HAGOOD
ENGINEERING ASSOCIATES
Registration No. F-12709

SEWAGE COLLECTION SYSTEM

FOR

YMCA GEORGETOWN

6200 WILLIAMS DRIVE
GEORGETOWN, TX 78633

APPLICANT:
YMCA OF GREATER CENTRAL TEXAS
1812 N. MAYS STREET
ROUND ROCK, TX 78664

SUBMITTED TO:
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
REGION 11 OFFICE
12100 PARK 35 CIRCLE, BLDG A.
AUSTIN, TEXAS 78753

JULY 2024

HEA#22-012

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

The Edwards Aquifer Program staff conducts an administrative and technical review of all applications. The turnaround time for administrative review can be up to 30 days as outlined in 30 TAC 213.4(e). Generally administrative completeness is determined during the intake meeting or within a few days of receipt. The turnaround time for technical review of an administratively complete Edwards Aquifer application is 90 days as outlined in 30 TAC 213.4(e). Please know that the review and approval time is directly impacted by the quality and completeness of the initial application that is received. In order to conduct a timely review, it is imperative that the information provided in an Edwards Aquifer application include final plans, be accurate, complete, and in compliance with 30 TAC 213.

Administrative Review

1. Edwards Aquifer applications must be deemed administratively complete before a technical review can begin. To be considered administratively complete, the application must contain completed forms and attachments, provide the requested information, and meet all the site plan requirements. The submitted application and plan sheets should be final plans. Please submit one full-size set of plan sheets with the original application, and half-size sets with the additional copies.

   To ensure that all applicable documents are included in the application, the program has developed tools to guide you and web pages to provide all forms, checklists, and guidance. Please visit the below website for assistance: http://www.tceq.texas.gov/field/eapp.

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.

3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.

4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

   An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.

6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.
4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

It is important to have final site plans prior to beginning the permitting process with TCEQ to avoid delays.

Occasionally, circumstances arise where you may have significant design and/or site plan changes after your Edwards Aquifer application has been deemed administratively complete by TCEQ. This is considered a "Mid-Review Modification". Mid-Review Modifications may require redistribution of an application that includes the proposed modifications for public comment.

If you are proposing a Mid-Review Modification, two options are available:

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

If the application is denied/withdrawn, the resubmitted application will be subject to the administrative and technical review processes and will be treated as a new application. The application will be redistributed to the affected jurisdictions.

Please contact the regional office if you have questions. If your project is located in Williamson, Travis, or Hays County, contact TCEQ's Austin Regional Office at 512-339-2929. If your project is in Comal, Bexar, Medina, Uvalde, or Kinney County, contact TCEQ's San Antonio Regional Office at 210-490-3096

Please fill out all required fields below and submit with your application.

<table>
<tr><td colspan="5">1. Regulated Entity Name:
YMCA GEORGETOWN</td><td colspan="4">2. Regulated Entity No.:</td></tr>
<tr><td colspan="5">3. Customer Name: YMCA OF CENTRAL TEXAS</td><td colspan="4">4. Customer No.: 601387905</td></tr>
<tr><td>5. Project Type:
(Please circle/check one)</td><td colspan="2">New</td><td colspan="2">Modification</td><td>Extension</td><td>Exception</td><td colspan="2"></td></tr>
<tr><td>6. Plan Type:
(Please circle/check one)</td><td>WPAP</td><td>CZP</td><td>SCS</td><td>UST</td><td>AST</td><td>EXP</td><td>EXT</td><td>Technical Clarification</td><td>Optional Enhanced Measures</td></tr>
<tr><td>7. Land Use:
(Please circle/check one)</td><td colspan="2">Residential</td><td colspan="3">Non-residential</td><td colspan="2">8. Site (acres):</td><td>22.40</td></tr>
<tr><td>9. Application Fee:</td><td colspan="2">1736.00</td><td colspan="3">10. Permanent BMP(s):</td><td colspan="3"></td></tr>
<tr><td>11. SCS (Linear Ft.):</td><td colspan="2">3472</td><td colspan="3">12. AST/UST (No. Tanks):</td><td colspan="3"></td></tr>
<tr><td>13. County:</td><td colspan="2">WMSN</td><td colspan="3">14. Watershed:</td><td colspan="3">BERRY CREEK</td></tr>
</table>

Application Distribution

Instructions: Use the table below to determine the number of applications required. One original and one copy of the application, plus additional copies (as needed) for each affected incorporated city, county, and groundwater conservation district are required. Linear projects or large projects, which cross into multiple jurisdictions, can require additional copies. Refer to the "Texas Groundwater Conservation Districts within the EAPP Boundaries" map found at:

http://www.tceq.texas.gov/assets/public/compliance/field_ops/eapp/EAPP%20GWCD%20map.pdf

For more detailed boundaries, please contact the conservation district directly.

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	___	___	_X_
Region (1 req.)	___	___	_X_
County(ies)	___	___	___
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	N/A
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence _X_Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	___	___	___	___
Region (1 req.)	___	___	___	___	___
County(ies)	___	___	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	___Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch ___Helotes ___Hill Country Village ___Hollywood Park ___San Antonio (SAWS) ___Shavano Park	___Bulverde ___Fair Oaks Ranch ___Garden Ridge ___New Braunfels ___Schertz	NA	___San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review. TERRY R. HAGOOD
Print Name of Customer/Authorized Agent 
Signature of Customer/Authorized Agent Date 7/15/24

FOR TCEQ INTERNAL USE ONLY				
Date(s)Reviewed:		Date Administratively Complete:		
Received From:		Correct Number of Copies:		
Received By:		Distribution Date:		
EAPP File Number:		Complex:		
Admin. Review(s) (No.):		No. AR Rounds:		
Delinquent Fees (Y/N):		Review Time Spent:		
Lat./Long. Verified:		SOS Customer Verification:		
Agent Authorization Complete/Notarized (Y/N):		Fee Check:	Payable to TCEQ (Y/N):	
Core Data Form Complete (Y/N):			Signed (Y/N):	
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):	

General Information Form

Texas Commission on Environmental Quality

For Regulated Activities on the Edwards Aquifer Recharge and Transition Zones and Relating to 30 TAC §213.4(b) & §213.5(b)(2)(A), (B) Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **General Information Form** is hereby submitted for TCEQ review. The application was prepared by:

Print Name of Customer/Agent: TERRY R. HAGOOD

Date: 7/15/2024

Signature of Customer/Agent:

Project Information

1. Regulated Entity Name: YMCA GEORGETOWN
2. County: WILLIAMSON
3. Stream Basin: SAN GABRIEL
4. Groundwater Conservation District (If applicable): N/A
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

   ☐ WPAP
   ☒ SCS
   ☐ Modification
   ☐ AST

☐ UST ☐ Exception Request

7. Customer (Applicant):

Contact Person: JEFF ANDRESEN
Entity: YMCA OF CENTRAL TEXAS
Mailing Address: 1812 N. MAYS STREET
City, State: ROUND ROCK, TX Zip: 78664
Telephone: 512.615.5555 FAX: _____
Email Address: RCARLTON@YMCACTX.ORG

8. Agent/Representative (If any):

Contact Person: TERRY R. HAGOOD
Entity: HAGOOD ENGINEERING ASSOCIATES, INC
Mailing Address: 900 E. MAIN STREET
City, State: ROUND ROCK, TX Zip: 78664
Telephone: 512.244.1546 FAX: _____
Email Address: TERRYH@HEAENG.COM

9. Project Location:

☒ The project site is located inside the city limits of GEORGETOWN.
☐ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
☐ The project site is not located within any city's limits or ETJ.

10. ☒ The location of the project site is described below. The description provides sufficient detail and clarity so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

6200 WILLIAMS DRIVE GEORGETOWN, TX 78633

11. ☒ **Attachment A – Road Map**. A road map showing directions to and the location of the project site is attached. The project location and site boundaries are clearly shown on the map.

12. ☒ **Attachment B - USGS / Edwards Recharge Zone Map**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached. The map(s) clearly show:

☒ Project site boundaries.
☒ USGS Quadrangle Name(s).
☒ Boundaries of the Recharge Zone (and Transition Zone, if applicable).
☒ Drainage path from the project site to the boundary of the Recharge Zone.

13. ☒ **The TCEQ must be able to inspect the project site or the application will be returned**. Sufficient survey staking is provided on the project to allow TCEQ regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment.

☒ Survey staking will be completed by this date: 8/30/2024

14. ☒ **Attachment C – Project Description**. Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:

☒ Area of the site
☒ Offsite areas
☒ Impervious cover
☒ Permanent BMP(s)
☒ Proposed site use
☒ Site history
☒ Previous development
☒ Area(s) to be demolished

15. Existing project site conditions are noted below:

☐ Existing commercial site
☐ Existing industrial site
☐ Existing residential site
☐ Existing paved and/or unpaved roads
☒ Undeveloped (Cleared)
☐ Undeveloped (Undisturbed/Uncleared)
☐ Other: _____

Prohibited Activities

16. ☒ I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:

(1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);

(2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;

(3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;

(4) The use of sewage holding tanks as parts of organized collection systems; and

(5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

(6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

17. ☒ I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project:

(1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);

(2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and

(3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

18. The fee for the plan(s) is based on:

- ☐ For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
- ☒ For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
- ☐ For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems.
- ☐ A request for an exception to any substantive portion of the regulations related to the protection of water quality.
- ☐ A request for an extension to a previously approved plan.

19. ☒ Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

- ☒ TCEQ cashier
- ☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
- ☐ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

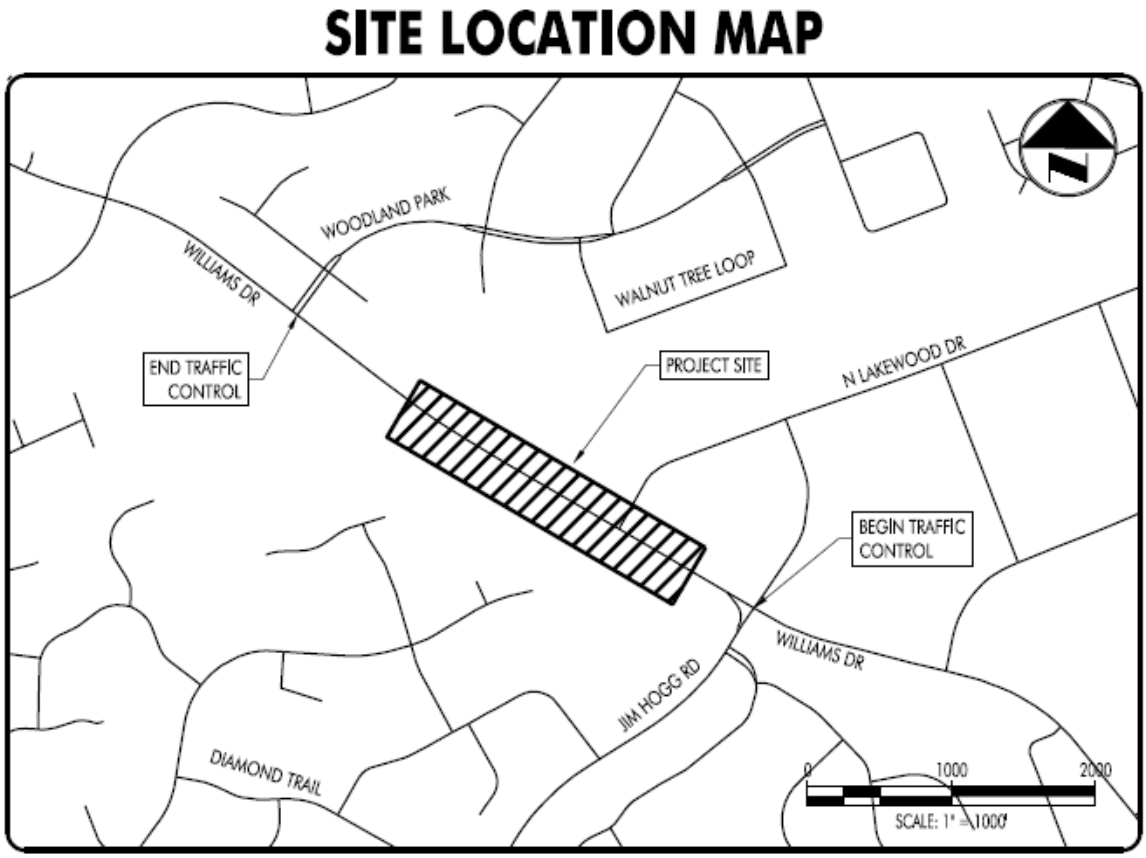
20. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

21. ☒ No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

GENERAL INFORMATION

Attachments to form TCEQ-0587

ATTACHMENT A - Road Map



ATTACHMENT B - USGS / Edwards Recharge Zone Map

See attached map

ATTACHMENT C - Project Description

Please refer to the attached plans for site improvement layout. The site is located within the City of Georgetown's (CoGt) Corporate Limits and the TCEQ Edwards Aquifer Recharge Zone.

This Sewage Collection System (SCS) Application request is for the following:

- Construction of 3070 lf of 8' AND 402 lf of 6" PVC SDR 26 gravity wastewater line to serve the new Georgetown Family YMCA (11.40 acs), existing Wellspring Church (10.65 acs), and approximately 51 acres of property along the south side of Williams Drive. No lift stations are a part of this SCS.

The Project is located at 6100 Williams Drive. The Property current legal description 11.40 acres out of the AW0229 Foy, F. Survey. During the course of permitting, the property will be platted along with the 10.65-acre Wellspring United Methodist Church parcel to create a 2-lot subdivision.

GENERAL INFORMATION

Attachments to form TCEQ-0587

The project site and service area are indicated on the Collection Area Map accompanying the Sewage Collection System (SCS) Engineering Design Report. The SCS has been designed to convey the flow from the 73.36 acres collection area. The collection area consists of multiple land parcels with acreage and existing land use noted as follows:

Georgetown Family YMCA: 11.40 acres currently undeveloped.
Wellspring Church: 10.65 acres currently exists.
Wolf, Gourley, MMSG, LP: 27.43 acres currently undeveloped
CRBCDI: 9.572 acres, commercial outdoor storage exists
Jeanette Brown: 19.22 acres, single family residence exists
Oberrener tracts (2): 10.118 acres, undeveloped
Hillside Nursery: 5.91 acres, commercial nursery exists
Snow: 6.487 acres, undeveloped.

The SCS is designed to convey future developed flows based upon land use assumptions shown below in the "*SCS Engineering Design Report"*.

The SCS will consist of:

- 3070 l.f. of eight-inch (8") pvc sdr 26 pipe
- 402 l.f. of six-inch (6") pvc sdr 26 pipe
- 15 new manholes (10-4' dia., 5 – 5' dia.)
- 2- 8" stub outs

Currently, the existing Wellspring Church is served by a Onsite Sewage Facility (OSSF). The OSSF will be decommissioned upon completion of the SCS installation, connection to the existing ww main, tested, and accepted by the CoGt.

An exception to provide a Geologic Assessment for the portion of the SCS inside the Williams Drive ROW was previously made and granted per the attached email from Bo Slone dated Jun 4, 2024. A Geologic Assessment has been provided for the YMCA and Wellspring parcel. No karst or sensitive geologic features are present.

The site is served by CoGt Water and Wastewater Utility. Wastewater from the site will be treated at the San Gabriel Wastewater Treatment Plant.

The Project SCS begins at the connection to an existing CoGt manhole (UID 1436566). (Please refer to the following CoGt GIS System Map.) The ww line downstream of this manhole is an existing 8" line operated and maintained by the City of Georgetown. The line was constructed as part of the Oak Meadows Marketplace Shopping Center. A copy of the record wastewater plan and profile and TCEQ Central Registry documentation of the approved SCS is attached.

SCS WWL A is an eight -inch (8") pvc main and will extend approximately 2,950 lf along Williams Drive. Two eight-inch (8") stubouts are provided on this line.

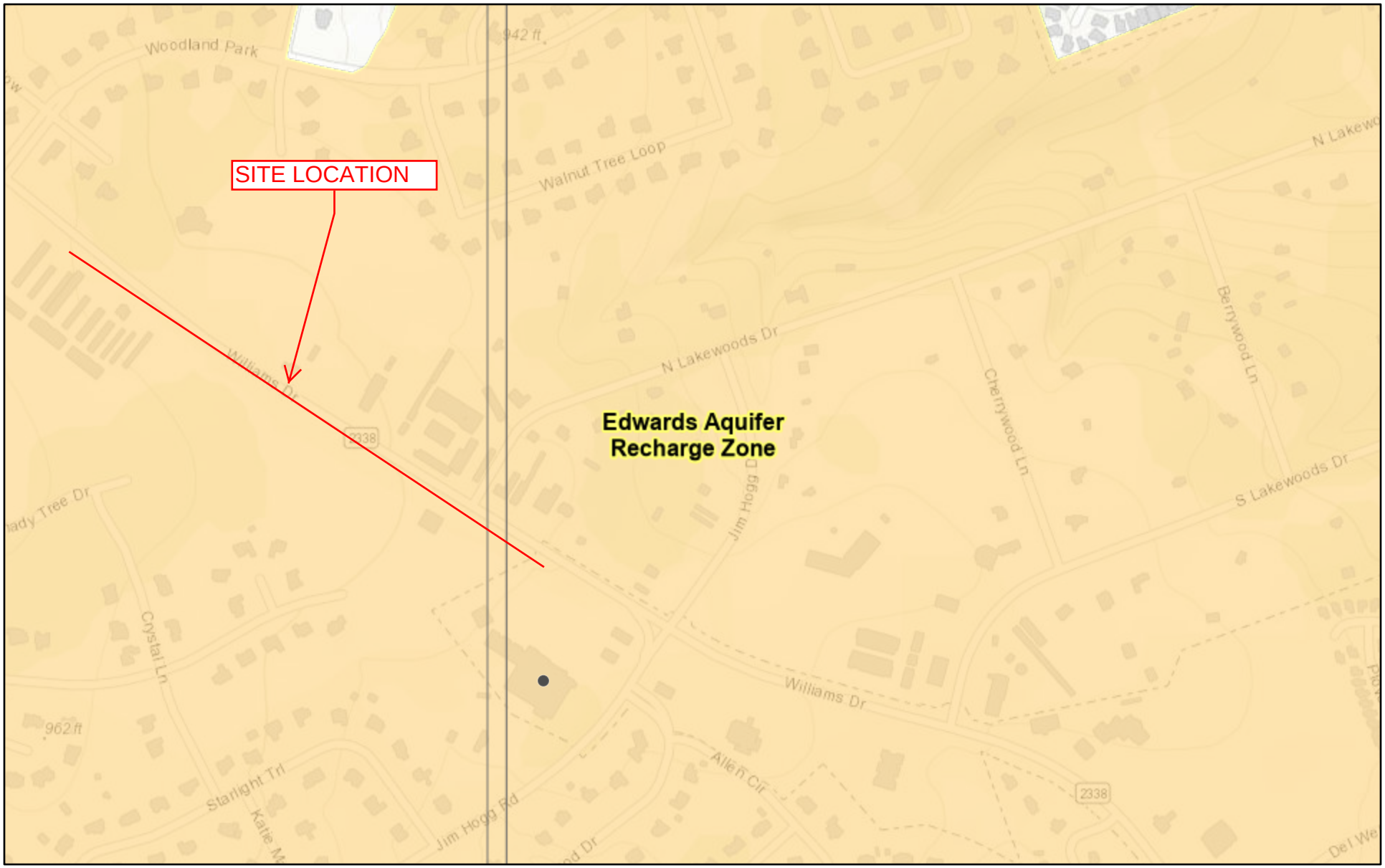
WWL A-1 is an eight-inch (8") line and extends from WWL A station (manhole) 19+00.96 across Willaims Drive 110.05 lf to a manhole. This crossing will be a 24" diameter bore with steel encasement. A stub out is provided at the manhole at the end of WWL A-1 for connection for a private main.

GENERAL INFORMATION

Attachments to form TCEQ-0587

The private main is WWL B and is an eight-inch (8”) main which extends approximately 403 lf along the common property line between YMCA and Wellspring parcels. WWL B ends at a manhole. A six-inch (6”) pvc service lateral continues from the manhole into the Wellspring parcel approximately 193 lf and ends with a connection to the existing ww service line from the existing building. A second service later stubout is provided for the YMCA parcel.

Edwards Aquifer Viewer Custom Print



6/7/2024, 10:56:15 AM

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

Edwards Aquifer Label

City/Place

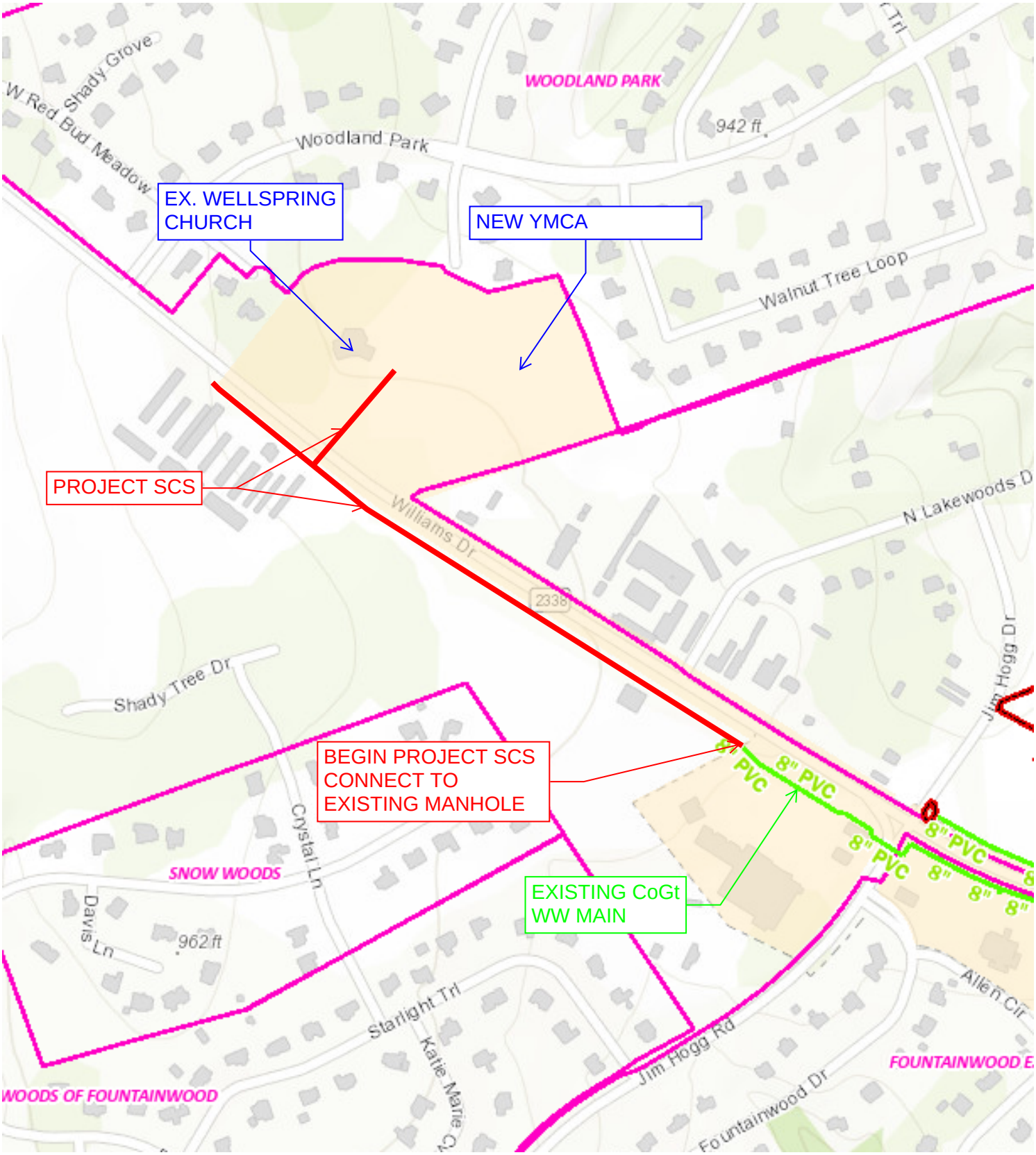
TX Counties

7.5 Minute Quad Grid

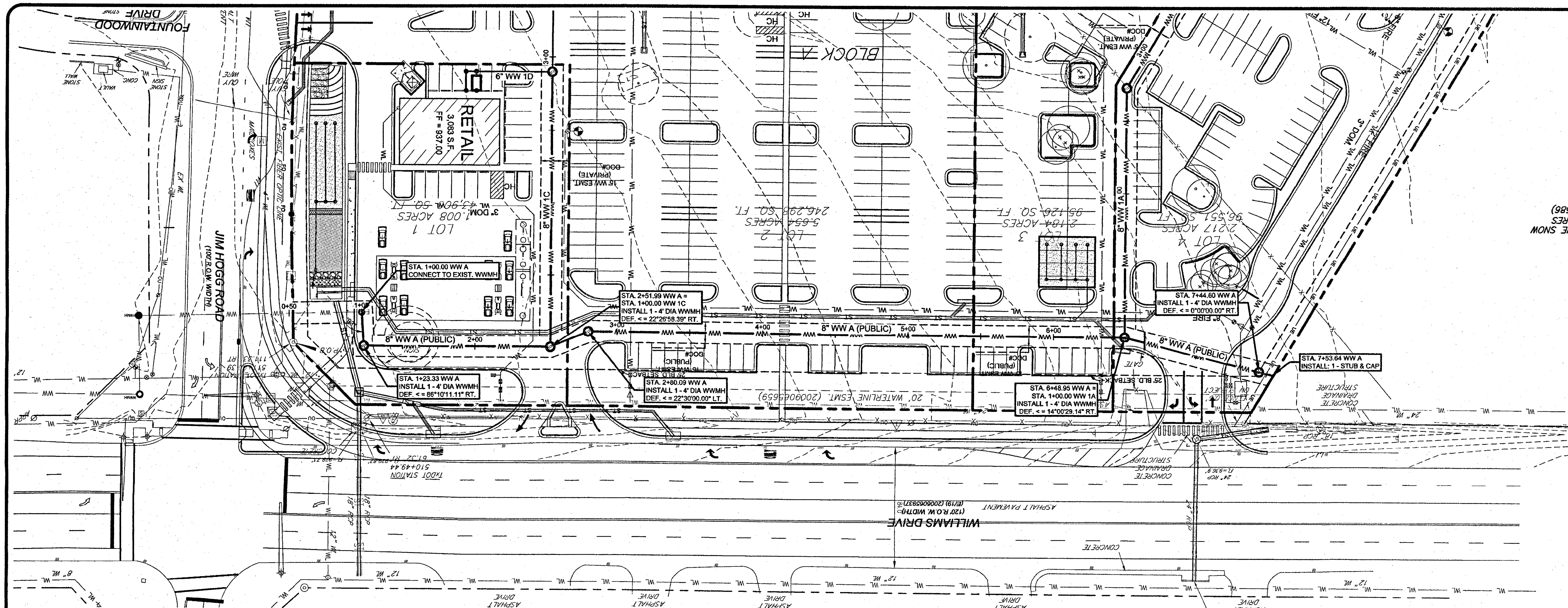
TCEQ_EDWARDS_OFFICIAL_MAPS

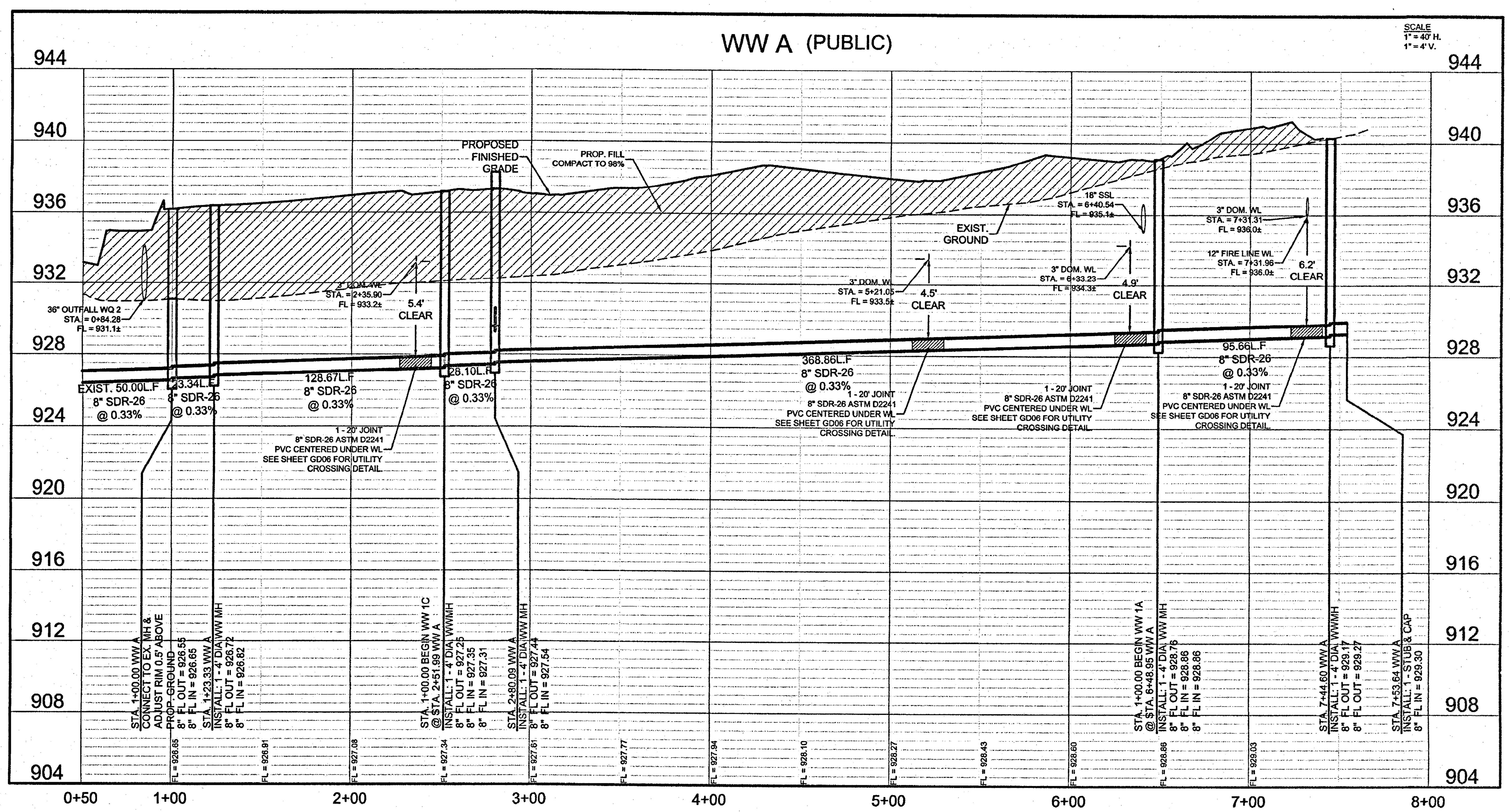
County of Williamson, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA, TCEQ

Web AppBuilder for ArcGIS



CITY OF GEORGETOWN WASTEWATER SYSTEM MAP





SCALE IN FEET (40 20 0 40 80)

LEGEND

PROPOSED	EXISTING	
ST	ST	STORM SEWER LINE
WW	WW	WASTEWATER LINE
		WASTEWATER SERVICE
WL	WL	WATER LINE
		WATER SERVICE
		WATER VALVE
		FIRE HYDRANT
	WWMH	WASTEWATER MANHOLE
	SSMH	STORMSEWER MANHOLE
		CURB INLET
		GRATE INLET
		1/2" REBAR FOUND (OR AS NOTED)
		1/2" REBAR WITH CAP FOUND
		1/2" REBAR WITH CHAPARRAL CAP SET
	W	WATER METER
		UTILITY POLE
	OU	OVERHEAD UTILITIES
	F	ELEC. UTILITY
		ELEC. MANHOLE
		LIGHT POLE
	T	TELEPHONE UTILITY
		UNDERGROUND FIBER OPTIC MARKER
		TELEPHONE MANHOLE
		UNDERGROUND GAS MARKER
		CHAIN LINK FENCE

WASTEWATER NOTES:

1. CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF ALL EXISTING UTILITIES HORIZONTALLY AND VERTICALLY PRIOR TO CONSTRUCTION.

2. MANDREL TESTING WILL BE REQUIRED ON ALL FLEXIBLE GRAVITY WASTEWATER PIPE AS PER TCEQ RULES.

3. ALL GRAVITY WASTEWATER LINES SHALL BE SDR-26 WWL ASTM D3034 UNLESS OTHERWISE NOTED.

4. CONTRACTOR TO FILL AND COMPACT TO 98% DENSITY IN FILL SECTIONS OVER WASTEWATER LINES. 2.0'(MIN) COVER OVER WASTEWATER PRIOR TO CONSTRUCTION.

5. ALL SERVICES SHALL TERMINATE WITH A 2-WAY CLEANOUT.

6. ALL ON-SITE UTILITIES SHALL BE LOCATED UNDERGROUND UNLESS REQUIRED BY THE UTILITY TO BE OTHERWISE LOCATED (SECTION 25-2-1125).

RECORD DRAWING

I CERTIFY THAT THIS DRAWING REFLECTS THE IMPROVEMENTS CONSTRUCTED AS TO SIZE, LOCATION, AND GRADE AND THAT THE CONSTRUCTION WAS IN FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS.

BY ________ DATE 2-7-18

TITLE Sup

LOCATION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR.

811 Know what's below. Call before you dig.

OAK MEADOWS MARKETPLACE
SITE DEVELOPMENT PLANS

WASTEWATER PLAN & PROFILE A
5721 WILLIAMS DR., GEORGETOWN, TX

NO.	DESCRIPTION	BY	DATE
REVISIONS			

DATE: 07/26/2017
DESIGNED BY: JTS
DRAWN BY: CDS
CHECKED BY: JDM
DRAWING NAME:

STATE OF TEXAS — JOSEPH T. SANDOVAL — 110257 — LICENSED PROFESSIONAL ENGINEER — 7/26/17

LJA Engineering, Inc.
5316 Highway 290 West
Suite 150
Austin, Texas 78735
Phone 512.439.4700
Fax 512.439.4716
FRN-F-1386

JOB NUMBER: A331-0401

WW02

SHEET NO. 16 OF 66 SHEETS

SDP-2017-025

Central Registry

The Customer Name displayed may be different than the Customer Name associated to the Additional IDs related to the customer. This name may be different due to ownership changes, legal name changes, or other administrative changes.

Detail of: **Edwards Aquifer Permit 11000515**

For: **OAK MEADOWS CORNER (RN109427922 ...)**

SW OF JIM HOGG RD AND WILLIAMS DR

Permit Status: **ACTIVE**

Held by: **Cypress Georgetown, LP (CN605245547 ...)** View 'Issued To' History ...

OWNER Since 10/11/2016 View Compliance History ...

Mailing Address: 8343 DOUGLAS AVE STE 200 DALLAS, TX 75225 -5887

Legal	Description	Start Date	End Date	Type	Status	Status Date
11000515	EDWARDS AQUIFER	01/13/2017		PERMIT	APPROVED	02/27/2017

Tracking No.	Type	Value	Start Date	End Date
23010024	Sewage Collection System Certification Date	02/09/2018	02/09/2018	
21321638	APPLICATION RECEIVED	01/13/2017	01/13/2017	02/27/2017

Physical	Description	Start Date	Type	Status	Status Date
OAK MEADOWS CORNER		01/13/2017	EDWARDS AQUIFER SITE	SEE LEGAL STATUS	01/13/2017

Tracking No.	Type	Value	Start Date	End Date
21321734	Feet of Sewer Lines	1257 FT	01/13/2017	
21321737	Watershed	NORTH FORK SAN GABRIEL RIVER	01/13/2017	
22590377	Permanent BMP Certification Date	02/12/2018 DATE	02/12/2018	
21394589	WASTEWATER TREATMENT PLANT	SAN GABRIEL WWTP	01/13/2017	

Last Modified 2024-03-05 - Production v2.2.0

SCI ENGINEERING, INC.
EARTH • SCIENCE • SOLUTIONS
GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

February 15, 2024

Rich Carlton
YMCA of Central Texas
1801 North IH-35
Round Rock, Texas 78664

RE: Geological Assessment
YMCA Wellspring
Georgetown, Texas
SCI No. 2024-0125.1G

Dear Rich Carlton:

As requested, SCI Engineering, Inc. (SCI) conducted a Geologic Assessment (GA) at the subject site located at 6200 Williams Drive (WCAD: R419754 and R419753) in Georgetown, Texas. Our services were provided in general accordance with our proposal, dated January 23, 2024, and authorized by Hagood Engineering Associates, Inc. on January 31, 2024. The GA was completed in compliance with the Texas Commission on Environmental Quality (TCEQ) requirements for regulated developments located within the Edwards Aquifer Recharge Zone (EARZ). As the site is in the EARZ, the GA must be completed and signed by a Professional Geoscientist licensed in the State of Texas. This letter addresses those requirements and describes the surficial geologic units and identifies the location and extent of geologic features present within the development area.

According to *30 TAC 213.5(b)(3)*, Effective June 1, 1999, a Geologic Assessment must include:

- Geologic Assessment Form (TCEQ-0585);
- Geologic Assessment Table (TCEQ-0585-Table);
- Stratigraphic Column;
- Overview Maps;
- Site Geologic Map;
- Narrative Description of Geology and Soils; and
- Site Photographs.

PROJECT DESCRIPTION

SCI understands that the project site measures 22.05 acres in size and is currently developed with an active church, drive lanes, parking lots, athletic fields, and nature areas. The proposed project site lies within the Edwards Aquifer Recharge Zone (EARZ) and the 2014 USGS Karst dataset indicates that the site is located within a Carbonate Karst Zone. The majority of the site is situated within Karst Zone 3 (defined as an area that probably does not contain endangered cave fauna) with a small northeast portion of the site that is situated within Karst Zone 1 (defined as an area known to contain endangered cave fauna). The site is located approximately 1 mile from a Salado Salamander Critical Habitat as identified by the U.S. Fish and Wildlife Service.

As the proposed project meets the 30 TAC 213 definition of a regulated activity, a GA will be required to be submitted to the TCEQ in conjunction with the Water Pollution Abatement Plan (WPAP), prepared by others, and approved prior to the beginning of construction activities.

SITE INVESTIGATION

The site investigation was conducted on February 6, 2024, by an SCI Staff Scientist under the supervision of a State of Texas Licensed Professional Geoscientist (PG). Vegetation consisted of grasses with deciduous and coniferous trees and scrub-shrub. There were multiple stands throughout the property of older cedar elms, live oaks, and red cedar, with varying vegetation of scrub/shrubs around older stands and smaller growth section throughout the property. White limestone outcrops and surficial limestone were observed. Some of the limestone outcrop appeared to be disturbed or graded due to past site work. Limestone bedrock belongs to the Georgetown (Kgt) and Edwards Limestone (Ked) formations of the Fredericksburg group according to United States Geological Survey (USGS) data.

The site is currently developed with an active church, drive lanes, parking lots, athletic fields, and nature areas. The site is surrounded by a mix of commercial and residential properties. The investigation was performed in maximum 50-foot transects to evaluate the property for potential sensitive/recharge features. One natural feature was documented and assessed for recharge potential, but no sensitive features (ex. caves, sinkholes, faults/fractures) were identified within the project site, nor along its perimeter.

SUMMARY

No sensitive features were identified within the project site, and it seems improbable that the features found on the property provide rapid recharge to underlying formations. However, it is possible that other features within the property may be covered by soil, organic debris, or vegetation. If such karst features are found during excavation or construction, further investigation may be required to determine the extent of these features and their influence on groundwater aquifers. Additional details regarding features found within the project site may be referenced in the Geologic Table in Attachment A and in the Geologic Narrative in Attachment C.

LIMITATIONS

This report has been prepared for the exclusive use of YMCA of Central Texas and Hagood Engineering Associates, Inc. SCI is not responsible for independent conclusions or recommendations made by others. The findings of this report are valid as of the present date of the assessment. SCI is not responsible for surveys, calculations, or plans that were prepared by others.

We appreciate the opportunity to be of service to you on this project. If you have any questions or comments, please do not hesitate to contact us.

Respectfully,

SCI ENGINEERING, INC.
Texas Engineering Firm F-7870
DocuSigned by:
97DD06437F0F489...
Brian C. Ratajczyk, P.G.
Professional Geoscientist

2/15/2024

STATE OF TEXAS
DocuSigned by:
97DD06437F0F489...
BRIAN C RATAJCZYK
GEOLOGY
13035
LICENSED
PROFESSIONAL GEOSCIENTIST

Tonya S. Sonsteng, P.E.
Regional Manager

CMH/LJV/TSS/BCR/mas/hgs

Enclosures
Attachment A - Geologic Assessment Form and Table
Attachment B - Stratigraphic Column
Attachment C - Site Geology Narrative
Attachment D - Site Maps
Attachment E - Photographic Summary

C: Terry Hagood, Hagood Engineering Associates, Inc.
Debbie Bauerkemper, Hagood Engineering Associates, Inc.

Attachment A

Geologic Assessment

Texas Commission on Environmental Quality

For Regulated Activities on The Edwards Aquifer Recharge/transition Zones and Relating to 30 TAC §213.5(b)(3), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Print Name of Geologist: Brian Ratajczyk Telephone: 512-996-9199

Date: 02/15/2024 Fax: 844-462-0439

Representing: SCI Engineering, Inc. - TBPG 13035

(Name of Company and TBPG or TBPE registration number)

Signature of Geologist:

DocuSigned by: 2/15/2024
97DD06437F0F489...

Regulated Entity Name: YMCA of Central Texas

Project Information

1. Date(s) Geologic Assessment was performed: 02/06/2024
2. Type of Project:
   - ☒ WPAP
   - ☐ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

4. ☒ **Attachment A - Geologic Assessment Table**. Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.

5. ☒ Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)

Soil Name	Group*	Thickness(feet)
DoC- Doss silty clay, moist, 1 to 5 percent slopes	D	>80"
EaD- Eckrant cobbly clay, 1 to 8 percent slopes	D	>80"

** Soil Group Definitions (Abbreviated)*

A. Soils having a high infiltration rate when thoroughly wetted.

B. Soils having a moderate infiltration rate when thoroughly wetted.

C. Soils having a slow infiltration rate when thoroughly wetted.

D. Soils having a very slow infiltration rate when thoroughly wetted.

6. ☒ **Attachment B – Stratigraphic Column**. A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.

7. ☒ **Attachment C – Site Geology**. A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.

8. ☒ **Attachment D – Site Geologic Map(s)**. The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'

   Applicant's Site Plan Scale: 1" = 250'
   Site Geologic Map Scale: 1" = 250'
   Site Soils Map Scale (if more than 1 soil type): 1" = _____'

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.

☐ Other method(s). Please describe method of data collection: _____

10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.
12. ☒ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.

    ☐ Geologic or manmade features were not discovered on the project site during the field investigation.

13. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.
14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

    ☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
    - ☐ The wells are not in use and have been properly abandoned.
    - ☐ The wells are not in use and will be properly abandoned.
    - ☐ The wells are in use and comply with 16 TAC Chapter 76.

    ☒ There are no wells or test holes of any kind known to exist on the project site.

Administrative Information

15. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: YMCA Wellspring

LOCATION			FEATURE CHARACTERISTICS											EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
CD-1	30.7093780	-97.755995	CD	5	Kgt	30	30	-1	E/W	0			V	5	10	X		X		Hilltop
D-1	30.7096347	-97.753873	MB	30	Ked	110	100	-5		0			X	5	35	X			X	Hilltop
D-2	30.7094860	-97.753501	MB	30	Ked	50	5	-4		0			X	5	35	X			X	Hilltop
D-3	30.7096073	-97.752883	MB	30	Ked	375	125	-6		0			X	5	35	X			X	Hilltop
D-4	30.7097970	-97.752404	MB	30	Ked	70	6	-5	E/W	0			X	5	35	X			X	Hilltop
D-5	30.7092960	-97.753953	MB	30	Kgt	300	10	-1	N/S	0			V	5	35	X			X	Drainage
D-6	30.7079707	-97.752729	MB	30	Kgt	900	10	-1	E/W	0			V	5	35	X			X	Drainage
UT-1	30.7082480	-97.755034	MB	30	Kgt	3	3	-4		0			X	5	35	X		X		Hilltop
UT-2	30.7081280	-97.755072	MB	30	Kgt	3	3	-4		0			X	5	35	X		X		Hilltop
UT-3	30.7083318	-97.755357	MB	30	Kgt	3	3	-4		0			X	5	35	X		X		Hilltop
UT-4	30.7852400	-97.754982	MB	30	Kgt	1	1	1		0			X	5	35	X		X		Hilltop
UT-5	30.7904400	-97.756391	MB	30	Kgt	3	3	-4		0			X	5	35	X		X		Hilltop
UT-6	30.7076030	-97.754191	MB	30	Kgt	3	3	-4		0			X	5	35	X		X		Hilltop
UT-7	30.7094950	-97.755605	MB	30	Kgt	3	3	-4		0			X	5	35	X		X		Hilltop
UT-8	30.7090270	-97.754880	MB	30	Kgt	3	3	-4		0			X	5	35	X		X		Hilltop

* DATUM: WGS 84

2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials: Engineered Fill

12 TOPOGRAPHY
Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

DocuSigned by:
97DD06437F0F489...

Date: 02/15/2023

2/15/2024

STATE OF TEXAS
DocuSigned by:
BRIAN C RATAJCZYK
97DD06437F0F489
GEOLOGY
13035
LICENSED
PROFESSIONAL GEOSCIENTIST

Attachment B

Attachment B - Stratigraphic Column

AGE	GROUP	STRATIGRAPHIC FORMATION	THICKNESS (ft)	LITHOLOGY	
Upper Cretaceous	Buda	**Buda Limestone (Kbu)**	~ 45	Fine grained, bioclastic, commonly glauconitic, pyritiferous, hard, massive, poorly bedded to nodular, thinner bedded and argillaceous near upper contact, light gray to pale orange; weathers dark gray to brown, burrows filled with chalky marl. Abundant pelecypods.	
	Grayson	**Del Rio Clay (Kdr)**	40 to 70	Calcareous and gypsiferous clay, blocky, medium gray, weathers light gray to yellowish gray; some thin lenticular beds of highly calcareous siltstone. Marine mega fossils include abundant Exogyra arietina and other pelecypods.	
Lower Cretaceous	Washita	**Georgetown Formation (Kgt)**	~ 90	Unit consists of thick bedded nodular limestone with interbedded chalky, argillaceous limestone and light gray to buff shale. Interbedded, thin, chalky limestone and light gray marl can be present near the bottom of the formation.	**Edwards Aquifer**
	Fredericksburg	**Edwards Formation (Ked)**	~ 210	Formation consists of massive limestone bed with chert nodules and dolomite. The limestone is aphanitic to fine-grained, massive to thin bedded, hard, brittle, some rudistid biostromes, and milliollid biosparite. Zones of recrystallized weathering and vuggy porosity.	
	Fredericksburg	**Comanche Peak Formation (Kcp)**	~ 65	Unit consists of fine to very fine grained, fairly hard, nodular, light gray weathers to white. Extensively burrowed, irregularly interbedded with marl.	
	Fredericksburg	**Walnut Formation (Kwa)**	70 to 90	Limestone and claystone interbedded. Argillaceous, nodular, thin to medium bedded, iron stained, and burrowed. unit consist of marly limestone alternating with harder more crystalline limestone.	

Note: Stratigraphic Column adapted from; Housh, Todd B. 2007, Bedrock Geology of Round Rock and Surrounding areas, Williamson and Travis Counties, Texas.

*Blue shading represents lithology underling the project site.

Attachment C

Attachment C – Site Geology Narrative

INTRODUCTION

This Geologic Assessment Narrative accompanies the TCEQ Geologic Assessment Form TCEQ-0585 completed for the approximately 22.05-acre property located at 6200 Williams Drive in Georgetown, Williamson County, Texas. The site location is depicted on the *Vicinity and Topographic Map,* Attachment D, Figure 1. SCI understands that the proposed development will likely include the construction of a new YMCA facility with associated pavement areas and infrastructure.

GEOLOGIC SETTING

Located within Williamson County, Texas, the project site is located in northwest Georgetown. The site is located on the east edge of the Edwards Plateau, within the Balcones Escarpment. With the region's semi-arid climate, precipitation is approximately 36 inches per year, with temperate grasslands, savannas, and shrublands. Outcrops were observed on site; however, our capacity to assess if the exposed rock is standalone vs actual outcrop is limited. Bedrock would consist of Cretaceous aged limestone belonging to the Georgetown and Edwards Limestone of the Fredericksburg Group. Lake Georgetown is approximately 2 miles south-southeast of the site. The project site is located within the Edwards Aquifer Recharge Zone.

Soils:

Information regarding the following soil description is derived from the soil survey of Williamson County published by the Soil Conservation Service via the Web Soil Survey application. The soils map shows the project site is located within the Doss silty clay unit (DoC) and the Eckrant stony clay unit (EaD). The soils are classified as Hydrologic Soil Group D which have a very slow infiltration rate (high runoff potential) when thoroughly wet, and water movement through the soil is restricted or very restricted. The Doss series soils occur on hillslopes and consist of silty clay typically 17 inches in thickness. The Eckrant series soils occur on ridges and consist of cobbly clays typically 11 inches in thickness. The Doss series and Eckrant series are underlain by limestone bedrock.

Table 1 – Soil Description

Map Symbol and Map Unit Name	Component/ Local Phase	Component Percent	Landform	Depth to Restrictive Feature	Depth to Water Table	Hydrologic Soil Group
DoC – Doss silty clay, moist, 1 to 5 percent slopes	Doss silty clay	87.6	Hillslopes	11 to 20-inches to lithic bedrock	>80"	D
EaD – Eckrant cobbly clay, 1 to 8 percent slopes	Eckrant cobbly clay	12.4	Ridges	4 to 20-inches to lithic bedrock	>80"	D

Stratigraphy:

The bedrock lithology underlying the site consists of the Georgetown (Kgt) and Edwards Limestone (Ked), and the tract is located entirely within the Edwards Aquifer Recharge Zone *Geologic Formation Map,* Attachment D, Figure 2. Georgetown limestone is a cretaceous age formation within the Washita Group of the Comanchean – Albian series. The formation consists of limestone and marl, mostly limestone, fine grained, argillaceous, nodular, light gray, hard, brittle, thick bedded. The Edwards Limestone is a cretaceous age limestone within the Fredericksburg Group of the Comanchean - Albian series. Edwards Limestone consists of limestone, dolostone, and chert. The limestone is aphanitic to fine grained, massive to thin bedded, hard, brittle, in part rudistid biostromes, many miliolid biospartie. Exposed outcrops are generally susceptible to chemical weathering, and secondary porosity may vary from microscopic to megascopic in scale.

Attachment C – Site Geology Narrative

A Stratigraphic Column Illustrating the Generalized Stratigraphy of the Edwards and Trinity Aquifers, underlaying the proposed project is provided in Attachment B. (Barton Springs Edwards Aquifer Conservation District (2022) defines the generalized stratigraphy and aquifers around the project site, accessed from https://bseacd.org/aquifer-science/about-the-aquifers).

Structure:

The Balcones Escarpment is a geologic fault zone several miles wide consisting of several faultings. The Balcones fault zone ultimately controls the structural geology of the region, displacing eastward dipping strata of the Early and Late Cretaceous as much as 1,000 feet down to the east through north to northeast-trending normal faults. It is thought that this displacement occurred primarily during the late Oligocene or early Miocene; others have argued instead that movement during the Late Cretaceous and Pliocene is plausible.

In general, aquifer recharge occurs where formations are exposed at or near the surface, but it may also occur in the presence of faults, fractures, and karst features. Exposure of the Edwards Formation is often correlated to karst development within the region. Karst features are commonly found along fractures, joints, and bedding planes within the Edwards Formation.

SITE SUMMARY

The site investigation was conducted on February 6, 2024, by an SCI Staff Scientist under the supervision of a State of Texas Licensed Professional Geoscientist (PG). Vegetation consisted of grasses with deciduous and coniferous trees and scrub-shrub. There were multiple stands throughout the property of older cedar elms, live oaks, and red cedar, with varying vegetation of scrub-shrub around older stands and smaller growth section throughout the property. White limestone outcrops and surficial limestone was observed. Some of the limestone outcrop appeared to be disturbed or graded due to past site work.

The site is currently developed with an active church, drive lanes, parking lots, athletic fields, and nature areas with utilities noted along Williams Drive and in conjunction with the existing facility. The site is surrounded by a mix of residential and commercial properties. Based on historical aerial images, the site was previously undeveloped agricultural land until the construction of the existing church in 2002 to 2003. Residential housing to the north of the property began to develop in the 2000's. Land development to the southeast of the site have varied from residential to commercial since the 2000's.

The site investigation was performed in maximum 50-foot transects to evaluate the property for potential sensitive/recharge features. One feature was documented and evaluated for recharge potential, but no sensitive features (ex. caves, sinkholes, faults/fractures) were identified within the 22.05-acre lot, nor along its perimeter.

Feature Description:

CD-1: Feature CD-1 is a topographic depression that is approximately 3 feet by 6 feet in diameter and approximately 6 inches to a foot deep. The depression appeared to develop by multiple surficial limestone slabs being displaced and edges of limestone slabs elevated along the rim of the depression. The depression was filled with soil and rock and vegetation covered. Other limestone cobbles were exposed around the rim. Probing with tool indicated that the feature was closed. Further evaluation suggests that CD-1 formed independently of karst processes.

Attachment C – Site Geology Narrative

Manmade Features:

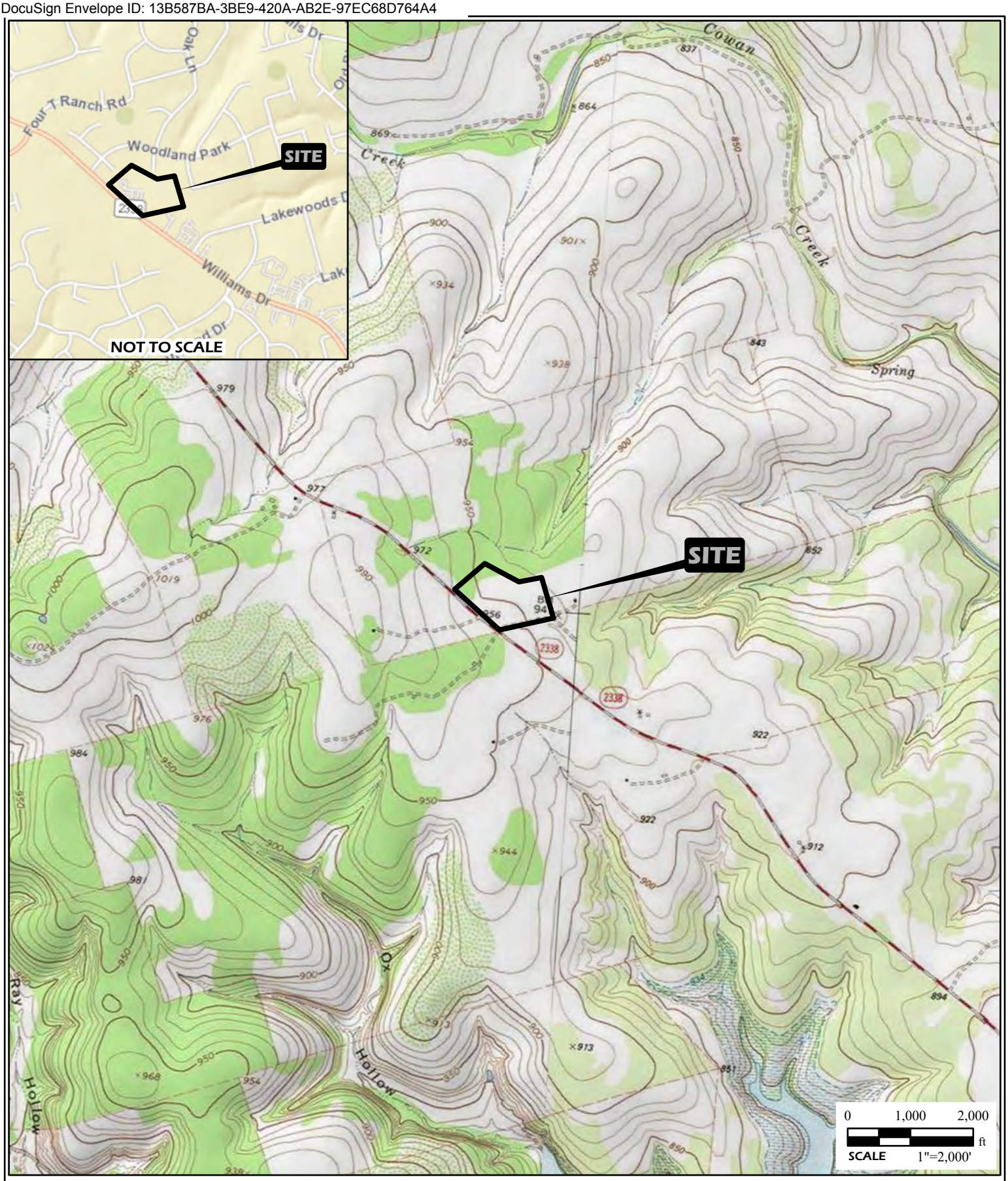
Due to the site being previously developed, infrastructure exists throughout the site. Several water utilities were observed such as sprinklers, fire hydrants, water shutoffs, and water meters throughout the existing church parking lot and drive (UT-1 to UT-8). SCI did observe underground utility connections at the corners of adjacent properties but did not observe any grading or disturbance for any underground utilities within the site. Based on our observations, the utilities appear to be performing as intended and there was no indication of increased infiltration at the utility locations. Two detention basins were observed on the northeast end of the property (D-1 to D-4). Detention basins were connected by a concrete overflow with a culvert. It is our presumption that the basins were installed in accordance with TCEQ requirements, and no evidence was observed to indicate that the basins are not performing as designed. Two drainage ways were observed on the northeast and southeast section of the site (D-5 to D-6). The northeast drainage way was approximately 1 to 3 feet deep containing mud, gravel, and grass. The drainage way ran from the northeast corner of the parking lot to the detention basins. The southeast drainage way was approximately 6 inches to 1 foot deep and ran along the fence line at the edge of the property. Two limestone boulder stockpiles were observed within the northern and eastern portions of the site (O-1 and O-2), these stockpiles are presumed to have been created during previous site grading and extend from the existing site grades.

City of Georgetown Ordinance:

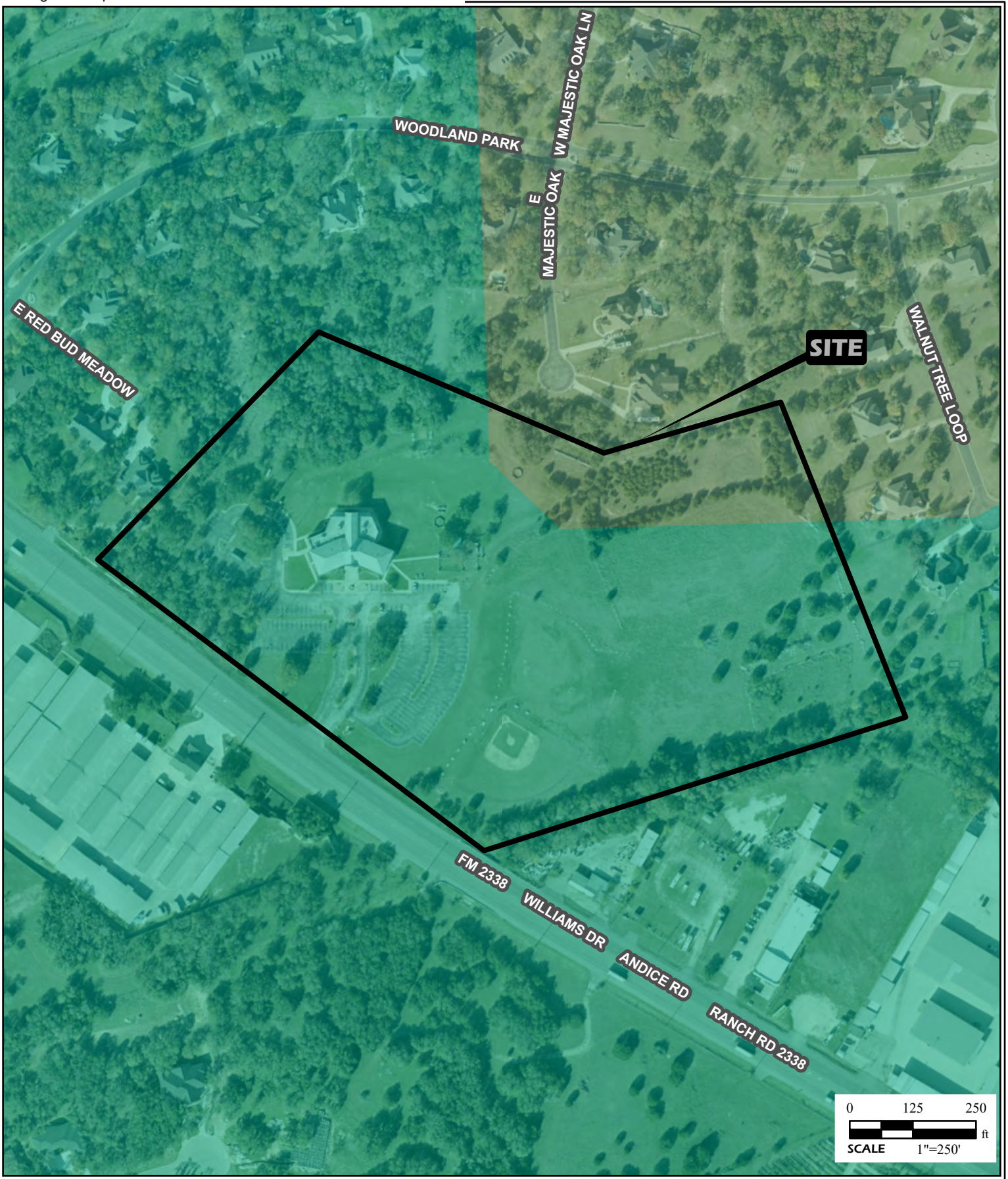
No springs or streams were identified on the property during the assessment site survey, and therefore no occupied site protection, or spring or stream buffer protections measures will be required for the property.

All regulated activities within the recharge zone must follow water quality best management practices, and development of the property will need to comply with the water quality protection measures as outlined in the City of Georgetown Unified Development Code, Section 11.07.040.

Attachment D

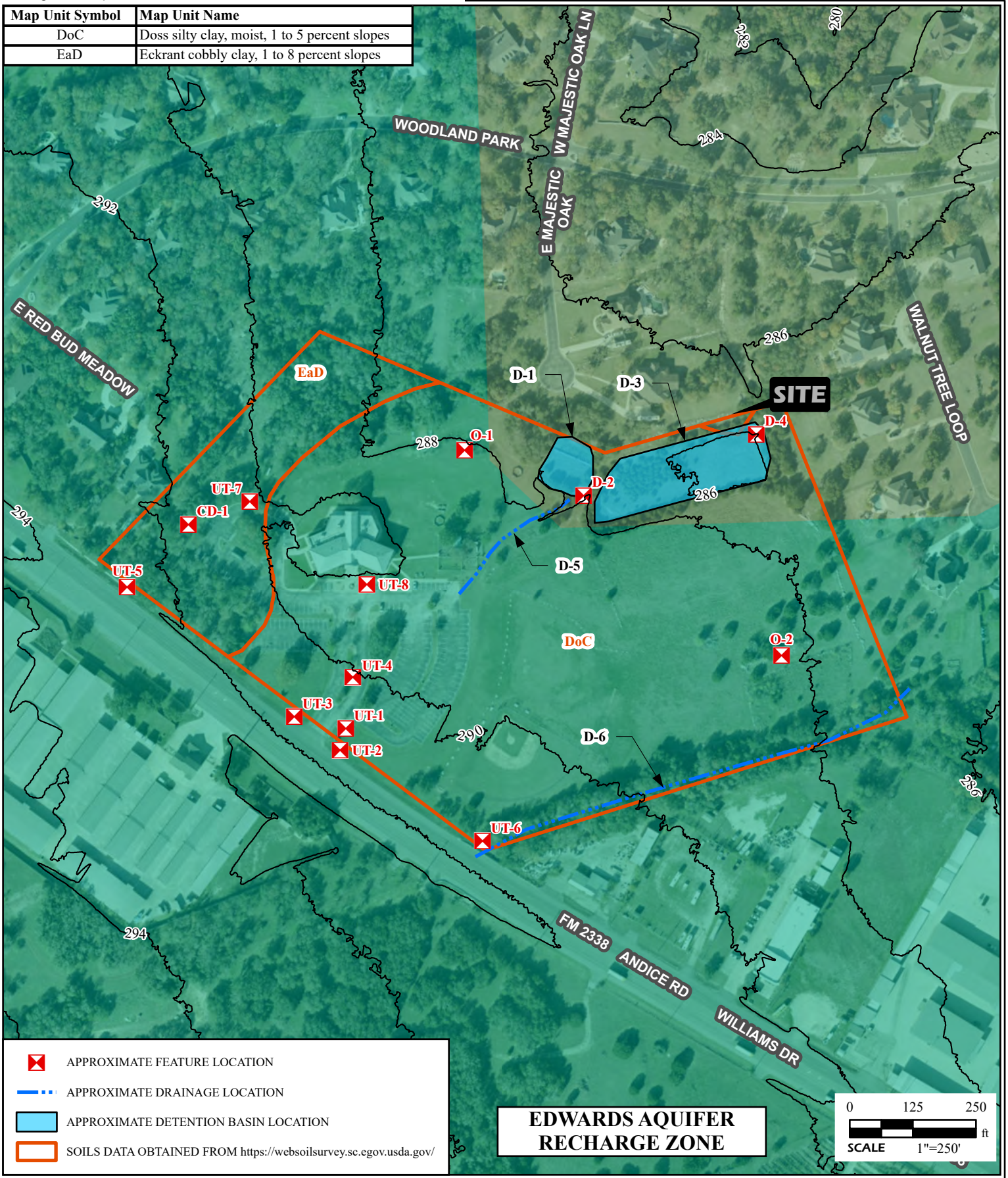


PROJECT NAME: YMCA WELLSPRING GEORGETOWN, TEXAS				GENERAL NOTES/LEGEND: USGS TOPOGRAPHIC MAP; LEANDER NE, TEXAS QUADRANGLE; DATED 1962 PHOTO REVISED 1991; 10' CONTOURS; GEORGETOWN, TEXAS QUADRANGLE; DATED 1982 PHOTO REVISED 1995; 10' CONTOURS; STREET MAP; HTTP://GOTO.ARCGISONLINE.COM/MAPS/WORLD_STREET_MAP
VICINITY AND TOPOGRAPHIC MAP				
DRAWN BY: JTM	FIGURE DATE: 02/2024	JOB NUMBER: 2024-0125.2G		FIGURE: 1
CHECKED BY: CMH				



SCI	PROJECT NAME: YMCA WELLSPRING, GEORGETOWN, TEXAS	GENERAL NOTES/LEGEND: Kgt - GEORGETOWN LIMESTONE; Ked - EDWARDS LIMESTONE	N / W / E / S	
	GEOLOGICAL FORMATION MAP	AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY. DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.		
	DRAWN BY: JTM; CHECKED BY: CMH	FIGURE DATE: 02/15/2024	JOB NUMBER: 2024-0125.1G	FIGURE: 2

Map Unit Symbol	Map Unit Name
DoC	Doss silty clay, moist, 1 to 5 percent slopes
EaD	Eckrant cobbly clay, 1 to 8 percent slopes



PROJECT NAME

YMCA WELLSPRING
GEORGETOWN, TEXAS

SITE GEOLOGIC MAP

DRAWN BY	JTM	FIGURE DATE	JOB NUMBER
CHECKED BY	CMH	02/15/2024	2024-0125.1G

GENERAL NOTES/LEGEND

Kgt - GEORGETOWN LIMESTONE

Ked - EDWARDS LIMESTONE

AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY.

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

N
W
E
S

FIGURE
3

Attachment E

Photo 1. CD-1, closed depression, facing northwest.

Photo 2. O-1, displaced limestone boulders, facing east.

Photo 3. O-2, limestone stockpile, facing southwest.

Photo 4. D-1, First stage detention, facing east.

Photo 5. D-3, Second stage detention, facing east.

Photo 6. D-3, Second stage detention, facing west.

Photo 7. D-4, Concrete structure for Detention, facing west.

Photo 8. D-2, Culvert overflow between detention stages, facing west.

Photo 9. Exposed surficial limestone, facing south.

Photo 10. D-6, South drainage, facing southwest.

Photo 11. D-6, South drainage, facing west.

Photo 12. D-5, Parking lot drainage, facing southwest.

Photo 13. D-5, Parking lot drainage, facing northeast.

Photo 14. UT-1, Hydrant line and shut off, facing southwest.

Photo 15. North side wooded area, facing south.

Photo 16. West side wooded area, facing east.

Photo 17. Open space facing north.

Photo 18. Site entrance, facing north.

Photo 19. Baseball field, facing east.

Photo 20. Parking, facing southwest.

Raquel Ramirez

From: James Slone <james.slone@tceq.texas.gov>
Sent: Tuesday, June 4, 2024 2:40 PM
To: Raquel Ramirez
Cc: Miki Chilarescu
Subject: RE: YMCA Georgetown SCS (HEA 22-012)

Raquel,
You can request the Exception to the Geologic Assessment (GA: Attachment D) – no GA is required for this project. Please retain this email for your records and present it with you application submittal.
Bo

James "Bo" Slone, P.G.
Geoscientist
Edwards Aquifer Protection Program
Texas Commission on Environmental Quality
(512) 239-6994

From: Raquel Ramirez <RaquelR@HEAENG.com>
Sent: Tuesday, June 4, 2024 11:33 AM
To: James Slone <james.slone@tceq.texas.gov>
Cc: Miki Chilarescu <miki.chilarescu@tceq.texas.gov>
Subject: RE: YMCA Georgetown SCS (HEA 22-012)

Good morning Bo

Following up on the email below regarding the requirement of the SCS for the YMCA Georgetown project. The ROW has been disturbed in the past. Can you please let us know? I'm out of the office today, but Terry can be reached at the office or he is cc'd on this email if you have any questions

Thank you

Raquel

From: Miki Chilarescu <miki.chilarescu@tceq.texas.gov>
Sent: Thursday, May 30, 2024 1:47 PM
To: Raquel Ramirez <RaquelR@HEAENG.com>
Cc: James Slone <james.slone@tceq.texas.gov>
Subject: RE: YMCA Georgetown SCS (HEA 22-012)

Raquel,
Please address the requests for the exception for the GA to Mr. James Slone at james.slone@tceq.texas.gov. He is out for the rest of the week, but will be back in the office next week.
Sincerely,

Miki Chilarescu, P.E.

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program
512-239-6175

From: Raquel Ramirez <RaquelR@HEAENG.com>
Sent: Thursday, May 30, 2024 1:41 PM
To: Miki Chilarescu <miki.chilarescu@tceq.texas.gov>
Subject: YMCA Georgetown SCS (HEA 22-012)

Afternoon Miki

We are working on a SCS submittal for the area in the attached. We are not sure if a GA is required if we're working within the public ROW adjacent to the existing pavement. Can we request an exception for the GA?

Your guidance is appreciated.

Your friendly Project Assistant
Raquel Saenz

HAGOOD ENGINEERING ASSOCIATES

900 E. Main Street
Round Rock, Texas 78664
RaquelR@heaeng.com
512.244.1546

Organized Sewage Collection System Application

Texas Commission on Environmental Quality

For Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(c), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Regulated Entity Name: YMCA GEORGETOWN

1. ☒ **Attachment A – SCS Engineering Design Report**. This Engineering Design Report is provided to fulfill the requirements of 30 TAC Chapter 217, including 217.10 of Subchapter A, §§217.51 – 217.70 of Subchapter C, and Subchapter D as applicable, and is required to be submitted with this SCS Application Form.

Customer Information

2. The entity and contact person responsible for providing the required engineering certification of testing for this sewage collection system upon completion (including private service connections) and every five years thereafter to the appropriate TCEQ region office pursuant to 30 TAC §213.5(c) is:

   Contact Person: JEFF ANDRESEN
   Entity: YMCA OF CENTRAL TEXAS
   Mailing Address: 1812 N. MAYS STREET
   City, State: ROUND ROCK, TX Zip: 78664

   Telephone: 512.615.5555 Fax: _____

   Email Address: RCARLTON@YMCACTX.ORG
   The appropriate regional office must be informed of any changes in this information within 30 days of the change.

3. The engineer responsible for the design of this sewage collection system is:

   Contact Person: TERRY R. HAGOOD
   Texas Licensed Professional Engineer's Number: 52960
   Entity: HAGOOD ENGINEERING ASSOCIATES, INC
   Mailing Address: 900 E. MAIN STREET
   City, State:ROUND ROCK, TX

Zip: 78664
Telephone:512.244.1546 Fax:_____

Email Address:TERRYH@HEAENG.COM

Project Information

4. Anticipated type of development to be served (estimated future population to be served, plus adequate allowance for institutional and commercial flows):

   ☒ Residential: Number of single-family lots: 240
   ☐ Multi-family: Number of residential units: _____
   ☒ Commercial
   ☐ Industrial
   ☐ Off-site system (not associated with any development)
   ☒ Other: CHURCH

5. The character and volume of wastewater is shown below:

   100% Domestic _____ gallons/day
   _____% Industrial _____ gallons/day
   _____% Commingled
   55,950 gallons/day

   Total gallons/day: 55,950

6. Existing and anticipated infiltration/inflow is 55,016 gallons/day. This will be addressed by: new manhole construction must be watertight, with watertight rings and covers and must be coonstructed and tested to meet the requiremnts of 3174.2(c)(5)(H). in place pipe testing by in-place deflection testing or internalline color camera inspections every 5 years certified by Texas licensed professional engineer.

7. A Water Pollution Abatement Plan (WPAP) is required for construction of any associated commercial, industrial or residential project located on the Recharge Zone.

   ☐ The WPAP application for this development was approved by letter dated _____. A copy of the approval letter is attached.
   ☐ The WPAP application for this development was submitted to the TCEQ on _____, but has not been approved.
   ☒ A WPAP application is required for an associated project, but it has not been submitted.
   ☐ There is no associated project requiring a WPAP application.

8. Pipe description:

Table 1 - Pipe Description

Pipe Diameter(Inches)	*Linear Feet (1)*	*Pipe Material (2)*	*Specifications (3)*
8	3070	PVC SDR 26	ASTM D3034
6	402	PVC SDR 26	ASTM D3034

Pipe Diameter(Inches)	*Linear Feet (1)*	*Pipe Material (2)*	*Specifications (3)*

Total Linear Feet: 3472

(1) Linear feet - Include stub-outs and double service connections. Do not include private service laterals.
(2) Pipe Material - If PVC, state SDR value.
(3) Specifications - ASTM / ANSI / AWWA specification and class numbers should be included.

9. The sewage collection system will convey the wastewater to the SAN GABRIEL WASTEWATER (name) Treatment Plant. The treatment facility is:

☒ Existing
☐ Proposed

10. All components of this sewage collection system will comply with:

☒ The City of GEORGETOWN standard specifications.
☐ Other. Specifications are attached.

11. ☒ No force main(s) and/or lift station(s) are associated with this sewage collection system.

☐ A force main(s) and/or lift station(s) is associated with this sewage collection system and the **Lift Station/Force Main System Application** form (TCEQ-0624) is included with this application.

Alignment

12. ☒ There are no deviations from uniform grade in this sewage collection system without manholes and with open cut construction.

13. ☒ There are no deviations from straight alignment in this sewage collection system without manholes.

☐ **Attachment B - Justification and Calculations for Deviation in Straight Alignment without Manholes**. A justification for deviations from straight alignment in this sewage collection system without manholes with documentation from pipe manufacturer allowing pipe curvature is attached.

☐ For curved sewer lines, all curved sewer line notes (TCEQ-0596) are included on the construction plans for the wastewater collection system.

Manholes and Cleanouts

14. ☒ Manholes or clean-outs exist at the end of each sewer line(s). These locations are listed below: (Please attach additional sheet if necessary)

Table 2 - Manholes and Cleanouts

Line	*Shown on Sheet*	*Station*	*Manhole or Clean-out?*
WW A	21 Of 30	25+95.42	MH
WW B	23 Of 30	4+03.27	MH
	Of		MH
	Of		MH
	Of		MH
	Of		MH
	Of		MH
	Of		
	Of		
	Of		

15. ☒ Manholes are installed at all Points of Curvature and Points of Termination of a sewer line.

16. ☒ The maximum spacing between manholes on this project for each pipe diameter is no greater than:

Pipe Diameter (inches)	Max. Manhole Spacing (feet)
6 - 15	500
16 - 30	800
36 - 48	1000
≥54	2000

☒ **Attachment C – Justification for Variance from Maximum Manhole Spacing**. The maximum spacing between manholes on this project (for each pipe diameter used) is greater than listed in the table above. A justification for any variance from the maximum spacing is attached, and must include a letter from the entity which will operate and maintain the system stating that it has the capability to maintain lines with manhole spacing greater than the allowed spacing.

17. ☐ All manholes will be monolithic, cast-in-place concrete.

☒ The use of pre-cast manholes is requested for this project. The manufacturer's specifications and construction drawings, showing the method of sealing the joints, are attached.

Site Plan Requirements

Items 18 - 25 must be included on the Site Plan.

18. ☒ The Site Plan must have a minimum scale of 1" = 400'.

Site Plan Scale: 1" = 20'.

19. ☒ The Site Plan must include the sewage collection system general layout, including manholes with station numbers, and sewer pipe stub outs (if any). Site plan must be overlain by topographic contour lines, using a contour interval of not greater than ten feet and showing the area within both the five-year floodplain and the 100-year floodplain of any drainage way.

20. Lateral stub-outs:

☒ The location of all lateral stub-outs are shown and labeled.
☐ No lateral stub-outs will be installed during the construction of this sewer collection system.

21. Location of existing and proposed water lines:

☐ The entire water distribution system for this project is shown and labeled.
☐ If not shown on the Site Plan, a Utility Plan is provided showing the entire water and sewer systems.
☒ There will be no water lines associated with this project.

22. 100-year floodplain:

☒ After construction is complete, no part of this project will be in or cross a 100-year floodplain, either naturally occurring or manmade. (Do not include streets or concrete-lined channels constructed above of sewer lines.)
☐ After construction is complete, all sections located within the 100-year floodplain will have water-tight manholes. These locations are listed in the table below and are shown and labeled on the Site Plan. (Do not include streets or concrete-lined channels constructed above sewer lines.)

Table 3 - 100-Year Floodplain

Line	*Sheet*	*Station*
	of	to
	of	to
	of	to
	of	to

23. 5-year floodplain:

☒ After construction is complete, no part of this project will be in or cross a 5-year floodplain, either naturally occurring or man-made. (Do not include streets or concrete-lined channels constructed above sewer lines.)
☐ After construction is complete, all sections located within the 5-year floodplain will be encased in concrete or capped with concrete. These locations are listed in the table below and are shown and labeled on the Site Plan. (Do not include streets or concrete-lined channels constructed above sewer lines.)

Table 4 - 5-Year Floodplain

Line	*Sheet*	*Station*

Line	*Sheet*	*Station*
	of	to
	of	to
	of	to
	of	to

24. ☒ Legal boundaries of the site are shown.

25. ☒ The ***final plans and technical specifications*** are submitted for the TCEQ's review. Each sheet of the construction plans and specifications are dated, signed, and sealed by the Texas Licensed Professional Engineer responsible for the design on each sheet.

Items 26 - 33 must be included on the Plan and Profile sheets.

26. ☒ All existing or proposed water line crossings and any parallel water lines within 9 feet of sewer lines are listed in the table below. These lines must have the type of pressure rated pipe to be installed shown on the plan and profile sheets. Any request for a variance from the required pressure rated piping at crossings must include a variance approval from 30 TAC Chapter 290.

☐ There will be no water line crossings.
☐ There will be no water lines within 9 feet of proposed sewer lines.

Table 5 - Water Line Crossings

Line	*Station or Closest Point*	*Crossing or Parallel*	*Horizontal Separation Distance*	*Vertical Separation Distance*
WW B	1+00.35	CROSSING		10.55

27. Vented Manholes:

☒ **No part** of this sewer line is within the 100-year floodplain and vented manholes are not required by 30 TAC Chapter 217.

☐ **A portion** of this sewer line is within the 100-year floodplain and vented manholes will be provided at less than 1500 foot intervals. These water-tight manholes are listed in the table below and labeled on the appropriate profile sheets.

☐ **A portion** of this sewer line is within the 100-year floodplain and an alternative means of venting shall be provided at less than 1500 feet intervals. A description of the alternative means is described on the following page.

☐ **A portion** of this sewer line is within the 100-year floodplain; however, there is no interval longer than 1500 feet located within. No vented manholes will be used.

Table 6 - Vented Manholes

Line	*Manhole*	*Station*	*Sheet*

28. Drop manholes:

☒ There are no drop manholes associated with this project.

☐ Sewer lines which enter new or existing manholes or "manhole structures" higher than 24 inches above the manhole invert are listed in the table below and labeled on the appropriate profile sheets. These lines meet the requirements of 30 TAC §217.55(l)(2)(H).

Table 7 - Drop Manholes

Line	*Manhole*	*Station*	*Sheet*

29. Sewer line stub-outs (For proposed extensions):

☒ The placement and markings of all sewer line stub-outs are shown and labeled.

☐ No sewer line stub-outs are to be installed during the construction of this sewage collection system.

30. Lateral stub-outs (For proposed private service connections):

☒ The placement and markings of all lateral stub-outs are shown and labeled.

☐ No lateral stub-outs are to be installed during the construction of this sewage collection system.

31. Minimum flow velocity (From Appendix A)

☒ Assuming pipes are flowing full; all slopes are designed to produce flows equal to or greater than 2.0 feet per second for this system/line.

32. Maximum flow velocity/slopes (From Appendix A)

☒ Assuming pipes are flowing full, all slopes are designed to produce maximum flows of less than or equal to 10 feet per second for this system/line.

☐ **Attachment D – Calculations for Slopes for Flows Greater Than 10.0 Feet per Second.** Assuming pipes are flowing full, some slopes produce flows which are greater than 10 feet per second. These locations are listed in the table below. Calculations are attached.

Table 8 - Flows Greater Than 10 Feet per Second

Line	*Profile Sheet*	*Station to Station*	*FPS*	*% Slope*	*Erosion/Shock Protection*

33. Assuming pipes are flowing full, where flows are ≥ 10 feet per second, the provisions noted below have been made to protect against pipe displacement by erosion and/or shock under 30 TAC §217.53(l)(2)(B).

☐ Concrete encasement shown on appropriate Plan and Profile sheets for the locations listed in the table above.

☐ Steel-reinforced, anchored concrete baffles/retards placed every 50 feet shown on appropriate Plan and Profile sheets for the locations listed in the table above.

☒ N/A

Administrative Information

34. ☒ The final plans and technical specifications are submitted for TCEQ review. Each sheet of the construction plans and specifications are dated, signed, and sealed by the Texas Licensed Professional Engineer responsible for the design on each sheet.

35. ☒ Standard details are shown on the detail sheets, which are dated, signed, and sealed by the Texas Licensed Professional Engineer, as listed in the table below:

Table 9 - Standard Details

Standard Details	*Shown on Sheet*
Lateral stub-out marking **[Required]**	13 of 30
Manhole, showing inverts comply with 30 TAC §217.55(l)(2) **[Required]**	02 of 30
Alternate method of joining lateral to existing SCS line for potential future connections **[Required]**	07 of 30
Typical trench cross-sections **[Required]**	08, 09 of 30
Bolted manholes **[Required]**	05 of 30

Standard Details	*Shown on Sheet*
Sewer Service lateral standard details **[Required]**	07 of 30
Clean-out at end of line **[Required, if used]**	N/A of
Baffles or concrete encasement for shock/erosion protection **[Required, if flow velocity of any section of pipe >10 fps]**	N/A of
Detail showing Wastewater Line/Water Line Crossing **[Required, if crossings are proposed]**	12 of 30
Mandrel detail or specifications showing compliance with 30 TAC §217.57(b) and (c) **[Required, if Flexible Pipe is used]**	11 of 30
Drop manholes **[Required, if a pipe entering a manhole is more than 24 inches above manhole invert]**	N/A of

36. ☒ All organized sewage collection system general construction notes (TCEQ-0596) are included on the construction plans for this sewage collection system.

37. ☐ All proposed sewer lines will be sufficiently surveyed/staked to allow an assessment prior to TCEQ executive director approval. If the alignments of the proposed sewer lines are not walkable on that date, the application will be deemed incomplete and returned.

    ☒ Survey staking was completed on this date: 08/30/2024

38. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

39. ☒ Any modification of this SCS application will require TCEQ approval, prior to construction, and may require submission of a revised application, with appropriate fees.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Organized Sewage Collection System Application** is hereby submitted for TCEQ review and executive director approval. The system was designed in accordance with the requirements of 30 TAC §213.5(c) and 30 TAC §217 and prepared by:

Print Name of Licensed Professional Engineer: TERRY R. HAGOOD

Date: 07/15/2024

Place engineer's seal here:

Signature of Licensed Professional Engineer:

Appendix A-Flow Velocity Table

Flow Velocity (Flowing Full) All gravity sewer lines on the Edwards Aquifer Recharge Zone shall be designed and constructed with hydraulic slopes sufficient to give a velocity when flowing full of not less than 2.0 feet per second, and not greater than 10 feet per second. The grades shown in the following table are based on Manning's formula and an n factor of 0.013 and shall be the minimum and maximum acceptable slopes unless provisions are made otherwise.

Table 10 - Slope Velocity

Pipe Diameter(Inches)	*% Slope required for minimum flow velocity of 2.0 fps*	*% Slope which produces flow velocity of 10.0 fps*
6	0.50	12.35
8	0.33	8.40
10	0.25	6.23
12	0.20	4.88
15	0.15	3.62
18	0.11	2.83
21	0.09	2.30
24	0.08	1.93
27	0.06	1.65
30	0.055	1.43
33	0.05	1.26
36	0.045	1.12
39	0.04	1.01
>39	*	*

**For lines larger than 39 inches in diameter, the slope may be determined by Manning's formula (as shown below) to maintain a minimum velocity greater than 2.0 feet per second when flowing full and a maximum velocity less than 10 feet per second when flowing full.*

$$v = \frac{1.49}{n} \times R_h^{0.67} \times \sqrt{S}$$

Figure 1 - Manning's Formula

Where:

v = velocity (ft/sec)
n = Manning's roughness coefficient (0.013)
Rh = hydraulic radius (ft)
S = slope (ft/ft)

Sewage Collection System

Engineering Design Report

Georgetown Family YMCA

6100 Williams Drive

Georgetown, Texas 78633

Submitted to:

Texas Commission on Environmental Quality

Region 11 Office

12100 Park 35 Circle

Building A

Room 179

Austin, TX 78753

(512) 339-2929

July 15, 2024

This engineering design report is intended to fulfil the requirements set forth in 30 TAC Chapter 217, including Chapter 217.10 of Subchapter A (Administrative Requirements) and §§217.51-217.70 of Subchapter C (Conventional Collection Systems). Subchapter D (Alternative Collection Systems) is not applicable for this report.

Site Location

The 11.40-acre site is located at 6100 Williams Drive in Williamson County, within the City of Georgetown Corporate Limits. The project site and service area are indicated on the Collection Area Map accompanying the Sewage Collection System (SCS) submittal information and is shown in general form in the Appendix of this report.

The SCS has been designed to convey the flow from the 73.36 acres collection area. The collection area consists of multiple land parcels with acreage and existing land use noted as follows:

Georgetown Family YMCA: 11.40 acres currently undeveloped.
Wellspring Church: 10.65 acres currently exists.
Wolf, Gourley, MMSG, LP: 27.43 acres currently undeveloped
CRBCDI: 9.572 acres, commercial outdoor storage exists
Jeanette Brown: 19.22 acres, single family residence exists
Oberrener tracts (2): 10.118 acres, undeveloped
Hillside Nursery: 5.91 acres, commercial nursery exists
Snow: 6.487 acres, undeveloped.

The SCS is designed to convey future developed flows based upon land use assumptions shown below in the "*Land Use Collection Basin Parcel Aras Flow Analysis"* table shown below.

The SCS will consist of:

- 3070 lf of eight-inch (8") pvc sdr 26 pipe
- 402 l.f. of six-inch (6") pvc sdr 26 pipe
- 15 new manholes (10-4' dia., 5 – 5' dia.)
- 2- 8" stub outs

Design Flow Determination

The design flow determination is shown in the following table. The Infiltration and Inflow rate is based upon 750 gallons per day over 73.36 acres of developed area.

Land Use Collection Basin Parcel Areas Flow Analysis Wastewater Line														
Parcel	Existing Land Use	GLA	GFA or Density	Quantity	Unit	Loading	Daily Volume	time period	ADWF	Peaking Factor	PDWF	I&I[1]	PWWF	Notes
	Category	acres	sf or unit/ac			gal/day	gallons	hours	gpm		gpm	gpm	gpm	
WWL A PUBLIC														
Wolf, Gourley, MMSG LP	single family	27.43	4.00	100.00	LUE	280	28000	24	19.44	4.05	78.73	14.29	93.02	single family density of 4 units /acre
CRBCDI	outdoor storage	9.57	3,000.00	100.00	persons	5	500	10	0.83	4.40	3.66	4.98	8.65	2 employes 100 customers per day
Jeanette Brown	single family	19.22	4.00	75.00	LUE	280	21000	24	14.58	4.10	59.83	10.01	69.84	single family density of 4 units /acre
Oberrender (2 Tracts)	single family	10.12	4.00	40.00	LUE	280	11200	24	7.78	4.20	32.67	5.27	37.94	single family density of 4 units /acre
Hillside Nursery	retail nursery	5.91	2,000.00	50.00	persons	5	250	10	0.42	4.43	1.84	3.08	4.92	7 emplyees, 50 customers per day
Snow	single family	6.49	4.00	25.00	LUE	280	7000	12	9.72	4.17	40.53	3.38	43.91	single family density of 4 units /acre
	Total	51.31					39950.00		33.33		138.54	26.72	165.26	
WWL A-1 PUBLIC														
	Total	0.00					0.00		0.00		0.00	0.00	0.00	
WWL B PRIVATE														
Wellspring Church	church	10.65	15,000.00	600.00	persons	10	6000	8	12.50	4.13	51.61	5.55	57.16	Occupancy - 10 employees
Georgetown Family YMCA	comm recreational	11.40	55,000.00	500.00	persons	20	10000	12	13.89	4.11	57.10	5.94	63.04	Swimming Pool Backwashing
	Total	22.05					16000.00		26.39		108.71	11.48	120.20	
	TOTALS	73.36					55950		59.72		247.25	38.21	285.45	

The flows from the YMCA and Wellspring Church are expected in the pipes immediately following construction completion and are not expected to increase at the end of its 50-year life. The remaining parcels will be added as development occurs. Additionally, odor control measures are not anticipated in this system.

The capacity of the SCS will be reviewed and approved by the City of Georgetown. The proposed SCS will gravity flow into the existing City of Georgetown public wastewater infrastructure located on Williams Drive and will not require the use of a lift station and force main. The City of Georgetown public wastewater system conveys flows to the San Gabriel Wastewater Treatment Plant.

Pipe Design

The wastewater collection system has been designed to transport the peak wet weather flow from the service area, plus the inflow and infiltration as discussed above. These were designed to ensure that the peak dry weather flow shall not exceed 65% of the capacity of the pipe flowing full and also the peak wet weather flow shall not exceed 85% of the capacity of the pipe flowing full. The collection system piping consists of 3070 LF of 8" SDR 26 PVC at a min. slope of 0.4%. The pipe can be seen in plan and profile in the construction drawings accompanying this report and the TCEQ Form 0582 (Organized Sewage Collection System Application).

The gravity wastewater pipe specified is a PVC SDR-26 pipe conforming to ASTM D3034 with a pipe stiffness of 115 psi. The 8" diameter pipe has an outside diameter of 8.4 inches, inside diameter of 7.92 inches, wall thickness of 0.240 inches. The permissible slopes within the Edwards Aquifer Recharge Zone, according to Appendix A of the SCS application are 0.33% to 8.40%. The velocity at the minimum and maximum slopes with the pipe flowing full is greater than 2 fps and less than 10 fps, respectively.

The detailed design of the pipe has taken the following into account: the characteristic of the wastewater conveyed, the possibility of septic conditions, the possibility of external forces, and the possibility of groundwater, internal pressure and the abrasion and corrosion resistance of the pipe material.

The separation distance for all points where a wastewater or force main line crosses a public water supply or service are:

- Vertical separation must be at least 18" in accordance with the TAC Title 30 Part 1 Chapter 290 Subchapter D Rules 290 and TAC Chapter 217
- Wastewater pipe has a minimum pressure rating of at least 150 PSI.
- One segment of wastewater pipe with minimum pressure rating of 150 psi is to be centered on water line crossing.

For wastewater or force main lines that parallel public water services:

- Vertical separation must be at least two feet from outside diameter of pipe
- Horizontal separation must be 4 feet from outside diameters of pipe
- Wastewater or force main lines must be below water lines.

Details for these crossings are noted on plan sheet C60.

This system will not be within 50 feet of an active fault. A geologic assessment has been submitted with this submittal.

The manholes are in compliance with §217.55 of the TAC. Manholes are located at points all intersections of pipes. There are clean-outs associated with this system as noted within the plan set. There will be no tunnels associated with this project. Manhole specifications and construction drawings are located in the plan sheets. The method of sealing the joints is depicted on drawing no. WW-10, as detail 11 on sheet C72 and for gasketed manholes the Owner must follow the national reference standard for the gasket type.

Structural Analysis

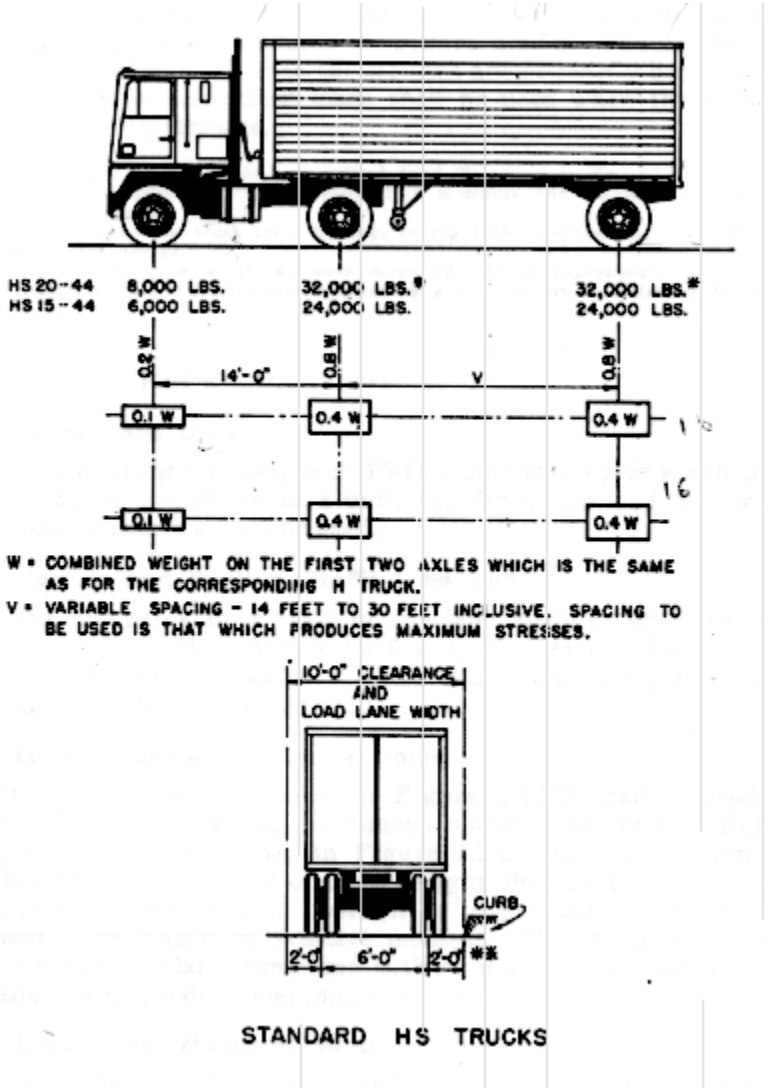
The SDR-26 PVC Pipe is a flexible conduit that takes advantage of the support capacity of the surrounding earth by transferring a major portion of the load directly to it. Deflection of the pipe varies with stiffness, class and density of the soil, degree of compaction, burial depth and live load.

The sewer pipe will be placed in an excavated trench and subsequently backfilled. The details of the trench can be found on the accompanying construction plans on the detail sheet. Watertight, size on size resilient connectors conforming to ASTM C-923 will be used for connecting to a manhole as shown in detail WW-10 (see accompanying construction plans). The bedding method will be compacted granular fill or densely compacted backfill and therefore will be Class C as shown in NAVFAC Design Manual DM-7.1, May 1982, Figure 18, Pg. 7.1-186. Bedding is required to establish line and grade and to provide firm pipe support. The Bedding materials will be Class IA (open-graded, clean manufactured aggregates, ASTM D 2321) with 6 in. minimum between the excavation lines ("foundation") to equalize load distributions along the invert of the pipe.

Live Load Calculation

The live loads that can be included in buried pipe are truck load, car load, train load and any other type of non-concentrated, surcharge, load (ex. equipment, piles of stored materials, debris). Vehicular loads are typically based on The American Association of State Highway and Transportation Officials (AASHTO) standard truck loadings. For calculating the soil pressure on flexible pipe, the loading is normally assumed to be an H20 (HS20) truck. A standard H20 truck has a total weight of 40,000 lbs.

(20 tons). The weight is distributed with 8,000 lbs. on the front axle and 32,000 lbs. on the rear axle. The HS20 truck is a tractor and trailer unit having the same axle loadings as the H20 truck but with two rear axles. For these trucks, the maximum wheel load is found at the rear axle(s) and equals 40 percent of the total weight of the truck. The maximum wheel load may be used to represent the static load applied by either a single axle or tandem axles. The heaviest tandem axle loads normally encountered on highways are around 40,000 lbs. (20,000 lbs per wheel).

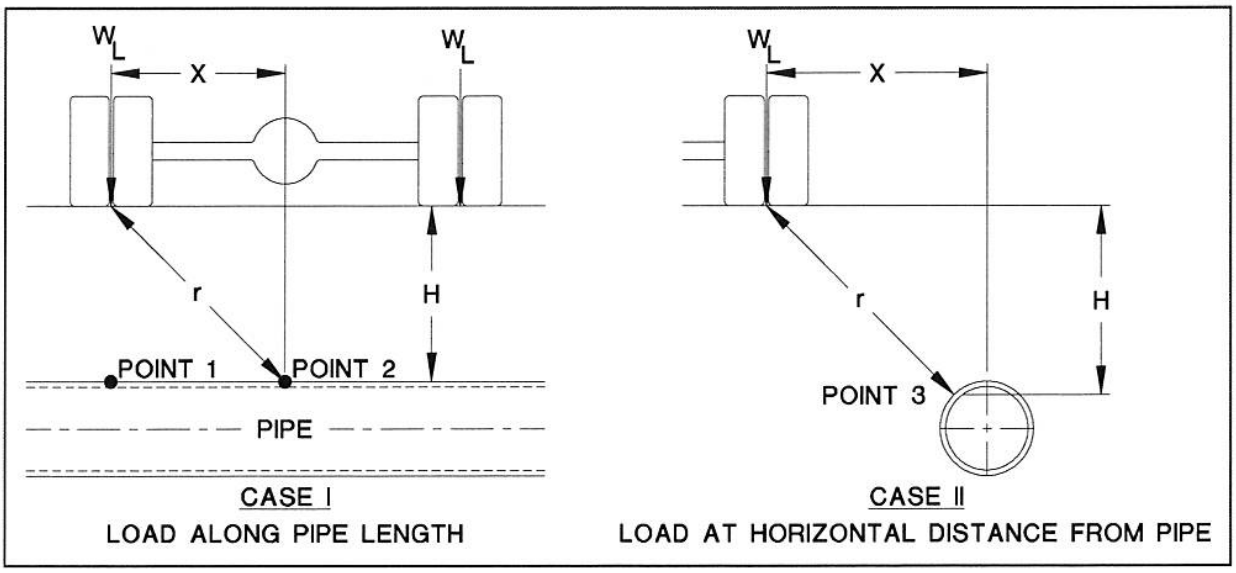


The Boussinesq Equation gives the pressure at any point in a soil mass under a concentrated surface load. The Boussinesq Equation may be used to find the pressure transmitted from a wheel load to a point that is not along the line of action of the load. Pavement effects are neglected.

$$P'_L = \frac{3 I_f W_w H^3}{2\pi r^5}$$

P_L = vertical soil pressure due to live load (psf)
W_w = wheel load, (20,000 lb)
H = vertical depth to pipe crown, (min. 3.5 ft)
I_f = impact factor (1.0)
r = distance from the point of load application to pipe crown, ft

$$r = \sqrt{X^2 + H^2}$$



For the proposed project, H = 2.5 ft.
r = $(o^2+2.5^2)^{0.5}$=2.5 ft.
P_L = $(3*1.0*20{,}000*2.5^3)/ (2*\pi*2.5^5)$ = 1527.89 psf. = 10.61 psi

Buckling Analysis

Predicted and allowable buckling pressures must be calculated for each size of pipe and type of flexible pipe material.

$$q_a = 0.4 * \sqrt[2]{32 * R_w * B\text{¢} * E_b * (E * I/D\backslash S\backslash up4(3))}$$ = 6,866.80 psi for a 8" diameter pipe

$$B' = \frac{1}{1 + 4 * e^{-0.065 H}}$$

q_a = Allowable buckling pressure, pounds per square inch (psi)

R_w =1; Water buoyancy factor. If (height of water surface above the top of the pipe) h_w = 0.

H = Depth of burial in feet (ft) from ground surface to crown of pipe. (2.5 feet min for the proposed project)

B'= Empirical coefficient of elastic support

E_b= Modulus of soil reaction for the bedding material (1,000 psi)

E = Modulus of elasticity of the pipe material (400,000 psi min for PVC)

I = moment of inertia of the pipe wall cross section per linear inch of pipe, $inch^4$/lineal inch

D = mean pipe diameter (8 in)

Hollow Cylindrical Cross Section: $I = \pi (d_o^4 - d_i^4) / 64 =$ **51.253** in^4 for a 8" diameter pipe

Where d_o = cylinder outside diameter; d_i = cylinder inside diameter

AVERAGE VALUES OF MODULUS OF SOIL REACTION, E'
(For Initial Flexible Pipe Deflection)

Soil type-pipe bedding material (Unified Classification System[a]) (1)	E' for Degree of Compaction of Pipe Zone Backfill, psi: Loose (2)	Slight <85% Proctor, <40% relative density (3)	Moderate 85%-95% Proctor, 40%-70% relative density (4)	High >95% Proctor, >70% relative density (5)
Fine-grained Soils (LL > 50)[b] Soils with medium to high plasticity CH, MH, CH-MH	No data available; consult a competent soils engineer; Otherwise use E' = 0			
Fine-grained Soils (LL < 50) Soils with medium to no plasticity CL, ML, ML-CL, with less than 25% coarse-grained particles	50	200	400	1,000
Fine-grained Soils (LL < 50) Soils with medium to no plasticity CL, ML, ML-CL, with more than 25% coarse-grained particles Coarse-grained Soils with Fines GM, GC, SM, SC[c] contains more than 12% fines	100	400	1,000	2,000
Coarse-grained Soils with Little or No Fines GW, GP, SW, SP[c] contains less than 12% fines	200	1,000	2,000	3,000
Crushed Rock	1,000	3,000	3,000	3,000
Accuracy in Terms of Percentage Deflection[d]	±2	±2	±1	±0.5

[a]ASTM Designation D 2487, USBR Designation E-3.
[b]LL = Liquid limit.
[c]Or any borderline soil beginning with one of these symbols (i.e., GM-GC, GC-SC).
[d]For ±1% accuracy and predicted deflection of 3%, actual deflection would be between 2% and 4%.
Note: Values applicable only for fills less than 50 ft (15 m). Table does not include any safety factor. For use in predicting initial deflections only, appropriate Deflection Lag Factor must be applied for long-term deflections. If bedding falls on the borderline between two compaction categories, select lower E' value or average the two values. Percentage Proctor based on laboratory maximum dry density from test standards using about 12,500 ft-lb/cu ft (598,000 J/m^3) (ASTM D 698, AASHTO T-99, USBR Designation E-11). 1 psi = 6.9 kN/m^2.

SOURCE: "Soil Reaction for Buried Flexible Pipe," by Amster K. Howard, U.S. Bureau of Reclamation, Denver, Colorado. Reprinted with Permission from American Society of Civil Engineers Journal of Geotechnical Engineering Division, January 1977, pp. 33-43.

Prism Load Calculations

The prism load calculations are equal to the assumed weight of soil over the pipe. The approximate dry density of the soil in the backfill as shown is 120 pcf. The total prism load is calculated by:

P = Density x Height of the soil = 120 pcf * 2.5 ft. = 300 psf = 2.083 psi

The Modified Iowa Equation is used for predicting deflection in buried flexible pipe:

$$\%\text{Deflection} = \frac{\%\Delta Y}{D} = \frac{(D_L KP + KW')(100)}{[2E/(3(DR-1)^3)] + 0.061E'}$$

Where:
D_L = Deflection Lag Factor=1.0 (Typical)
K = Bedding Constant=0.1 (Typical)
P = Prism Load=Weight of soil over pipe (2.083 psi, above)
W' = Live Load (10.61 psi, calculated above)
E = Modulus of Elasticity=400,000 psi minimum for PVC
DR = Dimension Ratio (OD/t) (8.40/0.240=35)
E' = Modulus of Soil Reaction (1,000 psi)

Δ= 1.87%

The maximum deflection allowed is 5%. This pipe meets this specification.

Q_p = Pressure applied to the pipe under installed conditions (psi) = Live load + Prism load

q_p= 10.61 psi+2.083 psi=12.693 psi

$q_a \geq q_p$ for the specified pipe and is acceptable for the proposed installation.

Wall Crushing

The project does not propose any trenchless installation and no vertical curvature between manholes is anticipated. Additionally, the project does not include any horizontally curved gravity sanitary sewer piping. Should any horizontal curves be required as an immediate field change, it shall be a minimum of 300*8.40 in= 2,520 inches= 210 feet.

The curves will be provided by pipe flexure and in no case will any joint flexure be allowed. All joints will be installed fully seated per the manufacturer's recommendation.

There will be no concrete encased flexible pipe with the proposed project. If encased flexible pipe is needed in the future, it shall be installed in a rigid encasement and installed at a maximum depth of:

H= (24*P_C*A)/ (£*D_O)

Where

P_C=compressive stress (4,000 psi for PVC pipe)

A=surface area of the pipe wall (in^2/ft)

£=specific weight of the soil (pcf)

D_O=outside pipe diameter (in)

The flexible pipe will be installed under favorable ambient temperature conditions and no provisions will be needed to ensure adequate installation.

The conditions of this installation are such that strain related failure is not anticipated within the 50-year life.

Pressure loss in fittings

Calculations:

$$zeta = \frac{1.44}{f + (1.44 - f) * (E_b / E_{n'})}$$

$$f = \frac{\frac{b}{d_a - 1}}{1.154 + 0.444 * (\frac{b}{d_a - 1})}$$

f =Pipe/trench width coefficient

b =Trench width (OD+12″ =8.4+12″ =20.4″)

d_a =Pipe diameter (8.40 in)

E_b =Modulus of soil reaction for the bedding material (1,000 psi)

E_n =Modulus of soil reaction for the in-situ soil (1.67 psi)

Pressure loss factor = Zeta = 0.0085 for 8″ pipes.

Pipe Stiffness

Pipe stiffness (P_s) in psi can be determined either by parallel plate test at 5% deflection, based on manufacturer's data or national reference standards; or, calculated using the following equation. The minimum pipe stiffness for PVC pipe less than 15 inches in diameter meeting ASTM D 3034 is 115 psi for SDR 26.

$$P_s = \frac{EI}{0.149 * r^3}$$

E = modulus of elasticity of the pipe material (400 ksi)

I =moment of inertia of the pipe wall cross section per linear inch of pipe, $inch^4$/lineal inch = $inch^3$. (51.253 in^4/12 in=4.27)

D =mean pipe diameter and (8 in)

r =mean radius (4 in)

P_S= (400*1.74)/ (0.149*3^3) =**179.11 psi**

In order to ensure that the stiffness being provided to the installation has a reasonable contribution from pipe stiffness, and does not rely solely on the stiffness provided by the soil stiffness factor (SSF), the ratio of P_s/SSF must be calculated. This process must be repeated until P_s/SSF ≥ 0.15 exists for all proposed pipe sizes and for all types of flexible pipe materials.

$$\frac{P_s}{SSF} = \frac{P_s}{0.061 * zeta * E_b} \geq 0.15$$

P_s =Pipe stiffness (**179.11** psi, above)

E_b =modulus of soil reaction for the bedding material (1,000 psi)

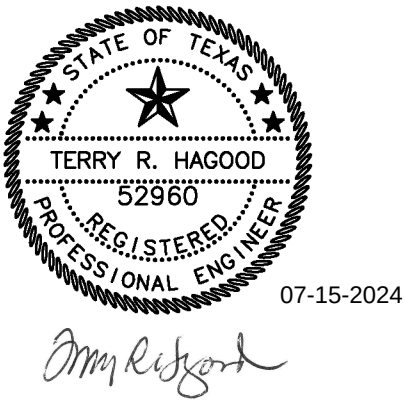
zeta =1.0, or a value calculated above, for 8" size pipe

SSF =soil stiffness factor (0.061*zeta*E_b)

SSF (at zeta of value 1.0) = 0.061 x 1 x 1000 = **61**

Ps/SSF=179.11/61=**2.93**

Based upon the above calculations, the 8" SDR-26 Pipes are adequate for the proposed installation as noted on the accompanying plan sheets.



07-15-2024

APPENDIX A
COLLECTION BASIN MAP

HAGOOD
ENGINEERING ASSOCIATES
900 E. Main Street
Round Rock, TX 78664
Phone (512) 244-1546
Fax (512) 244-1010
www.heaeng.com
TBPE Registration No. F-12709

STATE OF TEXAS
TERRY R. HAGOOD
52960
REGISTERED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGOOD, P.E. 52960

JOB NO. 22-012 © 2024 HEA, Inc.
DATE SIGNED: 6/19/2024
ISSUED FOR: AGENCY REVIEW & BID

SITE DEVELOPMENT PLANS FOR GEORGETOWN FAMILY YMCA WASTEWATER IMPROVEMENTS 6100 WILLIAMS DRIVE GEORGETOWN, TEXAS 78633

REVISIONS

NO.	DATE	DESCRIPTION

HEA PROJECT NO: 22-012
ISSUED DATE: 6/19/2024

CONTRIBUTING BASIN MAP

SHEET NO.
WW CBM
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2024-_____-CON

Z:\HEA\HEA Projects\Projects 22.000\22.012 YMCA of CT Georgetown - Feasibility\CAD Files\Civil\Exhibits\22-012 WW Collection Basins.dwg, 7/1/2024 8:49:52 PM, villarrub

Temporary Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Temporary Stormwater Section** is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Print Name of Customer/Agent: TERRY R. HAGOOD

Date: 7/15/2024

Signature of Customer/Agent:

Regulated Entity Name: YMCA GEORGETOWN

Project Information

Potential Sources of Contamination

Examples: Fuel storage and use, chemical storage and use, use of asphaltic products, construction vehicles tracking onto public roads, and existing solid waste.

1. Fuels for construction equipment and hazardous substances which will be used during construction:

   ☐ The following fuels and/or hazardous substances will be stored on the site: _____

   These fuels and/or hazardous substances will be stored in:

   ☐ Aboveground storage tanks with a cumulative storage capacity of less than 250 gallons will be stored on the site for less than one (1) year.

☐ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.

☐ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.

☒ Fuels and hazardous substances will not be stored on the site.

2. ☒ **Attachment A - Spill Response Actions**. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.

3. ☒ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

4. ☒ **Attachment B - Potential Sources of Contamination**. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

5. ☒ **Attachment C - Sequence of Major Activities**. A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.

   ☐ For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.

   ☒ For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: BERRY CREEK

Temporary Best Management Practices (TBMPs)

Erosion control examples: tree protection, interceptor swales, level spreaders, outlet stabilization, blankets or matting, mulch, and sod. Sediment control examples: stabilized construction exit, silt fence, filter dikes, rock berms, buffer strips, sediment traps, and sediment basins. Please refer to the Technical Guidance Manual for guidelines and specifications. All structural BMPs must be shown on the site plan.

7. ☒ **Attachment D – Temporary Best Management Practices and Measures**. TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information is attached:

☒ A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

☒ A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

☒ A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

☒ A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

8. ☒ The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

☐ **Attachment E - Request to Temporarily Seal a Feature**. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

☒ There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. ☒ **Attachment F - Structural Practices**. A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.

10. ☒ **Attachment G - Drainage Area Map**. A drainage area map supporting the following requirements is attached:

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

☐ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

☒ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.

11. ☐ **Attachment H - Temporary Sediment Pond(s) Plans and Calculations**. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.

☒ N/A

12. ☒ **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.

13. ☒ All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

14. ☒ If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

15. ☒ Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.

16. ☒ Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

Examples: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, or preservation of mature vegetation.

17. ☒ **Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices**. A schedule of the interim and permanent soil stabilization practices for the site is attached.

18. ☒ Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

19. ☒ Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

20. ☒ All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.

21. ☒ If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.

22. ☒ Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

TEMPORARY STORWATER SECTION

Attachments to form TCEQ-0602

ATTACHMENT A

There are several factors that could affect surface and ground water quality. During construction, fuels and hazardous substances could spill. These spills shall be contained on-site and immediately cleaned up and properly discarded. Any spills or discharges of oil, petroleum products and used oil onto land having a volume greater than 25 gallons, and spills or discharges directly into waters of the state having a quantity sufficient enough to create a sheen, shall be reported immediately to TCEQ at (512) 339-2929 or the State Emergency Response Center at 1-800-832-8224. There are no significant factors proposed which could affect surface and groundwater quality relating to the permanent use of the facility.

Education

1. Be aware that different materials pollute in different amounts. Make sure that each employee knows what a “significant spill” is for each material they use, and what is the appropriate response for “significant” and “insignificant” spills. Employees should also be aware of when a spill must be reported to the TCEQ. Information is available in 30 TAC 327.4 and 40 CFR 302.4
2. Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
3. Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
4. Establish a continuing education program to indoctrinate new employees
5. Have the contractor’s superintendent or representative oversee and enforce property spill prevention and control measures.

General Measures

1. To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110, 117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
2. Store hazardous materials and wastes in covered containers and protect from vandalism.
3. Place a stockpile of spill cleanup materials where it will be readily accessible.
4. Train employees in spill prevention and cleanup
5. Designate responsible individuals to oversee and enforce control measures.
6. Spills should be covered and protected from stormwater run-on during rainfall to the extent that it doesn’t compromise clean-up activities.
7. Do not bury or wash spills with water
8. Store and dispose of used clean-up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs
9. Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
10. Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
11. Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.

12. Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

1. Clean up leaks and spills immediately
2. Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste
3. Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of it properly. See the waste management BMPs in this section for specific information.

Refer to attached Spill Response Poster for quantity / action requirements

ATTACHMENT B

Potential Sources of Contamination:

1. Soil disturbance during construction.
2. Hydrocarbon-based fluids from Construction Equipment.
3. Landscaping – Fertilizer and Pesticides.

ATTACHMENT C

Sequence of major activities for each phase is as follows:

1. The installation of Erosion/Sedimentation Controls –2.14 ac. Disturbed
2. Clearing, grubbing, and removal of topsoil from entire site – Not required
3. Rough grading for trench benching – 1.93ac. Disturbed
4. Excavating for utilities – 1.6 ac. Disturbed
5. Finish grading and permanent erosion control – 3.4 ac. Disturbed

ATTACHMENT D

The Temporary Best Management Practices (TBMP) for this project will consist of:

1. A stabilized construction entrance.
2. Silt fencing
3. Rock berms.
4. Concrete washout station.

All TBMP's will be in place prior to any regulated activities commencing. The stabilized construction entrance will remove excess spoils from construction vehicles leaving the site. The silt fencing will collect silt runoff and debris during construction activities. These controls will be maintained during construction and will remain until after all construction activities are complete and permanent re-vegetation is established.

TEMPORARY STORWATER SECTION

Attachments to form TCEQ-0602

ATTACHMENT F

The wastewater line along Williams Drive (WWL A) will be installed parallel to and between the open grass lined channel and the Williams Drive Right-of-Way (ROW). This open ditch collects storm runoff from the upstream collection area to the south and the southern one-half of the Williams Drive ROW. Trench spoils will be temporarily stored on the Williams Drive side of the trench excavation. Construction vehicles will be primarily on the south side of the trench line for pipe, bedding, and backfilling operations. Silt fencing and rock berms are located at the upstream end of culvert(s) at each driveway crossing.

The wastewater line (WWL B) serving the Wellspring Church and YMCA tracts will be installed along the common property between the parcels. The topography generally slopes from the southwest to the northeast. A limit of construction (LOC) has been established to control the amount of ground disturbance. Silt fencing and rock berms are installed on the perimeter of the limits of construction.

The contractor staging, parking, and storage area is located on the YMCA parcel and is protected on the downstream side of the area to capture any polluted runoff.

ATTACHMENT G

Refer to the attached Collection Basin Area Map.

ATTACHMENT H

The total limit of construction and disturbed area is 2.34 acres and will not require a temporary sediment pond.

ATTACHMENT I

The contractor is required to inspect all of the erosion and sediment controls, fences, inlet protection, stabilized construction entrance and concrete washout at weekly intervals and after significant rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (6) inches. Records described in the SWPPP must be retained on site for 5 years beyond the date of the cover letter notifying the facility of coverage under a storm water permit, and shall be made available to the state or federal compliance inspection officer upon request. Additionally, employee training records and waste and recycling receipts or vouchers shall also be maintained.

ATTACHMENT J

Schedule of Interim Soil Stabilization Practices:

1. Erosion and sediment control measures including perimeter sediment controls must be in place before vegetation is disturbed and must remain in place and be maintained and repaired.

2. Temporary stabilization or covering of soil stockpiles and protection of stockpile located away from construction activity must be maintained
3. Should construction activities cease for fifteen (15) days or more on any significant portion of the construction site, temporary stabilization is required for that portion of the site to prevent soil and wind erosion until work resumes on that portion of the site.
4. Should all construction activities cease for thirty days or more, the entire site must be temporarily stabilized using vegetation or a heavy mulch layer, temporary seeding or other method.

Schedule of Permanent Soil Stabilization Practices:

1. Stabilized any unpaved area that is final grade or remain unpaved for the next two weeks. Permanent stabilization may consist of sodding, seeding, or mulching that must be maintained to prevent erosion from the site until re-vegetation has achieved 70% coverage
2. Once construction is complete, remove all the pollution prevention measures that were temporary.

Agent Authorization Form
For Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

I JEFF ANDRESEN,
Print Name

PRESIDENT,
Title - Owner/President/Other

of YMCA OF GREATER WILLIAMSON COUNTY,
Corporation/Partnership/Entity Name

have authorized TERRY R. HAGOOD
Print Name of Agent/Engineer

of HAGOOD ENGINEERING ASSOCIATES, INC.
Print Name of Firm

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Commission on Environmental Quality (TCEQ) for the review and approval consideration of regulated activities.

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to $10,000 per day per violation.

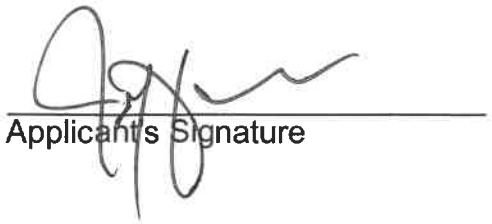
2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.

3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:



Applicant's Signature

5-30-23

Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared Jeff Andresen known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 30th day of May, ____.

Ariel White

NOTARY PUBLIC

Ariel White

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 05/12/2026

Agent Authorization Form

For Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

I JEFFREY A. SMITH, D.MIN.,
Print Name

SENIOR PASTOR,
Title - Owner/President/Other

of WELLSPRING UNITED METHODIST CHURCH,
Corporation/Partnership/Entity Name

have authorized TERRY R. HAGOOD
Print Name of Agent/Engineer

of HAGOOD ENGINEERING ASSOCIATES, INC.
Print Name of Firm

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Commission on Environmental Quality (TCEQ) for the review and approval consideration of regulated activities.

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to $10,000 per day per violation.

2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.

3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Applicant's Signature

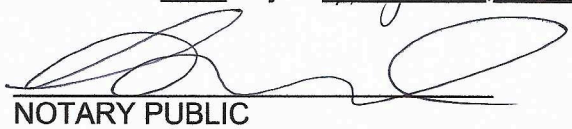
5 August 2024
Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared Jeffrey Smith known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

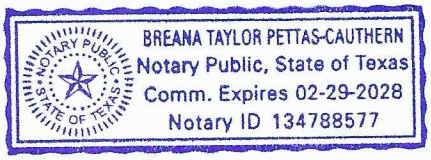
GIVEN under my hand and seal of office on this 5th day of August, 2024.



NOTARY PUBLIC

Breana T. Pettas-Cauthern
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 2-29-2028



Owner Authorization Form

Texas Commission on Environmental Quality
for Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

Land Owner Authorization

I, David Munk of City of Georgetown
Land Owner Signatory Name — Land Owner Name (Legal Entity or Individual)

am the owner of the property located at

ROW along Williams Dr. from 6100 Williams Dr. to 5731 Williams Dr

Legal description of the property referenced in the application

and am duly authorized in accordance with §213.4(c)(2) and §213.4(d)(1) or §213.23(c)(2) and §213.23(d) relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize Jeff Andresen

Applicant Name (Legal Entity or Individual)

to conduct SCS Application

Description of the proposed regulated activities

at within the ROW along Williams Dr. from 6100 Williams Dr. to 5731 Williams Dr .

Precise location of the authorized regulated activities

Land Owner Acknowledgement

I understand that David Munk

Land Owner Name (Legal Entity or Individual)

Is ultimately responsible for compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation is subject to administrative rule or orders and penalties as provided under §213.10 (relating to Enforcement). Such violation may also be subject to civil penalties and injunction.

Land Owner Signature

David Munk

Land Owner Signature

8/21/24

Date

THE STATE OF § Texas

County of § Williamson

BEFORE ME, the undersigned authority, on this day personally appeared David Munk known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 21st day of AUGUST, 2024

Sheila Mitchell

NOTARY PUBLIC

SHEILA KAYE MITCHELL
Notary Public, State of Texas
Comm. Expires 11-10-2025
Notary ID 133441435

SHEILA KAYE MITCHELL

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: NOV. 10, 2025

Attached: (Mark all that apply)

- ☐ Lease Agreement
- ☐ Signed Contract
- ☐ Deed Recorded Easement
- ■ Other legally binding document

Applicant Acknowledgement

I, Jeff Andresen of YMCA of Central Texas
Applicant Signatory Name — Applicant Name (Legal Entity or Individual)

acknowledge that City of Georgetown
Land Owner Name (Legal Entity or Individual)

has provided YMCA of Central Texas
Applicant Name (Legal Entity or Individual)

with the right to possess and control the property referenced in the Edwards Aquifer protection plan.

I understand that YMCA of Central Texas
Applicant Name (Legal Entity or Individual)

is contractually responsible for compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation. I further understand that failure to comply with any condition of the executive director's approval is a violation is subject to administrative rule or orders and penalties as provided under §213.10 (relating to Enforcement). Such violation may also be subject to civil penalties and injunction.

Applicant Signature

Applicant Signature — Date: 8-22-24

THE STATE OF § Texas

County of § Williamson

BEFORE ME, the undersigned authority, on this day personally appeared Jeff Andresen known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 22 day of August

NOTARY PUBLIC

SHANNON G. BARRY
Notary Public, State of Texas
Comm. Expires 04-05-2028
Notary ID 134839674

Shannon Barry
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 4-5-28

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: YMCA GEORGETOWN
Regulated Entity Location: 6200 WILLIAMS DRIVE GEORGETOWN, TX 78633
Name of Customer: YMCA OF CENTRAL TEXAS
Contact Person: RICH CARLTON Phone: _____
Customer Reference Number (if issued):CN 601387905
Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☒ Williamson
☐ Travis

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

Application fees must be paid by check, certified check, or money order, payable to the **Texas Commission on Environmental Quality**. Your canceled check will serve as your receipt. **This form must be submitted with your fee payment**. This payment is being submitted to:

☒ Austin Regional Office ☐ San Antonio Regional Office

☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
Sewage Collection System	3472 L.F.	$ 1,736.00
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$

Type of Plan	*Size*	*Fee Due*
Extension of Time	Each	$

Signature: _____ Date: 07-15-2024

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

Project	*Project Area in Acres*	*Fee*
One Single Family Residential Dwelling	< 5	$650
Multiple Single Family Residential and Parks	< 5 5 < 10 10 < 40 40 < 100 100 < 500 ≥ 500	$1,500 $3,000 $4,000 $6,500 $8,000 $10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 10 < 40 40 < 100 ≥ 100	$3,000 $4,000 $5,000 $6,500 $8,000 $10,000

Organized Sewage Collection Systems and Modifications

Project	*Cost per Linear Foot*	*Minimum Fee-Maximum Fee*
Sewage Collection Systems	$0.50	$650 - $6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

Project	*Cost per Tank or Piping System*	*Minimum Fee-Maximum Fee*
Underground and Aboveground Storage Tank Facility	$650	$650 - $6,500

Exception Requests

Project	***Fee***
Exception Request	$500

Extension of Time Requests

Project	***Fee***
Extension of Time Request	$150

TCEQ Core Data Form

TCEQ Use Only

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

SECTION I: General Information

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

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

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

2. Attachments **Describe Any Attachments:** *(ex. Title V Application, Waste Transporter Application, etc.)*

☒ Yes ☐ No SCS

3. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number *(if issued)*
CN 601387905		RN

SECTION II: Customer Information

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

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

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

7. General Customer Information

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State) ☒ No Change**

If "No Change" and Section I is complete, skip to Section III – Regulated Entity Information.

8. Type of Customer:			
☐ Corporation	☐ Individual	☐ Sole Proprietorship- D.B.A	
☐ City Government	☐ County Government	☐ Federal Government	☐ State Government
☐ Other Government	☐ General Partnership	☐ Limited Partnership	☒ Other: NON PROFIT

9. Customer Legal Name *(If an individual, print last name first: ex: Doe, John)* *If new Customer, enter previous Customer below* *End Date:*

YMCA OF CENTRAL TEXAS

10. Mailing Address: 1812 N. MAYS STREET

City	State	ZIP	ZIP + 4
ROUND ROCK	TX	78664	

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

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

13. Telephone Number	14. Extension or Code	15. Fax Number *(if applicable)*
(512) 615-5555		( ) -

16. Federal Tax ID *(9 digits)*	17. TX State Franchise Tax ID *(11 digits)*	18. DUNS Number *(if applicable)*	19. TX SOS Filing Number *(if applicable)*
56638201			

20. Number of Employees

☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

21. Independently Owned and Operated?

☐ Yes ☒ No

SECTION III: Regulated Entity Information

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

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information ☐ No Change** *(See below)*

If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparer Information.

23. Regulated Entity Name *(name of the site where the regulated action is taking place)*

YMCA GEORGETOWN

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	6100 WILLIAMS DRIVE						
	City	GEORGETOWN	**State**	TX	**ZIP**	78633	**ZIP + 4**
25. Mailing Address:	1812 N. MAYS						
	City	ROUND ROCK	**State**	TX	**ZIP**	78664	**ZIP + 4**

26. E-Mail Address:	

27. Telephone Number	**28. Extension or Code**	**29. Fax Number** *(if applicable)*
(512) 615-5555		( ) -

30. Primary SIC Code (4 digits)	**31. Secondary SIC Code** (4 digits)	**32. Primary NAICS Code** (5 or 6 digits)	**33. Secondary NAICS Code** (5 or 6 digits)
8399	7991	813319	713940

34. What is the Primary Business of this entity? *(Please do not repeat the SIC or NAICS description.)*

COMMUNITY FITNESS FACILITY

Questions 34 – 37 address geographic location. Please refer to the instructions for applicability.

35. Description to Physical Location:	BEGINS 689 FT FROM THE INTERSECTION OF JIM HOGG DR. & WILLIAMS DRIVE AND EXTENDS APPRX. 1809 FT WEST

36. Nearest City	**County**	**State**	**Nearest ZIP Code**
GEORGETOWN	WILLIAMSON	TX	78633

37. Latitude (N) In Decimal:	30.707784	**38. Longitude (W) In Decimal:**	-97.754512

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	42	28.01	97	45	16.35

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

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

SECTION IV: Preparer Information

40. Name:	RAQUEL SAENZ	**41. Title:**	PROJECT ASSISTANT

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512) 224-1546		( ) -	RAQUELR@HEAENG.COM

SECTION V: Authorized Signature

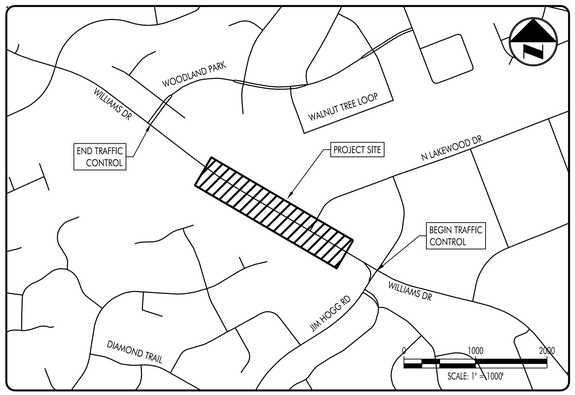
46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	HAGOOD ENGINEERING	**Job Title:**	PROJECT MANAGER
Name *(In Print)* :	TERRY R. HAGOOD	**Phone:**	(512) 244-1546
Signature:	Terry Hagood	**Date:**	7/15/2024

CONSTRUCTION PLANS
SUBMITTED FOR
GEORGETOWN FAMILY YMCA
WASTEWATER IMPROVEMENTS
6100 WILLIAMS DRIVE
GEORGETOWN, TEXAS 78633

SITE LOCATION MAP



BENCHMARKS

BM #1 - JPH BENCHMARK (SEE OP) ELEV = 956.76	BM #2 - JPH BENCHMARK (SEE OP) ELEV = 953.92

PLAN SUBMITTALS

NO.	DATE	COMMENTS
1	5/15/2024	SUBMITTAL TO CITY OF GEORGETOWN
2	6/10/2024	SUBMITTAL UPDATE 1 TO CITY OF GEORGETOWN
3	6/19/2024	SUBMITTAL UPDATE 2 TO CITY OF GEORGETOWN / ISSUED FOR BID
4		
5		
6		
7		
8		
9		
10		

NOTES:

1. THESE PLANS WERE PREPARED, SEALED, SIGNED, AND DATED BY A TEXAS LICENSED PROFESSIONAL ENGINEER. THEREFORE, BASED ON ENGINEER'S CONCURRENCE OF COMPLIANCE, THE PLANS FOR CONSTRUCTION OF THE PROPOSED PROJECT ARE HEREBY APPROVED SUBJECT TO THE STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS MANUAL AND ALL OTHER APPLICABLE CITY, STATE AND FEDERAL REQUIREMENTS AND CODES.

2. THIS PROJECT IS SUBJECT TO ALL CITY STANDARD SPECIFICATIONS AND DETAILS IN EFFECT AT THE TIME OF SUBMITTAL OF THE PROJECT TO THE CITY.

3. THE PROPERTY SUBJECT TO THIS APPLICATION IS SUBJECT TO THE WATER QUALITY REGULATIONS OF THE CITY OF GEORGETOWN.

4. A GEOLOGIC ASSESSMENT, IN ACCORDANCE WITH THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS, WAS COMPLETED ON 2/15/2024. ANY SPRINGS AND STREAMS AS IDENTIFIED IN THE GEOLOGIC ASSESSMENT ARE SHOWN HEREIN.

5. NO PORTION OF THE ABOVE LEGALLY DESCRIBED PROPERTY IS WITHIN THE DESIGNATED 1% ANNUAL CHANCE FLOODPLAIN AREA AS DESIGNATED BY F.E.M.A. FLOOD INSURANCE RATE MAP (FIRM) ON COMMUNITY PANEL NO. 48491C0275E, DATED SEPTEMBER 25, 2008 FOR THE CITY OF GEORGETOWN, WILLIAMSON COUNTY, TEXAS.

Sheet List Table

SHEET NUMBER	Sheet Title	Sheet Description
01	CVR	COVER
02	PLAT 1	FINAL PLAT
03	PLAT 2	FINAL PLAT
04	EC	EXISTING CONDITIONS PLAN
05	C00	GENERAL NOTES
06	C01	TCEQ NOTES
07	C10	OVERALL WASTEWATER PLAN
08	C11	TRAFFIC CONTROL PLAN
09	C12	TRAFFIC CONTROL PLAN
10	C13	TRAFFIC CONTROL PLAN
11	C14	EROSION AND SEDIMENTATION CONTROL PLAN
12	C15	EROSION AND SEDIMENTATION CONTROL PLAN
13	C16	EROSION AND SEDIMENTATION CONTROL PLAN
14	C17	DEMOLITION PLAN
15	C18	DEMOLITION PLAN
16	C19	DEMOLITION PLAN
17	C20	WASTEWATER PLAN AND PROFILE
18	C21	WASTEWATER PLAN AND PROFILE
19	C22	WASTEWATER PLAN AND PROFILE
20	C23	WASTEWATER PLAN AND PROFILE
21	C24	WASTEWATER PLAN AND PROFILE
22	C25	WASTEWATER PLAN AND PROFILE
23	C26	WASTEWATER PLAN AND PROFILE
24	C30	PAVING AND SIGNAGE PLAN
25	C31	PAVING AND SIGNAGE PLAN
26	C32	PAVING AND SIGNAGE PLAN
27	C40	TRAFFIC CONTROL
28	C41	TRAFFIC CONTROL
29	C42	ESC AND STORM DETAILS
30	C43	UTILITY DETAILS

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF GEORGETOWN MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

STATE OF TEXAS ★
COUNTY OF WILLIAMSON ★

I, TERRY R. HAGOOD, DO HEREBY CERTIFY THAT THE PUBLIC WORKS AND DRAINAGE IMPROVEMENTS DESCRIBED HEREIN HAVE BEEN DESIGNED IN COMPLIANCE WITH THE SUBDIVISION AND BUILDING REGULATION ORDINANCES AND STORM WATER DRAINAGE POLICY ADOPTED BY THE CITY OF GEORGETOWN, TEXAS.

STATE OF TEXAS
TERRY R. HAGOOD
92960
REGISTERED
PROFESSIONAL ENGINEER

6/19/2024

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGOOD, P.E. 92960
THIS DRAWING MAY NOT BE MODIFIED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ENGINEER, AND THEN ONLY IN ACCORDANCE WITH THE RULES OF THE TEXAS ENGINEERING PRACTICE ACT.

ACCEPTED FOR CONSTRUCTION BY:

Systems Engineering
City of Georgetown, Texas

Date

OWNER
YMCA OF CENTRAL TEXAS
1812 N. MAYS STREET
ROUND ROCK, TEXAS 78664
RICH CARLTON
(512)-246-YMCA

ENGINEER
HAGOOD ENGINEERING ASSOCIATES, INC.
900 E. MAIN STREET
ROUND ROCK, TEXAS 78664
TERRY R. HAGOOD, P.E.
(512) 244-1546
TERRYH@HEAENG.COM

SURVEYOR
JPH LAND SURVEYING INC.
1516 E. PALM VALLEY BLVD., SUITE A4
ROUND ROCK, TEXAS 78664
CHRIS HENDERSON, RPLS
(512)-686-1474

Texas 811
Know what's below.
Call before you dig.

REVISIONS

NO.	DATE	DESCRIPTION	APPROVED BY
1			
2			
3			
4			
5			

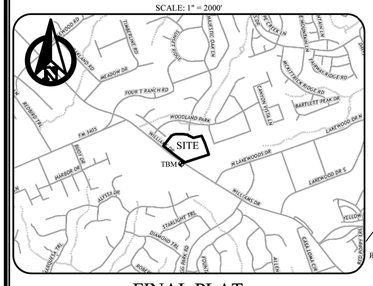
900 E. Main Street
Round Rock, TX 78664
Phone (512) 244-1546
Fax (512) 244-1010
www.heaeng.com
TBPE Registration No. F-12709

HAGOOD ENGINEERING ASSOCIATES

JOB NO:	22-012
DRAWN BY:	WSH
CHECKED BY:	TRH
P.I.C.:	TRH
FILE NO:	22-012 SI CVR
DATE:	6/19/2024
SHEET:	01 OF 30

2024-_____-CON

VICINITY MAP
SCALE: 1" = 2000'



FINAL PLAT
OF
WELLSPRING YMCA ADDITION

22.03 ACRES
SITUATED IN THE
FREDERICK FOY SURVEY
ABSTRACT NO. 229
CITY OF GEORGETOWN ETJ
WILLIAMSON COUNTY, TEXAS

NUMBER OF LOTS/BLOCKS: 2 LOTS, 1 BLOCK

SUBMITTAL DATE: _____, 2024

OWNERS:
Wellspring, a United Methodist Community of Faith
P.O. Box 5029, Georgetown, TX 78627

Young Men's Christian Association of Central Texas
1812 N. Mays Street, Round Rock, Texas 78664

SURVEYOR:
JPH Land Surveying, Inc.
1516 E Palm Valley Blvd, Ste A4, Round Rock, Texas 78664
Phone: (512) 778-5688

ENGINEER/APPLICANT:
Hagood Engineering Associates, Inc.
900 E. Main Street, Round Rock, Texas 78664
Phone: (512) 244-1546

FOR REVIEW. THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER THE AUTHORITY OF TERRELL HAGOOD, LICENSED PROFESSIONAL ENGINEER NO. 52960 ON APRIL 2, 2024. IT IS NOT TO BE USED FOR BIDDING, PERMIT OR CONSTRUCTION.

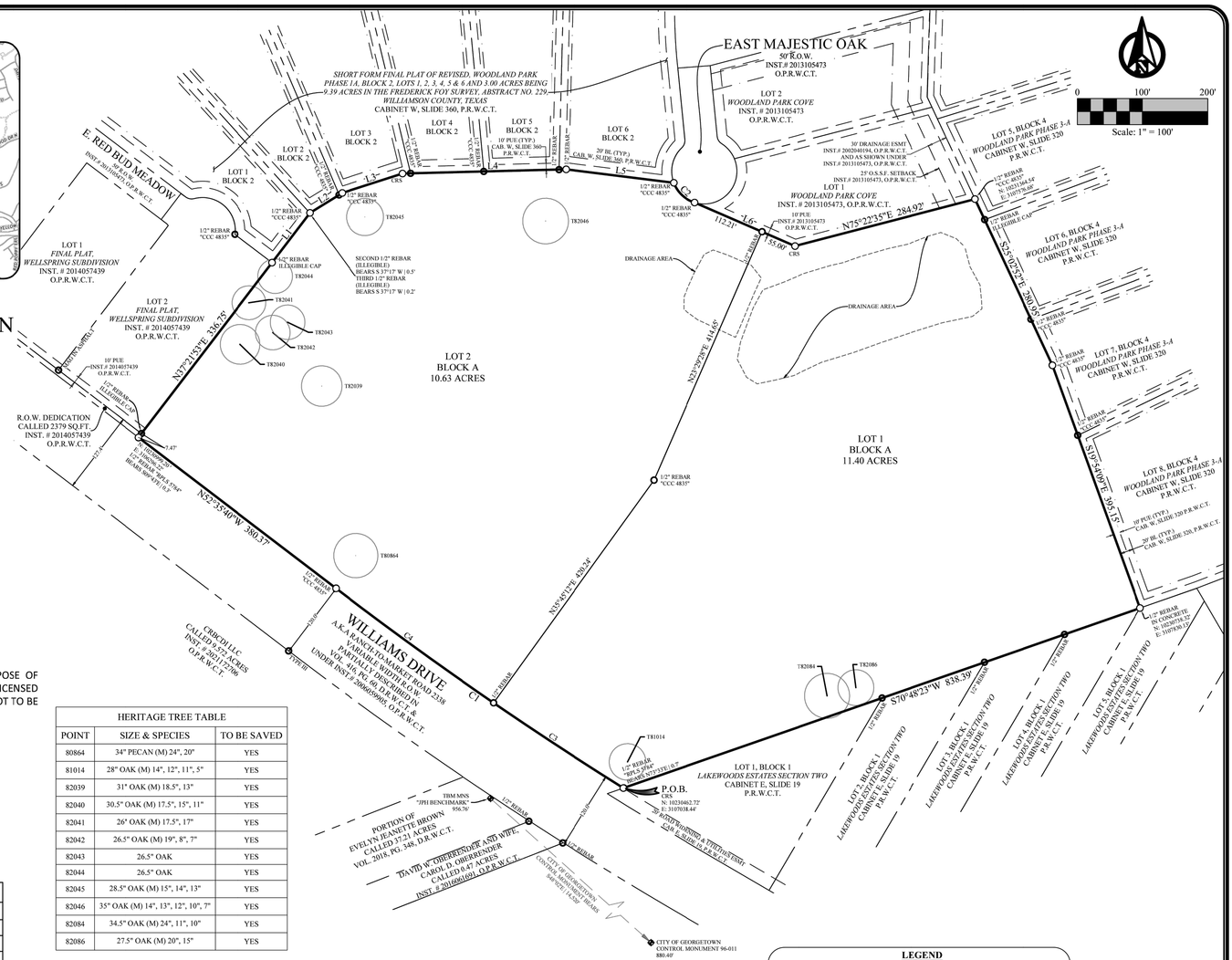
Curve Data Table					
Curve #	Arc	Radius	Delta	Chord Bearing	Chord
C1	536.07'	5669.58'	005°25'03"	N55°12'49"W	535.87'
C2	45.73'	50.00'	052°23'57"	S46°48'18"E	44.15'
C3	237.62'	5669.58'	002°24'05"	N56°43'18"W	237.60'
C4	298.45'	5669.58'	003°00'58"	N54°00'47"W	298.42'

Line Data Table		
Line #	Bearing	Distance
L1	N37°16'38"E	95.75'
L2	N58°16'13"E	57.97'
L3	N72°10'52"E	97.13'
L4	N88°32'09"E	250.41'
L5	S82°53'00"E	166.16'
L6	S66°30'32"E	167.21'

HERITAGE TREE TABLE		
POINT	SIZE & SPECIES	TO BE SAVED
80864	34" PECAN (M) 24", 20"	YES
81014	28" OAK (M) 14", 12", 11", 5"	YES
82039	31" OAK (M) 18.5", 13"	YES
82040	30.5" OAK (M) 17.5", 15", 11"	YES
82041	26" OAK (M) 17.5", 17"	YES
82042	26.5" OAK (M) 19", 8", 7"	YES
82043	26.5" OAK	YES
82044	26.5" OAK	YES
82045	28.5" OAK (M) 15", 14", 13"	YES
82046	35" OAK (M) 14", 13", 12", 10", 7"	YES
82084	34.5" OAK (M) 24", 11", 10"	YES
82086	27.5" OAK (M) 20", 15"	YES

LEGEND OF TREE SYMBOLS
tree trunk (with canopy)
caliper inches at breast height
(M) multiple trunks

MONUMENTS / DATUMS / BEARING BASIS
Monuments are found if not marked MNS or CRS.
CRS ○ 1/2" rebar stamped "JPH Land Surveying" set
MNS ○ Mag nail & washer stamped "JPH Land Surveying" set
TBM ⊕ Site benchmark (see vicinity map for general location)
○ Vertex or common point (not a monument)
Coordinate values, if shown, are US.SyFt/TxCS,'83,CZ
Elevations, if shown, are NAVD'88
Bearings are based on grid north (TxCS,'83,CZ)



LEGEND
US.SyFt, United States Survey Feet
TxCS,'83,CZ Texas Coordinate System of 1983, Central Zone
NAVD'88 North American Vertical Datum of 1988
P.R.W.C.T. Plat Records of Williamson County, Texas
O.P.R.W.C.T. Official Public Records of Williamson County, Texas
D.R.W.C.T. Deed Records of Williamson County, Texas
VOL/PG/INST#/CAB. Volume/Page/Instrument Number/Cabinet
POB/POC Point of Beginning/Point of Commencing
P.U.E. Public Utility Easement
B.L. Building Setback Line
O.S.S.F. On-Site Sewage Facility
Subdivision Boundary
Deed/adjoiner lines
Easement lines
Building Setback Lines
Topographic Feature

JPH Job/Drawing No. (see below)
531029201 2023.392.002 YMCA 6200 Williams Dr, Georgetown, Wilco, TX-PLAT.dwg

1516 E. Palm Valley Blvd., Ste. A4, Round Rock, Texas 78664
Telephone (817) 431-4971 www.jphlandsurveying.com
TBPELS Firm #10019500
DFW | Central Texas | West Texas | Houston | San Antonio

BOUNDARY DESCRIPTION:

FIELD NOTES to that certain 22.03 acre tract situated in the Frederick Foy Survey, Abstract No. 229, City of Georgetown Extra-Territorial Jurisdiction, Williamson County, Texas, being all of the tract described as 11.40 acres in a Special Warranty Deed to Young Men's Christian Association of Central Texas, a Texas nonprofit (hereinafter referred to as YMCA tract), recorded under Instrument Number 2024002229, Official Public Records of Williamson County, Texas and being a portion of the tract described as 11.76 acres in a Warranty Deed to Wellspring, a United Methodist Community of Faith (hereinafter referred to as Wellspring tract), recorded under Instrument Number 2001070398; the subject tract being more particularly described as follows:

BEGINNING at a 1/2-inch capped rebar stamped "JPH LAND SURVEYING" set at the intersection of the curving northeast right-of-way line of Williams Drive (a.k.a. Ranch-to-Market Road 2338, a variable width right-of-way partially described in Volume 416, Page 60, Deed Records of Williamson County, Texas and under Instrument Number 2006059905 of said Official Public Records) and the northwest line of Lot 1, Block 1, *LAKEWOODS ESTATES SECTION TWO*, an addition to the City of Georgetown Extra-Territorial Jurisdiction recorded in Cabinet E, Slide 19, Plat Records of Williamson County, Texas, at the common east corner of that tract described as 0.582 of an acre (Parcel No. 10) in a Deed to State of Texas, recorded under Instrument Number 2006059905 of said Official Public Records and said YMCA tract, at the beginning of a curve to the right (concave northeast), having a radius of 5,669.58 feet and a chord which bears NORTH 55° 12' 49" WEST, a distance of 535.87 feet, from which a 1/2-inch capped rebar stamped "RPLS 5784" found bears NORTH 73° 33' EAST, a distance of 0.7 feet;

THENCE Along said curve to the right with the common line of said YMCA tract and said Williams Drive, at an arc length of 237.62 feet passing a 1/2-inch rebar found at the common south corner of said YMCA tract and said Wellspring tract, continuing with the common line of said Wellspring tract and said Williams Drive a total arc length of 536.07 feet to a 1/2-inch capped rebar stamped "CCC 4835" found;

THENCE NORTH 52° 35' 40" WEST, a distance of 380.37 feet to the southwest corner of the herein described tract, from which a 1/2-inch rebar stamped "RPLS 5784" found bears SOUTH 09° 43' EAST, a distance of 0.3 feet;

THENCE NORTH 37° 21' 53" EAST, with the west line of the herein described tract, at 7.47 feet passing a 1/2-inch rebar with an illegible cap found at the common east corner of Lot 2, *FINAL PLAT, WELLSPRING SUBDIVISION*, an addition to the City of Georgetown Extra-Territorial Jurisdiction recorded under Instrument Number 2014057439 of said Official Public Records and a called 2,379 square foot Right-of-Way Dedication recorded under Instrument Number 2014057439 of said Official Public Records, continuing with the southeast line of said Lot 2 a total distance of 336.75 feet to a 1/2-inch rebar with an illegible cap at a common corner of said Wellspring tract, said Lot 2, and Lot 1, Block 2, *SHORT FORM FINAL PLAT OF REVISED, WOODLAND PARK PHASE 1A, BLOCK 2, LOTS 1, 2, 3, 4, 5, & 6 AND 3.00 ACRES BEING 9.39 ACRES IN THE FREDERICK FOY SURVEY, ABSTRACT NO. 229, WILLIAMSON COUNTY, TEXAS*, an addition to the City of Georgetown Extra-Territorial Jurisdiction recorded in Cabinet W, Slide 360 of said Plat Records;

THENCE with the common line of said Wellspring tract and said Block 2, the following bearings and distances:

1. NORTH 37° 16' 38" EAST, a distance of 95.75 feet to a 1/2-inch capped rebar stamped "CCC 4835" found, from which a second found 1/2-inch rebar with an illegible cap bears SOUTH 37° 17' WEST, a distance of 0.5 feet, also from which a third found 1/2-inch rebar with an illegible cap bears SOUTH 37° 17' WEST, a distance of 0.2 feet;
2. NORTH 58° 16' 13" EAST, a distance of 57.97 feet to a 1/2-inch capped rebar stamped "CCC 4835" found;
3. NORTH 72° 10' 52" EAST, a distance of 97.13 feet to a 1/2-inch capped rebar stamped "JPH LAND SURVEYING" set;
4. NORTH 88° 32' 09" EAST, a distance of 250.41 feet to a 1/2-inch rebar found;
5. SOUTH 82° 53' 00" EAST, a distance of 166.16 feet to a 1/2-inch capped rebar stamped "CCC 4835" found in the curving west right-of-way line of East Majestic Oak (a 50 foot wide right-of-way dedicated under Instrument Number 2013105473 of said Official Public Records) at the beginning of a curve to the left (concave northeast), having a radius of 50.00 feet and a chord which bears SOUTH 46° 48' 18" EAST, a distance 44.15 feet;

THENCE along said curve the left an arc length of 45.73 feet to a 1/2-inch capped rebar stamped "CCC 4835" found at the west corner of Lot 1, *WOODLAND PARK COVE*, an addition to the City of Georgetown Extra-Territorial Jurisdiction recorded under Instrument Number 2013105473 of said Official Public Records;

THENCE with south line of said Lot 1, *WOODLAND PARK COVE*, the following bearings and distances:

1. SOUTH 66° 30' 32" EAST, with the north line of said Wellspring tract, at a distance of 112.21 feet passing a 1/2-inch rebar found at the common north corner of said Wellspring tract and said YMCA tract, continuing with the north line of said YMCA tract a total distance of 167.21 feet to a 1/2-inch capped rebar stamped "JPH LAND SURVEYING" set;
2. NORTH 75° 22' 35" EAST, a distance of 284.92 feet to a 1/2-inch capped rebar stamped "CCC 4835" found in the west line of Lot 5, Block 4, *WOODLAND PARK PHASE 3-A*, an addition to the City of Georgetown Extra-Territorial Jurisdiction recorded in Cabinet W, Slide 320 of said Plat Records, at the common east corner of said YMCA tract and said Lot 1, *WOODLAND PARK COVE*;

THENCE with the common line of said YMCA tract and said Block 4, *WOODLAND PARK PHASE 3-A*, the following bearings and distances:

1. SOUTH 25° 02' 52" EAST, a distance of 280.95 feet to a 1/2-inch capped rebar stamped "CCC 4835" found;
2. SOUTH 19° 54' 09" EAST, a distance of 395.15 feet to a 1/2-inch rebar in concrete found in the north line of Block 1 of said *LAKEWOODS ESTATES SECTION TWO* at the east corner of said YMCA tract;

THENCE SOUTH 70° 48' 23" WEST, with the common line of said YMCA tract and said Block 1, *LAKEWOODS ESTATES SECTION TWO*, a distance of 838.39 feet to the POINT OF BEGINNING, enclosing 22.03 acres of land.

JPH Job/Drawing No. (see below)
531029201 2023.392.002 YMCA 6200 Williams Dr, Georgetown, Wilco, TX-PLAT.dwg

1516 E. Palm Valley Blvd., Ste. A4, Round Rock, Texas 78664
Telephone (817) 431-4971 www.jphlandsurveying.com
TBPELS Firm #10019500
DFW | Central Texas | West Texas | Houston | San Antonio

STATE OF TEXAS §
§ **KNOW ALL MEN BY THESE PRESENTS**
COUNTY OF WILLIAMSON §

That Wellspring, a United Methodist Community of Faith, acting by and through Robert Miles, Trustee, owner of the certain 11.76 acre tract of land recorded under 2001070398 of the Official Records of Williamson County, Texas, do hereby certify that there are no easement holders except as shown hereon; do hereby subdivide said tract as shown hereon; do hereby covenant to all restrictions listed herein, which shall run with the land; and do hereby dedicate to the City of Georgetown the streets, alleys, rights-of-way, easements, and public places shown hereon for such public purposes as Williamson County may deem appropriate. I hereby bind my heirs, successors, and assigns to warrant and forever defend such dedications, all and singular, to the City of Georgetown against every person whomsoever claiming or to claim the same or any part thereof. This subdivision is to be known as WELLSPRING YMCA ADDITION

TO CERTIFY WHICH, WITNESS by my hand this _____ day of _____, 20 __.

_____
Robert Miles, Trustee
Wellspring, a United Methodist Community of Faith
P.O. Box 5029
Georgetown, Texas 78626

STATE OF TEXAS §
§ **KNOW ALL MEN BY THESE PRESENTS**
COUNTY OF WILLIAMSON §

Before me, the undersigned, a notary public in and for said county and state, on this day personally appeared _____, know to me to be the person whose name is subscribed to the foregoing instrument.

GIVEN UNDER MY HAND AND SEAL of office this _____ day of _____, 20 ___.

Notary Public in and for the State of Texas

My Commission expires on:

STATE OF TEXAS §
§ **KNOW ALL MEN BY THESE PRESENTS**
COUNTY OF WILLIAMSON §

I, Texas Methodist Foundation, a Texas nonprofit corporation, Lien Holder of the certain 11.76 acre tract of land and described in a Deed of Trust and Security Agreement recorded in Document No. 2002008127, affected by Modification Agreement, recorded in Document No. 2007020346 of the Official Records of Williamson County, Texas, do hereby consent to the subdivision of said tract as shown hereon; do further hereby join, approve and covenant to all restrictions listed herein; and do hereby dedicate to the public the streets, alleys, rights-of-way, easements and public places shown hereon for such public purposes as the City of Georgetown may deem appropriate. This subdivision is to be known as WELLSPRING YMCA ADDITION.

TO CERTIFY WHICH, WITNESS by my hand this _____ day of _____, 20 __.

_____
Robert E. Hoppe, VP
for Texas Methodist Foundation
11709 Boulder Lane, Suite 100
Austin, Texas 78726

STATE OF TEXAS §
§ **KNOW ALL MEN BY THESE PRESENTS**
COUNTY OF WILLIAMSON §

Before me, the undersigned, a notary public in and for said county and state, on this day personally appeared _____, know to me to be the person whose name is subscribed to the foregoing instrument.

GIVEN UNDER MY HAND AND SEAL of office this _____ day of _____, 20 ___.

Notary Public in and for the State of Texas

My Commission expires on:

FINAL PLAT
OF
WELLSPRING YMCA ADDITION

22.03 ACRES
SITUATED IN THE
FREDERICK FOY SURVEY
ABSTRACT NO. 229
CITY OF GEORGETOWN ETJ
WILLIAMSON COUNTY, TEXAS

STATE OF TEXAS §
§ **KNOW ALL MEN BY THESE PRESENTS**
COUNTY OF WILLIAMSON §

That Young Men's Christian Association of Central Texas, a Texas nonprofit corporation, acting by and through _____, _____, owner of the certain 11.40 acre tract of land recorded under Instrument Number 2024002229 of the Official Records of Williamson County, Texas, do hereby certify that there area no easement holders except as shown hereon; do hereby subdivide said tract as shown hereon; do hereby covenant to all restrictions listed herein, which shall run with the land; and do hereby dedicate to the City of Georgetown the streets, alleys, rights-of-way, easements, and public places shown hereon for such public purposes as Williamson County may deem appropriate. I hereby bind my heirs, successors, and assigns to warrant and forever defend such dedications, all and singular, to the City of Georgetown against every person whomsoever claiming or to claim the same or any part thereof. This subdivision is to be known as WELLSPRING YMCA ADDITION

TO CERTIFY WHICH, WITNESS by my hand this _____ day of _____, 20 __.

_____
{Agent}
{Address}

STATE OF TEXAS §
§ **KNOW ALL MEN BY THESE PRESENTS**
COUNTY OF WILLIAMSON §

Before me, the undersigned, a notary public in and for said county and state, on this day personally appeared _____, know to me to be the person whose name is subscribed to the foregoing instrument.

GIVEN UNDER MY HAND AND SEAL of office this _____ day of _____, 20 ___.

Notary Public in and for the State of Texas

My Commission expires on:

STATE OF TEXAS §
§ **KNOW ALL MEN BY THESE PRESENTS**
COUNTY OF WILLIAMSON §

I, Wellspring, a United Methodist Community of Faith, Lien Holder of the certain 11.40 acre tract of land shown hereon and described in a Deed of Trust, Security Agreement and Fixture Filing recorded in Document No. 2024002230 of the Official Records of Williamson County, Texas, do hereby consent to the subdivision of said tract as shown hereon; do further hereby join, approve and covenant to all restrictions listed herein; and do hereby dedicate to the public the streets, alleys, rights-of-way, easements and public places shown hereon for such public purposes as the City of Georgetown may deem appropriate. This subdivision is to be known as WELLSPRING YMCA ADDITION.

TO CERTIFY WHICH, WITNESS by my hand this _____ day of _____, 20 __.

_____
_____,
Wellspring, a United Methodist Community of Faith
P.O. Box 5029
Georgetown, Texas 78626

STATE OF TEXAS §
§ **KNOW ALL MEN BY THESE PRESENTS**
COUNTY OF WILLIAMSON §

Before me, the undersigned, a notary public in and for said county and state, on this day personally appeared _____, know to me to be the person whose name is subscribed to the foregoing instrument.

GIVEN UNDER MY HAND AND SEAL of office this _____ day of _____, 20 ___.

Notary Public in and for the State of Texas

My Commission expires on:

PLAT NOTES:

1. Utility providers for this development are Water: City of Georgetown, Wastewater/septic: On-site sewage facility, and Electric: Oncor Electric Delivery Company.
2. There are no areas within the boundaries of this subdivision in the 100-year floodplain as defined by FIRM Number 48491C0275E, effective date of September 26, 2008.
3. In order to promote drainage away from a structure, the slab elevation should be built at least one-foot above the surrounding ground, and the ground should be graded away from the structure at a slope of 1/2" per foot for a distance of at least 10 feet.
4. All sedimentation, filtration, detention, and/or retention basins and related appurtenances shown shall be situated within a drainage easement or drainage lot. The owners, HOA, or assignees of the tracts upon which are located such easements, appurtenances, and detention facilities shall maintain same and be responsible for their maintenance, routine inspection, and upkeep.
5. Any Heritage Tree as noted on this plat is subject, in perpetuity, to the maintenance, care, pruning and removal requirements of the City of Georgetown. Approved removal does not require modification of the plat.
6. All individual lots containing Heritage Trees are configured and designed so that the lot is developable for the intended purpose without requiring removal of the Heritage Trees or exceeding the percentage of allowable disturbance within the Heritage Trees CRZ.
7. 15-foot Public Utility Easement is required along major arterials and a 10-foot Public Utility Easement is required along local streets.
8. The monuments of this plat have been rotated to Texas Coordinate System of 1983, Central Zone and NAVD'88. Distances and coordinates shown are scaled 1.0001465574 about N: 10230938.47, E: 3107004.83.
9. The maximum impervious coverage per non-residential lot shall be pursuant to the UDC at the time of the Site Plan application based on the zoning designation of the property.
10. The landowner assumes all risks associated with improvements located in the right-of-way, or road widening easements. By placing anything in the right-of-way or road widening easements, the landowner indemnifies and holds the City of Georgetown, Williamson County, their officers, agents and employees harmless from any liability owing to property defects or negligence not attributable to them and acknowledges that the improvements may be removed by the City and/or County and that the owner of the improvements will be responsible for the relocation and/or replacement of the improvements.
11. The building of all streets, roads, and other public thoroughfares and any bridges or culverts necessary to be constructed or placed is the responsibility of the owners of the tract of land covered by this plat in accordance with the plans and specifications prescribed by the City of Georgetown and/or Williamson County, Texas. Neither the City of Georgetown nor Williamson County assumes any obligation to build any of the streets, roads, or other public thoroughfares shown on this plat or of constructing any of the bridges or drainage improvements in connection therewith. Neither the City of Georgetown nor Williamson County assumes any responsibility for drainage ways or easements in the subdivision, other than those draining or protecting the road system and streets in their respective jurisdictions.
12. Neither the City of Georgetown nor Williamson County assumes any responsibility for the accuracy of representations by other parties in this plat. Floodplain data, in particular, may change depending on subsequent development. It is further understood that the owners of the tract of land covered by this plat must install at their own expense all traffic control devices and signage that may be required before the streets in the subdivision have finally been accepted for maintenance by the City and /or County.
13. Right-of-way easements for widening roadways or improving drainage shall be maintained by the landowner until road or drainage improvements are actually constructed on the property. The City and/or County have the right at any time to take possession of any road widening easement for construction, improvement, or maintenance of the adjacent road.
14. Unless otherwise noted herein, all easements dedicated to the City of Georgetown by this plat shall be EXCLUSIVE to the City of Georgetown, and Grantor covenants that Grantor and Grantor's heirs, successors, and assigns shall not convey any other easement, license, or conflicting right to use in any manner, the area (or any portion thereof) covered by this grant.
15. All easements dedicated to the City of Georgetown by this plat additionally include the following rights: (1) the right of the City to change the size of any facilities installed, maintained, or operated within the easement area; (2) the right of the City to relocate any facilities within the easement area; and (3) the right of the City to remove from the easement area all trees and parts thereof, or other obstructions, which endanger or may interfere with the efficiency and maintenance of any facilities within the easement area.
16. This plat is subject to the provisions of the City of Georgetown Water Conservation Ordinance.
17. The subdivision subject to this application is subject to the Water Quality Regulations of the City of Georgetown.
18. A geologic assessment, in accordance with the City of Georgetown Water Quality Regulations, was completed on _____. No springs or streams were identified in the Geologic Assessment.
19. This subdivision is subject to those easements described in Volume 416, Page 60, Volume 806, Page 193, and Volume 939, Page 321, D.R.W.C.T. and under Instrument Numbers 2002040194 and 2017017289, O.P.R.W.C.T.
20. It is the responsibility of the owner, not the county or the city of Georgetown, to assure compliance with the provisions of all applicable state, federal and local laws and regulations relating to the platting and development of this property.
21. All sidewalks shall be maintained by each of the adjacent property owners.
22. Maintenance responsibility for drainage will not be accepted by the county other than that accepted in connection with draining or protecting the road system. maintenance responsibility for storm water management controls will remain with the owner.
23. No construction in the subdivision may begin until the Texas Commission on Environmental Quality (TCEQ) has approved the Water Pollution Abatement Plan (WPAP) in writing.
25. On-Site Sewage Facilities must be designed by a Registered Professional Engineer or Registered Sanitarian.

JPH LaNd Surveying, Inc

JPH Job/Drawing No. (see below)
531029201 2023.392.002 YMCA 6200 Williams Dr, Georgetown, Wilco, TX-PLAT.dwg

1516 E. Palm Valley Blvd., Ste. A4, Round Rock, Texas 78664
Telephone (817) 431-4971 www.jphlandsurveying.com
TBPELS Firm #10019500
DFW | Central Texas | West Texas | Houston | San Antonio

ENGINEER'S CERTIFICATION:

I, Terrell Hagood, Licensed Professional Engineer in the State of Texas, do hereby certify that this subdivision is in the Edwards Aquifer Recharge Zone and is not encroached by a Zone A flood area, as denoted herein, and as defined by Federal Emergency Management Administration Flood Hazard Boundary Map, Community Panel Number 48491C0275E, effective date September 26, 2008, and that each lot conforms to the City of Georgetown regulations.

The fully developed, concentrated stormwater runoff resulting from the one hundred (100) year frequency storm is contained within the drainage easements shown and/or public rights-of-way dedicated by this plat.

TO CERTIFY WHICH, WITNESS by my hand and seal at the City of Round Rock, Williamson County, Texas, this _____ day of _____, 2024.

_____
Terrell Hagood
Licensed Professional Engineer
No. 52960 State of Texas

FOR REVIEW. THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER THE AUTHORITY OF TERRELL HAGOOD, LICENSED PROFESSIONAL ENGINEER NO. 52960 ON APRIL 2, 2024. IT IS NOT TO BE USED FOR BIDDING, PERMIT OR CONSTRUCTION.

STATE OF TEXAS §
KNOW ALL MEN BY THESE PRESENTS
COUNTY OF WILLIAMSON §

I, Chris Henderson, Registered Professional Land Surveyor in the State of Texas, do hereby certify that this plat is true and correctly made from an actual survey made on the ground of the property legally described hereon, and that the corner monuments shown thereon were properly placed under my supervision in accordance with the subdivision regulations of the City of Georgetown, Texas.

TO CERTIFY WHICH, WITNESS by my hand and seal at the City of Round Rock, Williamson County, Texas, this _____day of _____, 2024.

_____
Chris Henderson
Registered Professional Surveyor
No. 6831 State of Texas

FLOODPLAIN ADMINISTRATOR APPROVAL:

Based upon the representations of the Engineer or Surveyor whose seal is affixed hereto, and after review of the plat as represented by the said Engineer or Surveyor, I find that this plat complies with the Williamson County Floodplain Regulations. This certification is made solely upon such representations and should not be relied upon for verifications of the facts alleged. Williamson County disclaims any responsibility to any member of the public for independent verification of the representations, factual or otherwise, contained in this plat and the documents associated within it.

_____ _____
J. Terron Evertson, PE, DR, CFM Date
Williamson County Floodplain Administrator

ON-SITE SEWAGE FACILITY APPROVAL

Based upon the above representations of the engineer or surveyor whose seal is affixed hereto, and after a review of the survey as represented by the said engineer or surveyor, I find that this plat complies with the requirements of Edwards Aquifer Regulations for Williamson County and Williamson County On-Site Sewage Facility Regulations. This certification is made solely upon such representations and should not be relied upon for verifications of the facts alleged. The Williamson County Engineer's office and Williamson County disclaims any responsibility to any member of the public for independent verification of the representations, factual or otherwise, contained in this plat and the documents associated with it.

_____ _____
J. Terron Evertson, PE, DR, CFM Date
County Engineer

FINAL PLAT
OF
WELLSPRING YMCA ADDITION

22.03 ACRES
SITUATED IN THE
FREDERICK FOY SURVEY
ABSTRACT NO. 229
CITY OF GEORGETOWN ETJ
WILLIAMSON COUNTY, TEXAS

PLANNING AND ZONING COMMISSION APPROVAL:

This subdivision to be known as WELLSPRING YMCA ADDITION has been accepted and approved for filing of record with the County Clerk of Williamson County, Texas, according to the minutes of the meeting of the Georgetown Planning and Zoning Commission on the ____ day of _____, 2024, A.D.

_____ _____
Travis Perthuis, Chairman Date

_____ _____
Stephen Dickey, Secretary Date

PLANNING DIRECTOR APPROVAL:

I, Sofia Nelson, Planning Director of the City of Georgetown, Texas, do hereby certify this plat is approved for filing of record with the County Clerk of Williamson County, Texas.

_____ _____
Sofia Nelson, Planning Director Date
City of Georgetown

STATE OF TEXAS §
KNOW ALL MEN BY THESE PRESENTS
COUNTY OF WILLIAMSON §

I, Nancy E. Rister, Clerk of the County Court of said County, do hereby certify that the foregoing instrument in writing, with its certificate of authentication was filed for record in my office on the ____ day of _____, 20__, A.D., at ___ o'clock, __.M., and duly recorded this the ___ day of _____, 20__, A.D., at ___ o'clock, __.M., in the Official Public Records of said County in Document No. _____.

TO CERTIFY WHICH, WITNESS my hand and seal at the County Court of said County, at my office in Georgetown, Texas, the date last shown above written.

_____
Nancy Rister, Clerk County Court of Williamson County, Texas

By: _____, Deputy

2024-__-__

Tree Table	
Point	Size & Species
10563	10" CEDAR ELM
10564	9" CEDAR
10565	13.5" CEDAR ELM
10566	6.5" OAK
10567	12" OAK (44 8", 8"
10568	12" OAK
10569	14" OAK
10570	7" OAK
10571	10" OAK
10863	10.5" OAK
10864	34" PECAN (44 24", 20"
10865	18.5" CEDAR (44 10", 9", 8"
10866	13.5" CEDAR ELM
10867	6.5" OAK
10868	18.5" CEDAR (44 10", 9", 8"
10869	7" OAK
10870	12" OAK
10871	6" OAK
10872	6" OAK
10873	7.5" OAK
10874	10" OAK
10875	6" OAK
10876	8.5" OAK
10877	7.5" HACKBERRY
10878	9" OAK
10879	6" OAK
10880	6" OAK
10881	6" OAK
10882	7.5" OAK
10883	8" OAK
10884	7.5" CEDAR ELM
10885	6" CEDAR ELM
10886	30.5" CEDAR (44 10", 8", 8", 5"
10887	9.5" CEDAR
10888	6.5" CEDAR ELM
10889	6" CEDAR ELM
10890	15.5" OAK (44 11", 9"
10891	13" OAK
10892	11" OAK
10893	12" OAK
10894	6.5" CEDAR ELM
10895	6.5" CEDAR ELM
10896	6.5" OAK
10897	7" CEDAR
10898	6.5" CEDAR ELM
10899	13" OAK
10900	8" CEDAR ELM (44 6.5", 3"
10901	9" OAK
10902	7" CEDAR ELM (44 5", 4"
10903	8" OAK
10904	8" OAK
10905	7" OAK
10906	8.5" CEDAR ELM
10907	7.5" OAK (44 6", 3"
10908	7" OAK
10909	11" OAK
10910	7.5" OAK
10911	6.5" OAK
10912	6.5" OAK
10913	10.5" OAK (44 7.5", 4"
10914	8" OAK
10915	12.5" CEDAR ELM
10916	9" OAK
10917	6" CEDAR
10918	8.5" OAK
10919	6" OAK
10920	11.5" OAK
10921	6.5" CEDAR
10923	11" OAK
10924	6" OAK
10925	7" CEDAR ELM
10926	6.5" CEDAR ELM
10927	6" CEDAR ELM
10928	6.5" CEDAR ELM
10929	6.5" CEDAR
10930	14" CEDAR ELM (44 11.5", 5"
10931	9.5" OAK (44 7.5", 4"
10932	6" CEDAR ELM
10933	6" OAK

Tree Table	
Point	Size & Species
10934	6" OAK
10935	7" CEDAR ELM
10936	6" CEDAR ELM
10937	8" OAK
10938	6.5" OAK
10939	7" CEDAR
10940	7.5" CEDAR ELM
10941	14" OAK
10942	7" OAK
10943	13.5" CEDAR ELM
10944	7" OAK
10945	14" OAK
10946	7" OAK
10947	7" OAK
10948	8" OAK
10949	7" OAK
10950	7" OAK
10951	6" OAK
10952	6.5" OAK
10953	7" OAK
10954	7" OAK
10955	6.5" OAK
10956	7" OAK
10957	11" OAK
10958	7" OAK
10959	12" OAK
10960	14" OAK (44 10.5", 7"
10961	8" OAK
10962	8" OAK
10963	7" OAK

Tree Table	
Point	Size & Species
10964	6" OAK
10965	7" CEDAR ELM
10966	6" CEDAR ELM
10967	8" OAK
10968	6.5" OAK
10969	7" CEDAR ELM
10970	7.5" CEDAR ELM
10971	14" OAK
10972	13.5" OAK
10973	7.5" OAK
10974	7" OAK
10975	10" MOUNTAIN LAUREL (44 6.5", 6.5"
10982	14.5" OAK
10983	18.5" OAK
10984	12" OAK
10985	16.5" OAK
10986	16.5" OAK
10987	20.5" OAK (44 17", 7"
10988	21" OAK (44 16", 10"
10991	10" OAK
10992	10" OAK
10993	13.5" OAK
10994	10.5" OAK
10995	7.5" OAK
10996	9" OAK
10997	9" OAK
10998	8" OAK
10999	8" OAK
11000	6.5" OAK
11001	12" OAK
11002	9.5" OAK
11003	6.5" OAK
11004	9" OAK
11005	7" OAK
11006	6.5" OAK
11007	11" OAK
11008	12" CEDAR
11009	7.5" OAK
11010	12" CEDAR ELM (44 10", 4"
11011	8.5" CEDAR ELM
11012	9" OAK
11013	9" CEDAR ELM
11014	28" OAK (44 14", 12", 11", 3"
11015	15.5" CEDAR ELM (44 11", 7"
11016	8" CEDAR ELM
11017	7" CEDAR ELM
11906	10" CHINESE PISTACHE
11907	10" CHINESE PISTACHE
11908	19" OAK
11909	6.5" OAK
11910	8" OAK
11911	11.5" OAK
11912	8.5" OAK
11913	6" GUM-BUMELIA
11914	6.5" GUM-BUMELIA
11915	8.5" GUM-BUMELIA
11916	13.5" OAK
83039	21" OAK (44 18.5", 13"
83040	30.5" OAK (44 17.5", 15", 11"
83041	26" OAK (44 17.5", 17"
83042	36.5" OAK (44 19", 9", 7"
83043	26.5" OAK
83044	26.5" OAK
83045	28.5" OAK (44 19", 14", 13"
83046	20" OAK (44 14", 12", 12", 7"
83052	11" CEDAR ELM (44 6", 5", 5"
83053	10" CEDAR ELM (44 7", 4"
83054	7" CEDAR ELM
83055	7.5" CEDAR ELM
83056	13.5" CEDAR (44 11", 5"
83057	11" CEDAR ELM
83058	7.5" CEDAR
83059	12.5" CEDAR (44 9.5", 6"
83060	8" CEDAR ELM
83061	9" CEDAR
83062	7" CEDAR
83063	11.5" CEDAR (44 6", 5", 5", 3"
83095	10.5" CEDAR (44 9.5", 8"

Tree Table	
Point	Size & Species
83096	7" CEDAR
83097	10.5" CEDAR ELM (44 8", 5"
83098	11.5" OAK
83099	10.5" OAK
83100	6.5" CEDAR
83101	7" CEDAR
83102	8.5" CEDAR ELM
83103	14" OAK
83104	14" OAK
83105	10" OAK
83106	12" HACKBERRY (44 7", 7", 5"
83107	6.5" CEDAR
83108	6" OAK
83109	6" CHINABERRY
83110	6.5" CEDAR
83111	12" OAK
83112	8.5" OAK
83113	8.5" CEDAR ELM
83114	15.5" OAK
83115	9.5" OAK
83116	13.5" OAK
83117	18.5" OAK
83118	12" OAK
83119	9" CEDAR ELM
83120	11" CEDAR (44 8.5", 5"
83121	8" CEDAR
83122	6.5" CEDAR
83123	12" CEDAR (44 6.5", 4", 4", 3"
83124	13.5" CEDAR ELM
83125	9.5" CEDAR ELM
83126	6" CEDAR ELM
83127	6" CEDAR ELM
83128	6" OAK
83129	23" OAK (44 19", 14"
83130	13" OAK
83131	11" OAK
83132	12" OAK
83133	7" CEDAR ELM
83134	6" CEDAR ELM
83135	7" CEDAR ELM
83136	8.5" CEDAR ELM
83137	6.5" CEDAR
83138	6.5" CEDAR
83139	7" CEDAR
83140	11" CEDAR ELM (44 7.5", 7"
83141	12" CEDAR ELM (44 8.5", 5", 4", 4"
83142	6" CEDAR ELM
83143	13.5" OAK
83144	8" HACKBERRY
83147	16.5" CEDAR (44 8", 4", 4", 3", 3", 3"
83148	9" CEDAR
83149	10" CEDAR (44 6", 4", 4"
83150	7.5" HACKBERRY
83151	8" CEDAR
83152	11.5" CEDAR (44 7.5", 4", 4"
83153	9" GUM-BUMELIA (44 6", 6"
83154	16.5" CEDAR (44 9.5", 5", 5", 4"
83155	6.5" OAK
83156	8" OAK
83157	32" CEDAR (44 8.5", 8", 7", 7", 5", 5"
83158	30.5" CEDAR (44 8.5", 7", 7", 6", 6", 4"
83167	8.5" OAK
83168	15.5" OAK (44 7", 7"
83169	7.5" OAK
83170	9" OAK
83171	8" OAK
83172	10" OAK
83173	11" OAK
83187	11" CEDAR ELM
83188	9" OAK
83189	9" OAK
83190	11.5" OAK (44 9.5", 6"
83260	8" CEDAR ELM
83261	9" CEDAR
83262	7" CEDAR ELM (44 5", 4"
83263	11.5" CEDAR (44 9.5", 8"
83295	10.5" CEDAR ELM (44 9.5", 8"

Tree Table	
Point	Size & Species
90147	18.5" OAK
90148	27" OAK (44 15.5", 12"
90149	19" OAK (44 12", 12"
90150	17.5" OAK (44 12", 9"
90151	13.5" OAK
90152	12.5" OAK
90153	15.5" OAK
90154	8.5" CEDAR ELM
90155	15.5" OAK

HAGOOD
ENGINEERING ASSOCIATES
900 E. Main Street
Round Rock, TX 78664
Phone (512) 244-1546
Fax (512) 244-1010
www.heaeng.com
TBPE Registration No. F-12709
STATE OF TEXAS
TERRY R. HAGOOD
52960
REGISTERED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGOOD, P.E. 52960

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DATE SIGNED: 6/19/2024
ISSUED FOR: AGENCY REVIEW & BID

CONSTRUCTION PLANS FOR GEORGETOWN FAMILY YMCA WASTEWATER IMPROVEMENTS 6100 WILLIAMS DRIVE GEORGETOWN, TEXAS 78633

NO.	DATE	DESCRIPTION

REVISIONS

HEA PROJECT NO.22-012
ISSUED DATE: 6/19/2024

EXISTING CONDITIONS PLAN

SHEET NO.
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2024-_____-CON

GEORGETOWN GENERAL NOTES

WATER AND WASTEWATER NOTES:

1. PIPE MATERIAL FOR WATER MAINS SHALL BE PVC (AWWA C-900, MIN. CLASS 200), OR DUCTILE IRON (AWWA C-100, MIN. CLASS 200). WATER SERVICES (2" OR LESS) SHALL BE POLYETHYLENE TUBING (BLACK, 200 PSI, DR 9).

2. PIPE MATERIAL FOR PRESSURE WASTEWATER MAINS SHALL BE PVC (AWWA C-900, MIN. CLASS 150), OR DUCTILE IRON (AWWA C-100, MIN. CLASS 200). PIPE MATERIAL FOR GRAVITY WASTEWATER MAINS SHALL BE PVC (ASTM D2241 OR D3034, MAX. DR-26), DUCTILE IRON (AWWA C-100, MIN. CLASS 200).

3. UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER, DEPTH OF COVER FOR ALL LINES OUT OF THE PAVEMENT SHALL BE 42" MINIMUM AND DEPTH OF COVER FOR ALL LINES UNDER PAVEMENT SHALL BE A MINIMUM OF 30" BELOW SUBGRADE.

4. ALL FIRE HYDRANT LEADS SHALL BE DUCTILE IRON PIPE (AWWA C-100, MIN. CLASS 200).

5. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH MINIMUM 8-MIL POLYETHYLENE AND SEALED WITH DUCT TAPE OR EQUAL ACCEPTED BY THE CITY ENGINEER.

6. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR TO COORDINATE UTILITY TIE-INS AND NOTIFY HIM AT LEAST 48 HOURS PRIOR TO CONNECTING TO EXISTING LINES.

7. ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON RING AND COVER. ALL MANHOLES LOCATED OUTSIDE OF THE PAVEMENT SHALL HAVE BOLTED COVERS. TAPPING OF FIBERGLASS MANHOLES SHALL NOT BE ALLOWED.

8. THE CONTRACTOR MUST OBTAIN A BULK WATER PERMIT OR PURCHASE AND INSTALL A WATER METER FOR ALL WATER USED DURING CONSTRUCTION. A COPY OF THIS PERMIT MUST BE CARRIED AT ALL TIMES BY ALL WHO USE WATER.

9. LINE FLUSHING OR ANY ACTIVITY USING A LARGE QUANTITY OF WATER MUST BE SCHEDULED WITH THE CITY INSPECTOR.

10. THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM STERILIZATION OF ALL POTABLE WATER LINES CONSTRUCTED AND SHALL PROVIDE ALL EQUIPMENT (INCLUDING TEST GAUGES), SUPPLIES (INCLUDING CONCENTRATED CHLORINE DISINFECTING MATERIAL), AND NECESSARY LABOR REQUIRED FOR THE STERILIZATION PROCEDURE. THE STERILIZATION PROCEDURE SHALL BE MONITORED BY CITY PERSONNEL. WATER SAMPLES WILL BE COLLECTED BY THE CITY TO VERIFY EACH TREATED LINE HAS ATTAINED AN INITIAL CHLORINE CONCENTRATION OF 50 PPM. WHERE MEANS OF FLUSHING IS NECESSARY, THE CONTRACTOR, AT HIS EXPENSE, SHALL PROVIDE FLUSHING DEVICES AND REMOVE SAID DEVICES PRIOR TO FINAL ACCEPTANCE BY THE CITY OF GEORGETOWN.

11. SAMPLING TAPS SHALL BE BROUGHT UP TO 3 FEET ABOVE GRADE AND SHALL BE EASILY ACCESSIBLE FOR CITY PERSONNEL. AT THE CONTRACTOR'S REQUEST, AND IN HIS PRESENCE, SAMPLES FOR BACTERIOLOGICAL TESTING WILL BE COLLECTED BY THE CITY NOT LESS THAN 24 HOURS AFTER THE TREATED LINE HAS BEEN FLUSHED OF THE CONCENTRATED CHLORINE SOLUTION AND CHARGED WITH WATER APPROVED BY THE CITY. THE CONTRACTOR SHALL SUPPLY A CHECK OR MONEY ORDER, PAYABLE TO THE CITY OF GEORGETOWN, TO COVER THE FEE CHARGED FOR TESTING EACH WATER SAMPLE. CITY FEE AMOUNTS MAY BE OBTAINED BY CALLING THE ENGINEERING AND DEVELOPMENT SERVICES DEPARTMENT.

12. THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM QUALITY TESTING FOR ALL WASTEWATER PIPE INSTALLED AND PRESSURE PIPE HYDROSTATIC TESTING OF ALL WATER LINES CONSTRUCTED AND SHALL PROVIDE ALL EQUIPMENT (INCLUDING PUMPS AND GAUGES), SUPPLIES AND LABOR NECESSARY TO PERFORM THE TESTS. QUALITY AND PRESSURE TESTING SHALL BE MONITORED BY CITY PERSONNEL.

13. THE CONTRACTOR SHALL COORDINATE TESTING WITH THE CITY INSPECTOR AND PROVIDE NO LESS THAN 24 HOURS NOTICE PRIOR TO PERFORMING STERILIZATION, QUALITY TESTING OR PRESSURE TESTING.

14. THE CONTRACTOR SHALL NOT OPEN OR CLOSE ANY VALVES UNLESS AUTHORIZED BY THE CITY.

15. ALL VALVE BOXES AND COVERS SHALL BE CAST IRON.

16. ALL WATER SERVICE, WASTEWATER SERVICE AND VALVE LOCATIONS SHALL BE APPROPRIATELY MARKED AS FOLLOWS:

WATER SERVICE	"W" ON TOP OF CURB
WASTEWATER SERVICE	"S" ON TOP OF CURB
CURB VALVE	"V" ON FACE OF CURB

TOOLS FOR MARKING THE CURB SHALL BE PROVIDED BY THE CONTRACTOR. OTHER APPROPRIATE MEANS OF MARKING SERVICE AND VALVE LOCATIONS SHALL BE PROVIDED IN AREAS WITHOUT CURBS. SUCH MEANS OF MARKING SHALL BE AS SPECIFIED BY THE ENGINEER AND ACCEPTED BY THE CITY OF GEORGETOWN.

17. CONTACT THE CITY ENGINEERING AND DEVELOPMENT SERVICES DEPARTMENT FOR ASSISTANCE IN OBTAINING EXISTING WATER AND WASTEWATER LOCATIONS.

18. THE CITY FIRE DEPARTMENT SHALL BE NOTIFIED 48 HOURS PRIOR TO TESTING OF ANY BUILDING SPRINKLER PIPING IN ORDER THAT THE FIRE DEPARTMENT MAY MONITOR SUCH TESTING.

19. SAND, AS DESCRIBED IN SPECIFICATION ITEM 510 PIPE, SHALL NOT BE USED AS BEDDING FOR WATER AND WASTEWATER LINES. ACCEPTABLE BEDDING MATERIALS ARE PIPE BEDDING STONE, PEA GRAVEL AND IN LIEU OF SAND, A NATURALLY OCCURRING OR MANUFACTURED STONE MATERIAL CONFORMING TO ASTM C33 FOR STONE QUALITY AND MEETING THE FOLLOWING GRADATION SPECIFICATION.

SIEVE SIZE	PERCENT RETAINED BY WEIGHT
1/2"	0
3/8"	0-2
#4	40-85
#10	95-100

20. THE CONTRACTOR IS HEREBY NOTIFIED THAT CONNECTING TO, SHUTTING DOWN, OR TERMINATING EXISTING UTILITY LINES, MAY HAVE TO OCCUR AT OFF-PEAK HOURS. SUCH HOURS ARE USUALLY OUTSIDE NORMAL WORKING HOURS AND POSSIBLY BETWEEN 12 A.M. AND 6 A.M.

21. ALL WASTEWATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) REGULATIONS, 30 TAC CHAPTER 213 AND 317, AS APPLICABLE. WHENEVER TCEQ AND CITY SPECIFICATIONS CONFLICT, THE MORE STRINGENT SHALL APPLY.

FIRE DEPARTMENT CONNECTION (FDC) NOTES

1. 2018 IFC 912.2 - LOCATION
WITH RESPECT TO HYDRANTS, DRIVEWAYS, BUILDINGS AND LANDSCAPING, FIRE DEPARTMENT CONNECTIONS SHALL BE SO LOCATED THAT FIRE APPARATUS AND HOSE CONNECTED TO SUPPLY THE SYSTEM WILL NOT OBSTRUCT ACCESS TO THE BUILDINGS FOR OTHER FIRE APPARATUS.
2. 2018 IFC 912.4 - ACCESS
IMMEDIATE ACCESS TO FIRE DEPARTMENT CONNECTIONS SHALL BE MAINTAINED AT ALL TIMES AND WITHOUT OBSTRUCTION BY FENCES, BUSHES, TREES, WALLS, BEHIND PARKING STALLS, OR ANY OTHER FIXED OR MOVABLE OBJECT.
3. 2018 IFC 912.5 - SIGNS
INSTALL A SIGN ABOVE THE FIRE DEPARTMENT CONNECTION STATING "FDC". THE SIGN SHALL BE 7' ABOVE GRADE. THE SIGN SHALL HAVE REFLECTIVE WHITE LETTERS UPON A REFLECTIVE RED BACKGROUND. THE LETTERING SHALL BE MINIMUM 2 INCH STROKE AND MINIMUM 6 INCHES IN HEIGHT.
4. 2018 IFC 912.7 - INSPECTION
ALL FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED AS APPROVED BY THE FIRE CODE OFFICIAL.
5. TWO RED STREET LANE REFLECTORS (STIMSONITE MODEL 88AB OR SIMILAR) SHALL BE INSTALLED SIX INCHES FROM CENTERLINE OF THE FIRE APPARATUS ACCESS ROADWAY ON THE SIDE CLOSEST TO THE FDC. MARKERS SHALL BE PARALLEL TO THE FDC HAVING THE REFLECTIVE ENDS OF THE STREET MARKERS FACING THE DIRECTION OF TRAFFIC.
6. THE FDC FOR THE FIRE SPRINKLER SYSTEM SHALL HAVE A 5 INCH STORTZ CONNECTION ON A 30 DEGREE DOWNTURN WITH A KNOX BRAND LOCKING CAP.

SEQUENCE OF CONSTRUCTION:

A. INSTALL EROSION CONTROLS AS INDICATED ON APPROVED SITE PLAN.

B. INSTALL TREE PROTECTION AS NOTED ON APPROVED SITE PLAN.

C. SCHEDULE PRE CONSTRUCTION MEETING WITH THE CITY INSPECTION DEPT., CONTRACTOR, UTILITY CONTRACTOR, AND ENGINEER.

D. EVALUATION OF TEMPORARY EROSION CONTROL INSTALLATION. REVIEW CONSTRUCTION SCHEDULE AND THE EROSION CONTROL PLAN.

E. BEGIN SITE CLEARING.

F. INSTALL TEMPORARY SEDIMENTATION PONDS AND ROUGH GRADE SITE. INSPECT AND MAINTAIN ALL CONTROLS AS PER GENERAL NOTES.

G. CONSTRUCT SITE UTILITIES.

H. MID-CONSTRUCTION ON-SITE MEETING TO COORDINATE CHANGES IN CONSTRUCTION SCHEDULE AND EVALUATE EFFECTIVENESS OF EROSION CONTROL PLAN (CITY INSPECTOR, PROJECT ENGINEER, GENERAL CONTRACTOR).

I. CONSTRUCT PAVING, PARKING AND BUILDINGS.

J. COMPLETE CONSTRUCTION AND INSTALL LANDSCAPING.

K. PROVIDE AS-BUILTS TO ENGINEER.

L. REVEGETATE DISTURBED AREAS OR COMPLETE A DEVELOPERS CONTRACT FOR THE RE-VEGETATION ALONG WITH THE ENGINEERS CONCURRENCE LETTER.

M. PROJECT ENGINEER INSPECTS JOB AND WRITES CONCURRENCE LETTER TO THE CITY, FINAL INSPECTION IS SCHEDULED UPON RECEIPT OF THE LETTER

N. RECEIVE CITY CLEARANCE FOR OCCUPANCY.

O. REMOVE TEMPORARY EROSION/SEDIMENTATION CONTROLS.

FIRE DEPARTMENT NOTES

1. PRIVATE FIRE HYDRANT MAINTENANCE SHALL BE IN ACCORDANCE WITH NFPA 291.
2. ALL PRIVATE HYDRANT BARRELS WILL BE PAINTED RED WITH THE BONNET PAINTED
USING THE HYDRANT FLOW STANDARD IN PARAGRAPH C OF THIS SECTION TO INDICATE FLOW. IT WILL BE THE CUSTOMER'S RESPONSIBILITY TO TEST AND MAINTAIN
THEIR PRIVATE FIRE HYDRANT(S).
a. ALL PRIVATE FIRE HYDRANTS SHOULD BE INSPECTED, MAINTAINED, AND FLOW TESTED ANNUALLY AND COLOR CODED TO INDICATE THE EXPECTED FIRE FLOW FROM THE HYDRANT DURING NORMAL OPERATION. SUCH COLOR APPLIED TO THE
FIRE HYDRANT BY PAINTING THE BONNET THE APPROPRIATE COLOR FOR THE EXPECTED FLOW CONDITION.
b.HYDRANT FLOW CODING STANDARDS: PUBLIC HYDRANT BARRELS WILL BE PAINTED
SILVER, THE HYDRANTS WILL BE FLOW TESTED, AND THE BONNET PAINTED USING THE HYDRANT FLOW STANDARD IN AS FOLLOWS:
i. BLUE - GREATER THAN 1500 GPM
ii. GREEN - 1000-1500 GPM
iii.ORANGE - 500-999 GPM
iv.RED - LESS THAN 500 GPM
v.BLACK OR BAGGED - NOT WORKING
3. FIRE LANE MARKING
a.ON PAVEMENT FIRE LANE, STRIPES SHALL BE A CONTINUOUS 8" RED COLOR STRIPE
WITH:
"NO PARKING - FIRE LANE - TOW AWAY ZONE" IN 4' WHITE COLOR LETTERS.
b.ALONG CURBS, PAINT FACE WITH RED COLOR AND WRITE:
" NO PARKING - FIRE LANE - TOW AWAY ZONE" IN 4' WHITE COLOR LETTERS.

FIRE PROTECTION NOTES

1. APPROVAL OF THIS SITE PLAN DOES NOT IMPLY APPROVAL TO INSTALL UNDERGROUND FIRE LINES. PRIOR TO INSTALLATION OF UNDERGROUND FIRE LINES, A SEPARATE PERMIT SHALL BE SUBMITTED, UNDER GROUND FIRE LINE SUPPLY.
2. BACKFLOW PROTECTION WILL BE PROVIDED IN ACCORDANCE WITH THE CITY OF GEORGETOWN REQUIREMENTS WHEN REQUIRED. BACKFLOW PROTECTION WILL BE INSTALLED IN ACCORDANCE WITH THE DETAIL PROVIDED IN THE UTILITY DRAWINGS.
3. ALL PRIVATE FIRE LINES AND WHAT THEY PROVIDE SERVICE TO WILL BE INSTALLED IN ACCORDANCE WITH NFPA 24 INSTALLATION OF PRIVATE SERVICE MAINS AND THEIR APPURTENANCES.
4. ALL TEES, PLUGS, CAPS, BENDS, REDUCERS, VALVES SHALL BE RESTRAINED AGAINST MOVEMENT. THRUST BLOCKING AND JOINT RESTRAINTS WILL BE INSTALLED IN ACCORDANCE WITH NFPA 24.
5. ALL UNDERGROUND SHALL REMAIN UNCOVERED UNTIL A VISUAL INSPECTION IS CONDUCTED BY THE GEORGETOWN FIRE MARSHAL'S OFFICE (FMO). ALL JOINT RESTRAINTS AND THRUST BLOCKING SHALL BE UNCOVERED FOR VISUAL INSPECTION.
6. ALL UNDERGROUND SHALL BE FLUSHED PER THE REQUIREMENTS OF NFPA STANDARD 24 AND WITNESSED BY GEORGETOWN FMO.
7. ALL UNDERGROUND SHALL PASS A HYDROSTATIC TEST WITNESSED BY GEORGETOWN FMO. ALL JOINTS SHALL BE UNCOVERED FOR HYDROSTATIC TESTING. ALL PIPING AND ATTACHMENTS SUBJECTED TO SYSTEM WORKING PARESSURE SHALL BE TESTED AT 200 PSI OR 50 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, AND SHALL MAINTAIN THAT PRESSURE + OR - 5 PSI FOR 2 HOURS.
8. FENCES, LANDSCAPING, AND OTHER ITEMS WILL NOT BE INSTALLED WITHIN 3 FEET, AND WHERE THEY WILL OBSTRUCT THE VISIBILITY OR ACCESS TO HYDRANTS OR REMOTE FDCS.
9. LICENSE REQUIREMENTS OF EITHER RME-U OR G WHEN CONNECTING BY UNDERGROUND TO THE WATER PURVEYORS MAIN FROM THE POINT OF CONNECTION OR VALVE WHERE THE PRIMARY PURPOSE OF WATER IS FORE FIRE PROTECTION SPRINKLER SYSTEM.

STREET AND DRAINAGE NOTES:

1. ALL TESTING SHALL BE DONE BY AN INDEPENDENT LABORATORY AT THE OWNER'S EXPENSE. ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR. A CITY INSPECTOR SHALL BE PRESENT DURING ALL TESTS. TESTING SHALL BE COORDINATED WITH THE CITY INSPECTOR AND HE SHALL BE GIVEN A MINIMUM OF 24 HOURS NOTICE PRIOR TO ANY TESTING.

2. BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF 95% MAXIMUM DENSITY TO WITHIN 3' OF TOP OF CURB. MATERIAL USED SHALL BE PRIMARILY GRANULAR WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE REMAINING 3' SHALL BE CLEAN TOPSOIL FREE FROM ALL CLODS AND SUITABLE FOR SUSTAINING PLANT LIFE.

3. DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT INCLUDING GAS, ELECTRIC, TELEPHONE, CABLE TV, WATER SERVICES, ETC., SHALL BE A MINIMUM OF 30" BELOW SUBGRADE.

4. STREET RIGHTS-OF-WAY SHALL BE GRADED AT A SLOPE OF 1/4" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED. HOWEVER, IN NO CASE SHALL THE WIDTH OF RIGHT-OF-WAY AT 1/4" PER FOOT SLOPE BE LESS THAN 10 FEET UNLESS A SPECIFIC REQUEST FOR AN ALTERNATE GRADING SCHEME IS MADE TO AND ACCEPTED BY THE CITY ENGINEERING AND DEVELOPMENT SERVICES DEPARTMENT.

5. BARRICADES BUILT TO CITY STANDARDS SHALL BE CONSTRUCTED ON ALL DEAD-END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN JOB AND PUBLIC SAFETY.

6. ALL R.C.P. SHALL BE MINIMUM CLASS III.

7. THE SUBGRADE MATERIAL FOR THE STREETS SHOWN HEREIN WAS TESTED BY: SKG ENGINEERING IN A REPORT DATED OCTOBER 2022, AND THE PAVING SECTIONS DESIGNED IN ACCORDANCE WITH THE CURRENT CITY DESIGN CRITERIA. THE PAVING SECTIONS ARE TO BE CONSTRUCTED AS FOLLOWS: SEE DETAIL SHEET C70

THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SUBGRADE FOR COMPLIANCE WITH THE DESIGN ASSUMPTIONS MADE DURING PREPARATION OF THE SOILS REPORT. ANY ADJUSTMENTS THAT ARE REQUIRED SHALL BE MADE THROUGH REVISION OF THE CONSTRUCTION PLANS.

8. WHERE PIS ARE OVER 20, SUBGRADES MUST BE STABILIZED UTILIZING A METHOD ACCEPTABLE TO THE CITY ENGINEER. THE GEOTECHNICAL ENGINEER SHALL RECOMMEND AN APPROPRIATE SUBGRADE STABILIZATION IF SULFATES ARE DETERMINED TO BE PRESENT.

GENERAL NOTES: CITY OF GEORGETOWN

1. THESE CONSTRUCTION PLANS WERE PREPARED, SEALED, SIGNED AND DATED BY A TEXAS LICENSED PROFESSIONAL ENGINEER. THEREFORE, BASED ON THE ENGINEER'S CONCURRENCE OF COMPLIANCE, THE CONSTRUCTION PLANS FOR CONSTRUCTION OF THE PROPOSED PROJECT ARE HEREBY APPROVED SUBJECT TO THE STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS MANUAL AND ALL OTHER APPLICABLE CITY, STATE AND FEDERAL REQUIREMENTS AND CODES.

2. THIS PROJECT IS SUBJECT TO ALL CITY STANDARD SPECIFICATIONS AND DETAILS IN AFFECT AT THE TIME OF SUBMITTAL OF THE PROJECT TO THE CITY.

3. THIS SITE CONSTRUCTION PLANS SHALL MEET ALL REQUIREMENTS OF THE APPROVED SITE PLAN.

4. WASTEWATER MAINS AND SERVICE LINES SHALL BE SDR 26 PVC.

5. WASTEWATER MAINS SHALL BE INSTALLED WITHOUT HORIZONTAL OR VERTICAL BENDS.

6. MAXIMUM DISTANCE BETWEEN WASTEWATER MANHOLES IS 500 FEET.

7. WASTEWATER MAINS SHALL BE LOW PRESSURE AIR TESTED AND MANDREL TESTED BY THE CONTRACTOR ACCORDING TO CITY OF GEORGETOWN AND TCEQ REQUIREMENTS.

8. WASTEWATER MANHOLES SHALL BE VACUUM TESTED AND COATED BY THE CONTRACTOR ACCORDING TO THE CITY OF GEORGETOWN AND TCEQ REQUIREMENTS.

9. WASTEWATER MAINS SHALL BE CAMERA TESTED BY THE CONTRACTOR AND SUBMITTED TO THE CITY OF GEORGETOWN ON DVD FORMAT PRIOR TO PAVING THE STREETS.

10. PRIVATE WATER SYSTEM FIRE LINES SHALL BE TESTED BY CONTRACTOR TO 200 PSI FOR 4 HOURS.

11. PRIVATE WATER SYSTEM FIRE LINES SHALL BE DUCTILE IRON PIPING FROM THE WATER MAIN TO THE BUILDING SPRINKLER SYSTEM, AND 200 PSI C900 PVC FOR ALL OTHERS.

12. PUBLIC WATER SYSTEM MAINS SHALL BE 150 PSI C900 PVC AND TESTED BY THE CONTRACTOR AT 150 PSI FOR 4 HOURS.

13. ALL BENDS AND CHANGES IN DIRECTION ON WATER MAINS SHALL BE RESTRAINED AND THRUST BLOCKED.

14. LONG FIRE HYDRANT LEAD SHALL BE RESTRAINED.

15. ALL WATER LINES ARE TO BE BACTERIA TESTED BY THE CONTRACTOR ACCORDING TO THE CITY STANDARDS AND SPECIFICATIONS.

16. WATER AND SEWER MAIN CROSSINGS SHALL MEET ALL REQUIREMENTS OF TCEQ AND THE CITY.

17. FLEXIBLE BASE MATERIAL FOR PUBLIC STREETS SHALL BE TXDOT TYPE A GRADE 1.

18. HOT MIX ASPHALT CONCRETE PAVEMENT SHALL BE TYPE D UNLESS OTHERWISE SPECIFIED AND SHALL BE A MINIMUM OF 2 INCHES THICK ON PUBLIC STREETS AND ROADWAYS.

19. ALL SIDEWALK RAMPS ARE TO BE INSTALLED WITH THE PUBLIC INFRASTRUCTURE.

20. A MAINTENANCE BOND IS REQUIRED TO BE SUBMITTED TO THE CITY PRIOR TO ACCEPTANCE OF THE PUBLIC IMPROVEMENT. THIS BOND SHALL BE ESTABLISHED FOR 2YEARS IN THE AMOUNT OF 10% OF THE COST OF THE PUBLIC IMPROVEMENTS AND SHALL FOLLOW THE CITY FORMAT.

21. RECORD DRAWINGS OF THE PUBLIC IMPROVEMENTS SHALL BE SUBMITTED TO THE CITY BY THE DESIGN ENGINEER PRIOR TO ACCEPTANCE OF THE PROJECT. THESE DRAWINGS SHALL BE ON A PDF EMAILED TO THE DEVELOPMENT ENGINEER.

22. PRIOR TO CONSTRUCTION ABOVE THE SLAB, PROVIDE AN ALL-WEATHER DRIVE SURFACE OF ASPHALT OR CONCRETE OR CHIP SEAL PLACED ONTO BASE MATERIAL ENGINEERED TO WITHSTAND 75,000 LBS. AN ACCEPTANCE INSPECTION BY FIRE INSPECTIONS IS REQUIRED (2012 IFC 503 AND D102.1).

23. IN GENERAL ACCORDANCE WITH UDC SECT. 3.09.090, AN SDP SHALL EXPIRE 24 MONTHS AFTER APPROVAL, UNLESS AN ASSOCIATED BUILDING PERMIT APPLICATION HAS BEEN APPROVED.

HAGOOD ENGINEERING ASSOCIATES
900 E. Main Street
Round Rock, TX 78664
Phone (512) 244-1546
Fax (512) 244-1010
www.heaeng.com
TBPE Registration No. F-12709

STATE OF TEXAS
TERRY R. HAGOOD
52960
REGISTERED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGOOD, P.E. 52960

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DATE SIGNED: 6/19/2024
ISSUED FOR: AGENCY REVIEW & BID

CONSTRUCTION PLANS FOR
GEORGETOWN FAMILY YMCA WASTEWATER IMPROVEMENTS
6100 WILLIAMS DRIVE
GEORGETOWN, TEXAS 78633

REVISIONS

NO.	DATE	DESCRIPTION

HEA PROJECT NO 22-012
ISSUED DATE: 6/19/2024

GENERAL NOTES

SHEET NO.
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2024-_____-CON

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY ORGANIZED SEWAGE COLLECTION SYSTEM
GENERAL CONSTRUCTION NOTES TCEQ-0596 (REV. JULY 15, 2015)

EDWARDS AQUIFER PROTECTION PROGRAM CONSTRUCTION NOTES - LEGAL DISCLAIMER

THE FOLLOWING/LISTED "CONSTRUCTION NOTES" ARE INTENDED TO BE ADVISORY IN NATURE ONLY AND DO NOT CONSTITUTE AN APPROVAL OR CONDITIONAL APPROVAL BY THE EXECUTIVE DIRECTOR, NOR DO THEY CONSTITUTE A COMPREHENSIVE LISTING OF RULES OR CONDITIONS TO BE FOLLOWED DURING CONSTRUCTION. FURTHER ACTIONS MAY BE REQUIRED TO ACHIEVE COMPLIANCE WITH TCEQ REGULATIONS FOUND IN TITLE 30, TEXAS ADMINISTRATIVE CODE, CHAPTERS 213 AND 217, AS WELL AS LOCAL ORDINANCES AND REGULATIONS PROVIDING FOR THE PROTECTION OF WATER QUALITY. ADDITIONALLY, NOTHING CONTAINED IN THE FOLLOWING/LISTED "CONSTRUCTION NOTES" RESTRICTS THE POWERS OF THE EXECUTIVE DIRECTOR, THE COMMISSION OR ANY OTHER GOVERNMENTAL ENTITY TO PREVENT, CORRECT, OR CURTAIL ACTIVITIES THAT RESULT OR MAY RESULT IN POLLUTION OF THE EDWARDS AQUIFER OR HYDROLOGICALLY CONNECTED SURFACE WATERS. THE HOLDER OF ANY EDWARDS AQUIFER PROTECTION PLAN CONTAINING "CONSTRUCTION NOTES" IS STILL RESPONSIBLE FOR COMPLIANCE WITH TITLE 30, TEXAS ADMINISTRATIVE CODE, CHAPTERS 213 OR ANY OTHER APPLICABLE TCEQ REGULATION, AS WELL AS ALL CONDITIONS OF AN EDWARDS AQUIFER PROTECTION PLAN THROUGH ALL PHASES OF PLAN IMPLEMENTATION. FAILURE TO COMPLY WITH ANY CONDITION OF THE EXECUTIVE DIRECTOR'S APPROVAL, WHETHER OR NOT IN CONTRADICTION OF ANY "CONSTRUCTION NOTES," IS A VIOLATION OF TCEQ REGULATIONS AND ANY VIOLATION IS SUBJECT TO ADMINISTRATIVE RULES, ORDERS, AND PENALTIES AS PROVIDED UNDER TITLE 30, TEXAS ADMINISTRATIVE CODE § 213.10 (RELATING TO ENFORCEMENT). SUCH VIOLATIONS MAY ALSO BE SUBJECT TO CIVIL PENALTIES AND INJUNCTION. THE FOLLOWING/LISTED "CONSTRUCTION NOTES" IN NO WAY REPRESENT AN APPROVED EXCEPTION BY THE EXECUTIVE DIRECTOR TO ANY PART OF TITLE 30 TEXAS ADMINISTRATIVE CODE, CHAPTERS 213 AND 217, OR ANY OTHER TCEQ APPLICABLE REGULATION.

1. THIS ORGANIZED SEWAGE COLLECTION SYSTEM (SCS) MUST BE CONSTRUCTED IN ACCORDANCE WITH 30 TEXAS ADMINISTRATIVE CODE (TAC) §213.5(C), THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S (TCEQ) EDWARDS AQUIFER RULES AND ANY LOCAL GOVERNMENT STANDARD SPECIFICATIONS.

2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROPOSED REGULATED PROJECT MUST BE PROVIDED WITH COPIES OF THE SCS PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS MUST BE REQUIRED TO KEEP ON-SITE COPIES OF THE PLAN AND THE APPROVAL LETTER.

3. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE PRESIDING TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
   THE NAME OF THE APPROVED PROJECT;
   THE ACTIVITY START DATE; AND
   THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.

4. ANY MODIFICATION TO THE ACTIVITIES DESCRIBED IN THE REFERENCED SCS APPLICATION FOLLOWING THE DATE OF APPROVAL MAY REQUIRE THE SUBMITTAL OF AN SCS APPLICATION TO MODIFY THIS APPROVAL, INCLUDING THE PAYMENT OF APPROPRIATE FEES AND ALL INFORMATION NECESSARY FOR ITS REVIEW AND APPROVAL.

5. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.

6. IF ANY SENSITIVE FEATURES ARE DISCOVERED DURING THE WASTEWATER LINE TRENCHING ACTIVITIES, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPLICANT MUST IMMEDIATELY NOTIFY THE APPROPRIATE REGIONAL OFFICE OF THE TCEQ OF THE FEATURE DISCOVERED. A GEOLOGIST'S ASSESSMENT OF THE LOCATION AND EXTENT OF THE FEATURE DISCOVERED MUST BE REPORTED TO THAT REGIONAL OFFICE IN WRITING AND THE APPLICANT MUST SUBMIT A PLAN FOR ENSURING THE STRUCTURAL INTEGRITY OF THE SEWER LINE OR FOR MODIFYING THE PROPOSED COLLECTION SYSTEM ALIGNMENT AROUND THE FEATURE. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE EXECUTIVE DIRECTOR HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY WHILE MAINTAINING THE STRUCTURAL INTEGRITY OF THE LINE.

7. SEWER LINES LOCATED WITHIN OR CROSSING THE 5-YEAR FLOODPLAIN OF A DRAINAGE WAY WILL BE PROTECTED FROM INUNDATION AND STREAM VELOCITIES WHICH COULD CAUSE EROSION AND SCOURING OF BACKFILL. THE TRENCH MUST BE CAPPED WITH CONCRETE TO PREVENT SCOURING OF BACKFILL, OR THE SEWER LINES MUST BE ENCASED IN CONCRETE. ALL CONCRETE SHALL HAVE A MINIMUM THICKNESS OF 6 INCHES.

8. BLASTING PROCEDURES FOR PROTECTION OF EXISTING SEWER LINES AND OTHER UTILITIES WILL BE IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION CRITERIA. SAND IS NOT ALLOWED AS BEDDING OR BACKFILL IN TRENCHES THAT HAVE BEEN BLASTED. IF ANY EXISTING SEWER LINES ARE DAMAGED, THE LINES MUST BE REPAIRED AND RETESTED.

9. ALL MANHOLES CONSTRUCTED OR REHABILITATED ON THIS PROJECT MUST HAVE WATERTIGHT SIZE ON SIZE RESILIENT CONNECTORS ALLOWING FOR DIFFERENTIAL SETTLEMENT. IF MANHOLES ARE CONSTRUCTED WITHIN THE 100-YEAR FLOODPLAIN, THE COVER MUST HAVE A GASKET AND BE BOLTED TO THE RING. WHERE GASKETED MANHOLE COVERS ARE REQUIRED FOR MORE THAN THREE MANHOLES IN SEQUENCE OR FOR MORE THAN 1500 FEET, ALTERNATE MEANS OF VENTING WILL BE PROVIDED. BRICKS ARE NOT AN ACCEPTABLE CONSTRUCTION MATERIAL FOR ANY PORTION OF THE MANHOLE.

   THE DIAMETER OF THE MANHOLES MUST BE A MINIMUM OF FOUR FEET AND THE MANHOLE FOR ENTRY MUST HAVE A MINIMUM CLEAR OPENING DIAMETER OF 30 INCHES. THESE DIMENSIONS AND OTHER DETAILS SHOWING COMPLIANCE WITH THE COMMISSION'S RULES CONCERNING MANHOLES AND SEWER LINE/MANHOLE INVERTS DESCRIBED IN 30 TAC §217.55 ARE INCLUDED ON PLAN SHEET __ OF __.

   IT IS SUGGESTED THAT ENTRANCE INTO MANHOLES IN EXCESS OF FOUR FEET DEEP BE ACCOMPLISHED BY MEANS OF A PORTABLE LADDER. THE INCLUSION OF STEPS IN A MANHOLE IS PROHIBITED.

10. WHERE WATER LINES AND NEW SEWER LINE ARE INSTALLED WITH A SEPARATION DISTANCE CLOSER THAN NINE FEET (I.E., WATER LINES CROSSING WASTEWATER LINES, WATER LINES PARALLELING WASTEWATER LINES, OR WATER LINES NEXT TO MANHOLES) THE INSTALLATION MUST MEET THE REQUIREMENTS OF 30 TAC §217.53(D) (PIPE DESIGN) AND 30 TAC §290.44(E) (WATER DISTRIBUTION).

11. WHERE SEWERS LINES DEVIATE FROM STRAIGHT ALIGNMENT AND UNIFORM GRADE ALL CURVATURE OF SEWER PIPE MUST BE ACHIEVED BY THE FOLLOWING PROCEDURE WHICH IS RECOMMENDED BY THE PIPE MANUFACTURER: ______________________________.

   IF PIPE FLEXURE IS PROPOSED, THE FOLLOWING METHOD OF PREVENTING DEFLECTION OF THE JOINT MUST BE USED: ______________________________ ________.

   SPECIFIC CARE MUST BE TAKEN TO ENSURE THAT THE JOINT IS PLACED IN THE CENTER OF THE TRENCH AND PROPERLY BEDDED IN ACCORDANCE WITH 30 TAC §217.54.

12. NEW SEWAGE COLLECTION SYSTEM LINES MUST BE CONSTRUCTED WITH STUB OUTS FOR THE CONNECTION OF ANTICIPATED EXTENSIONS. THE LOCATION OF SUCH STUB OUTS MUST BE MARKED ON THE GROUND SUCH THAT THEIR LOCATION CAN BE EASILY DETERMINED AT THE TIME OF CONNECTION OF THE EXTENSIONS. SUCH STUB OUTS MUST BE MANUFACTURED WYES OR TEES THAT ARE COMPATIBLE IN SIZE AND MATERIAL WITH BOTH THE SEWER LINE AND THE EXTENSION. AT THE TIME OF ORIGINAL CONSTRUCTION, NEW STUB-OUTS MUST BE CONSTRUCTED SUFFICIENTLY TO EXTEND BEYOND THE END OF THE STREET PAVEMENT. ALL STUB-OUTS MUST BE SEALED WITH A MANUFACTURED CAP TO PREVENT LEAKAGE. EXTENSIONS THAT WERE NOT ANTICIPATED AT THE TIME OF ORIGINAL CONSTRUCTION OR THAT ARE TO BE CONNECTED TO AN EXISTING SEWER LINE NOT FURNISHED WITH STUB OUTS MUST BE CONNECTED USING A MANUFACTURED SADDLE AND IN ACCORDANCE WITH ACCEPTED PLUMBING TECHNIQUES.

   IF NO STUB-OUT IS PRESENT AN ALTERNATE METHOD OF JOINING LATERALS IS SHOWN IN THE DETAIL ON PLAN SHEET __ OF __. (FOR POTENTIAL FUTURE LATERALS).

   THE PRIVATE SERVICE LATERAL STUB-OUTS MUST BE INSTALLED AS SHOWN ON THE PLAN AND PROFILE SHEETS ON PLAN SHEET __ OF __ AND MARKED AFTER BACKFILLING AS SHOWN IN THE DETAIL ON PLAN
   SHEET __ OF __.

13. TRENCHING, BEDDING AND BACKFILL MUST CONFORM WITH 30 TAC §217.54. THE BEDDING AND BACKFILL FOR FLEXIBLE PIPE MUST COMPLY WITH THE STANDARDS OF ASTM D-2321, CLASSES IA, IB, II OR III. RIGID PIPE BEDDING MUST COMPLY WITH THE REQUIREMENTS OF ASTM C 12 (ANSI A 106.2) CLASSES A, B OR C.

14. SEWER LINES MUST BE TESTED FROM MANHOLE TO MANHOLE. WHEN A NEW SEWER LINE IS CONNECTED TO AN EXISTING STUB OR CLEAN-OUT, IT MUST BE TESTED FROM EXISTING MANHOLE TO NEW MANHOLE. IF A STUB OR CLEAN-OUT IS USED AT THE END OF THE PROPOSED SEWER LINE, NO PRIVATE SERVICE ATTACHMENTS MAY BE CONNECTED BETWEEN THE LAST MANHOLE AND THE CLEANOUT UNLESS IT CAN BE CERTIFIED AS CONFORMING WITH THE PROVISIONS OF 30 TAC §213.5(C)(3)(E).

15. ALL SEWER LINES MUST BE TESTED IN ACCORDANCE WITH 30 TAC §217.57. THE ENGINEER MUST RETAIN COPIES OF ALL TEST RESULTS WHICH MUST BE MADE AVAILABLE TO THE EXECUTIVE DIRECTOR UPON REQUEST. THE ENGINEER MUST CERTIFY IN WRITING THAT ALL WASTEWATER LINES HAVE PASSED ALL REQUIRED TESTING TO THE APPROPRIATE REGIONAL OFFICE WITHIN 30 DAYS OF TEST COMPLETION AND PRIOR TO USE OF THE NEW COLLECTION SYSTEM. TESTING METHOD WILL BE:

   a) FOR A COLLECTION SYSTEM PIPE THAT WILL TRANSPORT WASTEWATER BY GRAVITY FLOW, THE DESIGN MUST SPECIFY AN INFILTRATION AND EXFILTRATION TEST OR A LOW-PRESSURE AIR TEST. A TEST MUST CONFORM TO THE FOLLOWING REQUIREMENTS:

(1) LOW PRESSURE AIR TEST.
   A LOW PRESSURE AIR TEST MUST FOLLOW THE PROCEDURES DESCRIBED IN AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) C-828, ASTM C-924, OR ASTM F-1417 OR OTHER PROCEDURE APPROVED BY THE EXECUTIVE DIRECTOR, EXCEPT AS TO TESTING TIMES AS REQUIRED IN TABLE C.3 IN SUBPARAGRAPH (C) OF THIS PARAGRAPH OR EQUATION C.3 IN SUBPARAGRAPH (B)(II) OF THIS PARAGRAPH.
   b) FOR SECTIONS OF COLLECTION SYSTEM PIPE LESS THAN 36 INCH AVERAGE INSIDE DIAMETER, THE FOLLOWING PROCEDURE MUST APPLY, UNLESS A PIPE IS TO BE TESTED AS REQUIRED BY PARAGRAPH (2) OF THIS SUBSECTION. A PIPE MUST BE PRESSURIZED TO 3.5 POUNDS PER SQUARE INCH (PSI) GREATER THAN THE PRESSURE EXERTED BY GROUNDWATER ABOVE THE PIPE.

(2) ONCE THE PRESSURE IS STABILIZED, THE MINIMUM TIME ALLOWABLE FOR THE PRESSURE TO DROP FROM 3.5 PSI GAUGE TO 2.5 PSI GAUGE IS COMPUTED FROM THE FOLLOWING EQUATION:

EQUATION C.3

$$T = \frac{0.085 \times D \times K}{Q}$$

WHERE:

T = TIME FOR PRESSURE TO DROP 1.0 POUND PER SQUARE INCH GAUGE IN SECONDS
K = 0.000419 X D X L, BUT NOT LESS THAN 1.0
D = AVERAGE INSIDE PIPE DIAMETER IN INCHES
L = LENGTH OF LINE OF SAME SIZE BEING TESTED, IN FEET
Q = RATE OF LOSS, 0.0015 CUBIC FEET PER MINUTE PER SQUARE FOOT INTERNAL SURFACE

(A) SINCE A K VALUE OF LESS THAN 1.0 MAY NOT BE USED, THE MINIMUM TESTING TIME FOR EACH PIPE DIAMETER IS SHOWN IN THE FOLLOWING TABLE C.3:

Pipe Diameter *(inches)*	Minimum Time *(seconds)*	Maximum Length for Minimum Time *(feet)*	Time for Longer Length *(seconds/foot)*
6	340	398	0.855
8	454	298	1.520
10	567	239	2.374
12	680	199	3.419
15	850	159	5.342
18	1020	133	7.693
21	1190	114	10.471
24	1360	100	13.676
27	1530	88	17.309
30	1700	80	21.369
33	1870	72	25.856

(D) AN OWNER MAY STOP A TEST IF NO PRESSURE LOSS HAS OCCURRED DURING THE FIRST 25% OF THE CALCULATED TESTING TIME.
(E) IF ANY PRESSURE LOSS OR LEAKAGE HAS OCCURRED DURING THE FIRST 25% OF A TESTING PERIOD, THEN THE TEST MUST CONTINUE FOR THE ENTIRE TEST DURATION AS OUTLINED ABOVE OR UNTIL FAILURE.
(F) WASTEWATER COLLECTION SYSTEM PIPES WITH A 27 INCH OR LARGER AVERAGE INSIDE DIAMETER MAY BE AIR TESTED AT EACH JOINT INSTEAD OF FOLLOWING THE PROCEDURE OUTLINED IN THIS SECTION.
(G) TESTING PROCEDURE FOR PIPE WITH AN INSIDE DIAMETER GREATER THAN 33 INCHES MUST BE APPROVED BY THE EXECUTIVE DIRECTOR.

(3) INFILTRATION/EXFILTRATION TEST.
A. THE TOTAL EXFILTRATION, AS DETERMINED BY A HYDROSTATIC HEAD TEST, MUST NOT EXCEED 50 GALLONS PER INCH OF DIAMETER PER MILE OF PIPE PER 24 HOURS AT A MINIMUM TEST HEAD OF 2.0 FEET ABOVE THE CROWN OF A PIPE AT AN UPSTREAM MANHOLE.
   B. AN OWNER SHALL USE AN INFILTRATION TEST IN LIEU OF AN EXFILTRATION TEST WHEN PIPES ARE INSTALLED BELOW THE GROUNDWATER LEVEL.
   C. THE TOTAL EXFILTRATION, AS DETERMINED BY A HYDROSTATIC HEAD TEST, MUST NOT EXCEED 50 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOURS AT A MINIMUM TEST HEAD OF TWO FEET ABOVE THE CROWN OF A PIPE AT AN UPSTREAM MANHOLE, OR AT LEAST TWO FEET ABOVE EXISTING GROUNDWATER LEVEL, WHICHEVER IS GREATER.
   D. FOR CONSTRUCTION WITHIN A 25-YEAR FLOOD PLAIN, THE INFILTRATION OR EXFILTRATION MUST NOT EXCEED 10 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOURS AT THE SAME MINIMUM TEST HEAD AS IN SUBPARAGRAPH (C) OF THIS PARAGRAPH.
   E. IF THE QUANTITY OF INFILTRATION OR EXFILTRATION EXCEEDS THE MAXIMUM QUANTITY SPECIFIED, AN OWNER SHALL UNDERTAKE REMEDIAL ACTION IN ORDER TO REDUCE THE INFILTRATION OR EXFILTRATION TO AN AMOUNT WITHIN THE LIMITS SPECIFIED. AN OWNER SHALL RETEST A PIPE FOLLOWING A REMEDIATION ACTION.
(a) IF A GRAVITY COLLECTION PIPE IS COMPOSED OF FLEXIBLE PIPE, DEFLECTION TESTING IS ALSO REQUIRED. THE FOLLOWING PROCEDURES MUST BE FOLLOWED:

1. FOR A COLLECTION PIPE WITH INSIDE DIAMETER LESS THAN 27 INCHES, DEFLECTION MEASUREMENT REQUIRES A RIGID MANDREL.
A. MANDREL SIZING.
   I. A RIGID MANDREL MUST HAVE AN OUTSIDE DIAMETER (OD) NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER (ID) OR AVERAGE ID OF A PIPE, AS SPECIFIED IN THE APPROPRIATE STANDARD BY THE ASTMS, AMERICAN WATER WORKS ASSOCIATION, UNI-BELL, OR AMERICAN NATIONAL STANDARDS INSTITUTE, OR ANY RELATED APPENDIX.
II. IF A MANDREL SIZING DIAMETER IS NOT SPECIFIED IN THE APPROPRIATE STANDARD, THE MANDREL MUST HAVE AN OD EQUAL TO 95% OF THE ID OF A PIPE. IN THIS CASE, THE ID OF THE PIPE, FOR THE PURPOSE OF DETERMINING THE OD OF THE MANDREL, MUST EQUAL BE THE AVERAGE OUTSIDE DIAMETER MINUS TWO MINIMUM WALL THICKNESSES FOR OD CONTROLLED PIPE AND THE AVERAGE INSIDE DIAMETER FOR ID CONTROLLED PIPE.
   III. ALL DIMENSIONS MUST MEET THE APPROPRIATE STANDARD.
B. MANDREL DESIGN.
   I. A RIGID MANDREL MUST BE CONSTRUCTED OF A METAL OR A RIGID PLASTIC MATERIAL THAT CAN WITHSTAND 200 PSI WITHOUT BEING DEFORMED.
   II. A MANDREL MUST HAVE NINE OR MORE ODD NUMBER OF RUNNERS OR LEGS.
   III. A BARREL SECTION LENGTH MUST EQUAL AT LEAST 75% OF THE INSIDE DIAMETER OF A PIPE.
   IV. EACH SIZE MANDREL MUST USE A SEPARATE PROVING RING.
C. METHOD OPTIONS.
   I. AN ADJUSTABLE OR FLEXIBLE MANDREL IS PROHIBITED.
   II. A TEST MAY NOT USE TELEVISION INSPECTION AS A SUBSTITUTE FOR A DEFLECTION TEST.
III. IF REQUESTED, THE EXECUTIVE DIRECTOR MAY APPROVE THE USE OF A DEFLECTOMETER OR A MANDREL WITH REMOVABLE LEGS OR RUNNERS ON A CASE-BY-CASE BASIS.
(1) FOR A GRAVITY COLLECTION SYSTEM PIPE WITH AN INSIDE DIAMETER 27 INCHES AND GREATER, OTHER TEST METHODS MAY BE USED TO DETERMINE VERTICAL DEFLECTION.
(2) A DEFLECTION TEST METHOD MUST BE ACCURATE TO WITHIN PLUS OR MINUS 0.2% DEFLECTION.
(3) AN OWNER SHALL NOT CONDUCT A DEFLECTION TEST UNTIL AT LEAST 30 DAYS AFTER THE FINAL BACKFILL.
(4) GRAVITY COLLECTION SYSTEM PIPE DEFLECTION MUST NOT EXCEED FIVE PERCENT (5%).
(5) IF A PIPE SECTION FAILS A DEFLECTION TEST, AN OWNER SHALL CORRECT THE PROBLEM AND CONDUCT A SECOND TEST AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS.

16. ALL MANHOLES MUST BE TESTED TO MEET OR EXCEED THE REQUIREMENTS OF 30 TAC §217.58.
I. ALL MANHOLES MUST PASS A LEAKAGE TEST.
II. AN OWNER SHALL TEST EACH MANHOLE (AFTER ASSEMBLY AND BACKFILLING) FOR LEAKAGE, SEPARATE AND INDEPENDENT OF THE COLLECTION SYSTEM PIPES, BY HYDROSTATIC EXFILTRATION TESTING, VACUUM TESTING, OR OTHER METHOD APPROVED BY THE EXECUTIVE DIRECTOR.
(1) HYDROSTATIC TESTING.
   A . THE MAXIMUM LEAKAGE FOR HYDROSTATIC TESTING OR ANY ALTERNATIVE TEST METHODS IS 0.025 GALLONS PER FOOT DIAMETER PER FOOT OF MANHOLE DEPTH PER HOUR.
   B TO PERFORM A HYDROSTATIC EXFILTRATION TEST, AN OWNER SHALL SEAL ALLWASTEWATER PIPES COMING INTO A MANHOLE WITH AN INTERNAL PIPE PLUG, FILL THE MANHOLE WITH WATER, AND MAINTAIN THE TEST FOR AT LEAST ONE HOUR.
   C. A TEST FOR CONCRETE MANHOLES MAY USE A 24-HOUR WETTING PERIOD BEFORE TESTING TO ALLOW SATURATION OF THE CONCRETE.
(2) VACUUM TESTING.
   A TO PERFORM A VACUUM TEST, AN OWNER SHALL PLUG ALL LIFT HOLES AND EXTERIOR JOINTS WITH A NON-SHRINK GROUT AND PLUG ALL PIPES ENTERING A MANHOLE.
   B. NO GROUT MUST BE PLACED IN HORIZONTAL JOINTS BEFORE TESTING.
   C STUB-OUTS, MANHOLE BOOTS, AND PIPE PLUGS MUST BE SECURED TO PREVENT MOVEMENT WHILE A VACUUM IS DRAWN.
   D. AN OWNER SHALL USE A MINIMUM 60 INCH/LB TORQUE WRENCH TO TIGHTEN THE EXTERNAL CLAMPS THAT SECURE A TEST COVER TO THE TOP OF A MANHOLE.
   E. A TEST HEAD MUST BE PLACED AT THE INSIDE OF THE TOP OF A CONE SECTION, AND THE SEAL INFLATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
   F. THERE MUST BE A VACUUM OF 10 INCHES OF MERCURY INSIDE A MANHOLE TO PERFORM A VALID TEST.
   G. A TEST DOES NOT BEGIN UNTIL AFTER THE VACUUM PUMP IS OFF.
   H. A MANHOLE PASSES THE TEST IF AFTER 2.0 MINUTES AND WITH ALL VALVES CLOSED, THE VACUUM IS AT LEAST 9.0 INCHES OF MERCURY.

17. ALL PRIVATE SERVICE LATERALS MUST BE INSPECTED AND CERTIFIED IN ACCORDANCE WITH 30 TAC §213.5(C)(3)(I). AFTER INSTALLATION OF AND, PRIOR TO COVERING AND CONNECTING A PRIVATE SERVICE LATERAL TO AN EXISTING ORGANIZED SEWAGE COLLECTION SYSTEM, A TEXAS LICENSED PROFESSIONAL ENGINEER, TEXAS REGISTERED SANITARIAN, OR APPROPRIATE CITY INSPECTOR MUST VISUALLY INSPECT THE PRIVATE SERVICE LATERAL AND THE CONNECTION TO THE SEWAGE COLLECTION SYSTEM, AND CERTIFY THAT IT IS CONSTRUCTED IN CONFORMITY WITH THE APPLICABLE PROVISIONS OF THIS SECTION. THE OWNER OF THE COLLECTION SYSTEM MUST MAINTAIN SUCH CERTIFICATIONS FOR FIVE YEARS AND FORWARD COPIES TO THE APPROPRIATE REGIONAL OFFICE UPON REQUEST. CONNECTIONS MAY ONLY BE MADE TO AN APPROVED SEWAGE COLLECTION SYSTEM.

AUSTIN REGIONAL OFFICE
12100 PARK 35 CIRCLE, BUILDING A
AUSTIN, TEXAS 78753-1808
PHONE (512) 339-2929
FAX (512) 339-3795SAN ANTONIO REGIONAL OFFICE
14250 JUDSON ROAD
SAN ANTONIO, TEXAS 78233-4480
PHONE (210) 490-3096
FAX (210) 545-4329

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

TCEQ-0592 (REV. 3/15/07)

TCEQ-0592 (REV. JULY 15, 2015)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER POLLUTION ABATEMENT PLAN
GENERAL CONSTRUCTION NOTES

EDWARDS AQUIFER PROTECTION PROGRAM CONSTRUCTION NOTES - LEGAL DISCLAIMER

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1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
   - THE NAME OF THE APPROVED PROJECT;
   - THE ACTIVITY START DATE; AND
   - THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.

2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.

3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.

4. NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.

5. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.

6. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.

7. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.

8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.

9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.

10. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.

11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:
   - THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
   - THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND
   - THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.

12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:

   A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;

   B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;

   C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

AUSTIN REGIONAL OFFICE
12100 PARK 35 CIRCLE, BUILDING A
AUSTIN, TEXAS 78753-1808
PHONE (512) 339-2929
FAX (512) 339-3795

SAN ANTONIO REGIONAL OFFICE
14250 JUDSON ROAD
SAN ANTONIO, TEXAS 78233-4480
PHONE (210) 490-3096
FAX (210) 545-4329

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

HAGOOD ENGINEERING ASSOCIATES
900 E. Main Street
Round Rock, TX 78664
Phone (512) 244-1546
Fax (512) 244-1010
www.heaeng.com
TBPE Registration No. F-12709

STATE OF TEXAS
TERRY R. HAGOOD
52960
REGISTERED PROFESSIONAL ENGINEER

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DATE SIGNED: 6/19/2024
ISSUED FOR: AGENCY REVIEW & BID

CONSTRUCTION PLANS FOR
GEORGETOWN FAMILY YMCA WASTEWATER IMPROVEMENTS
6100 WILLIAMS DRIVE
GEORGETOWN, TEXAS 78633

REVISIONS

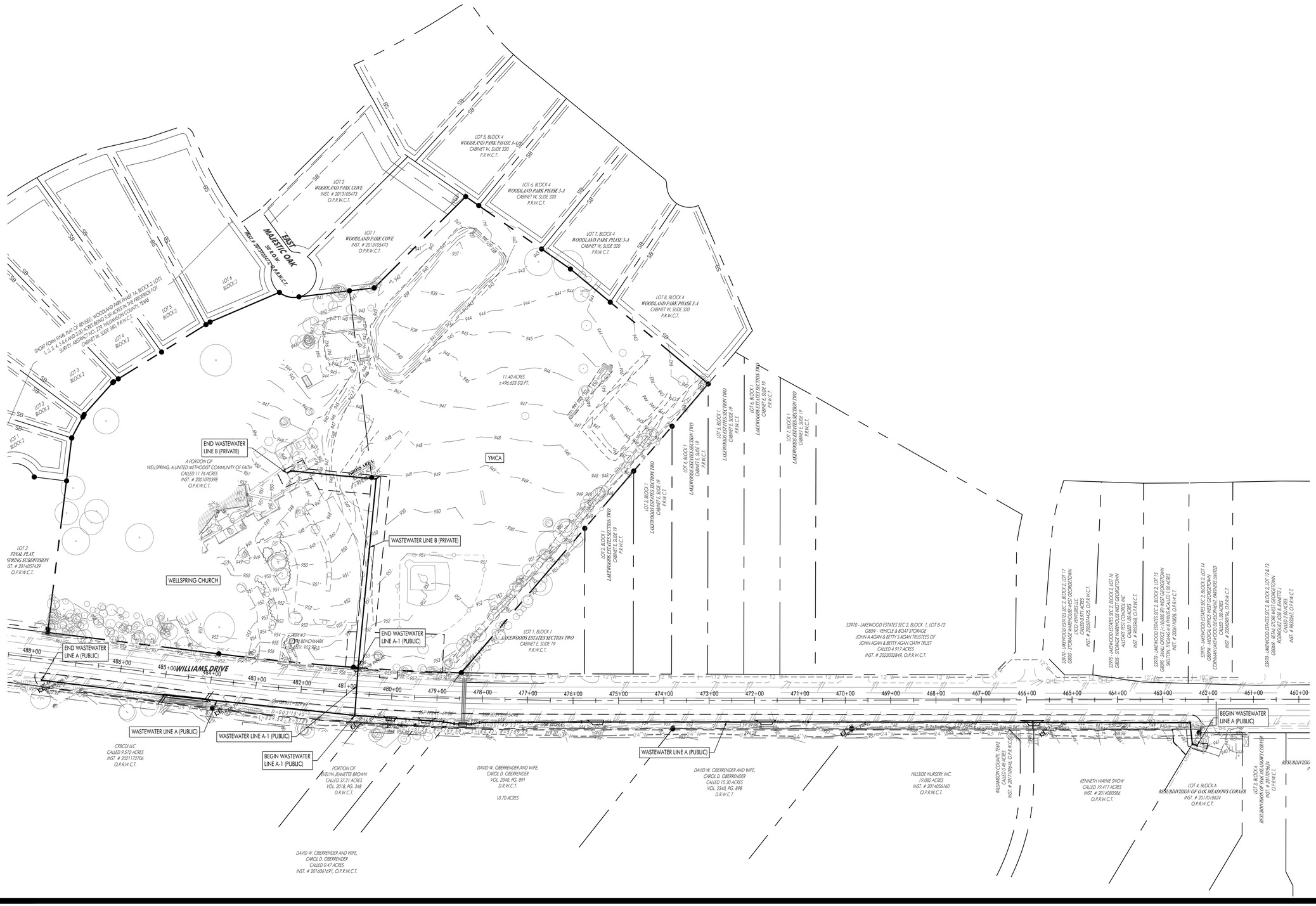
NO.	DATE	DESCRIPTION

HEA PROJECT NO.22-012
ISSUED DATE: 6/19/2024

TCEQ NOTES

SHEET NO.
C01
06
2024-______-CON

0 100 200
SCALE: 1" = 100'



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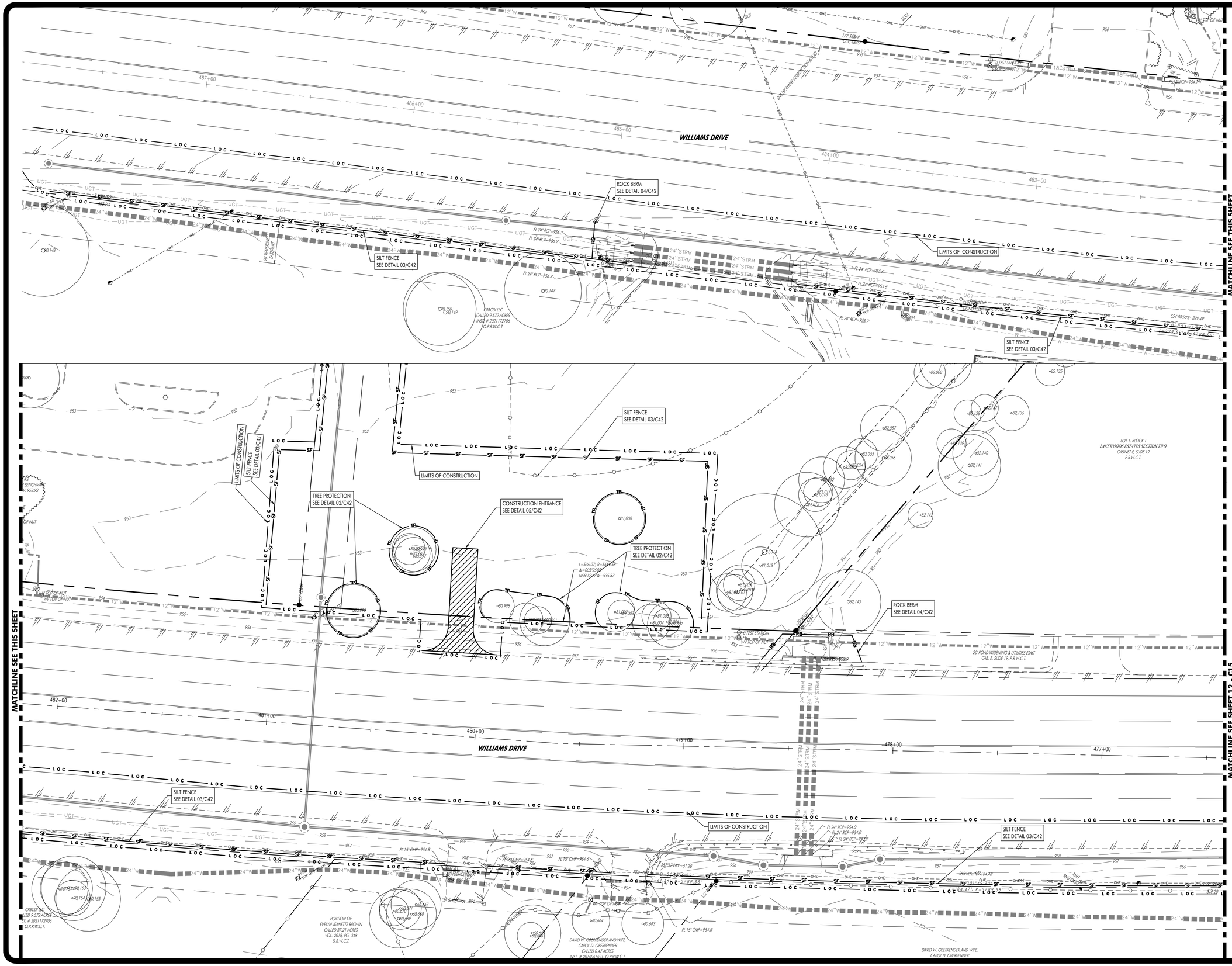
REVISIONS

NO.	DATE	DESCRIPTION

HEA PROJECT NO: 22-012
ISSUED DATE: 6/19/2024

OVERALL WASTEWATER PLAN

SHEET NO.
C10
07
2024-_____-CON



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6100 WILLIAMS DRIVE
GEORGETOWN, TEXAS 78633

REVISIONS

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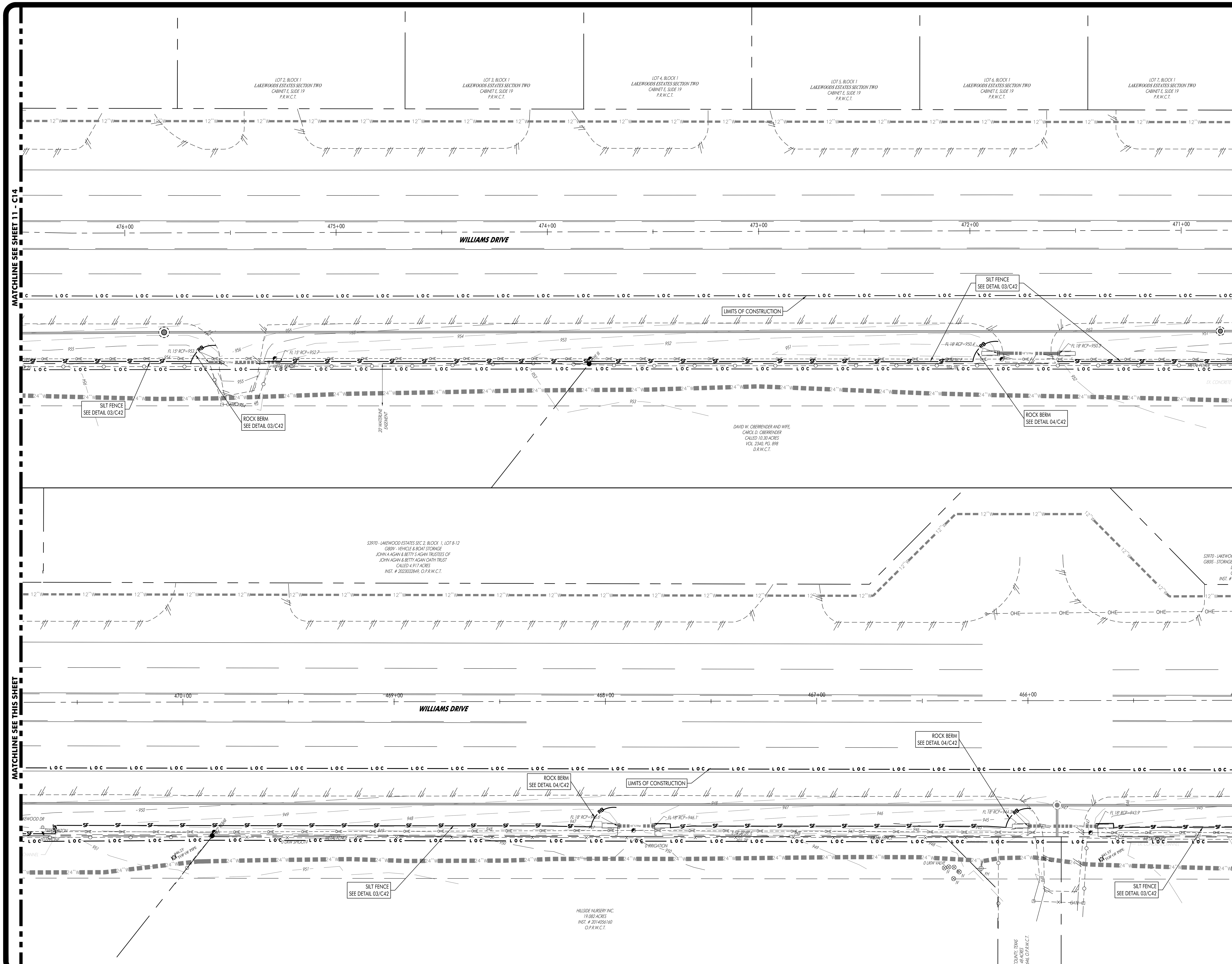
HEA PROJECT NO 22-012
ISSUED DATE: 6/19/2024

EROSION AND SEDIMENTATION CONTROL PLAN

SHEET NO.
C14
11
2024-_____-CON



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REVISIONS

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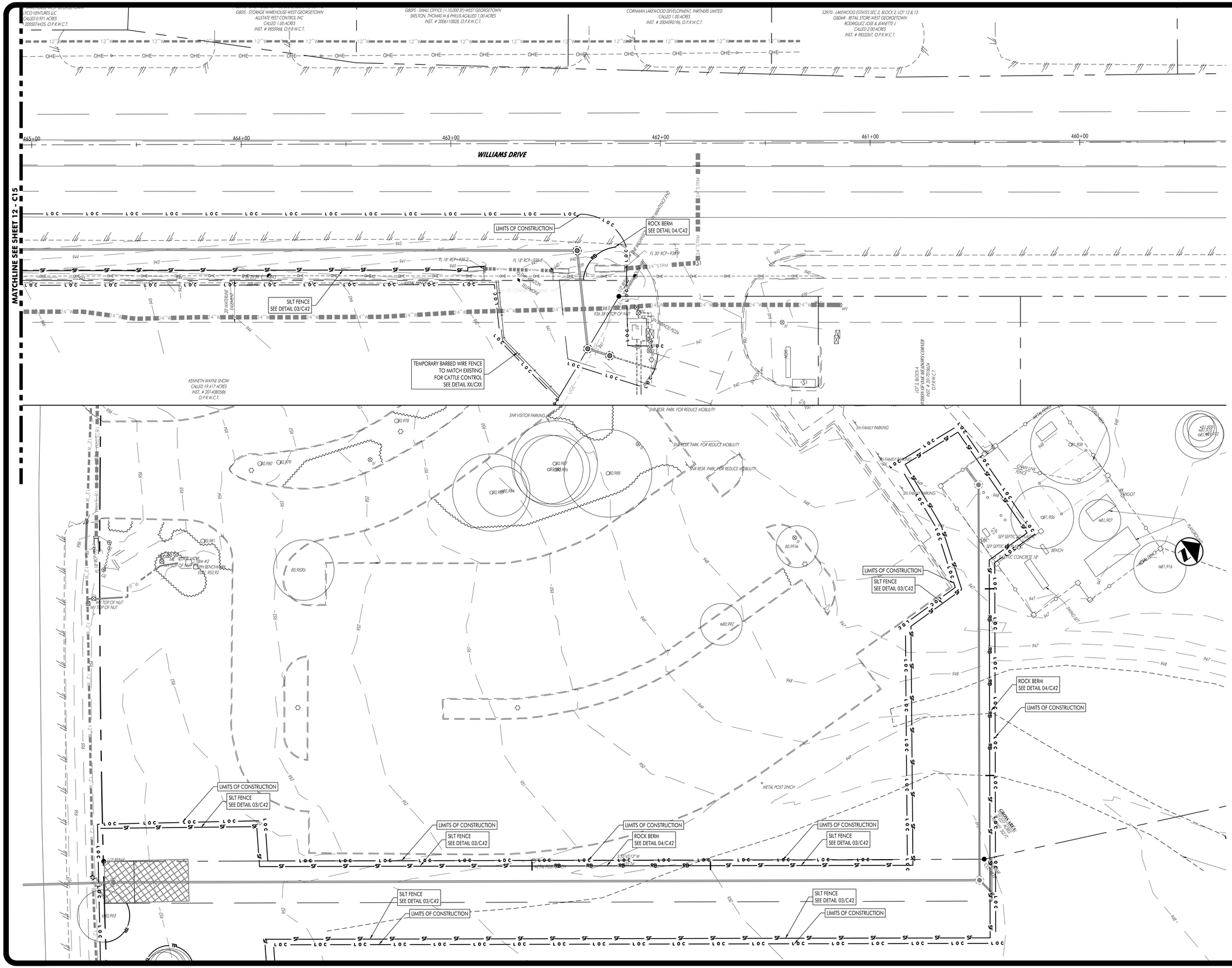
EROSION AND SEDIMENTATION CONTROL PLAN

SHEET NO.
C15
12
2024-______-CON



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EROSION AND SEDIMENTATION CONTROL PLAN

SHEET NO.
C16
13
2024-_____-CON

MATCHLINE SEE SHEET C(PREVIOUS)

MATCHLINE SEE THIS SHEET

MATCHLINE SEE THIS SHEET

MATCHLINE SEE SHEET C(NEXT)

WILLIAMS DRIVE

WILLIAMS DRIVE

EX. CONCRETE DRIVE AND STORM RIPRAP TO BE REMOVED. DEMOLITION SHALL BE IN 2 PHASES TO PROVIDE DAILY ACCESS. CONTRACTOR TO COORDINATE WITH OWNER AS NEEDED

EX. ASPHALT DRIVE TO BE REMOVED. CONTRACTOR SHALL COORDINATE WITH OWNER TO ENSURE PROPER ACCESS

EX. ASPHALT DRIVE TO BE REMOVED. CONTRACTOR SHALL COORDINATE WITH OWNER TO ENSURE PROPER ACCESS

EX. GUARDRAIL TO BE REMOVED

EX. CONCRETE RIPRAP TO SAWCUT AND REMOVED

CRBCDI LLC
CALLED 9.572 ACRES
INST. # 2021172706
O.P.R.W.C.T.

PORTION OF
EVELYN JEANETTE BROWN
CALLED 37.21 ACRES
VOL. 2018, PG. 348
D.R.W.C.T.

DAVID W. OBERRENDER AND WIFE,
CAROL D. OBERRENDER
CALLED 0.47 ACRES
INST. # 2016061691, O.P.R.W.C.T.

DAVID W. OBERRENDER AND WIFE,
CAROL D. OBERRENDER
VOL. 2340, PG. 891
D.R.W.C.T.

20' WASTEWATER EASEMENT

20' ROAD WIDENING & UTILITIES ESMT.
CAB. E, SLIDE 19, P.R.W.C.T.

20' DRAINAGE INTERCEPTION EASEMENT

1/2" REBAR
LCC #0051

0 20 40
SCALE: 1" = 20'

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6100 WILLIAMS DRIVE
GEORGETOWN, TEXAS 78633

REVISIONS			
NO.	DATE	DESCRIPTION	

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DEMOLITION PLAN

SHEET NO.
C17
14

2024-_____-CON

MATCHLINE SEE SHEET C(PREVIOUS)

MATCHLINE SEE THIS SHEET

MATCHLINE SEE THIS SHEET

MATCHLINE SEE SHEET C(NEXT)

0 20 40

SCALE: 1" = 20'

LOT 2, BLOCK 1
LAKEWOODS ESTATES SECTION TWO
CABINET E, SLIDE 19
P.R.W.C.T.

LOT 3, BLOCK 1
LAKEWOODS ESTATES SECTION TWO
CABINET E, SLIDE 19
P.R.W.C.T.

LOT 4, BLOCK 1
LAKEWOODS ESTATES SECTION TWO
CABINET E, SLIDE 19
P.R.W.C.T.

LOT 5, BLOCK 1
LAKEWOODS ESTATES SECTION TWO
CABINET E, SLIDE 19
P.R.W.C.T.

LOT 6, BLOCK 1
LAKEWOODS ESTATES SECTION TWO
CABINET E, SLIDE 19
P.R.W.C.T.

LOT 7, BLOCK 1
LAKEWOODS ESTATES SECTION TWO
CABINET E, SLIDE 19
P.R.W.C.T.

476+00 475+00 474+00 473+00 472+00 471+00

WILLIAMS DRIVE

EX. ASPHALT DRIVE TO BE REMOVED. CONTRACTOR SHALL COORDINATE WITH OWNER TO ENSURE PROPER ACCESS

EX. ASPHALT DRIVE TO BE REMOVED. CONTRACTOR SHALL COORDINATE WITH OWNER TO ENSURE PROPER ACCESS

EX. SIGN AND POST TO BE REMOVED AND STORED FOR REUSE

20' WATERLINE EASEMENT

DAVID W. OBERRENDER AND WIFE, CAROL D. OBERRENDER

S3970 - LAKEWOOD ESTATES SEC 2, BLOCK 1, LOT 8-12
GB0V - VEHICLE & BOAT STORAGE
JOHN A AGAN & BETTY S AGAN TRUSTEES OF
JOHN AGAN & BETTY AGAN OATH TRUST
CALLED 4.917 ACRES
INST. # 2023032849, O.P.R.W.C.T.

S3970 - LAKEWO
GB0S - STORAG
INST

470+00 469+00 468+00 467+00 466+00

WILLIAMS DRIVE

EX. ASPHALT DRIVE TO BE REMOVED. CONTRACTOR SHALL COORDINATE WITH OWNER TO ENSURE ACCESS

LAKEWOOD DR

TIEBACK

IRRIGATION

METAL FENCE

GATE

HILLSIDE NURSERY INC.
19.082 ACRES
INST. # 2014056160
O.P.R.W.C.T.

WILLIAMSON COUNTY, TEXAS
CALLED 0.48 ACRES
INST. # 2017109848, O.P.R.W.C.T.

HAGOOD
ENGINEERING ASSOCIATES

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Round Rock, TX 78664
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GEORGETOWN FAMILY YMCA WASTEWATER IMPROVEMENTS
6100 WILLIAMS DRIVE
GEORGETOWN, TEXAS 78633

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DEMOLITION PLAN

SHEET NO.
C18
15
2024-_____-CON

MATCHLINE SEE SHEET C(PREVIOUS)

S3970 - LAKEWOOD ESTATES SEC 2, BLOCK 2, LOT 17
G80S - WAREHOUSE-WEST GEORGETOWN
YCO VENTURES LLC
CALLED 0.971 ACRES
2005074425, O.P.R.W.C.T.

S3970 - LAKEWOOD ESTATES SEC 2, BLOCK 2, LOT 16
G80S - STORAGE WAREHOUSE-WEST GEORGETOWN
ALLSTATE PEST CONTROL INC
CALLED 1.00 ACRES
INST. # 9855968, O.P.R.W.C.T.

S3970 - LAKEWOOD ESTATES SEC 2, BLOCK 2, LOT 15
G80PS - SMALL OFFICE (< 10,000 SF)-WEST GEORGETOWN
SKELTON, THOMAS M & PHILLIS ACALLED 1.00 ACRES
INST. # 2006110828, O.P.R.W.C.T.

S3970 - LAKEWOOD ESTATES SEC 2, BLOCK 2, LOT 14
G80PM - MEDICAL OFFICE-WEST GEORGETOWN
CORNHAM LAKEWOOD DEVELOPMENT, PARTNERS LIMITED
CALLED 1.00 ACRES
INST. # 2004090196, O.P.R.W.C.T.

S3970 - LAKEWOOD ESTATES SEC 2, BLOCK 2, LOT 12 & 13
G80MR - RETAIL STORE-WEST GEORGETOWN
RODRIGUEZ JOSE & JEANETTE J
CALLED 2.00 ACRES
INST. # 9833267, O.P.R.W.C.T.

0 20 40
SCALE: 1" = 20'

465+00 464+00 463+00 462+00 461+00 460+00

WILLIAMS DRIVE

EX. ROAD SIGN TO BE REMOVED AND STORED FOR REUSE

EX. FENCING TO BE REMOVED AND REPLACED WHEN COMPLETE WITH WASTEWATER LINE

EX. SAFETY END TREATMENT TO BE REMOVED AND STROED FOR REUSE

24" STRM

20' WATERLINE EASEMENT

368.06'

KENNETH WAYNE SNOW
CALLED 19.417 ACRES
INST. # 2014080586
O.P.R.W.C.T.

LOT 4, BLOCK A
RESUBDIVISION OF OAK MEADOWS CORNER
INST. # 2017018624
O.P.R.W.C.T.

LOT 3, BLOCK A
RESUBDIVISION OF OAK MEADOWS CORNER
INST. # 2017018624
O.P.R.W.C.T.

0 10 20
SCALE: 1" = 10'

P1,P16 P1,P07 P1,P08 P1,P06

MESH FENCE
COVERED AREA
CHAIN LINK FENCE
BENCH
SWING SET

HAGOOD ENGINEERING ASSOCIATES
900 E. Main Street
Round Rock, TX 78664
Phone (512) 244-1546
Fax (512) 244-1010
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TBPE Registration No. F-12709

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CONSTRUCTION PLANS FOR GEORGETOWN FAMILY YMCA WASTEWATER IMPROVEMENTS 6100 WILLIAMS DRIVE GEORGETOWN, TEXAS 78633

REVISIONS

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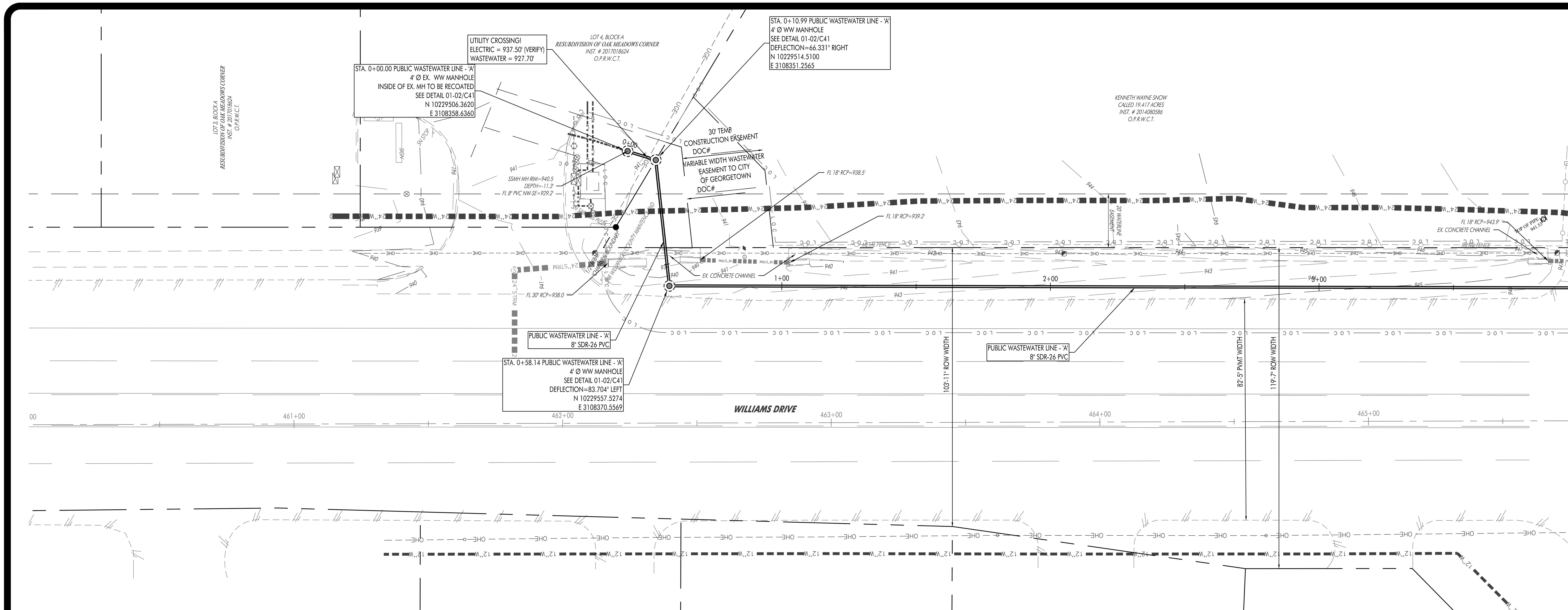
DEMOLITION PLAN

SHEET NO.
C19
16
2024-_____-CON



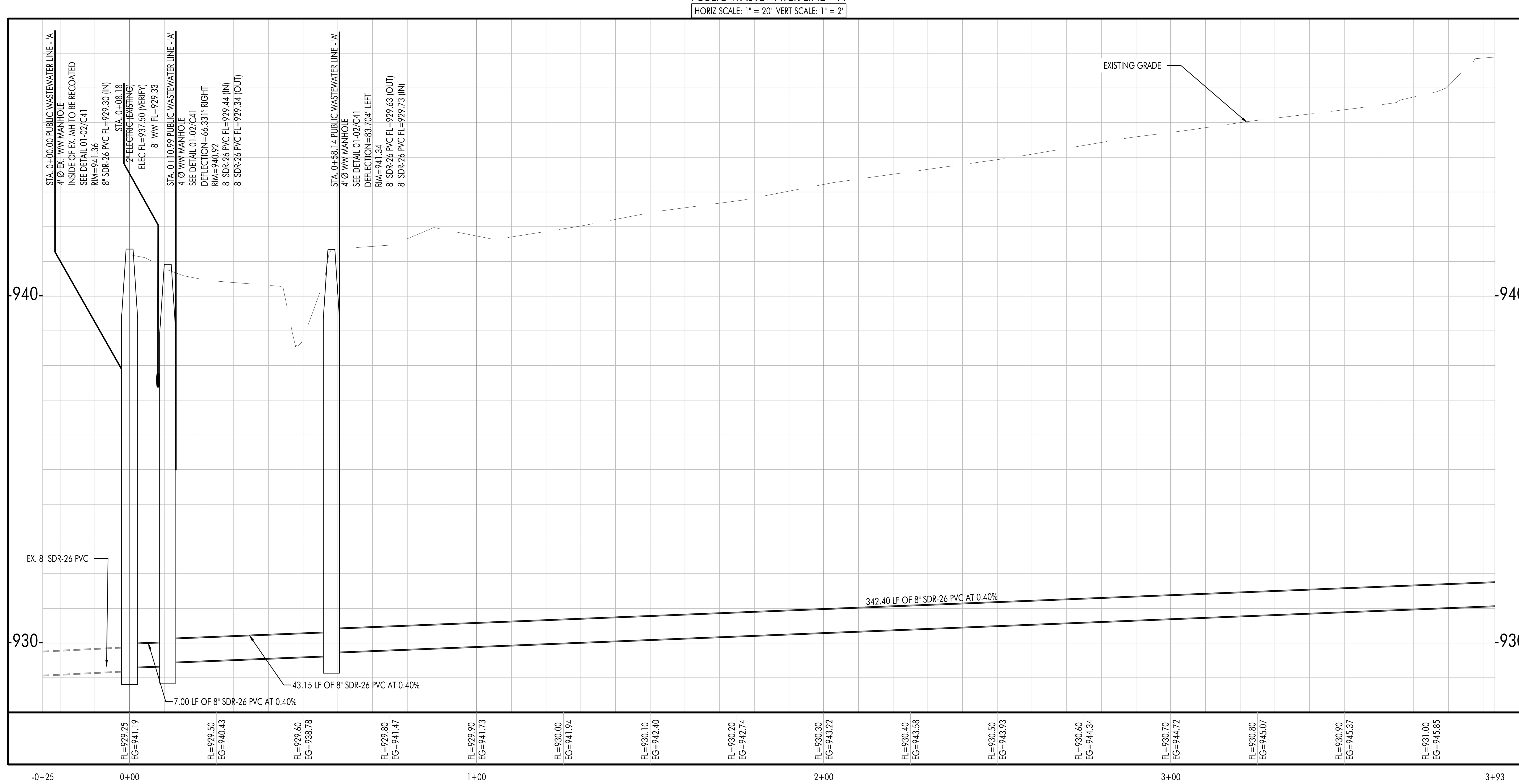
SCALE: 1" = 20'

LEGEND

- IRON ROD FOUND/SET
- CONCRETE MONUMENT FOUND/SET
- NAIL FOUND/SET
- PIPE FOUND
- STORMWATER MANHOLE (TO SCALE)
- JUNCTION BOX (TO SCALE)
- GRATE INLET (TO SCALE)
- WASTEWATER MANHOLE (TO SCALE)
- WASTEWATER CLEANOUT
- GAS TEST STATION
- GAS METER
- ELECTRIC METER
- LIGHT POLE
- SIGNAL LIGHT POLE
- UTILITY POLE
- TELEPHONE MANHOLE
- FIRE HYDRANT
- GATE VALVE
- IRRIGATION CONTROL VALVE
- WATER METER
- EXISTING CONTOURS
- PROPOSED CONTOUR
- PROPOSED CURB AND GUTTER
- PROPOSED ASPHALT
- PROPOSED X" DIA. GAS LINE
- PROPOSED X" DIA. STORM SEWER LINE
- PROPOSED X" DIA. WASTEWATER LINE
- PROPOSED X" DIA. WATER LINE
- EXISTING CHAIN LINK FENCE
- EXISTING WIRE FENCE
- EXISTING WOOD FENCE
- SETBACK LINE
- EASEMENT LINE
- EXISTING ASPHALT
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING OVERHEAD TELEPHONE LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING WATER LINE (SIZE VARIES)
- EXISTING WASTEWATER LINE (SIZE VARIES)
- EXISTING FORCE MAIN (SIZE VARIES)
- EXISTING FIBER OPTIC LINE
- EXISTING GAS LINE (SIZE VARIES)
- BENCHMARK LOCATION
- EXISTING TREE TO REMAIN (SIZE VARIES)
- EXISTING TREE TO BE REMOVED (SIZE VARIES)
- MONARCH/HERITAGE TREE (SIZE VARIES)
- PARKING COUNT
- PARCEL LINES
- HANDICAP ACCESS LINES
- CONCRETE PAVING
- ASPHALT PAVING
- CONCRETE SIDEWALK
- CONCRETE WASHOUT
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- ROCK BERM
- INLET PROTECTION
- TREE PROTECTION
- MULCH SOCK
- LIMITS OF CONSTRUCTION

PUBLIC WASTEWATER LINE - 'A'

HORIZ SCALE: 1" = 20' VERT SCALE: 1" = 2'



PLAN/PROFILE NOTES:

1. ALL PORTIONS OF WW TRENCH BACKFILL SHALL BE PLACED IN ACCORDANCE WITH SPECIFICATION G4.05.E.2 AND TESTED IN ACCORDANCE WITH CIP 12 AND 13.
2. ANY EXISTING IMPROVEMENTS (CULVERTS, PAVEMENTS, FENCING, ETC.) ALONG ALL PORTIONS OF WASTEWATER ALIGNMENTS WHICH ARE DISTUBED, DAMAGED, OR REMOVED SHALL BE REPLACED TO EQUAL OR BETTER CONDITION PRIOR TO DISTURBANCE.

HAGOOD ENGINEERING ASSOCIATES
900 E. Main Street
Round Rock, TX 78664
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Fax (512) 244-1010
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6100 WILLIAMS DRIVE GEORGETOWN, TEXAS 78633

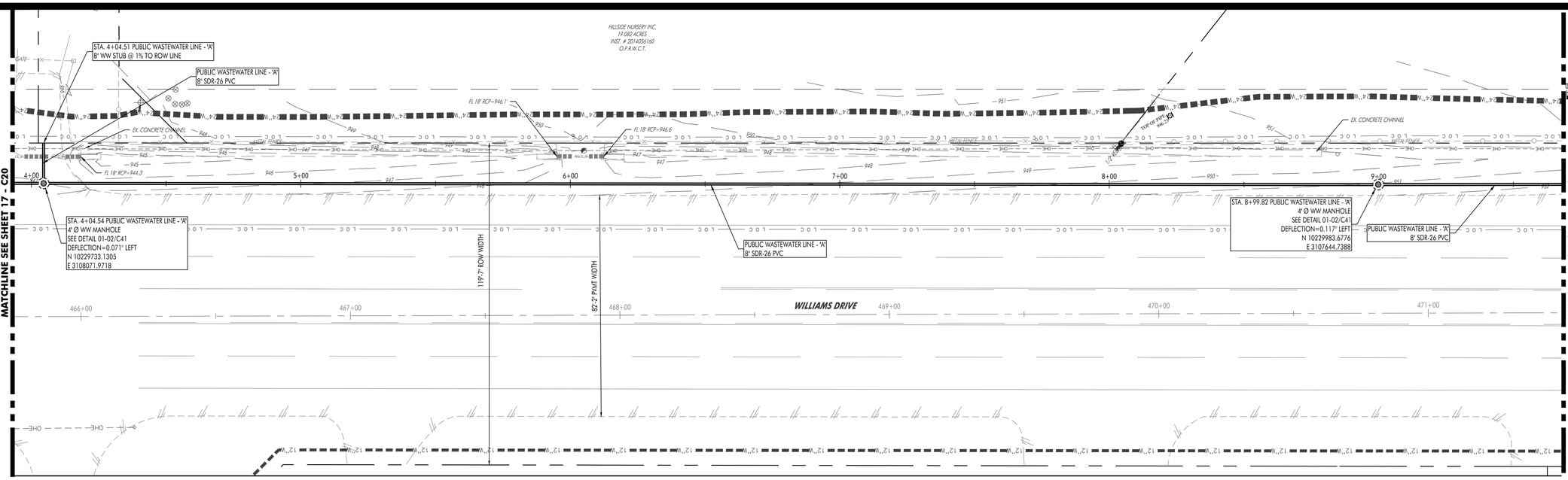
REVISIONS

NO.	DATE	DESCRIPTION

HEA PROJECT NO.22-012
ISSUED DATE: 6/19/2024

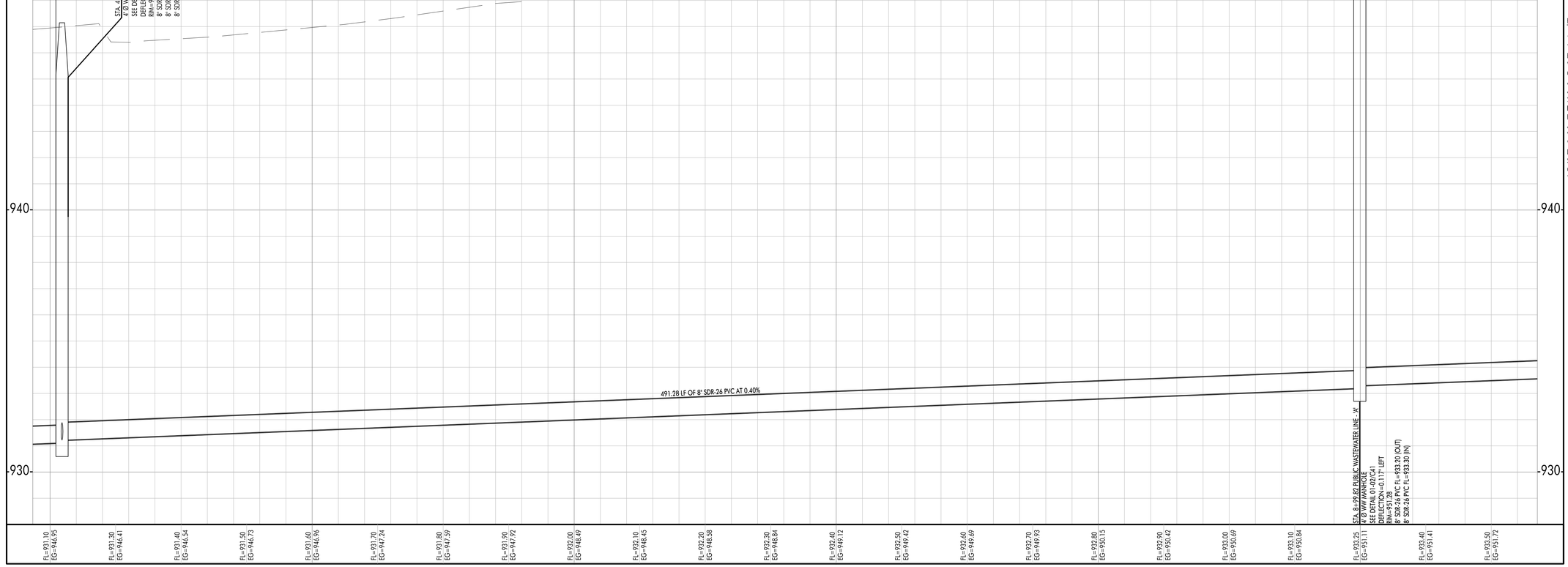
WASTEWATER PLAN AND PROFILE

SHEET NO.
C20



PUBLIC WASTEWATER LINE - 'A'

HORIZ SCALE: 1" = 20' VERT SCALE: 1" = 2'



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2. ANY EXISTING IMPROVEMENTS (CULVERTS, PAVEMENTS, FENCING, ETC.) ALONG ALL PORTIONS OF WASTEWATER ALIGNMENTS WHICH ARE DISTUBED, DAMAGED, OR REMOVED SHALL BE REPLACED TO EQUAL OR BETTER CONDITION PRIOR TO DISTURBANCE.

SCALE: 1" = 20'

0 20 40

LEGEND

- BENCHMARK (AS NOTED)
- CONCRETE MONUMENT FOUND (SET)
- NAIL FOUND (SET)
- PIPE FOUND
- STORMWATER MANHOLE (TO SCALE)
- JUNCTION BOX (TO SCALE)
- GIANT (INLET (TO SCALE)
- WASTEWATER MANHOLE (TO SCALE)
- WASTEWATER CLEANOUT
- GAS TEST STATION
- GAS METER
- ELECTRIC METER
- LIGHT POLE
- SIGNAL LIGHT POLE
- UTILITY POLE
- TELEPHONE MANHOLE
- FIRE HYDRANT
- GATE VALVE
- IRRIGATION CONTROL VALVE
- WATER METER
- EXISTING CONTOURS
- PROPOSED CONTOUR
- PROPOSED CURB AND GUTTER
- PROPOSED ASPHALT
- PROPOSED 4" DIA. GAS LINE
- PROPOSED 8" DIA. STORM SEWER LINE
- PROPOSED 8" DIA. WASTEWATER LINE
- PROPOSED 8" DIA. WATER LINE
- EXISTING CHAIN LINK FENCE
- EXISTING WIRE FENCE
- EXISTING WOOD FENCE
- SETBACK LINE
- EASEMENT LINE
- EXISTING ASPHALT
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING OVERHEAD TELEPHONE LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING WATER LINE (SIZE VARIES)
- EXISTING WASTEWATER LINE (SIZE VARIES)
- EXISTING STORM MAIN (SIZE VARIES)
- EXISTING FIBER OPTIC LINE
- EXISTING GAS LINE (SIZE VARIES)
- BENCHMARK LOCATION
- EXISTING TREE TO REMAIN (SIZE VARIES)
- EXISTING TREE TO BE REMOVED (SIZE VARIES)
- MONARCH HERITAGE TREE (SIZE VARIES)
- PARKING COUNT
- PARCEL LINES
- HANDICAP ACCESS (AHD)
- CONCRETE PAVING
- ASPHALT PAVING
- CONCRETE SIDEWALK
- CONCRETE WASHOUT
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- ROCK BERM
- INLET PROTECTION
- TREE PROTECTION
- ROCK DOCK
- LIMITS OF CONSTRUCTION

HAGOOD ENGINEERING ASSOCIATES
900 E. Main Street
Round Rock, TX 78664
Phone (512) 244-1546
Fax (512) 244-1010
www.heaeng.com
TBPE Registration No. F-12709

STATE OF TEXAS
TERRY R. HAGOOD
52960
REGISTERED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGOOD, P.E. 52960

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DATE SIGNED: 6/19/2024
ISSUED FOR: AGENCY REVIEW & BID

CONSTRUCTION PLANS FOR GEORGETOWN FAMILY YMCA WASTEWATER IMPROVEMENTS 6100 WILLIAMS DRIVE GEORGETOWN, TEXAS 78633

REVISIONS

NO.	DATE	DESCRIPTION

HEA PROJECT NO. 22-012
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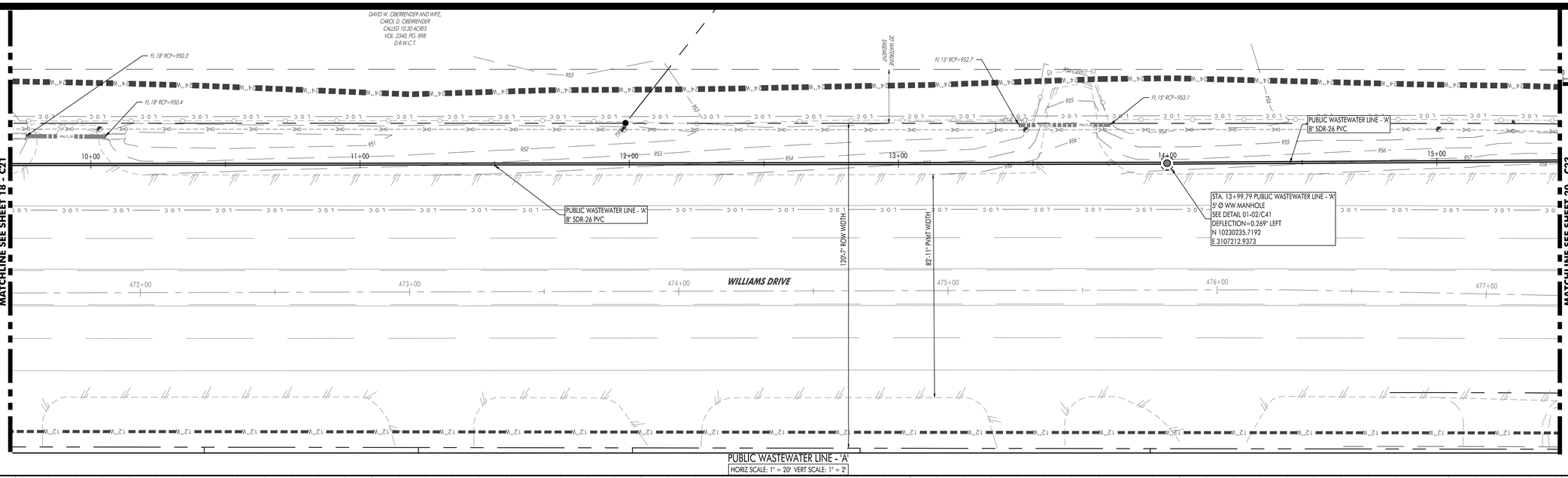
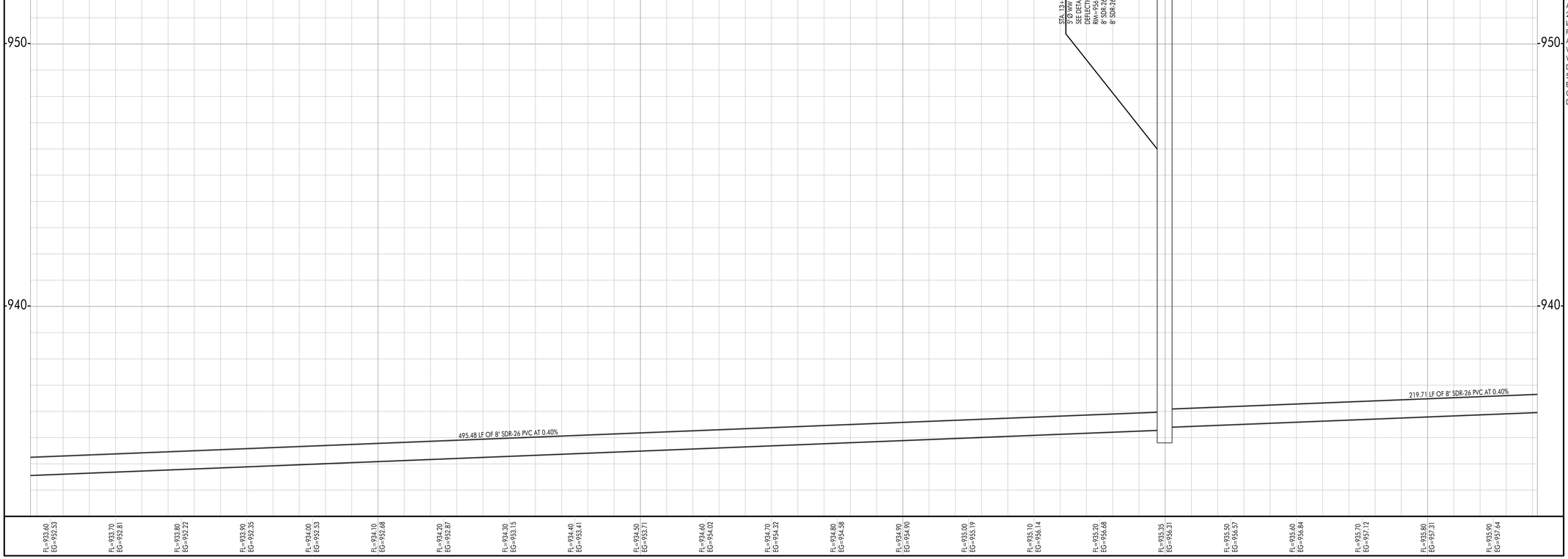
WASTEWATER PLAN AND PROFILE

SHEET NO.
C21
18
2024-_____-CON





PLAN/PROFILE NOTES:

1. ALL PORTIONS OF WW TRENCH BACKFILL SHALL BE PLACED IN ACCORDANCE WITH SPECIFICATION G4.05.E.2 AND TESTED IN ACCORDANCE WITH CIP 12 AND 13.
2. ANY EXISTING IMPROVEMENTS (CULVERTS, PAVEMENTS, FENCING, ETC.) ALONG ALL PORTIONS OF WASTEWATER ALIGNMENTS WHICH ARE DISTUBED, DAMAGED, OR REMOVED SHALL BE REPLACED TO EQUAL OR BETTER CONDITION PRIOR TO DISTURBANCE.

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WASTEWATER PLAN AND PROFILE

SHEET NO.
C22
19
2024-_____-CON

PUBLIC WASTEWATER LINE - 'A'
HORIZ SCALE: 1" = 20' VERT SCALE: 1" = 2'

0 20 40
SCALE: 1" = 20'

LEGEND

- WOOD BENCH HEADWALL
- CONCRETE HEADWALL
- PIPE FOUND/SET
- PIPE FOUND
- STORMWATER MANHOLE (TO SCALE)
- JUNCTION BOX (TO SCALE)
- GIANT INLET (TO SCALE)
- WASTEWATER MANHOLE (TO SCALE)
- WASTEWATER CLEANOUT
- GAS TEST STATION
- GAS METER
- ELECTRIC METER
- LIGHT POLE
- SIGNAL LIGHT POLE
- UTILITY POLE
- TELEPHONE MANHOLE
- FIRE HYDRANT
- GATE VALVE
- IRRIGATION CONTROL VALVE
- WATER METER
- EXISTING CONTOURS
- PROPOSED CONTOUR
- PROPOSED CURB AND GUTTER
- PROPOSED ASPHALT
- PROPOSED 8" DIA. GAS LINE
- PROPOSED 8" DIA. STORM SEWER LINE
- PROPOSED 8" DIA. WASTEWATER LINE
- PROPOSED 8" DIA. WATER LINE
- EXISTING OVHD LINE (NO TYPE)
- EXISTING WIRE FENCE
- EXISTING WOOD FENCE
- SPEACH LINE
- EASEMENT LINE
- EXISTING ASPHALT
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING OVERHEAD TELEPHONE LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING WATER LINE (SIZE VARIES)
- EXISTING WASTEWATER LINE (SIZE VARIES)
- EXISTING STORM WATER LINE (SIZE VARIES)
- EXISTING FIBER OPTIC LINE
- EXISTING GAS LINE (SIZE VARIES)
- BENCHMARK LOCATION
- EXISTING TREE TO REMAIN (SIZE VARIES)
- EXISTING TREE TO BE REMOVED (SIZE VARIES)
- MONARCH HERITAGE TREE (SIZE VARIES)
- PARKING COUNT
- PAVERS (JAVI)
- HANDICAP ACCESS (JAVI)
- CONCRETE PAVING
- ASPHALT PAVING
- CONCRETE SIDEWALK
- CONCRETE WASHOUT
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- ROCK BERM
- INLET PROTECTION
- TREE PROTECTION
- ROCK DOCK
- LIMITS OF CONSTRUCTION

PLAN/PROFILE NOTES:

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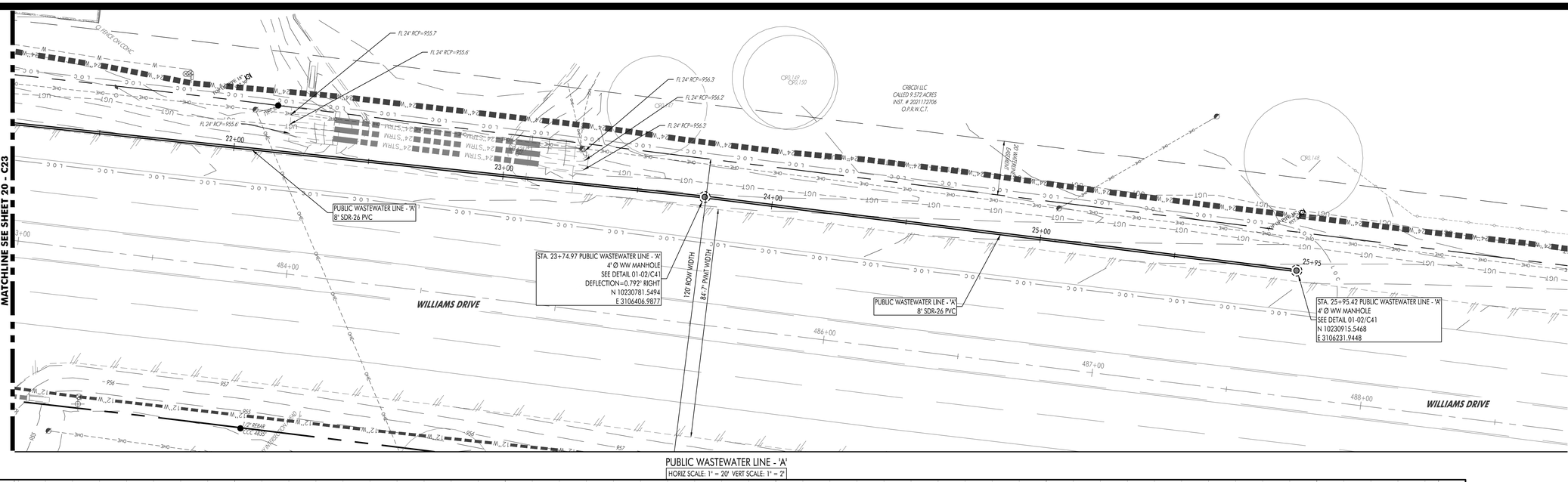
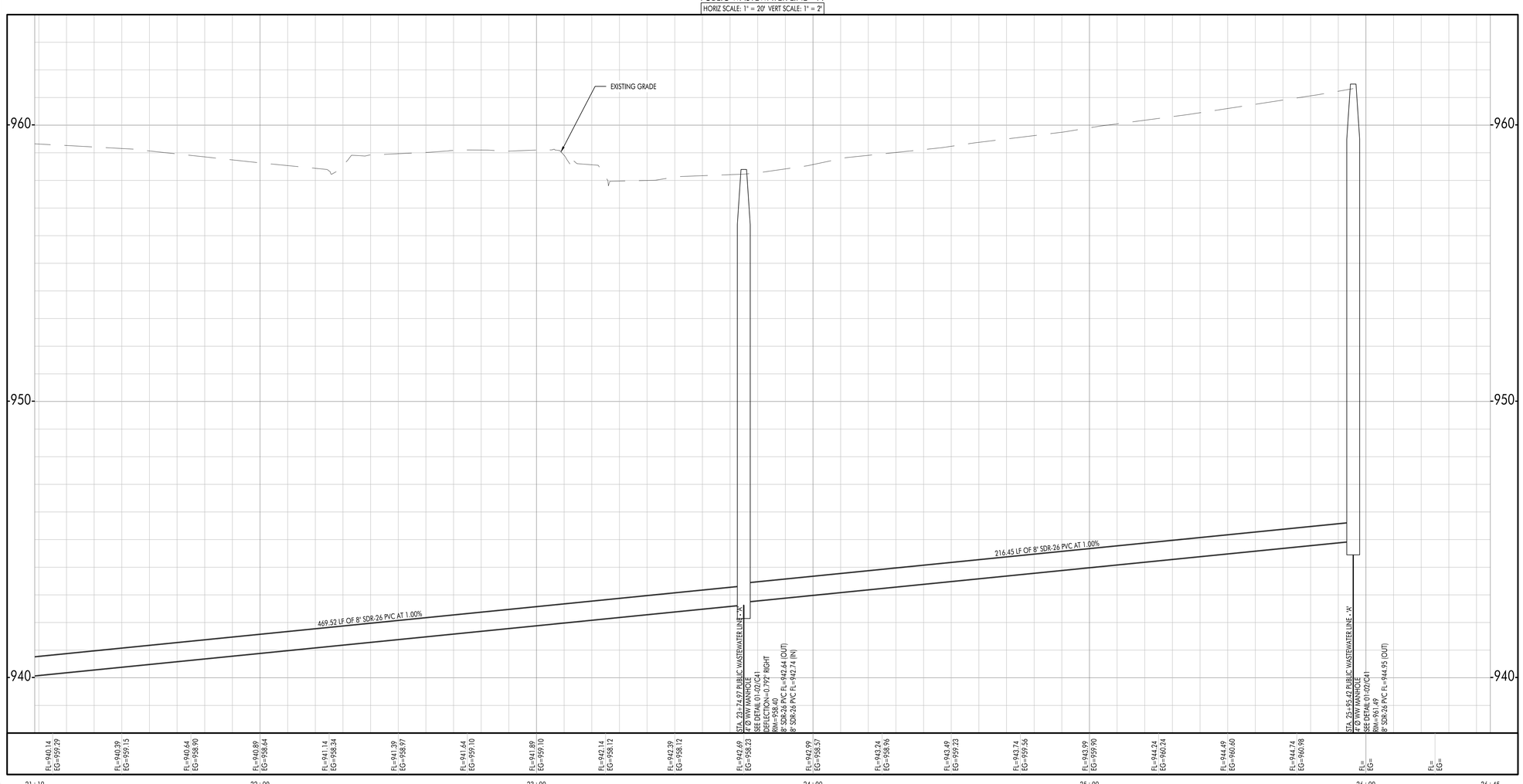
WASTEWATER PLAN AND PROFILE

SHEET NO.
C23
20
2024-_____-CON



PUBLIC WASTEWATER LINE - 'A'
HORIZ SCALE: 1" = 20' VERT SCALE: 1" = 2'



0 20 40
SCALE: 1" = 20'

LEGEND

- IRON ROD FOUND/SET
- CONCRETE MONUMENT FOUND/SET
- NAIL FOUND/SET
- PIPE FOUND
- STORM WATER MANHOLE (TO SCALE)
- JUNCTION BOX (TO SCALE)
- GRATE INLET (TO SCALE)
- WASTEWATER MANHOLE (TO SCALE)
- WASTEWATER CLEANOUT
- GAS TEST STATION
- GAS METER
- ELECTRIC METER
- LIGHT POLE
- SIGNAL LIGHT POLE
- UTILITY POLE
- TELEPHONE MANHOLE
- FIRE HYDRANT
- GATE VALVE
- IRRIGATION CONTROL VALVE
- WATER METER
- EXISTING CONTOURS
- PROPOSED CONTOUR
- PROPOSED CURB AND GUTTER
- PROPOSED ASPHALT
- PROPOSED 3" DIA. GAS LINE
- PROPOSED 8" DIA. STORM SEWER LINE
- PROPOSED 8" DIA. WASTEWATER LINE
- PROPOSED 8" DIA. WATER LINE
- EXISTING CHAIN LINK FENCE
- EXISTING WIRE FENCE
- EXISTING WOOD FENCE
- SETBACK LINE
- EASEMENT LINE
- EXISTING ASPHALT
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING OVERHEAD TELEPHONE LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING WATER LINE (SIZE VARIES)
- EXISTING WASTEWATER LINE (SIZE VARIES)
- EXISTING FORCE MAIN (SIZE VARIES)
- EXISTING FIBER OPTIC LINE
- EXISTING GAS LINE (SIZE VARIES)
- BENCHMARK LOCATION
- EXISTING TREE TO REMAIN (SIZE VARIES)
- EXISTING TREE TO BE REMOVED (SIZE VARIES)
- MONARCH HERITAGE TREE (SIZE VARIES)
- PARKING COUNT
- PARCEL LINES
- HANDICAP ACCESS LINES
- CONCRETE PAVING
- ASPHALT PAVING
- CONCRETE SIDEWALK
- CONCRETE WASHOUT
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- ROCK BERM
- INLET PROTECTION
- TREE PROTECTION
- MULCH SOCK
- LIMITS OF CONSTRUCTION

PLAN/PROFILE NOTES:

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6100 WILLIAMS DRIVE
GEORGETOWN, TEXAS 78633

REVISIONS

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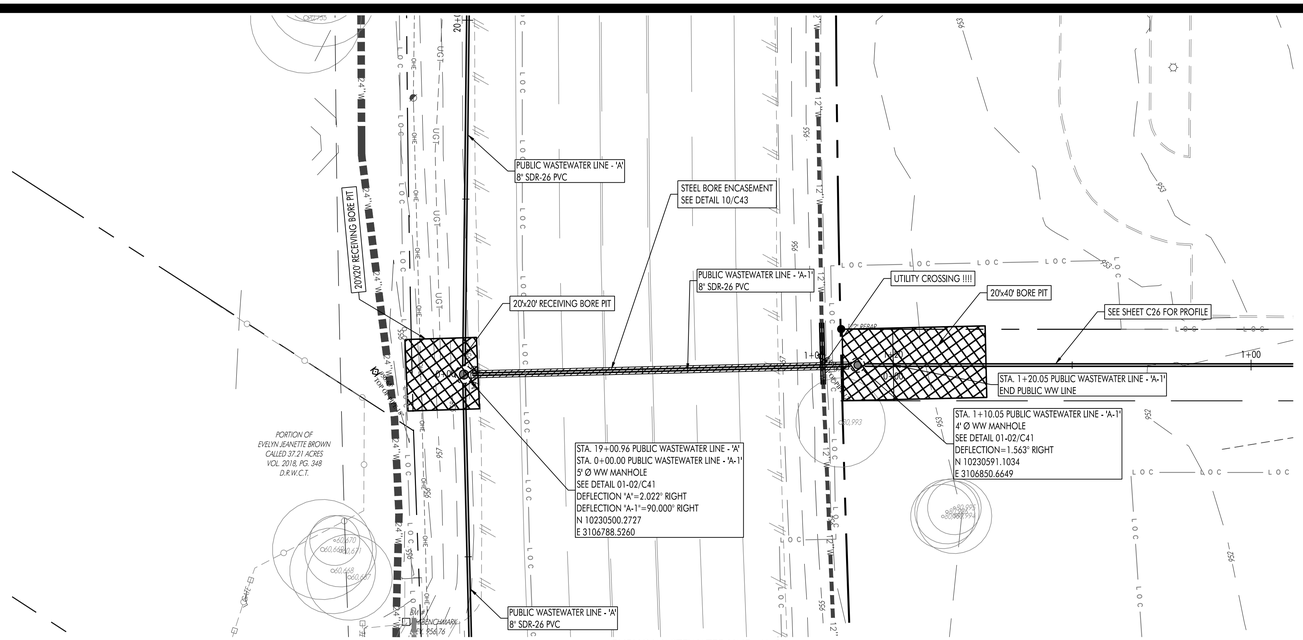
WASTEWATER PLAN AND PROFILE

SHEET NO.
C24
21
2024-_____-CON



LEGEND

- IRON ROD FOUND/SET
- CONCRETE MONUMENT FOUND/SET
- NAIL FOUND/SET
- PIPE FOUND
- STORMWATER MANHOLE (TO SCALE)
- JUNCTION BOX (TO SCALE)
- GRATE INLET (TO SCALE)
- WASTEWATER MANHOLE (TO SCALE)
- WASTEWATER CLEANOUT
- GAS TEST STATION
- GAS METER
- ELECTRIC METER
- LIGHT POLE
- SIGNAL LIGHT POLE
- UTILITY POLE
- TELEPHONE MANHOLE
- FIRE HYDRANT
- GATE VALVE
- IRRIGATION CONTROL VALVE
- WATER METER
- EXISTING CONTOURS
- PROPOSED CONTOUR
- PROPOSED CURB AND GUTTER
- PROPOSED ASPHALT
- PROPOSED X" DIA. GAS LINE
- PROPOSED X" DIA. STORM SEWER LINE
- PROPOSED X" DIA. WASTEWATER LINE
- PROPOSED X" DIA. WATER LINE
- EXISTING CHAIN LINK FENCE
- EXISTING WIRE FENCE
- EXISTING WOOD FENCE
- SETBACK LINE
- EASEMENT LINE
- EXISTING ASPHALT
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING OVERHEAD TELEPHONE LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING WATER LINE (SIZE VARIES)
- EXISTING WASTEWATER LINE (SIZE VARIES)
- EXISTING FORCE MAIN (SIZE VARIES)
- EXISTING FIBER OPTIC LINE
- EXISTING GAS LINE (SIZE VARIES)
- BENCHMARK LOCATION
- EXISTING TREE TO REMAIN (SIZE VARIES)
- EXISTING TREE TO BE REMOVED (SIZE VARIES)
- MONARCH/HERITAGE TREE (SIZE VARIES)
- PARKING COUNT
- PARCEL LINES
- HANDICAP ACCESS LINES
- CONCRETE PAVING
- ASPHALT PAVING
- CONCRETE SIDEWALK
- CONCRETE WASHOUT
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- ROCK BERM
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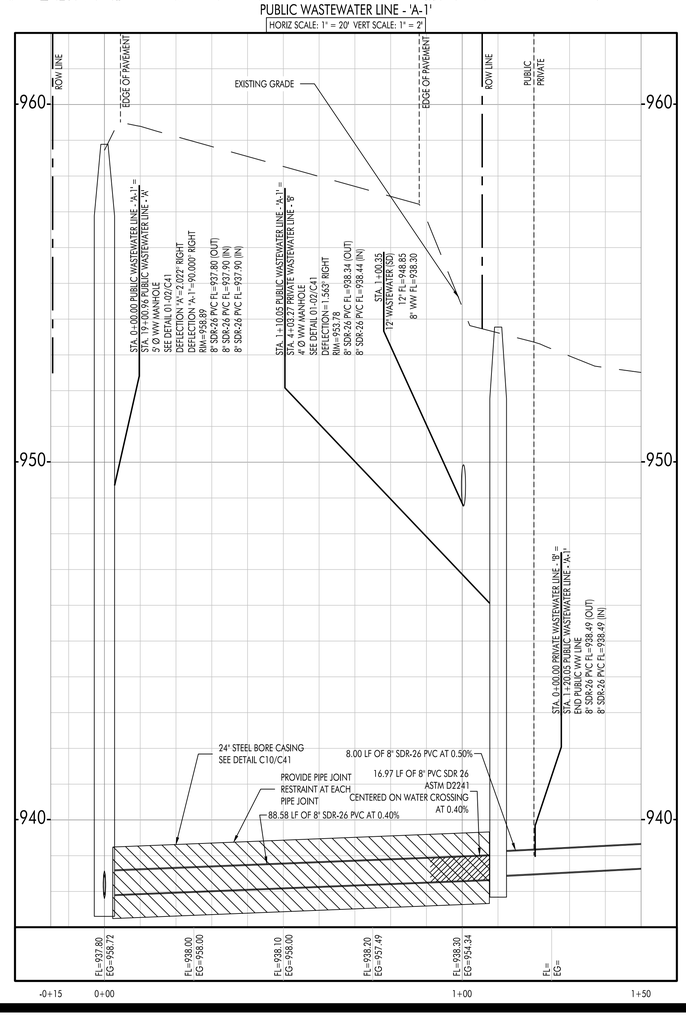
- LIMITS OF CONSTRUCTION



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CONSTRUCTION PLANS FOR GEORGETOWN FAMILY YMCA WASTEWATER IMPROVEMENTS

6100 WILLIAMS DRIVE
GEORGETOWN, TEXAS 78633

REVISIONS		
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WASTEWATER PLAN AND PROFILE

SHEET NO.
C25
22
2024-_____-CON

MATCHLINE SEE SHEET 22 - C25

STA. 6+02.00 PRIVATE WASTEWATER LINE - 'B'
CONNECT TO EXISTING WW

STA. 5+92.00 PRIVATE WASTEWATER LINE - 'B'
4' Ø WW MANHOLE
SEE DETAIL 01-02/C41
DEFLECTION=36.07° LEFT

PRIVATE WASTEWATER LINE - 'B'
6" SDR-26 PVC

PLAN/PROFILE NOTES:

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20'x40' BORE PIT

STA. 1+20.05 PUBLIC WASTEWATER LINE - 'A-1'
END PUBLIC WW LINE

STA. 1+10.05 PUBLIC WASTEWATER LINE - 'A-1'
4' Ø WW MANHOLE
SEE DETAIL 01-02/C41
DEFLECTION=1.563° RIGHT
N 10230591.1034
E 3106850.6649

PRIVATE WASTEWATER LINE - 'B'
8' SDR-26 PVC

STA. 4+03.27 PRIVATE WASTEWATER LINE - 'B'
4' Ø WW MANHOLE
SEE DETAIL 01-02/C41
DEFLECTION=90.00° LEFT

STA. 4+03.27 PRIVATE WASTEWATER LINE - 'B'
6" WW STUB

BM #2
TOP BENCHMARK
ELEV. 953.92

5' W

5' SW RESR. PARK. FOR REDUCE MOBILITY

5N FAMILY PARKING

PAVILION

BENCH

METAL FENCE

RINGSET

METAL POST 2INCH

WOOD GAZEBO

DRAINAGE CHANNEL

S 85°45'12" W
420.24'

0 20 40
SCALE: 1" = 20'

LEGEND

- IRON ROD FOUND/SET
- CONCRETE MONUMENT FOUND/SET
- NAIL FOUND/SET
- PIPE FOUND
- STORMWATER MANHOLE (TO SCALE)
- JUNCTION BOX (TO SCALE)
- GRATE INLET (TO SCALE)
- WASTEWATER MANHOLE (TO SCALE)
- WASTEWATER CLEANOUT
- GAS TEST STATION
- GAS METER
- ELECTRIC METER
- LIGHT POLE
- SIGNAL LIGHT POLE
- UTILITY POLE
- TELEPHONE MANHOLE
- FIRE HYDRANT
- GATE VALVE
- IRRIGATION CONTROL VALVE
- WATER METER
- EXISTING CONTOURS
- PROPOSED CONTOUR
- PROPOSED CURB AND GUTTER
- PROPOSED ASPHALT
- PROPOSED 3" DIA. GAS LINE
- PROPOSED 3" DIA. STORM SEWER LINE
- PROPOSED 3" DIA. WASTEWATER LINE
- PROPOSED 3" DIA. WATER LINE
- EXISTING CHAIN LINK FENCE
- EXISTING WIRE FENCE
- EXISTING WOOD FENCE
- SETBACK LINE
- EASEMENT LINE
- EXISTING ASPHALT
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING OVERHEAD TELEPHONE LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING WATER LINE (SIZE VARIES)
- EXISTING WASTEWATER LINE (SIZE VARIES)
- EXISTING FORCE MAIN (SIZE VARIES)
- EXISTING FIBER OPTIC LINE
- EXISTING GAS LINE (SIZE VARIES)
- BENCHMARK LOCATION
- EXISTING TREE TO REMAIN (SIZE VARIES)
- EXISTING TREE TO BE REMOVED (SIZE VARIES)
- MONARCH HERITAGE TREE (SIZE VARIES)
- PARKING COUNT
- PARCEL LINES
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- CONCRETE WASHOUT
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- ROCK BERM
- INLET PROTECTION
- TREE PROTECTION
- MULCH SOCK
- LIMITS OF CONSTRUCTION

PRIVATE WASTEWATER LINE - 'B'

HORIZ SCALE: 1" = 20' VERT SCALE: 1" = 2'

STA. 0+00.00 PRIVATE WASTEWATER LINE - 'B' =
STA. 1+20.05 PUBLIC WASTEWATER LINE - 'A-1'
END PUBLIC WW LINE
8" SDR-26 PVC FL=938.49 (OUT)
8" SDR-26 PVC FL=938.49 (IN)

401.27 LF OF 8" SDR-26 PVC AT 0.50%

STA. 4+03.27 PRIVATE WASTEWATER LINE - 'B'
4' Ø WW MANHOLE
SEE DETAIL 01-02/C41
DEFLECTION=90.00° LEFT
RIM=949.26
6" SDR-26 PVC FL=940.61 (IN)
8" SDR-26 PVC FL=940.51 (OUT)
8" SDR-26 PVC FL=940.61 (OUT)

184.74 LF OF 6" SDR-26 PVC AT 1.74%

8.00 LF OF 8" SDR-26 PVC AT 0.50%

STA. 5+92.00 PRIVATE WASTEWATER LINE - 'B'
4' Ø WW MANHOLE
SEE DETAIL 01-02/C41
DEFLECTION=36.07° LEFT
RIM=949.39
6" SDR-26 PVC FL=943.90 (OUT)
8" SDR-26 PVC FL=943.80 (IN)

STA. 6+02.00 PRIVATE WASTEWATER LINE - 'B'
CONNECT TO EXISTING WW
8" SDR-26 PVC FL=945.91 (OUT)

	FL=938.61 EG=952.58	FL=938.74 EG=952.31	FL=938.86 EG=951.98	FL=938.99 EG=951.60	FL=939.11 EG=951.04	FL=939.24 EG=950.60	FL=939.26 EG=950.28	FL=939.49 EG=950.12	FL=939.61 EG=950.12	FL=939.74 EG=950.25	FL=939.86 EG=950.03	FL=939.99 EG=949.84	FL=940.11 EG=949.74	FL=940.24 EG=949.79	FL=940.36 EG=949.51	FL=940.49 EG=949.13	FL=940.99 EG=949.01	FL=941.42 EG=948.85	FL=941.86 EG=948.64	FL=942.29 EG=948.53	FL=942.73 EG=946.03	FL=943.17 EG=947.44	FL=943.60 EG=947.78	FL=945.90 EG=948.48
	0+00			1+00			2+00				3+00					4+00				5+00				6+00	6+05

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WASTEWATER PLAN AND PROFILE

SHEET NO.
C26
23
2024-_____-CON

GUIDELINES FOR DESIGN AND INSTALLATION OF
TEMPORARY EROSION AND SEDIMENTATION CONTROLS

TYPE OF STRUCTURE	REACH LENGTH	MAXIMUM DRAINAGE AREA	SLOPE
SILT FENCE	N/A	2 ACRES	0 – 10%
	200 FEET	2 ACRES	10 – 20%
	100 FEET	1 ACRE	20 – 30%
	50 FEET	1/2 ACRE	> 30%
TRIANGLE FILTER DIKE	100 FEET	1/2 ACRE	< 30% SLOPE
	50 FEET	1/4 ACRE	> 30% SLOPE
ROCK BERM *, **	500 FEET	< 5 ACRES	0 – 10%

* FOR ROCK BERM DESIGN WHERE PARAMETERS ARE OTHER THAN STATED, DRAINAGE AREA CALCULATIONS AND ROCK BERM DESIGN MUST BE SUBMITTED FOR REVIEW.

** HIGH SERVICE ROCK BERMS MAY BE REQUIRED IN AREAS OF ENVIRONMENTAL SIGNIFICANCE AS DETERMINED BY THE CITY OF GEORGETOWN.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
TEMPORARY EROSION AND SEDIMENTATION CONTROL GUIDELINES
ADOPTED 6/21/2006 — EC01 — NTS — 1/2003

01 TEMP ESC GUIDELINES — NTS

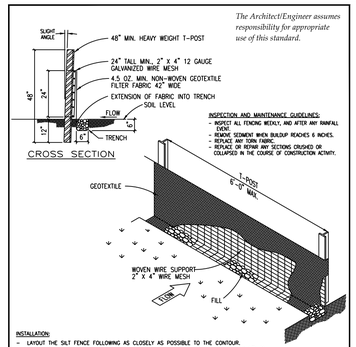
NOTE: THIS SECTION IS INTENDED TO ASSIST THOSE PERSONS PREPARING WATER POLLUTION ABATEMENT PLANS (WPAP) OR STORM WATER POLLUTION PREVENTION PLANS (SWPP) THAT COMPLY WITH FEDERAL, STATE AND/OR LOCAL STORM WATER REGULATIONS.

1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO REMOVE EROSION/SEDIMENTATION CONTROLS AT THE COMPLETION OF PROJECT AND GRASS RESTORATION.
2. ALL PROJECTS WITHIN THE RECHARGE ZONE OF THE EDWARD'S AQUIFER SHALL SUBMIT A BEST MANAGEMENT PRACTICES AND WATER POLLUTION AND ABATEMENT PLAN TO THE TNRCC FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
3. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS TO BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN AND WATER POLLUTION ABATEMENT PLAN. DEVIATIONS FROM THE APPROVED PLANS MUST BE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE.
4. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL EXPOSED SOILS EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING. A PLANTING ESTABLISHED TO BE DONE BETWEEN THE DATES SPECIFIED. THE SEED SHALL BE PLANTED WITH THE ADDITION OF WINTER FESCUE (KENTUCKY 31) AT A RATE OF 100#/ACRE. GRASS SHALL BE COMMON BERMUDA GRASS, HULLED, MINIMUM 80% PURE LIVE SEED. ALL GRASS SEED SHALL BE FREE FROM NOXIOUS WEED. GRADE "A" RECENT CROP, RECLEANED AND TREATED WITH APPROPRIATE FUNGICIDE AT TIME OF MIXING. SEED SHALL BE FURNISHED IN SEALED, STANDARD CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS.
5. ALL DISTURBED AREAS TO BE RESTORED AS NOTED IN THE WATER POLLUTION ABATEMENT PLAN.
6. THE PLANTED AREA TO BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL PENETRATE AND WET THE SOIL TO A DEPTH OF 4" TO 6". WATER SHALL BE APPLIED AT 15-20 DAY INTERVALS DURING THE FIRST TWO MONTHS TO INSURE GERMINATION AND ESTABLISHMENT OF THE GRASS. RAINFALL OCCURRENCES OF 1/2 INCH OR GREATER TO POSTPONE THE WATERING SCHEDULE ONE WEEK.
7. RESTORATION TO BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2 INCHES HIGH WITH 95# COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 25 SQUARE FEET EXIST.
8. A MINIMUM OF FOUR (4) INCHES OF TOPSOIL TO BE PLACED IN ALL AREAS DISTURBED BY CONSTRUCTION.
9. THE CONTRACTOR TO HYDROMULCH OR SOD (AS SHOWN ON PLANS) ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION.
10. EROSION AND SEDIMENTATION CONTROLS TO BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILDUP WITHIN TREE DRIPLINE.
11. TO AVOID SOIL COMPACTION, CONTRACTOR SHALL NOT ALLOW VEHICULAR TRAFFIC, PARKING, OR STORAGE OF EQUIPMENT OR MATERIALS IN TREE SHORING AREAS.
12. FOR EACH INCH OF TRUNK DIAMETER AT 4.5 FEET ABOVE GRADE, A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF EIGHT (8) FEET OR UP TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE FENCING.
13. TREES TO BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
14. ANY ROOT EXPOSED BY CONSTRUCTION ACTIVITY TO BE PROTECTED FROM BOTH THE SUN, SHOVEL-PRUNED AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. ALL EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
15. CONTRACTOR TO PRUNE VEGETATION TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT BEFORE DAMAGE OCCURS. (TRIMMING OF BRANCHES, ETC.). ALL FINISHED PRUNING TO BE DONE ACCORDING TO RECOMMENDED PROCEDURES/SPECIFICATIONS OF THE INDUSTRY (REFERENCE THE "NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES").
16. THE CONTRACTOR IS TO INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY RAINFALL EXCEEDING 1/4 INCH TO VERIFY THAT THEY HAVE NOT BEEN SIGNIFICANTLY DISTURBED BY ACCIDENTAL SEDIMENT AFTER A SIGNIFICANT RAINFALL TO BE REMOVED AND PLACED IN THE OWNER DESIGNATED SPOIL DISPOSAL SITE. THE CONTRACTOR TO CONDUCT PERIODIC INSPECTIONS OF ALL EROSION/SEDIMENTATION CONTROLS AND TO MAKE ANY REPAIRS OR MODIFICATIONS NECESSARY TO ASSURE CONTINUED EFFECTIVE OPERATION OF EACH DEVICE.
17. WHERE PHASING OR SEQUENCING OF CHANGE, IMPLEMENTAL PAVING SURFACE, TREE WELL, OR OTHER SUCH IMPROVEMENTS ARE SHOWN ON PLANS, THE AREA REQUIRED TO BE PROTECTED TREE, EXACT THE FENCE APPROXIMATELY TWO TO FOUR FEET (2'-4') BEHIND THE AREA IN QUESTION.
18. NO ABOVE AND/OR BELOW GROUND TEMPORARY FUEL STORAGE FACILITIES TO BE LOCATED ON THE PROJECT SITE.
19. IF EROSION AND SEDIMENTATION CONTROL SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER'S REPRESENTATIVE AND THE CONTRACTOR TO EXAMINE THE EXISTING EROSION AND SEDIMENTATION CONTROL SYSTEMS FOR DAMAGE PRIOR TO CONSTRUCTION. ANY DAMAGE TO PREEXISTING EROSION AND SEDIMENTATION CONTROLS NOTED TO BE REPAIRED AT OWNER'S EXPENSE.
20. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM ACCIDENTAL SPILL TO BE REMOVED AND DISPOSED OF PROPERLY.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES
ADOPTED 6/21/2006 — EC01A — NTS — 1/2003

02 ESC TREE PROTECTION NOTES — NTS



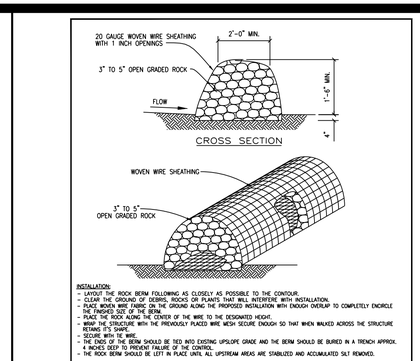
INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL EVENT.
- REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
- REPLACE ANY TORN FABRIC.
- REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY.

INSTALLATION:
- LAYOUT THE SILT FENCE FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS, PLANTS (INCLUDING GRASSES TALLER THAN 2") TO PROVIDE A SMOOTH FLOW APPROACH SURFACE. EXCAVATE 6" DEEP X 6" WIDE TRENCH ON UPSTREAM SIDE OF FACE PER PLANS.
- DRIVE THE HEAVY DUTY T-POST AT LEAST 12 INCHES INTO THE GROUND AND AT A SLIGHT ANGLE TOWARDS THE FLOW.
- ATTACH THE 2" X 4" 12 GAUGE WELDED WIRE MESH TO THE T-POST WITH 11 1/2 GAUGE GALVANIZED T-POST CLIPS. THE WIRE MESH TO BE PLACED IN THE TRENCH AT GROUND LEVEL. THE WELDED WIRE MESH TO BE OVERLAPPED 6" AND TIED AT LEAST 8 TIMES WITH WIRE TIES.
- THE SILT FENCE TO BE INSTALLED WITH A SHORT A MINIMUM OF 6" WIDE PLACED ON THE UPHILL SIDE OF THE FENCE INSIDE EXCAVATED TRENCH. THE FABRIC TO OVERLAP THE TOP OF THE WIRE BY 1".
- ANCHOR THE SILT FENCE BY BACKFILLING WITH EXCAVATED DIRT AND ROCKS (NOT LARGER THAN 2").
- GEOTEXTILE SPLICES SHOULD BE A MINIMUM OF 18" WIDE ATTACHED IN AT LEAST 6 PLACES. SPLICES IN CONCENTRATED FLOW AREAS WILL NOT BE ACCEPTED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
SILT FENCE DETAIL
ADOPTED 6/21/2006 — EC02 — NTS — 1/2003

03 SILT FENCE — NTS



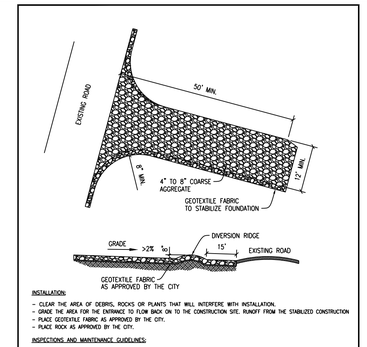
INSTALLATION:
- LAYOUT THE ROCK BERM FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- PLACE WOVEN WIRE FABRIC ON THE GROUND ALONG THE PROPOSED INSTALLATION WITH ENOUGH OVERLAP TO COMPLETELY ENCIRCLE ROCK WHEN THE ENDS ARE JOINED.
- PLACE THE ROCK ALONG THE CENTER OF THE WIRE TO THE DESIGNATED HEIGHT.
- WRAP THE STRUCTURE WITH THE PREVIOUSLY PLACED WIRE MESH SECURE ENOUGH SO THAT WHEN WALKED ACROSS THE STRUCTURE RETAINS IT'S SHAPE.
- SECURE WITH TIE WIRE.
- THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROX. 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
- THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL EVENT BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
- REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER.
- REPAIR ANY LOOSE WIRE SHEATHING.
- THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
- THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
ROCK BERM DETAIL
ADOPTED 6/21/2006 — EC03 — NTS — 1/2003

04 ROCK BERM — NTS



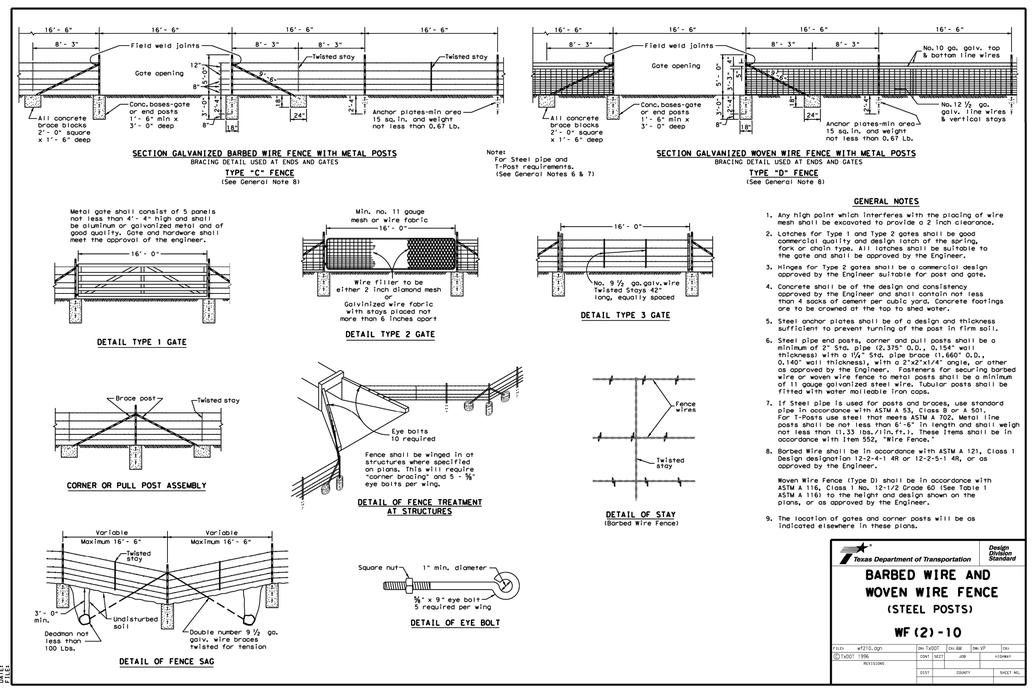
INSTALLATION:
- CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE. RUNOFF FROM THE STABILIZED CONSTRUCTION ENTRANCE IS NOT PERMITTED AS APPROVED BY THE CITY.
- PLACE GEOTEXTILE FABRIC AS APPROVED BY THE CITY.
- PLACE ROCK AS APPROVED BY THE CITY.

INSPECTIONS AND MAINTENANCE GUIDELINES:
- THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
- WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
STABILIZED CONSTRUCTION ENTRANCE
ADOPTED 6/21/2006 — EC06 — NTS — 1/2003

05 STABILIZED CONSTRUCTION ENTRANCE — NTS

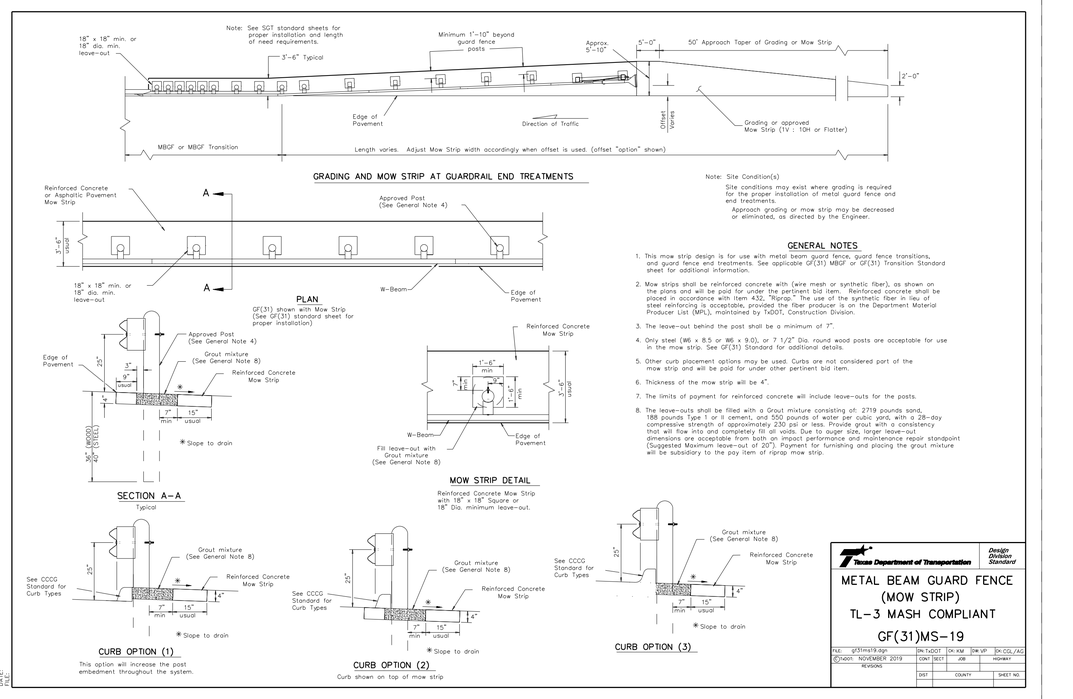


GENERAL NOTES

1. Any high point which interferes with the placing of wire mesh shall be excavated to provide a 2 inch clearance.
2. Latches for Type 1 and Type 2 gates shall be good commercial quality and design latch of the spring, fork or chain type. All latches shall be suitable to the gate and shall be approved by the Engineer.
3. Hinges for Type 2 gates shall be a commercial design approved by the Engineer suitable for post and gate.
4. Concrete shall be of the design and consistency approved by the Engineer and shall contain not less than 4 sacks of cement per cubic yard. Concrete footings are to be crowned at the top to shed water.
5. Steel anchor plates shall be of a design and thickness sufficient to prevent turning of the post in firm soil.
6. Steel pipe end posts, corner and pull posts shall be a minimum of 2" Std. pipe (2.375" O.D., 0.154" wall thickness) with a 1¼" Std. pipe brace (1.660" O.D., 0.140" wall thickness), with a 2"x2"x¼" angle, or other as approved by the Engineer. Fasteners for securing barbed wire or woven wire fence to metal posts shall be a minimum of 11 gauge galvanized steel wire. Tubular posts shall be fitted with water malleable iron caps.
7. If Steel pipe is used for posts and braces, use standard pipe in accordance with ASTM A 53, Class B or A 501. For T-Posts use steel that meets ASTM A 702. Metal line posts shall be not less than 6'-6" in length and shall weigh not less than (1.33 lbs./lin.ft.). These items shall be in accordance with Item 552, "Wire Fence."
8. Barbed Wire shall be in accordance with ASTM A 121, Class 1 Design designation 12-2-4-1 4R or 12-2-5-1 4R, or as approved by the Engineer.

   Woven Wire Fence (Type D) shall be in accordance with ASTM A 116, Class 1 No. 12-1/2 Grade 60 (See Table 1 ASTM A 116) to the height and design shown on the plans, or as approved by the Engineer.
9. The location of gates and corner posts will be as indicated elsewhere in these plans.

Texas Department of Transportation — Design Division Standard
BARBED WIRE AND WOVEN WIRE FENCE (STEEL POSTS)
WF(2)-10
FILE: wf210.dgn — DN: TxDOT — CK: BM — DW: VP — CK:
©TxDOT: 1996 — CONT: — SECT: — JOB: — HIGHWAY:
REVISIONS — DIST: — COUNTY: — SHEET NO.

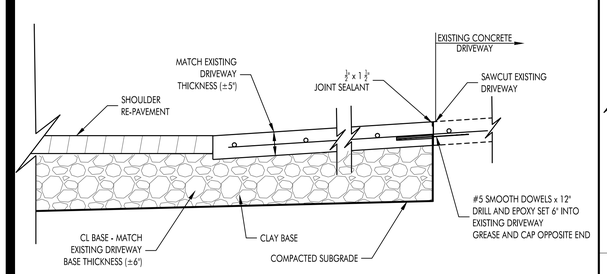


Note: Site Condition(s)
Site conditions may exist where grading is required for the proper installation of metal guard fence and end treatments.
Approach grading or mow strip may be decreased or eliminated, as directed by the Engineer.

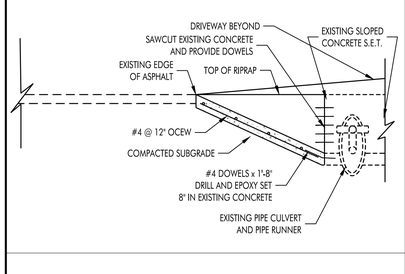
GENERAL NOTES

1. This mow strip design is for use with metal beam guard fence, guard fence transitions, and guard fence end treatments. See applicable GF(31) MBGF or GF(31) Transition Standard sheet for additional information.
2. Mow strips shall be reinforced concrete with (wire mesh or synthetic fiber), as shown on the plans and will be paid for under the pertinent bid item. Reinforced concrete shall be placed in accordance with Item 432, "Riprap." The use of the synthetic fiber in lieu of steel reinforcing is acceptable, provided the fiber producer is on the Department Material Producer List (MPL), maintained by TxDOT, Construction Division.
3. The leave-out behind the post shall be a minimum of 7".
4. Only steel (W6 x 8.5 or W8 x 9.0), or 7 1/2" Dia. round wood posts are acceptable for use in the mow strip. See GF(31) Standard for additional details.
5. Other curb placement options may be used. Curbs are not considered part of the mow strip and will be paid for under other pertinent bid item.
6. Thickness of the mow strip will be 4".
7. The limits of payment for reinforced concrete will include leave-outs for the posts.
8. The leave-outs shall be filled with a Grout mixture consisting of: 2719 pounds sand, 188 pounds Type 1 or II cement, and 550 pounds of water per cubic yard, with a 28-day compressive strength of approximately 230 psi or less. Provide grout with a consistency that will flow into and completely fill all voids. Due to auger size, larger leave-out dimensions are acceptable from both an impact performance and maintenance repair standpoint (Suggested Maximum leave-out of 20"). Payment for furnishing and placing the grout mixture will be subsidiary to the pay item of riprap mow strip.

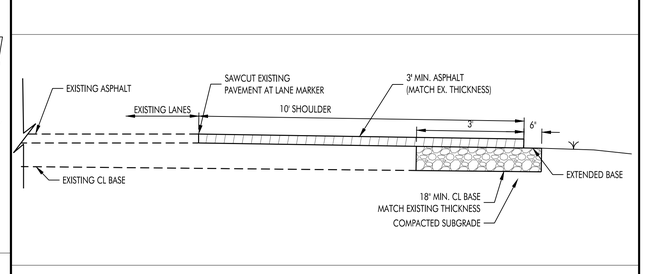
Texas Department of Transportation — Design Division Standard
METAL BEAM GUARD FENCE (MOW STRIP) TL-3 MASH COMPLIANT
GF(31)MS-19
FILE: gf31ms19.dgn — DN: TxDOT — CK: KM — DW: VP — CK: CGL/JAC
©TxDOT: NOVEMBER 2019 — CONT: — SECT: — JOB: — HIGHWAY:
REVISIONS — DIST: — COUNTY: — SHEET NO.



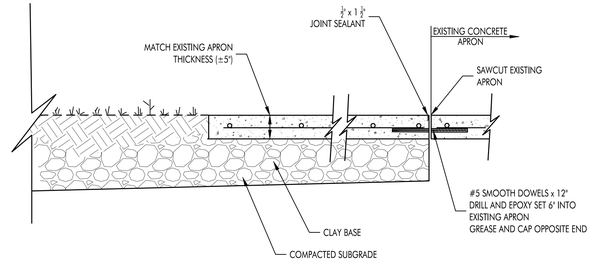
06 CONCRETE DRIVEWAY REPAIR — 1"=1'



07 S.E.T. REPAIR — 1"=2'



08 SHOULDER REPAVEMENT DETAIL — 1"=2'



09 CONCRETE APRON REPAIR — 1"=1'

HAGOOD ENGINEERING ASSOCIATES
900 E. Main Street
Round Rock, TX 78664
Phone (512) 244-1546
Fax (512) 244-1010
www.heaeng.com
TBPE Registration No. F-12709

STATE OF TEXAS — TERRY R. HAGOOD — 52960 — REGISTERED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGOOD, P.E. 52960.

JOB NO. 22-012 © 2024 HEA, Inc.
DATE SIGNED: 6/19/2024
ISSUED FOR: AGENCY REVIEW & BID

CONSTRUCTION PLANS FOR GEORGETOWN FAMILY YMCA WASTEWATER IMPROVEMENTS 6100 WILLIAMS DRIVE GEORGETOWN, TEXAS 78633

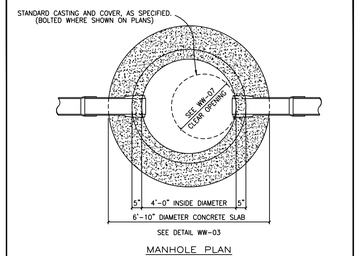
REVISIONS

NO.	DATE	DESCRIPTION

HEA PROJECT NO.22-012
ISSUED DATE: 6/19/2024

ESC AND STORM DETAILS

SHEET NO.
C42
29
2024-_____-CON



MANHOLE PLAN

CITY OF GEORGETOWN NOTES:

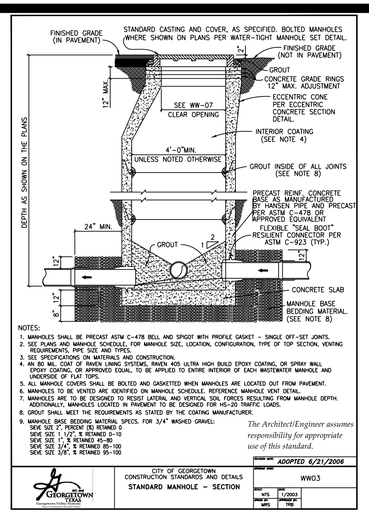
MANHOLE DETAILS SHALL REFLECT THE CITY'S MINIMUM SPECIFICATIONS, AS STATED BELOW:

A. ALL MANHOLES SHALL BE 48" I.D., R.C.P., CLASS III, WITH RUBBER PROFILE GASKET – SINGLE OFF-SET JOINT CONFORMING TO ASTM C478, C433 AND C76.
B. ALL MANHOLES SHALL HAVE FRAME AND COVER, AS MANUFACTURED BY EAST JORDAN IRON WORKS (AS PER DETAIL # WW-07) OR APPROVED EQUIVALENT.
C. ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON FRAME AND COVER.
D. ALL MANHOLES SHALL HAVE AN ECCENTRIC CONE.
E. MANHOLES MAY HAVE A FLAT LID, IF APPROVED BY CITY OF GEORGETOWN, BEING 12" THICK WITH A MINIMUM 30" OPENING, AS MANUFACTURED BY HANSEN PIPE AND PRECAST OR APPROVED EQUAL, M.I.G. CONFORMING TO ASTM C478, 5000 P.S.I. CONCRETE, TRAFFIC BEARING AND WITH PROFILE GASKET – SINGLE OFF-SET JOINT CONFORMING TO ASTM C443.
F. INVERTS AND FLEXIBLE SEAL BOOTS, PER ASTM C-923, SHALL BE CAST INTO BASE SECTION.
G. MINIMUM DROP BETWEEN INVERTS SHALL BE ONE-TENTH OF A FOOT (0.1').
H. GRADE RINGS WITH AN I.D. TO MATCH FRAMES CLEAR OPENING WITH A MAXIMUM ADJUSTMENT OF 12" ARE ALLOWED.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME: ADOPTED 6/21/2006
STANDARD MANHOLE – PLAN	DRAWING NAME: WW02
	SCALE: NTS; DATE: 1/2003; DRAWN BY: MPS; CHECKED BY: TRB

01 STANDARD MANHOLE PLAN — NTS

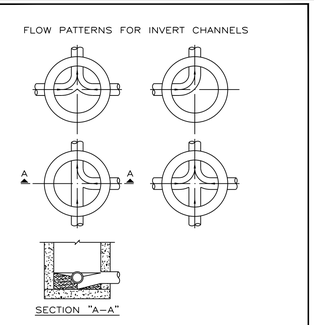


NOTES:
1. MANHOLES SHALL BE PRECAST ASTM C-478 BELL AND SPIGOT WITH PROFILE GASKET – SINGLE OFF-SET JOINTS.
2. SEE PLANS AND MANHOLE SCHEDULE, FOR MANHOLE SIZE, LOCATION, CONFIGURATION, TYPE OF TOP SECTION, VENTING REQUIREMENTS, PIPE SIZE AND TYPES.
3. SEE SPECIFICATIONS ON MATERIALS AND CONSTRUCTION.
4. AN 80 MIL COAT OF RAVEN LINING SYSTEMS, RAVEN 405 ULTRA HIGH BUILD EPOXY COATING, OR SPRAY WALL EPOXY COATING OR APPROVED EQUAL, TO BE APPLIED TO ENTIRE INTERIOR OF EACH WASTEWATER MANHOLE AND UNDERSIDE OF FLAT TOPS.
5. ALL MANHOLE COVERS SHALL BE BOLTED AND GASKETTED WHEN MANHOLES ARE LOCATED OUT FROM PAVEMENT.
6. MANHOLES TO BE VENTED ARE IDENTIFIED ON MANHOLE SCHEDULE. REFERENCE MANHOLE VENT DETAIL.
7. MANHOLES ARE TO BE DESIGNED TO RESIST LATERAL AND VERTICAL SOIL FORCES RESULTING FROM MANHOLE DEPTH. ADDITIONALLY, MANHOLES LOCATED IN PAVEMENT TO BE DESIGNED FOR HS-20 TRAFFIC LOADS.
8. GROUT SHALL MEET THE REQUIREMENTS AS STATED BY THE COATING MANUFACTURER.
9. MANHOLE BASE BEDDING MATERIAL SPECS, FOR 3/4" WASHED GRAVEL:
   SIEVE SIZE 2", PERCENT (%) RETAINED 0
   SIEVE SIZE 1 1/2", % RETAINED 0–10
   SIEVE SIZE 1", % RETAINED 45–80
   SIEVE SIZE 3/4", % RETAINED 85–100
   SIEVE SIZE 3/8", % RETAINED 95–100

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME: ADOPTED 6/21/2006
STANDARD MANHOLE – SECTION	DRAWING NAME: WW03
	SCALE: NTS; DATE: 1/2003; DRAWN BY: MPS; CHECKED BY: TRB

02 STANDARD MANHOLE SECTION — NTS

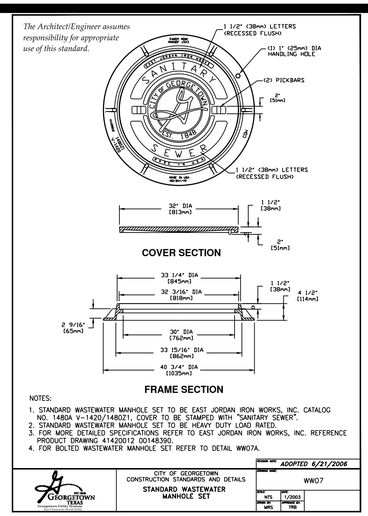


NOTES:
1. INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
2. SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOW.
3. CHANNELS FOR FUTURE CONSTRUCTIONS (STUBS) SHALL BE CONSTRUCTED, FILLED WITH SAND, AND COVERED WITH 1" OF MORTAR.
4. SLOPE MANHOLE ITSELF WITH A 1:2 SLOPE FROM MANHOLE WALL TO CHANNEL.
5. INVERT SHALL BE A MINIMUM OF 1/2 THE DIAMETER OF THE LARGEST PIPE OR 4" DEEP.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME: ADOPTED 6/21/2006
FLOW PATTERNS FOR INVERT CHANNELS	DRAWING NAME: WW06
	SCALE: NTS; DATE: 1/2003; DRAWN BY: MPS; CHECKED BY: TRB

03 FLOW PATTERNS FOR INVERT — NTS

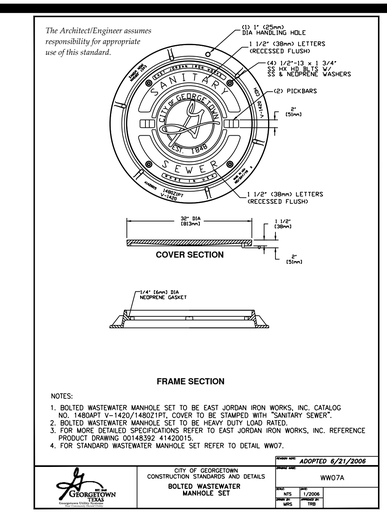


NOTES:
1. STANDARD WASTEWATER MANHOLE SET TO BE EAST JORDAN IRON WORKS, INC. CATALOG NO. 1480A V–1420/1480Z1. COVER TO BE STAMPED WITH "SANITARY SEWER".
2. STANDARD WASTEWATER MANHOLE SET TO BE HEAVY DUTY LOAD RATED.
3. FOR MORE DETAILED SPECIFICATIONS REFER TO EAST JORDAN IRON WORKS, INC. REFERENCE PRODUCT DRAWING 4142001Z 4142001S.
4. FOR BOLTED WASTEWATER MANHOLE SET REFER TO DETAIL WW07.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME: ADOPTED 6/21/2006
STANDARD WASTEWATER MANHOLE SET	DRAWING NAME: WW07
	SCALE: NTS; DATE: 1/2003; DRAWN BY: MPS; CHECKED BY: TRB

04 STANDARD WW MANHOLE SET — NTS

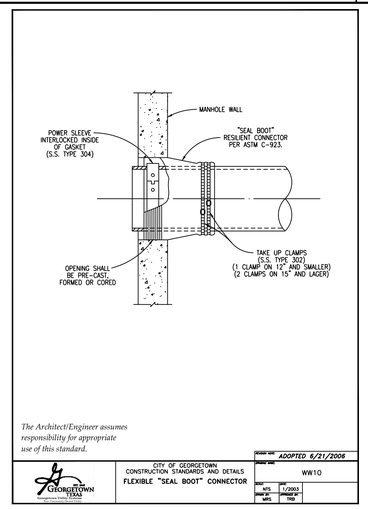


NOTES:
1. BOLTED WASTEWATER MANHOLE SET TO BE EAST JORDAN IRON WORKS, INC. CATALOG NO. 1480AP1 V–1420/1480Z1PT. COVER TO BE STAMPED WITH "SANITARY SEWER".
2. BOLTED WASTEWATER MANHOLE SET TO BE HEAVY DUTY LOAD RATED.
3. FOR MORE DETAILED SPECIFICATIONS REFER TO EAST JORDAN IRON WORKS, INC. REFERENCE PRODUCT DRAWING 4142001Z 4142001S.
4. FOR STANDARD WASTEWATER MANHOLE SET REFER TO DETAIL WW07.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME: ADOPTED 6/21/2006
BOLTED WASTEWATER MANHOLE SET	DRAWING NAME: WW07A
	SCALE: NTS; DATE: 1/2006; DRAWN BY: MPS; CHECKED BY: TRB

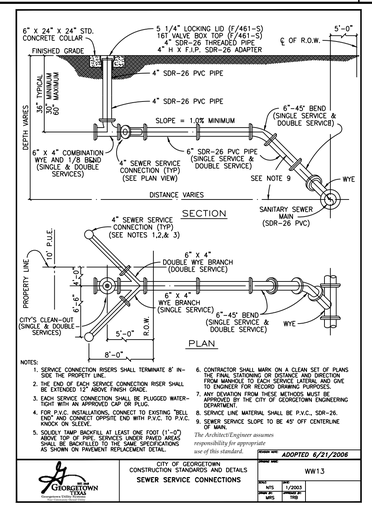
05 BOLTED WW MANHOLE SET — NTS



The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME: ADOPTED 6/21/2006
FLEXIBLE "SEAL BOOT" CONNECTOR	DRAWING NAME: WW10
	SCALE: NTS; DATE: 1/2003; DRAWN BY: MPS; CHECKED BY: TRB

06 FLEXIBLE SEAL BOOT CONNECTOR — NTS

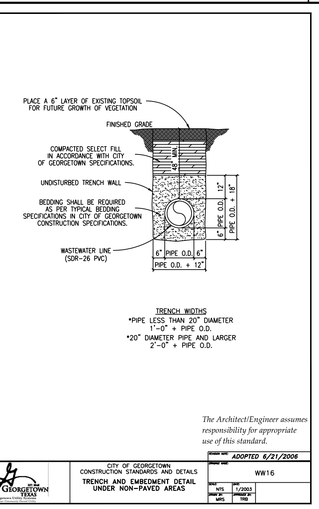


NOTES:
1. SERVICE CONNECTION RISERS SHALL TERMINATE 8' IN– SIDE THE PROPERTY LINE.
2. THE END OF EACH SERVICE CONNECTION RISER SHALL BE EXTENDED 12" ABOVE FINISH GRADE.
3. EACH SERVICE CONNECTION SHALL BE PLUGGED WATER–TIGHT WITH AN APPROVED CAP OR PLUG.
4. FOR P.V.C. INSTALLATIONS, CONNECT TO EXISTING "BELL END" AND CONNECT OPPSITE END WITH P.V.C. TO P.V.C. KNOCK ON "SLEEVE.
5. SOLIDLY TAMP BACKFILL AT LEAST ONE FOOT (1'–0") ABOVE TOP OF PIPE. SERVICES UNDER PAVED AREAS SHALL BE BACKFILLED TO THE SAME SPECIFICATIONS AS SHOWN ON PAVEMENT REPLACEMENT DETAIL.
6. CONTRACTOR SHALL MARK ON A CLEAN SET OF PLANS THE FINAL STATIONING OF DISTANCE AND DIRECTION FROM MANHOLE TO EACH SERVICE LATERAL AND GIVE TO THE CITY OF GEORGETOWN RECORDS DRAWING PURPOSES.
7. ANY DEVIATION FROM THESE METHODS MUST BE APPROVED BY THE CITY OF GEORGETOWN ENGINEERING DEPARTMENT.
8. SERVICE LINE MATERIAL SHALL BE P.V.C., SDR–26.
9. SEWER SERVICE SLOPE TO BE 45° OFF CENTERLINE OF MAIN.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME: ADOPTED 6/21/2006
SEWER SERVICE CONNECTIONS	DRAWING NAME: WW13
	SCALE: NTS; DATE: 1/2003; DRAWN BY: MPS; CHECKED BY: TRB

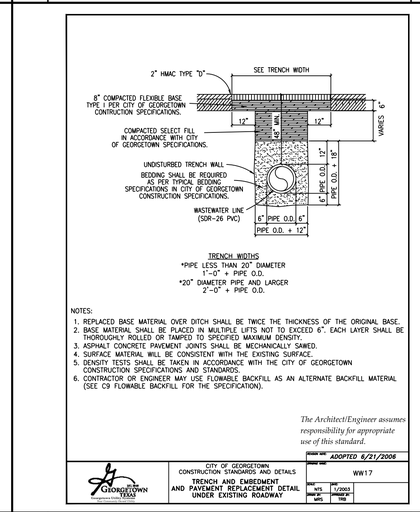
07 SEWER SERVICE CONNECTION — NTS



The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME: ADOPTED 6/21/2006
TRENCH AND EMBEDMENT DETAIL UNDER NON–PAVED AREAS	DRAWING NAME: WW16
	SCALE: NTS; DATE: 1/2003; DRAWN BY: MPS; CHECKED BY: TRB

08 TRENCH AND EMBEDMENT UNPAVED — NTS

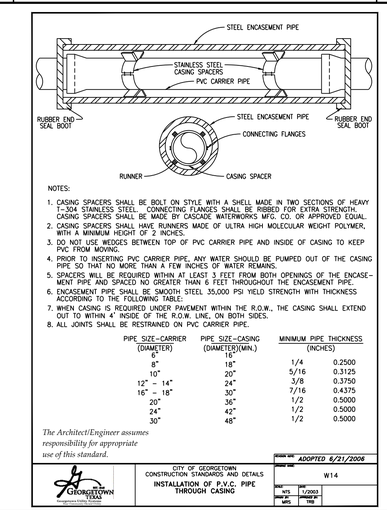


NOTES:
1. REPLACED BASE MATERIAL OVER DITCH SHALL BE TWICE THE THICKNESS OF THE ORIGINAL BASE.
2. BASE MATERIAL SHALL BE PLACED IN MULTIPLE LIFTS NOT TO EXCEED 6". EACH LAYER SHALL BE THOROUGHLY ROLLED OR TAMPED TO SPECIFIED MAXIMUM DENSITY.
3. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
4. SURFACE MATERIAL WILL BE CONSISTENT WITH THE EXISTING SURFACE.
5. DENSITY TESTS SHALL BE TAKEN IN ACCORDANCE WITH THE CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS AND STANDARDS.
6. CONTRACTOR OR ENGINEER MAY USE FLOWABLE BACKFILL AS AN ALTERNATE BACKFILL MATERIAL (SEE C9 FLOWABLE BACKFILL FOR THE SPECIFICATION).

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME: ADOPTED 6/21/2006
TRENCH AND EMBEDMENT AND PAVEMENT REPLACEMENT DETAIL UNDER EXISTING ROADWAY	DRAWING NAME: WW17
	SCALE: NTS; DATE: 1/2003; DRAWN BY: MPS; CHECKED BY: TRB

09 TRENCH AND EMBEDMENT PAVED — NTS



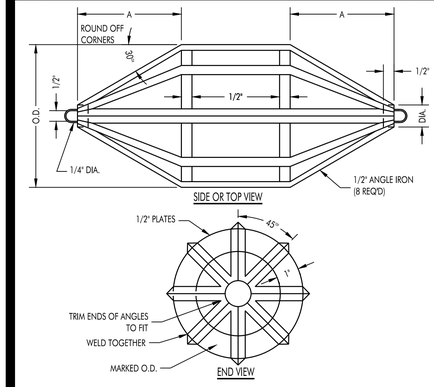
NOTES:
1. CASING SPACERS SHALL BE BOLT ON STYLE WITH A SHELL MADE IN TWO SECTIONS OF HEAVY T–304 STAINLESS STEEL. CONNECTING FLANGES SHALL BE RIBBED FOR EXTRA STRENGTH. CASING SPACERS SHALL BE MADE BY CASCADE WATERWORKS MFG. CO. OR APPROVED EQUAL.
2. CASING SPACERS SHALL HAVE RUNNERS MADE OF ULTRA HIGH MOLECULAR WEIGHT POLYMER, WITH A MINIMUM HEIGHT OF 2 INCHES.
3. DO NOT USE WEDGES BETWEEN TOP OF PVC CARRIER PIPE AND INSIDE OF CASING TO KEEP PVC FROM MOVING.
4. PRIOR TO INSERTING PVC CARRIER PIPE, ANY WATER SHOULD BE PUMPED OUT OF THE CASING PIPE SO THAT NO MORE THAN A FEW INCHES OF WATER REMAINS.
5. SPACERS WILL BE REQUIRED WITHIN AT LEAST 3 FEET FROM BOTH OPENINGS OF THE ENCASE–MENT PIPE AND SPACED NO GREATER THAN 6 FEET THROUGHOUT THE ENCASEMENT PIPE.
6. ENCASEMENT PIPE SHALL BE SMOOTH STEEL 35,000 PSI YIELD STRENGTH WITH THICKNESS ACCORDING TO THE FOLLOWING TABLE:
7. WHEN CASING IS REQUIRED UNDER PAVEMENT WITHIN THE R.O.W., THE CASING SHALL EXTEND OUT TO WITHIN 4' INSIDE OF THE R.O.W. LINE, ON BOTH SIDES.
8. ALL JOINTS SHALL BE RESTRAINED ON PVC CARRIER PIPE.

PIPE SIZE–CARRIER (DIAMETER)	PIPE SIZE–CASING (DIAMETER)(MIN.)	MINIMUM PIPE THICKNESS (INCHES)
6"	16"	
8"	18"	1/4 0.2500
10"	20"	5/16 0.3125
12" – 14"	24"	3/8 0.3750
16" – 18"	30"	7/16 0.4375
20"	36"	1/2 0.5000
24"	42"	1/2 0.5000
30"	48"	1/2 0.5000

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME: ADOPTED 6/21/2006
INSTALLATION OF P.V.C. PIPE THROUGH CASING	DRAWING NAME: W14
	SCALE: NTS; DATE: 1/2003; DRAWN BY: MPS; CHECKED BY: TRB

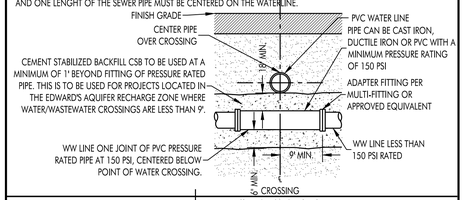
10 BORE DETAIL — NTS

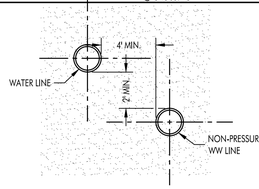


	PVC ASTM 3033 SDR–41 PSP	PVC ASTM 3034 SDR–42 PSM	PVC ASTM 3034 SDR–35 PSM(XH)	ABS COMPOSITE ASTM 2680	PSP	PSM	PSM(XH)	ABS COMPOSITE
4	5.67	5.62	5.62		4.96	4.91	4.91	
6	7.37	7.60	78.52	7.36	6.66	6.89	6.81	6.65
6	9.22	9.50	9.41	0.26	8.51	8.79	8.70	8.55
8	11.06	11.01	11.19	11.18	10.35	10.60	10.46	10.45
9	13.82			14.01	13.11			13.30

11 MANDREL — NTS

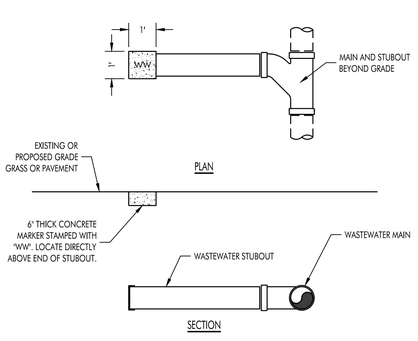
NOTE:
WHERE A SANITARY SEWER CROSSES A WATERLINE AND THE SEWER IS CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI, AN ABSOLUTE MINIMUM DISTANCE OF 6 INCHES BETWEEN OUTSIDE DIAMETERS SHALL BE MAINTAINED. IN ADDITION THE SEWER SHALL BE LOCATED BELOW THE WATERLINE WHERE POSSIBLE AND ONE LENGHT OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.





NOTE:
WHERE A NON–PRESSURIZED SANITARY SEWER PARALLELS A WATERLINE, THE SEWER SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC MEETING ASTM SPECIFICATIONS WITH A PRESSURE RATING FOR BOTH PIPE AND JOINTS OF 150 PSI. THE VERTICAL SEPERATION SHALL BE A MINIMUM OF 2' BETWEEN OUTSIDE DIAMETERS AND THE HORIZONTAL SEPARATION SHALL BE A MINIMUM OF 4' BETWEEN OUTSIDE DIAMTERES. THE SEWER SHALL BE LOCATED BELOW THE WATERLINE.

12 WATER LINE CROSSING AND SPACING — NTS



13 TCEQ STUBOUT — NTS

HAGOOD ENGINEERING ASSOCIATES
900 E. Main Street
Round Rock, TX 78664
Phone (512) 244-1546
Fax (512) 244-1010
www.heaeng.com
TBPE Registration No. F-12709

STATE OF TEXAS — TERRY R. HAGOOD — 52960 — REGISTERED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGOOD, P.E. 52960.

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DATE SIGNED: 6/19/2024
ISSUED FOR: AGENCY REVIEW & BID

CONSTRUCTION PLANS FOR GEORGETOWN FAMILY YMCA WASTEWATER IMPROVEMENTS 6100 WILLIAMS DRIVE GEORGETOWN, TEXAS 78633

REVISIONS

NO.	DATE	DESCRIPTION

HEA PROJECT NO 22-012
ISSUED DATE: 6/19/2024

UTILITY DETAILS

SHEET NO.
C43
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2024-_____-CON