# ORGANIZED SEWEAGE COLLECTION SYSTEM PLAN

# WILLIAMS DR COMMERCIAL GEORGETOWN, Williamson County, Texas

Prepared For:

# **WILLIAMS DR Commercial**

4785 WILLIAMS DR GEORGETOWN, TX 78633

Prepared By:

# KIMLEY-HORN AND ASSOCIATES, INC.

6800 Burleson Rd, Bldg 312, Suite 150 Austin, TX 78744 (512) 616-9942

Firm No. 928

KHA Project No. 064589720



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Kimley » Horn

# SECTION 1: EDWARDS AQUIFER APPLICATION COVER PAGE

# **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: <a href="http://www.tceq.texas.gov/field/eapp">http://www.tceq.texas.gov/field/eapp</a>.
- 2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.
- 3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.
- 4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.
  - An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.
- 5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.
- 6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

#### **Technical Review**

- 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: Williams Dr Commercial					2. Regulated Entity No.: RN111695623				
3. Customer Name: AGTX GT Williams RE Holdings, LLC					4. Customer No.: N/A				
<ul><li>5. Project Type:</li><li>(Please circle/check</li></ul>	New Modifica			Modification Extension		Exception			
6. Plan Type: (Please circle/check	WPAP CZP SCS UST AST			EXP	EXT	Technical Clarification	Optional Enhanced Measures		
7. Land Use: (Please circle/check	Reside	ntial (	Non-residential				8. Site	e (acres):	1.007 AC.
9. Application Fee:	\$4,000	)	10. Permanent BM			<b>IP(s)</b> :		Batch Detention Basin	
11. SCS (Linear Ft.):			12. AST/UST (No. Tar			Tanks	):		
13. County:	Willian	nson	14. Watershed:					Berry Creek	

# **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.)	_	_	<u>X</u>			
County(ies)	_	_	<u>X</u>			
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 HillPflugerville Round Rock			

San Antonio Region						
County:	Bexar	Comal	Kinney	Medina	Uvalde	
Original (1 req.)	_					
Region (1 req.)	_				_	
County(ies)	_					
Groundwater Conservation District(s)	Edwards Aquifer Authority Trinity-Glen Rose	Edwards Aquifer Authority	Kinney	EAA Medina	EAA Uvalde	
City(ies) Jurisdiction	Castle 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 application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.						
Ryan Mckay, P.E.						
Print Name of Customer/Authorized Agent						
The May	11/18/2025					
Signature of Customer/Authorized Agent	Date					

**FOR TCEQ INTERNAL USE ONLY**					
Date(s)Reviewed:	te(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):	Payable to TCEQ (Y/N):				
Core Data Form Complete (Y/N):	Check: Signed (Y/N):				
Core Data Form Incomplete Nos.:	Less than 90 days old (Y/N):				

Kimley » Horn

# **SECTION 2:**General Information Form

# **General Information Form**

**Texas Commission on Environmental Quality** 

Print Name of Customer/Agent: Ryan McKay

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:

Da	Date: <u>11/18/25</u>					
Sig	nature of Customer/Agent:					
1	13-May					
P	roject Information					
1.	Regulated Entity Name: Williams Dr Commercial					
2.	County: Williamson County					
3.	Stream Basin: San Gabriel River (Brazos River Basin)					
4.	Groundwater Conservation District (If applicable): N/A					
5.	Edwards Aquifer Zone:					
	Recharge Zone Transition Zone					
6.	Plan Type:					
	WPAP □ AST   SCS □ UST   Modification □ Exception Request					

/.	Customer (Applicant):	
	Contact Person: <u>Grey Reed</u> Entity: <u>AGTX GT Williams RE Holdings, LLe</u> Mailing Address: <u>12360 Market Dr</u> City, State: <u>Oklahoma City, OK</u> Telephone: <u>(214) 725-4886</u> Email Address: <u>greyreed@ashtongray.co</u>	Zip: <u>73114</u> FAX:
8.	Agent/Representative (If any):	
	Contact Person: Ryan McKay Entity: Kimley-Horn Mailing Address: 6800 Burleson Rd, Build City, State: Austin, Texas Telephone: 512-518-4875 Email Address: ryan.mckay@kimley-horn	Zip: <u>78744</u> FAX:
9.	Project Location:	
	<ul><li>☐ The project site is located inside the of the project site is located outside the jurisdiction) of</li><li>☐ The project site is not located within a graph of the project site is not located within a graph of the project site is not located within a graph of the project site is not located within a graph of the project site is not located within a graph of the project site is not located within a graph of the project site is not located within a graph of the project site is not located within a graph of the project site is not located within a graph of the project site is not located within a graph of the project site is not located within a graph of the project site is not located within a graph of the project site is not located within a graph of the project site is not located within a graph of the graph of the project site is not located within a graph of the graph of</li></ul>	city limits but inside the ETJ (extra-territorial
10.		cribed below. The description provides sufficient degional staff can easily locate the project and site
	Southeast of the Verde Vista and Will	iams Drive Intersection
11.		nap showing directions to and the location of the ocation and site boundaries are clearly shown on
12.		narge Zone Map. A copy of the official 7 ½ minute 1000') 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 of	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	his date: when advised of TCEQ site visit

narra	chment C – Project Description. Attached at the end of this form is a detailed ative description of the proposed project. The project description is consistent ughout the application and contains, at a minimum, the following details:
C   S   P   S   S   P	Area of the site Offsite areas Impervious cover Offermanent BMP(s) Offoposed site use Site history Offermous development Area(s) to be demolished
15. Existing	project site conditions are noted below:
E   E   E	existing commercial site existing industrial site existing residential site existing paved and/or unpaved roads Undeveloped (Cleared)
=	Indeveloped (Undisturbed/Uncleared)
	Other:
Prohibit	ted Activities
	aware that the following activities are prohibited on the Recharge Zone and are not osed for this project:
	Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Jnderground Injection Control);
(2) N	New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
(3) L	and disposal of Class I wastes, as defined in 30 TAC §335.1;
(4) T	The use of sewage holding tanks as parts of organized collection systems; and
S	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).
	New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.
<del></del>	aware that the following activities are prohibited on the Transition Zone and are proposed for this project:
	Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground njection Control);

(2) Land disposal of Class I wastes, as defined in 30 TAC  $\S335.1$ ; and

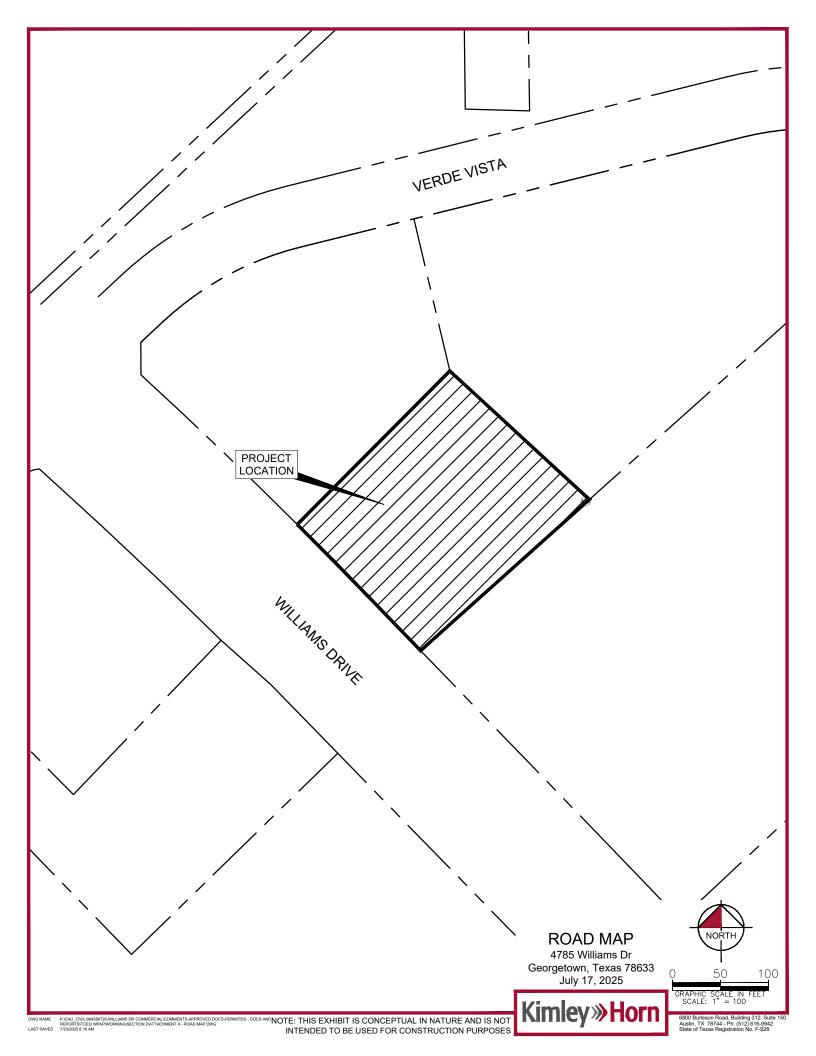
(3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

# **Administrative Information**

18. Th	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:
	<ul> <li>☐ TCEQ cashier</li> <li>☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)</li> <li>☐ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)</li> </ul>
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 regiona 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

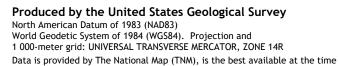




# ATTACHMENT B: USGS / Edwards Recharge Zone Map





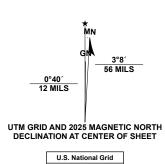


1 000-meter grid: UNIVERSAL TRANSVERSE MERCATOR, ZONE 14R

Data is provided by The National Map (TNM), is the best available at the time of map generation, and includes data content from supporting themes of Elevation, Hydrography, Geographic Names, Boundaries, Transportation, Structures, Land Cover, and Orthoimagery. Refer to associated Federal Geographic Data Committee (FGDC) Metadata for additional source data information.

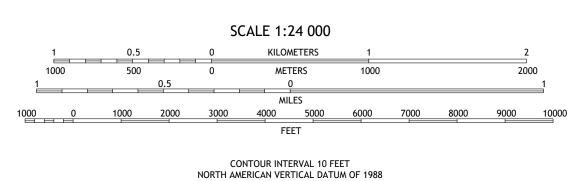
This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands. Temporal changes may have occurred since these data were collected and some data may no longer represent actual surface conditions.

Learn About The National Map: https://nationalmap.gov

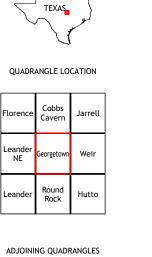


PV

PU
Grid Zone Designation
14R



CONTOUR SMOOTHNESS = Medium





GEORGETOWN, TX 2025



### **ATTACHMENT C: Project Description**

The Williams Dr Commercial project proposes a ±1.007-acre tract located at 4785 Williams Dr, Georgetown, Texas. This tract is currently undeveloped. The development proposed with this site plan application is for the construction of a commercial building, and associated parking and utility improvements.

No portion of the site is located within the Federal Emergency Management Agency's 100-year floodplain according to Flood Insurance Rate Map number 48491C0280E, dated September 26, 2008, for Williamson County, Texas and unincorporated areas. The site is located within the Edwards Aquifer Recharge Zone according to the Texas Commission on Environmental Quality (TCEQ). There are no critical water quality zones or water quality transition zones on-site. No ERI has been performed for this site, however, a geologic assessment has been provided with this report in Section 3.

The site is in the Berry Creek watershed. There is an existing Water Quality Best Management Practice (BMP) for the original WPAP of Schiller Business Park approved by TCEQ on May 19, 2023 (EAPP ID No. 11003524). The batch detention pond proposed with the Schiller Business Park Improvements will be used by this project to address the water quality requirements for the ultimate area disturbed by this commercial development. This site will also utilize pervious pavers as a BMP to meet the impervious cover threshold set by zoning and the max allowable per the Schiller Business Park batch detention pond.

The proposed impervious cover for this site within the lot boundary is ±0.65-acres with pavers incorporated. No areas are to be demolished considering that the site is undeveloped.

Kimley » Horn

# SECTION 3: GEOLOGIC ASSESSMENT FORM

# **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: <u>Timothy C. Weaver</u>	Telephone: <u>806-773-9326</u>
Date: <u>10/3/2025</u>	Fax: <u></u>
Representing: <u>SQ Environmental LLC; F-50464</u> (Nanregistration number)	ne of Company and TBPG or TBPE
Signature of Geologist:	
alt Whom	TIMOTHY C WEAVER TO GEOLOGY
Regulated Entity Name: Williams Dr Commercial Co	oncept CENTRAL
Project Information	
1. Date(s) Geologic Assessment was performed: 9	/30/2025
2. Type of Project:	
<ul><li>WPAP</li><li>SCS</li><li>Location of Project:</li></ul>	☐ AST ☐ UST
<ul><li>Recharge Zone</li><li>Transition Zone</li><li>Contributing Zone within the Transition Zon</li></ul>	e

4. Attachment A - Geologic Assessment Table. Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached. 5. Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups\* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map. **Table 1 - Soil Units, Infiltration** \* Soil Group Definitions (Abbreviated) **Characteristics and Thickness** A. Soils having a high infiltration rate when thoroughly wetted. Soil Name Group\* Thickness(feet) B. Soils having a moderate DoC 6.67 D 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" = 60' Site Geologic Map Scale: 1" = 60' Site Soils Map Scale (if more than 1 soil type): 1'' = NA'9. Method of collecting positional data: | Global Positioning System (GPS) technology. Other method(s). Please describe method of data collection: 10. The project site and boundaries are clearly shown and labeled on the Site Geologic Map. 11. Surface geologic units are shown and labeled on the Site Geologic Map.

12.	. Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
	Geologic or manmade features were not discovered on the project site during the field investigation.
13	. $igotimes$ The Recharge Zone boundary is shown and labeled, if appropriate.
14	. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.
	There are (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)  The wells are not in use and have been properly abandoned.  The wells are not in use and will be properly abandoned.  The wells are in use and comply with 16 TAC Chapter 76.
	There are no wells or test holes of any kind known to exist on the project site.

# **Administrative Information**

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

# **ATTACHMENT A**

GEOLO	GIC ASS	ESSMEN	IT TAE	BLE			PR	OJE	CT NA	ME	:	4785 V	Villiam	ıs Dr, Geo	rgetow	/n, T	X 786	333		
	LOCATIO	N				FEA <sup>-</sup>	TURI	Е СН	ARACT	ERI	STICS	j.			EVAL	LUAT	ION	PHY	SICAL	SETTING
1A	1B *	1C*	2A	2B	3		4		5	5A	6	7	8A	8B	9	1	10	1	11	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIME	NSIONS (	FEET)	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>&gt;40</u>	<1.6	<u>&gt;1.6</u>	
None																				
															-					
															-					
			<u> </u>												<del> </del>			├─		
			-																	
															_			<del></del>		

* DATUM:_	Google Earth		
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 featu	ıres	30

	8A INFILLING
N	None, exposed bedrock
С	Coarse - cobbles, breakdown, sand, gravel
0	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

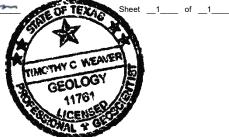
12 TOPOGRAPHY 12 TOPOGRAPHY | Cliff, Hillsop, Hillside, Drainage, Floodplain, Streambed

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.

10/3/2025

TCEQ-0585-Table (Rev. 10-01-04)



### **ATTACHMENT B**

# GENERAL STRATIGRAPHIC COLUMN 4785 Williams Drive Georgetown, Texas 78633

Upper Cretaceous	Del Rio Clay; 40 - 70 feet thick
Lower	Georgetown Formation; 30 - 80 feet thick  Edwards Limestone; 300 - 500 feet thick

#### NOTES:

Source: USGS Bureau of Economic Geology, Texas Geology Mapper.

Shaded blue cell represents the uppermost and observed unit located on the subject property.

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# ATTACHMENT C SITE GEOLOGIC DESCRIPTION

4785 Williams Drive Georgetown, Texas 78633

#### **PROPERTY DESCRIPTION**

The approximately 1.007-acre subject property is comprised of one Williamson County Appraisal District (WCAD) parcel (ID No. R655953) located at 4785 Williams Drive (Dr) in Georgetown, Texas. Based on a review of historical records, the subject property is vacant land and has never been developed. A layout of the subject property is shown on **Attachment D-1**.

The property is located within the Edwards Aquifer Recharge Zone (TCEQ, 2025). The Edwards Aquifer Recharge Zone is defined by areas where surface water enters the subsurface through exposed limestone bedrock containing faults, fractures, sinkholes, or caves.

#### **GEOLOGIC AND SOIL DESCRIPTION**

The geology at ground surface on the subject property and the adjacent properties consists of the Georgetown Formation (Kgt) of the Lower Cretaceous, which is a unit comprised of mostly fine-grained limestone, with some marl, and is 30 to 80 feet (ft) thick (USGS, 2025). Based on the Geologic Atlas of Texas (Austin Sheet), the Georgetown Formation in this area is underlain by the Edwards Limestone (Ked), which is comprised of fine to coarse grained limestone ranging from 60 to 350 ft in thickness. The Edwards Limestone is the outcropping unit in the area surrounding the subject property. A general stratigraphic column of the units in the area of the subject property is provided as **Attachment B**. A Site Geologic Map is provided as **Attachment D-2**.

The onsite soil is Doss silty clay, moist (DoC), classified as hydrologic soil group D, which is characterized by a very slow infiltration rate (USDA, 2025). The soil profile consists of silty clay up to 17 inches in depth, followed by bedrock between 17 and 80 inches deep. This soil is residuum weathered from limestone that originates on hillslopes.

#### **GEOLOGIC ASSESSMENT SUMMARY**

The following activities were completed as part of the Geologic Assessment to investigate the property for the presence of geologic and manmade features, and to identify potential pathways for contaminant movement to the Edwards Aquifer, pursuant to Texas rules for regulated activities within the Recharge Zone (30 Texas Administrative Code [TAC] §213). The Geologic Assessment included evaluating the property for the potential presence of the following features:

- Bedrock
- Caves
- Faults
- Water wells
- Streams or springs
- Fractures or solution zones

Prior to completing the field survey, research was conducted from available literature and online resources, including the United States Geological Survey (USGS) Bureau of Economic Geology Texas Geologic Atlas, United States Department of Agriculture (USDA) Web Soil Survey Mapper, Texas Water Development Board (TWDB) Groundwater Data Viewer, Texas Railroad Commission (RRC) Well Viewer, and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps. Additionally, historical aerial photographs were also examined. No portion of the site is located within the 100-year floodplain (FEMA, 2008). No oil/gas wells are located on or adjacent to the site (RRC, 2025). No water wells were identified on or within 500 ft of the subject property (TWDB, 2025).

A field survey was conducted on 30 September 2025. The entire subject property was walked on foot to survey the ground surface for the presence of geologic features. No sensitive geologic features, including caves, streams, or springs were observed at ground surface on the subject property or within 100 ft of the property at the time of the site assessment. No limestone bedrock outcrops, faults, fractures, solution zones, vugs, or cavities were observed at the ground surface of the subject property. No surface water features are present on the subject property. Stormwater that falls on the subject property travels by sheet flow primarily to the east-northeast. The completed Geologic Assessment Table is provided as **Attachment A**.

Boulder-sized pieces of limestone were present in two piles on the subject property. These limestone pieces appear to have originated and been removed from an offsite property, transported, and placed on the subject property. Based on historical aerial photographs, the piles of limestone have been present on the subject property since at least December 2023.

Based on the Geologic Assessment, no sensitive features were identified at ground surface on the subject property. If potentially sensitive geologic features are encountered during development activities, work should stop immediately and the feature be investigated by a Texas registered Professional Geologist.

10/3/2025

Timothy Weaver, P.G. No. 11761



<sup>1.</sup> TCEQ Edwards Aquifer Viewer, 2025.

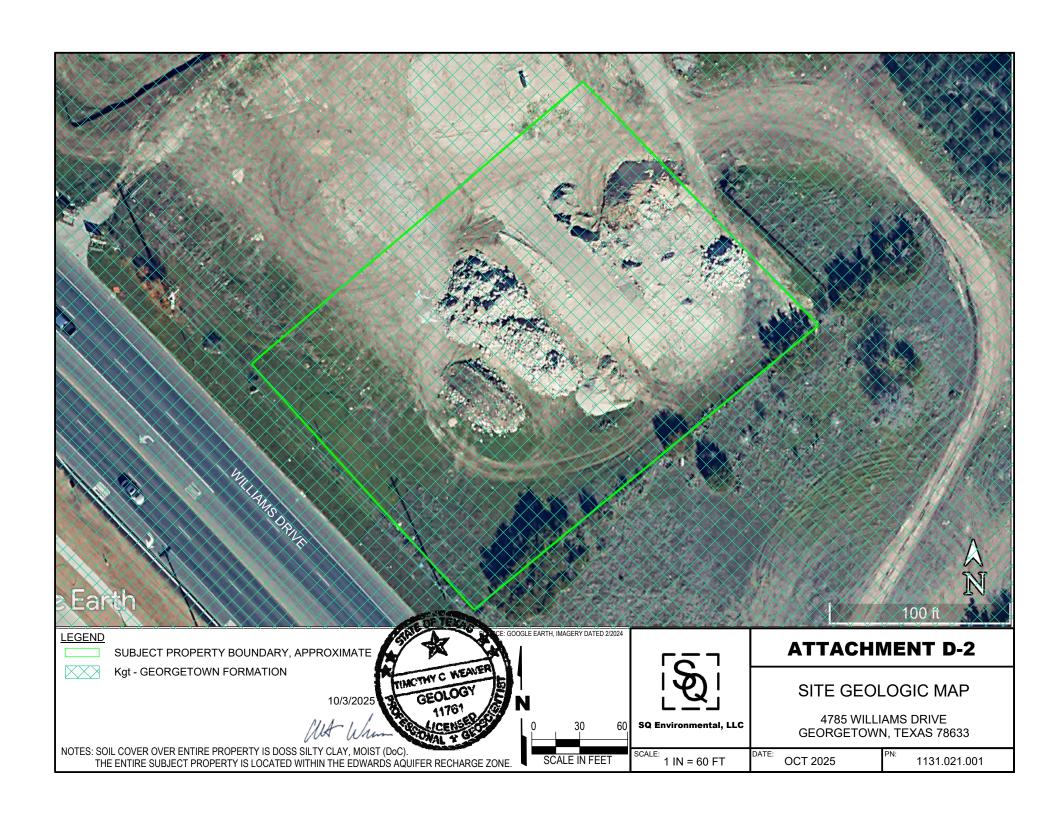
<sup>2.</sup> Texas Water Development Board, 2025.

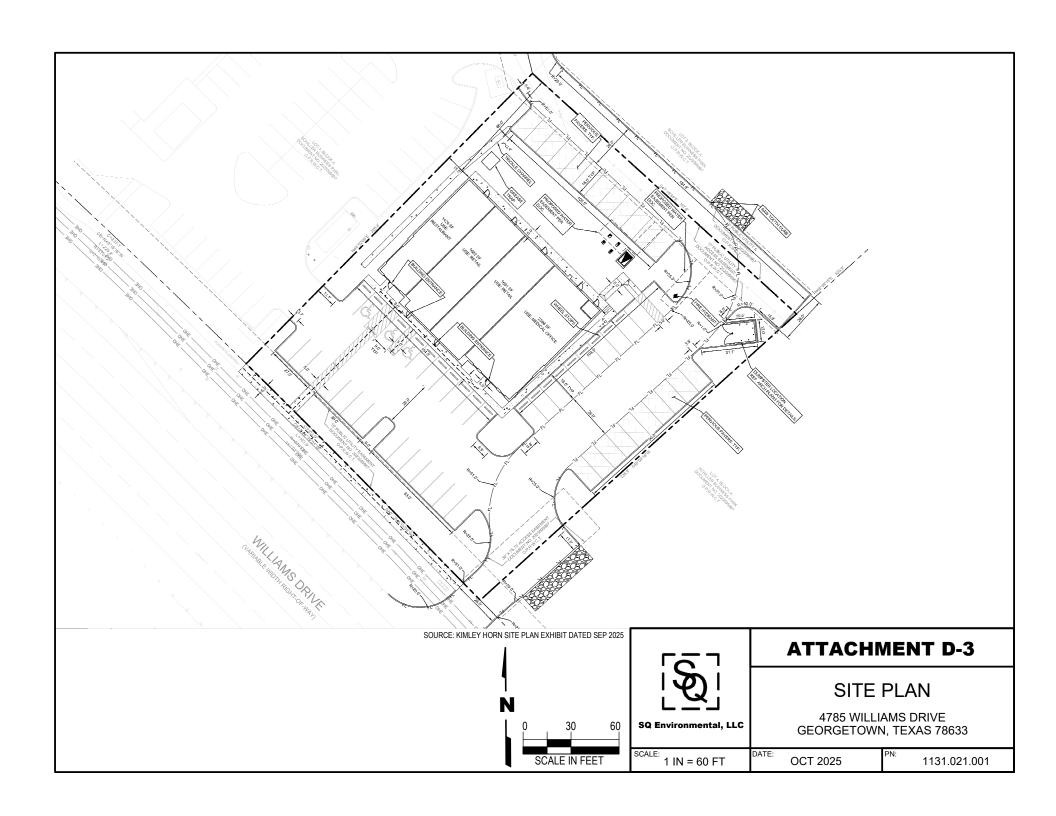
<sup>3.</sup> US Department of Agriculture Web Soil Survey, 2025.

<sup>4.</sup> Railroad Commission of Texas, 2025.

<sup>5.</sup> USGS Geologic Atlas of Texas - Bureau of Economic Geology, Austin Sheet, 2025.







# Kimley » Horn

SECTION 4: ORGANIZED SEWAGE COLLECTION SYSTEM APPLICATION

# Organized Sewage Collection System Application

Texas Commission on Environmental Quality

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

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

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

Regulated Entity Name: Schiller Business Park

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

### Customer Information

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

Contact Person: Grey Reed

Entity: AGTX GT Williams RE Holdings, LLC

Mailing Address: 12360 Market Dr

City, State: Oklahoma City, OK Zip: 73114
Telephone: (214) 725-4886 Fax: N/A

Email Address: greyreed@ashtongray.com

The appropriate regional office must be informed of any changes in this information within 30 days of the change.

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

Contact Person: Ryan McKay

Texas Licensed Professional Engineer's Number: <u>146418</u>

Entity: Kimley-Horn

Mailing Address: 6800 Burleson Rd, Bldg 312, Ste 150

 City, State: Austin, Texas
 Zip: 78745

 Telephone: 512-518-4875
 Fax: N/A

Email Address: ryan.mckay@kimley-horn.com

# Project Information

4. Anticipated type of development to be served (estimated future population to be served plus adequate allowance for institutional and commercial flows):										
	Residential: Number of lots: Multi-family: Number of residential units: Commercial Industrial Off-site system (not associated with any development) Other:									
5.	The character and vo	olume of wastewater is s	shown below:							
	% Domestic % Industrial % Commingled	gallons/day ns/day ns/day y:2,457_								
6.	Existing and anticipated infiltration/inflow is $\underline{0.39}$ MGD. This will be addressed by: $\underline{\text{N/A}}$ – Already considered within the City's modeling/master plan and line capacity.									
7.			s re quired for constructi located on the Recharge	•						
	<ul> <li>☐ The WPAP application for this development was approved by letter dated copy of the approval letter is attached.</li> <li>☐ The WPAP application for this development was submitted to the TCEQ on 09/05/2025, but has not been approved.</li> <li>☐ A WPAP application is required for an associated project, but it has not been submitted.</li> <li>☐ There is no associated project requiring a WPAP application.</li> </ul>									
8.	B. Pipe description:									
Та	ble 1 - Pipe Descripti	on								
	Pipe Diameter (Inches)	Linear Feet (1)	Pipe Material (2)	Specifications (3)						
	4" (Private)	132	PVC SDR-26	ASTM D-3034						

Total Linear Feet: N/A – All private

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

<ul> <li>The sewage collection system will convey the wastewater to the <u>Pecan Branch Wastewater Treatment plant</u>. The treatment facility is:</li> <li>Existing</li> <li>Proposed</li> </ul>
10. All components of this sewage collection system will comply with:
<ul><li>☐ The City of <u>Georgetown</u> standard specifications.</li><li>☐ Other. Specifications are attached.</li></ul>
11. $igotimes$ No force main(s) and/or lift station(s) are associated with this sewage collection system.
A force main(s) and/or lift station(s) is associated with this sewage collection system and the Lift Station/Force Main System Application form (TCEQ-0624) is included with this application.
Alignment
12. There are no deviations from uniform grade in this sewage collection system without manholes and with open cut construction.
13. X There are no deviations from straight alignment in this sewage collection system without manholes.
<ul> <li>Attachment B - Justification and Calculations for Deviation in Straight Alignment without Manholes. A justification for deviations from straight alignment in this sewage collection system without manholes with documentation from pipe manufacturer allowing pipe curvature is attached.</li> <li>For curved sewer lines, all curved sewer line notes (TCEQ-0596) are included on the construction plans for the wastewater collection system.</li> </ul>
Manholes and Cleanouts
14. Manholes or clean-outs exist at the end of each sewer line(s). These locations are listed

Manholes or clean-outs exist at the end of each sewer line(s). T below: (Please attach additional sheet if necessary)

Table 2 - Manholes and Cleanouts

Line	Shown on Sheet	Station	Manhole or Clean- out?
А	12 of 25	1+00.00	Manhole
A & B	12 of 25	1+04.94	Cleanout
А	12 of 25	1+34.70	Cleanout
А	12 of 25	1+38.95	Cleanout
А	12 of 25	1+51.41	Cleanout
А	12 of 25	1+74.57	Cleanout
А	12 of 25	1+78.81	Cleanout

Line	Shown on Sheet	Station	Manhole or Clean- out?						
В	12 of 25	1+24.30	Cleanout						
В	12 of 25	1+36.14	Cleanout						
15. Manholes are installed at all Points of Curvature and Points of Termination of a sewer line.									
16. The maximum sp greater than:	16. The maximum spacing between manholes on this project for each pipe diameter is no greater than:								
Pipe Diameter (inches) 6 - 15 500 16 - 30 36 - 48 ≥54  Max. Manhole Spacing 500 1000 1000 2000									
maximum spacin greater than liste maximum spacin operate and mai	Attachment C – Justification for Variance from Maximum Manhole Spacing. The maximum spacing between manholes on this project (for each pipe diameter used) is greater than listed in the table above. A justification for any variance from the maximum spacing is attached and must include a letter from the entity which will operate and maintain the system stating that it has the capability to maintain lines with manhole spacing greater than the allowed spacing.								
17. X All manholes will	be monolithic, cast-in-p	lace concrete.							
	s and construction drawi	ested for this project. The ngs, showing the metho							
Site Plan Requi	irements								
I tems 18 - 25 r	must be include	ed on the Site P	lan.						
18. The Site Plan mu Site Plan Scale: 1		e of 1" = 400'.							
19. The Site Plan must include the sewage collection system general layout, including manholes with station numbers, and sewer pipe stub outs (if any). Site plan must be overlain by topographic contour lines, using a contour interval of not greater than ten feet and showing the area within both the five-year floodplain and the 100-year floodplain of any drainage way.									
20. Lateral stub-outs:									
<ul><li>☐ The location of all lateral stub-outs are shown and labeled.</li><li>☐ No lateral stub-outs will be installed during the construction of this sewer collection system.</li></ul>									
21. Location of existing a	21. Location of existing and proposed water lines:								

<ul> <li>The entire water distribution system for this project is shown and labeled.</li> <li>If not shown on the Site Plan, a Utility Plan is provided showing the entire water and sewer systems.</li> <li>There will be no water lines associated with this project.</li> </ul>
22. 100-year floodplain:
After construction is complete, no part of this project will be in or cross a 100-year floodplain, either naturally occurring or manmade. (Do not include streets or concrete-lined channels constructed above of sewer lines.)  After construction is complete, all sections located within the 100-year floodplain will have water-tight manholes. These locations are listed in the table below and are shown and labeled on the Site Plan. (Do not include streets or concrete-lined channels constructed above sewer lines.)

Table 3 - 100-Year Floodplain

Line	Sheet	Station
n/a	n/a	n/a

# 23. 5-year floodplain:

$oxed{\boxtimes}$ After construction is complete, no part of this project will be in or cross a	5-year
floodplain, either naturally occurring or man-made. (Do not include stree	ets or
concrete-lined channels constructed above sewer lines.)	
After construction is complete, all sections located within the 5-year floo	dplain will
be encased in concrete or capped with concrete. These locations are list	ed in the
table below and are shown and labeled on the Site Plan. (Do not include	streets or
concrete-lined channels constructed above sewer lines.)	

Table 4 - 5-Year Floodplain

Line	Sheet	Station
n/a	n/a	n/a

24.  $\boxtimes$  Legal boundaries of the site are shown.

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

#### I tems 26 - 33 must be included on the Plan and Profile sheets. 26. All existing or proposed water line crossings and any parallel water lines within 9 feet of sewer lines are listed in the table below. These lines must have the type of pressure rated pipe to be installed shown on the plan and profile sheets. Any request for a variance from the required pressure rated piping at crossings must include a variance approval from 30 TAC Chapter 290. There will be no water line crossings. There will be no water lines within 9 feet of proposed sewer lines. Table 5 - Water Line Crossings Horizontal Vertical Station or Crossing or Line Separation Separation Closest Point Parallel Distance Distance n/a 27. Vented Manholes: No part of this sewer line is within the 100-year floodplain and vented manholes are not required by 30 TAC Chapter 217. A portion of this sewer line is within the 100-year floodplain and vented manholes will be provided at less than 1500-foot intervals. These water-tight manholes are listed in the table below and labeled on the appropriate profile sheets. A portion of this sewer line is within the 100-year floodplain and an alternative means of venting shall be provided at less than 1500 feet intervals. A description of the alternative means is described on the following page.

#### Table 6 - Vented Manholes

Line	Manhole	Station	Sheet
n/a	n/a	n/a	n/a

#### 28. Drop manholes:

There are no drop manholes associated with this project.
Sewer lines which enter new or existing manholes or "manhole structures" higher
than 24 inches above the manhole invert are listed in the table below and labeled on
the appropriate profile sheets. These lines meet the requirements of 30 TAC
§217.55(I)(2)(H).

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

Table 7 - Drop Manholes

Line	Manhole	Station	Sheet
n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a

29. Sev	wer line stub-outs (For proposed extensions):  The placement and markings of all sewer line stub-outs are shown and labeled.  No sewer line stub-outs are to be installed during the construction of this sewage collection system.
30. Lat	eral stub-outs (For proposed private service connections):
	<ul> <li>☐ The placement and markings of all lateral stub-outs are shown and labeled.</li> <li>☐ No lateral stub-outs are to be installed during the construction of this sewage collection system.</li> </ul>
31. Mi	nimum flow velocity (From Appendix A)
	Assuming pipes are flowing full; all slopes are designed to produce flows equal to or greater than 2.0 feet per second for this system/line.
32. Ma	aximum flow velocity/slopes (From Appendix A)
	<ul> <li>Assuming pipes are flowing full, all slopes are designed to produce maximum flows of less than or equal to 10 feet per second for this system/line.</li> <li>Attachment D – Calculations for Slopes for Flows Greater Than 10.0 Feet per Second. Assuming pipes are flowing full, some slopes produce flows which are greater than 10 feet per second. These locations are listed in the table below. Calculations are attached.</li> </ul>

Table 8 - Flows Greater Than 10 Feet per Second

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

33. As	ssuming pipes are flowing full, where flows are ≥ 10 feet per second, the provisions noted
be	elow have been made to protect against pipe displacement by erosion and/or shock under
30	0 TAC §217.53(I)(2)(B).
	Concrete encasement shown on appropriate Plan and Profile sheets for the locations
	listed in the table above.

<ul> <li>☐ Steel-reinforced, anchored concrete baffles/retards placed every appropriate Plan and Profile sheets for the locations listed in the N/A</li> </ul>	
Administrative Information	
34. The final plans and technical specifications are submitted for TCEQ returns the construction plans and specifications are dated, signed, and sealed Licensed Professional Engineer responsible for the design on each shape of the design of	ed by the Texas
35. Standard details are shown on the detail sheets, which are dated, sig the Texas Licensed Professional Engineer, as listed in the table below	•
Table 9 - Standard Details	
Standard Details	Shown on Sheet
Lateral stub-out marking [Required]	15 of 25
Manhole, showing inverts comply with 30 TAC §217.55(I)(2) [Required]	15 of 25
Alternate method of joining lateral to existing SCS line for potential future connections [Required]	15 of 25
Typical trench cross-sections [Required]	15 of 25
Bolted manholes [Required]	15 of 25
Sewer Service lateral standard details [Required]	15 of 25
Clean-out at end of line [Required, if used]	15 of 25
Baffles or concrete encasement for shock/erosion protection [Required, if flow velocity of any section of pipe >10 fps]	n/a
Detail showing Wastewater Line/Water Line Crossing [Required, if crossings are proposed]	n/a
Mandrel detail or specifications showing compliance with 30 TAC §217.57(b) and (c) [Required, if Flexible Pipe is used]	n/a
Drop manholes [Required, if a pipe entering a manhole is more than 24 inches above manhole invert]	n/a
36. All organized sewage collection system general construction notes (T included on the construction plans for this sewage collection system	·
37. All proposed sewer lines will be sufficiently surveyed/staked to allow prior to TCEQ executive director approval. If the alignments of the p are not walkable on that date, the application will be deemed incom  Survey staking will be completed on this date:	roposed sewer lines
38. Submit one (1) original and one (1) copy of the application, plus addi	tional copies as

needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional

copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

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

#### Signature

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

Print Name of Licensed Professional Engineer: Ryan McKay

Date: <u>11/18/2025</u>

Place engineer's seal here:

RYAN MCKAY

Signature of Licensed Professional Engineer:



TCEQ-0582 (Rev. 02-11-15)

#### Appendix A-Flow Velocity Table

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

Table 10 - Slope Velocity

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

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

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

Figure 1 - Manning's Formula

Where:

v = velocity (ft/sec)

n = Manning's roughness coefficient (0.013)

Rh = hydraulic radius (ft)

S = slope (ft/ft)



#### **Attachment A**

## **Engineer's Design Report**

This Engineering Design Report has been prepared to comply with the Texas Commission on Environmental Quality Design Criteria for Domestic Wastewater Systems, 30 TAC Chapter 217, including 217.10 of Subchapter A, §§217.51 – 217.70 of Subchapter C, and Subchapter D as applicable. Please note that throughout this application, the more stringent of AWU or TCEQ regulations shall apply.

#### **Project Description**

#### Introduction

The subject property containing the Project is located southeast of the intersection of Williams Dr and Verde Vista, in Georgetown, Texas. The Project will include a single commercial building intended for medical, office, and restaurant use. Other improvements for the project include parking and utility improvements.

This project is located within the Berry Creek Watershed. The proposed site is not located in the Federal Emergency Management Agency's 100-year floodplain according to the FEMA FIRM map 48491C0280E.

The entire ±1.007-acre site is located within the Edwards Aquifer Recharge Zone. There are no known critical water quality zones or critical environmental features located on-site.

This site will utilize the existing batch detention basin BMP constructed with the Schiller Business Park plans (EAPP ID No. 11003524). The batch detention basin was designed to detain runoff from the site under developed conditions assuming a max impervious cover of 70%. Two parking bays on site, totaling 3,257 sf will also be used as a supplemental BMP to ensure the site remains under the 70% impervious cover threshold.

#### **Pipe Design**

#### Flow Design Basis

The build-out of the ±1.007-acre commercial site will be served by this wastewater system. The City of Georgetown Criteria Manuals were used to determine the parameters for the design of the private wastewater laterals.

#### **Gravity Pipe and Joint Materials**

The proposed pipe to be used for the 4-inch wastewater line will be ASTM D3034 SDR-26 PVC pipe (cell class 12454). The joints for this pipe shall meet the requirements of ASTM D3212. The pipe joints shall have an integral bell and rubber gasket seal with the locked-in type gasket.

#### Separation Distances for Water and Wastewater

A nine-foot minimum horizontal separation is maintained between all proposed wastewater infrastructure and existing and proposed private water supply lines.



#### **Building Laterals and Taps**

An existing single service lateral is provided for the commercial development along the public utility and access easement to the northeast of the property.

#### **Boring and Tunneling of Crossings**

No boring or tunneling of crossings are proposed for this project.

#### **Corrosion Potential**

PVC pipe will be utilized for or all proposed wastewater lines. No deterioration of the proposed pipe or its associated components is anticipated in this application.

#### **Odor Control**

All flows contributing to the proposed wastewater lines are domestic sewage. No odor control is used.

#### **Active Geologic Faults**

Per the Geologic Assessment, no active geologic faults were located within the area of the project.

#### **Capacity Analysis**

The capacity of each proposed wastewater segment is calculated below based on Manning's Equation. The calculation for each segment is based on the minimum proposed slope.

Capacity: 
$$Q = \frac{1.49}{n} * A * R^{0.67} * S^{0.5}$$

Where:

Qfull = flow rate of fluid in pipe at full flow (ft<sup>3</sup>/s) (cfs)

Q90%= flow rate of fluid in pipe at 90% full flow (ft<sup>3</sup>/s) (cfs)

A = area of pipe (ft^2) = 
$$\frac{\pi * d^2}{4}$$

d = internal pipe diameter (ft) = Do - 2t

Do = outside diameter (in) t = pipe wall thickness (in)

n = Manning's Roughness coefficient = 0.013

Rfull = hydraulic radius of pipe (full flow) = A/P = D/4 (ft)

R90% = hydraulic radius of pipe (90% full flow) = 0.9\*A/P = 0.9\*D/4 (ft)

PW = wetted perimeter of pipe =  $\pi$  \*D (ft)

S = slope of energy line



DIDE ID	LEN	IGTH	AVE	RAGE SLOPE	PIPE D	IAMETER	NAA NINIINIG	PW	Α	Rfull	R90%	Qfull	Qfull	Q90% (Qc	ар)	Q90% (	Qcap)	Vfull	V90%
PIPE-ID	ı	FT		FT/FT	IN	FT	MANNING	FT	SF	FT	FT	CFS	GPM	CFS		GPI	М	FPS	FPS
9	1	8.8		0.0638	4	0.33	0.013	1.0	0.09	0.08	0.08	0.48	214.54	0.43		193.	08	5.48	4.93
09(1)	11	64		0.0638	4	0.33	0.013	1.0	0.09	0.08	0.08	0.48	214.54	0.43		193.	08	5.48	4.93
11	4.:	243		0.0638	4	0.33	0.013	1.0	0.09	0.08	0.08	0.48	214.54	0.43		193.	08	5.48	4.93
12	29	9.43		0.0638	4	0.33	0.013	1.0	0.09	0.08	0.08	0.48	214.54	0.43		193.	08	5.48	4.93
12(1)	17.	.357		0.0638	4	0.33	0.013	1.0	_	+	1	0.48	214.54	0.43		193.	08	5.48	4.93
14		243	+	0.0638	4	0.33	0.013	1.0	_	+		1	214.54	0.43		193.		5.48	4.93
15	-	6	_	0.0638	4	0.33	0.013	1.0		+	0.08	+	214.54	0.43	_	193.		5.48	4.93
19		243	+	0.1007	4	0.33	0.013	1.0	+	+			269.53	0.54		242.		6.88	6.19
20		.048	1	0.1007	4	0.33	0.013	1.0	+	+			269.53	0.54		242.		6.88	6.19
20(1) 20(1)(1)		375 .02	1	0.1007	4	0.33	0.013 0.013	1.0	_	+	0.08		269.53 269.53	0.54		242. 242.		6.88	6.19
20(1)(1)		5.5	+	0.1007	4	0.33	0.013	1.0	-	+	<del>                                     </del>	+	269.53	0.54		242.		6.88	6.19
22		13	+	0.1007	4	0.33	0.013	+-	0.09	+			269.53	0.54		242.		6.88	-
	SA	<b>I&amp;I</b>	Í	Active	vs.	PDWF	ADWF	ADV	VF	AD	WF	PWV	VF p	wwF	PV	VWF	Min.	V N	lax V
PIPE-ID	Acres	GPM	PF	Futur	e	GPM	GPM	Q/Q	full	٧/٧	/full	GPI	иQ	/Qfull	۷/	Vfull	FPS	5	FPS
9	1.01	0.52	4.0	Activ	e	7.384	1.7	19	6	29	9%	7.90	)9	4%	4	17%	1.5	8 :	2.59
09(1)	1.01	0.52	4.0	Activ	e	7.384	1.7	19	<b>6</b>	29	9%	7.90	)9	4%	4	17%	1.5	8 :	2.59
11	1.01	0.52	4.0	Activ	e	7.384	1.7	19	, 0	29	9%	7.90	)9	4%	4	17%	1.5	8 :	2.59
12	1.01	0.52	4.0	Activ	e	7.384	1.7	19	6	29	9%	7.90	)9	4%	4	17%	1.5	8 :	2.59
12(1)	1.01	0.52	4.0	Activ	e	7.384	1.7	19	6	29	9%	7.90	)9	4%	4	17%	1.5	8 :	2.59
14	1.01	0.52	4.0	Activ	e	7.384	1.7	19	ó	29	9%	7.90	)9	4%	4	17%	1.5	8 :	2.59
15	1.01	0.52	4.0	Activ	e	7.384	1.7	19	<b>,</b>	29	9%	7.90	)9	4%	4	17%	1.5	8 :	2.59
19	1.01	0.52	4.0	Activ	e	7.384	1.7	19	<b>,</b>	26	5%	7.90	)9	3%	4	13%	1.7	7 :	2.93
20	1.01	0.52	4.0	Activ	e	7.384	1.7	19	ó	26	5%	7.90	)9	3%	4	13%	1.7	7 :	2.93
20(1)	1.01	0.52	4.0	Activ	e	7.384	1.7	19	ó	26	5%	7.90	)9	3%	4	13%	1.7	7 :	2.93
20(1)(1)	1.01	0.52	4.0	Activ	e	7.384	1.7	19	ó	26	5%	7.90	)9	3%	4	13%	1.7	7 :	2.93
21	1.01	0.52	4.0	Activ	e	7.384	1.7	19	<u> </u>	26	5%	7.90	)9	3%	4	13%	1.7	7 :	2.93
22	1.01	0.52	4.0	Activ	e	7.384	1.7	19	<u> </u>	26	5%	7.90	)9	3%	4	13%	1.7	7 :	2.93

**Project Flows:** 

#### 4" ASTM D3034 SDR-26

LUE = Living Unit Equivalent = Population of Service

SA = Service Acreage: 1.007-Acres

Existing LUE's: 0

Williams Dr Commercial uses: Restaurant, Retail, Office

Restaurant SF: 1,424

LUE conversion: 200 LUEs: 1,424 / 200 = **7.5** 

Retail SF: 3,373

LUE conversion: 1,660 LUEs: 3,373 / 1,660 = **2.11** 

Medical SF: 2,396

LUE conversion: 3,000 LUEs: 2,396 / 3,000 = **0.83** 

**Total LUE's: 10** 

Peak Dry Flows



Peak Dry Flows

PDWF = Qpd = 
$$[(18+(0.0206 \times F)^{0.5})/(4+(0.0206 \times F)^{0.5})] \times F$$

Where:

PDWF = Peak Dry Weather Flow (MGD)

 $F = Avg \text{ daily flow (GPD)} = LUEs \times (GPD / LUE) = 2450 GPD = (2450/1440) 1.70 GPM$ 

PDWF = 
$$[(18+(0.0206 \times 1.70)^{0.5})/(4+(0.0206 \times 1.70)^{0.5})] \times 1.70$$

#### **PDWF =7.39 GPM**

Minimum Dry Weather Flows

$$MDWF = [0.2*(0.0144*ADWF*1,000,000)^{0.198}]*ADWF / 1,000,000$$

Where:

MDWF = Minimum Dry Weather Flow (GPM)

ADWF = Average Dry Weather Flow (GPD) = 3,205 (GPD)

$$MDWF = [0.2*(0.144*3,205)^{0.198}]*3,205 / 1440$$

#### MDWF = 1.5 GPM

*Infiltration & Inflow* 

I&I = 1.007 \* 750 GPD / 1440 (GPM)

#### I&I = 0.52 GPM

Peak Wet Flows

$$PWWF = PDWF + I\&I$$

Where:

PWWF = Peak Wet Weather Flow (GPM)

PWWF = 7.39 + 0.52

#### PWWF = 7.91 GPM

Minimum and Maximum Velocity

Minimum Velocity occurs during Average Dry Weather Flow. Flow calculations are based on Partial flow velocity calculations for pipe's flowing less than half full as noted in tables above.



Maximum Velocity occurs during Peak Wet Weather Flow. Flow calculations are based on Partial flow velocity calculations for pipe's flowing greater than half full as noted in tables above.

Capacity

The proposed wastewater line servicing the furthest tenant space of the building will be well below full flow capacity of 214.54 GPM, and 90% capacity of 193.08 GPM. The maximum capacity proposed by the wastewater lines is 4%. The proposed wastewater line servicing the restaurant tenant space with a grease trap will also be well below full flow capacity of 269.53 GPM, and 90% capacity of 242.58 GPM. The maximum capacity proposed by the wastewater line with the grease trap is 3%.

PWWF 7.91 GPM  $< Q_{90} = 193.08$  GPM & 242.58 GPM

#### 4" ASTM D3034 SDR-26

The 4" wastewater lines proposed as part of this project are to serve the tenants of this commercial project only. These are private service laterals for the Williams Dr Commercial project and combined serve approximately 7.91 GPM of PWWF. The total ~0.01 MGD for this development is accounted for in the main line calculations for the 8" line within the public utility and access easement. The 4" lines are designed at 1% minimum slope to exceed TCEQ minimum requirements for min. velocity of 2.0 feet per second at full capacity.

#### Structural Analysis

Flexible pipe is proposed on this project. Structural calculations are provided for the flexible pipe to be installed. The proposed collection system piping is designed to have a minimum structural life of 50 years. As previously mentioned, all proposed PVC pipe shall be cell class 12454 with a tensile strength of 7,000 psi.

Live Load Calculations - no significant live loads are anticipated on any segment of this project.

Buckling Pressure - the following equations utilized for the calculation of buckling pressure are taken from the Handbook of PVC Pipe: Design and Construction (Uni-Bell PVC Pipe Association, 2001).

Pcr = 
$$\frac{2*E}{(1-v^2)*(DR-1)^3}$$
 (Equation 7.14)

Pb = 
$$1.15 * \sqrt{Pcr * E'}$$
 (Equation 7.18)

H = (Pb\*144)/w (Equation 6.7)

Where:

Pcr = critical buckling pressure (psi)

E = modulus of elasticity (psi) = 400,000 psi for PVC

v = Poisson's Ratio = 0.38 for PVC

DR = dimension ratio

Pb = buckling pressure in soil (psi)



E' = modulus of soil reaction (psi) = 2,000 psi for crushed rock compacted to greater than 95% relative density

H = maximum allowable cover height of soil (ft)

w = weight of soil (lbs/ft³) = 120 lbs/ft³



#### 4" ASTM D3034 SDR-26

Pcr = 
$$\frac{2*400,000}{(1-0.38^2)*(26-1)^3}$$

Pcr = 59.84 psi

Pb = 
$$1.15 * \sqrt{59.84 * 2,000}$$

Pb = 397.84 psi

H = (397.84\*144) / 120

#### H = 477.41 ft height of soil to cause pipe buckling

*Prism Load Calculations* - the following equations utilized for the calculation of prism loads are taken from the *Handbook of PVC Pipe: Design and Construction* (Uni-Bell PVC Pipe Association, 2001).

P = H\*w (Equation 6.7)

Where:

P = prism load pressure due to soil weight (lbs/ft²)

H = depth of pipe (ft)

w = soil density (lbs/ft3) = 120 lbs/ft3

#### 4" ASTM D3034 SDR-26

H = 7' (Max Depth for System)

P = 7 \* 120

 $P = 840 \text{ lbs/ft}^2 \text{ or } 5.83 \text{ psi}$ 

Long Term Deflection Calculations - the following equations utilized for the calculation of long term deflection are taken from the Handbook of PVC Pipe: Design and Construction (Uni-Bell PVC Pipe Association, 2001).

$$\Delta Y/D = \frac{DL *K *P + K *W_1}{[2E/(3(DR-1)^3)] + 0.061 *E'} *100$$
 (Equation 7.10)

Where:

 $\Delta Y/D$  = long term deflection (%)

DL = Deflection Lag Factor = 1.0 for prism load calculation

K = bedding constant = 0.096 for 90°

P = prism load pressure due to soil weight (lbs/ft²)

 $W_1$  = live load (psi) = 0 psi

E = modulus of elasticity (psi) = 400,000 psi for PVC

DR = dimension ratio



E' = modulus of soil reaction (psi) = 2,000 psi for crushed rock bedding compacted to greater than 95% relative density

Note: Leonhardt's Zeta factor is assumed to equal 1 and thus is not required in the calculation. This is a conservative assumption that results in a more conservatively calculated value for long term deflection.

#### 4" ASTM D3034 SDR-26

$$\Delta Y/D = \frac{1.0*0.096*12.50 + 0.096*0}{[2(400,000)/(3(26-1)^3)] + 0.061*2,000} * 100$$

 $\Delta Y/D = 0.86\%$ 

Wall Crushing Calculations - the following equations utilized for the calculation of wall crushing are taken from the Handbook of PVC Pipe: Design and Construction (Uni-Bell PVC Pipe Association, 2001).

$$Py = \frac{\Theta c * 2 * A}{D}$$
 (Equation 7.20)

H = Py / w (Equation 6.7)

Where:

Py = pressure due to soil weight (psi)

 $\Theta c$  = compressive stress (psi) = 4,000 psi for PVC pipe

A= surface area of the pipe wall (in²/in)

D = mean pipe diameter (in) = Do - t

t = pipe wall thickness (in)

H = maximum allowable height of cover (ft)

w = soil density (lbs/ft<sup>3</sup>) = 120 lbs/ft<sup>3</sup>

#### 4" ASTM D3034 SDR-26

$$D = 4.215 - 0.162 = 4.053 \text{ in}, A = 1.94 \text{ in}^2/\text{ft} (0.162 \text{ in} * 12 \text{ in/ft})$$

$$Py = \frac{4,000*2*(1.94/12)}{4.053}$$

Py = 319.11 psi

H = (319.11\*144) / 120

#### H = 382.93 ft height of soil to cause wall crushing

Strain Calculations - the following equations utilized for the calculation of strain are taken from the Handbook of PVC Pipe: Design and Construction (Uni-Bell PVC Pipe Association, 2001).

$$\varepsilon h = \frac{P*D}{2*t*E}$$
 (Equation 7.22)



$$\varepsilon f = \frac{t * [3 * \Delta Y / D]}{D [1 - 2 * \Delta Y / D]}$$
 (Equation 7.24)

 $\varepsilon = \varepsilon h + \varepsilon f$  (Equation 7.25)

Where:

εh = maximum strain in the pipe wall due to hoop stress (in/in)

P = prism load pressure due to soil weight (psi)

D = mean pipe diameter (in) = Do - t

t = pipe wall thickness (in)

E = modulus of elasticity (psi) = 400,000 psi for PVC

εf = maximum strain in the pipe due to ring deflection or flexure (in/in)

 $\Delta Y/D$  = long term deflection

 $\varepsilon$  = maximum combined strain in pipe wall (in/in)

#### 4" ASTM D3034 SDR-26

 $\epsilon h = \frac{12.50 *4.053}{2 *0.162 *400,000}$ 

 $\epsilon h = 0.00039 \text{ in/in}$ 

 $\varepsilon f = \frac{0.162}{4.053} * \frac{[3*0.0086]}{[1-2*0.0086]}$ 

 $\epsilon f = 0.00105 \text{ in/in}$ 

 $\varepsilon = 0.00039 + 0.00105$ 

 $\epsilon = 0.00144 \text{ in/in}$ 

Per the *Handbook of PVC Pipe: Design and Construction* (Uni-Bell PVC Pipe Association, 2001), deflection test samples have experienced a pipe wall strain of up to 0.025 in/in and have not "showed any failures or cracks". The calculated strains for this project are significantly below this level, so no failure due to strain is anticipated.

*Pipe Stiffness Calculation* - the following equations utilized for the calculation of pipe stiffness are taken from the *Handbook of PVC Pipe: Design and Construction* (Uni-Bell PVC Pipe Association, 2001).

Ps = 
$$4.47 * \frac{E}{(DR-1)^3}$$
 (Equation 7.3)

Where:

Ps = pipe stiffness (psi)

DR = Dimensional Ration = Do / t

Do = Outside diameter (in)

t = pipe wall thickness (in)

E = modulus of elasticity (psi) = 400,000 psi for PVC

#### 4" ASTM D3034 SDR-26

DR = 26



$$Ps = 4.47 * \frac{400,000}{(26-1)^3}$$

Ps = 115 psi

#### **Criteria for Laying Pipe**

#### Pipe Embedment

Bedding and initial backfill material selection and installation will be carried out in accordance with applicable governing procedures contained within the *City of Georgetown Criteria Manual, TCEQ Chapter 217.54(a),* and in accordance with the City of Georgetown Details on Sheet 16. Brush, debris, and junk shall not be utilized as a backfilling material.

#### **Compaction**

Trench compaction will be carried out in accordance with the *City of Georgetown Code of Ordinances* and *TCEQ Chapter 217.54(b)*. Proper placement of the backfill and compaction per City of Georgetown requirements will not negatively impact the structural integrity of the pipe.

#### **Envelope Size**

Envelope size will be in accordance with *City of Georgetown Code of Ordinances* and *TCEQ Chapter 217.54(c)*. Per the City of Georgetown Detail WW-18 on sheet 16, a minimum of 6-inch and maximum of 24-inch space shall be allowed between the outside diameter of the pipe and the trench wall and floor. The embedment and initial backfill must be installed to a minimum depth of 12 inches above the crown of the pipe.

#### Trench Width

Trench width will be in accordance with the *City of Georgetown Code of Ordinances* and *TCEQ Chapter 217.54(d)*. Per the City of Georgetown Detail WW-18 on sheet 16, a minimum of 6-inch and maximum of 24-inch space shall be allowed between the outside diameter of the pipe and the trench wall and floor. These limits shall be maintained to protect the structural integrity of the pipe and will be sufficient for the placement of materials and use of compaction equipment in the pipe zone.

#### **Manholes and Related Structures**

#### Manhole and Appurtenance Placement

Manholes are located at all points of change in alignment or grade and at the intersection of all pipes for this project.

#### **Manhole Stub Outs**

No manhole stub outs are proposed in this project.

#### Cleanouts

Cleanouts are proposed along the wastewater line and all dead ends.

#### Manhole Material

Monolithic or precast manholes are acceptable for the contractor to utilize and are included in the City of Georgetown Detail WW-03.



#### Manhole Spacing

Manhole spacing meets the requirements of Table C.2 in TCEQ Chapter 217.55.

#### Manholes within Waterways

No manholes will be located within flow paths of waterways or in areas where water ponding is probable.

#### Manhole Covers, Inlets, and Bases

Per the Georgetown detail WW-03 and WW-07 on sheet 73, the manhole covers shall have a 32-inch diameter clear opening. Manhole covers shall be constructed of cast iron and have no openings for water to infiltrate. No proposed manholes are located within the 100-year flood plain. All manholes shall be watertight, with watertight rings and covers, as shown per the Georgetown detail WW-03 and WW-07 on sheet 73.

As shown in the project details, the bottom of the manhole shall have a U-shaped channel to provide smooth continuation between the inlet and outlet pipes. For the proposed pipe, the manhole channel depth shall be equal to at least half the largest pipe diameter. Manholes with different pipe sizes shall have the tops of the pipes at the same elevation and flow channels in the invert sloped evenly from pipe to pipe. A bench will be provided above each manhole channel to slope at a minimum of 0.5 inches per foot.

#### Manhole Steps

No steps shall be allowed in any proposed manholes.

#### **Manhole Connections**

Manhole-pipe connections shall be watertight per City of Georgetown Code of Ordinances. See City of Georgetown detail WW-3.

#### Manhole Venting

The proposed manholes are spaced at less than 500-foot intervals and none are located within the 100-year flood plain. Therefore, no vented manholes are proposed in this project.

#### **Trenchless Pipe Installation**

There will be no trenchless pipe installation.

#### **Testing Requirements for Gravity Pipes**

#### Infiltration/Exfiltration and Low Pressure Air Test

All testing will be in compliance with Texas Administrative Code title 30 Part 1 Chapter 217 Subchapter C 217.57 and 217.58. Infiltration and exfiltration or low-pressure air testing in accordance with ASTM C828, C924 or F1417 are required for all proposed gravity wastewater pipe as specified in the project notes. The requirements specified are in accordance with *TCEQ Chapter 217.57*.

#### **Deflection Testing**

For the proposed 4-inch wastewater line, deflection shall be measured with a rigid mandrel. The requirements specified are in accordance with *TCEQ Chapter 217.57*.



#### **Owner Inspection**

The Owner shall have an inspector onsite during construction of the project. A professional engineer registered in the state of Texas (Ryan McKay, P.E.) shall be present to witness the testing of the wastewater lines.

#### **Testing Requirements for Manholes**

Manhole testing in accordance with TCEQ Chapter 217.58 is specified in the project notes. Manholes will be tested after assembly and backfilling for leakage by either a hydrostatic test and/or a vacuum test. For the vacuum test, all lift holes and exterior joints shall be plugged with an approved non-shrink grout and no grout shall be placed in horizontal joints before testing. All pipes entering the manhole shall be plugged, taking care to securely brace the plugs from being drawn into the manhole. Stub outs, manhole boots and pipe plugs shall be secured to prevent movement while the vacuum is drawn. A minimum 60inch/lb torque wrench shall be used to tighten the external clamps that secure the test cover to the top of the manhole. The test head shall be placed at the inside of the top of the cone section and the seal inflated in accordance with the manufacturer's recommendation. A vacuum of 10 inches of mercury shall be drawn and the vacuum pump shut off. With the valves closed, the time shall be measured for the vacuum to drop to 9 inches of mercury. The manhole shall pass if the time is greater than 2 minutes. If the manhole fails the initial test, necessary repairs shall be made with a non-shrink grout while the vacuum is still being drawn. If the manhole fails a second time, repairs should again be made and the manhole shall be tested by means of a hydrostatic test. If any manhole fails the hydrostatic test, after failing the vacuum test twice, the contractor should consider replacing that manhole. If the contractor chooses to attempt to repair that manhole, the manhole must be retested by means of the hydrostatic test until it passes.

Inspection will be provided during critical phases of construction by a qualified inspector under the direction of a P.E. (Ryan McKay, P.E.). Critical phases of construction are deemed at a minimum to include testing of pipe and manholes for leakage, and testing of flexible pipe for installed deflection. TCEQ approval letters for plans and specifications review contain the requirement that once the project is completed, a P.E. registered in the state of Texas (Ryan McKay, P.E.) much certify that the construction was performed substantially in accordance with the approved plans and specifications.

#### **Notification and Inspection**

TCEQ Chapter 213 requires that the applicant must provide written notification to the Austin regional office at least 48 hours prior to commencing construction on the regulated activity. If any sensitive feature is discovered during construction, then the work shall be suspended immediately, and the Austin regional office shall be notified to then determine the appropriate course of action. All other notification and inspection requirements identified in TCEQ Chapter 213.5(c) shall be met. Justification and Calculations for Deviation in Straight Alignment without Manholes.

NOT APPLICABLE



#### Attachment B

Justification and Calculations for Deviation in Straight Alignment Manholes

NOT APPLICABLE



## Attachment C

Justification for Variance from Manhole Spacing NOT APPLICABLE



# Attachment D

Explanation of Slopes for Flows Greater Than 10.0 FPS NOT APPLICABLE



# Attachment E Site Plan

# CIVIL SITE DEVELOPMENT PLANS FOR

# WILLIAMS DR COMMERCIAL

4785 WILLIAMS DR, GEORGETOWN, TX 78633

#### **GENERAL PLAN NOTES:**

- 1. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER, AND SUCCESSORS TO THE CURRENT PROPERTY OWNER. TO ENSURE THE SUBJECT PROPERTY AND ANY IMPROVEMENTS ARE MAINTAINED IN CONFORMANCE WITH THIS SITE DEVELOPMENT PLAN.
- 2. THIS DEVELOPMENT SHALL COMPLY WITH ALL STANDARDS OF THE UNIFIED DEVELOPMENT CODE (UDC), THE CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND SPECIFICATION MANUAL, THE DEVELOPMENT MANUAL AND ALL OTHER APPLICABLE CITY STANDARDS.
- 3. THIS SITE DEVELOPMENT PLAN SHALL MEET THE UDC STORM WATER REQUIREMENTS
- 4. ALL SIGNAGE REQUIRES A SEPARATE APPLICATION AND APPROVAL FROM THE INSPECTION SERVICES DEPARTMENT. NO SIGNAGE IS APPROVED WITH THE SITE DEVELOPMENT PLAN
- 5. SIDEWALKS SHALL BE PROPOSED IN ACCORDANCE WITH THE UDC.
- 6. DRIVEWAYS WILL REQUIRE APPROVAL BY THE DEVELOPMENT ENGINEER OF THE CITY OF
- 7. SCREENING OF MECHANICAL EQUIPMENT, DUMPSTERS AND PARKING SHALL COMPLY WITH CHAPTER 8 OF THE UDC. THE SCREENING IS SHOWN ON THE LANDSCAPE AND ARCHITECTURAL
- 8. WATER AND WASTEWATER SERVICE WILL BE PROVIDED BY GEORGE UTILITY SERVICES, CONDITIONED UPON ALL FEES AND CHARGES ARE PAID.
- 9. THERE ARE NO KNOWN CRITICAL ENVIRONMENTAL FEATURES ON THIS SITE
- INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY
- 12. AS PART OF THIS SITE PLAN, THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED TO BE ON SITE AT ALL TIMES.
- 13. THIS SITE IS LOCATED IN THE EDWARDS AQUIFER RECHARGE ZONE
- 14. THE PROPERTY SUBJECT TO THIS APPLICATION IS SUBJECT TO THE WATER QUALITY REGULATIONS OF THE CITY OF GEORGETOWN.
- 15. ALL ELECTRIC AND COMMUNICATION INFRASTRUCTURE SHALL COMPLY WITH THE UDC SECTION
- 16. OUTDOOR LIGHTING SHALL COMPLY WITH SECTION 7.04 OF UDC.
- 17. THE COMPANION LANDSCAPE PLAN HAS BEEN DESIGNED AND PLANT MATERIALS SHALL BE INSTALLED TO MEET ALL REQUIREMENTS OF THE UDC.
- 18. ALL MAINTENANCE OF REQUIRED LANDSCAPE SHALL COMPLY WITH THE MAINTENANCE STANDARDS OF CHAPTER 8 OF THE UDC.
- 19. A SEPARATE IRRIGATION PLAN SHALL BE REQUIRED AT THE TIME OF BUILDING PERMIT APPLICATION. PROJECTS PROPOSING PUBLIC PARKLAND SHALL INCLUDE IRRIGATION PLANS AS PART OF THIS PLAN AS REQUIRED BY THE PARKLAND DEVELOPMENT GUIDELINES.
- 20. FIRE FLOW REQUIREMENTS OF 1,500 GALLONS PER MINUTE ARE BEING MET BY THIS PLAN.
- 21. ANY HERITAGE TREE NOTED ON THIS SITE DEVELOPMENT PLAN IS SUBJECT. IN PERPETUITY. TO THE MAINTENANCE, CARE, PRUNING AND REMOVAL REQUIREMENTS OF THE UNIFIED
- 22. THE CONSTRUCTION PORTION OF THESE 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.
- 23. THIS PROJECT IS SUBJECT TO ALL CITY STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS IN EFFECT AT THE TIME OF SUBMITTAL OF THE PROJECT TO THE CITY.
- 24. WHERE NO EXISTING OVERHEAD INFRASTRUCTURE EXISTS, UNDERGROUND ELECTRIC UTILITY LINES SHALL BE LOCATED 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

OWNER/DEVELOPER NAME AND ADDRESS AGTX GT WILLIAMS RE HOLDINGS, LLC 3102 MAPLE AVE, DALLAS, TX 75201

PREVIOUS RELATED SITE DEVELOPMENT CASE NO.: N/A

ZONING: C-1

WATERSHED: BERRY CREEK

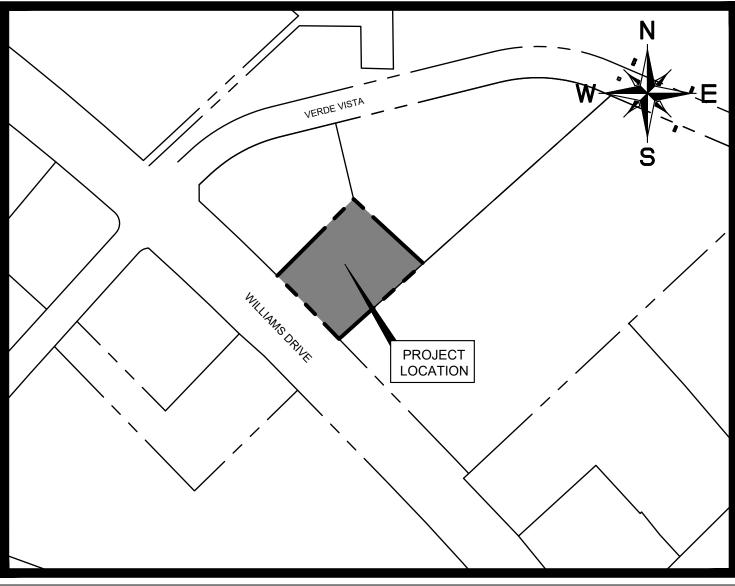
SUBMITTAL DATE: 09/05/2025

PROPOSED USE: RESTAURANT, MEDICAL, AND RETAIL ACREAGE: 1.007AC

PROPOSED IMPERVIOUS COVER: 64.88%

OVERLAY DISTRICT: WILLIAMS DR OVERLAY

SHILLER BUSINESS PARK, BLOCK A, LOT 2, ACRES 1.007 DOC NO. 2023095967



**VICINITY MAP** 

# SEPTEMBER 2025

CITY OF GEORGETOWN

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	FINAL PLAT
3	GENERAL NOTES
4	KIMLEY-HORN GENERAL NOTES
5	TCEQ NOTES
6	EXISTING CONDITIONS AND DEMO PLAN
7	EROSION CONTROL PLAN
8	OVERALL SITE PLAN
9	PAVING PLAN
10	GRADING & STORM PLAN
11	EXISTING DRAINAGE AREA MAP
12	PROPOSED DRAINAGE AREA MAP
13	OVERALL UTILITY PLAN
14	FIRE PROTECTION PLAN
15	PAVING DETAILS
16	UTILITY DETAILS
17	EROSION CONTROL DETAILS
18	DRAINAGE REF. SHEET (1 OF 4)
19	DRAINAGE REF. SHEET (2 OF 4)
20	DRAINAGE REF. SHEET (3 OF 4)
21	DRAINAGE REF. SHEET (4 OF 4)
22	LANDSCAPE SCHEDULE AND NOTES
23	LANDSCAPE PLAN
24	LANDSCAPE DETAILS
25	LANDSCAPE SPECIFICATIONS

		REVI	SIONS/CC	RRECTIONS	}		
NO.	DESCRIPTION	REVISE (R) VOID (V) ADD (A) SHEET NO.'S	TOTAL NO. SHEETS IN PLAN SET	NET CHANGE IMP. COVER (SQ. FT.)	TOTAL SITE IMP. COVER (SQ. FT.)/%	CITY OF GEORGETOWN APPROVAL DATE	DATE IMAGED

#### **ARCHITECT** BRR ARCHITECTURE

8131 METCALF AVENUE OVERLAND PARK, KS 66204 PH. (913) 262.9095 LANDSCAPE ARCHITECT

KIMLEY-HORN 5301 SOUTHWEST PARKWAY BLDG 2, SUITE 100

**AUSTIN, TX 78735** PH. (512) 910-8216

FORT WORTH, TX 76102 PH. (812) 335-6511

CERTIFICATE OF REGISTRATION #928

SURVEYOR KIMLEY-HORN 801 CHERRY STREET, UNIT 11, #1300

## LISTS OF CONTACTS:

PH. (512) 930-3473

**WATER & SANITARY SEWER** CITY OF GEORGETOWN GEORGETOWN UTILITY SERVICES DAVID MUNK 300-1 INDUSTRIAL AVENUE GEORGETOWN, TX 78626 (512) 930-3555

WEBSITE: WWW.ATMOSENERGY.COM GEORGETOWN FIRE DEPARTMENT 3500 D B WOOD ROAD GEORGETOWN ,TX 78628

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PEDERNALES ELECTRIC COOPERATIVE, INC LIBERTY HILL, TEXAS 78642

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**BENCHMARKS** 

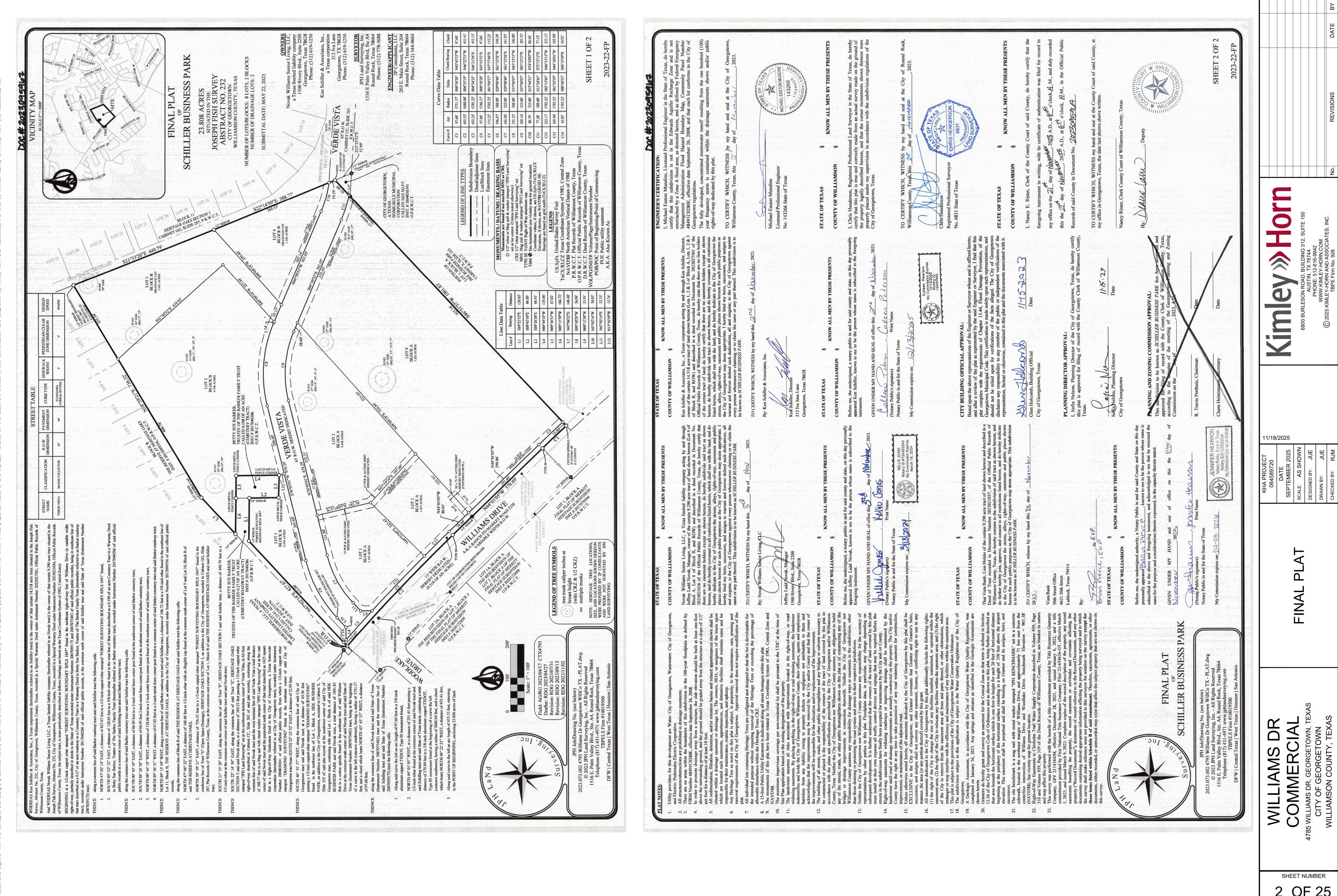
VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES

I CERTIFY THAT THESE ENGINEERING DOCUMENTS ARE COMPLETE, ACCURATE AND ADEQUATE

SHEET NUMBER

OVER

# FOR THE INTENDED PURPOSES, INCLUDING CONSTRUCTION, BUT ARE NOT AUTHORIZED FOR CONSTRUCTION PRIOR TO FORMAL CITY APPROVAL



2025-79-SDP

2 OF 25

FINAL PLAT

VARIOUS PAY ITEMS FOR INSTALLATION OF PIPE

- 1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THESE PLANS, THE CITY OF GEORGETOWN "UNIFIED DEVELOPMENT CODE" AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE

CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS.

- 3. CONTRACTOR SHALL CONTACT ALL FRANCHISE UTILITY COMPANIES TO HAVE THEM LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND DEPTH OF ALL FRANCHISE UTILITY SERVICES AND ANY REQUIRED RELOCATION AND/OR EXTENSIONS. SERVICES SHOWN ON THE PLANS ARE CONCEPTUAL.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELOCATION AND INSTALLATION OF FRANCHISE UTILITIES NECESSARY FOR ON AND OFF SITE CONSTRUCTION.
- 5. BRACING OF UTILITY POLES MAY BE REQUIRED BY UTILITY COMPANIES WHEN TRENCHING OR EXCAVATION IS IN CLOSE PROXIMITY TO THE POLES. THE COST OF BRACING POLES WILL BE BORNE BY THE CONTRACTOR. THERE IS NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL TO THE
- 6. THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE UTILITY COMPANY RECORDS AND PLANS AND ARE CONSIDERED APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC AND PRIVATE UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT THEIR EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES.
- 7. CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND POWER LINES.
- 8. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS SHOWN ON THE PLANS AND REVIEW ALL FIELD CONDITIONS, INCLUDING EXISTING GRADES AND UTILITY FLOW LINES, AND SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.
- 9. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERTY, INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PAVEMENT, GRASS, TREES, LAWN SPRINKLER AND IRRIGATION SYSTEMS AT NO COST TO THE OWNER. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT (UNLESS OTHERWISE NOTED) AND IS NOT A SEPARATE PAY ITEM.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO CONSTRUCTION.
- 11. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE APPROVED CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP AND INSPECTION REPORTS.
- 12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN NEAT AND ACCURATE CONSTRUCTION RECORD PLANS.
- 13. CONNECTIONS TO EXISTING FACILITIES SHALL BE ACCOMPLISHED IN A NEAT AND PROFESSIONAL MANNER. WHEN FIELD CONDITIONS INDICATE ANY VARIANCE FROM DETAILED METHODS, THE CONTRACTOR SHALL PROVIDE COMPREHENSIVE AND DETAILED DRAWINGS (FOR APPROVAL) OF METHODS PROPOSED.
- 14. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
- 15. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST. RESULTS ARE TO BE SENT TO THE OWNER AND DESIGN ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
- 16. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO THE FINAL CONNECTION OF SERVICES.
- 17. CONTRACTOR SHALL VERIFY BENCHMARKS AND DATUM PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS.
- 18. ALL HORIZONTAL DIMENSIONS GIVEN ARE TO FACE OF CURB AND TO PIPE CENTERLINES, UNLESS OTHERWISE NOTED ON PLANS.
- 19. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING. CONSTRUCTION STAKING SHALL BE PERFORMED BY A REGISTERED PUBLIC SURVEYOR IN THE STATE OF TEXAS.
- 20. THE CONTRACTOR SHALL TOPSOIL, SEED AND FERTILIZE ALL AREAS DISTURBED BY CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE WHATEVER MEASURES ARE NEEDED INCLUDING TEMPORARY IRRIGATION TO ENSURE FULL COVERAGE OF GRASSING. UNLESS OTHERWISE NOTED, PRIVATE LAWN AREAS AND PARKWAYS IN FRONT OF PRIVATE LAWN AREAS DISTURBED BY CONSTRUCTION SHALL BE REPLACED WITH BLOCK SOD OF A SIMILAR GRASS TO THAT EXISTING. ALL SEEDED OR SODDED AREAS SHALL RECEIVE SIX(6) INCHES OF TOPSOIL. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 21. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH. THE AREAS SHALL THEN BE SEEDED, IRRIGATED, AND STABILIZED AS SPECIFIED IN THE PLANS, AND MAINTAINED UNTIL SOIL IS STABILIZED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE STABILIZED AND MULCHED AS SHOWN ON THE LANDSCAPE, GRADING, AND EROSION CONTROL PLANS.
- 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- 23. SOD MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
- 24. CONTRACTOR IS TO CONSTRUCT A STABILIZED CONSTRUCTION EXIT AT ALL PRIMARY POINTS OF ACCESS. THIS STABILIZED EXIT SHALL BE CONSTRUCTED PER CITY DETAILS.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE SWPPP MUST BE MADE READILY AVAILABLE AT THE TIME OF AN ON-SITE INSPECTION TO:

THE EXECUTIVE DIRECTOR: A FEDERAL STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS GRADING PLANS OR STORMWATER

MANAGEMENT PLANS; LOCAL GOVERNMENT OFFICIALS; AND THE OPERATOR OF A MUNICIPAL SEPARATE STORM SEWER (MS4) RECEIVING DISCHARGES

- 26. ANY ENTITY THAT MEETS THE DEFINITION OF A "PRIMARY OPERATOR" FOR A LARGE CONSTRUCTION ACTIVITY (FIVE OR MORE ACRES) SHALL BE RESPONSIBLE FOR COMPLETING AND SUBMITTING A NOTICE OF INTENT (NOI) AND A NOTICE OF TERMINATION (NOT) WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ).
- 27. THE CONTRACTOR MUST CONSTRUCT AND MAINTAIN A PERMANENT STABLE PROTECTIVE COVER (GRASS) FOR EROSION AND SEDIMENT CONTROL ON ALL LAND SURFACES EXPOSED OR DISTURBED BY CONSTRUCTION OF THE PERMITTED PROJECT. THE PROTECTIVE COVER MUST BE INSTALLED WITHIN FOURTHEN DAYS AFTER FINAL GRADING OF THE AFFECTED LAND SURFACE. A PERMANENT STABLE COVER MUST BE ESTABLISHED WITHIN 60 DAYS OF IT'S
- 28. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL PROVIDE AS-BUILT PLANS IDENTIFYING ALL DEVIATIONS OR VARIATIONS OF ORIGINAL PLANS. AS-BUILT PLANS ARE SUBSIDIARY TO ALL OTHER BID ITEMS AND SHALL NOT BE PAID FOR AS A SEPARATE LINE ITEM.
- 29. DURING CONSTRUCTION, ALL MATERIAL TESTING SHALL BE COORDINATED WITH THE CITY OF GEORGETOWN CONSTRUCTION INSPECTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CITY STANDARD SPECIFICATIONS. ALL SOILS TESTING IS THE RESPONSIBILITY OF AND WILL BE PAID FOR BY THE CONTRACTOR. MATERIAL TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY.
- 30. ALL EXISTING TRAFFIC AND STREET SIGNS DISTURBED SHALL BE REINSTALLED WHERE APPLICABLE BY THE CONTRACTOR.
- 31. ALL EXISTING SHRUBS, TREES, PLANTING, AND OTHER VEGETATION, OUTSIDE OF PROPERTY LIMITS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED WITH EQUIVALENT MATERIAL BY THE CONTRACTOR AT NO ADDITIONAL COST.
- 32. THE CONTRACTOR SHALL SALVAGE AND PROTECT ALL EXISTING POWER POLES, SIGNS, MANHOLES, TELEPHONE RISERS, WATER VALVES, ETC. DURING ALL CONSTRUCTION PHASES.
- 33. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SILT AND DEBRIS OFFSITE FROM THE EXISTING ROADWAYS AND PROJECT SITE THAT ARE A RESULT OF THE PROPOSED CONSTRUCTION AS REQUESTED BY THE CITY OF GEORGETOWN. AT A MINIMUM, THIS TASK SHOULD OCCUR ONCE A WEEK.
- 4. CONNECTIONS TO EXISTING FACILITIES SHALL BE ACCOMPLISHED IN A NEAT AND PROFESSIONAL MANNER. WHEN FIELD CONDITIONS INDICATE ANY VARIANCE FROM DETAILED METHODS, THE CONTRACTOR SHALL PROVIDE COMPREHENSIVE AND DETAILED DRAWINGS (FOR APPROVAL) OF METHODS PROPOSED.
- 35. WATER SHALL NOT BE PERMITTED IN OPEN TRENCHES DURING CONSTRUCTION.
- 36. CONTRACTOR SHALL CONTACT THE DESIGNATED CONSTRUCTION INSPECTOR ASSIGNED TO THIS PROJECT AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION.
- 37. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A TRENCH SAFETY PLAN TO THE CITY OF GEORGETOWN PUBLIC WORKS DEPARTMENT AT THE TIME OF THE PRECONSTRUCTION MEETING, OR PRIOR TO BEGINNING CONSTRUCTION OF THESE IMPROVEMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY STANDARDS, TEXAS STATE LAW, AND O.S.H.A. STANDARDS FOR ALL EXCAVATION IN EXCESS OF FIVE FEET IN DEPTH. NO OPEN TRENCHES WILL BE ALLOWED OVERNIGHT WITHOUT THE PRIOR SPECIFIC WRITTEN APPROVAL OF THE CITY OF GEORGETOWN PUBLIC WORKS DEPARTMENT, OR DESIGNATED REPRESENTATIVE. ONSITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 38. CONTRACTOR TO REVIEW DESIGN INTENT OF THESE PLANS AND SUBMIT REQUESTS-FOR-INFORMATION IN A TIMELY MANNER PRIOR TO COMMENCING THAT WORK.
- 39. ALL APPURTENANCES INSTALLED IN PAVEMENT AREAS SHALL BE ADJUSTED AS REQUIRED TO BE FLUSH WITH FINISHED PAVEMENT.
- 40. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR COMPLETING AND IMPLEMENTING TRAFFIC CONTROL PLAN.

#### PAVING & STRIPING NOTES

- 1. ALL CONSTRUCTION SHALL BE IN GENERAL ACCORDANCE WITH THESE PLANS, CITY OF GEORGETOWN, TX STANDARD SPECIFICATIONS, THE FINAL GEOTECHNICAL REPORT AND COMMONLY ACCEPTED CONSTRUCTION STANDARDS.
- 2. TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAVING IMPROVEMENTS SHALL BE PERFORMED BY AN APPROVED AGENCY FOR TESTING MATERIALS. THE NOMINATION OF THE TESTING LABORATORY AND THE PAVEMENT OF SUCH TESTING SERVICES SHALL BE MADE BY THE CONTRACTOR. THE OWNER SHALL APPROVE THE LABORATORY NOMINATED TO DO THE TESTING OF MATERIALS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SHOW BY STANDARD TESTING PROCEDURES THAT THE WORK CONSTRUCTED DOES MEET THE REQUIREMENTS OF THE CITY'S SPECIFICATIONS AND THESE PLANS.
- 3. BARRIER FREE RAMPS SHALL BE CONSTRUCTED AT ALL DRIVEWAY APPROACHES PER CITY STANDARDS.
- 4. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- 5. CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS FOR FIRE LANES, PARKING STALLS, HANDICAPPED PARKING SYMBOLS, AND MISCELLANEOUS STRIPING WITHIN PARKING LOT AND AROUND BUILDING AS SHOWN ON THE PLANS. ALL PAINT FOR PAVEMENT MARKINGS SHALL ADHERE TO CITY OF GEORGETOWN STANDARD DETAILS AND SPECIFICATIONS.
- 6. REFER TO GEOTECHNICAL REPORT FOR PAVING JOINT LAYOUT PLAN.
- 7. REFER TO GEOTECHNICAL REPORT FOR REINFORCEMENT STEEL.
- 8. REFER TO GEOTECHNICAL REPORT FOR SOIL COMPACTION SPECIFICATION.
- 9. FIRE LANES SHALL BE DESIGNATED BY CONTINUOUS PAINTED LINES SIX (6) INCHES IN WIDTH ON EACH SIDE OF THE FIRE LANE STARTING AT THE ENTRANCE FROM THE STREET AND TO BE CONTINUED TO THE EXIT. SUCH LINES SHALL BE BRIGHT RED IN COLOR.
- 10. FIRE LANES ADJACENT TO CURBS SHALL BE OUTLINED BY A SIX (6) INCH WIDE STRIP PAINTED BRIGHT RED IN COLOR ALONG THE CURB'S GUTTER LINE.
- 11. ALL HANDICAP RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT THAT IS MOST CURRENT.
- 12. REFERENCE CITY OF GEORGETOWN, TX STANDARD CONSTRUCTION DETAILS FOR CURB RAMP AND OTHER PAVING DETAILS.
- 13. CONTRACTOR RESPONSIBLE FOR PREPARATION, SUBMITTAL, AND APPROVAL BY CITY OF GEORGETOWN, TX OF TRAFFIC CONTROL PLAN PRIOR TO START OF CONSTRUCTION.
- 14. SIDEWALKS ADJACENT TO CURB SHALL BE CONNECTED TO BACK OF CURB USING LONGITUDINAL BUTT JOINT.
- 15. UNLESS THE PLANS SPECIFICALLY DICTATE TO THE CONTRARY, ON-SITE AND OTHER DIRECTIONAL SIGNS SHALL BE LOCATED OUT OF THE PEDESTRIAN AND AUTOMOBILE ROUTES AND SHALL BE LOCATED BETWEEN THREE TO FIVE FEET BEHIND THE NEAREST BACK OF CURB. SIGN HEIGHT, LOCATION, AND STRUCTURE SHALL BE SUCH THAT THE SIGNS POSE NO THREAT TO PUBLIC SAFETY.
- 16. UNLESS THE PLANS SPECIFICALLY DICTATE TO THE CONTRARY, ON-SITE AND OTHER DIRECTIONAL SIGNS SHALL BE ORIENTED SO THEY ARE READILY VISIBLE TO THE ONCOMING TRAFFIC FOR WHICH THEY ARE INTENDED, FIELD ADJUSTMENTS OF LOCATION AND ORIENTATION OF THE SIGNS ARE TO BE MADE TO ACCOMPLISH THIS.
- 17. THE CONTRACTOR FOR THE PROJECT SHALL NOT PLACE ANY PERMANENT PAVEMENT UNTIL ALL SLEEVING FOR ELECTRIC, GAS, TELEPHONE, CABLE TV, SITE IRRIGATION, OR ANY OTHER UNDERGROUND UTILITY HAS BEEN INSTALLED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THAT ALL SLEEVING IS IN PLACE PRIOR TO PLACEMENT OF PERMANENT PAVEMENT.
- 18. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE HANDICAPPED ROUTES (PER A.D.A. & T.A.S) EXIST TO AND FROM EVERY DOOR. IN NO CASE SHALL HANDICAP RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5.0 PERCENT. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A. AND T.A.S. COMPLIANCE ISSUES.
- 19. STREETS, SIDEWALKS, DRIVEWAYS, AND STORM DRAINAGE FACILITIES IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE CITY OF GEORGETOWN INFRASTRUCTURE DESIGN & DEVELOPMENT STANDARDS MANUAL, LATEST EDITION
- 20. FIRE LANES SHALL REMAIN OPEN/ACCESSIBLE AT ALL TIMES DURING CONSTRUCTION; FIRE LANE SHALL BE INSTALLED & ACCEPTED BY THE CITY PRIOR TO ANY CONSTRUCTION ABOVE THE FOUNDATION.

#### **GRADING NOTES**

- 1. ALL CONSTRUCTION SHALL BE IN GENERAL ACCORDANCE WITH THESE PLANS, CITY OF GEORGETOWN, TX STANDARD SPECIFICATIONS, THE FINAL GEOTECHNICAL REPORT, AND COMMONLY ACCEPTED CONSTRUCTION STANDARDS.
- UNLESS OTHERWISE NOTED, PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN IN PAVED AREAS REFLECT TOP OF PAVEMENT SURFACE. ADD .50' TO PAVING GRADE FOR TOP OF CURB GRADE. THE LIMITS OF EARTHWORK IN PAVED AREAS IS THE BOTTOM OF PAVEMENT.
- 3. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE SILT FENCES (OR OTHER METHODS APPROVED BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL EROSION, CONSERVATION, AND SILTATION REQUIREMENTS. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND THE ESTABLISHMENT OF A STAND OF GRASS OR OTHER GROWTH TO PREVENT EROSION. CONTRACTOR IS RESPONSIBLE FOR FILING N.O.I. AND N.O.T. WITH THE TCEQ. CONTRACTOR SOLELY RESPONSIBLE FOR ALL MANDATED SWPPP RECORD KEEPING AND REPORTING.
- 4. ALL EXCAVATING IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED. UNUSABLE EXCAVATED MATERIAL AND ALL WASTE RESULTING FROM SITE CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF SITE BY THE GRADING CONTRACTOR AT HIS EXPENSE.
- 5. BEFORE ANY EARTHWORK IS PERFORMED, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF PAVEMENT AND OTHER ITEMS ESTABLISHED BY THE PLANS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGINEERING AND SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK.
- 6. REFERENCE STRUCTURAL DRAWINGS AND SPECIFICATIONS AND GEOTECHNICAL REPORT FOR STRUCTURAL SCOPE AND PAVING SUBGRADE INFORMATION.
- 7. THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS. THE FILL MATERIAL TO BE USED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
- 8. GRADING CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES FOR ANY REQUIRED UTILITY ADJUSTMENTS AND/OR RELOCATIONS.
- 9. TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAVING IMPROVEMENTS SHALL BE PERFORMED BY AN APPROVED AGENCY FOR TESTING MATERIALS. THE NOMINATION OF THE TESTING LABORATORY AND THE PAYMENTS FOR SUCH TESTING SERVICES SHALL BE MADE BY THE CONTRACTOR. THE OWNER SHALL APPROVE THE LABORATORY NOMINATED TO DO THE TESTING OF MATERIALS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SHOW BY STANDARD TESTING PROCEDURES THAT THE WORK CONSTRUCTED DOES MEET THE REQUIREMENTS OF THE CITY'S SPECIFICATIONS AND THESE PLANS.
- 10. PROPOSED CONTOURS ARE APPROXIMATE. PROPOSED SPOT ELEVATIONS AND DESIGNATED GRADIENT ARE TO BE USED IN CASE OF DISCREPANCY
- 11. REFER TO SITE PLAN AND/OR DIMENSION CONTROL PLAN AND FINAL PLAT FOR HORIZONTAL DIMENSIONS.
- 12. REFER TO EROSION CONTROL PLAN FOR EROSION CONTROL DEVICES TO BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
- 13. NO TREE SHALL BE REMOVED OR DAMAGED WITHOUT PRIOR AUTHORIZATION OF THE OWNER OR OWNER'S REPRESENTATIVE. EXISTING TREES SHALL BE PRESERVED WHENEVER POSSIBLE.
- 14. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL CONTROL PRIOR TO COMMENCING CONSTRUCTION AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES BEFORE CONSTRUCTION COMMENCES.
- 15. AFTER PLACEMENT OF SUBGRADE AND PRIOR TO PLACEMENT OF PAVEMENT, CONTRACTOR SHALL TEST AND OBSERVE PAVEMENT AREAS FOR EVIDENCE OF PONDING. ALL AREAS SHALL ADEQUATELY DRAIN TOWARDS THE INTENDED STRUCTURE TO CONVEY STORM RUNOFF. CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER AND ENGINEER IF ANY DISCREPANCIES ARE DISCOVERED.

#### STORM SEWER NOTES

- 1. THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND SHALL NOTIFY THE CONSTRUCTION MANAGER AND ENGINEER OF ANY CONFLICTS DISCOVERED. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE.
- 2. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS AND GRATE INLETS AND ALL UTILITIES CROSSING THE STORM SEWER.
- 3. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM SEWER.
- 4. THE INSPECTOR SHALL INSPECT ALL "PUBLIC" CONSTRUCTION. THE CONTRACTOR'S BID PRICE SHALL INCLUDE ALL INSPECTION FEES.
- 5. ALL PVC TO RCP CONNECTIONS SHALL BE CONSTRUCTED WITH CONCRETE COLLARS.
- 6. ALL PRIVATE STORM SHALL BE NOTED AS ON PLANS. CONTRACTOR TO CONTACT ENGINEER WITH QUESTIONS ABOUT PIPE MATERIAL PRIOR TO ORDERING. CONTRACTOR SHALL SUBMIT TECHNICAL DATA TO PROJECT ENGINEER AND CITY ENGINEER FOR APPROVAL PRIOR TO ORDERING MATERIAL.
- 7. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING FOR ALL STORM SEWER LINES AND OTHER UTILITIES.
- 8. EMBEDMENT FOR ALL ONSITE SEWER LINES, PUBLIC OR PRIVATE, SHALL BE PER CITY OF GEORGETOWN, TX STANDARD DETAILS.
- 9. REFER TO TCEQ DESIGN GUIDELINES (CHAPTER 290) FOR ALL WATER AND WASTEWATER CROSSINGS.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND IMPLEMENTING A TRENCH PROTECTION PLAN FOR ALL OPEN TRENCH EXCAVATION.
- 11. USE 4 FOOT JOINTS WITH BEVELED ENDS IF RADIUS OF STORM SEWER IS LESS THAN 100 FEET.
   12. ALL PRIVATE LANDSCAPE AREA DRAINS SHALL BE OF MATERIAL APPROVED BY BOTH ENGINEER AND LANDSCAPE

#### WATER AND SANITARY SEWER NOTES

- ALL MATERIALS AND WORKMANSHIP TO CONFORM TO THE REQUIREMENTS SET FORTH IN THE CITY OF GEORGETOWN WATER AND WASTEWATER CONSTRUCTION STANDARDS AND DETAILS, LATEST EDITION.
- 2. WATER MAINS SHALL HAVE THE FOLLOWING MINIMUM COVER BELOW STREET GRADES:



E. BLUE TAPE FOR WATER SERVICES.

- PLASTIC TAPE FOR UTILITY SERVICES SHALL BE ATTACHED TO THE ENDS OF ALL WATER AND SEWER SERVICE LINES AND EXTEND ABOVE GROUND LEVEL. THE TAPE SHALL MEET THE FOLLOWING SPECIFICATION:

   A. "GEORGETOWN MARKING TAPE" OR APPROVED EQUAL.
   B. ROLL MARKED CONTINUOUSLY, "CAUTION WATER LINE" OR "CAUTION SEWER LINE".
   C. SIX (6) INCHES IN WIDTH.
   D. RED TAPE FOR SEWER SERVICES.
- 4. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY EXACT LOCATIONS OF EXISTING PUBLIC AND PRIVATE UTILITIES AND SERVICES PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL CALL 811 FOR FIELD LOCATION OF EXISTING UTILITIES. CALL AT LEAST 48 HOURS BEFORE LOCATIONS ARE NEEDED. NOTE THAT THE DIG TESS SERVICE DOES NOT LOCATE ALL UTILITIES, ONLY THOSE REGISTERED WITH THE SERVICE.
- 5. REFER TO SITE GRADING PLANS, PAVING PLANS, AND LANDSCAPE PLANS FOR FINAL GRADES FOR DETERMINING PROPOSED MANHOLE RIM ELEVATIONS.

  6. LOCATIONS AND SIZES OF EXISTING PURPLIC AND PRIVATE LITTLES SHOWN ON THESE PLANS ARE FROM CITY.
- LOCATIONS AND SIZES OF EXISTING PUBLIC AND PRIVATE UTILITIES SHOWN ON THESE PLANS ARE FROM CITY AND UTILITY COMPANY RECORDS ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR LOCATING ALL UTILITIES AND FOR DAMAGES RESULTING FROM FAILURE TO DO SO.
- LOCATION OF WATER AND SEWER SERVICES AND ANY DEVIATIONS FROM PLANS MADE DURING CONSTRUCTION.

  THE CONTRACTOR SHALL VERIES ALL DIMENSIONS SHOWN, COORDINATING THE HORIZONTAL AND VERTICAL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING "RECORD" PLANS TO THE ENGINEER SHOWING THE

- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS SHOWN, COORDINATING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITY SERVICES ENTERING THE BUILDING AND/OR CROSSING OTHER UTILITIES.
- 9. ALL WATER AND SANITARY SEWER SERVICES SHALL TERMINATE FIVE (5) FEET OUTSIDE THE BUILDING, UNLESS NOTED OTHERWISE.
- 10. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE UTILITIES. ALL PUBLIC PIPE, STRUCTURES, AND FITTINGS SHALL BE INSPECTED BY THE CITY INSPECTOR PRIOR TO BEING COVERED. THE INSPECTOR MUST ALSO BE PRESENT DURING DISINFECTION AND PRESSURE TESTING OF ALL MAINS. THE CONTRACTOR'S BID PRICE SHALL INCLUDE ALL INSPECTION FEES.
- CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A TRENCH EXCAVATION PROTECTION PLAN, SEALED BY A GEOTECHNICAL ENGINEER REGISTERED IN THE STATE OF TEXAS, FOR ALL TRENCHES DEEPER THAN FIVE (5) FEET.

11. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE TRENCH SAFETY DURING ALL PHASES OF

- 12. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING FOR ALL WATER AND SANITARY SEWER LINES AND OTHER UTILITIES.
- 13. REFER TO TCEQ DESIGN GUIDELINES (CHAPTER 290) FOR ALL UTILITY CROSSINGS.
- 14. CONTRACTOR TO SEQUENCE CONSTRUCTION AS TO AVOID INTERRUPTION OF WATER OR SANITARY SEWER SERVICE TO SURROUNDING AREAS
- 15. EXISTING MANHOLE TOPS, VALVE BOXES, ETC. ARE TO BE ADJUSTED AS REQUIRED TO MATCH PROPOSED GRADES
- 16. FIRE HYDRANTS SHALL BE LOCATED A MINIMUM OF TWO (2) FEET AND A MAXIMUM OF SIX (6) FEET BEHIND THE CURB LINE OF FIRE LANE AND STREET
- 17. ANY WATER OR SANITARY SEWER SERVICE LOCATED OUTSIDE OF A STREET, ALLEY OR EASEMENT SHALL BE INSTALLED BY A PLUMBER AND BE INSPECTED BY CODE ENFORCEMENT.

#### CITY OF GEORGETOWN NOTES:

- 1. THE CONSTRUCTION PORTION OF THESE 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.
- 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 SDR 26 PVC.
   WASTEWATER MAINS SHALL BE INSTALLED WITHOUT HORIZONTAL OR VERTICAL BENDS.
- WASTEWATER MAINS SHALL BE INSTALLED WITHOUT HORIZONTAL OR VERTICAL BENDS.
   MAXIMUM DISTANCE BETWEEN WASTEWATER MANUELS IS 500 FEET.

   WASTEWATER MAINS SHALL BE LOW PRESSURE AND TESTED AND MANUEL TESTED.
- WASTEWATER MAINS SHALL BE LOW PRESSURE AIR TESTED AND MANDREL TESTED BY THE CONTRACTOR ACCORDING TO CITY OF GEORGETOWN AND TCEQ REQUIREMENTS.
   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 DUCTHE IRON PIPING FROM THE WATER MAIN TO
- 11. PRIVATE WATER SYSTEM FIRE LINES SHALL BE DUCTILE IRON PIPING FROM THE WATER MAIN TO THE BUILDING SPRINKLER SYSTEM, AND 200 PSI C900 PVC FOR ALL OTHERS.
- 12. PUBLIC WATER SYSTEM MAINS SHALL BE 150 PSI C900 PVC AND TESTED BY THE CONTRACTOR AT 150 PSI FOR 4 HOURS.
  13. ALL BENDS AND CHANGES IN DIRECTION ON WATER MAINS SHALL BE RESTRAINED AND THRUST
- BLOCKED.

  14. LONG FIRE HYDRANT 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 BEQUIREMENTS OF THE TOEO AND THE
- 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.
- 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. ALL SIDEWALK RAMPS AND SIDEWALK ALONG PARKLAND, OPEN SPACE, OR OTHER NON-RESIDENTIAL LOTS 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 OF 10% OF THE COST OF THE PUBLIC IMPROVEMENTS AND SHALL FOLLOW THE CITY FORMAT.

  21. RECORD DRAWINGS OF THE PUBLIC IMPROVEMENTS SHALL BE SUBMITTED TO THE CITY BY THE
- DESIGN ENGINEER PRIOR TO ACCEPTANCE OF THE PROJECT. THESE DRAWINGS SHALL BE ON MYLAR OR ON TIFF OR PDF DISK (300DPI). IF A DISK IS SUBMITTED, A BOND SET SHALL BE INCLUDED WITH THE DISK.

  22. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER, AND SUCCESSORS TO THE CURRENT
- 22. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER, AND SUCCESSORS TO THE CURRENT PROPERTY OWNER, TO ENSURE THE SUBJECT PROPERTY AND ANY IMPROVEMENTS ARE MAINTAINED IN CONFORMANCE WITH THIS SITE DEVELOPMENT PLAN.
   23. THE DEVELOPMENT SHALL COMPLY WITH ALL STANDARDS OF THE UNIFIED DEVELOPMENT CODE
- (UDC), THE CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND SPECIFICATIONS MANUAL, THE DEVELOPMENT MANUAL AND ALL OTHER APPLICABLE CITY STANDARDS.

  24. THE SITE DEVELOPMENT PLAN SHALL MEET THE UDC STORMWATER REQUIREMENTS.

  25. ALL SIGNAGE REQUIRES A SEPARATE APPLICATION AND APPROVAL FROM THE INSPECTION
- SERVICES DEPARTMENT. NO SIGNAGE IS APPROVED WITH THE SITE DEVELOPMENT PLAN.

  26. SIDEWALKS SHALL BE PROVIDED IN ACCORDANCE WITH THE UDC.

  27. DRIVEWAYS WILL REQUIRE APPROVAL BY THE DEVELOPMENT ENGINEER OF THE CITY OF GEORGETOWN
- OUTDOOR LIGHTING SHALL COMPLY WITH SECTION 7.05 OF THE UDC.
   SCREENING OF MECHANICAL EQUIPMENT, DUMPSTERS AND PARKING SHALL COMPLY WITH CHAPTER 8 OF THE UDC. THE SCREENING IS SHOWN ON THE LANDSCAPE AND ARCHITECTURAL PLANS AS APPLICABLE

30. THE COMPANION LANDSCAPE PLAN HAS BEEN DESIGNED AND PLANT MATERIALS SHALL BE

- INSTALLED TO MEET ALL REQUIREMENTS OF THE UDC.
  31. ALL MAINTENANCE OF REQUIRED LANDSCAPE SHALL COMPLY WITH THE MAINTENANCE STANDARDS OF CHAPTER 8 OF THE UDC.
- 32. A SEPARATE IRRIGATION PLAN SHALL BE REQUIRED AT THE TIME OF BUILDING PERMIT APPLICATION.
  33. FIRE FLOW REQUIREMENTS OF 1,750 GALLONS PER MINUTE ARE BEING MET BY THIS PLAN.
  34. ANY HERITAGE TREE NOTED ON THIS SITE DEVELOPMENT PLAN IS SUBJECT, IN PERPETUITY, TO
- FIRE PROTECTION NOTES

  1. APPROVAL OF THIS SITE PLAN DOES NOT IMPLY APPROVAL TO INSTALL UNDERGROUND FIRE LINES.
- PRIOR TO INSTALLATION OF UNDERGROUND FIRE LINES, A SEPARATE PERMIT SHALL BE SUBMITTED, UNDER GROUND FIRE LINE SUPPLY.

  2. BACKFLOW PROTECTION WILL BE PROVIDED IN ACCORDANCE WITH THE CITY OF GEORGETOWN

THE MAINTENANCE, CAR, PRUNING, AND REMOVAL REQUIREMENTS OF THE UDC.

- REQUIREMENTS WHEN REQUIRED. BACKFLOW PROTECTION WILL BE INSTALLED IN ACCORDANCE WITH THE DETAIL PROVIDED IN THE UTILITY DRAWINGS.

  3. ALL PRIVATE FIRE LINES AND WHAT THEY PROVIDE SERVICE TO WILL BE INSTALLED IN
- ACCORDANCE WITH NFPA 24 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.
- THE GEORGETOWN FIRE MARSHAL'S OFFICE (FMO). ALL JOINT RESTRAINTS AND THRUST BLOCKING SHALL BE UNCOVERED FOR VISUAL INSPECTION.

  6. ALL UNDERGROUND SHALL BE FLUSHED PER THE REQUIREMENTS OF NFPA STANDARD 24 AND WITNESSED BY GEORGETOWN FMO.

5. ALL UNDERGROUND SHALL REMAIN UNCOVERED UNTIL A VISUAL INSPECTION IS CONDUCTED BY

- 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.
- 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.
   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.

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WATER POLLUTION ABATEMENT PLAN GENERAL 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 REGULATED ACTIVITIES. THIS NOTICE MUST
- THE NAME OF THE APPROVED PROJECT;
   THE ACTIVITY START DATE; AND
   THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.

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

  3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED

IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY

SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION, CONSTRUCTION ACTIVITIES MAY

- NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.

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

  5. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
- 6. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.
   7. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER
- 7. SEDIMENT MOST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATE THAN WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.
  8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
- 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

9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED

- INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.

  11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON
- THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
   THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND
   THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
- 12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
  A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT

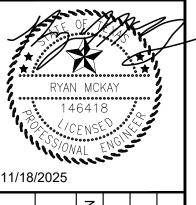
THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;

REQUEST:

- STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;

  B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF
- C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.





DATE
SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JUE
DRAWN BY: JUE

ENERAL NOTES

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JAMS DR, GEORGETOWN, TEXAS

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sheet number

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BUILDING FOOTPRINT.

ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THESE PLANS. CITY (OR TOWN) STANDARD DETAILS AND SPECIFICATIONS, THE FINAL GEOTECHNICAL REPORT AND ALL ISSUED ADDENDA, AND COMMONLY ACCEPTED CONSTRUCTION STANDARDS. THE CITY SPECIFICATIONS SHALL GOVERN WHERE OTHER SPECIFICATIONS DO NOT EXIST. IN CASE OF CONFLICTING

SPECIFICATIONS OR DETAILS, THE MORE RESTRICTIVE SPECIFICATION AND DETAIL SHALL BE FOLLOWED 2. THE CONTRACTOR SHALL COMPLY WITH CITY (OR TOWN) "GENERAL NOTES" FOR CONSTRUCTION, IF EXISTING AND REQUIRED BY THE CITY. FOR INSTANCES WHERE THEY CONFLICT WITH THESE KH GENERAL NOTES, THEN THE MORE RESTRICTIVE SHALL APPLY. 3. THE CONTRACTOR SHALL FURNISH ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE AUTHORITIES' SPECIFICATIONS AND REQUIREMENTS. 4. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO DETERMINE EXISTING CONDITIONS.

5. THE EXISTING CONDITIONS SHOWN ON THESE PLANS WERE PROVIDED BY THE TOPOGRAPHIC SURVEY PREPARED BY THE PROJECT SURVEYOR, AND ARE BASED ON THE BENCHMARKS SHOWN. THE CONTRACTOR SHALL REFERENCE THE SAME BENCHMARKS. 6. THE CONTRACTOR SHALL REVIEW AND VERIFY THE EXISTING TOPOGRAPHIC SURVEY SHOWN ON THE PLANS REPRESENTS EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION, AND SHALL REPORT ANY DISCREPANCIES FOUND TO THE OWNER AND ENGINEER

7. IF THE CONTRACTOR DOES NOT ACCEPT THE EXISTING TOPOGRAPHIC SURVEY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY AT THEIR OWN EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED PROFESSIONAL LAND SURVEYOR TO THE OWNER AND ENGINEER FOR REVIEW. 8. CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION SURVEYING AND STAKING.

9. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL CONTROL, INCLUDING BENCHMARKS PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS. PROPERTY LINES AND CORNERS SHALL BE HELD AS THE HORIZONTAL CONTROL. 10. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS, ELEVATIONS, AND FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ARCHITECT, ENGINEER, AND IF APPLICABLE THE CITY AND OWNER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE CITY, ENGINEER, AND OWNER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM. 11.CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL, LANDSCAPE, MEP, ARCHITECTURAL, AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER/ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY PRIOR TO COMMENCING WITH

12.IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK TO HAVE THEM LOCATE THEIR EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE AN ADEQUATE MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.

13. CONTRACTOR SHALL CALL TEXAS 811 AN ADEQUATE AMOUNT OF TIME PRIOR TO COMMENCING CONSTRUCTION OR ANY EXCAVATION. 14. CONTRACTOR SHALL USE EXTREME CAUTION AS THE SITE CONTAINS VARIOUS KNOWN AND UNKNOWN PUBLIC AND PRIVATE UTILITIES. 15. THE LOCATIONS. ELEVATIONS. DEPTH. AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE UTILITY COMPANY MAPS AND PLANS, AND ARE CONSIDERED APPROXIMATE AND INCOMPLETE. IT SHALL BE THE CONTRACTORS' RESPONSIBILITY TO VERIFY THE PRESENCE, LOCATION, ELEVATION, DEPTH, AND DIMENSION OF EXISTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION SO THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE ENGINEER SHALL BE NOTIFIED WHEN A PROPOSED IMPROVEMENT CONFLICTS WITH AN EXISTING UTILITY.

16. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ANY ADJUSTMENTS AND RELOCATIONS OF EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS. INCLUDING BUT NOT LIMITED TO, ADJUSTING EXISTING MANHOLES TO MATCH PROPOSED GRADE, RELOCATING EXISTING POLES AND GUY WIRES THAT ARE LOCATED IN PROPOSED DRIVEWAYS, ADJUSTING THE HORIZONTAL OR VERTICAL ALIGNMENT OF EXISTING UNDERGROUND UTILITIES TO ACCOMMODATE PROPOSED GRADE OR CROSSING WITH A PROPOSED UTILITY, AND ANY OTHERS THAT MAY BE ENCOUNTERED THAT ARE UNKNOWN AT THIS TIME AND NOT SHOWN ON THESE PLANS

17. CONTRACTOR SHALL ARRANGE FOR OR PROVIDE, AT ITS EXPENSE, ALL GAS, TELECOMMUNICATIONS, CABLE, OVERHEAD AND UNDERGROUND POWER LINE, AND UTILITY POLE ADJUSTMENTS NEEDED. 8 CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION OF FRANCHISE UTILITIES THAT ARE NECESSARY FOR ON-SITE AND OFF-SITE CONSTRUCTION, AND SERVICE TO THE PROPOSED DEVELOPMENT.

19. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL DAMAGES DUE TO THE CONTRACTORS' FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED BY THE CONTRACTOR AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK. 20.BRACING OF UTILITY POLES MAY BE REQUIRED BY THE UTILITY COMPANIES WHEN TRENCHING OR EXCAVATING IN CLOSE PROXIMITY

TO THE POLES. THE COST OF BRACING POLES WILL BE BORNE BY THE CONTRACTOR, WITH NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL TO THE PAY ITEM. 21.CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND POWER LINES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, FEDERAL AND UTILITY OWNER REGULATIONS PERTAINING TO WORK SETBACKS FROM POWER LINES

22.THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED CONSTRUCTION PERMITS, APPROVALS, AND BONDS PRIOR TO CONSTRUCTION. 23. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES A COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, GEOTECHNICAL REPORT AND ADDENDA, PROJECT AND CITY SPECIFICATIONS, AND SPECIAL CONDITIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS FROSION CONTROL PLANS SWPPP AND INSPECTION REPORTS 24.ALL SHOP DRAWINGS AND OTHER DOCUMENTS THAT REQUIRE ENGINEER REVIEW SHALL BE SUBMITTED BY THE CONTRACTOR

SUFFICIENTLY IN ADVANCE OF CONSTRUCTION OF THAT ITEM, SO THAT NO LESS THAN 10 BUSINESS DAYS FOR REVIEW AND RESPONSE 25.ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES, AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO USE OF THE FACILITY AND THE FINAL CONNECTION OF SERVICES. 26.CONTRACTOR SHALL ARRANGE FOR REQUIRED CITY INSPECTIONS.

27.CONTRACTOR'S BID PRICE SHALL INCLUDE ALL INSPECTION FEES 28.ALL SYMBOLS SHOWN ON THESE PLANS (E.G. FIRE HYDRANT, METERS, VALVES, INLETS, ETC....) ARE FOR PRESENTATION PURPOSES ONLY AND ARE NOT TO SCALE. CONTRACTOR SHALL COORDINATE FINAL SIZES AND LOCATIONS WITH APPROPRIATE CITY INSPECTOR. 29. THE SCOPE OF WORK FOR THE CIVIL IMPROVEMENTS SHOWN ON THESE PLANS TERMINATES 5-FEET FROM THE BUILDING. REFERENCE THE BUILDING PLANS (E.G. ARCHITECTURAL, STRUCTURAL, MEP) FOR AREAS WITHIN 5-FEET OF THE BUILDING AND WITHIN THE

30.REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR ALL FINAL BUILDING DIMENSIONS. 31. THE PROPOSED BUILDING FOOTPRINT(S) SHOWN IN THESE PLANS WAS PROVIDED TO KIMLEY-HORN AND ASSOCIATES, INC. (KH) BY THE PROJECT ARCHITECT AT THE TIME THESE PLANS WERE PREPARED. IT MAY NOT BE THE FINAL CORRECT VERSION BECAUSE THE BUILDING DESIGN WAS ONGOING. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFIRMING THE FINAL CORRECT VERSION OF THE BUILDING FOOTPRINT WITH THE ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO LAYOUT. DIMENSIONS AND/OR COORDINATES SHOWN ON THESE PLANS WERE BASED ON THE ABOVE STATED ARCHITECTURAL FOOTPRINT, AND ARE THEREFORE A PRELIMINARY LOCATION OF THE BUILDING. THE CONTRACTOR IS SOLELY RESPONSIBLE TO VERIFY WHAT PART OF THE BUILDING THE ARCHITECT'S FOOTPRINT REPRESENTS (E.G. SLAB, OUTSIDE WALL, MASONRY LEDGE, ETC.....) AND TO CONFIRM ITS FINAL POSITION ON THE SITE

BASED ON THE FINAL ARCHITECTURAL FOOTPRINT, CIVIL DIMENSION CONTROL PLAN, SURVEY BOUNDARY AND/OR PLAT. ANY DIFFERENCES FOUND SHALL BE REPORTED TO KH IMMEDIATELY. 32.ALL CONSTRUCTION SHALL COMPLY WITH THE PROJECT'S FINAL GEOTECHNICAL REPORT (OR LATEST EDITION), INCLUDING SUBSEQUENT ADDENDA

33.CONTRACTOR IS RESPONSIBLE FOR ALL MATERIALS TESTING AND CERTIFICATION, UNLESS SPECIFIED OTHERWISE BY OWNER. ALL MATERIALS TESTING SHALL BE COORDINATED WITH THE APPROPRIATE CITY INSPECTOR AND COMPLY WITH CITY STANDARD SPECIFICATIONS AND GEOTECHNICAL REPORT. TESTING SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY FOR TESTING MATERIALS. OWNER SHALL APPROVE THE AGENCY NOMINATED BY THE CONTRACTOR FOR MATERIALS TESTING. 34.ALL COPIES OF MATERIALS TEST RESULTS SHALL BE SENT TO THE OWNER, ENGINEER AND ARCHITECT DIRECTLY FROM THE TESTING

35.IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SHOW, BY THE STANDARD TESTING PROCEDURES OF THE MATERIALS, THAT THE WORK CONSTRUCTED MEETS THE PROJECT REQUIREMENTS AND CITY SPECIFICATIONS 36.DUE TO THE POTENTIAL FOR DIFFERENTIAL SOIL MOVEMENT ADJACENT TO THE BUILDING, THE CONTRACTOR SHALL ADHERE TO GEOTECHNICAL REPORT'S RECOMMENDATION FOR SUBGRADE PREPARATION SPECIFIC TO FLATWORK ADJACENT TO THE PROPOSED

BUILDING. THE OWNER AND CONTRACTOR ARE ADVISED TO OBTAIN A GEOTECHNICAL ENGINEER RECOMMENDATION SPECIFIC TO FLATWORK ADJACENT TO THE BUILDING, IF NONE IS CURRENTLY EXISTING. 37.ALL CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA. NO ENCROACHMENTS OUTSIDE OF THE WORK AREA WILL BE ALLOWED. ANY DAMAGE RESULTING THEREFROM SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY TO REPAIR. 38. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES. UTILITIES. MANHOLES. POLES. GUY WIRES. VALVE COVERS, VAULT

NO COST TO THE OWNER. 39. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERTY OR PUBLIC IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO: FENCES, WALLS, SIGNS, PAVEMENT, CURBS, UTILITIES, SIDEWALKS, GRASS, TREES, LANDSCAPING, AND IRRIGATION SYSTEMS, ETC .... TO ORIGINAL CONDITION OR BETTER AT NO COST TO THE OWNER. 40.ALL AREAS IN EXISTING RIGHT-OF-WAY DISTURBED BY SITE CONSTRUCTION SHALL BE REPAIRED TO ORIGINAL CONDITION OR BETTER,

LIDS, FIRE HYDRANTS, COMMUNICATION BOXES/PEDESTALS, AND OTHER FACILITIES TO REMAIN AND SHALL REPAIR ANY DAMAGES AT

INCLUDING AS NECESSARY GRADING, LANDSCAPING, CULVERTS, AND PAVEMENT. 41.THE CONTRACTOR SHALL SALVAGE ALL EXISTING POWER POLES, SIGNS, WATER VALVES, FIRE HYDRANTS, METERS, ETC... THAT ARE TO BE RELOCATED DURING CONSTRUCTION 42.CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION, INCLUDING MAINTAINING EXISTING

DITCHES OR CULVERTS FREE OF OBSTRUCTIONS AT ALL TIMES. 43.THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND SUBMITTING A TRENCH SAFETY PLAN, PREPARED BY A PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, TO THE CITY PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY, STATE, AND FEDERAL REQUIREMENTS, INCLUDING OSHA FOR ALL TRENCHES. NO OPEN TRENCHES SHALL BE ALLOWED OVERNIGHT WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY. 44.THE CONTRACTOR SHALL KEEP TRENCHES FREE FROM WATER.

45.SITE SAFETY IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. 46.THESE PLANS DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE ENGINEER'S SEAL HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF ALL REQUIRED SAFETY PROCEDURES AND PROGRAMS.

47.SIGNS RELATED TO SITE OPERATION OR SAFETY ARE NOT INCLUDED IN THESE PLANS. 48.CONTRACTOR OFFICE AND STAGING AREA SHALL BE AGREED ON BY THE OWNER AND CONTRACTOR PRIOR TO BEGINNING OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITTING REQUIREMENTS FOR THE CONSTRUCTION OFFICE, TRAILER, STORAGE, AND STAGING OPERATIONS AND LOCATIONS

49.LIGHT POLES, SIGNS, AND OTHER OBSTRUCTIONS SHALL NOT BE PLACED IN ACCESSIBLE ROUTES. 50.ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM 51.TOP RIM ELEVATIONS OF ALL EXISTING AND PROPOSED MANHOLES SHALL BE COORDINATED WITH TOP OF PAVEMENT OR FINISHED

GRADE AND SHALL BE ADJUSTED TO BE FLUSH WITH THE ACTUAL FINISHED GRADE AT THE TIME OF PAVING. 52.CONTRACTOR SHALL ADJUST ALL EXISTING AND PROPOSED VALVES, FIRE HYDRANTS, AND OTHER UTILITY APPURTENANCES TO MATCH ACTUAL FINISHED GRADES AT THE TIME OF PAVING. 53.THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION SEQUENCING AND PHASING, AND SHALL CONTACT THE APPROPRIATE CITY

OFFICIALS, INCLUDING BUILDING OFFICIAL, ENGINEERING INSPECTOR, AND FIRE MARSHALL TO LEARN OF ANY REQUIREMENTS. 54. CONTRACTOR IS RESPONSIBLE FOR PREPARATION, SUBMITTAL, AND APPROVAL BY THE CITY OF A TRAFFIC CONTROL PLAN PRIOR TO THE START OF CONSTRUCTION, AND THEN THE IMPLEMENTATION OF THE PLAN.

55.CONTRACTOR SHALL KEEP A NEAT AND ACCURATE RECORD OF CONSTRUCTION, INCLUDING ANY DEVIATIONS OR VARIANCES FROM 56.THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT PLANS TO THE ENGINEER AND CITY IDENTIFYING ALL DEVIATIONS

AND VARIATIONS FROM THESE PLANS MADE DURING CONSTRUCTION.

THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL EROSION CONTROL AND WATER QUALITY REQUIREMENTS, LAWS, AND ORDINANCES THAT APPLY TO THE CONSTRUCTION SITE LAND DISTURBANCE.

2. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE "TCEQ GENERAL PERMIT TO DISCHARGE UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM TXR 150000". 3. EROSION CONTROL DEVICES SHOWN ON THE EROSION CONTROL PLAN FOR THE PROJECT SHALL BE INSTALLED PRIOR TO THE START

4. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THE 5. CONTRACTOR IS SOLELY RESPONSIBLE FOR INSTALLATION, IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS OF ALL EROSION

CONTROL DEVICES, BEST MANAGEMENT PRACTICES (BMPS), AND FOR UPDATING THE EROSION CONTROL PLAN DURING CONSTRUCTION AS FIELD CONDITIONS CHANGE. 6. CONTRACTOR SHALL DOCUMENT THE DATES OF INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL FOR EACH BMP

EMPLOYED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IF APPLICABLE. 7. AS STORM SEWER INLETS ARE INSTALLED ON-SITE, TEMPORARY EROSION CONTROL DEVICES SHALL BE INSTALLED AT EACH INLET PER APPROVED DETAILS.

B. THE EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL THE AREA IT PROTECTS HAS BEEN PERMANENTLY STABILIZED. CONTRACTOR SHALL PROVIDE ADEQUATE EROSION CONTROL DEVICES NEEDED DUE TO PROJECT PHASING. 10. CONTRACTOR SHALL OBSERVE THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES AND MAKE FIELD ADJUSTMENTS AND MODIFICATIONS AS NEEDED TO PREVENT SEDIMENT FROM LEAVING THE SITE. IF THE EROSION CONTROL DEVICES DO NOT

EFFECTIVELY CONTROL EROSION AND PREVENT SEDIMENTATION FROM WASHING OFF THE SITE, THEN THE CONTRACTOR SHALL

11 OFF-SITE SOIL BORROW SPOIL AND STORAGE AREAS (IF APPLICABLE) ARE CONSIDERED AS PART OF THE PROJECT SITE AND MUST ALSO COMPLY WITH THE EROSION CONTROL REQUIREMENTS FOR THIS PROJECT. THIS INCLUDES THE INSTALLATION OF BMP'S TO CONTROL EROSION AND SEDIMENTATION AND THE ESTABLISHMENT OF PERMANENT GROUND COVER ON DISTURBED AREAS PRIOR TO FINAL APPROVAL OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE SWPPP AND EROSION CONTROL PLAN TO INCLUDE BMPS FOR ANY OFF-SITE THAT ARE NOT ANTICIPATED OR SHOWN ON THE EROSION CONTROL PLAN.

12. ALL STAGING, STOCKPILES, SPOIL, AND STORAGE SHALL BE LOCATED SUCH THAT THEY WILL NOT ADVERSELY AFFECT STORM WATER QUALITY. PROTECTIVE MEASURES SHALL BE PROVIDED IF NEEDED TO ACCOMPLISH THIS REQUIREMENT, SUCH AS COVERING OR ENCIRCLING THE AREA WITH AN APPROPRIATE BARRIER. 13. CONTRACTORS SHALL INSPECT ALL EROSION CONTROL DEVICES, BMPS, DISTURBED AREAS, AND VEHICLE ENTRY AND EXIT AREAS

WEEKLY AND WITHIN 24 HOURS OF ALL RAINFALL EVENTS OF 0.5 INCHES OR GREATER, AND KEEP A RECORD OF THIS INSPECTION IN THE SWPPP BOOKLET IF APPLICABLE. TO VERIFY THAT THE DEVICES AND EROSION CONTROL PLAN ARE FUNCTIONING PROPERLY 14. CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT ALL PRIMARY POINTS OF ACCESS IN ACCORDANCE WITH CITY SPECIFICATIONS. CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION TRAFFIC USES THE STABILIZED ENTRANCE AT ALL TIMES FOR ALL INGRESS/EGRESS

15. SITE ENTRY AND EXITS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING AND FLOWING OF SEDIMENT AND DIRT ONTO OFF-SITE ROADWAYS. ALL SEDIMENT AND DIRT FROM THE SITE THAT IS DEPOSITED ONTO AN OFF-SITE ROADWAY SHALL BE 7. RETAINING WALL DESIGN SHALL BE PROVIDED BY OTHERS AND SHALL FIT IN THE WALL ZONE OR LOCATION SHOWN ON THESE PLANS. REMOVED IMMEDIATELY 16. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SILT AND DEBRIS FROM THE AFFECTED OFF-SITE ROADWAYS THAT ARE A

RESULT OF THE CONSTRUCTION, AS REQUESTED BY OWNER AND CITY. AT A MINIMUM, THIS SHOULD OCCUR ONCE PER DAY FOR THE OFF-SITE ROADWAYS. 17. WHEN WASHING OF VEHICLES IS REQUIRED TO REMOVE SEDIMENT PRIOR TO EXITING THE SITE, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP BMP.

18. CONTRACTOR SHALL INSTALL A TEMPORARY SEDIMENT BASIN FOR ANY ON-SITE DRAINAGE AREAS THAT ARE GREATER THAN 10 ACRES, PER TCEQ AND CITY STANDARDS. IF NO ENGINEERING DESIGN HAS BEEN PROVIDED FOR A SEDIMENTATION BASIN ON THESE PLANS, THEN THE CONTRACTOR SHALL ARRANGE FOR AN APPROPRIATE DESIGN TO BE PROVIDED.

19 ALL FINES IMPOSED FOR SEDIMENT OR DIRT DISCHARGED FROM THE SITE SHALL BE PAID BY THE RESPONSIBLE CONTRACTOR 20. WHEN SEDIMENT OR DIRT HAS CLOGGED THE CONSTRUCTION ENTRANCE VOID SPACES BETWEEN STONES OR DIRT IS BEING TRACKED ONTO A ROADWAY, THE AGGREGATE PAD MUST BE WASHED DOWN OR REPLACED. RUNOFF FROM THE WASH-DOWN OPERATION SHALL NOT BE ALLOWED TO DRAIN DIRECTLY OFF SITE WITHOUT FIRST FLOWING THROUGH ANOTHER BMP TO CONTROL SEDIMENTATION. PERIODIC RE-GRADING OR NEW STONE MAY BE REQUIRED TO MAINTAIN THE EFFECTIVENESS OF THE CONSTRUCTION ENTRANCE. 21.TEMPORARY SEEDING OR OTHER APPROVED STABILIZATION SHALL BE INITIATED WITHIN 14 DAYS OF THE LAST DISTURBANCE OF ANY AREA, UNLESS ADDITIONAL CONSTRUCTION IN THE AREA IS EXPECTED WITHIN 21 DAYS OF THE LAST DISTURBANCE. 22.CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING CONSTRUCTION, ALWAYS CLEANING UP DIRT, LOOSE MATERIAL, AND TRASH AS CONSTRUCTION PROGRESSES. 23.UPON COMPLETION OF FINE GRADING, ALL SURFACES OF DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED. STABILIZATION IS

ACHIEVED WHEN THE AREA IS EITHER COVERED BY PERMANENT IMPERVIOUS STRUCTURES, SUCH AS BUILDINGS, SIDEWALK, PAVEMENT. OR A UNIFORM PERENNIAL VEGETATIVE COVER. 24.AT THE CONCLUSION OF THE PROJECT, ALL INLETS, DRAIN PIPE, CHANNELS, DRAINAGEWAYS AND BORROW DITCHES AFFECTED BY THE CONSTRUCTION SHALL BE DREDGED, AND THE SEDIMENT GENERATED BY THE PROJECT SHALL BE REMOVED AND DISPOSED IN ACCORDANCE WITH APPLICABLE REGULATIONS.

STORM WATER DISCHARGE AUTHORIZATION

. CONTRACTOR SHALL COMPLY WITH ALL TCEQ AND EPA STORM WATER POLLUTION PREVENTION REQUIREMENTS 2. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE TCEQ GENERAL PERMIT TO DISCHARGE UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM TXR 150000 3. THE CONTRACTOR SHALL ENSURE THAT ALL PRIMARY OPERATORS SUBMIT A NOI TO TCEQ AT LEAST SEVEN DAYS PRIOR TO

COMMENCING CONSTRUCTION (IF APPLICABLE), OR IF UTILIZING ELECTRONIC SUBMITTAL, PRIOR TO COMMENCING CONSTRUCTION. ALL PRIMARY OPERATORS SHALL PROVIDE A COPY OF THE SIGNED NOI TO THE OPERATOR OF ANY MS4 (TYPICALLY THE CITY) 4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IF

APPLICABLE, INCLUDING POSTING SITE NOTICE, INSPECTIONS, DOCUMENTATION, AND SUBMISSION OF ANY INFORMATION REQUIRED BY THE TCEQ AND EPA (E.G. NOI). ALL CONTRACTORS AND SUBCONTRACTORS PROVIDING SERVICES RELATED TO THE SWPPP SHALL SIGN THE REQUIRED CONTRACTOR CERTIFICATION STATEMENT ACKNOWLEDGING THEIR RESPONSIBILITIES AS SPECIFIED IN THE SWPPP. 6. A COPY OF THE SWPPP, INCLUDING NOI, SITE NOTICE, CONTRACTOR CERTIFICATIONS, AND ANY REVISIONS, SHALL BE SUBMITTED TO THE CITY BY THE CONTRACTOR AND SHALL BE RETAINED ON-SITE DURING CONSTRUCTION.

7. A NOTICE OF TERMINATION (NOT) SHALL BE SUBMITTED TO TCEQ BY ANY PRIMARY OPERATOR WITHIN 30 DAYS AFTER ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND A UNIFORM VEGETATIVE COVER HAS BEEN ESTABLISHED ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY STRUCTURES, A TRANSFER OF OPERATIONAL CONTROL HAS OCCURRED, OR THE OPERATOR HAS OBTAINED ALTERNATIVE AUTHORIZATION UNDER A DIFFERENT PERMIT. A COPY OF THE NOT SHALL BE PROVIDED TO THE OPERATOR OF ANY MS4 RECEIVING DISCHARGE FROM THE SITE.

INFORMATION

. KH IS NOT RESPONSIBLE FOR THE MEANS AND METHODS EMPLOYED BY THE CONTRACTOR TO IMPLEMENT THIS DEMOLITION PLAN. THIS PRELIMINARY DEMOLITION PLAN SIMPLY INDICATES THE KNOWN OBJECTS ON THE SUBJECT TRACT THAT ARE TO BE DEMOLISHED AND REMOVED FROM THE SITE 2. KH DOES NOT WARRANT OR REPRESENT THAT THE PLAN. WHICH WAS PREPARED BASED ON SURVEY AND UTILITY INFORMATION PROVIDED BY OTHERS, SHOWS ALL IMPROVEMENTS AND UTILITIES, THAT THE IMPROVEMENTS AND UTILITIES ARE SHOWN ACCURATELY, OR THAT THE UTILITIES SHOWN CAN BE REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ITS OWN SITE RECONNAISSANCE TO SCOPE ITS WORK AND TO CONFIRM WITH THE OWNERS OF IMPROVEMENTS AND UTILITIES THE ABILITY AND

PROCESS FOR THE REMOVAL OF THEIR FACILITIES. 3. THIS PLAN IS INTENDED TO GIVE A GENERAL GUIDE TO THE CONTRACTOR, NOTHING MORE. THE GOAL OF THE DEMOLITION IS TO LEAVE THE SITE IN A STATE SUITABLE FOR THE CONSTRUCTION OF THE PROPOSED DEVELOPMENT. REMOVAL OR PRESERVATION OF IMPROVEMENTS, UTILITIES, ETC. TO ACCOMPLISH THIS GOAL ARE THE RESPONSIBILITY OF THE CONTRACTOR.

4. CONTRACTOR IS STRONGLY CAUTIONED TO REVIEW THE FOLLOWING REPORTS DESCRIBING SITE CONDITIONS PRIOR TO BIDDING AND IMPLEMENTING THE DEMOLITION PLAN-a. ENVIRONMENTAL SITE ASSESSMENT PROVIDED BY THE OWNER.

. ASBESTOS BUILDING INSPECTION REPORT(S) PROVIDED BY THE OWNER, c. GEOTECHNICAL REPORT PROVIDED BY THE OWNER. d. OTHER REPORTS THAT ARE APPLICABLE AND AVAILABLE.

5 CONTRACTOR SHALL CONTACT THE OWNER TO VERIEV WHETHER ADDITIONAL REPORTS OR AMENDMENTS TO THE ABOVE CITED. REPORTS HAVE BEEN PREPARED AND TO OBTAIN/REVIEW/AND COMPLY WITH THE RECOMMENDATION OF SUCH STUDIES PRIOR TO STARTING ANY WORK ON THE SITE.

6. CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS REGARDING THE DEMOLITION OF OBJECTS ON THE SITE AND THE DISPOSAL OF THE DEMOLISHED MATERIALS OFF-SITE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO REVIEW THE SITE DETERMINE THE APPLICABLE REGULATIONS RECEIVE THE REQUIRED PERMITS AND AUTHORIZATIONS AND COMPLY . KH DOES NOT REPRESENT THAT THE REPORTS AND SURVEYS REFERENCED ABOVE ARE ACCURATE, COMPLETE, OR COMPREHENSIVE

SHOWING ALL ITEMS THAT WILL NEED TO BE DEMOLISHED AND REMOVED. 8. SURFACE PAVEMENT INDICATED MAY OVERLAY OTHER HIDDEN STRUCTURES, SUCH AS ADDITIONAL LAYERS OF PAVEMENT FOUNDATIONS OR WALLS, THAT ARE ALSO TO BE REMOVED.

1. THE CONTRACTOR AND GRADING SUBCONTRACTOR SHALL VERIFY THE SUITABILITY OF EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE START OF CONSTRUCTION. THE CIVIL ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.

CONTRACTOR SHALL OBTAIN ANY REQUIRED GRADING PERMITS FROM THE CITY. 3. UNLESS OTHERWISE NOTED, PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN IN PAVED AREA REFLECT TOP OF PAVEMENT SURFACE. IN LOCATIONS ALONG A CURB LINE, ADD 6-INCHES (OR THE HEIGHT OF THE CURB) TO THE PAVING GRADE FOR TOP OF CURB 4. PROPOSED SPOT ELEVATIONS AND CONTOURS OUTSIDE THE PAVEMENT ARE TO TOP OF FINISHED GRADE.

5. PROPOSED CONTOURS ARE APPROXIMATE. PROPOSED SPOT ELEVATIONS AND DESIGNATED GRADIENT ARE TO BE USED IN CASE OF DISCREPANCY. ALL FINISHED GRADES SHALL TRANSITION UNIFORMLY BETWEEN THE FINISHED ELEVATIONS SHOWN 7. CONTOURS AND SPOT GRADES SHOWN ARE ELEVATIONS OF TOP OF THE FINISHED SURFACE. WHEN PERFORMING THE GRADING OPERATIONS, THE CONTRACTOR SHALL PROVIDE AN APPROPRIATE ELEVATION HOLD-DOWN ALLOWANCE FOR THE THICKNESS OF

PAVEMENT, SIDEWALK, TOPSOIL, MULCH, STONE, LANDSCAPING, RIP-RAP AND ALL OTHER SURFACE MATERIALS THAT WILL CONTRIBUTE TO THE TOP OF FINISHED GRADE. FOR EXAMPLE, THE LIMITS OF EARTHWORK IN PAVED AREAS IS THE BOTTOM OF THE 8. NO REPRESENTATIONS OF EARTHWORK QUANTITIES OR SITE BALANCE ARE MADE BY THESE PLANS. THE CONTRACTOR SHALL PROVIDE THEIR OWN EARTHWORK CALCULATION TO DETERMINE THEIR CONTRACT QUANTITIES AND COST. ANY SIGNIFICANT VARIANCE FROM A BALANCED SITE SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CIVIL ENGINEER.

9. ALL GRADING AND EARTHWORK SHALL COMPLY WITH THE PROJECT'S FINAL GEOTECHNICAL REPORT (OR LATEST EDITION), INCLUDING 10. ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED. UNUSABLE EXCAVATED MATERIAL AND ALL WASTE RESULTING FROM SITE CLEARING AND GRUBBING SHALL BE REMOVED FROM THE SITE AND APPROPRIATELY DISPOSED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE 11. EROSION CONTROL DEVICES SHOWN ON THE EROSION CONTROL PLAN FOR THE PROJECT SHALL BE INSTALLED PRIOR TO THE START OF GRADING. REFERENCE EROSION CONTROL PLAN, DETAILS, GENERAL NOTES, AND SWPPP FOR ADDITIONAL INFORMATION AND

12.BEFORE ANY EARTHWORK IS PERFORMED, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF THE PROJECT'S PROPERTY LINE AND SITE IMPROVEMENTS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGINEERING AND SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK. 13. CONTRACTOR TO DISPOSE OF ALL EXCESS EXCAVATION MATERIALS IN A MANNER THAT ADHERES TO LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS. THE CONTRACTOR SHALL KEEP A RECORD OF WHERE EXCESS EXCAVATION WAS DISPOSED, ALONG WITH

THE RECEIVING LANDOWNER'S APPROVAL TO DO SO. 14. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF TOPSOIL AT THE COMPLETION OF FINE GRADING. CONTRACTOR SHALL REFER TO LANDSCAPE ARCHITECTURE PLANS FOR SPECIFICATIONS AND REQUIREMENTS FOR TOPSOIL. 15. CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION, INCLUDING MAINTAINING EXISTING DITCHES OR CULVERTS FREE OF OBSTRUCTIONS AT ALL TIMES.

16.NO EARTHWORK FILL SHALL BE PLACED IN ANY EXISTING DRAINAGE WAY, SWALE, CHANNEL, DITCH, CREEK, OR FLOODPLAIN FOR ANY REASON OR ANY LENGTH OF TIME, UNLESS THESE PLANS SPECIFICALLY INDICATE THIS IS REQUIRED. 17. TEMPORARY CULVERTS MAY BE REQUIRED IN SOME LOCATIONS TO CONVEY RUN-OFF. 18. REFER TO DIMENSION CONTROL PLAN, AND PLAT FOR HORIZONTAL DIMENSIONS.

19. THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND CONDITION FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS. THE FILL MATERIAL TO BE USED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO 20.CONTRACTOR IS RESPONSIBLE FOR ALL SOILS TESTING AND CERTIFICATION, UNLESS SPECIFIED OTHERWISE BY OWNER. ALL SOILS TESTING SHALL BE COORDINATED WITH THE APPROPRIATE CITY INSPECTOR AND SHALL COMPLY WITH CITY STANDARD

SPECIFICATIONS AND THE GEOTECHNICAL REPORT. SOILS TESTING SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY FOR TESTING SOILS. THE OWNER SHALL APPROVE THE AGENCY NOMINATED BY THE CONTRACTOR FOR SOILS TESTING. 21.ALL COPIES OF SOILS TEST RESULTS SHALL BE SENT TO THE OWNER, ENGINEER AND ARCHITECT DIRECTLY FROM THE TESTING 22.IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SHOW, BY THE STANDARD TESTING PROCEDURES OF THE SOILS, THAT THE WORK CONSTRUCTED MEETS THE PROJECT REQUIREMENTS AND CITY SPECIFICATIONS. 23.THE SCOPE OF WORK FOR CIVIL IMPROVEMENT SHOWN ON THESE PLANS TERMINATES 5-FEET FROM THE BUILDING. CONTRACTOR

IN THE BUILDING PAD. 24.DUE TO THE POTENTIAL FOR DIFFERENTIAL SOIL MOVEMENT ADJACENT TO THE BUILDING, THE CONTRACTOR SHALL ADHERE TO GEOTECHNICAL REPORT'S RECOMMENDATION FOR SUBGRADE PREPARATION SPECIFIC TO FLATWORK ADJACENT TO THE PROPOSED BUILDING. THE OWNER AND CONTRACTOR ARE ADVISED TO OBTAIN A GEOTECHNICAL ENGINEER RECOMMENDATION SPECIFIC TO FLATWORK ADJACENT TO THE BUILDING. IF NONE IS CURRENTLY EXISTING. 25.CONTRACTOR SHALL ENSURE THAT SUFFICIENT POSITIVE SLOPE AWAY FROM THE BUILDING PAD IS ACHIEVED FOR ENTIRE PERIMETER OF THE PROPOSED BUILDING(S) DURING GRADING OPERATIONS AND IN THE FINAL CONDITION. IF THE CONTRACTOR OBSERVES THAT

SHALL REFER TO THE GEOTECHNICAL REPORT AND STRUCTURAL PLANS AND SPECIFICATIONS FILL, CONDITIONING, AND PREPARATION

THIS WILL NOT BE ACHIEVED, THE CONTRACTOR SHALL CONTACT THE ENGINEER TO REVIEW THE LOCATION 26.THE CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST. CONTRACTOR SHALL CONTROL DUST BY SPRINKLING WATER, OR BY OTHER MEANS APPROVED BY THE CITY, AT NO ADDITIONAL COST TO THE OWNER. 27.CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES FOR ANY REQUIRED UTILITY ADJUSTMENTS AND/OR RELOCATIONS NEEDED FOR GRADING OPERATIONS AND TO ACCOMMODATE PROPOSED GRADE, INCLUDING THE UNKNOWN UTILITIES NOT SHOWN ON THESE PLANS. CONTRACTOR SHALL REFER TO THE GENERAL NOTES "OVERALL" SECTION THESE PLANS FOR ADDITIONAL

28.EXISTING TREE LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. CONTRACTOR SHALL REPORT ANY DISCREPANCIES FOUND IN THE FIELD THAT AFFECT THE GRADING PLAN TO THE CIVIL ENGINEER. 29. CONTRACTOR SHALL FIELD VERIFY ALL PROTECTED TREE LOCATIONS, INDIVIDUAL PROTECTED TREE CRITICAL ROOT ZONES, AND PROPOSED SITE GRADING, AND NOTIFY THE CIVIL ENGINEER AND LANDSCAPE ARCHITECT OF ANY CONFLICTS WITH THE TREE PRESERVATION PLAN BY THE LANDSCAPE ARCHITECT PRIOR TO COMMENCING THE WORK. 30.TREE PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY STANDARD TREE PROTECTION DETAILS AND THE

APPROVED TREE PRESERVATION PLANS BY THE LANDSCAPE ARCHITECT 31.CONTRACTOR SHALL REFER TO THE LANDSCAPING AND TREE PRESERVATIONS PLANS FOR ALL INFORMATION AND DETAILS REGARDING EXISTING TREES TO BE REMOVED AND PRESERVED.

32.NO TREE SHALL BE REMOVED UNLESS A TREE REMOVAL PERMIT HAS BEEN ISSUED BY THE CITY, OR CITY HAS OTHERWISE CONFIRMED IN WRITING THAT ONE IS NOT NEEDED FOR THE TREE(S) 33.NO TREE SHALL BE REMOVED OR DAMAGED WITHOUT PRIOR AUTHORIZATION OF THE OWNER OR OWNER'S REPRESENTATIVE

EXISTING TREES SHALL BE PRESERVED WHENEVER POSSIBLE AND GRADING IMPACT TO THEM HELD TO A MINIMUM. 34 AFTER PLACEMENT OF SURGRADE AND PRIOR TO PLACEMENT OF PAVEMENT, CONTRACTOR SHALL TEST AND OBSERVE PAVEMENT

AREAS FOR EVIDENCE OF PONDING AND INADEQUATE SLOPE FOR DRAINAGE. ALL AREAS SHALL ADEQUATELY DRAIN TOWARDS THE INTENDED STRUCTURE TO CONVEY STORMWATER RUNOFF. CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER AND ENGINEER IF ANY AREAS OF POOR DRAINAGE ARE DISCOVERED 35.CONTRACTOR FIELD ADJUSTMENT OF PROPOSED SPOT GRADES IS ALLOWED, IF THE APPROVAL OF THE CIVIL ENGINEER IS OBTAINED.

. RETAINING WALLS SHOWN ARE FOR SITE GRADING PURPOSES ONLY, AND INCLUDE ONLY LOCATION AND SURFACE SPOT ELEVATIONS AT THE TOP AND BOTTOM OF THE WALL. 2. RETAINING WALL TYPE OR SYSTEM SHALL BE SELECTED BY THE OWNER.

STRUCTURAL DESIGN AND PERMITTING OF RETAINING WALLS, RAILINGS, AND OTHER WALL SAFETY DEVICES SHALL BE PERFORMED BY A LICENSED ENGINEER AND ARE NOT PART OF THIS PLAN SET. 4. RETAINING WALL DESIGN SHALL MEET THE INTENT OF THE GRADING PLAN AND SHALL ACCOUNT FOR ANY INFLUENCE ON ADJACENT BUILDING FOUNDATIONS, UTILITIES, PROPERTY LINES AND OTHER CONSTRUCTABILITY NOTES. RETAINING WALL ENGINEER SHALL CONSULT THESE PLANS AND THE GEOTECHNICAL REPORT FOR POTENTIAL CONFLICTS.

1. ALL PAVING MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS. THE CITY STANDARD DETAILS AND SPECIFICATIONS, THE FINAL GEOTECHNICAL REPORT AND ALL ISSUED ADDENDA, AND COMMONLY ACCEPTED CONSTRUCTION STANDARDS. THE CITY SPECIFICATIONS SHALL GOVERN WHERE OTHER SPECIFICATIONS DO NOT EXIST. IN CASE OF CONFLICTING SPECIFICATIONS OR DETAILS, THE MORE RESTRICTIVE SPECIFICATION/DETAIL SHALL BE FOLLOWED 2. ALL PRIVATE ON-SITE PAVING AND PAVING SUBGRADE SHALL COMPLY WITH THE PROJECT'S FINAL GEOTECHNICAL REPORT (OR LATEST

EDITION), INCLUDING ALL ADDENDA. 3. ALL FIRÉLANE PAVING AND PAVING SUBGRADE SHALL COMPLY WITH CITY STANDARDS AND DETAILS. IF THESE ARE DIFFERENT THAN THOSE IN THE GEOTECHNICAL REPORT. THEN THE MORE RESTRICTIVE SHALL BE FOLLOWED 4. ALL PUBLIC PAVING AND PAVING SUBGRADE SHALL COMPLY WITH CITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS 5. CONTRACTOR IS RESPONSIBLE FOR ALL PAVING AND PAVING SUBGRADE TESTING AND CERTIFICATION, UNLESS SPECIFIED OTHERWISE

BY OWNER. ALL PAVING AND PAVING SUBGRADE TESTING SHALL BE COORDINATED WITH THE APPROPRIATE CITY INSPECTOR. TESTING SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY FOR TESTING PAVING AND SUBGRADE. OWNER SHALL APPROVE THE AGENCY NOMINATED BY THE CONTRACTOR FOR PAVING AND PAVING SUBGRADE TESTING 6. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SHOW, BY THE STANDARD TESTING PROCEDURES OF THE PAVING AND PAVING SUBGRADE, THAT THE WORK CONSTRUCTED MEETS THE PROJECT REQUIREMENTS AND CITY SPECIFICATIONS. 7. DUE TO THE POTENTIAL FOR DIFFERENTIAL SOIL MOVEMENT ADJACENT TO THE BUILDING, THE CONTRACTOR SHALL ADHERE TO

GEOTECHNICAL REPORT'S RECOMMENDATION FOR SUBGRADE PREPARATION SPECIFIC TO FLATWORK ADJACENT TO THE PROPOSED BUILDING. THE OWNER AND CONTRACTOR ARE ADVISED TO OBTAIN A GEOTECHNICAL ENGINEER RECOMMENDATION SPECIFIC TO FLATWORK ADJACENT TO THE BUILDING, IF NONE IS CURRENTLY EXISTING. 8. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BASED ON THE CITY STANDARD CONSTRUCTION DETAIL AND SPECIFICATIONS

SHALL HAVE A DETECTABLE WARNING SURFACE THAT IS FULL WIDTH AND FULL DEPTH OF THE CURB RAMP, NOT INCLUDING FLARES. 10. ALL ACCESSIBLE RAMPS, CURB RAMPS, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA AND TAS STANDARDS, LATEST 11. ANY COMPONENTS OF THE PROJECT SUBJECT TO RESIDENTIAL USE SHALL ALSO CONFORM TO THE FAIR HOUSING ACT. AND COMPLY WITH THE FAIR HOUSING ACT DESIGN MANUAL BY THE US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.

9. PRIVATE CURB RAMPS ON THE SITE (I.E. OUTSIDE PUBLIC STREET RIGHT-OF-WAY) SHALL CONFORM TO ADA AND TAS STANDARDS AND

12 CONTRACTOR SHALL CONSTRUCT PROPOSED PAVEMENT TO MATCH EXISTING PAVEMENT WITH A SMOOTH FLUSH CONNECTION. 13. CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS FOR FIRE LANES, PARKING STALLS, HANDICAPPED PARKING SYMBOLS, AND MISCELLANEOUS STRIPING WITHIN PARKING LOT AND AROUND BUILDING AS SHOWN ON THE PLANS. ALL PAINT AND PAVEMENT MARKINGS SHALL ADHERE TO CITY AND OWNER STANDARDS. 14. REFER TO GEOTECHNICAL REPORT FOR PAVING JOINT LAYOUT PLAN REQUIREMENTS FOR PRIVATE PAVEMENT.

15. REFER TO CITY STANDARD DETAILS AND SPECIFICATIONS FOR JOINT LAYOUT PLAN REQUIREMENTS FOR PUBLIC PAVEMENT 16. ALL REINFORCING STEEL SHALL CONFORM TO THE GEOTECHNICAL REPORT, CITY STANDARDS, AND ASTM A-615, GRADE 60, AND SHALL BE SUPPORTED BY BAR CHAIRS. CONTRACTOR SHALL USE THE MORE STRINGENT OF THE CITY AND GEOTECHNICAL STANDARDS. 17. ALL JOINTS SHALL EXTEND THROUGH THE CURB 18. THE MINIMUM LENGTH OF OFFSET JOINTS AT RADIUS POINTS SHALL BE 2 FEET.

19. CONTRACTOR SHALL SUBMIT A JOINTING PLAN TO THE ENGINEER AND OWNER PRIOR TO BEGINNING ANY OF THE PAVING WORK.

20.ALL SAWCUTS SHALL BE FULL DEPTH FOR PAVEMENT REMOVAL AND CONNECTION TO EXISTING PAVEMENT

21.FIRE LANES SHALL BE MARKED AND LABELED AS A FIRELANE PER CITY STANDARDS 22.UNLESS THE PLANS SPECIFICALLY DICTATE TO THE CONTRARY. ON-SITE AND OTHER DIRECTIONAL SIGNS SHALL BE ORIENTED SC THEY ARE READILY VISIBLE TO THE ONCOMING TRAFFIC FOR WHICH THEY ARE INTENDED. 23.CONTRACTOR IS RESPONSIBLE FOR INSTALLING NECESSARY CONDUIT FOR LIGHTING, IRRIGATION, ETC. PRIOR TO PLACEMENT OF PAVEMENT. ALL CONSTRUCTION DOCUMENTS (CIVIL, MEP, LANDSCAPE, IRRIGATION, AND ARCHITECT) SHALL BE CONSULTED.

24.BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA, TAS, AND FHA) EXIST TO AND FROM EVERY DOOR AND ALONG SIDEWALKS. ACCESSIBLE PARKING SPACES. ACCESS AISLES. AND ACCESSIBLE ROUTES. IN NO CASE SHALL AN ACCESSIBLE RAMP SLOPE EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPE EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPE EXCEED 5.0 PERCENT. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION 25.CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO VERIFY THAT ADA/TAS SLOPE REQUIREMENTS ARE PROVIDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EVCS EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR ADA AND TAS SLOPE COMPLIANCE ISSUES.

. ALL STORM SEWER MATERIALS AND CONSTRUCTION SHALL COMPLY WITH CITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS. 2. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF

THE STORM SEWER 3. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE, CONDITION, HORIZONTAL, AND VERTICAL LOCATIONS OF ALL EXISTING STORM SEWER FACILITIES THAT ARE TO BE CONNECTED TO, PRIOR TO START OF CONSTRUCTION OF ANY STORM SEWER, AND SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS DISCOVERED. 4. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION KH OF CURB INLETS AND GRATE INLETS AND ALL UTILITIES CROSSING THE STORM SEWER.

5. FLOW LINE, TOP-OF-CURB, RIM, THROAT, AND GRATE ELEVATIONS OF PROPOSED INLETS SHALL BE VERIFIED WITH THE GRADING PLAN LAT AND FIELD CONDITIONS PRIOR TO THEIR INSTALLATION. 6. ALL PUBLIC STORM SEWER CONSTRUCTION, PIPE, STRUCTURES, AND FITTINGS SHALL ADHERE TO CITY PUBLIC WORKS STANDARD DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL ARRANGE FOR REQUIRED CITY INSPECTIONS.

7. ALL PRIVATE STORM SEWER CONSTRUCTION, PIPE, STRUCTURES, AND FITTINGS SHALL ADHERE TO THE APPLICABLE PLUMBING CODE. CONTRACTOR SHALL ARRANGE FOR REQUIRED CITY INSPECTIONS. 8. ALL PVC TO RCP CONNECTIONS AND ALL STORM PIPE CONNECTIONS ENTERING STRUCTURES OR OTHER STORM PIPES SHALL HAVE A CONCRETE COLLAR AND BE GROUTED TO ASSURE THE CONNECTION IS WATERTIGHT. 9. ALL PUBLIC STORM SEWER LINES SHALL BE MINIMUM CLASS III RCP. PRIVATE STORM SEWER LINES 18-INCHES AND GREATER SHALL BE CLASS III RCP OR OTHER APPROVED MATERIAL

10. WHERE COVER EXCEEDS 20-FEET OR IS LESS THAN 2-FEET, CLASS IV RCP SHALL BE USED. 11.IF CONTRACTOR PROPOSES TO USE HDPE OR PVC IN LIEU OF RCP FOR PRIVATE STORM SEWER, CONTRACTOR SHALL SUBMIT TECHNICAL DATA TO THE OWNER, ENGINEER AND CITY ENGINEER/INSPECTOR FOR APPROVAL PRIOR TO ORDERING THE MATERIAL. ANY PROPOSED HDPE AND PVC SHALL BE WATERTIGHT.

12. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION SURVEYING FOR ALL STORM SEWER LINES. 13.EMBEDMENT FOR ALL STORM SEWER LINES, PUBLIC OR PRIVATE, SHALL BE PER CITY STANDARD DETAILS. 14. ALL WYE CONNECTIONS AND PIPE BENDS ARE TO BE PREFABRICATED AND INSTALLED PER MANUFACTURERS SPECIFICATIONS. 15. USE 4 FOOT JOINTS WITH BEVELED ENDS IF RADIUS OF STORM SEWER IS LESS THAN 100 FEET. 16. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND SUBMITTING A TRENCH SAFETY PLAN, PREPARED BY A PROFESSIONAL

ENGINEER IN THE STATE OF TEXAS, TO THE CITY PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY, STATE, AND FEDERAL REQUIREMENTS, INCLUDING OSHA FOR ALL TRENCHES. NO OPEN TRENCHES SHALL BE ALLOWED OVERNIGHT WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY. 17. THE CONTRACTOR SHALL KEEP TRENCHES FREE FROM WATER.

ANY PONDS THAT ARE INTENDED TO HOLD WATER INDEFINITELY SHALL BE CONSTRUCTED WATERTIGHT 2. FOR ANY PONDS INTENDED TO HOLD WATER INDEFINITELY: THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR POND LINER SPECIFICATIONS

3. A GEOTECHNICAL ENGINEER SHALL REVIEW AND APPROVE ALL POND LINER MATERIAL, PLACEMENT PROCEDURES, AND PROVIDE TESTING TO ENSURE THE POND LINER MATERIAL PLACED IS WATERTIGHT. 4. STORM SEWER PIPES AND HEADWALLS THAT CONNECT TO A POND INTENDED TO HOLD WATER INDEFINITELY SHALL BE INSTALLED WITH WATERTIGHT JOINTS TO AT LEAST 1-FOOT ABOVE THE NORMAL POOL WATER SURFACE ELEVATION. 5. ANY GRAVEL OR OTHER PERVIOUS EMBEDMENT AROUND PIPES OR OUTFALL STRUCTURES NEAR THE POND SHALL BE ELIMINATED FOR

AT LEAST 20-FEET FROM THE POND SO NO ROUTE FOR WATER TO LEAK THROUGH THE EMBEDMENT MATERIAL IS PROVIDED. BACKFILL SS IN THESE AREAS SHALL BE OF IMPERVIOUS MATERIAL. 6. FOR ANY PONDS INTENDED TO HOLD WATER INDEFINITELY: THE WATER LEVEL FOLLOWING COMPLETION AND FILLING OF THE POND SHALL BE MONITORED BY THE CONTRACTOR FOR AT LEAST 60 DAYS TO OBSERVE WATER INFLOW, OUTFLOW, AND CALCULATE EVAPORATION TO VERIFY THAT THE POND IS WATERTIGHT

7. FOR ANY PONDS INTENDED TO HOLD WATER INDEFINITELY: THE POND WATER LEVEL SHALL ALSO BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION SO THAT IT REMAINS FULL TO ITS DESIGN WATER LEVEL, AND IS NOT LOWERED. AS THIS MAY DRY-OUT THE POND LINER AND RISK ITS WATERTIGHT PROPERTIES.

. ALL WATER AND WASTEWATER MATERIALS AND CONSTRUCTION SHALL COMPLY WITH CITY STANDARD CONSTRUCTION DETAILS AND

2. CONTRACTOR SHALL FIELD VERIFY THE SIZE, CONDITION, HORIZONTAL, AND VERTICAL LOCATIONS OF ALL EXISTING WATER AND WASTEWATER FACILITIES THAT ARE TO BE CONNECTED TO, PRIOR TO START OF CONSTRUCTION OF ANY WATER OR WASTEWATER CONSTRUCTION, AND SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS DISCOVERED. 3. CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF

ALL UTILITY SERVICES ENTERING THE BUILDING. 4. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATION OF ALL UTILITY CROSSINGS PRIOR TO THE INSTALLATION OF ANY PIPE 5. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE WATER AND WASTEWATER IMPROVEMENTS

6. ALL PUBLIC WATER AND WASTEWATER CONSTRUCTION, PIPE, STRUCTURES, AND FITTINGS SHALL ADHERE TO CITY PUBLIC WORKS

STANDARD DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL ARRANGE FOR REQUIRED CITY INSPECTIONS. 7. ALL PRIVATE WATER AND WASTEWATER CONSTRUCTION, PIPE, STRUCTURES, AND FITTINGS SHALL ADHERE TO THE APPLICABLE PLUMBING CODE. CONTRACTOR SHALL ARRANGE FOR REQUIRED CITY INSPECTIONS 8. FIRE SPRINKLER LINES SHALL BE DESIGNED AND INSTALLED BY A LICENSED FIRE SPRINKLER CONTRACTOR, AND COMPLY TO THE

APPLICABLE CODES AND INSPECTIONS REQUIRED. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF THE FIRE SPRINKLER

DESIGN. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES. 9. EMBEDMENT FOR ALL WATER AND WASTEWATER LINES, PUBLIC OR PRIVATE, SHALL BE PER CITY STANDARD DETAILS. 10. CONTRACTOR SHALL TAKE REQUIRED SANITARY PRECAUTIONS, FOLLOWING ANY CITY, TCEQ, AND AWWA STANDARDS, TO KEEP WATER PIPE AND FITTINGS CLEAN AND CAPPED AT TIMES WHEN INSTALLATION IS NOT IN PROGRESS. 11. CONTRACTOR SHALL PROVIDE CONSTRUCTION SURVEYING FOR ALL WATER AND WASTEWATER LINES.

12. ALL WATER AND WASTEWATER SERVICES SHALL TERMINATE 5-FEET OUTSIDE THE BUILDING, UNLESS NOTED OTHERWISE

13. CONTRACTOR SHALL COMPLY WITH CITY REQUIREMENTS FOR WATER AND WASTEWATER SERVICE DISRUPTIONS AND THE AMOUNT OF PRIOR NOTICE THAT IS REQUIRED, AND SHALL COORDINATE DIRECTLY WITH THE APPROPRIATE CITY DEPARTMENT. 14. CONTRACTOR SHALL SEQUENCE WATER AND WASTEWATER CONSTRUCTION TO AVOID INTERRUPTION OF SERVICE TO SURROUNDING 15. CONTRACTOR SHALL MAINTAIN WATER SERVICE AND WASTEWATER SERVICE TO ALL CUSTOMERS THROUGHOUT CONSTRUCTION (IF NECESSARY, BY USE OF TEMPORARY METHODS APPROVED BY THE CITY AND OWNER). THIS WORK SHALL BE CONSIDERED

SUBSIDIARY TO THE PROJECT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED 16. THE CONTRACTOR IS RESPONSIBLE TO PROTECT ALL WATER AND WASTEWATER LINES CROSSING THE PROJECT. THE CONTRACTOR SHALL REPAIR ALL DAMAGED LINES IMMEDIATELY. ALL REPAIRS OF EXISTING WATER MAINS, WATER SERVICES, SEWER MAINS, AND SANITARY SEWER SERVICES ARE SUBSIDIARY TO THE WORK, AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. 17. VALVE ADJUSTMENTS SHALL BE CONSTRUCTED SUCH THAT THE COVERS ARE AT FINISHED SURFACE GRADE OF THE PROPOSED

18. THE ENDS OF ALL EXISTING WATER MAINS THAT ARE CUT. BUT NOT REMOVED. SHALL BE PLUGGED AND ABANDONED IN PLACE. THIS

WORK SHALL BE CONSIDERED AS A SUBSIDIARY COST TO THE PROJECT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

END VERTICAL CURVE STATION

UNITES STATES ENVIRONMENTAL PROTECTION AGENCY

EX. EXISTING F-F FACE TO FACE FINISHED GROUND FIRE HYDRANT FLOW LINE FACE OF CURB

**ELEVATION** 

EASEMENT

FFFT GRATE INLET HYDRAULIC GRADE LINE IRRIGATION KIMLEY-HORN AND ASSOCIATES, INC

ELECTRICAL / ELECTRICITY

END VERTICAL CURVE ELEVATION

LATERAL LINEAR FEET

LANDSCAPE MATCH EXISTING ELEVATION MANHOLE

MINUTE / MINIMUM

NOTICE OF INTENT, REF. TCEQ GENERAL PERMIT NOTICE OF TERMINATION, REF. TCEQ GENERAL PERMIT NTS NOT TO SCALE ON CENTER

OFFSFT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION POINT OF CURVATURE PORTLAND CEMENT CONCRETE / POINT OF COMPOUND CURVATURE PROPOSED GRADE LINE

POINT OF INFLECTION PROPOSED POINT OF REVERSE CURVATURE POUNDS PER SQUARE INCH POINT OF TANGENCY POLYVINYL CHLORIDE

POINT OF VERTICAL INFLECTION PAVEMENT REINFORCED CONCRETE PIPE ROW RIGHT OF WAY

SQUARE FEET SANITARY SEWER SANITARY SEWER MANHOLE STA STATION

WYE INLET

WASTEWATER

WATER

STD STANDARD SQUARE YARD ARCHITECTURAL BARRIERS TEXAS ACCESSIBILITY STANDARDS TOP OF CURB

**TCEQ** TEXAS COMMISSION OF ENVIRONMENTAL QUALITY TEXAS DEPARTMENT OF TRANSPORTATION TXMUTCD TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES TOP OF WALL TYPICAL VERTICAL CURVE WATER EASEMEN

19. ALL FIRE HYDRANTS, VALVES, TEES, BENDS, WYES, REDUCERS, FITTINGS, AND ENDS SHALL BE MECHANICALLY RESTRAINED AND/OR THRUST BLOCKED TO CITY STANDARDS.

20.CONTRACTOR SHALL INSTALL A FULL SEGMENT OF WATER OR WASTEWATER PIPE CENTERED AT ALL UTILITY CROSSINGS SO THAT THE JOINTS ARE GREATER THAN 9-FEET FROM THE CROSSING 21.ALL CROSSINGS AND LOCATIONS WHERE WASTEWATER IS LESS THAN 9-FEET FROM WATER, WASTEWATER CONSTRUCTION AND

MATERIALS SHALL COMPLY WITH TOFO CHAPTER 217.53 22.ALL CROSSING AND LOCATIONS WHERE WATER IS LESS THAN 9-FEET FROM WASTEWATER, WATER CONSTRUCTION AND MATERIALS SHALL COMPLY WITH TCEQ CHAPTER 290.44.

23.ALL WATER AND WASTEWATER SHALL BE TESTED IN ACCORDANCE WITH THE CITY, AWWA, AND TCEQ STANDARDS AND SPECIFICATIONS. AT A MINIMUM, THIS SHALL CONSIST OF THE FOLLOWING: a. ALL WATERLINES SHALL BE HYDROSTATICALLY TESTED AND CHLORINATED BEFORE BEING PLACED INTO SERVICE. CONTRACTOR SHALL COORDINATE WITH THE CITY FOR THEIR REQUIRED PROCEDURES AND SHALL ALSO COMPLY WITH TCEQ REGULATIONS. b. WASTEWATER LINES AND MANHOLES SHALL BE PRESSURE TESTED. CONTRACTOR SHALL COORDINATE WITH THE CITY FOR THEIR

REQUIRED PROCEDURES AND SHALL ALSO COMPLY WITH TCEQ REGULATIONS. AFTER COMPLETION OF THESE TESTS, A TELEVISION INSPECTION SHALL BE PERFORMED AND PROVIDED TO THE CITY AND OWNER ON A DVD. 24. CONTRACTOR SHALL INSTALL DETECTABLE WIRING OR MARKING TAPE A MINIMUM OF 12" ABOVE WATER AND WASTEWATER LINES. MARKER DECALS SHALL BE LABELED "CAUTION - WATER LINE", OR "CAUTION - SEWER LINE". DETECTABLE WIRING AND MARKING TAPE SHALL COMPLY WITH CITY STANDARDS. AND SHALL BE INCLUDED IN THE COST OF THE WATER AND WASTEWATER PIPE.

25.DUCTILE IRON PIPE SHALL BE PROTECTED FROM CORROSION BY A LOW-DENSITY POLYETHYLENE LINER WRAP THAT IS AT LEAST A

SINGLE LAYER OF 8-MIL. ALL DUCTILE IRON JOINTS SHALL BE BONDED. 26.WATERLINES SHALL BE INSTALLED AT NO LESS THAN THE MINIMUM COVER REQUIRED BY THE CITY. 27.CONTRACTOR SHALL PROVIDE CLEAN-OUTS FOR PRIVATE SANITARY SEWER LINES AT ALL CHANGES IN DIRECTION AND 100-FOOT INTERVALS, OR AS REQUIRED BY THE APPLICABLE PLUMBING CODE. CLEAN-OUTS REQUIRED IN PAVEMENT OR SIDEWALKS SHALL HAVE CAST IRON COVERS FLUSH WITH FINISHED GRADE.

OPEN TRENCHES SHALL BE ALLOWED OVERNIGHT WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY.

28.CONTRACTOR SHALL PROVIDE BACKWATER VALVES FOR PLUMBING FIXTURES AS REQUIRED BY THE APPLICABLE PLUMBING CODE (E.C FLOOR ELEVATION OF FIXTURE UNIT IS BELOW THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE IN THE PUBLIC SEWER). CONTRACTOR SHALL REVIEW BOTH MEP AND CIVIL PLANS TO CONFIRM WHERE THESE ARE REQUIRED. 29 THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND SUBMITTING A TRENCH SAFETY PLAN, PREPARED BY A PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, TO THE CITY PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRENCI SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY, STATE, AND FEDERAL REQUIREMENTS, INCLUDING OSHA FOR ALL TRENCHES. NO

**ABBREVIATIONS AND DEFINITIONS:** 

AWWA

**BVCE** 

**BVCS** 

CFS

CITY

CONC

DEMO

DTL

ELEC

EVCE

30.THE CONTRACTOR SHALL KEEP TRENCHES FREE FROM WATER.

ARFA INI FT AMERICANS WITH DISABILITIES ACT AMERICAN WATER WORKS ASSOCIATION BACK TO BACK BEGIN CURVE BACK OF CURB BEGIN CURB RETURN BEST MANAGEMENT PRACTICE BACK OF CURB BEGIN VERTICAL CURVE ELEVATION BEGIN VERTICAL CURVE STATION **BOTTOM OF WALL** CUBIC FEET PER SECOND **CURB INLET** CITY. TOWN, OR OTHER APPLICABLE LOCAL GOVERNMENT JURISDICTION CENTERLINE CENTERLINE CONCRETE CUBIC YARD DRAINAGE EASEMENT DEMOLITION DECOMPOSED GRANITE DROP INLET DOMESTIC DETAIL EACH END CURVE END CURB RETURN EXISTING GROUND **ELEVATION** 

RYAN MCKAY 1/18/2025

SHEET NUMBER

#### TCEQ SCS GENERAL CONSTRUCTION NOTES

- THIS ORGANIZED SEWAGE COLLECTION SYSTEM (SCS) MUST BE CONSTRUCTED IN ACCORDANCE WITH 30 TEXAS ADMINISTRATIVE CODE (TAC) §213.5(C), THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S (TCEQ) EDWARDS AQUIFER RULES AND ANY LOCAL GOVERNMENT STANDARD SPECIFICATIONS.
- ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROPOSED REGULATED PROJECT MUST BE PROVIDED WITH COPIES OF THE SCS PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS MUST BE REQUIRED TO KEEP ON-SITE COPIES OF THE PLAN AND THE APPROVAL LETTER.
- A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE PRESIDING TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE: - THE NAME OF THE APPROVED PROJECT:
- THE ACTIVITY START DATE; AND - THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.
- ANY MODIFICATION TO THE ACTIVITIES DESCRIBED IN THE REFERENCED SCS APPLICATION FOLLOWING THE DATE OF APPROVAL MAY REQUIRE THE SUBMITTAL OF AN SCS APPLICATION TO MODIFY THIS APPROVAL, INCLUDING THE PAYMENT OF APPROPRIATE FEES AND ALL INFORMATION NECESSARY FOR ITS REVIEW AND
- PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY. ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE
- IF ANY SENSITIVE FEATURES ARE DISCOVERED DURING THE WASTEWATER LINE TRENCHING ACTIVITIES, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPLICANT MUST IMMEDIATELY NOTIFY THE APPROPRIATE REGIONAL OFFICE OF THE TCEQ OF THE FEATURE DISCOVERED. A GEOLOGIST'S ASSESSMENT OF THE LOCATION AND EXTENT OF THE FEATURE DISCOVERED MUST BE REPORTED TO THAT REGIONAL OFFICE IN WRITING AND THE APPLICANT MUST SUBMIT A PLAN FOR ENSURING THE STRUCTURAL INTEGRITY OF THE SEWER LINE OR FOR MODIFYING THE PROPOSED COLLECTION SYSTEM ALIGNMENT AROUND THE FEATURE. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE EXECUTIVE DIRECTOR HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY WHILE MAINTAINING THE STRUCTURAL INTEGRITY OF THE LINE.
- SEWER LINES LOCATED WITHIN OR CROSSING THE 5-YEAR FLOODPLAIN OF A DRAINAGE WAY WILL BE PROTECTED FROM INUNDATION AND STREAM VELOCITIES WHICH COULD CAUSE EROSION AND SCOURING OF BACKFILL. THE TRENCH MUST BE CAPPED WITH CONCRETE TO PREVENT SCOURING OF BACKFILL, OR THE SEWER LINES MUST BE ENCASED IN CONCRETE. ALL CONCRETE SHALL HAVE A MINIMUM THICKNESS OF 6 INCHES.
- BLASTING PROCEDURES FOR PROTECTION OF EXISTING SEWER LINES AND OTHER UTILITIES WILL BE IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION CRITERIA. SAND IS NOT ALLOWED AS BEDDING OR BACKFILL IN TRENCHES THAT HAVE BEEN BLASTED. IF ANY EXISTING SEWER LINES ARE DAMAGED, THE LINES MUST BE REPAIRED AND RETESTED.
- ALL MANHOLES CONSTRUCTED OR REHABILITATED ON THIS PROJECT MUST HAVE WATERTIGHT SIZE ON SIZE RESILIENT CONNECTORS ALLOWING FOR DIFFERENTIAL SETTLEMENT. IF MANHOLES ARE CONSTRUCTED WITHIN THE 100-YEAR FLOODPLAIN. THE COVER MUST HAVE A GASKET AND BE BOLTED TO THE RING. WHERE GASKETED MANHOLE COVERS ARE REQUIRED FOR MORE THAN THREE MANHOLES IN SEQUENCE OR FOR MORE THAN 1500 FEET, ALTERNATE MEANS OF VENTING WILL BE PROVIDED. BRICKS ARE NOT AN ACCEPTABLE CONSTRUCTION MATERIAL FOR ANY PORTION OF THE MANHOLE.

THE DIAMETER OF THE MANHOLES MUST BE A MINIMUM OF FOUR FEET AND THE MANHOLE FOR ENTRY MUST HAVE A MINIMUM CLEAR OPENING DIAMETER OF 30 INCHES. THESE DIMENSIONS AND OTHER DETAILS SHOWING COMPLIANCE WITH THE

COMMISSION'S RULES CONCERNING MANHOLES AND SEWER LINE/MANHOLE INVERTS DESCRIBED IN 30 TAC §217.55 ARE INCLUDED ON

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

- 10. WHERE WATER LINES AND NEW SEWER LINE ARE INSTALLED WITH A SEPARATION DISTANCE CLOSER THAN NINE FEET (I.E., WATER LINES CROSSING WASTEWATER LINES, WATER LINES PARALLELING WASTEWATER LINES, OR WATER LINES NEXT TO MANHOLES) THE INSTALLATION MUST MEET THE REQUIREMENTS OF 30 TAC §217.53(D) (PIPE DESIGN) AND 30 TAC §290.44(E) (WATER DISTRIBUTION).
- . WHERE SEWERS LINES DEVIATE FROM STRAIGHT ALIGNMENT AND UNIFORM GRADE ALL CURVATURE OF SEWER PIPE MUST BE ACHIEVED BY THE FOLLOWING PROCEDURE WHICH IS RECOMMENDED BY THE PIPE MANUFACTURER:
- IF PIPE FLEXURE IS PROPOSED, THE FOLLOWING METHOD OF PREVENTING DEFLECTION OF THE JOINT MUST BE USED:

SPECIFIC CARE MUST BE TAKEN TO ENSURE THAT THE JOINT IS PLACED IN THE CENTER OF THE TRENCH AND PROPERLY BEDDED IN

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

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

- THE PRIVATE SERVICE LATERAL STUB-OUTS MUST BE INSTALLED AS SHOWN ON THE PLAN AND PROFILE SHEETS ON PLAN SHEET \_\_ OF \_\_ AND MARKED AFTER BACKFILLING AS SHOWN IN THE DETAIL ON PLAN SHEET \_\_ OF \_\_.
- 13. TRENCHING, BEDDING AND BACKFILL MUST CONFORM WITH 30 TAC §217.54. THE BEDDING AND BACKFILL FOR FLEXIBLE PIPE MUST COMPLY WITH THE STANDARDS

OF ASTM D-2321, CLASSES IA, IB, II OR III. RIGID PIPE BEDDING MUST COMPLY WITH THE REQUIREMENTS OF ASTM C 12 (ANSI A 106.2) CLASSES A, B OR C.

- 4. SEWER LINES MUST BE TESTED FROM MANHOLE TO MANHOLE. WHEN A NEW SEWER LINE IS CONNECTED TO AN EXISTING STUB OR CLEAN-OUT, IT MUST BE TESTED FROM EXISTING MANHOLE TO NEW MANHOLE. IF A STUB OR CLEAN-OUT IS USED AT THE END OF THE PROPOSED SEWER LINE, NO PRIVATE SERVICE ATTACHMENTS MAY BE CONNECTED BETWEEN THE LAST MANHOLE AND THE CLEANOUT UNLESS IT CAN BE CERTIFIED AS CONFORMING WITH THE PROVISIONS OF 30 TAC
- 5. ALL SEWER LINES MUST BE TESTED IN ACCORDANCE WITH 30 TAC §217.57. THE ENGINEER MUST RETAIN COPIES OF ALL TEST RESULTS WHICH MUST BE MADE AVAILABLE TO THE EXECUTIVE DIRECTOR UPON REQUEST. THE ENGINEER MUST CERTIFY IN WRITING THAT ALL WASTEWATER LINES HAVE PASSED ALL REQUIRED TESTING TO THE APPROPRIATE REGIONAL OFFICE WITHIN 30 DAYS OF TEST COMPLETION AND PRIOR TO USE OF THE NEW COLLECTION SYSTEM. TESTING METHOD
- (A) FOR A COLLECTION SYSTEM PIPE THAT WILL TRANSPORT WASTEWATER BY GRAVITY FLOW, THE DESIGN MUST SPECIFY AN INFILTRATION AND EXFILTRATION TEST OR A LOW-PRESSURE AIR TEST. A TEST MUST CONFORM TO THE FOLLOWING REQUIREMENTS:
  - (1) LOW PRESSURE AIR TEST. (A) A LOW PRESSURE AIR TEST MUST FOLLOW THE PROCEDURES DESCRIBED IN AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) C-828, ASTM C-924, OR ASTM F-1417 OR OTHER PROCEDURE APPROVED BY THE EXECUTIVE DIRECTOR, EXCEPT AS TO TESTING TIMES AS REQUIRED IN TABLE C.3 IN SUBPARAGRAPH (C) OF THIS PARAGRAPH OR EQUATION C.3 IN SUBPARAGRAPH
  - (B) FOR SECTIONS OF COLLECTION SYSTEM PIPE LESS THAN 36 INCH AVERAGE INSIDE DIAMETER, THE FOLLOWING PROCEDURE MUST
  - APPLY, UNLESS A PIPE IS TO BE TESTED AS REQUIRED BY PARAGRAPH (2) OF THIS SUBSECTION.
  - A PIPE MUST BE PRESSURIZED TO 3.5 POUNDS PER SQUARE INCH (PSI) GREATER THAN THE PRESSURE EXERTED BY
  - GROUNDWATER ABOVE THE PIPE (II) ONCE THE PRESSURE IS STABILIZED, THE MINIMUM TIME ALLOWABLE FOR THE PRESSURE TO DROP FROM 3.5 PSI GAUGE TO 2.5

# WHERE:

T = TIME FOR PRESSURE TO DROP 1.0 POUND PER SQUARE INCH GAUGE IN SECONDS

PSI GAUGE IS COMPUTED FROM THE FOLLOWING EQUATION:

- K = 0.000419 X D X L. BUT NOT LESS THAN 1.0 D = AVERAGE INSIDE PIPE DIAMETER IN INCHES
- I = I ENGTH OF LINE OF SAME SIZE BEING TESTED IN FEET Q = RATE OF LOSS, 0.0015 CUBIC FEET PER MINUTE PER SQUARE FOOT INTERNAL SURFACE
- (C) SINCE A K VALUE OF LESS THAN 1.0 MAY NOT BE USED, THE MINIMUM TESTING TIME FOR EACH PIPE DIAMETER IS SHOWN IN THE FOLLOWING TABLE C.3:

Pipe Diameter (inches)	Minimum Time (seconds)	Maximum Length for Minimum Time (feet)	Time for Longer Length
	0.40	000	(seconds/foot)
6	340	398	0.855
8	454	298	1.520
10	567	239	2.374
12	680	199	3.419
15	850	159	5.342
18	1020	133	7.693
21	1190	114	10.471
24	1360	100	13.676
27	1530	88	17.309
30	1700	80	21.369
33	1870	72	25.856

(D) AN OWNER MAY STOP A TEST IF NO PRESSURE LOSS HAS OCCURRED DURING THE FIRST 25% OF THE CALCULATED TESTING TIME. (E) IF ANY PRESSURE LOSS OR LEAKAGE HAS OCCURRED DURING THE FIRST 25% OF A TESTING PERIOD, THEN THE TEST MUST CONTINUE

- FOR THE ENTIRE TEST DURATION AS OUTLINED ABOVE OR UNTIL FAILURE. WASTEWATER COLLECTION SYSTEM PIPES WITH A 27 INCH OR LARGER AVERAGE INSIDE DIAMETER MAY BE AIR TESTED AT EACH JOINT
- INSTEAD OF FOLLOWING THE PROCEDURE OUTLINED IN THIS SECTION.
- (G) A TESTING PROCEDURE FOR PIPE WITH AN INSIDE DIAMETER GREATER THAN 33 INCHES MUST BE APPROVED BY THE EXECUTIVE
- (2) INFILTRATION/EXFILTRATION TEST. (A) THE TOTAL EXFILTRATION, AS DETERMINED BY A HYDROSTATIC HEAD TEST, MUST NOT EXCEED 50 GALLONS PER INCH OF DIAMETER PER MILE OF PIPE PER 24 HOURS AT A MINIMUM TEST HEAD OF 2.0 FEET ABOVE THE CROWN OF A PIPE AT AN UPSTREAM MANHOLE.
  - AN OWNER SHALL USE AN INFILTRATION TEST IN LIEU OF AN EXFILTRATION TEST WHEN PIPES ARE INSTALLED BELOW THE GROUNDWATER LEVEL THE TOTAL EXFILTRATION, AS DETERMINED BY A HYDROSTATIC HEAD TEST, MUST NOT EXCEED 50 GALLONS PER INCH DIAMETER PER
  - MILE OF PIPE PER 24 HOURS AT A MINIMUM TEST HEAD OF TWO FEET ABOVE THE CROWN OF A PIPE AT AN UPSTREAM MANHOLE, OR AT LEAST TWO FEET ABOVE EXISTING GROUNDWATER LEVEL. WHICHEVER IS GREATER. (D) FOR CONSTRUCTION WITHIN A 25-YEAR FLOOD PLAIN, THE INFILTRATION OR EXFILTRATION MUST NOT EXCEED 10 GALLONS PER INCH
  - DIAMETER PER MILE OF PIPE PER 24 HOURS AT THE SAME MINIMUM TEST HEAD AS IN SUBPARAGRAPH (C) OF THIS PARAGRAPH. IF THE QUANTITY OF INFILTRATION OR EXFILTRATION EXCEEDS THE MAXIMUM QUANTITY SPECIFIED, AN OWNER SHALL UNDERTAKE
- REMEDIAL ACTION IN ORDER TO REDUCE THE INFILTRATION OR EXFILTRATION TO AN AMOUNT WITHIN THE LIMITS SPECIFIED. AN OWNER SHALL RETEST A PIPE FOLLOWING A REMEDIATION ACTION. (B) IF A GRAVITY COLLECTION PIPE IS COMPOSED OF FLEXIBLE PIPE, DEFLECTION TESTING IS ALSO REQUIRED. THE FOLLOWING PROCEDURES MUST BE FOLLOWED:
- (1) FOR A COLLECTION PIPE WITH INSIDE DIAMETER LESS THAN 27 INCHES, DEFLECTION MEASUREMENT REQUIRES A RIGID MANDREL. (I) A RIGID MANDREL MUST HAVE AN OUTSIDE DIAMETER (OD) NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER (ID) OR AVERAGE ID OF
  - A PIPE, AS SPECIFIED IN THE APPROPRIATE STANDARD BY THE ASTMS, AMERICAN WATER WORKS ASSOCIATION, UNI-BELL, OR AMERICAN NATIONAL STANDARDS INSTITUTE, OR ANY RELATED APPENDIX. (II) IF A MANDREL SIZING DIAMETER IS NOT SPECIFIED IN THE APPROPRIATE STANDARD, THE MANDREL MUST HAVE AN OD EQUAL TO 95% OF THE ID OF A PIPE. IN THIS CASE, THE ID OF THE PIPE, FOR THE PURPOSE OF DETERMINING THE OD OF THE MANDREL, MUST EQUAL BE THE
  - AVERAGE OUTSIDE DIAMETER MINUS TWO MINIMUM WALL THICKNESSES FOR OD CONTROLLED PIPE AND THE AVERAGE INSIDE DIAMETER FOR ID CONTROLLED PIPE (III) ALL DIMENSIONS MUST MEET THE APPROPRIATE STANDARD. (B) MANDREL DESIGN.

(I) A RIGID MANDREL MUST BE CONSTRUCTED OF A METAL OR A RIGID PLASTIC MATERIAL THAT CAN WITHSTAND 200 PSI WITHOUT BEING

- (II) A MANDREL MUST HAVE NINE OR MORE ODD NUMBER OF RUNNERS OR LEGS.
- A BARREL SECTION LENGTH MUST EQUAL AT LEAST 75% OF THE INSIDE DIAMETER OF A PIPE. V) EACH SIZE MANDREL MUST USE A SEPARATE PROVING RING.
- AN ADJUSTABLE OR FLEXIBLE MANDREL IS PROHIBITED. A TEST MAY NOT USE TELEVISION INSPECTION AS A SUBSTITUTE FOR A DEFLECTION TEST.
- IF REQUESTED, THE EXECUTIVE DIRECTOR MAY APPROVE THE USE OF A DEFLECTOMETER OR A MANDREL WITH REMOVABLE LEGS OR RUNNERS ON A CASE-BY-CASE BASIS
- (2) FOR A GRAVITY COLLECTION SYSTEM PIPE WITH AN INSIDE DIAMETER 27 INCHES AND GREATER, OTHER TEST METHODS MAY BE USED TO DETERMINE
- A DEFLECTION TEST METHOD MUST BE ACCURATE TO WITHIN PLUS OR MINUS 0.2% DEFLECTION AN OWNER SHALL NOT CONDUCT A DEFLECTION TEST UNTIL AT LEAST 30 DAYS AFTER THE FINAL BACKFILL.
- GRAVITY COLLECTION SYSTEM PIPE DEFLECTION MUST NOT EXCEED FIVE PERCENT (5% IF A PIPE SECTION FAILS A DEFLECTION TEST, AN OWNER SHALL CORRECT THE PROBLEM AND CONDUCT A SECOND TEST AFTER THE FINAL
- BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. 16. ALL MANHOLES MUST BE TESTED TO MEET OR EXCEED THE REQUIREMENTS OF 30 TAC §217.58. (A) ALL MANHOLES MUST PASS A LEAKAGE TEST.
- (B) AN OWNER SHALL TEST EACH MANHOLE (AFTER ASSEMBLY AND BACKFILLING) FOR LEAKAGE, SEPARATE AND INDEPENDENT OF THE COLLECTION SYSTEM PIPES, BY HYDROSTATIC EXFILTRATION TESTING, VACUUM TESTING, OR OTHER METHOD APPROVED BY THE EXECUTIVE
- (1) HYDROSTATIC TESTING (A) THE MAXIMUM LEAKAGE FOR HYDROSTATIC TESTING OR ANY ALTERNATIVE TEST METHODS IS 0.025 GALLONS PER FOOT DIAMETER
  - (B) TO PERFORM A HYDROSTATIC EXFILTRATION TEST, AN OWNER SHALL SEAL ALL WASTEWATER PIPES COMING INTO A MANHOLE WITH AN INTERNAL PIPE PLUG, FILL THE MANHOLE WITH WATER, AND MAINTAIN THE TEST FOR AT LEAST ONE HOUR.
  - (C) A TEST FOR CONCRETE MANHOLES MAY USE A 24-HOUR WETTING PERIOD BEFORE TESTING TO ALLOW SATURATION OF THE
  - (A) TO PERFORM A VACUUM TEST, AN OWNER SHALL PLUG ALL LIFT HOLES AND EXTERIOR JOINTS WITH A NON-SHRINK GROUT AND PLUG ALL PIPES ENTERING A MANHOLE.
  - (B) NO GROUT MUST BE PLACED IN HORIZONTAL JOINTS BEFORE TESTING. (C) STUB-OUTS, MANHOLE BOOTS, AND PIPE PLUGS MUST BE SECURED TO PREVENT MOVEMENT WHILE A VACUUM IS DRAWN.
  - (D) AN OWNER SHALL USE A MINIMUM 60 INCH/LB TORQUE WRENCH TO TIGHTEN THE EXTERNAL CLAMPS THAT SECURE A TEST COVER TO THE TOP OF A MANHOLE
  - (E) A TEST HEAD MUST BE PLACED AT THE INSIDE OF THE TOP OF A CONE SECTION, AND THE SEAL INFLATED IN ACCORDANCE WITH
  - THE MANUFACTURER'S RECOMMENDATIONS. (F) THERE MUST BE A VACUUM OF 10 INCHES OF MERCURY INSIDE A MANHOLE TO PERFORM A VALID TEST.
  - (G) A TEST DOES NOT BEGIN UNTIL AFTER THE VACUUM PUMP IS OFF.
- (H) A MANHOLE PASSES THE TEST IF AFTER 2.0 MINUTES AND WITH ALL VALVES CLOSED, THE VACUUM IS AT LEAST 9.0 INCHES OF 17. ALL PRIVATE SERVICE LATERALS MUST BE INSPECTED AND CERTIFIED IN ACCORDANCE WITH 30 TAC §213.5(C)(3)(I). AFTER INSTALLATION OF AND, PRIOR TO

COVERING AND CONNECTING A PRIVATE SERVICE LATERAL TO AN EXISTING ORGANIZED SEWAGE COLLECTION SYSTEM, A TEXAS LICENSED PROFESSIONAL ENGINEER TEXAS REGISTERED SANITARIAN, OR APPROPRIATE CITY INSPECTOR MUST VISUALLY INSPECT THE PRIVATE SERVICE LATERAL AND THE CONNECTION TO THE SEWAGE COLLECTION SYSTEM, AND CERTIFY THAT IT IS CONSTRUCTED IN CONFORMITY WITH THE APPLICABLE PROVISIONS OF THIS SECTION. THE OWNER OF THE COLLECTION SYSTEM MUST MAINTAIN SUCH CERTIFICATIONS FOR FIVE YEARS AND FORWARD COPIES TO THE APPROPRIATE REGIONAL OFFICE UPON REQUEST. CONNECTIONS MAY ONLY BE MADE TO AN APPROVED SEWAGE COLLECTION SYSTEM.

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

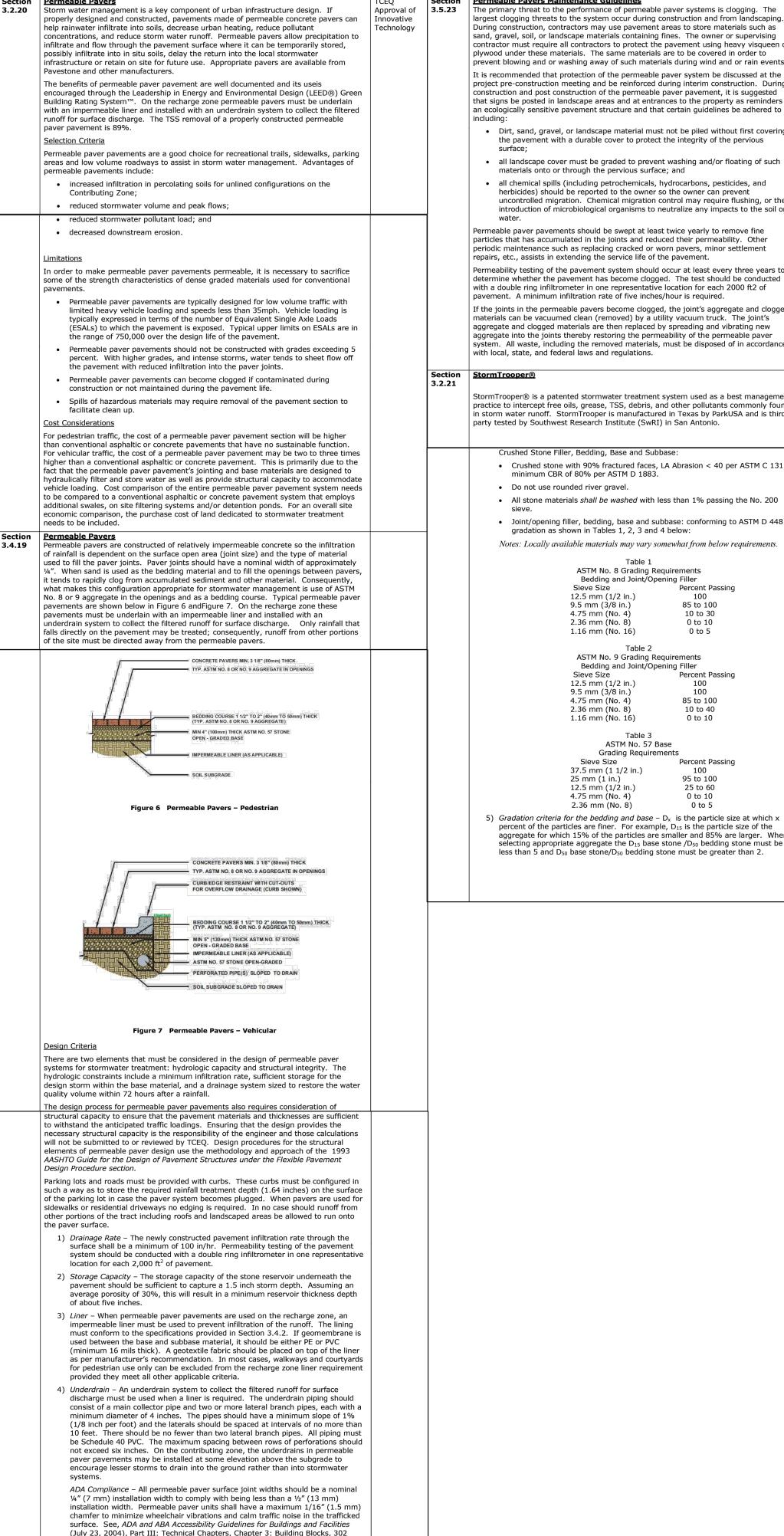
- 1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
- THE ACTIVITY START DATE: AND

SYSTEM, WELL, OR SENSITIVE FEATURE

- THE CONTACT INFORMATION OF THE PRIME CONTRACTOR
- 2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER. 3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE
- SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TOPO HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY 4. NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION
- PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED
- 6. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS. SENSITIVE FEATURES, ETC. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY

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

- 9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS, FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE. THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE. 10. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS. SOIL STABILIZATION IN
- THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE
- 11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
  - THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
- 12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING
- A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS. AND DIVERSIONARY STRUCTURES: B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD
- SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
- C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.



Floor or Ground Surfaces, 302.3 Openings. Materials - Permeable paver units should comply with ASTM C 936. Bedding and base materials should conform to

the specifications below.

sand, gravel, soil, or landscape materials containing fines. The owner or supervising contractor must require all contractors to protect the pavement using heavy visqueen or plywood under these materials. The same materials are to be covered in order to prevent blowing and or washing away of such materials during wind and or rain events. It is recommended that protection of the permeable paver system be discussed at the project pre-construction meeting and be reinforced during interim construction. During construction and post construction of the permeable paver pavement, it is suggested that signs be posted in landscape areas and at entrances to the property as reminders of an ecologically sensitive pavement structure and that certain guidelines be adhered to Dirt, sand, gravel, or landscape material must not be piled without first covering the pavement with a durable cover to protect the integrity of the pervious • all landscape cover must be graded to prevent washing and/or floating of such materials onto or through the pervious surface; and all chemical spills (including petrochemicals, hydrocarbons, pesticides, and herbicides) should be reported to the owner so the owner can prevent uncontrolled migration. Chemical migration control may require flushing, or the introduction of microbiological organisms to neutralize any impacts to the soil or Permeable paver pavements should be swept at least twice yearly to remove fine particles that has accumulated in the joints and reduced their permeability. Other periodic maintenance such as replacing cracked or worn pavers, minor settlement repairs, etc., assists in extending the service life of the pavement. Permeability testing of the pavement system should occur at least every three years to determine whether the pavement has become clogged. The test should be conducted with a double ring infiltrometer in one representative location for each 2000 ft2 of pavement. A minimum infiltration rate of five inches/hour is required If the joints in the permeable pavers become clogged, the joint's aggregate and clogged materials can be vacuumed clean (removed) by a utility vacuum truck. The joint's aggregate and clogged materials are then replaced by spreading and vibrating new aggregate into the joints thereby restoring the permeability of the permeable paver system. All waste, including the removed materials, must be disposed of in accordance with local, state, and federal laws and regulations. StormTrooper® is a patented stormwater treatment system used as a best management practice to intercept free oils, grease, TSS, debris, and other pollutants commonly found in storm water runoff. StormTrooper is manufactured in Texas by ParkUSA and is thirdparty tested by Southwest Research Institute (SwRI) in San Antonio • Crushed stone with 90% fractured faces, LA Abrasion < 40 per ASTM C 131, minimum CBR of 80% per ASTM D 1883. Do not use rounded river gravel. • All stone materials *shall be washed* with less than 1% passing the No. 200 Joint/opening filler, bedding, base and subbase: conforming to ASTM D 448 gradation as shown in Tables 1, 2, 3 and 4 below: Notes: Locally available materials may vary somewhat from below requirements. ASTM No. 8 Grading Requirements Bedding and Joint/Opening Filler 12.5 mm (1/2 in.) 9.5 mm (3/8 in.) 85 to 100 4.75 mm (No. 4) 10 to 30 2.36 mm (No. 8) 0 to 10 1.16 mm (No. 16) 0 to 5 ASTM No. 9 Grading Requirements Bedding and Joint/Opening Filler Sieve Size Percent Passing 12.5 mm (1/2 in.) 9.5 mm (3/8 in.) 4.75 mm (No. 4) 85 to 100 2.36 mm (No. 8) 10 to 40 1.16 mm (No. 16) 0 to 10 ASTM No. 57 Base Grading Requirements Sieve Size 37.5 mm (1 1/2 in.) 95 to 100 25 mm (1 in.) 12.5 mm (1/2 in.) 4.75 mm (No. 4) 5) Gradation criteria for the bedding and base –  $D_x$  is the particle size at which xpercent of the particles are finer. For example, D<sub>15</sub> is the particle size of the aggregate for which 15% of the particles are smaller and 85% are larger. When selecting appropriate aggregate the D<sub>15</sub> base stone /D<sub>50</sub> bedding stone must be less than 5 and  $D_{50}$  base stone/ $D_{50}$  bedding stone must be greater than 2.

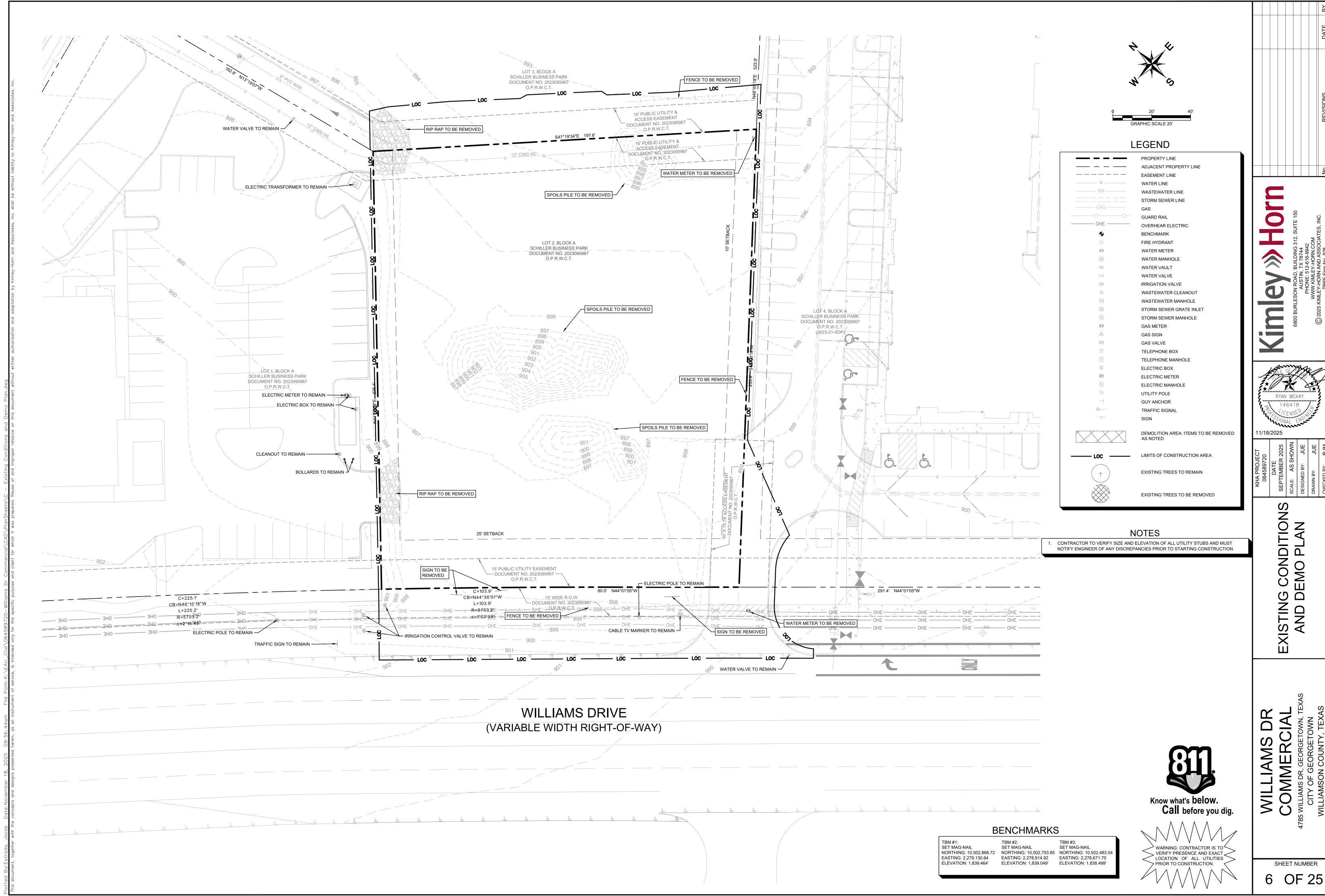
During construction, contractors may use pavement areas to store materials such as

Q

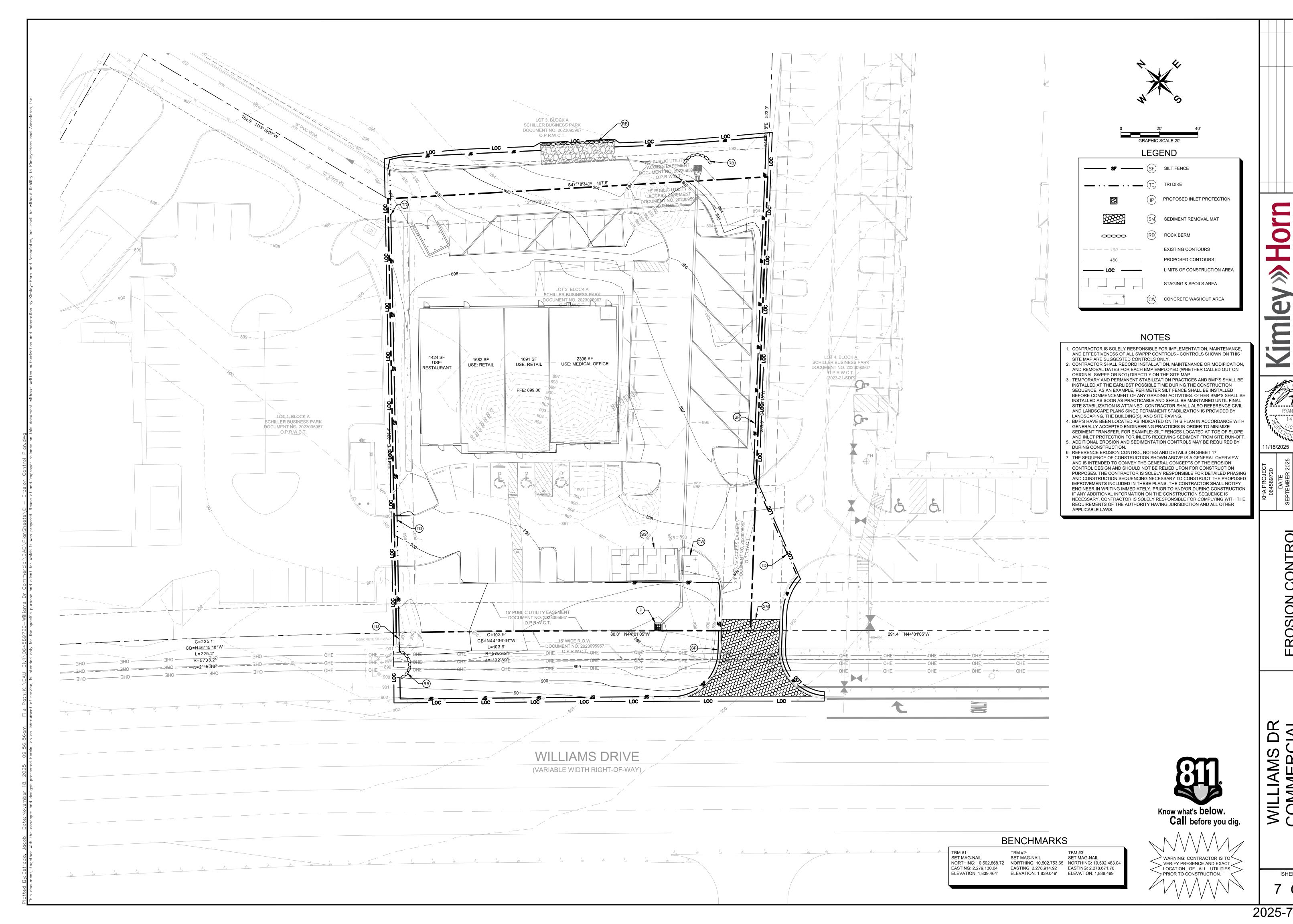
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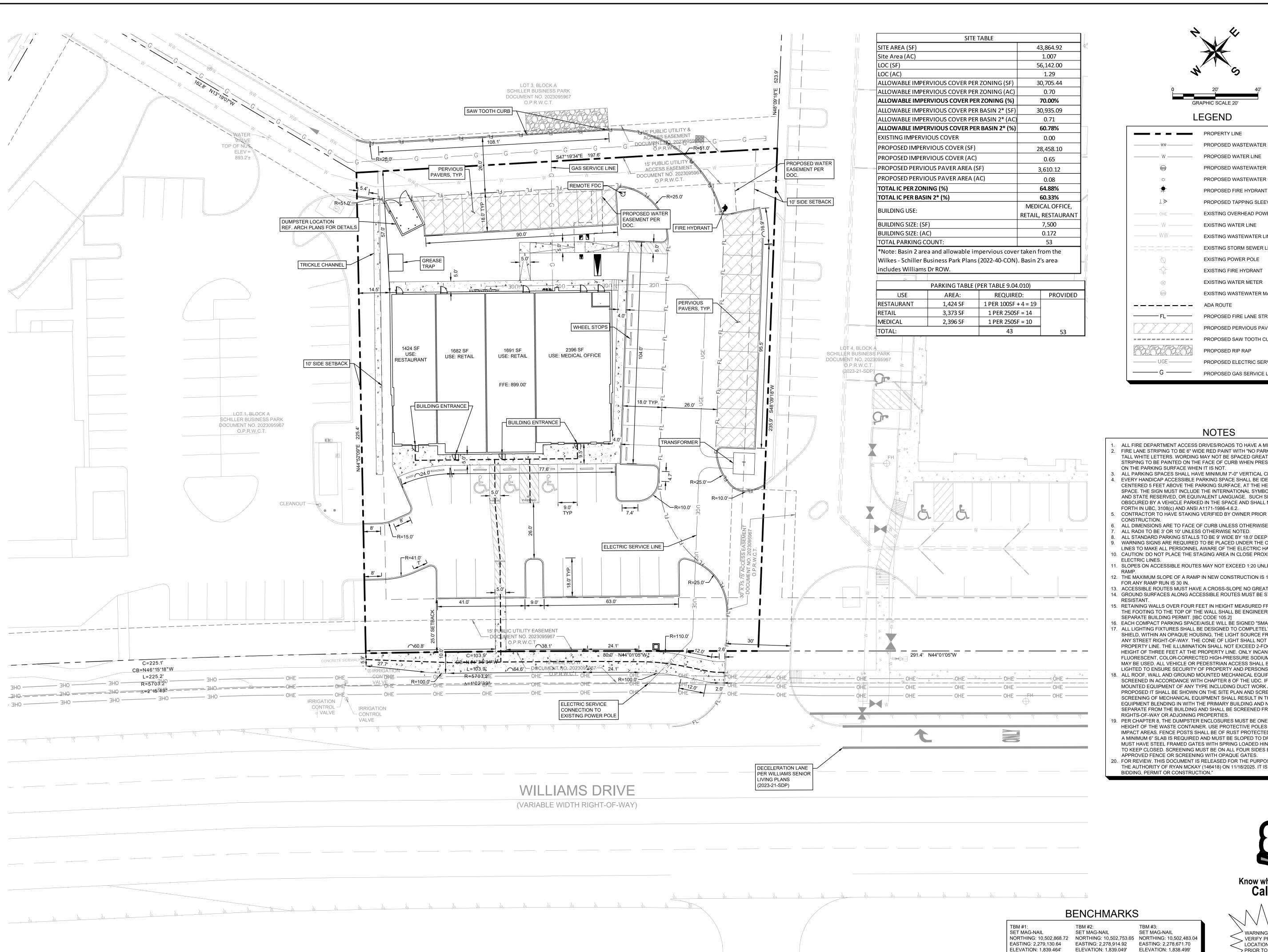


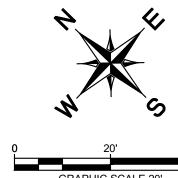
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SHEET NUMBER

RYAN MCKAY





## LEGEND

	PROPERTY LINE
	PROPOSED WASTEWATER LINE
w	PROPOSED WATER LINE
(w)	PROPOSED WASTEWATER MANHOLE
0	PROPOSED WASTEWATER CLEANOUT
<del> </del>	PROPOSED FIRE HYDRANT
	PROPOSED TAPPING SLEEVE & VALVE
OHE	EXISTING OVERHEAD POWER LINE
W	EXISTING WATER LINE
WW	EXISTING WASTEWATER LINE
=======	EXISTING STORM SEWER LINE
$\Diamond$	EXISTING POWER POLE
	EXISTING FIRE HYDRANT
$\otimes$	EXISTING WATER METER
(W)	EXISTING WASTEWATER MANHOLE
	ADA ROUTE
FL	PROPOSED FIRE LANE STRIPING
	PROPOSED PERVIOUS PAVERS
	PROPOSED SAW TOOTH CURB
	PROPOSED RIP RAP
———— UGE ———	PROPOSED ELECTRIC SERVICE LINE
G	PROPOSED GAS SERVICE LINE

# NOTES

- ALL FIRE DEPARTMENT ACCESS DRIVES/ROADS TO HAVE A MINIMUM 13'-6" VERTICAL FIRE LANE STRIPING TO BE 6" WIDE RED PAINT WITH "NO PARKING FIRE LANE" IN 4" TALL WHITE LETTERS. WORDING MAY NOT BE SPACED GREATER THAN 30' APART. STRIPING TO BE PAINTED ON THE FACE OF CURB WHEN PRESENT AND PAINTED FLAT ON THE PARKING SURFACE WHEN IT IS NOT.
- ALL PARKING SPACES SHALL HAVE MINIMUM 7'-0" VERTICAL CLEARANCE. EVERY HANDICAP ACCESSIBLE PARKING SPACE SHALL BE IDENTIFIED BY A SIGN CENTERED 5 FEET ABOVE THE PARKING SURFACE, AT THE HEAD OF THE PARKING SPACE. THE SIGN MUST INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND STATE RESERVED, OR EQUIVALENT LANGUAGE. SUCH SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE AND SHALL MEET THE CRITERIA SET FORTH IN UBC, 3108(c) AND ANSI A1171-1986-4.6.2.
- CONTRACTOR TO HAVE STAKING VERIFIED BY OWNER PRIOR TO ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED
- ALL RADII TO BE 3' OR 10' UNLESS OTHERWISE NOTED. ALL STANDARD PARKING STALLS TO BE 9' WIDE BY 18.0' DEEP TO FACE OF CURB. WARNING SIGNS ARE REQUIRED TO BE PLACED UNDER THE OVERHEAD ELECTRIC
- LINES TO MAKE ALL PERSONNEL AWARE OF THE ELECTRIC HAZARD. 10. CAUTION: DO NOT PLACE THE STAGING AREA IN CLOSE PROXIMITY TO OVERHEAD
- 1. SLOPES ON ACCESSIBLE ROUTES MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A 12. THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12.
- FOR ANY RAMP RUN IS 30 IN. 13. ACCESSIBLE ROUTES MUST HAVE A CROSS-SLOPE NO GREATER THAN 1:50.
- 14. GROUND SURFACES ALONG ACCESSIBLE ROUTES MUST BE STABLE, FIRM, AND SLIP
- THE FOOTING TO THE TOP OF THE WALL SHALL BE ENGINEERED AND REQUIRE A SEPARATE BUILDING PERMIT. [IBC CODE 105.2]
- 16. EACH COMPACT PARKING SPACE/AISLE WILL BE SIGNED "SMALL CAR ONLY." . ALL LIGHTING FIXTURES SHALL BE DESIGNED TO COMPLETELY CONCEAL AND FULLY SHIELD, WITHIN AN OPAQUE HOUSING, THE LIGHT SOURCE FROM VISIBILITY FROM ANY STREET RIGHT-OF-WAY. THE CONE OF LIGHT SHALL NOT CROSS ANY ADJACENT PROPERTY LINE. THE ILLUMINATION SHALL NOT EXCEED 2-FOOT CANDLES AT A HEIGHT OF THREE FEET AT THE PROPERTY LINE. ONLY INCANDESCENT, FLUORESCENT, COLOR-CORRECTED HIGH-PRESSURE SODIUM OR METAL HALIDE MAY BE USED. ALL VEHICLE OR PEDESTRIAN ACCESS SHALL BE SUFFICIENTLY
- MOUNTED EQUIPMENT OF ANY TYPE INCLUDING DUCT WORK AND LARGE VENTS IS PROPOSED IT SHALL BE SHOWN ON THE SITE PLAN AND SCREENING IDENTIFIED. SCREENING OF MECHANICAL EQUIPMENT SHALL RESULT IN THE MECHANICAL SEPARATE FROM THE BUILDING AND SHALL BE SCREENED FROM VIEW OF ANY RIGHTS-OF-WAY OR ADJOINING PROPERTIES.
- PER CHAPTER 8, THE DUMPSTER ENCLOSURES MUST BE ONE (1) FOOT ABOVE THE HEIGHT OF THE WASTE CONTAINER. USE PROTECTIVE POLES IN CORNERS AND AT IMPACT AREAS. FENCE POSTS SHALL BE OF RUST PROTECTED METAL OR CONCRETE. A MINIMUM 6" SLAB IS REQUIRED AND MUST BE SLOPED TO DRAIN; THE ENCLOSURE MUST HAVE STEEL FRAMED GATES WITH SPRING LOADED HINGES AND FASTENERS TO KEEP CLOSED. SCREENING MUST BE ON ALL FOUR SIDES BY MASONRY WALL OR
- APPROVED FENCE OR SCREENING WITH OPAQUE GATES. FOR REVIEW. THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER THE AUTHORITY OF RYAN MCKAY (146418) ON 11/18/2025. IT IS NOT TO BE USED FOR



WARNING: CONTRACTOR IS TO

VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES

PRIOR TO CONSTRUCTION.

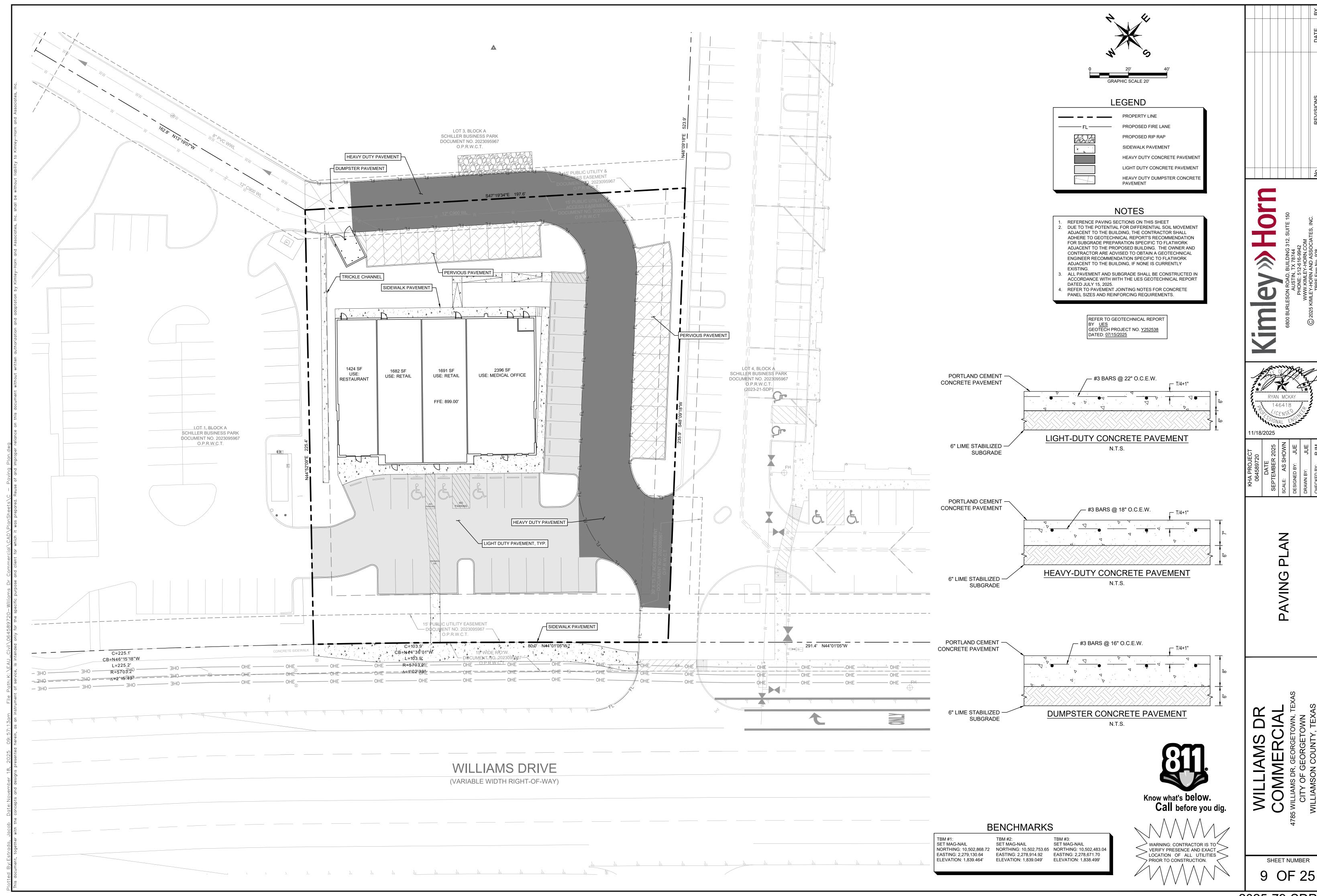
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RYAN MCKAY

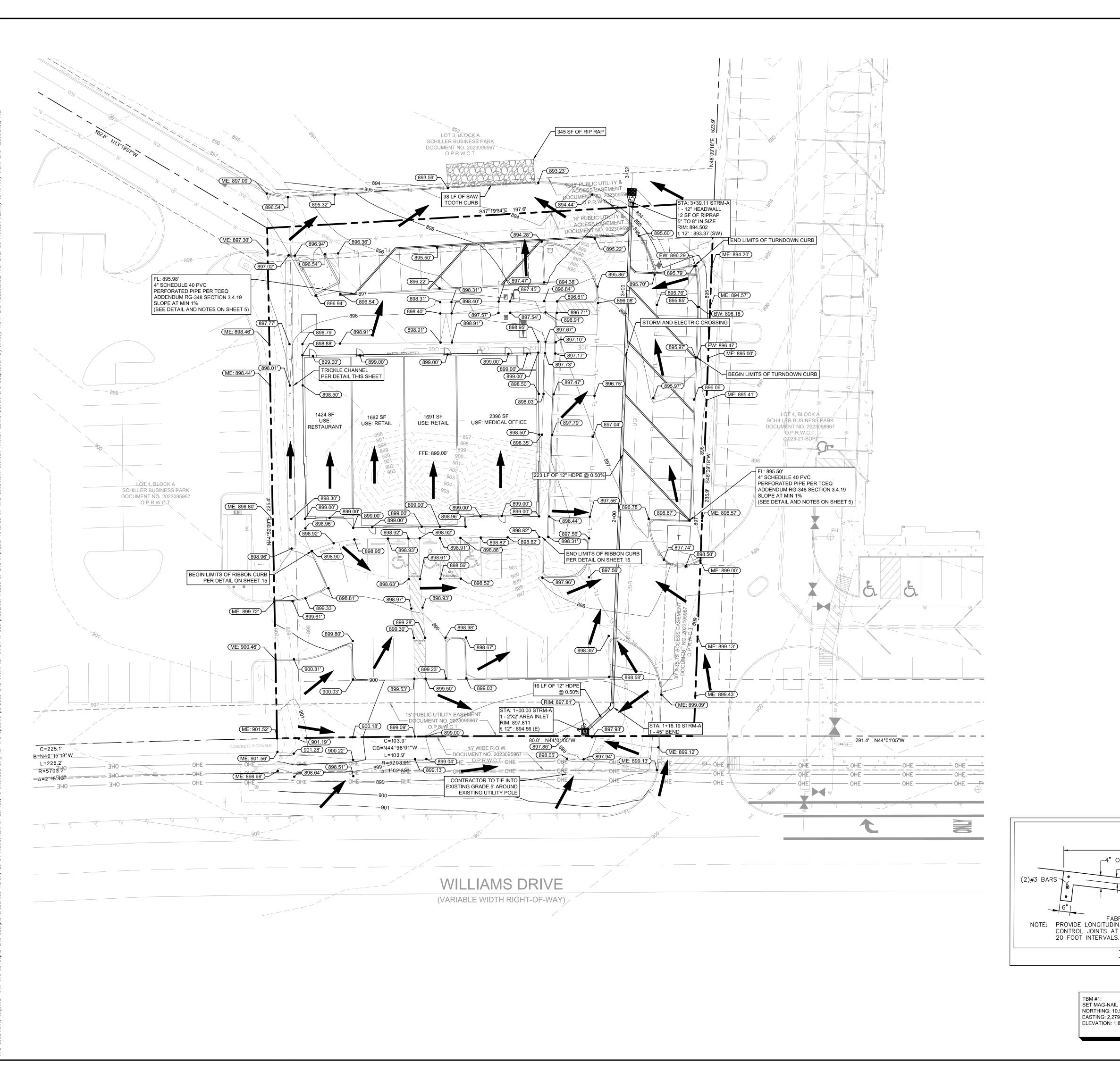
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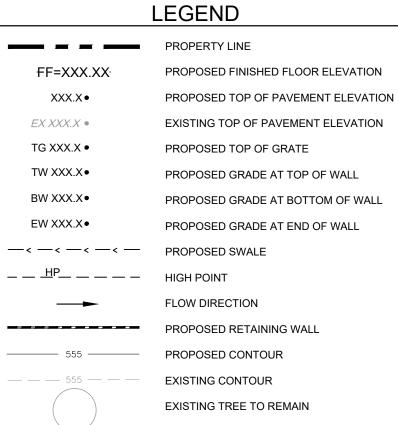


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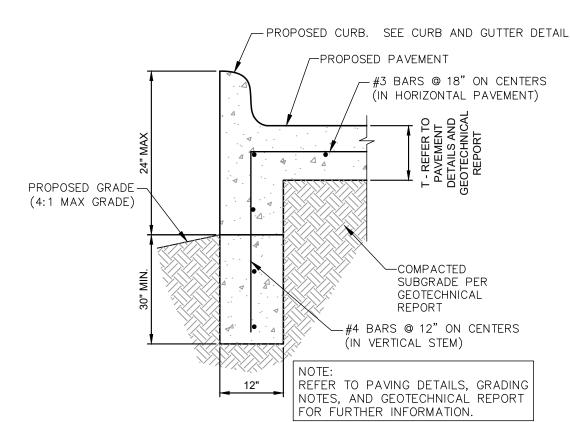






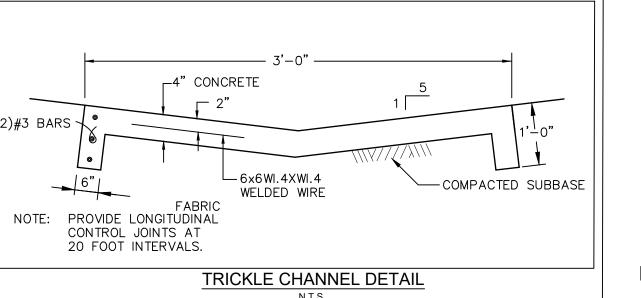
## NOTES

- ALL PROPOSED ELEVATIONS ARE TOP OF PAVEMENT OR NATURAL GROUND UNLESS OTHERWISE NOTED. ALL TOP OF WALL ELEVATIONS ARE TO TOP OF GRADE AT WALL.
- ALL BOTTOM OF WALL ELEVATIONS ARE TO BOTTOM OF GRADE AT WALL. CONTRACTOR TO VERIFY A.D.A. COMPLIANCE FOR GRADES IN
- ALL SIDEWALK ACCESSIBLE ROUTES, INCLUDING DRIVEWAY CROSSINGS, SHALL CONFORM TO ALL APPLICABLE A.D.A. STANDARDS: NOT EXCEED 5.0% ALONG TRAVEL PATH WITH NOT MORE THAN 2.0% CROSS SLOPE AND NOT EXCEED 2.0% IN ANY DIRECTION IN ACCESSIBLE PARKING AREAS.
- MAINTAIN EXISTING GRADE IN TREE WELLS. CONTRACTOR TO ENSURE POSITIVE DRAINAGE TO AREA INLETS. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SIDEWALKS AND PEDESTRIAN ROUTES DO NOT EXCEED A 5% SLOPE IN THE PATH OF TRAVEL OR A 2% CROSS SLOPE, AND CONTRACTOR SHALL VERIFY THAT ACCESSIBLE PARKING AREAS (INCLUDING THE ADJOINING ACCESS AISLES) DO NOT EXCEED A 2% SLOPE IN ANY DIRECTION. CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO ENSURE ADA/TAS SLOPE CRITERIA ARE NOT EXCEEDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PLACING PAVEMENT IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CHANGE ORDERS WILL BE ACCEPTED FOR ADA/TAS SLOPE COMPLIANCE ISSUES.



TURN DOWN CURB DETAIL

N.T.S.



# Know what's below.

# Call before you dig.

**BENCHMARKS** SET MAG-NAIL SET MAG-NAIL NORTHING: 10,502,868.72 NORTHING: 10,502,753.65 NORTHING: 10,502,483.04 EASTING: 2,279,130.64 EASTING: 2,278,914.92 EASTING: 2,278,671.70 ELEVATION: 1,839.049' ELEVATION: 1,838.499' ELEVATION: 1,839.464'

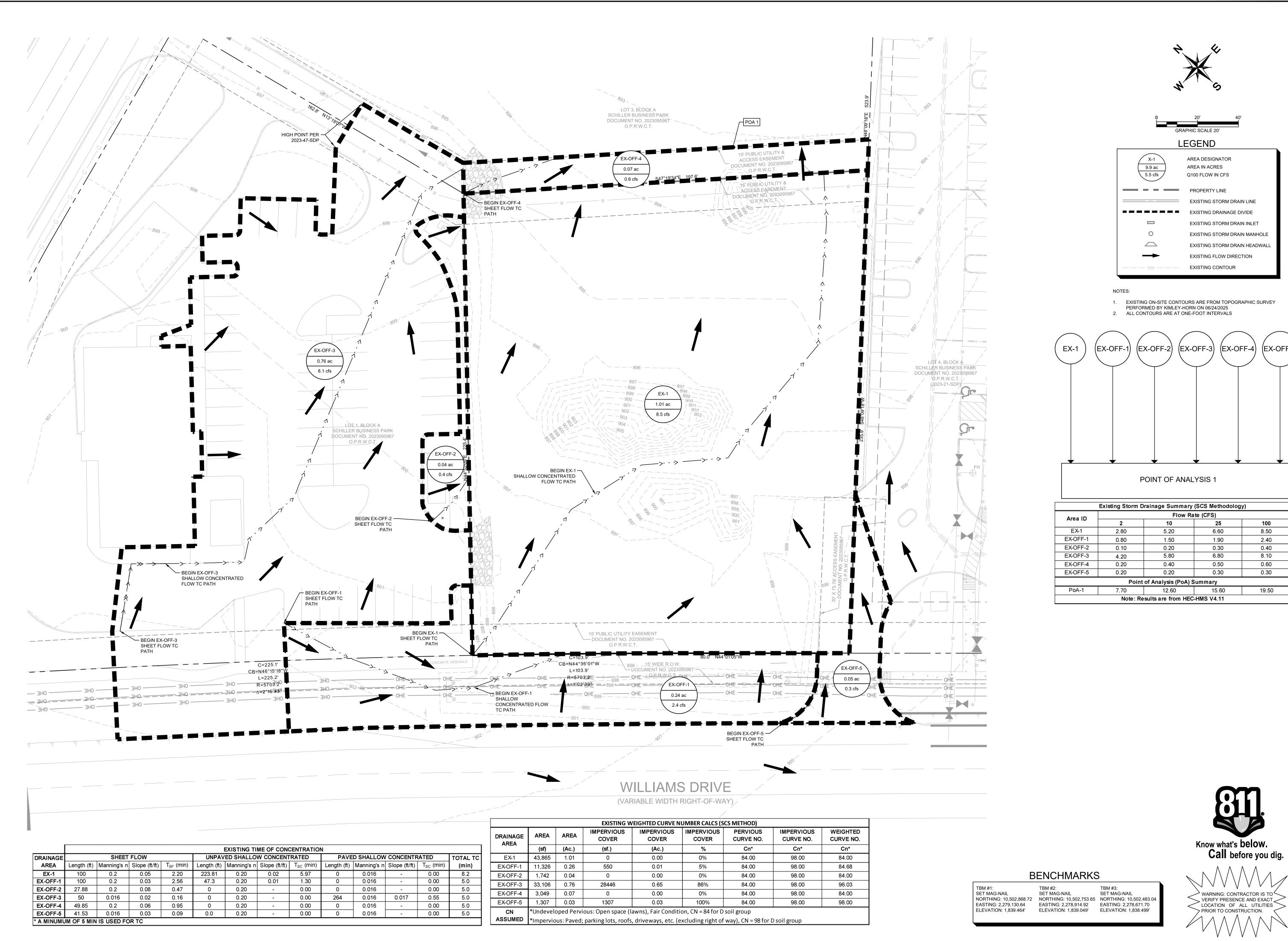
WARNING: CONTRACTOR IS TO  $^{\zeta}$ VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

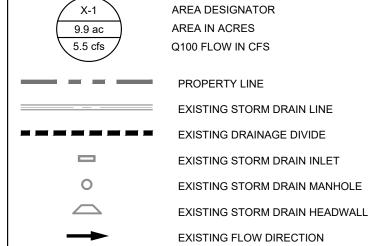
RYAN MCKAY 146418

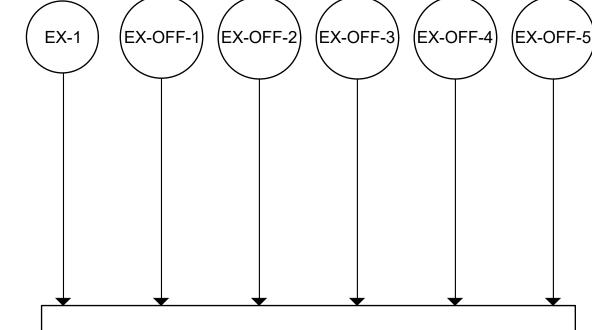
11/18/2025

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SHEET NUMBER 10 OF 25





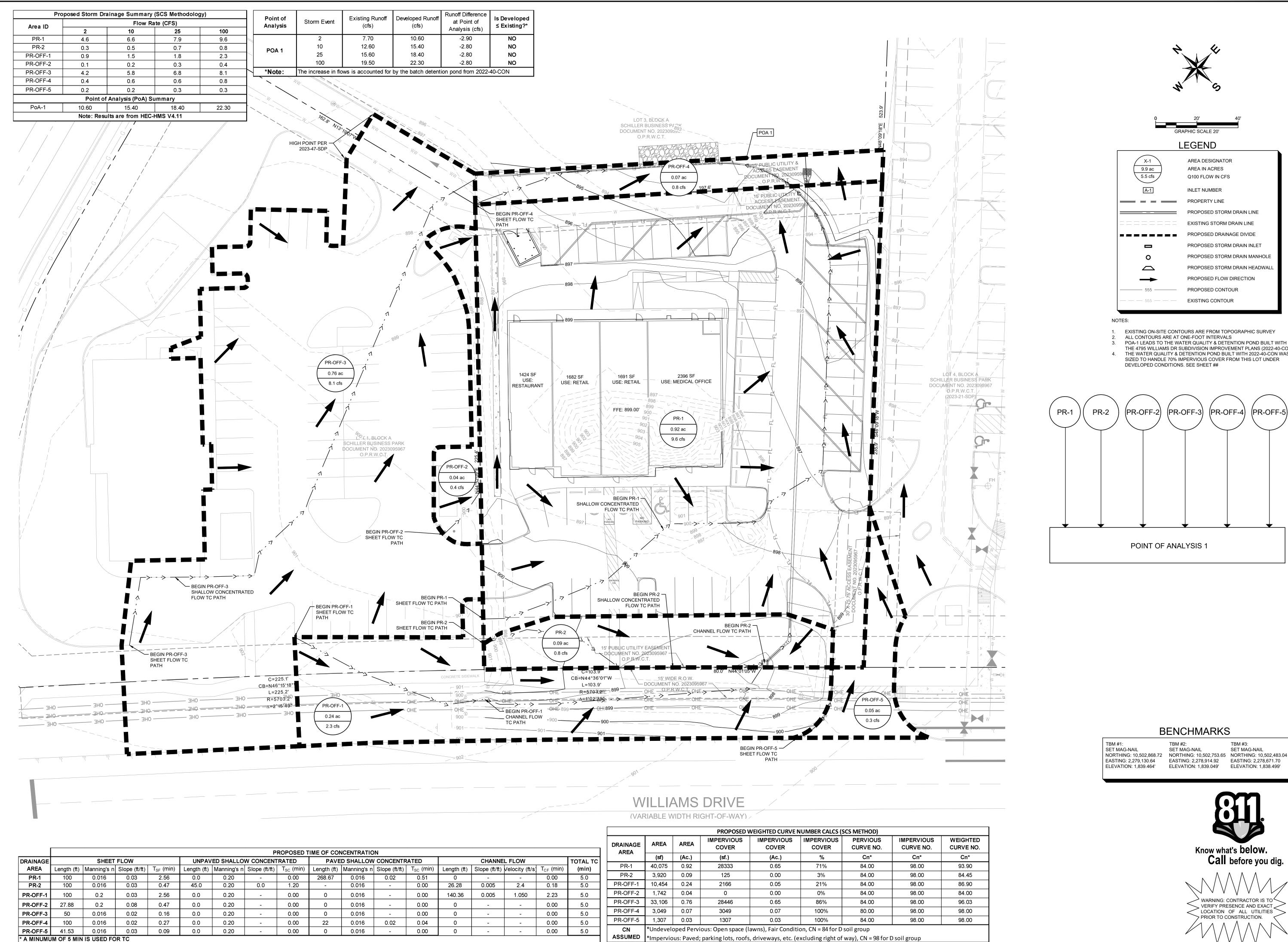


Area ID		Flow Ra	ite (CFS)	
AlealD	2	10	25	100
EX-1	2.80	5.20	6.60	8.50
EX-OFF-1	0.80	1.50	1.90	2.40
EX-OFF-2	0.10	0.20	0.30	0.40
EX-OFF-3	4.20	5.80	6.80	8.10
EX-OFF-4	0.20	0.40	0.50	0.60
EX-OFF-5	0.20	0.20	0.30	0.30

1/18/2025

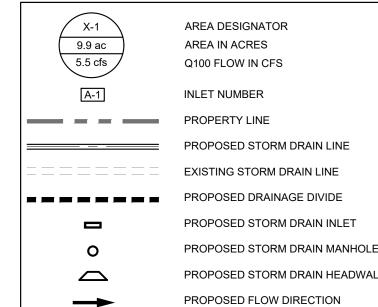
VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

SHEET NUMBER 11 OF 25

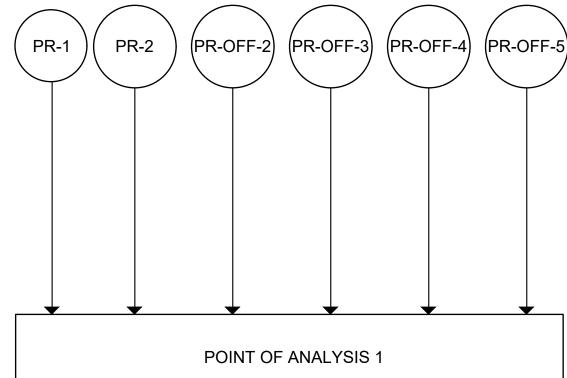








- EXISTING ON-SITE CONTOURS ARE FROM TOPOGRAPHIC SURVEY
- ALL CONTOURS ARE AT ONE-FOOT INTERVALS POA-1 LEADS TO THE WATER QUALITY & DETENTION POND BUILT WITH
- THE 4795 WILLIAMS DR SUBDIVISION IMPROVEMENT PLANS (2022-40-CON) 4. THE WATER QUALITY & DETENTION POND BUILT WITH 2022-40-CON WAS SIZED TO HANDLE 70% IMPERVIOUS COVER FROM THIS LOT UNDER DEVELOPED CONDITIONS. SEE SHEET ##



# DPOSED IAGE ARE/ MAP

RYAN MCKAY

11/18/2025

SET MAG-NAIL

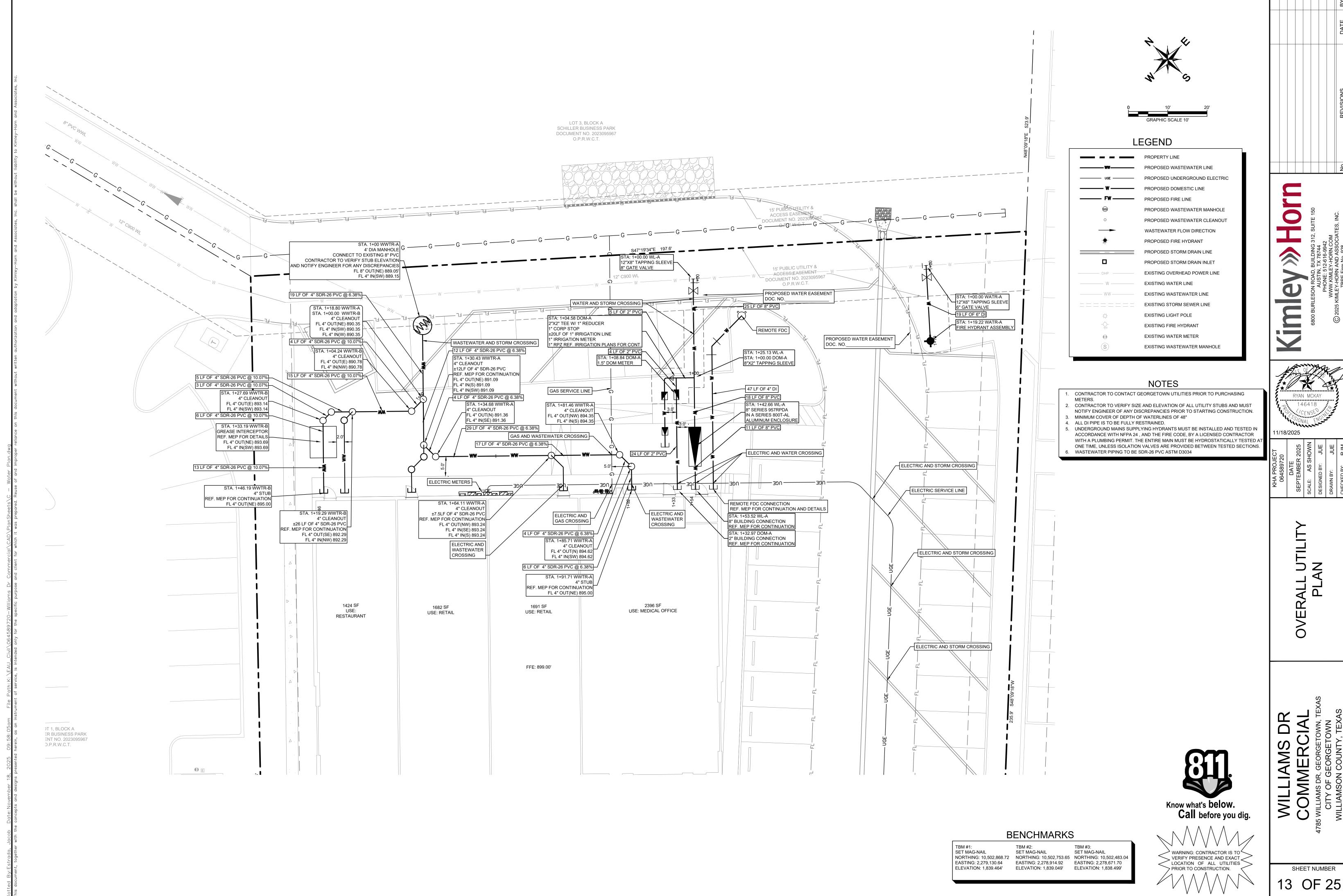
Know what's below.

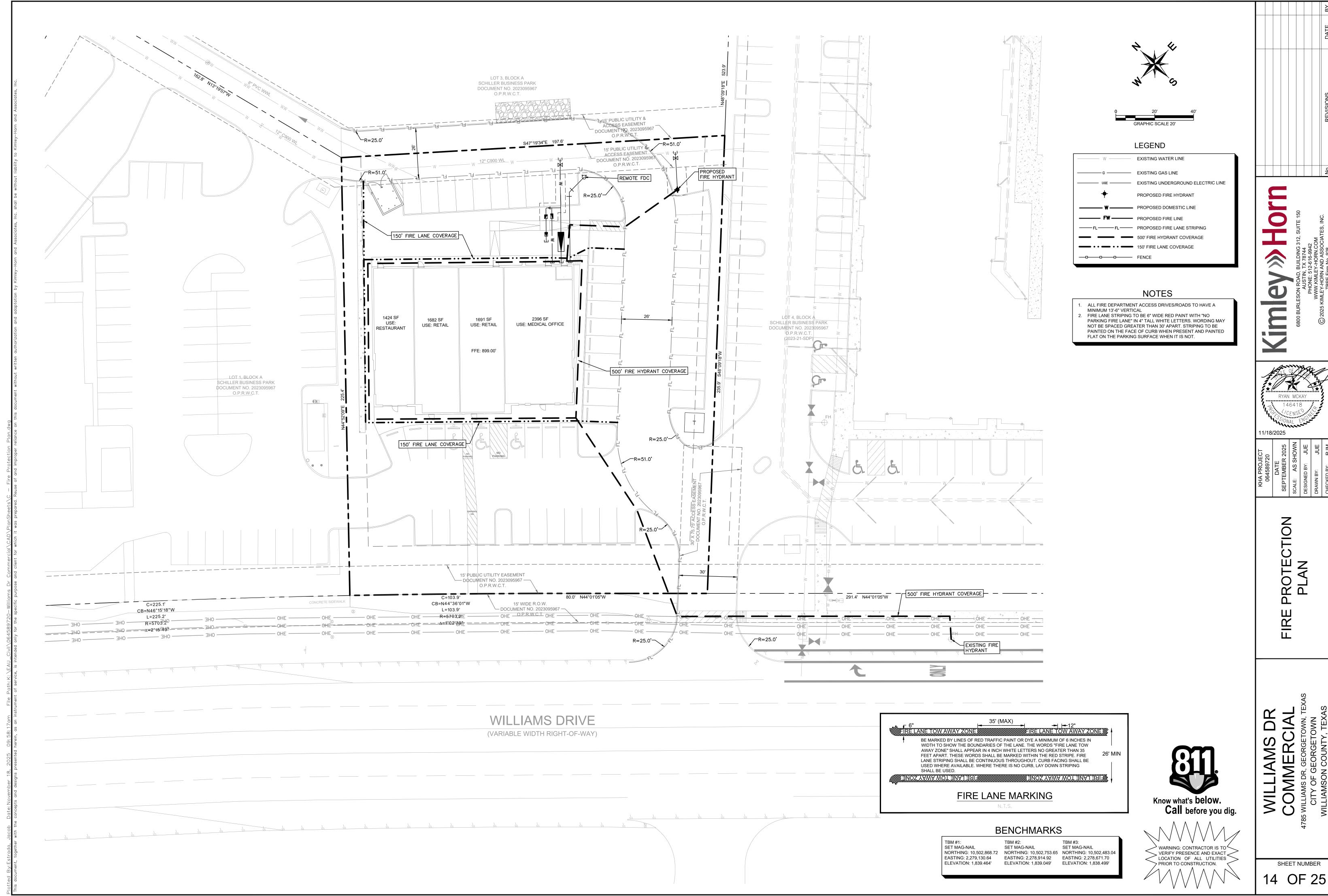
Call before you dig.

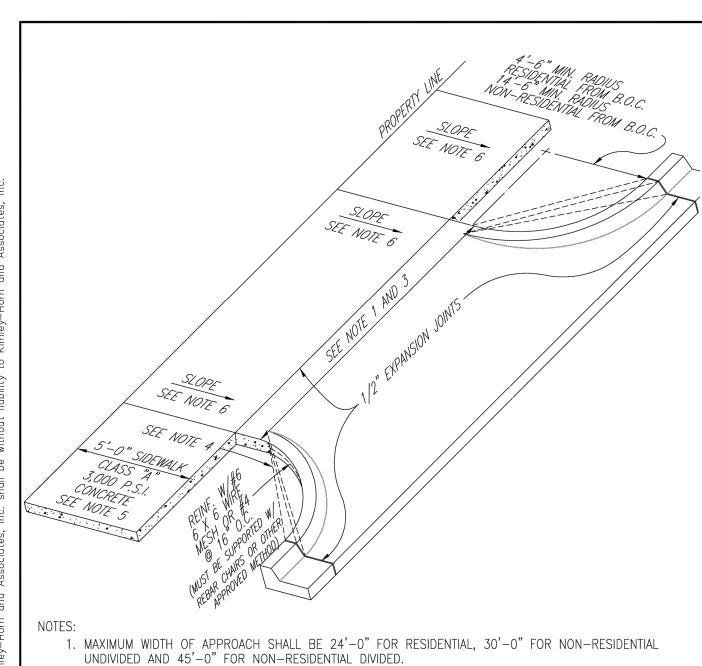
VERIFY PRESENCE AND EXACT
LOCATION OF ALL UTILITIES
PRIOR TO CONSTRUCTION.

ELEVATION: 1,838.499'

SHEET NUMBER 12 OF 25







2. DRIVEWAY PERMITS TO BE ACQUIRED FROM CITY INSPECTION OFFICE. 3. MINIMUM WIDTH OF APPROACH SHALL BE 10'-0" FOR RESIDENTIAL AND 15'-0" FOR NON-RESIDENTIAL.

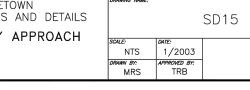
4. LINEAR "RADIUS" AT CORNERS, PERMITTED FOR "SINGLE FAMILY" OR "TWO FAMILY" RESIDENTIAL DRIVEWAY APPROACH.

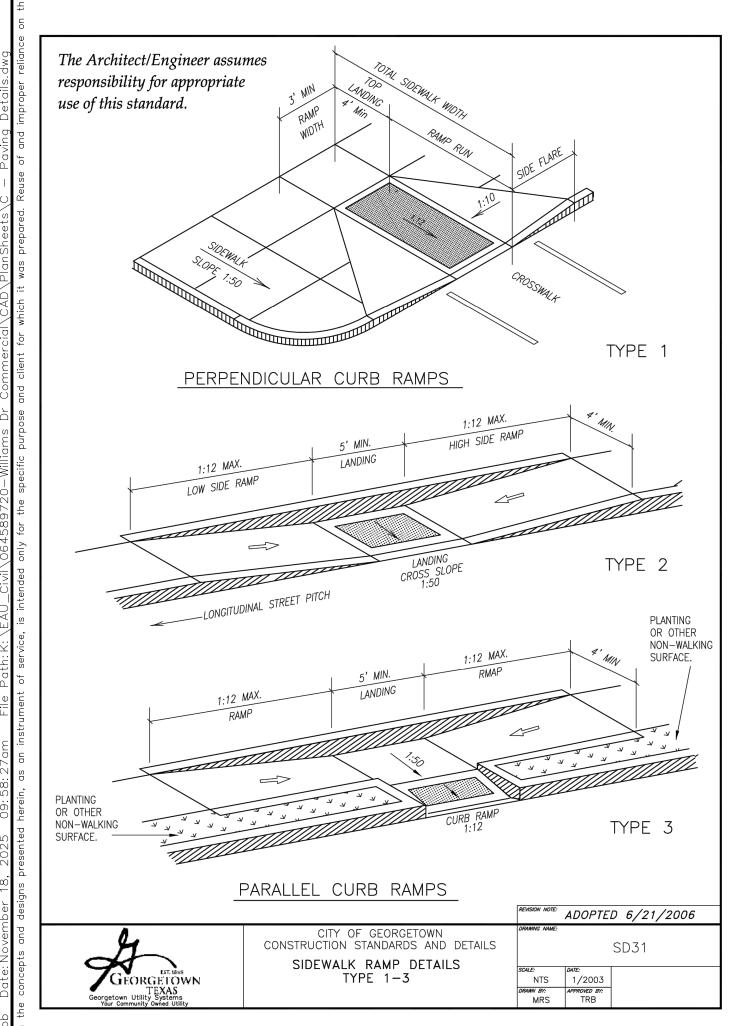
5. SIDEWALK LOCATION TO BE APPROVED BY CITY ENGINEER PRIOR TO FINAL DESIGN.

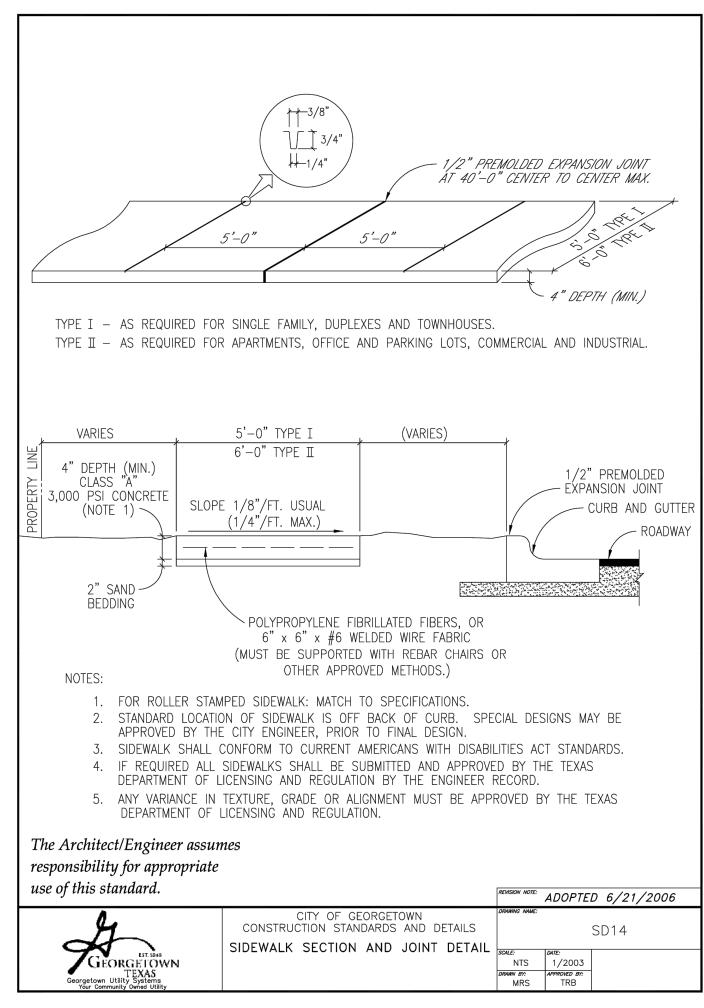
6. SLOPE 1/8" PER FOOT USUAL, NOT TO EXCEED 1/4" PER FOOT. 7. DRIVEWAY APPROACH THICKNESS TO BE A MIN. OF 6".

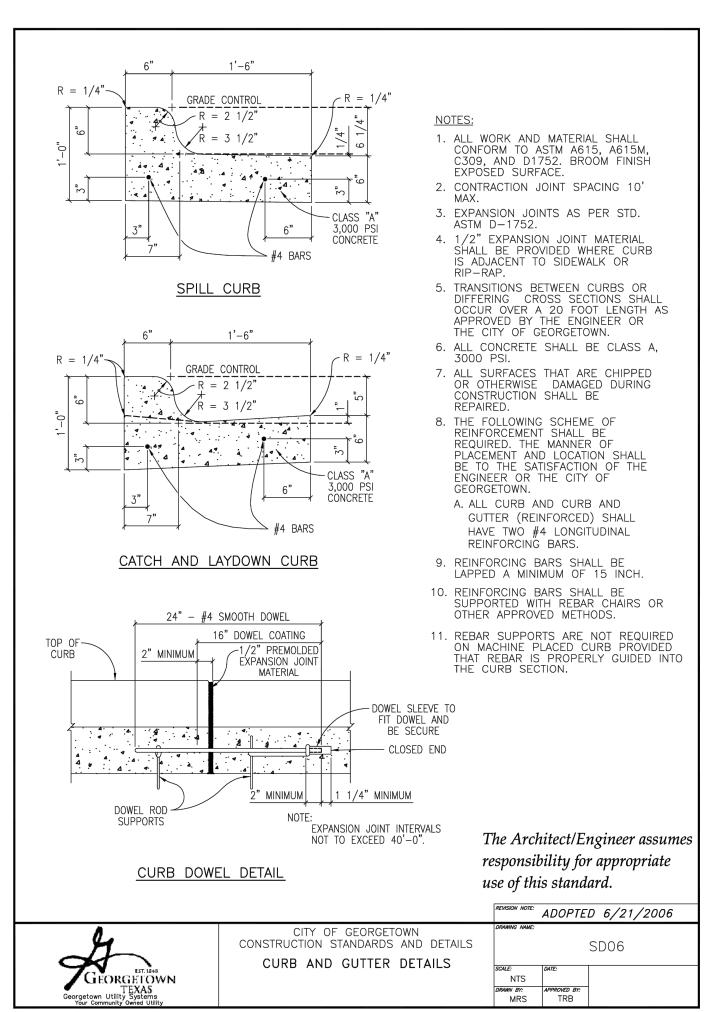
> The Architect/Engineer assumes responsibility for appropriate use of this standard.

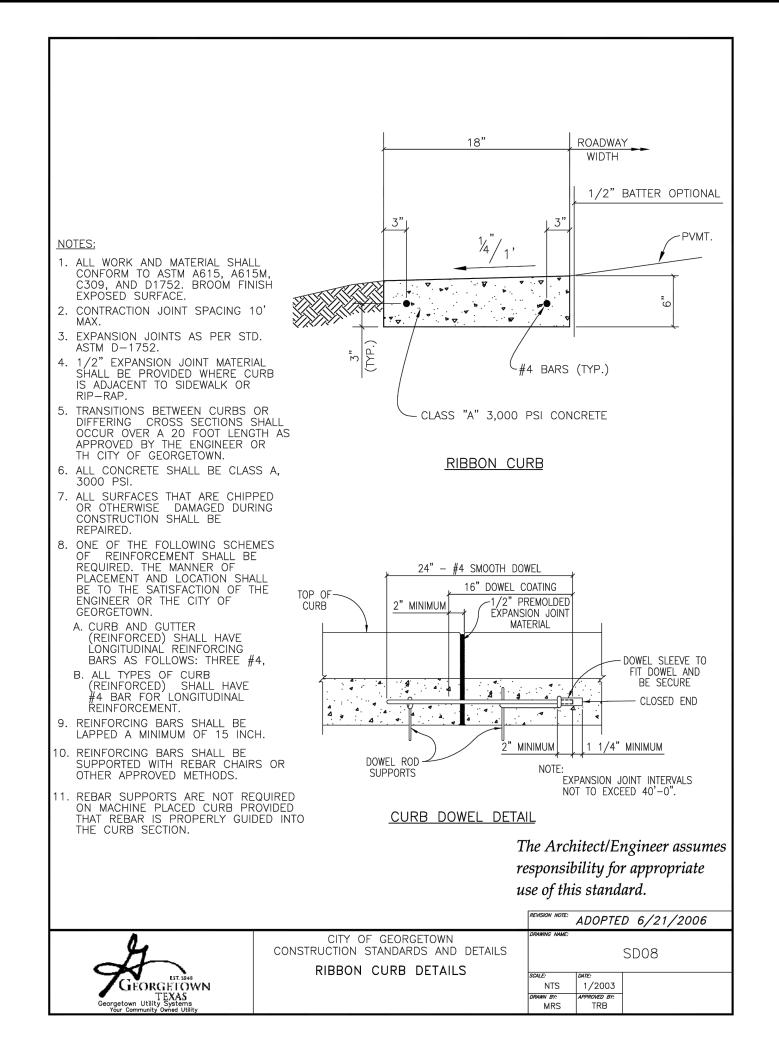
REVISION NOTE: ADOPTED 6/21/2006 CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS SD15 CONCRETE DRIVEWAY APPROACH TYPICAL

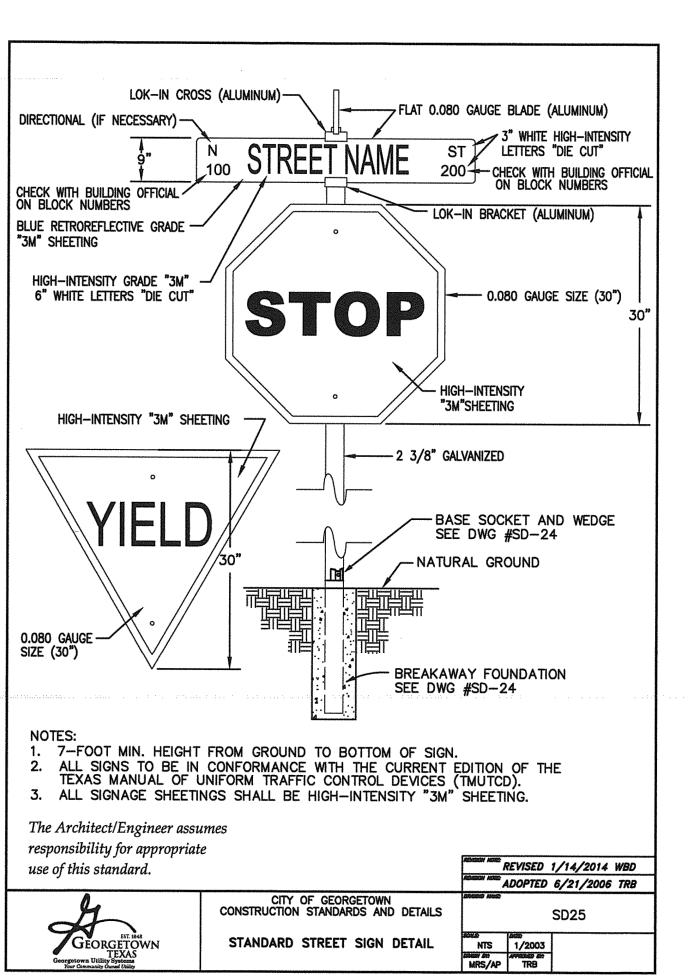


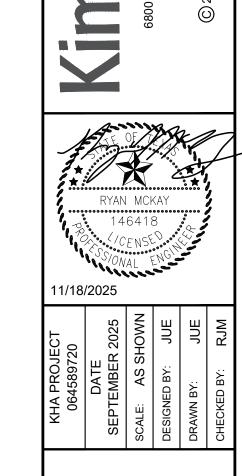






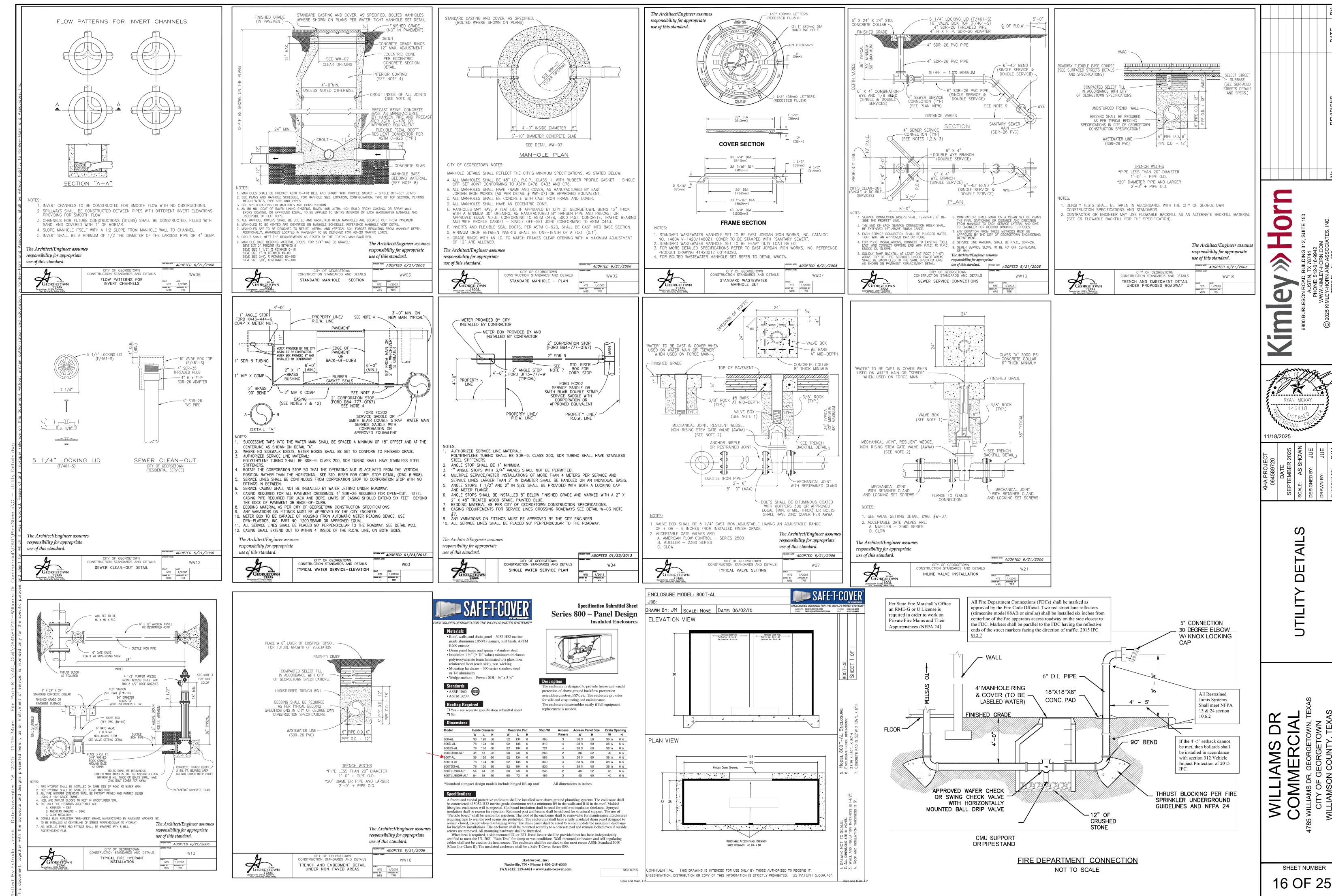






DETAIL **PAVING** 

SHEET NUMBER 15 OF 25



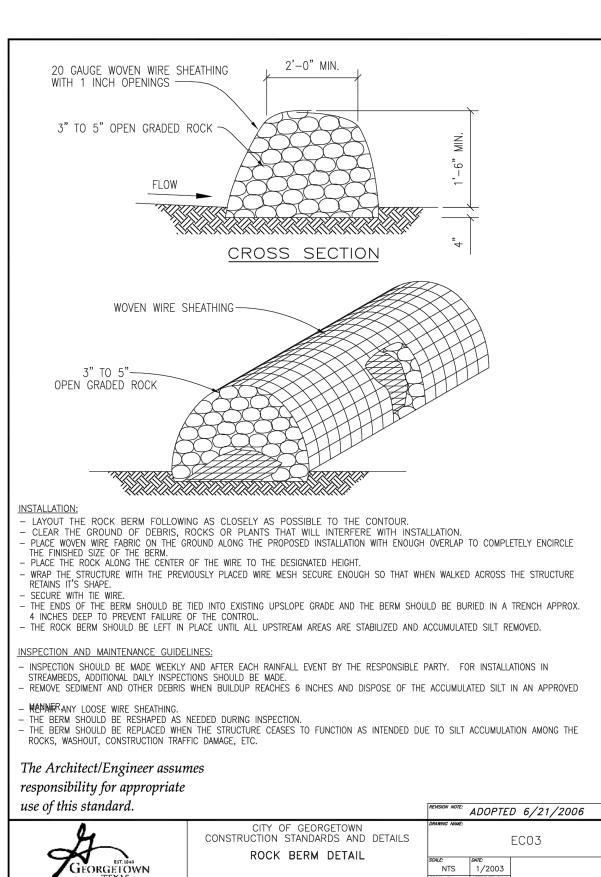
#### GUIDELINES FOR DESIGN AND INSTALLATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROLS

TYPE OF STRUCTURE	REACH LENGTH	MAXIMUM DRAINAGE AREA	SLOPE
SILT FENCE	N/A	2 ACRES	0 - 10%
	200 FEET	2 ACRES	10 - 20%
	100 FEET	1 ACRE	20 - 30%
	50 FEET	1/2 ACRE	> 30%
TRIANGLE FILTER DIKE	100 FEET	1/2 ACRE	< 30% SLOPE
	50 FEET	1/4 ACRE	> 30% SLOPE
ROCK BERM *, **	500 FEET	< 5 ACRES	0 - 10%

\* FOR ROCK BERM DESIGN WHERE PARAMETERS ARE OTHER THAN STATED, DRAINAGE AREA CALCULATIONS AND ROCK BERM DESIGN MUST BE SUBMITTED FOR REVIEW. \*\* HIGH SERVICE ROCK BERMS MAY BE REQUIRED IN AREAS OF ENVIRONMENTAL SIGNIFICANCE AS DETERMINED BY THE CITY OF GEORGETOWN.

#### The Architect/Engineer assumes responsibility for appropriate use of this standard.

,		REVISION NOTE:	ADOPTE	D 6/21/2006
4	CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TEMPORARY FROSION AND	DRAWING NAME:		EC01
GEORGETOWN	SEDIMENTATION CONTROL GUIDELINES	scale: NTS	1/2003	
TEXAS Georgetown Utility Systems Your Community Owned Utility		drawn by: MRS	APPROVED BY: TRB	



- NOTE: THIS SECTION IS INTENDED TO ASSIST THOSE PERSONS PREPARING WATER POLLUTION ABATEMENT PLANS (WPAP) OR STORM WATER POLLUTION PREVENTION PLANS (SW3P) THAT COMPLY WITH FEDERAL, STATE AND/OR LOCAL STORM WATER REGULATIONS.
- 1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO REMOVE EROSION/SEDIMENTATION CONTROLS AT THE COMPLETION OF PROJECT AND GRASS RESTORATION. 2. ALL PROJECTS WITHIN THE RECHARGE ZONE OF THE EDWARD'S AQUIFER SHALL SUBMIT A BEST MANAGEMENT PRACTICES AND WATER POLLUTION AND ABATEMENT PLAN TO THE TNRCC FOR APPROVAL PRIOR TO ANY CONSTRUCTION. 3. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS TO BE IN ACCORDANCE WITH THE APPROVED EROSION AND
- SEDIMENTATION CONTROL PLAN AND WATER POLLUTION ABATEMENT PLAN. DEVIATIONS FROM THE APPROVED PLAN MUST BE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE. 4. ALL PLANTING SHALL BE DONE BETWEEN MAY 1 AND SEPTEMBER 15 EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING.

  IF PLANTING IS AUTHORIZED TO BE DONE OUTSIDE THE DATES SPECIFIED, THE SEED SHALL BE PLANTED WITH THE ADDITION

  OF WINTER FESCUE (KENTUCKY 31) AT A RATE OF 1001b/ACRE. GRASS SHALL BE COMMON BERMUDA GRASS, HULLED,

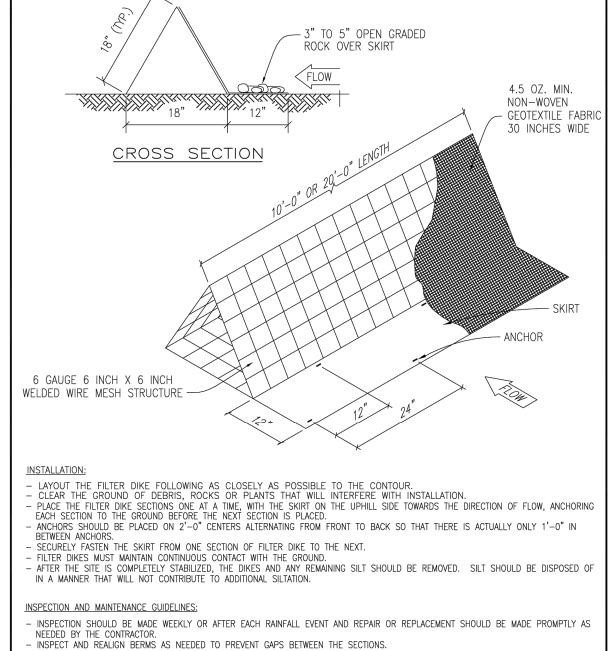
  MINIMUM 82% PURE LIVE SEED. ALL GRASS SEED SHALL BE FREE FROM NOXIOUS WEED, GRADE "A" RECENT CROP,

  RECLEANED AND TREATED WITH APPROPRIATE FUNGICIDE AT TIME OF MIXING. SEED SHALL BE FURNISHED IN SEALED,

  STANDARD CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS.
- 5. ALL DISTURBED AREAS TO BE RESTORED AS NOTED IN THE WATER POLLUTION ABATEMENT PLAN. 6. THE PLANTED AREA TO BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF FOUR (4) INCHES. THE IRRIGATION TO OCCUR AT 10-DAY INTERVALS DURING THE FIRST TWO MONTHS TO INSURE GERMINATION AND ESTABLISHMENT OF THE GRASS . RAINFALL OCCURRENCES OF 1/2 INCH OR GREATER TO POSTPONE THE WATERING SCHEDULE ONE WEEK.
- 7. RESTORATION TO BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 25 SQUARE FEET EXIST.
- 8. A MINIMUM OF FOUR (4) INCHES OF TOPSOIL TO BE PLACED IN ALL AREAS DISTURBED BY CONSTRUCTION. 9. THE CONTRACTOR TO HYDROMULCH OR SOD (AS SHOWN ON PLANS) ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION.
- 10. EROSION AND SEDIMENTATION CONTROLS TO BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILDUP WITHIN TREE DRIPLINE.
- 11. TO AVOID SOIL COMPACTION, CONTRACTOR SHALL NOT ALLOW VEHICULAR TRAFFIC, PARKING, OR STORAGE OF EQUIPMENT OR MATERIALS IN THE TREE DRIPLINE AREAS.
- 12. WHERE A FENCE IS CLOSER THAN FOUR (4) FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF EIGHT (8) FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE FENCING. 13. TREES TO BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
- 14. ANY ROOT EXPOSED BY CONSTRUCTION ACTIVITY TO BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
- 15. CONTRACTOR TO PRUNE VEGETATION TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.). ALL FINISHED PRUNING TO BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE "NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES").
- 16. THE CONTRACTOR IS TO INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY RAINFALL EXCEEDING 1/4
  INCH TO VERIFY THAT THEY HAVE NOT BEEN SIGNIFICANTLY DISTURBED. ANY ACCUMULATED SEDIMENT AFTER A
  SIGNIFICANT RAINFALL TO BE REMOVED AND PLACED IN THE OWNER DESIGNATED SPOIL DISPOSAL SITE. THE CONTRACTOR
  TO CONDUCT PERIODIC INSPECTIONS OF ALL EROSION/SEDIMENTATION CONTROLS AND TO MAKE ANY REPAIRS OR
  MODIFICATIONS NECESSARY TO ASSURE CONTINUED EFFECTIVE OPERATION OF EACH DEVICE. 17. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT IMMEDIATELY ADJACENT TO A PROTECTED TREE, ERECT THE FENCE APPROXIMATELY TWO TO FOUR
- FEET (2'-4') BEHIND THE AREA IN QUESTION. 18. NO ABOVE AND/OR BELOW GROUND TEMPORARY FUEL STORAGE FACILITIES TO BE STORED ON THE PROJECT SITE.
- 19. IF EROSION AND SEDIMENTATION CONTROL SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER'S REPRESENTATIVE AND THE CONTRACTOR TO EXAMINE THE EXISTING EROSION AND SEDIMENTATION CONTROL SYSTEMS FOR DAMAGE PRIOR TO CONSTRUCTION. ANY DAMAGE TO PREEXISTING EROSION AND SEDIMENTATION CONTROLS NOTED TO BE PEPDAIDED AT OWNERS SYSTEMS. FOR DAMAGE PRIOR TO CONSTRUCTION. ANY TO BE REPAIRED AT OWNERS EXPENSE.
- 20. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM ACCIDENTAL SPILL TO BE REMOVED AND DISPOSED OF PROPERLY.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES  CONSTRUCTION STANDARDS AND DETAILS  EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES  CONSTRUCTION STANDARDS  EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES  CONSTRUCTION STANDARDS  CONSTRUCTION AND TREE PROTECTION NOTES  CONSTRUCTION STANDARDS  CONST		REVISION NOTE:	ADOPTE	0 6/21/2006
Georgetown Utility Systems Your Community Owned Utility  MRS TRB	CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS EROSION AND SEDIMENTATION AND	SCALE: NTS DRAWN BY:	DATE: 1/2003 APPROVED BY:	ECO1A

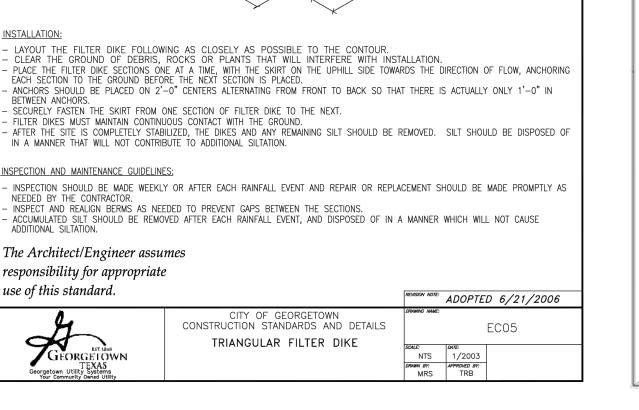


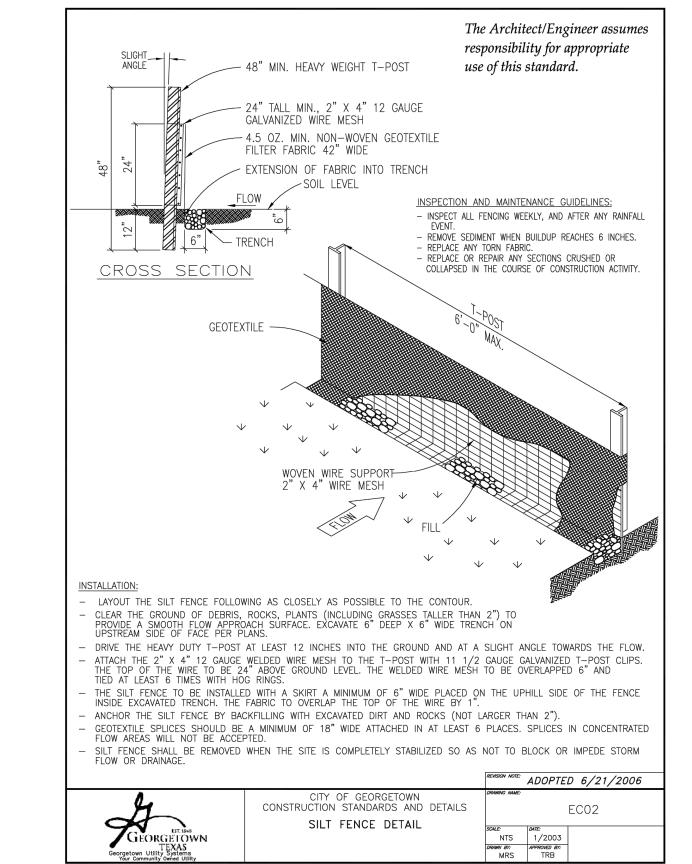
The Architect/Engineer assumes

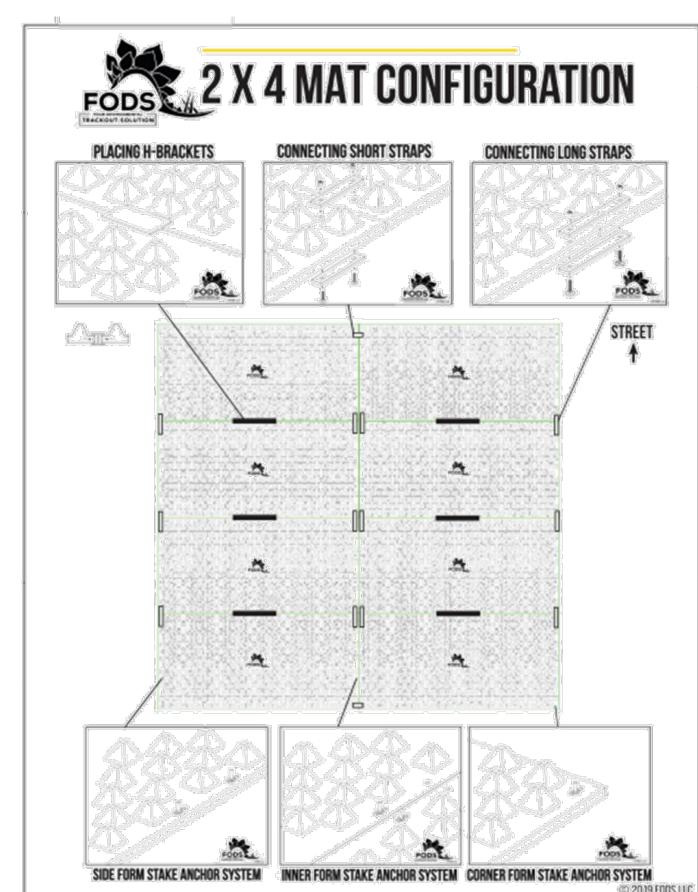
responsibility for appropriate

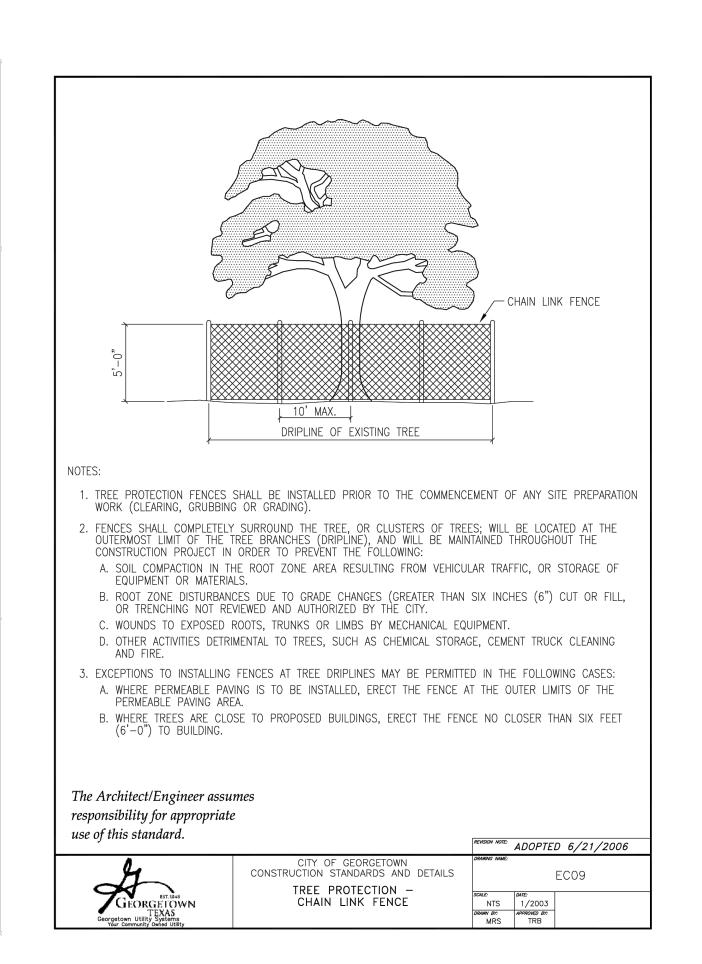
use of this standard.

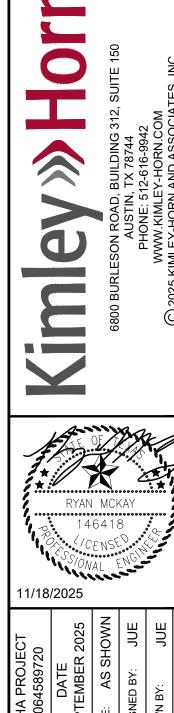
GEORGETOWN



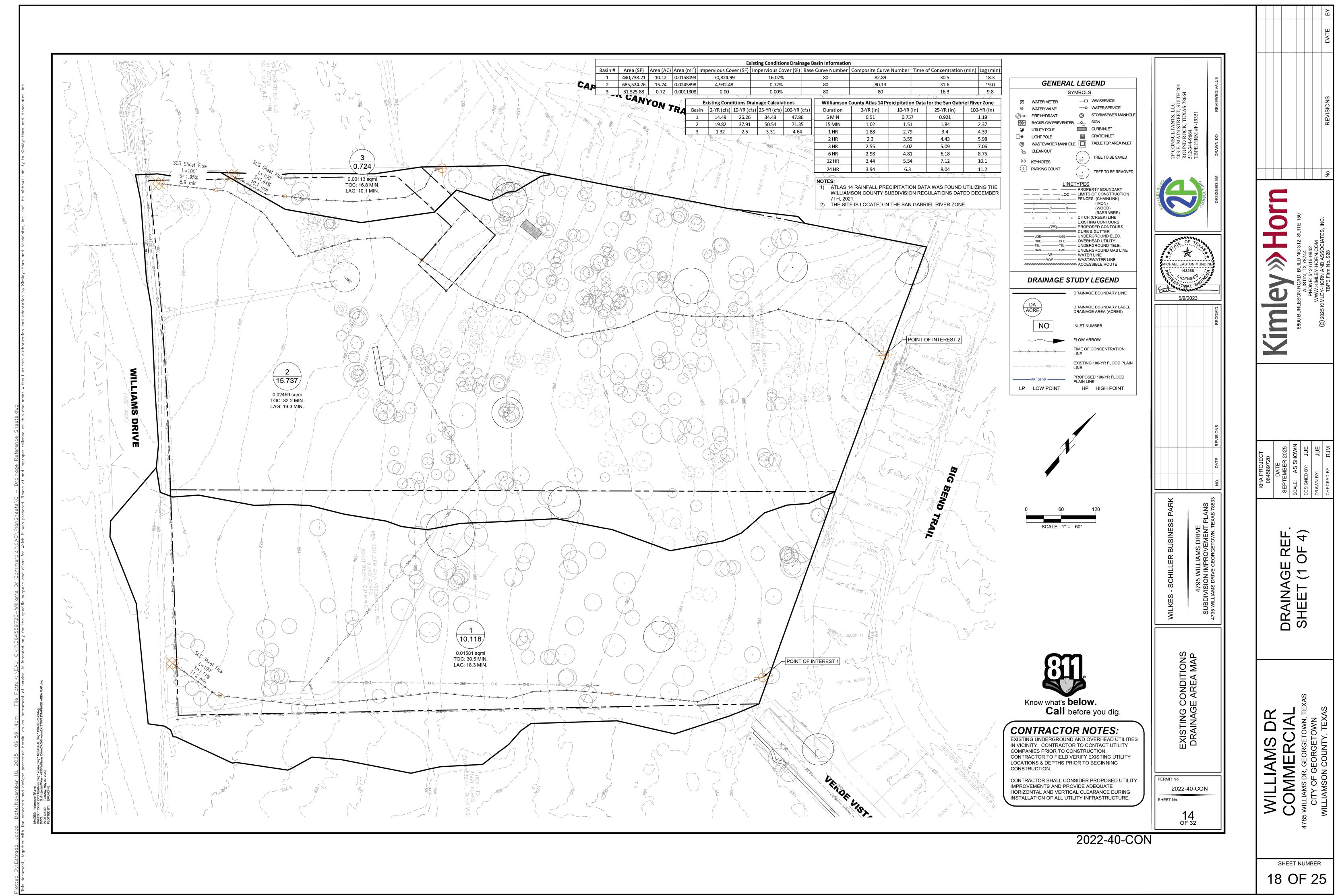




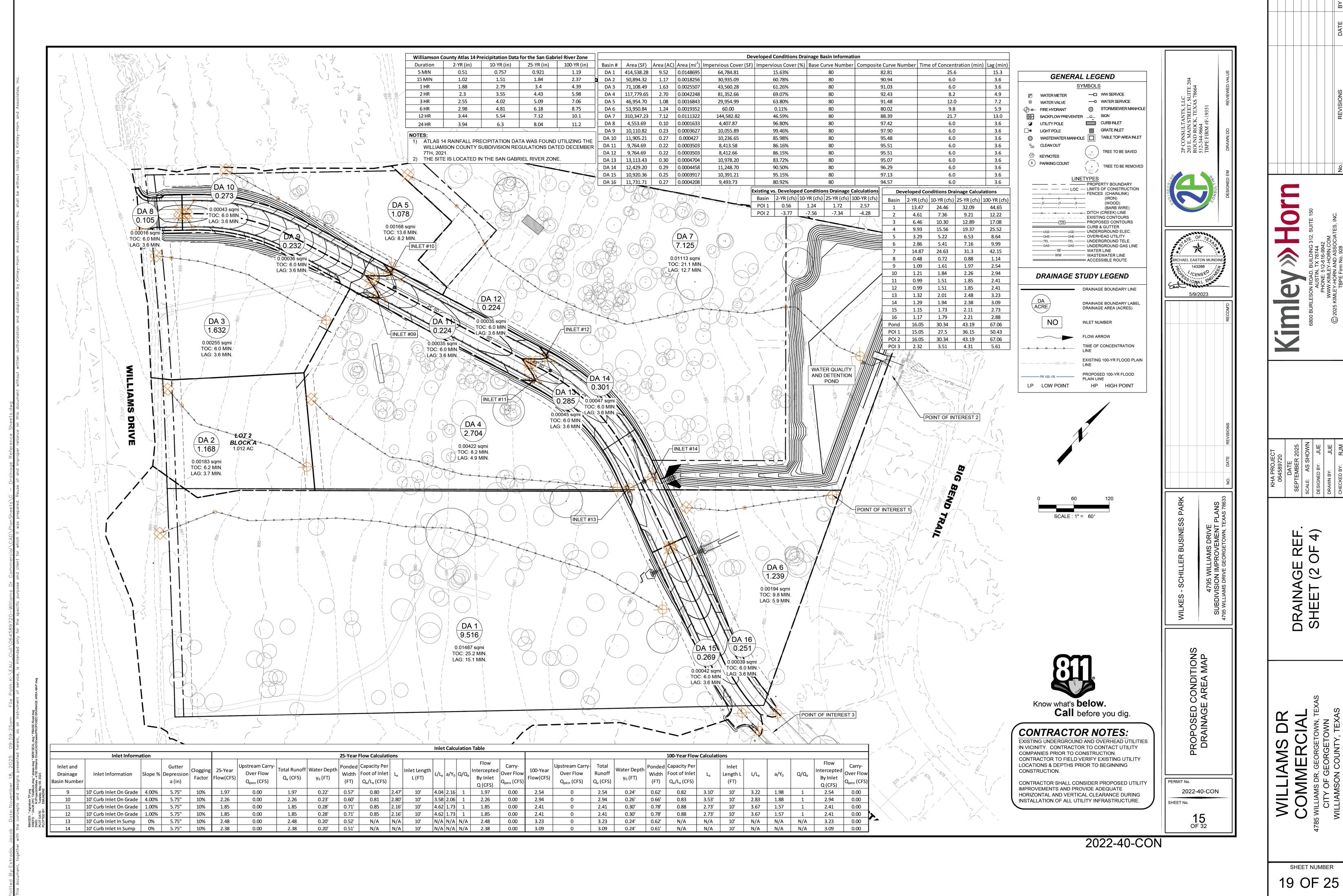




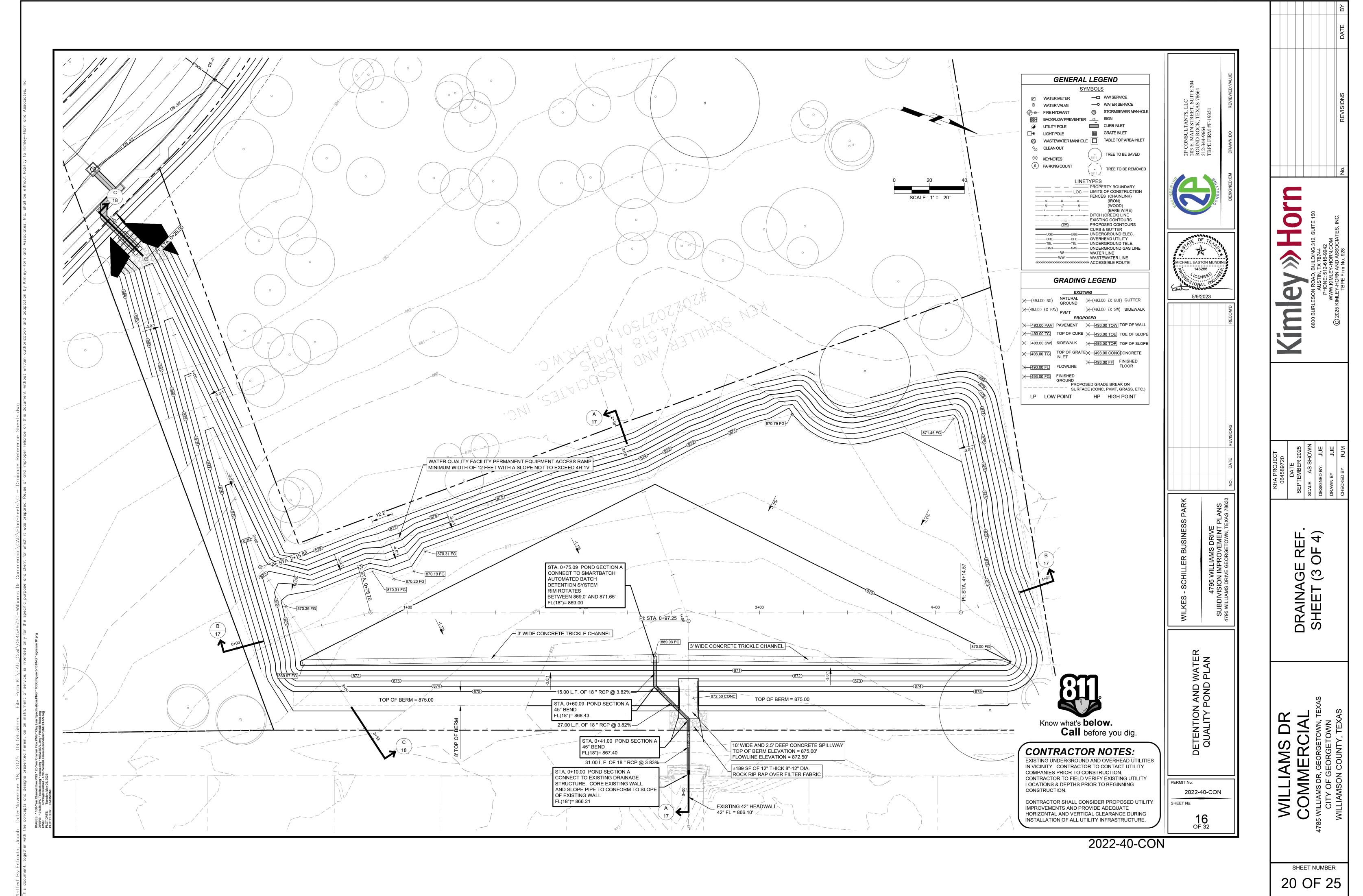
SHEET NUMBER 17 OF 25



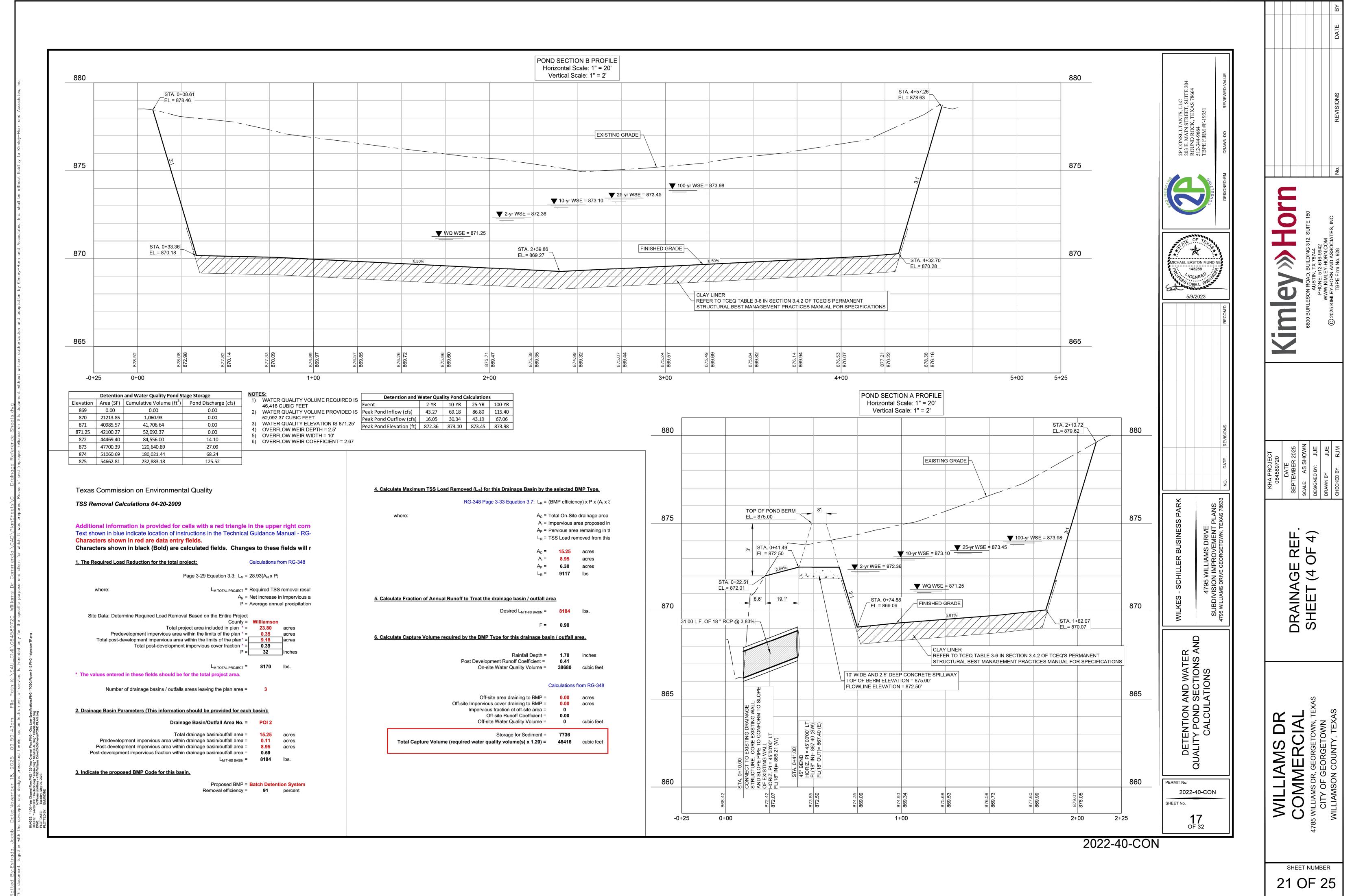
2025-79-SDP



2025-79-SDP



2025-79-SDP



## CITY CODE:

# LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND UTILITIES, PIPES, STRUCTURES, AND LINE RUNS IN THE FIELD PRIOR TO THE INSTALLATION OF ANY PLANT MATERIAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADVISE THE LANDSCAPE ARCHITECT OF ANY CONDITION FOUND ON THE SITE WHICH PROHIBITS

- INSTALLATION AS SHOWN ON THESE DRAWINGS.

  3. ALL PLANT MATERIAL SHALL BE MAINTAINED IN A HEALTHY AND GROWING CONDITION AND MUST BE REPLACED WITH PLANT MATERIAL OF SAME VARIETY AND SIZE IF DAMAGED, DESTROYED, OR REMOVED.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING AND REMOVAL OF DEBRIS PRIOR TO PLANTING IN ALL AREAS.
   FINAL FINISH GRADING SHALL BE REVIEWED BY THE LANDSCAPE ARCHITECT.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL TOPSOIL REQUIRED TO CREATE A SMOOTH CONDITION PRIOR TO PLANTING.

  6. ALL PLANT QUANTITIES LISTED ARE FOR INFORMATION ONLY. IT IS THE
- CONTRACTOR'S RESPONSIBILITY TO PROVIDE FULL COVERAGE IN ALL PLANTING AREAS AS SPECIFIED IN THE PLANT SCHEDULE AND VERIFY ALL QUANTITIES.

  7. LANDSCAPE CONTRACTOR TO PROVIDE STEEL EDGING (REFER TO MATERIALS
- 8. ALL PLANT MATERIAL SHALL CONFORM TO THE SPECIFICATIONS AND SIZES GIVEN IN THE PLANT LIST AND SHALL BE NURSERY GROWN IN ACCORDANCE WITH THE CURRENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK. ANY PLANT SUBSTITUTION SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO PURCHASE.

LEGEND) BETWEEN ALL PLANTING BEDS AND LAWN AREAS.

- 9. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ANY COORDINATION WITH OTHER CONTRACTORS ON SITE AS REQUIRED TO ACCOMPLISH ALL PLANTING OPERATIONS.
- 10. ALL SOILS IN ALL NEW PLANTING AREAS ARE TO BE AMENDED PER SPECIFICATIONS.
- 11. ANY PLANT MATERIAL THAT DOES NOT SURVIVE SHALL BE REPLACED WITH AN EQUIVALENT SIZE AND SPECIES WITHIN THIRTY (30) DAYS.
   12. PLANT MATERIAL SHALL BE PRUNED AS NECESSARY TO CONTROL SIZE BUT NOT
- 12. PLANT MATERIAL SHALL BE PRUNED AS NECESSARY TO CONTROL SIZE BUT NOT TO DISRUPT THE NATURAL GROWTH PATTERN OR CHARACTERISTIC FORM OF THE PLANT EXCEPT AS NECESSARY TO ACHIEVE HEIGHT CLEARANCE FOR VISIBILITY AND PEDESTRIAN PASSAGE OR TO ACHIEVE A CONTINUOUS OPAQUE HEDGE IF REQUIRED.
- 13. LANDSCAPED AREAS SHALL BE KEPT FREE OF TRASH, WEEDS, DEBRIS, AND DEAD PLANT MATERIAL. ALL LIME STABILIZED SOIL & INORGANIC SELECT FILL FOR BUILDING SHOULD BE REMOVED FROM PLANTING AREAS TO ALLOW FOR SOIL AMENDMENTS.

## **ACCESSIBILITY NOTES:**

- 1. TREES PLANTED ADJACENT TO ACCESSIBLE ROUTES AND ACCESSIBLE AREAS
- SHALL BE PRUNED TO PROVIDE CLEARANCE OF 80" AFF.

  2. IF PAVING HAS IRREGULAR PATTERN PROVIDED, JOINTS EXCEEDING MAX. 1/4" W, SHALL BE "FLUSH" WITH PAVING SURFACE MATERIAL

## **GENERAL NOTES:**

- 1. WRITTEN DIMENSIONS PREVAIL OVER SCALED DIMENSIONS. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
- 2. THE CONTRACTOR BEARS ALL RESPONSIBILITY FOR VERIFYING ALL UNDERGROUND UTILITIES, PIPES, STRUCTURES, AND LINE RUNS IN THE FIELD PRIOR TO CONSTRUCTION. ANY DAMAGE TO UTILITIES THAT ARE TO REMAIN SHALL BE REPAIRED IMMEDIATELY AT NO EXPENSE TO THE OWNER. LANDSCAPE ARCHITECT ASSUMES NO RESPONSIBILITY FOR ANY UTILITY NOT SHOWN ON PLANS.
- ALL PROPOSED AND FINISHED GRADES ARE BASED ON INFORMATION
  PROVIDED BY THE OWNER'S SURVEY AND/OR SURFACE BY THE PROJECT
  CIVIL ENGINEER. ANY DISCREPANCIES IN ACTUAL FIELD MEASUREMENTS ARE
  TO BE REPORTED TO THE LANDSCAPE ARCHITECT IMMEDIATELY.
   PRIOR TO COMMENCEMENT OF HARDSCAPE CONSTRUCTION, ALL PIERS,
- FOOTINGS, AND WALLS ARE TO BE SURVEYED, LAID OUT, AND STAKED IN FIELD FOR REVIEW BY LANDSCAPE ARCHITECT. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DEMOLITION, ADJUSTMENTS, OR RECONSTRUCTION RESULTING FROM UNAUTHORIZED CONSTRUCTION ACTIVITIES.
- 5. CONTRACTOR IS RESPONSIBLE FOR ALL QUANTITIES PER DRAWINGS AND SPECIFICATIONS. ANY QUANTITIES PROVIDED BY LANDSCAPE ARCHITECT ARE PROVIDED FOR CONVENIENCE ONLY. CONTRACTORS ARE TO BID THEIR OWN VERIFIED QUANTITIES. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
- 6. EASEMENTS SETBACKS, BUILDING, CURB AND GUTTER, AND UNDERGROUND UTILITIES HAVE BEEN SUPPLIED TO LANDSCAPE ARCHITECT BY THE PROJECT CIVIL ENGINEER. REFER TO CIVIL ENGINEER'S DRAWINGS FOR ADDITIONAL INFORMATION.

## **CLARIFICATIONS / EXCLUSIONS:**

- 1. CONCRETE LIGHT POLE BASES, INCLUDING ALL MEP AND STRUCTURAL ENGINEERING REQUIRED FOR THE INSTALLATION OF SPECIFIED LIGHTS AS WELL AS PROCUREMENT AND COORDINATION WITH POWER COMPANY IS SPECIFICALLY EXCLUDED FROM KIMLEY-HORN SCOPE.
- 2. ALL PROJECT SAFETY SIGNAGE, GRAPHICS, AND WAYFINDING WILL BE BY

FLAINI	SOLIL	DULL						
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CALIPER	SIZE	REMARKS
SHADE TREE	<u>s</u> BM	5	ACER GRANDIDENTATUM	BIGTOOTH MAPLE	B & B	3" CAL	12`-14` H X 6`-8` W	SINGLE STRAIGHT TRUNK, FULL AND MATCHING
	CE	5	ULMUS CRASSIFOLIA	CEDAR ELM	B & B	3" CAL	12`-14` H X 4`-6` W	SINGLE STRAIGHT TRUNK, FULL AND MATCHING
	SRO	4	QUERCUS VIRGINIANA	SHUMARD RED OAK	В&В	3" CAL	12`-14` H X 4`-6` W	SINGLE STRAIGHT TRUNK, FULL AND MATCHING
$\odot$	QV	5	QUERCUS SHUMARDII	SOUTHERN LIVE OAK	B & B	3" CAL	12`-14` H X 6`-8` W	SINGLE STRAIGHT TRUNK, FULL AND MATCHING
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SIZE	SPACING	REMARKS
SHRUBS •	ID	26	ILEX CORNUTA 'DWARF BURFORD'	DWARF BURFORD HOLLY	7 GAL	30" H X 30" W	48" O.C.	FULL AND MATCHING
	MP	27	MYRICA PUSILLA	DWARF SOUTHERN WAX MYRTLE	5 GAL	24" H X 36" W	18" O.C.	FULL AND MATCHING
£ • • • • • • • • • • • • • • • • • • •	IH	27	RAPHIOLEPIS INDICA	INDIAN HAWTHORNE	5 GAL	24" H X 24" W	36" O.C.	FULL AND MATCHING
$\odot$	TS	26	LEUCOPHYLLUM FRUTESCENS	TEXAS SAGE	5 GAL	24" H X 24" W	48" O.C.	FULL AND MATCHING
GROUND CO	VERS MG	126	OPHIOPOGON JAPONICUS	MONDO GRASS	1 GAL	12" H X 12" W	12" O.C.	TRIANGULAR SPACING, FULL AND MATCHING
MULCH / AGO	DG	<u>S</u> 117 SF	DECOMPOSED GRANITE	DECOMPOSED GRANITE	ROCK			COLOR TO BE TAN OR COMPLIMENT BUILDING. CONTRACTOR TO PROVIDE SAMPLE FOR CLIENT APPROVAL.
SOD / SEED	SOD	9,826 SF	CYNODON DACTYLON	BERMUDA GRASS	SOD			SOLID SOD, ROLLED TIGHT WITH SAND FILLED JOINTS, 100% WEED, DISEASE, AND PEST FREE

LANDSCAPE PLAN NOTES:

PLANT SCHEDULE

- 1. THE SYSTEM FOR IRRIGATION HAS BEEN SELECTED FOR THIS DEVELOPMENT. (CHOOSE ONE FROM BELOW)
- CONVENTIONAL SYSTEM: AN AUTOMATIC OR MANUAL UNDERGROUND IRRIGATION SYSTEM, WHICH MAY HAVE CONVENTIONAL SPRAY OR BUBBLER TYPE HEADS.
   DRIP: AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM IN CONJUNCTION WITH A WATER-SAVING SYSTEM, WHICH IS A DRIP.
- TEMPORARY AND ABOVE-GROUND WATERING: LANDSCAPE AREAS UTILIZING XERISCAPING PLANTS AND INSTALLATION TECHNIQUES, INCLUDING AREAS PLANTED WITH NATIVE GRASSES, WILDFLOWERS, AND TREES MAY USE A TEMPORARY AND ABOVE GROUND SYSTEM, AND SHALL BE REQUIRED TO PROVIDE IRRIGATION FOR THE FIRST THREE (3) GROWING SEASONS.

  2. A SEPARATE IRRIGATION PLAN SHALL BE PROVIDED AT THE TIME OF APPLICATION FOR A BUILDING PERMIT. IRRIGATION PLANS SHALL BE SUBMITTED WHEN SDP FOR PROJECTS PROPOSING PUBLIC
- MAINTENANCE: THE CURRENT OWNER AND SUBSEQUENT OWNERS OF THE LANDSCAPED PROPERTY, OR THE MANAGER OR AGENT OF THE OWNER, SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPED AREAS AND MATERIALS, REQUIRED BUFFER YARD AREAS AND MATERIALS AND REQUIRED SCREENING MATERIALS. SAID AREAS MUST BE MAINTAINED SO AS TO PRESENT A HEALTHY, NEAT AND ORDERLY APPEARANCE AT ALL TIMES AND SHALL BE KEPT FREE OF REFUSE AND DEBRIS. MAINTENANCE WILL INCLUDE REPLACEMENT OF ALL DEAD PLANT MATERIAL IF THAT MATERIAL WAS USED TO MEET THE REQUIREMENTS OF THE UDC. ALL SUCH PLANTS SHALL BE REPLACED WITHIN SIX (6) MONTHS OF NOTIFICATION, OR BY THE NEXT PLANTING SEASON, WHICHEVER COMES FIRST. A
- PROPERTY/ HOMEOWNERS ASSOCIATION MAY ASSUME RESPONSIBILITY FOR MAINTENANCE OF COMMON AREAS.

  4. THIS LANDSCAPE PLAN HAS BEEN PREPARED AND CERTIFIED BY A LANDSCAPE ARCHITECT TO MEET ALL REQUIREMENTS OF THE CITY OF GEORGETOWN UNIFIED DEVELOPMENT CODE.
- 5. ALL PLANT SELECTIONS HAVE BEEN CHOSEN FROM THE CITY OF GEORGETOWN PREFERRED PLANT LIST.

  6. NO MORE THAN 25% OF PLANTINGS HAVE BEEN SELECTED FROM ANY ONE SPECIES (IF PLANTING MORE THAN
- 6. NO MORE THAN 25% OF PLANTINGS HAVE BEEN SELECTED FROM ANY ONE SPECIES (IF PLANTING MORE THAN 5 TREES OR 10 SHRUBS)
  7. AT LEAST 50% OF THE REQUIRED PLANT MATERIALS ARE LOW WATER USERS AS IDENTIFIED ON THE PREFERRED PLANT LIST.
- I, MORGAN DEPINE, HEREBY CERTIFY THAT THIS LANDSCAPE PLAN COMPLIES WITH THE REQUIREMENTS OF CHAPTER 8 OF THE UNIFIED DEVELOPMENT CODE

GEND
PROPERTY LINE
EASEMENTS
STREET YARD

<b>Common Name</b>	Scientific Name	Native	Height	Spread	Light	Water	Evergreen / Deciduous	Utility
Maple, Big Tooth	Acer grandidentatum	E	40-50'	20-30'	Sun/Part Shade	VL	D	
Oak, Shumard Red*	Quercus shumardii	E	30-50'	30-50'	Sun	L	D	
Oak, Southern Live*	Quercus virginiana	B/E	30-50'	50'+	Sun	L	E	
Holly, Dwarf Burford	llex cornuta 'Dwarf Burford'		4-6'	3-4'	Sun/Part Shade	L	E	
Wax Myrtle, Southern	Myrica cerifera	В	Up to 12'	6-15'	Sun/Part Shade	М	E	
Hawthorne, Indian	Rhaphiolepis indica		4-6'	4-6'	Sun/Part Shade	М	E	
Holly, Dwarf Yaupon	llex vomitoria 'Nana'	X	2-4'	2-4'	Sun/Shade	L	E	

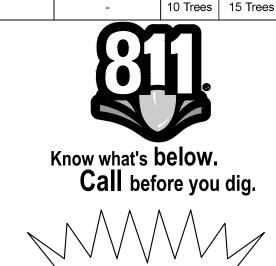
E - EDWARDS PLATEAU
B - BLACKLAND PRAIRIE
B/E - NATIVE TO BOTH
EDWARDS PLATEAU
AND BLACKLAND PRAIRIE
T- TEXAS (OUTSIDE CENTRAL TEXAS)
VL - VERY LOW
L - LOW
M - MEDIUM
E - EVERGREEN

D - DECIDUOUS

Site Area: 1.0 acres (43,875 SF) COMMERCIAL		
	REQUIRED	PROVIDED
Street Yard Landscaping (UDC Section 8.04.030)		
Minimum Required Street Yard Landscape Area		
The amount of Landscape Area required is:	3,127 SF	4,648 SF
15,635.0 SF X 0.2 (20%) = 3,127.0 SF	0,127 01	4,040 01
Minimum Number of Required Street Yard Shade Trees		
The minimum number of Shade Trees required is determined by the total size of the street yard:		
For street yards between 10,000 and 100,000 sq. ft., the number is:	5 Trees	6 Trees
15,635.0 SF - 10,000 sq. ft. ÷ 10,000 = .5635 + 4 additional trees = 4.56 Trees	3 Hees	O Hees
Minimum Number of Required Street Yard Shrubs		
The minimum number of shrubs required is determined by the total size of the street yard:		
For street yards between 10,000 and 100,000 sq. ft., the number is:	1E Charles	40 Charles
15,635.0 SF - 10,000 sq. ft. ÷ 10,000 = .5635 * 4 = 2.25 + 12 additional shrubs = 14.25 Shrubs	15 Shrubs	42 Shrubs
Gateway Overlay District Landscaping		
The required amount of live vegetative coverage is:		
Lot width at designated right-of-way in feet X 25, then multiplied by 0.8 (80%)	0.000.05	0.000.05
184 LF * 25 = 4,600 * .8 = 3,680 SF of Vegetative	3,680 SF	3,680 SF
The minimum number of Shade Trees required is:		ı
Lot width at designated right-of-way in feet X 25, divided by 1000, then multiplied by 2	10 T	40.7
184 LF * 25 = 4,600 / 1,000 = 4.6 * 2 = 9.2 Shade Trees	10 Trees	10 Trees
The minimum number of Shrubs required is:		1
Lot width at designated right-of-way in feet X 25, divided by 1000, then multiplied by 5	00.01	00.01.1
184 LF * 25 = 4,600 / 1,000 = 4.6 * 5 = 23 Shrubs	23 Shrubs	23 Shrubs
Parking Lot Landscaping (UDC Section 8.04.040)		
Minimum Required Parking Lot Landscape Area		
The square footage of Landscape Area required is:		
23 parking stalls located between the building and the street X 20 = 460 SF	700.05	0.404.05
30 parking stalls not located between the building and the street X 10 = 300 SF	760 SF	2,131 SF
Minimum Number of Required Parking Lot Shade Trees		
The minimum number of Shade Trees required is determined by the total number of parking spaces:		
53 ÷ 12 = 4.42 Shade Trees (please note - parking stalls provided in excess of the UDC parking requirements		40 T
shall be calculated as 1½ stalls each for purposes of this calculation)	5 Trees	10 Trees
Screening (UDC Section 8.04.070)		
Screening has been selected and designed in a manner that will meet the screening criteria for the particular	\	\ (= 0
tem being screened at the time of planting and reach a height of three or four feet within two years.	YES	YES
50% of Landscape Area To Be Low Water Use	•	
Total Landscape Area on site = 43,875 SF within limits of disturbance		
	21,938 SF	0.040.05.0
43,875 / 2 = 21,937.5 SF Max allowed to be sod	Allowed to be	9,812 SF Sc
	sod	Provided
Precent of Low Water Use Plant Material		
7 Plants provided / 5 Low water Usage = 71% of Plant Material Low Water Usage	50% Required	71% Provide

## NON-RESIDENTIAL LANDSCAPE REQUIREMENTS:

	Landscape Area Required	Landscape Area Proposed	Shrubs Required	Shrubs Proposed	Evergreen Shrubs Required	Evergreen Shrubs Proposed	Evergreen Ornamental Trees Required	Evergreen Ornamental Trees Proposed	Shade Trees Required	Shade Trees Propose
Gateway Overlay District Lands caping – Section 8.04.050 (if applicable)	3,680 SF	3,680 SF	23 Shrubs	23 Shrubs	I				10 Trees	10 Trees
Gatew ay Landscape Required										$\geq$
Minus < 20" Landscape Credit Trees Counted										
Minus 20"+ Landscape Credit Trees Counted x 2										
Gatew ay Landscape Provided		3,680 SF		23 Shrubs						10 Tree
Total	3,680 SF	3,680 SF		23 Shrubs					><	10 Tree
Street Yard Landscaping -										
Section 8.04.030 Street Yard Landscape Required	3,127 SF		15 Shrubs						5 Trees	$\overline{}$
Minus < 20" Landscape Credit Trees Counted										
Minus 20"+ Landscape Credit Trees Counted x 2										
Minus area or plantings that can be credited from Gatew ay Landscaping										6 Trees
Street Yard Landscape Provided		4,648 SF		42 Shrubs						6 Trees
Total		4,648 SF		42 Shrubs					5 Trees	6 Trees
Parking Lot Landscaping - Section 8.04.040										
Parking Lot Landscape Required	760 SF								5 Trees	$\geq$
Minus area or plantings that can be credited tow ards Street Yard Landscaping										
Minus < 20" Landscape Credit Trees Counted										
Minus 20"+ Landscape Credit Trees Counted x 2										
Parking Lot Landscape Provided		2,131 SF								8 Trees
Total		2,131 SF							5 Trees	8 Trees
Bufferyard Landscaping - Section 8.04.060 (if applicable)		,								
Bufferyard Landscape Required										$\nearrow$
Minus < 20" Landscape Credit Trees Counted										
Minus 20"+ Landscape Credit Trees Counted x 2										
Total Screening – Section										
8.04.060 (if applicable) Total						42 Shrubs				
Grand Total	7.507.05	40.450.05		05.01		42 Shrubs				45.7
Grand Total	7,597 SF	10,459 SF	38 Shrubs	65 Shrubs	_	1 42 Shrube	=	_	10 Trees	15 Tree



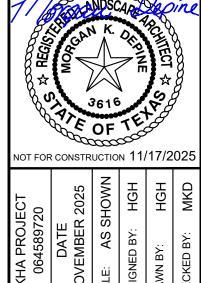
WARNING: CONTRACTOR IS TO VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES

SUITE 150

TES, INC.

No. REVISIONS





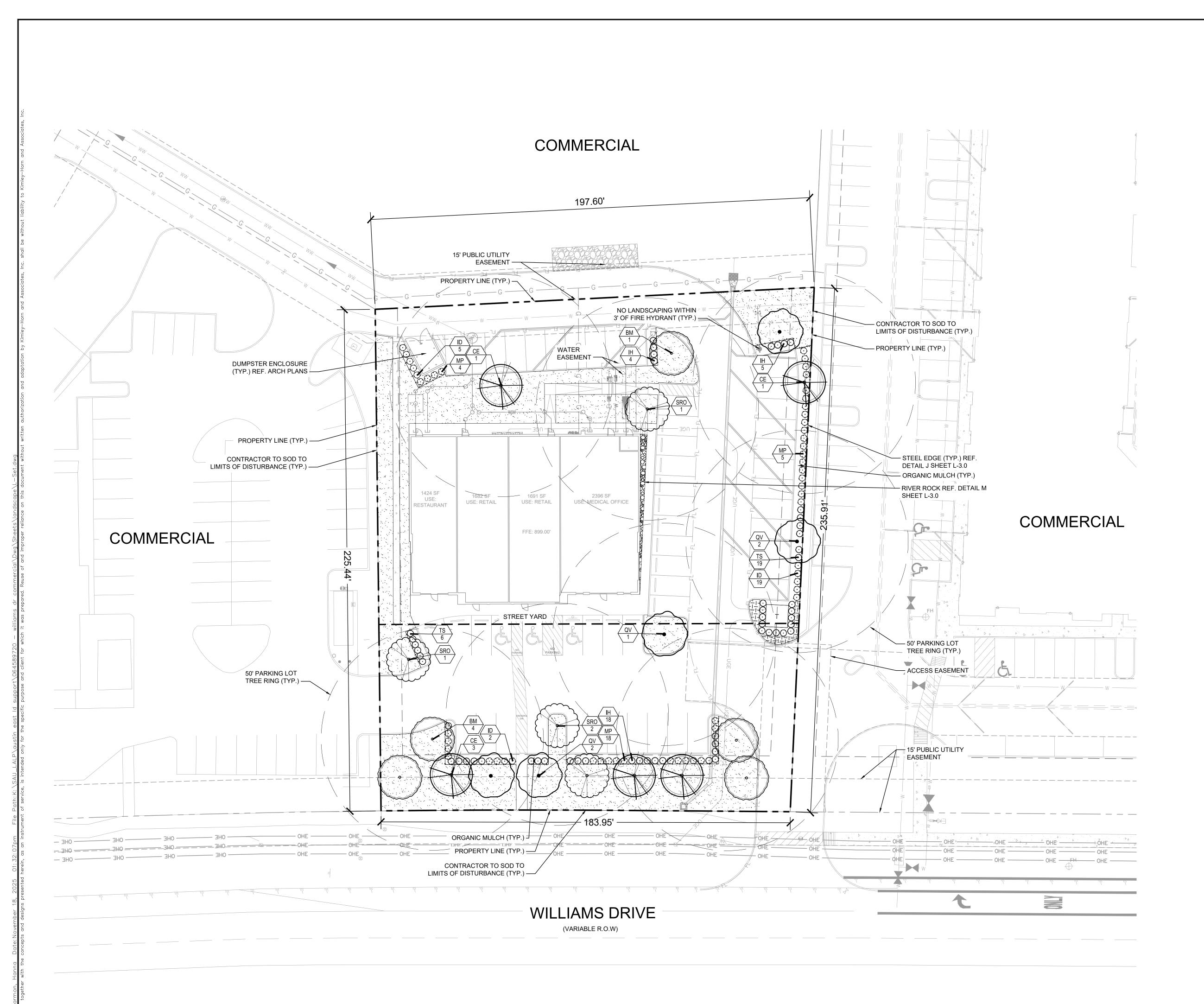
LANDSCAPE SCHEDULE AND

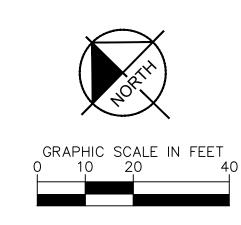
MMERCIAL

AMS DR, GEORGETOWN, TEXAS

CON 4785 WILLIAMS CITY O

SHEET NUMBER 22 OF 25





LEGEND

PLANT SCHEDULE

SYMBOL CODE COMMON NAME
SHADE TREES

BM BIGTOOTH MAPLE

CE CEDAR ELM

SRO SHUMARD RED OAK

QV SOUTHERN LIVE OAK

DWARF BURFORD HOLLY

MP DWARF SOUTHERN WAX MYRTLE

( IH INDIAN HAWTHORNE

TS TEXAS SAGE

GROUND COVERS

MG MONDO GRASS

MULCH / AGGREGATES

DECOMPOSED GRANITE

SOD / SEED
SOD BERMUDA GRASS

SEE FULL PLANT SCHEDULE ON SHEET L-1.0



WARNING: CONTRACTOR IS TO VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

JITE 150
S, INC.

6800 BURLESON ROAD, BUILDING 312, SUIYON TO AUSTIN, TX 78744
PHONE: 512-616-9942
WWW.KIMLEY-HORN.COM
© 2025 KIMLEY-HORN AND ASSOCIATES, TRAPE Firm NO 928

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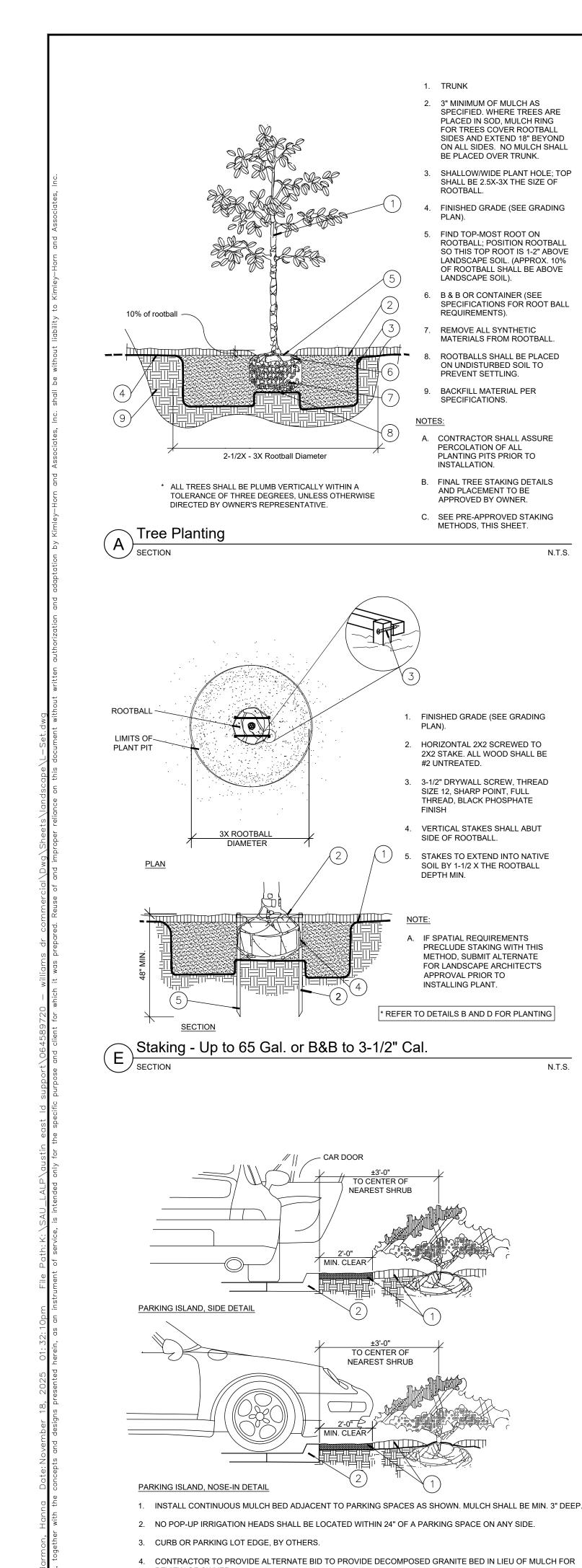
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DESIGNED BY: HGH
DRAWN BY: HGH

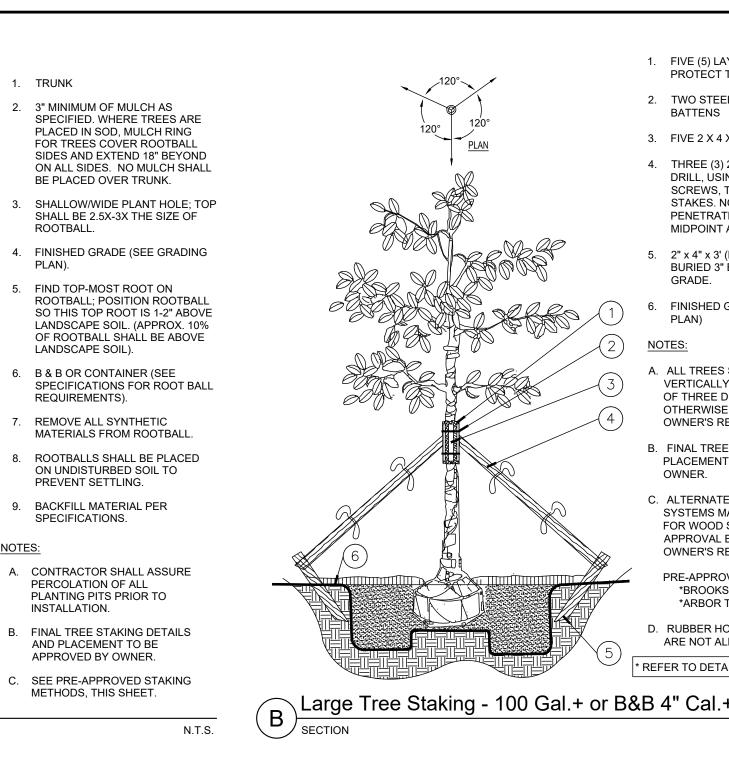
ANDSCAPE PLAN

CITY OF GEORGETOWN

SHEET NUMBER

23 OF 25





FINISHED GRADE (SEE GRADING

2X2 STAKE. ALL WOOD SHALL BE

2. HORIZONTAL 2X2 SCREWED TO

3. 3-1/2" DRYWALL SCREW, THREAD

THREAD, BLACK PHOSPHATE

SIZE 12, SHARP POINT, FULL

4. VERTICAL STAKES SHALL ABUT

5. STAKES TO EXTEND INTO NATIVE

. IF SPATIAL REQUIREMENTS

APPROVAL PRIOR TO

\* REFER TO DETAILS B AND D FOR PLANTING

INSTALLING PLANT.

TO CENTER OF

NEAREST SHRUB

TO CENTER OF

√Parking Space / Curb Planting

PRECLUDE STAKING WITH THIS

METHOD, SUBMIT ALTERNATE

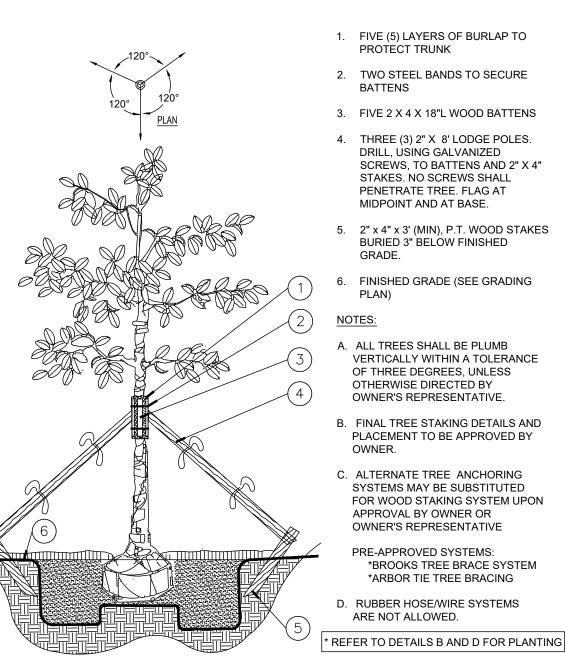
FOR LANDSCAPE ARCHITECT'S

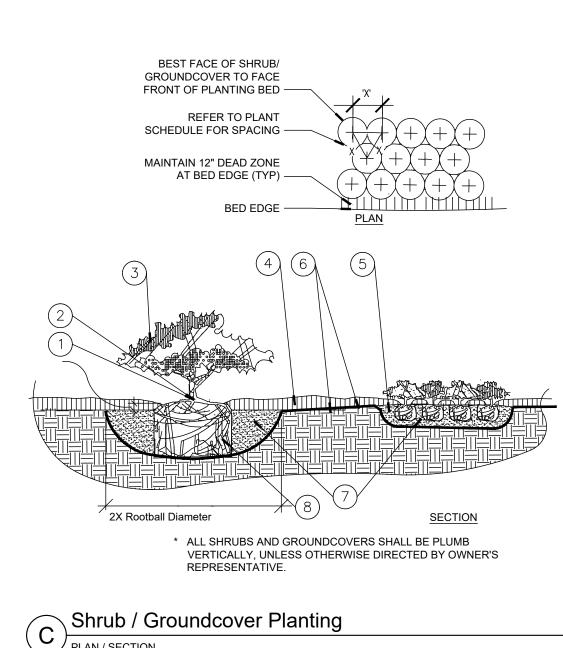
SOIL BY 1-1/2 X THE ROOTBALL

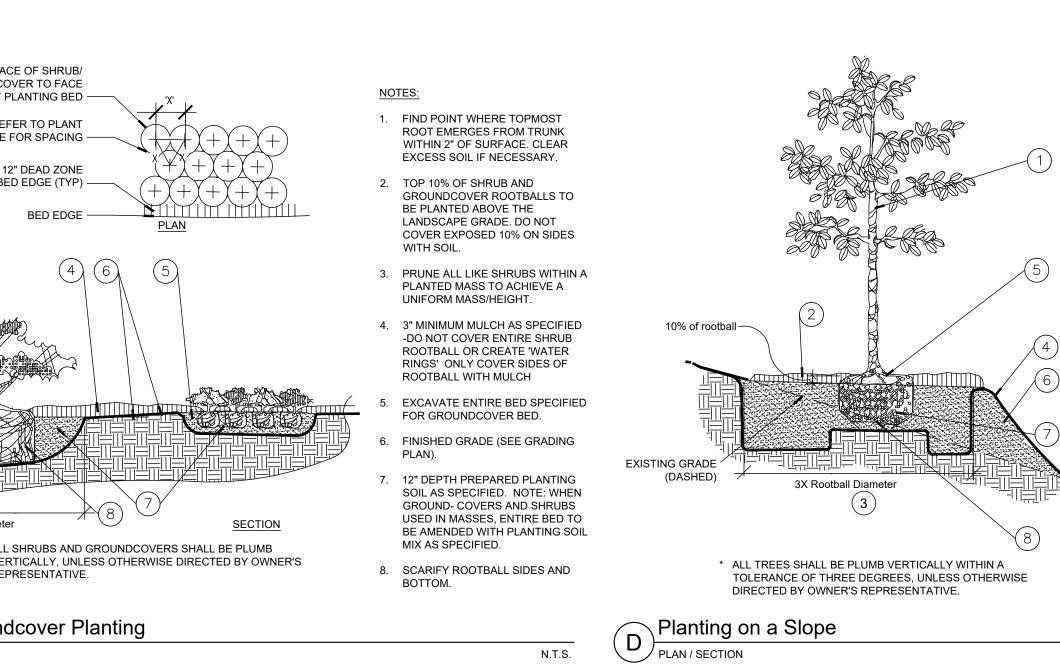
SIDE OF ROOTBALL.

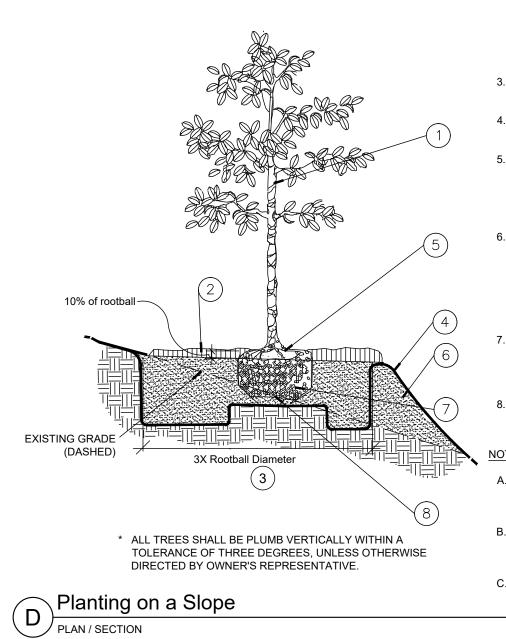
DEPTH MIN.

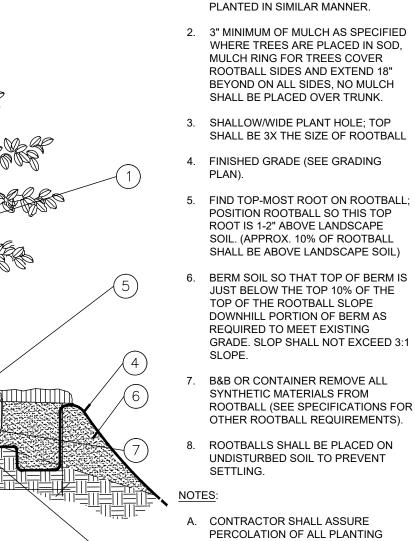
#2 UNTREATED.

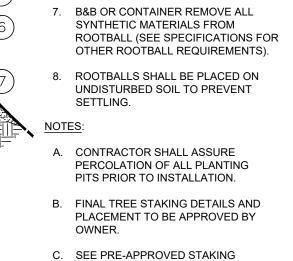








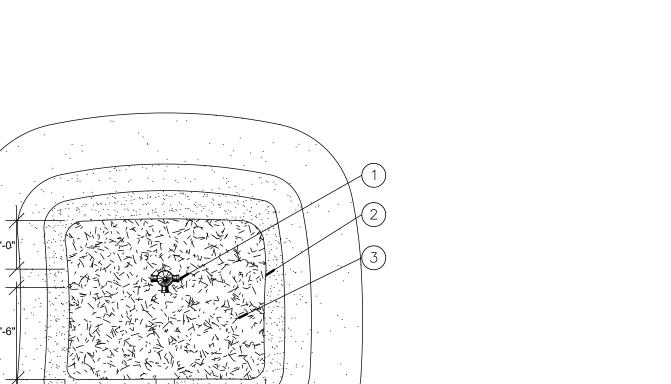


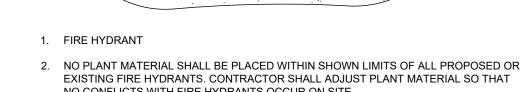


METHODS, THIS SHEET

N.T.S.

1. TREES, PALMS, AND LARGE SHRUBS (15 GAL OR GREATER) SHALL BE



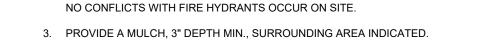


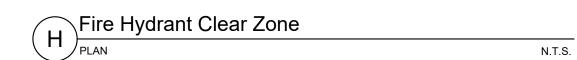
1) RIVER ROCK

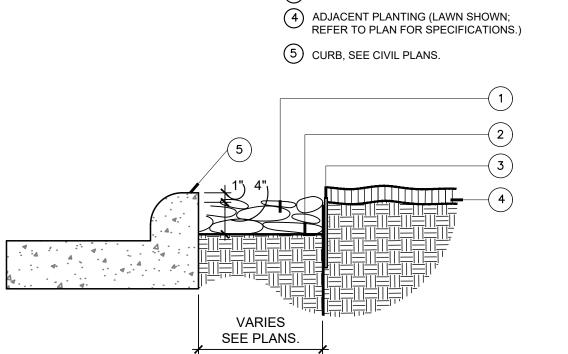
(3) METAL EDGING

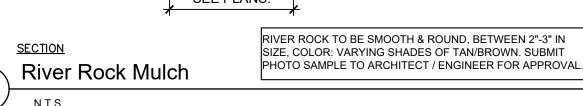
(2) WEED BLOCK / FILTER FABRIC

'FRONT' OF HYDRANT (TOWARDS CURB)











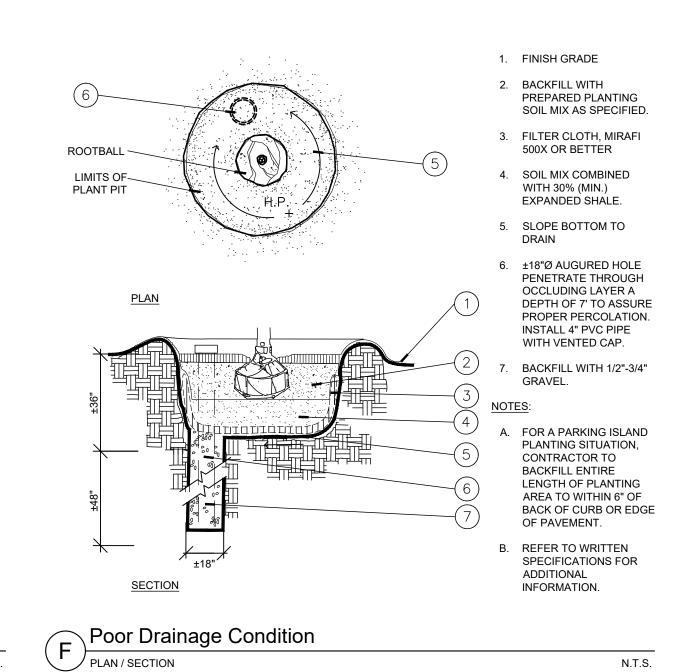
VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES

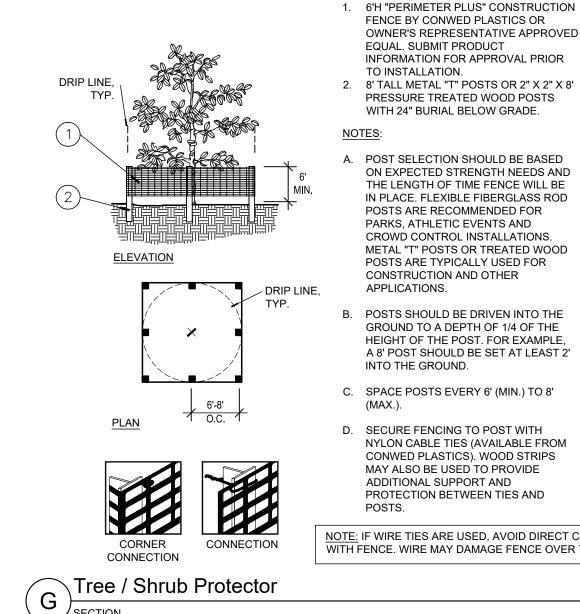
OT FOR CONSTRUCTION 11/17/202

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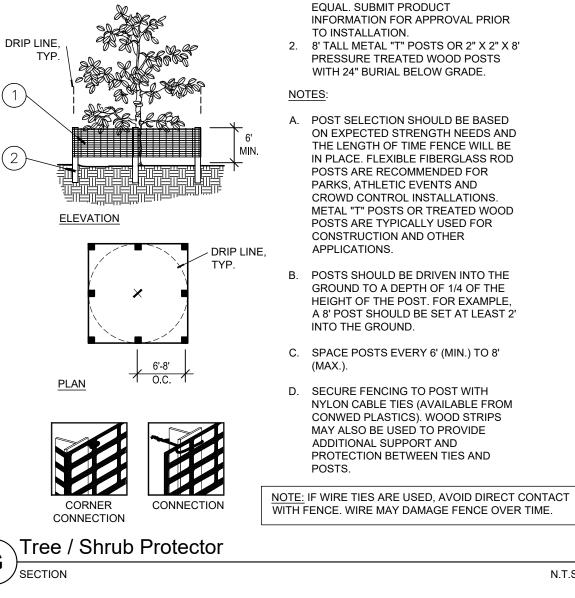
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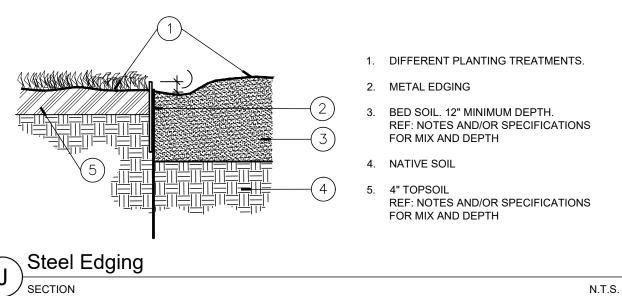
SHEET NUMBER 24 OF 25

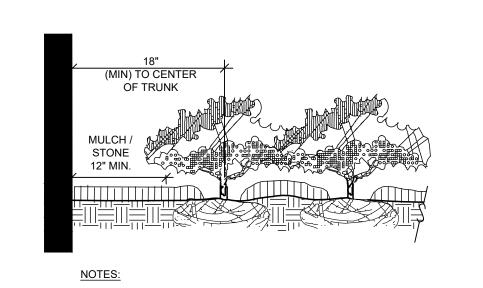




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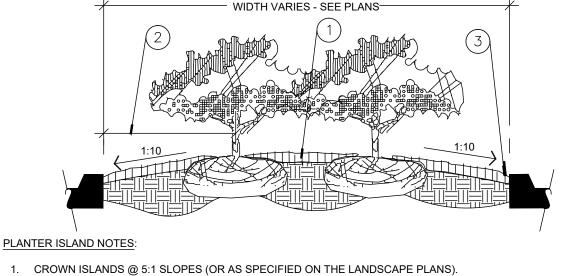




- A. <u>CLEAR ZONE:</u> 18" MIN. FROM BUILDING TO CENTER OF NEAREST
- B. MULCH / STONE TO BE AS INDICATED ON THE PLANS. STONE TO BE PEA GRAVEL, 4" DEPTH WITH WEED BARRIER AND STEEL EDGING.

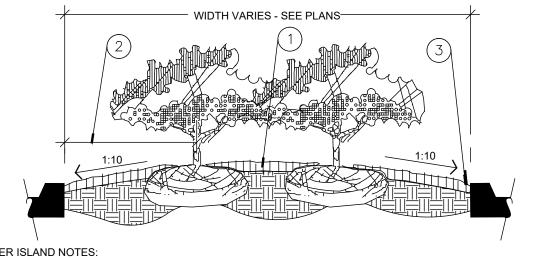
N.T.S.

Plantings Adjacent to Buildings / Walls

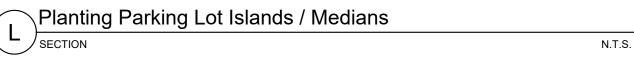




- 2. CLEAR ZONE: 36" MIN. FROM BACK OF CURB TO CENTER OF NEAREST SHRUB. CLEAR ZONE SHALL CONTAIN 3" CONTINUOUS MULCH OR TURF, SEE PLANS. SEE DETAIL I FOR PLANTER MEDIANS ADJACENT TO PARKING
- 3. 1" MIN. VERTICAL CLEARANCE, TOP OF CURB TO TOP OF MULCH.



- WHEN LIME STABILIZED SOIL IS ENCOUNTERED, EXCAVATE CONTINUOUS 36" DEEP (FROM TOP OF CURB) FOR ENTIRE LENGTH AND WIDTH OF ISLAND AND BACKFILL WITH APPROVED PLANTING MIX.
- PROTECT AND RETAIN ALL CURBS AND BASE. COMPACTED SUBGRADE TO REMAIN FOR STRUCTURAL SUPPORT OF CURB SYSTEM (TYP.)
- ALL ISLANDS SHALL UTILIZE POOR DRAINAGE DETAIL WITH PERCOLATION RATES ARE 2" PER HOUR OR LESS.



#### GENERAL LANDSCAPE SPECIFICATIONS AND NOTES

#### A. SCOPE OF WORK

- 1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.
- 2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

#### B. PROTECTION OF EXISTING STRUCTURES

ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.

#### C. PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED WHERE HEAT WILL DAMAGE ANY PLANT. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/ OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS (\$100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.

### D. MATERIALS

#### 1. GENERAL

MATERIALS LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL. UPON SUBMITTALS' APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL SUBMITTAL

MULCH PRODUCT DATA

TOPSOIL MIX AMENDMENT MIX/PRODUCT DATA/TEST RESULTS
PLANTS PHOTOGRAPHS OF ONE (1) OF EACH SPECIES
(OR TAGGED IN NURSERY)

FERTILIZER PRODUCT DATA
INNOCULANT PRODUCT DATA
HERBICIDE PRODUCT DATA

STAKING/GUYING FOR ALTERNATE TO DETAILS: SEND PRODUCT DATA, DETAIL CLIENT-REQUESTED TAGGING MAY SUBSTITUTE PHOTOS.

#### 2. PLANT MATERIALS INDICATE SIZES (HEIGHT/WIDTH) AND QUALITY PER SPEC.

- 2.a. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE AMERICAN STANDARD NURSERY STOCK. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE.
- 2.b. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.
- 2.c. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY; SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

## E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)

- 1. ALL PLANTING BED PIT BACKFILL AREAS TO BE PREPARED USING COMPOST, SHARP SCREENED SAND AND EXPANDED SHALE BY SOIL BUILDING SOLUTIONS, LIVING EARTH, OR APPROVED EQUAL. TILL SOIL AMENDMENTS INTO EXISTING SOIL TO DEPTHS PER PLANTING DETAILS (12" DEPTH MIN). FINISHED GRADES OF PLANTING BEDS TO BE 1" BELOW FINISHED GRADE OF ADJACENT CONCRETE MOW STRIP OR AS SHOWN ON GRADING PLAN. PLANTING BED PIT SOIL SHALL BE A MIXTURE OF APPROXIMATELY 50% WEED-FREE EXISTING SOIL, 35% COMPOST, 10% EXPANDED SHALE, AND 5% SCREENED SHARP SAND. 98.5% OF THE PLANTING BED PIT SOIL PARTICLES WILL PASS THROUGH A 1/2 INCH SCREEN AND 99% OR MORE SHALL PASS THROUGH A 3/4 INCH SCREEN. COLOR TO BE A MEDIUM BROWN WITH A WEIGHT OF 1900-2250 LBS. PER CUBIC YARD (DEPENDING ON THE MOISTURE CONTENT).
- 2. ALL SOD AND SEED AREAS TO BE PREPARED USING COMPOST AND SHARP SCREENED SAND, BY SOIL BUILDING SOLUTIONS, LIVING EARTH, OR APPROVED EQUAL. TILL SOIL AMENDMENTS INTO EXISTING SOIL TO DEPTHS PER PLANTING DETAILS (4" DEPTH MIN.). TOPSOIL SHALL BE A MIXTURE OF APPROXIMATELY 50% WEED-FREE EXISTING SOIL, 40% COMPOST, AND 10% SHARP SCREENED SAND. TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE, pH RANGE OF 6.0-6.5 WITH 25% (MIN) ORGANIC MATERIAL, AND FREE OF TRASH, DEBRIS, STONES, WEEDS AND TWIGS/BRANCHES. THE PARTICLE SIZES SHALL BE SUCH THAT 98.5% OF THE TOPSOIL WILL PASS THROUGH A 1/2 INCH SCREEN AND 99% OR MORE SHALL PASS THROUGH A 3/4 INCH SCREEN. TOPSOIL SHALL BE REVIEWED/APPROVED BY OWNER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. CONTRACTOR TO SUBMIT SAMPLES IN 1 GAL. (MIN) CONTAINER.
- 3. THE CONTRACTOR SHALL REESTABLISH ANY ADDITIONAL DISTURBED AREAS NOT SHOWN ON THE PLANS WITH A FULL COVERING OF SOD OR SEED. THE CONTRACTOR SHALL PROVIDE 4" DEPTH (MIN) PREPARED TOPSOIL IN ALL AREAS TO RECEIVE SEED OR SOD AT NO ADDITIONAL COST.
- 4. TREE PLANTING PITS SHALL BE BACKFILLED WITH COMPOST BY SOIL BUILDING SOLUTIONS, LIVING EARTH OR APPROVED EQUAL AND NATIVE SOIL. THE TOP 1/3 OF EACH TREE PIT SHALL RECEIVE BACKFILL MATERIAL OF 80% WEED FREE NATIVE SOIL AND 20% COMPOST. THE BOTTOM 2/3 OF EACH TREE PIT SHALL RECEIVE BACKFILL MATERIAL OF 100% WEED FREE NATIVE SOIL.
- 5. EXISTING SOIL USED IN PLANT BACKFILL AND TOPSOIL PREP SHALL BE REASONABLY FREE OF STONES, LIME, LUMPS OF CLAY, ROOTS AND OTHER FOREIGN MATTER. EXISTING SOIL SHALL HAVE A MINIMUM ORGANIC COMPOSITION OF 25% AND THE ACIDITY SHALL BE BETWEEN 5.0 AND 7.0 pH. CONTRACTOR SHALL SUBMIT A 1 GAL. MINIMUM SAMPLE OF THE EXISTING SOIL TO AN APPROVED TESTING FACILITY TO VERIFY COMPOSITION, ACIDITY AND ORGANIC CONTENT.
- 6. IF SOIL FAILS TO ACHIEVE THE AFOREMENTIONED pH AND ORGANIC COMPOSITION QUANTITIES, THE CONTRACTOR SHALL TILL AN ADEQUATE AMOUNT OF COMPOST IN TO THE EXISTING SOIL UNTIL IT MEETS THE REQUIREMENTS PRIOR TO COMBINING WITH OTHER SPECIFIED SOIL AMENDMENTS.
- 7. CONTRACTOR TO SUBMIT SAMPLES OF SOIL MIXTURE AND AMENDMENTS FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.
- 8. WHERE LIME STABILIZED SOIL IS ENCOUNTERED, LAWN AREAS SHALL BE EXCAVATED TO A DEPTH OF 12", PLANT BEDS SHALL BE EXCAVATED TO A DEPTH OF 24", AND TREE PITS SHALL BE EXCAVATED TO A DEPTH OF 36", AND BACKFILLED WITH CLEAN NATIVE SOIL (E.5) AND APPROVED PLANTING SOIL (E.1-4).

## F. WATER

WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE OBTAINED ON THE SITE, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS,

ETC.. ALL COSTS FOR WATER SUPPLY AND WATERING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNTIL FINAL ACCEPTANCE. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

\*WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

#### G. FERTILIZER

CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

\*FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

#### H. MULCH

ALL PLANTING BED TO BE TOP DRESSED WITH A MINIMUM OF 3" "RUSTIC CUT HARDWOOD MULCH" BY SOIL BUILDING SOLUTIONS OR LIVING EARTH (OR APPROVED EQUAL) WITH A pH RANGE OF 6.5-8.5 AND SHALL BE FREE OF MAN-MADE FOREIGN MATTER, LUMBER, TREATED MATERIALS, PALLETS, GRASS AND LEAVES. NO PARTICLE SIZE SHOULD EXCEED 3.5" IN LENGTH.

#### I. DIGGING AND HANDLING

- 1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.
- 2. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS BALLED AND BURLAPPED OR CONTAINER GROWN SHALL NOT BE HANDLED BY STEMS.
- 3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS, COMPLYING WITH AMERICAN STANDARD FOR NURSERY PLANTS, CURRENT EDITION. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.
- 4. PROTECTION OF PALMS (IF APPLICABLE): ONLY A MIN. OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MIN. OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.
- 5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES, HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB BASES.

#### J. CONTAINER GROWN STOCK

- 1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.
- 2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.
- 3. PLANT ROOTS BOUND IN CONTAINERS ARE NOT ACCEPTABLE.
- 4. SUBSTITUTION OF NON-CONTAINER GROWN MATERIAL FOR MATERIAL EXPLICITLY SPECIFIED TO BE CONTAINER GROWN WILL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL IS OBTAINED FROM THE OWNER OR OWNER'S REPRESENTATIVE.

#### K. COLLECTED STOCK

WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

### L. NATIVE STOCK

PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE

## M. MATERIALS LIST

QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

## N. FINE GRADING

- 1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.
- 2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. THIS CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.
- 3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES.

## O. PLANTING PROCEDURES

- 1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.
- 2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL NATIONAL ONE CALL 811 TO LOCATE UTILITIES.
- 3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED ROCK AND ROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36". CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF ROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND ADEQUATE PERCOLATION CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.
- 4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HEREIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY/GROWING SITE.
- 5. GENERAL: COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES, METHODS

CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

- 6. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.
- 7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACKFILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER PERCOLATION. IF POOR PERCOLATION EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN.
- 8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.
- 9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.
- 10. TREES SHALL BE SET WITH ROOT BALL CENTERED IN PLANTING PIT WITH ROOT FLARE 2" ABOVE ADJACENT SOIL ELEVATION. SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE TOP OF ROOT BALL SHALL BE EVEN WITH TOP OF PLANTING BED. PLANTING SOIL MIXTURE SHALL BE BACKFILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).
- 11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL FOR SOILNOC SRT ADVANCED MYCORRHIZAL INOCULUM (OR EQUAL) PRIOR TO INOCULATION.
- 12.FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET. ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE, ONLY WITH MULCH. ALL BURLAP, ROPE, WIRES, BASKETS, ETC., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.
- 13. PRUNING: TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY LICENSED ARBORIST, IN ACCORDANCE WITH ANSI A 300
- 14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 12", REMOVE AND DISPOSE ALL DEBRIS AND MIX TO ACHIEVE SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.
- 15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE DEPSON OR PROPERTY.
- 16.MULCHING: PROVIDE A THREE INCH (MINIMUM) LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT PLANTED UNDER THIS CONTRACT.
- 17. HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

#### P. LAWN SODDING/SEEDING

- 1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.
- 2. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, DEBRIS, HAVE SOIL PREPARED PER SECTION E, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.
- 3. SOIL PREPARATION: ALL SOIL TO BE PREPARED PER SECTION E.

## 4. SODDING:

- 4.a. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.
- 4.b. THE SOD SHALL BE CERTIFIED TO MEET AMERICAN STANDARD FOR NURSERY STOCK SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.
- 4.c. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE / MULCH STRIP SHALL BE PROVIDED REFER TO DETAILS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY
- 4.d. CONTRACTOR SHALL REFERENCE PLANTING SCHEDULE FOR SEEDING VARIETY AND RATES.
- 4.e. IF SEED INSTALLATION FALLS BETWEEN SEPTEMBER 16TH AND MARCH 14TH, THE CONTRACTOR SHALL INSTALL EITHER SOD OR A COLD SEASON VARIETY SEED MIX, SUCH AS WINTER RYE. IF A COOL SEASON VARIETY MIX IS INSTALLED BETWEEN SEPTEMBER 16TH AND MARCH 14TH, THE CONTRACTOR SHALL RESEED THE AREA WITH THE ORIGINAL SPECIFIED SEED MIX PER THE PLANS AND SPECIFICATIONS BETWEEN MARCH 15TH AND SEPTEMBER 15TH.
- 4.f. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

## 5. LAWN MAINTENANCE:

- 5.a. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).
- 5.b. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.
- 5.c. CONTRACTOR SHALL REESTABLISH 95% (MIN) COVERAGE FOR ALL DISTURBED AREAS OF VEGETATION WITHIN 60 DAYS OF SUBSTANTIAL COMPLETION. CONTRACTOR SHALL PROVIDE SEED AND/OR SOD THAT MATCHES THE ADJACENT LAWN AREA.

Q. CLEANUP

UPON COMPLETION OF ALL PLANTING WORK AND BEFORE AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM-CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

#### R. PLANT MATERIAL MAINTENANCE

ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. MAINTENANCE AFTER THE CERTIFICATION OF ACCEPTABILITY SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS IN THIS SECTION. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE TO COVER LANDSCAPE AND IRRIGATION MAINTENANCE FOR A PERIOD OF 90 CALENDAR DAYS COMMENCING AFTER ACCEPTANCE.

#### S. MAINTENANCE (ALTERNATE BID ITEM)

CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE FOR MAINTENANCE FOLLOWING THE INITIAL 90-DAY MAINTENANCE PERIOD ON A COST-PER-MONTH BASIS.

#### T. FINAL INSPECTION AND ACCEPTANCE OF WORK

FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

#### U. WARRANTY

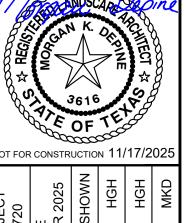
- THE LIFE AND SATISFACTORY CONDITION OF ALL 1 GALLON AND LARGER PLANT MATERIAL INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
- 2. THE LIFE AND SATISFACTORY CONDITION OF ALL OTHER PLANT MATERIAL (INCLUDING SOD) INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
- 3. REPLACEMENT: ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED UNDER "PLANTING", AT NO ADDITIONAL COST TO THE OWNER.
- 4. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE (AND IRRIGATION) MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. IT IS SUGGESTED SUCH SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.



WARNING: CONTRACTOR IS TO VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

No. REVISIONS

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SECTION 5: TEMPORARY STORMWATER SECTION

## **Temporary Stormwater Section**

**Texas Commission on Environmental Quality** 

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

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

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

#### Signature

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

Print Name of Customer/Agent: Ryan McKay

Date: <u>11/18/2025</u>

Signature of Customer/Agent:

Regulated Entity Name: Williams Dr Commercial

#### **Project Information**

#### **Potential Sources of Contamination**

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

1.	Fuels for construction equipment and hazardous substances which will be used during construction:
	The following fuels and/or hazardous substances will be stored on the site:
	These fuels and/or hazardous substances will be stored in:
	Aboveground storage tanks with a cumulative storage capacity of less than 250 gallons will be stored on the site for less than one (1) year.

	<ul> <li>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.</li> <li>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.</li> </ul>
	Evels 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.
S	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.
	<ul> <li>For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.</li> <li>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.</li> </ul>
6.	Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: N/A

#### Temporary Best Management Practices (TBMPs)

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

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

	A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.
	A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.
	A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.
	A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.
8.	The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.
	Attachment E - Request to Temporarily Seal a Feature. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.
	There will be no temporary sealing of naturally-occurring sensitive features on the site.
9.	<b>Attachment F - Structural Practices</b> . A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.
10.	<b>Attachment G - Drainage Area Map</b> . A drainage area map supporting the following requirements is attached:
	For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.
	For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.
	For areas that will have more than 10 acres within a common drainage area
	disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.
	There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

	There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.
11. 🗌	Attachment H - Temporary Sediment Pond(s) Plans and Calculations. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.
$\boxtimes$	N/A
12. 🔀	<b>Attachment I - Inspection and Maintenance for BMPs.</b> 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**

If there is an accidental spill on site, the contractor shall respond with appropriate action. The contractor will be required to contact the owner and in turn the owner will contact the TCEQ in the event of a spill on site. In addition to the following guidance, reference the latest version of TCEQ's Technical Guidance Manual (TGM) RG-348 Section 1.4.16.

#### Cleanup

- · Clean up leaks and spills immediately.
- 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.
- 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**

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

#### **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:

- Contain spread of the spill.
- Notify the project foreman immediately.
- If the spill occurs on paved or impermeable surfaces, cleanup 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.
- If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
- 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:

- Notify the TCEQ by telephone as soon as possible and within 24 hours at (512)339-2929 (Austin) or (254)751-0335 (Waco) between 8 AM and 5PM. 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.
  - For spills of federal reportable quantities, in conformance with requirements in 40 CFR parts 110,119 and 302, the contractor should notify the National Response Center at (800) 424-8802.
  - Notification should first be made by telephone and followed up with a written report.
  - 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.
  - Other agencies which may need to be consulted include, but not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

TCEQ Reportable Quantities link:

https://www.tceq.texas.gov/response/spills



#### **ATTACHMENT B: Potential Source of Contamination**

**Potential Source:** Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle dripping.

**Preventative Measures:** Vehicle maintenance will be performed within the construction staging area or a local maintenance shop.

Potential Source: Miscellaneous trash and litter from construction workers and material wrappings.

**Preventative Measures:** Trash containers will be placed throughout the sire to encourage proper disposal of trash.

Potential Source: Silt leaving the site.

**Preventative Measures:** Contractor will install all temporary best management practices prior to start of construction including the stabilized construction entrance to prevent tracking onto adjoing streets.

Potential Source: Construction Debris

**Preventative Measures:** Construction debris will be monitored daily by contractor. Debris will be collected weekly and placed in disposal bins. Situations requiring immediate attention will be addressed on a case by case basis.

Potential Source: Soil and Mud from Construction Vehicle tires as they leave the site.

**Preventative Measures:** A stabilized construction exit shall be utilized as vehicles leave the site. Any soil, mud, etc. carried from the project onto public roads shall be cleaned up within 24 hours.

Potential Source: Sediment from soil, sandm gravel and excavated materials stock piled on site.

**Preventative Measures:** Silt fence shall be installed on the down gradient side of the stock piled materials. Reinforced rock berms shall be installed at all downstream discharge locations.

Potential Source: Portable toilet spill.

**Preventative Measures:** Toilets on the site will be emptied on a regular basis by the contracted toilet company.



#### **ATTACHMENT C:** Sequence of Major Activities

The installation of erosion and sedimentation controls shall occur prior to any excavation of materials or major disturbances on the site. The sequence of major construction activities will be as follows. Approximate acreage to be disturbed is listed in parentheses next to each activity.

#### Intended Schedule or Sequence of Major Activities:

- 1. Construct Access (0.03 Acres)
- 2. Installation of Temporary BMPs (1.007 Acres)
- 3. Initiate Grubbing and Topsoil Stripping of Site (1.36 Acres)
- 4. Rough Subgrade Preparation (earthwork, grading, street and drainage excavation and embankment) (1.36 Acres)
- 5. Wet and Dry Utility Construction (0.17 Acres)
- 6. Final Subgrade Preparation (0.17 Acres)
- 7. Instillation of Base Materials (0.17 Acres)
- 8. Paving Activities (0.49 Acres)
- 9. Site cleanup and Removal of Temporary BMPs (<u>1.007</u> Acres) Maximum total construction time is not expected to exceed 12 months.



## **ATTACHMENT D:** Temporary Best Management Practices And Measures

As shown in the erosion and sediment control plan, to protect surface streams during construction activities, silt fence and triangular filter dike will be placed on the downslope along the property line where construction activities end. In addition, a construction entrance will be utilized to filter stormwater through the rock material and inlet protection will be placed at installed inlets.



## **ATTACHMENT E:** Request to Temporarily Seal a Feature

There are no features proposed to be sealed with this development.



#### **ATTACHMENT F - Structural Practices**

The plan for temporary structural controls on this site includes placing silt fence and triangular filter dike at the down slope of the site that will collect sediment prior to exiting the site. For continued effective use, the silt fence and triangular filter dike will need to be cleaned out when appropriate.



## **ATTACHMENT G:** Drainage Area Map

Refer to Existing and Proposed Drainage Area Maps in Construction Plans.



## ATTACHMENT H: Temporary Sediment Pond(s) Plans and Calculations

This attachment is not applicable. There will be no temporary sediment pond or basin provided on site.



#### **ATTACHMENT I: Inspection and Maintenance for BMPs**

#### A. Inspection Schedule

- 1. All disturbed areas, as well as all erosion and sediment control devices, will be inspected according to one of the following schedules:
  - a) at least every seven (7) calendar days and within 24 hours after a rainfall of 0.25" or greater, or
  - b) every seven (7) days on the same day of the week each week, regardless of whether or not there has been a rainfall event since the previous inspection.
- 2. Inspections will occur on the schedule provided in this plan and any changes made to the schedule must adhere to the following:
  - a) the schedule can change a maximum of one time each month,
  - b) the schedule change must be implemented at the beginning of a calendar month, and
  - c) the reason for the schedule change must be documented in this plan (an inspection schedule form is located below).

#### **B.** Inspection Reports

- 1. Completed inspection reports (see below) will include the following information:
  - a) scope of the inspection,
  - b) date of the inspection,
  - c) name(s) of personnel making the inspection,
  - d) reference to qualifications of inspection personnel,
  - e) observed major construction activities, and
  - f) actions taken as a result of the inspection.
- 2. All disturbed areas (on and off-site), areas for material storage locations where vehicles enter or exit the site, and all of the erosion and sediment controls that were identified as part this plan must be inspected. The inspection report must state whether the site was in compliance or identify any incidents of non-compliance. The report will be signed by the qualified inspector in accordance with the TPDES general permit and filed in this plan. A sample Inspection Report is included below along with an Inspector Qualification Form. All reports and inspections required by the general construction permit will be completed by a duly authorized representative.
- 3. The operator should correct any damage or deficiencies as soon as practicable after the inspection, but in no case later than seven (7) calendar days after the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in this plan, and wherever possible, those changes implemented before the next storm event or as soon as practicable. A list of maintenance guidelines are included below.



4. Inspection reports will be kept in the Operator's file, along with this plan, for at least three years from the date that the NOT is submitted to the TCEQ for the construction site.

#### C. Final Stabilization

Final stabilization of the construction site has been achieved when all soil disturbing activities at the site have been completed, and a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures. If a vegetative cover cannot be established, equivalent permanent stabilization measures (such as riprap, gabions, or geotextiles) can be employed. When these conditions have been met, BMPs can be removed from the construction area.



## Inspector Qualifications\*

Inspector Name:							
Qualifications (Check as appropriate and provide description):							
□ Training Course							
□ Supervised Experience							
□ Other							
Inspector Name:							
Qualifications (Check as appropriate and provide description):							
□ Training Course							
□ Supervised Experience							
□ Other							
Inspector Name:							
Qualifications (Check as appropriate and provide description):							
□ Training Course							
□ Supervised Experience							
□ Other							

<sup>\*</sup>Personnel conducting inspections must be knowledgeable of the general permit, familiar with the construction site, and knowledgeable of the SWP3 for the site.



#### **INSPECTION SCHEDULE**

Inspections must be conducted:

- Option 1 at least once every 7 calendar days and within 24 hours of the end of a storm event of 0.25 inch or greater
- Option 2 at least once every 7 calendar days, regardless of whether or not there has been a rainfall event since the previous inspection.

Any changes to the schedule are conducted in accordance with the following:

- the schedule is changed a maximum of one time each month,
- the schedule change must be implemented at the beginning of a calendar month, and
- the reason for the schedule change must be documented below.

Date	Schedule Option	Reason for Schedule Change



## Construction Site SWP3 Inspection Report

	□ Complies	
Status	□ Warning	No.
St	□ Project Shutdown	

	On-	Site	Up-to-date				
SWP3	Yes No <sup>1</sup>		Yes	No <sup>2</sup>			
S							

_	Project:	Date:
al tion	Address:	Inspector:
ਕੂ ਫ		Qualifications: see Appendix E of SWP3
Gen		Weather Conditions:
Ë	Owner:	Contractor:

	BMP Maint.				
ВМР	In U	Jse	Req'd		Comments
	Yes	No	Yes <sup>2</sup>	No	
		1			

<sup>&</sup>lt;sup>1</sup>The SWP3 must be retained on-site at the construction site or, if the site is inactive or does not have an on-site location to store the plan, a notice must be posted describing the location of the SWP3.

<sup>&</sup>lt;sup>2</sup>Items marked in this column need to be addressed in the Actions to be Taken table.



ACTIONS TO BE TAKEN	RESPONSIBLE PERSON(S)	DUE DATE	DATE COMPLETED	INITIALS	
NOTE: These reports will be least three years. A copy of the					
CERTIFICATION STATEMENT: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."					
Name:					
Address:					
Telephone:					
Site Location:					
Inspector Signature:			Date:		



#### **MAINTENANCE GUIDELINES**

- 1. Below are some maintenance practices to be used to maintain erosion and sediment controls:
  - All control measures will be inspected according to the schedule identified in Appendix E.
  - All measures will be maintained in good working order. The operator should correct any damage or deficiencies as soon as practicable after the inspection, but in no case later than seven (7) calendar days after the inspection.
  - BMP Maintenance (as applicable)
    - Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50%. For perimeter controls such as silt fences, berms, etc., the trapped sediment must be removed before it reaches 50% of the above-ground height.
    - Silt fence will be inspected for depth of sediment, tears, to see of the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
    - Drainage swale will be inspected and repaired as necessary.
    - o Inlet control will be inspected and repaired as necessary.
    - Check dam will be inspected and repaired as necessary.
    - Straw bale dike will be inspected and repaired as necessary.
    - Diversion dike will be inspected and any breaches promptly repaired.
    - Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
    - o If sediment escapes the site, accumulations must be removed at a frequency that minimizes off-site impacts, and prior to the next rain event, if feasible. If the permittee does not own or operate the off-site conveyance, then the permittee must to work with the owner or operator of the property to remove the sediment.
    - Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.
- 2. To maintain the above practices, the following will be performed:
  - Maintenance and repairs will be conducted before the next anticipated storm event or as necessary to maintain the continued effectiveness of storm water controls. Following an inspection, deficiencies should be corrected no later than seven (7) calendar days after the inspection.
  - Any necessary revisions to the SWP3 as a result of the inspection must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event.
  - Personnel selected for inspection and maintenance responsibilities must be knowledgeable of the general permit, familiar with the construction site, and knowledgeable of the SWP3 for the site.



#### ATTACHMENT J: Schedule of Interim and permanent Soil Stabilization

Construction practices shall disturb the minimal amount of existing ground cover as required for land clearing, grading, and construction activity for the shortest amount of time possible to minimize the potential of erosion and sedimentation from the site. Existing vegetation shall be maintained and left in place until it is necessary to disturb for construction activity. For this project the following stabilization practices will be implemented:

- 1. Seeding: Disturbed areas subject to erosion shall be stabilized by seeding and watering to provide interim stabilization. For areas that are not to be sodded as per the project landscaping plan, a minimum of 85% vegetative cover will be established to provide permanent stabilization.
- 2. Sodding and Wood Mulch: As per the project landscaping plan, Sodding and wood mulch will be applied to landscaped areas to provide permanent stabilization prior to project completion.

Records of the following shall be maintained:

- a. The dates when major grading activities occur;
- b. The dates when construction activities temporarily or permanently cease on a portion of the site; and
- c The dates when stabilization measures are initiated.

Stabilization measures must be initiated as soon as practical in portions of the site where construction activities have temporarily or permanently ceased, and except as provided in the following, must be initiated no more that fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased:

- 1. Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practical.
- 2. Where construction activity on a portion of the site is temporarily ceased and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of the site.
- 3. In arid areas (areas with an average rainfall of 0-10 inches), semiarid areas (areas with an average annual rainfall of 10 to 20 inches), and areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practical.

#### Maintenance

Below are some maintenance practices to be used to maintain erosion and sediment controls:

- All measures will be maintained in good working order. The operator should correct any damage or deficiencies as soon as practicable after the inspection, but in no case later than seven (7) calendar days after the inspection.
- BMP Maintenance (as applicable)
- Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50%. For perimeter controls such as



- silt fences, berms, etc., the trapped sediment must be removed before it reaches 50% of the above-ground height.
- Silt fence will be inspected for depth of sediment, tears, to see of the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- Drainage swale will be inspected and repaired as necessary.
- Inlet control will be inspected and repaired as necessary.
- Check dam will be inspected and repaired as necessary.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
- If sediment escapes the site, accumulations must be removed at a frequency that minimizes off-site impacts, and prior to the next rain event, if feasible. If the permittee does not own or operate the off-site conveyance, then the permittee must to work with the owner or operator of the property to remove the sediment.
- Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.

To maintain the above practices, the following will be performed:

 Maintenance and repairs will be conducted before the next anticipated storm event or as necessary to maintain the continued effectiveness of stormwater controls. Following an inspection, deficiencies should be corrected no later than seven (7) calendar days after the inspection.

Kimley » Horn

# SECTION 6: ADDITIONAL FORMS



## **TCEQ Core Data Form**

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

#### **SECTION I: General Information**

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

New Perm	nit, Registration or	Authorization	(Core Data Form	should be s	submitte	d with the	prog	ram application.)			
Renewal (	Core Data Form sh	ould be submi	tted with the ren	ewal form)	1		<u> </u>	ther			
2. Customer I	Customer Reference Number (if issued)  Follow this link for CN or RN nu  Central Regis						3. Re	gulated Entity Re	ference	Number (if	issued)
	N II: Cus		1			Informa	ation	Updates (mm/dd/	, (yyyy)		
New Custor	nor		Jpdate to Custom					nge in Regulated Ent		orchin	
=	ner egal Name (Verifial						-		ity Own	zı əttip	
(SOS) or Texa	r Name submitte s Comptroller of .egal Name (If an	Public Accou	unts (CPA).			l on wha	it is c	urrent and active  If new Customer,			
AGTX GT Willia	ms RE Holdings, LL	C									
7. TX SOS/CPA Filing Number 8. TX State Tax ID (11 digits)					ligits)			9. Federal Tax ID 10. DUNS Number (i)			Number /if
806211312	A THING HUMBER		32102080564				(9 digits)				
								39-4314759			
L1. Type of C	ustomer:	☐ Corpora	tion				ndivid	lual	Partne	rship: 🔲 Ger	neral 🗌 Limited
Government:	City County	☐ Federal ☐	Local State	Other			Sole P	roprietorship	⊠ Ot	her: LLC	
L2. Number o	of Employees					I		13. Independer	ntly Ow	ned and Op	erated?
□ 0-20   ⊠ 2	21-100 🗌 101-2	250 🗌 251	-500 🔲 501 a	nd higher				⊠ Yes	□ No		
14. Customer	Role (Proposed o	r Actual) – as	it relates to the R	egulated Er	ntity liste	d on this j	form.	Please check one of	the follo	wing	
☐Owner ☐Occupationa		perator Responsible Pa	_	ner & Opera CP/BSA App				Other:			
15 84-11	600 N. Robinson	Avenue									
15. Mailing Address:	Ste. 1000										
Auuress:	<b>City</b> Oklah	oma City		State	ОК	Z	IP	73102		ZIP + 4	
16. Country N	/lailing Informat	ion (if outside	USA)			17. E-M	ail A	l ddress (if applicabl	e)		
						hunterharrison@ashtongray.com					

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( 405 ) 400-4003							(	) -		
ECTION III:	Regula	ated Ent	ity	Inform	natio	<u>n</u>				
21. General Regulated E	ntity Informa	<b>ition</b> (If 'New Reg	gulated	l Entity" is selec	ted, a ne	v permit applic	ation is al	so required.)		
New Regulated Entity	Update to	Regulated Entity	Name	Update t	o Regulat	ed Entity Inform	mation			
The Regulated Entity Na as Inc, LP, or LLC).	me submitte	d may be upda	ted, ir	order to mee	et TCEQ	Core Data Sto	andards (	removal of o	rganization	al endings such
22. Regulated Entity Nar	<b>me</b> (Enter nam	e of the site wher	re the r	egulated action	is taking	place.)				
AGTX GT Williams RE Holdin	ngs, LLC									
23. Street Address of the Regulated Entity:	4785 Willian	ms Dr								
(No PO Boxes)	City	Georgetown		State	TX	ZIP	78633	3	ZIP + 4	
24. County	Williamson									
		If no Stre	et Ado	dress is provid	led, field	s 25-28 are r	equired.			
25. Description to										
Physical Location:										
26. Nearest City							State		Nea	rest ZIP Code
Latitude/Longitude are i	required and	may be added,	/upda	ted to meet T	CEQ Cor	e Data Stand	lards. (Ge	cocoding of the	ne Physical	Address may be
used to supply coordinat	-	-					•		,	·
27. Latitude (N) In Decim	nal:				28	. Longitude (	W) In De	cimal:		
Degrees	Minutes		Secon	ıds	De	grees	T	Minutes		Seconds
29. Primary SIC Code	30.	Secondary SIC	Code		31. Prir	nary NAICS C	ode	32. Seco	ndary NAIC	CS Code
4 digits)	(4 d	igits)			<b>(</b> 5 or 6 o	-		(5 or 6 di	gits)	
5552					237210					
33. What is the Primary	Business of t	his entity? (De	o not r	epeat the SIC or	· NAICS de	escription.)				
and Development										
04 Mailina	600 N. Rob	oinson Avenue								
34. Mailing	Ste. 1000									
Address:	City	Oklahoma City	у	State	ок	ZIP	73102	2	ZIP + 4	
35. E-Mail Address:	hun	terharrison@ash	tongra	y.com	<u> </u>					
36. Telephone Number			37.	Extension or (	Code	38.	Fax Num	<b>ber</b> (if applical	ble)	
( 405 ) 300-4003						(	) -			

19. Extension or Code

20. Fax Number (if applicable)

18. Telephone Number

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39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance. ☐ Dam Safety Districts ☐ Edwards Aquifer ☐ Emissions Inventory Air ☐ Industrial Hazardous Waste ☐ New Source OSSF ☐ Petroleum Storage Tank ☐ PWS Review Air Sludge Storm Water ☐ Title V Air Tires Used Oil ☐ Voluntary Cleanup ■ Wastewater ■ Wastewater Agriculture ■ Water Rights Other: **SECTION IV: Preparer Information** 40. Name: 41. Title: 42. Telephone Number 43. Ext./Code 44. Fax Number 45. E-Mail Address **SECTION V: Authorized Signature** 46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39. Company: Job Title: AGTX GT Williams RE Holdings, LLC **Development Director** Name (In Print): **Hunter Harrison** Phone: ( 405 ) 300- **4003** Signature: Date: 11/11/2025

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#### Agent Authorization Form

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

1	Denver Green	
	Print Name	,
	Owner	
	Title - Owner/President/Other	
of	AGTX GT Williams RE Holdings, LLC Corporation/Partnership/Entity Name	
have authorized	Ryan McKay Print Name of Agent/Engineer	
of	Kimley-Horn and Associates Inc Print Name of Firm	

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

#### I also understand that:

- 1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to \$10,000 per day per violation.
- 2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.
- 3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.
- 4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.
- 5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

#### SIGNATURE PAGE:

P- Fr	11/10/2	25
Applicant's Signature	Date	
THE STATE OF OK §		
County of Oklahama §		
BEFORE ME, the undersigned auth to me to be the person whose name that (s)he executed same for the	e is subscribed to the foregoing	instrument, and acknowledged to
GIVEN under my hand and seal of o	Michael Feighny Typed or Printed Name of Nota	# # 25009643 EXP. 0814129
	MY COMMISSION EXPIRES:	8-14-2029



## **Owner Authorization Form**

#### Edwards Aquifer Protection Program

#### Instructions

Complete the following form by adding the requested information in the fields below. The form must be notarized for it to be considered complete. Attach it to other programmatic submittals required by 30 Texas Administrative Code (30 TAC), Chapter 213, and provide it to TCEQ's Edwards Aquifer Protection Program (EAPP) as part of your application.

If you have questions on how to fill out this form or about EAPP, please contact us by phone at 512-339-2929 or by e-mail at <a href="mailto:eapp@tceq.texas.gov">eapp@tceq.texas.gov</a>.

#### Landowner Authorization

am the owner of the property located at:

and am duly authorized in accordance with 30 TAC 213.4(c)(2) and 213.4(d)(1), or 30 TAC 213.23(c)(2) and 213.23(d), relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize AGTX GT Williams RE Holdings, LLC To conduct submission of TCEQ Core Data Form At 4785 Williams Dr, Georgetown, TX 78633

#### Landowner Acknowledgement

I understand that Ken Schiller and Associates, INC

violations may also be subject to civil penalties.

I. Travis Wilkes of Ken Schiller and Associates, INC

Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation and subject to administrative rule or orders and penalties as provided under 30 TAC 213.10, relating to enforcement. Such

Is ultimately responsible for the compliance with the approved or conditionally approved

## Landowner Signature

Signature Candowner Signature

9/12/2025

Date

THE STATE § OF Texas

County & of County Williamson

BEFORE ME, the undersigned authority, on this day personally appeared

Travis Wilkes of Ken Schiller and Associates, INC

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 12th day of September

known to me to be the person whose name is subscribed to the foregoing instrument and

Typed or Printed Name of Notary

Click or tap here to add ID

**NOTARY PUBLIC** 

f Notary S: Date 5/10/2029

MY COMMISSION EXPIRES: Date 5/12/2029

#### Optional Attachments

Select All that apply:

☐ Lease Agreement

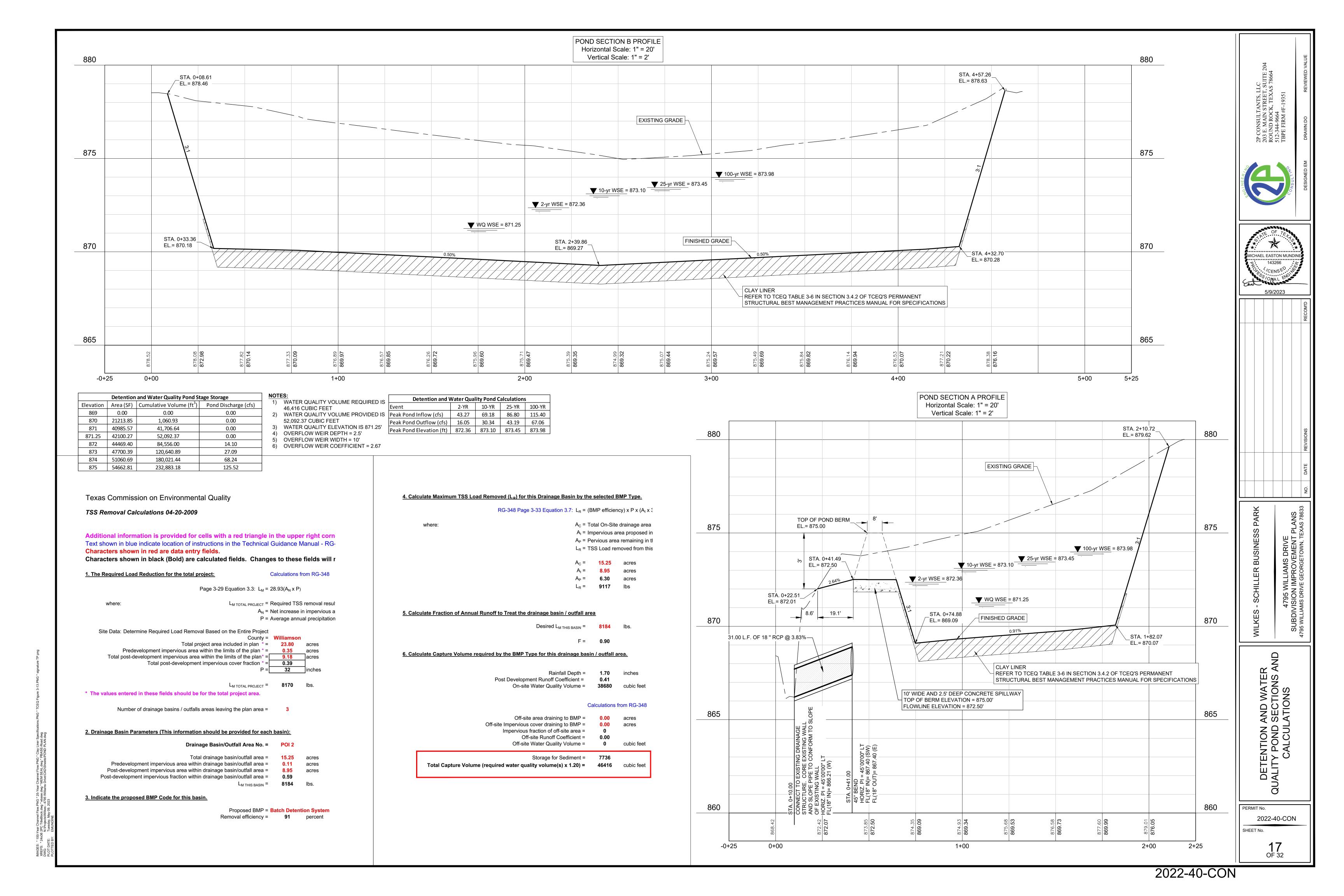
☐ Signed Contract

☐ Deed Restricted Easement

☐ Other legally binding documents

LISA TORRES
Notary Public, State of Texas

Comm. Expires 05-12-2029 Notary ID 130949376



## **Application Fee Form**

#### **Texas Commission on Environmental Quality** Name of Proposed Regulated Entity: Williams Dr Commercial Regulated Entity Location: 600 N. Robinson Ave, Suite 1000 Oklahoma City, OK 73102 Name of Customer: AGTX GT Williams RE Holdings, LLC Contact Person: Grey Reed Phone: (214) 725-4886 Customer Reference Number (if issued):CN Regulated Entity Reference Number (if issued):RN 111695623 **Austin Regional Office (3373)** Travis Havs San Antonio Regional Office (3362) Uvalde Bexar Medina Comal Kinney Application fees must be paid by check, certified check, or money order, payable to the Texas Commission on Environmental Quality. Your canceled check will serve as your receipt. This form must be submitted with your fee payment. This payment is being submitted to: Austin Regional Office San Antonio Regional Office Mailed to: TCEQ - Cashier Overnight Delivery to: TCEQ - Cashier **Revenues Section** 12100 Park 35 Circle Mail Code 214 Building A, 3rd Floor P.O. Box 13088 Austin, TX 78753 (512)239-0357 Austin, TX 78711-3088 Site Location (Check All That Apply): Contributing Zone **Transition Zone** Recharge Zone Type of Plan Size Fee Due Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling Acres Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks \$ Acres Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential Acres Sewage Collection System 138 L.F. \$ 650 Lift Stations without sewer lines Acres | \$ Tanks | \$ Underground or Aboveground Storage Tank Facility Each | \$ Piping System(s)(only) Each | \$ Exception

Signature:		
agnature.		
ngilatare.		

Each

Extension of Time

Date: 11/18/2025

## **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