interest or involvement



## Section 6. Planned Public Outreach Activities

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

Yes      No

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

Yes      No

If Yes, please describe.

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

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

Yes      No

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

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

Publish in alternative language newspaper

Posted on Commissioner's Integrated Database Website

Mailed by TCEQ's Office of the Chief Clerk

Other (specify)

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

Yes      No

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

Yes      No

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

TCEQ Regional Office

TCEQ Central Office

Public Place (specify)

## Section 7. Voluntary Submittal

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

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

Yes      No

What types of notice will be provided?

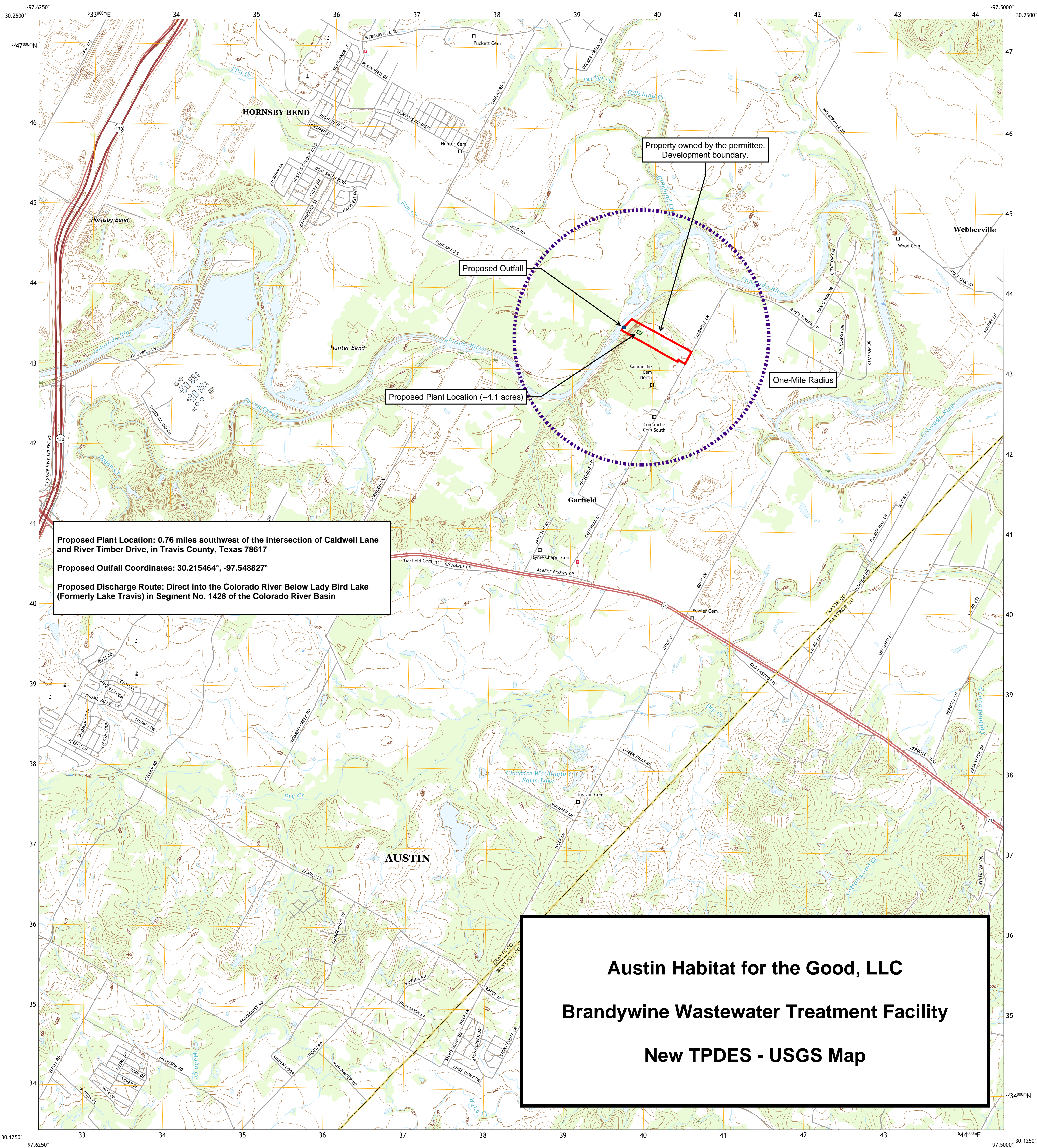
Publish in alternative language newspaper

Posted on Commissioner's Integrated Database Website

Mailed by TCEQ's Office of the Chief Clerk

Other (specify)

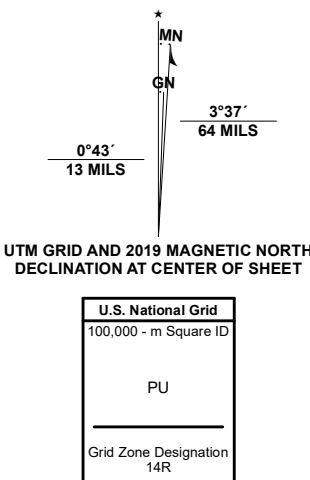




Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)  
World Geodetic System of 1984 (WGS84). Projection and  
1 000-meter grid/Universal Transverse Mercator, Zone 14R  
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 - 2019  
Names.....GNIS, 1979 - 2021  
Hydrography.....National Hydrography Dataset, 2000 - 2018  
Contours.....National Elevation Dataset, 2019  
Boundaries.....Multiple sources; see metadata file 2019 - 2021  
Wetlands.....FWS National Wetlands Inventory Not Available



1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

1 Austin East  
2 Manor  
3 Elgin West  
4 Montopolis  
5 Uteley  
6 Creedmoor  
7 Lytton Springs  
8 Bastrop SW

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

WEBBERVILLE, TX

2022





**ATTACHMENT L**

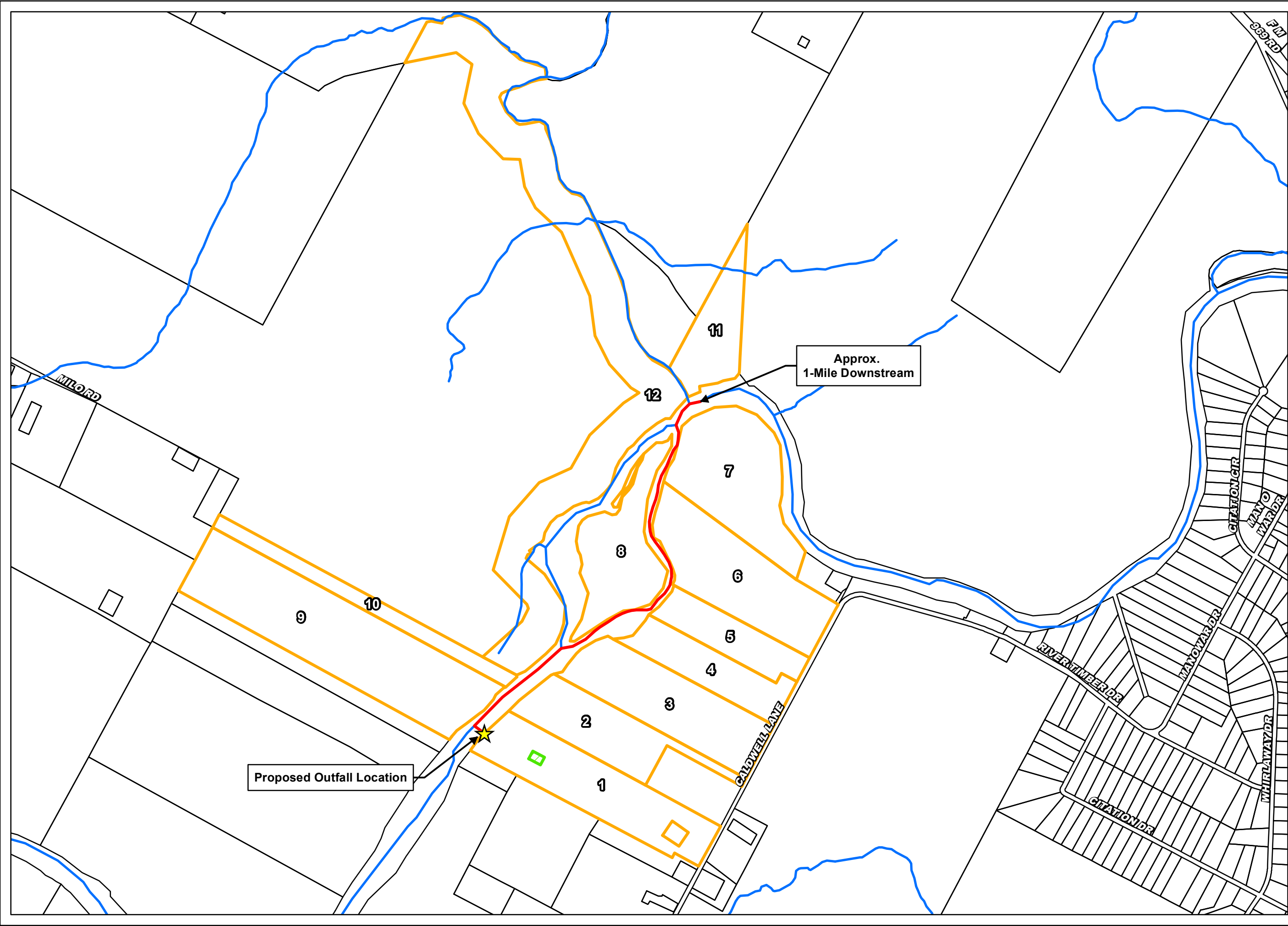
**AFFECTED LANDOWNERS**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**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



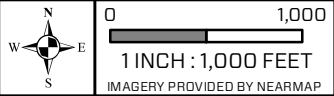
VICINITY MAP  
1 INCH = 5 MILES

LEGEND

- ★ Outfall
- Discharge Route
- Streams
- ▭ Adjacent Parcels
- ▭ Applicant Property Boundary
- ▭ TCAD Parcels

AFFECTED  
LANDOWNERS  
MAP

CALDWELL LANE  
TRAVIS COUNTY, TEXAS



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**QUIDDITY**

Texas Board of Professional Engineers Registration No. F-23290



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Austin, Texas 78741  
Tel: 512.441.9493  
[www.quiddity.com](http://www.quiddity.com)

Austin Habitat for the Good, LLC  
Brandywine Wastewater Treatment Plant  
TPDES New Application – Affected Landowners

OBJECT ID	OWNER	MAILING ADDRESS
1	QUINTOS ANTONIO M & KAREN H	14007 PANORAMA DR AUSTIN TX 78732
2	GARWOOD ROBERT DOUGLAS III	2400 CALDWELL LN DEL VALLE TX 78617
3	DOSS H ALLEN & SUSAN B & TRAVIS A	PO BOX 1105 DEL VALLE TX 78617
4	POTTS LAND COMPANY LLC	10214 BRAEMAR DR AUSTIN TX 78747
5	LOPEZ THEODORE & MARY ESTHER	1118 TILLERY ST AUSTIN TX 78702
6	DELOACH ENCHANTED FOREST LLC	2806 SKYWAY UNIT 102 AUSTIN TX 78704
7	ROBERTS ROANNE MUREE	PO BOX 8 DEL VALLE TX 78617
8	TRAVIS COUNTY	PO BOX 1748 AUSTIN TX 78767
9	WIMBERLY BARRY & MARY ELLEN	1236 S DUNLAP RD AUSTIN TX 78725
10	AUSTIN TREE FARMS INC	PO BOX 26676 AUSTIN TX 78755
11	TRAVIS COUNTY	PO BOX 1748 AUSTIN TX 78767
12	TRAVIS COUNTY	PO BOX 1748 AUSTIN TX 78767

**ATTACHMENT L**

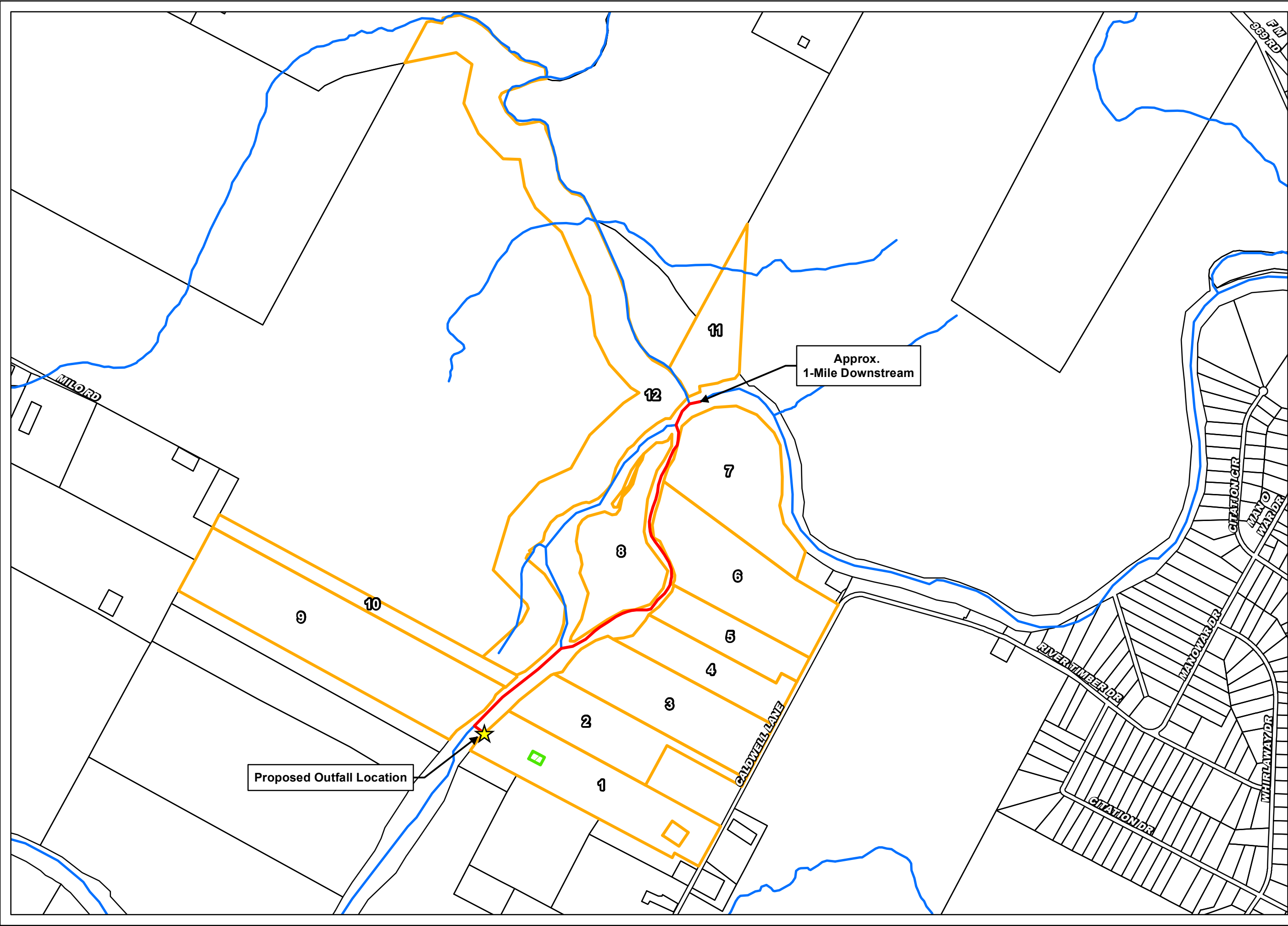
**AFFECTED LANDOWNERS**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**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 = 5 MILES

LEGEND

- ★ Outfall
- Discharge Route
- Streams
- ▭ Adjacent Parcels
- ▭ Applicant Property Boundary
- ▭ TCAD Parcels

AFFECTED  
LANDOWNERS  
MAP

CALDWELL LANE  
TRAVIS COUNTY, TEXAS



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Austin Habitat for the Good, LLC  
Brandywine Wastewater Treatment Plant  
TPDES New Application – Affected Landowners

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11	TRAVIS COUNTY	PO BOX 1748 AUSTIN TX 78767
12	TRAVIS COUNTY	PO BOX 1748 AUSTIN TX 78767



AUSTIN TREE FARMS INC  
PO BOX 26676  
AUSTIN TX 78755

GARWOOD ROBERT DOUGLAS III  
2400 CALDWELL LN  
DEL VALLE TX 78617

DELOACH ENCHANTED FOREST LLC  
2806 SKYWAY UNIT 102  
AUSTIN TX 78704

DOSS H ALLEN & SUSAN B & TRAVIS A  
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DEL VALLE TX 78617

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DEL VALLE TX 78617

LOPEZ THEODORE & MARY ESTHER  
1118 TILLERY ST  
AUSTIN TX 78702

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10214 BRAEMAR DR  
AUSTIN TX 78747

QUINTOS ANTONIO M & KAREN H  
14007 PANOTAMA DR  
AUSTIN TX 78732

TRAVIS COUNTY  
PO BOX 1748  
AUSTIN TX 78767

WIMBERLY BARRY & MARY ELLEN  
1236 S DUNLAP RD  
AUSTIN TX 78725

**ATTACHMENT M**

**ORIGINAL PHOTOGRAPHS**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**QUIDDITY**

Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100  
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Austin Habitat for the Good, LLC  
Brandywine Wastewater Treatment Facility  
Original Photos



Google Earth

Image Landsat / Copernicus

800 ft





**Photo 1178 - Proposed Treatment Plant Location,  
Facing Northeast**





**Photo 1183 - Proposed Treatment Plant Location,  
Facing Southwest**





**Photo 1183 - Proposed Outfall Location, Downstream**





Photo 1183 - Proposed Outfall Location, Upstream





**ATTACHMENT B**

**SUPPLEMENTAL PERMIT INFORMATION FORM**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**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](mailto:WQ-ARPTeam@tceq.texas.gov) or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: Austin Habitat for the Good, 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):

0.76 miles southwest of the intersection of Caldwell Lane and River Timber Drive, in Travis County, Texas 78617

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.): \_\_\_\_\_

Title: Permitting Specialist

Mailing Address: 912 S. Capital of Texas Hwy, Suite 300

City, State, Zip Code: Austin, TX 78746

Phone No.: 512-685-5156 Ext.:

Fax No.:

E-mail Address: jnguyen@quiddity.com

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

Property owned by 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.

Directly into the Colorado River Below Lady Bird Lake in Segment No. 1428 of the Colorado 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):

Approximately 4.1 acres will be used for the treatment plant.

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

Current land use if residential.

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:

Residential home built in 1980

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

Home improvements made in 2012



**ATTACHMENT E**

**BUFFER ZONE MAPS**

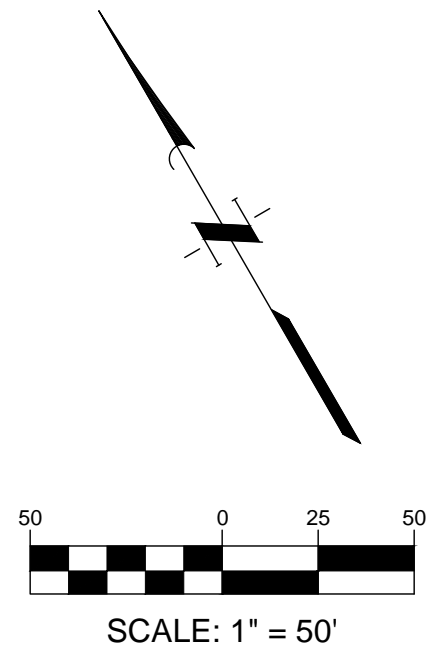
**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**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

GUARDIAN HILL COUNTRY INVESTMENTS, LLC  
25.539 ACRES  
GENERAL WARRANTY DEED  
DOC. 2020047224



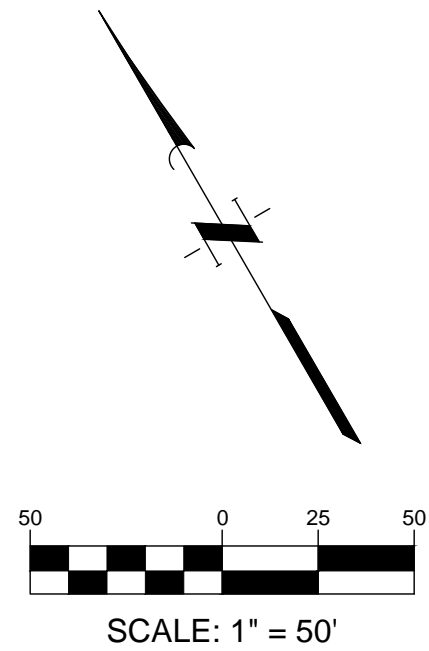
BRANDYWINE LAND HOLDINGS, LLC  
GENERAL WARRANTY DEED  
DOC. 2023008265 O.P.R.T.C.T.

ROANNE ROBERTS CRANFORD  
TRACT 2 - 2.8801 ACRES  
WARRANTY DEED  
DOC. 2001013337

LAURA ZUE CALDWELL WHITE  
37.00 ACRES  
VOL. 6066 PG. 1082  
VOL. 6030 PG. 1127  
VOL. 5679 PG. 1048

**BUFFER ZONE EXHIBIT  
AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER  
TREATMENT PLANT PHASE I - 0.075 MGD  
TRAVIS COUNTY, TEXAS**

GUARDIAN HILL COUNTRY INVESTMENTS, LLC  
25.539 ACRES  
GENERAL WARRANTY DEED  
DOC. 2020047224

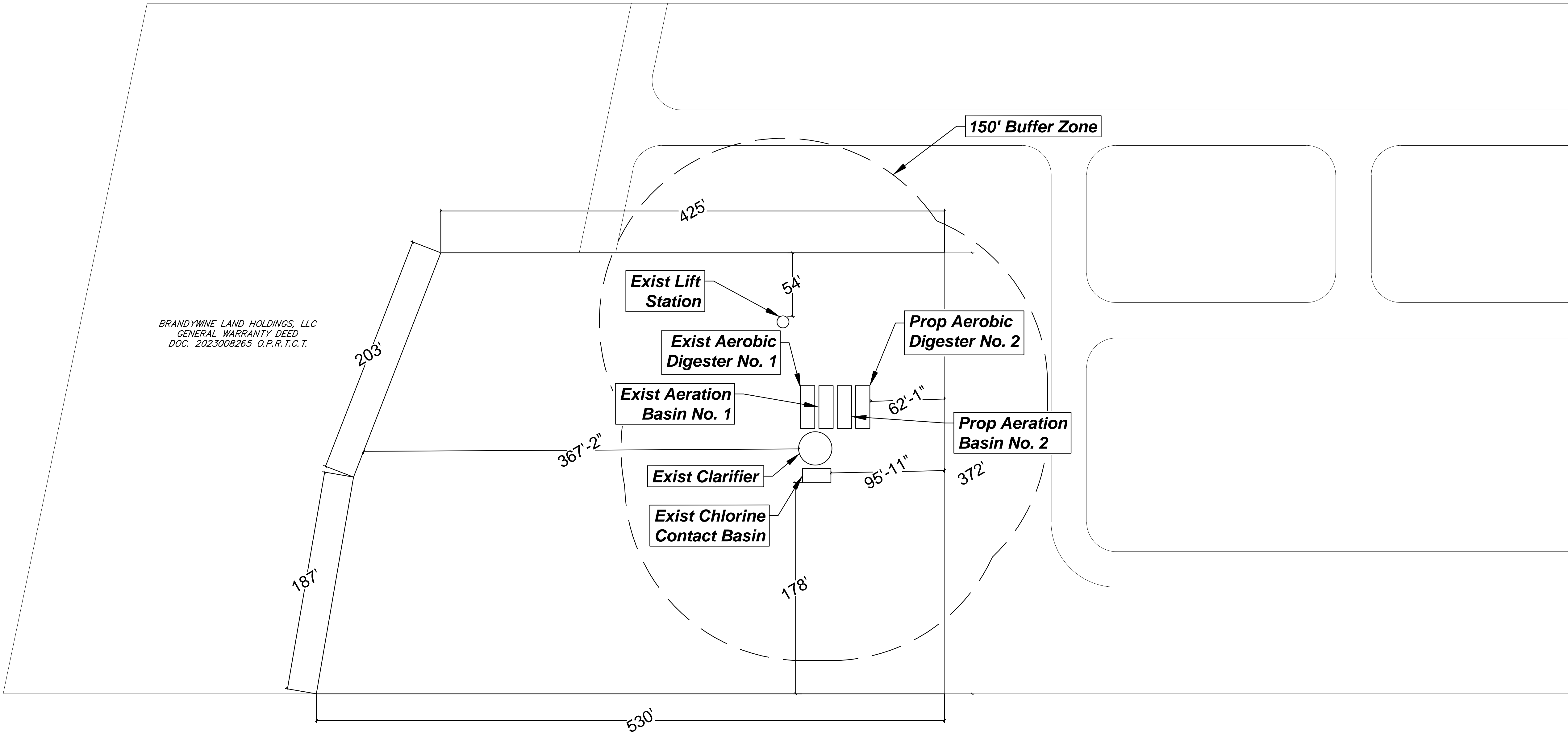


BRANDYWINE LAND HOLDINGS, LLC  
GENERAL WARRANTY DEED  
DOC. 2023008265 O.P.R.T.C.T.

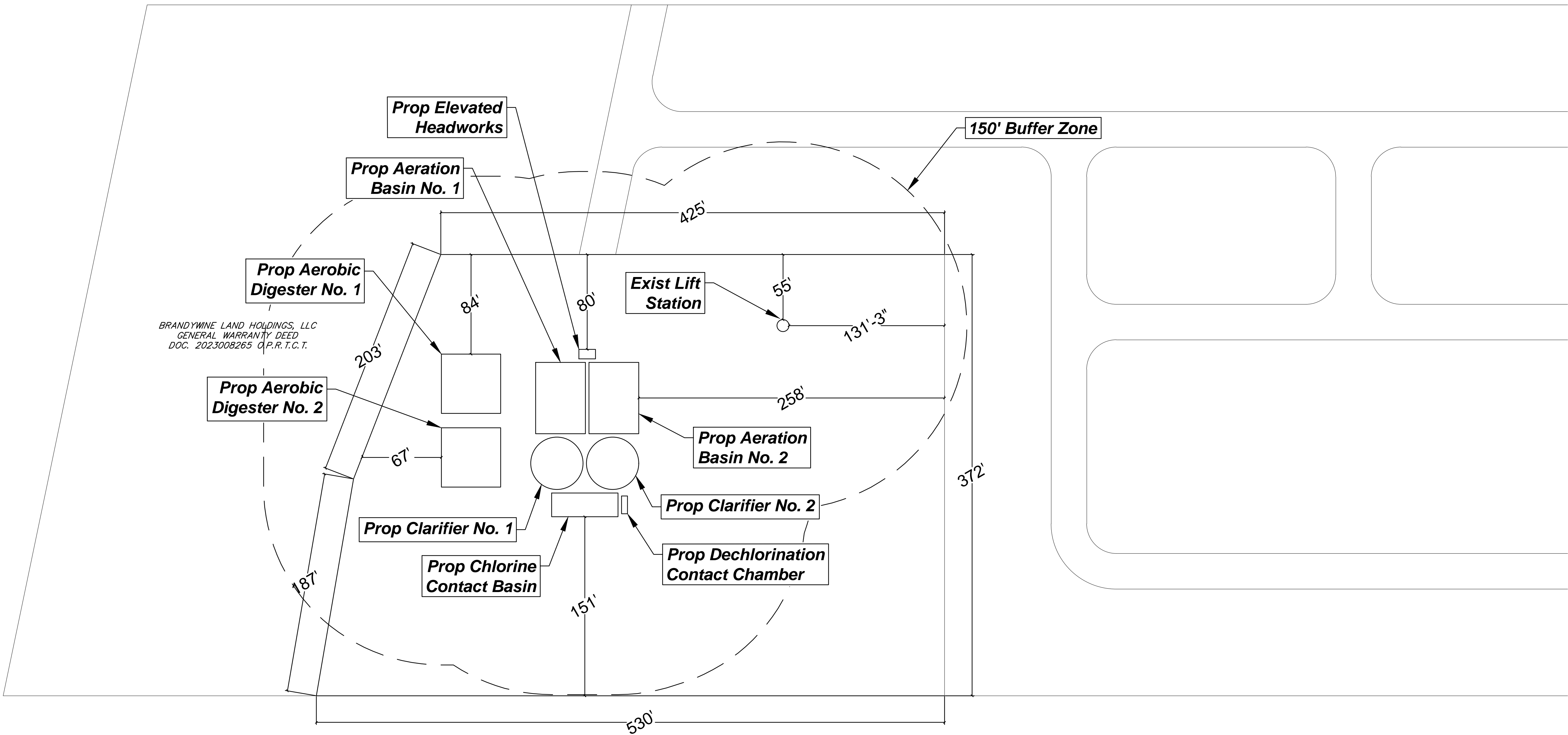
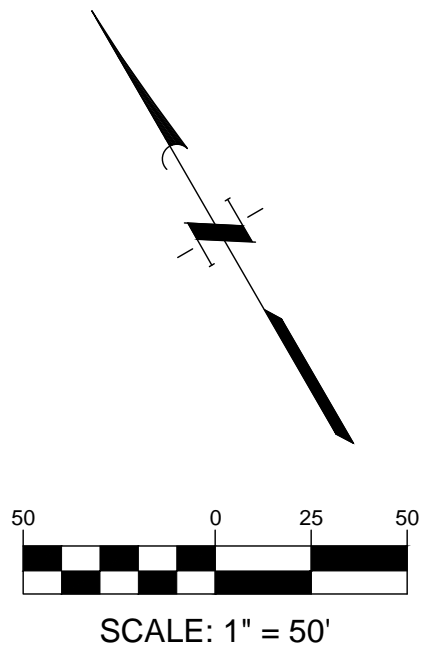
ROANNE ROBERTS CRANFORD  
TRACT 2 - 2.8801 ACRES  
WARRANTY DEED  
DOC. 2001013337

LAURA ZUE CALDWELL WHITE  
37.00 ACRES  
VOL. 6066 PG. 1082  
VOL. 6030 PG. 1127  
VOL. 5679 PG. 1048

**BUFFER ZONE EXHIBIT  
AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT  
PLANT PHASE II - 0.15 MGD  
TRAVIS COUNTY, TEXAS**



GUARDIAN HILL COUNTRY INVESTMENTS, LLC  
25.539 ACRES  
GENERAL WARRANTY DEED  
DOC. 2020047224



BRANDYWINE LAND HOLDINGS, LLC  
GENERAL WARRANTY DEED  
DOC. 2023008265 O.P.R.T.C.T.

ROANNE ROBERTS CRANFORD  
TRACT 2 - 2.8801 ACRES  
WARRANTY DEED  
DOC. 2001013337

LAURA ZUE CALDWELL WHITE  
37.00 ACRES  
VOL. 6066 PG. 1082  
VOL. 6030 PG. 1127  
VOL. 5679 PG. 1048

**BUFFER ZONE EXHIBIT  
AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT  
PLANT PHASE III - 0.975 MGD  
TRAVIS COUNTY, TEXAS**

**ATTACHMENT D**

**APPLICATION TECHNICAL REPORT 1.0-1.1-2.0**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**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: Travis 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



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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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): 0.075

2-Hr Peak Flow (MGD): 0.30

Estimated construction start date: 6/2025

Estimated waste disposal start date: 1/2026

#### B. Interim II Phase

Design Flow (MGD): 0.15

2-Hr Peak Flow (MGD): 0.60

Estimated construction start date: 2/2026

Estimated waste disposal start date: 8/2026

#### C. Final Phase

Design Flow (MGD): 0.975

2-Hr Peak Flow (MGD): 3.90

Estimated construction start date: 11/2029

Estimated waste disposal start date: 11/2030

#### D. Current Operating Phase

Provide the startup date of the facility: not yet constructed

### 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 H – 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 H		

### C. Process Flow Diagram

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

**Attachment:** Attachment F

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

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

- Latitude: 30.215464
- Longitude: -97.548827

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 G

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

The Brandywine Plant will serve the new development and nearby future developments located 2 miles north of Highway 71 in Travis 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
Brandywine	Austin Habitat for Good, LLC	Privately Owned	3,250 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: N/A

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.**

Summary transmittal will be submitted and 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.

Will be met by ownership.



### C. Other actions required by the current permit

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

☐ Yes ☒ No

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

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.  
N/A

**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<sub>5</sub> concentration of the sludge, and the design BOD<sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.



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<sub>5</sub> concentration of the septic waste, and the design BOD<sub>5</sub> concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

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). **Water treatment facilities** discharging filter backwash water, complete Table 1.0(3). Provide copies of the laboratory results sheets. **These tables are not applicable for a minor amendment without renewal.** See the instructions for guidance.

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD <sub>5</sub> , 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
<i>E.coli</i> (CFU/100ml) freshwater	N/A	N/A	N/A	N/A	N/A
Enterococci (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 <sub>3</sub> )*, 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 <sub>3</sub> ), 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 dischargeFacility Operator's License Classification and Level: 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  $\geq$  1 MGD
- ☐ Serves  $\geq$  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 ( $\geq 2$  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 decided prior to discharge

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

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

### E. Transportation method

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

Name of the hauler: will be decided prior to discharge

Hauler registration number: will be decided 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	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
Marketing and Distribution of sludge	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
Sludge Surface Disposal or Sludge Monofill	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
Temporary storage in sludge lagoons	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	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  $1 \times 10^{-7}$  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 P – Justification

#### B. Regionalization of facilities

For additional guidance, please review [TCEQ's Regionalization Policy for Wastewater Treatment](#)<sup>1</sup>.

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: Attachment Q

<sup>1</sup> <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 Q

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 Q

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:** Attachment Q

## 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<sub>5</sub> Concentration in mg/l: N/A

Average Influent Loading (lbs/day = total average flow X average BOD<sub>5</sub> conc. X 8.34): N/A

Provide the source of the average organic strength or BOD<sub>5</sub> 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 BOD <sub>5</sub> Concentration (mg/l)
Municipality	0.975	300
Subdivision		



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	0.975	
AVERAGE BOD <sub>5</sub> from all sources		300

### 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: Click to enter text.

Dissolved Oxygen, mg/l: 6

Other: Click to enter text.

#### 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: Click to enter text.

Dissolved Oxygen, mg/l: 6

Other: Click to enter text.

### C. Final Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 15

Ammonia Nitrogen, mg/l: 3

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

Dissolved Oxygen, mg/l: 6

Other: Click to enter text.

### D. Disinfection Method

Identify the proposed method of disinfection.

☒ Chlorine: 1.0 mg/l after 20 minutes detention time at peak flow

Dechlorination process: sodium bisulfate

☐ 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 H

## 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 R – 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 S

# 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 I

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 to Section 2. If **yes**, provide the following:

Owner of the drinking water supply: N/A

Distance and direction to the intake: N/A

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

Attachment: N/A

### 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: N/A

#### 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).

N/A

#### 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).

N/A

### 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: N/A

### A. Receiving water type

Identify the appropriate description of the receiving waters.

- ☐ Stream
- ☐ Freshwater Swamp or Marsh
- ☐ Lake or Pond

Surface area, in acres: Click to enter text.

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

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

- ☐ Man-made Channel or Ditch
- ☐ Open Bay
- ☐ Tidal Stream, Bayou, or Marsh
- ☐ Other, specify: Click to enter text.

### B. Flow characteristics

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

- ☐ Intermittent - dry for at least one week during most years
- ☐ Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses
- ☐ Perennial - normally flowing

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

- ☐ USGS flow records
- ☐ Historical observation by adjacent landowners
- ☐ Personal observation
- ☐ Other, specify: Click to enter text.

### C. Downstream perennial confluences

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

N/A

#### 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.

N/A

Date and time of observation: N/A

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.

- |   |  |
|---|--|
| <input type="checkbox"/> Oil field activities           | <input checked="" type="checkbox"/> Urban runoff       |
| <input checked="" type="checkbox"/> Upstream discharges | <input type="checkbox"/> Agricultural runoff           |
| <input type="checkbox"/> Septic tanks                   | <input type="checkbox"/> Other(s), specify: <u>N/A</u> |

#### B. Waterbody uses

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

- |  |  |
|--|--|
| <input type="checkbox"/> Livestock watering    | <input type="checkbox"/> Contact recreation                |
| <input type="checkbox"/> Irrigation withdrawal | <input checked="" type="checkbox"/> Non-contact recreation |
| <input type="checkbox"/> Fishing               | <input type="checkbox"/> Navigation                        |
| <input type="checkbox"/> Domestic water supply | <input type="checkbox"/> Industrial water supply           |
| <input type="checkbox"/> Park activities       | <input type="checkbox"/> Other(s), specify: <u>N/A</u>     |

#### 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 H**

**SUPPLEMENTAL TECHNICAL REPORT**

**AUSTIN HABITAT FOR THE GOOD, LLC**  
**BRANDYWINE WASTEWATER TREATMENT PLANT**



**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  
AUSTIN HABITAT FOR THE GOOD, LLC.  
BRANDYWINE WASTEWATER TREATMENT PLANT  
IN  
TRAVIS COUNTY, TEXAS**



**OCTOBER 2024  
QE Job No. 17799-0025-02**



**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

**10/30/2024**

## **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 Brandywine Wastewater Treatment Facility within Travis County, Texas. This facility will be constructed in three phases. The first two interim phases will treat 0.075 million gallons per day (MGD) and 0.15 MGD, respectively, and the final phase will treat 0.975 MGD.

## **II. LOCATION INFORMATION**

The facility will be located approximately 0.76 miles southeast of Caldwell Lane and River Timber Drive, in Travis County, Texas 78617. The discharge flows directly into Colorado River Below Lady Bird Lake (Formerly Lake Travis) in Segment No. 1428 of the Colorado River Basin.

## **III. TREATMENT UNITS**

(For Section 2 of Technical Report 1.0)

The proposed Phase I facility will be constructed with a design flow of 0.075 MGD. A detailed description of the treatment process is presented below:

The proposed Interim I Phase WWTP will consist of package plant facilities that are designed and constructed to treat 0.075 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 WWTP will consist of package plant facilities that are designed and constructed to treat 0.15 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 WWTP will consist of permanent plant facilities that are designed and constructed to treat 0.975 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, three (3) 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.

## **I. SCOPE**

The proposed Interim I phase WWTP will consist of facilities that are designed and constructed to treat 0.075 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<sub>5</sub> = 10 mg/l (daily average)
- b. TSS = 15 mg/l (daily average)
- c. NH<sub>3</sub>-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<sub>5</sub>/day/1,000 ft<sup>3</sup>) = 35
- b. Maximum Clarifier Surface Loading at Peak Flow  
(gal/day/ft<sup>2</sup>) = 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<sup>3</sup>) = 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) =  $0.075Q = 75,000 \text{ gpd} = 52 \text{ gpm}$
- b. Peak (2 hour) =  $4.0Q = 300,000 \text{ gpd} = 208 \text{ gpm}$

### 2. Influent Composition.

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

- $\text{BOD}_5 = 250 \text{ mg/L}$
- $\text{TSS} = 250 \text{ mg/L}$
- $\text{NH}_3\text{-N} = 40 \text{ mg/L}$

### 3. Organic Loadings.

- $\text{BOD}_5 = (0.075 \text{ MGD})(8.34)(250 \text{ mg/L}) = 156 \text{ lbs BOD}_5/\text{day}$
- $\text{TSS} = (0.075 \text{ MGD})(8.34)(250 \text{ mg/L}) = 156 \text{ lbs TSS/day}$
- $\text{NH}_3\text{-N} = (0.075 \text{ MGD})(8.34)(40 \text{ mg/L}) = 25 \text{ lbs NH}_3\text{-N/day}$

### 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 36' long. The average water depth is assumed at 11.5'.

#### i. Total Required Volume

$$\begin{aligned} &\text{Required Volume Using Traditional Design Method (30 TAC §217 Guidelines)} \\ &(0.075 \text{ MGD})(8.34)(250 \text{ mg/L}) / (35 \text{ lb BOD}_5/1,000 \text{ ft}^3) \\ &= 4,468 \text{ ft}^3 \end{aligned}$$

#### ii. Proposed Volume

$$\begin{aligned} &1. \text{ Proposed Volume – Phase I} \\ &(1)(12 \text{ ft})(36 \text{ ft})(11.5 \text{ ft}) = 4,968 \text{ ft}^3 \end{aligned}$$

$$\begin{array}{lll} \text{iii.} & \text{Actual Organic Loading} & \\ & (156 \text{ lb BOD}_5/\text{day})/(4,968 \text{ ft}^3/1,000 \text{ ft}^3) & = 31.5 \text{ lb BOD}_5/ \\ & & \text{day}/1,000 \text{ ft}^3 \end{array}$$

b. Secondary Clarifier. The proposed Interim I Phase plant will consist of one (1) clarifier, sized at 28' diameter to accommodate Phase I and II. The side water depth is 10'.

$$\begin{array}{lll} \text{i.} & \text{Required Surface Area at Peak Flow} & \\ & (300,000 \text{ gpd})/(1,200 \text{ gpd}/\text{ft}^2) & = 250 \text{ ft}^2 \end{array}$$

ii. Proposed Surface Area

$$\begin{array}{lll} 1. & \text{Proposed Surface Area – Interim I Phase} & \\ & (\pi/4)(28 \text{ ft})^2 & = 616 \text{ ft}^2 \end{array}$$

iii. Surface Loading

$$\begin{array}{lll} 1. & \text{At Design Flow} & \\ & (75,000 \text{ gpd})/(616 \text{ ft}^2) & = 122 \text{ gpd}/\text{ft}^2 \end{array}$$

$$\begin{array}{lll} 2. & \text{At Peak Flow} & \\ & (300,000 \text{ gpd})/(616 \text{ ft}^2) & = 487 \text{ gpd}/\text{ft}^2 \end{array}$$

iv. Proposed Clarifier Weir Length

$$\begin{array}{lll} 1. & \text{Proposed – Interim I Phase} & \\ & (\pi)(28 \text{ ft} - 2 \text{ ft}) & = 82 \text{ ft} \end{array}$$

$$\begin{array}{lll} \text{v.} & \text{Proposed Weir Loading at Peak Flow} & \\ & (300,000 \text{ gpd})/(82 \text{ ft}) & = 3,659 \text{ gpd}/\text{ft} \end{array}$$

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

$$\begin{array}{lll} 1. & \text{Proposed Clarifier Side Water Depth} & = 10 \text{ ft} \end{array}$$

vii. Hydraulic Detention Times at Peak Flow

$$\begin{array}{lll} 1. & \text{Proposed Hydraulic Detention Time at Peak Flow – Interim I Phase} & \\ & (616 \text{ ft}^2)(10 \text{ ft})(7.48 \text{ gal}/\text{ft}^3)/(208 \text{ gal}/\text{min}) & \\ & & = 222 \text{ minutes} \\ & & = 3.69 \text{ hours} \end{array}$$

- c. Aerobic Digesters. The proposed Interim I Phase plant will consist of one (1) proposed multi-stage digester, sized at 12' wide by 36' long. The average water depth is assumed at 11.5'.

Assume one (1) pound of solids produced per pound of BOD<sub>5</sub> 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  
 $(156 \text{ lb BOD}_5 / \text{day}) / (1 \text{ lb solids} / 1 \text{ lb BOD}_5) = 156 \text{ lb solids/day}$
2. Digested Solids Production  
 $(156 \text{ lb solid/day})(1 - (0.3)(0.7)) = 124 \text{ lb solids/day}$
3. Average Solids in Digester  
 $(156 \text{ lb solids/day} + 124 \text{ lb solids/day}) / 2 = 140 \text{ lb solids/day}$
4. Total Solids in Digester for 28-day SRT\*  
 $(140 \text{ lb solids/day})(28 \text{ days}) = 3,920 \text{ lb solids}$

ii. Required Volume

$$(3,920 \text{ lb solids})(10^6) / ((8.34)(15,000 \text{ mg/l MLSS in digester})(7.48)) = 4,189 \text{ ft}^3$$

iii. Proposed Volume

1. Proposed Volume – Interim I Phase  
 $(1)(12 \text{ ft})(36 \text{ ft})(11.5 \text{ ft}) = 4,968 \text{ ft}^3$

\*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 24' 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  
 $(208 \text{ gpm})(20 \text{ min}) / (7.48) = 556 \text{ ft}^3$

ii. Proposed Volume

1. Proposed Volume – Interim I Phase  
 $(24 \text{ ft})(12 \text{ ft})(9 \text{ ft}) = 2,592 \text{ ft}^3$

- iii. Actual Detention Time at Peak Flow  
 $(2,592 \text{ ft}^3)(7.48) / (208 \text{ gpm}) = 93.21 \text{ minutes}$

e. Air Requirements.

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

1. Air Required for Treatment

$$\frac{(1.2)(250 \text{ mg/l BOD}_5) + (4.3)(40 \text{ mg/l NH}_3\text{-N})}{(250 \text{ mg/l BOD}_5)} = 1.9 \text{ lb O}_2/\text{lb BOD}_5$$

\* 2.2 lb O<sub>2</sub>/lb BOD<sub>5</sub> used instead per TCEQ minimum oxygen requirement for systems intended to nitrify.

2. Coarse Bubble Requirements

$$\frac{(250 \text{ mg/l BOD}_5)(8.34)(0.075 \text{ MGD})(2.2 \text{ lb O}_2/\text{lb BOD}_5)(1.42)**}{(0.0510*)(0.23)(0.075)(1440)} = 388 \text{ scfm}$$

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

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

- ii. Aerobic Digester  
(4,968 ft<sup>3</sup>)(20 scfm/1000 ft<sup>3</sup>) = 99 scfm
- iii. Chlorine Contact Basin  
(2,592 ft<sup>3</sup>)(20 scfm/1000 ft<sup>3</sup>) = 52 scfm
- iv. Miscellaneous Air Lifts  
(2)(50 scfm) = 100 scfm
- v. Total Air Requirements (Coarse Bubble)  
388 scfm + 99 scfm + 52 scfm + 100 scfm = 639 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)(800 scfm) = 1,600 scfm
- ii. Firm Blower Capacity with Largest Unit out of Service  
(1)(800 scfm) = 800 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  
$$\frac{(8 \text{ mg/l})(8.34)(0.075 \text{ MGD})}{((9\%)/1.159)(9.7 \text{ lbs/gal})} = 9 \text{ gal/day}$$

3. NaOCl Solution Feed Rate at Peak Daily Flow  
$$\frac{(8 \text{ mg/l})(8.34)(0.3 \text{ MGD})}{((9\%)/1.159)(9.7 \text{ lbs/gal})} = 20 \text{ gal/day}$$

ii. Maximum Bleach Storage  
(Covered Storage)  
$$(15 \text{ days})(9 \text{ gal/day}) = 135 \text{ gal}$$

iii. Proposed Bleach Storage  
$$(1)(125 \text{ gal}) = 125 \text{ gal}$$

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

## INTERIM II PHASE – 0.15 MGD

### I. SCOPE

The proposed Interim II Phase WWTP will consist of facilities that are designed and constructed to treat 0.15 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 modifications.

### II. PROPOSED WASTEWATER TREATMENT PLANT DESIGN

#### A. DESIGN CRITERIA

##### 1. Proposed Effluent Limits.

- a. BOD<sub>5</sub> = 10 mg/l (daily average)
- b. TSS = 15 mg/l (daily average)
- c. NH<sub>3</sub>-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<sub>5</sub>/day/1,000 ft<sup>3</sup>) = 35
- b. Maximum Clarifier Surface Loading at Peak Flow  
(gal/day/ft<sup>2</sup>) = 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\*

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

\*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.

$$\begin{aligned} \text{a. Average (Design)} &= 1.0Q = 150,000 \text{ gpd} = 104 \text{ gpm} \\ \text{b. Peak (2 hour)} &= 4.0Q = 600,000 \text{ gpd} = 417 \text{ gpm} \end{aligned}$$

### 2. Influent Composition

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

$$\begin{aligned} \text{BOD}_5 &= 250 \text{ mg/L} \\ \text{TSS} &= 250 \text{ mg/L} \\ \text{NH}_3\text{-N} &= 40 \text{ mg/L} \end{aligned}$$

### 3. Organic Loadings.

$$\begin{aligned} \text{BOD}_5 &= (0.15 \text{ MGD})(8.34)(250 \text{ mg/L}) = 313 \text{ lbs BOD}_5/\text{day} \\ \text{TSS} &= (0.15 \text{ MGD})(8.34)(250 \text{ mg/L}) = 313 \text{ lbs TSS/day} \\ \text{NH}_3\text{-N} &= (0.15 \text{ MGD})(8.34)(40 \text{ mg/L}) = 50 \text{ lbs NH}_3\text{-N/day} \end{aligned}$$

### 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 36' long. The average water depth is assumed at 11.5'.

#### i. Total Required Volume

$$\begin{aligned} &\text{Required Volume Using Traditional Design Method (30 TAC §217 Guidelines)} \\ &(0.15 \text{ MGD})(8.34)(250 \text{ mg/L})/(35 \text{ lb BOD}_5/1,000 \text{ ft}^3) \\ &= 8,936 \text{ ft}^3 \end{aligned}$$

#### ii. Proposed Volume

$$\begin{aligned} 1. \quad &\text{Existing Volume – Interim I Phase} \\ &(1)(12 \text{ ft})(36 \text{ ft})(11.5 \text{ ft}) = 4,968 \text{ ft}^3 \end{aligned}$$

2. Proposed Volume – Interim II Phase  
 $(1)(12 \text{ ft})(36 \text{ ft})(11.5 \text{ ft}) = 4,968 \text{ ft}^3$
  3. Total Volume = 9,936 ft<sup>3</sup>
  - iii. Actual Organic Loading  
 $(313 \text{ lb BOD}_5/\text{day})/(9,936 \text{ ft}^3/1,000 \text{ ft}^3) = 31.5 \text{ lb BOD}_5/\text{day}/1,000 \text{ ft}^3$
- b. Secondary Clarifier. The proposed Interim II Phase plant will consist of one (1) existing clarifier sized at 28' diameter constructed in Interim I Phase. The side water depth is 10'.
- i. Required Surface Area at Peak Flow  
 $(600,000 \text{ gpd})/(1,200 \text{ gpd}/\text{ft}^2) = 500 \text{ ft}^2$
  - ii. Existing Surface Area = 616 ft<sup>2</sup>
  - iii. Existing Surface Loading
    1. At Design Flow  
 $(150,000 \text{ gpd})/(616 \text{ ft}^2) = 244 \text{ gpd}/\text{ft}^2$
    2. At Peak Flow  
 $(600,000 \text{ gpd})/(616 \text{ ft}^2) = 974 \text{ gpd}/\text{ft}^2$
  - iv. Existing Clarifier Weir Length  
 $(\pi)(28\text{ft} - 2 \text{ ft}) = 82 \text{ ft}$
  - v. Existing Weir Loading at Peak Flow  
 $(600,000 \text{ gpd})/(82 \text{ ft}) = 7,317 \text{ gpd}/\text{ft}$
  - 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  
 $(616 \text{ ft}^2)(10 \text{ ft})(7.48 \text{ gal}/\text{ft}^3)/(417 \text{ gal}/\text{min})$   
 $= 110 \text{ minutes}$   
 $= 1.84 \text{ hours}$
- 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 36' long. The average water depth for both digesters is assumed at 11.5'.

Assume one (1) pound of solids produced per pound of BOD<sub>5</sub> 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  
 $(313 \text{ lb BOD}_5 / \text{day}) / (1 \text{ lb solids} / 1 \text{ lb BOD}_5) = 313 \text{ lb solids/day}$
2. Digested Solids Production  
 $(313 \text{ lb solid/day})(1 - (0.3)(0.7)) = 247 \text{ lb solids/day}$
3. Average Solids in Digester  
 $(313 \text{ lb solids/day} + 247 \text{ lb solids/day}) / 2 = 280 \text{ lb solids/day}$
4. Total Solids in Digester for 28-day SRT\*  
 $(280 \text{ lb solids/day})(28 \text{ days}) = 7,840 \text{ lb solids}$

ii. Required Volume

$$(7,840 \text{ lb solids})(10^6) / ((8.34)(15,000 \text{ mg/l MLSS in digester})(7.48))$$

$$= 8,376 \text{ ft}^3$$

iii. Proposed Volume

1. Existing Volume – Interim I Phase  
 $(1)(12 \text{ ft})(36 \text{ ft})(11.5 \text{ ft}) = 4,968 \text{ ft}^3$
2. Proposed Volume – Interim II Phase  
 $(1)(12 \text{ ft})(36 \text{ ft})(11.5 \text{ ft}) = 4,968 \text{ ft}^3$
3. Total Volume  
 $= 9,936 \text{ ft}^3$

\*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 24' long. The maximum water depth is assumed to be 10 ft.

- i. Required Volume at Peak Flow  
 $(417 \text{ gpm})(20 \text{ min}) / (7.48) = 1,114 \text{ ft}^3$
- ii. Existing Volume  
 $(24 \text{ ft})(12 \text{ ft})(9 \text{ ft}) = 2,592 \text{ ft}^3$
- iii. Actual Detention Time at Peak Flow  
 $(2,592 \text{ ft}^3)(7.48) / (417 \text{ gpm}) = 46.5 \text{ minutes}$

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<sub>2</sub>/lb BOD<sub>5</sub> used instead per TCEQ minimum oxygen requirement for systems intended to nitrify.

2. Coarse Bubble Requirements

$$\frac{(250 \text{ mg/l BOD}_5)(8.34)(0.15 \text{ MGD})(2.2 \text{ lb O}_2/\text{lb BOD}_5)(1.42)**}{(0.0510*)(0.23)(0.075)(1440)} = 771 \text{ scfm}$$

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

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

- ii. Aerobic Digester  
(9,936 ft<sup>3</sup>)(20 scfm/1000 ft<sup>3</sup>) = 199 scfm
- iii. Chlorine Contact Basin  
(2,592 ft<sup>3</sup>)(20 scfm/1000 ft<sup>3</sup>) = 52 scfm
- iv. Miscellaneous Air Lifts  
(2)(50 scfm) = 100 scfm
- v. Total Air Requirements (Coarse Bubble)  
771 scfm + 199 scfm + 52 scfm + 100 scfm = 1,122 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 psi discharge pressure at 100°F, 80% RH, and 14.64 psia inlet.

- i. Existing Blower Capacity – Interim I Phase  
(2)(800 scfm) = 1,600 scfm
- ii. Proposed Blower Capacity – Interim II Phase  
(3)(800 scfm) = 2,400 scfm
- iii. Total Blower Capacity = 2,400 scfm

$$\begin{array}{lll} \text{iv.} & \text{Firm Blower Capacity with Largest Unit out of Service} & \\ & (2)(800 \text{ scfm}) & = 1,600 \text{ scfm} \end{array}$$

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.

$$1. \quad \text{Chlorine Dosage Rate} = 8 \text{ mg/l}$$

$$\begin{array}{lll} 2. & \text{NaOCl Solution Feed Rate at Average Daily Flow} & \\ & \frac{(8 \text{ mg/l})(8.34)(0.15 \text{ MGD})}{((9\%)/1.159)(9.7 \text{ lbs/gal})} & = 13 \text{ gal/day} \end{array}$$

$$\begin{array}{lll} 3. & \text{NaOCl Solution Feed Rate at Peak Daily Flow} & \\ & \frac{(8 \text{ mg/l})(8.34)(0.8 \text{ MGD})}{((9\%)/1.159)(9.7 \text{ lbs/gal})} & = 40 \text{ gal/day} \end{array}$$

$$\begin{array}{lll} \text{ii.} & \text{Maximum Bleach Storage} & \\ & \text{(Covered Storage)} & \\ & (15 \text{ days})(13 \text{ gal/day}) & = 195 \text{ gal} \end{array}$$

$$\begin{array}{lll} \text{iii.} & \text{Existing Bleach Storage} & \\ & (1)(125 \text{ gal}) & = 125 \text{ gal} \end{array}$$

$$\begin{array}{lll} \text{iv.} & \text{Total Bleach Storage} & \\ & & = 125 \text{ gal} \end{array}$$

## **I. SCOPE**

The proposed Phase III will consist of facilities that are designed and constructed to treat 0.975 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, a sodium hypochlorite chemical disinfection system, and a sodium bisulfite for dechlorination.

## **II. PROPOSED WASTEWATER TREATMENT PLANT DESIGN**

### **A. DESIGN CRITERIA**

#### **1. Proposed Effluent Limits.**

- a. BOD<sub>5</sub> = 10 mg/l (daily average)
- b. TSS = 15 mg/l (daily average)
- c. NH<sub>3</sub>-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<sub>5</sub>/day/1,000 ft<sup>3</sup>) = 35
- b. Maximum Clarifier Surface Loading at Peak Flow  
(gal/day/ft<sup>2</sup>) = 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\*

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

\*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.

$$\begin{aligned} \text{a. Average (Design)} &= 1.0Q = 975,000 \text{ gpd} = 677 \text{ gpm} \\ \text{b. Peak (2 hour)} &= 4.0Q = 3,900,000 \text{ gpd} = 2,708 \text{ gpm} \end{aligned}$$

### 2. Influent Composition

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

$$\text{BOD}_5 = 325 \text{ mg/L}$$

$$\text{TSS} = 300 \text{ mg/L}$$

$$\text{NH}_3\text{-N} = 60 \text{ mg/L}$$

### 3. Organic Loadings.

$$\text{BOD}_5 = (0.975 \text{ MGD})(8.34)(325 \text{ mg/L}) = 2,643 \text{ lbs BOD}_5/\text{day}$$

$$\text{TSS} = (0.975 \text{ MGD})(8.34)(300 \text{ mg/L}) = 2,439 \text{ lbs TSS/day}$$

$$\text{NH}_3\text{-N} = (0.975 \text{ MGD})(8.34)(60 \text{ mg/L}) = 488 \text{ lbs NH}_3\text{-N/day}$$

### 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 3.9 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

$$\begin{aligned} &\text{Required Volume Using Traditional Design Method (30 TAC § 217 Guidelines)} \\ &(0.975 \text{ MGD})(8.34)(325 \text{ mg/L})/(35 \text{ lb BOD}_5/1,000 \text{ ft}^3) \\ &= 75,507 \text{ ft}^3 \end{aligned}$$



$$\text{ii. Proposed Volume} \\ (2)(16 \text{ ft})(42 \text{ ft})(60 \text{ ft}) = 80,640 \text{ ft}^3$$

$$\text{iii. Actual Organic Loading} \\ (2,643 \text{ lb BOD}_5/\text{day})/(80,640 \text{ ft}^3/1,000 \text{ ft}^3) = 32.8 \text{ lb BOD}_5/\text{day}/1,000 \text{ ft}^3$$

- c. Secondary Clarifier. The proposed Final Phase plant will consist of two (2) proposed clarifiers, sized at 44' diameter. The side water depth is 14.5'.

$$\text{i. Required Surface Area at Peak Flow} \\ (3,900,000 \text{ gpd})/(1,200 \text{ gpd}/\text{ft}^2) = 3,250 \text{ ft}^2$$

$$\text{ii. Proposed Surface Area} \\ (2)(\pi/4)(46 \text{ ft})^2 = 3,322 \text{ ft}^2$$

iii. Surface Loading

$$\text{1. At Design Flow} \\ (975,000 \text{ gpd})/(3,322 \text{ ft}^2) = 293 \text{ gpd}/\text{ft}^2$$

$$\text{2. At Peak Flow} \\ (3,900,000 \text{ gpd})/(3,322 \text{ ft}^2) = 1,174 \text{ gpd}/\text{ft}^2$$

$$\text{iv. Proposed Clarifier Weir Length} \\ (2)(\pi)(46 \text{ ft} - 2 \text{ ft}) = 276 \text{ ft}$$

$$\text{v. Proposed Weir Loading at Peak Flow} \\ (3,900,000 \text{ gpd})/(276 \text{ ft}) = 14,130 \text{ gpd}/\text{ft}$$

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

$$\text{1. Proposed Clarifier Side Water Depth} = 14.5 \text{ ft}$$

vii. Hydraulic Detention Times at Peak Flow

$$\text{1. Proposed Hydraulic Detention Time at Peak Flow – Final Phase} \\ (3,322 \text{ ft}^2)(14.5 \text{ ft})(7.48 \text{ gal}/\text{ft}^3)/(2,708 \text{ gal}/\text{min}) \\ = 133 \text{ minutes} \\ = 2.22 \text{ hours}$$

- d. Aerobic Digesters. The proposed Final Phase plant will consist of two (2) proposed multi-stage digesters sized at 50' wide by 50' long. The average water depth is assumed at 16'.

Assume one (1) pound of solids produced per pound of BOD<sub>5</sub> 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  

$$(2,643 \text{ lb BOD}_5 / \text{day}) / (1 \text{ lb solids} / 1 \text{ lb BOD}_5) = 2,643 \text{ lb solids/day}$$
2. Digested Solids Production  

$$(2,643 \text{ lb solid/day})(1 - (0.3)(0.7)) = 2,088 \text{ lb solids/day}$$
3. Average Solids in Digester  

$$(2,643 \text{ lb solids/day} + 2,088 \text{ lb solids/day}) / 2 = 2,366 \text{ lb solids/day}$$
4. Total Solids in Digester for 28-day SRT\*  

$$(2,366 \text{ lb solids/day})(28 \text{ days}) = 66,248 \text{ lb solids}$$

ii. Required Volume  

$$(66,248 \text{ lb solids})(10^6) / ((8.34)(15,000 \text{ mg/l MLSS in digester})(7.48))$$

$$= 70,797 \text{ ft}^3$$

iii. Proposed Volume  

$$(2)(16 \text{ ft})(50 \text{ ft})(50 \text{ ft}) = 80,000 \text{ ft}^3$$

\*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, sized at 20' wide by 56' long. The maximum water depth is assumed to be 10 ft.

- i. Required Volume at Peak Flow  

$$(2,708 \text{ gpm})(20 \text{ min}) / (7.48) = 7,242 \text{ ft}^3$$
- ii. Proposed Volume  

$$(10 \text{ ft})(56 \text{ ft})(20 \text{ ft}) = 11,200 \text{ ft}^3$$
- iii. Actual Detention Time at Peak Flow  

$$(11,200 \text{ ft}^3)(7.48) / (2,708 \text{ gpm}) = 30.93 \text{ minutes}$$

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<sub>2</sub>/lb BOD<sub>5</sub> used instead per TCEQ minimum oxygen requirement for systems intended to nitrify.

## 2. Coarse Bubble Requirements

$$\frac{(325 \text{ mg/l BOD}_5)(8.34)(0.975 \text{ MGD})(2.2 \text{ lb O}_2/\text{lb BOD}_5)(0.91^{**})}{(0.0510^*)(0.23)(0.075)(1440)} = 4,176 \text{ scfm}$$

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

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

- ii. Aerobic Digester  
(80,000 ft<sup>3</sup>)(20 scfm/1000 ft<sup>3</sup>) = 1,600 scfm
- iii. Chlorine Contact Basin  
(11,200 ft<sup>3</sup>)(20 scfm/1000 ft<sup>3</sup>) = 224 scfm
- iv. Miscellaneous Air Lifts  
(3)(50 scfm) = 150 scfm
- v. Total Air Requirements (Coarse Bubble)  
4,176 scfm + 1,600 scfm + 224 scfm + 150 scfm = 6,150 scfm

g. Blower Capacities. The proposed Final Phase plant will include five (5) 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  
(4)(2,500 scfm) = 10,000 scfm
- ii. Firm Blower Capacity with Largest Unit out of Service  
(3)(2,500 scfm) = 7,500 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  

$$\frac{(8 \text{ mg/l})(8.34)(0.975 \text{ MGD})}{((9\%)/1.159)(9.7 \text{ lbs/gal})} = 86.36 \text{ gal/day}$$
  - 3. NaOCl Solution Feed Rate at Peak Daily Flow  

$$\frac{(8 \text{ mg/l})(8.34)(3.9 \text{ MGD})}{((9\%)/1.159)(9.7 \text{ lbs/gal})} = 260 \text{ gal/day}$$

- ii. Maximum Bleach Storage  
(Covered Storage)  
(15 days)(65 gal/day) = 975 gal
- iii. Proposed Bleach Storage  
(1)(900 gal) = 900 gal

A total of one (1) 900-gallon bulk storage tank will be provided.

- i. Dechlorination Contact Chamber. The proposed phase will include one (1) dechlorination contact chamber, sized at fifteen feet (15') long by five feet (5') wide. The side water depth at peak flow is assumed at two feet (2').

- i. Required Volume at Peak Flow  
(2,708 gpm)(0.33 min)/(7.48) = 119.5 ft<sup>3</sup>
- ii. Total Volume  
(15 ft)(5 ft)(2 ft) = 150 ft<sup>3</sup>
- iii. Actual Detention Time at Peak Flow  
(150 ft<sup>3</sup>)(7.48)/(2,708 gpm) = 0.41 min  
= 25 sec

- j. Dechlorination Equipment. Calculations are for 38% trade strength Sodium Bisulfite (NaHSO<sub>3</sub>) with a specific gravity of 1.320, 29% availability sulfur dioxide by weight, 11 pounds per gallon, and no noticeable degradation of strength after 30 days.

- i. Anticipated Chlorine Residual = 2 mg/l
- ii. Sodium Bisulfite Dosage Rate  
(2 mg/L Cl<sub>2</sub>)(1.5 part NaHSO<sub>3</sub>/part Cl<sub>2</sub>) = 3 mg/l
- iii. Required NaHSO<sub>3</sub> Feed Rate at Average Daily Flow  
$$\frac{(0.975 \text{ MGD})(8.34)(3 \text{ mg/L})}{(2.1692 \text{ lb SO}_3/\text{gal NaHSO}_3)}$$
 = 11 gal/day
- iv. Required NaHSO<sub>3</sub> Feed Rate at Peak Flow  
$$\frac{(3.9 \text{ MGD})(8.34)(3 \text{ mg/L})}{(2.1692 \text{ lb SO}_3/\text{gal NaHSO}_3)}$$
 = 45 gal/day
- v. Sodium Bisulfite Storage  
(Covered Storage)  
(15 days)(11 gal/day) = 165 gal
- vi. Sodium Bisulfite Storage Provided  
(1)(180 gal) = 180 gal

One (1) 180-gallon bulk storage tank will be provided.

**ATTACHMENT I**

**SLUDGE MANAGEMENT PLAN**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**QUIDDITY**

Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-23290 & 10046100  
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**SLUDGE MANAGEMENT PLAN  
AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT FACILITY TPDES PERMIT**

## INTRODUCTION

This sludge management and disposal plan is being submitted as an attachment to the TPDES permit application for Austin Habitat for the Good, LLC. The Brandywine Wastewater Treatment Facility will be a 0.075 million gallons per day (MGD) single stage nitrification activated sludge plant, with proposed future phases of 0.150 MGD and 0.975 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 4,968 ft<sup>3</sup> in the Interim I phase. The Interim II and Final phases will have digester volumes of 9,936 ft<sup>3</sup> and 80,000 ft<sup>3</sup>, 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 – 0.075 MGD		
Percent of Design Flow	Flow (MGD)	Solids Generated (lb/day)
25	0.02	39
50	0.04	78
75	0.06	117
100	0.075	156



Interim II Phase – 0.150 MGD		
Percent of Design Flow	Flow (MGD)	Solids Generated (lb/day)
25	0.04	78
50	0.08	156
75	0.11	235
100	0.15	313

Final Phase – 0.975 MGD		
Percent of Design Flow	Flow (MGD)	Solids Generated (lb/day)
25	0.24	661
50	0.49	1,321
75	0.73	1,982
100	0.975	2,643

## 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.

At this concentration, a 4,968 ft<sup>3</sup> digester will hold 4,649 pounds of solids in the Interim I phase. In the Interim II phase, a 9,936 ft<sup>3</sup> digester will hold 9,298 pounds of solids. In the Final phase, an 80,000 ft<sup>3</sup> digester will hold 74,860 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 – 0.075 MGD		
Percent of Design Flow	Solids Disposed (lb/day)	Hauling Schedule (days)
25	31	151
50	62	75
75	93	50
100	124	38

Interim II Phase – 0.150 MGD		
Percent of Design Flow	Solids Disposed (lb/day)	Hauling Schedule (days)
25	62	151
50	124	75
75	185	50
100	247	38

Final Phase – 0.975 MGD		
Percent of Design Flow	Solids Disposed (lb/day)	Hauling Schedule (days)
25	522	143
50	1,044	72
75	1,566	48
100	2,088	36

## 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.

**ATTACHMENT H**

**SUPPLEMENTAL TECHNICAL REPORT**

**AUSTIN HABITAT FOR THE GOOD, LLC**  
**BRANDYWINE WASTEWATER TREATMENT PLANT**



**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



**ATTACHMENT F**

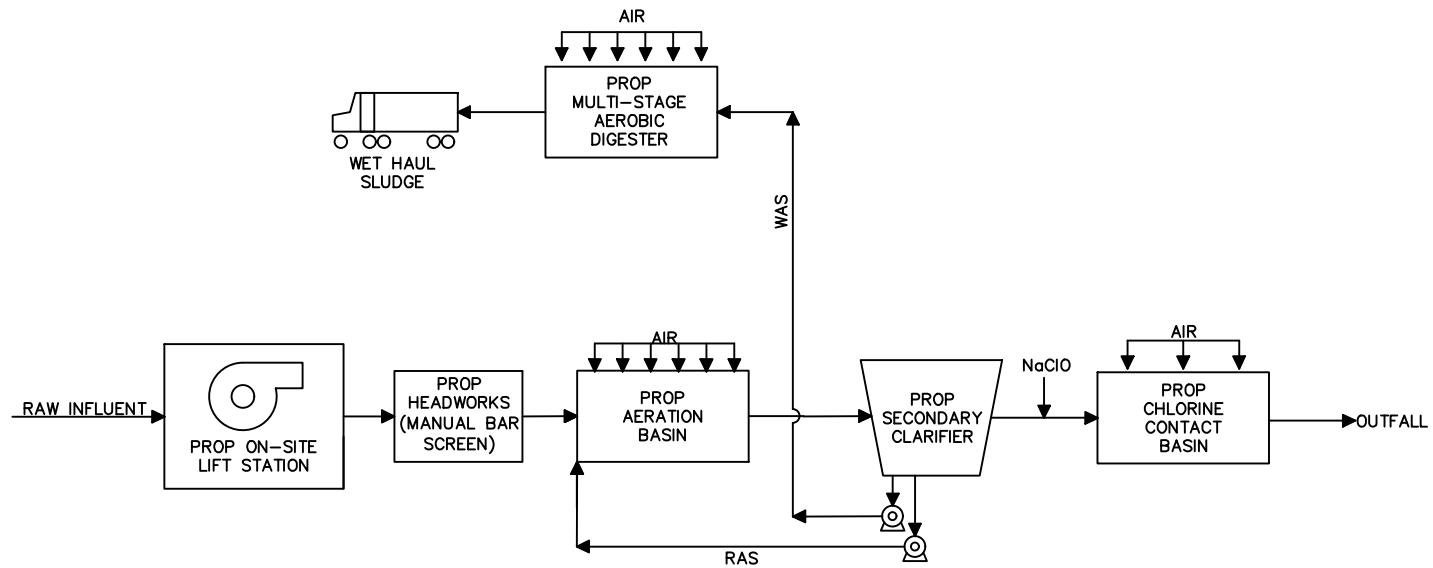
**FLOW SCHEMATICS**

**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



**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



#### LEGEND

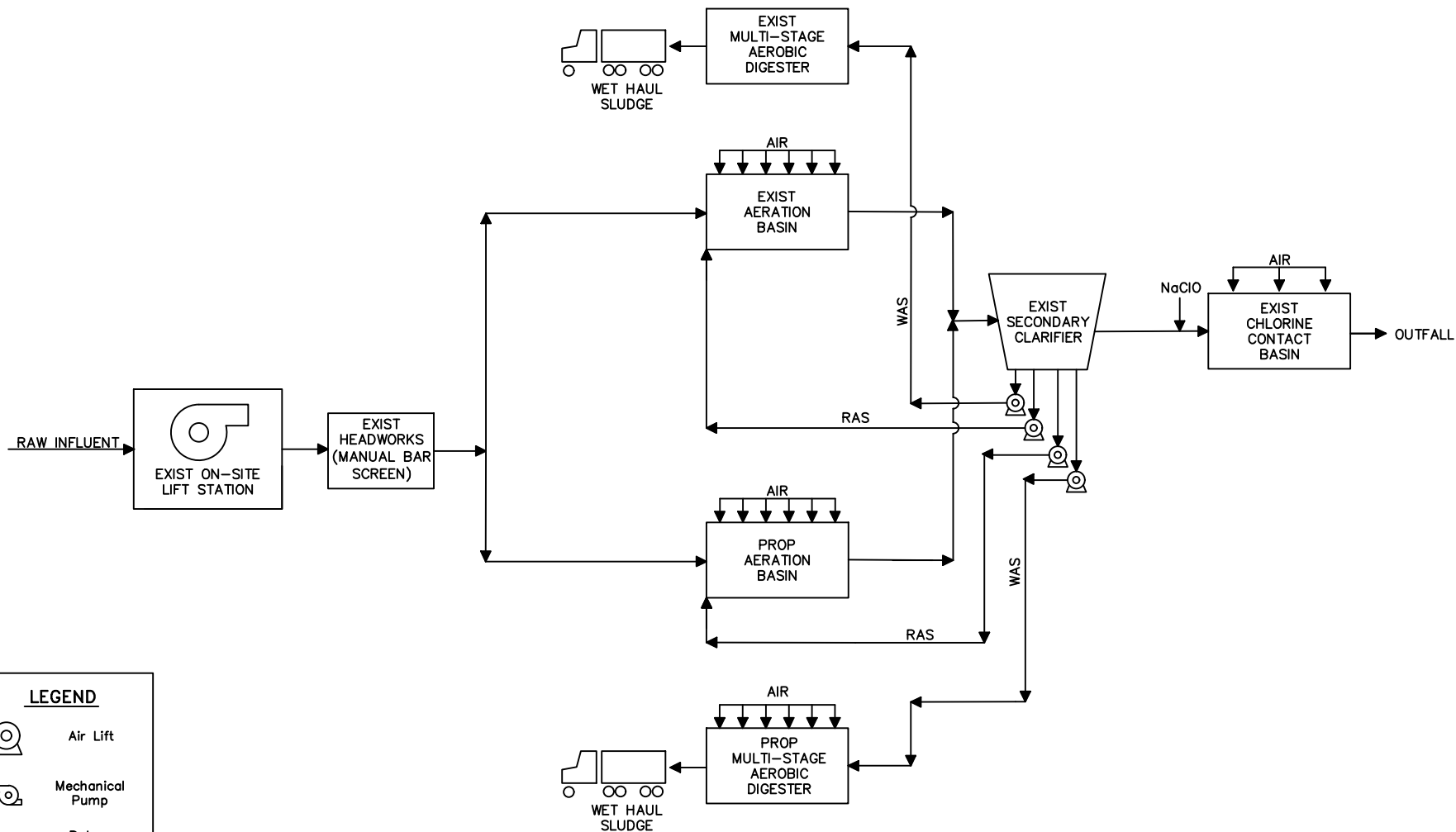
	Air Lift
	Mechanical Pump
RAS	Return Activated Sludge
WAS	Waste Activated Sludge
NaClO	Sodium Hypochlorite

**Flow Schematics**  
**Austin Habitat for the Good, LLC**  
**Brandywine Wastewater Treatment Facility**  
**Interim I Phase - 0.075 MGD**



**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



#### LEGEND

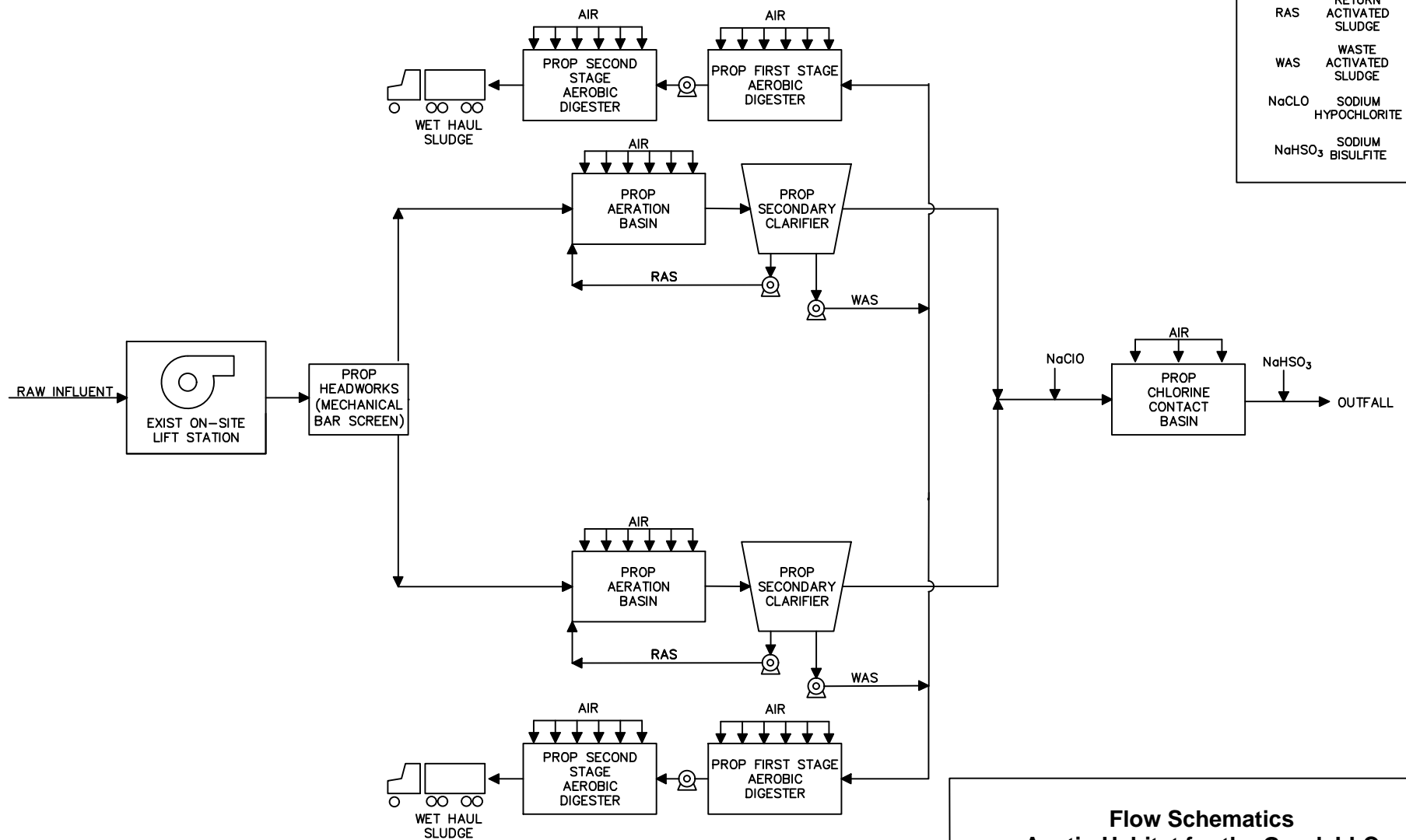
	Air Lift
	Mechanical Pump
RAS	Return Activated Sludge
WAS	Waste Activated Sludge
NaClO	Sodium Hypochlorite

**Flow Schematics**  
**Austin Habitat for the Good, LLC**  
**Brandywine Wastewater Treatment Facility**  
**Interim II Phase - 0.150 MGD**



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6330 West Loop South, Suite 150 • Bellaire, TX 77401 • 713.777.5337



**ATTACHMENT G**

**SERVICE AREA MAP**

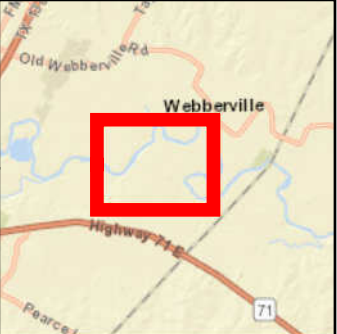
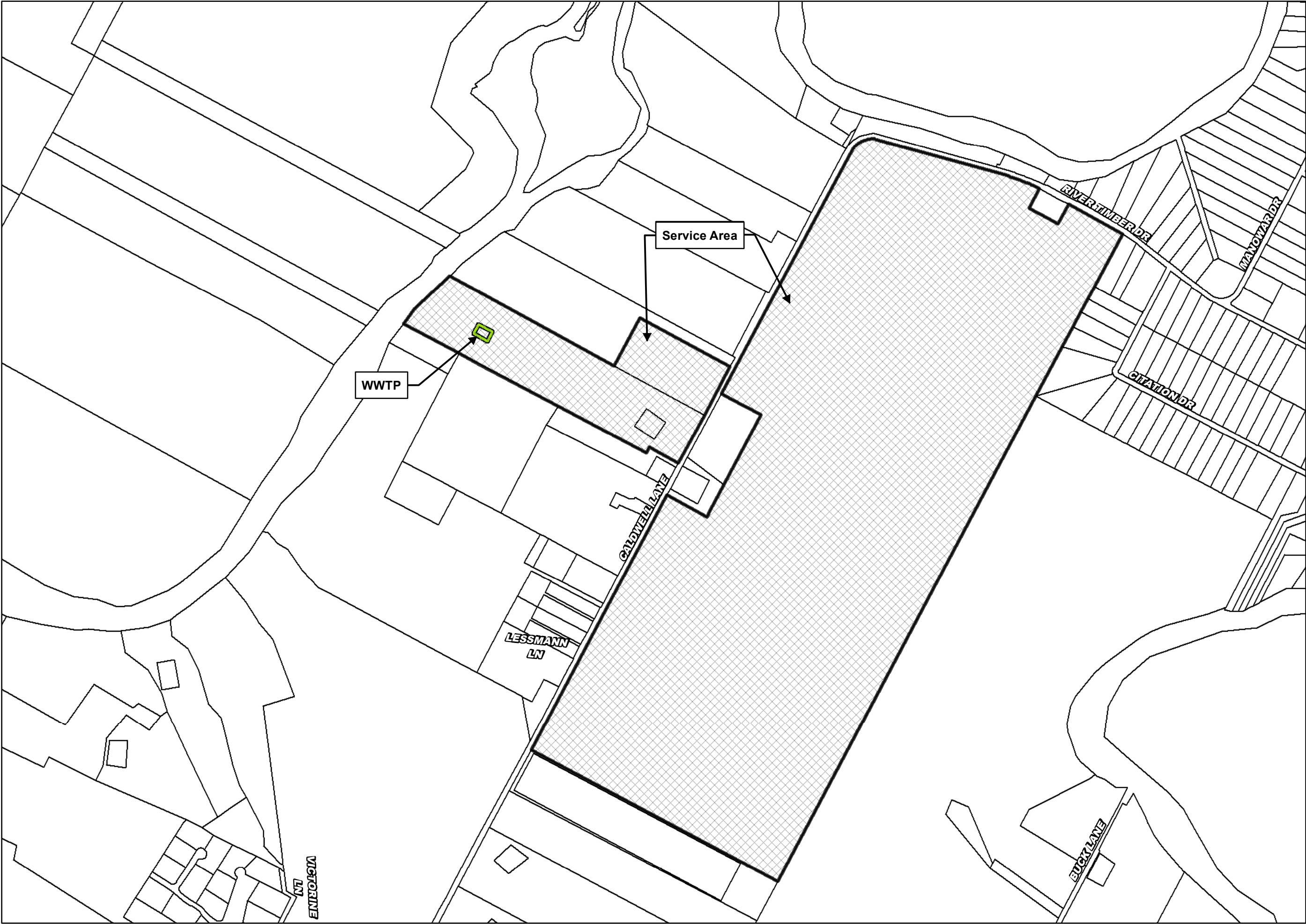
**AUSTIN HABITAT FOR THE GOOD, LLC  
BRANDYWINE WASTEWATER TREATMENT PLANT**



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VICINITY MAP  
1 INCH = 5 MILES

LEGEND

- Service Area Boundary
- Service Area
- WWTP Boundary
- TCAD Parcels

SERVICE AREA  
MAP

CALDWELL LANE  
TRAVIS COUNTY, TEXAS



Disclaimer: This product is offered for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property, governmental and/or political boundaries or related facilities to said boundary. No express warranties are made by Quiddity Engineering concerning the accuracy, completeness, reliability, or usability of the information included within this exhibit.



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

# 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. WQ0016661001**

**SOLICITUD.** Austin Habitat For The Good, LLC, 5599 San Felipe Street, Suite 1500, Houston, Texas 77056 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016661001 (EPA I.D. No. TX0146935) 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 975,000 galones por día. La planta está ubicada 0.76 millas al suroeste de la intersección de Caldwell Lane y River Timber Drive, cerca de la ciudad de Austin, en el condado de Travis, Texas 78617. La ruta de descarga es del sitio de la planta a directamente al río Colorado debajo del lago Lady Bird. La TCEQ recibió esta solicitud el 13 de noviembre de 2024. La solicitud para el permiso está disponible para leerla y copiarla en Biblioteca Pública de Garfield, 5121 Albert Brown Drive, Del Valle, 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.

[Insert web link from English notice]

**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. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas de 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 específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía 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](http://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](http://www.tceq.texas.gov).

También se puede obtener información adicional del Austin Habitat For The Good, LLC a la dirección indicada arriba o llamando a Sr. Jonathan Nguyen, Quiddity Engineering, al 512-685-5156.

Fecha de emisión \_\_\_\_\_ *[Date notice issued]*

## Rachel Ellis

---

**From:** Jonathan Nguyen <jnguyen@quiddity.com>  
**Sent:** Tuesday, November 19, 2024 1:15 PM  
**To:** Rachel Ellis  
**Subject:** Re: Application for New Permit No. WQ0016661001-Austin Habitat For The Good, LLC- Notice of Deficiency Letter  
**Attachments:** Brandywine Spanish NORI.docx

Good afternoon Rachel,

I am sending you a copy of the application. Once I get the tracking info, I will forward your way. Attached is the Spanish NORI. Only note is for the NORI paragraph is the discharge route, which will be "directly into the Colorado River Below Lady Bird Lake." The Spanish NORI already incorporates this language. Other than that, the NORI statement is good to go.

Let me know if you have any questions.

Thank you!

**Jonathan Nguyen**  
*Permitting Specialist*



---

✉ [jnguyen@quiddity.com](mailto:jnguyen@quiddity.com)

☎ [\(512\) 685-5156](tel:(512)685-5156)

📍 912 S. Capital of Texas Hwy, Suite 300, Austin, Texas, 78746

[www.quiddity.com](http://www.quiddity.com)



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**From:** Rachel Ellis <Rachel.Ellis@tceq.texas.gov>  
**Sent:** Monday, November 18, 2024 11:57 AM  
**To:** Jonathan Nguyen <jnguyen@quiddity.com>  
**Subject:** Application for New Permit No. WQ0016661001-Austin Habitat For The Good, LLC- Notice of Deficiency Letter

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.



Dear Mr. Nguyen ,

The attached Notice of Deficiency letter sent on November 18, 2024, requests additional information needed to declare the application administratively complete. Please send the complete response to my attention by December 2, 2024.

Thank you,

*Rachel Ellis*

Texas Commission on Environmental Quality  
Water Quality Division  
Application Review & Processing Team  
[Rachel.Ellis@tceq.texas.gov](mailto:Rachel.Ellis@tceq.texas.gov)



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ORIGIN ID:MMRA (512) 685-5118  
JENNA POPE  
QUIDDITY ENGINEERING  
912 S. CAPITAL OF TEXAS HIGHWAY  
SUITE 300  
AUSTIN, TX 78746  
UNITED STATES US

SHIP DATE: 19NOV24  
ACTWGT: 1.00 LB  
CAD: 102146543/INET4535

BILL SENDER

TO **ATTN: WASTEWATER PERMITTING  
TCEQ (WATER QUALITY DIV MC-148)  
12100 PARK 35 CIRCLE  
MC 148- APPS REVIEW  
AUSTIN TX 78753**

59CJ83903709C4

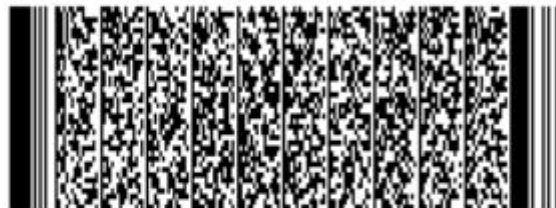
(512) 685-5118

REF: 17799-0025-02.800

INV:

PO:

DEPT:



**FedEx**  
Express



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**THU - 21 NOV 5:00P  
\*\* 2DAY \*\***

TRK#

0201

**7700 7637 2453**

**44 MMRA**

**78753**

**TX-US AUS**

