JAB ENGINEERING, LLC.
4500 Williams Dr., Ste. 212-121
Georgetown, TX 78633
512-779-7414
josh.baran@jabeng.com

Water Pollution Abatement Plan

Application for

Rivery Business Park

at

2006 Rivery Boulevard

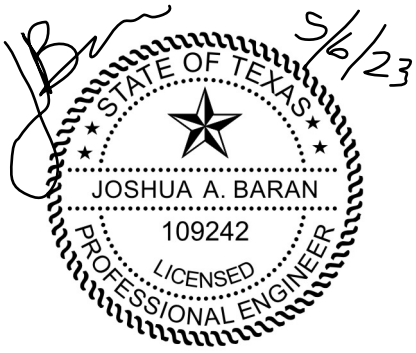
Georgetown, Williamson County, Texas 78628

Prepared by:

JAB Engineering, LLC.

TBPE Firm No. F-14076

May 6, 2023



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I. 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

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

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

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

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

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

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

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

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

Technical Review

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

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

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

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Rivery Business Park					2. Regulated Entity No.:				
3. Customer Name: Rivery Business Park Condominiums Association, Inc.					4. Customer No.:				
5. Project Type: (Please circle/check one)	New		Modification			Extension		Exception	
6. Plan Type: (Please circle/check one)	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential		Non-residential			8. Site (acres):			3.29945
9. Application Fee:	$4,000		10. Permanent BMP(s):			Batch Detention			
11. SCS (Linear Ft.):	0		12. AST/UST (No. Tanks):			0			
13. County:	Williamson		14. Watershed:			San Gabriel River			

Application Distribution

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

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

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

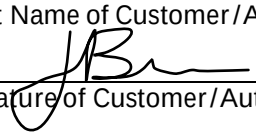
Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	__	__	_1_
Region (1 req.)	__	__	_1_
County(ies)	__	__	__
Groundwater Conservation District(s)	__Edwards Aquifer Authority __Barton Springs/ Edwards Aquifer __Hays Trinity __Plum Creek	__Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	__Austin __Buda __Dripping Springs __Kyle __Mountain City __San Marcos __Wimberley __Woodcreek	__Austin __Bee Cave __Pflugerville __Rollingwood __Round Rock __Sunset Valley __West Lake Hills	__Austin __Cedar Park __Florence _1_Georgetown __Jerrell __Leander __Liberty Hill __Pflugerville __Round Rock

San Antonio Region					
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)	__	__	__	__	__
Region (1 req.)	__	__	__	__	__
County(ies)	__	__	__	__	__
Groundwater Conservation District(s)	__ Edwards Aquifer Authority __Trinity-Glen Rose	__Edwards Aquifer Authority	__Kinney	__EAA __Medina	__EAA __Uvalde
City(ies) Jurisdiction	__Castle Hills __Fair Oaks Ranch __Helotes __Hill Country Village __Hollywood Park __San Antonio (SAWS) __Shavano Park	__Bulverde __Fair Oaks Ranch __Garden Ridge __New Braunfels __Schertz	NA	__San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.

Joshua A. Baran

Print Name of Customer/Authorized Agent



5/6/2023

Signature of Customer/Authorized Agent Date

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

II. Geologic Assessment

Narrative Description of Site-Specific Geology for the Property Located at 401 N IH 35, Georgetown, Williamson County, Texas

Prepared for:

JAB Engineering, LLC

Prepared by:

Cambrian Environmental

April 16, 2021

NARRATIVE DESCRIPTION OF SITE-SPECIFIC GEOLOGY FOR THE PROPERTY LOCATED AT 401 N IH 35, GEORGETOWN, WILLIAMSON COUNTY, TEXAS

Prepared for:

JAB Engineering, LLC.
4500 Williams Drive
Georgetown Texas 78633

Prepared by:

Heather L. Beatty, P.G.

Cambrian Environmental
4422 Pack Saddle Pass
Suite 204
Austin, Texas 78745

TX Geoscience Firm Registration #50484

As a licensed professional geoscientist I attest that the contents of this report are complete and accurate to the best of my knowledge.

April 16, 2021

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: Heather Beatty, PG

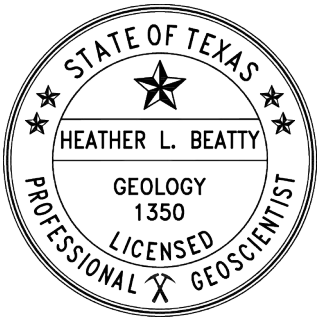
Telephone: 512.470.4013

Fax: _____

Date: 16 April 2021

Representing: Cambrian Environmental (TBPG # 50484) (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: 401 N IH 35

Project Information

1. Date(s) Geologic Assessment was performed: 26 March 2021
2. Type of Project:

   ☒ WPAP ☐ AST
   ☐ SCS ☐ UST
3. Location of Project:

   ☒ Recharge Zone
   ☐ Transition Zone
   ☐ Contributing Zone within the Transition Zone

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

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Georgetown (GsB)	D	<3.5
Fairlie (FaB)	D	< 4.0
Crawford (CfB)	D	<2.5

** Soil Group Definitions (Abbreviated)*

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

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

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

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

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

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

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

   Applicant's Site Plan Scale: 1" = 40'
   Site Geologic Map Scale: 1" = 125'
   Site Soils Map Scale (if more than 1 soil type): 1" = 125'

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.
   ☐ Other method(s). Please describe method of data collection: _____

10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.

11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.

12. ☐ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.

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

13. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.

14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

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

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

Administrative Information

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

NARRATIVE DESCRIPTION OF SITE-SPECIFIC GEOLOGY FOR THE PROPERTY LOCATED AT 401 N IH 35, GEORGETOWN, WILLIAMSON COUNTY, TEXAS

INTRODUCTION

This narrative Geologic Assessment accompanies the Texas Commission on Environmental Quality (TCEQ) Geologic Assessment Form TCEQ-0585 completed for the approximately 3.3-acre tract located at 401 N IH 35 in Georgetown, Williamson County, Texas (See Figure 1). At present, the 3.3-acre tract (Williamson County parcel R344520) has no improvements.

METHODOLOGY

Two Cambrian Environmental Registered Professional Geoscientists (Texas License #s 10791 and 1350) conducted a field survey for a Geologic Assessment on the 26th of March 2021. The pedestrian survey was completed by walking parallel transects spaced approximately 50 feet apart as directed by the TCEQ in the Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones (Rev. 10-01-04). Closer spacing was used where vegetation inhibited clear observation. All potential karst features, including depressions, holes, and animal burrows, were carefully examined for evidence of subsurface extent. A number of techniques were used for this effort, including probing with a digging implement to determine the thickness and consistency of fill material and feeling for the presence of air flow, which may indicate the presence of a sub-surface void space. Other techniques included making observations of any notable characteristics of the feature site such as the presence of various types of vegetation or a semi-circular burrow mound produced by the activities of small mammals. We also conducted due diligence activities as called for under the City of Georgetown Edwards Aquifer Recharge Zone Water Quality Ordinance ("the Ordinance").

RESULTS

Soils

Soils mapped on the property consist of the Georgetown stony clay loam (GsB), the Fairlie clay (FaB) and the Crawford clay (CfB) series soils[1] (See Figure 2). These series soils are all within the "D" classification of the hydrologic soil groups. Type "D" soils have a very slow infiltration rate (very high runoff potential) when thoroughly wet. This Georgetown soil unit is nearly level to gently sloping and occurs on uplands. Typically, this soil has a slightly acid, brown stony clay loam surface layer about 7 inches thick. The subsoil is neutral to slightly acid, reddish brown cobbly clay that extends to about 35 inches. This Fairlie soil unit is gently sloping, and occurs on broad flats and on the edges of drainage ways on uplands. This soil has dark gray clay surface layer about eight inches thick. The subsoil is grey to greyish brown clay that extends to 46 inches deep. This Crawford soil unit is gently sloping and occurs on mesas, foot slopes and at the head of drainage ways on uplands. Typically, the uppermost layer of this soil is brown neutral clay about six inches thick. The subsoil is a reddish brown clay that extends to about 27 inches deep.

[1] United States Department of Agriculture, Natural Resource Conservation Service. Online Web Soil Survey, Williamson County, Texas. http://websoilsurvey.sc.egov.usda.gov/

Geology

The bedrock lithology underlying the site consists entirely of the Edwards Limestone (See Figure 3). The geology of the property has been mapped most recently at a useful scale by Collins (2005) and we find his interpretation of the geology to be generally accurate.[2] Additionally, the entire project site is within the Edwards Aquifer Recharge Zone.

Recharge into the aquifer primarily occurs in areas where the Edwards Group and upper confining units are exposed at the surface. Most recharge is from direct infiltration via precipitation and streamflow loss. Recharge occurs predominantly along secondary porosity features such as faults, fractures, and karst features (caves, solution cavities, sinkholes, etc.). Karst features are commonly formed along joints, fractures, and bedding plane surfaces in the Edwards Group. There is one fault mapped outside the eastern edge of the project area which juxtaposes the Edwards Limestone on the west and Georgetown Limestone on the east. No evidence of the fault trace was directly observed during the pedestrian survey.

Site Hydrogeologic Assessment

In the absence of discrete recharge features, the likelihood of significant recharge occurring within the project area and contributing to the main body of the aquifer is thought to be very low. Should any features be discovered during the land clearing or construction phases of the project, they should be investigated by a qualified geoscientist to determine if notification to TCEQ and mitigation measures will be necessary.

Feature Descriptions

No geologic or man-made features were identified during the pedestrian survey. A review of the Texas Water Development Board's online Groundwater Data Viewer did not produce any results for any existing wells located on this property.

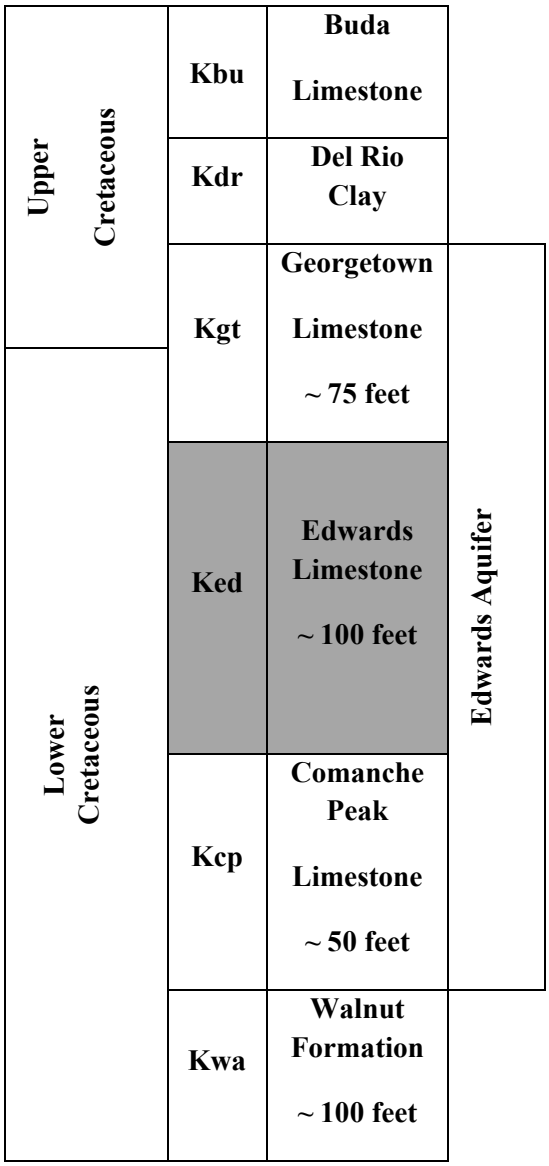
City of Georgetown Salamander Ordinance

No springs or streams were identified on the property during the pedestrian survey, and therefore no occupied site protection, or spring or stream buffer protection measures will be required for the property. All regulated activities within the recharge zone must follow water quality best management practices, and development of the property will need to comply with the water quality protection measures as outlined in Section 8 of the Ordinance.

[2] Collins, E.W., 2005, Geologic Map of the West Half of the Taylor 30x60 Quadrangle: Central Texas Urban Corridor, Encompassing Round Rock, Georgetown, Salado, Briggs, Liberty Hill, and Leander. Bureau of Economic Geology, The University of Texas at Austin. Austin, Texas 78713-8924.

Stratigraphic Column for 401 N IH 35

*Shaded areas represent lithologies underlying the project area



GEOLOGIC ASSESSMENT TABLE — PROJECT NAME: 401 N IH 35

LOCATION			FEATURE CHARACTERISTICS											EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
No geologic or man-made features were identified on the property																				

* DATUM: WGS84

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

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

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

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.
My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Date 16 April 2021

Sheet 1 of 1

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

Typical view of the project area facing east.

Typical view of the project area facing southwest.

Figure 1 – Site Location Map

Cambrian

Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri

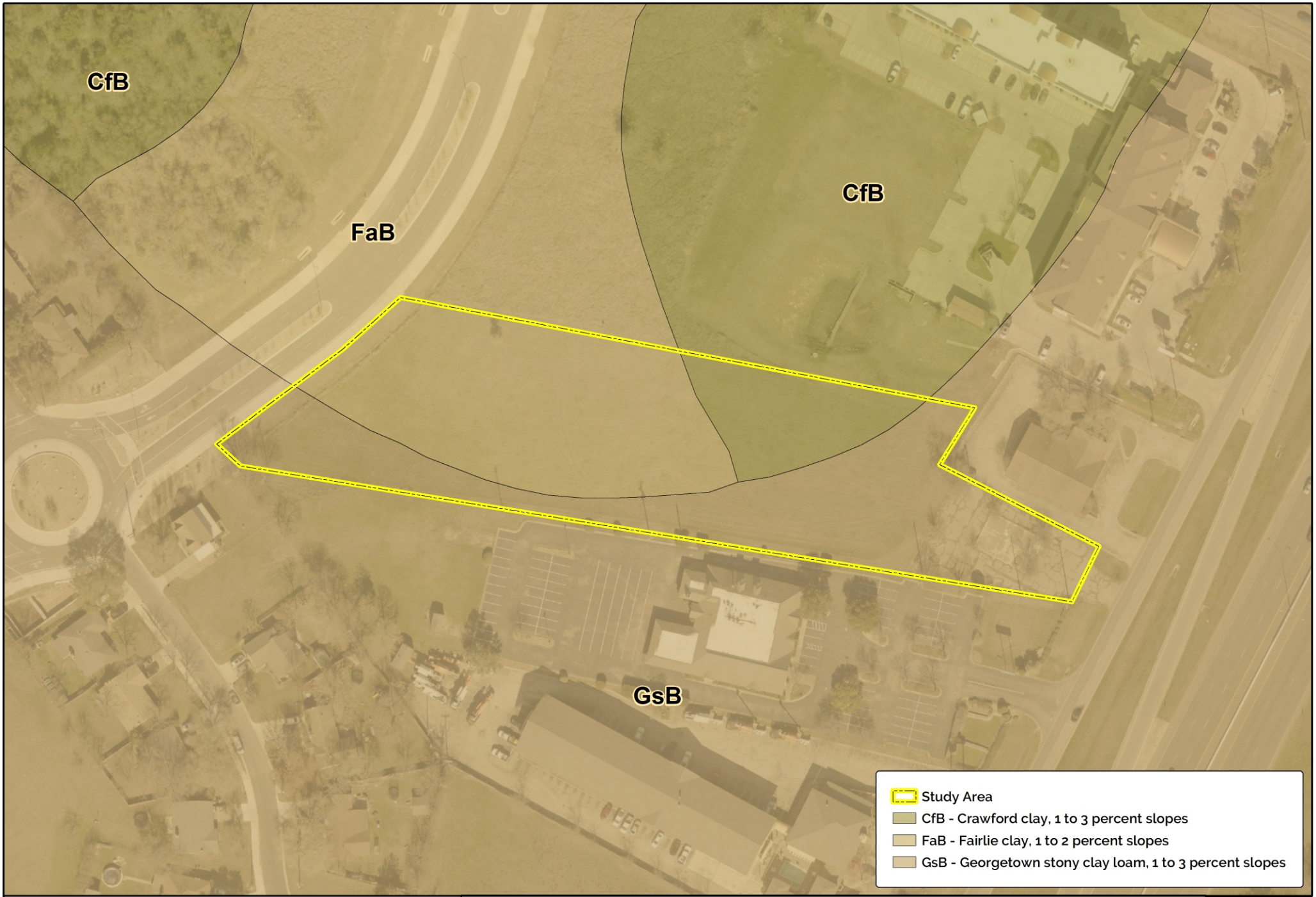


Figure 2 – Site Soils Map

Cambrian

Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS,

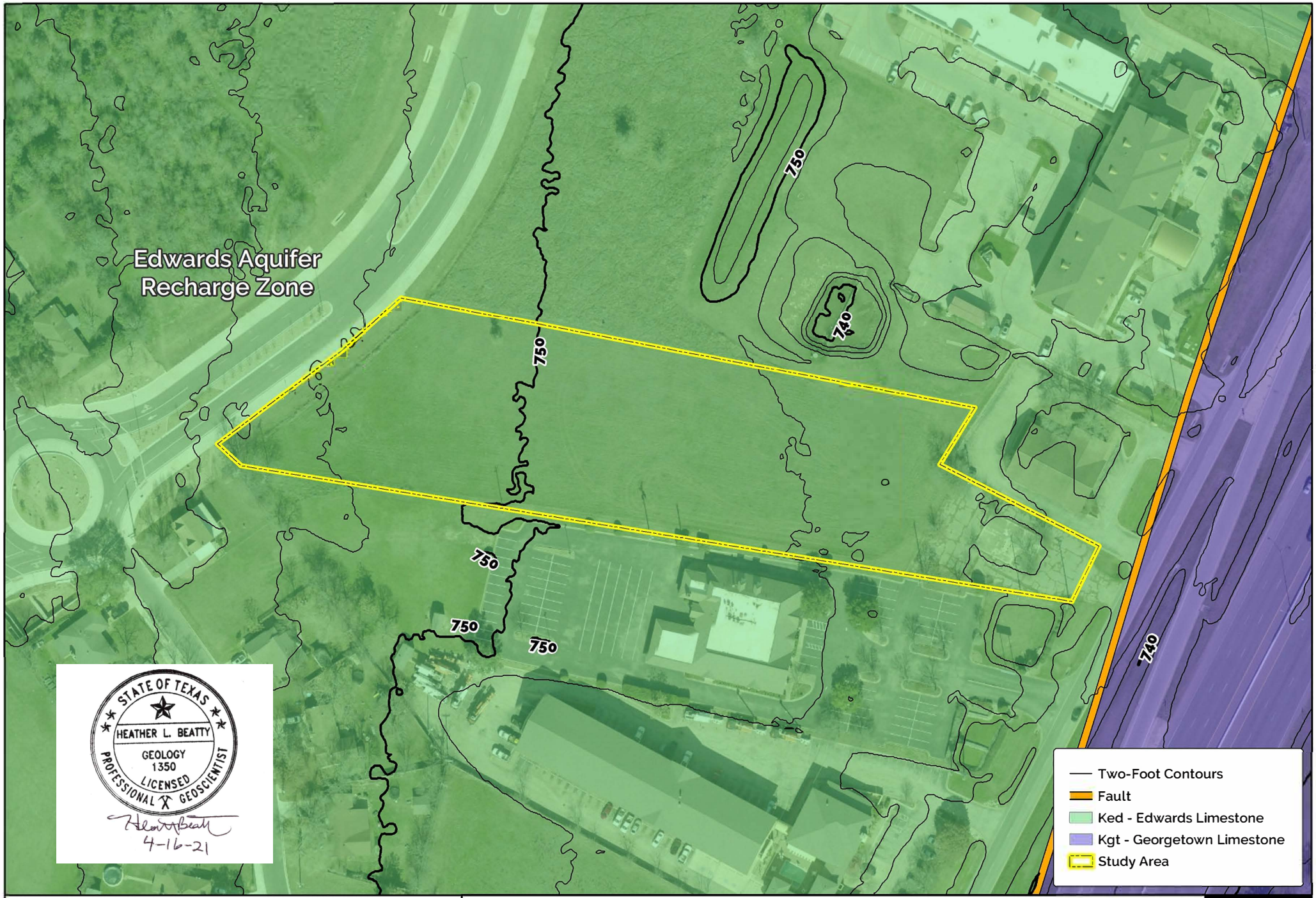


Figure 3 – Site Geologic Map

Cambrian

Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS,

III. General Information Form

General Information Form

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Joshua A. Baran

Date: 5/6/2023

Signature of Customer/Agent:

Project Information

1. Regulated Entity Name: Rivery Business Park
2. County: Williamson
3. Stream Basin: San Gabriel River
4. Groundwater Conservation District (If applicable): N/A
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

   ☒ WPAP
   ☐ SCS
   ☐ Modification
   ☐ AST
   ☐ UST
   ☐ Exception Request

7. Customer (Applicant):

   Contact Person: Joshua Baran
   Entity: Rivery Business Park Condominiums Association, Inc.
   Mailing Address: 1625 Williams Drive, Ste. 201
   City, State: Georgetown, TX Zip: 78628
   Telephone: 512-508-4970 FAX: _____
   Email Address: josh@seven10dev.com

8. Agent/Representative (If any):

   Contact Person: Joshua A. Baran
   Entity: JAB Engineering, LLC
   Mailing Address: 4500 Williams Drive, Ste. 212-121
   City, State: Georgetown, TX Zip: 78633
   Telephone: 512-779-7414 FAX: _____
   Email Address: josh.baran@jabeng.com

9. Project Location:

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

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

    East side of Rivery Boulevard, approximately 380 feet from its intersection with Park Lane

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

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

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

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

☒ Survey staking will be completed by this date: 11/1/2023

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

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

15. Existing project site conditions are noted below:

    ☒ Existing commercial site
    ☐ Existing industrial site
    ☐ Existing residential site
    ☒ Existing paved and/or unpaved roads
    ☐ Undeveloped (Cleared)
    ☐ Undeveloped (Undisturbed/Uncleared)
    ☒ Other: Construction activities started on this project

Prohibited Activities

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

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

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

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

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

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

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

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

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

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

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

Administrative Information

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

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

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

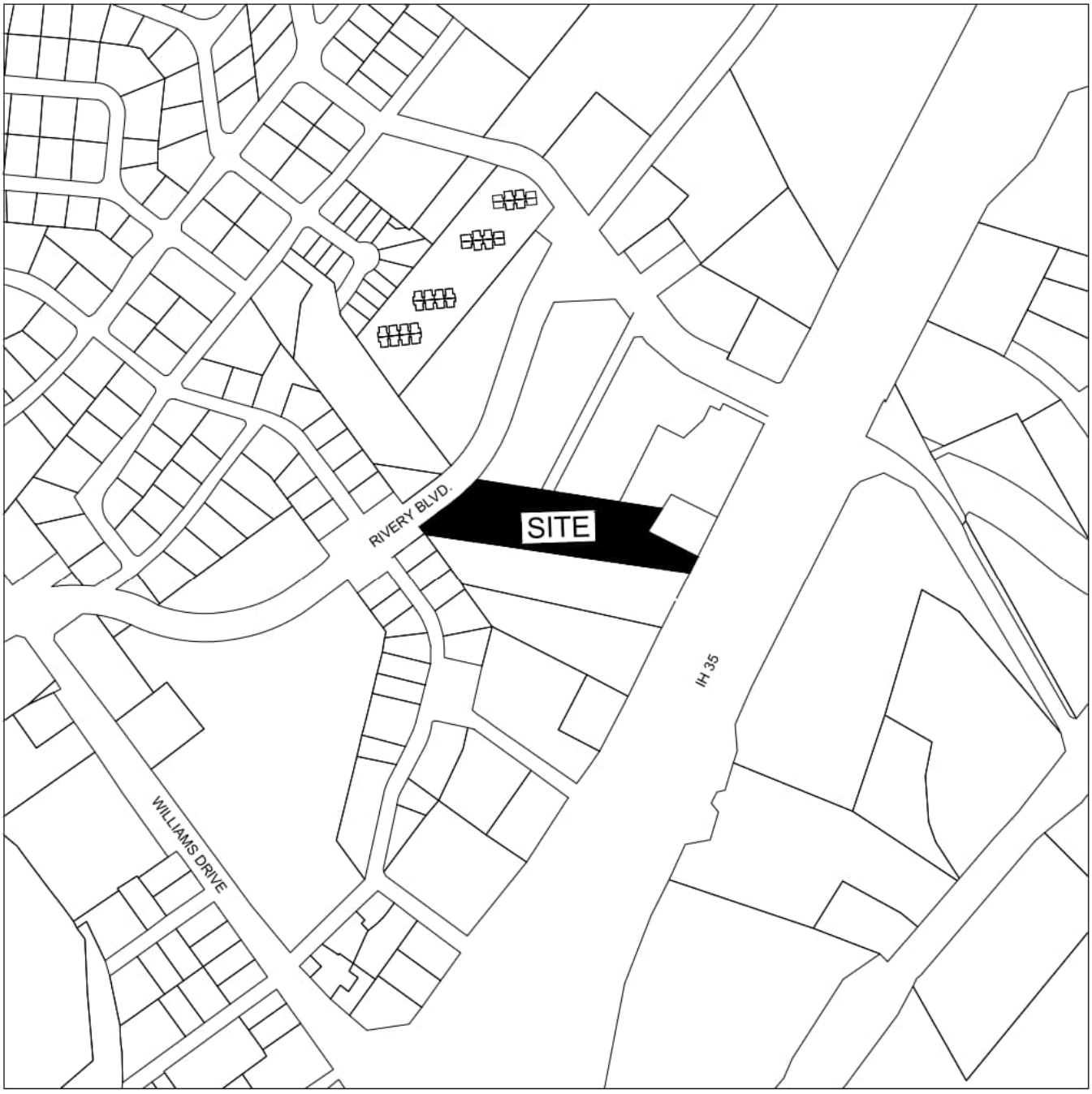
☒ TCEQ cashier
☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
☐ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

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

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

Attachment A

Road Map



Attachment B

USGS Map

USGS
science for a changing world

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

The National Map
US Topo

GEORGETOWN QUADRANGLE
TEXAS-WILLIAMSON CO.
7.5-MINUTE SERIES

RECHARGE ZONE

PROJECT SITE

TRANSITION ZONE

Sun City
Berrys Creek
Serenada
Georgetown Springs
North Georgetown
GEORGETOWN
Russell Crossing
Lake Georgetown
Landry Airport
Georgetown Municipal Airport
Bar 3 Ranch Airport
Railroad Produce Depot
Georgetown Light and Water Works
Belford Historic District
University Avenue Elm Street Historic District

Berry Cr
Dry Berry Cr
Smiley Br
Pecan Br
Smith Br
W Fork Smith Br
Berry Springs
N Fork San Gabriel River
Middle Fork San Gabriel River

3 140 000 FEET
10 240 000 FEET
10 210 000 FEET

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid: Universal Transverse Mercator, Zone 14R
10 000-foot ticks: Texas Coordinate System of 1983 (central zone)

Imagery.....NAIP, May 2010
Roads.....©2006-2012 TomTom
Names.....GNIS, 2012
Hydrography.....National Hydrography Dataset, 2010
Contours.....National Elevation Dataset, 2004
Boundaries.....Census, IBWC, IBC, USGS, 1972 - 2012

MN 4° 20′ 77 MILS
GN 0° 40′ 12 MILS
UTM GRID AND 2013 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
PV / PU
Grid Zone Designation 14R

SCALE 1:24 000

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

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.7

TEXAS
QUADRANGLE LOCATION

Florence	Cobbs Cavern	Jarrell
Leander NE	Georgetown	Weir
Leander	Round Rock	Hutto

ADJOINING 7.5' QUADRANGLES

ROAD CLASSIFICATION
Interstate Route
US Route
Ramp
State Route
Local Road
4WD
Interstate Route
US Route
State Route

GEORGETOWN, TX
2013

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

USGS science for a changing world

The National Map US Topo

WEIR QUADRANGLE
TEXAS-WILLIAMSON CO.
7.5-MINUTE SERIES

RECHARGE ZONE

TRANSITION ZONE

Walburg
Jonah
Weir
Queen Hill
Cross Country Estates
Marshall Field
Bar 3 Ranch Airport

Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid: Universal Transverse Mercator, Zone 14R
10 000-foot ticks: Texas Coordinate System of 1983 (central zone)

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

Imagery.....NAIP, October 2014
Roads..... U.S. Census Bureau, 2014 - 2015
Names.....GNIS, 2015
Hydrography.....National Hydrography Dataset, 2014
Contours.....National Elevation Dataset, 2004
Boundaries.....Multiple sources; see metadata file 1972 - 2015

Wetlands.....FWS National Wetlands Inventory 1977 - 2014

UTM GRID AND 2016 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
MN 3° 58′ 71 MILS
GN 0° 44′ 13 MILS

U.S. National Grid
100,000-m Square ID
PV / PU
Grid Zone Designation
14R

SCALE 1:24 000

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

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.19

TEXAS
QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

1 Cobbs Cavern
2 Jarrell
3 Bartlett
4 Georgetown
5 Granger
6 Round Rock
7 Hutto
8 Taylor
ADJOINING QUADRANGLES

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

WEIR, TX
2016

NSN 7643016398832
NGA REF NO. USGSX24K72006

Attachment C

PROJECT DESCRIPTION

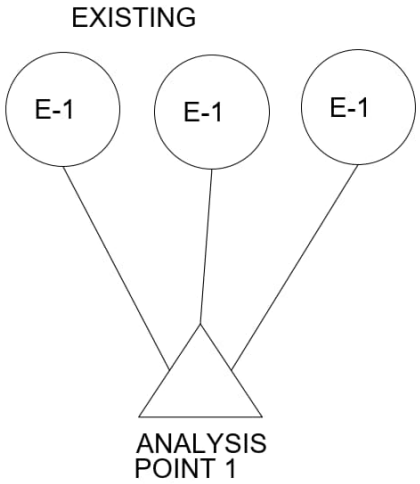
INTRODUCTION
The proposed development known as Rivery Business Park (the "development"), located at 2006 Rivery Boulevard, Williamson County, Texas 78628 will be constructed on 3.30 acres, as conveyed to Rivery Business Park, LLC, by Deed as recorded in Document 2021026118, Official Public Records of Williamson County, Texas and managed by Rivery Business Park Condominiums Association, Inc.

The project was constructed prior to submittal of a WPAP. This summary describes the project design elements used to design / construct the project site. In this case, the term "existing" used below refers to the preconstruction conditions, and the term "proposed" refers to the currently built conditions.

ACCESS
Access will be taken from the existing driveway off Rivery Boulevard.

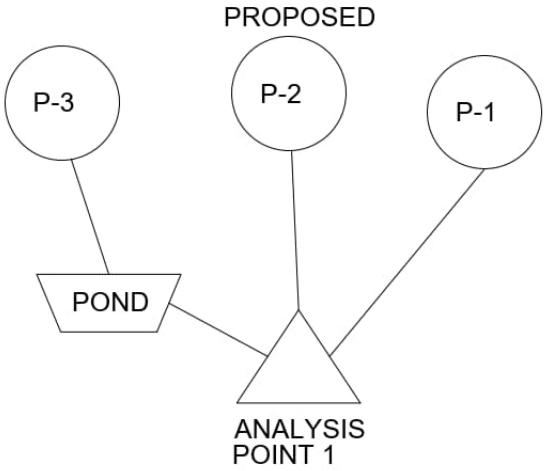
STORMWATER DRAINAGE

EXISTING CONDITIONS
The existing property consists of three drainage areas. Drainage area 1 discharges toward the east through an existing hotel development that was approved under previous permit. This development includes detention facilities designed under the Georgetown DCM. This area is assumed for overall basin purposes to be in the previous discharge conditions since these calculation are not available for public record. Drainage area 2 discharges over the adjoining site and into the right-of-way undetained. Drainage area 3 discharges towards the east IH 35 right-of-way by sheet flow and shallow concentrated flow. A summary of the existing area features can be found in the area listing of the existing drainage calculations.



PROPOSED DEVELOPMENT
The development will convey stormwater runoff by surface drainage to the same locations as the existing discharges. The area of flow from all three drainage areas is combined in the existing roadside ditch, which is the analysis point for both existing and proposed conditions. A proposed pond addresses the increase in drainage area 3 to reduce the proposed discharge below the existing. This area is also routed through an

extended batch detention facility for water quality controls. A summary of the proposed area features can be found in the area listing of the proposed drainage calculations.



DRAINAGE SUMMARY

Utilizing the SCS method for comparison of the existing vs. proposed conditions yielded a decrease in peak discharge to both drainage areas.

EXISTING DRAINAGE SUMMARY									
Area ID	**DA (ac.)**	**DA (mi^2.)**	**TC(min.)**	**Lag (min)**	**CN**	**Q_2(cfs)**	**Q_{10}(cfs)**	**Q_{25}(cfs)**	**Q_{100}(cfs)**
E-1	5.52	0.0086	7.0	4.2	73	5.1	12.9	17.8	25.6
E-2	2.65	0.0041	0.0	0.0	78	3.7	8.2	10.8	14.9
E-3	2.84	0.0044	7.0	4.2	76	3.8	8.6	11.5	16.1
Total	11.01	0.0172		Total Peak Flow		12.2	29.0	39.3	55.5

PROPOSED DRAINAGE SUMMARY									
Area ID	**DA (ac.)**	**DA (mi^2.)**	**TC(min.)**	**Lag (min)**	**CN**	**Q_2(cfs)**	**Q_{10}(cfs)**	**Q_{25}(cfs)**	**Q_{100}(cfs)**
P-1	5.52	0.0086	7.0	4.2	73	5.1	12.9	17.8	25.6
P-2	2.17	0.0034	7.0	4.2	79	3.3	7.0	9.2	12.6
P-3	3.32	0.0052	5.0	3.0	94	11.8	18.4	22.1	27.6
P-3 Pond	3.32	0.0052				4.2	9.6	12.2	17.9
Total	11.01	0.0172		Total Peak Flow		12.2	29.0	38.6	55.5

ANALYSIS POINT 1 (CFS) ROUTED FLOWS				
Condition	**2-year**	**10-year**	**25-year**	**100-year**
Existing	12.2	29.0	39.3	55.5
Developed	12.2	29.0	38.6	55.5

The design of the drainage minimizes any effects on the natural and traditional character of the land and waterways; therefore, no adverse effects to the environment are anticipated due to the development.

WATER QUALITY
This development is proposing a Batch Detention BMP.

WATER AND WASTEWATER
Water will be connected to the City of Georgetown services and requires installation of two single-service lines and an extension of a public water line. Wastewater service will be connected to the City of Georgetown services and requires installation of six single-service laterals to a proposed sewer extension.

SEDIMENTATION / EROSION CONTROL / TREE SURVEY
All sedimentation / erosion controls are required and will be in accordance with the City of Georgetown and TCEQ.

CRITICAL ENVIRONMENTAL FEATURES
There are no CEF's per the include GA.

IV. Water Pollution Abatement Plan

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

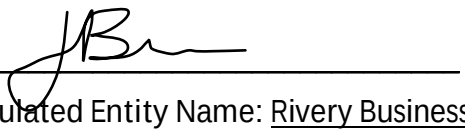
Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This Water Pollution Abatement Plan Application Form is hereby submitted for TCEQ review and Executive Director approval. The form was prepared by:

Print Name of Customer/Agent: Joshua A. Baran

Date: 5/6/2023

Signature of Customer/Agent:



Regulated Entity Name: Rivery Business Park

Regulated Entity Information

1. The type of project is:

   ☐ Residential: Number of Lots:_____
   ☐ Residential: Number of Living Unit Equivalents:_____
   ☒ Commercial
   ☐ Industrial
   ☐ Other:_____

2. Total site acreage (size of property):3.29945

3. Estimated projected population:200

4. The amount and type of impervious cover expected after construction are shown below:

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	36,300	÷ 43,560 =	0.83333
Parking	58,379	÷ 43,560 =	1.34020
Other paved surfaces	2,750	÷ 43,560 =	0.06313
Total Impervious Cover	97,429	÷ 43,560 =	2.23666

Total Impervious Cover 3.29945 ÷ Total Acreage 2.23666 X 100 = 67.8% Impervious Cover

5. ☒ Attachment A - Factors Affecting Surface Water Quality. A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.

6. ☒ Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

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

7. Type of project:

☐ TXDOT road project.
☐ County road or roads built to county specifications.
☐ City thoroughfare or roads to be dedicated to a municipality.
☐ Street or road providing access to private driveways.

8. Type of pavement or road surface to be used:

☐ Concrete
☐ Asphaltic concrete pavement
☐ Other: _____

9. Length of Right of Way (R.O.W.): _____ feet.

Width of R.O.W.: _____ feet.
L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

10. Length of pavement area: _____ feet.

Width of pavement area: _____ feet.
L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.
Pavement area _____ acres ÷ R.O.W. area _____ acres x 100 = _____% impervious cover.

11. ☐ A rest stop will be included in this project.

☐ A rest stop will not be included in this project.

12. ☐ Maintenance and repair of existing roadways that do not require approval from the TCEQ Executive Director. Modifications to existing roadways such as widening roads/adding shoulders totaling more than one-half (1/2) the width of one (1) existing lane require prior approval from the TCEQ.

Stormwater to be generated by the Proposed Project

13. ☒ Attachment B - Volume and Character of Stormwater. A detailed description of the volume (quantity) and character (quality) of the stormwater runoff which is expected to occur from the proposed project is attached. The estimates of stormwater runoff quality and quantity are based on the area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

Wastewater to be generated by the Proposed Project

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

100% Domestic	1,400 Gallons/day
_____% Industrial	_____ Gallons/day
_____% Commingled	_____ Gallons/day
TOTAL gallons/day 1,400	

15. Wastewater will be disposed of by:

☐ On-Site Sewage Facility (OSSF/Septic Tank):

☐ Attachment C - Suitability Letter from Authorized Agent. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.

☐ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

☒ Sewage Collection System (Sewer Lines):

☒ Private service laterals from the wastewater generating facilities will be connected to an existing SCS.

☐ Private service laterals from the wastewater generating facilities will be connected to a proposed SCS.

☐ The SCS was previously submitted on_____.

☐ The SCS was submitted with this application.

☐ The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to Executive Director approval.

☒ The sewage collection system will convey the wastewater to the Georgetown Utility Systems - San Gabriel (name) Treatment Plant. The treatment facility is:

☒ Existing.
☐ Proposed.

16. ☒ All private service laterals will be inspected as required in 30 TAC §213.5.

Site Plan Requirements

Items 17 – 28 must be included on the Site Plan.

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

Site Plan Scale: 1" = 40'.

18. 100-year floodplain boundaries:

☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
☒ No part of the project site is located within the 100-year floodplain.
The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA Panel No. 48491C0293F, dated December 20, 2019

19. ☒ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, open space, etc. are shown on the plan.

☐ The layout of the development is shown with existing contours at appropriate, but not greater than ten-foot intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, open space, etc. are shown on the site plan.

20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):

☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

☐ The wells are not in use and have been properly abandoned.
☐ The wells are not in use and will be properly abandoned.
☐ The wells are in use and comply with 16 TAC §76.

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

21. Geologic or manmade features which are on the site:

☐ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.
☒ No sensitive geologic or manmade features were identified in the Geologic Assessment.
☐ Attachment D - Exception to the Required Geologic Assessment. A request and justification for an exception to a portion of the Geologic Assessment is attached.

22. ☒ The drainage patterns and approximate slopes anticipated after major grading activities.

23. ☒ Areas of soil disturbance and areas which will not be disturbed.

24. ☒ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.

25. ☒ Locations where soil stabilization practices are expected to occur.

26. ☐ Surface waters (including wetlands).

    ☒ N/A

27. ☐ Locations where stormwater discharges to surface water or sensitive features are to occur.

    ☒ There will be no discharges to surface water or sensitive features.

28. ☒ Legal boundaries of the site are shown.

Administrative Information

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

30. ☒ Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

ATTACHMENT A

Factors Affecting Surface Water Quality

*Potential Sources of Contamination associated with this project:

1. Oil and Grease: from runoff pollutants associated with paved driving surfaces, especially around the areas of fueling operations
2. Trash and debris: from customers at the retail / convenience center
3. Construction Phase Pollutants: hydraulic fluid, machine oil, and sediment

ATTACHMENT B

PROJECT DESCRIPTION

INTRODUCTION

The proposed development known as Rivery Business Park (the "development"), located at 2006 Rivery Boulevard, Williamson County, Texas 78628 will be constructed on 3.30 acres, as conveyed to Rivery Business Park, LLC, by Deed as recorded in Document 2021026118, Official Public Records of Williamson County, Texas and managed by Rivery Business Park Condominiums Association, Inc.

The project was constructed prior to submittal of a WPAP. This summary describes the project design elements used to design / construct the project site. In this case, the term "existing" used below refers to the preconstruction conditions, and the term "proposed" refers to the currently built conditions.

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Access will be taken from the existing driveway off Rivery Boulevard.

STORMWATER DRAINAGE

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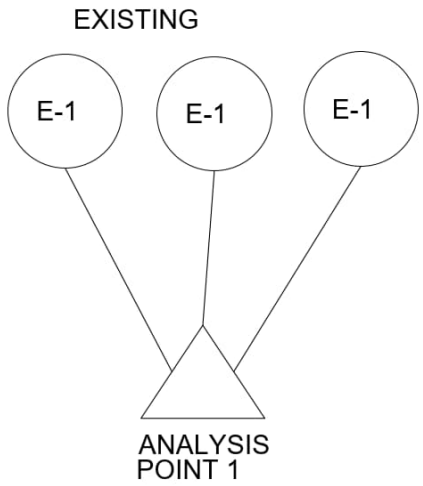

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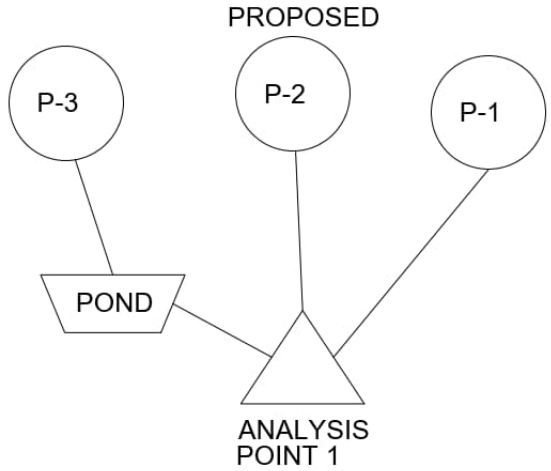

DRAINAGE SUMMARY

Utilizing the SCS method for comparison of the existing vs. proposed conditions yielded a decrease in peak discharge to both drainage areas.

EXISTING DRAINAGE SUMMARY									
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Existing	12.2	29.0	39.3	55.5
Developed	12.2	29.0	38.6	55.5

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WATER QUALITY

This development is proposing a Batch Detention BMP.

WATER AND WASTEWATER

Water will be connected to the City of Georgetown services and requires installation of two single-service lines and an extension of a public water line. Wastewater service will be connected to the City of Georgetown services and requires installation of six single-service laterals to a proposed sewer extension.

SEDIMENTATION / EROSION CONTROL / TREE SURVEY
All sedimentation / erosion controls are required and will be in accordance with the City of Georgetown and TCEQ.

CRITICAL ENVIRONMENTAL FEATURES
There are no CEF's per the include GA.

V. 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.

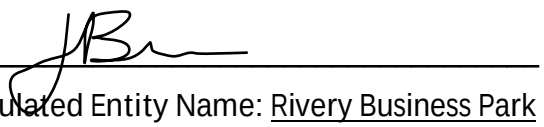
Signature

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: Joshua A. Baran

Date: 5/6/2023

Signature of Customer/Agent:



Regulated Entity Name: Rivery Business Park

Project Information

Potential Sources of Contamination

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

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

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

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

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

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

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

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

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

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

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

Sequence of Construction

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

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

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

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

Temporary Best Management Practices (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

ATTACHMENT A

SPILL RESPONSE ACTIONS

Spills will be prevented utilizing Best Management Practices previously described such as proper material storage, handling, and disposal practices. However, despite such efforts, a spill may occur on site. If a spill occurs, the following procedures will be utilized.

- ***Stop the spill, if possible.*** This can include shutting off power to a pump, righting an overturned container, or plugging a hole in a damaged container.

- ***Contain the spill, safely.*** Spill containment can be accomplished using a variety of materials and methods such as the use of absorbents (i.e. sawdust, Oil Dri, rags, soil, polypropylene pads or booms, etc.) to dike the area around the spill, or placing a leaking container inside one which is not leaking. Spill containment should only be attempted if it is safe to do so. Proper safety equipment such as gloves and eye protection should be used as directed on the Material Safety Data Sheet for the spilled material.

- ***Report the spill, if necessary.*** Certain quantities of hazardous or toxic materials such as pesticides, paint thinners, gasoline, etc. are required by Federal Law to be reported to the National Response Center (NRC) at 1-800-424-8802 as soon as you have knowledge of the spill. Since most of the quantities which require reporting to the NRC are larger than that found on a typical construction site, spill reporting to the State or Local authorities is more likely. When in doubt, report the spill.

<u>The reporting requirements which may aggly to the sites covered in this SW3P are:</u>

Texas Commission on Environmental Quality (TCEQ)
1-800-832-8224

TCEQ requires reporting of spills of 25 gallons or greater, especially those which might impact a waterway.

- ***Clean the spill up, properly.*** Spill clean up should be performed in accordance with applicable regulations or according to the manufacturer's recommendations on the Material Safety Data Sheet. In most cases, proper spill clean up is to use a dry method such as absorbing the spill and containerize for disposal via a licensed disposal company. For non-hazardous and non-toxic materials this may be through your solid waste disposal service with prior approval.

- ***Fill in table on next page.***

The SW3P must be modified within 14 days of a release to provide a description of the spill, the circumstances leading to the spill, and the date of the spill. Spill clean-up materials, methods, and additional Best Management Practices addressing spill prevention should also be included.

Spill Date	Material Spilled	Amount of spill (in gallons)	Circumstance of Spill (what caused the spill)	Corrective Action	Correction Date & Sign-off

ATTACHMENT B

Potential Sources of Contamination

*Potential Sources of Contamination associated with this project:

1. Oil and Grease: from runoff pollutants associated with paved driving surfaces, especially around the areas of fueling operations
2. Trash and debris: from customers at the retail / convenience center
3. Construction Phase Pollutants: hydraulic fluid, machine oil, and sediment

ATTACHMENT C

Sequence of Major Activities

1. Install construction fencing, stabilized construction entrance, erosion controls, and tree protection fencing per approved erosion and sedimentation control/tree protection plan. (Area Disturbed = 0.1 acres)
2. The contractor shall arrange and coordinate acceptable meeting times for an on-site pre-construction meeting with the Owner, Project Engineer, relevant contractors, and the City Environmental Inspector. The Environmental Inspector shall be contacted 72 hours prior to the required on-site preconstruction meeting.
3. Begin site clearing/demolition. Silt Fence and SCE must be installed prior and maintained during operations. (Area Disturbed = 3.3 acres)
4. Rough grade the site in accordance with plans and specifications. Silt Fence and SCE must be maintained during operations. (Area Disturbed = 3.3 acres)
5. Install utility improvements. Silt Fence and SCE must be maintained during operations. (Area Disturbed = 0.15 acres)
6. Construct Pond structure. Silt Fence and SCE must be maintained during operations. (Area Disturbed = 0.25 acres)
7. Construct building. Silt Fence and SCE must be maintained during operations.
8. Complete final grading, drainage, and pavement. Silt Fence and SCE must be maintained during operations. (Area Disturbed = 3.3 acres)
9. Hydromulch or sod all disturbed areas per landscape plan and general site cleanup. Silt Fence and SCE must be maintained during operations.
10. Final clearing of erosion and sedimentation controls and storm drain structures.
11. Project engineer inspects job and submits the Engineer's Concurrence Letter.
12. City Environmental inspector visits site and issues certificate of acceptance only if all construction is in substantial conformance to the plans.

Total Disturbed Area = 3.30 acres

*Note: Areas identified above in the sequence of construction may overlap and should not be totaled.

ATTACHMENT D

Temporary Best Management Practices and Measures

- Silt Fence – Approximately 620 linear feet of silt fence will be installed along the property line prior to the start of demolition or construction activities. The silt fence will prevent total suspended solids from leaving the site via sheet flow.

- Stabilized Construction Entrance / Exit – One Construction Entrance / Exit

- Concrete Washout Area – One concrete washout container will be used.

ATTACHMENT F

Structural Practices

Upgradient flows will be routed to bypass the proposed BMP through a proposed diversion channel. The flows from the bypassed areas are mitigated by additional storage of the proposed development areas. See drainage area maps for specific flow calculations. All on-site drainage during construction will flow through the proposed temporary BMP's.

ATTACHMENT G

DRAINAGE AREA MAPS (EXISTING AND PROPOSED)

(REFER TO CONSTRUCTION PLANS UNDER SEPARATE COVER FOR FULL SIZE COPIES)

SITE DEVELOPMENT PLAN (2021-28-SDP)

RIVERY BUSINESS PARK

AT

2006 RIVERY BOULEVARD
GEORGETOWN, TX 78628

OWNER/ DEVELOPER:

SEVEN10 DEVELOPMENT GROUP, LLC
1625 WILLIAMS DRIVE, STE 201
GEORGETOWN, TX 78628
[TEL] (512) 508-4970

SURVEYOR:

TEXAS LAND SURVEYING, INC.
3613 WILLIAMS DRIVE, STE 903
GEORGETOWN, TX 78628
[TEL] (512) 930-1600

UTILITY SERVICE PROVIDERS:

SANITARY SEWER
CITY OF GEORGETOWN
[TEL] (512) 930-2572

WATER
CITY OF GEORGETOWN
[TEL] (512) 930-2572

STORM SEWER
CITY OF GEORGETOWN
[TEL] (512) 930-2572

ELECTRIC
CITY OF GEORGETOWN
[TEL] (512) 930-2572

GAS
ATMOS ENERGY
[TEL] (512) 419-8822

CIVIL ENGINEER/ APPLICANT

JAB ENGINEERING, LLC.
4500 WILLIAMS DRIVE, SUITE 212-121
GEORGETOWN, TEXAS 78633
[TEL] (512) 779-7414

LEGAL DESCRIPTION:

3.30 ACRE TRACT OF LAND OUT OF LOT ONE OF F.T.B. COMMERCIAL NUMBER ONE, A SUBDIVISION IN WILLIAMSON COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT RECORDED UNDER CABINET L, VOLUME 224 OF THE PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS AND BEING THAT SAME TRACT CONVEYED TO SEVEN10 DEVELOPMENT GROUP, LLC IN DOCUMENT 2021026118 OF THE OFFICIAL PUBLIC RECORDS, WILLIAMSON COUNTY, TEXAS.

FLOODPLAIN NOTE:

THE SUBJECT TRACT IS SHOWN TO BE IN FLOOD ZONE "X", AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS IDENTIFIED BY THE FLOOD INSURANCE RATE MAP NO. 48491C0293F, DATED DECEMBER 20, 2019 (WILLIAMSON COUNTY AND INCORPORATED AREAS).

ZONING NOTE:

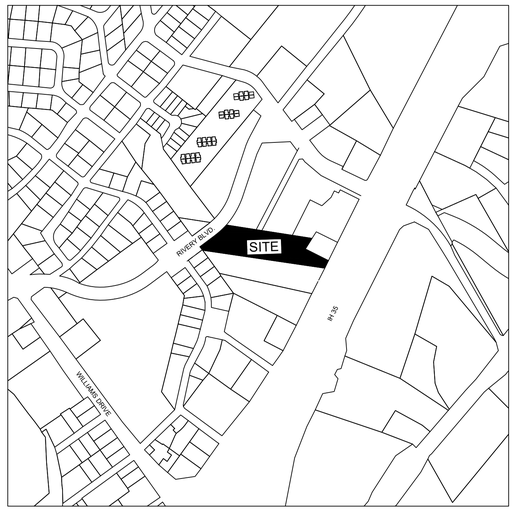
THIS SITE IS LOCATED WITHIN THE CITY LIMITS OF GEORGETOWN.
ZONING CLASSIFICATION: C3

PROPOSED USE:

OFFICE / WAREHOUSE, BEING TWO NEW OFFICE BUILDINGS

SITE 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 PERMIT.
2. THIS 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.
3. THIS SITE PLAN SHALL MEET THE UDC STORMWATER REQUIREMENTS.
4. ALL SIGNAGE REQUIRES A SEPARATE APPLICATION AND APPROVAL FROM THE INSPECTION SERVICES DEPARTMENT. NO SIGNAGE IS APPROVED WITH THE SITE PLAN.
5. SIDEWALKS SHALL BE PROVIDED IN ACCORDANCE WITH THE UDC.
6. DRIVEWAYS WILL REQUIRE APPROVAL BY THE DEVELOPMENT ENGINEER OF THE CITY OF GEORGETOWN.
7. OUTDOOR LIGHTING SHALL COMPLY WITH SECTION 7.04 OF THE UDC.
8. SCREENING OF MECHANICAL EQUIPMENT AND PARKING SHALL COMPLY WITH CHAPTER 8 OF THE UDC. THE SCREENING IS SHOWN ON THE LANDSCAPE AND ARCHITECTURAL PLANS, AS APPLICABLE. NO DUMPSTERS ARE PROPOSED WITH THIS DEVELOPMENT.
9. THE COMPANION LANDSCAPE PLAN HAS BEEN DESIGNED AND PLANT MATERIALS SHALL BE INSTALLED TO MEET ALL REQUIREMENTS OF THE UDC.
10. ALL MAINTENANCE OF REQUIRED LANDSCAPE SHALL COMPLY WITH THE MAINTENANCE STANDARDS OF CHAPTER 8 OF THE UDC.
11. A SEPARATE IRRIGATION PLAN SHALL BE REQUIRED AT THE TIME OF BUILDING PERMIT APPLICATION.
12. FIRE FLOW REQUIREMENTS OF 1,500 GALLONS PER MINUTE ARE BEING MET BY THIS PLAN.
13. ANY HERITAGE TREE AS NOTED ON THIS SITE PLAN IS SUBJECT, IN PERPETUITY, TO THE MAINTENANCE, CARE, PRUNING AND REMOVAL REQUIREMENTS OF THE UNIFIED DEVELOPMENT CODE.
14. 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.
15. THIS PROJECT IS SUBJECT TO ALL CITY STANDARD SPECIFICATIONS AND DETAILS IN EFFECT AT THE TIME OF SUBMITTAL OF THE PROJECT TO THE CITY.
16. THE PROPERTY SUBJECT TO THIS APPLICATION IS SUBJECT TO THE WATER QUALITY REGULATIONS OF THE CITY OF GEORGETOWN.
17. A GEOLOGIC ASSESSMENT, IN ACCORDANCE WITH THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS, WAS COMPLETED ON APRIL 16, 2021. ANY SPRINGS AND STREAMS AS IDENTIFIED IN THE GEOLOGIC ASSESSMENT ARE SHOWN HEREIN.
18. 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 ENGINEER.
19. ALL ELECTRIC AND COMMUNICATION INFRASTRUCTURE SHALL COMPLY WITH UDC SECTION 13.06.



INITIAL SUBMITTAL DATE:

APRIL 19, 2021

RE-SUBMITTAL DATE:

DECEMBER 19, 2022

SHEET INDEX:

SITE INFORMATION

ZONING	C3, GATEWAY / HIGHWAY OVERLAY		
PROPOSED USE	OFFICE / WAREHOUSE		
BUILDING (SQUARE FEET)	OFFICE	WAREHOUSE	TOTAL
BUILDING 1	14,650 SF	5,500 SF	20,150 SF
BUILDING 2	11,750 SF	4,400 SF	16,150 SF
TOTAL	26,400 SF	9,900 SF	35,300 SF
PARKING REQUIRED (SPACES)	(1:300)	(1:2500)	TOTAL
BUILDING 1	49	3	52
BUILDING 2	40	2	42
TOTAL	89	5	94
PARKING PROVIDED (SPACES)			
STANDARD	95 SPACES		
HANDICAP / VAN ACCESSIBLE	4 SPACES		
TOTAL	99 SPACES		
SITE DATA			
AREA (ACRES)	3.30 AC		
AREA (SQUARE FEET)	143,724 SF		

IMPERVIOUS COVER CALCULATIONS

TOTAL AREA	3.30 AC
TOTAL IMPERVIOUS AREA ALLOWED (70%)	100,607 SF
BUILDING IMPERVIOUS COVER	36,300 SF
SIDEWALK IMPERVIOUS COVER	2,750 SF
PAVEMENT IMPERVIOUS COVER	58,379 SF
TOTAL IMPERVIOUS AREA PROPOSED (47.8%)	97,429 SF

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates: Daily Rate	AM Rate	PM Rate	Total Trips: Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out
150	Warehousing	1,000 Sq Ft	9.9	Avg	1.74	0.22	0.24	17	2	2	1	1	1	1
710	General Office Building (1)	1,000 Sq Ft	26.4	Avg	9.74	1.47	1.42	257	39	37	20	19	19	18
							Totals	274	41	39	21	20	20	19

Approved for construction by the City of Georgetown Planning & Zoning Commission on:

February 7, 2023

This SDP will expire 24 months from the date of approval if the applicable conditions of UDC Section 3.09.090 are not met.

No.	Date	Revisions	App.

JAB Engineering, LLC
(F-14076)
4500 Williams Drive
Suite 212-121
Georgetown, TX 78633
512-779-7414 (p)
josh.baran@jabeng.com

RIVERY BUSINESS PARK
2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

COVER

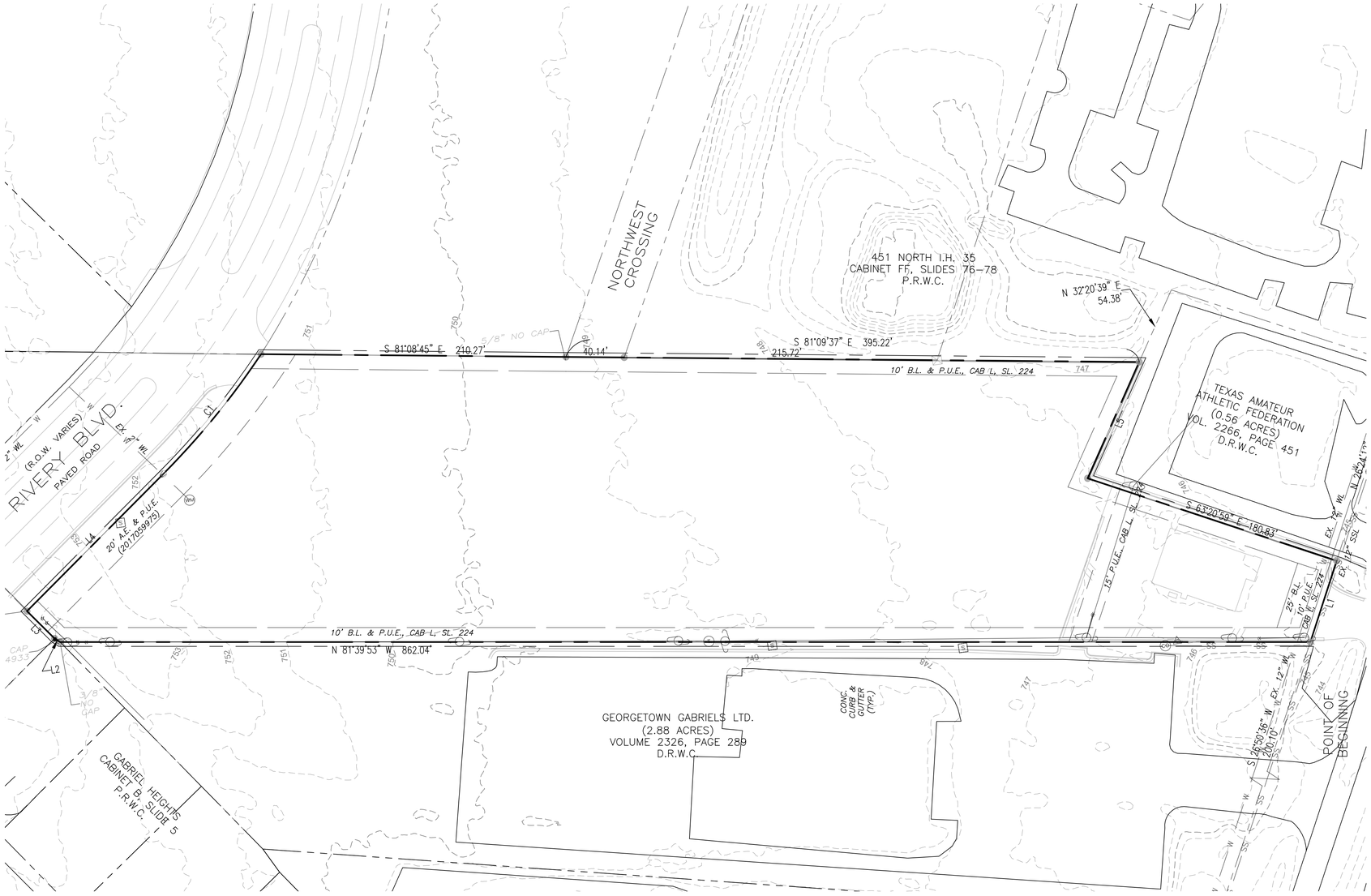
02/06/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.01

Sheet 1 OF 26

2021-28-SDP



LEGEND:

- PROPERTY LINE
- LOT LINE
- EASEMENT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING OVERHEAD ELECTRIC LINE
- PROPOSED FIRE LANE
- PROPOSED SCREEN FENCE
- LIMITS OF CONSTRUCTION (L.O.C.)
- ACCESSIBLE ROUTE
- EXISTING HERITAGE TREE DRIP LINE

N

0' 20' 40' 60' 80'

LINE TABLE		
NUMBER	DIRECTION	DISTANCE
L1	S 26°14'00" W	58.92'
L2	N 48°41'24" W	4.47'
L3	N 36°54'49" W	26.80'
L4	N 53°08'04" E	133.46'
L5	S 32°14'01" W	87.75'

CURVE TABLE					
NUMBER	DELTA	RADIUS	ARC	CHORD	DIRECTION
C1	11°11'21"	546.07'	106.64'	106.47'	N 47°32'49" E

No.	Date	Revisions	App.

JAB Engineering, LLC
(F-14076)
4500 Williams Drive
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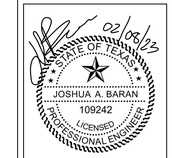
Georgetown, TX 78633
512-779-7414 (p)
josh.baran@jabeng.com

RIVERY BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

EXISTING SURVEY & DEMO PLAN



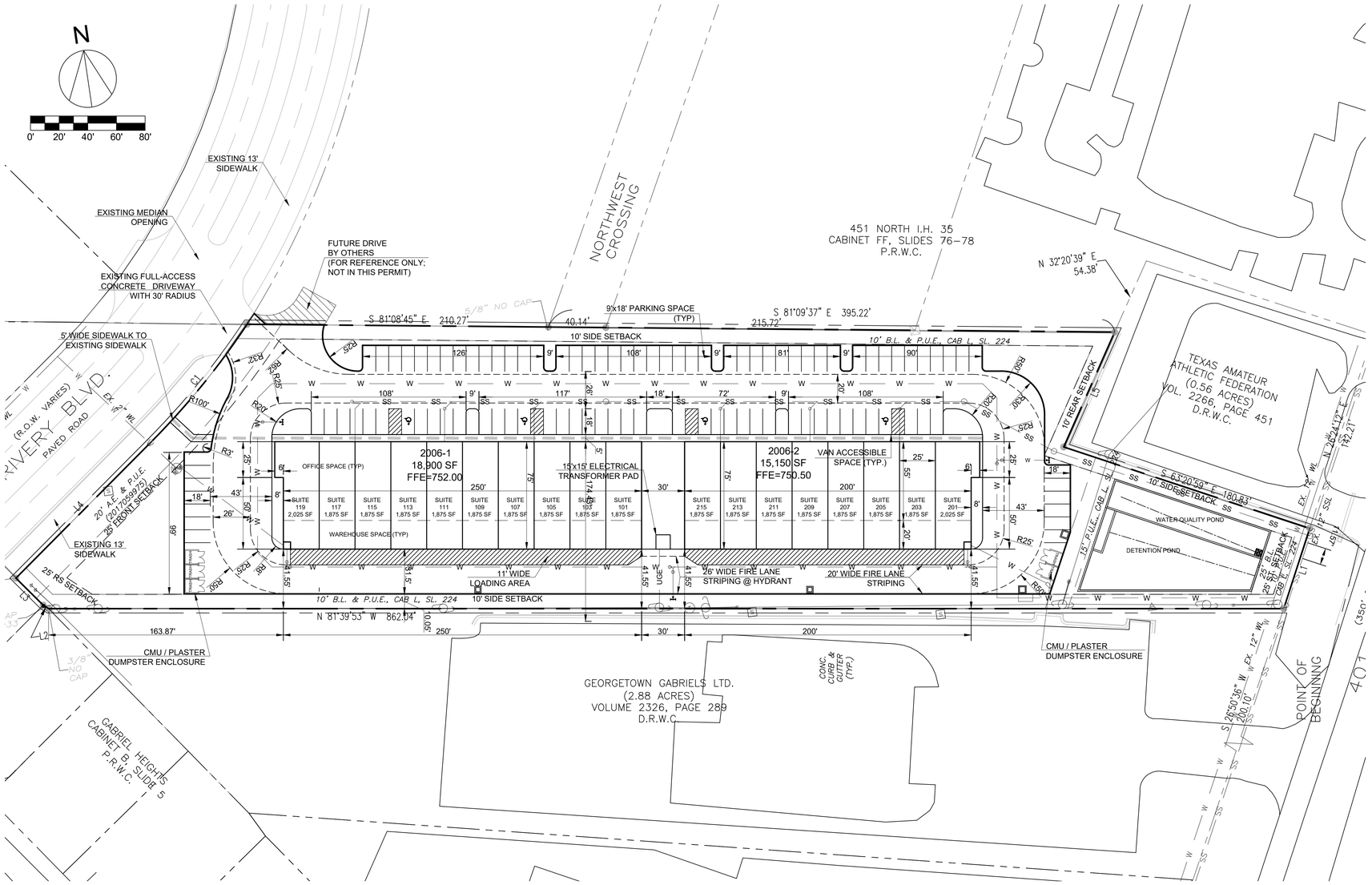
Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.02

Sheet 2 OF 26

2021-28-SDP

Texas 811



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NOTES:
1. WATER AND WASTEWATER SERVICE TO BE PROVIDED BY THE CITY OF GEORGETOWN.
2. ALL FIRE DEPARTMENT ACCESS DRIVES/ROADS TO HAVE A MINIMUM 14'-0" VERTICAL CLEARANCE AND MAXIMUM SLOPE OF 15% IN ANY DIRECTION.
3. ALL PARKING SPACES SHALL HAVE A 7'-0" VERTICAL CLEARANCE.
4. EVERY HANDICAP ACCESSIBLE PARKING SPOT 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 THE UBC, 3108(C) AND ANSI A1171-1986-4.6.2. (SEE DETAIL). REFER TO ARCHITECTURAL ADA SHEET FOR MORE INFORMATION.
5. CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
6. SLOPES ON ACCESSIBLE ROUTES MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP.
7. THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12. THE MAXIMUM RISE FOR ANY RAMP RUN IS 30 INCHES.
8. ACCESSIBLE ROUTES MUST HAVE A CROSS-SLOPE NO GREATER THAN 1:50. 5' X 5' LANDINGS ARE REQUIRED AT ALL CHANGES IN DIRECTION. LANDINGS SHALL NOT HAVE A SLOPE OF GREATER THAN 1:50 IN ANY DIRECTION.
9. GROUND SURFACES ALONG ACCESSIBLE ROUTES MUST BE STABLE, FIRM, AND SLIP RESISTANT.
10. REFER TO DETAILS FOR PAVEMENT SECTIONS.
11. ALL CURBS AND CURB ENDS SHALL BE PAINTED RED WITH FOUR-INCH WHITE LETTERING STATING "FIRE LANE—TOW AWAY ZONE". THE WORDS "FIRE LANE" BY THEMSELVES ARE NOT ACCEPTABLE. WORDING MAY NOT BE SPACED MORE THAN 30 FEET APART.
12. CONTRACTOR SHALL SAW CUT AND REMOVE 1' OF EXISTING PAVEMENT AND PROVIDE A SMOOTH TRANSITION FROM EXISTING PAVEMENT TO PROPOSED PAVEMENT. COORDINATE CONSTRUCTION WITHIN THE ROW WITH TXDOT PER THE DRIVEWAY PERMIT.
13. COORDINATE LOCATION, SIZE AND TYPE OF LIGHTING WITH MEP AND BUILDING PLANS.
14. SECURITY FENCE AND GATES SHALL BE DESIGN BUILD AND SHALL BE COORDINATED BETWEEN OWNER AND CONTRACTOR. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PROPOSED SECURITY FENCE AND GATES TO ENGINEER AND OWNER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. VERIFY UNDERGROUND UTILITIES PRIOR TO FENCE POST PLACEMENT.
15. EDGE LINES PAINTED SINGLE WHITE SOLID LINE/4" WITH INSIDE STRIPING PAINTED SINGLE WHITE SOLID LINE/4" AT 30" O.C. 45 DEGREES TO EDGE LINES.
16. SITE SURVEY, PROVIDED BY OTHERS, DOES NOT INCLUDE A REFERENCE TO TEMPORARY OR PERMANENT BENCHMARKS NEAR THE SITE. CONTRACTOR SHALL VERIFY EXISTING TOPOGRAPHY AND THE LOCATION/ELEVATION OF THE SITE IMPROVEMENTS PRIOR TO STARTING CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY IF DISCREPANCIES ARE DISCOVERED.
17. 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 LIGHTED TO ENSURE SECURITY OF PROPERTY AND PERSONS.
18. ALL ROOF, WALL AND GROUND MOUNTED MECHANICAL EQUIPMENT MUST BE SCREENED IN ACCORDANCE WITH SECTION 8 OF THE UDC. IF ROOF AND WALL 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 EQUIPMENT BLENDING IN WITH THE PRIMARY BUILDING AND NOT APPEARING SEPARATE FROM THE BUILDING AND SHALL BE SCREENED FROM VIEW OF ANY RIGHTS-OF-WAY OR ADJOINING PROPERTIES.
19. 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 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.

LEGEND:

- PROPERTY LINE
- LOT LINE
- EASEMENT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING OVERHEAD ELECTRIC LINE
- PROPOSED FIRE LANE
- PROPOSED SCREEN FENCE
- LIMITS OF CONSTRUCTION (L.O.C.)
- ACCESSIBLE ROUTE
- EXISTING HERITAGE TREE DRIP LINE

SITE INFORMATION

ZONING	C3, GATEWAY / HIGHWAY OVERLAY		
PROPOSED USE	OFFICE / WAREHOUSE		
BUILDING (SQUARE FEET)	OFFICE	WAREHOUSE	TOTAL
BUILDING 1	13,900 SF	5,000 SF	18,900 SF
BUILDING 2	11,150 SF	4,000 SF	15,150 SF
TOTAL	25,050 SF	9,000 SF	34,050 SF
PARKING REQUIRED (SPACES)	(1:300)	(1:2500)	TOTAL
BUILDING 1	47	2	49
BUILDING 2	38	2	40
TOTAL	85	4	89
PARKING PROVIDED (SPACES)	OFFICE	WAREHOUSE	TOTAL
STANDARD	91	4	95
HANDICAP / VAN ACCESSIBLE	4	0	4
TOTAL	95	4	99
SITE DATA			
AREA (ACRES)	3.30 AC		
AREA (SQUARE FEET)	143,724 SF		

IMPERVIOUS COVER CALCULATIONS

TOTAL AREA	3.30 AC
TOTAL IMPERVIOUS AREA ALLOWED (70%)	100,607 SF
BUILDING IMPERVIOUS COVER	34,050 SF
SIDEWALK IMPERVIOUS COVER	2,750 SF
PAVEMENT IMPERVIOUS COVER	60,859 SF
TOTAL IMPERVIOUS AREA PROPOSED (67.95%)	97,659 SF

No.	Date	Revisions	App.

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2006 RIVERY BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

DIMENSIONAL SITE PLAN

02/08/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

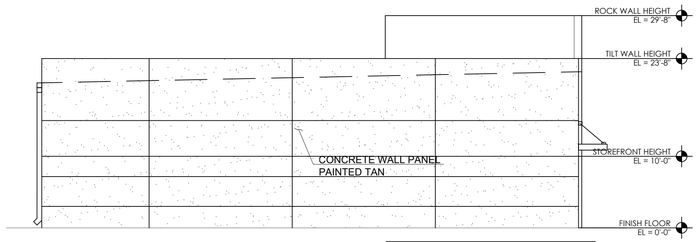
Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.03

Sheet 3 OF 26

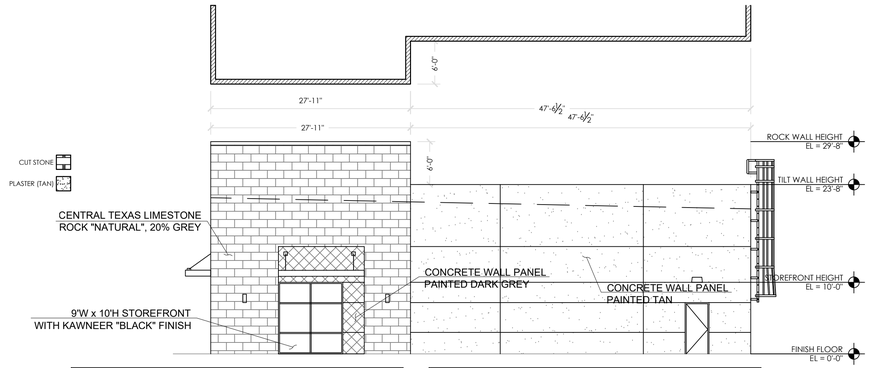
2021-28-SDP

Texas 811



VERTICAL & HORIZONTAL ARTICULATION (NOT REQUIRED):
WALL IS INTERIOR TO OTHER BUILDINGS AND DOES NOT FACE RESIDENTIAL ZONING OR STREET DIRECTLY

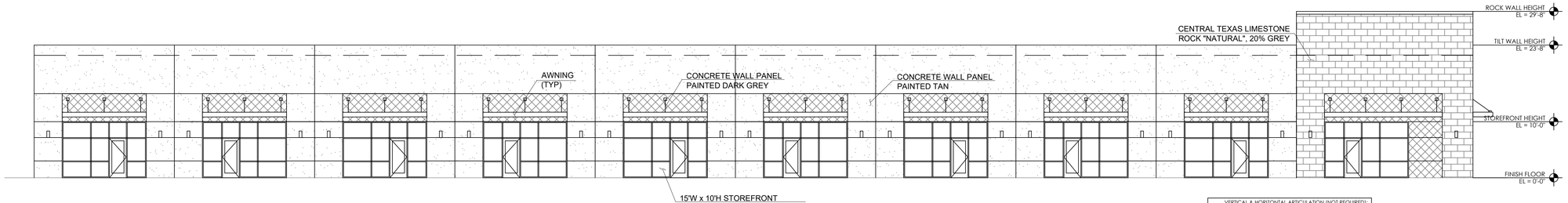
EAST ELEVATION
1/8" = 1'-0"



HORIZONTAL ARTICULATION:
AVERAGE BUILDING HEIGHT 23'-8" x 3 = 71'-0", MAXIMUM DISTANCE WITHOUT PERPENDICULAR OFFSET
AVERAGE BUILDING HEIGHT 23'-8" x 25% = 5'-11", MINIMUM HEIGHT OF PERPENDICULAR OFFSET
AVERAGE BUILDING HEIGHT 23'-8" x 75% = 17'-9", MINIMUM SPAN OF PERPENDICULAR OFFSET

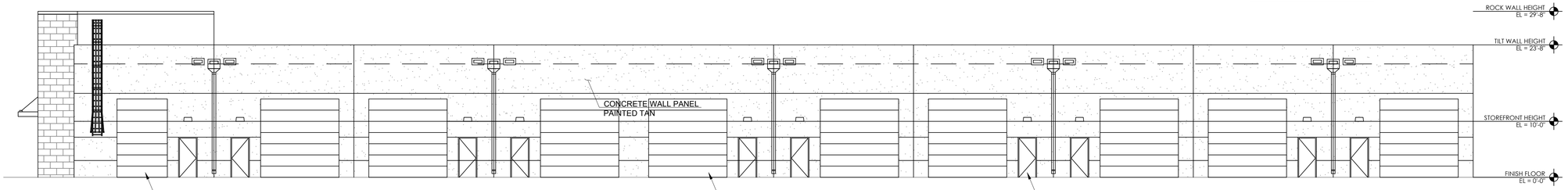
VERTICAL ARTICULATION:
AVERAGE BUILDING HEIGHT 23'-8" x 3 = 71'-0", MAXIMUM DISTANCE WITHOUT VERTICAL CHANGE
AVERAGE BUILDING HEIGHT 23'-8" x 25% = 5'-11", MINIMUM HEIGHT OF VERTICAL CHANGE
AVERAGE BUILDING HEIGHT 23'-8" x 75% = 17'-9", MINIMUM LATERAL ELEVATION CHANGE

WEST ELEVATION
1/8" = 1'-0"



VERTICAL & HORIZONTAL ARTICULATION (NOT REQUIRED):
WALL IS INTERIOR TO OTHER BUILDINGS AND DOES NOT FACE RESIDENTIAL ZONING OR STREET DIRECTLY

NORTH ELEVATION



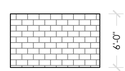
VERTICAL & HORIZONTAL ARTICULATION (NOT REQUIRED):
WALL IS INTERIOR TO OTHER BUILDINGS AND DOES NOT FACE RESIDENTIAL ZONING OR STREET DIRECTLY

SOUTH ELEVATION
1/8" = 1'-0"

NOTES:
1. ALL SIGNAGE REQUIRES A SEPARATE APPLICATION AND FROM THE BUILDING INSPECTIONS DEPARTMENT. NO SIGNAGE IS APPROVED WITH THE SITE DEVELOPMENT PLAN.
2. COLOR SELECTION IS NOT APPROVED WITH THE SITE DEVELOPMENT PLAN AND MAY BE COUNTED TOWARD THE SIGNAGE CALCULATION IF IT IS FOUND TO REFLECT COLOR THAT IS CONSIDERED SIGNAGE ACCORDING TO THE DEFINITION OF SIGNAGE IN THE UDC.
3. THIS SITE DEVELOPMENT PLAN SHALL MEET ALL DESIGN STANDARDS FOR ARTICULATION, BUILDING DESIGN, ELEMENTS AND ARCHITECTURAL FEATURES OF SECTION 7.03 OF THE UDC.
4. ALL ROOF, WALL AND GROUND MOUNTED MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE SCREENED USING THE FOLLOWING METHODS:
   - HVAC EQUIPMENT WILL BE SCREENED BY THE PARAPET WALL
   - ELECTRICAL TRANSFORMER WILL BE SCREENED BY VEGETATION ALONG THE SOUTHERN PROPERTY BOUNDARY
5. FOUNDATION IS CONCRETE SLAB ON GRADE.
6. ROOF IS TO BE TPO, WHITE COLOR.

MATERIAL PERCENTAGE CALCULATIONS

ELEVATION	PLASTER	PERCENTAGE	CUT STONE	PERCENTAGE	GLAZING	PERCENTAGE	OTHER	PERCENTAGE	TOTAL
EAST	306	38%	260	32%	246	30%	0	0%	812
SOUTH	357	35%	397	39%	142	14%	115	11%	1011
WEST	663	91%	26	4%	39	5%	0	0%	728
NORTH	589	54%	285	26%	215	20%	0	0%	1089
TOTAL	1915	53%	968	27%	642	18%	115	3%	3640



DUMPSTER SCREEN FENCE ELEVATION (TYP.)
- CMU WITH SMOOTH PLASTER
- MATCH PAINTED "TAN" COLOR TO BUILDING
- 6' TALL HEIGHT MINIMUM
- SEE PLAN FOR LOCATION
- SWING GATES TO BE SOLID

No.	Date	Revisions	App.

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RIVERY
BUSINESS PARK
2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

ARCHITECTURAL
PLAN
BUILDING 2006-1

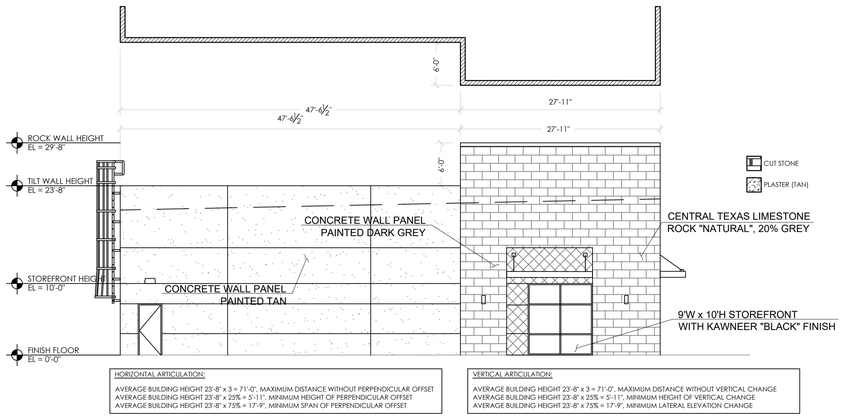
02/06/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.04

Sheet 4 OF 26
2021-28-SDP

Texas 811



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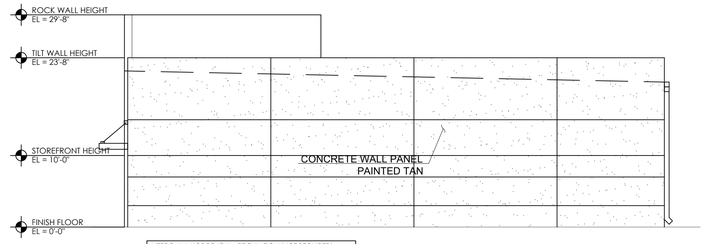

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WEST ELEVATION

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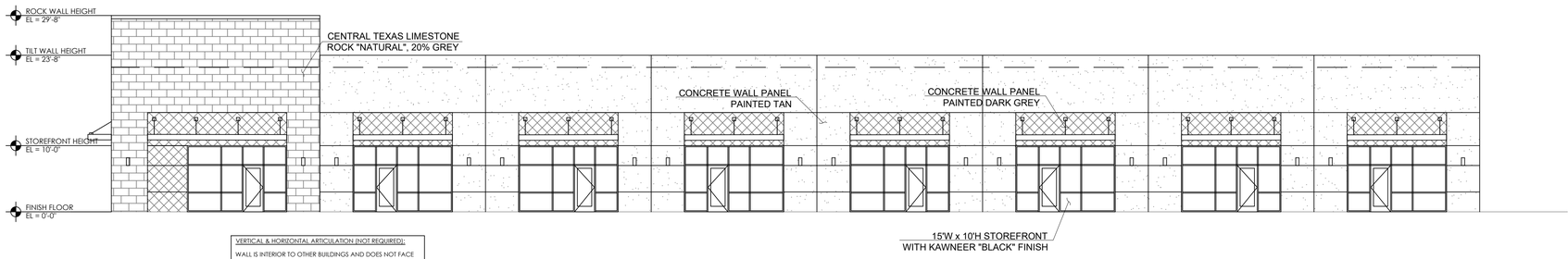

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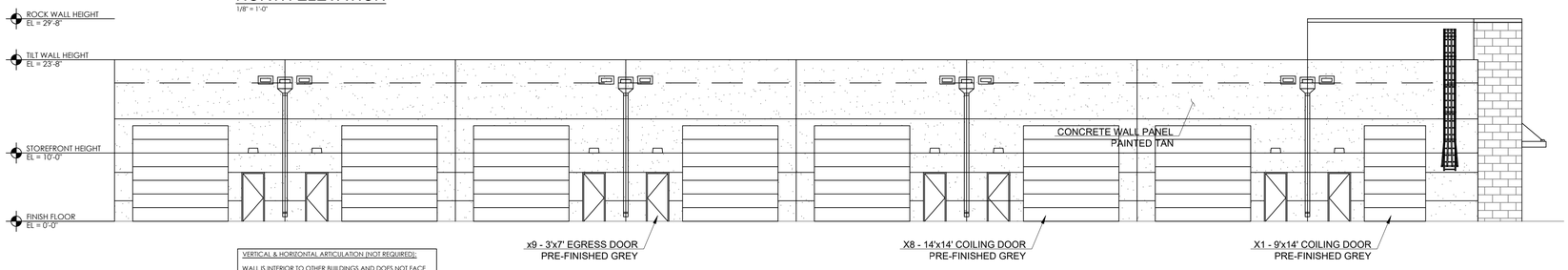
1/8" = 1'-0"



VERTICAL & HORIZONTAL ARTICULATION (NOT REQUIRED):

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SOUTH ELEVATION

1/8" = 1'-0"

NOTES:

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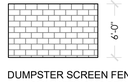

DUMPSTER SCREEN FENCE ELEVATION (TYP.)

- CMU WITH SMOOTH PLASTER
- MATCH PAINTED "TAN" COLOR TO BUILDING
- 6' TALL HEIGHT MINIMUM
- SEE PLAN FOR LOCATION
- SWING GATES TO BE SOLID

No.	Date	Revisions	App.

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RIVERY
BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

ARCHITECTURAL
PLAN
BUILDING 2006-2

02/04/22
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

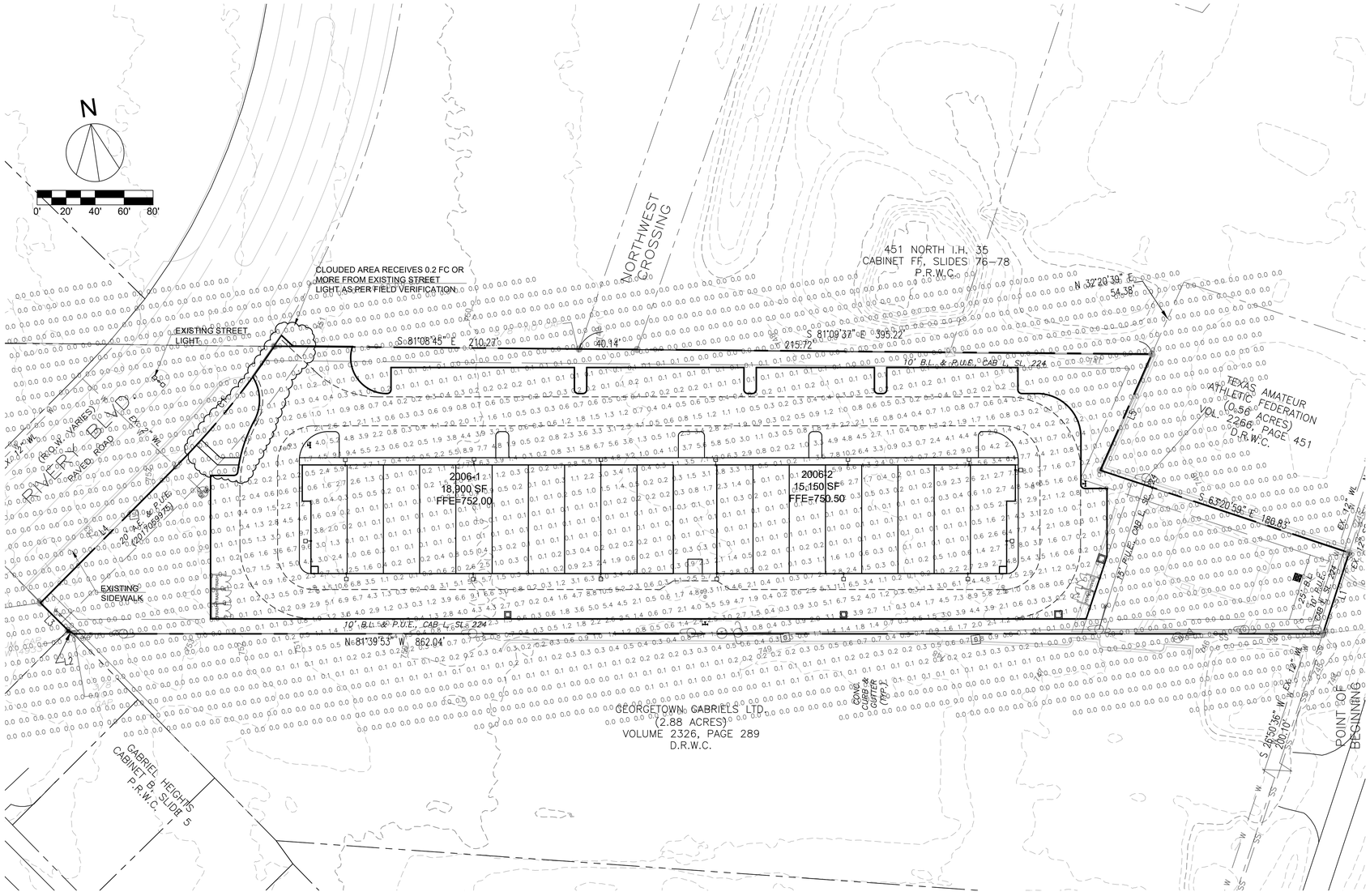
Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.05

Sheet 5 OF 26

2021-28-SDP

Texas 811 TEXAS



NOTES:

1. ALL LIGHTING FIXTURES SHALL BE DESIGNED SO THAT THE LIGHT SOURCE IS COMPLETELY CONCEALED, FULLY SHIELDED WITHIN OPAQUE HOUSING AND NOT VISIBLE 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 (3) FEET AT THE PROPERTY LINE. ONLY INCANDESCENT, FLOURESCENT, LIGHT-EMITTING DIODE (LED), COLOR-CORRECTED HIGH-PRESSURE SODIUM OR METAL HALIDE MAY BE USED.
2. ROOF LIGHTING MAY NOT INCLUDE NAKED BULBS OR TUBING OR RUN ALONG THE HIGHEST PEAK OF THE ROOFLINE. ROOF LIGHTING THAT QUALIFIES AS SIGNAGE PER THE UDC IS PROHIBITED.

15 TOTAL — LITHONIA LIGHTING - WALL PACK
DSXW2-LED-30C-1000-50K-TFTM-MVOLT

LEGEND:

- PROPERTY LINE
- LOT LINE
- EASEMENT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING OVERHEAD ELECTRIC LINE
- PROPOSED FIRE LANE
- PROPOSED MASONRY SCREEN WALL
- LIMITS OF CONSTRUCTION (L.O.C.)
- EXISTING HERITAGE TREE DRIP LINE

No.	Date	Revisions	App.

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RIVERY BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

LIGHTING PLAN

02/06/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

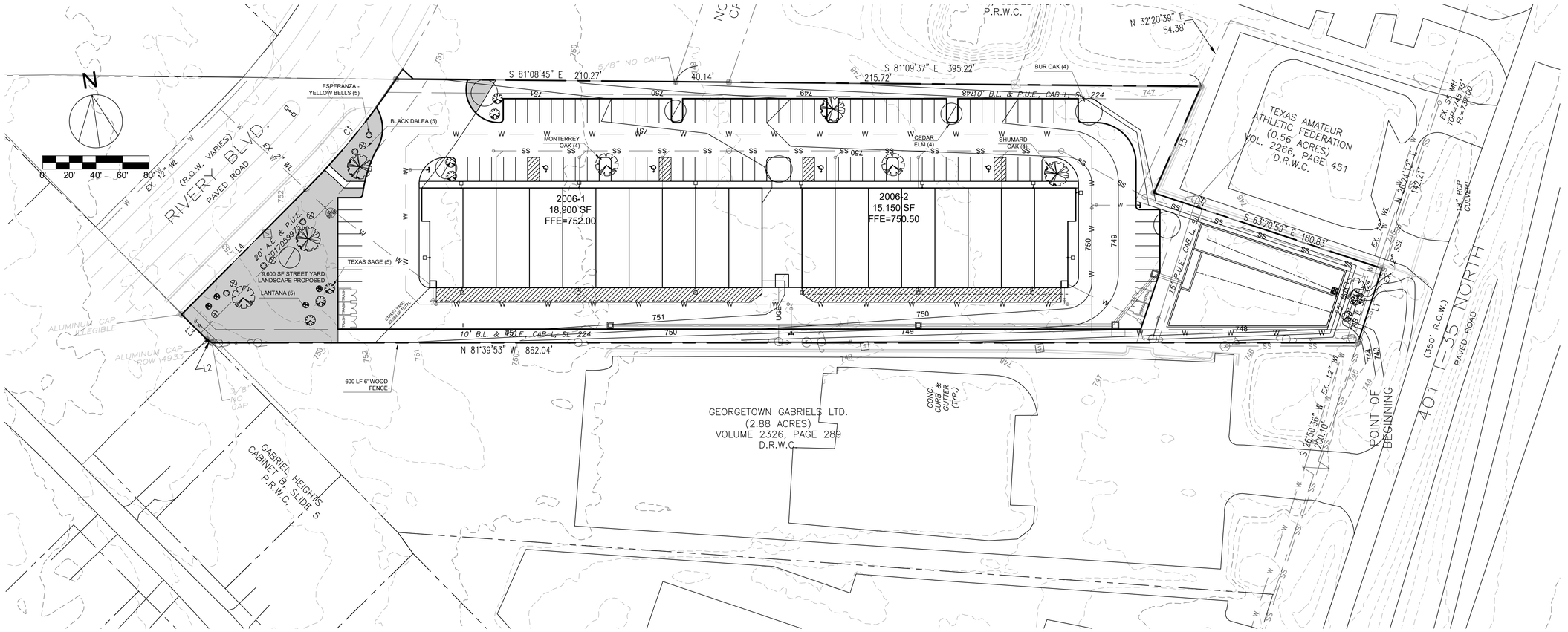
Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.06

Sheet 7 OF 26

2021-28-SDP

Texas 811 DIG TESS



LEGEND:

- PROPERTY LINE
- LOT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING OVERHEAD ELECTRIC LINE
- PROPOSED TREE PROTECTION FENCE
- TREE DRIP LINE (TO REMAIN)
- TREE DRIP LINE (TO BE REMOVED)

P = PROTECTED
HT = HERITAGE TREE
R = REMOVAL OF PROTECTED TREE
C = CREDIT TREES TO REMAIN

*THERE ARE NO PROTECTED OR HERITAGE TREES ON THIS SITE

REQUIRED PROTECTED TREE PRESERVATION PERCENTAGE (UDC SEC. 8.02.030.E)
Percentage of Protected Trees that must be retained on site (not applicable to residential subdivisions or Heritage Trees)

Project Acreage: 3.30
Total number of Protected Trees existing on-site: 0
Average number of Protected trees per acre: 0
Applicable Required Protected Tree Preservation percentage: 30%
Number of existing protected trees to remain on-site: 3

OWED MITIGATION FOR PROTECTED REMOVALS
Total diameter inches of Removed Protected trees: 0"
Overall protected tree mitigation inches owed: 0"

CREDIT TREES - ON-SITE PLANTED TREES
Inches of shade trees planted on-site: 0"

CREDIT TREES - ON-SITE EXISTING TREES (6-11" TREES ONLY)
Inches of credit trees to remain: 0"

SOIL AERATION & SUPPLEMENTAL NUTRIENTS CREDIT - UP TO 30%
Not used

OWED MITIGATION FOR HERITAGE TREE REMOVALS
None removed

CASH PAYOUT
Not used

PLANT SCHEDULE

Qty / SF	% Total	Botanical Name	Common Name	Size	Water Use	Deciduous / Evergreen	Mature Size (H x W)	Notes
SHADE / EVERGREEN TREES								
4	25%	Quercus shumardii	Shumard Oak	3" cal.	L	Deciduous	30' x 50'	65 gal container, 11'-12' ht., 4' sprd.
4	25%	Quercus polymorpha	Monterrey Oak	3" cal.	VL	Evergreen	40' x 60'	container grown, 11'-12' ht., 4' sprd.
4	25%	Ulmus crassifolia	Cedar Elm	3" cal.	L	Deciduous	40' x 30'	container grown, 11'-12' ht., 4' sprd.
4	25%	Quercus macrocarpa	Bur Oak	3" cal.	VL	Deciduous	60' x 50'	container grown, 11'-12' ht., 4' sprd.
16	100%	Total						
ORNAMENTAL TREES								
0	0%	Total						
SHRUBS / GRASSES / PERENINAL / AGAVE / CACTUS								
5	25%	Leucophyllum frutescens	Texas Sage	3 gal.	L	Evergreen	5' x 5'	
5	25%	Tecoma stans	Esperanza	3 gal.	L-M	Deciduous	8' x 6'	
5	25%	Lantana horrida	Texas Lantana	1 gal.	VL	Deciduous	6' x 5'	
5	25%	Teucrium Fruticans	Germander Bush	1 gal.	L	Evergreen	4' x 4'	
20	100%	Total						
VINES / GROUNDCOVER								

Non-Residential Landscape Planting Requirements Summary Table

22559	Landscape Area Req'd	Landscape Area Proposed	Shrubs Required	Shrubs Proposed	Evergreen Shrubs Required	Evergreen Shrubs Proposed	Evergreen Ornamental Trees Req'd	Evergreen Ornamental Trees Proposed	Shade Trees Required	Shade Trees Proposed
Street Yard Landscaping - Section 8.04.030	**4,512**	**10,743**	**18**	**20**	**0**	**0**			**6**	**6**
Minus < 20" Landscape Credit Trees Counted									0	
Minus 20"+ Landscape Credit Trees Counted x 2									0	
Total	***4,512***	***10,743***	***18***	***20***	***0***	***0***	***0***	***0***	***6***	***6***
Parking Lot Landscaping - Section 8.04.040	**990**	**5,000**							**9**	**10**
Minus area or plantings that can be credited towards Street Yard Landscaping									0	0
Minus < 20" Landscape Credit Trees Counted									0	0
Minus 20"+ Landscape Credit Trees Counted x 2									0	0
Total	***990***	***5,000***	***0***	***0***	***0***	***0***	***0***	***0***	***9***	***10***
Gateway Overlay District Landscaping - Section 8.04.050	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minus area or plantings that can be credited towards Street Yard Landscaping									0	0
Minus < 20" Landscape Credit Trees Counted									0	0
Minus 20"+ Landscape Credit Trees Counted x 2									0	0
Total	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Bufferyard Landscaping - Section 8.04.060 (if appl.)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minus < 20" Landscape Credit Trees Counted	0	0	0	0	0	0	0	0	0	0
Minus 20"+ Landscape Credit Trees Counted x 2	0	0	0	0	0	0	0	0	0	0
Total	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Grand Total	***5,502***	***15,743***	***18***	***20***	***0***	***0***	***0***	***0***	***15***	***16***

I, TIMOTHY JAMES URBAN, HEREBY CERTIFY THAT THIS LANDSCAPE PLAN COMPLIES WITH THE REQUIREMENTS OF CHAPTER 8 OF THE UNIFIED DEVELOPMENT CODE.

TIMOTHY JAMES URBAN

No.	Date	Revisions	App.

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(F-14076)
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512-779-7414 (p)
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RIVERY BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

LANDSCAPE PLAN

02/08/22
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
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Checked By:	JAB

C.07

Sheet 7 OF 26

2021-28-SDP

LANDSCAPE NOTES:

1. Complete all landscape planting and related earthwork including all products, equipment and labor, for the landscape areas shown on the drawing and described in the specifications.
2. All questions should be referred to the project landscape architect.
3. Information provided on this plan is general in nature. Dimensions, locations, and areas are approximate and should be field verified prior to bidding & installation.
4. Quantities shown for plant materials are approximate. Actual installed quantities of plant materials may vary from the plan and should be field determined according to the given spacing and field conditions. Discrepancies between field conditions a n d the plan which limit the contractor should be brought to the attention of the landscape architect prior to installation.
5. By bidding, the contractor acknowledges that he/she has satisfied himself/herself as to the nature and location of the work and to the quality of surface and subsurface materials or obstacles insofar as this data is reasonably ascertainable from an inspection of the site. Any failure by the contractor to acquaint himself/herself with the available information will not relieve him/her from responsibility for estimating properly the difficulty or cost of successfully performing the work as described.
6. Installation of all landscaping must be coordinated with the installation of related irrigation, site work, and grading.
7. Unless specifically noted, install all massed planting utilizing equilateral triangular spacing.
8. Evenly apply 3" of mulch to all continuous planting beds. Mulch will be provided and installed by the contractor.
9. Substitutions of plant species, sizes, or other specified materials will not be allowed without prior approval by the project landscape architect.
10. Plant material a n d layout must be approved by the project landscape architect prior to installation.
11. All identification tags provided by growers and placed on trees and shrubs are to remain on the plants through the punch-list inspection. Tags are to be removed prior to final acceptance, or upon request of the project landscape architect.
12. Seed mix/solid sod will be applied to all construction-damaged ground surfaces not otherwise planted. Contractor shall review related construction drawings for limits of construction and shall also be responsible for coordinating with other site contractors to determine actual areas of seeding required, including areas disturbed by utility extensions.
13. Living earth technologies mix is to be used for planting backfill mixtures.
14. All planting beds indicated will be irrigated with an underground automatic irrigation contractor is to be a state of Texas licensed irrigator, and is to follow all TCEQ codes and regulations. Contractor is responsible for providing as-built drawings and specifications for irrigation system including pipe sizes and locations.
15. All seeding areas disturbed by construction shall temporarily irrigated or sprinkled in a manner that will not erode the topsoil, but will sufficiently soak the soil to a depth of six inches. The irrigation shall occur at ten-day intervals during the first two months. Rainfall occurences of 1/2 inch or more shall postpone the watering schedule for one week. Restoration shall be acceptable when the grass has grown at least 1-1/2 inches high with 95% coverage, provided no bare spots larger than 16 square feet exist.
16. Regular maintenance is required of all landscape areas and plant materials in a vigorous and healthy condition, free from diseases, pest weeds, and litter. This maintenance shall include weeding, watering, fertilization, pruning, mowing , edging, mulching or other needed maintenance, in accordance with generally accepted horticultural practices until the project has been accepted by the project landscape architect.
17. The owners of the landscaped property, or the manager or agent of the owner, shall be responsible for the maintenance of all landscape areas. Said areas shall be maintained so as to present a healthy, neat and orderly appearance at all times and shall be kept free of refuse and debris. All planting beds shall be provided with a readily available water supply and watered as necessary to ensure continuous healthy growth a n d development. Maintenance shall include the replacement of all dead plant material if that material was used to meet the requirements of the ordinance.
18. All parking lot landscape islands will have a 6 " crown above the top of curb.

LANDSCAPE BIDDING CRITERIA:

1. Landscape contractors are to bid on one-year of maintenance for the landscape in addition to the bid proposal for installation. The landscape maintenance should be a separate line item from the landscape installation bid proposal.
2. Contractors are to adhere to the landscape maintenance specifications when preparing the landscape maintenance bid proposal.

LANDSCAPE MAINTENANCE SPECIFICATIONS:

The property's landscaping shall be maintained in first class condition at all times. The quality of the landscape maintenance should meet the standards normally provided by landscape companies in Georgetown. It will at all times have a neat, clean, healthy, and manicured appearance. Contractor shall provide for fifty-two visits per year.

I. Turf areas
- A. Mowing and edging of all turf areas shall be performed at least once per week, January through December.
- B. Perennial rye grass over-seeding shall be separate and must be approved by management prior to over-seeding. Over-seeding shall be done in a manner and at a rate to insure a lush, thick consistent winter turf.
- C. Trimming and edging of turf areas to be performed at each visit.
- D. All turf areas are to be fertilized a minimum of four times per year with a high quality, slow release fertilizer from a reputable manufacturer.
- E. Contractor shall apply appropriate fungicides as necessary and pre-emergent herbicide two times per year and post-emergent herbicide at the time deemed most efficient and favorable by contractor.
- F. Turf to be treated as often as necessary with appropriate insecticide to control normal soil pests.
- G. Treat fire ants in all turf areas as necessary.
- H. Raking to be performed as needed to maintain appearance.
- I. De-thatch and aerate turf once during the year in conjunction with rye overseeding. If owner opts to not perform rye overseed, de-thatching and aerating to be performed in early spring.
- J. Bag all areas within 45 feet of buildings, driveways, and sidewalks.

II. Shrubs, ground cover, beds and annuals
- A. To be maintained weed free, as needed using appropriate herbicides and manual weeding. Use a minimum of two pre-emergent applications and manually weed each visit.
- B. To be fertilized four times per year with a balanced high quality, slow release fertilizer, appropriate to the shrubs on the project.
- C. Shrubbery to be hand trimmed as specified to maintain a manicured appearance or as otherwise requested by owner. Use only skilled personnel with significant experience in class a properties. No shearing, all to be done with selective hand pruning to keep plant within bounds but to maintain a natural shape and appearance.
- D. To be inspected weekly by qualified supervisor, followed by a written report of problems discovered and actions to be taken.
- E. To be sprayed with appropriate insecticides and fungicides as necessary.
- F. Annuals to be changed out four times per year using four (4) inch pots and fertilized at each change. Monitor and apply fungicides and insecticides as necessary to insure maximum vigor and
- A. appearance.
- G. Apply shredded hardwood mulch to a depth of two inches, a minimum of three times annually. If mulch depth accumulation becomes so excessive as to be detrimental to plant health, rake out and dispose of excess quantities of the oldest material.
- H. All traffic and directional signage to be kept free and clear from all bushes/shrubs, etc.
- I. A three-foot perimeter around all fire hydrants shall be maintained.

III. Landscape trees (4" caliper or less)
- A. To be lightly pruned as necessary (at least once a month during growing season).
- B. To be pruned and shaped once during winter months. Prune to class I standards. Notify management prior to and immediately following pruning activity. Pruning to be done by qualified tree care firm, subject to management approval.
- C. Deep root fertilize all landscape trees one time per year. Submit information on materials, application methods and applicator qualification one week prior to performing work.
- D. All traffic and directional signage to be kept free of tree limbs and branches.

IV. Large trees (greater than 4" caliper)
- A. Keep trees free of vines at all times.
- B. Contractor shall at all times be on the lookout for insect and disease infestations and other tree damage such as lightning or vehicular damage. Contractor shall notify management immediately of such danger or disease so that corrective action can be taken.

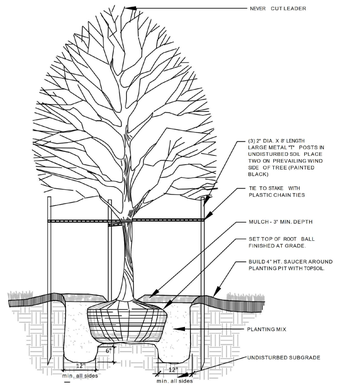
V. Debris and litter
- A. Normal trash and litter will be removed from all lawn and landscaped areas weekly.
- B. All debris resulting from any and all landscape work shall be cleaned up immediately.
- C. Remove debris from pots/planters on sidewalks.

VI. Paved areas
- A. At parking lot perimeters and paving joints, weeds and grasses are to be controlled with contact herbicide sprays and manual weeding as required.
- B. All debris resulting from any and all landscape work shall be cleaned up immediately.

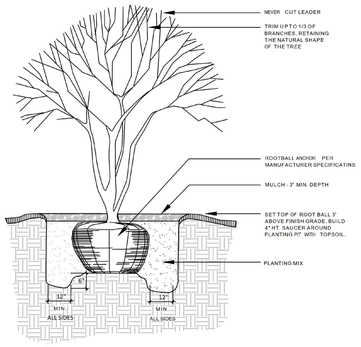
VII. Irrigation
- A. Contractor shall be responsible for maintaining and operating all irrigation systems at the property except as may be otherwise noted.
- B. Irrigation systems must be inspected monthly and a report must be submitted to management. Management must approve repairs greater than $250.00.
- C. Contractor will ensure that watering cycles are in compliance with any city guidelines as a result of water rationing or water conservation. Any fees or penalties incurred by violation of Ordinances will be billed to contractor.
- D. All heads and nozzles broken by landscape maintenance operations will be repaired or replaced at contractor expense.
- E. All nozzles will be cleaned monthly if necessary and all heads will be adjusted as needed.

VIII. General
- A. Contractor shall provide adequate supervision to assure that all work will be done in accordance with this agreement and generally accepted good practice. A weekly visit by a qualified supervisor is a minimum requirement. Adequate time shall be allowed for a thorough and complete examination of the entire property.
- B. Contractor shall replace at contractor's expense any plant material that dies due to damage by lawn maintenance, equipment or contractor's negligence.
- C. All work shall be performed by contractor's employees; no work shall be performed by Subcontractors without written consent of management.
- D. All employees will wear uniforms and provide a neat appearance and professional behavior at all times.
- E. Crew members will observe all OSHA regulations. All equipment will be properly maintained and kept in a safe operating condition.
- F. All debris resulting from any and all landscape work shall be immediately cleaned up and removed from site. Use of an on-site dumpster is prohibited.
- G. Additional projects, landscape upgrades, etc. Will be negotiated as needed.

H. If there are pots or sidewalk planters at property, contractor shall maintain irrigation or hand water as needed. Contractor to maintain plants/annuals in pots/containers in accordance with all specs noted above.



1 SHADE TREE PLANTING
NOT TO SCALE



2 ORNAMENTAL TREE PLANTING
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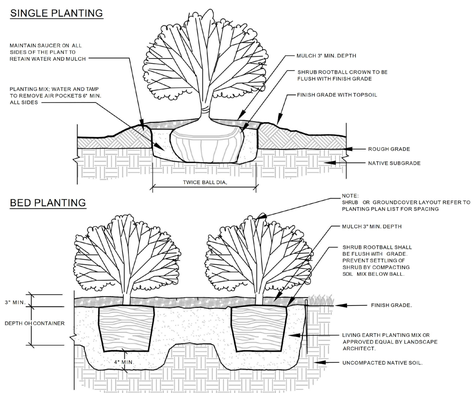
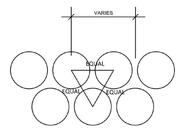
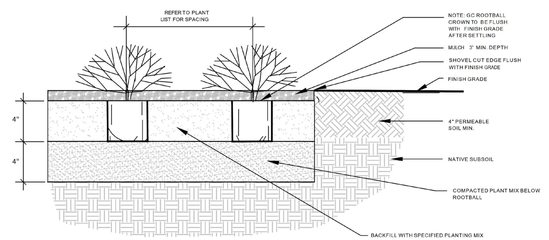


3 SHRUB PLANTING (SINGLE & BED PLANTING)
NOT TO SCALE



4 SHRUB OR GROUNDCOVER TRIANGULAR SPACING
NOT TO SCALE



5 GROUND COVER PLANTING
NOT TO SCALE

No.	Date	Revisions	App.

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RIVERY BUSINESS PARK
2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

LANDSCAPE NOTES

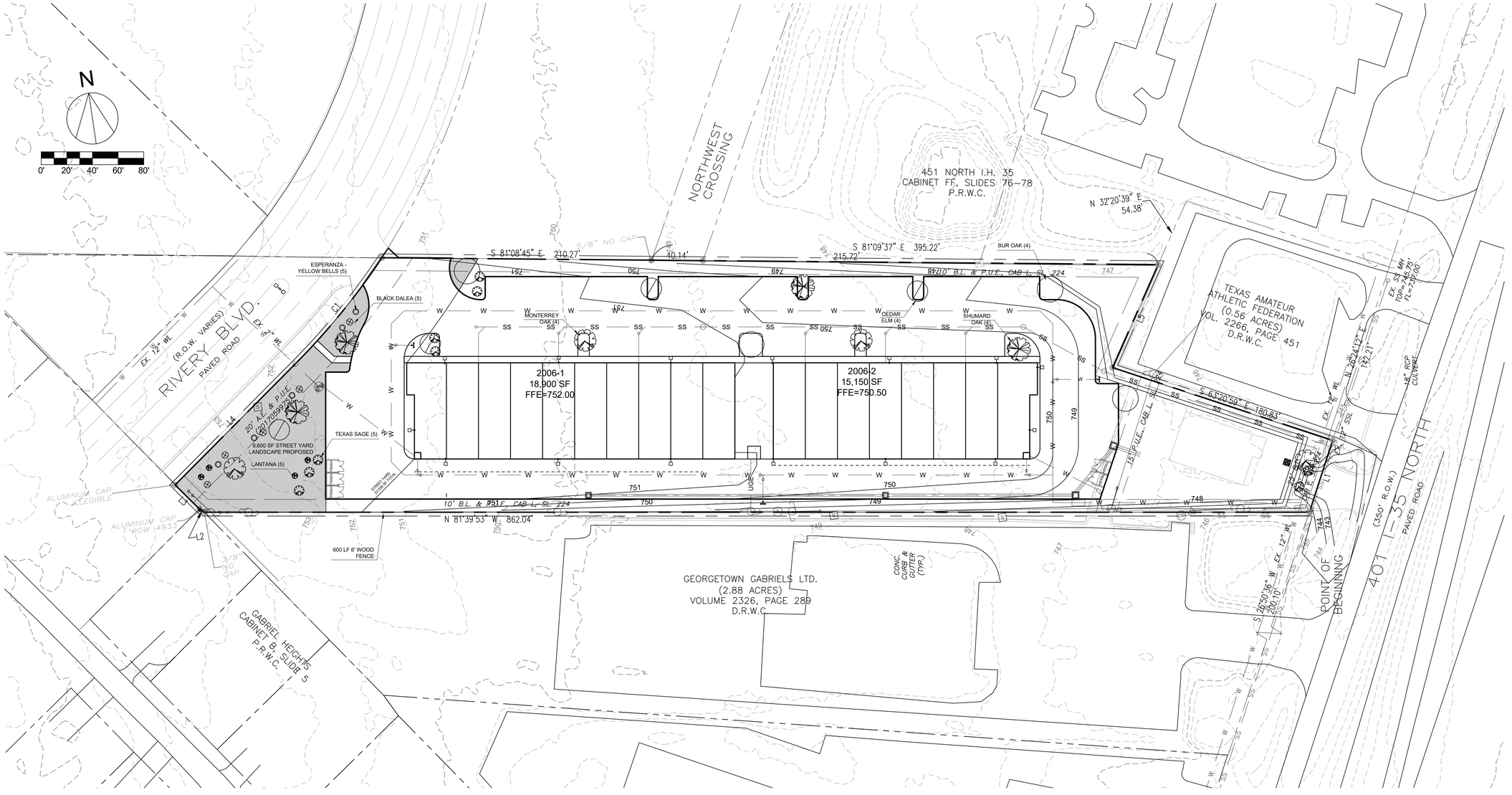
02/06/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.08

Sheet 8 OF 26

2021-28-SDP



LEGEND:

- PROPERTY LINE
- LOT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING OVERHEAD ELECTRIC LINE
- PROPOSED TREE PROTECTION FENCE
- TREE DRIP LINE (TO REMAIN)
- TREE DRIP LINE (TO BE REMOVED)

P = PROTECTED
HT = HERITAGE TREE
R = REMOVAL OF PROTECTED TREE
C = CREDIT TREES TO REMAIN

REQUIRED PROTECTED TREE PRESERVATION PERCENTAGE (UDC SEC. 8.02.030.E)
Percentage of Protected Trees that must be retained on site (not applicable to residential subdivisions or Heritage Trees)

Project Acreage: 3.30
Total number of Protected Trees existing on-site: 0
Average number of Protected trees per acre: 0
Applicable Required Protected Tree Preservation percentage: 30%
Number of existing protected trees to remain on-site: 3

OWED MITIGATION FOR PROTECTED REMOVALS
Total diameter inches of Removed Protected trees: 0"
Overall protected tree mitigation inches owed: 0"

CREDIT TREES - ON-SITE PLANTED TREES
Inches of shade trees planted on-site: 0"

CREDIT TREES - ON-SITE EXISTING TREES (6-11" TREES ONLY)
Inches of credit trees to remain: 0"

SOIL AERATION & SUPPLEMENTAL NUTRIENTS CREDIT - UP TO 30%
Not used

OWED MITIGATION FOR HERITAGE TREE REMOVALS
None removed

CASH PAYOUT
Not used

*THERE ARE NO PROTECTED OR HERITAGE TREES ON THIS SITE

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RIVERY BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

TREE PRESERVATION PLAN

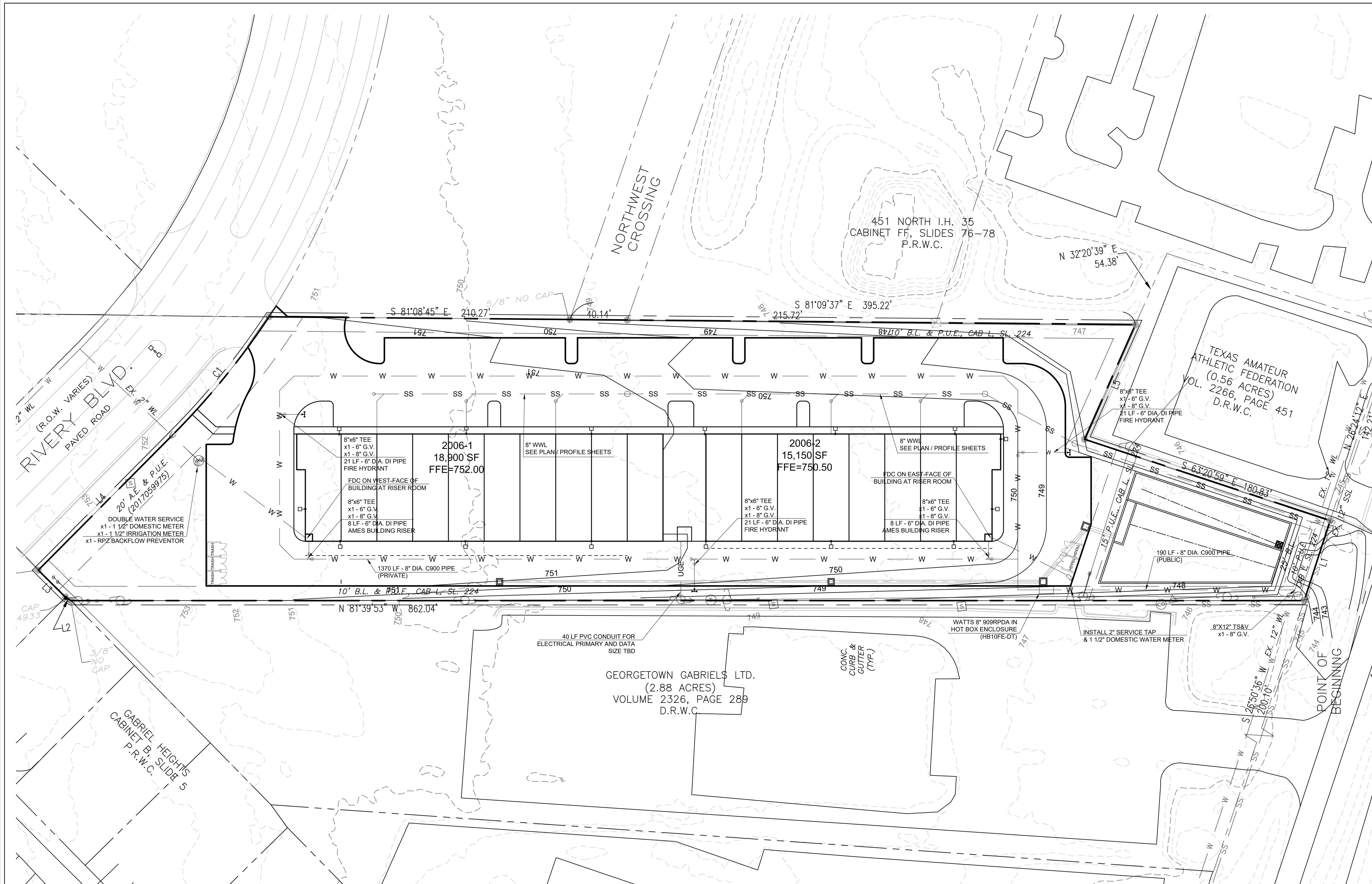
02/08/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.09

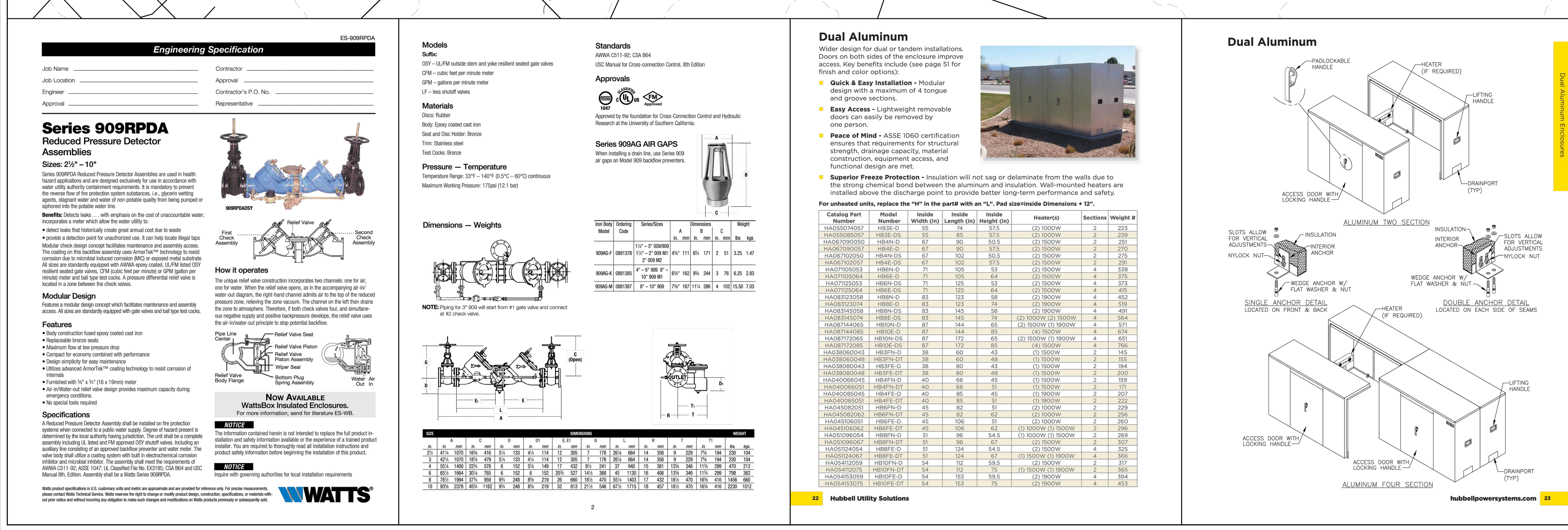
Sheet 9 OF 26
2021-28-SDP

Texas 811



LEGEND:

- PROPERTY LINE
- LOT LINE
- EASEMENT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING OVERHEAD ELECTRIC LINE
- PROPOSED WATER LINE (W)
- PROPOSED SANITARY SEWER LINE (SS)
- PROPOSED STORM SEWER
- PROPOSED SCREEN FENCE
- LIMITS OF CONSTRUCTION (L.O.C.)
- EXISTING HERITAGE TREE DRIP LINE



NOTES:

1. WATER AND WASTEWATER SERVICE TO BE PROVIDED BY THE CITY OF GEORGETOWN.
2. CONTRACTOR TO COORDINATE WITH MEP PLANS AT ALL UTILITY STUB OUTS.
3. CONTRACTOR TO ENSURE NO FIRE HYDRANTS, METERS OR VALVES ARE PLACED IN SIDEWALKS.
4. UNLESS OTHERWISE NOTED, ALL WATER LINES 4" - 12" IN DIAMETER SHALL BE C900 PVC PIPE. WATER LINES LESS THAN 4" IN DIAMETER SHALL BE SCH 40 PVC PIPE.
5. ALL WASTEWATER PIPE SHALL BE SDR-26 PVC PIPE.
6. CONTRACTOR TO COORDINATE AND INSTALL NECESSARY IRRIGATION, ELECTRICAL AND TELECOMMUNICATIONS SLEEVES PRIOR TO PLACEMENT OF PAVEMENT.
7. ALL BENDS, TEES, REDUCERS AND GATE VALVES SHALL BE RESTRAINED PER CITY OF GEORGETOWN STANDARDS.
8. MINIMUM CLEARANCE BETWEEN WATER AND SANITARY SEWER LINES SHALL COMPLY WITH TCEQ REQUIREMENTS.
9. REFER TO SITE PLAN FOR UTILITY EASEMENT LOCATIONS.
10. CONTRACTOR SHALL COORDINATE LIGHT POLE LOCATIONS AND SLEEVING FOR ELECTRICAL SERVICE WITH MEP.
11. COORDINATE LOCATION, SIZE AND TYPE OF LIGHTING WITH MEP AND BUILDING PLANS.
12. CONTRACTOR SHALL ADJUST ALL VISIBLE UTILITY FEATURES TO FINISHED GRADE AS NEEDED AT NO ADDITIONAL COST TO OWNER.

THE FIRE CODE, SECTION LA- 507.5.7 CITY OF GEORGETOWN FIRE HYDRANT COLOR CODE SYSTEM, IS HEREBY ADDED TO READ AS FOLLOWS:
LA-507.5.7 CITY OF GEORGETOWN FIRE HYDRANT COLOR CODE SYSTEM. PRIVATE FIRE HYDRANT MAINTENANCE SHALL BE IN ACCORDANCE WITH NFPA 291.

A. ALL PRIVATE HYDRANT BARRELS WILL BE PAINTED RED WITH THE BONNET PAINTED USING THE HYDRANT FLOW STANDARD IN PARAGRAPH C OF THIS SECTION TO INDICATE FLOW. IT WILL BE THE CUSTOMER'S RESPONSIBILITY TO TEST AND MAINTAIN THEIR PRIVATE FIRE HYDRANT(S).
B. ALL PRIVATE FIRE HYDRANTS SHOULD BE INSPECTED, MAINTAINED, AND FLOW TESTED ANNUALLY, AND COLOR CODED TO INDICATE THE EXPECTED FIRE FLOW FROM THE HYDRANT DURING NORMAL OPERATION. SUCH COLOR APPLIED TO THE FIRE HYDRANT BY PAINTING THE BONNET THE APPROPRIATE COLOR FOR THE EXPECTED FLOW CONDITION.
C. HYDRANT FLOW CODING STANDARDS. PUBLIC HYDRANTS BARRELS WILL BE PAINTED SILVER, THE HYDRANTS WILL BE FLOW TESTED, AND THE BONNET PAINTED USING THE HYDRANT FLOW STANDARD IN AS FOLLOWS:

FLOW	COLOR
GREATER THAN 1500 GPM	BLUE
1000- 1500 GPM	GREEN
500-999 GPM	ORANGE
LESS THAN 500 GPM	RED
NOT WORKING	BLACK OR BAGGED

D. AT THE CONCLUSION OF CONSTRUCTION FIRE HYDRANTS SHALL BE FLOW TESTED AND COLOR CODED IN ACCORDANCE WITH CITY'S STANDARDS, AND RESULTS SHALL BE EMAILED TO THE FIRE DEPARTMENT. IFC- LA-507.5.7 FIRE HYDRANT SYSTEMS.

Texas 811

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RIVERY BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

UTILITY PLAN

STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER
02/03/23

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.10

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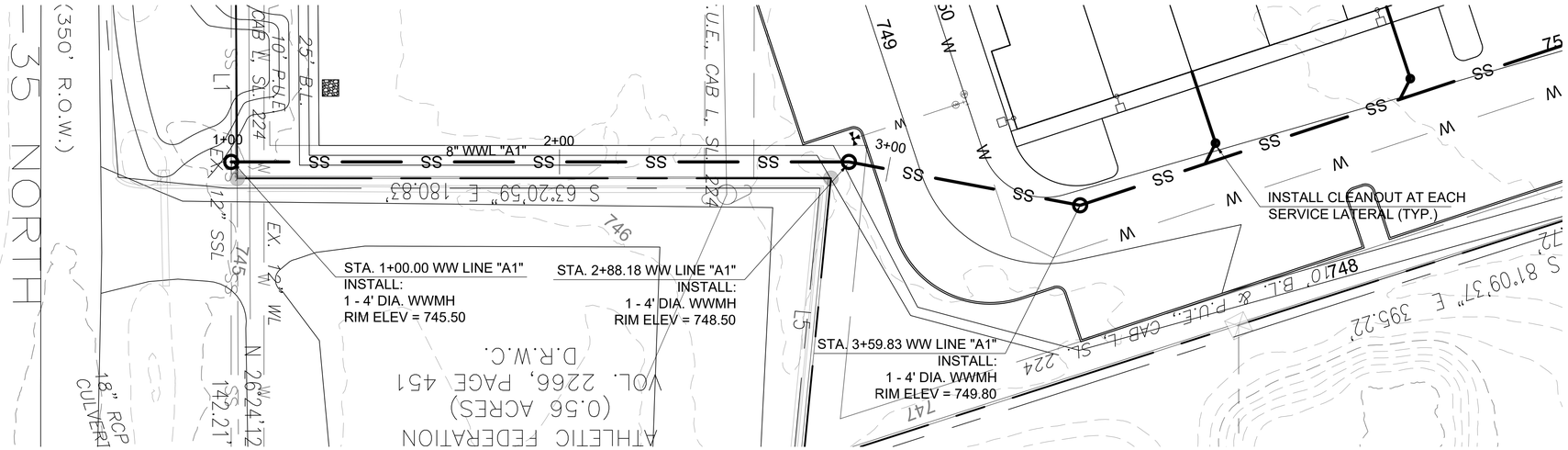
2021-28-SDP



LEGEND:

- PROPERTY LINE
- LOT LINE
- EASEMENT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING OVERHEAD ELECTRIC LINE
- PROPOSED WATER LINE — W
- PROPOSED SANITARY SEWER LINE — SS
- PROPOSED STORM SEWER
- PROPOSED SCREEN FENCE
- LIMITS OF CONSTRUCTION — L.O.C.
- EXISTING HERITAGE TREE DRIP LINE

N

0' 10' 20' 30' 40'

NOTES:

1. WATER AND WASTEWATER SERVICE TO BE PROVIDED BY THE CITY OF GEORGETOWN.
2. CONTRACTOR TO COORDINATE WITH MEP PLANS AT ALL UTILITY STUB OUTS.
3. CONTRACTOR TO ENSURE NO FIRE HYDRANTS, METERS OR VALVES ARE PLACED IN SIDEWALKS.
4. UNLESS OTHERWISE NOTED, ALL WATER LINES 4" - 12" IN DIAMETER SHALL BE C900 PVC PIPE. WATER LINES LESS THAN 4" IN DIAMETER SHALL BE SCH 40 PVC PIPE.
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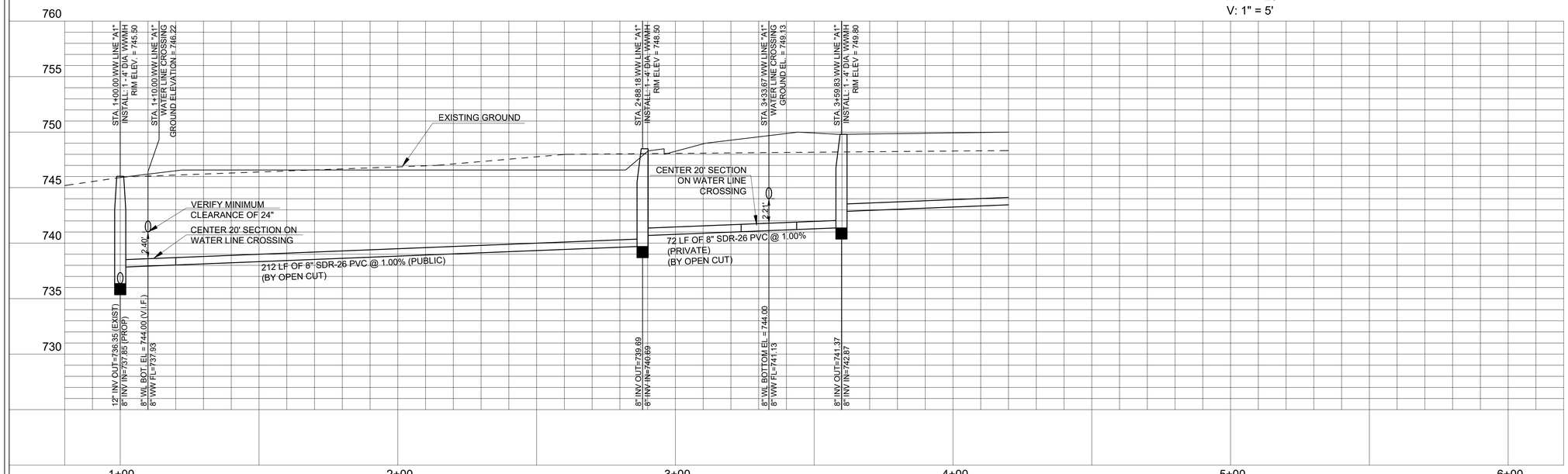
12. CONTRACTOR SHALL ADJUST ALL VISIBLE UTILITY FEATURES TO FINISHED GRADE AS NEEDED AT NO ADDITIONAL COST TO OWNER.

SCALE:
H: 1" = 20'
V: 1" = 5'



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RIVERY BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

WASTEWATER PLAN & PROFILE

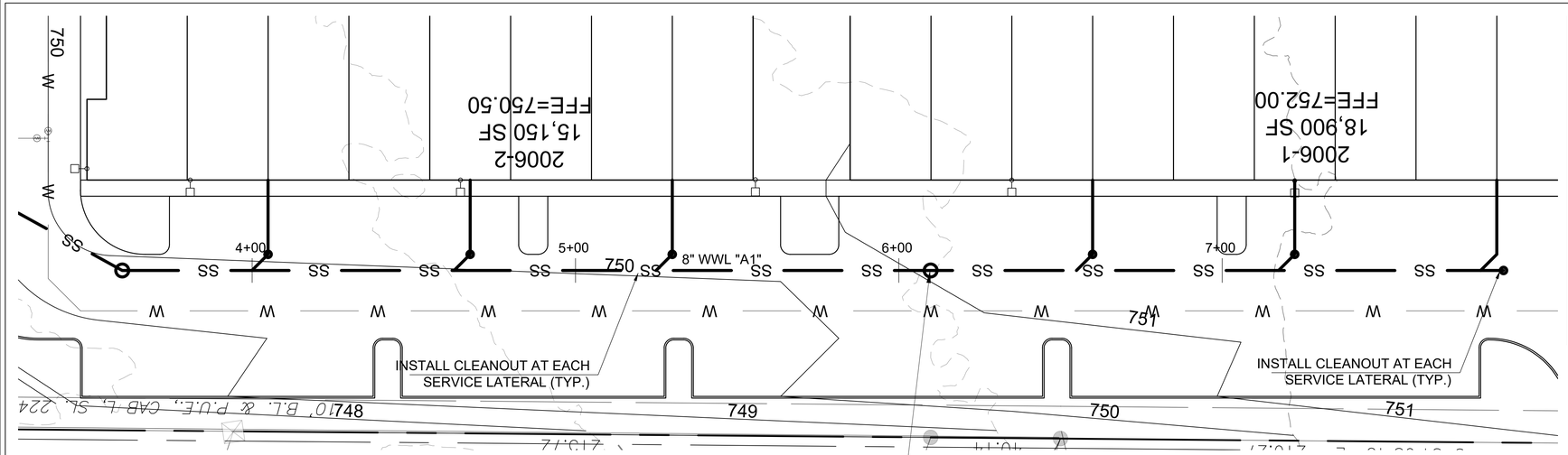
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER
02/08/22

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

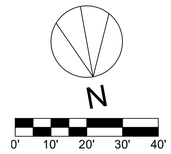
C.11

Sheet 11 OF 26

2021-28-SDP



STA. 6+09.83 WW LINE "A1"
INSTALL:
1 - 4' DIA. WWMH
RIM ELEV = 751.05



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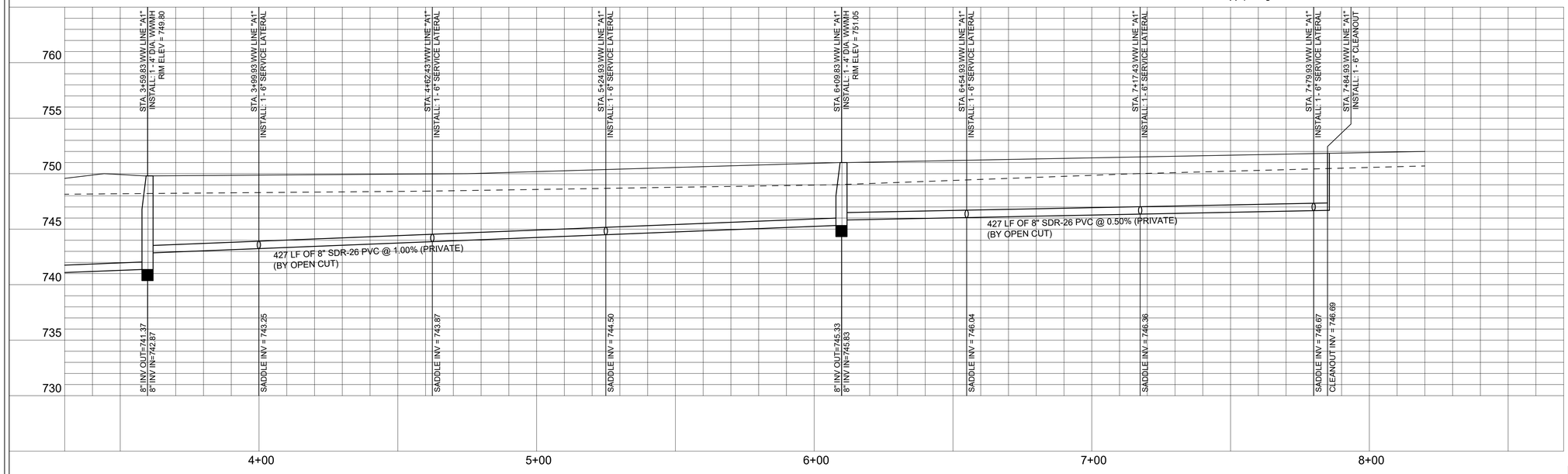

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RIVERY BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

WASTEWATER PLAN & PROFILE

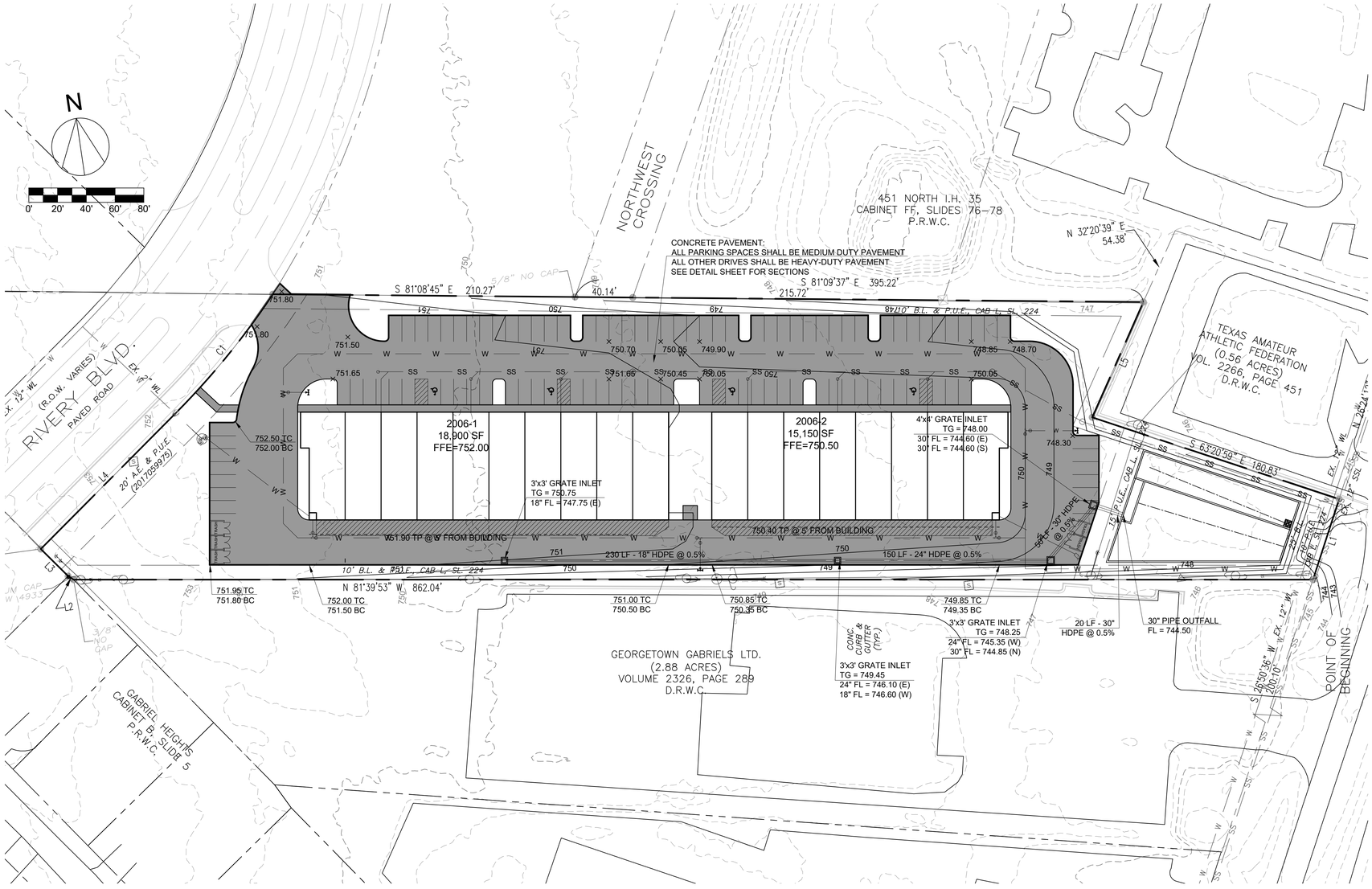
02/18/22
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.12

Sheet 12 OF 26

2021-28-SDP



LEGEND:

PROPERTY LINE	
LOT LINE	
EXISTING EDGE OF PAVEMENT	
PROPOSED SWALE	
PROPOSED HIGH POINT	
EXISTING MAJOR CONTOUR	785
EXISTING MINOR CONTOUR	786
PROPOSED MAJOR CONTOUR	785
PROPOSED MINOR CONTOUR	786
PROPOSED RETAINING WALL	
EXISTING HERITAGE TREE DRIP LINE	
TOP OF PAVEMENT	TP
TOP OF GRATE	TG
TOP OF SIDEWALK	TS
FINISHED GRADE	FG
BOTTOM OF WALL	BW
TOP OF WALL	TW
TOP OF CURB	TC
BOTTOM OF CURB	BC

NOTES:

1. SLOPES ON ACCESSIBLE RAMPS MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP.
2. THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12. THE MAXIMUM RISE FOR ANY RAMP IS 30 INCHES.
3. ACCESSIBLE ROUTES MUST HAVE A CROSS-SLOPE NO GREATER THAN 1:50.
4. 5' X 5' LANDINGS ARE REQUIRED AT ALL CHANGES IN DIRECTION. LANDINGS SHALL NOT HAVE A SLOPE OF GREATER THAN 1:50 IN ANY DIRECTION.
5. GROUND SURFACES ALONG ACCESSIBLE ROUTES MUST BE STABLE, FIRM, AND SLIP RESISTANT.
6. CONTRACTOR TO MATCH EXISTING GRADE, GUTTER, AND ASPHALT WHEN TYING INTO EXISTING ROADWAYS.
7. CONTRACTOR TO COORDINATE GRADES WITH ARCHITECTURAL PLANS.
8. CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM BUILDING FOUNDATION AND TO INLETS.
9. CONCRETE PAVEMENT TO HAVE MINIMUM 0.5% SLOPE IN ALL AREAS. NO PONDING IS ALLOWED IN THE PARKING AREA.
10. ELEVATIONS SHOWN OUTSIDE OF PAVEMENT ARE FINISHED GRADES INCLUDING ANY TOPSOIL, GRASS, ETC.
11. ELEVATIONS SHOWN WITHIN PAVEMENT ARE TO GUTTER ELEVATION UNLESS OTHERWISE NOTED.
12. THE EXCAVATION CONTRACTOR SHALL TAKE INTO ACCOUNT THE REQUIREMENTS FOR COMPACTED BASE AND CONCRETE THICKNESS AS CALLED FOR ON THE FOUNDATION PLAN. ALL ELEVATIONS SHOWN ARE TO FINISHED GRADE.
13. SIDEWALK LOCATED ADJACENT TO BUILDING SHALL SLOPE A MINIMUM OF 1% AWAY FROM THE BUILDING.
14. LANDSCAPE AREAS DIRECTLY ADJACENT TO THE BUILDING SHALL SLOPE A MINIMUM OF 1% AWAY FROM THE BUILDING.
15. SITE SURVEY, PROVIDED BY OTHERS, DOES NOT INCLUDE A REFERENCE TO TEMPORARY OR PERMANENT BENCHMARKS NEAR THE SITE. CONTRACTOR SHALL VERIFY EXISTING TOPOGRAPHY AND THE LOCATION/ELEVATION OF THE SITE IMPROVEMENTS PRIOR TO STARTING CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY IF DISCREPANCIES ARE DISCOVERED.
16. CONTRACTOR SHALL ADJUST ALL VISIBLE UTILITY STRUCTURES TO FINISHED GRADE AS NEEDED AT NO ADDITIONAL COST TO OWNER.

Texas 811

No.	Date	Revisions	App.

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(F-14076)
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RIVERY BOULEVARD BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

GRADING PLAN

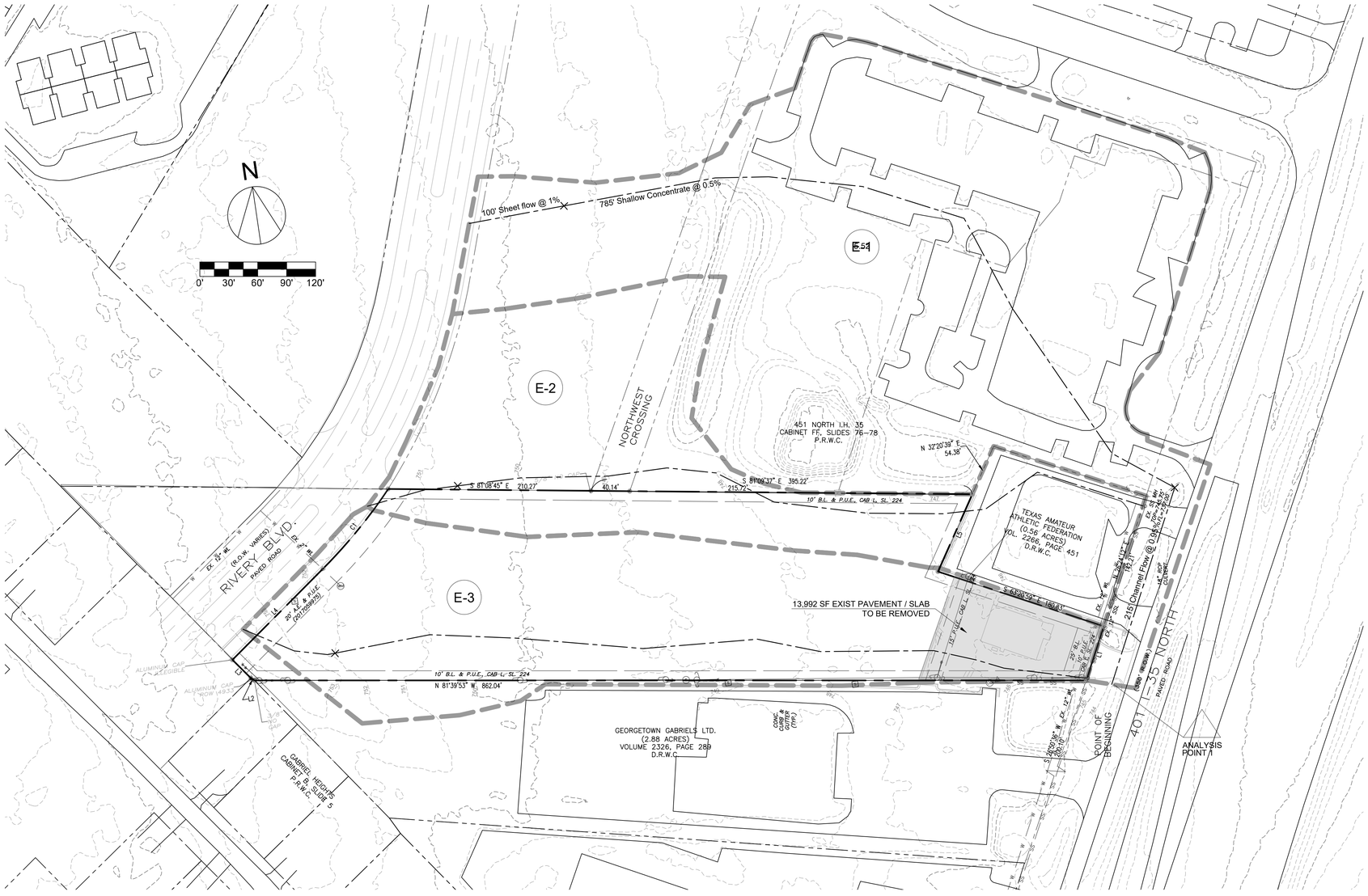
02/06/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.13

Sheet 13 OF 26

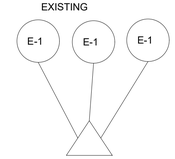
2021-28-SDP



LEGEND:

- PROPERTY LINE
- LOT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING MAJOR CONTOUR — 105
- EXISTING MINOR CONTOUR — 104
- EXISTING DRAINAGE AREA BOUNDARY
- FLOW ARROW
- DRAINAGE AREA TAG — E-1

EXISTING



NOTES:
1. REFER TO ENGINEERING REPORT FOR SUPPORTING CALCULATIONS.
2. THIS SHEET IS USED SOLELY FOR THE PURPOSE OF DETENTION POND AND WATER QUALITY DESIGN, NOT FOR CONSTRUCTION.

EXISTING DRAINAGE SUMMARY

Area ID	DA (ac.)	DA (mi^2.)	TC(min.)	Lag (min)	CN	Q_2(cfs)	Q_{10}(cfs)	Q_{25}(cfs)	Q_{100}(cfs)
E-1	5.52	0.0086	7.0	4.2	73	5.1	12.9	17.8	25.6
E-2	2.65	0.0041	0.0	0.0	78	3.7	8.2	10.8	14.9
E-3	2.84	0.0044	7.0	4.2	76	3.8	8.6	11.5	16.1
Total	11.01	0.0172		Total Peak Flow		12.2	29.0	39.3	55.5

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RIVERY BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

EXISTING DRAINAGE AREA MAP

02/06/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED PROFESSIONAL ENGINEER

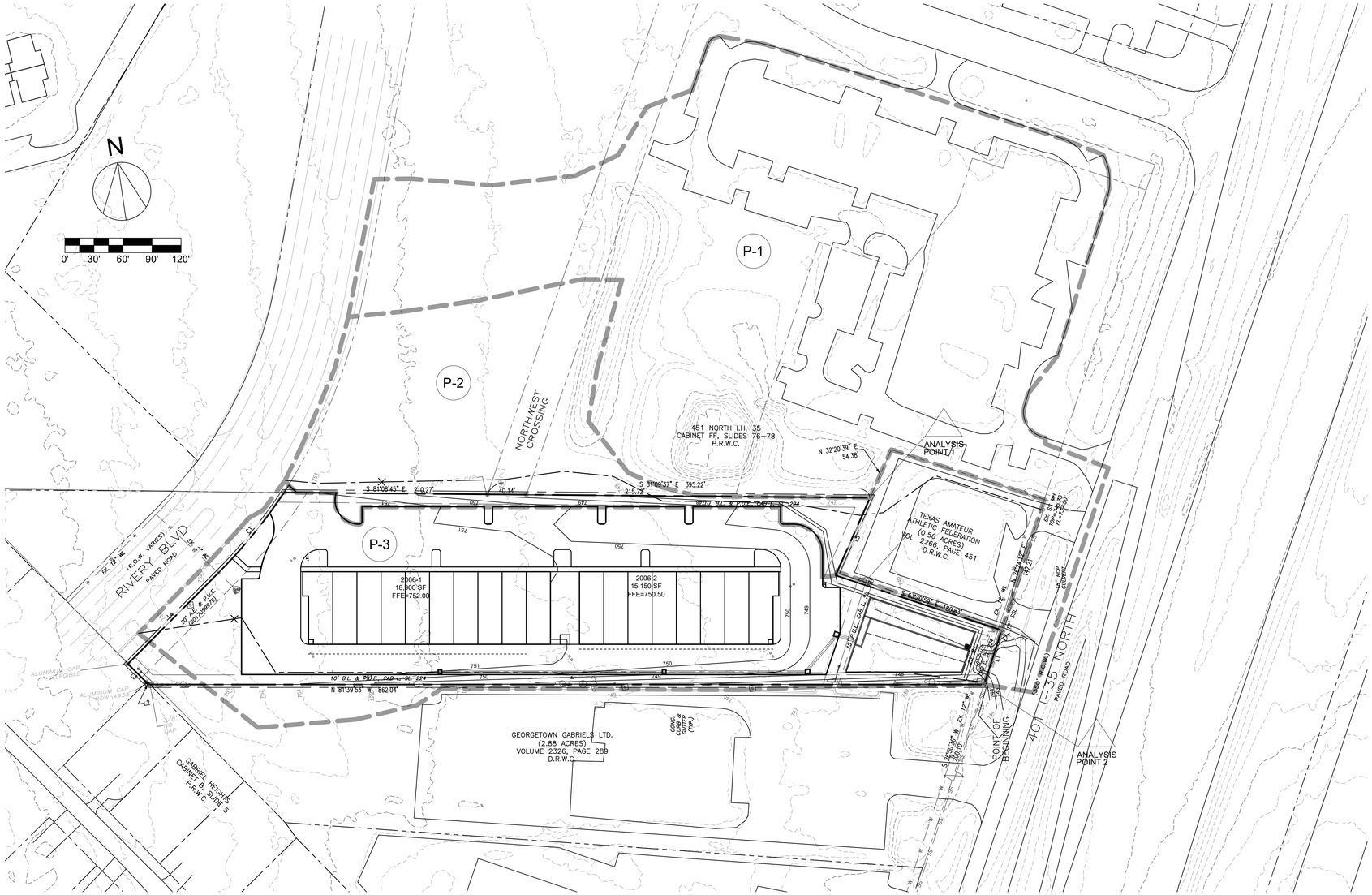
Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.14

Sheet 14 OF 26

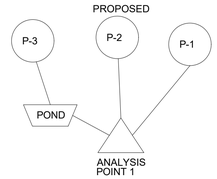
2021-28-SDP

Texas 811



LEGEND:

- PROPERTY LINE
- LOT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING MAJOR CONTOUR 105
- EXISTING MINOR CONTOUR 104
- PROPOSED MAJOR CONTOUR 115
- PROPOSED MINOR CONTOUR 114
- SUBBASIN WATERSHED BOUNDARY
- PRPOSED SWALE
- FLOW ARROW
- DRAINAGE AREA TAG P-1



PROPOSED DRAINAGE SUMMARY

Area ID	DA (ac.)	DA (mi^2.)	TC(min.)	Lag (min)	CN	Q_2(cfs)	Q_{10}(cfs)	Q_{25}(cfs)	Q_{100}(cfs)
P-1	5.52	0.0086	7.0	4.2	73	5.1	12.9	17.8	25.6
P-2	2.17	0.0034	7.0	4.2	79	3.3	7.0	9.2	12.6
P-3	3.32	0.0052	5.0	3.0	94	11.8	18.4	22.1	27.6
P-3 Pond	3.32	0.0052				4.2	9.6	12.2	17.9
Total	11.01	0.0172		Total Peak Flow		12.2	29.0	38.6	55.5

ANALYSIS POINT 1 (CFS) ROUTED FLOWS

Condition	2-year	10-year	25-year	100-year
Existing	12.2	29.0	39.3	55.5
Developed	12.2	29.0	38.6	55.5

NOTES:
1. REFER TO ENGINEERING REPORT FOR SUPPORTING CALCULATIONS.
2. THE ENGINEERING DRAWINGS FOR DRAINAGE AREA E-1 / P-1 POND ARE NOT AVAILABLE THROUGH PUBLIC RECORDS. THE POND IS ASSUMED TO DISCHARGE AT THE PREVIOUS CONDITIONS (PRIOR TO DEVELOPMENT OF THE HOTEL) AND CALCULATION FOR THIS AREA ARE PROVIDED IN THE ENGINEER'S REPORT TO CORRESPOND TO PRE-DEVELOPMENT CONDITIONS.
3. THIS SHEET IS USED SOLELY FOR THE PURPOSE OF DETENTION POND AND WATER QUALITY DESIGN, NOT FOR CONSTRUCTION.

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RIVERY BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

PROPOSED DRAINAGE AREA MAP

02/09/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

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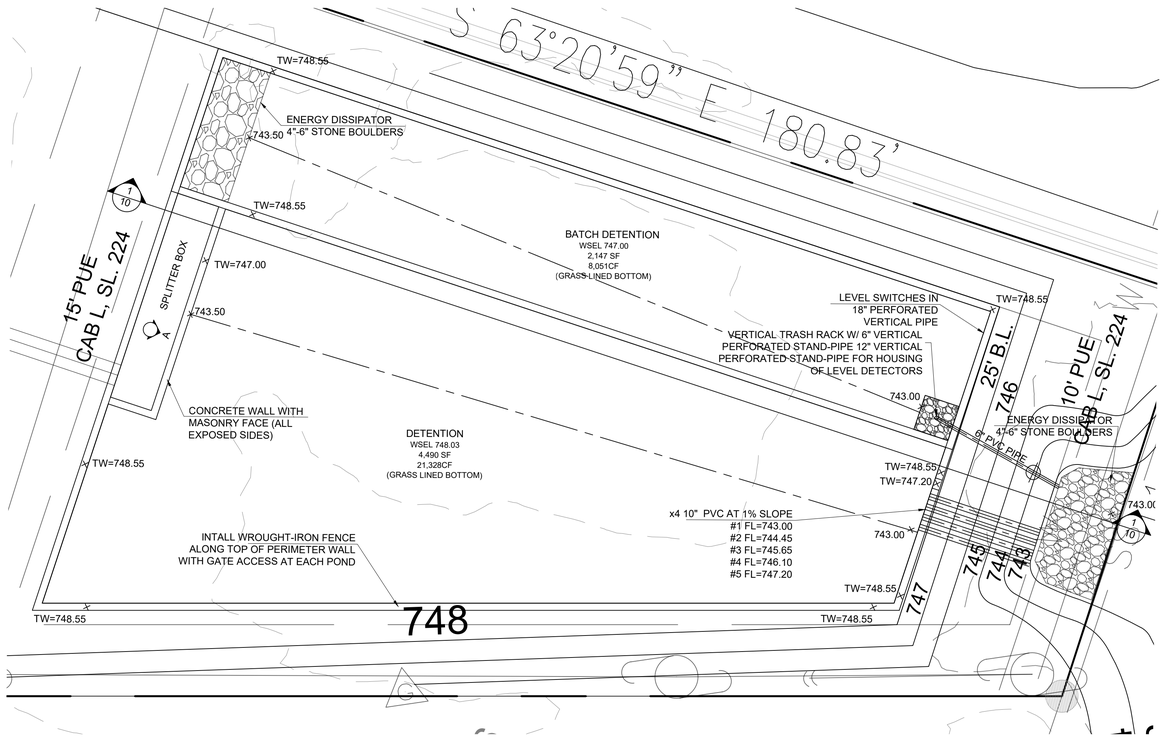
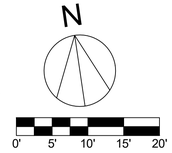
Sheet 15 OF 26

2021-28-SDP



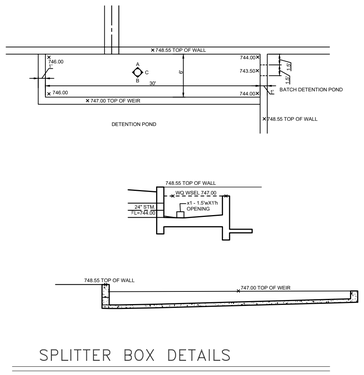
POND PLAN

SCALE: 1"=10'

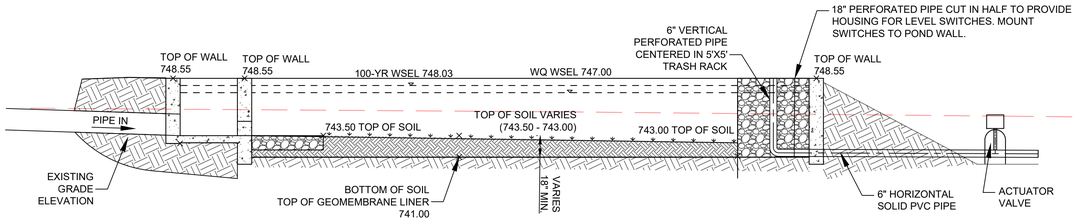


LEGEND:

- PROPERTY LINE
- LOT LINE
- EASEMENT LINE
- EXISTING EDGE OF PAVEMENT
- PROPOSED RETAINING WALL
- EXISTING HERITAGE TREE DRIP LINE



SPLITTER BOX DETAILS



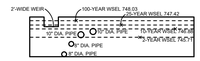
DETENTION POND STAGE/STORAGE/DISCHAGE TABLE		
STAGE	CUMULATIVE VOLUME (SQ-FT)	Q (CFS)
743.00	0	0.00
744.00	4490	1.37
744.45	5388	1.78
745.00	7858	2.95
745.65	10777	4.13
745.71	11052	4.23
746.00	12348	5.04
746.10	12797	5.41
746.88	17255	9.58
747.00	18063	10.08
747.20	19456	10.88
747.42	20984	12.23
748.00	25029	17.57
748.03	25217	18.00
748.55	28700	24.10

8" PIPE INV	
8" PIPE INV	
10" PIPE INV	
2-YEAR	
10" PIPE INV	
10-YEAR	
2' WIDE WEIR	
25-YEAR	
100-YEAR	

DETENTION STAGE/STORAGE

WATER QUALITY STAGE / DISCHARGE	
STAGE	CUMULATIVE VOLUME (SQ-FT)
743.00	0
743.50	537
744.00	1610
745.00	3757
746.00	5904
746.50	6978
747.00	8051
747.50	9125
748.00	10198

WATER QUALITY STAGE/STORAGE



DETENTION OUTFALL ELEVATION

Device	Routing	Invert	Outlet Devices
#1	Primary	743.00'	**8.0" Vert. Orifice/Grate** C= 0.600
#2	Primary	744.45'	**8.0" Vert. Orifice/Grate** C= 0.600
#3	Primary	745.65'	**10.0" Vert. Orifice/Grate** C= 0.600
#4	Primary	746.10'	**10.0" Vert. Orifice/Grate** C= 0.600
#5	Primary	747.20'	**2.0' long x 1.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32

Primary OutFlow Max=17.80 cfs @ 1.88 hrs HW=748.02' (Free Discharge)
- **1=Orifice/Grate** (Orifice Controls 3.64 cfs @ 10.42 fps)
- **2=Orifice/Grate** (Orifice Controls 3.02 cfs @ 8.66 fps)
- **3=Orifice/Grate** (Orifice Controls 3.67 cfs @ 6.73 fps)
- **4=Orifice/Grate** (Orifice Controls 3.22 cfs @ 5.90 fps)
- **5=Broad-Crested Rectangular Weir** (Weir Controls 4.25 cfs @ 2.59 fps)

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RIVERY
BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

DETENTION /
WATER QUALITY
PLAN

02/06/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
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Checked By:	JAB

C.16

Sheet 16 OF 26

2021-28-SDP

GEORGETOWN CALCULATIONS

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Rivery Business Park
Date Prepared: 4/18/2021

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:
- $L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
- A_N = Net increase in impervious area for the project
- P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

County =	Williamson	
TSS Removal Required =	85	Percent
Total project area included in plan * =	3.50	acres
Predevelopment impervious area within the limits of the plan * =	0.32	acres
Total post-development impervious area within the limits of the plan* =	2.31	acres
Total post-development impervious cover fraction * =	0.70	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	1841	lbs.

* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 1

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = P-2

Total drainage basin/outfall area =	3.32	acres
Predevelopment impervious area within drainage basin/outfall area =	0.32	acres
Post-development impervious area within drainage basin/outfall area =	2.31	acres
Post-development impervious fraction within drainage basin/outfall area =	0.70	
$L_{M\ THIS\ BASIN}$ =	1731	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	Batch Detention	
Removal efficiency =	91	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

where:
- A_C = Total On-Site drainage area in the BMP catchment area
- A_I = Impervious area proposed in the BMP catchment area
- A_P = Pervious area remaining in the BMP catchment area
- L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	3.32	acres
A_I =	2.31	acres
A_P =	1.01	acres
L_R =	2343	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 1841 lbs.

F = 0.79

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	1.04	inches
Post Development Runoff Coefficient =	0.50	
On-site Water Quality Volume =	6284	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site Runoff Coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	1257	
Total Capture Volume (required water quality volume(s) x 1.20) =	7541	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

TCEQ CALCULATIONS (80% TSS)

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Rivery Business Park
Date Prepared: 4/18/2021

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:
- $L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
- A_N = Net increase in impervious area for the project
- P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

County =	Williamson	
TSS Removal Required =	80	Percent
Total project area included in plan * =	3.50	acres
Predevelopment impervious area within the limits of the plan * =	0.32	acres
Total post-development impervious area within the limits of the plan* =	2.31	acres
Total post-development impervious cover fraction * =	0.70	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	1733	lbs.

* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 1

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = P-2

Total drainage basin/outfall area =	3.32	acres
Predevelopment impervious area within drainage basin/outfall area =	0.32	acres
Post-development impervious area within drainage basin/outfall area =	2.31	acres
Post-development impervious fraction within drainage basin/outfall area =	0.70	
$L_{M\ THIS\ BASIN}$ =	1731	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	Batch Detention	
Removal efficiency =	91	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

where:
- A_C = Total On-Site drainage area in the BMP catchment area
- A_I = Impervious area proposed in the BMP catchment area
- A_P = Pervious area remaining in the BMP catchment area
- L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	3.32	acres
A_I =	2.31	acres
A_P =	1.01	acres
L_R =	2343	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 1733 lbs.

F = 0.74

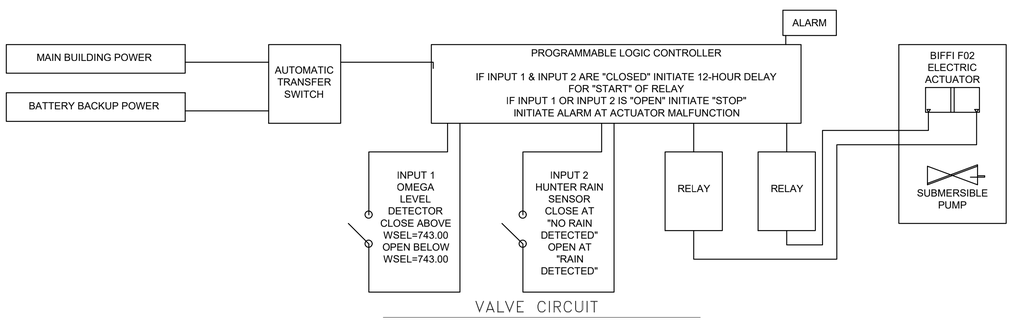
6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	0.89	inches
Post Development Runoff Coefficient =	0.50	
On-site Water Quality Volume =	5365	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site Runoff Coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	1073	
Total Capture Volume (required water quality volume(s) x 1.20) =	6438	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.



VALVE CIRCUIT

SCALE: NTS

CONTROLLER NOTES:
1. DUAL SENSOR LEVEL CONTROLLER - OMEGA MODEL LVCN-130 OR APPROVED EQUAL
2. ALARM MODULE SHALL BE REQUIRED. PROVIDE OMEGA DMD1080 SERIES WITH CONNECTED VISUAL ALARM. MOUNT ALARM TO OUTSIDE OF BUILDING FACING POND. VISUAL ALARM SHALL INITIATE AT VALVE MALFUNCTION. ALARM TO BE EDWARDS SIGNALING HORN OR APPROVED EQUAL.
3. VALVE TO BE METALTITE METAL SEATED, FLANGED END OR APPROVED EQUAL. ACTUATOR TO BE IN "NORMALLY CLOSED" POSITION.
4. ELECTRIC ACTUATOR TO BE BETTIS SCE300 ELECTRIC ACTUATOR OR APPROVED EQUAL.
5. LEVEL SWITCHES TO BE OMEGA HEAVY DUTY SIDE-MOUNTED. MOUNT SWITCHES TO SIDE WALL AS SHOW ON PLAN AND PROFILE. PROTECT SWITCH CONTROLLERS WITH HALF OF PERFORATED PVC PIPE GROUTED TO SIDE WALL.
6. PROVIDE BATTERY BACKUP SYSTEM WITH PHOTOCELL MOUNTED ADJACENT TO VALVE.
7. LOGIC CONTROLLER TO BE OMEGA OR SIMILAR.
8. ELECTRIC ACTUATOR: MANUAL OVERRIDE TO BE ALWAYS ENGAGED. PROVIDE INSTRUCTIONS FOR MANUAL OVERRIDE IN WATERPROOF CASING IN THE CONTROLLER BOX. MANUAL OVERRIDE TO BE USED FOR HAZARDOUS MATERIAL THREAT.

NOTE: CONC. IN RET. WALL SHALL CURE 10 DAYS PRIOR TO BACKFILL.

RETAINING WALL SCHEDULE

H. MAX	A	B	C	R1	R2	R3	SLIDING KEY
2'-0"	2'-4"	8"	8"	#4 @ 9"	NOT USED	#4 @ 9"	NOT USED
4'-0"	3'-8"	8"	2'-0"	#4 @ 9"	NOT USED	#4 @ 9"	NOT USED
6'-0"	5'-0"	1'-4"	2'-8"	#4 @ 9"	#4 @ 9"	#4 @ 9"	YES
8'-0"	6'-0"	1'-8"	3'-4"	#4 @ 8"	#4 @ 16"	#4 @ 9"	YES
10'-0"	7'-4"	2'-4"	4'-0"	#5 @ 8"	#5 @ 16"	#5 @ 8"	YES
12'-0"	8'-4"	2'-8"	4'-8"	#6 @ 8"	#6 @ 16"	#6 @ 10"	YES

VERTICAL RETAINING WALL DETAIL
N.T.S.

Texas 811

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RIVERY BUSINESS PARK
2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

TCEQ CALCULATIONS

02/06/22
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

Project No.: 19010
Issued: 12/18/2022
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Checked By: JAB

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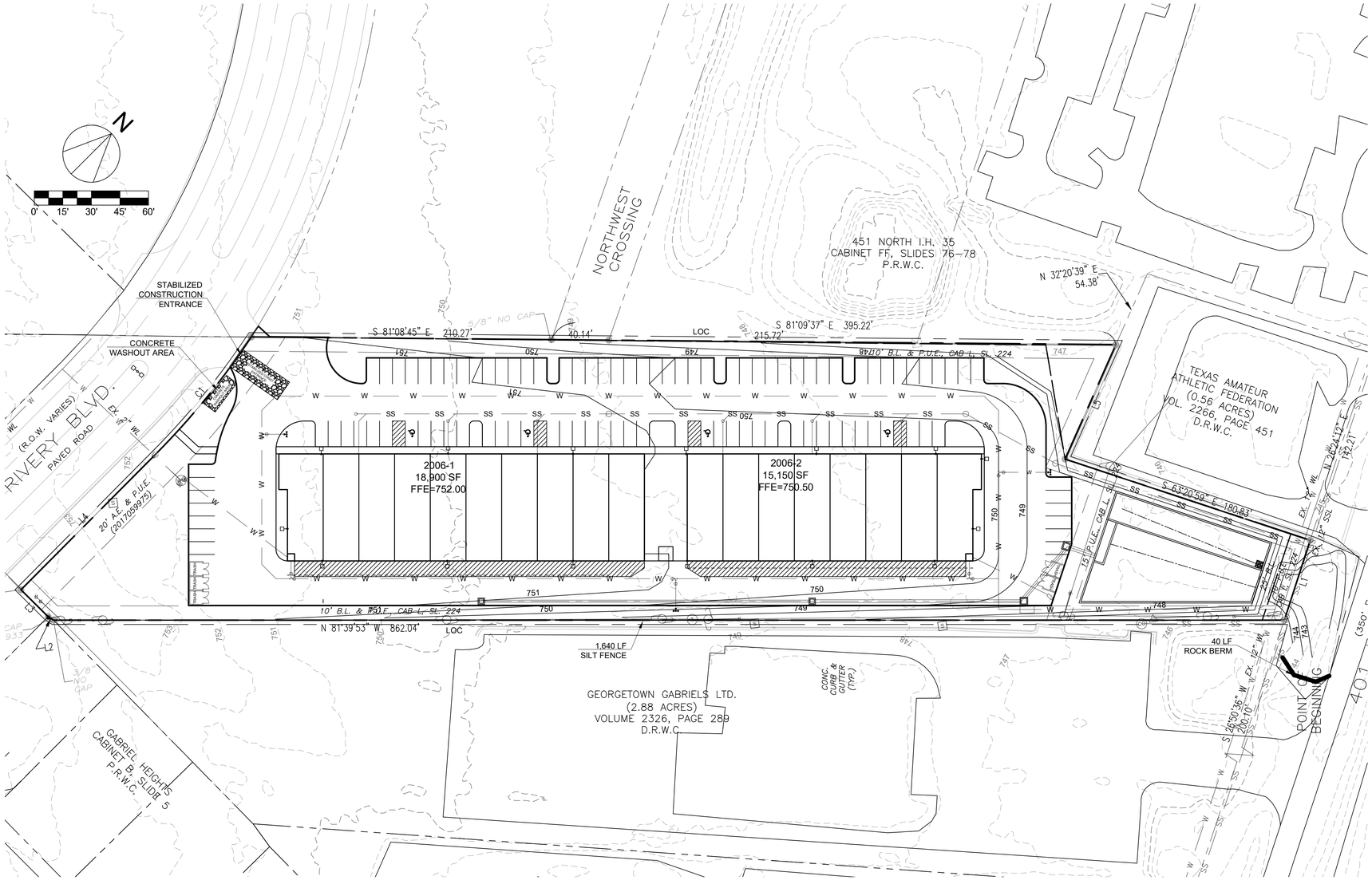

LEGEND:

PROPERTY LINE	
LOT LINE	
EXISTING EDGE OF PAVEMENT	
EXISTING MAJOR CONTOUR	105
EXISTING MINOR CONTOUR	104
PROPOSED MAJOR CONTOUR	115
PROPOSED MINOR CONTOUR	114
PROPOSED HIGH POINT	
PROPOSED SILT FENCE	
PROPOSED ROCK BERM	
PROPOSED INLET PROTECTION	
PROPOSED STABILIZED CONSTRUCTION ENTRANCE/EXIT	

EROSION CONTROL QUANTITIES		
SILT FENCE	1,640	LF
ROCK BERM	40	LF
STABILIZED CONSTRUCTION ENTRANCE	1	EA
LIMITS OF CONSTRUCTION	3.40	AC

NOTES:
1. CONTRACTOR IS RESPONSIBLE FOR DEWATERING OF WORK AREAS. WHEN REQUIRED CONTRACTOR SHALL DEWATER EXCAVATED AREAS USING A CITY METHOD (I.E. SILT FENCE, HAY BALE DIKE, ROCK BERM, ETC.)
2. CONTRACTOR SHALL PROVIDE TEMPORARY STAGING AND SPOILS AREA AS NEEDED AND PROVIDE ADDITIONAL SILT FENCE ALONG THE DOWNSTREAM SIDE OF THESE AREAS THROUGHOUT CONSTRUCTION.
3. IF DISTURBED AREA IS NOT TO BE WORKED ON FOR MORE THAN 14 DAYS, DISTURBED AREA NEEDS TO BE STABILIZED BY REVEGETATION, MULCH, TARP, OR REVEGETATION MATTING.
4. CITY INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/ SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN-COMPLIANCE WITH THE CITY RULES AND REGULATIONS.
5. CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER CITY REQUIREMENTS, OR AS DIRECTED BY THE CITY INSPECTOR.

No.	Date	Revisions	App.

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RIVERY BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

EROSION / SEDIMENTATION CONTROL PLAN

02/18/22
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.18

Sheet 18 OF 26

2021-28-SDP

Texas 811 Texas

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

Edwards Aquifer Protection Program Construction Notes - Legal Disclaimer

The following/listed "construction notes" are intended to be advisory in nature only and do not constitute an approval or conditional approval by the Executive Director (ED), nor do they constitute a comprehensive listing of rules or conditions to be followed during construction. Further actions may be required to achieve compliance with TCEQ regulations found in Title 30, Texas Administrative Code (TAC), Chapters 213 and 217, as well as local ordinances and regulations providing for the protection of water quality. Additionally, nothing contained in the following/listed "construction notes" restricts the powers of the ED, the commission or any other governmental entity to prevent, correct, or curtail activities that result or may result in pollution of the Edwards Aquifer or hydrologically connected surface waters. The holder of any Edwards Aquifer Protection Plan containing "construction notes" is still responsible for compliance with Title 30, TAC, Chapters 213 or any other applicable TCEQ regulation, as well as all conditions of an Edwards Aquifer Protection Plan through all phases of plan implementation. Failure to comply with any condition of the ED's approval, whether or not in contradiction of any "construction notes," is a violation of TCEQ regulations and any violation is subject to administrative rules, orders, and penalties as provided under Title 30, TAC § 213.10 (relating to Enforcement). Such violations may also be subject to civil penalties and injunction. The following/listed "construction notes" in no way represent an approved exception by the ED to any part of Title 30 TAC, Chapters 213 and 217, or any other TCEQ applicable regulation

1. A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any regulated activities. This notice must include:
   - the name of the approved project;
   - the activity start date; and
   - the contact information of the prime contractor.

2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan (WPAP) and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.

3. If any sensitive feature(s) (caves, solution cavity, sink hole, etc.) is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. Construction activities may not be resumed until the TCEQ has reviewed and approved the appropriate protective measures in order to protect any sensitive feature and the Edwards Aquifer from potentially adverse impacts to water quality.

4. No temporary or permanent hazardous substance storage tank shall be installed within 150 feet of a water supply source, distribution system, well, or sensitive feature.

5. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the approved plans and manufacturers specifications. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. These controls must remain in place until the disturbed areas have been permanently stabilized.

6. Any sediment that escapes the construction site must be collected and properly disposed of before the next rain event to ensure it is not washed into surface streams, sensitive features, etc.

7. Sediment must be removed from the sediment traps or sedimentation basins not later than when it occupies 50% of the basin's design capacity.

8. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from being discharged offsite.

9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.

10. If portions of the site will have a temporary or permanent cease in construction activity lasting longer than 14 days, soil stabilization in those areas shall be initiated as soon as possible prior to the 14th day of inactivity. If activity will resume prior to the 21st day, stabilization measures are not required. If drought conditions or inclement weather prevent action by the 14th day, stabilization measures shall be initiated as soon as possible.

11. The following records shall be maintained and made available to the TCEQ upon request:
   - the dates when major grading activities occur;
   - the dates when construction activities temporarily or permanently cease on a portion of the site; and
   - the dates when stabilization measures are initiated.

12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:

   A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;

   B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;

   C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

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

TCEQ-0592 (Rev. July 15, 2015)

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TCEQ NOTES

02/08/23
STATE OF TEXAS
JOSHUA A. BARAN
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2021-28-SDP

Texas 811

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

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   - the name of the approved project;
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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.
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TCEQ-0592 (Rev. July 15, 2015)

Texas Commission on Environmental Quality
Organized Sewage Collection System
General Construction Notes

Edwards Aquifer Protection Program Construction Notes - Legal Disclaimer

The following/listed "construction notes" are intended to be advisory in nature only and do not constitute an approval or conditional approval by the Executive Director, nor do they constitute a comprehensive listing of rules or conditions to be followed during construction. Further actions may be required to achieve compliance with TCEQ regulations found in Title 30, Texas Administrative Code, Chapters 213 and 217, as well as local ordinances and regulations providing for the protection of water quality. Additionally, nothing contained in the following/listed "construction notes" restricts the powers of the Executive Director, the commission or any other governmental entity to prevent, correct, or curtail activities that result or may result in pollution of the Edwards Aquifer or hydrologically connected surface waters. The holder of any Edwards Aquifer Protection Plan containing "construction notes" is still responsible for compliance with Title 30, Texas Administrative Code, Chapters 213 or any other applicable TCEQ regulation, as well as all conditions of an Edwards Aquifer Protection Plan through all phases of plan implementation. Failure to comply with any condition of the Executive Director's approval, whether or not in contradiction of any "construction notes," is a violation of TCEQ regulations and any violation is subject to administrative rules, orders, and penalties as provided under Title 30, Texas Administrative Code § 213.10 (relating to Enforcement). Such violations may also be subject to civil penalties and injunction. The following/listed "construction notes" in no way represent an approved exception by the Executive Director to any part of Title 30 Texas Administrative Code, Chapters 213 and 217, or any other TCEQ applicable regulation.

1. This Organized Sewage Collection System (SCS) must be constructed in accordance with 30 Texas Administrative Code (TAC) §213.5(c), the Texas Commission on Environmental Quality's (TCEQ) Edwards Aquifer Rules and any local government standard specifications.
2. All contractors conducting regulated activities associated with this proposed regulated project must be provided with copies of the SCS plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors must be required to keep on-site copies of the plan and the approval letter.
3. A written notice of construction must be submitted to the presiding TCEQ regional office at least 48 hours prior to the start of any regulated activities. This notice must include:
   - the name of the approved project;
   - the activity start date; and
   - the contact information of the prime contractor.
4. Any modification to the activities described in the referenced SCS application following the date of approval may require the submittal of an SCS application to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval.
5. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturers specifications. These controls must remain in place until the disturbed areas have been permanently stabilized.
6. If any sensitive features are discovered during the wastewater line trenching activities, all regulated activities near the sensitive feature must be suspended immediately. The applicant must immediately notify the appropriate regional office of the TCEQ of the feature discovered. A geologist's assessment of the location and extent of the feature discovered must be reported to that regional office in writing and the applicant must submit a plan for ensuring the structural integrity of the sewer line or for modifying the proposed collection system alignment around the feature. The regulated activities near the sensitive feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality while maintaining the structural integrity of the line.
7. Sewer lines located within or crossing the 5-year floodplain of a drainage way will be protected from inundation and stream velocities which could cause erosion and scouring of backfill. The trench must be capped with concrete to prevent scouring of backfill, or the sewer lines must be encased in concrete. All concrete shall have a minimum thickness of 6 inches.
8. Blasting procedures for protection of existing sewer lines and other utilities will be in accordance with the National Fire Protection Association criteria. Sand is not allowed as bedding or backfill in trenches that have been blasted. If any existing sewer lines are damaged, the lines must be repaired and retested.
9. All manholes constructed or rehabilitated on this project must have watertight size on size resilient connectors allowing for differential settlement. If manholes are constructed within the 100-year floodplain, the cover must have a gasket and be bolted to the ring. Where gasketed manhole covers are required for more than three manholes in sequence or for more than 1500 feet, alternate means of venting will be provided. Bricks are not an acceptable construction material for any portion of the manhole.

   The diameter of the manholes must be a minimum of four feet and the manhole for entry must have a minimum clear opening diameter of 30 inches. These dimensions and other details showing compliance with the commission's rules concerning manholes and sewer line/manhole inverts described in 30 TAC §217.55 are included on Plan Sheet __ of __.

   It is suggested that entrance into manholes in excess of four feet deep be accomplished by means of a portable ladder. The inclusion of steps in a manhole is prohibited.
10. Where water lines and new sewer line are installed with a separation distance closer than nine feet (i.e., water lines crossing wastewater lines, water lines paralleling wastewater lines, or water lines next to manholes) the installation must meet the requirements of 30 TAC §217.53(d) (Pipe Design) and 30 TAC §290.44(e) (Water Distribution).
11. Where sewers lines deviate from straight alignment and uniform grade all curvature of sewer pipe must be achieved by the following procedure which is recommended by the pipe manufacturer: _____.

    If pipe flexure is proposed, the following method of preventing deflection of the joint must be used: _____ _____.

    Specific care must be taken to ensure that the joint is placed in the center of the trench and properly bedded in accordance with 30 TAC §217.54.
12. New sewage collection system lines must be constructed with stub outs for the connection of anticipated extensions. The location of such stub outs must be marked on the ground such that their location can be easily determined at the time of connection of the extensions. Such stub outs must be manufactured wyes or tees that are compatible in size and material with both the sewer line and the extension. At the time of original construction, new stub-outs must be constructed sufficiently to extend beyond the end of the street pavement. All stub-outs must be sealed with a manufactured cap to prevent leakage. Extensions that were not anticipated at the time of original construction or that are to be connected to an existing sewer line not furnished with stub outs must be connected using a manufactured saddle and in accordance with accepted plumbing techniques.

    If no stub-out is present an alternate method of joining laterals is shown in the detail on Plan Sheet __ of __. (For potential future laterals).

    The private service lateral stub-outs must be installed as shown on the plan and profile sheets on Plan Sheet __ of __ and marked after backfilling as shown in the detail on Plan
    Sheet __ of __.
13. Trenching, bedding and backfill must conform with 30 TAC §217.54. The bedding and backfill for flexible pipe must comply with the standards of ASTM D-2321, Classes IA, IB, II or III. Rigid pipe bedding must comply with the requirements of ASTM C 12 (ANSI A 106.2) classes A, B or C.
14. Sewer lines must be tested from manhole to manhole. When a new sewer line is connected to an existing stub or clean-out, it must be tested from existing manhole to new manhole. If a stub or clean-out is used at the end of the proposed sewer line, no private service attachments may be connected between the last manhole and the cleanout unless it can be certified as conforming with the provisions of 30 TAC §213.5(c)(3)(E).
15. All sewer lines must be tested in accordance with 30 TAC §217.57. The engineer must retain copies of all test results which must be made available to the executive director upon request. The engineer must certify in writing that all wastewater lines have passed all required testing to the appropriate regional office within 30 days of test completion and prior to use of the new collection system. Testing method will be:
    (a) For a collection system pipe that will transport wastewater by gravity flow, the design must specify an infiltration and exfiltration test or a low-pressure air test. A test must conform to the following requirements:
        (1) *Low Pressure Air Test.*
            (A) A low pressure air test must follow the procedures described in American Society For Testing And Materials (ASTM) C-828, ASTM C-924, or ASTM F-1417 or other procedure approved by the executive director, except as to testing times as required in Table C.3 in subparagraph (C) of this paragraph or Equation C.3 in subparagraph (B)(ii) of this paragraph.
            (B) For sections of collection system pipe less than 36 inch average inside diameter, the following procedure must apply, unless a pipe is to be tested as required by paragraph (2) of this subsection.
                (i) 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 psi gauge is computed from the following equation:

Equation C.3 $$T = \frac{0.085 \times D \times K}{Q}$$

Where:

T = time for pressure to drop 1.0 pound per square inch gauge in seconds
K = 0.000419 X D X L, but not less than 1.0
D = average inside pipe diameter in inches
L = length of line of same size being tested, in feet
Q = rate of loss, 0.0015 cubic feet per minute per square foot internal surface

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

(D) An owner may stop a test if no pressure loss has occurred during the first 25% of the calculated testing time.
(E) If any pressure loss or leakage has occurred during the first 25% of a testing period, then the test must continue for the entire test duration as outlined above or until failure.
(F) Wastewater collection system pipes with a 27 inch or larger average inside diameter may be air tested at each joint instead of following the procedure outlined in this section.
(G) A testing procedure for pipe with an inside diameter greater than 33 inches must be approved by the executive director.

(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.
(B) An owner shall use an infiltration test in lieu of an exfiltration test when pipes are installed below the groundwater level.
(C) The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch diameter per mile of pipe per 24 hours at a minimum test head of two feet above the crown of a pipe at an upstream manhole, or at least two feet above existing groundwater level, whichever is greater.
(D) For construction within a 25-year flood plain, the infiltration or exfiltration must not exceed 10 gallons per inch diameter per mile of pipe per 24 hours at the same minimum test head as in subparagraph (C) of this paragraph.
(E) If the quantity of infiltration or exfiltration exceeds the maximum quantity specified, an owner shall undertake remedial action in order to reduce the infiltration or exfiltration to an amount within the limits specified. An owner shall retest a pipe following a remediation action.

(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.
(A) *Mandrel Sizing.*
(i) A rigid mandrel must have an outside diameter (OD) not less than 95% of the base inside diameter (ID) or average ID of a pipe, as specified in the appropriate standard by the ASTMs, American Water Works Association, UNI-BELL, or American National Standards Institute, or any related appendix.
(ii) If a mandrel sizing diameter is not specified in the appropriate standard, the mandrel must have an OD equal to 95% of the ID of a pipe. In this case, the ID of the pipe, for the purpose of determining the OD of the mandrel, must equal be the average outside diameter minus two minimum wall thicknesses for OD controlled pipe and the average inside diameter for ID controlled pipe.
(iii) All dimensions must meet the appropriate standard.
(B) *Mandrel Design.*
(i) A rigid mandrel must be constructed of a metal or a rigid plastic material that can withstand 200 psi without being deformed.
(ii) A mandrel must have nine or more odd number of runners or legs.
(iii) A barrel section length must equal at least 75% of the inside diameter of a pipe.
(iv) Each size mandrel must use a separate proving ring.
(C) *Method Options.*
(i) An adjustable or flexible mandrel is prohibited.
(ii) A test may not use television inspection as a substitute for a deflection test.
(iii) If requested, the executive director may approve the use of a deflectometer or a mandrel with removable legs or runners on a case-by-case basis.
(2) For a gravity collection system pipe with an inside diameter 27 inches and greater, other test methods may be used to determine vertical deflection.
(3) A deflection test method must be accurate to within plus or minus 0.2% deflection.
(4) An owner shall not conduct a deflection test until at least 30 days after the final backfill.
(5) Gravity collection system pipe deflection must not exceed five percent (5%).
(6) 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 director.
        (1) Hydrostatic Testing.
            (A) The maximum leakage for hydrostatic testing or any alternative test methods is 0.025 gallons per foot diameter per foot of manhole depth per hour.
            (B) To perform a hydrostatic exfiltration test, an owner shall seal 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 concrete.
        (2) Vacuum Testing.
            (A) To perform a vacuum test, an owner shall plug all lift holes and exterior joints with a non-shrink grout and plug all pipes entering a manhole.
            (B) No grout must be placed in horizontal joints before testing.
            (C) Stub-outs, manhole boots, and pipe plugs must be secured to prevent movement while a vacuum is drawn.
            (D) An owner shall use a minimum 60 inch/lb torque wrench to tighten the external clamps that secure a test cover to the top of a manhole.
            (E) A test head must be placed at the inside of the top of a cone section, and the seal inflated in accordance with the manufacturer's recommendations.
            (F) There must be a vacuum of 10 inches of mercury inside a manhole to perform a valid test.
            (G) A test does not begin until after the vacuum pump is off.
            (H) A manhole passes the test if after 2.0 minutes and with all valves closed, the vacuum is at least 9.0 inches of mercury.
17. All private service laterals must be inspected and certified in accordance with 30 TAC §213.5(c)(3)(I). After installation of and, prior to covering and connecting a private service lateral to an existing organized sewage collection system, a Texas Licensed Professional Engineer, Texas Registered Sanitarian, or appropriate city inspector must visually inspect the private service lateral and the connection to the sewage collection system, and certify that it is constructed in conformity with the applicable provisions of this section. The owner of the collection system must maintain such certifications for five years and forward copies to the appropriate regional office upon request. Connections may only be made to an approved sewage collection system.

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TCEQ NOTES

STATE OF TEXAS
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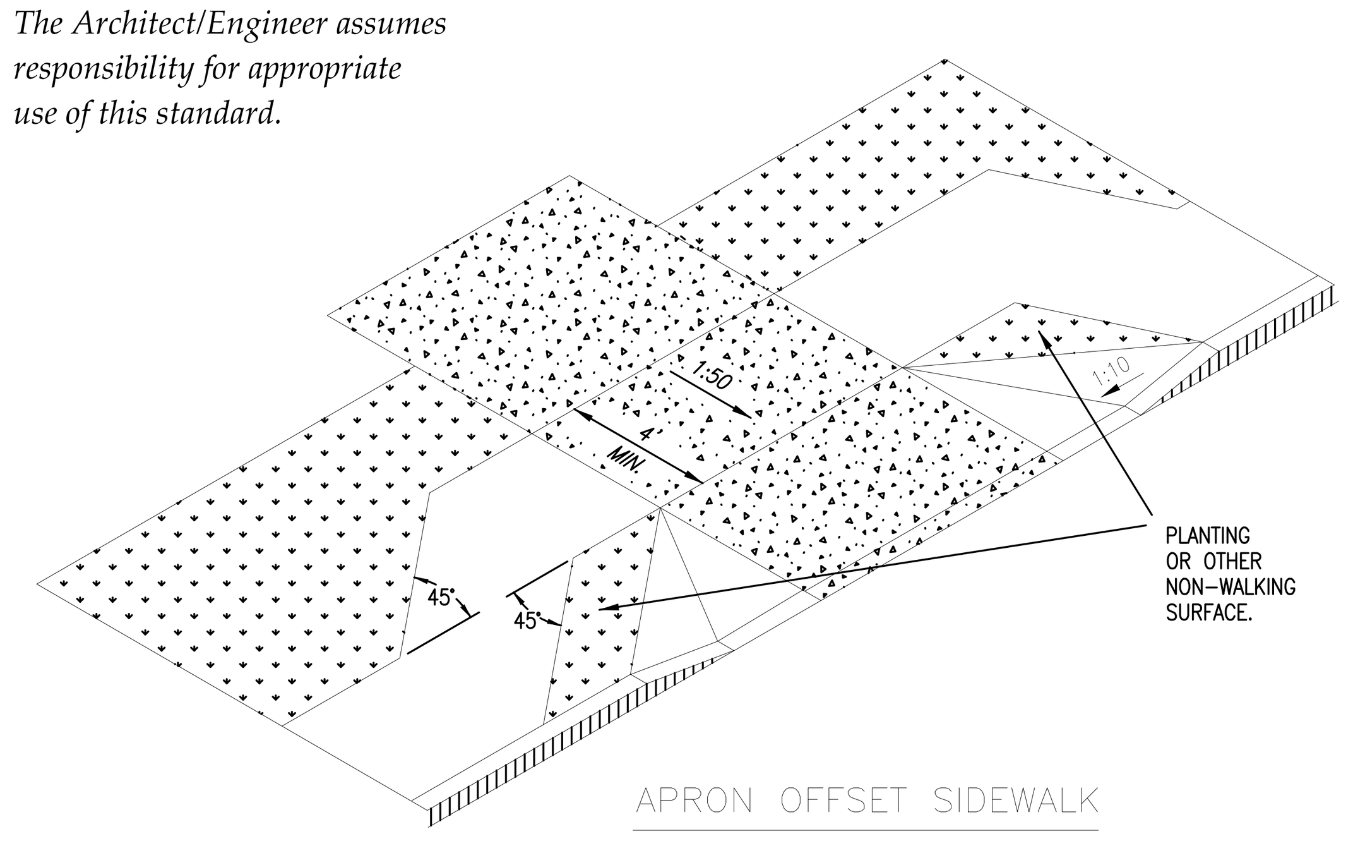
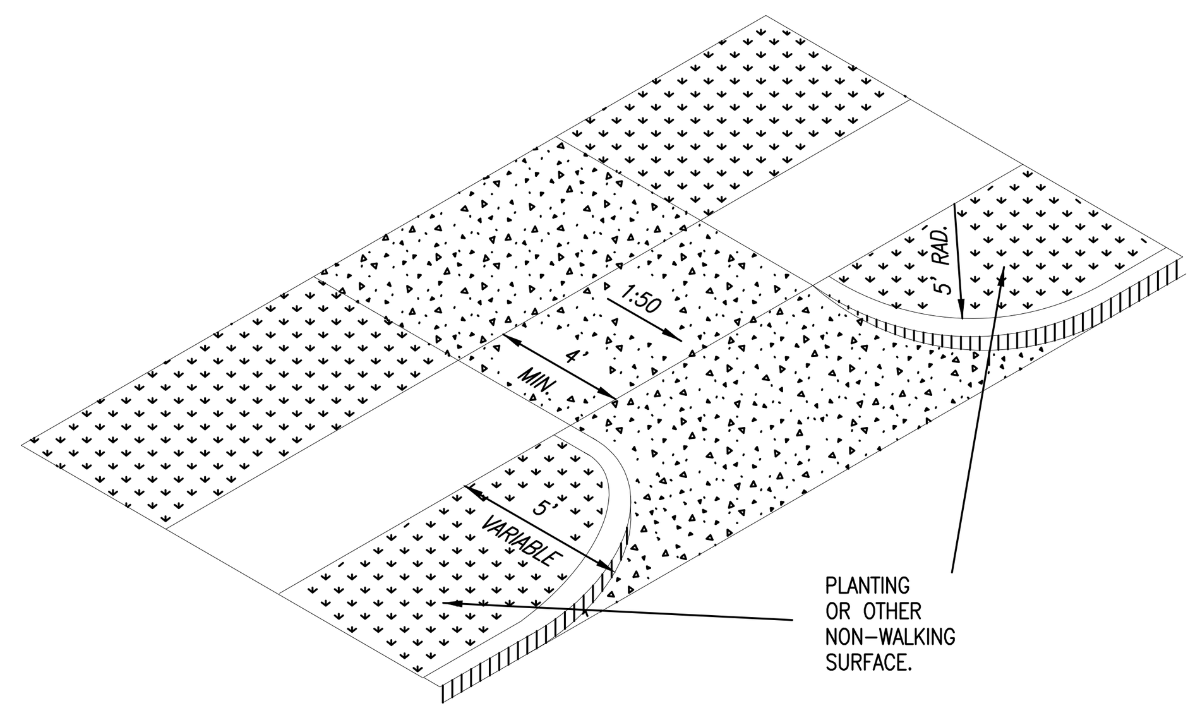
Sheet 20 OF 26

2021-28-SDP

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



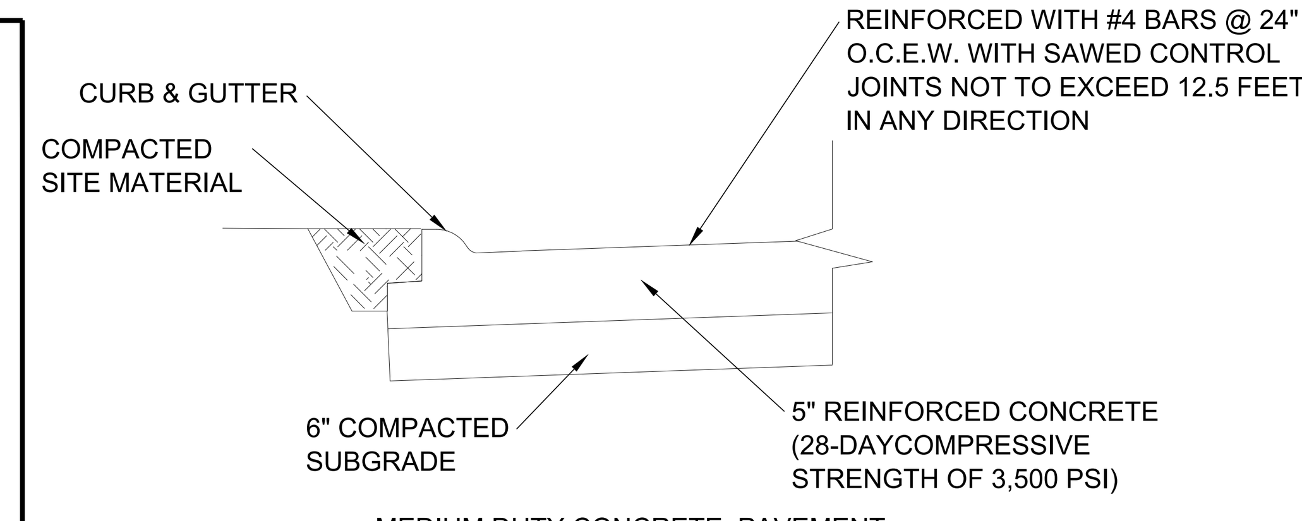
APRON OFFSET SIDEWALK
TYPE 12



SETBACK SIDEWALK
TYPE 13

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS

GEORGETOWN TEXAS

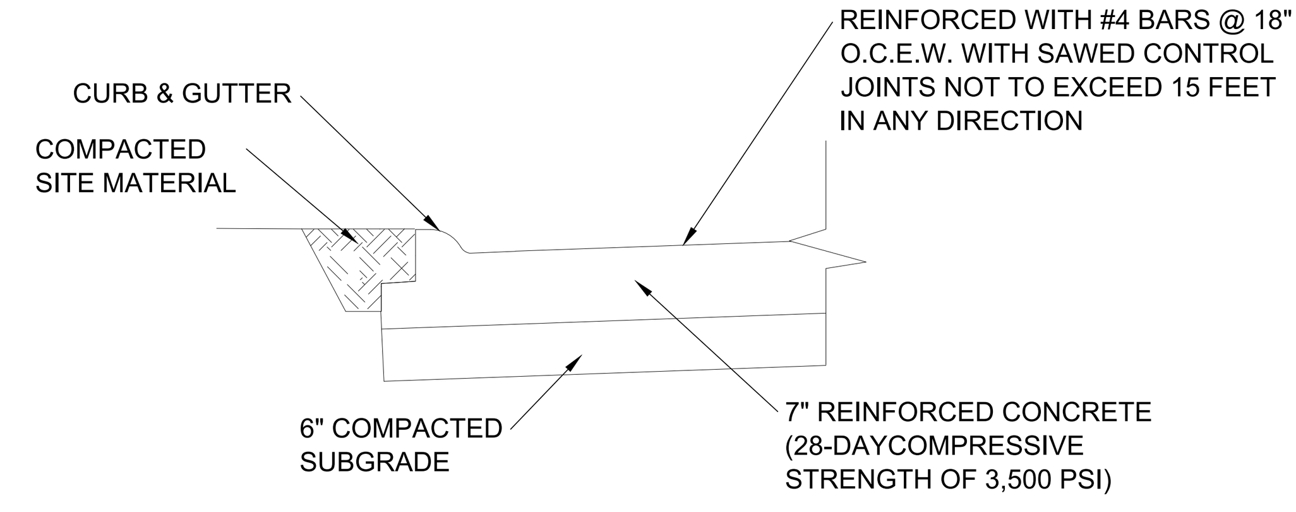


MEDIUM DUTY CONCRETE PAVEMENT

GEOTECHNICAL PAVEMENT RECOMMENDATIONS SHALL TAKE PRECEDENT OVER ABOVE PAVEMENT SECTION.

* THE MATERIALS AND PROPERTIES OF CONCRETE SHALL MEET APPLICABLE REQUIREMENTS IN THE ACI MANUAL OF CONCRETE PRACTICE.
NOTE: THE CONTRACTOR SHALL REFERENCE THE MEP AND LANDSCAPE PLANS FOR THE SIZE AND LOCATIONS OF PROPOSED ELECTRIC, TELEPHONE, CABLE CONDUITS, AND IRRIGATION SLEEVES.

PAVING SECTIONS
SCALE: N.T.S.

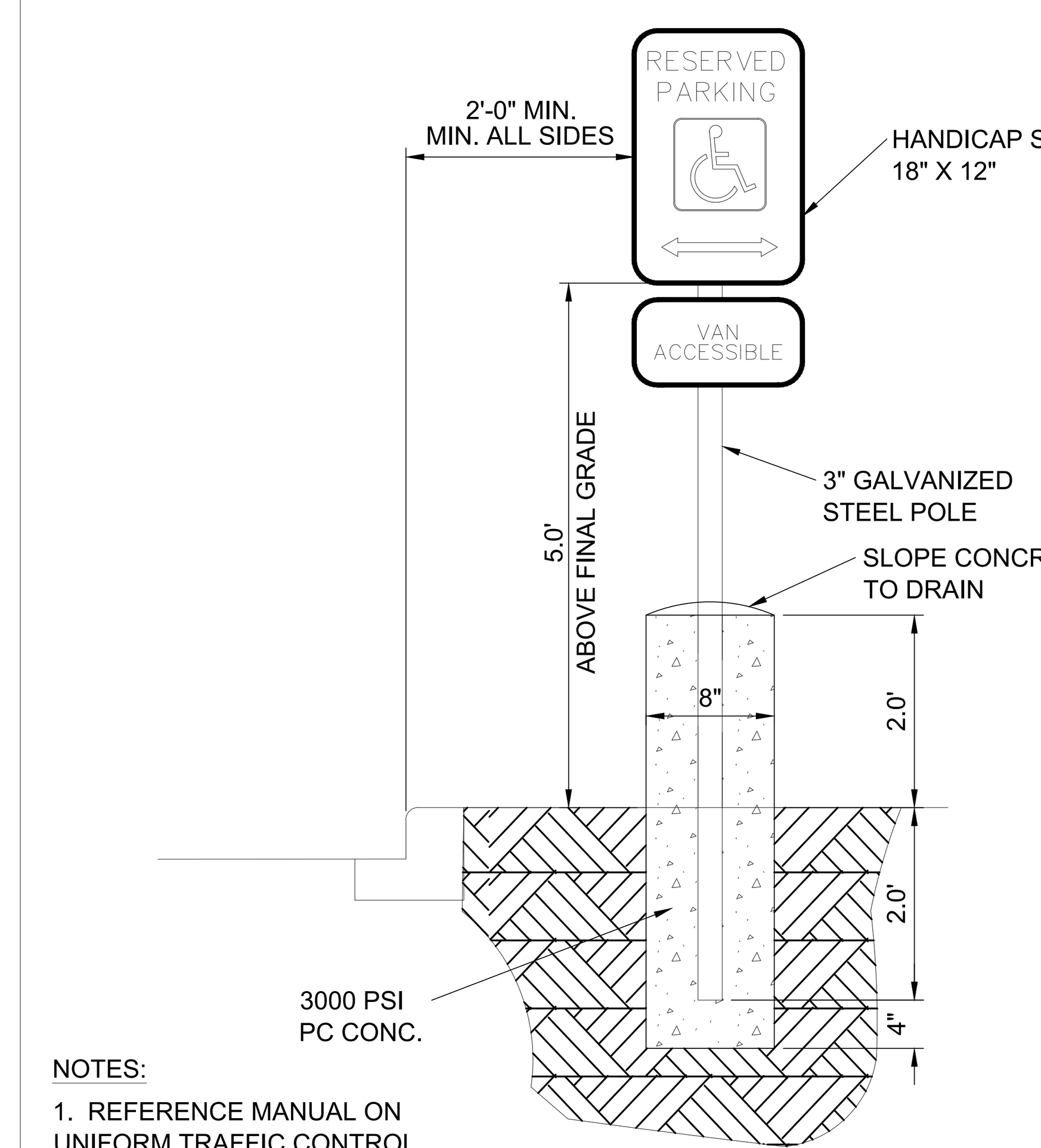


HEAVY DUTY CONCRETE PAVEMENT

GEOTECHNICAL PAVEMENT RECOMMENDATIONS SHALL TAKE PRECEDENT OVER ABOVE PAVEMENT SECTION.

* THE MATERIALS AND PROPERTIES OF CONCRETE SHALL MEET APPLICABLE REQUIREMENTS IN THE ACI MANUAL OF CONCRETE PRACTICE.
NOTE: THE CONTRACTOR SHALL REFERENCE THE MEP AND LANDSCAPE PLANS FOR THE SIZE AND LOCATIONS OF PROPOSED ELECTRIC, TELEPHONE, CABLE CONDUITS, AND IRRIGATION SLEEVES.

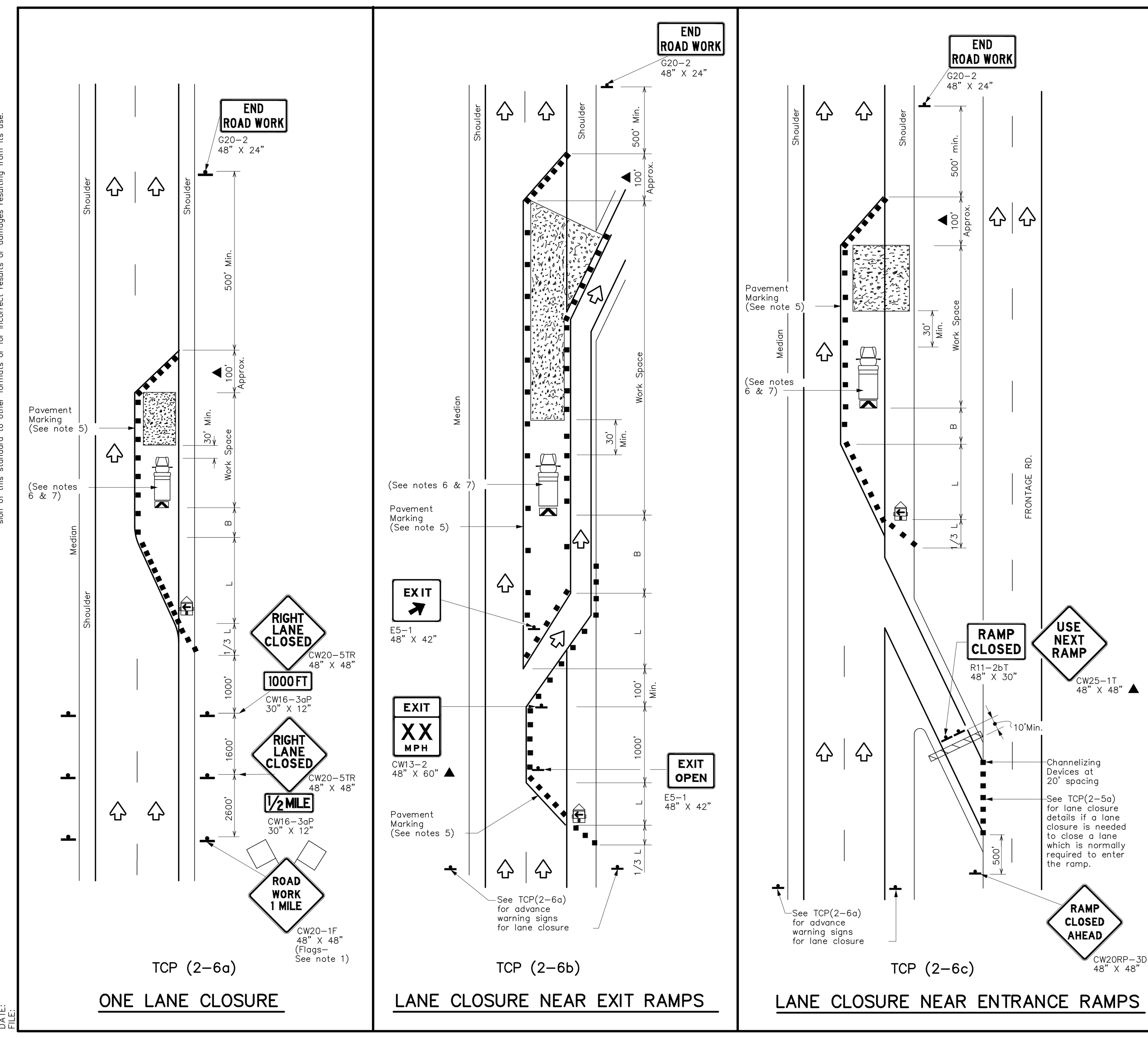
PAVING SECTIONS
SCALE: N.T.S.



NOTES:
1. REFERENCE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
2. PROVIDE "FINE" SIGN WHEN REQUIRED BY MUNICIPALITY.

HANDICAP SIGN DETAIL
SCALE: N.T.S.

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.



LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent		
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only
** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
			✓	✓

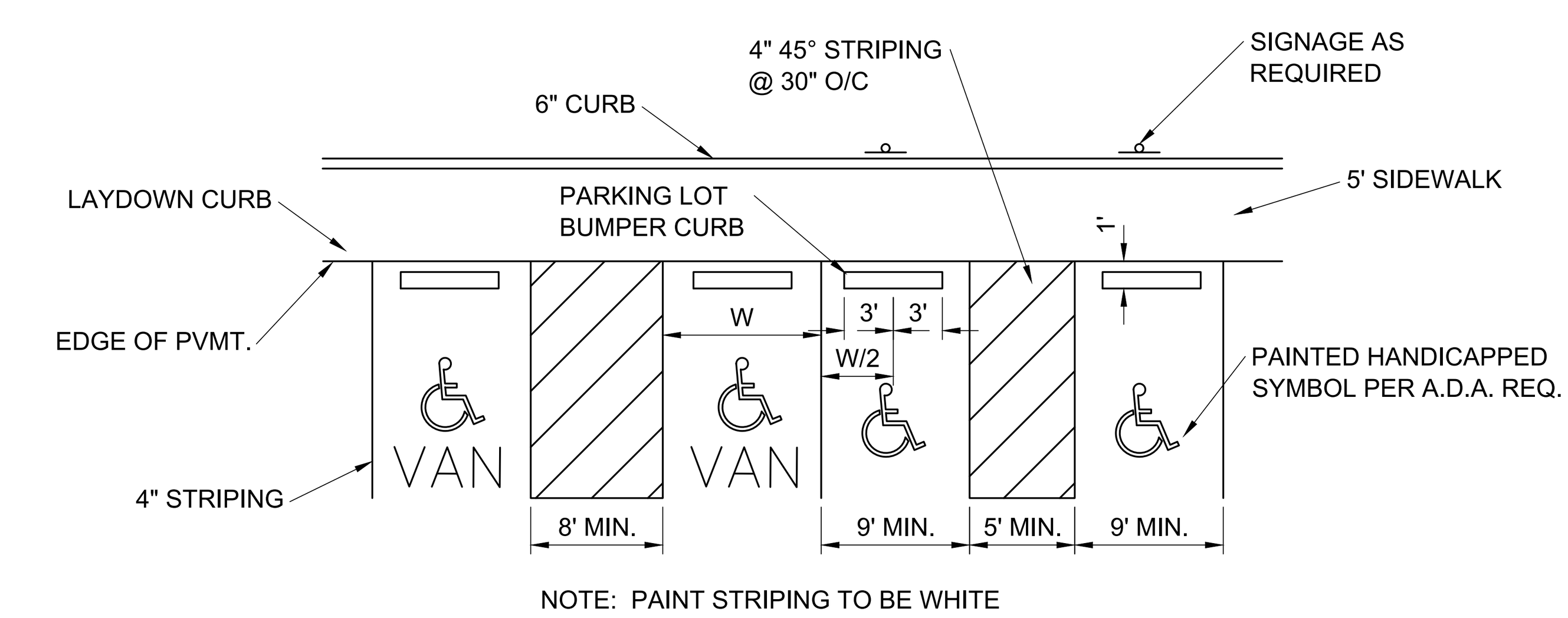
GENERAL NOTES
1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. Channelizing devices used to close lanes may be supplemented with the Chevron Alignment Sign placed on every other channelizing device. Chevrons may be attached to plastic drums as per BC Standards.
4. Channelizing devices used along the work space or along tangent sections may be supplemented with vertical panels (VP) placed on everyother channelizing device. If night time conditions make it difficult to see at least two VPs, the VPs may be placed on each channelizing device.
5. The placement of pavement markings may be omitted on Intermediate-term stationary work zones with the approval of the Engineer.
6. Shadow Vehicle with TMA and high intensity rotating, flashing,oscillating or strobe lights. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
7. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.

For construction or maintenance contract work, specific project requirements for shadow vehicles can be found in the project GENERAL NOTES for Item 502, Barricades, Signs and Traffic Handling.

Texas Department of Transportation
Traffic Operations Division

TRAFFIC CONTROL PLAN
LANE CLOSURES ON
DIVIDED HIGHWAYS

TCP(2-6)-12



NOTE: PAINT STRIPING TO BE WHITE

ADA PARKING SPACE DETAIL (TYP.)
SCALE: N.T.S.

No.	Date	Revisions	App.

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DETAILS

STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER
02/08/23

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

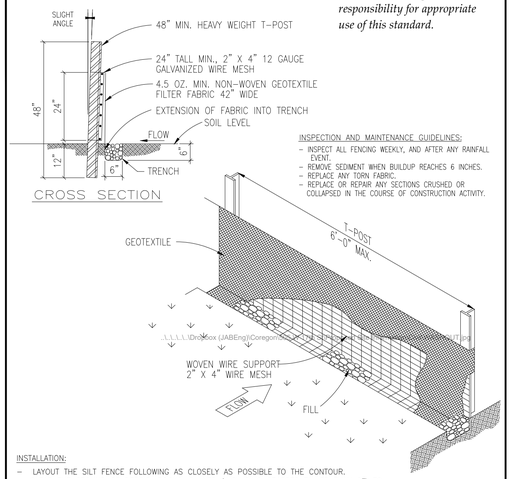
C.21

Sheet 21 OF 26

2021-28-SDP

Texas 811

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



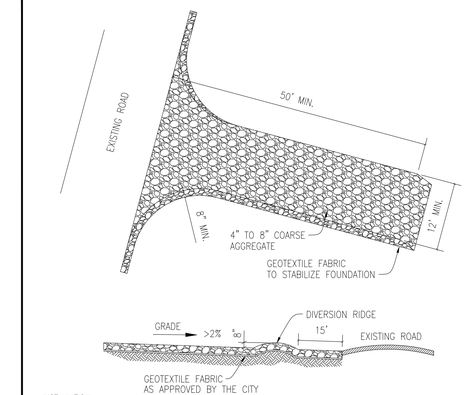
INSPECTION AND MAINTENANCE GUIDELINES:

- INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL EVENT.
- REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
- REPLACE ANY TORN FABRIC.
- REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY.

INSTALLATION:

- LAYOUT THE SILT FENCE FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS, PLANTS (INCLUDING GRASSES TALLER THAN 2") TO PROVIDE A SMOOTH FLOW APPROACH SURFACE. EXCAVATE 6" DEEP X 6" WIDE TRENCH ON UPSTREAM SIDE OF FACE PER PLANS.
- DRIVE THE HEAVY DUTY T-POST AT LEAST 12 INCHES INTO THE GROUND AND AT A SLIGHT ANGLE TOWARDS THE FLOW.
- ATTACH THE 2" X 4" 12 GAUGE WELDED WIRE MESH TO THE T-POST WITH 11 1/2 GAUGE GALVANIZED T-POST CLIPS. THE TOP OF THE WIRE TO BE 24" ABOVE GROUND LEVEL. THE WELDED WIRE MESH TO BE OVERLAPPED 6" AND TIED AT LEAST 6 TIMES WITH HOG RINGS.
- THE SILT FENCE TO BE INSTALLED WITH A SKIRT A MINIMUM OF 6" WIDE PLACED ON THE UPHILL SIDE OF THE FENCE INSIDE EXCAVATED TRENCH. THE FABRIC TO OVERLAP THE TOP OF THE WIRE BY 1".
- ANCHOR THE SILT FENCE BY BACKFILLING WITH EXCAVATED DIRT AND ROCKS (NOT LARGER THAN 2").
- GEOTEXTILE SPLICES SHOULD BE A MINIMUM OF 18" WIDE ATTACHED IN AT LEAST 6 PLACES. SPLICES IN CONCENTRATED FLOW AREAS WILL NOT BE ACCEPTED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	REVISION NOTE: 06/21/2006	
SILT FENCE DETAIL	DRAWING NAME: EC02	
	QUALITY:	DATE:
	DRAWN BY:	APPROVED BY:



INSTALLATION:

- CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE. RUNOFF FROM THE STABILIZED CONSTRUCTION
- PLACE GEOTEXTILE FABRIC AS APPROVED BY THE CITY.
- PLACE ROCK AS APPROVED BY THE CITY.

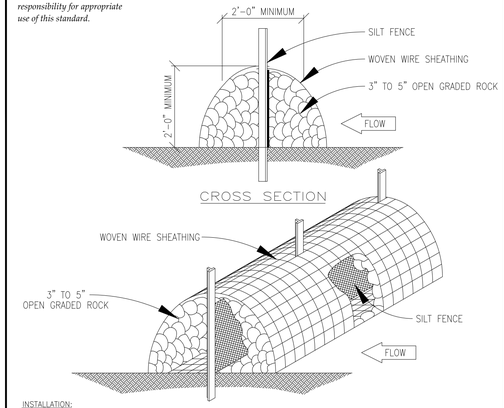
INSPECTIONS AND MAINTENANCE GUIDELINES:

- THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
- WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

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

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	REVISION NOTE: 06/21/2006	
STABILIZED CONSTRUCTION ENTRANCE	DRAWING NAME: EC06	
	QUALITY:	DATE:
	DRAWN BY:	APPROVED BY:

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



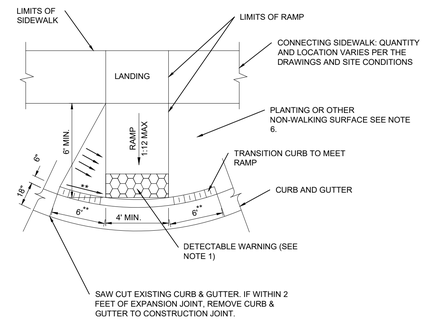
INSTALLATION:

- LAYOUT THE ROCK BERM FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- PLACE WOVEN WIRE FABRIC ON THE GROUND ALONG THE PROPOSED INSTALLATION WITH ENOUGH OVERLAP TO COMPLETELY ENCIRCLE THE FINISHED SIZE OF THE BERM.
- INSTALL THE SILT FENCE ALONG THE CENTER OF THE PROPOSED BERM PLACEMENT. INSTALLATION SHOULD BE AS DESCRIBED IN DRAWING NO. EC-02 "SILT FENCE DETAIL"
- PLACE THE ROCK ALONG THE CENTER OF THE WIRE AND ON BOTH SIDES OF THE SILT FENCE TO THE DESIGNATED HEIGHT.
- WRAP THE STRUCTURE WITH THE PREVIOUSLY PLACED WIRE MESH SECURE ENOUGH SO THAT WHEN WALKED ACROSS THE STRUCTURE RETAINS IT'S SHAPE.
- SECURE WITH TIE WIRE.
- THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

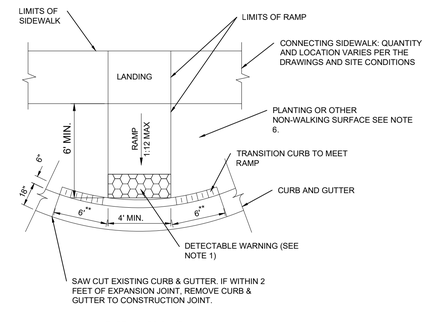
INSPECTION AND MAINTENANCE GUIDELINES:

- INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL EVENT BY THE CONTRACTOR. FOR THE INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE ON ROCK BERM.
- REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER.
- REPAIR ANY LOOSE WIRE SHEATHING.
- THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
- THE BERM SHOULD BE REPLACES WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	REVISION NOTE: ADOPTED 6/21/2006	
HIGH SERVICE ROCK BERM DETAIL	DRAWING NAME: EC04	
	SCALE: NTS	DATE: 1/2003
	DRAWN BY: MRS	APPROVED BY: TRB



TYPE 3 CURB RAMP



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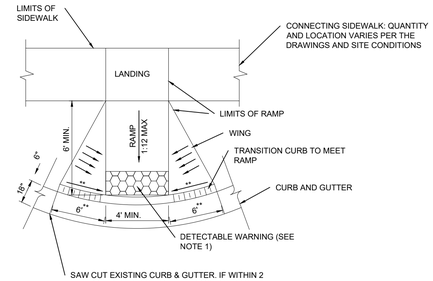
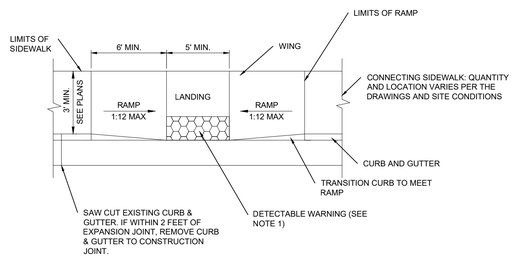


TYPE 1 CURB RAMP



TYPE 2 CURB RAMP

CURB RAMP GENERAL NOTES:

1. CURB RAMPS MUST CONTAIN A DETECTABLE WARNING SURFACE THAT CONSISTS OF RAISED TRUNCATED DOMES COMPLYING WITH THE LATEST REVISION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS).
2. AREA OF RAMP TO INCLUDE CONTRASTING COLOR DOES NOT HAVE TO INCLUDE THE WINGS, UNLESS THE WINGS ARE PART OF THE WALKING SURFACE.
3. TYPICAL SIDEWALK WIDTHS AND CURB RADII SHOWN FOR ILLUSTRATION REFER TO TRANSPORTATION MANUAL FOR SIDEWALK WIDTHS AND RADII.
4. REFER TO PLANS FOR RAMP CONFIGURATIONS AND LOCATIONS.
5. ** 1:10 MAX
6. SLOPE OF LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION.

SIDEWALK CURB RAMP WITH DETECTABLE WARNING

SCALE: N.T.S.

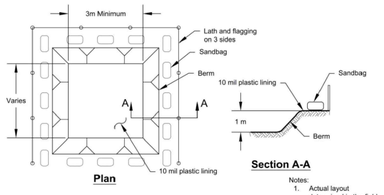
FOR PRIVATE USE ONLY - DETAIL SHALL NOT BE USED IN THE ROW OR EASEMENT AREAS

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.

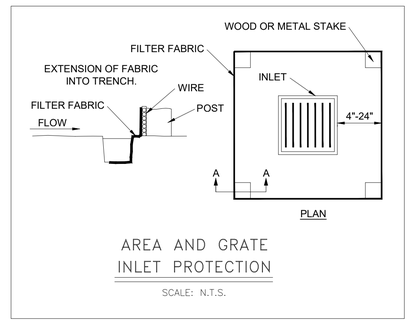
1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO REMOVE EROSION/SEDIMENTATION CONTROLS AT THE COMPLETION OF PROJECT AND GRASS RESTORATION.
2. 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 100lb/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 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	REVISION NOTE: ADOPTED 6/21/2006	
EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES	DRAWING NAME: EC01A	
	SCALE: NTS	DATE: 1/2003
	DRAWN BY: MRS	APPROVED BY: TRB



CONCRETE WASHOUT



AREA AND GRATE INLET PROTECTION

SCALE: N.T.S.

No.	Date	Revisions	App.

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GEORGETOWN, TEXAS 78628

DETAILS

02/09/22
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

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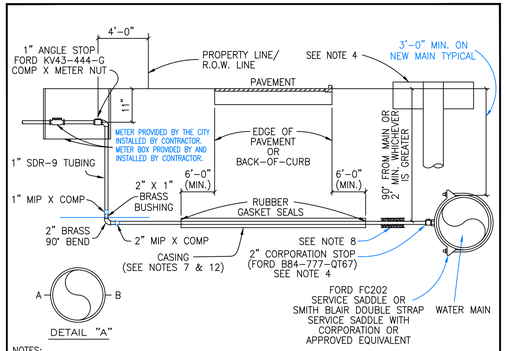
Sheet 22 OF 26

2021-28-SDP

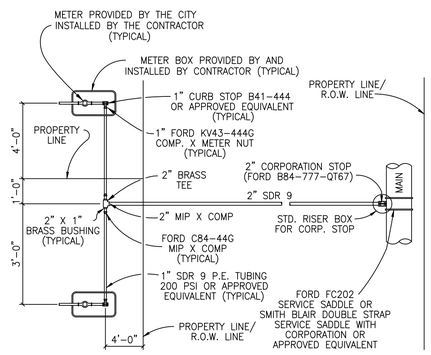


NOTES:

1. SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" OFFSET AND AT THE CENTERLINE AS SHOWN ON DETAIL "A".
2. WHERE NO SIDEWALK EXISTS, METER BOXES SHALL BE SET TO CONFORM TO FINISHED GRADE.
3. AUTHORIZED SERVICE LINE MATERIAL: POLYETHYLENE TUBING SHALL BE SDR-9. CLASS 200, SDR TUBING SHALL HAVE STAINLESS STEEL STIFFENERS.
4. ROTATE THE CORPORATION STOP SO THAT THE OPERATING NUT IS ACTUATED FROM THE VERTICAL POSITION RATHER THAN THE HORIZONTAL. SEE STD. RISER FOR CORP. STOP DETAIL, (DWG # W08).
5. SERVICE LINES SHALL BE CONTINUOUS FROM CORPORATION STOP TO CORPORATION STOP WITH NO FITTINGS IN BETWEEN.
6. SERVICE CASING SHALL NOT BE INSTALLED BY WATER JETTING UNDER ROADWAY.
7. CASING REQUIRED FOR ALL PAVEMENT CROSSINGS. 4" SDR-26 REQUIRED FOR OPEN-CUT. STEEL CASING PIPE REQUIRED FOR JACK AND BORE. LIMITS OF CASING SHOULD EXTEND SIX FEET BEYOND THE EDGE OF PAVEMENT OR BACK-OF-CURB.
8. BEDDING MATERIAL AS PER CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS.
9. ANY VARIATIONS ON FITTINGS MUST BE APPROVED BY THE CITY ENGINEER.
10. METER BOX TO BE CAPABLE OF HOUSING ITRON AUTOMATIC METER READING DEVICE. USE DFW-PLASTICS, INC. PART NO. 1200.SBAMR OR APPROVED EQUAL.
11. ALL SERVICE LINES SHALL BE PLACED 90° PERPENDICULAR TO THE ROADWAY. SEE DETAIL W23.
12. CASING SHALL EXTEND OUT TO WITHIN 4' INSIDE OF THE R.O.W. LINE, ON BOTH SIDES.

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

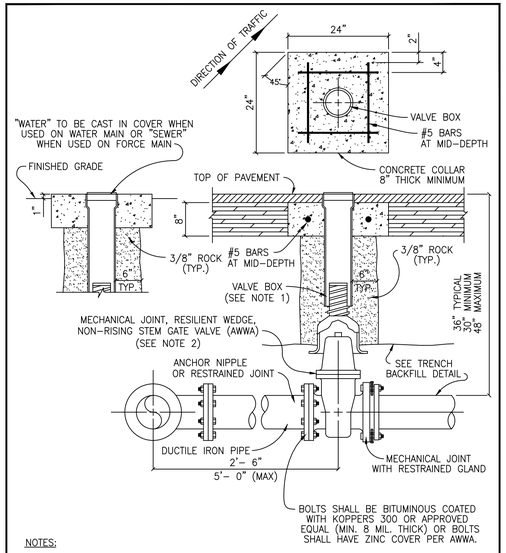
REVISION NOTE: ADOPTED 01/23/2013		
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME:	W03
TYPICAL WATER SERVICE-ELEVATION	SCALE: NTS	DATE: 1/2013
	DRAWN BY: —	APPROVED BY: MH



NOTES:

1. AUTHORIZED SERVICE LINE MATERIAL: POLYETHYLENE TUBING SHALL BE SDR-9. CLASS 200, SDR TUBING SHALL HAVE STAINLESS STEEL STIFFENERS.
2. ANGLE STOP SHALL BE 1" MINIMUM.
3. 1" ANGLE STOPS WITH 3/4" VALVES SHALL NOT BE PERMITTED.
4. MULTIPLE SERVICE/METER INSTALLATIONS OF MORE THAN 4 METERS PER SERVICE AND SERVICE LINES LARGER THAN 2" IN DIAMETER SHALL BE HANDLED ON AN INDIVIDUAL BASIS.
5. ANGLE STOPS 1 1/2" AND 2" IN SIZE SHALL BE PROVIDED WITH BOTH A LOCKING CAP AND METER FLANGE.
6. ANGLE STOPS SHALL BE INSTALLED 8" BELOW FINISHED GRADE AND MARKED WITH A 2" X 2" X 48" TREATED WOOD STAKE, PAINTED BLUE.
7. BEDDING MATERIAL AS PER CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS.
8. CASING REQUIREMENTS FOR SERVICE LINES CROSSING ROADWAYS SEE DETAIL W-03 NOTE #7.
9. ANY VARIATIONS ON FITTINGS MUST BE APPROVED BY THE CITY ENGINEER.
10. ALL SERVICE LINES SHALL BE PLACED 90° PERPENDICULAR TO THE ROADWAY.

REVISION NOTE: ADOPTED 01/23/2013		
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME:	W05
DOUBLE WATER SERVICE PLAN	SCALE: NTS	DATE: 1/2013
	DRAWN BY: —	APPROVED BY: MH

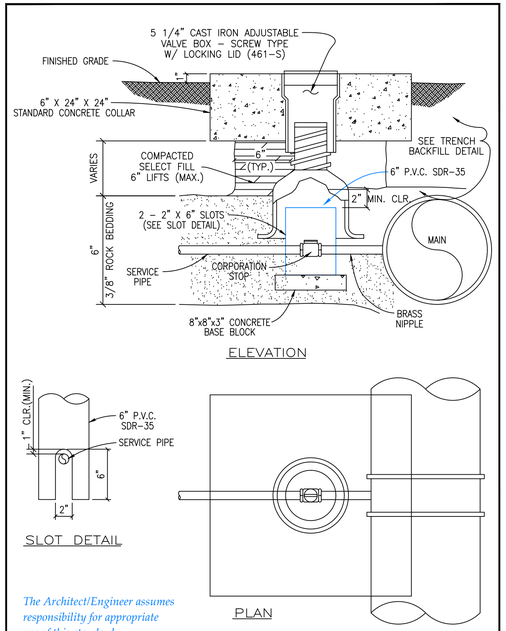


NOTES:

1. VALVE BOX SHALL BE 5 1/4" CAST IRON ADJUSTABLE HAVING AN ADJUSTABLE RANGE OF + OR - 6 INCHES FROM INSTALLED FINISH GRADE.
2. ACCEPTABLE GATE VALVES ARE:
   A. AMERICAN FLOW CONTROL - SERIES 2500
   B. MUELLER - 2360 SERIES
   C. CLOW

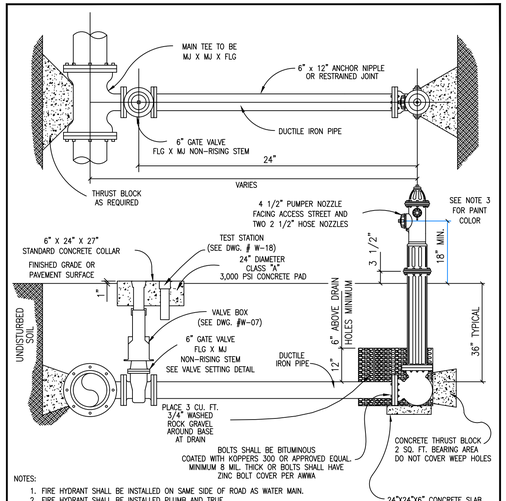
The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006		
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME:	W07
TYPICAL VALVE SETTING	SCALE: NTS	DATE: 1/2003
	DRAWN BY: MRS	APPROVED BY: TRB



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

REVISION NOTE: ADOPTED 6/21/2006		
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME:	W08
STANDARD RISER BOX FOR CORPORATION STOP	SCALE: NTS	DATE: 1/2003
	DRAWN BY: MRS	APPROVED BY: TRB

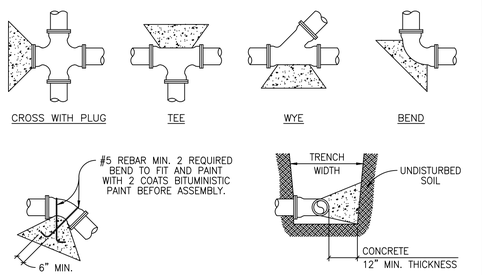


NOTES:

1. FIRE HYDRANT SHALL BE INSTALLED ON SAME SIDE OF ROAD AS WATER MAIN.
2. FIRE HYDRANT SHALL BE INSTALLED PLUMB AND TRUE.
3. ALL FIRE HYDRANT EXTERIORS SHALL BE FACTORY PRIMED AND PAINTED SILVER USING A HIGH GRADE ENAMEL.
4. HEEL AND THRUST BLOCKS TO REST IN UNDISTURBED SOIL.
5. THE ONLY FIRE HYDRANTS ACCEPTABLE ARE:
   A. KENNEDY - K81
   B. AMERICAN DARLING - B84B
   C. CLOW MEDALLION
6. DOUBLE BLUE REFLECTOR "IYE-LITES" BRAND, MANUFACTURED BY PAVEMENT MARKERS INC. TO BE INSTALLED AT CENTERLINE OF STREET PERPENDICULAR TO HYDRANT.
7. ALL METALLIC PIPES AND FITTINGS SHALL BE WRAPPED WITH 8 MIL. POLYETHELENE FILM.

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

REVISION NOTE: ADOPTED 6/21/2006		
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME:	W10
TYPICAL FIRE HYDRANT INSTALLATION	SCALE: NTS	DATE: 1/2003
	DRAWN BY: MRS	APPROVED BY: TRB



*DEADMAN

TYPICAL SECTION

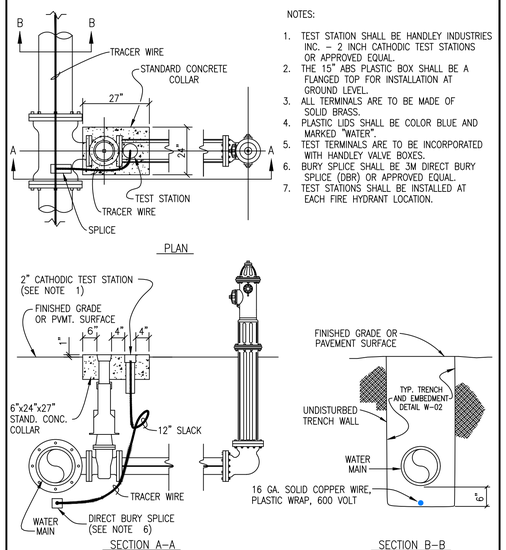
ALL THRUST BLOCKS SHALL BE FORMED. LAID FORMS SHALL BE INSPECTED BY THE CITY OF GEORGETOWN PRIOR TO THE POURING OF CONCRETE AND SHALL ALSO BE INSPECTED BY THE CITY OF GEORGETOWN PRIOR TO COVERING. TYPICAL LOCATIONS WHICH REQUIRE CONCRETE REACTION (THRUST) BLOCKS, FOR PRESSURE MAINS FOUR INCHES (4") AND GREATER, CONCRETE SHALL HAVE 2,500 P.S.I. MINIMUM STRENGTH AT TWENTY EIGHT (28) DAYS AND BEAR AGAINST UNDISTURBED STABLE SOILS, AREA OF CONTACT SHALL BE GOVERNED BY PIPE SIZE, MAXIMUM PRESSURE IN PIPE, AND BEARING CAPACITY OF SOIL. PROTECT FITTINGS, BOLTS, ETC. BY COVERING WITH VISQUEEN OR OTHER ACCEPTABLE MATERIAL. CONCRETE SHALL BE A MINIMUM OF TWELVE INCHES (12") THICK.

PIPE SIZE	THRUST BLOCK AREA REQUIRED	PIPE SIZE	THRUST BLOCK AREA REQUIRED	REMARKS
4"	2.0 SQ. FT.	18"	30.0 SQ. FT.	
6"	4.0 SQ. FT.	20"	37.0 SQ. FT.	VALUES ARE FOR 90° BENDS, BASED ON 2000 P.S.F. SAFE BEARING LOAD AND PIPE PRESSURE OF 150 P.S.I. PLUS 33% SAFETY FACTOR FOR OTHER SOILS AND PRESSURES, THE AREA REQUIRED IS IN DIRECT PROPORTION.
8"	6.6 SQ. FT.	24"	53.0 SQ. FT.	
10"	10.0 SQ. FT.	27"	80.0 SQ. FT.	
12"	14.0 SQ. FT.	30"	98.0 SQ. FT.	
14"	18.0 SQ. FT.	36"	127.0 SQ. FT.	
16"	24.0 SQ. FT.			

* THE ENGINEER OF RECORD SHALL CALCULATE THE SIZE OF THE DEADMAN REQUIRED AS WELL AS ANY INSTALLATION WHICH IS NOT COVERED BY THE ABOVE.

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

REVISION NOTE: ADOPTED 6/21/2006		
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME:	W11
TYPICAL THRUST BLOCKS FOR WATER AND FORCE MAIN	SCALE: NTS	DATE: 1/2003
	DRAWN BY: MRS	APPROVED BY: TRB

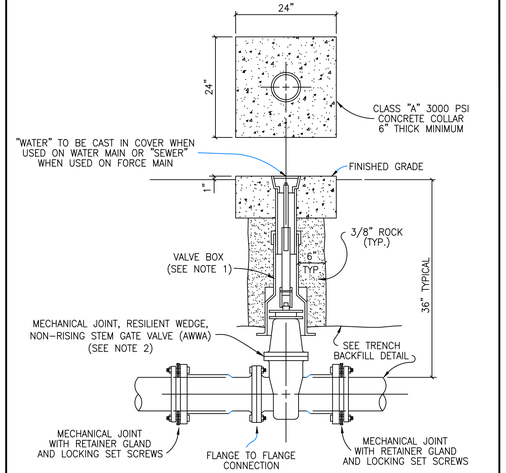


NOTES:

1. TEST STATION SHALL BE HANDLEY INDUSTRIES INC. - 2 INCH CATHODIC TEST STATIONS OR APPROVED EQUAL.
2. THE 15" ABS PLASTIC BOX SHALL BE A FLANGED TOP FOR INSTALLATION AT GROUND LEVEL.
3. ALL TERMINALS ARE TO BE MADE OF SOLID BRASS.
4. PLASTIC LIDS SHALL BE COLOR BLUE AND MARKED "WATER".
5. TEST TERMINALS ARE TO BE INCORPORATED WITH HANDLEY VALVE BOXES.
6. BURY SPLICE SHALL BE 3M DIRECT BURY SPLICE (DBR) OR APPROVED EQUAL.
7. TEST STATIONS SHALL BE INSTALLED AT EACH FIRE HYDRANT LOCATION.

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

REVISION NOTE: ADOPTED 6/21/2006		
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME:	W18
TRACER WIRE INSTALLATION AND TEST STATION LOCATION	SCALE: NTS	DATE: 1/2003
	DRAWN BY: MRS	APPROVED BY: TRB



NOTES:

1. SEE VALVE SETTING DETAIL, DWG. #W-07.
2. ACCEPTABLE GATE VALVES ARE:
   A. MUELLER - 2360 SERIES
   B. CLOW

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

REVISION NOTE: ADOPTED 6/21/2006		
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	DRAWING NAME:	W21
INLINE VALVE INSTALLATION	SCALE: NTS	DATE: 1/2003
	DRAWN BY: MRS	APPROVED BY: TRB

No.	Date	Revisions	App.

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RIVERY
BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

DETAILS

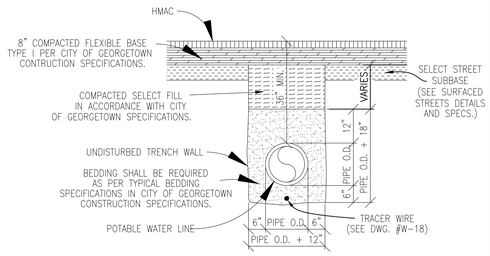
02/06/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.23

Sheet 23 OF 26

2021-28-SDP



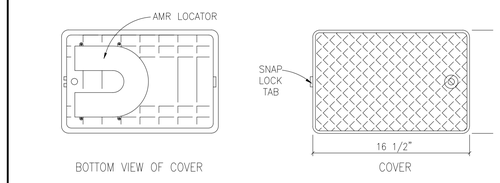
TRENCH WIDTHS
*PIPE LESS THAN 20" DIAMETER
1'-0" + PIPE O.D.
*20" DIAMETER PIPE AND LARGER
2'-0" + PIPE O.D.

NOTES:
1. DENSITY TESTS SHALL BE TAKEN IN ACCORDANCE WITH THE CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS AND STANDARDS.
2. CONTRACTOR OR ENGINEER MAY USE FLOWABLE BACKFILL AS AN ALTERNATE BACKFILL MATERIAL (SEE C9 FLOWABLE BACKFILL FOR THE SPECIFICATION).

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
TRENCH AND EMBEDMENT DETAIL UNDER PROPOSED ROADWAY

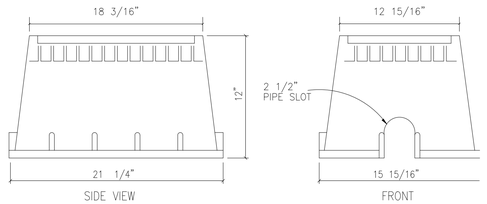
DRAWING NAME: W22
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB



BOTTOM VIEW OF COVER

COVER

DFW PLASTINCS, INC. PART NO. 1200.SBAMR, BLACK BOX, BLACK COVER AND 2 1/2" PIPE SLOT OR APPROVED EQUAL.



SIDE VIEW

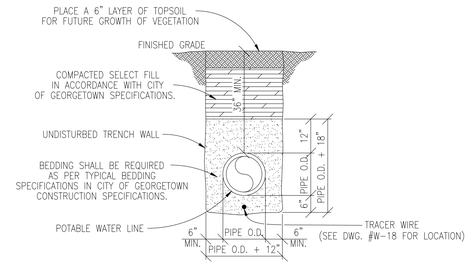
FRONT

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

REVISION NOTE: 06/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
METER BOX (NON-TRAFFIC AREAS)

DRAWING NAME: W23
SCALE: | DATE:
DRAWN BY: | APPROVED BY:



TRENCH WIDTHS
*PIPE LESS THAN 20" DIAMETER
1'-0" + PIPE O.D.
*20" DIAMETER PIPE AND LARGER
2'-0" + PIPE O.D.

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

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
TRENCH AND EMBEDMENT DETAIL UNDER NON-PAVED AREAS

DRAWING NAME: W02
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB

No.	Date	Revisions	App.

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BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

DETAILS

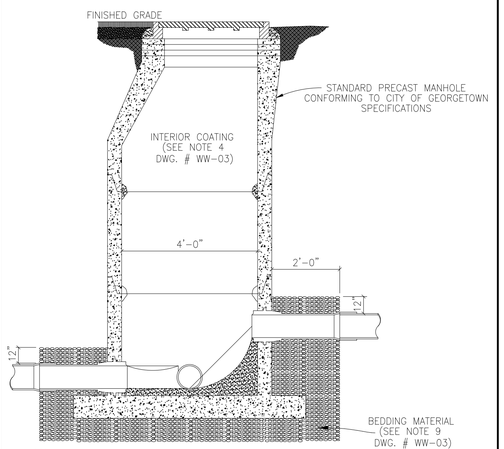
02/06/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.24

Sheet 24 OF 26
2021-28-SDP

Texas 811

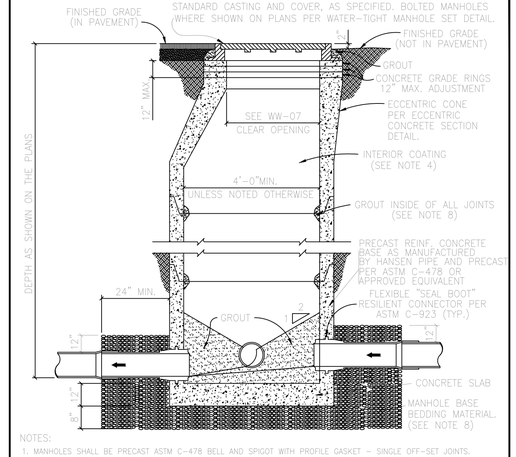


NOTES:

1. TO BE USED WHERE DROP IS SIX INCHES (6") TO TWO FEET (2'-0").
2. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
3. CONSTRUCTION OF DROP SHALL PROVIDE AN OVERSIZED SLAB TO EXTEND UNDER THE DROP CONNECTION.
4. MINIMUM PIPE SIZE FOR DROP IS EIGHT INCHES (8").
5. SEE STANDARD MANHOLE DETAIL (DWG. # WW-03) FOR ADDITIONAL REQUIREMENTS.

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

	CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	APPROVED NOTE: ADOPTED 6/21/2006
	DROP CONNECTION–PRECAST MANHOLE TYPE "B"	DRAWING NAME: WW05
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; APPROVED BY: TRB

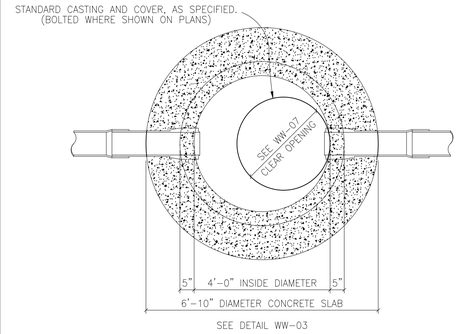


NOTES:

1. MANHOLES SHALL BE PRECAST ASTM C-478 BELL AND SPIGOT WITH PROFILE GASKET – SINGLE OFF-SET JOINTS.
2. SEE PLANS AND MANHOLE SCHEDULE, FOR MANHOLE SIZE, LOCATION, CONFIGURATION, TYPE OF TOP SECTION, VENTING REQUIREMENTS, PIPE SIZE AND TYPES.
3. SEE SPECIFICATIONS ON MATERIALS AND CONSTRUCTION.
4. AN 80 MIL. COAT OF RAVEN LINING SYSTEMS, RAVEN 405 ULTRA HIGH BUILD EPOXY COATING, OR SPRAY WALL EPOXY COATING, OR APPROVED EQUAL, TO BE APPLIED TO ENTIRE INTERIOR OF EACH WASTEWATER MANHOLE AND UNDERSIDE OF FLAT TOPS.
5. ALL MANHOLE COVERS SHALL BE BOLTED AND GASKETTED WHEN MANHOLES ARE LOCATED OUT FROM PAVEMENT.
6. MANHOLES TO BE VENTED ARE IDENTIFIED ON MANHOLE SCHEDULE; REFERENCE MANHOLE VENT DETAIL.
7. MANHOLES ARE TO BE DESIGNED TO RESIST LATERAL AND VERTICAL SOIL FORCES RESULTING FROM MANHOLE DEPTH. ADDITIONALLY, MANHOLES LOCATED IN PAVEMENT TO BE DESIGNED FOR HS-20 TRAFFIC LOADS.
8. GROUT SHALL MEET THE REQUIREMENTS AS STATED BY THE COATING MANUFACTURER.
9. MANHOLE BASE BEDDING MATERIAL SPECS. FOR 3/4" WASHED GRAVEL:
   SIEVE SIZE 2", PERCENT (%) RETAINED 0
   SIEVE SIZE 1 1/2", % RETAINED 0-10
   SIEVE SIZE 1", % RETAINED 45-80
   SIEVE SIZE 3/4", % RETAINED 85-100
   SIEVE SIZE 3/8", % RETAINED 95-100

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

	CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	APPROVED NOTE: ADOPTED 6/21/2006
	STANDARD MANHOLE – SECTION	DRAWING NAME: WW03
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; APPROVED BY: TRB



SEE DETAIL WW-03

MANHOLE PLAN

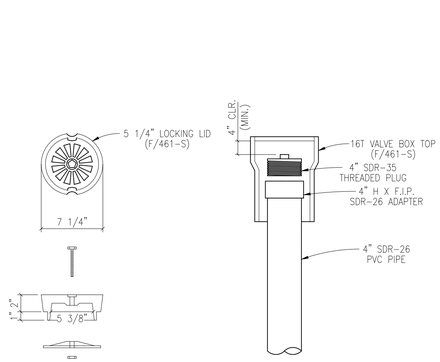
CITY OF GEORGETOWN NOTES:

MANHOLE DETAILS SHALL REFLECT THE CITY'S MINIMUM SPECIFICATIONS, AS STATED BELOW:

A. ALL MANHOLES SHALL BE 48" I.D., R.C.P., CLASS III, WITH RUBBER PROFILE GASKET – SINGLE OFF-SET JOINT CONFORMING TO ASTM C478, C433 AND C76.
B. ALL MANHOLES SHALL HAVE FRAME AND COVER, AS MANUFACTURED BY EAST JORDAN IRON WORKS (AS PER DETAIL # WW-07) OR APPROVED EQUIVALENT.
C. ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON FRAME AND COVER.
D. ALL MANHOLES SHALL HAVE AN ECCENTRIC CONE.
E. MANHOLES MAY HAVE A FLAT LID, IF APPROVED BY CITY OF GEORGETOWN, BEING 12" THICK WITH A MINIMUM 30" OPENING, AS MANUFACTURED BY HANSEN PIPE AND PRECAST OR APPROVED EQUAL M.F.G. CONFORMING TO ASTM C478, 5000 P.S.I. CONCRETE, TRAFFIC BEARING AND WITH PROFILE GASKET – SINGLE OFF-SET JOINT CONFORMING TO ASTM C443.
F. INVERTS AND FLEXIBLE SEAL BOOTS, PER ASTM C-923, SHALL BE CAST INTO BASE SECTION.
G. MINIMUM DROP BETWEEN INVERTS SHALL BE ONE-TENTH OF A FOOT (0.1').
H. GRADE RINGS WITH AN I.D. TO MATCH FRAMES CLEAR OPENING WITH A MAXIMUM ADJUSTMENT OF 12" ARE ALLOWED.

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

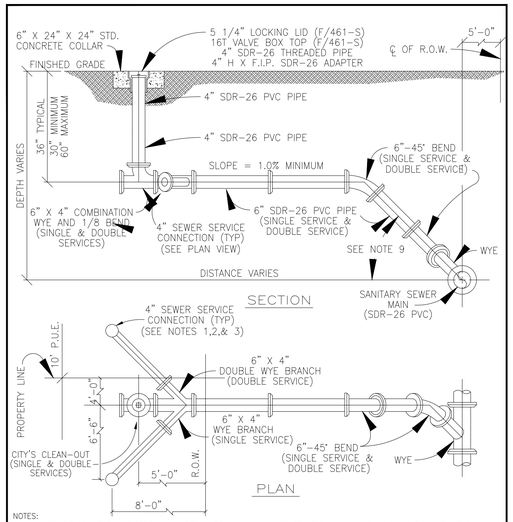
	CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	APPROVED NOTE: ADOPTED 6/21/2006
	STANDARD MANHOLE – PLAN	DRAWING NAME: WW02
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; APPROVED BY: TRB



5 1/4" LOCKING LID
(F/461-S)

SEWER CLEAN-OUT
CITY OF GEORGETOWN
(RESIDENTIAL SERVICE)

	CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	APPROVED NOTE: ADOPTED 6/21/2006
	SEWER CLEAN-OUT DETAIL	DRAWING NAME: WW12
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; APPROVED BY: TRB



SECTION

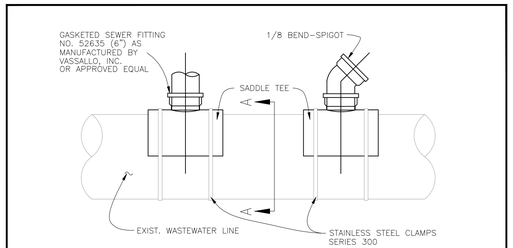
PLAN

NOTES:

1. SERVICE CONNECTION RISERS SHALL TERMINATE 8' INSIDE THE PROPETY LINE.
2. THE END OF EACH SERVICE CONNECTION RISER SHALL BE EXTENDED 12" ABOVE FINISH GRADE.
3. EACH SERVICE CONNECTION SHALL BE PLUGGED WATER-TIGHT WITH AN APPROVED CAP OR PLUG.
4. FOR P.V.C. INSTALLATIONS, CONNECT TO EXISTING "BELL END" AND CONNECT OPPSITE END WITH P.V.C. TO P.V.C. KNOCK ON SLEEVE.
5. SOLIDLY TAMP BACKFILL AT LEAST ONE FOOT (1'-0") ABOVE TOP OF PIPE. SERVICES UNDER PAVED AREAS SHALL BE BACKFILLED TO THE SAME SPECIFICATIONS AS SHOWN ON PAVEMENT REPLACEMENT DETAIL.
6. CONTRACTOR SHALL MARK ON A CLEAN SET OF PLANS THE FINAL STATIONING OR DISTANCE AND DIRECTION FROM MANHOLE TO EACH SERVICE LATERAL AND GIVE TO ENGINEER FOR RECORD DRAWING PURPOSES.
7. ANY DEVIATION FROM THESE METHODS MUST BE APPROVED BY THE CITY OF GEORGETOWN ENGINEERING DEPARTMENT.
8. SERVICE LINE MATERIAL SHALL BE P.V.C., SDR-26.
9. SEWER SERVICE SLOPE TO BE 45° OFF CENTERLINE OF MAIN.

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

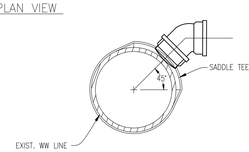
	CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	APPROVED NOTE: ADOPTED 6/21/2006
	SEWER SERVICE CONNECTIONS	DRAWING NAME: WW13
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; APPROVED BY: TRB



PLAN VIEW

SADDLE TEE					
PART NO.	SIZE	A	L1	H	P
52635	8"X6"	5.625	5.659	1.448	

PLASTIC TRENDS INC. – 1/8 BEND – SPIGOT					
PART NO.	SIZE	A	B	C	D
G 406	6	11.270	6.146	1.870	6.090



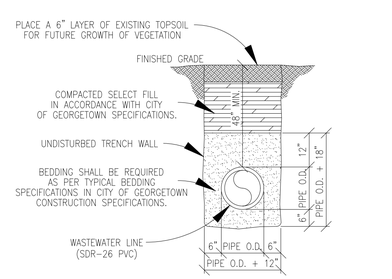
SECTION A–A

NOTES:

1. FLEXIBLE SADDLE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.
2. SADDLE TEE SHALL BE ORIENTATED 45° TO MAIN. (SEE SEWER SERVICE CONNECTIONS DETAIL – DWG # WW-13)
3. EXCAVATE AROUND EXISTING 8-INCH PIPE, EXPOSING SUFFICIENT ROOM FOR S.S. CLAMPS.
4. THOROUGHLY CLEAN AND DRY THE MATING SURFACE WITH RAG OR PAPER TOWEL MAKE SURE THEY ARE FREE OF DUST AND MOISTURE.
5. MARK THE SIZE OF THE HOLE TO BE CUT USING THE GASKET SKIRT OR THE SADDLE ITSELF AS THE TEMPLATE.
6. SAW OUT THE SECTION OF THE PIPE WHERE THE SADDLE WILL BE LOCATED, WITH A SABER OR KEY HOLE SAW.
7. TEST TO MAKE SURE SADDLE FITS HOLE PROPERLY.
8. SERVICE PIPE SHALL NOT EXTEND MORE THAN ONE-HALF INCH INTO THE MAIN.
9. PLACE GASKET SKIRT AND SADDLE OVER OPENING AND TIGHTEN BAND CLAMPS EVENLY UNTIL SADDLE IS FIRMLY ATTACHED TO THE PIPE. APPLY PRESSURE ON THE SADDLE AGAINST THE PIPE WHILE TIGHTENING THE CLAMPS AS INDICATED ABOVE. DO NOT OVER TIGHTEN, DO NOT STRIP THREAD.
10. REPLACE THE BEDDING AND BACKFILL IN ACCORDANCE WITH THE TRENCH EMBEDMENT DETAIL.

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

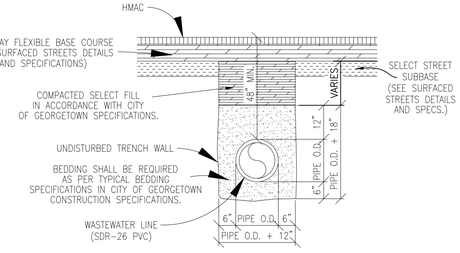
	CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	APPROVED NOTE: ADOPTED 6/21/2006
	GASKETED SEWER FITTING FOR SEWER SERVICE CONNECTIONS TO EXISTING MAINS	DRAWING NAME: WW13A
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; APPROVED BY: TRB



TRENCH WIDTHS
*PIPE LESS THAN 20" DIAMETER
1'-0" + PIPE O.D.
*20" DIAMETER PIPE AND LARGER
2'-0" + PIPE O.D.

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

	CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	APPROVED NOTE: ADOPTED 6/21/2006
	TRENCH AND EMBEDMENT DETAIL UNDER NON-PAVED AREAS	DRAWING NAME: WW16
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; APPROVED BY: TRB



TRENCH WIDTHS
*PIPE LESS THAN 20" DIAMETER
1'-0" + PIPE O.D.
*20" DIAMETER PIPE AND LARGER
2'-0" + PIPE O.D.

NOTES:

1. DENSITY TESTS SHALL BE TAKEN IN ACCORDANCE WITH THE CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS AND STANDARDS.
2. CONTRACTOR OR ENGINEER MAY USE FLOWABLE BACKFILL AS AN ALTERNATE BACKFILL MATERIAL (SEE C9 FLOWABLE BACKFILL FOR THE SPECIFICATION).

	CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	APPROVED NOTE: ADOPTED 6/21/2006
	TRENCH AND EMBEDMENT DETAIL UNDER PROPOSED ROADWAY	DRAWING NAME: WW18
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; APPROVED BY: TRB

No.	Date	Revisions	App.

JAB Engineering, LLC
(F-14076)
4500 Williams Drive
Suite 212-121
Georgetown, TX 78633
512-779-7414 (p)
josh.baran@jabeng.com

RIVERY
BUSINESS PARK

2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

DETAILS

02/06/23
STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED
PROFESSIONAL ENGINEER

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.25

Sheet 25 OF 26

2021-28-SDP

Texas 811

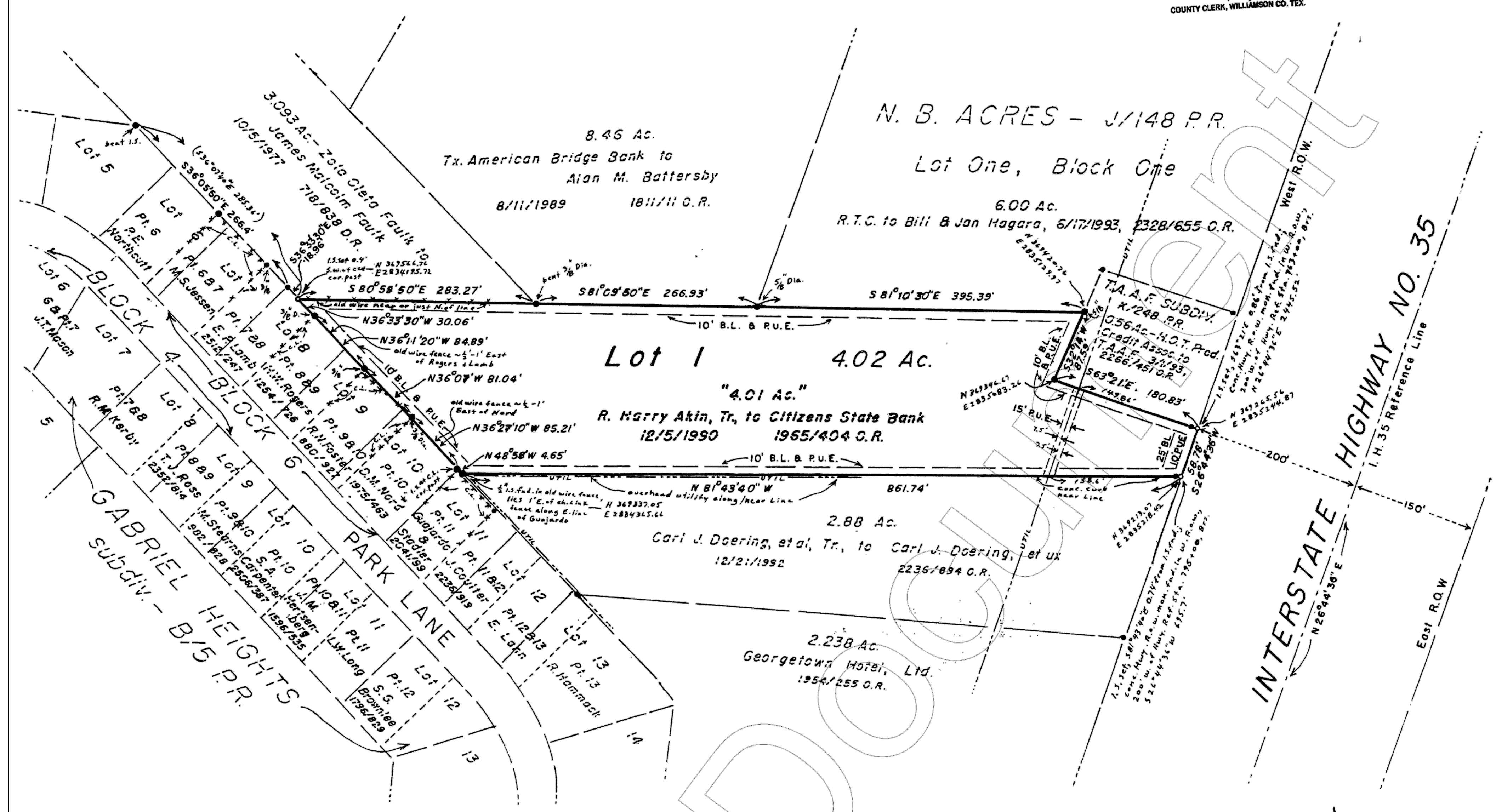
F. T. B. COMMERCIAL NUMBER ONE

a 4.02 acre subdivision situated in the Nicholas Porter Survey, Abstract No. 497, in the City of Georgetown, Williamson County, Texas.

DOC# 9459620

FILED FOR RECORD
DEC 14 1994
COUNTY CLERK, WILLIAMSON CO. TEX.

CABINET L
SLIDE 224



LEGEND

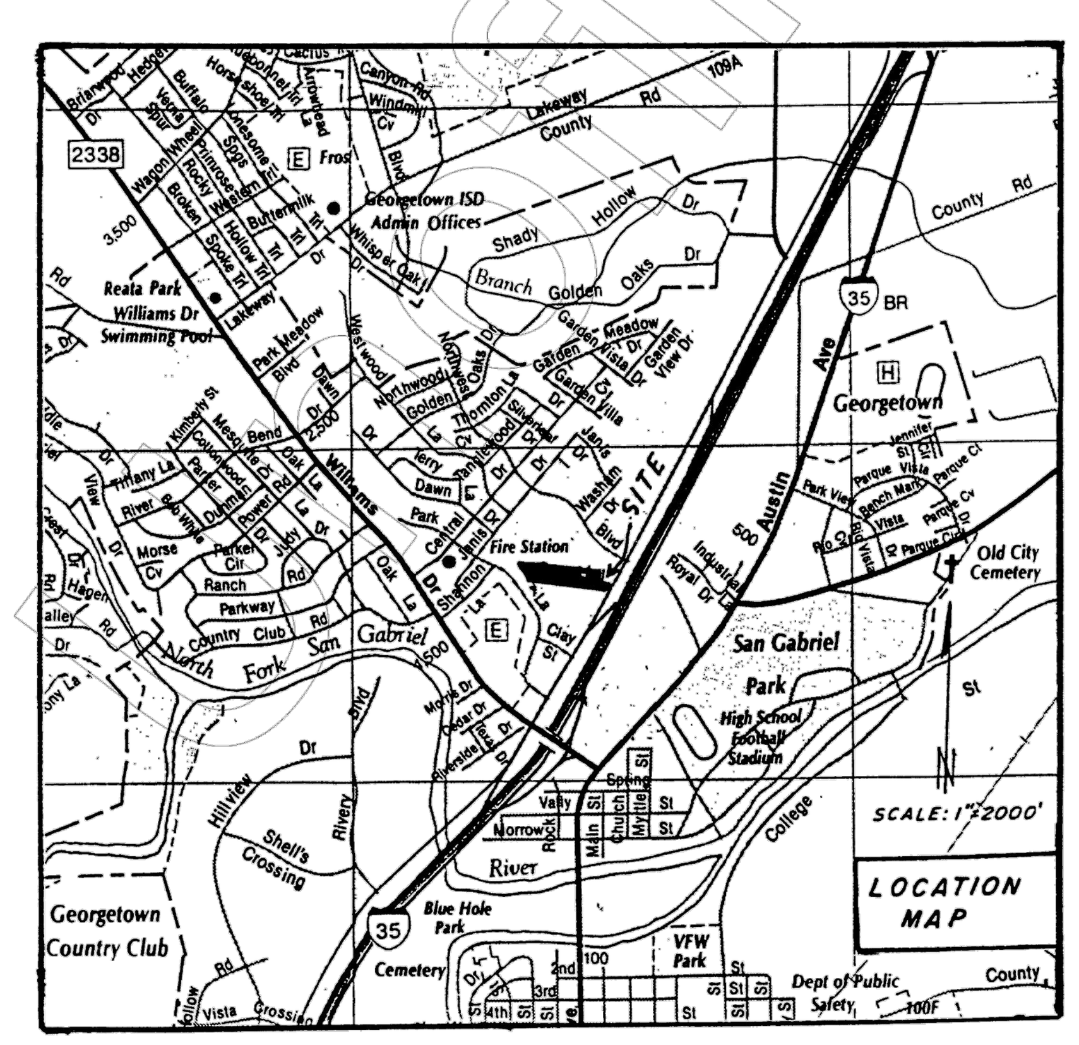
- Rebar iron stake set (1/2" Dia.)
- Rebar iron stake found (1/2" Dia., except as shown)
- Wire fence
- Chain link fence
- Overhead utility line
- Building Line
- Public Utility Easement

Scale: 1" = 100'

PROPERTY OWNER: First Texas Bank
900 S. Austin Ave.
Georgetown, Texas 78626
TOTAL ACREAGE: 4.02 acres
TOTAL NO. BLOCKS: 1
TOTAL NO. LOTS: 1
DENSITY (No. lots per acre): 0.25
SIZE OF SMALLEST LOT: 4.02 acres
LINEAL FEET NEW ROADWAY: 0
PROPOSED USE: Commercial, C-HI
MAXIMUM IMPERVIOUS COVER: 70 %

SURVEYOR: Michael Meador, RPLS #1966
MEADOR SURVEYING
P. O.Box 96
Georgetown, Texas 78627
Tel.: (512) 863-5852

Date: November 8, 1994



NOTES:

1) Water, wastewater and electrical service for this subdivision will be provided by the City of Georgetown, Texas.
2) This tract is located within the Edwards Aquifer Recharge Zone; no construction in the subdivision may begin until the Texas Natural Resources Conservation Commission has approved in writing the water pollution abatement plan.
3) No lot in this subdivision is encroached by any Special Flood Hazard Areas inundated by 100 Year Flood as identified by the U. S. Federal Emergency Management Agency Flood Insurance Rate Map # 48491C0230 C, effective date 9/27/1991.
4) The provisions of the Century-Plan Development Plan shall also govern this project;this tract is designatedIntensity Level 6.
5) The bearings on this plat have been rotated to the Texas Plane Coordinate System.
6) There shall be an avigation easement over this subdivision which:
a. Grants for the use and benefit of the public a continuing easement and right of flight for the passage of aircraft in the space above the surface of the land over which this easement is obtained, together with the right to cause in said air space such noise as may be inherent in the operation of aircraft, now known or hereafter used for navigation of or flight in the air space using said air space for landing at, taking off from or operationg on the Georgetown Municipal Airport; and
b. will limit the height of any structure to no more than the approach slope of the transition slope elevation of the Georgetown Airport as indicated on the plat. The maximum height of any structure shall be the difference between the ground elevation and the avigation elevation for any particular location.
c. This subdivision is located beneath the horizontal control elevation of 939 feet.
d. The maximum height of any structure located in the easement is189 ft.

Sheet 1 of 2

DOC.# 9459620

Cabinet L, Slide 225

F. T. B. COMMERCIAL NUMBER ONE, cont.

Field notes for a tract of 4.02 acres of land out of the Nicholas Porter Survey, Abstract No. 497, in the City of Georgetown, Williamson County, Texas; being that tract described as containing 4.01 acres in a trustee's deed from R. Harry Akin, Tr., to Citizens State Bank, dated December 5, 1990, and recorded in Volume 1965, Page 404 of the Official Records of Williamson County, Texas.

Beginning at a 1/2" rebar iron stake set at the point of intersection of the easterly projection of the south line of the above described 4.01 acre tract, said line being common with the north line of that 2.88 acre tract described in a deed from Carl J. Doering, et al, Tr., to Carl J. Doering, et ux, dated December 21, 1992, and recorded in Volume 2236, Page 894 of said Official Records, as said line is found marked on the ground with iron stakes, with the westerly right-of-way of Interstate Highway No. 35; said stake set bearing N 26°44'36" E, along said highway westerly right-of-way, 695.7 ft. distant from the remains of a concrete highway right-of-way monument found lying 200 ft. westerly of and opposite highway reference line station 795+00; said stake lying about 0.3 ft. southerly of a concrete curb which extends westerly along or near an easterly portion of said 4.01 acre south line and 2.88 acre north line; said stake being at or near the common record southeast corner of said 4.01 acre tract and northeast corner of said 2.88 acre tract; for the POINT OF BEGINNING and Southeast corner hereof.

Thence leaving said highway, and proceeding along said staked common 4.01 acre south line and 2.88 acre north line, N 81°43'40" W, at 0.74 ft. pass a 1/2" rebar iron stake found, at about 173.3 ft. pass about 1 ft. southerly of the westerly end of said concrete curb, in all 861.74 ft. to a 1/2" rebar iron stake found, in the remains of an old wire fence, marking the common southwest corner of said 4.01 acre tract and northwest corner of said 2.88 acre tract; said stake lying about 1 ft. northeasterly of a chain link fence extending along or near the northeasterly line of that tract, described as being a portion of Lot 11, Block 6 of GABRIEL HEIGHTS, a subdivision of record in Cabinet B, Slide 5 of the Plat Records of Williamson County, Texas, as described in a deed from Melve Lee Smith to James Robert Guajardo and Jennifer Ann Stadler, dated July 29, 1991, and recorded in Volume 2041, Page 99 of said Official Records; for the Southwest corner hereof.

Thence leaving said 2.88 acre tract, and proceeding along the southwesterly line of said 4.01 acre tract, N 48°58' W 4.65 ft. to a 1/2" rebar iron stake found, on the northwesterly side of a chain link fence post at the northerly end of said chain link fence, marking the common most northerly corner of said Guajardo/Stadler tract and most easterly corner of that tract, described as being a portion of Lot 10, Block 6 of said GABRIEL HEIGHTS, as described in a deed from Elsie A. Nord to Donald Lee Nord, dated January 4, 1991, and recorded in Volume 1975, Page 463 of said Official Records; said point being the common most northerly corner of said Lot 11, Block 6 and most easterly corner of said Lot 10, Block 6; said stake lying about 1 ft. westerly of the aforementioned old wire fence.

Thence leaving said Guajardo/Stadler tract and said Lot 11, and continuing along the southwesterly line of said 4.01 acre tract, common with the northeasterly line of said Nord tract and said Lot 10, Block 6 of GABRIEL HEIGHTS, running about 1/2 ft.to 1 ft. westerly of an old wire fence, N 36°27'10" W 85.21 ft. to a 3/8" rebar iron stake found, on the southwesterly side of the easterly corner post of a chain link fence, marking the common most northerly corner of said Nord tract and most easterly corner of that tract, described as being portions of Lot 9 and 10, Block 6 of said GABRIEL HEIGHTS, as described in a deed from J. C. Bayless, et ux, to Randolph N. and Anna Melba C. Foster, dated June 28, 1982, and recorded in Volume 880, Page 927 of the Deed Records of Williamson County, Texas.

Thence leaving said Nord tract, and continuing along the southwesterly line of said 4.01 acre tract, common with the northeasterly line of said Foster tract and said Lots 10 and 9, Block 6 of said GABRIEL HEIGHTS, running near a chain link fence,
N 36°07' W, passing the record common most northerly corner of said Lot 10 and most easterly corner of said Lot 9, in all 81.04 ft. to a 3/8" rebar iron stake found, lying about 1/2 ft. northeasterly and 1/2 ft. northwesterly of the northerly corner post of said chain link fence, marking the common most northerly corner of said Foster tract and most easterly corner of that tract, described as being portions of Lot 8 and 9, Block 6 of said GABRIEL HEIGHTS, as described in a deed from Gary L. Banks to Hoy W. Rogers, et ux, dated October 2, 1985, and recorded in Volume 1254, Page 726 of said Official Records.

Thence leaving said Foster tract, and continuing along the southwesterly line of said 4.01 acre tract, common with the northeasterly line of said Rogers tract and said Lots 9 and 8, Block 6 of said GABRIEL HEIGHTS, running about 1/2 ft.to 1 ft. westerly of an old wire fence, N 36°11'20" W, passing the record common most northerly corner of said Lot 9 and most easterly corner of said Lot 8, in all 84.89 ft. to a 3/8" rebar iron stake found, on the northeast side of the easterly corner post of a chain link fence, marking the common most northerly corner of said Rogers tract and most easterly corner of that tract, described as being portions of Lot 7 and 8, Block 6 of said GABRIEL HEIGHTS, as described in a deed from Rodney D. Kellum, et ux, to E. P. and Bobbie Lamb, dated March 31, 1994, and recorded in Volume 2512, Page 247 of said Official Records.

Thence leaving said Rogers tract, and continuing along the southwesterly line of said 4.01 acre tract, common with the northeasterly line of said Lamb tract and said Lot 8, Block 6 of said GABRIEL HEIGHTS, running about 1/2 ft. westerly of an old wire fence, N 36°33'30" W 30.06 ft. to a 1/2" rebar iron stake set, about 0.4 ft. southwesterly of an old cedar fence corner post, at the common northwest corner of said 4.01 acre tract and most southerly southwest corner of that 3.093 acre tract described in a deed from Zola Oleta Faulk to James Malcolm Faulk, dated October 5, 1977, and recorded in Volume 718, Page 838 of said Deed Records; said stake set bearing S 36°33'30" E 18.96 ft. distant from a 1/2" rebar iron stake found, in said Lamb northeasterly line, marking the common most northerly corner of said Lot 8 and most easterly corner of said Lot 7; said stake also bearing, along the northeasterly line of said Block 6 of GABRIEL HEIGHTS, S 36°05'30" E 266.4 ft. and S 36°33'30" E 18.96 ft. (or S 36°07'40" E a total distance of 285.36 ft.) distant from a bent 1/2" rebar iron stake found, referred to in said Faulk deed, marking the most northerly northeast corner of Lot 5, Block B of said GABRIEL HEIGHTS at a slight angle point in the southwesterly line of said 3.093 acre tract; for the Northwest corner hereof.

Thence leaving said Lamb tract and said GABRIEL HEIGHTS, and proceeding along the common most westerly north line of said 4.01 acre tract and south line of said 3.093 acre tract, near or just northerly of the majority of which runs the remains of an old wire fence, S 80°59'50" E 283.27 ft. to a bent 3/8" rebar iron stake found marking the common southeast corner of said 3.093 acre tract and the "most Westerly Southwest" corner of that 8.46 acre tract described in a deed from Texas American Bridge Bank to Alan M. Battersby, dated August 11, 1989, and recorded in Volume 1811, Page 11 of said Official Records.

Thence leaving said 3.093 acre tract, and continuing along said 4.01 acre most westerly north line, common with the south line of said 8.46 acre tract, S 81°09'50" E 266.93 ft. to a 5/8" rebar iron stake found marking the common "most Southerly Southwest" corner of said 8.46 acre tract and "southwesterly" corner of Lot One, Block One, N. B. ACRES, a subdivision of record in Cabinet J, Slide 148 of said Plat Records, the same being the "most Southerly southwest" corner of that 6.00 acre tract described in a deed from the Resolution Trust Corp. to Bill and Jan Hagara, dated June 17, 1993, and recorded in Volume 2328, Page 655 of said Official Records.

Thence leaving said 8.46 acre tract, and continuing along said 4.01 acre most westerly north line, common with the south line of said Lot One, Block One, N. B. ACRES and said Hagara 6.00 acre tract, S 81°10'30" E 395.39 ft. to a 5/8" rebar iron stake found, just westerly of a wood rail fence, marking the common "most northerly N. E." corner of said 4.01 acre tract and "southerly exterior" corner of said Lot One, Block One, N. B. ACRES and southerly exterior corner of said Hagara 6.00 acre tract; said stake lying in the westerly line of T. A. A. F. SUBDIVISION, a subdivision of record in Cabinet K, Slide 248 of said Plat Records, and also lying in the west line of that 0.56 acre tract described in a deed from Heart of Texas Production Credit Association to Texas Amateur Athletic Federation, dated March 1, 1993, and recorded in Volume 2266, Page 451 of said Official Records; for the Most Northerly Northeast corner hereof.

Thence leaving said Lot One, Block One, N. B. ACRES and said Hagara 6.00 acre tract, and proceeding along the most westerly east line of said 4.01 acre tract, common with the westerly line of said T. A. A. F. SUBDIVISION and said 0.56 acre tract,
S 32°14' W, westerly of said wood rail fence, 87.59 ft. to a 1/2" rebar iron stake found marking the common interior corner of said 4.01 acre tract and southwest corner of said T. A. A. F. SUBDIVISION and said 0.56 acre tract; for the Interior corner hereof.

Thence proceeding along the common most easterly north line of said 4.01 acre tract and south line of said T. A. A. F. SUBDIVISION and 0.56 acre tract, S 63°21' E, southerly of said wood rail fence, at 179.97 ft. pass a 1/2" rebar iron stake found, in all 180.83 ft. to a 1/2" rebar iron stake set in the westerly right-of-way of the aforementioned Interstate Highway No. 35; said stake set bearing S 26°44'36" W, along said highway westerly right-of-way, 2445.52 ft. distant from a concrete highway right-of-way monument found lying 200 ft. westerly of and opposite highway reference line station 763+00; said stake being at or near the common record "most easterly N. E." corner of said 4.01 acre tract and southeast corner of said T. A. A. F. SUBDIVISION and 0.56 acre tract; for the Most Easterly Northeast corner hereof.

Thence leaving said T. A. A. F. SUBDIVISION and 0.56 acre tract; and proceeding along the westerly right-of-way of said Interstate Highway No. 35, along or near the record most easterly east line of said 4.01 acre tract, S 26°44'36" W 58.78 ft. to the POINT OF BEGINNING, containing 4.02 acres of land.

CABINET L
SLIDE 225

STATE OF TEXAS)(KNOW ALL MEN BY THESE PRESENTS: That I, Michael Meador, Registered
WILLIAMSON COUNTY)(Professional Land Surveyor No. 1966 of the State of Texas, do hereby certify that this survey was made on the ground of the property legally described hereon and is correct, and that there are no apparent significant discrepancies, conflicts, overlapping of improvements, visible utility lines or roads in place, except as shown on the accompanying plat, and that said property has access to an from a public roadway, to the best of my knowledge an belief; I further certify that (1) this subdivision is located within the Edwards Aquifer Recharge Zone, and no construction in the subdivision may begin until the Texas Natural Resources Conservation Commission has approved in writing the pollution abatement plan, (2) no lot in this subdivision is encroached by any Special Flood Hazard Areas inundated by 100 year Flood as identified by the U. S. Federal Emergency Management Agency Boundary Map (Flood Insurance Rate Map),Community Panels Number 48491C0230 C, effective date September 27, 1991, and (3) each lot contains more than 6,000 square feet of land.

TO CERITIFY WHICH, WITNESS my hand and seal of office at Georgetown, Williamson County, Texas this the 8 day of November, 1994.

Michael Meador, RPLS #1966
MEADOR SURVEYING
P. O. Box 96, Georgetown, Tx. 78627
Tel.: (512) 863-5852

STATE OF TEXAS · MICHAEL MEADOR · 1966 · REGISTERED PUBLIC SURVEYOR

STATE OF TEXAS)(KNOW ALL MEN BY THESE PRESENTS: That First Texas Bank, owner of the
WILLIAMSON COUNTY)(4.02 acre tract of land, out of the Nicholas Porter Survey, Abstract No.497, in Williamson County, Texas, as described hereon, being that tract of land described in a deed from R. Harry Akin, Tr., dated December 5, 1990, and recorded in Volume 1965, Page 404 of the Official Records of Williamson County, Texas, does hereby subdivide said 4.02 acre tract, in accordance with this plat, to be known as F.T.B. COMMERCIAL NUMBER ONE, and does hereby dedicate to the public any streets and easements shown hereon, subject to any easements or restrictions heretofore granted.

Witness my/our hands, this the 14 day of November, 1994, A.D.

First Texas Bank
900 S. Austin Ave.
Georgetown, Texas 78626

By: ____________

STATE OF TEXAS)(KNOW ALL MEN BY THESE PRESENTS: That before
WILLIAMSON COUNTY)(me, the undersigned authority, on this day personally appeared E. L. Gentry known to me to be the person(s) whose name(s) is/are are subscribed to the foregoing instrument, and acknowledged to me that he/they executed the same for the purposes and considerations therein expressed, and in the capacity therein stated.

Given under my hand and seal of office this the 14 day of November, 1994 A.D.

Carol Wilson
Notary Public, State of Texas
My Commission expires:

CAROL WILSON
Notary Public, State of Texas

Approved for the U. S. Postal Service this the 12 day of Dec, 1994 A.D.

Postmaster, Georgetown, Texas

Be it resolved by the City Council of Georgetown, Texas, that First Texas Bank, owner of the hereon described subdivision to be known as F.T.B. COMMERCIAL NUMBER ONE, is hereby authorized to file for record in the Office of the County Clerk of Williamson County, Texas, this plat of said subdivision attached hereto, and the County Clerk of Williamson County, Texas, is hereby authorized to file for records this plat of land.

The City of Georgetown assumes no liability for the engineering or planning of subdivider and by this authorization makes no representations regarding such. By approving this plat said City makes no representations regarding the availability of City of Georgetown utilities.
ADOPTED and approved this the 8 day of November, 1994, A.D.

Leo Wood
Leo Wood, Mayor, City of Georgetown, Texas

I, Sandra Lee, City Secretary of the City of Georgetown, Texas, do hereby certify that the subdivision, known as F.T.B. COMMERCIAL NUMBER ONE, has been approved for filing for record according to the minutes of the meeting of the Georgetown City Council on the 8 day of November, 1994, A.D.

TO CERTIFY WHICH, WITNESS my official hand of the City of Georgetown, Texas.

Sandra D. Lee
Sandra Lee, City Secretary, City of Georgetown, Texas

I, Bob Hart, City Manager of the City of Georgetown, Texas, hereby certify that this subdivision plat confirms to all requirements of the subdivision regulations as to which my approval is required.

Bob Hart — 12/2/94
Bob Hart, City Manager, City of Georgetown, Texas — Date

Accepted and authorized for record by the City Planning and Zoning Commission of Georgetown, Texas.

John Kuhn, Chairman — Date

Edward J. Barry, Secretary — 12/12/94 Date

STATE OF TEXAS)(KNOW ALL MEN BY THESE PRESENTS:
WILLIAMSON COUNTY)(I, Elaine Bizzell, Clerk of the County Court of said County, do hereby certify that the foregoing instrument in writing, with its certificate of authentication was filed for record in my office this 14th day of December, 1994, A. D., at 4:15 o'clock P. M. and duly recorded this the 14th day of December, 1994, A. D., at 4:20 o'clock, P.M. in the Plat Records of said County in Cabinet L, Slide 224-225.

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

Elaine Bizzell, Clerk, County Court of Williamson County, Texas

By: Belinda Wallace
Deputy

COUNTY COURT OF WILLIAMSON COUNTY TEXAS

Sheet 2 of 2

No.	Date / Revisions / App.

JAB Engineering, LLC
(F-14076)
4500 Williams Drive
Suite 212-121
Georgetown, TX 78633
512-779-7414 (p)
josh.baran@jabeng.com

RIVERY BUSINESS PARK
2006 RIVERY BOULEVARD
GEORGETOWN, TEXAS 78628

FINAL PLAT

STATE OF TEXAS
JOSHUA A. BARAN
109242
LICENSED PROFESSIONAL ENGINEER
02/03/23

Project No.:	19010
Issued:	12/18/2022
Drawn By:	JAB
Checked By:	JAB

C.26

Sheet 26 OF 26

2021-28-SDP

Texas 811

ATTACHMENT I
INSPECTION AND MAINTENANCE FOR BMPs

PROJECT NAME: **Rivery Business Park**
ADDRESS: **2006 Rivery Boulevard**
CITY, STATE: **Georgetown, TX**

SILT FENCE

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

CONCRETE WASHOUT AREAS

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

TEMPORARY CONSTRUCTION ENTRANCE / EXIT

- The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment.
- All sediment spilled, dropped, washed or tracked onto public rights-of-way should be removed immediately by contractor.
- When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-way.
- When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.
- All sediment should be prevented from entering any storm drain, ditch or water course by using approved methods.

Disposal of accumulated silt shall be accomplished following Texas Commission on Environmental Quality guidelines and specifications.

An amended copy of this document will be provided to the Texas Commission on Environmental Quality within thirty (30) days of any changes in the following information.

Responsible Party: Rivery Business Park Condominiums Association, Inc.
Mailing Address: 1625 Williams Drive, Ste. 201
City, State: Georgetown, TX Zip: 78628
Telephone: (512) 508-4970 Fax:

Signature of Responsible Party  Date 5/6/2023

ATTACHMENT J

Schedule of Interim and Permanent Soil Stabilization Practices

Interim stabilization shall be achieved through the temporary erosion controls. These temporary controls are specifically listed in Attachment I and noted on the Erosion / Sedimentation Control Plan, Sheet C.12 of the construction drawings. Temporary controls include: Silt Fence, Stabilized Construction Entrance / Exit, Concrete Washout.

The management of land by using ground cover reduces erosion by reducing the flow rate of runoff and the raindrop impact. Bare soils should be seeded or otherwise stabilized within 14 calendar days after final grading or where construction activity has temporarily ceased for more than 21 days.

All disturbed pervious space shall receive permanent vegetative stabilization after final grading. Specifications for permanent vegetative are included in the General Notes, Sheet C.13 and shown below for reference.

PERMANENT VEGETATIVE STABILIZATION:

1. From September 15 to march 1, seeding is considered to be temporary stabilization only. if cool season cover crops exist where permanent vegetative stabilization is desired, the grasses shall be mowed to a height of less than one-half (1/2) inch and the area shall be re-seeded in accordance with 2, below.

2. From March 2 to September 14, seeding shall be hulled bermuda at a rate of 1 pound per 1000 sf with a purity of 95% with 85% germination. Bermuda grass is a warm season grass and is considered permanent erosion control.
   a. Bermuda sod 5' outside the buildings and bermuda hydromulch all areas disturbed by construction.
   b. Bio-swale areas shall be a native seed bio-swale mix or an overseed with annual rye, if required.
   c. Fertilizer shall be water soluble with an analysis of 15-15-15 to be applied once at planting and once during the period of establishment at a rate of 1/2 pounds per 1000 sf.
   d. If no permenant irrigation is anticipated. Watering will be performed by a water truck, as needed.
   e. Hydromulch shall comply with table 2, below.
   f. Permanent erosion control shall be acceptable when the grass has grown to at least 1 1/2 inches high with 95% coverage, provided no bare spots larger than 16 square feet exist.

TABLE 2: HYDROMULCHING FOR PERMANENT VEGETATIVE STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATIONS	APPLICATION RATES
BONDED FIBER MATRIX (BFM)	80% ORGANIC 10% DEFIBRATED FIBERS TACKIFIER	6 MONTHS	ON SLOPES UP TO 2:1 AND EROSIVE SOIL CONDITIONS	2500 TO 4000 LBS PER ACRE (SEE MANUFACTURES RECOMMENDATIONS)
FIBER REINFORCED MATRIX (BFM)	65% ORGANIC DEFIBRATED FIBERS 25% REINFORCING FIBERS OR LESS 10% TACKIFIER	UP TO 12 MONTHS	ON SLOPES UP TO 1:1 AND EROSIVE SOIL CONDITIONS	3000 TO 41500 LBS PER ACRE (SEE MANUFACTURES RECOMMENDATIONS)

VI. Permanent Stormwater Section

Permanent Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(C), (D)(Ii), (E), and (5), Effective June 1, 1999

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

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

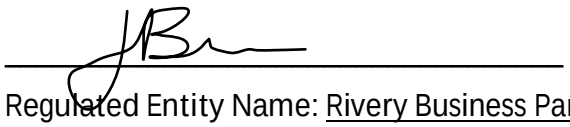
Signature

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

Print Name of Customer/Agent: Joshua A. Baran

Date: 5/6/2023

Signature of Customer/Agent



Regulated Entity Name: Rivery Business Park

Permanent Best Management Practices (BMPs)

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

1. ☒ Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.

   ☐ N/A

2. ☒ These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.

   ☒ The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

☐ A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is: _____

☐ N/A

3. ☒ Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.

   ☐ N/A

4. Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

   ☐ The site will be used for low density single-family residential development and has 20% or less impervious cover.
   ☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.
   ☒ The site will not be used for low density single-family residential development.

5. The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

   ☐ Attachment A - 20% or Less Impervious Cover Waiver. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.
   ☐ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
   ☒ The site will not be used for multi-family residential developments, schools, or small business sites.

6. ☒ Attachment B - BMPs for Upgradient Stormwater.

☐ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.

☐ No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.

☒ Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.

7. ☒ Attachment C - BMPs for On-site Stormwater.

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

☐ Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.

8. ☐ Attachment D - BMPs for Surface Streams. A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.

☒ N/A

9. ☒ The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.

☒ The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.

☐ Attachment E - Request to Seal Features. A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.

10. ☒ Attachment F - Construction Plans. All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:

☒ Design calculations (TSS removal calculations)
☒ TCEQ construction notes
☒ All geologic features
☒ All proposed structural BMP(s) plans and specifications

☐ N/A

11. ☒ Attachment G - Inspection, Maintenance, Repair and Retrofit Plan. A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:

    ☒ Prepared and certified by the engineer designing the permanent BMPs and measures
    ☒ Signed by the owner or responsible party
    ☒ Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit
    ☒ A discussion of record keeping procedures

    ☐ N/A

12. ☐ Attachment H - Pilot-Scale Field Testing Plan. Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.

    ☒ N/A

13. ☐ Attachment I -Measures for Minimizing Surface Stream Contamination. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that results in water quality degradation.

    ☒ N/A

Responsibility for Maintenance of Permanent BMP(s)

Responsibility for maintenance of best management practices and measures after construction is complete.

14. ☒ The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.

    ☐ N/A

15. ☒ A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

    ☐ N/A

ATTACHMENT B

BMPs FOR UPGRADIENT STORMWATER

Upgradient flows will be routed to bypass the proposed BMP through a proposed diversion channel. The flows from the bypassed areas are mitigated by additional storage of the proposed development areas. See drainage area maps for specific flow calculations.

ATTACHMENT C

BMPS FOR ON-SITE STORMWATER

INTRODUCTION

The proposed development known as Rivery Business Park (the "development"), located at 2006 Rivery Boulevard, Williamson County, Texas 78628 will be constructed on 3.30 acres, as conveyed to Rivery Business Park, LLC, by Deed as recorded in Document 2021026118, Official Public Records of Williamson County, Texas and managed by Rivery Business Park Condominiums Association, Inc.

The project was constructed prior to submittal of a WPAP. This summary describes the project design elements used to design / construct the project site. In this case, the term "existing" used below refers to the preconstruction conditions, and the term "proposed" refers to the currently built conditions.

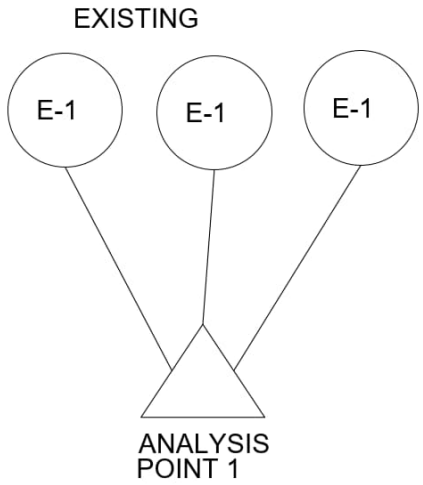
ACCESS

Access will be taken from the existing driveway off Rivery Boulevard.

STORMWATER DRAINAGE

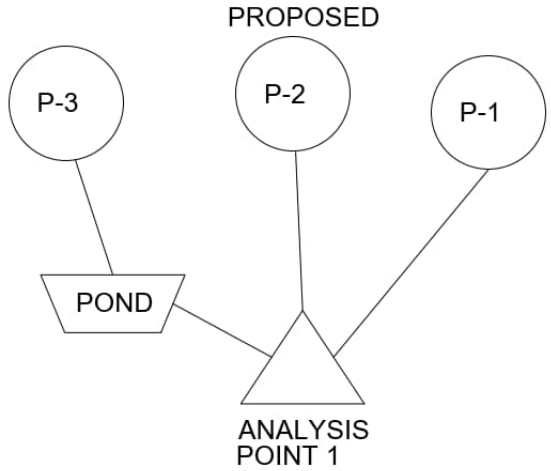
EXISTING CONDITIONS

The existing property consists of three drainage areas. Drainage area 1 discharges toward the east through an existing hotel development that was approved under previous permit. This development includes detention facilities designed under the Georgetown DCM. This area is assumed for overall basin purposes to be in the previous discharge conditions since these calculation are not available for public record. Drainage area 2 discharges over the adjoining site and into the right-of-way undetained. Drainage area 3 discharges towards the east IH 35 right-of-way by sheet flow and shallow concentrated flow. A summary of the existing area features can be found in the area listing of the existing drainage calculations.



PROPOSED DEVELOPMENT

The development will convey stormwater runoff by surface drainage to the same locations as the existing discharges. The area of flow from all three drainage areas is combined in the existing roadside ditch, which is the analysis point for both existing and proposed conditions. A proposed pond addresses the increase in drainage area 3 to reduce the proposed discharge below the existing. This area is also routed through an extended batch detention facility for water quality controls. A summary of the proposed area features can be found in the area listing of the proposed drainage calculations.



DRAINAGE SUMMARY

Utilizing the SCS method for comparison of the existing vs. proposed conditions yielded a decrease in peak discharge to both drainage areas.

EXISTING DRAINAGE SUMMARY									
Area ID	**DA (ac.)**	**DA (mi^2.)**	**TC(min.)**	**Lag (min)**	**CN**	**Q_2(cfs)**	**Q_{10}(cfs)**	**Q_{25}(cfs)**	**Q_{100}(cfs)**
E-1	5.52	0.0086	7.0	4.2	73	5.1	12.9	17.8	25.6
E-2	2.65	0.0041	0.0	0.0	78	3.7	8.2	10.8	14.9
E-3	2.84	0.0044	7.0	4.2	76	3.8	8.6	11.5	16.1
Total	11.01	0.0172		Total Peak Flow		12.2	29.0	39.3	55.5

PROPOSED DRAINAGE SUMMARY									
Area ID	**DA (ac.)**	**DA (mi^2.)**	**TC(min.)**	**Lag (min)**	**CN**	**Q_2(cfs)**	**Q_{10}(cfs)**	**Q_{25}(cfs)**	**Q_{100}(cfs)**
P-1	5.52	0.0086	7.0	4.2	73	5.1	12.9	17.8	25.6
P-2	2.17	0.0034	7.0	4.2	79	3.3	7.0	9.2	12.6
P-3	3.32	0.0052	5.0	3.0	94	11.8	18.4	22.1	27.6
P-3 Pond	3.32	0.0052				4.2	9.6	12.2	17.9
Total	11.01	0.0172		Total Peak Flow		12.2	29.0	38.6	55.5

ANALYSIS POINT 1 (CFS) ROUTED FLOWS				
Condition	**2-year**	**10-year**	**25-year**	**100-year**
Existing	12.2	29.0	39.3	55.5
Developed	12.2	29.0	38.6	55.5

The design of the drainage minimizes any effects on the natural and traditional character of the land and waterways; therefore, no adverse effects to the environment are anticipated due to the development.

WATER QUALITY

This development is proposing a Batch Detention BMP.

WATER AND WASTEWATER

Water will be connected to the City of Georgetown services and requires installation of two single-service lines and an extension of a public water line. Wastewater service will be connected to the City of Georgetown services and requires installation of six single-service laterals to a proposed sewer extension.

SEDIMENTATION / EROSION CONTROL / TREE SURVEY
All sedimentation / erosion controls are required and will be in accordance with the City of Georgetown and TCEQ.

CRITICAL ENVIRONMENTAL FEATURES
There are no CEF's per the include GA.

ATTACHMENT F

Construction Plans

(UNDER SEPARATE COVER)

ATTACHMENT G
MAINTENANCE PLAN AND SCHEDULE FOR BMPs

PROJECT NAME: **Rivery Business Park**
ADDRESS: **2006 Rivery Boulevard**
CITY, STATE: **Georgetown, TX**

BATCH DETENTION BASIN

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

- Mowing. The basin, basin side-slopes, and embankment of the basin must be mowed to prevent woody growth and control weeds. A mulching mower should be used, or the grass clippings should be caught and removed. Mowing should take place at least twice a year, or more frequently if vegetation exceeds 18 inches in height. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. Litter and Debris Removal. Litter and debris removal should take place at least twice a year, as part of the periodic mowing operations and inspections. Debris and litter should be removed from the surface of the basin. Particular attention should be paid to floatable debris around the outlet structure. The outlet should be checked for possible clogging or obstructions and any debris removed.

- Erosion control. The basin side slopes and embankment all may periodically suffer from slumping and erosion. To correct these problems, corrective action, such as regrading and revegetation, may be necessary. Correction of erosion control should take place whenever required based on the periodic inspections. Nuisance Control. Standing water or soggy conditions may occur in the basin. Some standing water may occur after a storm event since the valve may close with 2 to 3 inches of water in the basin. Some flow into the basin may also occur between storms due to spring flow and residential water use that enters the storm sewer system. Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.).

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

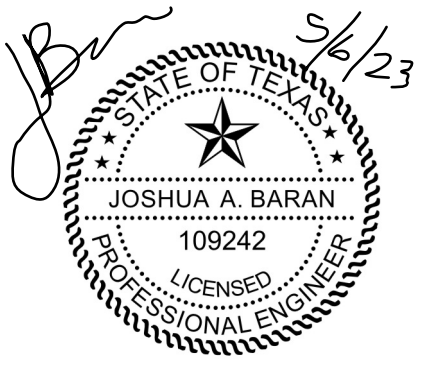
- Sediment Removal. A properly designed batch detention basin will accumulate quantities of sediment over time. The accumulated sediment can detract from the appearance of the facility and reduce the pollutant removal performance of the facility. The sediment also tends to accumulate near the outlet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

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

An amended copy of this document will be provided to the Texas Commission on Environmental Quality within thirty (30) days of any changes in the following information.

Responsible Party: Rivery Business Park Condominiums Association, Inc.
Mailing Address: 1625 Williams Drive, Ste. 201
City, State: Georgetown, TX Zip: 78628
Telephone: (512) 508-4970 Fax:

Signature of Responsible Party  Date 5/6/2023



Engineer: Joshua A. Baran, P.E.
Firm: JAB Engineering, LLC
TBPE Firm No.: F-14076
Mailing Address: 4500 Williams Drive, Ste. 212-121
City, State: Georgetown, TX 78633
Telephone: (512) 779-7414

ATTACHMENT I

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

The proposed development does not increases the peak discharge of the 2, 10, 25, and 100-year events, as the development is existing. The discharge will be directed to a batch detention pond and outfall to the adjoining property.

VII. Agent Authorization Form

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

I Joshua A. Baran,
Print Name

Managing Member,
Title - Owner/President/Other

of Rivery Business Park Condomimiums Association, Inc.,
Corporation/Partnership/Entity Name

have authorized Joshua A. Baran, P.E.
Print Name of Agent/Engineer

of JAB Engineering, LLC.
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Applicant's Signature

5/6/23
Date

THE STATE OF Texas §

County of Williamson §

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

GIVEN under my hand and seal of office on this 05th day of November 2024.

Michelle Baran
NOTARY PUBLIC

MICHELLE BARAN
Notary Public, State of Texas
Comm. Expires 02-21-2026
Notary ID 129721540

Michelle Baran
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 02-21-2026

VIII. Application Fee Form

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Rivery Business Park
Regulated Entity Location: 2006 Rivery Boulevard, Georgetown, TX 78628
Name of Customer: Rivery Business Park Condominiums Association, Inc.
Contact Person: Joshua Baran Phone: 512-508-4970
Customer Reference Number (if issued):CN _____
Regulated Entity Reference Number (if issued):RN _____
Austin Regional Office (3373)

☐ Hays ☐ Travis ☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

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

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

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

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	*Size*	*Fee Due*
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	3.29945 Acres	$ 4,000
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 5/6/2023

TCEQ-0574 (Rev. 02-24-15)

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

IX. Core Data Form

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

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

SECTION II: Customer Information

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

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State *(SOS) or Texas Comptroller of Public Accounts (CPA).*

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* *If new Customer, enter previous Customer below:*

Rivery Business Park Condominiums Association, Inc.

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
805473094	32094288332		

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?
☒ Yes ☐ No

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

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address: 1625 Williams Drive, Ste 201

City	Georgetown	State	TX	ZIP	78628	ZIP + 4	

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

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*

(512) 508-4970		( ) -

SECTION III: Regulated Entity Information

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

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

***The Regulated Entity Name submitted may be** updated, in order to meet TCEQ Core **Data Standards (removal of organizational endings such** as Inc, LP, or LLC).*

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

Rivery Business Park

23. Street Address of **the Regulated Entity:** *(No PO Boxes)*	2006 Rivery Boulevard							
	City	Georgetown	State	TX	ZIP	78628	ZIP + 4	
24. County	Williamson							

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

25. **Description to Physical Location:**					
26. Nearest City			State	Nearest ZIP Code	
Georgetown			TX	78628	

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

27. **Latitude (N)** In Decimal:	30.654766		28. Longitude (W) In Decimal:	-97.677338	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	39	17.16	97	40	38.42

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)
4225	13	493110	

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

Office / Warehouse

34. Mailing Address:	1625 Williams Drive, Ste. 201							
	City	Georgetown	State	TX	ZIP	78628	ZIP + 4	
35. E-Mail Address:	josh@seven10dev.com							

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
(512) 508-4970		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

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

SECTION IV: Preparer Information

40. Name:	Joshua A. Baran, P.E.	41. Title:	Owner's Representative

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(512) 779-7414		( ) -	josh.baran@jabeng.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	JAB Engineering, LLC	Job Title:	Owner's Representative for Rivery Business Park Condominium Association, Inc.
Name *(In Print):*	Joshua A. Baran, P.E.	Phone:	(512) 779- 7414
Signature:		Date:	5/6/2023