

PARKSIDE – 2243 SITE PLAN WATER POLLUTION ABATEMENT PLAN

Submitted to:

Texas Commission on Environmental Quality Region 11 Field Office (Austin) 12100 Park 35 Circle, Bldg. A, Rm 179 Austin TX 78753

Submitted by / Agent:

Eli Engineering, PLLC 700 Theresa Cove Cedar Park, TX 78613 Office: (512) 658-8095 Attn: Gary Eli Jones, P.E.

Owner / Applicant:

Georgetown Eco Lands, LLC 2040 FM 969 Elgin, TX. 78621 Voice: 678-296-2851

Attn: Mr. Kevin Bolin



6/9/2024

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

- 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.
- 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.
- 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.

1. Regulated Entity Name: Parkside – 2243				2. Regulated Entity No.:				
3. Customer Name: Georgetown Eco Lands, LLC			4. Customer No.:					
5. Project Type: (Please circle/check one)	New	Modif	ication	1	Exter	ısion	Exception	
6. Plan Type: (Please circle/check one)	WPAP CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential (Non-r	esiden	tial		8. Sit	e (acres):	6.137 AC
9. Application Fee:	\$5000	10. P	10. Permanent BMP(s):		s):	Batch Detention		
11. SCS (Linear Ft.):	N/A	12. A	12. AST/UST (No. Tanks):			ıks):	N/A	
13. County:	Williamson	14. W	14. Watershed:			SAN GABRIEL RIVER		

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%2oGWCD%2omap.pdf

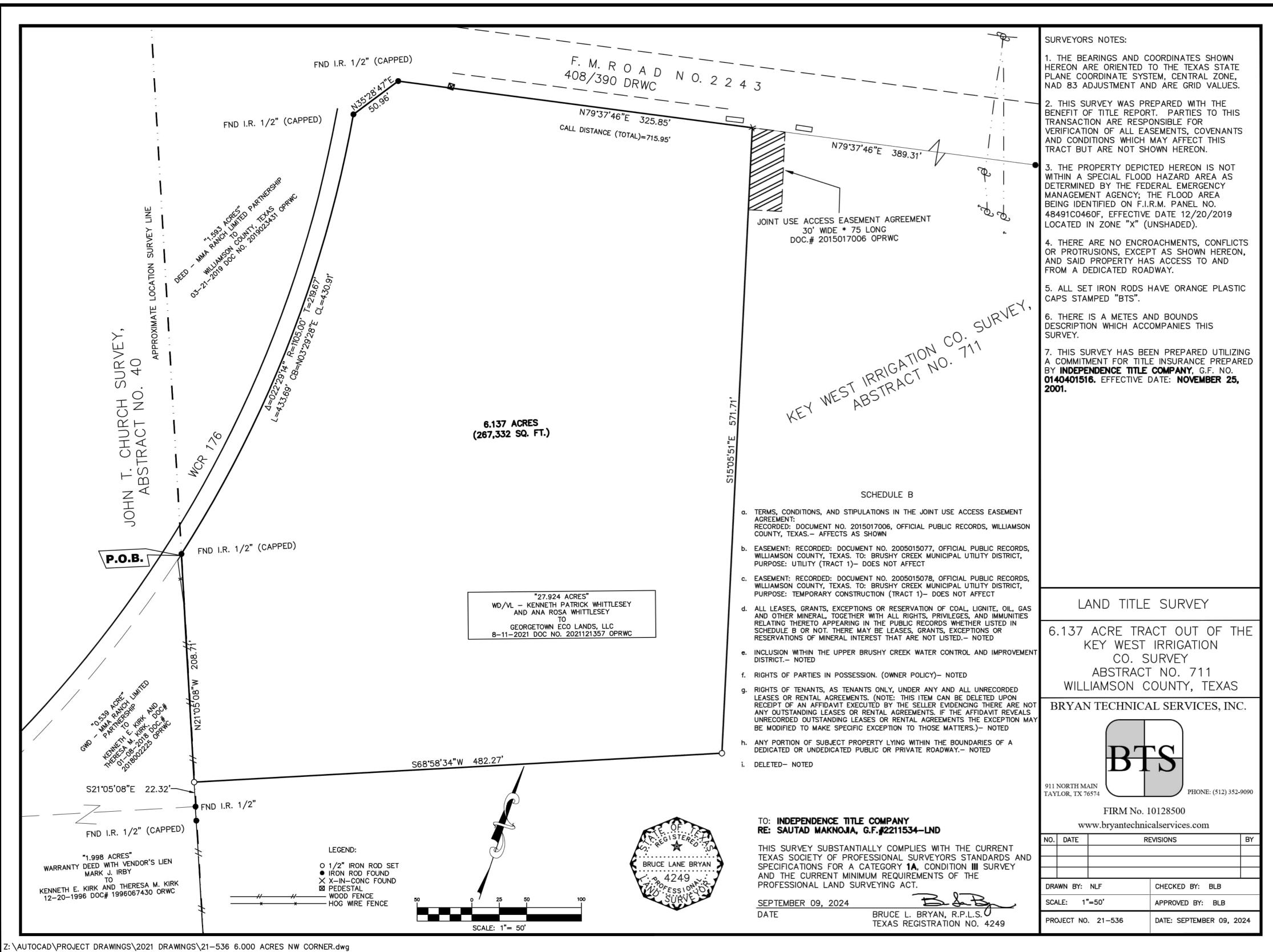
For more detailed boundaries, please contact the conservation district directly.

Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	_	_	_x_
Region (1 req.)	_	1	_X
County(ies)	_	<u> </u>	_X_
Groundwater Conservation District(s)	Edwards Aquifer AuthorityBarton Springs/ Edwards AquiferHays TrinityPlum Creek	Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	AustinBudaDripping SpringsKyleMountain CitySan MarcosWimberleyWoodcreek	AustinBee CavePflugervilleRollingwoodRound RockSunset ValleyWest Lake Hills	AustinCedar ParkFlorence _x_GeorgetownJerrellLeanderLiberty HillPflugervilleRound Rock

	Sa	an Antonio Region			
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)		_	ξ .	£	(i)—
Region (1 req.)		_	Q 	£	10-
County(ies)				¥	V
Groundwater Conservation District(s)	Edwards Aquifer Authority Trinity-Glen Rose	Edwards Aquifer Authority	Kinney	EAA Medina	EAA Uvalde
City(ies) Jurisdiction	Castle HillsFair Oaks RanchHelotesHill Country VillageHollywood ParkSan 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 appl application is hereby submitted to TCEQ for administrations.	
Gary Eli Jones, P.E.	
Print Name of Customer/Authorized Agent	
Soy Elf-	9/26/2024
Signature of Customer/Authorized Agent	Date

FOR TCEQ INTERNAL USE ONI	Y			
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	Payable to TCEQ (Y	/N):
Core Data Form Complete (Y/N):		Check: Signed (Y/N):		
Core Data Form Incomplete Nos.:			Less than 90 days o	ld (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: Gary Eli Jones, P.E. Date: 06/08/2024

Project Information

Signature of Customer/Agent:

1.	Regulated Entity Name: Georgetown Eco Lands, LLC	
2.	County: Williamson	
3.	Stream Basin: SAN GABRIEL RIVER	
4.	Groundwater Conservation District (If applicable): $\underline{\mathbf{N}}$	<u>/A</u>
5.	Edwards Aquifer Zone:	
	Recharge Zone Transition Zone	
6.	Plan Type:	
	WPAPSCSModification	AST UST Exception Request

7.	Customer (Applicant):	
	Contact Person: Kevin Bolin Entity: Georgetown Eco Lands, LLC Mailing Address: 2040 FM 969 City, State: Elgin, TX Telephone: 678-296-2851 Email Address: kbolin@q2earth.com	Zip: <u>78621</u> FAX: <u>N/A</u>
8.	Agent/Representative (If any):	
	Contact Person: <u>Gary Eli Jones, P.E.</u> Entity: <u>Eli Engineering, PLLC</u> Mailing Address: <u>700 Theresa Cove</u> City, State: <u>Cedar Park, TX</u> Telephone: <u>512-658-8095</u> Email Address: <u>gejtexas@gmail.com</u>	Zip: <u>78613</u> FAX: <u>N/A</u>
9.	Project Location:	
	 ☐ The project site is located inside the ☐ The project site is located outside the jurisdiction) of Georgetown. ☐ The project site is not located within 	e city limits but inside the ETJ (extra-territorial
10.		cribed below. The description provides sufficient Regional staff can easily locate the project and site
	Project is in located on the southeast	corner of Parkside Drive and RR 2243.
11.		nap showing directions to and the location of the ocation and site boundaries are clearly shown on
12.		harge Zone Map. A copy of the official 7 ½ minute 000') of the Edwards Recharge Zone is attached.
		(and Transition Zone, if applicable). te to the boundary of the Recharge Zone.
13.	Sufficient survey staking is provided	e project site or the application will be returned. on the project to allow TCEQ regional staff to locate regulated activities and the geologic or manmade sment.
	Survey staking will be completed by t	this date: <u>Jan 31, 2023</u>

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:
 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

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

Injection Control);

(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	e 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.

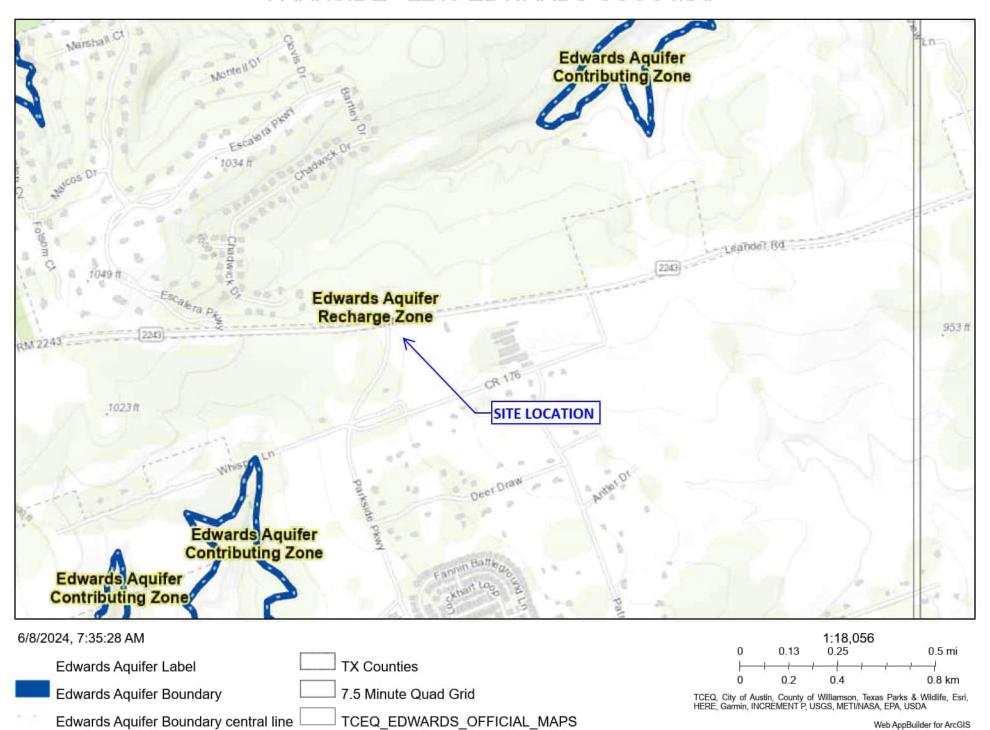


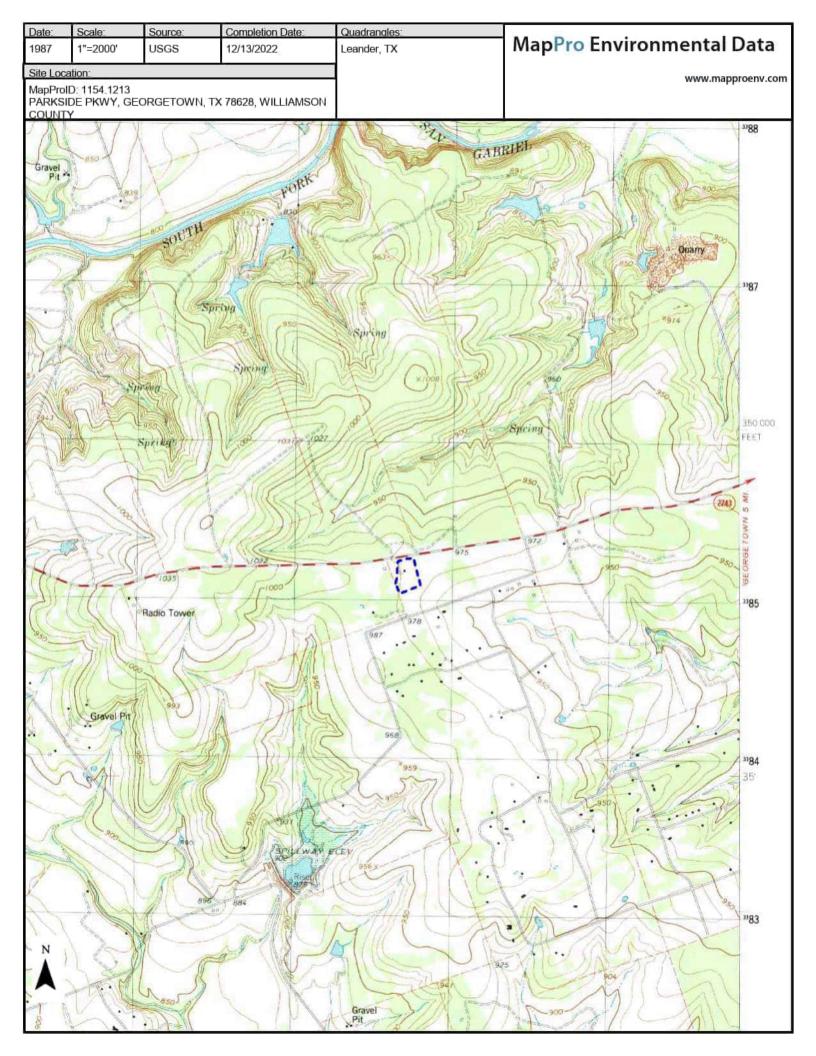
ATTACHMENT "A" - ROAD MAP Web Print: 05/21/2023 This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.



0 752 1,505 Feet

PARKSIDE - 2243 EDWARDS USGS MAP







June 8, 2024

Ms. Lillian Butler Texas Commission on Environmental Quality 12100 Park 35 Circle, Bld A, Rm 179 Austin, TX 78753

Re: Parkside - 2243

Water Pollution Abatement Plan Attachment C-Project Narrative

To Whom It May Concern:

Eli Engineering, PLLC is pleased to submit this Project Narrative accompanying the Water Pollution Abatement plan application for the Parkside 2243 project. This project, located at 5501 RM 2243 Georgetown TX 78628 on the SE corner of Parkside Drive and RM 2243. The project consists of 14,000 SF in two buildings comprised of a 5000 SF convenience store with five (5) fueling stations and a future 9000 SF retail.

The site currently is undeveloped with a few scattered trees that remain from oak wilt on the property. The project is located in the Edwards Aquifer. There is no previous known use of the property. City of Georgetown water is being extended across RM 2243 and run down Parkside Drive to serve the property. Wastewater will be provided by septic per Williamson County permitting requirements. Pedernales Electric will provide electric service to the property. The property drains to the SE corner of the property where the proposed detention and water quality pond is located. There is no offsite drainage flowing through the property. The permanent BMP for the development includes batch detention. The total impervious cover for the site is 1.89 ac (31.5%) with no existing impervious cover. The total 10,078 CF of water quality volume required for the site is provided in the SE corner pond. Water quality volume in the pond will be provided up to elevation 971.60 with a volume of 11,132 CF. Drainage area 2 is 2.32 acres of the property with no impervious cover that bypasses the pond. Full details of the calculations and proposed pond is included in the Site Plan Construction set.

If you have any questions or need further assistance, please call me at 512-658-8095.

Sincerely,

6/8/2024

Gary Eli Jones, P.E. Authorized Agent

GEOLOGIC ASSESSMENT REPORT

Gas Station/Convenience Store Complex 0 RR-2243 (SE Quadrant of RR-2243 and Parkside Parkway) Leander, TX 78641

Prepared For:

SRP ESSENTIAL LLC 3105 Catalina Ranch Rd Leander, TX 78641

Prepared By:

RST Environmental Consultants Sugarland, Texas

January 2023

January 19, 2023

SRP ESSENTIAL LLC 3105 Catalina Ranch Rd Leander, Texas 78641

Attn: SRP ESSENTIAL LLC ESQR

GEOLOGIC ASSESSMENT REPORT

Gas Station/Convenience Store Complex 0 RR-2243 (SE Quadrant of RR-2243 and Parkside Parkway) Leander, TX 78641

This report along with the TCEQ GEOLOGIC ASSESSMENT FORMS and other attachments serve to document the Findings related to the Water Quality Regulations for the Edwards Aquifer Recharge Zone [EARZ], which established buffers around springs and streams in the EARZ as well as recommendations for Occupied Salamander sites.

This report details the investigations RST Environmental Consultants [RST] has conducted for the proposed Gas Station-Convenience Store Complex located at the Southeast Quadrant of the intersection of Parkside Pkwy and FM 2243 in the City of Georgetown, Williamson County with regards to complying with the City of Georgetown Water Quality Ordinance.

The Report has been prepared using the GEOLOGIC ASSESSMENT Guidelines for Regulated activities on the Edwards Aquifer Recharge /Transition Zones and Relating to 30 TAC 213.5 (b)(3), Effective June 1, 1999.

The report has also included the over-lapping general requirements for "investigative" methods for concluding whether there are potential recharge areas on the subject property.

We appreciate the opportunity to be of assistance on this project. If you have any questions concerning this report, or if we can assist you in any other matter, please do not hesitate to call.

Respectfully,

RST Environmental Consultants

Ravindra (Ravi) S. Tipnis, PG, Ph.D.; REM

avi S. Fromp

Project Manager

Mohammad U. Shafiq, M.S. Staff Environmental Geologist

TABLE OF CONTENTS

- 1.0 INTRODUCTION
- 2.0 PROJECT INFORMATION
- 3.0 EDWARDS AQUIFER RECHARGE ZONE (EARZ) BACKGROUND
- 4.0 INVESTIGATION METHODS
- 5.0 SUMMARY OF FINDINGS
- 6.0 RECOMMENDATIONS
- 7.0 REFERENCES

LIST OF ATTACHMENTS

- ATTACHMENT A- Geologic Assessment Form and Table
- ATTACHMENT B- Stratigraphic Column
- ATTACHMENT C- Site Geology
- ATTACHMENT D- Site Maps
- ATTACHMENT E- Historical Aerial Photographs
- ATTACHMENT F- Topographic Maps
- ATTACHMENT G- Soil Map, Fault Map, Wetlands Map, Flood Zone Map, Water Wells Map, and Oil & Gas Map
- ATTACHMENT H- Résumés

1.0 INTRODUCTION:

RST Environmental Consultants (RST) performed a GEOLOGIC ASSESSMENT for the proposed Gas Station/Convenience Store Complex (henceforth referred to as the "Study Area", "Subject Property", or "Site"), located at the Southeast Quadrant of Parkside Pkwy and RR-2243 in the City of Leander, Williamson County, Texas.

RST personnel conducted a site reconnaissance of the subject property on December 15, 2022. The subject tract is about 5.00 acres in size is located on the East side of Parkside Pkwy and the south side of RR-2243. The property is almost a skewed trapezoid in shape with the Northern boundary along RR-2243 being 315.49 feet in length and the Eastern boundary about 481 feet in linear footage. The other two sides include the Western boundary which parallels Parkside Pkwy slightly arcuate appears to be about 433 feet in length while the Southern boundary is about 481 feet in length. There are two short connector segments, one of about on the NW side which connects Parkside Pkwy and FM 2243 while the segment on the SW side connects Parkside Pkwy with the Southern boundary and is about 117 feet in linear footage.

As noted above, the subject tract of about 5 acres is currently vacant and is the future site of a gas station complex as shown in the Site Map provided by Eli Engineering.

The property is vacant and appears to have remained such at least since 2005. There is a grassy veneer on the surface with relatively thicker grass on the Central and Northern East side. The site has numerous Live Oak Trees on the property, some will be retained while some will be removed. A couple of wooden posts are seen on the property-removable items. There are no man-made features seen on the property.

The subject tract for most of the aerial coverage is covered with grass; however, the "western" boundary shows a spotty exposure of indurated limestones. The so called "outcrops" are only present within about 5 feet of the boundary limits of the property more or less parallel to Parkside Pkwy. At present no other area shows exposed rocks. However, it should be recognized that after the removal of grass on the East/SE side there does exist the possibility of finding additional outcrops.

At this point it is worth pointing out that based on the information obtained via review of the geological literature, the exposed rocks belong to the Edwards Limestone. They are well indurated and also show dolomitic composition mixed with cherts. This association generally represents post depositional activities involving significant "cementing" of the mineral "Calcite" which makes up the Limestones. The cementing process is post depositional and one of the products is Dolostone, which is an integral part of the Edwards Limestone lithology. The primary surface strata in the Project Area identified by the symbol-Ked [Edwards Limestone Symbol]. More information on this is addressed later in the Report.

The survey map provided by Eli Engineering does not show any exposed outcrop on the property. The topographic contours on the property show a gradual sloping from W/NW towards the SW with the elevation difference of about 10 feet at the terminals. The higher elevations are on the NW side [980 Feet above mean sea level (MSL)] sloping towards SE/E where the elevation is less ranging between 972 Feet above MSL and 970 Feet above MSL. The shape of the contours and the spread of the contours show a fairly normal land disposition. There is no evidence of "inverted V's- thus no creeks on the property. No evidence of extreme contour shapes as noted earlier, which eliminates the presence of either caves, solution valleys or significant dissolution features that may serve as "pathways" into the subsurface. Additionally, as has been discussed in the Report the soil underneath also shows clayey textures and is both hard and firm, thereby restricting downward flow.

In addition to the above, our professional site investigator Mr. Mohammad Shafiq who is currently completing his Ph.D. at Texas A & M -Kingsville did not observe any significant saturated areas, nor did he come across any surficial "catchment area" on the down-dip side of the property.

The contour elevation extremities ranges from 980 feet to 970 feet, hence the drop of about 10 feet.

As described earlier, the subject property is bordered on the West and North side by road arteries. Along RR-2243 [N] there is a very narrow drainage ditch and cable lines. Adjacent property on the East side appears to be a landscaping supply company. The landscaping property contains mounds of dirt, gravel, and other landscaping material that is hauled off by customers.

The proposed Gas Station Complex which includes also a convenience store includes the UST Station and related features on the North side of the subject property, along with the usual network of lanes and parking spaces with entrance via RR-2243, while towards the central portion of the property, the proposed setting includes the convenience store building as well as an additional building. The southern area is currently shown as the space that will be occupied by a detention pond.

In Summary, the surface of the property is devoid of any "man-made features", but does show a sliver of exposed rocks on the western side almost hugging Parkside Pkwy. We have briefly noted that the rocks belong to Edwards Formation [Ked] and do show features that include well indurated textures and are hard and firm, thereby unlikely to act as "conduits" to enter the Edwards Aquifer in the sub-surface.

Based on the arrangement of contours, we have pointed out that there is no evidence indicating the presence of Faults or other features showing significant displacement in the sub-surface. Additionally, there is no evidence indicating solution features such as solution valleys, sinks or depressions or "cavities".

Lastly, it is also noted briefly that the soil present below the surface is predominantly clayey and does not show features that suggest significant transmissivity. The name of the soil unit is Georgetown Stony Clay Loam. It is not

considered to reach a depth where significant infiltration would be possible. Further underneath in-fact the Edwards Limestone rocks [about 35 inches or more] are also very tight and indurated.

2.0 PROJECT INFORMATION

The report is intended to satisfy the requirements for a Geologic Assessment which is included as a component of a Water Pollution Abatement Plan (WPAP) and Sewage Collection System (SCS). The proposed site will be developed as a Gas Station-Convenience Store Complex. The scope of the study consists of a site reconnaissance, field survey, and review of existing data and reports. The study also includes the geological setting for Edwards Formation, Edwards Aquifer Recharge Zone (EARZ), a review of soil and rock formations, and a review of the Balcones Fault System and possibly its origin and spatial distribution in controlling the site/regional stratigraphy.

The identification procedure includes both "natural" and "man-made" features that may be encountered on the property. The "features" for either category are "ranked" utilizing the Texas Commission on Environmental Quality (TCEQ) matrix for EDWARDS AQUIFER Recharge Zone. Those that are "outside" the normal are placed in "sensitive" category and form the basis of the recommendations. On-site outcrops are not included in the category of "FEATURES".

The Edwards Aquifer Data Base for subject site shows that the setting at Southeast Quadrant of Parkside Pkwy and FM 2243 is located well within the Edwards Aquifer Recharge Zone.

3.0 EDWARDS AQUIFER RECHARGE ZONE (EARZ) BACKGROUND

The Edwards aquifer is used in Central Texas for drinking water. The aquifer has "karst" characteristics which lead to the formation of fractures, caves, and sinkholes that act as conduits to the aquifer from the surface. This also allows for rainwater and surface runoff to reach and recharge the aquifer quickly. However, this also is responsible for **surface pollution percolation** into the aquifer impacting water quality. Therefore, the TCEQ created the Edwards Aquifer Protection Plan (EAPP) to help create guidelines for developers to ensure that the water quality of the Edwards aquifer remains acceptable. The EAPP includes guidelines for water pollution abatement, sewage collection, underground and aboveground storage tanks, and contributing zone plans. The Edwards aquifer recharge zone stretches eastward from Kinney County through Uvalde County and Medina County to Bexar County. From Bexar County, the EARZ stretches northeast through Comal County, Hays County, Travis County, and finally terminates in Williamson County. The majority of the contributing zone is located along the western edge of the EARZ i.e. the 'hill country" also famously known as Edwards Plateau.

The majority of the transition zone is located along the eastern edge of the EARZ. The different zones are described in detail in the following paragraphs.

The EARZ setting includes in addition to the Edwards Aquifer Recharge Zone, three related "Zonal" entities as described below:

- a. Transition Zone: Geologic Formations included in this "Zone" include faults, fractures, etc. providing an avenue for recharge of surface water to the Edwards Aquifer Recharge Zone.
- b. Contributing Zone: This 'zone' includes the area where run-off, via natural recharge [i.e. precipitation], percolates into the Recharge Zone of Edwards Aquifer. The "contributing zone" is located upstream generally north and northwest of recharge zone. The Contributing Zone is present in the Subject Area but is outside the 1500 feet distance both on the North and the South side of the Property.
- c. Contributing Zone within the Transition Zone: This zone represents the southern-downslope location within the Transition Zone and could include areas outside the Edwards Aquifer Group. One example often cited in this category are the pathways through Frio Group, which are not of the same age geologically.

4.0 INVESTIGATION METHODS

Since the subject site is an undeveloped vacant tract of land, the investigation methods used to gather the necessary information included, aside from the mandatory site visit described earlier, the following tasks:

- a. Review existing literature including publications by the State of Texas via University of Texas or the USGS (United States Geological Survey) and other governmental or private institutions to understand the geology of the Edwards Aquifer as well as the potential pathways for "recharge" or the avenues for discharge through springs/rivers.
- b. Review of the historic topographic maps of the site that may demonstrate karst topographic features that can be identified via contour line configurations [e.g depressions, disappearing streams, numerous ponds, irregular nature of the contour lines or actual presence of historic water bodies on the property which may have later been "filled"].
- c. Aerial Photos- both present and past to document if the subject property had prior development which underwent subsequent demolition and clean-up.
- d. A geologic review for the possible presence of Faults in the Project area
- e. Presence of oil & gas wells in the area or the presence of water wells as these are "highly likely" pathways to impact the Edwards Aquifer. Water wells can provide important information on the depth of the "water body" in the Edwards Aquifer.

5.0 SUMMARY OF FINDINGS -REGIONAL

A. The subject property is located to the West of I-35 which is generally regarded as being located within the elements of the Balcones Fault System. It is part of the Physiographic Setting referred to as the Edwards Plateau. This area primarily occupies the area West of the Balcones Fault System and has undergone significant "uplift" thereby the strata present in the area has been subjected to weathering and erosion making the surface topography "rugged",

- B. The East side of the Balconies Fault System occupies the "down-throw" side of the Fault Zone and has undergone significant "sedimentary deposition". The deposition includes the sediments that are a result of the erosion of rocks from the Edwards Plateau region to the NW which travelled via both, running water and wind.
- C. The above described "deposition of the sediments" towards the down slope and finally into the then present Gulf of Mexico, caused significant "subsidence" primarily due to the weight, thereby developing a weak-ness in the crust to such an extent that a "flexure' developed. It is this "flexture" -warping of the Earth's Crust, which resulted in the origin of the Balcones Fault System. This Fault System is composed of numerous N/NW to S/SE aligned Fault Off-Sets and Joints which became the avenue for waters from the surface to infiltrate into the Edwards Limestone Group of Rocks because of the tendency of the Limestones to be subjected to "dissolution". Water entered into the Edwards Formation and became what we refer to today as part of the Edwards Aquifer.
- D. In the current setting, it is generally agreed that the recharge of the water into the Edwards Aquifer is primarily about 75% via the Faults associated with the Balcones Fault System and about 25% via the solution cavities and other dissolution features such as caves, sink holes, solution valleys as well as the fractured rocks in the area.
- E. The approximate depth to the surface of the Edwards Aquifer varies from about 400 feet to 700 feet depending upon both the regional and local geology. A search for water wells in the surrounding area shows that the Brownish Edwards Limestones occurs at a depth varying from 650 to 720 feet as seen in two of the wells that are located on the South side of the property several hundred feet away.
- F. The "contribution zone" for recharging the Edwards Aquifer through surface runoffs, also popularly referred to as "sheet-flow," is to the West/NW with higher elevations, where-as the Artesian Zone, where springs are more likely to occur, is on the East side of the Balcones Fault System.
- G. The Recharge Zone is also where the Edwards Limestone is exposed to the surface. Here the term used is "unconfined" versus the East of Balcones Fault Zone where the Edwards Formation is "confined", since it is overlain by younger strata [in terms of its stratigraphy].
- H. Geologic Information in published material/literature related to Edwards Aquifer shows that the entire Williamson County is cut across by the Edwards Aquifer Recharge Zone and the Edwards Formation does thin towards the southwest.
- I. The Edwards Aquifer Recharge Zone is part of the Edwards Formation of Lower Cretaceous Age [Comanchean Series], and is underlain by the Glen Rose Limestone, which acts as the lower confining bed. The Georgetown

Formation, which rests on top of the Edwards Formation is also of Lower Cretaceous age although the Upper Confining units are of Upper Cretaceous Age including Del Rio Clay. The reason for the "missing" Georgetown Formation as being stratigraphically above the Edwards Formation in most areas is because of the erosion of the Edwards Plateau described earlier. The Georgetown Formation rests above the Edwards Formation at only very few places on the West side of the Balcones Fault Zone.

J. In the Georgetown area the Edwards Formation increases in depth in the East/Southeast direction. Edwards Aquifer is Recharged by Infiltration via Precipitation/Faults as well as Stream Flows and discharged by wells (man-made), springs (natural), possibly evaporation or by water seeping through overlying beds that cover the Aquifer.

K. Lastly, the Balcones Fault is located to the West of Georgetown and that the area between Austin to Georgetown appears not to have been Faulted significantly. The Balcones Fault, whose geological origin goes back to the Ouachita Orogeny, affected post Paleozoic Deposition on the erosional surface of the Paleozoic coastline of the North American Continent at its southern end. This coastline was encroached by the Gulf of Mexico waters to establish a shallow marine depositional basin. The sediments that were deposited in these shallow seas were of Lower Cretaceous Age. The depositional environments generally varied from deeper waters to the shallow waters, in some instances almost "sabkha deposition". The limestones that were deposited under water were eventually exposed either by sea withdrawal [regression], thereby exposing the rocks for erosion/weathering, or in some instances by continental uplifts. The exposed limestones of the Edwards Group were affected by the weathering/erosion and "dissolution" and as a result the landforms developed a karst topographic expression which was the primary cause for the solution cavities, conduit developments, caves and vugs, seen associated with the Edwards Limestone.

The origin of the "uplift" which established the boundaries of the Balcones Fault Zone has been described earlier.

Hence, the Balcones Fault Zone is the region where Texas Gulf Coast Plain transitions into the Texas Hill Country. The Balcones Fault Zone is replete with multiple geological Faults that are mostly Normal Faults or Echelon Faults, i.e., somewhat "step like".

SUMMARY OF FINDINGS- SITE SPECIFIC

- Review of topographic maps show that there were no karst features including ponds, creeks, or sinkholes in the
 vicinity of the subject property including the "on-site" Contour Map" as described earlier. However, site visit does
 show a narrow band of staggered exposed indurated Limestones almost paralleling the arcuate boundary of the subject
 property.
- The aerial photos show the subject property as mostly vacant with the "live oak trees". No manmade features are present.
- 3. There are no oil & gas wells on the property or in the vicinity. Additionally, there are no petroleum pipelines present in the Project area.

- 4. There are no wetlands on the subject property or within a 150 feet buffer
- **5.** According to the United States Department of Agriculture (USDA), there is one soil series for the subject property, Georgetown Stony Clay [GsB 1 to 3%]. The soil unit however occupies "uplands" and slopes.

The soil series is underlain by indurated limestones. The permeability is slow and surface run-off medium. The water capacity is low.

The Soil Series Manual for Williamson County divides the Georgetown Clay Loam into 4 horizontal "layers" described as:

Unit A: Dark Brown Clay Loam with granular texture, hard and firm with fragments of chert and also some fine roots.

The depth is about 7 inches and the occurrence is from 5 inches to 11 inches depth

Unit Bt 1: The color continues to remain Brown, it is also clayey with hard firm as well as blocky/angular structure and also includes chert fragments. Clay is almost 60%-80% and is strongly cemented with Limestone as well as some Limey Earth

The depth is to 18 inches and is about 5-9 inch thick

Unit Bt2: Reddish Brown cobbly clay, moderate to fine angular, hard and firm with fine roots and chert particles that are ¼ inch to almost 4inches in size.

The depth is at about 35 inches and the thickness is about 10 inches to 21 inches.

Unit R: Fractured indurated Limestone serves as "bed-rock" with brown or pink silty clay loam in available crevices/interstices.

This soil sequence with dominant clays is the uppermost layer with indurated Limestones and Limey Earth underneath.

This soil unit caps the Edwards Limestone present in the area including the subject property.

6. According to the United States Geological Survey (USGS), there are no springs located on the subject property or in the direct vicinity of the property.

The above analysis indicates that there is no direct nexus from the surface of the subject property to the aquifer below.

- 7. There are water wells in the area but not within a buffer of 150 feet. As noted earlier, the surface of the Edwards Aquifer appears to be at a depth of any where from about 650 feet to 720, based on data recovered from a couple of logged water wells.
- 8. The Water Shed in the Project Area is associated with the Chandler Branch Creek which flows due SE but appears to be well over 300 feet from the subject property.

6. 0 RECOMMENDATIONS

This "geological assessment" concludes that the subject property located at the Southeast Quadrant of the road arteries RR-2243 and Parkside Pkwy does not contain any "features" - natural or manmade, that is/are likely to enhance the possibility of establishing a "pathway" via infiltration into the Edwards Aquifer Recharge Zone. It is important to point out here that the presence of exposed rocks noted as part of "site visit" is NOT included as a FEATURE in the TCEQ Manual for performing the Geological Assessment.

Therefore, to the best of our knowledge obtained by the study of the Subject Property, visually i.e. "in-person", as well as reviewing the geologic literature, **NO NEXUS** was identified that would provide a sub-surface pathway for water to travel from the subject property to the Edwards Aquifer.

THUS, NO FURTHER ACTION IS RECOMMENDED FOR ANY FEATURE EXPOSED ON THE PROPERTY

7.0 REFERENCES:

- Tectonic Map of Texas: Scale 1: 750,000 by Bureau of Economic Geology, The University of Texas at Austin, 1990.
- 2. Edwards Aquifer Recharge Zone- Chapter 213 Rules
- Reassessment of Georgetown Limestone as A Hydrologic Unit of Edwards Aquifer, TX by L.T Land & M.E. Dorsey -USGS Water Resources Investigative Report 88-4190
- 4. Soil survey of Williamson County, September 23, 2016
- TCEQ: Instructions to Geologists for Geologic Assessments on Edwards Aquifer Recharge/Transition Zones.
 October 1, 2004. Austin Texas.
- 6. Mr. Stephen, TCEQ [512-239-5717]
- Federal Emergency Management Agency Flood Insurance Rate Map, Montgomery County
- 8. Texas Indoor Radon Survey, 1992
- Texas Department of Health, Bureau of Radiation Control, April 12, 1992
- 10. EPA Indoor Quality Control Environmental Protection Agency (EPA)
- 11. Texas Department of Water Resources (TDWR) report, Water for Texas
- 12. MapPro Environmental Data, Houston, Texas
- 13. American Society of Testing Materials (ASTM) ASTM Standard Practice Designation E 1527-13
- 14. United States Geological Survey (USGS) Maps

- 15. United States Department of Agriculture (USDA) Maps
- USGS "Reassessment of the Georgetown Limestone as a Hydrogeologic Unit of the Edwards Aquifer, Georgetown Area, Texas". [Water-Resources Investigations Report 88-4190]. 1988
- Austin Geological Society, "Urban Karst Geologic Excursion in Travis and Williamson Counties, Texas", 1996.
- Collins, E. W. (2005). Geologic Map of the West Half of the Taylor, 30 x 60 Minute Quadrangle: Central Texas Urban Corridor, Encompassing Round Rock, Georgetown, Salado, Briggs, Liberty Hill, and Leander. Walter Geology Library.

ATTACHMENT A

Geologic Assessment Form and Table

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: Ravindra Tipnis Ph.D., TX-PG#	Telephone: (281) 734-3909	
Date: <u>January 1</u> 9, 2023	Fax: N/A	
Representing: RST Environmental Consultants, TX Firm #506	67	
Signature of Geologist:		
Clavi S. Pions		STATE OF TEX
Regulated Entity Name: Gas Station/Convenience Store Complex (F	RR-2243 and Parkside Parkway)	* * * * * * * * * * * * * * * * * * *
Project Information		RAVINDRA TIPNIS GEOLOGY
1. Date(s) Geologic Assessment was performed:	<u>December</u> 15, 2022	CENSED
2. Type of Project:		GEOSON
WPAPSCSScsLocation of Project:	☐ AST ☑ UST	
Recharge ZoneTransition ZoneContributing Zone within the Transition Zone	one	

- 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)
Georgetown stony clay loam, 1 to 3 percent slopes (GsB)	D	5 feet

- * 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: $1'' = \underline{60}$ 'Site Geologic Map Scale: $1'' = \underline{60}$ '

Site Soils Map Scale (if more than 1 soil type): 1'' = 400

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.
abla	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.
	known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If blicable, 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.
Adm	ninistrative 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.

GEOL	OGIC A	SSESS	MENT	TABL	E,				CT NAN											
	OCATIO	N N				FE	ATUR	E CI	IARACT	ERIS	STICS				EVA	LUAT	ION	PHY	SICAL	SETTING
1A	1B *	1C*	2A	2B	3		4		5	5A	6	7	8A	8B	9	1	10	1	1	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIME	NSIONS (F	EET)	TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	ITIVITY		ENT AREA RES)	TOPOGRAPHY
						Х	Υ	Z		10						<40	<u>>40</u>	<1.6	<u>>1.6</u>	
N/A	-	-	-	-	-	25	-20	<u> </u>	-	Œ	-	-	-	-1	-	÷.,	70	- 1/2	F2_	-
															<u> </u>					
_																				
			-		-					<u> </u>	-				<u> </u>		<u> </u>			
										_			-		-	-	-	_	-	
		-	<u> </u>		-	-	-	_		-	-			-	_	-	-	 	_	
-						-							-		-		-	-		
		100												100		-				
		Š.										3	_				\vdash	\vdash		
																				`
															1					

+	-	-			
~	DA	ш	л	VI	r

2A TYPE	TYPE	2B POINTS
С	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
0	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

- None, exposed bedrock
- C Coarse cobbles, breakdown, sand, gravel
- D 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

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.

Clavi S. Tions

Date 1-19-23

Sheet 1 ___ of 1___



ATTACHMENT B

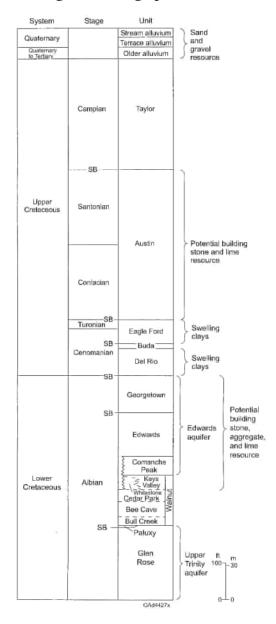
Stratigraphic Column

Local Stratigraphic Column

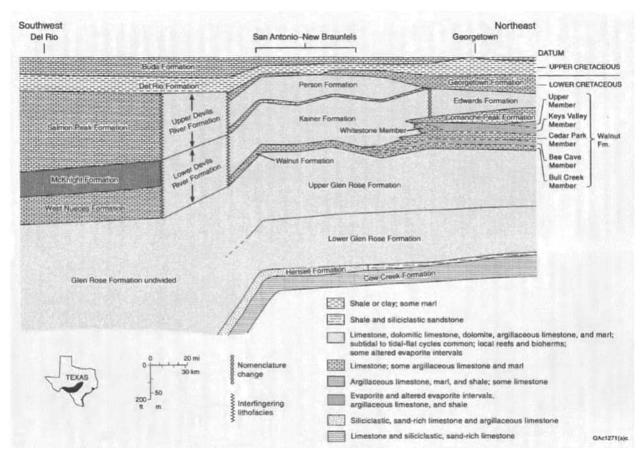
Near Southeast Quadrant of RR-2243 and Parkside Parkway, Leander, Texas 78641

Formation	Symbol	Thickness			
Edwards Formation	Ked	80-100 Feet			
Comanche Peak Formation	Кср	40-50 Feet			
Walnut Formation	Kw	160-170 Feet			
Glen Rose Formation	Kgr	600 Feet			

Regional Stratigraphic Column



(Adapted from Collins, E. W. (2005). Geologic Map of the West Half of the Taylor, 30 x 60 Minute Quadrangle: Central Texas Urban Corridor, Encompassing Round Rock, Georgetown, Salado, Briggs, Liberty Hill, and Leander. Walter Geology Library.)



(Adapted from Collins, E. W. (2005). Geologic Map of the West Half of the Taylor, 30 x 60 Minute Quadrangle: Central Texas Urban Corridor, Encompassing Round Rock, Georgetown, Salado, Briggs, Liberty Hill, and Leander. Walter Geology Library.)

ATTACHMENT C

Site Geology

The subject property is located in the Lower Cretaceous System, specifically in the Edwards Formation (Ked), Comanche Peak Formation (Kcp), Walnut Formation (Kw), and Glen Rose Formation (Kgr). The stratigraphy, structure, and karstic characteristics of the formations are below.

Stratigraphy

Edwards Formation (Ked) – The primary components of this Formation include limestone, dolostone, and chert. The limestone is aphanitic to fine grained, massive to thin bedded, hard, brittle, and in part made up of larger particles with some fossils included. The dolostone is fine to very fine grained, porous, and medium gray to grayish brown. Chert nodules and plates are common. Formation is 60 to 350 feet thick and thins Northward. Age is Early Cretaceous.

Comanche Peak (Kcp) – The primary components of this Formation include nodular, fossiliferous limestone with wackestone and packstone textures. It is typically between 40 and 70 ft thick, thickening toward the north and pinching out southwest. Comanche Peak rocks make up the lower part of the Edwards aquifer northern segment.

Walnut (Kw) – The primary components of this Formation include limestone, argillaceous limestone, and marl. Walnut deposits represent transgressive facies and are subdivided into six members: Bull Creek limestone, Bee Cave marl, Cedar Park limestone, Whitestone limestone, Keys Valley marl, and the upper marl. Individual members are 30 to 50 ft thick. Walnut carbonate rocks exhibit mudstone, wackestone, and packstone textures. Walnut rocks are not considered aquifer units of the Northern Edwards aquifer, although limestone intervals of the Walnut could locally contain water or allow some recharge to the aquifer.

Glen Rose (Kgr) – The primary components of this Formation include limestone, argillaceous limestone, and dolomitic limestone with wackestone, packstone, and lesser grainstone textures. This Formation is the oldest Lower Cretaceous strata in the area. Characteristic Glen Rose stairstep topography caused by alternating resistant and recessive beds results from the common, upward-shoaling, subtidal to tidal-flat, cyclic deposition. Some strata exhibit vuggy porosity and karst features. This Formation is about 800 feet thick.

Soil Series

Site Specific Soil Serie(s):

Georgetown stony clay loam, 1 to 3 percent slopes (GsB) – The GsB series is well drained and has very high runoff. The series is rarely flooded and rarely ponded. The GsB ability to transmit water is considered to be very low to moderately low (0.00 to 0.06 inches/hour). The soil is typically stony clay loam at the surface (0 to 7 inches), below which is cobbly clay (7 to 35 inches), followed by bedrock (35 to 60 inches).

Regional Geological Setting

The Del Rio Clay Formation is dated as Upper Cretaceous in age. Above the Del Rio Clay Formation is the Buda Formation and below the Del Rio Clay Formation is the Georgetown Formation. The Georgetown Formation is dated as Lower Cretaceous in age. Below the Georgetown Formation is the Edwards Formation. The Edwards Formation is dated as Lower part of the Cretaceous age. Below the Edwards Formation is the Comanche Peak Formation. However, in some area the Edwards Formation is directly over the Walnut Formation. The Walnut Formation is typically located below the Comanche Peak Formation. The Walnut Formation can be split into four separate Formation, listed as follows from upper to lower: Keys Valley and Whitestone Formation, Cedar Park Formation, Bee Cave Formation, and Bull Creek Formations. Following the Walnut Formation is the Glen Rose Formation and is the basal unit for the lower Cretaceous rocks. The sequence above the Edwards Group include Taylor Formation, Austin Formation, Eagle Ford Formation, Buda Formation, and the Del Rio Formation.

The Edwards Limestone is the main water-bearing unit of the Edwards Aquifer. The confining units are the overlying clays from the Del Rio formation and the interbedded clay bed within the limestones within the underlying Walnut Formation.

Karstic Characteristics

The Karst characteristics of limestone are used to define landscapes formed on slightly soluble bedrock owing to processes of dissolution by groundwater. In limestone terrains, Karst is expressed by erratically developed cavernous porosity and the surface manifestation such as sinkholes, voids of various sizes, and locally erratic surface drainage. The Karst landscapes are typical of the Edwards Limestone and Georgetown Limestone. The Karst processes are key to the workings of the Edwards Aquifer. The voids, holes, and other Karst manifestations act as recharge points for the Edwards Aquifer. The TCEQ monitors and requires protective strategies when dealing with Karst manifestations to help maintain the water quality of the Edwards Aquifer.

The absence of Karst from visual inspection of the property during the site visit have also been confirmed by reviewing the historic topographic maps where no indication of Karst features can be seen.

Sources

Barnes, V.E. (project director) (1974). Geologic atlas of Texas, Seguin sheet: University of Texas-Austin, Bureau of Economic Geology Geologic Atlas of Texas, scale 1:250,000, Donald Clinton Barton memorial edition.

Collins, E. W. (2004). Geologic Map of the West Half of the Taylor, 30 x 60 Minute Quadrangle: Central Texas Urban Corridor, Encompassing Round Rock, Georgetown, Salado, Briggs, Liberty Hill, and Leander. Walter Geology Library.

Soil Survey of Williamson County, Texas. USGS.

Features/Photos

No features, as per the TCEQ geologic assessment guidelines, were identified. Below are photos that show the setting of the site as it relates to the geology and surface conditions.



(Photo of Feature NA)

Photo 1

Feature: N/A

Location: (30°35'40.4226"N, 97°46'22.566"W)

Description: Photo 1 showing an overview of the subject property. The subject property is shown as having trees, grasses, and shrubs. Some exposed rock is also present as described in the report.



(Photo of Feature N/A)

Feature: N/A

Location: (30°35'44.718"N, 97°46'20.67"W)

Description: Photo 2 shows what appears to be recrystallized limestone. The exposed rocks are

only seen on a small portion of the subject property as discussed in the report.



(Photo of Feature N/A)

Feature: N/A

Location: (30°35'44.749"N, 97°46'20.976"W)

Description: Photo 3 shows what appears to be dolomitized limestone. The exposed rocks are

only seen on a small portion of the subject property as discussed in the report.



(Photo of Feature N/A)

Feature: N/A

Location: (30°35'42.717"N, 97°46'19.905"W)

Description: Photo 4 shows a closeup view of the trunk of a tree located on the subject property. The trunk does not show any signs of long-term water flooding or ponding. No watermarks are seen and no hydrophilic fauna, such as lichen and moss, are seen on the trunk.



(Photo of Feature N/A)

Feature: N/A

Location: (30°35'42.425"N, 97°46'20.593"W)

Description: Photo 5 shows a tree located on the subject property that is slated for removal. Many of the trees on the property have pink/orange ribbons tied around the trucks, indicating that they are also slated for removal.



(Photo of Feature N/A)

Feature: N/A

Location: (30°35'42.968"N, 97°46'23.731"W)

Description: Photo 6 shows a view looking west, across of Parkside Parkway, at the adjacent property. As seen from this view, it appears that the adjacent property is at a higher elevation compared to the road which indicates an outcropping.



(Photo of Feature N/A)

Feature: N/A

Location: (30°35'41.754"N, 97°46'19.369"W)

Description: Photo 7 shows a wooden stake that is located on the central part of the subject property. The stake is not considered to be a feature as the portion of the stake in the ground is unlikely to be much more than a foot.



(Photo of Feature N/A)

Feature: N/A

Location: (30°35'43.411"N, 97°41'18.502"W)

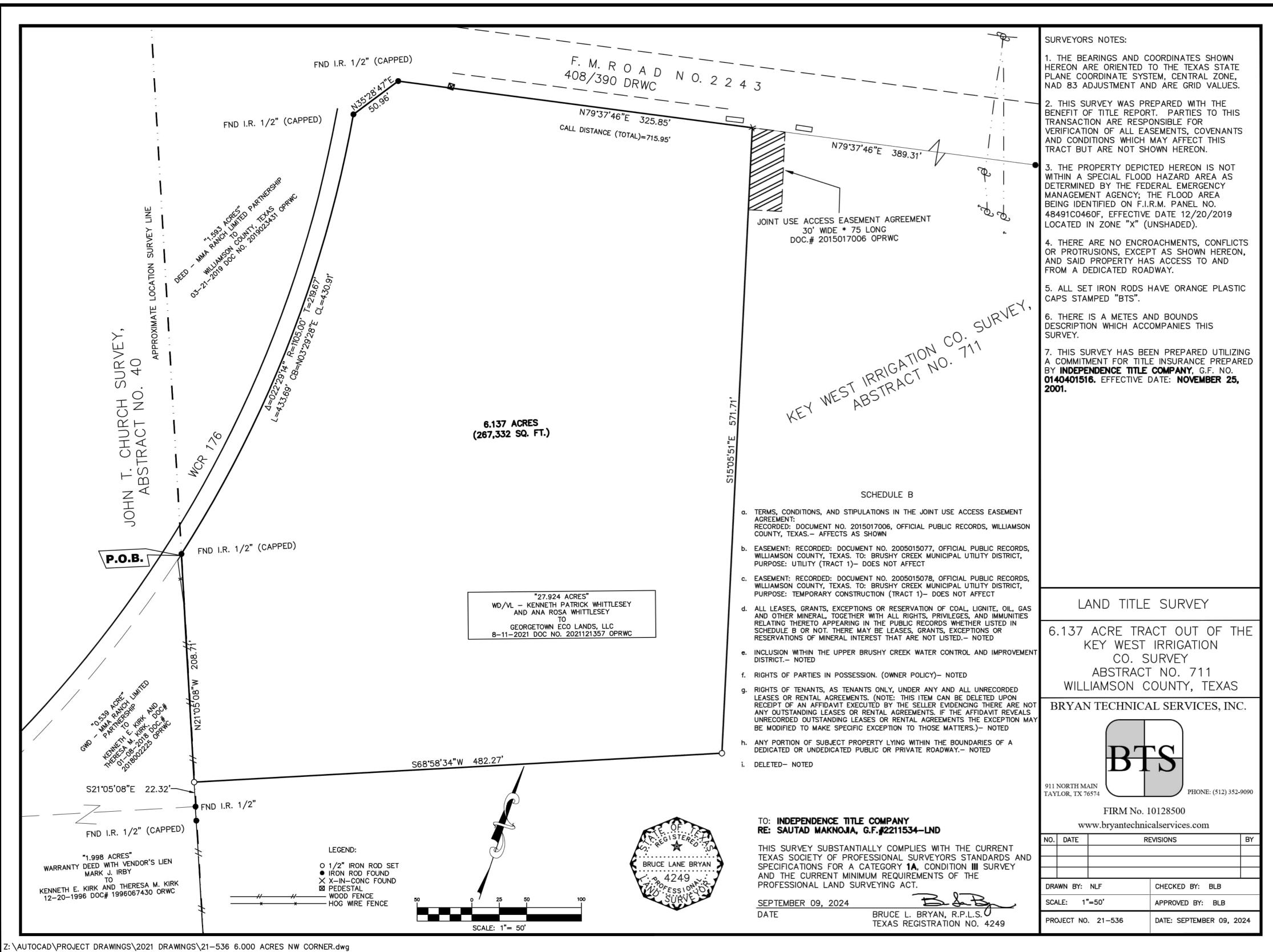
Description: Photo 8 shows some dry vegetation located along the eastern portion of the subject property. The dry vegetation is a clear indicator that there is poor saturation in the soil of the subject property.

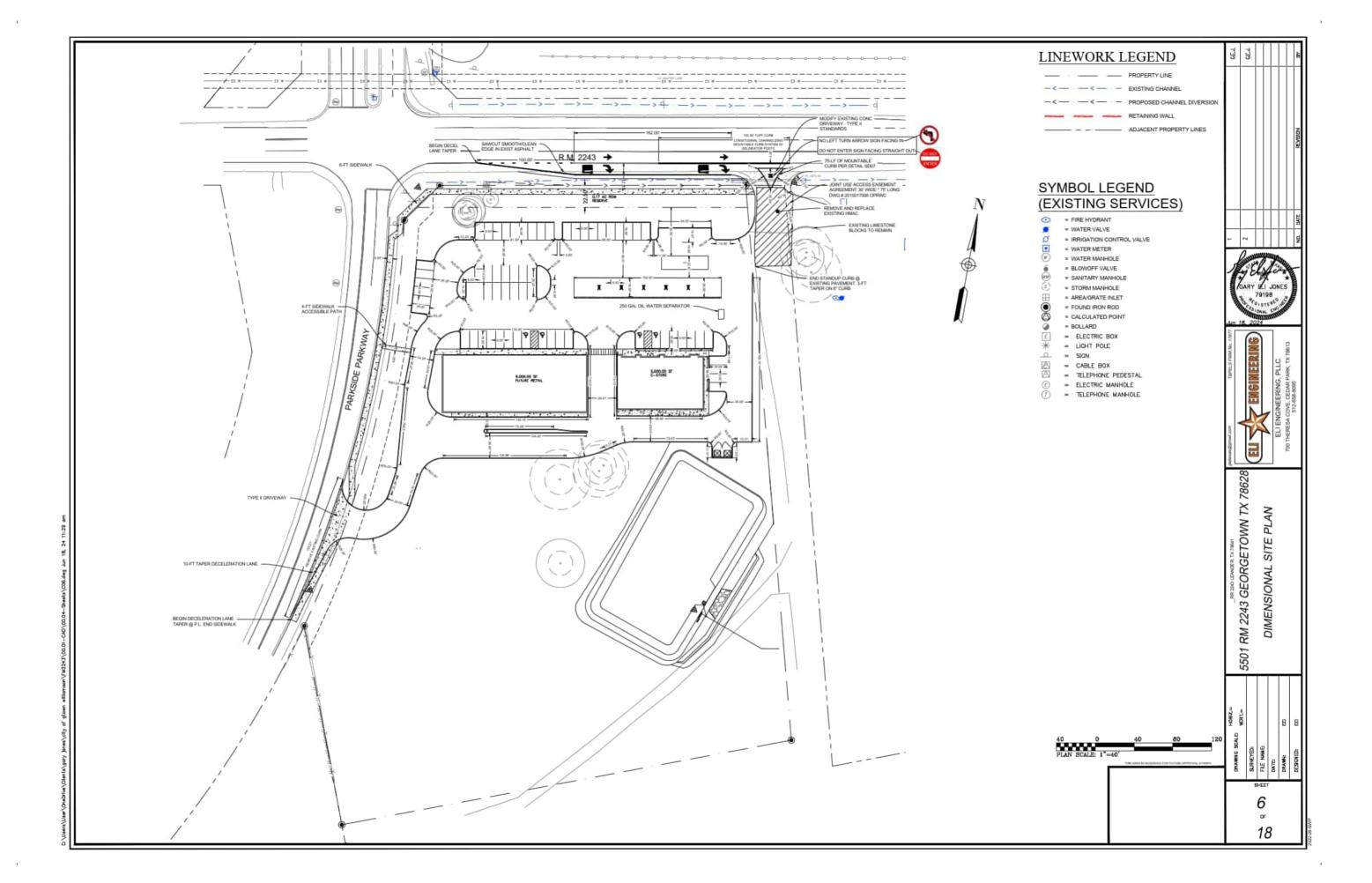
ATTACHMENT D

Site Maps

Site Maps

- 1. Survey Map
- 2. Site Plan Map
- 3. Site Geologic Map
- 4. Site Soils Map
- 5. Edwards Aquifer Recharge Zone Map



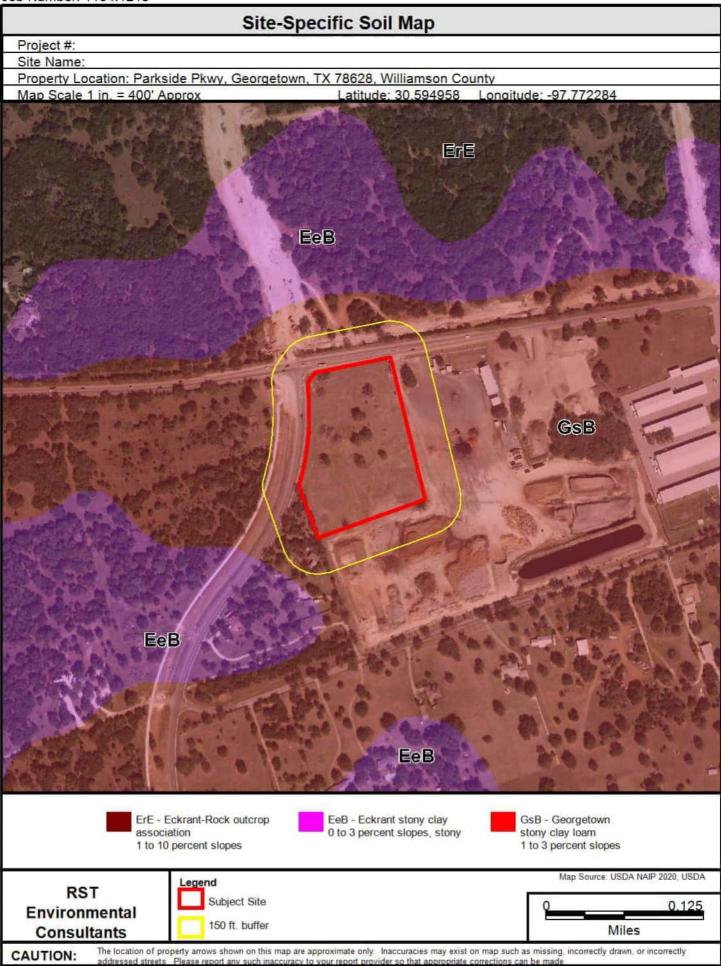


Job Number: 1154.1213 Site-Specific Geologic Map Project #: Site Name: Property Location: Parkside Pkwy, Georgetown, TX 78628, Williamson County

Map Scale 1 in. = 60' Approx

Latitude: 30.594958

Location: Latitude: 30.594958 Lonaitude: -97.772285 Ked Map Source: USDA NAIP 2020; WCAD; TCEQ; COA 2017 Legend **RST** Ked - Edwards Formation Subject Site WCAD Parcel 165 **Environmental** 150 ft. buffer Feet Consultants 2-Foot Contours The location of property arrows shown on this map are approximate only. Inaccuracies may exist on map such as missing, incorrectly drawn, or incorrectly addressed streets. Please report any such inaccuracy to your report provider so that appropriate corrections can be made. CAUTION:



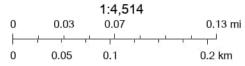
Edwards Aquifer Viewer Custom Print



1/15/2023, 4:29:19 PM

Edwards Aquifer Label 7.5 Minute Quad Grid

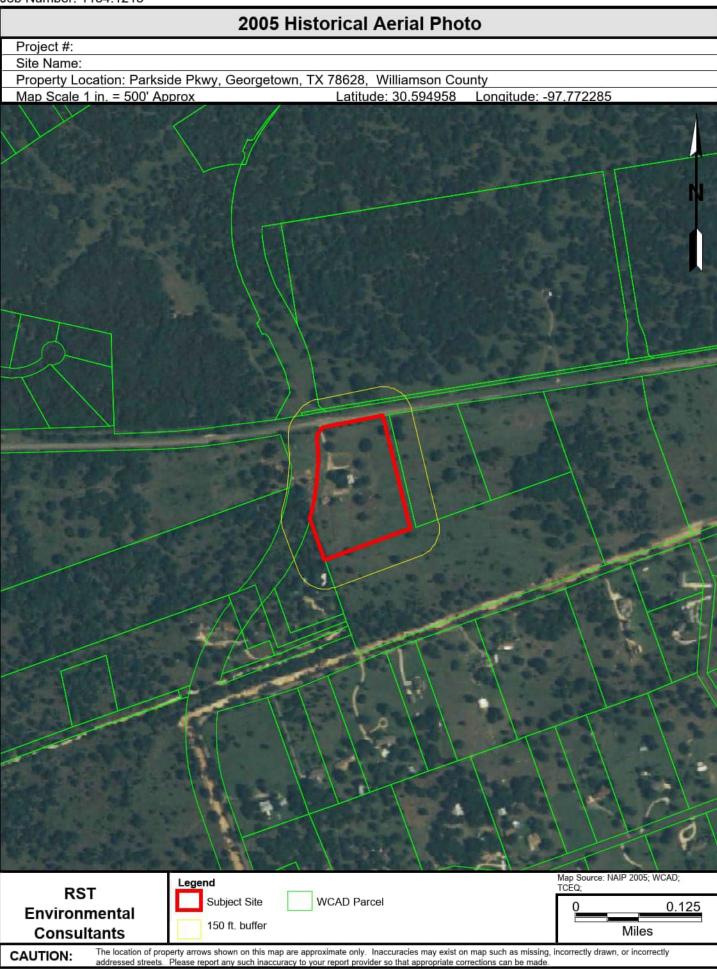
TX Counties TCEQ_EDWARDS_OFFICIAL_MAPS



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, TCEQ, Esri Community Maps Contributors, City of Austin, County of

ATTACHMENT E

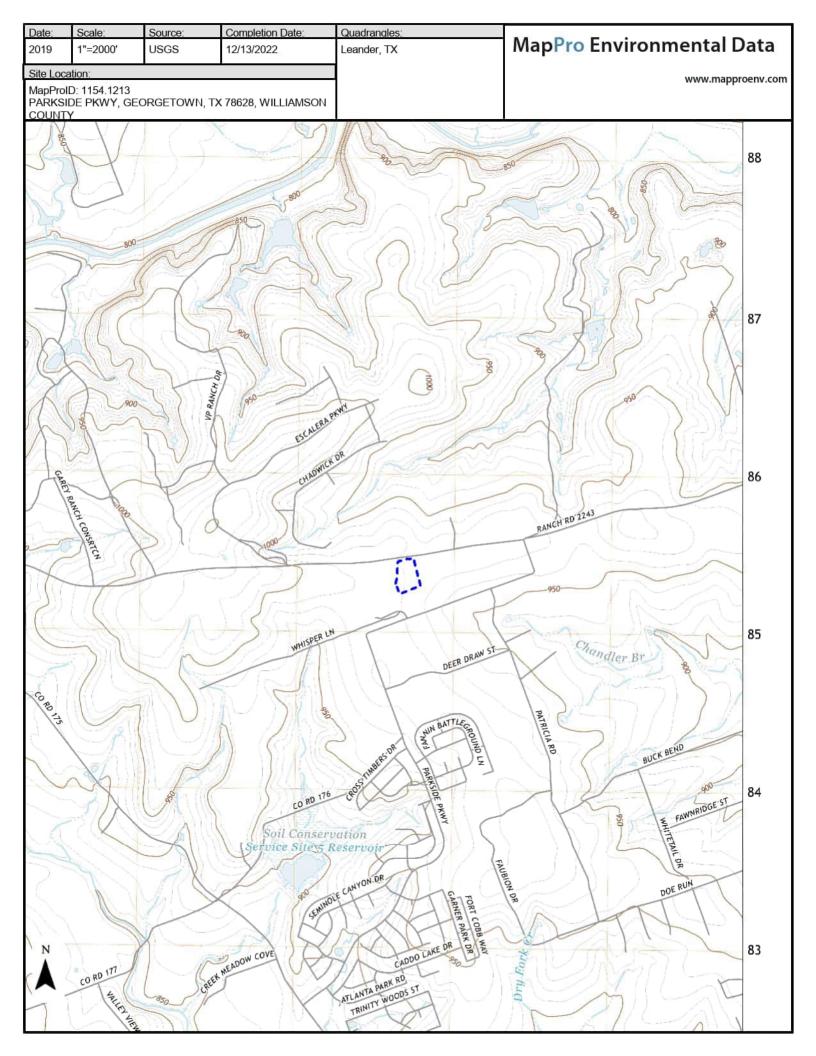
Historical Aerial Photographs

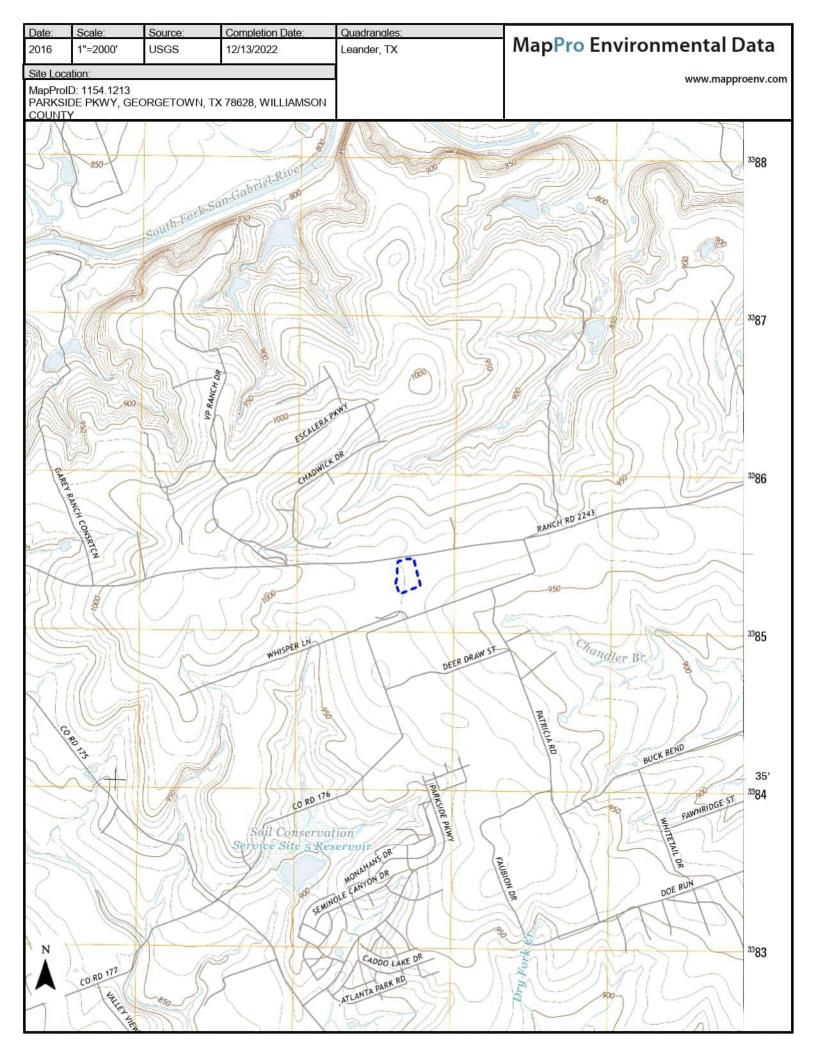


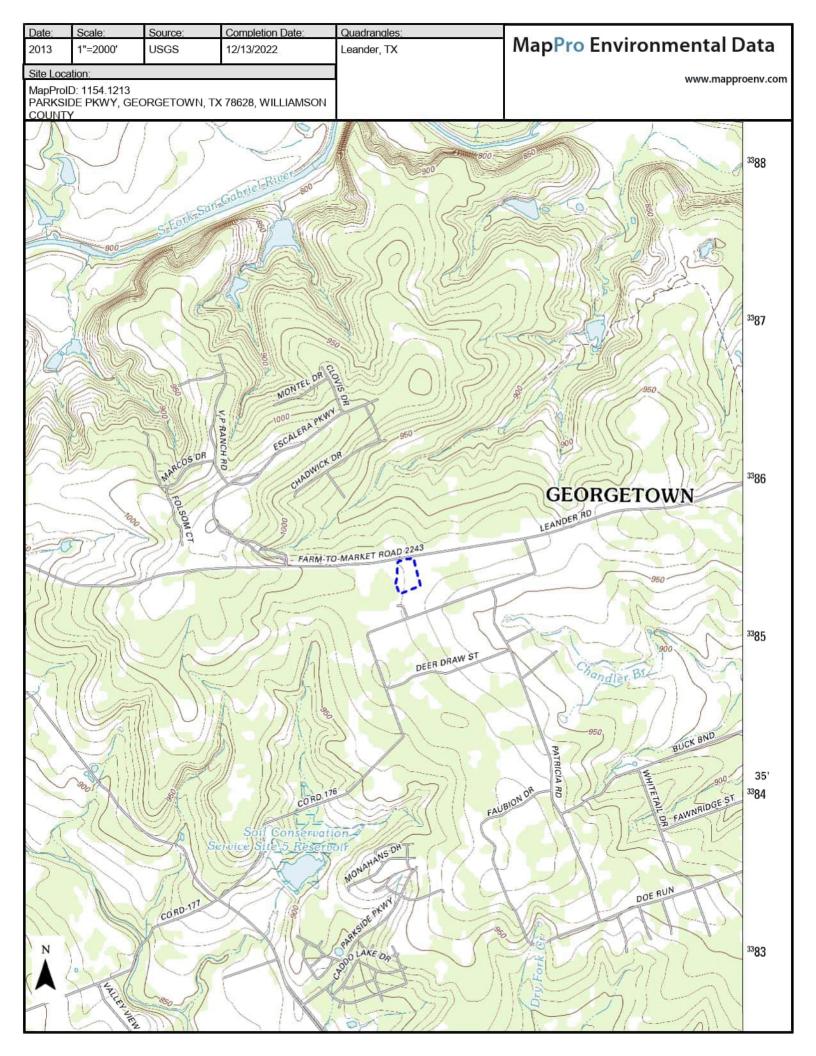


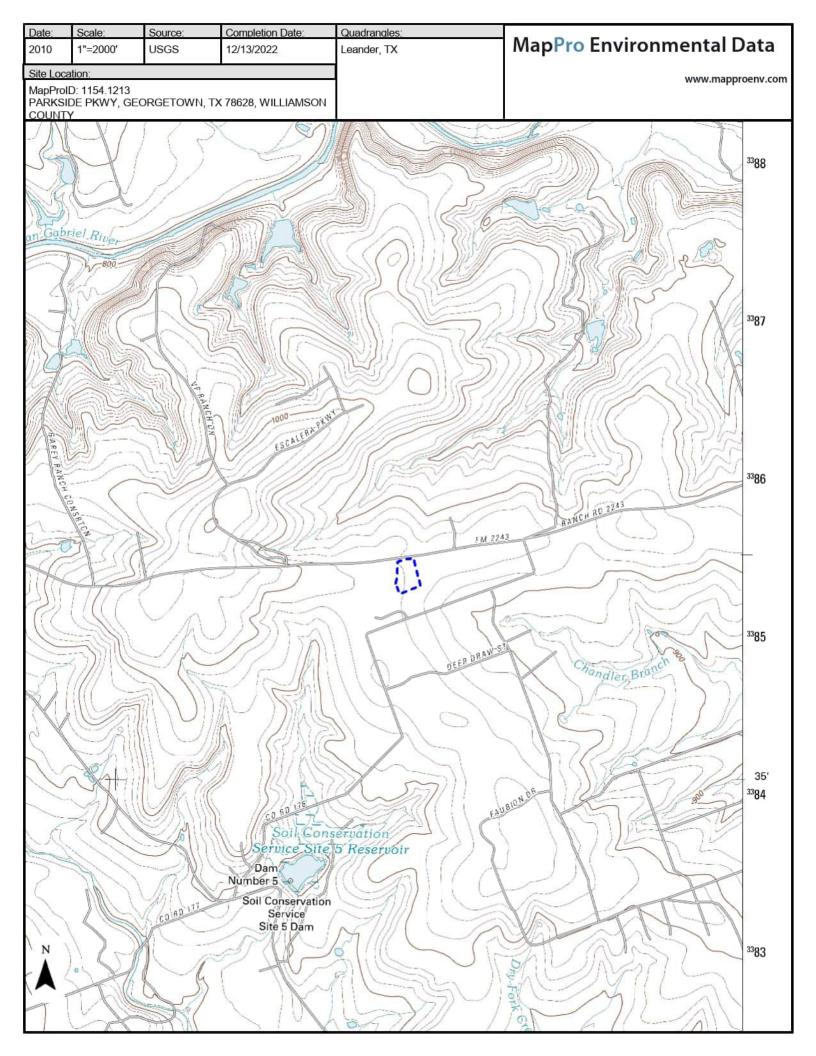
ATTACHMENT F

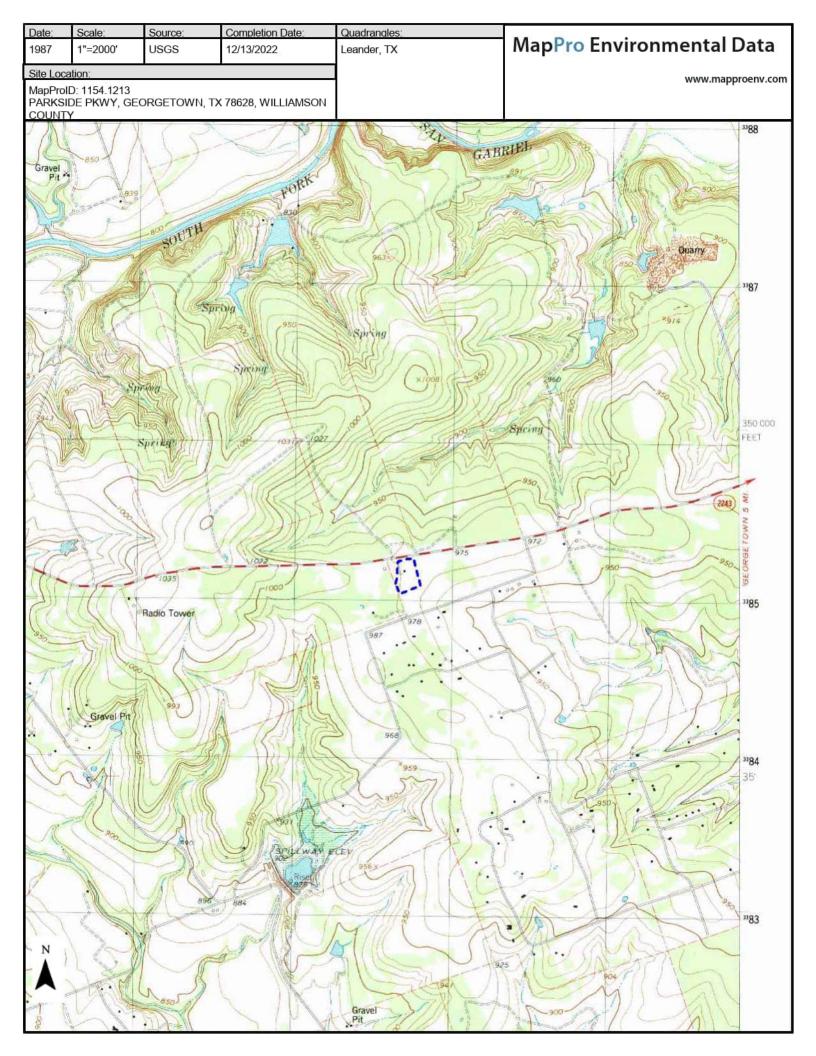
Topographic Maps

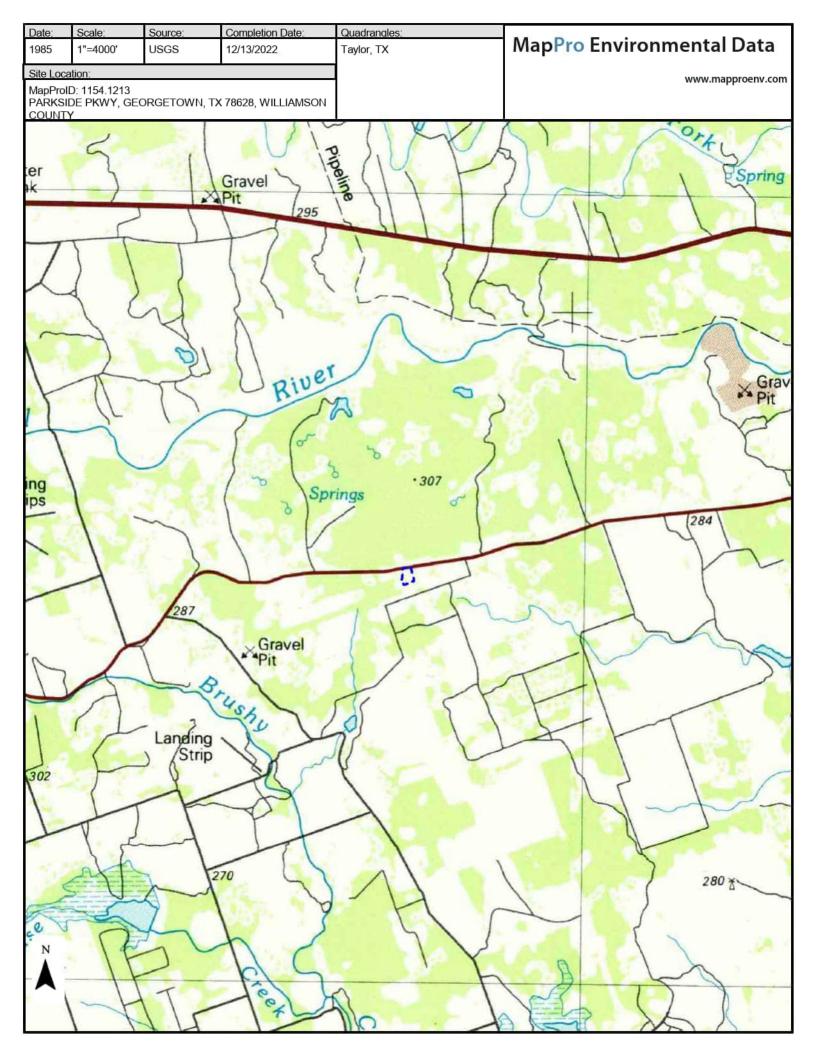


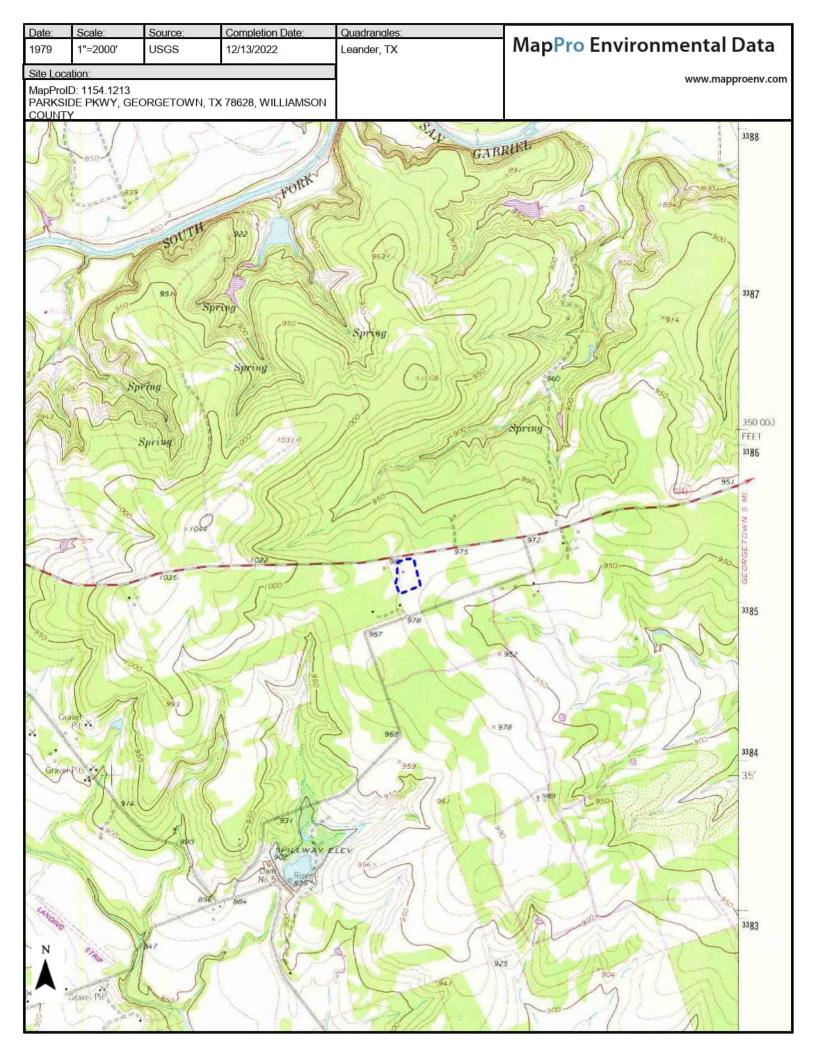


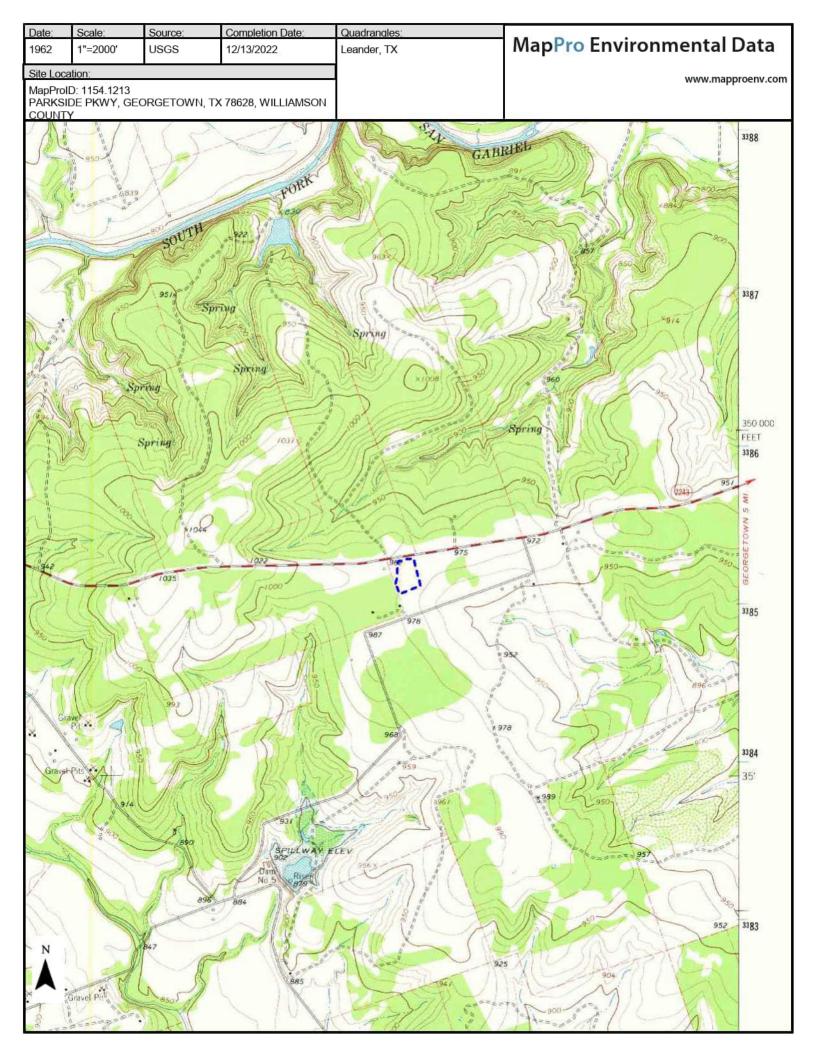


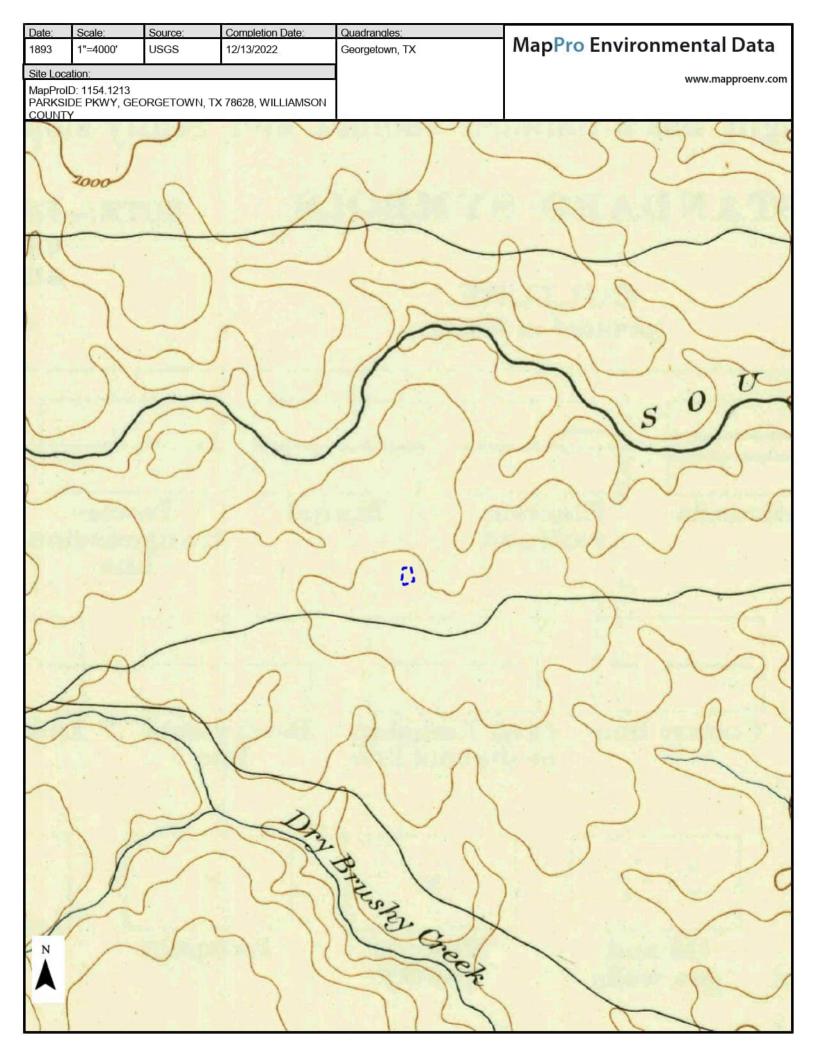












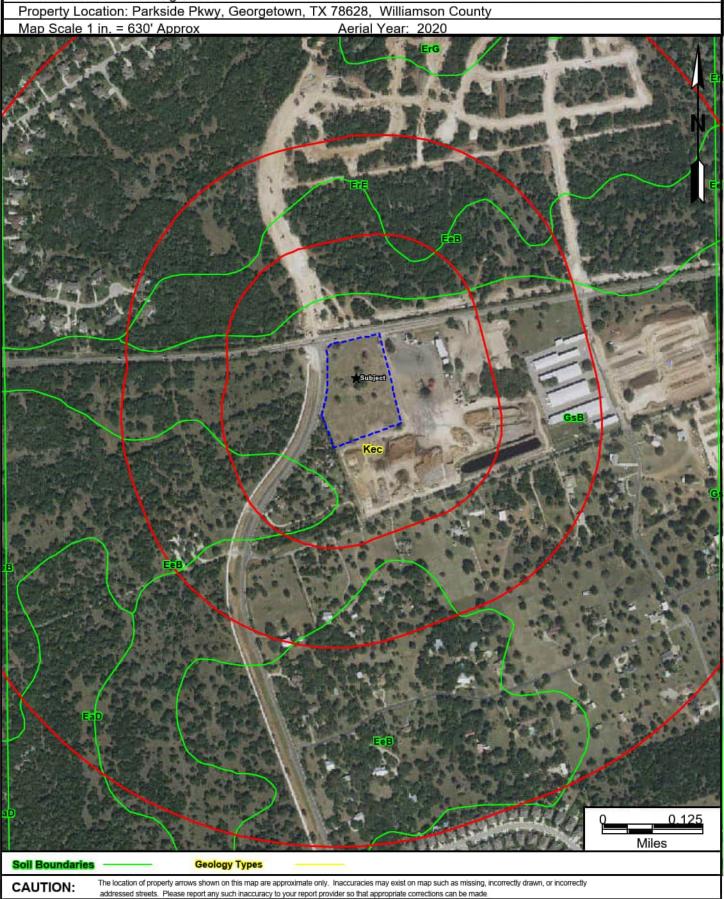
ATTACHMENT G

Soils Map, Fault Map, Wetlands Map, Flood Zone Map, Water Well Map, and Oil & Gas Map

USDA/NRCS SOIL MAP

Project #:

Site Name: GAR - Georgetown



USDA SOIL AND GEOLOGY MAP LEGEND

There are 1 distinct geologic types and 5 distinct soil types within the mapped area.

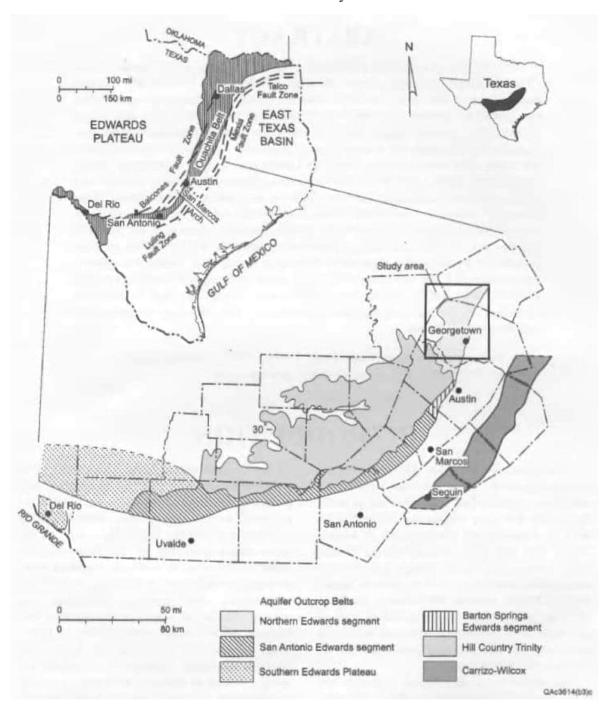
Soil Maps are a product provided by the Natural Resources Convervation Service (NRCS) dvision of the US Department of Agriculture and are formatted as Soil Survey database (SSURGO) files. A legend page is provided that provides the map symbol and a limited amount of descriptive information for each soil type. For more information, contact the NRCS at https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/.

Geology Map Symbol: Kec		COUNT: 1
Geology Description:	Unit Age: Early Cretaceous Rock Type: limestone, dolostone	(dolomite)
Soil Map Symbol: EeB		COUNT: 4
Soil Description:	Eckrant stony clay, 0 to 3 percent slopes, stony	
Soil Map Symbol: ErG		COUNT: 1
Soil Description:	Eckrant-Rock outcrop association, 8 to 30 percent slopes	
Soil Map Symbol: ErE		COUNT: 1
Soil Description:	Eckrant-Rock outcrop association, 1 to 10 percent slopes	
Soil Map Symbol: EaD		COUNT: 1
Soil Description:	Eckrant cobbly clay, 1 to 8 percent slopes	•
Soil Map Symbol: GsB		COUNT: 1
Soil Description:	Georgetown stony clay loam, 1 to 3 percent slopes	•

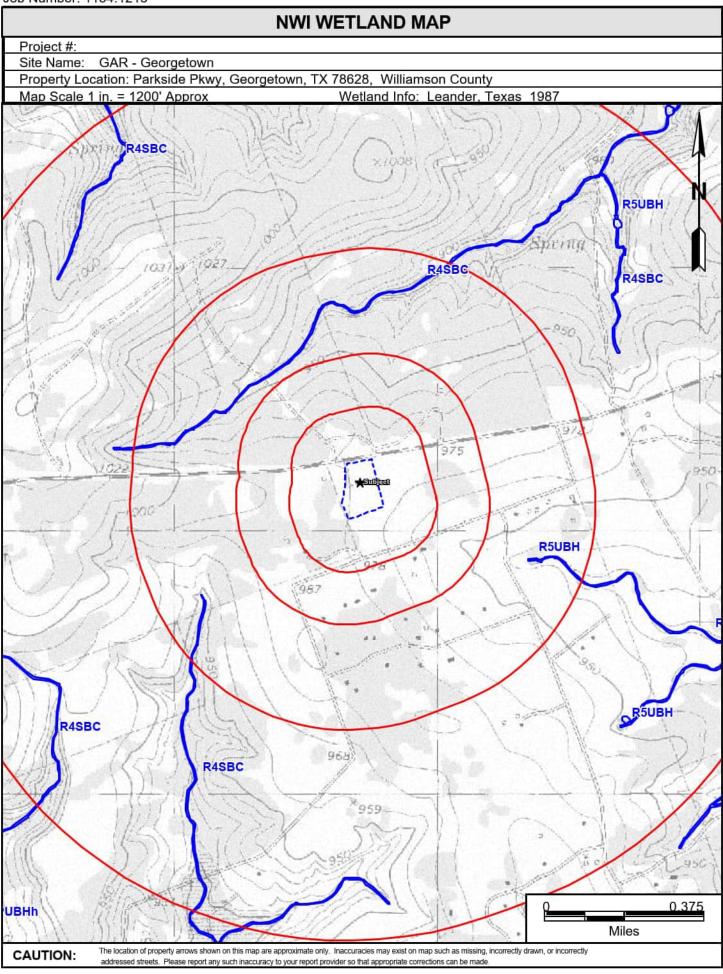
Property Location: Parkside Pkw y

Georgetown, TX 78628

Balcones Fault System



(Adapted from Collins, E. W. (2005). Geologic Map of the West Half of the Taylor, 30 x 60 Minute Quadrangle: Central Texas Urban Corridor, Encompassing Round Rock, Georgetown, Salado, Briggs, Liberty Hill, and Leander. Walter Geology Library.)



WETLAND MAP LEGEND

There are 4 distinct National Wetlands Inventory types within the mapped area.

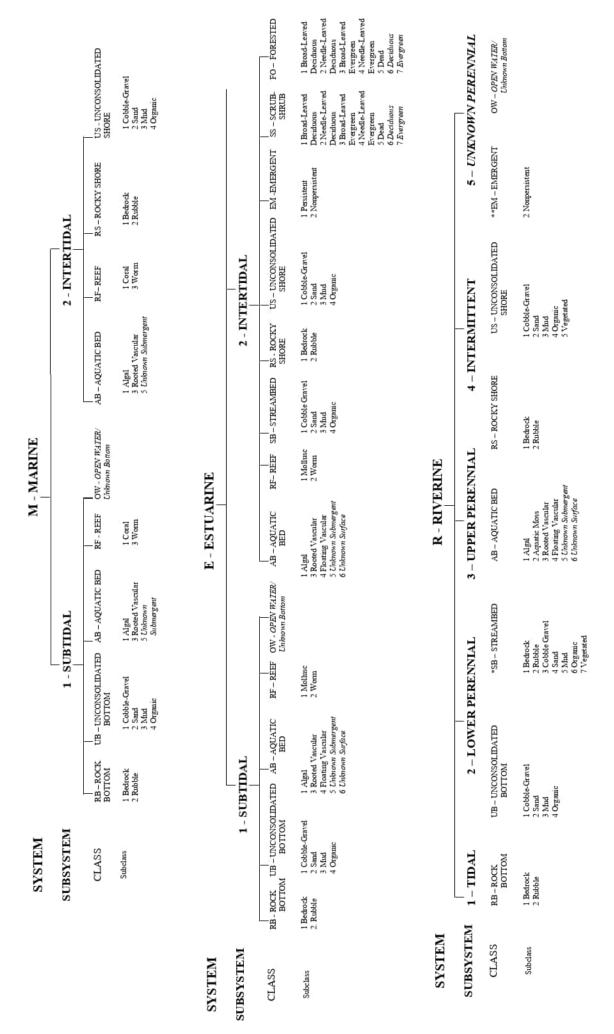
More information about Wetlands can be found at: http://www.fws.gov/wetlands/data/wetland-codes.html

Map Symbol: PFO1A		COUNT: 1
Description:	Freshwater Forested/Shrub Wetland	
Map Symbol: PUBHh		COUNT: 4
Description:	Freshw ater Pond	
Map Symbol: R5UBH		COUNT: 4
Description:	Riverine	
Map Symbol: R4SBC		COUNT: 8
Description:	Riverine	_

Property Location: Parkside Pkw y

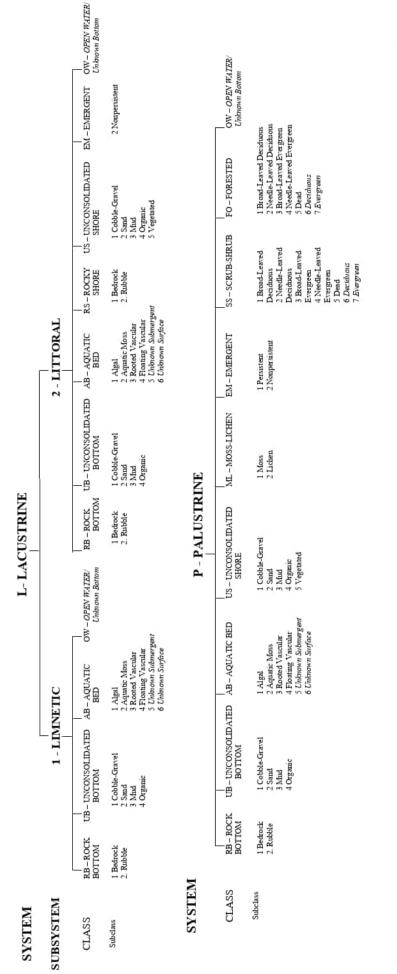
Georgetown, TX 78628

WETLANDS AND DEEPWATER HABITATS CLASSIFICATION



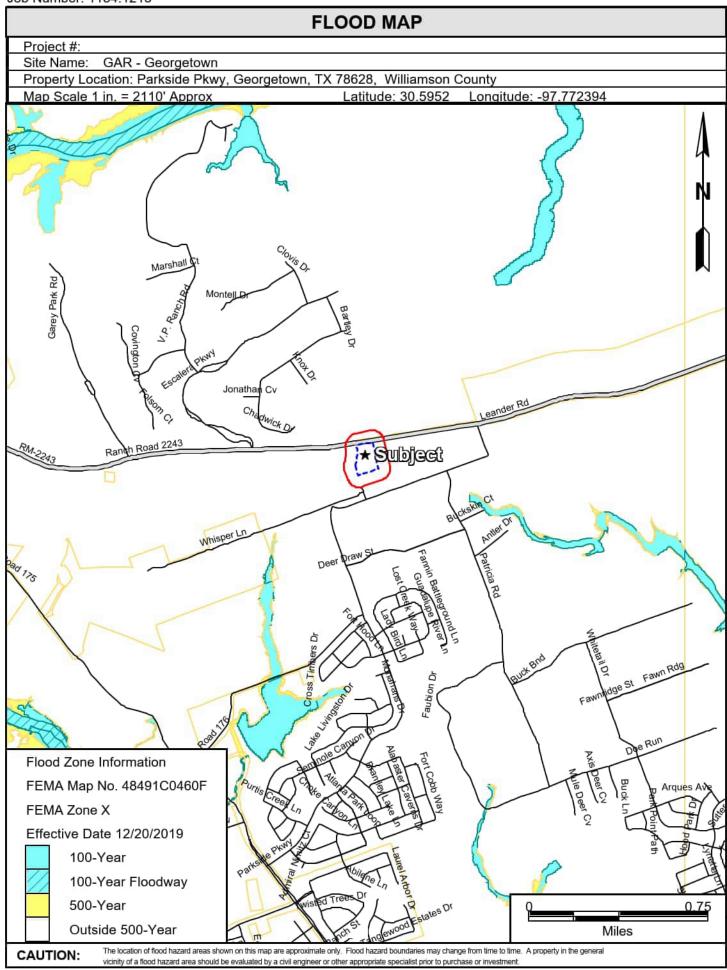
^{*} STREAMBED is limited to TIDAL and INTERMITTENT SUBSYSTEMS, and comprises the only CLASS in the INTERMITTENT SUBSYSTEM.
** EMERGENT is limited to TIDAL and LOWER PERENNIAL SUBSYSTEMS.

WETLANDS AND DEEPWATER HABITATS CLASSIFICATION



		27	SPECIAL MODIFIERS		Д.	a ramany bramed brones ramides substrate	f Farmed s Spoil	x Excavated						
	nemistry,	the ecological system.	Nos		g Organic b		C							
2	rater regime, water cl	ray also be applied to		Inland Salinity pH Modifiers for all Fresh Water	A 50.04	a Acid	t Circummentral	i Alkalme						
	one or more of the w	e farmed modifier m	WATER CHEMISTRY	Inland Salinity	7 Hypersaline	o Eusanne	9 Mixosaline	0 Fresh						
MODIFIERS	nd deepwater habitats or rel in the hierarchy. The WATE	Coastal Halinity	1 Hyperhaline	2 EURINGIDE	3 Mixohaline (Brackish)	4 Polyhalme	5 Mesohalme	6 Oli gohaline	0 Fresh					
	In order to more adequately describe the wetland and deepwater habitats one or more of the water regime, water chemistry,	plied at the class or lower	Soil, or special modifiers may be applied at the class or lower level in the hierarchy. The farmed modifier may also be applied to the ecological system. R REGIME WATER CHEMISTRY SOIL		*S Temporary-Tidal	K Seasonal-130al	*T Sempermanent-Tidal	*V Permanent-Tidal	U Unknown				These water regimes are only used in	tidally influenced, freshwater systems.
	In order to more adequ	pecial modifiers may be ap		Tidal	K. Artificially Flooded	L Subtidal	M Irregularly Exposed	N Regularly Exposed	P Irregularly Flooded				*These wate	tidally influe
	In soil, or special WATER REGIME	WATE		Tidal	H Permanently Flooded	Juneammently Flooded	K Artificially Flooded	W Intermittently	Flooded/Temporary	Y Saturated/Semipermanent/	Seasonal	Z Intermittently	Exposed/Permanent	U Unknown
				Non-Tidal	A Temporarily Flooded	B Santared	C Seasonally Flooded	D Seasonally Flooded/	Well Drained	E Seasonally Flooded/	Saturated	F Semipermanently Flooded	G Intermittently Exposed	

NOTE: Italicized terms were added for mapping by the National Wetlands Inventory program.



www.mapproenv.com

12/20/2022

1/4 MILE WATER WELL SEARCH

Parkside Pkwy, Georgetown, TX 78628

Thank you for contacting MapPro Environmental Data for a 1/4 mile Water Well Search for the site described above. MapPro has searched properly filed well records available at the Texas Water Development Board (TWDB) and the Texas Commission on Environmental Quality (TCEQ). While we have made every reasonable effort, due to data limitations, MapPro Environmental Data, Inc. can make no claims to the accuracy or completeness of the available information.

The following 3.75 Minute Grids have been researched for this report: 58-26-3

The following sources have been researched for this report:

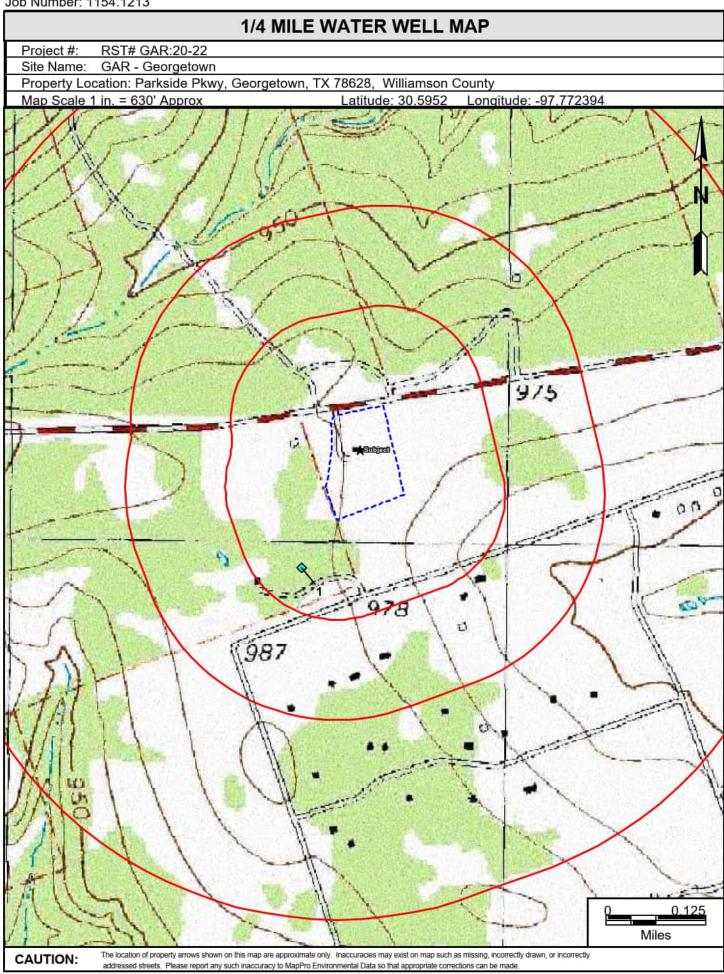
Texas Water Development Board - Over the past several decades, TWDB staff have inventoried and entered records of nearly 140,000 water wells (including ~2,000 springs) in the TWDB Groundwater Database (GWDB). TWDB has assigned 'state well numbers' to these sites based on their location within numbered 7.5 minute quadrangles. The GWDB contains well information including location, depth, well type, owner, driller, construction and completion data, aquifer, water-level and water quality data. The TWDB also hosts the Texas Department of Licensing and Regulation's (TDLR) Submitted Driller's Report Database. This database contains water well reports submitted to TDLR from February 2001 to present. The Submitted Driller's Report Database assigns a tracking number as the unique identifier for each well. Only construction information on the well is available in these reports. We have included both well types in this report.

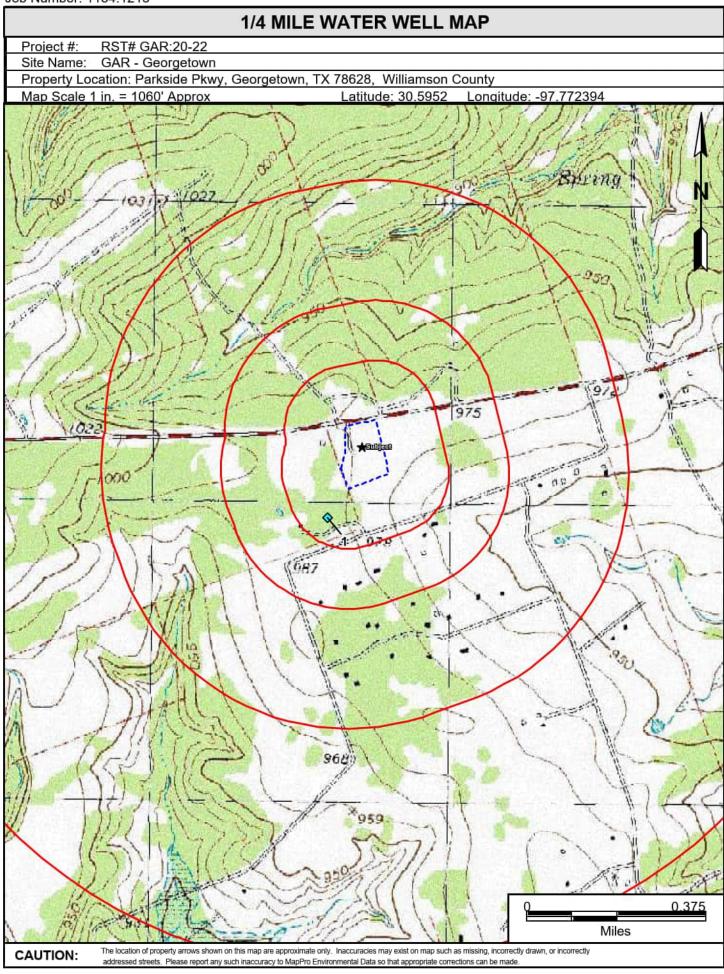
Texas Commission on Environmental Quality - Historical water well logs not included in the TWDB's located well records. A water well report includes information about the well location, depth, construction, water level, local geology, driller and original owner. Some records may have a state well ID, others may be partially numbered. Some of these records have been mapped, though the vast majority have insufficient information to accurately map. We have made our best efforts to include relevant wells where available information allows but complete information is available through a review of the logs associated with the grids listed above.

USGS - As part of the U.S. Geological Survey's (USGS) program for disseminating water data within USGS, to USGS cooperators, and to the general public, the USGS maintains a distributed network of servers for the acquisition, processing, review, and long-term storage of water data. This water data is collected at over 1.5 million sites around the country and at some border and territorial sites. Many types of data are stored in NWIS, including comprehensive information for site characteristics, well-construction details, time-series data for gage height, streamflow, groundwater level, precipitation, physical and chemical properties of water and water use data. Additionally, peak flows, chemical analyses for discrete samples of water, sediment, and biological media are accessible within NWIS. We have included these sites in this report.

Monitoring wells are not included in this report.

If you have any questions regarding this report, please contact us at 866-3MAPPRO.

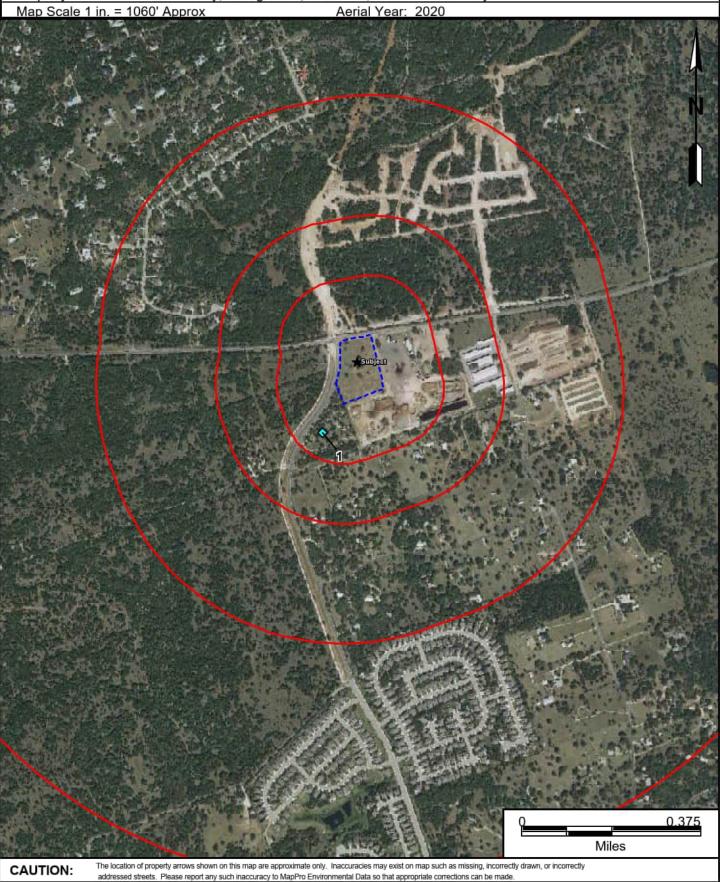




1/4 MILE WATER WELL MAP

Project #: RST# GAR:20-22 Site Name: GAR - Georgetown

Property Location: Parkside Pkwy, Georgetown, TX 78628, Williamson County



1/4 MILE WATER WELL MAP

Project #: RST# GAR:20-22 Site Name: GAR - Georgetown

Property Location: Parkside Pkwy, Georgetown, TX 78628, Williamson County



Georgetown, TX 12/20/2022

SUMMARY OF WELL FINDINGS BY DISTANCE

EFFECTIVE DATE: 12/20/2022

SUBJECT PROPERTY:

Parkside Pkwy Georgetown, TX

MAP ID: 1 DIST/DIR: 0.08 SW

Well Type: Withdrawal of Water Completion Date: 1971 Well ID: 5826301

Owner: Pete Zamora Grid: Tracking#:

WELL LOG MAP ID: 1

Well Type: Withdrawal of Water
Completion Date: 1971
Well Depth: 400
Tracking#:
State Well ID: 5826301
Owner: Pete Zamora
Grid:





GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	5826301
County	Williamson
River Basin	Brazos
Groundwater Management Area	8
Regional Water Planning Area	G - Brazos G
Groundwater Conservation District	GCD Does Not Exist
Latitude (decimal degrees)	30.593056
Latitude (degrees minutes seconds)	30° 35' 35" N
Longitude (decimal degrees)	-97.773611
Longitude (degrees minutes seconds)	097° 46' 25" W
Coordinate Source	+/- 5 Seconds
Aquifer Code	218GLRS - Glen Rose Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	985
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	400
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	1/25/1971
Drilling Method	Cable Tool
Borehole Completion	Open Hole

M/all Time	Withdrawal of Water
Well Type	
Well Use	Stock
Water Level Observation	Miscellaneous Measurements
Water Quality Available	Yes
Pump	Piston
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	Pete Zamora
Driller	Verley Hunt
Other Data Available	Drillers Log
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	6/17/1972
Last Update Date	3/4/2020

Remarks Bailed 8 GPM in 1971. Pump set at 365 feet.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
7	Blank	Steel			0	86
6	Open Hole				86	400

Well Tests - No Data

Lithology - No Data

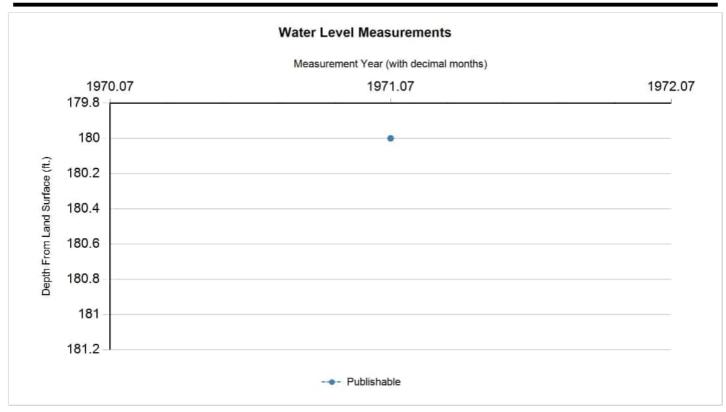
Annular Seal Range - No Data

Borehole - No Data Plugged Back - No Data

Filter Pack - No Data Packers - No Data







Status Code	Date	Time	Water Level (ft. below land surface)	1	Water Elevation (ft. above sea level)	#	Measuring Agency	Method	Remark ID	Comments
Р	1/25/1971		180		805	1	Registered Water Well Driller	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable





Water Quality Analysis

Sample Date: 6/17/1972 Sample Time: 0000 Sample Number: 1 Collection Entity: Texas Water Development Board

Sampled Aquifer: Glen Rose Limestone

Analyzed Lab: Texas Department of Health Reliability: Collected from pumped well, but not filtered or preserved

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		298	mg/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		363.66	mg/L	
00910	CALCIUM (MG/L)		99	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		66	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.8	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		461	mg/L	
00920	MAGNESIUM (MG/L)		52	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		1.5	mg/L	
00400	PH (STANDARD UNITS), FIELD		7.4	SU	
00937	POTASSIUM, TOTAL (MG/L AS K)		17	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SI02)		9	mg/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.84		
00932	SODIUM, CALCULATED, PERCENT		30	PCT	
00929	SODIUM, TOTAL (MG/L AS NA)		91	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		1499	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		282	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		25	С	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		799	mg/L	





Water Quality Analysis

Sample Date: 8/25/1980 Sample Time: 0000 Sample Number: 1 Collection Entity: Texas Water Development Board

Sampled Aquifer: Glen Rose Limestone

Analyzed Lab: Texas Department of Health Reliability: Collected from pumped well, but not filtered or preserved

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		348	mg/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		424.68	mg/L	
00910	CALCIUM (MG/L)		57	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		108	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		5.6	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		392	mg/L	
00920	MAGNESIUM (MG/L)		61	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		1.8	mg/L	
00400	PH (STANDARD UNITS), FIELD		8.3	SU	
00937	POTASSIUM, TOTAL (MG/L AS K)		30	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SI02)		11	mg/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		5.57		
00932	SODIUM, CALCULATED, PERCENT		58	PCT	
00929	SODIUM, TOTAL (MG/L AS NA)		254	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		2228	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		468	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		29	С	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1205	mg/L	





Water Quality Analysis

Sample Date: 7/23/1987 Sample Time: 0000 Sample Number: 1 Collection Entity: Texas Water Development Board

Sampled Aquifer: Glen Rose Limestone

Analyzed Lab: Texas Department of Health Reliability: Collected from pumped well, but not filtered or preserved

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		350	mg/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		427.12	mg/L	
00910	CALCIUM (MG/L)		62	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		79	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		5.4	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		376	mg/L	
00920	MAGNESIUM (MG/L)		54	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		0.53	mg/L	
00400	PH (STANDARD UNITS), FIELD		8	SU	
00937	POTASSIUM, TOTAL (MG/L AS K)		27	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SI02)		9	mg/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		5.24		
00932	SODIUM, CALCULATED, PERCENT		57	PCT	
00929	SODIUM, TOTAL (MG/L AS NA)		234	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		2065	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		413	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		31	С	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1093	mg/L	

^{*} Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (https://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information it contains. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData@twdb.texas.gov.



TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Class	Pasa		ZK	m 1	1 201	
Aquitor 6/219_	Kuse	Field No.		xo.58 - 2		
		Owner's Well No.	County_A	UIliamsal	h	-,-,-,-,-
1. Location: 1	Λι. 1/4 Sec.	, Block Survey				
	nomy 5 Mi.	E of leander off l	F.M. 2243		·	
						lil
		Address: Georg	CIONIT - LI	<u>^</u>	- - - 	
Tenant:		Address:			- 1	(! (
Driller: Ver	ex Hunt	Address:_ /5 /0	TIWITO KO	. George	fown -	7-7-1
3. Elevation of Q	nd Surface	Address: 1510	mined by Leand	r Quad,		
		; Dug, peole Too), Rotary,		CASTNO & BLAN		
	100 ft. Heas.		Cemented		t. to	ft.
	Hole Streight Wall, Under		Diam.	Туре	Settin	to to
					1	
		Type reciprocal	7	Steel	6"	86'
No. Stages	, Bowle Dismin	., Setting 1262 _r.			4	
	in., Length Ta		1 1		1 1	
8. Motor: Fuel el	CCMake	& Model Newman HP. 1			44	
9. Yield: Flow	дри, Риир дри	, Meas., Rept., Est)		1 1	
		of Test Hade by			1	
		_ft. Drawdownft.	7		11	
	_	Capacitygpm/ft.	1			
					- ah	
11. Water Level	M_ R. 1891. 0-11	19 72 above		which is	ft. be	Low surface,
189	Or.Copy. 1-45_	19 7/ above				
	rept.	19 above		which is	ft. ab	ove surface.
	mens	_{bel}			De.	
		DELUM				
12. Use: Dom., 6to	ft. rept.	19 sbove below		which is_	rt. abo	low surface.
	Public Supply, Ind.,	19 below Irr., Waterflooding, Observation, Not		which is_	rt. abo	low surface.
13. Quality: (Remarks	public Supply, Ind.,	19 below below Irr., Waterflooding, Observation, Not c.) Llear	Used,	which is	e t. abc	low surface.
est, 70 °F,	Public Supply, Ind., o on taste, odor, color, et Date sampled for analysis	19 shows below Irr., Waterflooding, Observation, Not c.) Llar 6-17-72 Laboratory 75PH	Used,	which is_	e t. abc	low surface.
13. Quality: (Remarks) EST' - 70 *F, Temp *F,	Public Supply, Ind., a on taste, odor, color, et Date sampled for analysis Date sampled for analysis	19 shows below Irr., Waterflooding, Observation, Not c.) Clar 6-17-72 Laboratory TSPH Laboratory	Used, Scree	which is	rt. abe	ove surface.
13. Quality: (Remarks) EST/Temp.70 °F, Temp °F, Temp °F,	Public Supply, Ind., s on taste, odor, color, et Date sampled for analysis Date sampled for analysis	19 shows below Irr., Waterflooding, Observation, Not c.) Clar 6-17-72 Laboratory TSPH Laboratory Laboratory	Used, Scree	which is WELL SC!	rt. abo	ove surface.
13. Quality: (Remarks) EST/Temp.70 °F, Temp °F, Temp °F,	Public Supply, Ind., s on taste, odor, color, et Date sampled for analysis Date sampled for analysis	19 shows below Irr., Waterflooding, Observation, Not c.) Llar 6-17-72 Laboratory 75PH	Used, Scree	which is WELL SC!	rt. abe	ove surface.
13. Quality: (Remarks CST. 70 °F, Temp. °F, Temp. °F, 14. Other data available Parmation Samples,	pate sampled for analysis Date sampled for analysis	19 show below Irr., Waterflooding, Observation, Not c.) Clar 6-17-72 Laboratory TSPH Laboratory Laboratory DACK, Radioactivity Log, Electric Log,	Scree	which is WELL SC!	rt. abe	ove surface.
13. Quality: (Remarks) CST. 70 °F, Temp. °F, Temp. °F, 14. Other data available Formation Samples, 15. Record by: D.	pate sampled for analysis Date sampled for analysis	19 Showe below Irr., Waterflooding, Observation, Not c.) Clar 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Laboratory Date 6-17 19	Scree	which is WELL SC!	rt. abe	ove surface.
13. Quality: (Remarks) CST. 70 °F, Temp. °F, Temp. °F, 14. Other data available Formation Samples, 15. Record by: D.	pate sampled for analysis Date sampled for analysis	19 sbove below Irr., Waterflooding, Observation, Not c.) Ular 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Date 6-17 19	Scree	which is WELL SC!	rt. abe	ove surface.
13. Quality: (Remarks CST. 70 °F, Temp. °F, Temp. °F, 14. Other data available Parmation Samples, 15. Record by: D.	pate sampled for analysis Date sampled for analysis	19 sbove below Irr., Waterflooding, Observation, Not c.) Ular 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Date 6-17 19	Scree	which is WELL SC!	rt. abe	ove surface.
13. Quality: (Remarks) CST. 70 °F, Temp. °F, Temp. °F, 14. Other data available Formation Samples, 15. Record by: D.	pate sampled for analysis Date sampled for analysis	19 sbove below Irr., Waterflooding, Observation, Not c.) Ular 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Date 6-17 19	Scree	which is WELL SC!	rt. abe	ove surface.
13. Quality: (Remarks CST. 70 °F, Temp. °F, Temp. °F, 14. Other data available Parmation Samples, 15. Record by: D.	pate sampled for analysis Date sampled for analysis	19 Showe below Irr., Waterflooding, Observation, Not c.) Clar 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Laboratory Date 6-17 19	Scree	which is WELL SC!	rt. abe	ove surface.
13. Quality: (Remarks CST. 70 °F, Temp. °F, Temp. °F, 14. Other data available Parmation Samples, 15. Record by: D.	pate sampled for analysis Date sampled for analysis	19 sbove below Irr., Waterflooding, Observation, Not c.) Ular 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Date 6-17 19	Scree	which is WELL SC!	rt. abe	ove surface.
13. Quality: (Remarks CST. 70 °F, Temp. °F, Temp. °F, 14. Other data available Parmation Samples, 15. Record by: D.	pate sampled for analysis Date sampled for analysis	19 sbove below Irr., Waterflooding, Observation, Not c.) Ular 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Date 6-17 19	Scree	which is WELL SC!	rt. abe	ove surface.
13. Quality: (Remarks CST. 70 °F, Temp. °F, Temp. °F, 14. Other data available Parmation Samples, 15. Record by: D.	pate sampled for analysis Date sampled for analysis	19 sbove below Irr., Waterflooding, Observation, Not c.) Ular 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Date 6-17 19	Scree	which is WELL SC!	rt. abe	ove surface.
13. Quality: (Remarks CST. 70 °F, Temp. °F, Temp. °F, 14. Other data available Parmation Samples, 15. Record by: D.	pate sampled for analysis Date sampled for analysis	19 shows below Irr., Waterflooding, Observation, Not c.) Clar 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Date 6-17 19	Scree	which is WELL SC!	rt. abe	ove surface.
13. Quality: (Remarks) ESTemp. 70 °F, Temp. °F, 14. Other data available Pormation Samples, Source of Data 16. Remarks:	pate sampled for analysis Date sampled for analysis	19 shows below Irr., Waterflooding, Observation, Not c.) Clar 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Date 6-17 19	Scree	which is WELL SC!	rt. abe	to to
13. Quality: (Remarks CST. 70 °F, Temp. °F, Temp. °F, 14. Other data available Parmation Samples, 15. Record by: D.	pate sampled for analysis Date sampled for analysis	19 Shows below Irr., Waterflooding, Observation, Not c.) Clar 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Date 6-17 19 s 169 September 19	Scree Diam. (in.)	which is WELL SC!	rt. abe	ove surface.
13. Quality: (Remarks) ESTemp. 70 °F, Temp. °F, 14. Other data available Pormation Samples, Source of Data 16. Remarks:	pate sampled for analysis Date sampled for analysis	19 Shows below Irr., Waterflooding, Observation, Not c.) Clar 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Date 6-17 19 s 169 September 19	Scree	which is WELL SC!	Settin from	to to
13. Quality: (Remarks) ESTemp. 70 °F, Temp. °F, 14. Other data available Pormation Samples, Source of Data 16. Remarks:	pate sampled for analysis Date sampled for analysis	19 Shows below Irr., Waterflooding, Observation, Not c.) Clar 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Date 6-17 19 s 169 September 19	Scree Diam. (in.)	which is	Settin from	to to
13. Quality: (Remarks) ESTemp. 70 °F, Temp. °F, 14. Other data available Pormation Samples, Source of Data 16. Remarks:	pate sampled for analysis Date sampled for analysis	19 shows below Irr., Waterflooding, Observation, Not c.) Clear 6-17-72 Laboratory Labora	Scree Diam. (in.)	which is	Settin from	to to
13. Quality: (Remarks) ESTemp. 70 °F, Temp. °F, 14. Other data available Pormation Samples, Source of Data 16. Remarks:	pate sampled for analysis Date sampled for analysis	19 Shows below Irr., Waterflooding, Observation, Not c.) Clar 6-17-72 Laboratory TSPH Laboratory Laboratory Laboratory Date 6-17 19 s 169 September 19	Scree Diam. (in.)	which is	Setting from	to to
13. Quality: (Remarks) ESTemp. 70 °F, Temp. °F, 14. Other data available Pormation Samples, Source of Data 16. Remarks:	pate sampled for analysis Date sampled for analysis	19 shows below Irr., Waterflooding, Observation, Not c.) Clear 6-17-72 Laboratory Labora	Scree Diam. (in.)	which is	Settin from	to to
13. Quality: (Remarks) ESTemp. 70 °F, Temp. °F, 14. Other data available Pormation Samples, 15. Record by: D. Source of Data 16. Remarks:	rept. mass. Public Supply, Ind., a on taste, odor, color, et Date sampled for analysis. Date sampled for analysis ble sampled for analysis. Date sampled for analysis.	19 Showe below Irr., Waterflooding, Observation, Not c.) Clear 6-17-72 Laboratory Labora	Scree Diam. (in.)	which is	Setting from	to to
13. Quality: (Remarks) ESTemp. 70 °F, Temp. °F, 14. Other data available Pormation Samples, 15. Record by: D. Source of Data 16. Remarks:	rept. mass. Public Supply, Ind., a on taste, odor, color, et Date sampled for analysis. Date sampled for analysis ble sampled for analysis. Date sampled for analysis.	19 Showe below Irr., Waterflooding, Observation, Not c.) Clear 6-17-72 Laboratory Labora	Scree Diam. (in.)	which is	Setting from	to to
13. Quality: (Remarks) ESTemp. 70 °F, Temp. °F, 14. Other data available Pormation Samples, 15. Record by: D. Source of Data 16. Remarks:	pate sampled for analysis Date sampled for analysis	19 Showe below Irr., Waterflooding, Observation, Not c.) Clear 6-17-72 Laboratory Labora	Scree Diam. (in.)	which is	Setting from	to to

Driller's log

From	<u>To</u>	Description
0	80	Yellow clay, red clay, coarse boulders
80	175	Hard dry rock
175	300	Hard grey rock, some blue rock
300	320	Grey sandy rock
320	345	White sandy rock (some water)
345	400	white grey rock

介人

Send original copy by certified mail to the Texas Mater Development Board	State of Te	745		Well No.	SS-22-25 on map yes
P. O. Son 12386 Austin, Texas 78711	WATER WELL REPORT				71.
1) OMMER: Person having well drilled PCT Landowner 1,	O- ,	Address (Street		(City)	Ostaté)
2) LOCATION OF WELL:)	(Street	or MD)	(City)	(State)
county Williams		(N.R., S.Y., ecc.)	_direction from_	Honge	(Town)
Locate by sketch map showing landmar	ks, roads, creaks,		tion with distance me or survey lines		ng from
liardie					
	Q Georgeton 1	Abstract No.		Survey	
(Une reverse side if necessa	J. 12		t) of Section		
3) TYPE OF WORK (Check): Boy Well Despensing	4)PROPOSED USE (Check): Domestic Industrial	Municipel	5) TYPE OF WELL Rotary	(Check): Driven	Dug
Reconditioning Plugging	Irrigation Test Well	Other	Cables	Jetted	Bored
7	mpth drilled 456 ft. Dep	oth of completed wel		ft, Date drill	1-257
	ction and color of	Casing: Type: Old	New Steal	Plastic	Other
	day Redday	Commented from		_ft. to	ft,
Cour.	Baulder -	Dimeter (inches)	Setting From (ft.)	to (ft.)	Gage
80 - Word Huy	rech.	and Coxin	6	86	24
80. 175 Nord #	y rock.	7			
175. 300 700	my south soul				
300. 320 Hun 20	da Rock	Type			
720 : 345 78 dit	sadu Ruch	Perforated		Slotted	
20me	water .	Diameter (inches)	Setting From (ft,)	To (ft.)	Slot Size
345 - 400 white	Huy rock-				
(Use reverse side if r 7) COMPLETION (Check):	ecessary)) WELL TESTS:			
Straight wall Gravel packed	Other	Was a pump test	made! Yes	Not—11 ye	a, by whom?
Under remed Open Hol	eL_	Yield:	aps with	ft, drædown	afterhrs.
8) WATER LEVEL: Static level 180 ft. below lar	nd surface Date	Beiler test_ &	gpm with	_ft,drawdown	afterhrs.
Artesian pressurelbs. per so	quare inch Date	Artesian flow	gpa		
Depth to pump bowls, cylinder, jet,	etc., 365_ft.	Temperature of w	ater	=====	
below land surface.	12) WATER QUALITY:	nalysis made?	Yes	16n.
		Did any strata c	oncein undesirable	water? Y	es MG-
	90 m 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Type of water1_	There o	epth of strate	11-
	rrify that this well was drilled h				
HAME VERLEY	of la nit water	r Well Drillers Regi	stracion No. 3	22	
ADDRESS 15/6 Hetts Rd Strangeton (Scate)					
(Signed) Delle Anter Adii Drifter)					
Please attach electric log, chemical	analysis, and other percinent info	rmation, if availabl	. ZK5	8-26-	301

(

*Additional instructions on reverse side.

TWOBE-CH-53

Typewrite (Black ribbon) or Print Plainly (soft pencil or black ink) Do not use ball point pan

Texas Department of Heelth Leboratories 1100 West 49th Street Austin, Texas 78756

1	TWDB ONLY
	Organization No. 422 Lab No. 9 /
	Work No. 6042 IAC(86-87) 1585

CHEMICAL WATER ANALYSIS REPORT

Send Reply To: Water Availability Data and Studio Texas Water Development Board Stephen F. Austin Building 1700 Congress Ave. Austin, Texas 78711 Attn: F. Bildery Owner Pete Zamor	Rm. 3	34	Send copy to ow	State W Data Co ner Sample No.	Woll	24 301 23 87 23 87
Date Drilled 1-25-71 Depth			П		urce (type of we	II) Seeden.
Producing intervals	Water leve		ft. Sample depth	111 ft.	179	
Sampled after pumping 2			GPM		rature 1981	Ll°FLl°c
Point of collection		•		sarance Z clear	☐ turbid ☐	cclored other
Use Dan Stock Remarks						
(FOR LABORATORY USE DNLY)						
		CHEMICA	L ANALYSIS	•		· · · · · · · · · · · · · · · · · · ·
Laboratory No.		Date Received_	JUL 24'87	Date	Reported	AUG 14 87
1		WATER ANA	ALYSTS &			
State Well No:58-26-3	0.1	Date: 080		Sample	No:ERT-	1493
	MG/L	ME/L			MG/L	MEZL
Silica: 00955:	9	77 475	Carbonate	** 10 1000 1000 10	0.00	0.00
Calcium 00915	<i>6</i> 2	3.12	Bicarbonate		427	2.00
Magnesium:00925: Sodiem:00930:	54 234	4.48 10.17	Sulfate		413	8.60
Potassium: 00935:	27.0	0.69	Chloride Fluoride		79 5.4	2,23 ∂ .28
T. Cations	f J , V	18.46	Nitrate as NO		0.53	0 .28
Manganese: 01055:		%Na		Anions	Ø : 3:5	18.12
1911 A 1812 1 A . 1 1 1 1 1		PO 17 57	nH	:00403:	8.0	60.31
Beren: 01020:		SAR		THE STREET	W. I. W	
			TDS(Calc)	: 20301:	1095	
Total Iron 01045:		RSC	P. A)k.		Ď.	
)ther			T. Alk.	00410:	350	
ther (Specific Cond.:00) Giluted Conductance (095:	1340	T. Hardness		380	
		05/CM3)	121			
13.5 ×15		gr 42 81	Ammonia-N	:00610:		
items will be anal	yzed if	checked.	Nitrite-N			
		_	Nitrate-N			
		Or	rganicNitrogen	1006051		

Typewrite (Black ribbon) or Print Plainly (soft pencil or black ink) Do not use ball point pen

Texas Department of Health Laboratories

TDWR-0148 (Rev. 1-8-80)

DWR ONLY
Organization NoLab No.
Work No. 6040-410

1100 West 49th Street Austin, Texas 78756	Work No. 6040-410
CHEMICAL WATER A	NALYSIS REPORT
Send report to:	County 246 Williamson
Data Collection and Evaluation Section	8. R. S. State Well No. 58-26-30/
Texas Department of Water Resources	SEP 2 4 1989 Well No.
P.O. Box 13087 Austin, Texas 78711	Date Collected 08-25-70
Location	Sample No. By V-DertoN
Source (type of well) Subm. , Elec Owner Pete	
Date Drilled 1971 Depth 400 ft. WBF G/es	
Producing intervals 86-400 Water level	1 15/2/ 1 1 1
Point of collection <u>Faucet At well</u> - PT	GPM mees, Temperature 77°F 7°C
Use Dom 15+K Remarks	
(FOR LABORATORY LISE ONLY) CHEMICAL A	NALYSIS KEY PUNCHED
Laboratory N CO 16482 Date Received	3 2 6 1980 Date Reported SEP 22 '80
MG/L ME/L	MG/L ME/L
Silica · · · 00955 · · ·	Carbonate 00445
Calcium · · · 00915 · · · 57 2 86	Bicarconets 9. 00440
Magnesium · · 00925 · · · 6/	Sulfate · · · 00945 · · 468
Sodium · · · 00929 · · · 254	Chloride · · 00940 · · / 08 3 . 0 5
Total 18 90	Fluoride · · 00951 · 5.6 0.29
Potessium · 00937 · · · 3 0 0.72	Nitrata · · · 71850 · / • 8
□ Manganese · 01055 · · · □ 9 · 67	pH · · · · · 00403 · · 8 3 Total 20.05
Boron 01022	¹ Dissolved Solids (residue at 180°C) · 70300 · /250
□ Total Iron - 01045 · · · ■ RSC	Phanolphthelain Alkalinity as C aCO ₃ · 00415 · ·
O(other) MG/L	Total Alkalinity as C aCO ₃ .6. 96) 00410 348
Specific Conductance (micromhos/cm ³) · 00095 · /460	Total Hardness as C acco (2-86) 00900 .
Diluted Conductance (micromhos/cm ³) 1342 x 165	Ammonia - N
" items will be analyzed if checked. 2228	Nitrite - N · · · · · · · · · · · · · · · · · ·
The bicarbonate reported in this analysis can be converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure used in the computation of	Nitrata - N
dissolved solids. ² Nitrogen cycle requires separate sample. ³ Total Iron and Manganese require separate sample.	Organic Nitrogen · · · · · ·
	Analysis Charlest By

Typewrite (Black ribbon) or Print Plainly (soft pencil or black ink) -Do not use ball point pen

Texas State Department of Health Laboratories 1100 West 49th Street Austin, Texas 78756

TWDB USE ONLY Program No. 429
Proj. No.

<i>-0</i> -	CHEMICAL WATER A	NALYSIS REPORT	ER 1	Villiamson
Send report to:			County	177-177
Ground Water Data and Protec	tion Division		State Well No. 28	146 6141
Texas Water Development Board P.O. Box 13087			06	1011 No
Austin, Texas 78711			By D. EUONS	for A. Wvai
Location approx. 5 mi. E Source (type of well) drilled; recip	0.7	off (S.) of F Zamora	ZM. 2243.	107 71.1494
Date Drilled 1971 Depth 400	71	0 . 0	•	
100/2	er level	n. Creported - 197	71) 	п (тт '
Sampled after pumping 5 min.	hrs. Yield	10 GPM TORS	Temperature 7	10, 25%
7) 1	pressure tan	K Appearance	ce 🗆 clear 🗅 turbid l	colored other
(FOR LABORATORY USE ONLY)		KEY PU	NCHED	
231802	CHEMICAL	N 2 0 1972		JN 28 1972
Laboratory No	Date Received	11 6 0 13/2	Date Reported -	
MG/L	ME/L		MG/L	ME/L
Silica · · · · · · · · · ·	a	Cerbonate · · · · ·		111.0
Calcium · · · · · · · · · · ·	9 9.67	Bicarbonate · · ·	364	5.96
Magnesium · · · · · · ·	2 4.30	Sulfate · · · · ·	282	5.88
Godium · · · · · · · ·	1 3.95	Chloride · · · · ·	66	1.87
	Total 13.22	Fluoride · · · ·	2.8	0.15
Potessium · · · · · ·	0143	Nitrate · · · · ·	1.5	
☐ Manganese · · · · · ·	. 13.6 5	рн	7.4 Tota	13.86
□ Boron · · · · · ·	sar	Dissolved Solids (sum in MG	i/L)	800
Total Iron · · · · ·	RSC	Phenolphthalein Alkalinity a	is C aCO ₃ · · · · ·	
Gother) MG/L		Total Alkalinity as C aCO3	(5.96)	268
Specific Conductance (micromhos/cm ³) · ·	1/60	Total Hardness as C aCO3		464
Diluted Conductance (micromhos/cm ³) 13	/2 × 111	2/ Nitrog Ammonia - N · · · · ·	en Cycle	
" items will be analyzed if checked.	1499	Nitrite - N · · · · ·		
The bicarbonate reported in this analysis is a imultiplying by 0.4917) to an equivalent amount arbonate figure is used in the computation of this	nt of carbonate, and the	Nitrate - N		
2/ Nitrogen cycle requires separate sample. 3/ Total Iron requires separate sample.	-,	Organic Nitrogen · · ·	· · · · · · · · ·	Ш.Ш
TWDRS.SI.27		Analyst	Checked By	

UNPLOTTABLE WELL LOGS

The following well logs represent wells that may be located within the searched area, but due to the available information could not be accurately located. Many wells do not have complete, accurate, or legible geographic information. If you identify any wells that you believe should appear in the report, please contact MapPro at 866-3MAPPRO.

5		
1		
	act of a	**

Send original copy by certified mail to the Texas Water Development Board	State o	f Texas		For TWDB Well No. C	use only 58-26-3D on map
P. O. Box 13087 Austin, Texas 78711	WATER WEL	L REPORT		Received:	27-7-
1)OWNER: Person having well drilled	Nealnon	Address (Street	W5Tun	Texas	(State)
Landowner(Nam		Address	,	(GILY)	(State)
2)LOCATION OF WELL:			or RFD)	(City)	(State)
County_Williamson	z, <u>le</u> mile	es in S.W., etc.)	direction from_	Beago	Tours
Locate by sketch map showing landman hiway number, etc.*	cks, roads, creeks,	or Give legal loca adjacent section	ation with distance	S.	s from
Leonell	North				
0	NOTER	1			
(Use reverse side if necessary	my Sub.		法) of Section		
3) TYPE OF WORK (Check): New Well Deepening	4)PROPOSED USE (Check): Domestic Industr		5) TYPE OF WEL	L (Check): Driven	Dug
Reconditioning Plugging	Irrigation Test	72.50	Cable	Jetted	Bored
6)WELL LOG: Diameter of holein. D	epth drilled 500 ft.	Depth of completed wel	500	_ft. Date drilled	2-15-77
A	11 measurements made from/	ft.above g	round level.		
	tion and color of ation material	9) Casing: Type: Old	New Steel	Plastic	Other
0-120 to	ult	Cemented from_	٥	ft. to/	/ O ft.
120-180 9194	line	Diameter	Setting		
180-235 line	on leane	(inches)	From (ft.)	To (ft.)	Gage
235-295 Gray	lime.	<u> </u>	<u> </u>	140	
295.500 Ina	un line		1		
*		10) SCREEN: Type	2) 41	3	
		Perforated		Slotted	
	(Con)	Diameter (inches)	Setting From (ft.)	To (ft.)	Slot Size
	_		~		07700
(Use reverse side if no 7) COMPLETION (Check):	ecessary)	11) WELL TESTS:			
Straight wall Gravel packed	Other	Was a pump test n	nade? Yes	No If yes,	by whom?
Under reamed Open Holo	2			4	
8) WATER LEVEL: 2 86	2/1/27		gpm with		
Static level 286 ft. below land			_gpm with	ft.drawdown ar	terhrs.
Artesian pressurelbs. per squ	·	Artesian flow			
Depth to pump bowls, cylinder, jet, below land surface.	etc.,ft.	Temperature of wa	iter		
below land Suttace.	-	Was a chemical ar	nalysis made?	Yes	No
	3	-	ontain undesirable		
	15 11 11 11 11 11 11 11 11 11 11 11 11 1		d		
	ctify that this well was drilled t of the statements herein are				
NAME Thomas An	10/d, Wat	ter Well Drillers Regis	tration No	1319	
ADDRESS 6/6 W Pow	// Lane A	ustin 1	exas	7875 (State)	حی
(Signed) Comu (Water Well Dril	ww	Tom A.h.	Company Name	h; //;	bg
Please attach electric log, chemical au	alysis, and other pertinent inf	formation, if available			

The sketch showing the well location must be as accurate as possible, showing landmarks, in sufficient detail so that the well may be plotted on a General Highway Map of the county in which the well is located.

Reference points from which distances are measured and directions given should be of a permanent nature (e.g. highway intersections, center of towns, river and creek bridges, railroad crossings). The distance and direction from the nearest town should always be indicated.

When giving a legal description include a sketch showing location of the well within the described area. e.g. survey abstract.

Information furnished in Section 2) of the TWDBE-GW-53 is very important. Unless the well can be accurately located on a map the value of the other data contained in the Report is greatly reduced.

MAY A Description Board

DEVELOPMENT BOARD

TYER 8'S SAM IN

Send original copy by	, Chaba	£ mana		For TWDB u	ise only
certified mail to the Texas Water Development Board	State o	r Texas		Well No.	8-24-34
P. O. Box 13087	WATER WEL	T. REPORT		Received:	map
Austin, Texas 78711	WALLER WELL	H KBI OKI			
1)OWNER: Person having well drilled Joz	STANFA	Address Min Da	or RED)	AUSTIN	TEURS
	. <u> </u>	(Street	or KFD)	(City)	(State)
Landowner) 79 Am (Address (Street	or RFD)	(City)	(State)
2)LOCATION OF WELL:	,				,
County 6/1///Anh 100/	,,mil	es in <u>5. W.</u>	direction from	GEORGE	TOWN
		(N.E., S.W., etc.)			.own)
Locate by sketch map showing landmar hiway number, etc.*		Give legal loca adjacent section	tion with distance ons or survey lines	·.	
de Horas	i, Hi				
3/	North	Block		Survey	
3/	1 4	Abstract No			
(Use reverse side if necessa	ary)	(NW% NE% SW% SE) of Section		
3) TYPE OF WORK (Check); New Well Deepening	4)PROPOSED USE (Check)		5) TYPE OF WELL	(Check): Driven	Dug
Reconditioning Plugging	Irrigation Test	Well Other	Cable	Jetted	Bored
6)WELL LOG: Diameter of holein. D	epth drilled 697) ft.	Depth of completed wel	1 690	ft. Date drilled	11-12-16
A	11 measurements made from	O ft.above g	round level.		
From To Descrip	tion and color of	9) Casing:			20 a 20022
	ation material	Type: 01d	New Steel		Other
0-1 -70P Sc	212	Cemented from	0	_ft. to	eft.
1-55 - BROKE	N DIME	Diameter	C Setting		
55-270- 9864	linn 2	(inches)	From (ft.)	To (ft.)	Gage 40
270-305- Bonun /	ME (WATER)				
737	mE		~		
/				a. 8	
595-690- TRINIT	7	10) SCREEN: Type		1	
		Perforated		Slotted	
			Setting		Slot
		Diameter (inches)	From (ft.)	To (ft.)	Size
	940				
	1				
(Use reverse side if n 7) COMPLETION (Check):	ecessary)	11) WELL TESTS:			
Straight wall Gravel packed	Other	Was a pump test	made? Yes	No If yes,	by whom?
Under reamed Open Holo	e	Yield:	gpm with	ft. drawdown a	fterhrs.
8) WATER LEVEL: Static level 2; () ft. below land	d surface Date /1-13-76	Bailer test	gpm with	ft.drawdown af	terhrs.
Artesian pressurelbs. per squ		Artesian flow_	gpm		
			ater		
Depth to pump bowls, cylinder, jet,	ecc.,it.				
below land surface.	•	12) WATER QUALITY: Was a chemical a	35	Yes	
	3		ontain undesirable		•
		Type of water?	d	epth of strata	
I hereby ce	rtify that this well was drille l of the statements herein are	ed by me (or under my so true to the best of my	upervision) and the knowledge and bel	at ief.	
NAME A.P. BE 5 9 EN H		iter Well Drillers Regi			
	CEORR	PARK	7.	EXAS	
(Street or RFD)	(City)	R. P. Ber		M3 /	SERVICE
(Signed) (Water Well Dri	ner (CILY)	11111 11079	(Compa ny Name)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		formation if available	9 -		

loggot.

The sketch showing the well location must be as accurate as possible, showing landmarks, in sufficient detail so that the well may be plotted on a General Highway Map of the county in which the well is located.

Reference points from which distances are measured and directions given should be of a permanent nature (e.g. highway intersections, center of towns, river and creek bridges, railroad crossings). The distance and direction from the nearest town should always be indicated.

When giving a legal description include a sketch showing location of the well within the described area, e.g. survey abstract.

Information furnished in Section 2) of the TWDBE-GW-53 is very important. Unless the well can be accurately located on a map the value of the other data contained in the Report is greatly reduced.

DEAETOLWENT BOARD

DECEINED

Send original copy by	100		<u> </u>	For TWDB	use only
certified mail to the Texas Water Development Board	State o	of Texas		Well No. 1 - 3	
P. O. Box 13087	WATER WEL	I. REPORT		Received:	n map
Austin, Texas 78711		THE STATE OF THE S			
1) OWNER: Person having well drilled	to Cale	Address (A)	wet.	10.1.	
Person having well drilled	10M (Name) and Assa	Address(Street		(City)	(State)
Landowner		Address			
(Name)	(Street	or RFD)	(City)	(State)
2)LOCATION OF WELL:	17	es in 5 (4)		4/2 -	
County AUAMACTAMA	mil.	es in (N.E., S.W., etc.	direction from	NEONSO 16	10 (Town) 27
Locate by sketch map showing landmar	ks, roads, creeks,		ation with distance		s from
hiway number, etc.*	C391		ons or survey line		
1	- Deay Tan	A Labor		League	
Leonele -	North	Block		Survey	
· well	6.01	Abstract No			
(Use reverse side if necessar	Type White Til	(NW% NE% SW% SI	Ek) of Section		
3) TYPE OF WORK (Check):	4) PROPOSED USE (Check)		E)/mrnv on rmr	(at the	
New Well — Deepening	Domestic L Industr		5) TYPE OF WELL	Driven	Dug
Reconditioning Plugging	Irrigation Test V	Well Other	Cable	Jetted	Bored
6)WELL LOG:	1.0				
Diameter of hole 5 in. De	epth drilled 720 ft.	Depth of completed well	720	ft. Date drille	16-27-76
A	11 measurements made from	ft.above g	ground level.		
From To Descript	tion and color of	9) Casing:			
(ft.) (ft.) forms	ation material	Type: 01d	New — Steel	Plastic	Other
0. 85 for	dt	Cemented from	<i>D</i>	ft. to/i	Dft.
85- 280 ma	a limes	Diameter	Setting		
280-330 fra	lemo,	(inches)	From (ft.)	To (ft.)	Gage
330-430 920	· lima	5"	.0	120	
480-506 line	lima				
506 \$30 Gra	D'e	10) COPPER			
1 11-	o Ni	10) SCREEN: Type			
630 - 720 Ibra	in Jime	Perforated		Slotted	
		Diameter	Setting		Slot
		(inches)	From (ft.)	To (ft.)	Size
	<u> </u>				
(Use reverse side if ne	ecessary)				
7) COMPLETION (Check):		11) WELL TESTS:			
Straight wall Gravel packed	Other	Was a pump test	made? Yes	No If yes	, by whom?
Under reamed Open Hole	1	Viold.	gpm with	ft drawdown	efter bre
8) WATER LEVEL:					
Static level 3/6 ft. below land	surface Date		gpm with	ft.drawdown a	ter hrs.
Artesian pressurelbs. per squ	are inch Date	Artesian flow	gpm		
Depth to pump bowls, cylinder, jet,	etc.,ft.	Temperature of w	ater		
below land surface.		12) WATER QUALITY:	- almod - mada 2	Yes	No
		Was a chemical a			
			ontain undesirable		
		Type of water?	d	epth of strata_	
I hereby cer	tify that this well was drille of the statements herein are	d by me (or under my s	upervision) and th	at ief.	
The A	1 0			4 4	
NAME / NO/N 4.5 /T/N (Type or Print)	10 /d Wa	ter Well Drillers Regi	stration No	1311	
ADDRESS 616 West Fo	ewell have	Austin	12×45	787	53
. (Street or RFD)	(City)	1	// 0 '	(State)	
(Signed) Memmer	will-	Jon Ahn	Company Name	11/19	
(Water WellLDff1	101) - C	-	(-anto-n) vienne		
Please attach electric log, chemical an	alysis, and other pertinent in	formation, if availabl	e.		

^{*}Additional instructions on reverse side.

The sketch showing the well location must be as accurate as possible, showing Pandmarks, in sufficient detail so that the well may be plotted on a General Highway Map of the county in which the well is located.

Reference points from which distances are measured and directions given should be of a permanent nature (e.g. highway intersections, center of towns, river and creek bridges, railroad crossings). The distance and direction from the nearest town should always be indicated.

When giving a legal description include a sketch showing location of the well within the described area, e.g. survey abstract.

Information furnished in Section 2) of the TWDBE-GW-53 is very important. Unless the well can be accurately located on a map the value of the other data contained in the Report is greatly reduced.

AMELIVED IN SOME

Control Broom's Toxas Water Bayalupmant Board

DEVELORMENT COARD

Send original copy by certified mail to the Texas Water Development Board P. O. Box 13087	Received				
Austin, Texas 78711	WATER WEL	L REPORT		db	
1)OWNER: Person having well drilled M	elvin Birtelbac	Address R+1	Box 191	A George tow (State)	
Landowner Sa (No	me)	Address (Street	or RFD)	(City) (State)	
2) LOCATION OF WELL: County W////Amso)	, <u>2</u> mil	es in South (N.E., S.W., etc.)	_direction from6	enree town	
Locate by sketch map the wing lands	narks, roads, creeks,	or Give legal loca	tion with distances ns or survey lines.	and directions from	
3 % / In		Labor		League	
	North	Block		Survey	
West of the second	4	Abstract No			
(Use reverse side if neces	ssary)	(NW\ NE\ SW\ SE	弘) of Section		
3)TYPH OF WORK (Check): New Well Deepening	4)PROPOSED USE (Check) Comestic Industr		5) TYPE OF WELL (Check); Driven Dug	
Reconditioning Plugging	Irrigation Test V	Vel1 Other	Cable	Jetted Bored	
6)WELL LOG: Diameter of hole in.	Depth drilled 245 ft. All measurements made from			. Date drilled 8-20-75	
	iption and color of ormation material	9) Casing:	New Steel	Plastic Other	
	4	Type: 01d		ft. to 8 ft.	
	top soil	Diameter	Setting	11. 1011.	
8-18 Gellow	. 1	(inches)		To (ft.) Gage	
18 94 Due	lay & shelf	7400	0 -	100 ft 1/4	
74 - 200 while	line stone				
200-245 white	. Dans				
		10) SCREEN: Type	20ne		
		Perforated		Slotted	
		Diameter	Setting	Slot	
		(inches)	From (ft.)	To (ft.) Size	
(1)					
(Use reverse side if 7) COMPLETION (Check):	necessary)	11) WELL TESTS:			
Straight wall Gravel packed	27. (4)	Was a pump test m	nade? Yes	No If yes, by whom?	
Under reamed Open H	ole	Yield:	gom with	ft. drawdown after hrs.	
8) WATER LEVEL: Static level 2 ft. below 1	and surface Date 8-27-75			ft.drawdown afterhrs.	
Artesian pressurelbs. per	e eur e	Artesian flow	gpm		
Depth to pump bowls, cylinder, je	t, etc.,ft.	Temperature of wa	ter		
below land surface.	Tale en	12) WATER QUALITY: Was a chemical an	alvsis made?	Yes (No	
		ontain undesirable w			
		Type of water?	. 0	th of strata 200-245	
I hereby	certify that this well was drille	d by me (or under my su	pervision) and that	F *	
NAME JOEY C.	all of the statements herein are	true to the best of my ter Well Drillers Regis	1.1	7	
ADDRESS RT BOX	ADDRESS RT BOX 4841 BUCHANAN DAM, 18x, 18609				
(Signed)	(Signed) My M Dr. 1/ing				
	(Water Well Driller) (Company Name)				
Please attach electric log, chemical	analysis, and other pertinent in	formation, if available	• 1,7 -, W 6 5		

*Additional instructions on reverse side.

The sketch showing the well location must be as accurate as possible, showing landmarks, in sufficient detail so that the well may be plotted on a General Highway Map of the county in which the well is located.

Reference points from which distances are measured and directions given should be of a permanent nature (e.g. highway intersections, center of towns, river and creek bridges, railroad crossings). The distance and direction from the nearest town should always be indicated.

When giving a legal description include a sketch showing location of the well within the described area. e.g. survey abstract.

Information furnished in Section 2) of the TWDBE-GW-53 is very important. Unless the well can be accurately located on a mathe value of the other data contained in the Report is greatly reduced.

JAN2 0 1976

Land Resords

Texas Cater Conclopation Claim

DEVELOPMENT BOARD

DECEINED OCT 16/1975

Send original copy by certified mail to the Texas Water Development Board	State of Texas				For TWDB use only Well No. 12 - 36 - 3A Located on map Ve 5	
P. O. Box 12386 Austin, Texas 78711	WATER WELL REPORT			Received	1: 73/	
1)OWNER: Person having well drilled HU	NT DRILLING	Address GEO	OR GETOWN	TEX	AS	
Landowner	(114415)	4.13		(City)	(State)	
(Name	2)	(Street	or RFD)	(City)	(State)	
2) LOCATION OF WELL: County M//LL/AMSON	,mil	es in W	direction from_	Hengeton	(Tour)	
Locate by sketch map showing landman hiway number etg.	rks, roads, creeks,	Give legal loca adjacent section	tion with distance ns or survey lines		ons from	
North		Labor				
183 Leoyelow		Abstract No.				
()se reverse side if necessa	· ·	(NW\ NE\ SW\ SE	t) of Section			
3) TYPE OF WORK (Check): New Well Deepening					(Check): Driven Dug	
Reconditioning Plugging	Irrigation Test N	Well Other	Cable	Jetted	Bored	
6)WELL LOG: Diameter of hole 6 in. I	Conth dutilled 625 ft	Don'th of completed well	625	ft. Data defili	7/30/12	
Diameter of hole 6 in. Depth drilled 625 ft. Depth of completed well 625 ft. Date drilled 30/12 All measurements made from 6 ft. above ground level.						
	otion and color of	9) Casing:	Name On all	Plants	0.1	
	Clay of Rad	Type: 01d Cemented from	New Steel	Plastic ft. to	Other	
	France short	Diameter	Setting			
54 600 Lacy	Shale	(inches)	From (ft.)	To (ft.)	21 theorpe	
600 625 June	& Sand	7 0,0,	0		0 1 100110	
		10) SCREEN: Type_				
		Perforated		Slotted		
		Diameter (inches)	Setting From (ft.)	To (ft.)	Slot Size	
(Use reverse side if n 7) COMPLETION (Check):	11) WELL TESTS:					
Straight wall Gravel packed	Was a pump test	nade? Yes	No If yes	s, by whom?		
Under reamed Open Hol	Viola, 300	gpm with 300	JAPX drawdown	after / bre		
8) WATER LEVEL: Static level /30 ft. below lan		gpm with	V. 500	11 10		
Artesian pressure 1bs. per sq	Artesian flow					
Depth to pump bowls, cylinder, jet,	Temperature of water					
below land surface.	12) WATER QUALITY: Was a chemical analysis made? Yes No					
t - 2 - t	Did any strata contain undesirable water? Yes No.					
		Type of water? FRFSH depth of strata 600-625				
I hereby ce each and al	rtify that this well was drille 1 of the statements herein are	ed by me (or under my su	pervision) and the knowledge and beli	at lef.		
(Type or Print) ADDRESS R +2 BOX		*			AS	
(Street or RFD) (Signed) Robert M. (Water Well Dri	(City)	WOLFE	DRILL (Company Name)	(State) ///6 & S	OPPLX	
Please attach electric log, chemical analysis, and other pertinent information, if available.						

The sketch showing the well location must be as accurate as possible, showing landmarks, in sufficient detail so that the well may be plotted on a General Highway Map of the county in which the well is located.

Reference points from which distances are measured and directions given should be of a permanent nature (e.g. highway intersections, center of towns, river and creek bridges, railroad crossings). The distance and direction from the nearest town should always be indicated.

When giving a legal description include a sketch showing location of the well within the described area. e.g. survey abstract.

Information furnished in Section 2) of the TWDBE-CW-53 is very important. Unless the well can be accurately located on a map the value of the other data contained in the Report is greatly reduced.

JANS 1973

Gallial Reservis

Texas Vister Development 2.27d

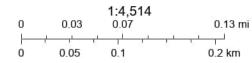
DEVELOPICENT BOARD

ZEb 2-1613





January 15, 2023



Public GIS Viewer Legend

Well Number

0

Well Locations

- Permitted Location
- Dry Hole
- Oil
- 🌣 Gas
- Oil / Gas
- Plugged Oil
- Plugged Gas
- Canceled / Abandoned Location
- 💘 🛮 Plugged Oil / Gas
- Injection / Disposal
- Core Test
- Sulfur Test
- Storage from Oil
- Storage from Gas
- Shut-In Oil
- Shut-In Gas
- Injection / Disposal from Oil
- 🦎 🛮 Injection / Disposal from Gas
- 🤾 🛮 Injection / Disposal from Oil / Gas
- Geothermal
- Brine Mining
- Water Supply
- Water Supply from Oil
- water Supply from Gas

- ™ Water Supply from Oil / Gas
- ⁰⁸o Observation
- Observation from Oil
- Observation from Gas
- Observation from Oil / Gas
- Storage
- Svo Service
- Service from Oil
- Service from Gas
- Service from Oil / Gas
- Storage from Oil / Gas
- Injection / Disposal from Storage
- Injection / Disposal from Storage /
- Injection / Disposal from Storage / Gas
- Injection / Disposal from Storage / Oil / Gas
- 080 Observation from Storage
- Observation from Storage / Oil
- Observation from Storage / Gas
- Observation from Storage / Oil / Gas
- Service from Storage
- Service from Storage / Oil
- Service from Storage / Gas
- Service from Storage / Oil / Gas
- Plugged Storage
- Plugged Storage / Oil

Public GIS Viewer Legend

- Plugged Storage / Gas
- Plugged Storage Oil / Gas
- Brine Mining
- Brine Mining / Oil
- Brine Mining / Gas
- ■★ Brine Mining / Oil / Gas
- Injection / Disposal from Brine Mining
- Injection / Disposal from Brine Mining / Oil
- Injection / Disposal from Brine Mining / Gas
- Injection / Disposal from Brine Mining / Oil / Gas
- Observation from Brine Mining
- Observation from Brine Mining /
- Observation from Brine Mining /
 Gas
- Observation from Brine Mining /
 Oil / Gas
- Service from Brine Mining
- Service from Brine Mining / Oil
- Service from Brine Mining / Gas
- Service from Brine Mining / Oil / Gas
- Plugged Brine Mining
- Plugged Brine Mining / Oil
- Plugged Brine Mining / Gas
- Plugged Brine Mining / Oil / Gas
- Storage / Brine Mining

- Storage / Brine Mining / Oil
- Storage / Brine Mining / Gas
- Storage / Brine Mining / Oil / Gas
- Injection / Disposal from Storage / Brine Mining
- Injection / Disposal from Storage /
 Brine Mining / Oil
- Injection / Disposal from Storage / Brine Mining / Gas
- Injection / Disposal from Storage / Brine Mining / Oil / Gas
- Observation from Storage / Brine Mining
- Observation from Storage / Brine Mining / Oil
- Observation from Storage / Brine Mining / Gas
- Observation from Storage / Brine Mining / Oil / Gas
- Plugged Storage / Brine Mining
- Plugged Storage / Brine Mining / Oil
- Plugged Storage / Brine Mining /
 Gas
- Plugged Storage / Brine Mining /
 Oil / Gas

Orphan Wells



Commercial Disposal



Injection/Disposal



HCTS Deeper than 15,000 ft.



Public GIS Viewer Legend

High Cost Tight Sands		
	Alert Areas	
EOR H13 Oil Wells		
	Water	
Well Logs		
	City Limits	
Horiz/Dir Surface Locations		
☐ Horizontal Well	Counties	
Oirectional Well		
Horizontal/Directional Lines	Operator Cleanup Program Sites	
—	▲ Active	
LPGAS Sites		
	Voluntary Cleanup Program Sites	
QPipelines	♦ VCP, Accepted	
	♦ VCP, Closed	
Pipelines	Brownfield Response Program Sites	
	* Brownfield, Accepted	
Bay Tracts	☆ Brownfield, Closed	
Offshore Areas	Commercial Waste Disposal Sites & Discharge Permits	
Offshore Tracts	Commercial Waste Disposal	
	Discharge Permits	
Water Lines	Oil and Gas Districts	
_		
Subdivisions	AED Districts	
_		
Railroads	Pipeline Safety Regions	
+	The salety Regions	
Surveys	_	

Quads

ATTACHMENT H

Résumés

RAVI S. TIPNIS, Ph.D.

Environmental Consultant Deputy Quality Manager

Education

1977	Ph. D. in Geology	University of Alberta, Edmonton, Alberta, Canada.
1973	Master of Science in Geology	Temple University, Philadelphia, Pa.
1967	MSc Tech in Applied Geology	IIT, Roorkee , India

Training and Certification

1994-2004	Registered Environmental Manager (R.E.M)
1989-2004	HAZWOPER- (48 Hour OSHA Supervisor)
1996	Environmental Train - The- Trainer [24 Hours Emergency Response]
1995.	Environmental Compliance Seminar (OSHA/DOT/EPA)
1998-2004	TxDOT Pre-Certification in Hazardous Material Reports/Environmental
	Document Preparation
2006	Construction Safety Outreach Trainer
	OSHA Compliance Training > OSHA Authorized Trainer for Construction
	Safety

Experience

EIGHTEEN YEARS OF DIVERSIFIED TECHNICAL EXPERIENCE INCLUDES:

- Environmental Audits & Assessments Phase I and Phase II [Over 1000 Reports]
- Storm Water analytical & monitoring support services,
- Asbestos and Lead based paint inspections
- Ground water monitoring at LUST sites
- Preparing of NEPA Reports for several dozen cell towers
- Impact assessments for sewer rehab projects (Greater Houston Waste Water)
- Geo-environmental investigations [soil logging, hydrological/geological site studies]
- Coordinating wetland delineation studies with technical report preparation for the Wetland Hydrology and Hydric Soils Criteria
- Wetland and storm water permitting,
- NEPA Reports and FONSI based Environmental Assessments / Categorical Exclusion Reports for projects involving bikeways, walkways, roads and bridges
- EA Reports for the City of Houston, Wharton City, Dayton City and Harlingen (West Texas)
- Currently in the mid-stages of a Phase II/Phase III project involving hazard evaluation & risk assessment/ remediation of an unknown chemical substance found inside a building according to TRRP (Texas Risk Reduction Program)

ENVIRONMENTAL HEALTH & SAFETY BACKGROUND

- A. Complete HAZWOPER & OSHA Compliance Training
- B. Developed a special program for Confined Space Entry for Storm Sewers
- C. Familiar with the Haz-Com & DOT Training Requirements
- D. Adjunct Faculty, Houston Community College, SW (HCC-Stafford)

MOHAMMAD UMER SHAFIQ

mohammadumershafiq@gmail.com • (936) 443-8011 • www.linkedin.com/in/mohammad-umer-shafiq

EDUCATION

B.S. in Environmental Geoscience Texas A&M University, College Station, Texas

(August 2008 - May 2013)

M.S. in Environmental Engineering Texas A&M University - Kingsville, Kingsville, Texas

(August 2016 – August 2018)

Ph.D. in Environmental Engineering Texas A&M University - Kingsville, Kingsville, Texas

(August 2018 - August 2023 (expected))

RESEARCH EXPERIENCE

Nuclear Regulatory Commission Fellowship

Kingsville, TX

NRC Nuclear Doctoral Fellow

2019 - 2021

- Design and execute novel electrodialysis experiments to test the separation and recovery of rare earth elements and uranium.
- Analysis of heavy metals via inductively coupled plasma mass spectrometry (ICP-MS) and high-pressure liquid chromatography (HPLC). Analysis of anions via ion chromatography (IC).
- Identify the effect of electrochemical processes on the oxidation state of rare earth elements and uranium.
- · Identify the solubility of rare earth chlorides and sulfates at different pH values.
- · Sample and Data Collection. Quantitative and Statistical Analysis.

Texas A&M University Kingsville

Kingsville, TX

Graduate Researcher

2016 - Present

- Design and execute novel electrodialysis experiments to test the separation and recovery of rare earth elements.
- Developed methods for analyzing heavy metals via inductively coupled plasma mass spectrometry (ICP-MS) and highpressure liquid chromatography (HPLC).
- Perform statistical analysis on data through use of Excel, Geochemist Workbench, and Minitab.
- Mentor and train Master students on the use of analytical equipment.
- Perform STEM outreach by inviting high school seniors to participate in fundamental lab activities while supervised.

WORK EXPERIENCE

Radius Environmental Consulting, LLC

San Antonio, TX

Co-Founder / Senior Environmental Consultant

2021 - Present

- Perform Phase-I and Phase-II Environmental Site Assessments according to American Society for Testing and Materials (ASTM) standards.
- · Field testing of soil and water samples.
- Perform preliminary fault studies.
- Perform geologic assessment report (GAR) according to the Texas Commission on Environmental Quality (TCEQ) standards.
- · Perform Preliminary Wetland Surveys
- · Perform Environmental Resource Inventory (ERI) Reports

Austin Community College

Adjunct Faculty

Austin, TX

2022 - Present

- Teach undergraduate level classes on environmental science.
- Teach both college students and early college/high school (ECHS) students.

RST Environmental Consulting

Houston, TX

Staff Engineer / Environmental Specialist / Project Manager

2016 - 2021

- Perform Phase-I and Phase-II Environmental Site Assessments according to American Society for Testing and Materials (ASTM) standards.
- · Field testing of soil and water samples.
- · Perform preliminary fault studies.
- Perform geologic assessment report (GAR) according to the Texas Commission on Environmental Quality (TCEQ) standards.

Texas A&M University - Kingsville

Kingsville, TX

Teaching Assistant

2018 - Present

- Acted as mentor for the undergraduate capstone research class.
- · Designed and taught course material for Master classes when asked to substitute for my advisor.
- Give tour of labs for high school students and other guests.

Geoscience Engineering and Testing

Houston, TX

Staff Engineer / Environmental Specialist / Project Manager

2013 - 2016

- · Write geotechnical engineering reports for residential buildings.
- Project manage long-term (>6 months) construction material testing (CMT) jobs which included managing the budget and contacting clients with reports.
- Perform Phase-I and Phase-II Environmental Site Assessments according to American Society for Testing and Materials (ASTM) standards.
- · Field testing of soil and water samples.
- · Perform preliminary fault studies.

LEADERSHIP/TEAMWORK EXPERIENCE

Air & Waste Management Association – Student Chapter

Kingsville, TX

President

2019 - 2021

- · Organized bi-monthly meetings with organization members
- · Organized volunteer activities
- Organized guest speakers and workshops
- · Mentored undergraduates

TECHNICAL SKILLS

Computer Programs

 AutoCAD, ArcGIS, MatLab, Microsoft Office, Minitab, R Studio, Python, Wave, Syngistix, Empower, Geochemist Workbench, and PHREEQC

Lab Experience

 Biology Lab, Inorganic Chemistry Lab, Organic Chemistry Lab, Atmospheric Chemistry Lab, Geology Lab, Environmental Lab, and Physics Lab.

Analytical Instrument Experience

 Inductively coupled plasma mass spectrometry (ICP-MS, 5 years), high-performance liquid chromatography (HP-LC, 3 years), and ion chromatography (IC, 5 years).

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(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 **Water Pollution Abatement Plan Application Form** is hereby submitted for TCEQ review and Executive Director approval. The form was prepared by:

Print Name of Customer/Agent: Gary Eli Jones, P.E.

Date: 6/8/2024

Signature of Customer/Agent:

Regulated Entity Name: Parkside - 2243 Site Plan

Regulated Entity Information

1.	The type of project is:
	Residential: Number of Lots: Residential: Number of Living Unit Equivalents:
	Commercial
	☐ Industrial ☐ Other:

- Total site acreage (size of property): 6.0 AC
- Estimated projected population: N/A
- 4. The amount and type of impervious cover expected after construction are shown below:

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	14,000	÷ 43,560 =	0.32
Parking	68,328	÷ 43,560 =	1.57
Other paved surfaces	0	÷ 43,560 =	0
Total Impervious Cover	82,328	÷ 43,560 =	1.89

Total Impervious Cover 1.89 ÷ Total Acreage 6 X 100 = 31 % Impervious Cover

- 5. Attachment A Factors Affecting Surface Water Quality. A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.
- 6. Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

Complete questions 7 - 12 if this application is exclusively for a road project.

7.	Type of project:
	 ☐ TXDOT road project. ☐ County road or roads built to county specifications. ☐ City thoroughfare or roads to be dedicated to a municipality. ☐ Street or road providing access to private driveways.
8.	Type of pavement or road surface to be used:
	Concrete Asphaltic concrete pavement Other:
9.	Length of Right of Way (R.O.W.): feet.
	Width of R.O.W.: feet. $L \times W = Ft^2 \div 43,560 Ft^2/Acre = acres.$
10.	Length of pavement area: feet.
	Width of pavement area: feet. L x W = $Ft^2 \div 43,560 \ Ft^2/Acre = acres.$ Pavement area acres \div R.O.W. area acres x $100 = \%$ impervious cover.
11.	A rest stop will be included in this project.
	A rest stop will not be included in this project.

12. 🗌	Maintenance and repair of existing roadways that do not require approval TCEQ Executive Director. Modifications to existing roadways such as widen roads/adding shoulders totaling more than one-half (1/2) the width of one lane require prior approval from the TCEQ.	ing
Stor	ormwater to be generated by the Proposed Proje	ect
13. 🛚	Attachment B - Volume and Character of Stormwater. A detailed descript volume (quantity) and character (quality) of the stormwater runoff which i occur from the proposed project is attached. The estimates of stormwater quality and quantity are based on the area and type of impervious cover. I runoff coefficient of the site for both pre-construction and post-construction	s expected to runoff nclude the
Was	astewater to be generated by the Proposed Proje	ect
14. The	The character and volume of wastewater is shown below:	
0%	100% Domestic2,000Gallons/day0% Industrial0Gallons/day0% Commingled0Gallons/dayTOTAL gallons/day 2,000 - (8 LUES @ 250gpd / LUE)	
15. Wa	Wastewater will be disposed of by:	
\boxtimes	On-Site Sewage Facility (OSSF/Septic Tank):	
	Attachment C - Suitability Letter from Authorized Agent. An on-site see will be used to treat and dispose of the wastewater from this site. The licensing authority's (authorized agent) written approval is attached. It the land is suitable for the use of private sewage facilities and will meet the requirements for on-site sewage facilities as specified under 30 TAG relating to On-site Sewage Facilities. Each lot in this project/development is at least one (1) acre (43,560 squ size. The system will be designed by a licensed professional engineer of sanitarian and installed by a licensed installer in compliance with 30 TAG 285.	appropriate states that t or exceed Chapter 285 hare feet) in or registered
	Sewage Collection System (Sewer Lines): (NONE REQUIRED)	
	 Private service laterals from the wastewater generating facilities will be to an existing SCS. Private service laterals from the wastewater generating facilities will be to a proposed SCS. NO COMBINED SERVICE LATERALS	
	 The SCS was previously submitted on The SCS was submitted with this application. The SCS will be submitted at a later date. The owner is aware that the S be installed prior to Executive Director approval. 	GCS may not

	The sewage collection system will convey the wastewater to the (name) Treatment Plant. The treatment facility is:
	Existing. Proposed.
16.	All private service laterals will be inspected as required in 30 TAC §213.5.
Sit	te Plan Requirements
Iten	ns 17 – 28 must be included on the Site Plan.
17.	The Site Plan must have a minimum scale of 1" = 400'.
	Site Plan Scale: 1" = <u>40</u> '.
18.	100-year floodplain boundaries:
	 Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled. No part of the project site is located within the 100-year floodplain. The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA PANEL 48491CO460F
19.	The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, open space, etc. are shown on the plan.
	The layout of the development is shown with existing contours at appropriate, but not greater than ten-foot intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, open space, etc. are shown on the site plan.
20.	All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):
	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 §76.
	igstyle igstyle There are no wells or test holes of any kind known to exist on the project site.
21.	Geologic or manmade features which are on the site:
	 ✓ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled. ✓ No sensitive geologic or manmade features were identified in the Geologic Assessment.
	Attachment D - Exception to the Required Geologic Assessment. A request and justification for an exception to a portion of the Geologic Assessment is attached.

22. 🖂	The drainage patterns and approximate slopes anticipated after major grading activities.
23. 🖂	Areas of soil disturbance and areas which will not be disturbed.
24. 🛚	Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
25. 🖂	Locations where soil stabilization practices are expected to occur.
26. 🗌	Surface waters (including wetlands).
\boxtimes	N/A
27. 🗌	Locations where stormwater discharges to surface water or sensitive features are to occur.
\boxtimes	There will be no discharges to surface water or sensitive features.
28. 🖂	Legal boundaries of the site are shown.
Adm	inistrative Information
29. 🛚	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.
30. 🖂	Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.



Firm # 17877

November 14, 2024

Ms. Lillian Butler Texas Commission on Environmental Quality 12100 Park 35 Circle, Bld A, Rm 179 Austin, TX 78753

Re: Parkside – 2243 Site Plan

Attachment A-Factors Affecting Surface Water Quality

To Whom It May Concern:

The proposed 6.137 acre property includes proposed impervious cover of 1.89 ac when fully developed. The impervious cover will be routed to the proposed detention/water quality pond in the SE corner of the property. The permanent BMP proposed for the property is a batch detention system with 11,132 CF of the pond dedicated to water quality. The drainage patterns proposed are intended to match the drainage patterns that exist on the site prior to development.

If you have any questions or need further assistance, please call me at 512-658-8095.

Sincerely,

Gary Eli Jones, P.E.

Authorized Agent



Firm # 17877

June 8, 2024

Ms. Lillian Butler Texas Commission on Environmental Quality 12100 Park 35 Circle, Bld A, Rm 179 Austin. TX 78753

Re: Parkside – 2243 Site Plan

Attachment B-Volume and Character of Stormwater

To Whom It May Concern:

The development of the site will change the volume and character of the stormwater from the site. The site is currently undeveloped and is vegetated with natural prairie type grasses. The addition of the impervious cover with parking and fueling stations will be captured and routed to the batch detention pond to be treated prior to discharge per batch detention requirements. Note, Equation 3-3 that calculates TSS removal has been modified to account for the 85% removal efficiency required by City of Georgetown. The area under the fuel canopy will be graded to a trench drain and routed to an oil/water separator before being conveyed to the batch detention pond. The drainage area map is divided into two drainage areas to account for the total property. Drainage Area 1 is 3.68 acres with 1.89 acres of impervious cover that is routed to the batch detention pond. Drainage Area 2 will remain undeveloped with no impervious cover and will bypass the pond. All of the proposed impervious cover is routed to the batch detention pond. A summary of existing and proposed flows at each analysis point may be seen below:

PROPOSED

	Existing Flows		Propose	d Flows
2 YR	18.05	CFS	16.75	CFS
10 YR	31.87	CFS	29.70	CFS
25 YR	41.34	CFS	38.60	CFS
100 YR	57.35	CFS	53.15	CFS

NOTE: ALL PROPOSED FLOWS LEAVING THE PROPERTY ARE LESS THAN OR EQUAL TO EXISTING CONDITION FLOWS

If you have any questions or need further assistance, please contact me at 512-658-8095.

6/8/2024

Gary Eli Jones, P.E. Authorized Agent Department of Infrastructure County Engineer's Office 3151 SE Inner Loop, Ste B Georgetown, TX 78626

T: 512.943.3330 F: 512.943.3335

J. Terron Evertson, PE, DR, CFM



November 26, 2024

Georgetown Eco Lands, LLC 2040 FM 969 Elgin, Texas 78621

RE: 5501 RM 2243, Georgetown, Texas 78628 AW0711 AW0711 – Key West Irrig. Co. Sur., Acres 6.528

The above referenced property is located within the Edwards Aquifer Recharge Zone.

Based on the surrounding subdivisions and the soil survey for Williamson County and planning material received, this office is able to determine that the soil and site conditions of this lot is suitable to allow the use of on-site sewage facilities (OSSF). It should be noted that this office has not actually studied the physical properties of this site. Site specific conditions such as OSSF setbacks, recharge features, drainage, soil conditions, etc..., will need taken into account in planning any OSSF.

These OSSF's will have to be designed by a professional engineer or a registered sanitarian. An Edwards Aquifer protection plan shall be approved by the appropriate TCEQ regional office before an authorization to construct an OSSF may be issued. The owner will be required to inform each prospective buyer, lessee or renter of the following in writing:

- That an authorization to construct shall be required before an OSSF can be constructed in the subdivision;
- That a notice of approval shall be required for the operation of an OSSF;
- Whether an application for a water pollution abatement plan as defined in Chapter 213 has been made, whether it has been approved and if any restrictions or conditions have been placed on the approval.

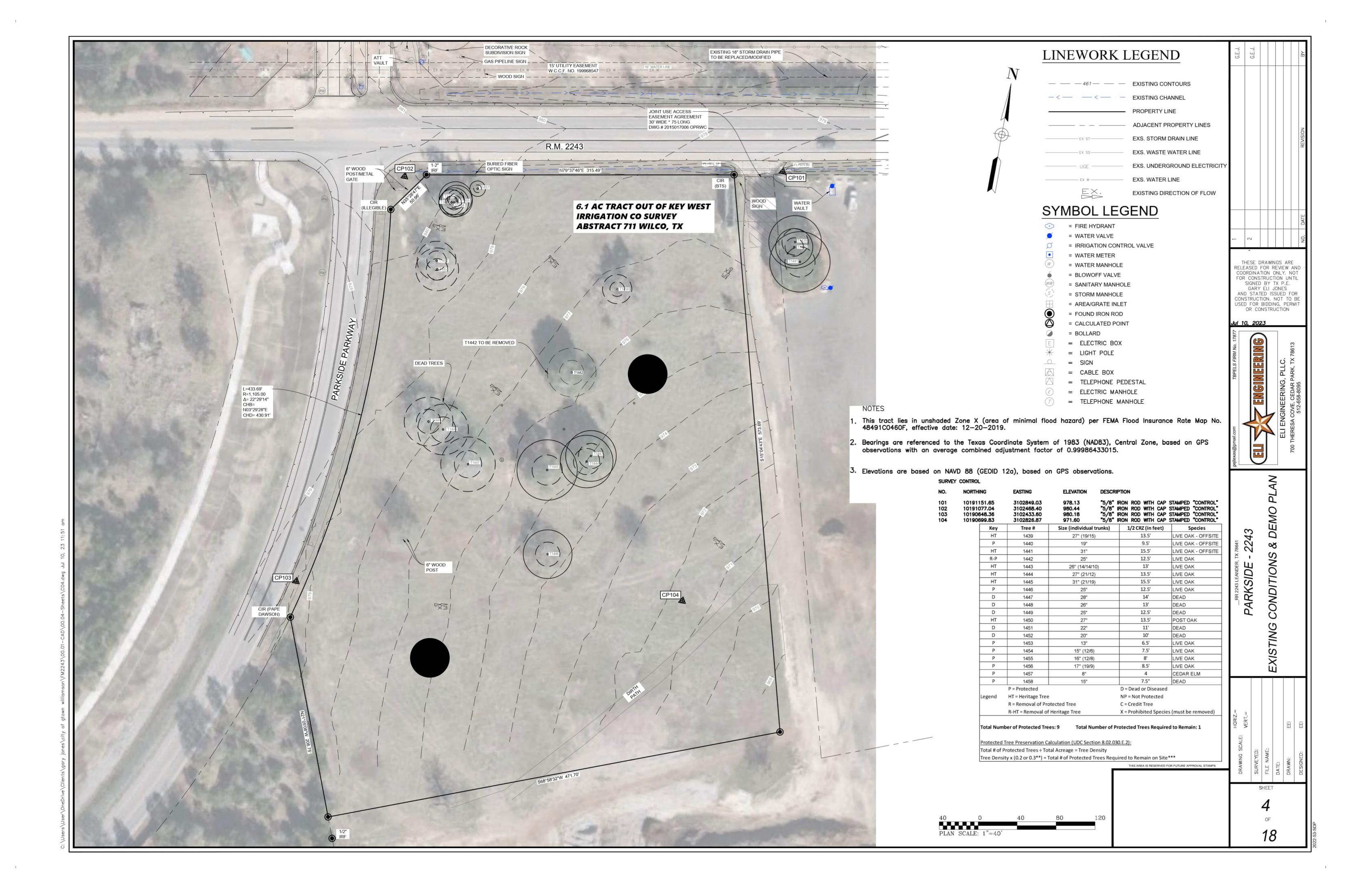
If this office can be of further assistance, please do not hesitate to call.

Sincerely,

Williamson County Engineer's Office J. Austin Nelson, MPH, DR, SE

Professional Sanitarian

OS 33516



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:

executive director approval. The application was prepared by:

Print Name of Customer/Agent: Gary Eli Jones, P.E.

Date: 6/8/2024

Regulated Entity Name: Parkside - 2243 Site Plan

Project Information

Signature of Customer/Agent:

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.
Se	equence 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

Temporary Best Management Practices (TBMPs)

receive discharges from disturbed areas of the project: San Gabriel River

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 p groundwater or stormwater that originates upgradient	
	across the site. A description of how BMPs and measures will prevent p groundwater that originates on-site or flows off site, incontaminated stormwater runoff from the site.	
	A description of how BMPs and measures will prevent p	ollutants from entering
	surface streams, sensitive features, or the aquifer. A description of how, to the maximum extent practicabl maintain flow to naturally-occurring sensitive features in geologic assessment, TCEQ inspections, or during excava construction.	dentified in either the
8. [The temporary sealing of a naturally-occurring sensitive feat to the Edwards Aquifer as a temporary pollution abatement construction should be avoided.	- 20 C.
	Attachment E - Request to Temporarily Seal a Feature. seal a feature is attached. The request includes justifica and practicable alternative exists for each feature.	tion as to why no reasonable
	There will be no temporary sealing of naturally-occurring site.	g sensitive features on the
9. [Attachment F - Structural Practices. A description of the structural to divert flows away from exposed soils, to store flows discharge of pollutants from exposed areas of the site is att structural practices in floodplains has been avoided.	, or to otherwise limit runoff
10. [Attachment G - Drainage Area Map. A drainage area map s requirements is attached:	supporting the following
	For areas that will have more than 10 acres within a condisturbed at one time, a sediment basin will be provided. For areas that will have more than 10 acres within a condisturbed at one time, a smaller sediment basin and/or used.	l. nmon drainage area
	For areas that will have more than 10 acres within a condisturbed at one time, a sediment basin or other equiva attainable, but other TBMPs and measures will be used down slope and side slope boundaries of the construction	lent controls are not in combination to protect
	There are no areas greater than 10 acres within a comm disturbed at one time. A smaller sediment basin and/or used in combination with other erosion and sediment co drainage area.	on drainage area that will be sediment trap(s) will be

	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.
\times	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.

ATTACHMENT "A"

Spill Response Actions

Occurrences contributing to a spill may occur during scheduled maintenance of construction equipment. There are no special potential sources of contamination with this site other than normal construction activities for site and building construction. Temporary BMPs including silt fence, rock berms, settling basin, and concrete washout will be on site prior to construction and monitored per SWPPP. Caution is to be exercised to prevent any existing ground surfaces, or new ground surfaces to become contaminated. Once the refueling staging area is no longer needed, the area is to be returned to its original condition, or better. Concrete curing compound and fuel leakage shall be contained downstream of the pond outlet structure. Contractor shall follow the steps below in preventing and responding to spills as outlined in TCEQ publication RG-348, *Technical Guidance on Best Management Practices* (Revised July 2005).

Spill Prevention and Control:

The objective of this section is to describe measures to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

The following steps will help reduce the stormwater impacts of leaks and spills:

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 spill must be reported to the TCEQ. Information 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 contractor's superintendent or representative oversee and enforce proper 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 runon during rainfall to the extent that it doesn't compromise clean up activities.
- (7) Do not bury or wash spills with water.
- 1-118
- (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 properly. See the waste management BMPs in this section for specific information.

Minor Spills

- (1) Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
- (2) Use absorbent materials on small spills rather than hosing down or burying the spill.
- (3) Absorbent materials should be promptly removed and disposed of properly.
- (4) Follow the practice below for a minor spill:
- (5) Contain the spread of the spill.
- (6) Recover spilled materials.
- (7) Clean the contaminated area and properly dispose of contaminated materials.
- 1-119

Semi-Significant Spills

Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

Spills should be cleaned up immediately:

- (1) Contain spread of the spill.
- (2) Notify the project foreman immediately.
- (3) If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
- (4) If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
- (5) If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

- (1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
- (2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
- (3) Notification should first be made by telephone and followed up with a written report.
- (4) The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
- (5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

 More information on spill rules and appropriate responses is available on the TCEQ website at: https://www.tceq.texas.gov/response/spills.

Vehicle and Equipment Maintenance

- (1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.
- (2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately
- (3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
- (4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- (5) Place drip pans or absorbent materials under paving equipment when not in use.
- (6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- (7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
- (8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute

stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.

(9) Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

- (1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.
- (2) Discourage "topping off" of fuel tanks.
- (3) Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

Concrete Washout Areas

The purpose of concrete washout areas is to prevent or reduce the discharge of pollutants to stormwater from concrete waste by conducting washout offsite, performing onsite washout in a designated area, and training employees and subcontractors.

The following steps will help reduce stormwater pollution from concrete wastes:

- Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.
- Avoid mixing excess amounts of fresh concrete.
- Perform washout of concrete trucks in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped onsite, except in designated areas.
 For onsite washout:
- Locate washout area at least 50 feet from sensitive features, storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
- Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed properly.

Below grade concrete washout facilities are typical. These consist of a lined excavation sufficiently large to hold expected volume of washout material. Above grade facilities are used if excavation is not practical. Temporary concrete washout facility (type above grade) should be constructed as shown on the details at the end of this section, with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. Plastic lining material should be a minimum of 10 mil in polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.

When temporary concrete washout facilities are no longer required for the work, the hardened concrete should be removed and disposed of. Materials used to construct temporary concrete washout facilities should be removed from the site of the work and disposed of. Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled and repaired.

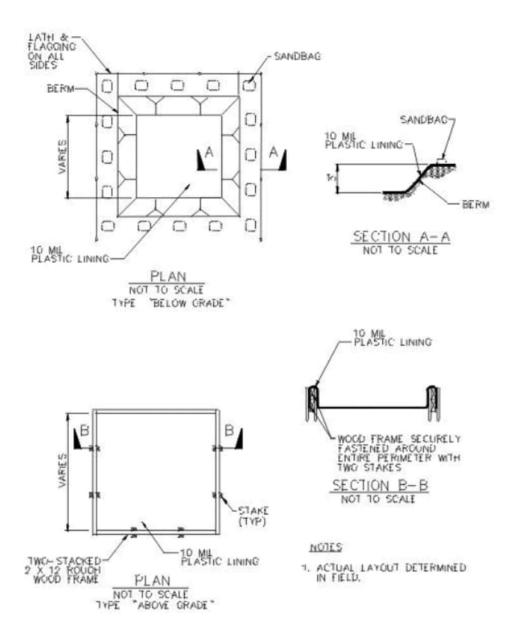


Figure: Schematics of Concrete Washout Areas

ATTACHMENT "B"

Potential Sources of Contamination

Occurrences contributing to a spill may occur during scheduled maintenance of construction equipment. There are no special potential sources of contamination with this site other than normal construction activities for site and building construction. Temporary BMPs including construction entrance, silt fence and concrete washout will be on site prior to construction and monitored per SWPPP. Caution is to be exercised to prevent any existing ground surfaces, or new ground surfaces to become contaminated. Once the refueling staging area is no longer needed, the area is to be returned to its original condition, or better. Concrete curing compound and fuel leakage shall be contained downstream of the pond outlet structure. Contractor shall follow the steps below in preventing and responding to spills as outlined in TCEQ publication RG-348, *Technical Guidance on Best Management Practices* (Revised July 2005).

ATTACHMENT "C"

Sequence of Major Activities

De	scription	Area (acres)
1.	Install all erosion control	3.85
2.	Conduct pre-construction conference	N/A
3.	Excavate pond	0.64
4.	Establish subgrade on site	2.88
5.	Construct driveways and install all underground utilities	2.56
6.	Process and compact subgrade to final grades	2.88
7.	Install paving	1.62
8.	Final grade ponds and outlet controls	0.64
9.	Install all landscape and irrigation, re-vegetate all disturbed areas	1.20
10.	Remove temporary erosion control subsequent to establishment of vegetation	3.85

ATTACHMENT "D"

Temporary Best Management Practices

Silt fence will be installed to intercept storm water runoff originating within the project, prior to discharge to existing drainage conveyances (East & South Property lines).

A stabilized construction entrance will be installed to minimize construction vehicles transporting sediment onto neighboring roadways. This site contains no surface streams.

ATTACHMENT "F"

Structural Practices

No improvements are proposed to divert storm water run-off from its existing drainage pattern. All unpaved areas will be re-vegetated according to City of Georgetown & TCEQ Specifications for revegetation of disturbed areas.

ATTACHMENT "G"

Drainage Area Map

Included in the attached Set of Construction Plans. There are no off-site flows entering the property.

ATTACHMENT "I"

Inspection & Maintenance for Temporary BMPs

SUMMARY OF EROSION AND SEDIMENT CONTROL MAINTENANCE/INSPECTION PROCEDURES

Silt Fence Inspection and Maintenance Guidelines:

- (1) Inspect all fencing weekly, and after any rainfall.
- (2) Remove sediment when buildup reaches 6 inches.
- (3) Replace any torn fabric or install a second line of fencing parallel to the torn section.
- (4) Replace or repair any sections crushed or collapsed in the course of construction activity. If a section of fence is obstructing vehicular access, consider relocating it to a spot where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike may be preferable to a silt fence at common vehicle access points.
- (5) When construction is complete, the sediment should be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence should be revegetated. The fence itself should be disposed of in an approved landfill.

Inlet Protection Inspection and Maintenance Guidelines:

- (1) Inspection should be made weekly and after each rainfall. Repair or replacement should be made promptly as needed by the contractor.
- (2) Remove sediment when buildup reaches a depth of 3 inches. Removed sediment should be deposited in a suitable area and in such a manner that it will not erode.
- (3) Check placement of device to prevent gaps between device and curb.
- (4) Inspect filter fabric and patch or replace if torn or missing.
- (5) Structures should be removed and the area stabilized only after the remaining drainage area has been properly stabilized.

Temporary Construction Entrance/Exit Inspection and Maintenance Guidelines:

- (1) 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.
- (2) All sediment spilled, dropped, washed or tracked onto public rights-of-way should be removed immediately by contractor.
- (3) When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-ofway.
- (4) 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.
- (5) All sediment should be prevented from entering any storm drain, ditch or water course by using approved methods.
 - Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
 - A maintenance inspection report will be made after each inspection. A copy of the report forms to be used are included in this WPAP.

- The site job superintendent will select the individuals who will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance reports.
- Personnel selected for inspection and maintenance responsibilities will receive training from the site job superintendent. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.

FINAL STABILIZATION/TERMINATION CHECKLIST

- 1. All soil disturbing activities are complete
- 2. Temporary erosion and sediment control measures have been removed or will be removed at an appropriate time.
- All areas of the construction site not otherwise covered by a permanent pavement or structure
 have been stabilized with a uniform perennial vegetative cover with a density of 70% or
 equivalent measures have been employed.

WATER POLLUTION ABATEMENT PLAN (WPAP) INSPECTION AND MAINTENANCE REPORT FORM

STABILIZA	TION MEASUF	RES			
INSPECTOR	:	DATE	E:		
QUALIFICAT	TIONS OF INSP	ECTOR:			
-					
DAYS SINCE	E LAST RAINFA	ALL:	AMOUNT	OF LAST RAINI	FALL:
AREA	DATE SINCE LAST RAINFALL	DATE OF NEXT DISTURBANCE	STABILIZED? (YES/NO)	STABILIZED WITH	CONDITION
STABILIZAT	TION REQUIRE	D:			
TO BE PERF	ORMED BY:		ON OR E	BEFORE:	

WATER POLLUTION ABATEMENT PLAN (WPAP) INSPECTION AND MAINTENANCE REPORT FORM

SILT FENCE INSPECTOR: _______ DATE: _____ QUALIFICATIONS OF INSPECTOR: DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL: _____ IS THE BOTTOM OF THE FABRIC STILL BURIED? _____ IS THE FABRIC TORN OR SAGGING? _____ ARE THE POSTS TIPPED OVER? _____ HOW DEEP IS THE SEDIMENT? _____ MAINTENANCE REQUIRED FOR SILT FENCE: ______ TO BE PERFORMED BY: _____ ON OR BEFORE:

WATER POLLUTION ABATEMENT PLAN (WPAP) INSPECTION AND MAINTENANCE REPORT FORM

STABILIZED CONSTRUCTION EXIT

INSPECTOR:	DATE:
QUALIFICATIONS OF INSPECTOR:	
DAYS SINCE LAST RAINFALL:	AMOUNT OF LAST RAINFALL:
DOES MUCH SEDIMENT GET TRACKED ON TO	ROAD?
IS THE GRAVEL CLEAN OR FILLED WITH SEDIM	MENT?
DOES ALL TRAFFIC USE THE STABILIZED EXIT	TO LEAVE THE JOB SITE?
IS THE CULVERT BENEATH THE EXIT WORKIN	G?
MAINTENANCE REQUIRED FOR STABILIZED CO	ONSTRUCTION EXIT:
s	
TO BE PERFORMED BY:	ON OR BEFORE:

ATTACHMENT "J"

Schedule of Interim and Permanent Soil Stabilization Practices

All areas within the project limits that are disturbed during construction will be revegetated and restabilized immediately following construction activities. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

Permanent 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)(C), (D)(Ii), (E), and (5), 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 **Permanent Stormwater Section** is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Print Name of Customer/Agent: Gary Eli Jones, P.E

Date: 6/8/2024

Signature of Customer/Agent

Regulated Entity Name: Parkside - 2243 Site Plan

Permanent Best Management Practices (BMPs)

Permanent best management practices and measures that will be used during and after construction is completed.

1. Permanent BMPs and measures must be implemented to control the discharge of

	pollution from regulated activities after the completion of construction.
	□ N/A
2.	These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.
	The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

	A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is:
	□ N/A
3.	Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.
	□ N/A
4.	Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.
	 The site will be used for low density single-family residential development and has 20% or less impervious cover. The site will be used for low density single-family residential development but has more than 20% impervious cover.
	$oxed{\boxtimes}$ The site will not be used for low density single-family residential development.
5.	The executive director may waive the requirement for other permanent BMPs for multifamily residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.
	 Attachment A - 20% or Less Impervious Cover Waiver. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached. ☑ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover. ☑ The site will not be used for multi-family residential developments, schools, or small business sites.
6.	Attachment B - BMPs for Upgradient Stormwater.

		 A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached. No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached. Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.
7.	\times	Attachment C - BMPs for On-site Stormwater.
		A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached. Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.
8.		Attachment D - BMPs for Surface Streams . A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.
		N/A
9.	\boxtimes	The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.
		 The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed. Attachment E - Request to Seal Features. A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.
10.		Attachment F - Construction Plans. All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:
		 ✓ Design calculations (TSS removal calculations) ✓ TCEQ construction notes ✓ All geologic features ✓ All proposed structural BMP(s) plans and specifications
		N/A

11. Attachment G - Inspection, Maintenance, Repair and Retrofit Plan. A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:
Prepared and certified by the engineer designing the permanent BMPs and measures
Signed by the owner or responsible party Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit
A discussion of record keeping procedures
□ N/A
12. Attachment H - Pilot-Scale Field Testing Plan. Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.
⊠ N/A
13. Attachment I -Measures for Minimizing Surface Stream Contamination. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that results in water quality degradation.
⊠ N/A
Responsibility for Maintenance of Permanent BMP(s)
Responsibility for maintenance of best management practices and measures after construction is complete.
14. The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.
□ N/A
15. A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.
□ N/A



June 8, 2024

Ms. Lillian Butler Texas Commission on Environmental Quality 12100 Park 35 Circle, Bld A, Rm 179 Austin, TX 78753

Re: Parkside - 2243 Site Plan

Attachment B - BMPs for Upgradient Stormwater

To Whom It May Concern:

There are no upgradient drainage areas draining onto the property.

If you have any questions or need further assistance, please contact me at 512-658-8095.

Gary Eli Jones, P.E.



June 8, 2024

Ms. Lillian Butler Texas Commission on Environmental Quality 12100 Park 35 Circle, Bld A, Rm 179 Austin, TX 78753

Re: Parkside – 2243 Site Plan

Attachment C - BMPs for On-site Stormwater

To Whom It May Concern:

The proposed BMP for new on-site impervious cover is a batch detention pond. This BMP has a TSS removal efficiency of 91%. The outlet structure for the pond is designed so that the drawdown time of each basin does not exceed 48 hours. Based on the TCEQ Spreadsheet, 85% (City of Georgetown criteria) of the total annual mass loading of total suspended solids generated by regulated activity on the site is 1,750 lbs. The BMP catchment area is 3.89 acres with 1.89 ac of impervious cover. The TSS load removal from this catchment by the batch detention system is 1,750 lbs which results in a total volume required of 10,078 CF. The proposed water quality volume in the pond is 11,132 CF.

If you have any questions or need further assistance, please contact me at 512-658-8095.

Gary Eli Jones, P.E.



June 8, 2024

Ms. Lillian Butler Texas Commission on Environmental Quality 12100 Park 35 Circle, Bld A, Rm 179 Austin, TX 78753

Re: Parkside - 2243 Site Plan

Attachment D - BMP's for Surface Streams

To Whom It May Concern:

There are no BMP's or measures needed to prevent pollutants from entering surface streams on this project due to there not being surface streams on or adjacent to the property.

If you have any questions or need further assistance, please contact me at 512-658-8095.

Gary Eli Jones, P.E.



June 9, 2024

Ms. Lillian Butler Texas Commission on Environmental Quality 12100 Park 35 Circle, Bld A, Rm 179 Austin, TX 78753

Re: Parkside – 2243 Site Plan

Attachment F - Construction Plans

To Whom It May Concern:

Construction plans and design calculations for the proposed permanent BMP and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMP and measures are attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.

If you have any questions or need further assistance, please contact me at 512-658-8095.

Gary Eli Jones, P.E.

THIS SITE IS WITHIN THE EDWARD'S AQUIFER RECHARGE ZONE

SITE IMPERVIOUS COVER = 30.90%. SEE DRAINAGE REPORT

THIS PROJECT IS NOT ENCROACHED BY ANY SPECIAL FLOOD HAZARD AREA AS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY BOUNDARY MAP (FLOOD INSURANCE RATE MAP), COMMUNITY PANEL NUMBER 48491C0460F, EFFECTIVE DATE 12/20/2019, FOR WILLIAMSON COUNTY TEXAS. THE PROPERTY HAS NO FLOODPLAIN AND FLOODWAY AND NOT IN ZONE AE OR ZONE X

SITE MAP

WHERE NO EXISTING OVERHEAD INFRASTRUCTURE EXISTS, UNDERGROUND ELECTRIC UTILITY LINES SHALL BE REQUIRED ALONG THE STREET AND WITHIN THE SITE. WHERE EXISTING OVERHEAD INFRASTRUCTURE IS TO BE RELOCATED, IT SHALL BE RE-INSTALLED UNDERGROUND AND THE EXISTING FACILITIES SHALL BE REMOVED AT THE DISCRETION OF THE DEVELOPMENT ENGINEER

PARKSIDE - 2243 5501 RM 2243 GEORGETOWN TX 78628 LEANDER, TEXAS 78641

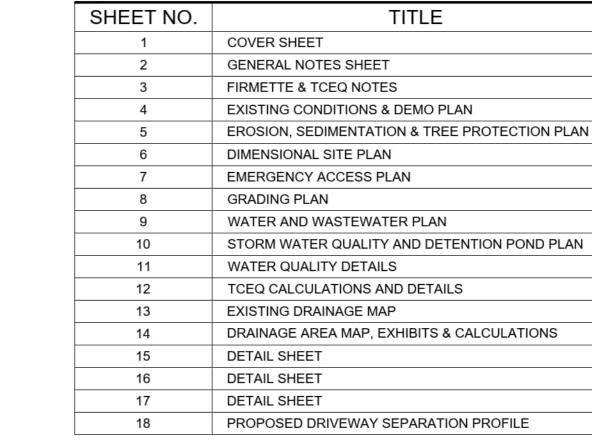
2022-28-SWP

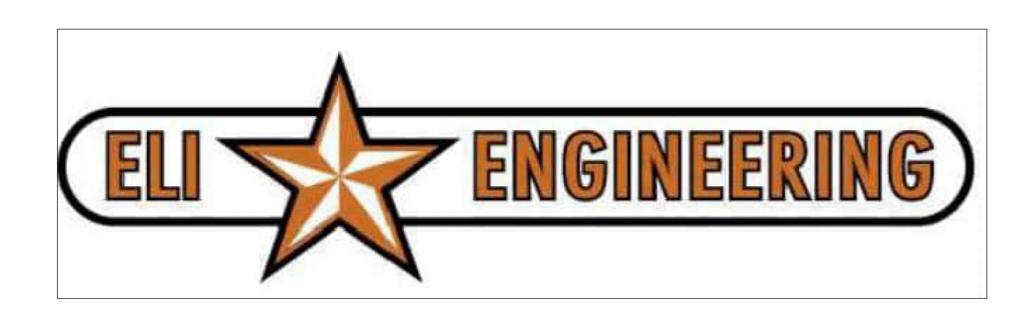
PROJECT ADDRESS: 5501 RM 2243 GEORGETOWN, TX 78628

LEGAL DESCRIPTION: KEY WEST IRRIGATION CO. SURVEY,

WATERSHED: CHANDLER BRANCH FEMA PANELS: 48491C0460F EFFECTIVE 12/20/2019

SHEET INDEX





ATMOS ENERGY 3110 N INTERSTATE HWY 35 GEORGETOWN, TX 78681 CONTACT: DAVID DOBERNECKI 512-310-3854

david.dobernecki@atmosenergy.com

TRIP GENERATION:

EAK AM = 316EAK PM = 318

ITE CODES 822 & 945

RIPS PER DAY = 2,898

SUBMITTED FOR APPROVAL:

Jun 18, 2024 DATE GARY ELI JONES, P.E.

REVIEWED FOR COMPLIANCE WITH COUNTY REQUIREMENTS

Jun 18, 2024 DATE for WILLIAMSON COUNTY ENGINEER

CONTACTS & UTILITIES

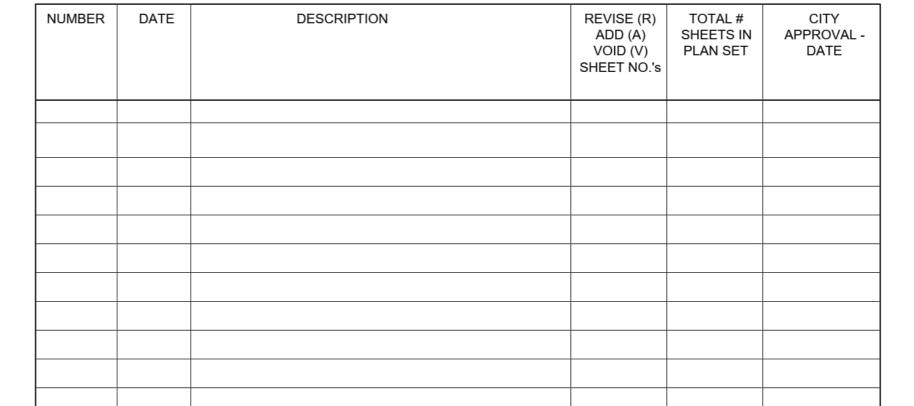
ENGINEER ELI ENGINEERING, PLLC 700 THERESA COVE CEDAR PARK, TEXAS 78613 CONTACT: GARY ELI JONES, P.E. 512-658-0895 gejtexas@gmail.com	AGENT ELI ENGINEERING, PLLC 700 THERESA COVE CEDAR PARK, TEXAS 78613 CONTACT: GARY ELI JONES, P.E. 512-658-0895 gejtexas@gmail.com	PEDERNALES ELECTRIC COOPERATIVE 10625 W W STATE HWY 29, LIBERTY HILL, TX 78642 512-355-2131 HTTPS://WWW.PEC.COOP/
STORMWATER CITY OF GEORGETOWN, TEXAS 300 INDUSTRIAL AVE #1 GEORGETOWN, TEXAS 78626 512-930-3640	FRONTIER COMMUNICATIONS 911 S CHURCH ST #5931, GEORGETOWN, TX 78626 CONTACT: TROY VALDEZ 512-869-2231 Lorenzo.t.valdez@ftr.com CONTACT: KATHY HEINER 830-997-2186	CEQUEL COMMUNICATIONS, LLC d/b/a SUDDENLINK COMMUNICATION CONTACT: DEAN COLE 512-931-2965 dean.cole@AlticeTechServicesUSA.com CONTACT: GUS KAWELL 512-931-2981 gus. kawell@AlticeUSA.com
ELECTRIC	WATER & WASTEWATER	
CITY OF GEORGETOWN, TEXAS 300 INDUSTRIAL AVE #1 GEORGETOWN, TEXAS 78626 512-930-3640	CITY OF GEORGETOWN, TEXAS 300 INDUSTRIAL AVE #1 GEORGETOWN, TEXAS 78626 512-930-3640	
APPLICANT & OWNER GEORGETOWN ECO LANDS, LLC 2030 FM 969 ELGIN, TX 78621 713-897-1733	TELEPHONE AT&T 1010 SAN ANTONIO AUSTIN, TEXAS 78704 CONTACT: ROBERT GUERRA 512-870-5215	GAS ONCOR 3620 FRANKLIN AVE. WACO, TEXAS 76710 CONTACT: MARK LUCAS 245-750-5351
ESTIMATED FROM SERVICE AREA MAPS; CONTRACTOR ENTIRELY RESPONSIBLE FOR NOTIFICATIO DMPANIES, REGARDLESS WITH WHAT IS SHOWN ON THIS SHEET OR IN THESE PLANS.	N OF CONSTRUCTION AND CALLING FOR LOCATES OF EXISTING UTILITIES WITH ACTUAL UTILITY	245-750-5351

GENERAL SITE NOTES:

- ALL RESPONSIBILITY OF THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS THE CITY MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

- IN THE EVENT THE CONTRACTOR OR SURVEYOR OBTAINS A DIGITAL COPY OF THE CAD FILES THAT REPRESENT THESE IMPROVEMENTS; ELI ENGINEERING AND IT'S ASSOCIATES TAKE NO RESPONSIBILITY FOR THE LOCATION OF THESE IMPROVEMENTS IN ANY COORDINATE SYSTEM. DIGITAL FILES USED TO PRODUCE THESE PLANS WERE PARTIALLY CREATED BY PARTIES OTHER THAN THE DESIGN ENGINEER AND ARE NOT INTENDED FOR USE IN CONSTRUCTION STAKING.

- ELI ENGINEERING HAS ENDEAVORED TO DESIGN THESE PLANS COMPLIANT WITH ADA, TDLR, TEXANS WITH DISABILITIES ACT, AND OTHER ACCESSIBILITY REQUIREMENTS. HOWEVER, THE CONTRACTOR SHALL NOT BE RELIEVED OF ANY RESPONSIBILITY FOR CONSTRUCTING THESE IMPROVEMENTS COMPLIANT WITH ALL APPLICABLE ACCESSIBILITY STANDARDS. IF THE CONTRACTOR NOTICES ANY DISCREPANCIES BETWEEN THESE PLANS AND ACCESSIBILITY LAWS/RULES, HE IS TO STOP WORK IN THE AREA OF CONFLICT AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY FOR A RESOLUTION AND/OR REVISION TO THESE PLANS. ELI ENGINEERING SHALL NOT BE HELD RESPONSIBLE FOR CONSTRUCTING THIS SITE COMPLIANT WITH ACCESSIBILITY LAWS/RULES REGARDLESS OF WHAT IS SHOWN IN THESE PLANS.



BENCHMARKS ARE LOCATED IN THE COORDINATES FOR TEXAS STATE PLANES, CENTRAL ZONE, US FOOT (TX83-CF) AND ARE SHOWN IN DETAIL ON THE EXISTING CONDITIONS SHEET AND GRADING PLAN

SHE

BEFORE YOU DIG

- 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 EFFECT AT THE TIME OF SUBMITTAL
- OF THE PROJECT TO THE CITY. THE SITE CONSTRUCTION PLANS SHALL MEET ALL REQUIREMENTS OF THE APPROVED SITE PLAN.
- WASTEWATER MAINS AND SERVICE LINES SHALL BE SOR 26 PVC. WASTEWATER MAINS SHALL BE INSTALLED WITHOUT HORIZONTAL OR VERTICAL BENDS.
- MAXIMUM DISTANCE BETWEEN WASTEWATER MANHOLES IS 500 FEFT.
- 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 CITY OF GEORGETOWN AND TCEQ REQUIREMENTS.
- 9. WASTEWATER MAINS SHALL BE CAMERA TESTED BY THE CONTRACTOR AND SUBMITTED TO THE CITY ON DVD FORMAT PRIOR TO PAVING THE STREETS.
- 10. PRIVATE WATER SYSTEM FIRE LINES SHALL BE TESTED BY THE CONTRACTOR TO 200 PSI FOR 2 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.
- 14. LONG FIRE HYDRANT LEADS 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 THE TCEQ AND THE CITY.
- 17. FLEXIBLE BASE MATERIAL FOR PUBLIC STREETS SHALL BE TXDOT TYPE A GRADE 1.

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

- 18. HOT MIX ASPHALTIC CONCRETE PAVEMENT SHALL BE TYPE D UNLESS OTHERWISE SPECIFIED AND SHALL BE A MINIMUM
- OF 2 INCHES THICK ON PUBLIC STREETS AND ROADWAYS. 19. AU 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 IMPROVEMENTS. THIS BOND SHALL BE ESTABLISHED FOR 2 YEARS IN THE AMOUNT 0-F-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 SUBMITTED AS A PDF AND SENT TO THE CITY BY EMAIL OR CLOUD SOURCE.

ADDITIONAL SITE DEVELOPMENT PLAN NOTES, SUBJECT TO APPLICABILITY:

- 1. THE PROPERTY SUBJECT TO THIS APPLICATION IS SUBJECT TO THE WATER QUALITY REGULATIONS OF THE CITY OF GEORGETOWN. (FOR PROPERTIES LOCATED OVER THE EDWARDS AQUIFER RECHARGE ZONE)
- 2. A GEOLOGIC ASSESSMENT, IN ACCORDANCE WITH THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS, WAS COMPLETED ON (DATE). ANY SPRINGS AND STREAMS AS IDENTIFIED IN THE GEOLOGIC ASSESSMENT ARE SHOWN HEREIN.
- ARCHITECTURAL PLAN NOTES: 1. ALL SIGNAGE REQUIRES A SEPARATE APPLICATION AND APPROVAL FROM THE BUILDING INSPECTIONS DEPARTMENT. NO SIGNAGE IS APPROVED WITH THE SITE DEVELOPMENT PLAN.
- 2. COLOR SELECTION IS NOT APPROVED WITH THE SITE DEVELOPMENT PLAN AND MAY BE COUNTED TOWARD THE SIGNAGE CALCULATION IF IT IS FOUND TO REFLECT COLOR THAT IS CONSIDERED SIGNAGE ACCORDING TO THE DEFINITION OF SIGNAGE IN THE UDC.
- 3. THIS SITE DEVELOPMENT PLAN SHALL MEET ALL DESIGN STANDARDS FOR ARTICULATION, BUILDING DESIGN, ELEMENTS AND ARCHITECTURAL FEATURES OF SECTION 7.03 OF THE UDC.
- 4. ALL ROOF, WALL AND GROUND MOUNTED MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE SCREENED USING THE FOLLOWING METHODS: (LIST).

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. TELEPHONE 218-5555 (INSPECTIONS).
- 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
- 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 OF GEORGETOWN ENGINEERING AND DEVELOPMENT SERVICES DEPARTMENT.
- BARRICADES BUILT TO CITY OF GEORGETOWN STANDARDS SHALL BE CONSTRUCTED ON ALL DEAD—END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN JOB AND PUBLIC SAFETY.
- ALL R.C.P. SHALL BE MINIMUM CLASS III. WHERE PI'S 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.

EROSION AND SEDIMENTATION CONTROL NOTES:

- 1. EROSION CONTROL MEASURES, SITE WORK AND RESTORATION WORK SHALL BE IN ACCORDANCE WITH THE CITY OF GEORGETOWN EROSION AND SEDIMENTATION CONTROL ORDINANCE.
- 2. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS, GRASS MIXTURES OR GROUND COVER SUITABLE TO
- THE AREA AND SEASON IN WHICH THEY ARE APPLIED. 3. SILT FENCES, ROCK BERMS, SEDIMENTATION BASINS AND SIMILARLY RECOGNIZED TECHNIQUES AND MATERIALS SHALL
- BE EMPLOYED DURING CONSTRUCTION TO PREVENT POINT SOURCE SEDIMENTATION LOADING OF DOWNSTREAM FACILITIES. SUCH INSTALLATION SHALL BE REGULARLY INSPECTED BY THE CITY OF GEORGETOWN FOR EFFECTIVENESS. ADDITIONAL MEASURES MAY BE REQUIRED IF, IN THE OPINION OF THE CITY ENGINEER, THEY ARE WARRANTED. 4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF
- THE PROJECT BY THE ENGINEER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE ENGINEER. ALL MUD, DIRT, ROCKS, DEBRIS, ETC., SPILLED, TRACKED OR OTHERWISE DEPOSITED ON EXISTING PAVED STREETS,
- DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY.

TRAFFIC MARKING NOTES:

- 1. ANY METHODS, STREET MARKINGS AND SIGNAGE NECESSARY FOR WARNING MOTORISTS, WARNING PEDESTRIANS OR DIVERTING TRAFFIC DURING CONSTRUCTION SHALL CONFORM TO THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, LATEST EDITION.
- 2. ALL PAVEMENT MARKINGS, MARKERS, PAINT, TRAFFIC BUTTONS, TRAFFIC CONTROLS AND SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES AND, THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, LATEST EDITIONS.

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
- 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
- 3. ALL PRIVATE FIRE LINES AND WHAT THEY PROVIDE SERVICE TO WILL BE INSTALLED IN ACCORDANCE WITH NFPA 24 INSTILLATION OF PRIVATE SERVICE MAINS AND THEIR APPURTENANCES.
- 4. ALL TEES, PLUGS, CAPS, BENDS, REDUCERS, VALVES SHALL BE RESTRAINED AGAINST MOVEMENT. THRUST BLOCKING AND JOINT RESTRAINED 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 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 PRESSURE SHALL BE TESTED AT 200 PSI. OR 50 PSI MORE THAN 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 FT, 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 PURVEYOR'S MAIN FROM THE POINT OF CONNECTION OR VALVE WHERE THE PRIMARY PURPOSE OF WATER IS FOR FIRE PROTECTION SPRINKLER SYSTEM.

EXISTING DIRECTION OF FLOW

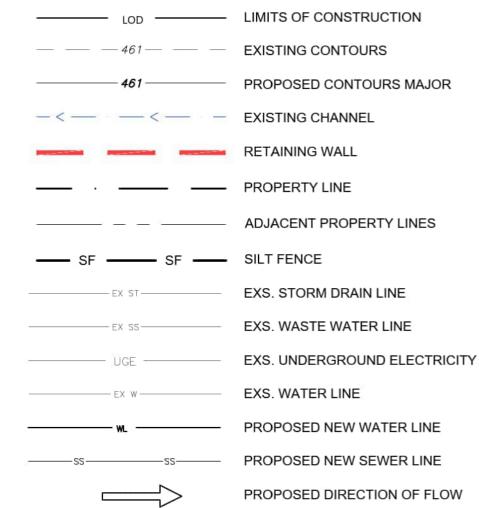
GEOTECHNICAL PAVEMENT DESIGN BY BRAUN INTERTEC CORPORATION, PROJECT B2201705, DATED MARCH 30, 2021. BY JOHN P. STYRON, P.E., SEE GEOTECHNICAL REPORT FOR FULL PAVING SPECIFICATION. THIS PROJECT IS PERMITTED FOR EITHER FLEXIBLE PAVEMENT OR RIGID PAVEMENT CONSTRUCTION IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

Table 7. Recommended Pavement Sections

Pavement Type	Pavement Use	Pavement Section	
Rigid: Portland Cement Concrete,	Light Duty Traffic: parking areas	5.0" Portland Cement Concrete ≥6.0" Density Controlled Stratum I or II Soil or Select Fill	
4,000 psi, 30 Year Design Period	Medium Duty Traffic: entrances, driveways, channelized traffic	6.0" Portland Cement Concrete ≥6.0" Density Controlled Stratum I or II Soil or Select Fill	
Flexible: HMAC Over Crushed	Light Duty Traffic (30,000 ESALs): parking areas	2.0" Type "D" Dense HMAC 6.0" Aggregate Base Course (flexible base) ≥6.0" Density Controlled Stratum I or II Soil or Select Fill	
Aggregate Base, 20 Year Design Period	Medium Duty Traffic (100,000 ESALs): entrances, driveways, channelized traffic	2.0" Type "D" Dense HMAC 8.0" Aggregate Base Course (flexible base) >6.0" Density Controlled Stratum I or II Soil or Select Fill	

NOTE: Materials shall meet general requirements of the local governing bodies, TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets, & Bridges, Williamson County or City of Cedar Park local requirements, and specific requirements listed herein.

LINEWORK LEGEND SYMBOL LEGEND



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 ACCEPTED BY THE CITY ENGINEER, DEPTH OF COVER FOR ALL LINES OUT OF THE PAVEMENT SHALL BE 42" MIN., AND DEPTH OF COVER FOR ALL LINES UNDER PAVEMENT SHALL BE A MIN. 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 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
- WATER & WASTEWATER SUPERINTENDENT. 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 OF GEORGETOWN PERSONNEL. WATER SAMPLES WILL BE COLLECTED BY THE CITY OF GEORGETOWN 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 OF GEORGETOWN 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 OF GEORGETOWN FEE AMOUNTS MAY BE OBTAINED BY CALLING THE ENGINEERING AND DEVELOPMENT SERVICES DEPARTMENT AT 218-5555.
- 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 OF GEORGETOWN PERSONNEL.
- 13. THE CONTRACTOR SHALL COORDINATE TESTING WITH THE CITY OF 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 OF 15. ALL VALVE BOXES AND COVERS SHALL BE CAST IRON.
- 16. ALL WATER SERVICE, WASTEWATER SERVICE AND VALVE LOCATIONS SHALL BE APPROPRIATELY MARKED AS
- WATER SERVICE "W" ON TOP OF CURB
- WASTEWATER SERVICE "S" ON TOP OF 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 CITY OF GEORGETOWN ENGINEERING AND DEVELOPMENT SERVICES DEPARTMENT FOR ASSISTANCE IN OBTAINING EXISTING WATER AND WASTEWATER LOCATIONS.
- 18. THE CITY OF GEORGETOWN FIRE DEPARTMENT SHALL BE NOTIFIED 48 HOURS PRIOR TO TESTING OF ANY BUILDING SPRINKLER PIPING IN ORDER THAT THE FIRE DEPARTMENT MAY MONITOR SUCH
- 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:

- 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 OF GEORGETOWN SPECIFICATIONS CONFLICT, THE MORE STRINGENT SHALL APPLY.

TRENCH SAFETY NOTES:

- 1. IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U. S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER 5 FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOIL SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN 5 FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED. TRENCH SAFETY
- SYSTEMS TO BE UTILIZED FOR THIS PROJECT (WILL FOLLOW OSHA). 2. IN ACCORDANCE WITH THE U. S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN PERSONS ARE IN TRENCHES 4-FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN 25 FEET OF LATERAL TRAVEL.
- 3. IF TRENCH SAFETY SYSTEM DETAILS WERE NOT PROVIDED IN THE PLANS BECAUSE TRENCHES WERE ANTICIPATED TO BE LESS THAN 5 FEET IN DEPTH AND DURING CONSTRUCTION IT IS FOUND THAT TRENCHES ARE IN FACT 5 FEET OR MORE IN DEPTH OR TRENCHES LESS THAN 5 FEET IN DEPTH ARE IN AN AREA WHERE HAZARDOUS GROUND MOVEMENT IS EXPECTED, ALL CONSTRUCTION SHALL CEASE, THE TRENCHED AREA SHALL BE BARRICADED AND THE ENGINEER NOTIFIED IMMEDIATELY. CONSTRUCTION SHALL NOT RESUME UNTIL APPROPRIATE TRENCH SAFETY SYSTEM DETAILS, AS DESIGNED BY A PROFESSIONAL ENGINEER, ARE RETAINED AND COPIES SUBMITTED TO THE CITY OF GEORGETOWN.

SEQUENCE OF CONSTRUCTION:

- 1. CONDUCT PRE-CONSTRUCTION CONFERENCE 2. INSTALL ALL EROSION CONTROL.
- 3. PERFORM EXCAVATIONS, INCUDING PONDS (IF ANY) ESTABLISH SUBGRADE ON SITE.
- 4. CONSTRUCT DRIVEWAYS AND INSTALL ALL UNDERGROUND UTILITIES
- 5. CONSTRUCT BUILDING PAD(S) PER STRUCTURAL ENGINEER'S SPECIFICATIONS.
- 6. PROCESS AND COMPACT SUBGRADE TO FINAL GRADES. 7. INSTALL PAVING
- 8. FINAL GRADE DETENTION POND AND OUTLET CONTROLS (IF 9. FINAL BUILDING
- 10. INSTALL ALL LANDSCAPE AND IRRIGATION, RE-VEGETATE ALL DISTURBED AREAS.
- 11. REMOVE TEMPORARY EROSION CONTROL SUBSEQUENT TO ESTABLISHMENT OF VEGETATION.

18, 2024 S $^{\omega}$

THIS AREA IS RESERVED FOR FUTURE APPROVAL STAMPS

0

= FIRE HYDRANT

= WATER VALVE

= WATER METER

= WATER MANHOLE

= BLOWOFF VALVE

= SANITARY MANHOLE = STORM MANHOLE

= AREA/GRATE INLET

= FOUND IRON ROD

= ELECTRIC BOX

= LIGHT POLE

= CABLE BOX

= BOLLARD

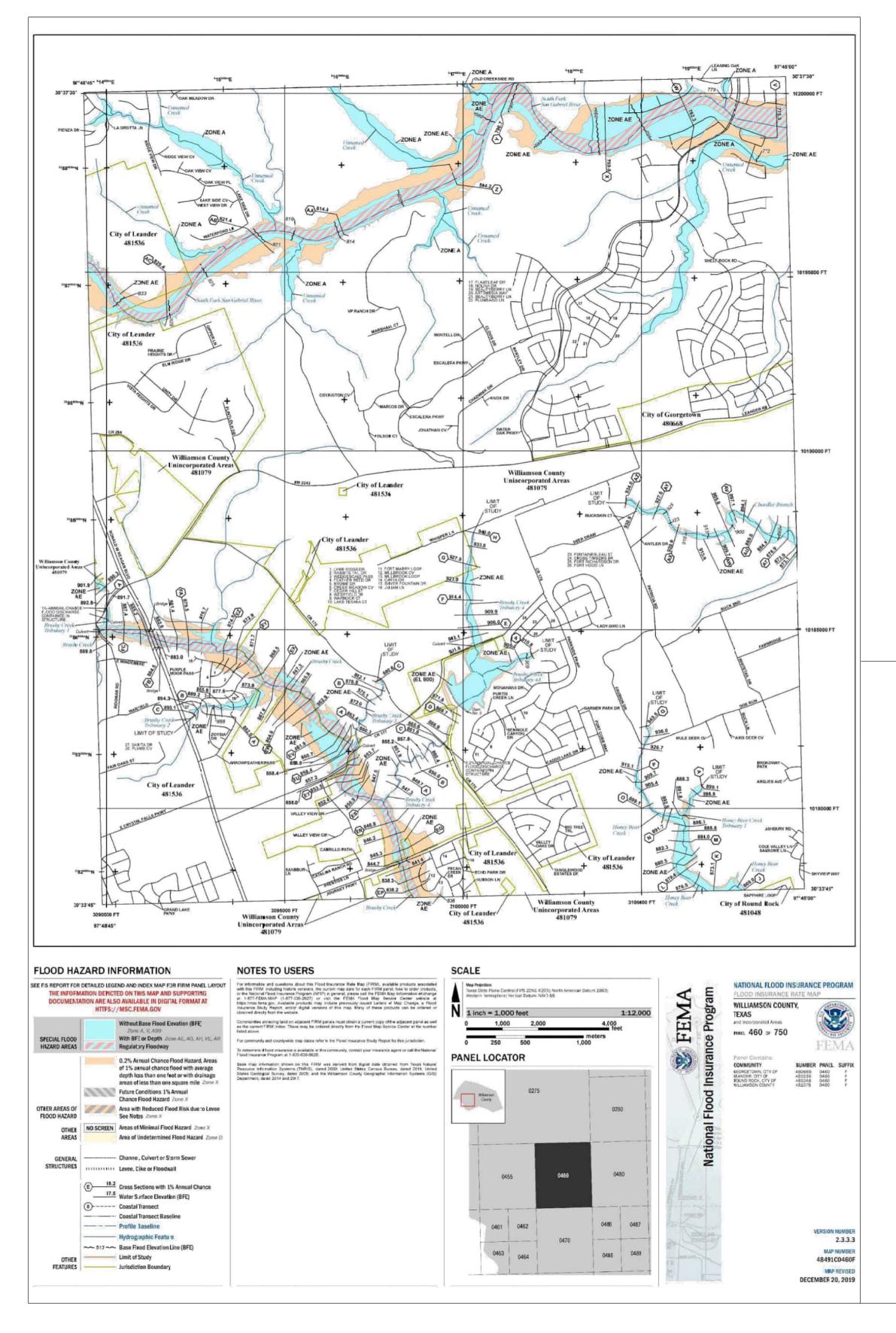
= SIGN

= CALCULATED POINT

= IRRIGATION CONTROL VALVE

= ELECTRIC MANHOLE = TELEPHONE MANHOLE

= TELEPHONE PEDESTAL



Texas Commission on Environmental Quality Water Pollution Abatement Plan General Construction Notes

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 (ED), 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 (TAC), 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 ED, 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, TAC, 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 ED'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, TAC § 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 ED to any part of Title 30 TAC, Chapters 213 and 217, or any other TCEQ applicable regulation

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 name of the approved project;
the activity start date; and
the contact information of the prime contractor.

- 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.
- 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.
- 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,
- Sediment must be removed from the sediment traps or sedimentation basins not later than

TCEQ-0592 (Rev. July 15, 2015)

when it occupies 50% of the basin's design capacity.

- 8. Litter, construction debris, and construction chemicals exposed to stormwater shall be
- 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.
- 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
- of the site; and
 the dates when stabilization measures are initiated.
- 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:
- 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;
- 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;
- any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office	San Antonio Regional Office
12100 Park 35 Circle, Building A	14250 Judson Road
	San Antonio, Texas 78233-4480
	Phone (210) 490-3096
Fax (512) 339-3795	Fax (210) 545-4329

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

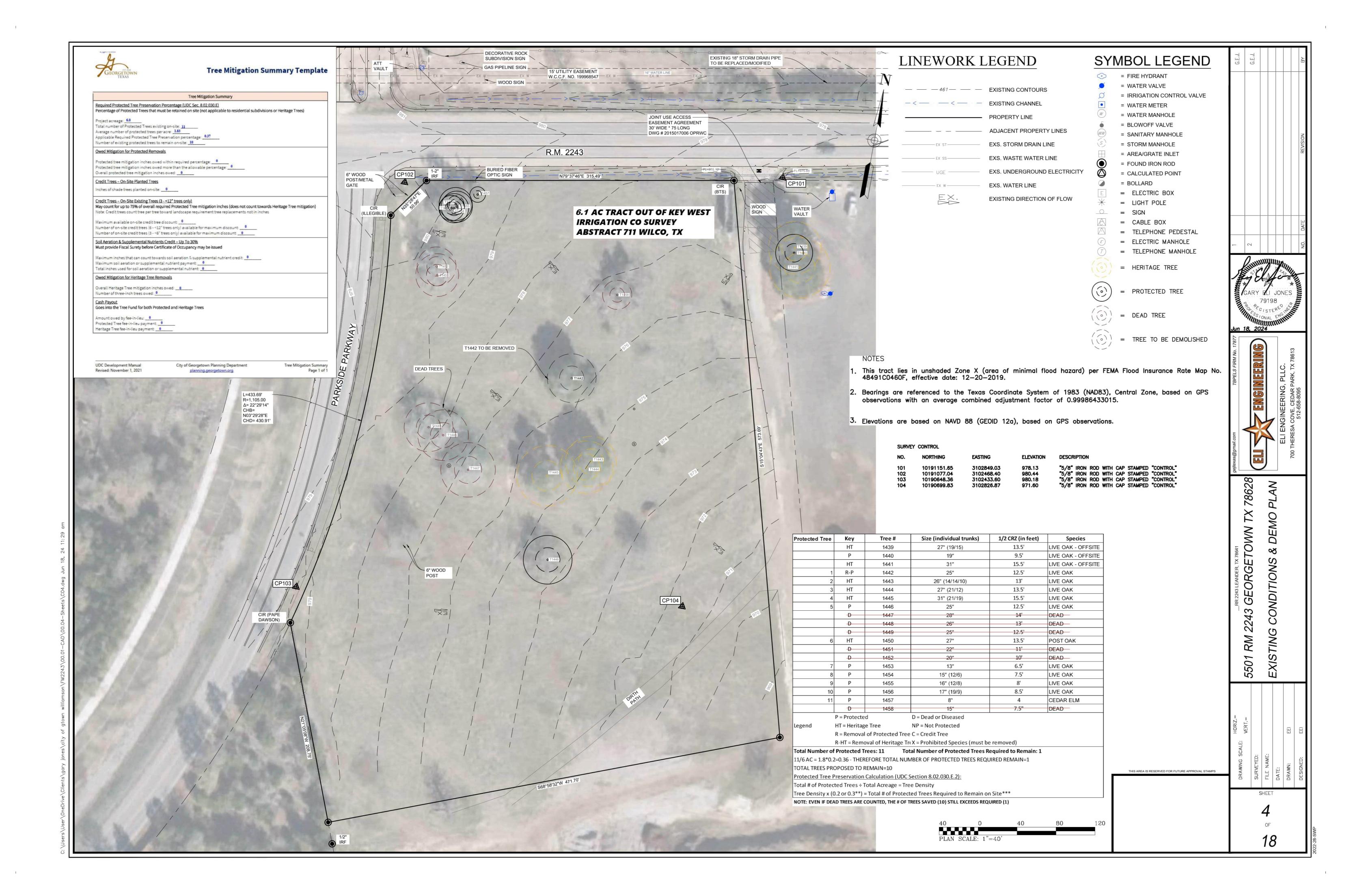
TCEQ-0592 (Rev. July 15, 2015)

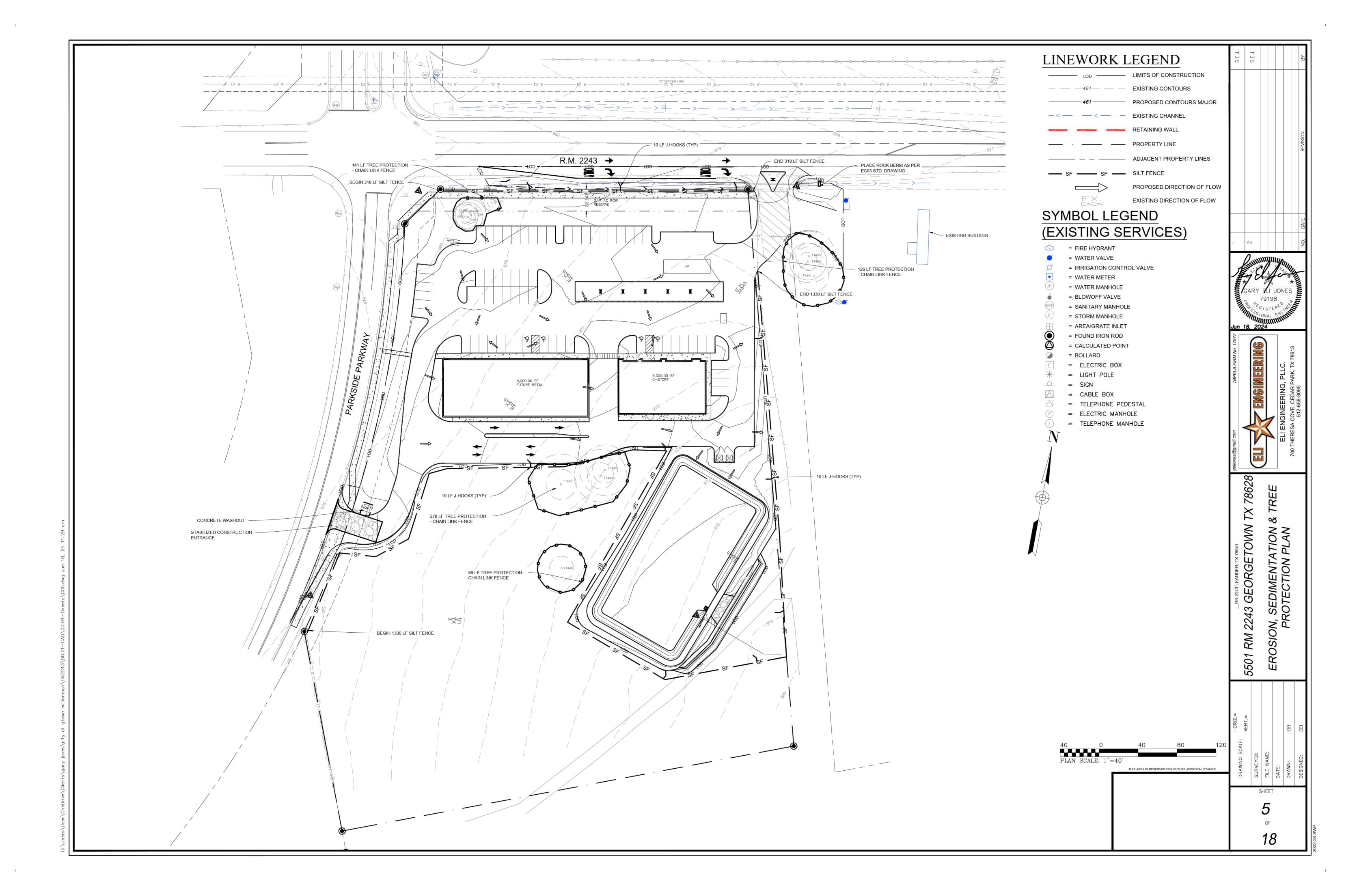
Page 2 of 2

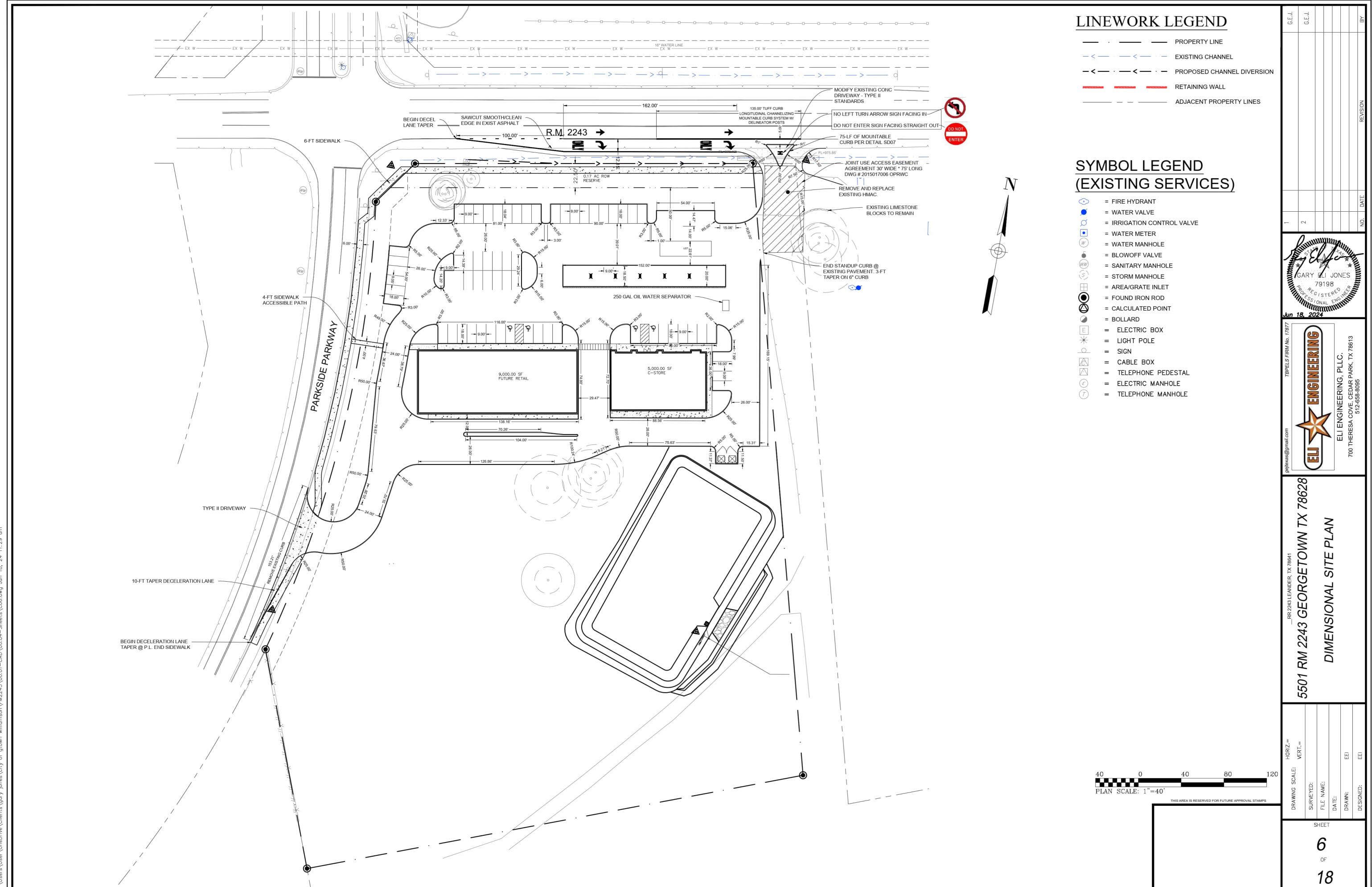
TOWN NOT Q $\dot{\mathcal{O}}$ \mathcal{C} THIS AREA IS RESERVED FOR FUTURE APPROVAL STAMPS SHEET

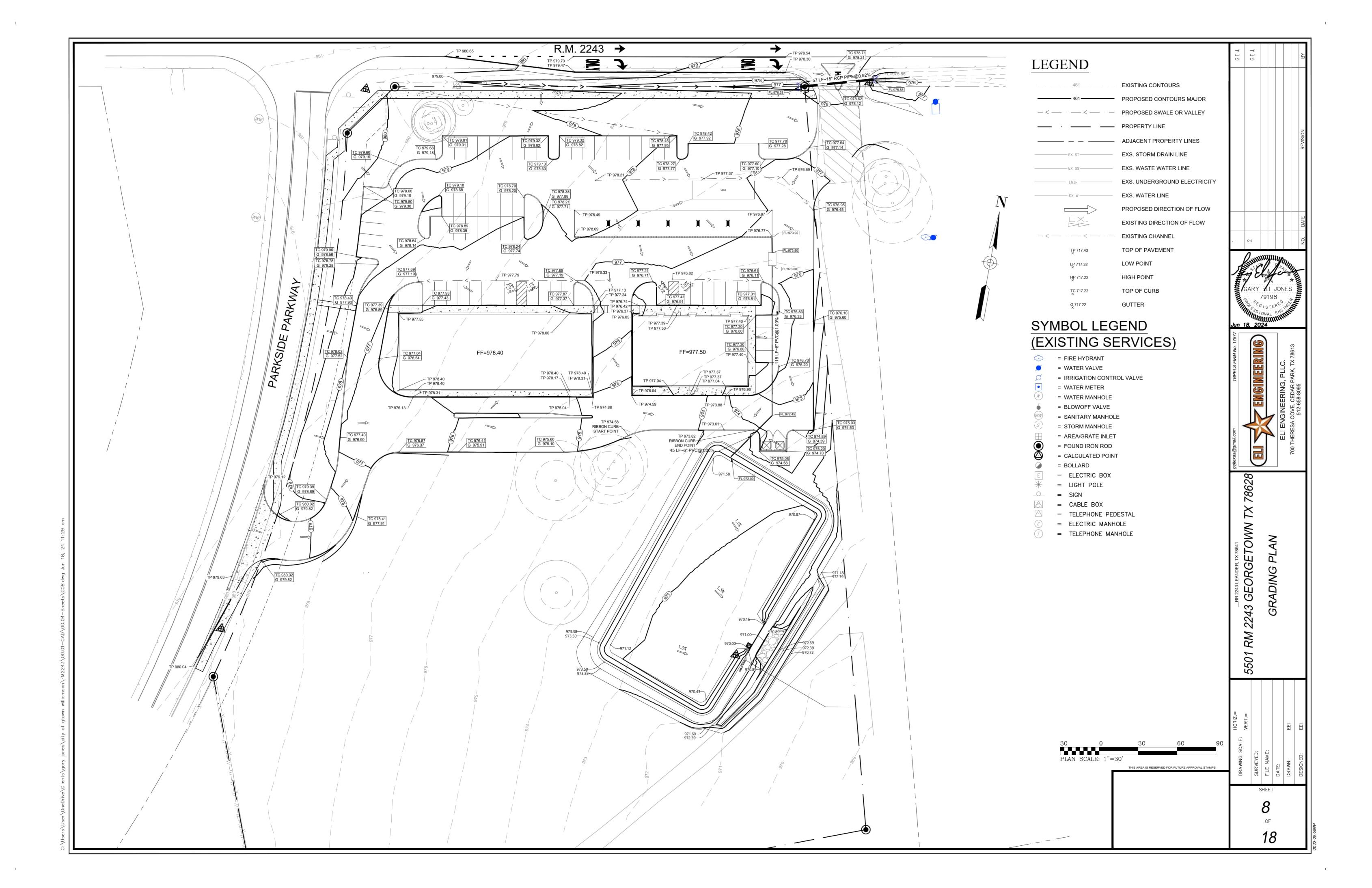
C: \Users\User\OneDrive\Clients\gary jones\cfty of gtown williamson\FM2243\00.01—CAD\00.04—Sheets\C01—C03.dwg Jun 18, 24 11

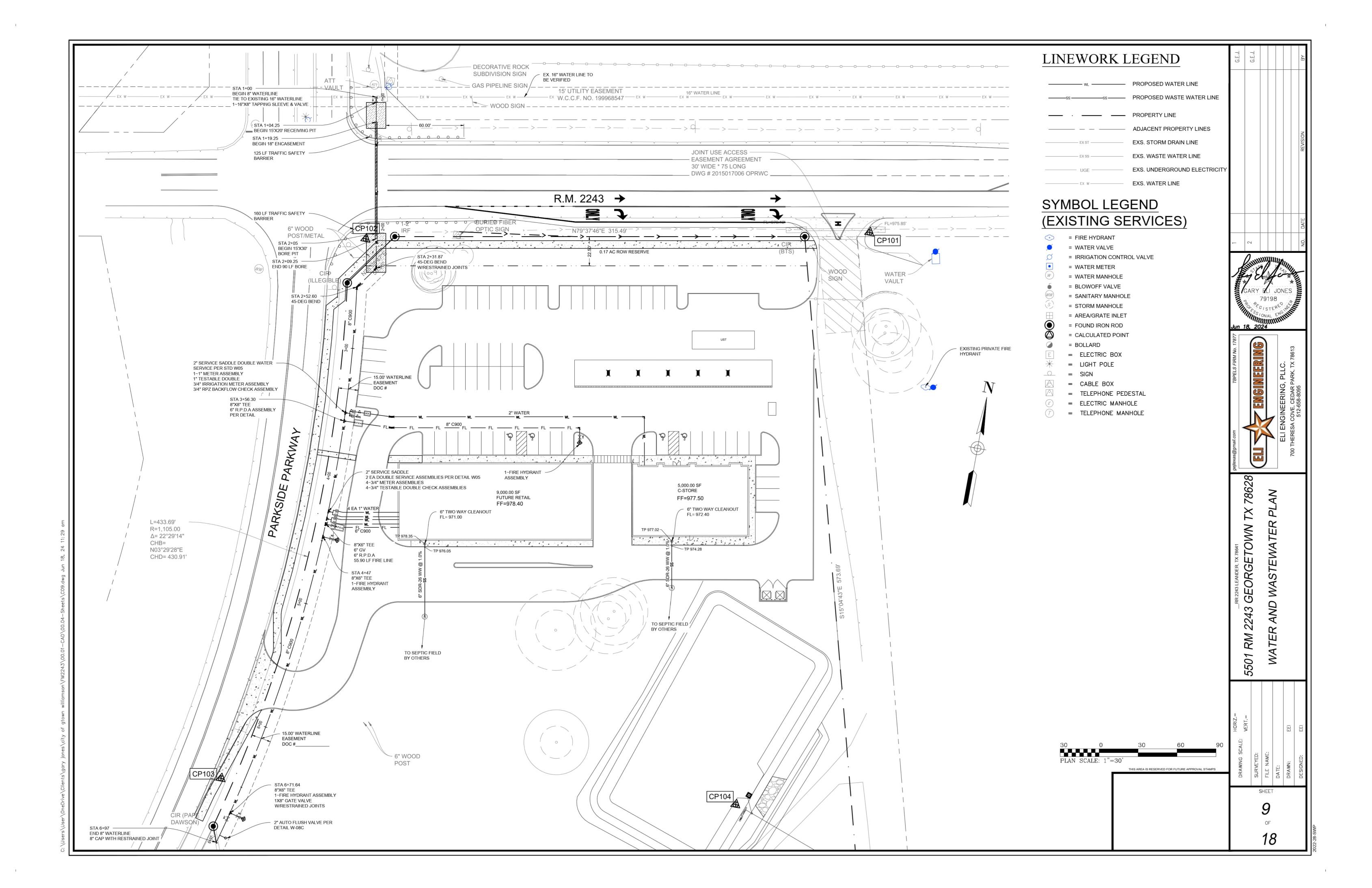
8-SWP

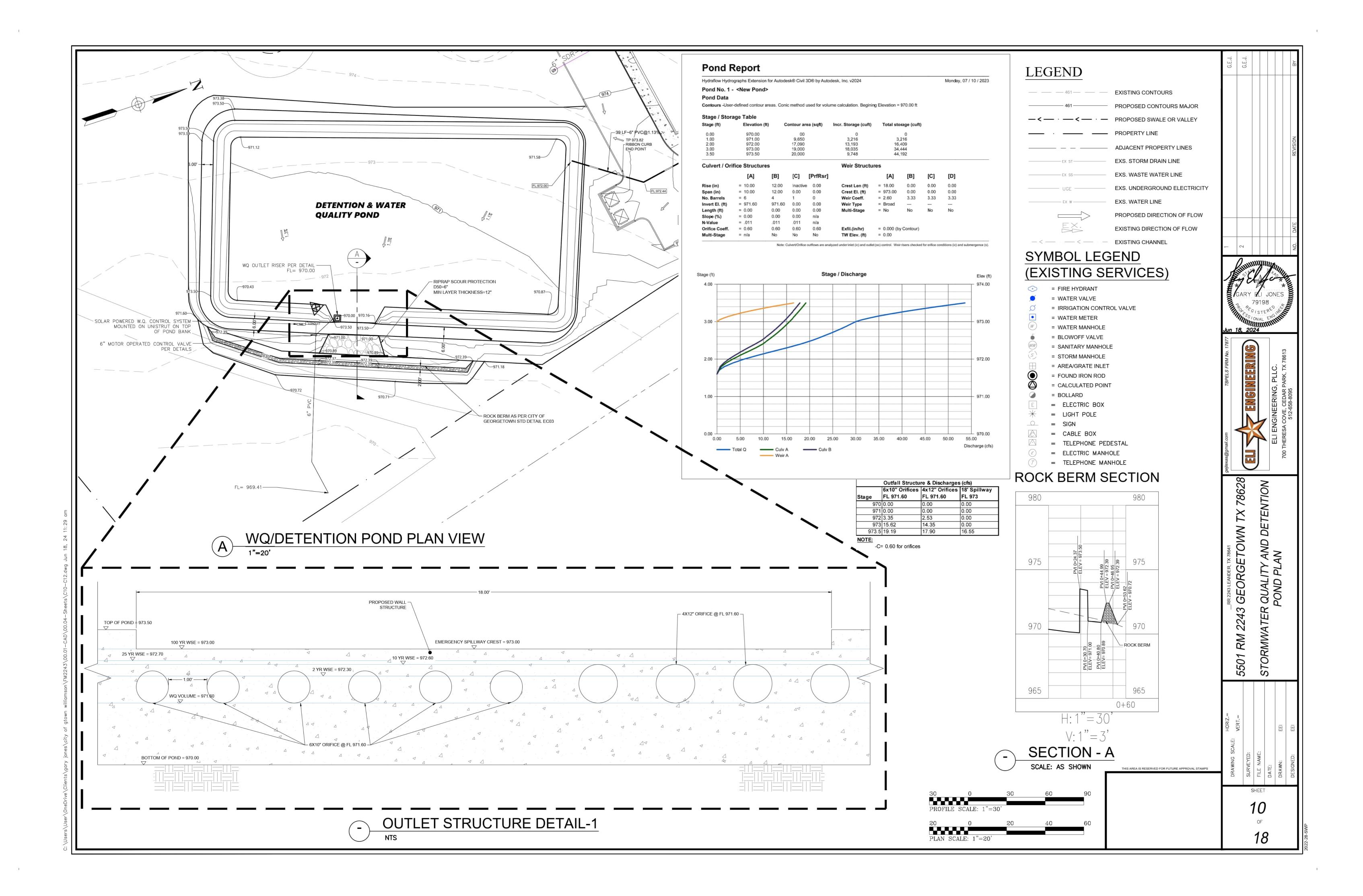




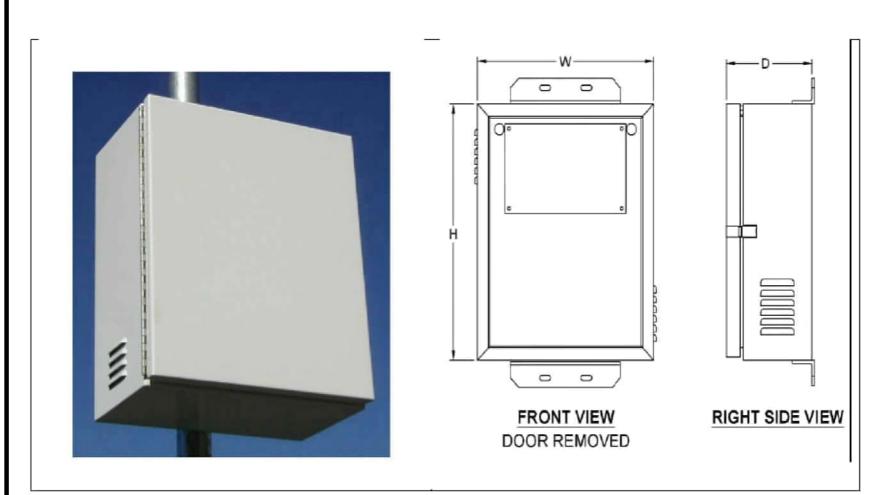








Ground Mount Controller and Battery Enclosure



- Standard boxes are fabricated from .125" thick 5052--H32 aluminum
- Heavy--duty stainless steel continuous
- Heavy--duty stainless steel continuous hinge
- Seams are continuously welded and then sanded smooth
- Adjustable tension stainless steel padlock hasp

Substantial RE causes water

to fill pond and activates

water sensor switch (WSS) which initiates 12-hour batch etention timer to hold water in pond, valve position remains in closed position

After 12-hour detention

time passes, BV opens

to drain pond, pond must drain in 48 hours

or less

Once WSS detects no water

in pond, valve remains open

for two additional hours to

allow any remaining shallow

water to be discharged

After 14 hours the WSS has detected water in pond, BV closes and goes back into standby mode until next RE

> atch detention cycle complete

· Removable component mounting plate

- · Standard finish is a bright white polyester powder-coat inside and out
- Two 7/8" diameter wire holes
- Built to NEMA 3R specifications
- Filtered or screened ventilation louvers

Small RE causes no

water to fill pond

system remains in

standby mode until

next RE

- - Supplied with u--bolts (when pole specified)

Solar Panel

30 Watt @ 24V

SunSaver - 10L Solar Charge

Controller

-010-

Earth Ground

-000

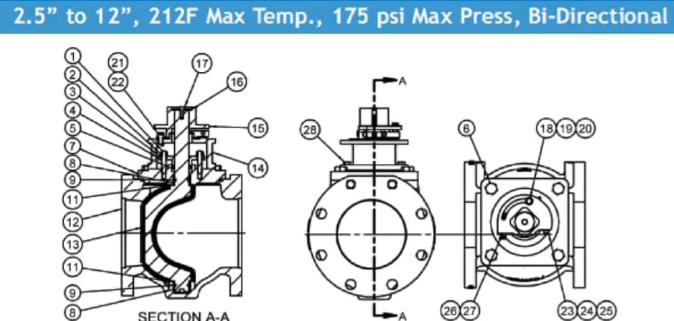
· Hinged front door with PORON door gasket

Batch Valve Programmable Logic Flow Chart

closed position, in

standby mode waiting for rain event (RE)

800 SERIES MATERIAL LIST



Item	Description	Material	Item	Description	Material
1	Gland Stud	Stainless Steel	15	Torque Collar	A536 GR 65-45-12
2	Hex Nut	Stainless Steel	16	Flat Washer	Q235-A Zinc Plated
3	Flat Washer	Stainless Steel	17	Socket Head Capscrew	Stainless Steel
4	Gland	ASTM A126 CL B	18	Hex Head Capscrew	Stainless Steel
5	V-Ring Set	NBR	19	Hex Nut	Stainless Steel
6	Hex Head Capscrew	Stainless Steel	20	Flat Washer	Stainless Steel
7	Cover	ASTM A126 CL B	21	Socket Head Capscrew	Stainless Steel
8	Bearing	SST, Sintered	22	Lock Washer	Stainless Steel
9	O-Ring	NBR	23	Socket Head Capscrew	Stainless Steel
10	O-Ring	NBR	24	Hex Nut	Stainless Steel
11	Thrust Washer	PTFE	25	Flat Washer	Stainless Steel
12	Body	ASTM A126 CL B	26	Hex Head Capscrew	Stainless Steel
13	Plug Molded	A536 GR 65-45-12 +NBR	27	Hex Nut	Stainless Steel
14	Torque Collar Adapter (Buried)	ASTM A126 CL B	28	Hex Head Capscrew	Stainless Steel

800 SERIES Cv Data (GPM@1PSI)

Size	2.5	3	4	5	6	8	10	12
Cv	425	680	1190	2000	2400	4600	5800	9100

Crispin/K-Flo Valves, 600 Fowler Ave., Berwick PA 18603 T: 800-247-VALV W: www.kflovalves.com

Roto Float

2" - 6" plug

valve and 24V

motor actuator

Circuit Block Diagram

External

Indicator/

Alarm

-000-

Step Down

DC-DC Converter

Rainwater

Automation

Logic Controller

12V



Actuator Specifications	P	4	P	5	P	6
Torque "lb/Nm	3500"lbs	500"lbs/400Nm 4400"lbs/500Nm 5		5750"lb:	s/650Nm	
Supply Voltage	12vac/vdc	24vac/vdc	12vac/vdc	24vac/vdc	12vac/vdc	24vac/vdc
Max Inrush Current	16.1A	9.2A	13.5A	9.0A	12.5A	8.5A
Running Current	16.1A	8.5A	14.1A	7.5A	12.3A	7.0A
Motor			DC Bru	sh Type		
Runtime (90°@60Hz/vdc)	16	sec	22	sec	28	sec
Runtime (90°@50Hz)	16	sec	22	sec	28	sec
Duty Cycle			75	%		
Motor Starts	1200 per hour					
Weight	47lbs/22kg					
Mechanical Connections	ISO5211 F10 8pt 35mm					
Electrical Entry			(2) 3/4	" NPT		
Electrical Terminations			12-1	16ga		
Environmental Rating			NEMA	4/4X		-
Manual Override			7.6" Ha	ndwheel		
Control		On	/Off-Jog,	Proportio	nal	
Actuator Case material		Alumin	um Alloy	Powder	coated	
Motor Protection	230°F/110°C Thermal F* Class					
Motor Protection	*Totally Enclosed Non-Ventilated Motors					
Ambient Temperature			-22°F to	+125°F		
Operating Range			-30°C to	+52°C		

TCEQ CONSTRUCTION NOTES:

- A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY GROUND DISTURBANCE OR CONSTRUCTION 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 SHOULD BE WITH COMPLETE COPIES OF THE APPROVED CONTRIBUTING ZONE PLAN (CZP) AND THE TCEQ LETTER
- INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTOR(S) SHOULD KEEP COPIES OF THE APPROVED PLAN AND APPROVAL LETTER ONSITE. 3. NO HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.
- 4. 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. 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.
- 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,
- SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.
- 7. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
- ALL EXCAVATED MATERIAL THAT WILL BE STORED ON-SITE MUST HAVE PROPER E&S CONTROLS. 9. IF PORTIONS OF THE SITE WILL HAVE A 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
- SHALL BE INITIATED AS SOON AS POSSIBLE. 10. THE FOLLOWING RECORDS SHOULD BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST: - THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;

DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES

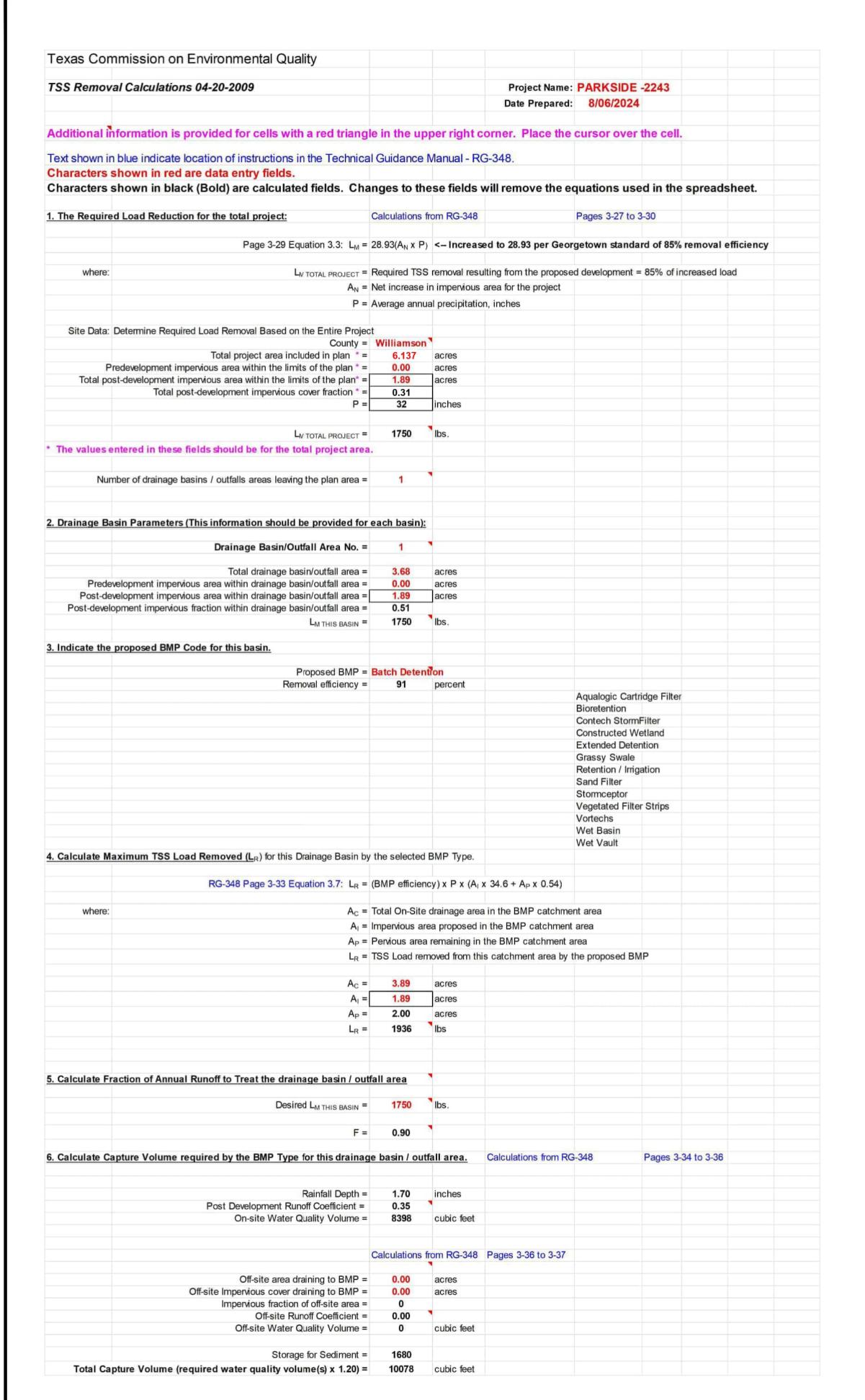
- THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE
- THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
- 11. THE HOLDER OF ANY APPROVED CZP MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
- A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY BEST MANAGEMENT PRACTICES (BMPS) OR STRUCTURE(S), INCLUDING BUT NOT LIMITED TO TEMPORARY OR PERMANENT PONDS, DAMS, BERMS, SILT FENCES, AND DIVERSIONARY STRUCTURES;
- B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS
- C. ANY CHANGE THAT WOULD SIGNIFICANTLY IMPACT THE ABILITY TO PREVENT POLLUTION OF THE EDWARDS
- D. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE APPROVED CONTRIBUTING ZONE PLAN.

THIS AREA IS RESERVED FOR FUTURE APPROVAL STAMPS

SHEET

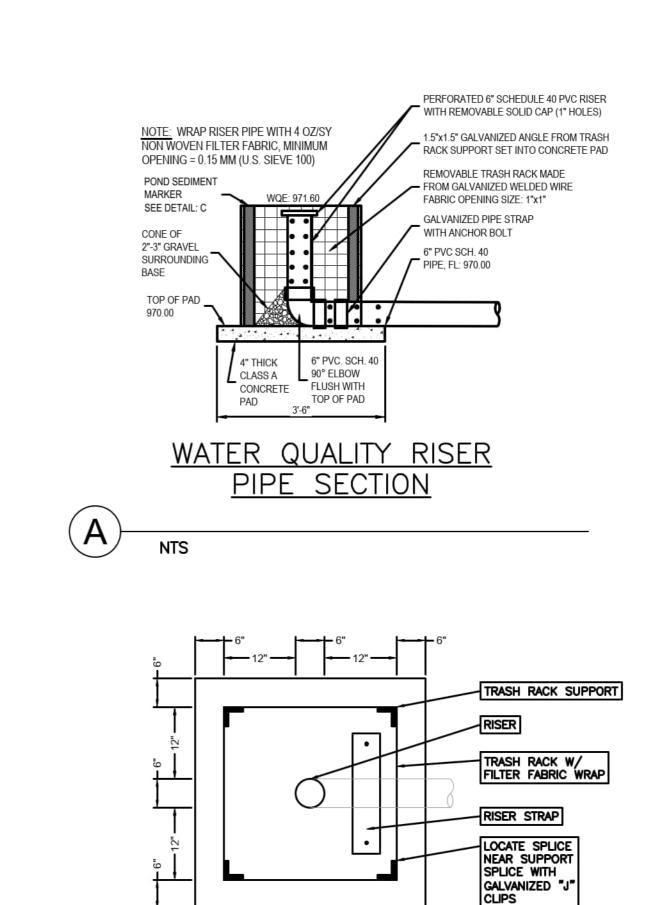
DETAIL

QUALIT



TCEQ CALCS WITH COGT 85% REMOVAL BATCH DETENTION POND Onsite DA Contributing Drainage Area = to Pond Total Drainage Area = 6.00 Pre-Development I.C. = 0.00 acre Post-Development I.C. = 1.89 acre Post-Development I.C. Fraction = 0.32 1750 L_{M TOTAL PROJECT} = 3.89 A_C = acre 1.89 acre 2.00 acre A_P = 1936 L_R = Fraction of Annual Runoff (F) = 0.90 Rainfall Depth = 1.70 inch Post Development Runoff Coefficient = 0.35 On-site Water Quality Volume = 8398 cubic ft Off-site area draining to BMP = 0.00 acre Off-site Impervious cover draining to BMP = 0.00 acre Impervious fraction of off-site area = Off-site Runoff Coefficient = Off-site Water Quality Volume = 0 cubic ft Storage for Sediment = 1680 cubic ft Total Capture Volume Required = 10078 cubic ft Total Capture Volume Provided = 11132 cubic ft

*** Table to Put in WQ Sheet



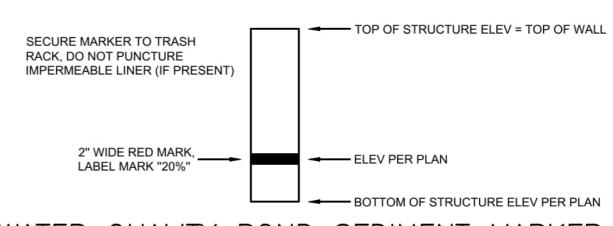
POST THE FOLLOWING SIGN UNDER THE VISIBLE ALARM FOR EMERGENCY CONTACT:

BATCH DETENTION

POND RISER PIPE

EMERGENCY CONTACT: OWNER: XXX-XXX-XXXX TCEQ: 512-339-2929

POND BOTTOM SHALL BE VEGETATED PER THE SEEDING SPECIFICATION ON THE EROSION CONTROL PLAN SHEET.



WATER QUALITY POND SEDIMENT MARKER

N.T.S.

THIS AREA IS RESERVED FOR FUTURE APPROVAL STAMPS

O

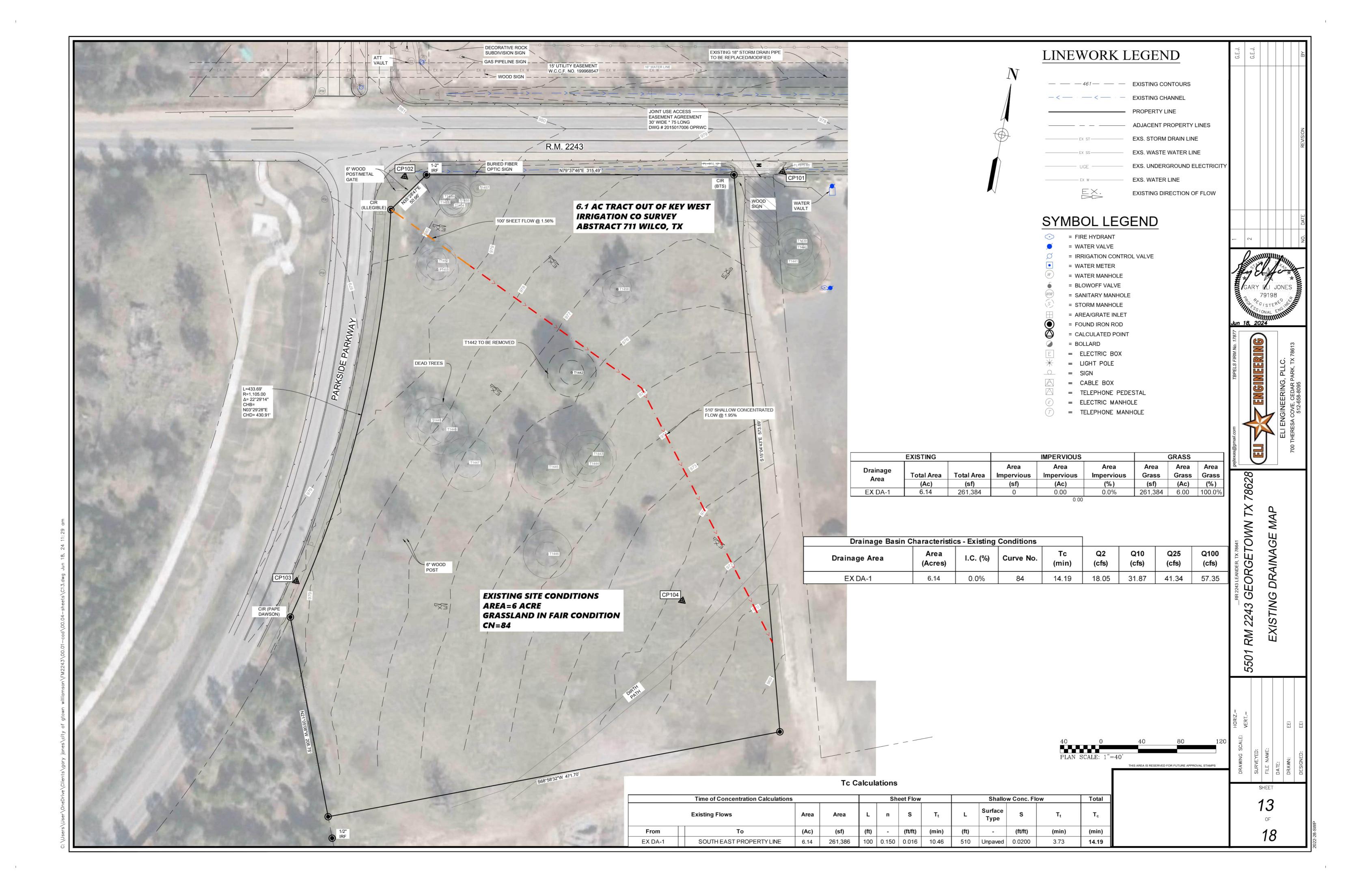
AND

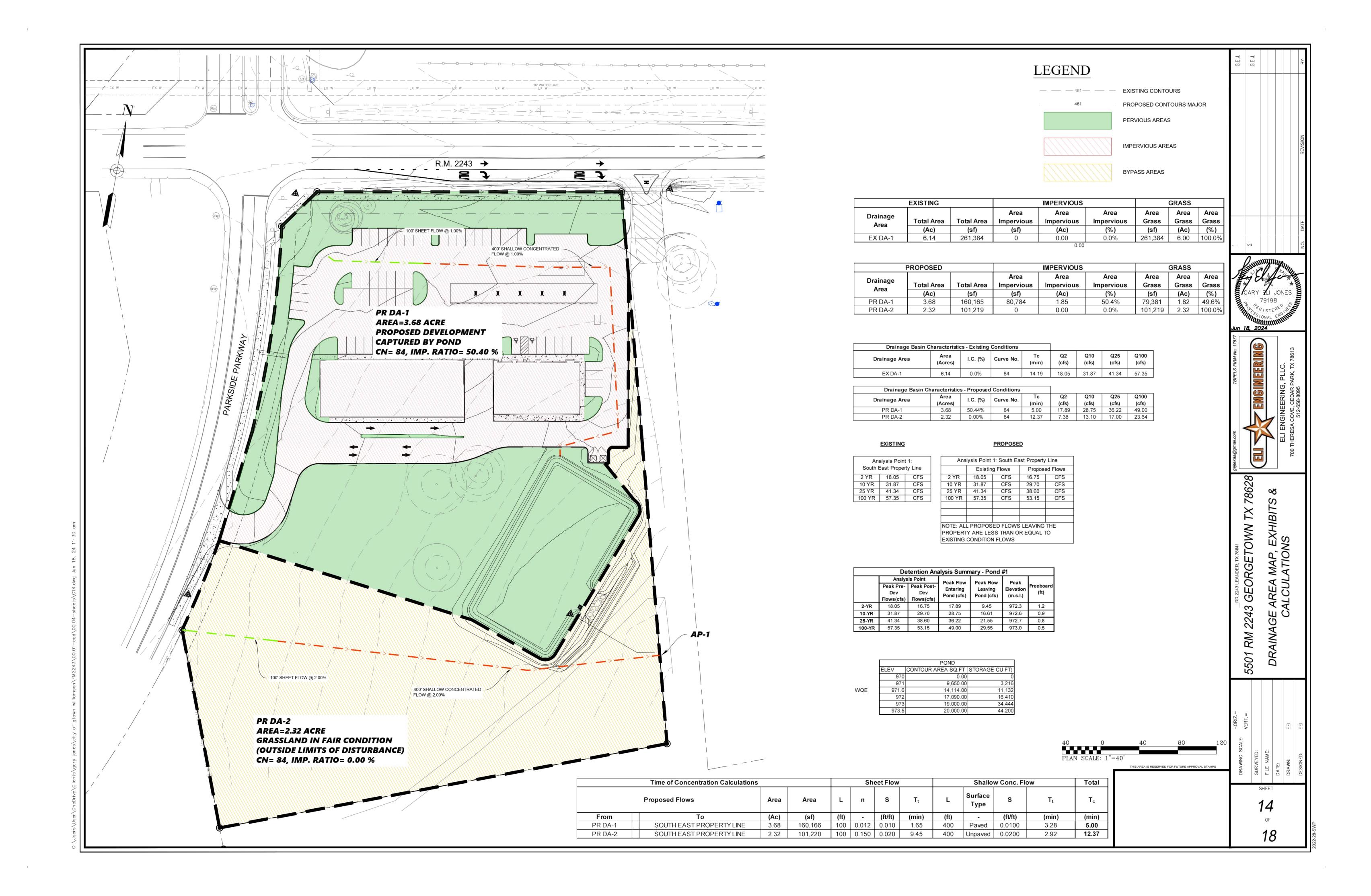
ATION.

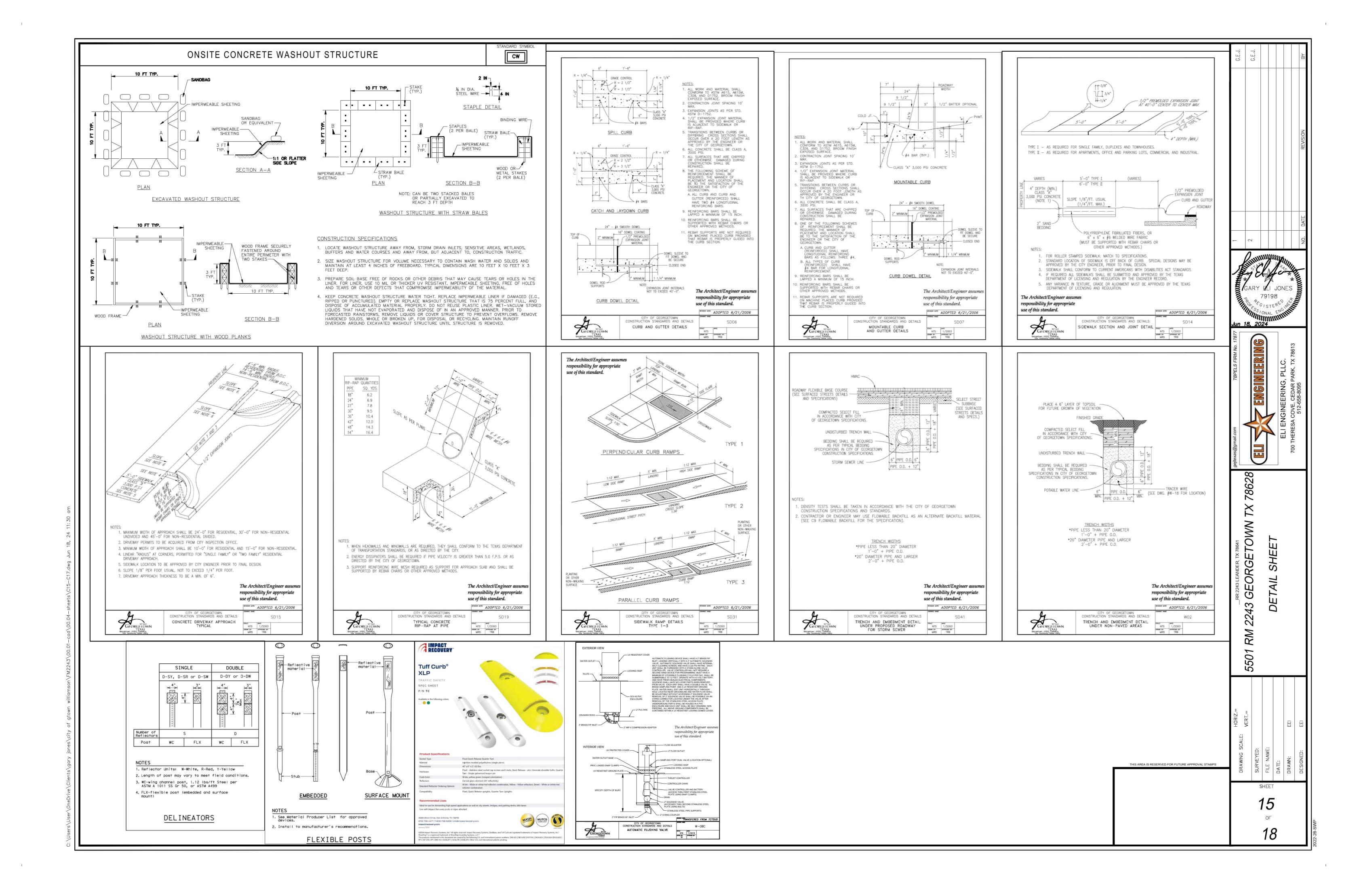
TCEQ

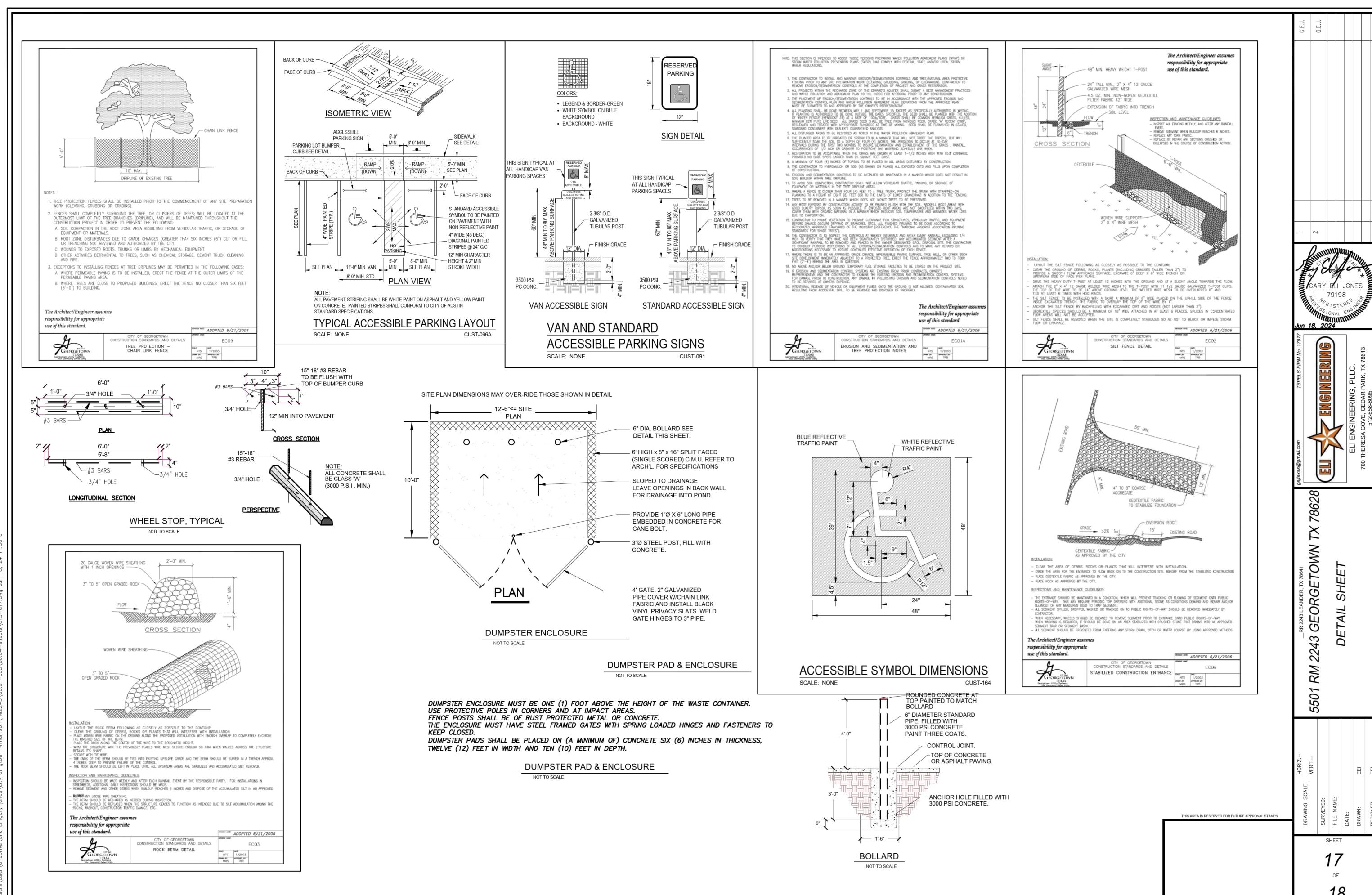
2243

220











June 8, 2024

Ms. Lillian Butler Texas Commission on Environmental Quality 12100 Park 35 Circle, Bld A, Rm 179 Austin, TX 78753

Re: Parkside – 2243 Site Plan

Attachment G - Inspection, Maintenance, Repair and Retrofit Plan

To Whom It May Concern:

A plan for the inspection, maintenance, repair, and if necessary, retrofit of the permanent BMPs and measures is attached. It includes procedures for documenting inspections, maintenance, repairs, and if necessary, retrofits as well as record keeping procedures. The plan has been prepared and certified by the engineer that designed the permanent BMP and measures. The owner or responsible party has signed the plan.

If you have any questions or need further assistance, please contact me at 512-658-8095.

Gary Eli Jones, P.E. Authorized Agent



July 2, 2024

Mr. Kevin Bolin Georgetown Eco Lands, LLC 2040 FM 969 Elgin, TX. 78621

Re: Parkside – 2243 Site Plan

Attachment G - Inspection, Maintenance, Repair and Retrofit Plan

To Mr. Bolin:

TCEQ requires the property owner to keep operation, maintenance, and inspections records of the BMP features including the grassy swale and batch detention pond.

General Guidelines:

- Accessibility: You should maintain accessibility to the BMP at all times. Equipment and personnel required to maintain and inspect the BMP should not be obstructed under reasonable conditions.
- Material Disposal: Stormwater pollutants include a variety of substances that are deposited in the BMP. Federal and state laws and regulations may apply to the disposal of substances removed from the BMP. In order to dispose of substances removed from the BMP you must 1) characterize the waste 2) classify the waste based on character 3) properly dispose the waste according to current state (30TAC 330 or 335) and federal rules (40 CFR Subchapter C or D). The sediment must be determined inert for on-site disposal.

At a minimum, you should keep written records indicating the following:

Subject	Frequency
Pest management	Develop an integrated pest management plan for vegetated areas. Specify how problem weeds and insects will be controlled with minimal or no use of insecticides and herbicides.
Inspect swales & filters	Twice per year, once after a major rainfall event.
Inspect outlet structure	Twice per year, once after a major rainfall event.
Mow and maintain area	As needed such that grass is less than 18" tall or twice per year.
Remove sediment	Remove sediment that reaches 3 inches in depth over any spot or covers vegetation. Replace eroded areas with compacted fill and re-seed as necessary to maintain

Maintenance Guidelines for Batch Detention Basins

Batch detention basins may have somewhat higher maintenance requirements than an extended detention basin since they are active stormwater controls. The maintenance activities are identical to those of extended detention basins with the addition of maintenance and inspections of the automatic controller and the valve at the outlet.

Inspections. Inspections should take place a minimum of twice a year. One inspection should take place during wet weather to determine if the basin is meeting the target detention time of 12 hours and a drawdown time of no more than 48 hours. The remaining inspections should occur between storm events so that manual operation of the valve and controller can be verified. The level sensor in the basin should be inspected and any debris or sediment in the area should be removed. The outlet structure and the trash screen should be inspected for signs of clogging. Debris and sediment should be removed from the orifice and outlet(s) as described in previous sections. Debris obstructing the valve should be removed. During each inspection, erosion areas inside and downstream of this BMP should be identified and repaired/revegetated immediately.

Mowing. The basin, basin side-slopes, and embankment of the basin must be mowed to prevent woody growth and control weeds. A mulching mower should be used, or the grass clippings should be caught and removed. Mowing should take place at least twice a year, or more frequently if vegetation exceeds 18 inches in height. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas.

Litter and Debris Removal. Litter and debris removal should take place at least twice a year, as part of the periodic mowing operations and inspections. Debris and litter should be removed from the surface of the basin. Particular attention should be paid to floatable debris around the outlet structure. The outlet should be checked for possible clogging or obstructions and any debris removed.

Erosion control. The basin side slopes and embankment all may periodically suffer from slumping and erosion. To correct these problems, corrective action, such as regrading and revegetation, may be necessary. Correction of erosion control should take place whenever required based on the periodic inspections.

Nuisance Control. Standing water or soggy conditions may occur in the basin. Some standing water may occur after a storm event since the valve may close with 2 to 3 inches of water in the basin. Some flow into the basin may also occur between storms due to spring flow and residential water use that enters the storm sewer system. Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.).

Structural Repairs and Replacement. With each inspection, any damage to structural elements of the basin (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. An example of this type of repair can include patching of cracked concrete, sealing of voids, removal of vegetation from cracks and joints. The various inlet/outlet structures in a basin will eventually deteriorate and must be replaced.

Sediment Removal. A properly designed batch detention basin will accumulate quantities of sediment over time. The accumulated sediment can detract from the appearance of the facility and reduce the pollutant removal performance of the facility. The sediment also tends to accumulate near the outlet structure and can interfere with the level sensor operation. Sediment shall be removed from the basin at least every 5 years, when sediment depth exceeds 6 inches, when the sediment interferes with the level sensor or when the basin does not drain within 48 hours. Care should be taken not to compromise the basin lining during maintenance.

Logic Controller. The Logic Controller should be inspected as part of the twice yearly investigations. Verify that the external indicators (active, cycle in progress) are operating properly by turning the controller off and on, and by initiating a cycle by triggering the level sensor in the basin. The valve should be manually opened and closed using the open/close switch to verify valve operation and to assist in inspecting the valve for debris. The solar panel should be inspected and any dust or debris on the panel should be carefully removed. The controller and all other circuitry and wiring should be inspected for signs of corrosion, damage from insects, water leaks, or other damage. At the end of the inspection, the controller should be reset.

All maintenance and repairs made to the BMP should be documented along with the inspection report.

Sincerely,

Concurrence & Acceptance:

Gary Eli Jones, P.E.

Kevin Bolin

KnBR

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

	Kevin Bolin	
=	Print Name	
	Manager	
	Title - Owner/President/Other	
of	Georgetown Eco Lands, LLC Corporation/Partnership/Entity Name	
have authorized	Gary Eli Jones, P.E. Print Name of Agent/Engineer	
of	Eli Engineering, PLLC	7
	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:

- 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.
- 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.
- 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.
- 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.
- 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.

Page 1 of 2

SIGNATURE PAGE:

Applicant's Signature

6/28/24 Date

THE STATE OF GLOVGIAS
COUNTY OF DELANDS

BEFORE ME, the undersigned authority, on this day personally appeared <u>Ed Fleming</u>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 28th

a day or

2024

my

Augson Sims

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 219/2027

Application Fee Form

Texas Commission on Environmental Quality								
Name of Proposed Regulated Entit	y: <u>Parkside - 2243</u>							
Regulated Entity Location: SE corne	er of Parkside Pkwy and	RR 2243, Georgetowi	<u>n, TX</u>					
Name of Customer: Georgetown E	co Lands, LLC							
Contact Person: Kevin Bolin	Phone	e: <u>678-296-2851</u>						
Customer Reference Number (if iss	sued):CN							
Regulated Entity Reference Number (if issued):RN								
Austin Regional Office (3373)								
Hays	Travis	⊠ Wil	liamson					
San Antonio Regional Office (3362	2)							
Bexar	Medina	□Uva	ılde					
Comal	Kinney							
Application fees must be paid by cl		r money order, payable	e to the Texas					
Commission on Environmental Qu								
form must be submitted with you		-	•					
Austin Regional Office	n Antonio Regional Of	fice						
Mailed to: TCEQ - Cashier	□ o _\	vernight Delivery to: TCEQ - Cashier						
Revenues Section		2100 Park 35 Circle						
Mail Code 214		uilding A, 3rd Floor						
P.O. Box 13088		ustin, TX 78753						
Austin, TX 78711-3088		12)239-0357						
Site Location (Check All That Apple	*							
Recharge Zone	Contributing Zone	Transiti	ion Zone					
	· - 1.6							
Type of Pla		Size	Fee Due					
Water Pollution Abatement Plan,								
Plan: One Single Family Residentia		Acres	\$					
Water Pollution Abatement Plan,	_							
Plan: Multiple Single Family Resid		Acres	\$					
Water Pollution Abatement Plan,	Contributing Zone	2.42-	<i>4</i>					
Plan: Non-residential	6.137 Acres	\$ 5000						
Sewage Collection System	L.F.	\$						
Lift Stations without sewer lines	Acres	\$						
Underground or Aboveground Sto	orage Tank Facility	Tanks	\$					
Piping System(s)(only)		Each	\$					
Exception		Each	\$					
Extension of Time	_Λ Each	\$						

1 of 2

Date: 6/8/2024

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

✓ 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 3. Remetal Entity Reference Number (If insued)					
2. Curtamore Defenses a Number (if insued)					
2. Containing Defending Number (# income)					
CN Follow this link to search for CN or RN numbers in Central Registry** Central Registry** CN CN CN CN CN CN CN CN CN					
SECTION II: Customer Information					
4. General Customer Information 5. Effective Date for Customer Information Updates (mm/dd/yyyy)					
New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership ☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)					
The Customer Name submitted here may be updated automatically based on what is current and active with the					
Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John) If new Customer, enter previous Customer below:					
Georgetown Eco Lands, LLC					
7. TX SOS/CPA Filing Number 8. TX State Tax ID (11 digits) 9. Federal Tax ID (9 digits) 10. DUNS Number (if applicable)					
0804105901 32079656321					
11. Type of Customer: Corporation Individual Partnership: General Limited					
Government: City County Federal State Other Sole Proprietorship Other:					
12. Number of Employees □ 0-20 □ 21-100 □ 101-250 □ 251-500 □ 501 and higher □ Yes □ No					
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following					
☑Owner ☐ Operator ☐ Owner & Operator ☐Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:					
2040 FM 969					
15. Mailing Address:					
City Elgin State TX ZIP 78621 ZIP +4 6102					
16. Country Mailing Information (if outside USA) 17. E-Mail Address (if applicable)					
kbolin@q2earth.com					
18. Telephone Number 19. Extension or Code 20. Fax Number (if applicable)					
(678) 296-2851					
SECTION III: Regulated Entity Information					
21. General Regulated Entity Information (If 'New Regulated Entity" is selected below this form should be accompanied by a permit application					
⊠ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information					
The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal					
of organizational endings such as Inc, LP, or LLC).					
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)					

TCEQ-10400 (02/21) Page 1 of 2

23. Street Address of	5501 R	M 2243							
the Regulated Entity:									
(No PO Boxes)	City	Georgetown	State	TX	ZIP	78628	ZIP + 4		
24. County		o telgoto mi	- 1		1	,, 0020	1		
		Enter Physical Loc	cation Description	on if no str	eet address	s is provided.			
25. Description to Physical Location:		ner of Parkside				•			
26. Nearest City						State	Nea	rest ZIP Code	
		,							
27 . Latitude (N) In Decimal: 30.595140		30.595140	28. Longitude (ongitude (V	V) In Decimal:	-97.7725	-97.772510	
Degrees	Minutes		conds	Degree		Minutes		Seconds	
30		35	42.504		97		46	21.036	
29. Primary SIC Code	(4 digits) 30	. Secondary SIC C	code (4 digits)	31. Primar (5 or 6 digits	y NAICS C		Secondary NAI digits)	ICS Code	
5541				457110	,				
33. What is the Prima	ry Business	of this entity? (D	o not repeat the SIC	or NAICS desc	cription.)				
Convenience Stor	e with fue	ling stations.	Future retail	building.					
24 M-111				5501	RM 2243				
34. Mailing Address:									
Address.	City	Georgetown	State	TX	ZIP	78628	ZIP + 4		
35. E-Mail Addre	ss:	'							
36. Telep	hone Numbe	er	37. Extensio	n or Code	1	38. Fax Nu	ımber <i>(if appli</i>	cable)	
(678) 296-2851					(), , ,-		
39. TCEQ Programs and orm. See the Core Data For	ID Numbers m instructions f	Check all Programs a or additional guidance	and write in the per e.	mits/registra	tion numbers	that will be affected	d by the updates	submitted on this	
39. TCEQ Programs and orm. See the Core Data For Dam Safety	m instructions f	or additional guidance	and write in the per e. Edwards Aqui			that will be affected		submitted on this Hazardous Waste	
orm. See the Core Data For Dam Safety	m instructions f	or additional guidance	e. Edwards Aqui		☐ Emissio	ons Inventory Air	☐ Industrial		
orm. See the Core Data For	m instructions f	or additional guidance	е.		☐ Emissio				
orm. See the Core Data For Dam Safety Municipal Solid Waste	m instructions f	or additional guidance	e. Edwards Aqui		☐ Emissio	ons Inventory Air	☐ Industrial	Hazardous Waste	
orm. See the Core Data For Dam Safety	m instructions f	or additional guidance	e. Edwards Aqui		☐ Emissio	ons Inventory Air	☐ Industrial	Hazardous Waste	
orm. See the Core Data For Dam Safety Municipal Solid Waste	m instructions f	or additional guidance	e. Edwards Aqui	fer	☐ Emissio	ons Inventory Air um Storage Tank	☐ Industrial	Hazardous Waste	
orm. See the Core Data For Dam Safety Municipal Solid Waste Sludge	m instructions f	or additional guidance cts Source Review Air Water	e. Edwards Aqui OSSF Title V Air	fer	☐ Emissio	ons Inventory Air um Storage Tank	☐ Industrial ☐ PWS ☐ Used Oil	Hazardous Waste	
orm. See the Core Data For Dam Safety Municipal Solid Waste Sludge	m instructions f	or additional guidance cts Source Review Air Water Water	e. Edwards Aqui OSSF Title V Air	fer	☐ Emissio	ons Inventory Air um Storage Tank	☐ Industrial ☐ PWS ☐ Used Oil	Hazardous Waste	
orm. See the Core Data For Dam Safety Municipal Solid Waste Sludge Voluntary Cleanup	m instructions f	or additional guidance cts Source Review Air Water Water	e. Edwards Aqui OSSF Title V Air	fer	Petrole Tires Water	ons Inventory Air um Storage Tank	☐ Industrial ☐ PWS ☐ Used Oil	Hazardous Waste	
orm. See the Core Data For ☐ Dam Safety ☐ Municipal Solid Waste ☐ Sludge ☐ Voluntary Cleanup SECTION IV: P: 40. Garry Fli Id.	minstructions f Districtions New S Storm Waste	or additional guidance ots Source Review Air Water Water mformation	e. Edwards Aqui OSSF Title V Air Wastewater A	griculture 41. Title:	Petrole Tires Water	um Storage Tank Rights Engineer	☐ Industrial☐ PWS☐ Used Oil☐	Hazardous Waste	
orm. See the Core Data For Dam Safety Municipal Solid Waste Sludge Voluntary Cleanup SECTION IV: P 40. Name: Gary Eli Jo	minstructions f Districtions New S Storm Waste	or additional guidance ots Source Review Air Water Water mformation	e. Edwards Aqui OSSF Title V Air Wastewater A	griculture 41. Title: 45. E-M	☐ Emission ☐ Petrole ☐ Tires ☐ Water for Civil	um Storage Tank Rights Engineer	☐ Industrial☐ PWS☐ Used Oil☐	Hazardous Waste	
orm. See the Core Data For ☐ Dam Safety ☐ Municipal Solid Waste ☐ Sludge ☐ Voluntary Cleanup SECTION IV: P: 40. Name: Gary Eli Jo 42. Telephone Number (512) 658-8095	minstructions f Districtions f New S Storm Waste reparer I ones 43. Ext./Co	or additional guidance of the state of the s	e. Edwards Aqui OSSF Title V Air Wastewater A	griculture 41. Title: 45. E-M	☐ Emission ☐ Petrole ☐ Tires ☐ Water for all Address	um Storage Tank Rights Engineer	☐ Industrial☐ PWS☐ Used Oil☐	Hazardous Waste	
orm. See the Core Data For ☐ Dam Safety ☐ Municipal Solid Waste ☐ Sludge ☐ Voluntary Cleanup SECTION IV: Para to the Core Data For Data	minstructions f Districtions f Districtions f New S Storm Storm Waste reparer I ones 43. Ext./Co uthorized w, I certify, to	Source Review Air Water Water Market Air Water Water Source Review Air Water Water Source Review Air Water Water Source Review Air Water	E. Edwards Aqui OSSF Title V Air Wastewater A Number - owledge, that the	griculture 41. Title: 45. E-M gejtex information	Petrole Tires Water F Civil ail Address as@gma.	um Storage Tank Rights Engineer il.com	Industrial PWS Used Oil Other:	Hazardous Waste	

TCEQ-10400 (02/21) Page 2 of 2

Phone:

Date:

(512)658-8095

6/8/2024

Gary Eli Jones

Name (In Print):

Signature: