

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 if not withdrawn the application will be denied and 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 to you:

- You can withdraw your application, and your fees will be refunded or credited for a resubmittal.
- 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 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 effected 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: FRONTIER BANK					2. Regulated Entity No.:				
3. Customer Name: FRONTIER BANK					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 XX			8. Site (acres):		1.33		
9. Application Fee:	4,000.00	10. Permanent BMP(s):			WQ POND, JF UNIT				
11. SCS (Linear Ft.):	N/A	12. AST/UST (No. Tanks):							
13. County:	Williamson	14. Watershed:			BRUSHY CREEK				

Application Distribution

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

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

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

Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	—	—	<u> X </u>
Region (1 req.)	—	—	<u> X </u>
County(ies)	—	—	<u> X </u>
Groundwater Conservation District(s)	<u> </u> Edwards Aquifer Authority <u> </u> Barton Springs/ Edwards Aquifer <u> </u> Hays Trinity <u> </u> Plum Creek	<u> </u> Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	<u> </u> Austin <u> </u> Buda <u> </u> Dripping Springs <u> </u> Kyle <u> </u> Mountain City <u> </u> San Marcos <u> </u> Wimberley <u> </u> Woodcreek	<u> </u> Austin <u> </u> Bee Cave <u> </u> Pflugerville <u> </u> Rollingwood <u> </u> Round Rock <u> </u> Sunset Valley <u> </u> West Lake Hills	<u> </u> Austin <u> </u> Cedar Park <u> </u> Florence <u> </u> Georgetown <u> </u> Jerrell <u> </u> Leander <u> </u> Liberty Hill <u> </u> Pflugerville <u> </u> Round Rock

San Antonio Region					
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)	—	—	—	—	—
Region (1 req.)	—	—	—	—	—
County(ies)	—	—	—	—	—
Groundwater Conservation District(s)	<u> </u> Edwards Aquifer Authority <u> </u> Trinity-Glen Rose	<u> </u> Edwards Aquifer Authority	<u> </u> Kinney	<u> </u> EAA <u> </u> Medina	<u> </u> EAA <u> </u> Uvalde
City(ies) Jurisdiction	<u> </u> Castle Hills <u> </u> Fair Oaks Ranch <u> </u> Helotes <u> </u> Hill Country Village <u> </u> Hollywood Park <u> </u> San Antonio (SAWS) <u> </u> Shavano Park	<u> </u> Bulverde <u> </u> Fair Oaks Ranch <u> </u> Garden Ridge <u> </u> New Braunfels <u> </u> Schertz	NA	<u> </u> 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.

LAKSHAY SHARMA

Print Name of Customer/Authorized Agent

Lakshay Sharma

09/12/2023

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):

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: LAKSHAY SHARMA

Date: 09/11/2023

Signature of Customer/Agent:

Lakshay Sharma

Project Information

1. Regulated Entity Name: FRONTIER BANK
2. County: WILLIAMSON
3. Stream Basin: BRUSHY CREEK
4. Groundwater Conservation District (If applicable): N/A

5. Edwards Aquifer Zone:

- Recharge Zone
 Transition Zone

6. Plan Type:

- | | |
|--|--|
| <input checked="" type="checkbox"/> WPAP | <input type="checkbox"/> AST |
| <input type="checkbox"/> SCS | <input type="checkbox"/> UST |
| <input checked="" type="checkbox"/> Modification | <input type="checkbox"/> Exception Request |

7. Customer (Applicant):

Contact Person: PATRICK JOHNSON

Entity: FRONTIER BANK

Mailing Address: 1213 HWY 290

City, State: ELGIN, TX

Zip: 78621

Telephone: 512.281.1533

FAX: _____

Email Address: PJOHNSON@FRONTIERBANKOFTEXAS.BANK

8. Agent/Representative (If any):

Contact Person: LAKSHAY SHARMA

Entity: HAGOOD ENGINEERING

Mailing Address: 7509 O'CONNER DR.

City, State: ROUND ROCK, TX

Zip: 78727

Telephone: 512.244.1546

FAX: N/A

Email Address: LAKSHAYS@HEAENG.COM

9. Project Location:

- The project site is located inside the city limits of _____.
- The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of ROUND ROCK.
- 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.

300 FEET NW OF THE INTERSECTION OF O'CONNER & FM 620

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: _____

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

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

15. Existing project site conditions are noted below:

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

Prohibited Activities

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

- (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
- (2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
- (3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;
- (4) The use of sewage holding tanks as parts of organized collection systems; and
- (5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).
- (6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

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

- (1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);
- (2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and

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

Administrative Information

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

- For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
 - For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
 - For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems.
 - A request for an exception to any substantive portion of the regulations related to the protection of water quality.
 - A request for an extension to a previously approved plan.
19. Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:
- TCEQ cashier
 - Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
 - San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)
20. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
21. No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

GENERAL INFORMATION
Attachments to form TCEQ-0587

ATTACHMENT A - Road Map

SEE ATTACHED ROAD MAP

ATTACHMENT B - USGS / Edwards Recharge Zone Map

SEE ATTACHED USGS / EDWARDS RECHARGE ZONE MAP

ATTACHMENT C - Project Description

Please refer to the attached plans for the site improvement layout. The site is located within the City of Round Rock's ETJ. This site is also located in the Edwards Aquifer Recharge Zone.

This WPAP modification is for Site Development on the 1.33 acre of Lot 86, Block D Cat Hollow Section C-Commercial 1 (Frontier Bank of Texas, A Texas State Bank). See Plat included in the plan set.

The Frontier Bank Office Lease Building development will be on the 1.33 acres tract with 0.67 acres of impervious cover (50.38%) when fully developed. Currently, the site is developed with an existing building, asphalt pavement, sidewalk, and drives. The proposed development is for Commercial (Office) use and the site development improvements consist of one 5,000 sq. ft. office use building, existing driveways, sidewalks, drainage, and utility infrastructure. This development will be utilizing an existing partial sedimentation and filtration pond located in the same tract. This pond was designed to treat a total of 1.33 acres with 43.6% impervious cover (0.58 acres).

There are currently improvements on site to be demolished, namely a portion of existing asphalt pavement (ref. C11 of attached construction plans).

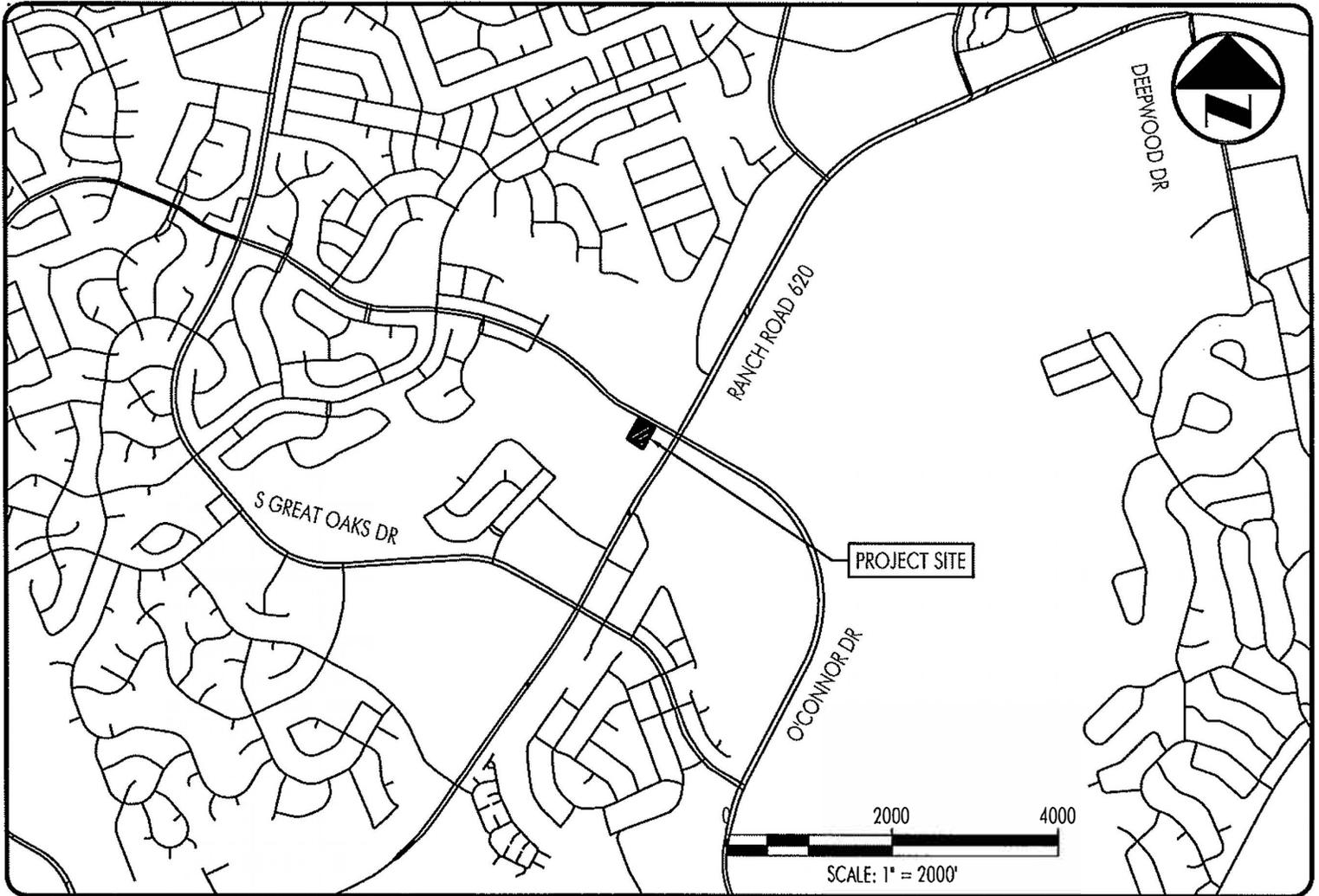
Wastewater will be built and will tie into an existing 8" line along the O'Connor Dr. ROW at the N-E point of the site. A storm sewer system will also be constructed to collect and convey stormwater to the existing Water Quality and Detention Pond.

Analysis of the increased impervious cover (TSS Calcs) is provided for proposed conditions on sheet PDA. Required Water Quality volume, minimum Sedimentation, and Filtration Basin areas have been met for the proposed conditions.

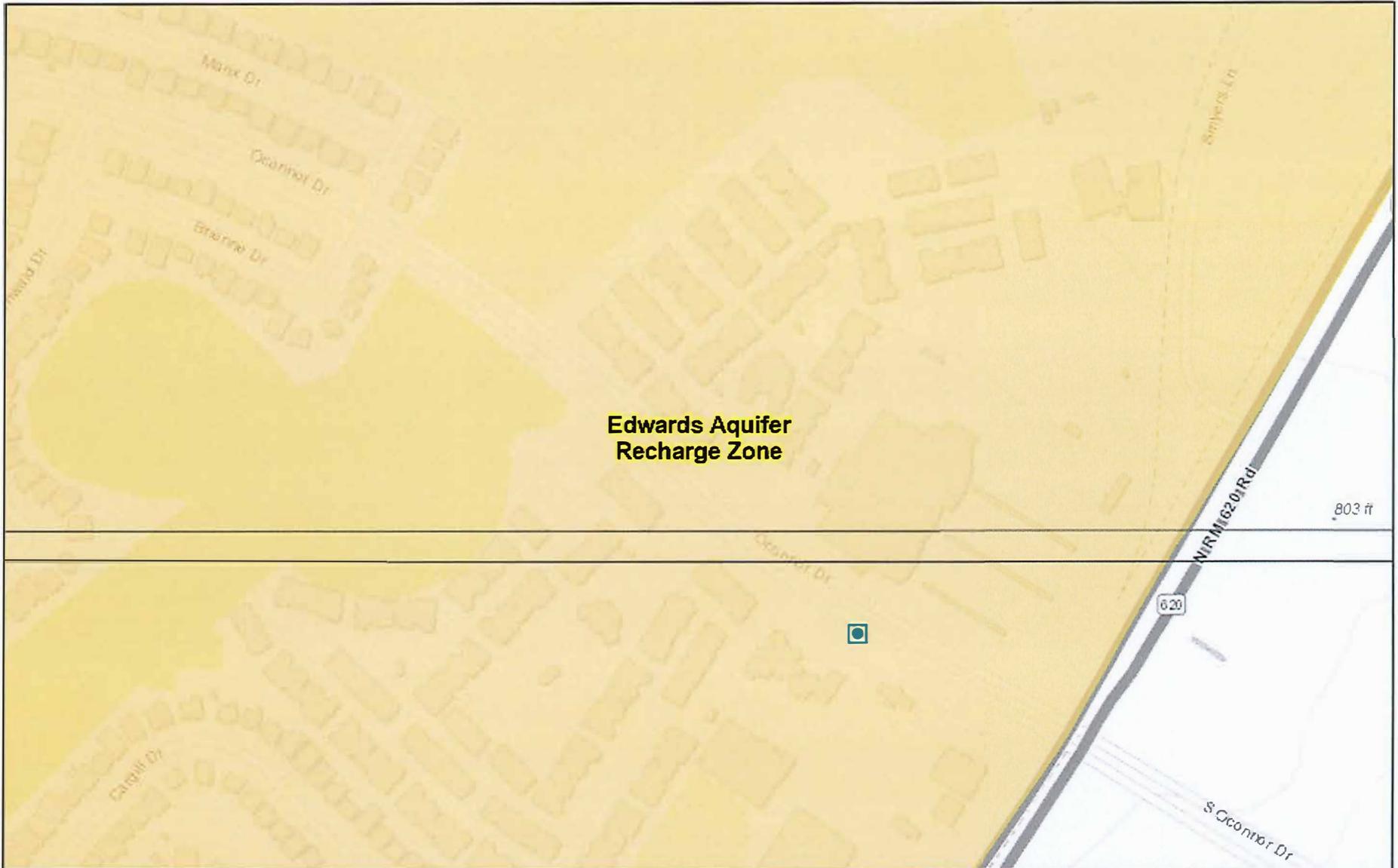
An increase in impervious cover within Drainage Area DA C-1 on sheet PDA (0.6 ac.) shall be treated by a Surface Inlet Jellyfish BMP for which TSS Load Removal Calculations are provided on Sheet PDA in the attached Site Development plans for the project.

And a portion of increased impervious cover within Drainage Area DA C-3 shall be treated by a Vegetative Filter Strip that has been provided in accordance with the provision of TCEQ RG-348. Please refer to the attached Vegetative Filter Strip maintenance plan accompanied by this application.

SITE LOCATION MAP

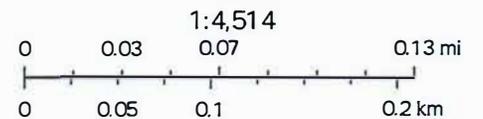


Edwards Aquifer Viewer Custom Print



6/29/2022, 3:23:52 PM

- Edwards Aquifer Label  7.5 Minute Quad Grid
-  City/Place
-  TX Counties
-  TCEQ_EDWARDS_OFFICIAL_MAPS



TCEQ, Austin Community College, City of Austin, County of Williamson, Texas Parks & Wildlife, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS,

Web AppBuilder for ArcGIS

Modification of a Previously Approved Plan

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Transition Zone and Relating to 30 TAC 213.4(j), 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.

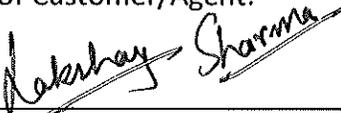
Signature

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 request for a **Modification of a Previously Approved Plan** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent: LAKSHAY SHARMA

Date: 07/07/2022

Signature of Customer/Agent:



Project Information

1. Current Regulated Entity Name: FRONTIER BANK
Original Regulated Entity Name: FIRST TEXAS BANK
Regulated Entity Number(s) (RN): 102842051

Edwards Aquifer Protection Program ID Number(s): 96052901

The applicant has not changed and the Customer Number (CN) is: _____

The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

2. **Attachment A: Original Approval Letter and Approved Modification Letters.** A copy of the original approval letter and copies of any modification approval letters are attached.

3. A modification of a previously approved plan is requested for (check all that apply):
- 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;
 - 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;
 - Development of land previously identified as undeveloped in the original water pollution abatement plan;
 - Physical modification of the approved organized sewage collection system;
 - Physical modification of the approved underground storage tank system;
 - Physical modification of the approved aboveground storage tank system.
4. Summary of Proposed Modifications (select plan type being modified). If the approved plan has been modified more than once, copy the appropriate table below, as necessary, and complete the information for each additional modification.

<i>WPAP Modification</i>	<i>Approved Project</i>	<i>Proposed Modification</i>
<i>Summary</i>		
Acres	<u>1.33</u>	<u>1.33</u>
Type of Development	<u>Office Bldg. & Parking</u>	<u>Office Bldg. & Parking</u>
Number of Residential Lots	<u>0</u>	<u>0</u>
Impervious Cover (acres)	<u>0.58</u>	<u>0.794</u>
Impervious Cover (%)	<u>43.6%</u>	<u>59.71%</u>
Permanent BMPs	<u>WQ Pond</u>	<u>WQ Pond, Jellyfish Filters</u>
Other	_____	_____

<i>SCS Modification</i>	<i>Approved Project</i>	<i>Proposed Modification</i>
<i>Summary</i>		
Linear Feet	<u>N/A</u>	<u>N/A</u>
Pipe Diameter	<u>N/A</u>	<u>N/A</u>
Other	_____	_____

<i>AST Modification</i>	<i>Approved Project</i>	<i>Proposed Modification</i>
<i>Summary</i>		
Number of ASTs	_____	_____
Volume of ASTs	_____	_____
Other	_____	_____

<i>UST Modification</i>	<i>Approved Project</i>	<i>Proposed Modification</i>
<i>Summary</i>		
Number of USTs	_____	_____
Volume of USTs	_____	_____
Other	_____	_____

5. **Attachment B: Narrative of Proposed Modification.** A detailed narrative description of the nature of the proposed modification is attached. It discusses what was approved, including any previous modifications, and how this proposed modification will change the approved plan.

6. **Attachment C: Current Site Plan of the Approved Project.** A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere.
 - The approved construction has not commenced. The original approval letter and any subsequent modification approval letters are included as Attachment A to document that the approval has not expired.
 - The approved construction has commenced and has been completed. Attachment C illustrates that the site was constructed as approved.
 - The approved construction has commenced and has been completed. Attachment C illustrates that the site was **not** constructed as approved.
 - The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was constructed as approved.
 - The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was **not** constructed as approved.

7. The acreage of the approved plan has increased. A Geologic Assessment has been provided for the new acreage.
 - Acreage has not been added to or removed from the approved plan.

8. 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

MODIFICATION TO PREVIOUSLY APPROVED

WATER POLLUTION ABATEMENT PLAN APPLICATION

Attachments to form TCEQ-05090

ATTACHMENT A

See attached approval letter for First Texas Bank – O'Connor Branch; O'Connor Drive at RM 620, Round Rock, Texas.

ATTACHMENT B

Please refer to the attached plans for the site improvement layout. The site is located within the City of Round Rock's ETJ. This site is also located in the Edwards Aquifer Recharge Zone.

This WPAP modification is for Site Development on the 1.33 acre of Lot 86, Block D Cat Hollow Section C-Commercial 1 (Frontier Bank of Texas, A Texas State Bank). See Plat included in the plan set.

The Frontier Bank Office Lease Building development will be on the 1.33 acres tract with 0.67 acres of impervious cover (50.38%) when fully developed. Currently, the site is developed with an existing building, asphalt pavement, sidewalk, and drives. The proposed development is for Commercial (Office) use and the site development improvements consist of one 5,000 sq. ft. office use building, existing driveways, sidewalks, drainage, and utility infrastructure. This proposed development will be utilizing an existing partial sedimentation and filtration pond located in the same tract. This pond was designed to treat a total of 1.33 acres with 43.6% impervious cover (0.58 acres).

There are currently improvements on site to be demolished, namely a portion of existing asphalt pavement (ref. C11 of attached construction plans).

Wastewater will be built and will tie into an existing 8" line along the O'Connor Dr. ROW at the N-E point of the site. A storm sewer system will also be constructed to collect and convey stormwater to the existing Water Quality and Detention Pond.

Analysis of the increased impervious cover (TSS Calcs) is provided for proposed conditions on sheet PDA. Required Water Quality volume, minimum Sedimentation, and Filtration Basin areas have been met for the proposed conditions.

An increase in impervious cover within Drainage Area DA C-1 on sheet PDA (0.6 ac.) shall be treated by a Surface Inlet Jellyfish BMP for which TSS Load Removal Calculations are provided on Sheet PDA in the attached Site Development plans for the project.

And a portion of increased impervious cover within Drainage Area DA C-3 shall be treated by a Vegetative Filter Strip that has been provided in accordance with the provision of TCEQ RG-348. Please refer to the attached Vegetative Filter Strip maintenance plan accompanied by this application.

MODIFICATION TO PREVIOUSLY APPROVED

WATER POLLUTION ABATEMENT PLAN APPLICATION

Attachments to form TCEQ-05090

ATTACHMENT C

See attached original approval letter EAPP #96052901 and please refer to the First Texas Bank – O'Connor Branch Site Development Plans.

Barry R. McBee, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Dan Pearson, *Executive Director*



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

August 22, 1996

Mr. Jon Sloan
First Texas Bank
P.O. Box 5
Round Rock, Texas 78680-0005

Re: Edwards Aquifer, Williamson County
NAME OF PROJECT: First Texas Bank - O'Connor Branch; O'Connor Drive at RM 620; Round Rock, Texas.
TYPE OF PLAN: Request for Approval of Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) §313.4; Edwards Aquifer Protection Program.

Edwards Aquifer Protection Program File Number: 96052901

Dear Mr. Sloan:

The Texas Natural Resource Conservation Commission (TNRCC) has completed its review of the WPAP application for the referenced project that was submitted by Baker Aicklen and Associates on behalf of First Texas Bank to the Austin Regional Office on May 29, 1996.

PROJECT DESCRIPTION

The proposed 1.33 acre commercial project will consist of a single-story bank facility with ancillary drives, five parking spaces and three commercial drive-in banking lanes. The site is located within Williamson County and will conform with applicable County codes and requirements.

The normal population of the development is estimated to be four persons. Approximately 400 gallons per day of wastewater is to be generated by this project, 100% domestic and 0% industrial wastewater.

Project wastewater will be disposed of by conveyance to the existing Brushy Creek M.U.D. Wastewater Treatment Plant owned by the Brushy Creek M.U.D.

REPLY TO: REGION 11 • 1921 CEDAR BEND, STE. 150 • AUSTIN, TEXAS 78758 • AREA CODE 512/339-2929 • FAX 512/339-3795

Mr. Jon Sloan
Page 2
August 22, 1996

The proposed impervious cover for the development, approximately .58 acres (43.6%), includes structure roof tops, driveways, sidewalks, and streets.

The storm water runoff will be typical of a commercial site.

The sedimentation/filtration basins are designed in accordance with the City of Austin Environmental Criteria Manual. The basins will incorporate sedimentation and filtration.

GEOLOGY

According to the geologic assessment included with the submittal, no potential recharge features were identified at the site. The Austin Regional Office site inspection of August 19, 1996, revealed the site to be generally as described in the geologic assessment.

APPROVAL

The plan for this project has been reviewed for compliance with 30 TAC §313.4 which sets forth pollution abatement criteria for any development on the recharge zone of the Edwards Aquifer. The proposed water pollution abatement plan is in general agreement with 30 TAC §313.4; therefore, approval of the plan is hereby granted subject to the specific conditions listed below.

Failure to comply with any of the following conditions, the deed recordation requirement, or any other specific conditions of approval is a violation of these rules. Pursuant to §26.136 of the Texas Water Code, any violations of the Edwards Aquifer Rules may result in administrative penalties of up to \$10,000 for each act of violation and for each day of violation.

STANDARD CONDITIONS OF APPROVAL

1. Please be reminded that 30 TAC §313.4 requires the owner/ developer to, within 30 days of receiving this written notice of approval and prior to commencing construction, record in the county deed records that this property is subject to the approved WPAP and submit to the appropriate region office proof of the deed recordation. Enclosed is a suggested format you may use to deed record the approved WPAP.
2. Prior to commencing construction, the applicant/agent shall submit to the Austin Regional Office copies of any changes made to the plans and specifications for this project which have been required by the TNRCC review and/or all other permitting authorities.
3. Please note, following this approval of the regulated activities described in the referenced WPAP submittal, any amendment to these activities required by some other regulating authority or desired by the applicant will require the submittal of

a WPAP application to amend this approval. And, as indicated in 30 TAC §313.4 and 30 TAC §313.27, an application to amend any approved regulated activity shall include payment of appropriate fees and all information necessary for its review and Executive Director approval.

4. Additionally, all contractors conducting regulated activities associated with this proposed regulated project shall be provided with copies of this approval letter and the entire contents of the submitted WPAP so as to convey to the contractors the specific conditions of this approval. During the course of these regulated activities, the contractors shall be required to keep on-site copies of the WPAP and this approval letter.
5. The temporary erosion and sedimentation (E&S) controls for the entire project shall be installed and the water quality pond(s) shall be excavated prior to beginning any other construction work on this project. The water quality pond(s) shall be used as a sedimentation basin(s) until the contractor is ready to proceed with their final construction.
6. The appropriate E&S controls that shall be used during the construction of the project are as follows: (1) **Stabilized construction entrances** shall be installed at all sites of ingress and egress prior to initiation of any other regulated activity. (2) **Silt fences** should be used when the drainage areas are less than 2 acres or when the slopes are less than 10%. The ends of silt fences and rock berms should be installed along constant contour lines and curved slightly upgradient. (3) **Rock berms with filtration** should be used when the drainage areas are greater than two acres or when the slopes are in excess of 10%. The bottom edge of the filter fabric must be buried a minimum of 6 inches below grade.
7. The TNRCC may monitor storm water discharges from the site to evaluate the adequacy of the temporary erosion and sedimentation control measures. Additional protection may be necessary if excessive solids are being discharged from the site.
8. Also, 30 TAC §313.4(d)(2) requires that if any significant recharge features, such as solution openings or sinkholes, are discovered during construction, all regulated activities near the significant recharge feature must be suspended immediately and may not be resumed until the Executive Director has reviewed and approved the methods proposed to protect the aquifer from any potential adverse impacts. Upon discovery of the significant recharge features, the developer shall immediately notify the Austin Regional Office.
9. Temporary erosion and sedimentation controls must be installed prior to construction, maintained during construction, and removed when vegetation is established and the construction area is stabilized.

Mr. Jon Sloan
Page 4
August 22, 1996

10. No wells exist at this proposed development. If any abandoned wells are encountered during construction of the proposed development, they shall be plugged in accordance with the local underground water conservation district's plugging procedures, if applicable, or 30 TAC §287.50(a) of this title (relating to Standards for Plugging Wells that Penetrate Undesirable Water Zones), or an equivalent method, as approved by the Executive Director. Pursuant to 30 TAC §287.48(e), the person that plugs such a well shall, within 30 days after plugging is complete, submit a Water Well Completion and Plugging Report to the Executive Director, through the Austin Regional Office and to the Barton Springs/Edwards Aquifer Conservation District.

Any drill holes resulting from core sampling on-site or down-gradient of the site shall be plugged with cement slurry, from the bottom of the hole to the top of the hole, so as to not allow water or contaminants to enter the subsurface environment.

11. No waste-disposal wells, new confined animal feeding operations, land disposal of Class I wastes, or use of sewage holding tanks as parts of organized collection systems shall be allowed on the recharge zone of this regulated development.
12. During the course of the construction related to the referenced regulated project, the owner/developer shall comply with all applicable provisions of 30 TAC §313.4. Construction which is initiated and abandoned, or not completed, shall be returned to a permanent condition such that groundwater in the Edwards Aquifer is protected from potential contamination. Additionally, First Texas Bank, applicant, shall remain responsible for the provisions and special conditions of this approval until such responsibility is legally transferred to another person or entity, upon which that person or entity shall assume responsibility for all provisions and specific conditions of this approval.
13. Pursuant to 30 TAC §313.4(d)(1) and prior to commencing regulated activities, the applicant must provide the Austin Regional Office with the date on which the regulated activity will commence.
14. Please note that 30 TAC §313.4(g) states that this approval expires two years from this date unless, prior to the expiration date, construction has commenced on the regulated project.
15. Approval of the design of the sewage collection system for this proposed subdivision shall be obtained from the Texas Natural Resource Conservation Commission prior to the commencement of construction of any sewage collection system, the design of which shall be in accordance with 30 TAC §313.5 and 30 TAC §317.

Mr. Jon Sloan
Page 5
August 22, 1996

If you have any questions or require additional information, please contact Melissa Lopez with the Edwards Aquifer Protection Program at the Austin Regional Office at (512) 339-2929.

Sincerely,



Dan Pearson
Executive Director
Texas Natural Resource Conservation Commission

DP/MML

Enclosures

cc: A. William Waeltz, Baker Aicklen and Associates
James R. Nuse, P.E., Director of Public Works, City of Round Rock
The Honorable John Doerfler, County Judge, Williamson County
Rosalinda Escalon, Field Operations, Administration, TNRCC

Jon Niermann, *Chairman*
Emily Lindley, *Commissioner*
Bobby Janecka, *Commissioner*
Kelly Keel, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 11, 2023

Mr. Patrick Johnson
Frontier Bank
1213 Hwy 290 E
Elgin, Texas 78621

Re: Approval of an Encountered Feature Mitigation Plan (EFMP)
Frontier Bank; Located at 7509 O'Connor Drive; Round Rock, Williamson County, Texas
Edwards Aquifer Protection Program ID: 11003673, Regulated Entity No. RN111539169

Dear Mr. Johnson:

The Texas Commission on Environmental Quality (TCEQ) has completed its review on the geologic report and EFMP for the above-referenced project submitted to the Edwards Aquifer Protection Program (EAPP) by aci Consulting on behalf of the applicant, Frontier Bank, on August 9, 2023.

The geologic report and EFMP describe feature MB-01 encountered. The feature was discovered on August 3, 2023 and reported to the TCEQ on August 3, 2023. A TCEQ site assessment conducted on August 9, 2023 determined that the feature reported was generally as described by the geologic report submitted by a professional geoscientist (P.G.).

The feature location and assessment are outlined in the table below:

Feature No.	Feature Dimensions	Location	Case*/Sensitivity**
MB-01	4' x 2' x 2'	30.49913, -97.722889	2/40

*per TCEQ Guidance Document RG-348

**per Geologic Assessment Table, TCEQ - 0585

The report described the location and extent of the feature and the mitigation details. The EFMP recommends an appropriate protection method and is **approved** in accordance with 30 Texas Administrative Code (TAC) §213.5(f)(2) and with the following conditions:

1. The approved feature mitigation method(s) must be implemented prior to the recommencement of regulated activities near the discovered feature(s).
2. The location of the feature shall be shown on the "as-built" plans.
3. In accordance with TAC §213.5(f), immediately notify the TCEQ if a new feature is discovered with continuation of construction activities.
4. The treatment method is designed to address environmental concerns related to surface water infiltration and is not intended to address structural integrity issues.

Mr. Patrick Johnson
Page 2
August 11, 2023

5. Temporary protective measures shall remain installed around the discovered feature until the approved feature mitigation method has been implemented.

This action is taken as delegated by the executive director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact James "Bo" Slone, P.G. of the Edwards Aquifer Protection Program at (512) 239-5711 or the regional office at 512-339-2929.

Sincerely,



Lillian Butler, Section Manager
Edwards Aquifer Protection Program
Texas Commission on Environmental Quality

LIB/jcs

cc: Mr. Mark Adams, P.G., aci Consulting

Enclosure: Narrative Description of Closure Method

7509 O'Connor Drive Tract
Frontier Bank of Texas
Feature Description of MB-01 (SC-1)
N. 30.49913, W. -97.722889

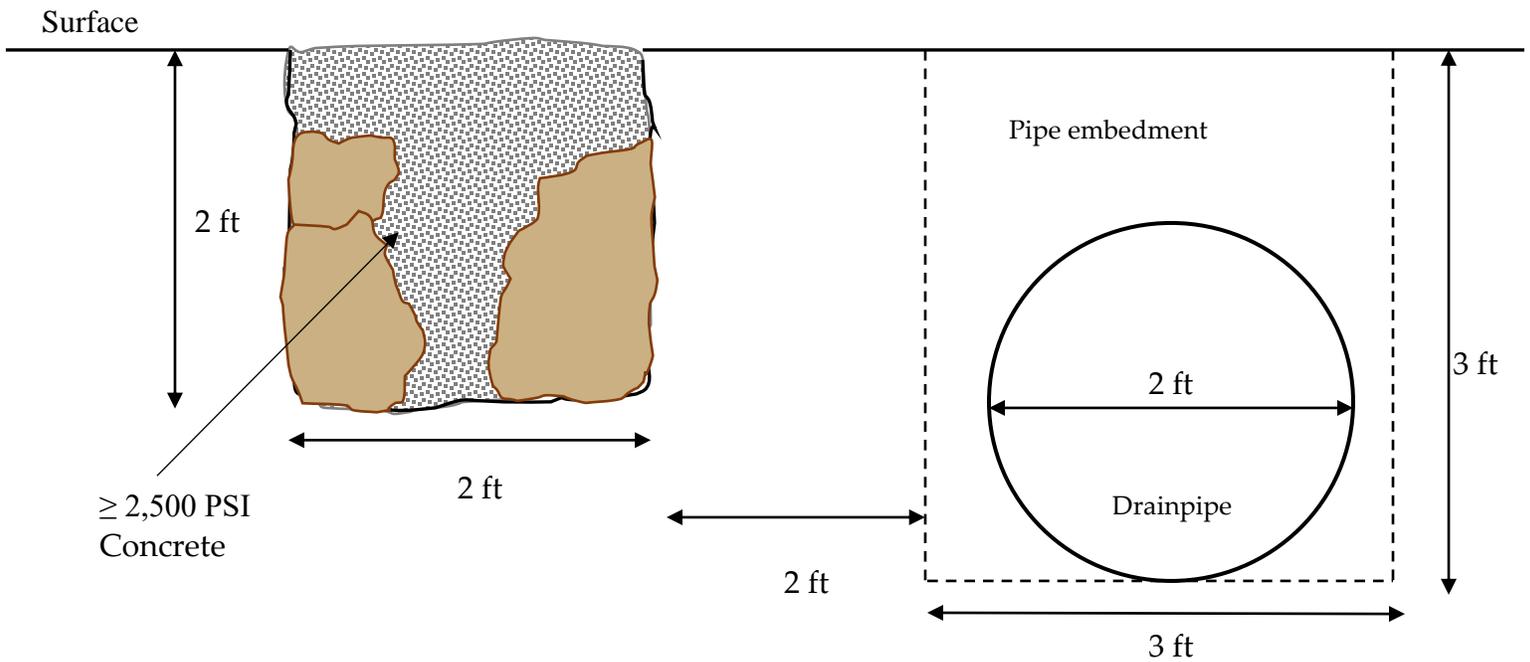
The feature is located between a storm drain in the parking lot of Frontier Bank of Texas, and the stormwater detention pond for the bank. The location of this feature is approximately 2 feet away from the pipe embedment of the stormwater drain which flows into the associated stormwater detention pond. The inlet for the drain is surrounded by a standard curb which prevents any runoff from the parking lot into the feature.

Initial hand excavations were performed, and it was determined that the feature was a man-made, backfilled hole as the result of construction on the stormwater pond. After additional investigations, including a re-visit to the feature, it was determined that the feature is in fact a naturally occurring karst feature. The initial dimensions prior to excavations were 0.5 feet in diameter by 1 foot deep (vertically). After hand excavations were completed, the feature was 4 feet long, 2 feet wide, with a vertical depth of approximately 2 feet. Partially cleaned rock within the feature, as well as the continuation of a small drain within the feature was noted; however, more sufficient tools are required at this point. No airflow or water were noted, but the presence of loose soils and cobbles within the feature indicates possible infiltration within the feature. The feature is located on relatively flat ground, and the catchment area is determined to be less than 1.6 acres. No speleothems or other fauna were observed within the feature. Considering the impermeable surfaces (parking lots, commercial structures, and roadways), as well as the urban development (stormwater infrastructure, curb, and gutter) surrounding the feature, it is determined that the probability of rapid infiltration for this feature is intermediate.

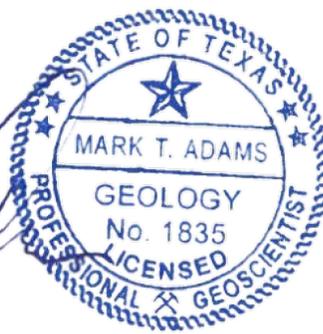
Although this feature is not located within the pipe embedment of the existing storm drain, it is larger than six (6) inches in at least one direction. A two (2) case has been assigned to the feature, and it is recommended that the feature be filled with a minimum of 2,500 psi concreted for a minimum of 18 inches.

Not to Scale

-  Bedrock
-  $\geq 2,500$ PSI Concrete



The void will be prepared by cleaning all loose materials from inside of the void as able. After cleaning the interior of the void, the void is to be closed by filling entirely with a minimum of 2,500 PSI concrete. Standard construction methods for forms may be utilized.

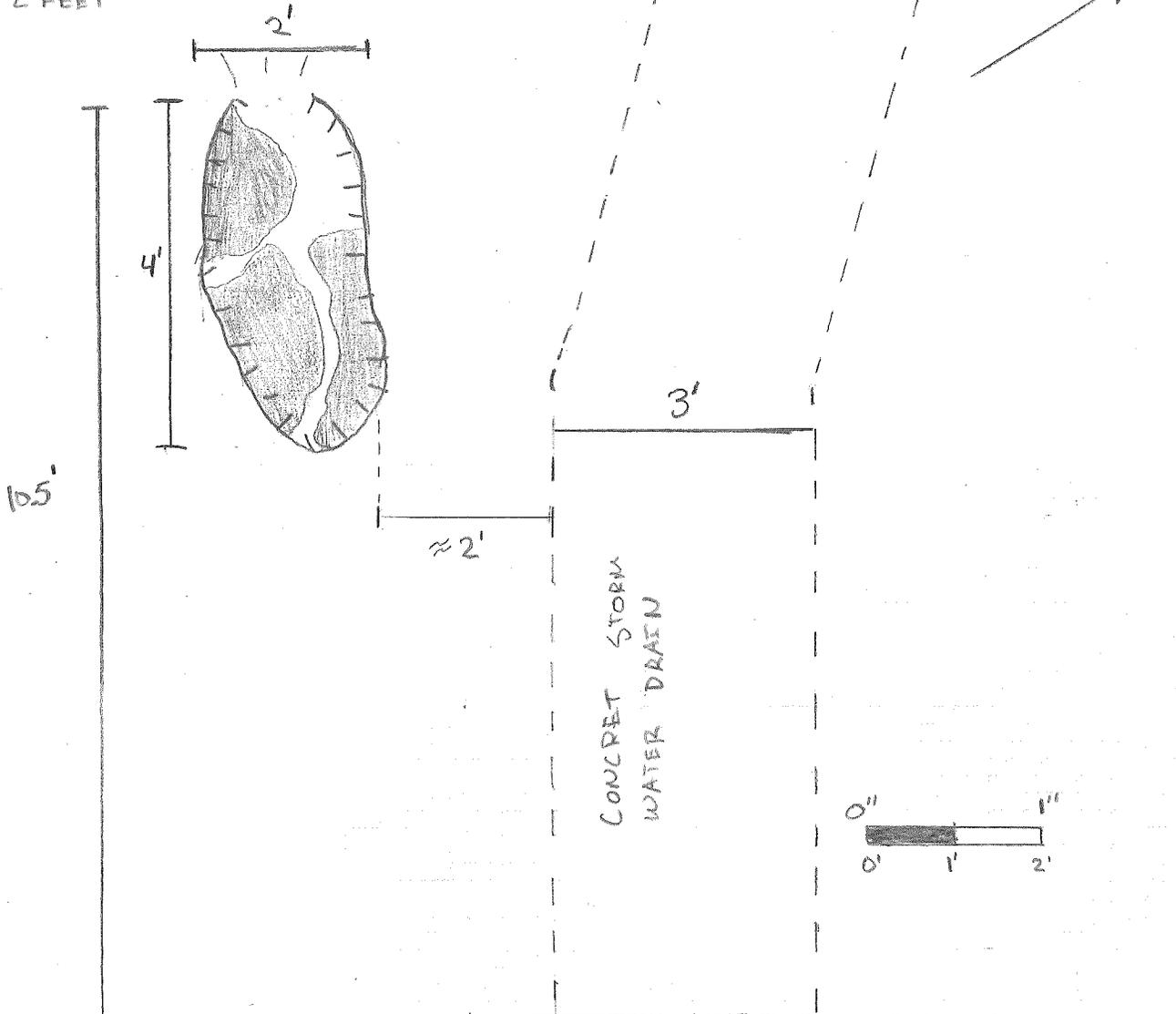
8/9/2023

7509 0' CONNOR DRIVE

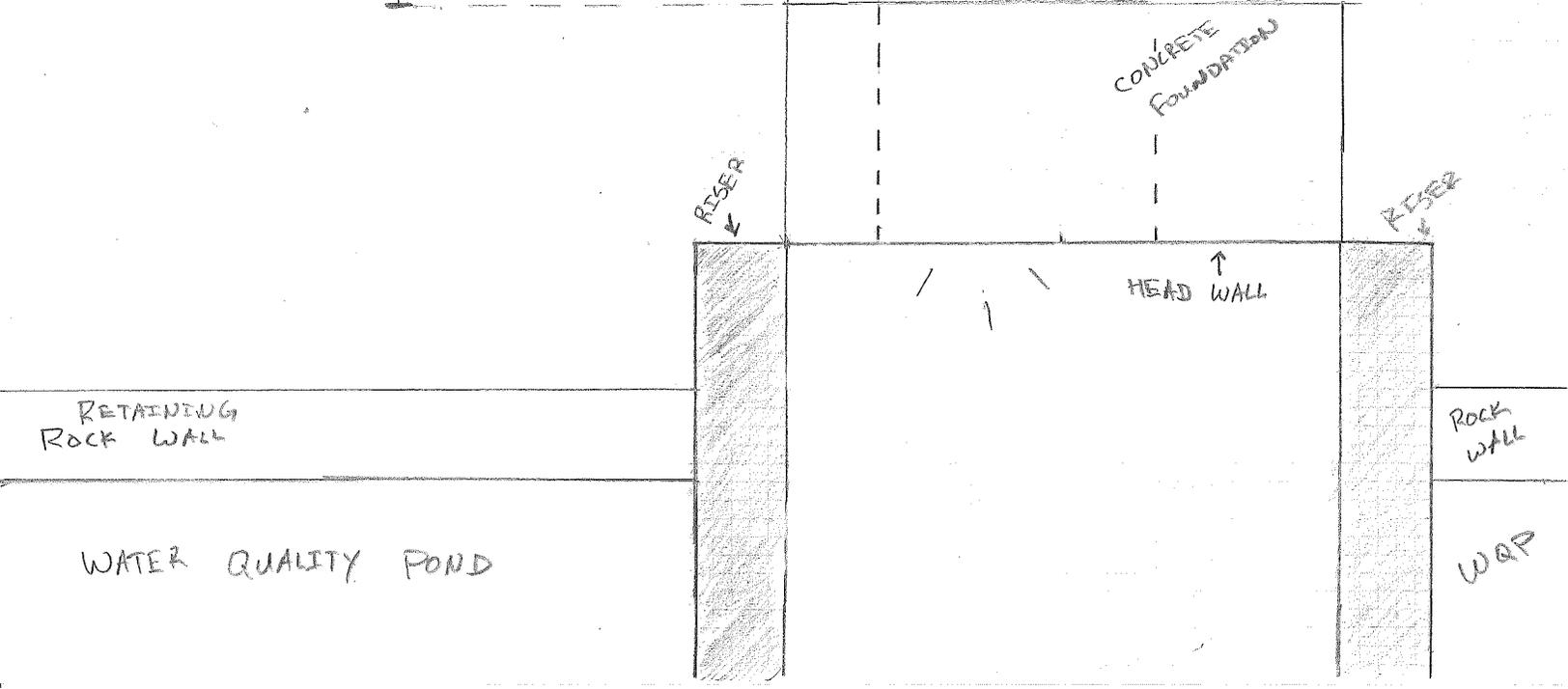
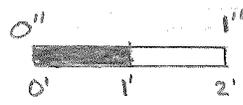
MB-01 (SC-1)

PLAN VIEW

SCALE: 1 INCH = 2 FEET



CONCRETE STORM
WATER DRAIN



CONCRETE
FOUNDATION

RISER

↑
HEAD WALL

RISER

RETAINING
ROCK WALL

ROCK
WALL

WATER QUALITY POND

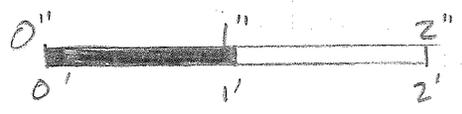
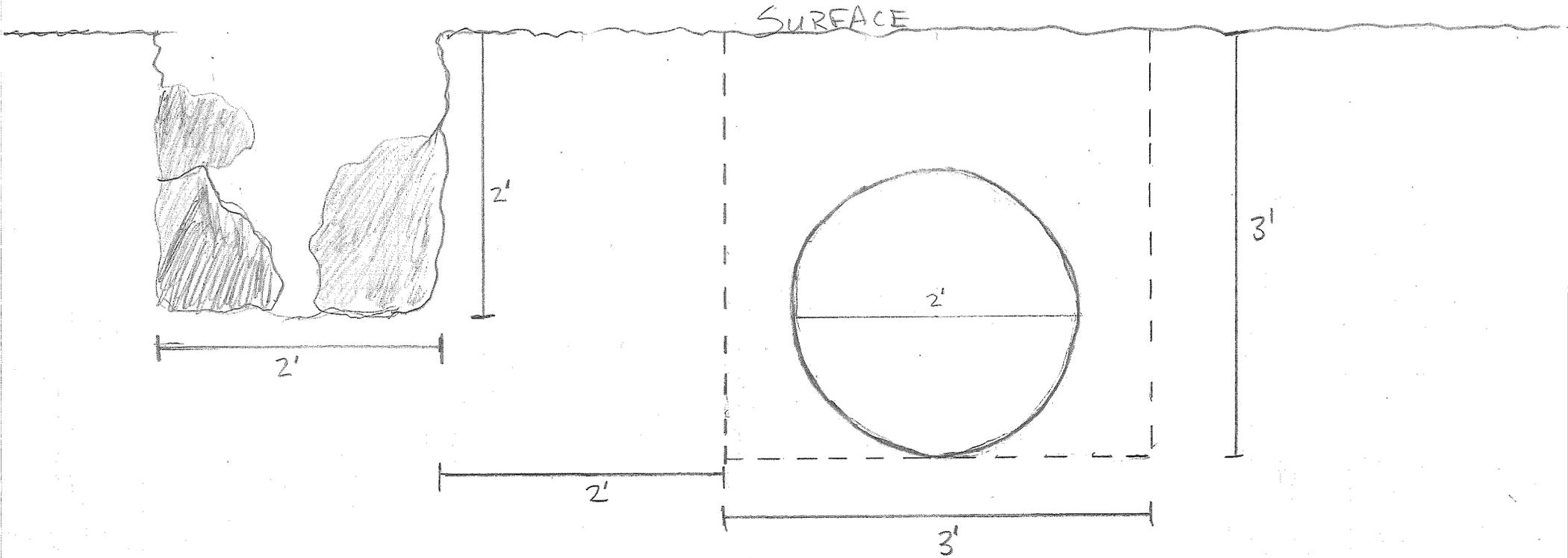
WQP

7509 O'CONNOR DRIVE

MB-01 (SC-1)

PROFILE VIEW

SCALE: 1 INCH = 1 FOOT



1 INCH = 1 FOOT

**GEOLOGIC ASSESSMENT
FOR THE APPROXIMATELY 1.33-ACRE
7509 O'CONNOR DRIVE TRACT
(FRONTIER BANK OF TEXAS)**

Williamson County, Texas

June 2023

Submitted to:

Frontier Bank of Texas
1213 Highway 290
Elgin, TX 78621

Prepared by:

aci consulting
1001 Mopac Circle
Austin, Texas 78746
TBPG Firm License No. 50260

aci project #: 22-23-085

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: Mark T. Adams

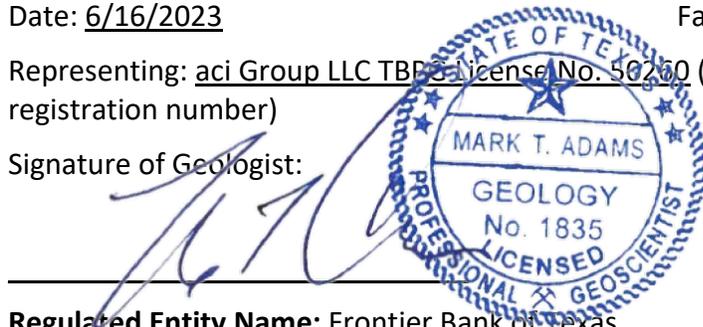
Telephone: (512) 347-9000

Date: 6/16/2023

Fax: (512) 306-0974

Representing: aci Group LLC TBPE License No. 50260 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: Frontier Bank of Texas

Project Information

1. Date(s) Geologic Assessment was performed: 6/7/2023

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)
(GsB) Georgetown stony clay loam, 1 to 3 percent slopes	D	<3

Soil Name	Group*	Thickness(feet)

** Soil Group Definitions (Abbreviated)*

- A. Soils having a high infiltration rate when thoroughly wetted.
- B. Soils having a moderate infiltration rate when thoroughly wetted.
- C. Soils having a slow infiltration rate when thoroughly wetted.
- D. Soils having a very slow infiltration rate when thoroughly wetted.

6. **Attachment B – Stratigraphic Column.** A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.
7. **Attachment C – Site Geology.** A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.
8. **Attachment D – Site Geologic Map(s).** The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'
 Applicant's Site Plan Scale: 1" = 40'
 Site Geologic Map Scale: 1" = 100'
 Site Soils Map Scale (if more than 1 soil type): 1" = 100'
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.

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June 2023

Geologic Assessment for the 7509 O'Connor Drive Tract located in Williamson County, Texas

1.0 INTRODUCTION

The Texas Commission on the Environmental Quality (TCEQ) regulates activities that have the potential to pollute the Edwards Aquifer through the Edwards Aquifer Protection Program. Projects meeting a certain criterion over the Edwards Aquifer Recharge Zone must submit an Edwards Aquifer Protection Plan (EAPP).

The purpose of this report is to identify all potential pathways for contaminant movement to the Edwards Aquifer and provide sufficient geologic information so that the appropriate Best Management Practices (BMPs) can be proposed in the Edwards Aquifer Protection Plan (EAPP). This report complies with the requirements of Title 30, Texas Administrative Code (TAC) Chapter 213 relating to the protection of the Edwards Aquifer Recharge Zone. Per the Rules, the Geologic Assessment must be completed by a Geologist licensed according to the Texas Geoscience Practice Act.

2.0 PROJECT INFORMATION

The 7509 O'Connor Drive Tract, hereafter referred to as the subject area or site, is home to the Frontier Bank of Texas Round Rock branch and located at 7509 O'Connor Drive (Dr) in the extraterritorial jurisdiction (ETJ) of Round Rock, Williamson County, Texas (**Attachment A, Figure 1**). Pedestrian investigations of the approximately 1.33-acre tract were performed on June 2, 2023, by Kevin Ramberg and Stan Reece, P.G., as well as on June 7, 2023, by Marcos Cardenas and Gabriel Nejad, under the supervision of Mark Adams, P.G. with **aci consulting**.

This report is intended to satisfy the requirements for a Geologic Assessment, which shall be included as a component of a Water Pollution Abatement Plan (WPAP). The site is approximately 1.33 acres in total. The scope of the report consists of a site reconnaissance, field survey, and review of existing data and reports. Features identified during the field survey were ranked utilizing the Texas Commission on Environmental Quality (TCEQ)

matrix for Edwards Aquifer Recharge Zone features. The ranking of the features will determine their viability as “sensitive” features.

3.0 INVESTIGATION METHODS

The following investigation methods and activities were used to develop this report:

- Review of existing files and literature to determine the regional geology and any known caves associated with the project area;
- Review of past geological field reports, cave studies, and correspondence regarding the existing geologic features on the project area, if available;
- Site reconnaissance by a registered professional geologist to identify and examine caves, recharge features, and other significant geological structures;
- Evaluation of collected field data and a ranking of features using the TCEQ Ranking Table 0585 for the Edwards Aquifer Recharge Zone; and
- Review of historic aerial photographs to determine if there are any structural features present, and to determine any past disturbances on the subject property.

4.0 SOILS AND GEOLOGY

The following includes a site-specific description of the soils, geologic stratigraphy, geologic structure, and karstic characteristics as they relate to the Edwards aquifer. Also included in this section is a review of historic aerials for presence of geologic changes or changes to manmade features in bedrock.

Soils

According to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Web Soil Survey (2023), one soil unit occurs within the project area (**Attachment A, Figure 2**):

- GsB – Georgetown stony clay loam, 1 to 3 percent slopes

The Crawford component makes up 88 percent of the map unit. Slopes are 0 to 1 percent. This component is on plains on dissected plateaus. The parent material consists of residuum weathered from limestone. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is very high. This soil is not flooded. It is not ponded. There is no

zone of water saturation within a depth of 72 inches. This soil does not meet the criteria for hydric soils. Hydrologic Soil Group: D.

Geologic Stratigraphy

According to the *Geologic Atlas of Texas, Austin Sheet*, one geologic unit occurs within the subject area (**Attachment A, Figure 3**). These units and a description by Barnes (1981) with a thickness from the *Geologic Map of the Round Rock Quadrangle, Texas* are as follows:

- Edwards Limestone (Ked)

“Limestone, dolomite, and chert; limestone aphanitic to fine grained, massive to thin bedded, hard, brittle, in part rudistids biostromes, much miliolid biosparite; dolomite fine to very fine grained, porous, medium gray to grayish brown; chert, nodules, and plates common, varies in amount from bed to bed, some intervals free of chert, mostly white to light gray; in zone of weathering considerably recrystallized, ‘honeycombed,’ and cavernous forming an aquifer; forms flat areas and plateaus bordered by scarps; thickness 60-350 feet, thins northward”

Site-Specific Stratigraphic Column

Formation	Members	Thickness (Barnes 1981)
Disconformity: Units above the Edwards Limestone have been eroded from this location.		
Edwards Limestone	Edwards Limestone	0-300 feet

Geologic Structure

The geologic strata associated with the Edwards Aquifer include the Georgetown Limestone Formation of the Washita Group, the Edwards Limestone Group which is interfingering with the Comanche Peak Formation, followed by the Walnut formation, and finally the Glen Rose Formation of the Trinity Group. These Groups dip gently to the southeast and are characterized by the Balcones Fault Escarpment, a zone of en echelon normal faults downthrown to the southeast. Locally, the dominant structural trend of faults within the area is 15°, as evidenced by the mapped fault patterns (**Attachment A,**

Figure 4). Thus, all features that have a trend ranging from 0° to 30° are considered “on trend” and were awarded the additional 10 points in the Geologic Assessment Table.

Karstic Characteristics

In limestone landscapes, karst is expressed by erratically developed cavernous porosity from dissolution of bedrock as water combined with weak acids moves through the subsurface. Karst terrains are typical of the Edwards Limestone, occurring across a vast region of Central Texas, including the Balcones Fault Escarpment. The features produced by karst processes include, but are not limited to, sinkholes, solution cavities, solution enlarged fractures, and caves. These features can eventually provide conduits for fluid movement such as surface water runoff, as “point recharge” to the Edwards Aquifer. Faults and manmade features within bedrock can also provide conduits for point recharge in many cases.

According to Edwards aquifer zone map produced by the TCEQ (2005), the entire subject area is within the Edwards Aquifer Recharge Zone. Thus, all karst features identified as sensitive within the project limits have the potential to be point recharge features into the Edwards aquifer.

Review of Historic Aerials

Aerial photographs were reviewed for the site and it was determined that ranching and agricultural activities occurred on the site since the first aerial image dated 1941 (**Attachment C**). O’Connor Drive can first be seen to the north in the 1995 aerial. A commercial structure can first be seen on-site in the 2004 aerial, and the subject area remains relatively unchanged throughout the 2020 aerial. Residential and commercial structures first appear in the vicinity of the subject area in the 2004 aerial, and this development continues throughout the 2020 aerial.

5.0 SUMMARY OF FINDINGS

This report documents the findings of a geologic assessment conducted by **aci consulting** personnel on June 2, 2023, and June 7, 2023. One feature (MB-01) was noted on the site. The remaining manmade features in bedrock associated with the existing commercial structure including but not limited to parking lots, storm drains, detention ponds, utility poles, and telecommunication cables were noted in the field but, due to the extensive number of these infrastructure-type features, they have been omitted from the findings

section of this report. A comprehensive description and recommendations for MB-01 can be found in **Attachment B**.

Based on assessment of each feature, it was determined that there are no sensitive karst features on the subject area. The singular feature was determined to be a non-karst feature and has been deemed non-sensitive. Several other utility and man-made features in bedrock were verified in the field but have been excluded from the findings of this report.

6.0 REFERENCES

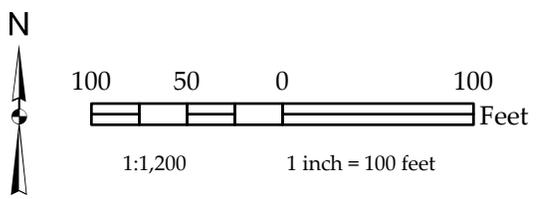
- Barnes, V.E. (project director) et. al., 1981. *Geologic Atlas of Texas, Austin Sheet*. The University of Texas at Austin, Bureau of Economic Geology. Scale 1:250,000
- (SCS) Soil Conservation Survey. 1983. Soil Survey of Williamson County, Texas. United States Department of Agriculture. Texas Agriculture Experiment Station.
- (TCEQ) Texas Commission on Environmental Quality. 2004. Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones. October 1, 2004. Austin, Texas.
- (TCEQ) Texas Commission on Environmental Quality. 2005. "Edwards Aquifer Protection Program, Chapter 213 Rules - Recharge Zone, Transition Zone, Contributing Zone, and Contributing Zone within the Transition Zone." Map. Digital data. September 1, 2005. Austin, Texas.
- (TWDB) Texas Water Development Board. 2023. Water Data Interactive Groundwater Data Viewer. Accessed on June 10, 2023. Available at:
<http://www2.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer>
- (USDA NRCS) U.S. Department of Agriculture Natural Resources Conservation Service. 2023. WebSoilSurvey.com. Soil Survey Area: Williamson County, Texas. Date accessed: June 10, 2023.

ATTACHMENT A

Site Maps

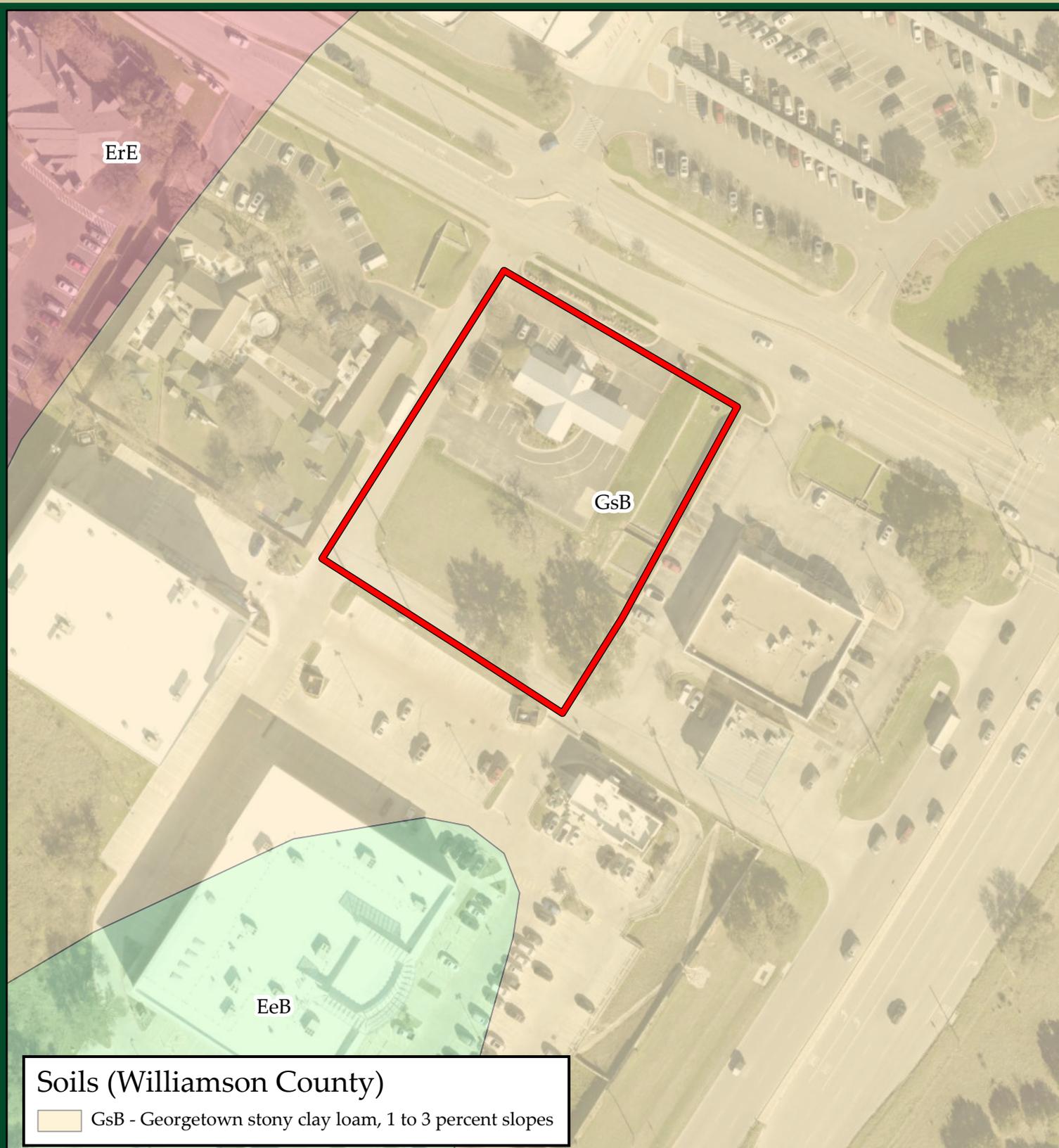


This map is intended for planning purposes only. All map data should be considered preliminary. All boundaries and designations are subject to confirmation.

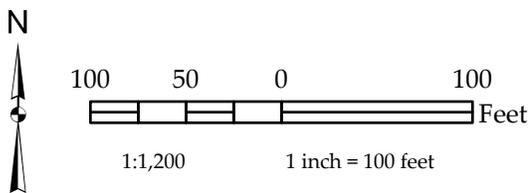


 Subject Area





This map is intended for planning purposes only. All map data should be considered preliminary. All boundaries and designations are subject to confirmation.



 **Subject Area**



The entire subject area is within the Edwards Aquifer Recharge Zone.



Ked

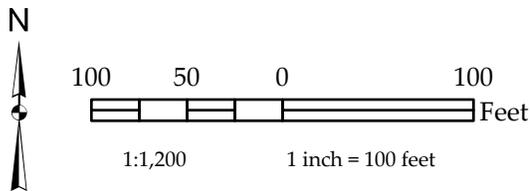
Geology

-  Ked - Edwards Limestone

Edwards Aquifer Zones

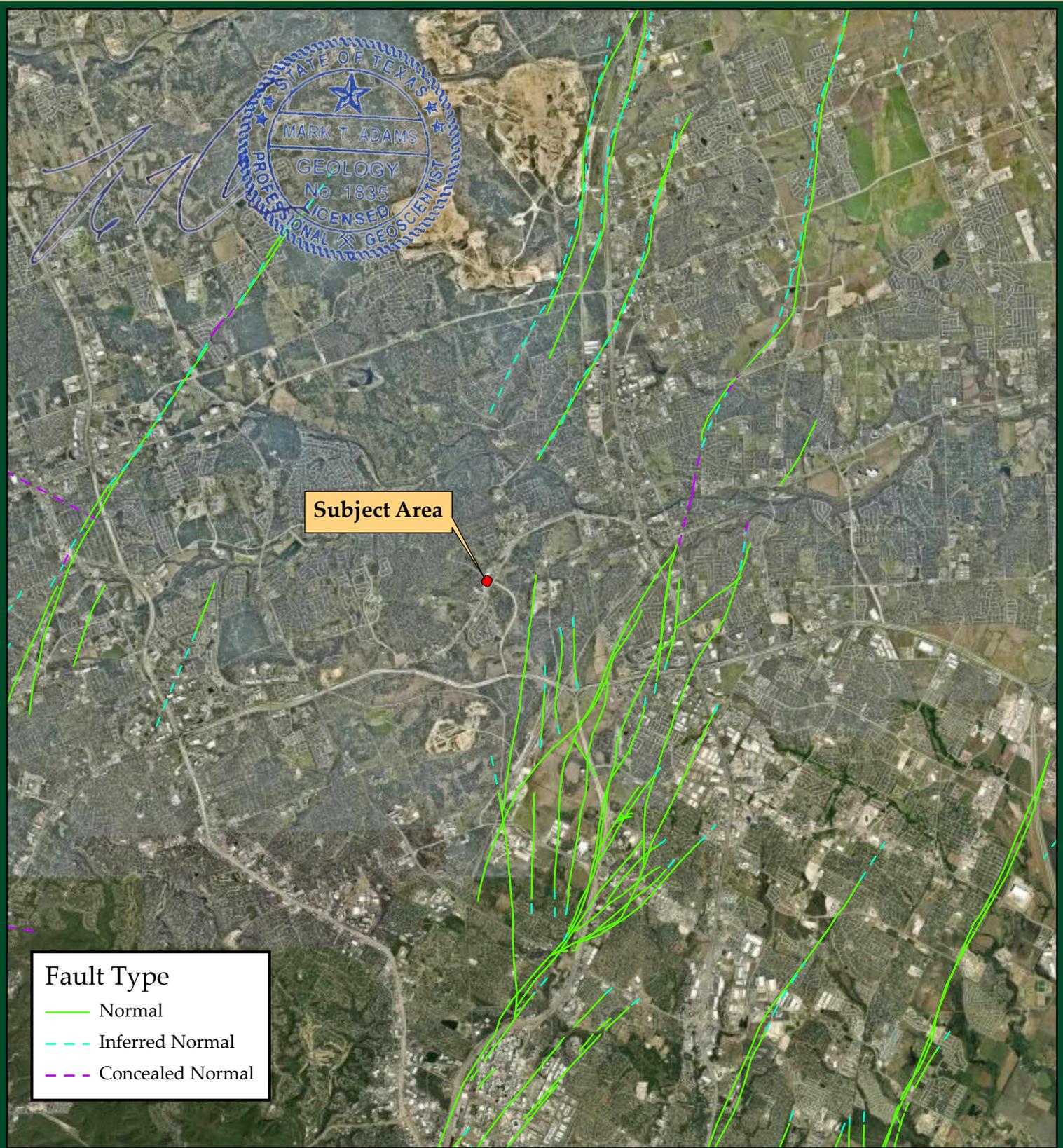
-  Edwards Aquifer Recharge Zone

This map is intended for planning purposes only. All map data should be considered preliminary. All boundaries and designations are subject to confirmation.



 Subject Area





This map is intended for planning purposes only. All map data should be considered preliminary. All boundaries and designations are subject to confirmation.

Fault Type

- Normal
- - - Inferred Normal
- - - Concealed Normal

N

10,000 5,000 0 10,000
 Feet

1:120,000 1 inch = 10,000 feet

The regional fault trend is approximately 15°.

Subject Area



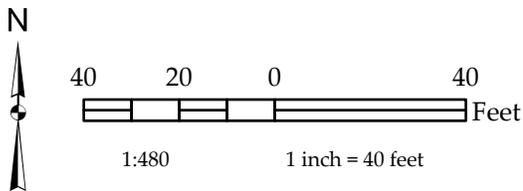
ATTACHMENT B

Geologic Table Geologic and Manmade Feature Map (Figure 5) Feature Descriptions and Recommendations

The subject area is entirely within the Edwards Limestone (Ked) and Edwards Aquifer Recharge Zone. There are no NHD Flowlines, Waterbodies, or NWI Wetlands within the Subject Area. There are no FEMA Flood Hazard Zones within the Subject Area.



This map is intended for planning purposes only. All map data should be considered preliminary. All boundaries and designations are subject to confirmation.



- Subject Area
- F-01 (Non-Sensitive)



MB-01

GPS: 30.49913, -97.722889

This feature is a manmade feature in bedrock (a backfilled hole) with an apparent diameter of 0.5 feet extending below the surface for approximately 1 foot. The feature is located in the Edwards Limestone and is positioned on a gently sloping hillside. Hand excavations were performed on this feature in order to identify the infill material within the feature. Loose, light-colored, non-native soil was noted within the feature, as well as small cobbles typically associated with fill material. No evidence of bedrock or drainage portals were noted within the feature. The feature has no trend, and a drainage area of less than 1.6 acres. MB-01 is located between a storm drain in the parking lot of Frontier Bank of Texas, and the stormwater detention pond for the bank. In using Figure 1 in Instructions to Geologists, it was determined that this feature is a soil-floored non-karst feature, and the probability of rapid infiltration into the subsurface is low. The infiltration rate for MB-01 has been assigned a point value of 7 and the feature is deemed non-sensitive.

Recommendation: As this feature is non-sensitive, no setbacks or buffers are required.



Overview of MB-01.



Fill-type material removed from inside MB-01



Interior of MB-01 showing more soils and fill-type material within.

ATTACHMENT C

Historic Aerial Photographs

Prepared for:

ACI CONSULTING
1001 Mopac Circle
Austin, TX 78746



Historical Aerial Photographs

TX

Williamson County

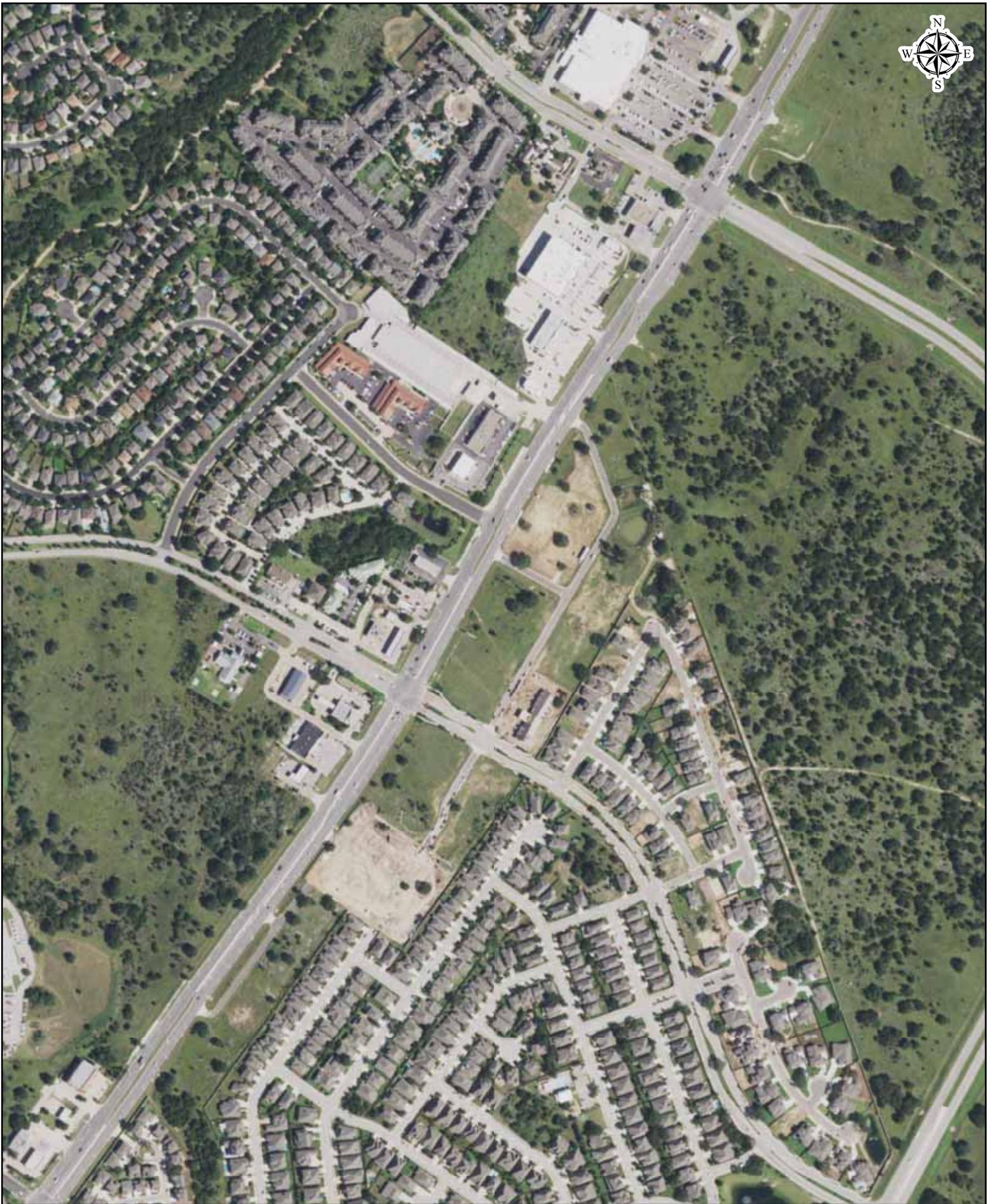
ES-140031

Wednesday, June 15, 2022



Date: 2020
Source: USDA





Date: 2016
Source: USDA





Date: 2010
Source: USDA





Date: 2004
Source: USDA





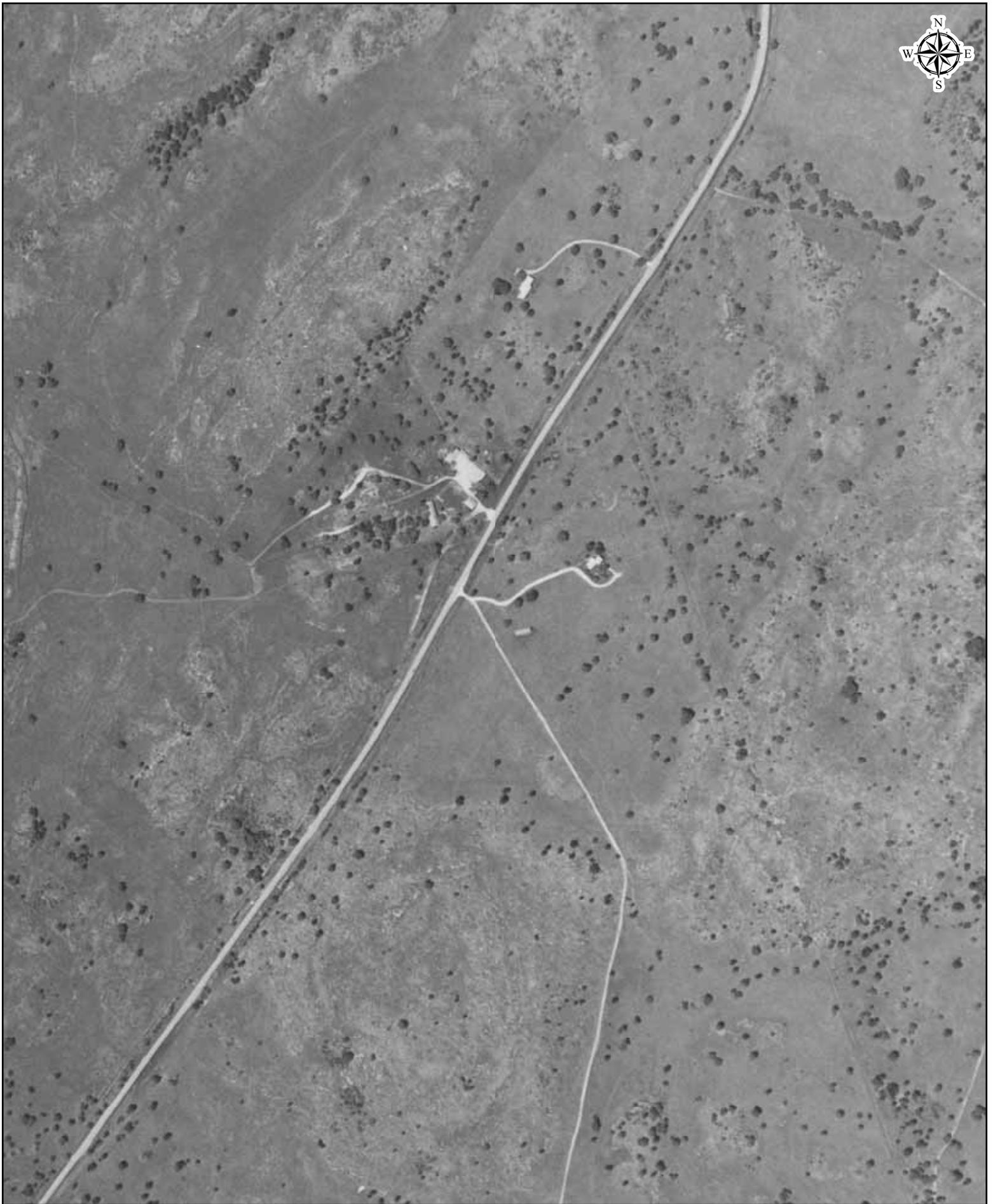
Date: 1995
Source: USGS





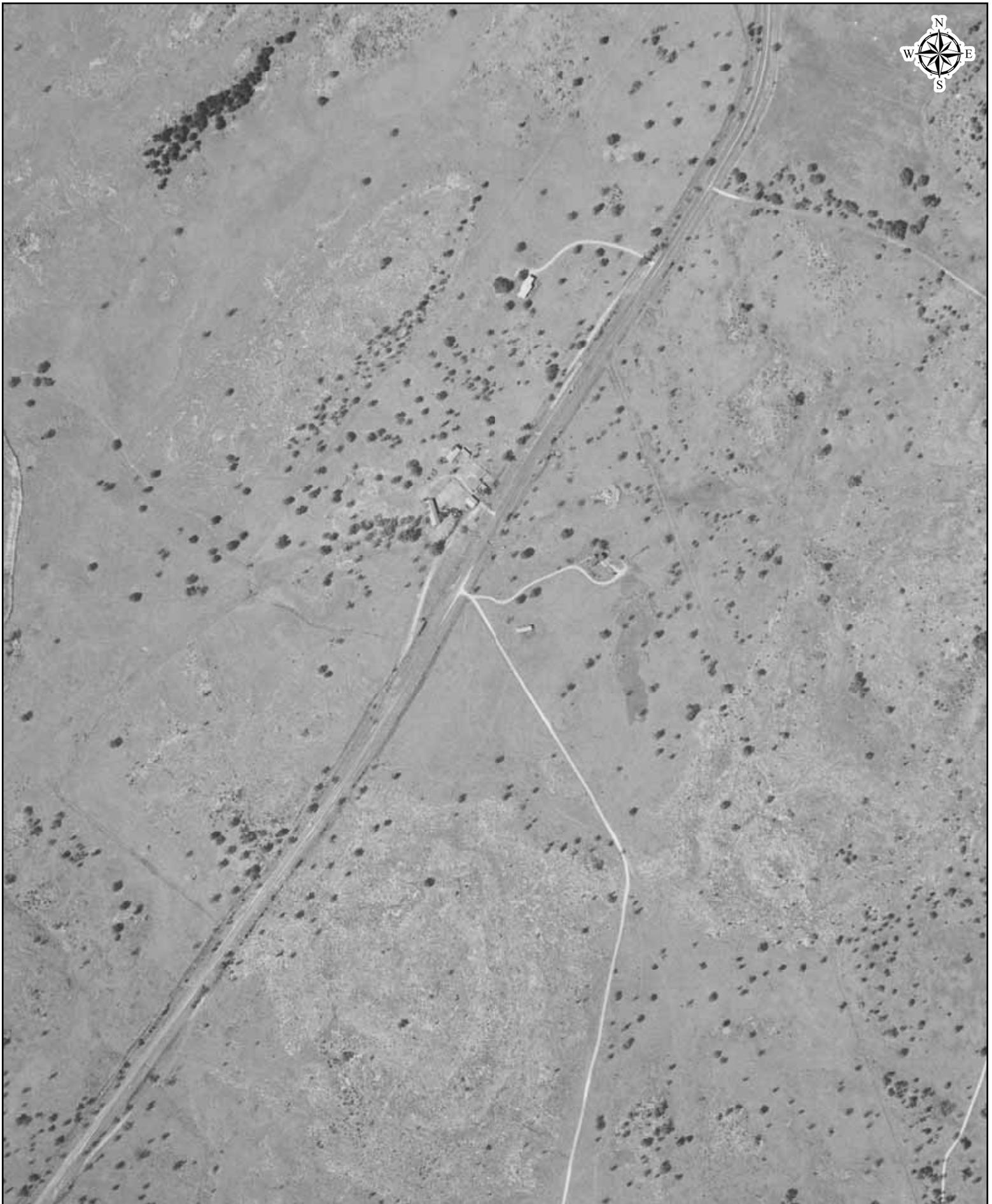
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Source: USGS



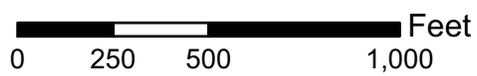


Date: 1973
Source: USGS



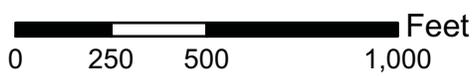


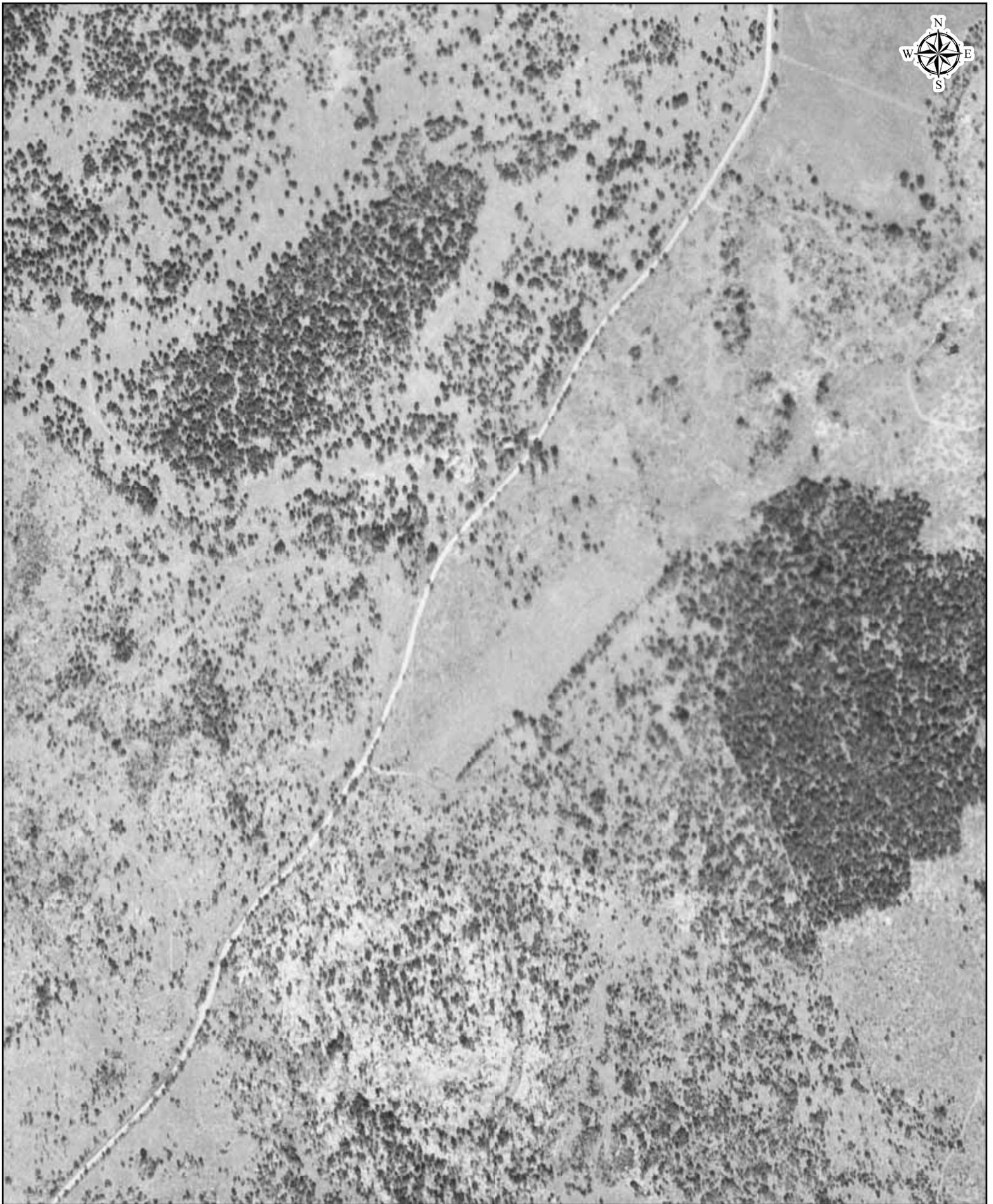
Date: 1967
Source: USGS





Date: 1954
Source: USGS





Date: 1941
Source: ASCS



AERIAL SOURCE DEFINITIONS

Acronym	Agency
NASA	National Aeronautics & Space Administration
AMS	Army Mapping Service
ASCS	Agricultural Stabilization & Conservation Service
SCS	Soil Conservation Service
USBR	United States Bureau of Reclamation
Fairchild	Fairchild Aerial Surveys
TXDOT	Texas Department of Transportation
BLM	Bureau of Land Management
USAF	United States Air Force
USCOE	United States Corps of Engineers
USDA	United States Department of Agriculture
USGS	United States Geological Survey
WALLACE	Wallace-Zingery Aerial Surveys
TNRIS	Texas Natural Resources Information System

HISTORICAL AERIAL PHOTOGRAPHS	
ES-140031	June 15, 2022



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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: LAKSHAY SHARMA

Date: 06/30/2022

Signature of Customer/Agent:



Regulated Entity Name: FRONTIER BANK

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): 1.33

3. Estimated projected population: 0

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	6,666	÷ 43,560 =	0.15
Parking	19,282.40	÷ 43,560 =	0.44
Other paved surfaces	3,015.47	÷ 43,560 =	0.07
Total Impervious Cover	28,963.42	÷ 43,560 =	0.67

Total Impervious Cover 0.67 ÷ Total Acreage 1.33 X 100 = 74.77% Impervious Cover

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

For Road Projects Only

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

7. Type of project:
 - TXDOT road project.
 - County road or roads built to county specifications.
 - City thoroughfare or roads to be dedicated to a municipality.
 - Street or road providing access to private driveways.
8. Type of pavement or road surface to be used:
 - Concrete
 - Asphaltic concrete pavement
 - Other: _____
9. Length of Right of Way (R.O.W.): _____ feet.
 Width of R.O.W.: _____ feet.
 $L \times W = \text{_____ Ft}^2 \div 43,560 \text{ Ft}^2/\text{Acre} = \text{_____ acres.}$
10. Length of pavement area: _____ feet.
 Width of pavement area: _____ feet.
 $L \times W = \text{_____ Ft}^2 \div 43,560 \text{ Ft}^2/\text{Acre} = \text{_____ acres.}$
 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:

<u>100%</u> Domestic	_____ Gallons/day
_____ % Industrial	_____ Gallons/day
_____ % Commingled	_____ Gallons/day
TOTAL gallons/day _____	

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 BRUSHY CREEK WASTEWATER (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" = 20'.

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): 48491C0630F FEMA FIRM PANEL (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.

WATER POLLUTION ABATEMENT PLAN APPLICATION
(FRONTIER BANK OFFICE LEASE BUILDING)

Attachments to form TCEQ-0584

ATTACHMENT A

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

ATTACHMENT B

The character of the storm water leaving the site shall be filtered and all pollutants will remain onsite. There is a partial sedimentation/filtration pond located on the site and Jellyfish filters which will filter the first flush of runoff from the proposed impervious areas. The outflow from these BMPs will be released and discharged into the existing Brushy Creek MUD storm sewer conveyance system and will not adversely impact the environment downstream.

ATTACHMENT C

Attachment C is not required. (Sustainability Letter for OSSF/Septic Tank)

ATTACHMENT D

A revised Geologic Assessment was performed and submitted along with this WPAP Application.

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: LAKSHAY SHARMA

Date: 06/30/2022

Signature of Customer/Agent:



Regulated Entity Name: FRONTIER BANK

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: N/A

Temporary Best Management Practices (TBMPs)

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

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

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

- There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.
11. **Attachment H - Temporary Sediment Pond(s) Plans and Calculations.** Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.
- N/A
12. **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.
13. All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.
14. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
15. Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.
16. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

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

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

18. Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
19. Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

20. All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.
21. If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.
22. Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

TEMPORARY STORWATER SECTION

Attachments to form TCEQ-0602

ATTACHMENT A

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

ATTACHMENT B

Potential Sources of Contamination:

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

ATTACHMENT C

Sequence of major activities for each phase is as follows:

1. The installation of Erosion/Sedimentation Controls –0.06 Ac. Disturbed
2. Clearing, grubbing, and removal of topsoil from entire site – 0.95 Ac. Disturbed
3. Rough grading and building pad excavation – 0.446. Disturbed
4. Excavating for utilities – 0.92 Ac. Disturbed
5. Finish grading and landscaping – 0.95 Ac. Disturbed

ATTACHMENT D

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

1. A stabilized construction entrance.
2. Silt fencing and rock berms around down gradient boundary of site.
3. Temporary sediment pond. The pond will be rough graded at the locations of the permanent wet basins.

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

ATTACHMENT F

Due to the limited area of the site, the silt fence and filter dikes will provide control to retain any runoff from the exposed site.

TEMPORARY STORWATER SECTION

Attachments to form TCEQ-0602

ATTACHMENT G

Refer to the drawings, sheet PDA.

ATTACHMENT H

The total site area is 1.33 acres and will not require a temporary sediment pond.

ATTACHMENT I

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

ATTACHMENT J

Schedule of Interim Soil Stabilization Practices:

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

Schedule of Permanent Soil Stabilization Practices:

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

SUGGESTED MAINTENANCE PLAN AND SCHEDULE FOR SEDIMENTATION AND FILTRATION BASINS

PROJECT NAME: FRONTIER BANK
ADDRESS: 7509 O'CONNER DR.
CITY, STATE ZIP: ROUND ROCK, TX 78681

SEDIMENTATION BASINS

Monthly: The vegetative growth in the basin shall be checked. The growth shall not exceed 18 inches in height.
Quarterly: The level of accumulated silt shall be checked. If depth of silt exceeds 6 inches, it shall be removed and disposed of "properly".
Annually: The basin shall be inspected for structural integrity and repaired if necessary.
After Rainfall: The basin shall be checked after each rainfall occurrence to insure that it drains within 48 hours after the storm is over.

FILTRATION BASINS

Monthly: The vegetative growth shall be checked. Vegetation in the basin shall not exceed 18 inches in height.
Quarterly: The level of accumulated silt shall be checked. If depth of silt/pollutants exceeds 1/4 inch, it shall be removed and disposed of "properly".
Annually: The basin shall be inspected for structural integrity and repaired if necessary.
After Rainfall: The basin shall be checked after each rainfall occurrence to insure that it drains within 48 hours after the sedimentation basin has been emptied.

Following any required maintenance, the surface of the filtration basin shall be raked and leveled to restore the system to its designed condition.

"Proper" disposal of accumulated silt shall be accomplished following Texas Natural Resource Conservation Commission and City of Austin guidelines and specifications.

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

Responsible Party: FRONTIER BANK
Mailing Address: 1213 HIGHWAY 290
City, State: ELGIN, TX Zip: 78621
Telephone: 512.281.1500 FAX: 512.281.1575

Signature of Responsible Party (with handwritten signature)

Date: June 26, 2022

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: LAKSHAY SHARMA

Date: 06/30/2022

Signature of Customer/Agent



Regulated Entity Name: FRONTIER BANK

Permanent Best Management Practices (BMPs)

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

- Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.
 N/A
- 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

PERMANENT STORMWATER SECTION

Attachments to form TCEQ-0600

ATTACHMENT A

This attachment is not needed. (20% or less Impervious Cover Waiver is not applied for as part of this application.)

ATTACHMENT B

Water quality will be provided by one sedimentation/filtration BMPs. Please refer to Sheet PDA. There are no up-gradient drainage areas which will bypass the site drainage areas.

ATTACHMENT C

One sedimentation/filtration pond and a wet basin will be used to prevent pollution of surface water or ground water originating on-site. A Vegetative Filter Strip and a Jellyfish Unit shall be provided for treatment of stormwater. Please ref. sheet PDA for TSS Load Removal calcs for respective BMPs.

ATTACHMENT D

There are no surface streams, sensitive features or aquifer entrance points on this site.

ATTACHMENT E

This attachment is not needed. (Request to Seal Features)

ATTACHMENT F

See attached drawings. (Construction Plans)

ATTACHMENT G

See attached maintenance plan for the ponds. (TCEQ-0589). The vegetative filter strips occur naturally and are adjacent to the land draining to the ponds. The area will not drain via gravity to any other BMP. The filter strips will be used in accordance with RG-348. Once the vegetative filter strips are established, little additional maintenance is necessary.

ATTACHMENT H

This attachment is not needed. (Pilot-Scale Field Testing Plan)

ATTACHMENT I

All flows from the site will be conveyed through a private storm sewer system to proposed BMPs. There will be no increase in the flows as demonstrated in the calculations in the plan sheets.

SIGNATURE PAGE:

Patricia Johnson
Applicant's Signature

Jun 26, 2022
Date

THE STATE OF Texas §

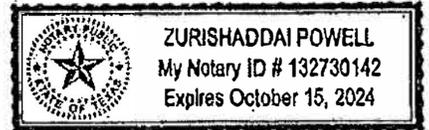
County of Tarrant §

BEFORE ME, the undersigned authority, on this day personally appeared Patricia Johnson 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 26th day of June, 2022.

Zurishaddai Powell
NOTARY PUBLIC

Zurishaddai Powell
Typed or Printed Name of Notary



MY COMMISSION EXPIRES: 10-15-2024

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: FRONTIER BANK

Regulated Entity Location: 7509 O'CONNOR DRIVE ROUND ROCK, TX 78681

Name of Customer: FRONTIER BANK

Contact Person: PATRICK JOHNSON Phone: _____

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 San Antonio Regional Office
 Mailed to: TCEQ - Cashier Overnight Delivery to: TCEQ - Cashier
 Revenues Section 12100 Park 35 Circle
 Mail Code 214 Building A, 3rd Floor
 P.O. Box 13088 Austin, TX 78753
 Austin, TX 78711-3088 (512)239-0357

Site Location (Check All That Apply):

- Recharge Zone Contributing Zone Transition Zone

Type of Plan	Size	Fee Due
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	1.33 Acres	\$ 4,000.00
Sewage Collection System		\$
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: _____

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

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

Organized Sewage Collection Systems and Modifications

<i>Project</i>	<i>Cost per Linear Foot</i>	<i>Minimum Fee- Maximum Fee</i>
Sewage Collection Systems	\$0.50	\$650 - \$6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

<i>Project</i>	<i>Cost per Tank or Piping System</i>	<i>Minimum Fee- Maximum Fee</i>
Underground and Aboveground Storage Tank Facility	\$650	\$650 - \$6,500

Exception Requests

<i>Project</i>	<i>Fee</i>
Exception Request	\$500

Extension of Time Requests

<i>Project</i>	<i>Fee</i>
Extension of Time Request	\$150



TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input type="checkbox"/> 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)	3/25/2021	
<input type="checkbox"/> New Customer <input type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership <input type="checkbox"/> 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:	
FRONTIER BANK			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
	12083847207		
11. Type of Customer:	<input checked="" type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other:	
12. Number of Employees	13. Independently Owned and Operated?		
<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input checked="" type="checkbox"/> 501 and higher	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following			
<input type="checkbox"/> Owner <input checked="" type="checkbox"/> Operator <input type="checkbox"/> Owner & Operator <input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> Voluntary Cleanup Applicant <input type="checkbox"/> Other:			
15. Mailing Address:	1213 HIGHWAY 290		
	City	ELGIN	State TX ZIP 78621 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) 281-1500		(512) 281-1575	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)	
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information	
The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).	
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)	
FRONTIER BANK	

23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	7509 O'CONNER DR							
	ROUND ROCK							
	City	RR	State	TX	ZIP	78681	ZIP + 4	
24. County								

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	300 FEET NW OF THE INTERSECTION OF O'CONNER & FM 620									
26. Nearest City	ROUND ROCK				State	TX	Nearest ZIP Code		78681	
27. Latitude (N) In Decimal:	30.4994			28. Longitude (W) In Decimal:	-97.7231					
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds					
29. Primary SIC Code (4 digits)	6029			30. Secondary SIC Code (4 digits)				31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)	
				52110						
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>										
34. Mailing Address:	7509 O'CONNER DRIVE									
	ROUND ROCK, TX 78681									
	City	RR	State	TX	ZIP	78681	ZIP + 4			
35. E-Mail Address:										
36. Telephone Number			37. Extension or Code			38. Fax Number <i>(if applicable)</i>				
() -			() -			() -				

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.

<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input checked="" type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

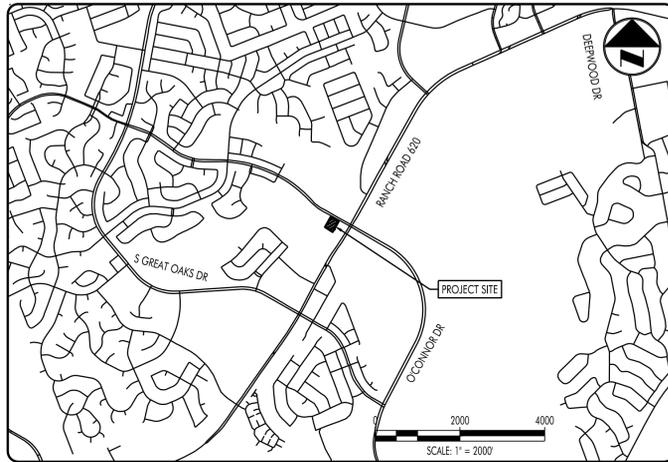
40. Name:	RAQUEL SAENZ			41. Title:	PROJECT ASSISTANT		
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address				
(512) 244-1546		() -	RAQUELR@HEAENG.COM				

SECTION V: Authorized Signature

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

Company:	HAGOOD ENGINEERING ASSOCIATES		Job Title:	PROJECT MANAGER	
Name <i>(In Print)</i> :	LAKSHAY SHARMA			Phone:	(512) 244- 1546
Signature:				Date:	

SITE LOCATION MAP



BENCHMARKS

TBM #1 - JPH BENCHMARK (SEE SP1)
ELEV = 810.79
TBM #2 - JPH BENCHMARK (SEE SP1)
ELEV = 813.34

LEGAL DESCRIPTION

LOT 86 CAT HOLLOW SECTION C-COMMERCIAL I (1.33 AC.)

PLAN SUBMITTALS

NO.	DATE	COMMENTS
1	6/30/2022	SUBMITTAL TO TCEQ (WPAP MOD)
2	7/27/2022	SUBMITTAL TO BRUSHY CREEK MUD, WILLIAMSON COUNTY AND SAM BASS FIRE DEPARTMENT
3	8/18/2023	SUBMITTAL TO TCEQ (WPAP MOD) - 2
4		
5		
6		
7		
8		
9		
10		

NOTES:

- NO PORTION OF THE ABOVE LEGALLY DESCRIBED PROPERTY IS WITHIN THE DESIGNATED 1% ANNUAL CHANCE FLOODPLAIN AREA AS DESIGNATED BY F.E.M.A. FLOOD INSURANCE RATE MAP (FIRM) ON COMMUNITY PANEL NO. 48491C0630F, DATED DECEMBER 20, 2019 FOR THE CITY OF ROUND ROCK, WILLIAMSON COUNTY, TEXAS.
- THIS PROPERTY IS WITHIN THE EDWARDS AQUIFER RECHARGE ZONE.
- SEE SHEET C00 FOR GENERAL NOTES.

**SITE DEVELOPMENT PLANS
SUBMITTED FOR
FRONTIER BANK LEASE BUILDING**

**7509 O'CONNOR DR.
ROUND ROCK, TEXAS 78681**

Sheet List Table

SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION
01	PSP	PRELIMINARY SITE PLAN
01	CVR	COVER
02	SP	SITE PLAN
03	PLAT 1	PLAT
04	PLAT 2	PLAT
05	SRV	SURVEY
06	EDA	EXISTING DRAINAGE AREA
07	PDA	PROPOSED DRAINAGE AREA
08	PDA-2	PROPOSED DRAINAGE AREA CALCULATIONS
09	C00	GENERAL NOTES
10	C10	EROSION AND SEDIMENTATION CONTROL PLAN
11	C11	DEMOLITION PLAN
12	C20	DIMENSION CONTROL PLAN
13	C30	PAVING AND STRIPING PLAN
14	C40	GRADING PLAN
15	C50	DRAINAGE PLAN
16	C60	UTILITY PLAN
17	C61	UTILITY PROFILE
18	C70	CONSTRUCTION DETAILS
19	C71	EROSION DETAILS
20	C72	UTILITY DETAILS

**OWNER
FRONTIER BANK**
1213 HIGHWAY 290
ELGIN, TEXAS 78621
512-281-1500

**ARCHITECT
TGS ARCHITECTS**
825 WATTERS CREEK BLVD
ALLEN, TEXAS 75013
SEAN NEAL

**SURVEYOR
JPH LAND SURVEYING, INC.**
785 LONESOME DOVE TRAIL
HURST, TEXAS 76054
COLE STREVEY
512-686-1474

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

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

STATE OF TEXAS ★
COUNTY OF WILLIAMSON ★

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



Terry R. Hagood

08/18/2023

ACCEPTED FOR CONSTRUCTION BY:

Planning and Development Services
City of Round Rock, Texas

Date

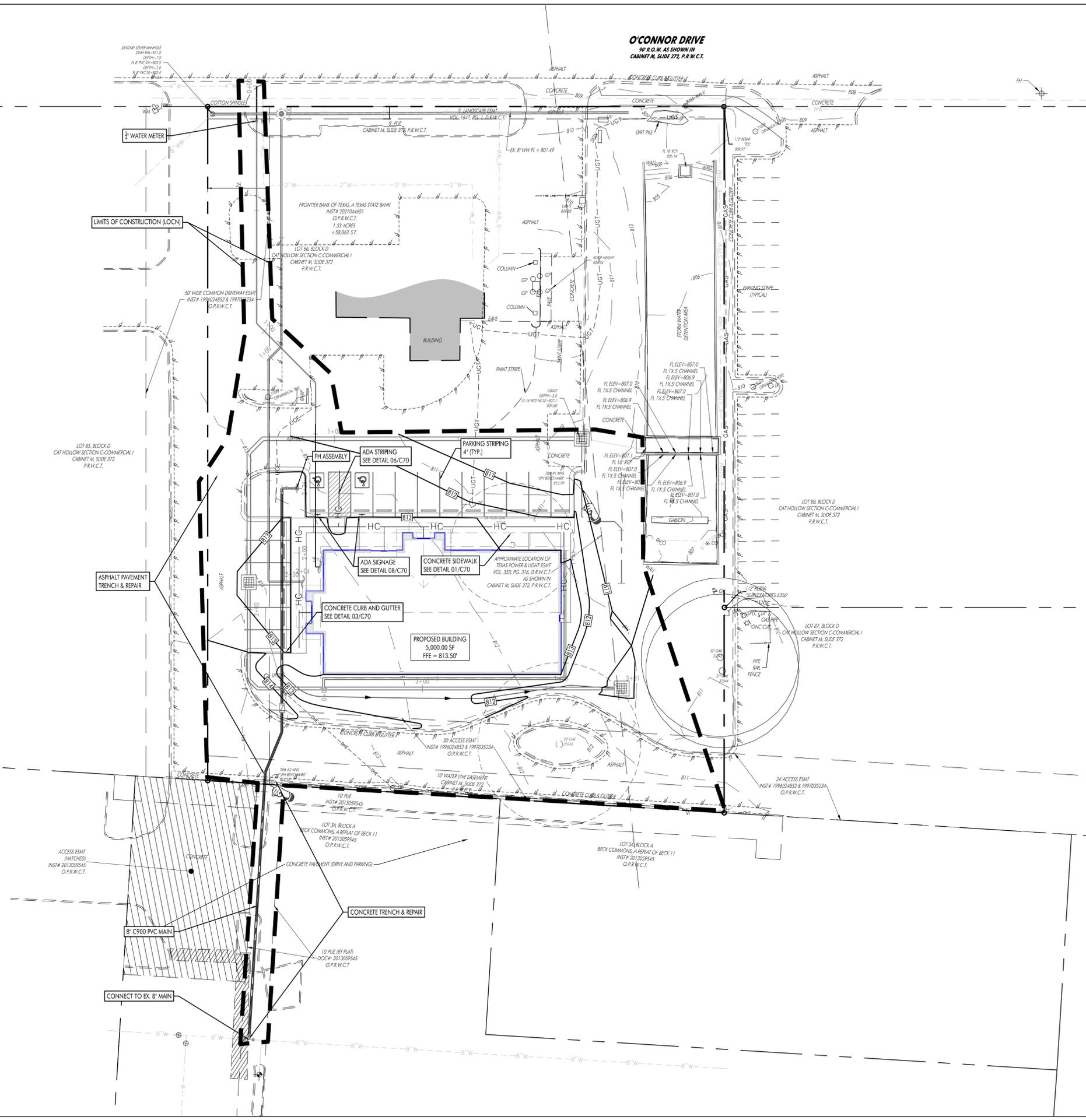
SITE PLAN PERMIT NO.	_____
RECORDED FINAL PLAT DOC. NO.	_____
METER SERIAL NO.	_____
UTILITY BILLING ACCOUNT NO.	_____
WPAP APPROVAL CASE #	_____ APPROVAL DATE _____
IMPERVIOUS COVER	
PUBLIC SIDEWALK, STREET, CURB AND GUTTER	0 SF
BUILDING FOOTPRINT	6,665.55 SF
PARKING, PRIVATE SIDEWALK	27,928.88 SF
TOTAL	34,594.43 SF
TOTAL AREA OF DISTURBANCE (LOC)	41,480.8 SF



REVISIONS

NO.	DATE	DESCRIPTION	APPROVED BY
1			
2			
3			
4			
5			

<p>900 E. Main Street Round Rock, TX 78664 Phone (512) 244-1546 Fax (512) 244-1010 www.heaa.eng.pro TBPE Registration No. F-12709 JOB NO. 22-001 © 2022 HEA, Inc.</p>	JOB NO:	22-001
	DRAWN BY:	AMR
	CHECKED BY:	TRH
	P.I.C.:	TRH
	FILE NO:	22-001 CVR
DATE:	08/18/2023	
SHEET:	01 OF 19	



- ### LEGEND
- IRON ROD FOUND/SET
 - CONCRETE MONUMENT FOUND/SET
 - ▲ NAIL FOUND/SET
 - △ PIPE FOUND
 - ⊙ STORMWATER MANHOLE (DRAWN TO SCALE)
 - ⊙ WASTEWATER CLEANOUT
 - ⊙ WASTEWATER MANHOLE (DRAWN TO SCALE)
 - ⊙ GAS TEST STATION
 - ⊙ GAS METER
 - ⊙ ELECTRIC METER
 - ⊙ LIGHT POLE
 - ⊙ SIGNAL LIGHT POLE
 - ⊙ UTILITY POLE
 - ⊙ TELEPHONE MANHOLE
 - ⊙ FIRE HYDRANT
 - ⊙ GATE VALVE
 - ⊙ IRRIGATION CONTROL VALVE
 - ⊙ WATER METER
 - EXISTING CONTOURS
 - PROPOSED CONTOUR
 - PROPOSED CURB AND GUTTER
 - PROPOSED ASPHALT
 - PROPOSED X" DIA. GAS LINE
 - PROPOSED X" DIA. STORM SEWER LINE
 - PROPOSED X" DIA. WASTEWATER LINE
 - PROPOSED X" DIA. WATER LINE
 - EXISTING CHAIN LINK FENCE
 - EXISTING WIRE FENCE
 - EXISTING WOOD FENCE
 - SETBACK LINE
 - EASEMENT LINE
 - EXISTING ASPHALT
 - OHE --- EXISTING OVERHEAD ELECTRIC LINE
 - UGE --- EXISTING UNDERGROUND ELECTRIC LINE
 - OHT --- EXISTING OVERHEAD TELEPHONE LINE
 - UGT --- EXISTING UNDERGROUND TELEPHONE LINE
 - W --- EXISTING WATER LINE (SIZE VARIES)
 - WW --- EXISTING WASTEWATER LINE (SIZE VARIES)
 - FM --- EXISTING FORCE MAIN (SIZE VARIES)
 - FOC --- EXISTING FIBER OPTIC LINE
 - GAS --- EXISTING GAS LINE (SIZE VARIES)
 - BENCHMARK LOCATION
 - EXISTING TREE TO REMAIN (SIZE VARIES)
 - EXISTING TREE TO BE REMOVED (SIZE VARIES)
 - MONARCH/HERITAGE TREE (SIZE VARIES)
 - PARKING COUNT
 - HC --- PARCEL LINES
 - HC --- HANDICAP ACCESS LINES
 - CONCRETE PAVING
 - ASPHALT PAVING
 - CONCRETE SIDEWALK

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

TERRY R. HAGOOD
REGISTERED PROFESSIONAL ENGINEER
No. 15182723

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGOOD, P.E. 07/09. THIS DOCUMENT MAY NOT BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ENGINEER AND MAY NOT BE ACCORDING WITH THE RULES OF THE TEXAS ENGINEERING PRACTICE ACT.

JOB NO. 22-001 © 2022 HEA, Inc.
DATE SIGNED: 08/18/2023
ISSUED FOR: AGENCY REVIEW

**SITE DEVELOPMENT PLANS FOR
FRONTIER BANK LEASE BUILDING
7509 O'CONNOR DR.
ROUND ROCK, TEXAS 78681**

NO.	DATE	DESCRIPTION	REVISIONS

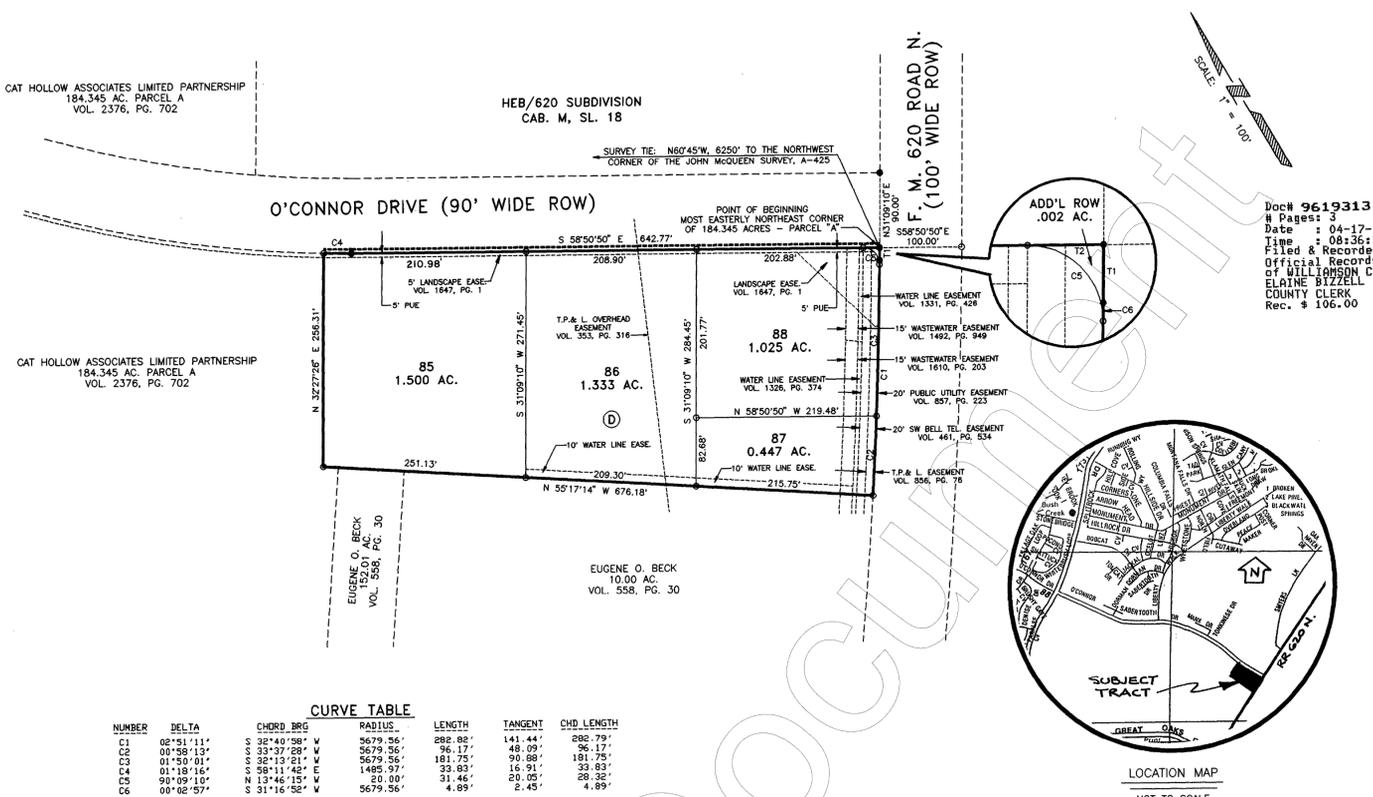
HEA PROJECT NO. 22-001
ISSUED DATE: 08/18/2023

SITE PLAN

SHEET NO.
SP
02

Aug 15, 2023 5:00pm Z:\HEA\HEA Projects\Projects 22-000\22-001 Frontier Bank Lease Building\CAD Files\Civil\SD\22-001.SP.dwg

CAT HOLLOW SECTION C-COMMERCIAL I



Doch 9619313
Pages: 3
Date: 04-17-96
Time: 08:36:15 A.M.
Filed & Recorded in
Official Records
of WILLIAMSON County, TX.
ELAINE BITZELL
COUNTY CLERK
Rec. \$ 106.00

CURVE TABLE

NUMBER	DELTA	CHORD BEG	RADIUS	LENGTH	TANGENT	CHD LENGTH
C1	02°51'11"	S 32°49'38" W	5679.56'	282.82'	141.44'	96.17'
C2	01°58'13"	S 33°27'28" W	5679.56'	36.17'	48.09'	36.17'
C3	01°50'01"	S 32°13'21" W	5679.56'	181.75'	90.88'	181.75'
C4	01°18'16"	S 58°11'42" E	1485.97'	33.83'	16.91'	33.83'
C5	01°09'10"	N 1°16'15" E	1519.00'	31.46'	20.05'	31.46'
C6	00°02'57"	S 31°16'52" W	5679.56'	4.89'	2.45'	4.89'

TANGENT TABLE

NUMBER	DISTANCE	BEARING
T1	15.16'	S 31°09'10" W
T2	50.01'	S 58°50'50" E

FIELD NOTES FOR CAT HOLLOW SECTION C-COMMERCIAL I

FIELD NOTES DESCRIBING 4.307 ACRES OF LAND IN THE JOHN MCQUEEN SURVEY, A-425, SITUATED IN WILLIAMSON COUNTY, TEXAS, BEING A 1.232 ACRE PORTION OF THAT CERTAIN 184.345 ACRE PARCEL "A" CONVEYED TO CAT HOLLOW ASSOCIATES LIMITED PARTNERSHIP BY SPECIAL WARRANTY DEED RECORDED IN VOLUME 2376, PAGE 702 OF THE DEED RECORDS OF WILLIAMSON COUNTY, TEXAS, AND A 3.075 ACRE PORTION OF THAT CERTAIN 152.01 ACRE TRACT OF LAND CONVEYED TO EUGENE O. BECK BY DEED RECORDED IN VOLUME 558, PAGE 30 OF THE DEED RECORDS OF WILLIAMSON COUNTY, TEXAS, AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT AN IRON PIN FOUND ON THE SOUTH RIGHT-OF-WAY LINE OF O'CONNOR DRIVE AT ITS INTERSECTION WITH THE WEST RIGHT-OF-WAY LINE RANCH ROAD 620 N., BEING THE MOST EASTERLY NORTHEAST CORNER OF SAID 184.345 ACRE PARCEL "A", FROM WHICH THE NORTHWEST CORNER OF THE JOHN MCQUEEN SURVEY, ABSTRACT NO. 425 BEARS N60°45'W, 6250 FEET, FOR THE NORTHEAST CORNER AND POINT OF BEGINNING OF THE HEREINAFTER DESCRIBED TRACT.

THENCE ALONG THE WEST RIGHT-OF-WAY LINE OF RANCH ROAD 620 N., FOR THE EAST LINE HEREOF, THE FOLLOWING TWO (9) COURSES:

- S31°09'10"W, 15.16 FEET TO AN IRON PIN FOUND AT THE POINT OF CURVATURE OF A CURVE TO THE RIGHT HAVING A RADIUS OF 5679.56 FEET AND A CENTRAL ANGLE OF 2°51'11"
- TO THE RIGHT HAVING A RADIUS OF 5679.56 FEET AND A CENTRAL ANGLE OF 1°58'13"
- ALONG THE ARC OF SAID CURVE 282.82 FEET, THE SUB-CHORD OF WHICH BEARS S32°49'38"W, 282.79 FEET TO AN IRON PIN SET AT THE NORTHEAST CORNER OF THAT CERTAIN 10.00 ACRE TRACT OF LAND CONVEYED TO EUGENE O. BECK BY DEED RECORDED IN VOLUME 558, PAGE 30 OF THE SAID DEED RECORDS, FOR THE SOUTHEAST CORNER OF THIS TRACT.

THENCE DEPARTING SAID WEST RIGHT-OF-WAY LINE, ALONG THE NORTH LINE OF SAID 10.00 ACRE TRACT, FOR THE SOUTH LINE HEREOF, N55°17'14"W, 676.18 FEET TO AN IRON PIN SET FOR THE SOUTHWEST CORNER OF THIS TRACT.

THENCE ALONG THE WEST LINE HEREOF, N32°27'28"E, 256.31 FEET TO AN IRON PIN SET ON THE CURVING SOUTH RIGHT-OF-WAY LINE OF O'CONNOR DRIVE, BEING THE POINT OF CURVATURE OF A CURVE TO THE LEFT HAVING A RADIUS OF 1485.97 FEET AND A CENTRAL ANGLE OF 1°18'16"

THENCE ALONG THE CURVING SOUTH RIGHT-OF-WAY LINE OF O'CONNOR DRIVE, FOR THE NORTH LINE HEREOF, THE FOLLOWING TWO (2) COURSES:

- ALONG THE ARC OF SAID CURVE 33.83 FEET, THE SUB-CHORD OF WHICH BEARS S58°11'42"E, 33.83 FEET TO AN IRON PIN SET FOR THE POINT OF TANGENCY OF SAID CURVE.
- S58°50'50"E, 642.77 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT, CONTAINING 4.307 ACRES OF LAND, MORE OR LESS.

I, CLAUDE F. HINKLE, JR., A REGISTERED PROFESSIONAL LAND SURVEYOR, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF SURVEYING AND HEREBY CERTIFY THAT THIS PLAN COMPLIES WITH THE SURVEYING RELATED PORTIONS OF TITLE 13 OF THE AUSTIN CITY CODE OF 1981, AS AMENDED, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND WAS PREPARED FROM AN ACTUAL ON-THE-GROUND SURVEY OF THE PROPERTY MADE UNDER MY DIRECTION AND SUPERVISION, AND THE FIELD NOTES SHOWN HEREON CLOSE.

AUSTIN SURVEYORS
P. O. BOX 180243
AUSTIN, TEXAS 78757

CLAUDE F. HINKLE, JR.
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 4629

DATE: 1-19-96

CAT HOLLOW SECTION C-COMMERCIAL I

OWNERS: CAT HOLLOW ASSOCIATES LIMITED PARTNERSHIP
C/O PARKLANE DEVELOPMENT CO.
HOUSTON BUILDING, SUITE 100
HOUSTON, TEXAS 78759
EUGENE O. BECK
15611 RANCH ROAD 620 N.
AUSTIN, TEXAS 78717

ACREAGE: 4.307 ACRES
SURVEY: JOHN MCQUEEN SURVEY, A-425
NUMBER OF BLOCKS: 1 BLOCKS
NUMBER OF LOTS: 4 LOTS
L. F. OF NEW STREET: NO NEW STREETS
DATE: OCTOBER, 1995
SURVEYOR: AUSTIN SURVEYORS
P. O. BOX 180243
AUSTIN, TEXAS 78757
ENGINEER: GRAY ENGINEERING, INC.
8217 SHOAL CREEK BLVD., SUITE 100
AUSTIN, TEXAS 78757-7592

CAT HOLLOW SECTION C-COMMERCIAL I SHEET 1 OF 3

PROJECT NO. 1210-7405-14	DESIGNED BY: MEW
FILE NO. 7405P1.DWG	DRAWN BY: MEW
DATE: OCTOBER, 1995	CHECKED BY: DWG
SCALE: 1" = 100'	REVISED BY:

GRAY ENGINEERING, INC.
Consulting Engineers
8217 Shoal Creek Blvd., Suite 100
Austin, Texas 78757-7596
(512)452-0871 FAX:(512)454-9933

C8-94-0233.1A

CAT HOLLOW SECTION C-COMMERCIAL I

THE STATE OF TEXAS :
THE COUNTY OF TRAVIS :

KNOW ALL MEN BY THESE PRESENTS:

THAT CAT HOLLOW ASSOCIATES LIMITED PARTNERSHIP, A TEXAS LIMITED PARTNERSHIP, HAVING ITS HOME OFFICE IN AUSTIN, TEXAS, ACTING HEREIN BY AND THROUGH ITS GENERAL PARTNER, E.W. DEVELOPMENT COMPANY, A TEXAS CORPORATION, ACTING HEREIN BY AND THROUGH ITS DULY AUTHORIZED PRESIDENT, ED WENDLER, JR., BEING THE SOLE OWNER OF 1.232 ACRES OF LAND OUT OF AND A PART OF THE JOHN MCQUEEN SURVEY, ABSTRACT NO. 425, SITUATED IN WILLIAMSON COUNTY, TEXAS, BEING A PORTION OF THAT CERTAIN 184.345 ACRE PARCEL "A" AS CONVEYED BY SPECIAL WARRANTY DEED RECORDED IN VOLUME 2376, PAGE 702 OF THE DEED RECORDS OF WILLIAMSON COUNTY, TEXAS, AND EUGENE O. BECK, AN INDIVIDUAL, BEING THE SOLE OWNER OF 3.075 ACRES OF LAND OUT OF AND A PART OF THE JOHN MCQUEEN SURVEY, ABSTRACT NO. 425, SITUATED IN WILLIAMSON COUNTY, TEXAS, BEING A PORTION OF THAT CERTAIN 152.01 ACRE TRACT OF LAND AS CONVEYED BY DEED RECORDED IN VOLUME 558, PAGE 30 OF THE DEED RECORDS OF WILLIAMSON COUNTY, TEXAS, DO HEREBY SUBDIVIDE SAID 4.307 ACRES OF LAND PURSUANT TO TITLE 13 OF THE AUSTIN CITY CODE AND CHAPTER 212, TEXAS LOCAL GOVERNMENT CODE, AND IN ACCORDANCE WITH THE ATTACHED MAP OR PLAT, TO BE KNOWN AS

CAT HOLLOW SECTION C-COMMERCIAL I

AND DO HEREBY JOIN, APPROVE, AND CONSENT TO ALL DEDICATIONS AND PLAT NOTE REQUIREMENTS SHOWN HEREON, AND DO HEREBY APPROVE THE RECORDATION OF THIS SUBDIVISION PLAT AND DEDICATE TO THE PUBLIC USE FOREVER ANY AND ALL EASEMENTS, STREETS AND ROADS THAT ARE SHOWN HEREON, SUBJECT TO ANY EASEMENTS AND/OR RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED. WE HEREBY ACKNOWLEDGE THAT CAT HOLLOW ASSOCIATES LIMITED PARTNERSHIP AND EUGENE O. BECK ARE THE SOLE OWNERS OF THIS PROPERTY AND DO HEREBY STATE THAT THERE ARE NO LIENHOLDERS OR ANY UNPAID DEBT FOR WHICH THIS PROPERTY REPRESENTS COLLATERAL ON ANY LOAN.

WITNESS MY HAND THIS THE 12th DAY OF February, 1996 A.D.

CAT HOLLOW ASSOCIATES LIMITED PARTNERSHIP
A TEXAS LIMITED PARTNERSHIP
C/O PARKLANE DEVELOPMENT CO.
9171 CAPITOL OF TEXAS HIGHWAY NORTH
HOUSTON BUILDING, SUITE 100
AUSTIN, TEXAS 78759

BY: E. W. DEVELOPMENT COMPANY
A TEXAS CORPORATION, GENERAL PARTNER

BY: Ed Wendler, Jr.
ED WENDLER, JR., PRESIDENT

WITNESS MY HAND THIS THE 28th DAY OF February, 1996 A.D.

EUGENE O. BECK
15611 RANCH ROAD 620 N.
AUSTIN, TEXAS 78717

BY: Eugene Beck
EUGENE O. BECK, INDIVIDUAL

THE STATE OF TEXAS :
THE COUNTY OF TRAVIS :

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED ED WENDLER, JR., PRESIDENT OF E. W. DEVELOPMENT COMPANY, GENERAL PARTNER OF CAT HOLLOW ASSOCIATES LIMITED PARTNERSHIP, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND HE ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED.

WITNESS MY HAND AND SEAL THIS THE 12 DAY OF February, 1996 A.D.

Kimberly Tippitt
NOTARY PUBLIC IN AND FOR
THE STATE OF TEXAS

PRINTED NAME OF NOTARY MY COMMISSION EXPIRES ON 07/25/00

THE STATE OF TEXAS :
THE COUNTY OF TRAVIS :

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED EUGENE O. BECK, AN INDIVIDUAL, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND HE ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED.

WITNESS MY HAND AND SEAL THIS THE 28th DAY OF February, 1996 A.D.

Sharon L. Lopez
NOTARY PUBLIC IN AND FOR
THE STATE OF TEXAS

PRINTED NAME OF NOTARY MY COMMISSION EXPIRES ON 12-12-99

GENERAL NOTES:

- ALL STREETS, DRAINAGE SIDEWALKS, EROSION CONTROL, AND WATER AND WASTEWATER LINES SHALL BE CONSTRUCTED AND INSTALLED TO CITY OF AUSTIN STANDARDS.
- NO LOT IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTION IS MADE TO THE BRUSHY CREEK MUNICIPAL UTILITY DISTRICT WATER AND WASTEWATER SYSTEM.
- AN EROSION/SEDIMENTATION CONTROL PLAN PURSUANT TO LDC SECTION 13-7-14 IS REQUIRED FOR ALL CONSTRUCTION, INCLUDING SINGLE FAMILY HOMES IN THIS SUBDIVISION.
- PRIOR TO CONSTRUCTION, EXCEPT DETACHED SINGLE FAMILY ON ANY LOT IN THIS SUBDIVISION, A SITE DEVELOPMENT PERMIT MUST BE OBTAINED FROM THE CITY OF AUSTIN.
- WATER AND WASTEWATER SYSTEMS SERVING THIS SUBDIVISION SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE CITY OF AUSTIN AND STATE HEALTH DEPARTMENT PLANS AND SPECIFICATIONS. PLANS AND SPECIFICATIONS SHALL BE SUBMITTED TO THE CITY OF AUSTIN, WATER AND WASTEWATER DEPARTMENT, FOR REVIEW AND APPROVAL.
- THE OWNER OF THIS SUBDIVISION, AND HIS OR HER SUCCESSORS AND ASSIGNS, ASSUMES RESPONSIBILITY FOR PLANS FOR CONSTRUCTION OF SUBDIVISION IMPROVEMENTS WHICH COMPLY WITH APPLICABLE CODES AND REQUIREMENTS OF THE CITY OF AUSTIN. THE OWNER UNDERSTANDS AND ACKNOWLEDGES THAT PLAT VACATION OR REPLATING MAY BE REQUIRED, AT THE OWNER'S SOLE EXPENSE, IF PLANS TO CONSTRUCT THIS SUBDIVISION DO NOT COMPLY WITH SUCH CODES AND REQUIREMENTS.
- THIS SUBDIVISION PLAT WAS APPROVED AND RECORDED BEFORE THE CONSTRUCTION AND ACCEPTANCE OF STREETS AND OTHER SUBDIVISION IMPROVEMENTS. PURSUANT TO THE TERMS OF A SUBDIVISION IMPROVEMENTS AGREEMENT BETWEEN THE SUBDIVIDER AND THE CITY OF AUSTIN DATED 12/11/95, THE SUBDIVIDER IS RESPONSIBLE FOR THE CONSTRUCTION OF ALL IMPROVEMENTS NEEDED TO SERVE THE LOTS WITHIN THE SUBDIVISION. THIS RESPONSIBILITY MAY BE ASSIGNED IN ACCORDANCE WITH THE TERMS OF THAT AGREEMENT. FOR THE SUBDIVISION IMPROVEMENTS AGREEMENT PERTAINING TO THIS SUBDIVISION, SEE SEPARATE INSTRUMENT RECORDED IN DOCUMENT NO. 9619313 IN THE DEED RECORDS OF WILLIAMSON COUNTY, TEXAS.
- WATER AND WASTEWATER SERVICE FOR THIS SUBDIVISION WILL BE PROVIDED BY BRUSHY CREEK MUNICIPAL UTILITY DISTRICT.
- PUBLIC SIDEWALKS, BUILT TO CITY OF AUSTIN STANDARDS, ARE REQUIRED ALONG THE SUBDIVISION SIDE OF O'CONNOR DRIVE, AND AS SHOWN BY A DOTTED LINE ON THE FACE OF THE PLAT. THESE SIDEWALKS SHALL BE IN PLACE PRIOR TO THE LOT BEING OCCUPIED. FAILURE TO CONSTRUCT THE REQUIRED SIDEWALKS MAY RESULT IN THE WITHHOLDING OF CERTIFICATE OF OCCUPANCY, BUILDING PERMITS, OR UTILITY CONNECTIONS BY THE GOVERNING BODY OR UTILITY COMPANY.
- ALL DWELLINGS, TRAILERS, OR MOBILE HOMES PLACED ON SUBDIVISION LOTS OR RANCHETTES MUST BE CONNECTED TO SEPTIC TANKS OR DISPOSAL FACILITIES MEETING THE SPECIFICATIONS AND CONDITIONS OF THE STATE DEPARTMENT OF HEALTH AND THE PRIVATE SEWAGE FACILITY REGULATIONS APPLICABLE TO WILLIAMSON COUNTY AS OF THE DATE OF INSTALLATION.
- THIS SUBDIVISION IS LOCATED WITHIN THE BOUNDARIES OF THE BRUSHY CREEK MUNICIPAL UTILITY DISTRICT. WATER AND WASTEWATER SERVICE TO THIS SUBDIVISION WILL BE PROVIDED BY THE DISTRICT IN ACCORDANCE WITH ITS RATE ORDER, AS AMENDED. ALL CONSTRUCTION PLANS FOR WATER, WASTEWATER, AND STORM DRAINAGE IMPROVEMENTS MUST BE PRESENTED TO THE DISTRICT AND APPROVED BY THE DISTRICT'S ENGINEER PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. ALL WATER, WASTEWATER, AND STORM DRAINAGE IMPROVEMENTS MAY BE INSPECTED BY THE DISTRICT.
- THIS SUBDIVISION IS SUBJECT TO THE AGREEMENT CONCERNING CREATION AND OPERATION OF THE BRUSHY CREEK MUNICIPAL UTILITY DISTRICT (MUD CONSENT AGREEMENT) AND SHALL BE DEVELOPED AND MAINTAINED IN ACCORDANCE WITH SAID AGREEMENT. IN ACCORDANCE WITH THE MUD CONSENT AGREEMENT, RESTRICTIVE COVENANTS FOR THIS SUBDIVISION ARE RECORDED IN DOCUMENT NO. 9619313 OF THE DEED RECORDS OF WILLIAMSON COUNTY.
- THIS SUBDIVISION IS LOCATED WITHIN THE LAKE CREEK WATERSHED, WHICH IS CLASSIFIED AS A WATER SUPPLY SUBURBAN CLASS III WATERSHED AND HAS BEEN REVIEWED AND APPROVED AS A PROJECT EXEMPT UNDER LDC SECTION 13-2-502-(B)(2) DUE TO APPROVAL OF BRUSHY CREEK M.U.D. (FORMERLY WILLIAMSON COUNTY M.U.D. NO. 2) LAND PLAN PRIOR TO 5/18/86 AND SUBJECT TO THE TERMS AND CONDITIONS OF SAID LAND PLAN.
- IT IS THE RESPONSIBILITY OF THE DEVELOPER-OWNER, NOT THE COUNTY, TO ASSURE COMPLIANCE WITH THE PROVISIONS OF ALL APPLICABLE STATE, FEDERAL AND LOCAL LAWS AND REGULATIONS RELATING TO THE ENVIRONMENT, INCLUDING (BUT NOT LIMITED TO) THE ENDANGERED SPECIES ACT, STATE AQUIFER REGULATIONS, AND MUNICIPAL WATERSHED REGULATIONS.
- ALL PUBLIC ROADWAYS AND EASEMENTS AS SHOWN ON THIS PLAT ARE FREE OF LIENS.
- OFF-STREET LOADING AND UNLOADING FACILITIES SHALL BE PROVIDED ON ALL COMMERCIAL AND INDUSTRIAL LOTS.

CAT HOLLOW SECTION C-COMMERCIAL I SHEET 2 OF 3

PROJECT NO. 1210-7405-14	DESIGNED BY: MEW
FILE NO. 7405P12.DWG	DRAWN BY: MEW
DATE: OCTOBER, 1995	CHECKED BY: DWG
SCALE:	REVISED BY:

GRAY ENGINEERING, INC.
Consulting Engineers
8217 Shoal Creek Blvd., Suite 100
Austin, Texas 78757-7596
(512)452-0871 FAX:(512)454-9933

C8-94-0233.1A

Cabaret M
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 Doc # 9619313

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 Slide 372
 Doc # 9619313

CAT HOLLOW SECTION C-COMMERCIAL I

DETENTION NOTE:

PRIOR TO CONSTRUCTION ON LOTS IN THIS SUBDIVISION, DRAINAGE PLANS WILL BE SUBMITTED TO THE CITY OF AUSTIN FOR REVIEW. RAINFALL RUN-OFF SHALL BE HELD TO THE EXISTING 10, 25 AND 100 YEAR FLOW RATE AT UNDEVELOPED STATUS BY PONDING OR OTHER APPROVED METHODS.

THIS IS TO CERTIFY THAT I AM AUTHORIZED TO PRACTICE THE PROFESSION OF ENGINEERING IN THE STATE OF TEXAS; THAT I PREPARED THE PLAT SUBMITTED HERewith; THAT ALL INFORMATION SHOWN THEREON IS ACCURATE AND CORRECT TO THE BEST OF MY KNOWLEDGE AS RELATED TO THE ENGINEERING PORTIONS THEREOF; AND THAT SAID PLAT COMPLES WITH TITLE 13 OF THE AUSTIN CITY CODE OF 1981, AS AMENDED, AND ALL OTHER APPLICABLE CODES AND ORDINANCES.

ALL ENGINEERING WORK FOR THE ROADS AND DRAINAGE (INCLUDING DRIVEWAY DRAIN PIPES) WITHIN THIS SUBDIVISION WILL BE COMPLETED IN COMPLIANCE WITH THE WILLIAMSON COUNTY SUBDIVISION REGULATIONS (INCLUDING THE ENGINEERING GUIDELINES INCORPORATED AS APPENDIX B) AND WITH ALL GENERALLY ACCEPTED ENGINEERING STANDARDS.

I DAVID W. GRAY, A REGISTERED PROFESSIONAL ENGINEER DO HEREBY ATTEST TO THE FOLLOWING:

1. THE 100 YEAR FLOOD PLAIN IS CONTAINED WITHIN THE DRAINAGE EASEMENTS SHOWN HEREON. NO PORTION OF THIS TRACT IS WITHIN THE BOUNDARIES OF THE 100 YEAR FLOOD PLAIN OF ANY WATERWAY THAT IS WITHIN THE LIMITS OF STUDY OF THE FEDERAL FLOOD INSURANCE ADMINISTRATION FIRM COMMUNITY PANEL NUMBER 48491C 0330 C, DATED SEPTEMBER 27, 1991, FOR WILLIAMSON COUNTY, TEXAS.
2. NO BUILDINGS, FENCES, LANDSCAPING OR OTHER STRUCTURES ARE PERMITTED IN DRAINAGE EASEMENTS EXCEPT AS APPROVED BY THE CITY OF AUSTIN/WILLIAMSON COUNTY.
3. ALL DRAINAGE EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER OR HIS ASSIGNS.
4. PROPERTY OWNER SHALL PROVIDE FOR ACCESS TO DRAINAGE EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY GOVERNMENTAL AUTHORITIES FOR INSPECTION OF SAID EASEMENT.
5. NO STRUCTURE OR LAND ON THIS PLAT SHALL HEREFTER BE LOCATED OR ALTERED WITHOUT FIRST SUBMITTING A CERTIFICATE OF COMPLIANCE DEVELOPMENT PERMIT (CCDP) APPLICATION FORM TO THE WILLIAMSON COUNTY FLOOD PLAIN ADMINISTRATOR.
6. THIS SUBDIVISION IS LOCATED WITHIN THE EDWARD'S AQUIFER RECHARGE ZONE. NO CONSTRUCTION IN THE SUBDIVISION MAY BEGIN UNTIL THE TEXAS WATER COMMISSION HAS APPROVED, IN WRITING, THE POLLUTION ABATEMENT PLAN.
7. THIS SUBDIVISION HAS 0-15% SLOPES. NO SLOPES IN THIS SUBDIVISION EXCEED 15% GRADIENT.
8. NO LOT WITHIN THIS SUBDIVISION IS ENROACHED 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 PANEL NUMBER 48491C 0330 C, EFFECTIVE DATE, SEPTEMBER 27, 1991, FOR WILLIAMSON COUNTY, TEXAS.

WITNESS MY HAND THIS 19 DAY OF January, 1996 A.D.

GRAY ENGINEERING, INC.
8217 SHOAL CREEK BLVD., SUITE 100
AUSTIN TEXAS 78758

David W. Gray
DAVID W. GRAY,
REGISTERED PROFESSIONAL ENGINEER NO. 49754

1/19/96
DATE

WILLIAMSON COUNTY AND CITIES HEALTH DISTRICT APPROVAL

BASED UPON THE REPRESENTATIONS OF THE ENGINEER OR SURVEYOR WHOSE SEAL IS AFFIXED HERETO, AND AFTER A REVIEW OF THE PLAT AS REPRESENTED BY THE SAID ENGINEER OR SURVEYOR, I FIND THAT THIS PLAT COMPLES WITH THE REQUIREMENTS OF EDWARD'S AQUIFER REGULATIONS FOR WILLIAMSON COUNTY, THE WILLIAMSON COUNTY FLOOD PLAIN REGULATIONS, AND WILLIAMSON COUNTY ON-SITE SEWERAGE FACILITY REGULATIONS. THIS CERTIFICATION IS MADE SOLELY UPON SUCH REPRESENTATIONS AND SHOULD NOT BE RELIED UPON FOR VERIFICATIONS OF THE FACTS ALLEGED. THE WILLIAMSON COUNTY AND CITIES HEALTH DISTRICT AND WILLIAMSON COUNTY DISCLAIMS ANY RESPONSIBILITY TO ANY MEMBER OF THE PUBLIC FOR INDEPENDENT VERIFICATION OF THE REPRESENTATIONS, FACTUAL OR OTHERWISE, CONTAINED IN THIS PLAT AND THE DOCUMENTS ASSOCIATED WITH IT.

Paula Pinto
PAULA PINTO
DATE 1/19/96

NOTE:
CAT HOLLOW DEVELOPMENT LIMITED PARTNERSHIP HAS REQUESTED THE REMOVAL OF CAT HOLLOW SECTION C-COMMERCIAL I SUBDIVISION PLAT. PURSUANT TO THE PROVISIONS OF SENATE BILL 1575, WHICH ESTABLISHED SUBCHAPTER C, CHAPTER 64, WATER CODE, OF THE TEXAS LOCAL GOVERNMENT CODE, THE CITY OF AUSTIN NO LONGER HAS ANY REGULATORY OR OVERSIGHT JURISDICTION OF ANY LAND USE OR SITE PLANNING REGULATIONS, THE PROVISION OF DRAINAGE AND SOLID WASTE DISPOSAL, SOLID WASTE, THE REGULATION OF SEPTIC TANKS, THE CONTROL AND ABATEMENT OF WATER POLLUTION, THE PROVISION OF POLLUTION AND POLLING OF ANY SOURCE OF WATER SUPPLY OR THE PROTECTION AND POLLING OF WATERWAYS WITHIN THE DISTRICT.

THE CITY OF AUSTIN NO LONGER HAS ANY AUTHORITY TO ENFORCE THE PLAT NOTES ON THE CAT HOLLOW SECTION C-COMMERCIAL I PLAT. BY RELEASING THIS PLAT THE CITY OF AUSTIN IS MAKING NO REPRESENTATION REGARDING THE ENFORCEABILITY OF THE PLAT NOTES CONTAINED IN CAT HOLLOW SECTION C-COMMERCIAL I.

APPROVED FOR ACCEPTANCE

3/19/96
DATE
Alice Glasco
ALICE GLASCO, DIRECTOR
DEPARTMENT OF PLANNING AND DEVELOPMENT

ACCEPTED AND AUTHORIZED FOR RECORD BY THE PLANNING COMMISSION OF THE CITY OF AUSTIN ON THE 23rd DAY OF January, 1996 A.D.

Michael A. Rivera
MICHAEL A. RIVERA, CHAIRPERSON
Cathy Vasquez-Revilla
CATHY VASQUEZ-REVILLA, SECRETARY

WILLIAMSON COUNTY COMMISSIONERS COURT RESOLUTION AND APPROVAL

PRIOR TO GRADING, ANY TYPE OF EARTH MOVING, CONSTRUCTION OF, ON OR UNDER THE LAND IN THIS SUBDIVISION, A DRAINAGE PLAN DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER SHALL BE SUBMITTED FOR THE PROPOSED DEVELOPMENT, AND MODIFICATION THEREOF TO THE CITY OF AUSTIN AND COMMISSIONER'S COURT OF WILLIAMSON COUNTY FOR REVIEW AND APPROVAL. IT IS FURTHER UNDERSTOOD THAT THE ENFORCEMENT OF THE PLAT RESTRICTIONS IS THE RESPONSIBILITY OF THE DEVELOPER-OWNER. HOWEVER, THE CITY OF AUSTIN AND THE COMMISSIONER'S COURT OF WILLIAMSON COUNTY SHALL HAVE THE RIGHT AND AUTHORITY TO ENFORCE THE PLAT RESTRICTIONS THROUGH APPROPRIATE LEGAL PROCEDURE TO PROHIBIT THE CONSTRUCTION, CONNECTION OF UTILITIES OR ISSUING OF PERMITS UNLESS OR UNTIL THE REQUIREMENTS OF THE PLAT RESTRICTIONS HAVE BEEN ACHIEVED.

BY: *Ed Wendler Jr.*
ED WENDLER, JR., PRESIDENT
E. W. DEVELOPMENT CO., GENERAL PARTNER
CAT HOLLOW ASSOCIATES LIMITED PARTNERSHIP

BY: *Eugene O. Beck*
EUGENE O. BECK, INDIVIDUAL

IN APPROVING THIS PLAT BY THE COMMISSIONERS COURT OF WILLIAMSON COUNTY, TEXAS, IT IS UNDERSTOOD THAT THE BUILDING OF ALL STREETS, ROADS AND OTHER PUBLIC THOROUGHFARES AND ANY BRIDGES OR CULVERTS NECESSARY TO BE CONSTRUCTED OR PLACED IS THE RESPONSIBILITY OF THE OWNERS OF THE TRACT OF LAND COVERED BY THIS PLAT IN ACCORDANCE WITH PLANS AND SPECIFICATIONS PRESCRIBED BY THE COMMISSIONERS' COURT OF WILLIAMSON COUNTY, TEXAS. SAID COMMISSIONERS' COURT ASSUMES NO OBLIGATION TO BUILD OR MAINTAIN ANY OF THE STREETS, ROADS OR OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT OR OF CONSTRUCTING ANY OF THE BRIDGES OR CULVERTS IN CONNECTION THEREWITH. IT IS FURTHER UNDERSTOOD THAT UPON COMPLETION OF THE AFORESAID OBLIGATIONS OF THE DEVELOPER AND EITHER 60% OCCUPANCY OF THE LOTS ALONG THE ROADWAYS AND STREETS IN THE SUBDIVISION HAS BEEN ACHIEVED OR THE EXPIRATION OF 2 YEARS FROM THE DATE OF COMPLETION AND ALL DRIVEWAY DRAINPIPES HAVE BEEN INSTALLED, ON WRITTEN PERMISSION FROM THE COUNTY COMMISSIONERS' COURT, THE COUNTY WILL ASSUME FULL RESPONSIBILITY FOR MAINTENANCE OF SAID STREETS AND ROADS. THE COUNTY WILL ASSUME NO RESPONSIBILITY FOR DRAINAGE WAYS OR EASEMENTS IN THE SUBDIVISION, OTHER THAN THOSE DRAINING OR PROTECTING THE ROAD SYSTEM AND STREETS.

THE COUNTY ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF REPRESENTATIONS BY OTHER PARTIES IN THIS PLAT. FLOOD PLAIN DATA, IN PARTICULAR, MAY CHANGE DEPENDING ON SUBSEQUENT DEVELOPMENT.

IT IS FURTHER UNDERSTOOD THAT THE OWNERS OF THE TRACT OF LAND COVERED BY THIS PLAT MUST INSTALL AT THEIR OWN EXPENSE ALL TRAFFIC CONTROL DEVICES AND SIGNAGE THAT MAY BE REQUIRED BEFORE THE STREETS IN THE SUBDIVISION HAVE FINALLY BEEN ACCEPTED FOR MAINTENANCE BY THE COUNTY.

THE STATE OF TEXAS
THE COUNTY OF WILLIAMSON

I, JOHN C. DOERFLER, COUNTY JUDGE OF WILLIAMSON COUNTY, TEXAS, DO HEREBY CERTIFY THAT THIS MAP OR PLAT, WITH WRITTEN FIELD NOTES SHOWN HEREON, AND THE SURVEYOR'S CERTIFICATE APPEARING HEREON, KNOWN AS "CAT HOLLOW SECTION C-COMMERCIAL I" HAVING BEEN DULY PRESENTED TO THE COMMISSIONERS COURT OF WILLIAMSON COUNTY, TEXAS, AND BY SAID COURT WAS DULY CONSIDERED, WAS ON THIS DAY APPROVED, AND SAID PLAT IS AUTHORIZED TO BE REGISTERED AND RECORDED IN THE PROPER RECORDS OF THE COUNTY CLERK OF WILLIAMSON COUNTY, TEXAS.

4-2-96
DATE
John C. Doerfler
JOHN C. DOERFLER, COUNTY JUDGE,
WILLIAMSON COUNTY, TEXAS

THE STATE OF TEXAS
THE COUNTY OF WILLIAMSON

I, ELAINE BIZZELL, CLERK OF THE COUNTY COURT, WITHIN AND FOR THE COUNTY AND STATE AFORESAID, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING, WITH ITS CERTIFICATE OF AUTHENTICATION, WAS FILED FOR RECORD IN MY OFFICE ON THE 16 DAY OF April, 1996 A.D., AT 9:00 O'CLOCK P M., AND WAS DULY RECORDED ON THIS THE 17 DAY OF April, 1996 A.D., AT 9:26 O'CLOCK A M., IN THE PLAT RECORDS OF SAID COUNTY IN CABINET M, SLIDES 373, 373 & 374.

WITNESS MY HAND AND SEAL OF THE COUNTY COURT OF SAID COUNTY, AT MY OFFICE IN WILHOARGETOWN, TEXAS, THE LAST DATE WRITTEN ABOVE.

BY: *Elaine Bizzell*
ELAINE BIZZELL
CLERK, COUNTY COURT
WILLIAMSON COUNTY, TEXAS

CAT HOLLOW SECTION C-COMMERCIAL I SHEET 3 OF 3

PROJECT NO. 1210-7403-14	DESIGNED BY: MEW
FILE NO. 7405PLT3.DWG	DRAWN BY: MEW
DATE: OCTOBER, 1992	CHECKED BY: DWG
SCALE:	REVISED BY:

GRAY ENGINEERING, INC.
Consulting Engineers
8217 Shoal Creek Blvd., Suite 100
Austin, Texas 78757-7098
(512)452-0271 FAX(512)454-9853

C8-94-0233.1A

C8-94-0233.1A Slides 374

Field: RG 2022/03/15 CTX5116
 Drafter: RDG 2022/03/24
 Revision:
 Revision:

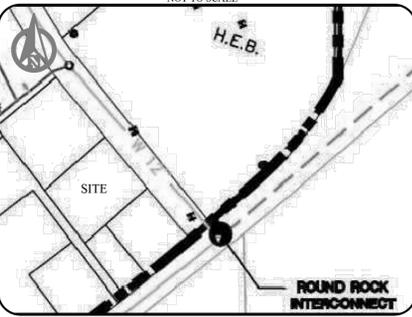
- LEGEND OF SYMBOLS**
- air conditioner
 - borchole
 - cable tv
 - electric meter
 - fence or handrail
 - fire dept. connection
 - fire hydrant
 - fire lane
 - guard rail
 - grease trap
 - bollard
 - grate inlet
 - gas meter
 - gas line
 - utility pole anchor
 - irrigation valve
 - landscape or tree line
 - landscape electric box
 - landscape light
 - light pole
 - mailbox
 - monitoring well
 - overhead utility lines
 - pool equipment
 - road sign
 - roof drain
 - silt fence
 - spot elevation
 - sanitary sewer manhole
 - sanitary sewer pipe
 - storm water manhole
 - storm water pipe
 - telephone manhole
 - tank fill lid
 - telephone riser
 - traffic signal pole
 - unknown manhole
 - utility clean out
 - utility cabinet
 - utility vault
 - utility pole
 - utility pole with riser
 - utility sign
 - water shutoff
 - water valve
 - water manhole
 - water meter
 - well
 - water line
 - one-foot contour lines
 - tree trunk (with canopy)
 - caliper inches at breast height
 - ornamental tree
 - multiple trunks
 - Google 360 Hyperlink

NOTE - Some items may not pertain to this survey. The identification is subject to interpretation, verification may be required.

WATER UTILITY MAP

CLICK HERE FOR MAP IN PDF FORMAT

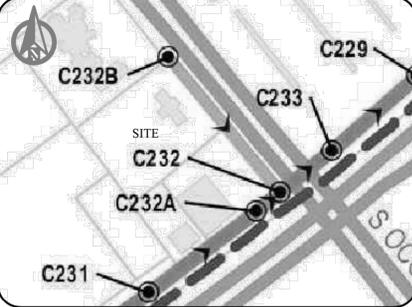
NOT TO SCALE



WASTEWATER UTILITY MAP

CLICK HERE FOR MAP IN PDF FORMAT

NOT TO SCALE



NOTE REGARDING UTILITIES:
 Utility locations are per observed and sources listed below:
 DIG-TESS - ticket number(s) 2256680931.
<https://portal.texas811.org/#/ticket/2256680931>
 GIS MAPS - Provided by Brushy Creek Municipal Utility District
 Web: www.bcemd.org | Phone: 512-255-7871

UTILITY WARNING

Unless otherwise stated, the client or client's representative did not provide JPH with plans and/or reports, and JPH did not coordinate a private utility locate request. If these Table A items are listed in the certification, the client, being aware of the factors listed above, has agreed for these Table A item(s) to be addressed from a combination of online GIS maps, markings from locate requests to municipalities and 811 and observed evidence of utilities. The client is aware locate requests to 811 and the like, may be ignored or result in an incomplete response, in which case utilities may not have been marked, or not completely marked, at the time the fieldwork was performed. Therefore, utilities may exist which are not shown on this survey. Lacking excavation and/or a private utility locate request, the exact location of underground features cannot be accurately, completely, and reliably depicted.

FLOOD ZONE CLASSIFICATION

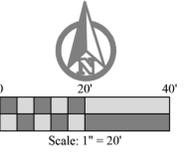
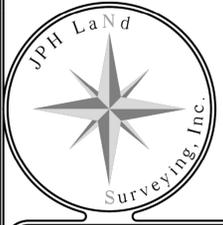
This property lies within ZONE(S) X of the Flood Insurance Rate Map for Williamson County, Texas and Incorporated Areas, map no. 48491C0630F, dated 2019/12/20, via scaled map location and graphic plotting and/or the National Flood Hazard Layer (NFHL) Web Map Service (WMS) at <http://hazards.fema.gov>.

MONUMENTS / DATUMS / BEARING BASIS

Monuments are found if not marked MNS or CRS.
 CRS 1/2" rebar stamped "JPH Land Surveying" set
 MNS Mag nail & washer stamped "JPH Land Surveying" set
 TBM Site benchmark (see vicinity map for general location)
 *+ cut in concrete
 Vertex or common point (not a monument)
 Coordinate values, if shown, are US S.F.L. TxCs, '83, CZ
 Elevations, if shown, are NAVD'88 (Geoid 18)
 Bearings are based on the TxCs, '83, CZ
 Distances & areas shown are represented in surface values

LEGEND OF ABBREVIATIONS

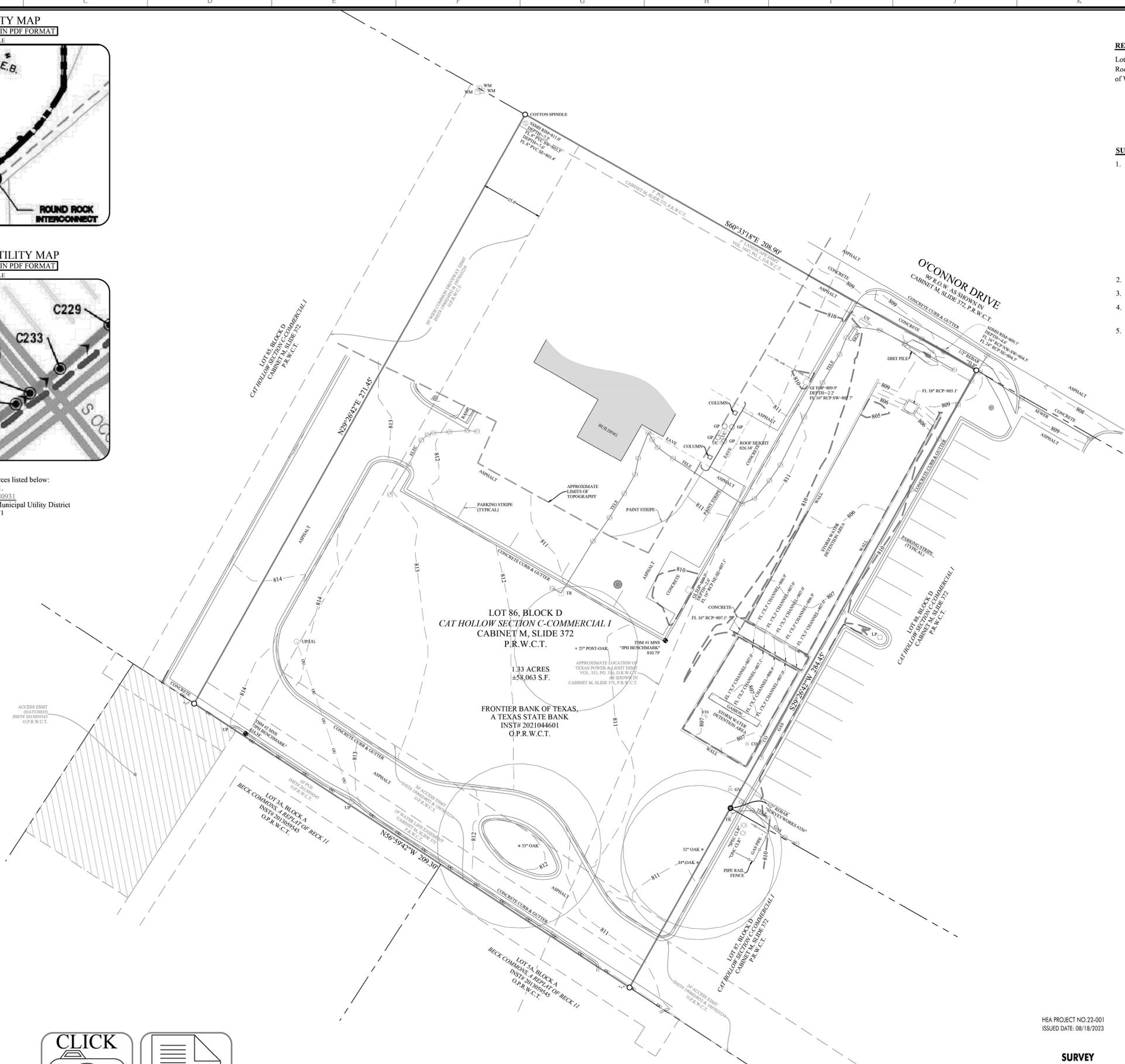
US.SyFl. United States Survey Feet
 TxCs, '83, CZ Texas Coordinate System of 1983, Central Zone
 NAVD'88 North American Vertical Datum of 1988
 P.R.W.C.T. Plat Records of Williamson County, Texas
 O.P.R.W.C.T. Official Public Records of Williamson County, Texas
 D.R.W.C.T. Deed Records of Williamson County, Texas
 VOL/P.G./INST# Volume/Page/Instrument Number
 POB/POC Point of Beginning/Point of Commencing
 ESMT/BL Easement/Building Line
 RCP Reinforced Concrete Pipe
 PVC Polyvinyl Chloride Pipe



DIG-TESS MARKED UTILITY LEGEND

ELECTRIC	
GAS-OIL-STEAM	
COMMUNICATION-CATV	
WATER	
SEWER	

JPH Job/Drawing No. (see below)
 2022.294.001.7509 O'Connor Dr., Round Rock, TX.dwg
 © 2022 JPH Land Surveying, Inc. - All Rights Reserved
 1516 E. Palm Valley Blvd., Ste. A4, Round Rock, Texas 78664
 Telephone (817) 431-4971 www.jphlandsurveying.com
 TBPELS Firm #10019500
 DFW | Central Texas | West Texas | Houston



RECORD DESCRIPTION:

Lot 86, Block D, CAT HOLLOW SECTION C-COMMERCIAL I, an addition to the City of Round Rock, Williamson County, Texas, according to the plat recorded in Cabinet M, Slide 372, Plat Records of Williamson County, Texas.

SURVEYOR'S NOTES:

- The first site benchmark (TBM #1) is a mag nail with metal washer stamped "JPH BENCHMARK" set in a concrete curb on the subject property, and located approximately 410 feet westerly from the intersection of O'Connor Drive and F.M. 620, and approximately 156 feet southwesterly from the southwest right-of-way line of O'Connor Drive. Benchmark Elevation = 810.79' (NAVD'88). See vicinity map for general location.
- The second site benchmark (TBM #2) is a mag nail with metal washer stamped "JPH BENCHMARK" set in a concrete curb running along the southwest line of the subject property, and located approximately 580 feet southwesterly from the intersection of O'Connor Drive and F.M. 620, and approximately 272 feet southwesterly from the southwest right-of-way line of O'Connor Drive. Benchmark Elevation = 814.34' (NAVD'88). See vicinity map for general location.
- Subject property's record description's error of closure: 0.00'
- The site surface is natural ground/dirt, unless noted otherwise.
- Improvements and topographic data was only collected over a portion of the subject property, as directed by client.
- This survey was performed without the benefit of a title commitment. Complete copies of the record description of the property, any record easements benefiting the property, the record easements or servitudes and covenants affecting the property ("Record Documents"), documents of record referred to in the Record Documents, and any other documents containing desired appropriate information affecting the property being surveyed and to which the survey shall make reference were not provided to this surveyor for notation on the survey. Therefore, easements, agreements, or other documents, either recorded, or unrecorded may exist that affect the subject property that are not shown on this survey.

Chris Henderson
 Registered Professional
 Land Surveyor No. 6831
 Chris@jphls.com
 March 24, 2022



VICINITY MAP



TOPOGRAPHIC SURVEY
1.33 ACRES
 BEING
LOT 86, BLOCK D
CAT HOLLOW SECTION C-COMMERCIAL I
 CABINET M, SLIDE 372, P.R.W.C.T.
 CITY OF ROUND ROCK
 WILLIAMSON COUNTY, TEXAS
 ADDRESS: 7509 O'CONNOR DRIVE (PER APPRAISAL DISTRICT AND AS POSTED)

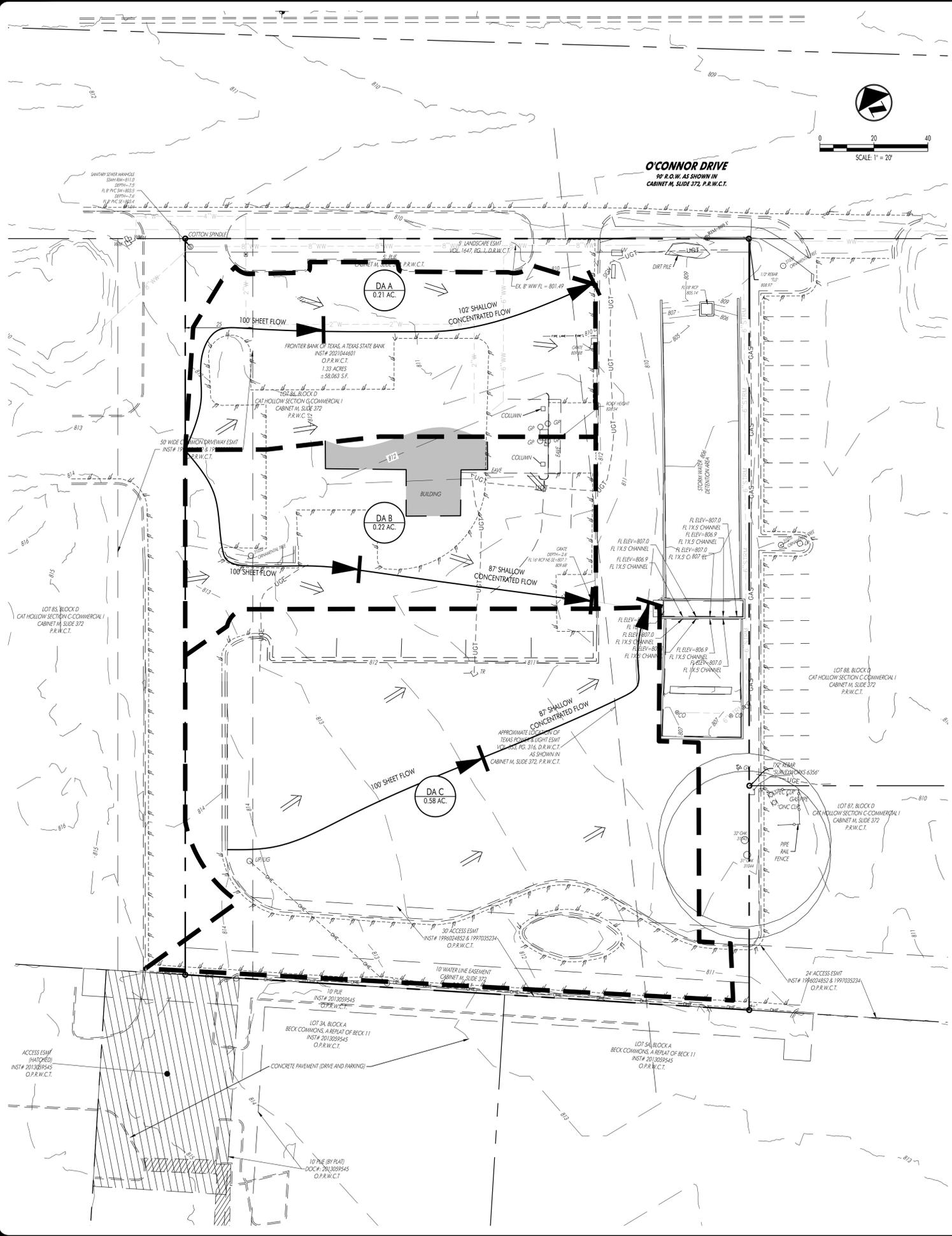
HEA PROJECT NO. 22-001
 ISSUED DATE: 08/18/2023

SURVEY

SRV

05

V:\HEA\EA - Project\Pages 22-0002\22-001 Frontier Bank Lease Building CAD Files\CAD\22-001 SRV.dwg, 8/15/2023 5:03:03 PM, DWG To PDF with Layers.pc3



O'CONNOR DRIVE
 90' R.O.W. AS SHOWN IN
 CABINET M, SLIDE 372, P.R.W.C.T.



HYDROLOGIC SUMMARY for DA A

TR-55 SCS Lag Time (hours)			Flow Summary						
Segment #1	Segment #2	Segment #3	Area	Tc	Cn	Q2	Q10	Q25	Q100
Sheet Flow	Shallow Concent	Channelized	acres	hours	-	cfs	cfs	cfs	cfs
Mannings "n"	0.011 Paved	Mannings "n"	0.21	0.1	79	0.88	1.3	1.58	2.03
Length (ft)	100	Length (ft)							
Slope (%)	2.44	Slope (%)							
2-yr, 24 hr rainfall		Velocity (fps)							
segment total	0.016	segment total							
USER DEFINED		time of conc.(hrs)	0.1	SCS Lag Time (0.6 x Tc)=		0.06			

HYDROLOGIC SUMMARY for DA B

TR-55 SCS Lag Time (hours)			Flow Summary						
Segment #1	Segment #2	Segment #3	Area	Tc	Cn	Q2	Q10	Q25	Q100
Sheet Flow	Shallow Concent	Channelized	acres	hours	-	cfs	cfs	cfs	cfs
Mannings "n"	0.011 Paved	Mannings "n"	0.22	0.1	79	0.93	1.36	1.65	2.11
Length (ft)	100	Length (ft)							
Slope (%)	2.04	Slope (%)							
2-yr, 24 hr rainfall		Velocity (fps)							
segment total	0.018	segment total							
USER DEFINED		time of conc.(hrs)	0.1	SCS Lag Time (0.6 x Tc)=		0.06			

HYDROLOGIC SUMMARY for DA C

TR-55 SCS Lag Time (hours)			Flow Summary						
Segment #1	Segment #2	Segment #3	Area	Tc	Cn	Q2	Q10	Q25	Q100
Sheet Flow	Shallow Concent	Channelized	acres	hours	-	cfs	cfs	cfs	cfs
Mannings "n"	0.15 Unpaved	Mannings "n"	0.58	0.148	69	2.02	3.23	4.02	5.3
Length (ft)	100	Length (ft)							
Slope (%)	2.29	Slope (%)							
2-yr, 24 hr rainfall		Velocity (fps)							
segment total	0.137	segment total							
USER DEFINED		time of conc.(hrs)	0.148	SCS Lag Time (0.6 x Tc)=		0.0888			

Ex. Detention Pond Depth v. Storage v. Outflow (Atlas 14)

(ft.)	(ft.)	Accumul. Volume (ac.-ft.)	Accumul. Volume (cfs)	Outflow (cfs)	Remarks
804.55	0	0	0.00	0.00	
805.55	1	1	0.00	0.32	
806.36	0.81	1.81	0.03	0.03	2.01 2 yr
806.57	0.21	2.02	0.04	0.07	2.38
806.99	0.42	2.44	0.05	0.12	3.16 10 yr
807.31	0.32	2.76	0.07	0.19	3.81
807.31	0	2.76	0.07	0.19	3.81 25 yr
807.33	0.02	2.78	0.07	0.24	3.83
807.88	0.55	3.33	0.11	0.30	5.03 100 yr

EXISTING CONDITIONS DRAINAGE SUMMARY

Area No.	Area (SF)	Acres	%IC	Tc (Minutes)	Remarks
DA A	9,305.50	0.21	87.21%	6	
DA B	9,612.82	0.22	98.26%	6	
DA C	25,181.75	0.58	32.92%	9	
Total	44,100.07	1.01	58.46		

- NOTES:
- WILLIAMSON COUNTY SUBDIVISION REGULATIONS (DATED DEC 7, 2022) WERE UTILIZED FOR ANALYSIS OF EXISTING CONDITIONS AGAINST ATLAS 14 PRECIPITATION DATA LISTED UNDER EXHIBIT 2 OF THE SAME.
 - HEC-HMS 4.9 SOFTWARE IS UTILIZED FOR ROUTING ANALYSIS OF EXISTING DETENTION POND.

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

TERRY R. MACGOOD
 REGISTERED PROFESSIONAL ENGINEER

Terry R. MacGood

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. MACGOOD, P.E. (5799) THIS DOCUMENT AND THE SEAL ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ENGINEER AND FIRM. ANY UNAUTHORIZED REPRODUCTION OR TRANSMISSION OF THIS DOCUMENT IS STRICTLY PROHIBITED AND WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.

JOB NO. 22-001 © 2022 HEA, Inc.
 DATE SIGNED: 08/18/2023
 ISSUED FOR: AGENCY REVIEW

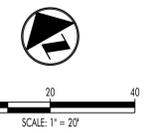
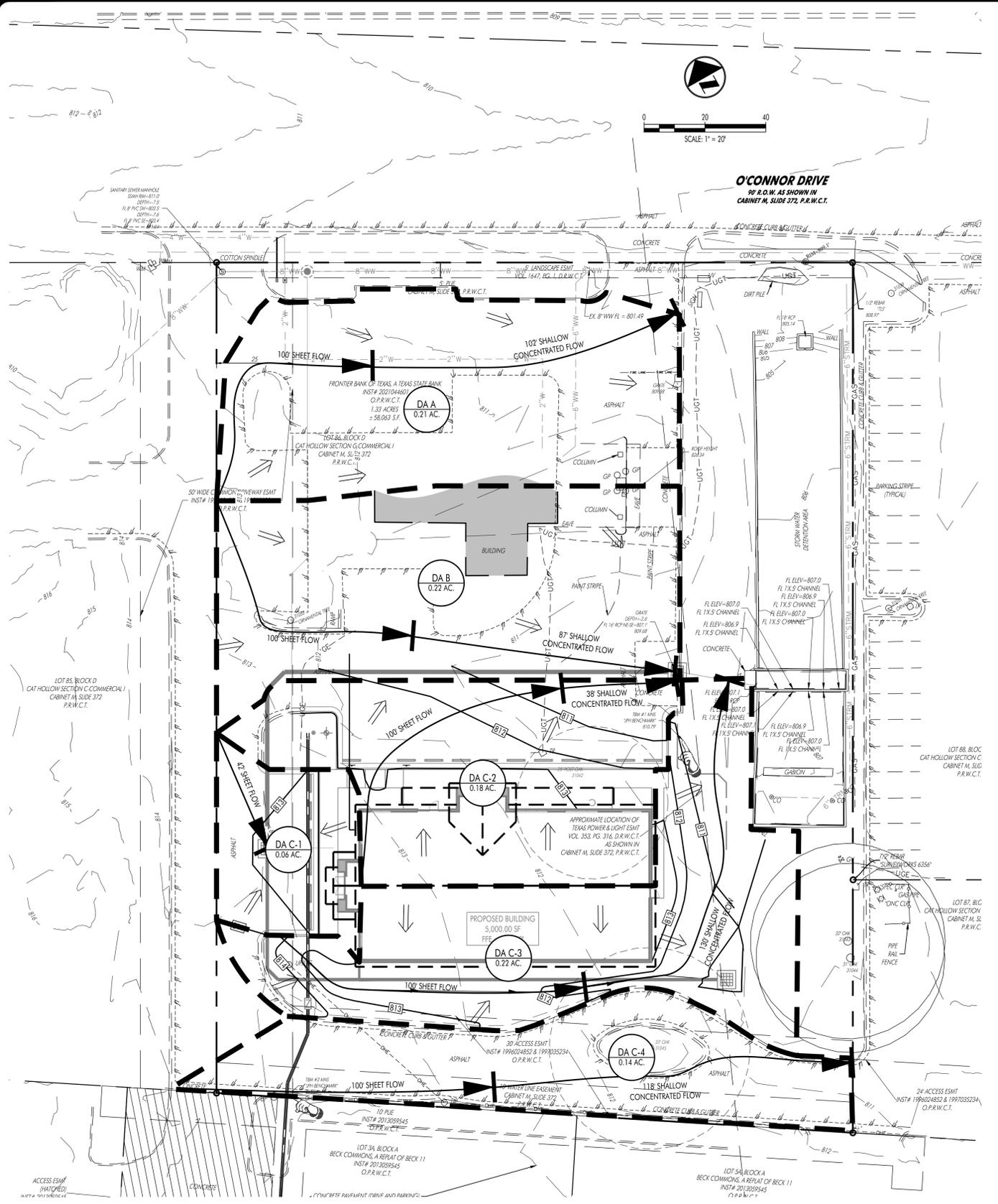
**SITE DEVELOPMENT PLANS FOR
 FRONTIERS BANK LEASE BUILDING
 7509 O'CONNOR DR.
 ROUND ROCK, TEXAS 78681**

NO.	DATE	DESCRIPTION	REVISIONS

HEA PROJECT NO. 22-001
 ISSUED DATE: 08/18/2023

EXISTING DRAINAGE AREA

SHEET NO.
EDA
 06



O'CONNOR DRIVE
P.R.W. AS SHOWN IN
CABINET M. SLIDE 372, P.R.W.C.T.

- NOTES:**
- THIS DEVELOPMENT IS PART OF FIRST TEXAS BANK O'CONNOR BRANCH DATED MAY 1996.
 - PLEASE REF. SHEET 08 - PDA-2 FOR DRAINAGE AREA SUMMARY TABLES.
 - HEC-HMS V4.9 WAS UTILIZED FOR THE HYDROLOGIC ANALYSIS AND MODEL WAS PROVIDED TO WILLIAMSON COUNTY FOR THIS DEVELOPMENT.
 - NOAA ATLAS 14 RAINFALL DATA PER WILLIAMSON COUNTY SUBDIVISION REGULATIONS (VERSION - DEC 7, 2021) EXHIBIT-2 WAS UTILIZED FOR HYDROLOGIC ANALYSES. CURVE NUMBER OF 79 AND 69 FOR SOIL GROUP B WAS ASSUMED BETWEEN EXISTING AND DEVELOPED CONDITIONS.
 - EXISTING DETENTION POND ON SITE IS UTILIZED WITH MODIFIED OUTLET STRUCTURE (SEE DETAIL 01/C50) TO LIMIT STORMWATER RELEASE TO EXISTING CONDITIONS.
 - NO OFFSITE RUN-OFF IS ROUTED THROUGH EXISTING DETENTION POND.

Context Engineering Solutions Calculations for Texas Commission on Environmental Quality TSS Removal Calculations

Project Name: **Frontier Bank - Round Rock**
Date Prepared: **01/20/2022**

1. The Required Load Reduction for the total project:
Calculations from RG-348 Page 3-27 to 3-30
Equation 3.3: $L_d = 27.2(A_i \times P)$

where:
 L_d = Required TSS removal resulting from the proposed development = 80% of increased load
 A_i = 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
Total project area included in plan	1.33 acres
Predevelopment impervious area within the limits of the plan	0.00 acres
Total post-development impervious area within the limits of the plan	0.30 acres
Total post-development impervious cover fraction	0.23
Impervious project	0.30 acres
Number of drainage basins / outfalls areas leaving the plan area	3

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

Drainage Basin/Outfall Area No.	DA-C-1
Total drainage basin/outfall area	0.06 acres
Predevelopment impervious area within drainage basin/outfall area	0.00 acres
Post-development impervious area within drainage basin/outfall area	0.06 acres
Post-development impervious fraction within drainage basin/outfall area	1.00
L_d lbs./acre	54

3. Indicate the proposed BMP Code for this basin:

Proposed BMP	JF	abbreviation
Removal efficiency	84.6	percent

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

RG-348 Page 3-33 Equation 3.27
 $L_d = (\text{BMP efficiency}) \times P \times (A_i \times 34.6 + A_p \times 0.54)$

A_i = Total On-Site drainage area in the BMP catchment area	0.06	acres
A_p = Impervious area proposed in the BMP catchment area	0.00	acres
A_p = Previous area remaining in the BMP catchment area	0.00	acres
L_d = TSS Load removed from this catchment area by the proposed BMP	57	lbs.

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

Desired L_d lbs./acre	54
F	0.914

6. Calculate Treated Flow required by the BMP Type for this drainage basin / outfall area:

Offsite area draining to BMP	0.00	acres
Offsite impervious cover draining to BMP	0.00	acres
Rainfall Intensity	1.45	inches per hour
Effective Area	0.07	acres
Cartridge Length	24	inches
Peak Treatment Flow Required	0.063	cubic feet per second

7. Jellyfish
Designed as Required in RG-348 Section 3.2.22

Flow Through Jellyfish Size	75	microns
Jellyfish Size for Flow-Based Configuration	JF50404-1-1	microns
Jellyfish Treatment Flow Rate	0.27	cfs

Context Engineering Solutions Calculations for Texas Commission on Environmental Quality TSS Removal Calculations

Project Name: **Frontier Bank - Round Rock**
Date Prepared: **01/20/2022**

1. The Required Load Reduction for the total project:
Calculations from RG-348 Page 3-27 to 3-30
Equation 3.3: $L_d = 27.2(A_i \times P)$

where:
 L_d = Required TSS removal resulting from the proposed development = 80% of increased load
 A_i = 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
Total project area included in plan	1.33 acres
Predevelopment impervious area within the limits of the plan	0.00 acres
Total post-development impervious area within the limits of the plan	0.30 acres
Total post-development impervious cover fraction	0.23
Impervious project	0.30 acres
Number of drainage basins / outfalls areas leaving the plan area	3

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

Drainage Basin/Outfall Area No.	DA-C-2
Total drainage basin/outfall area	0.18 acres
Predevelopment impervious area within drainage basin/outfall area	0.00 acres
Post-development impervious area within drainage basin/outfall area	0.18 acres
Post-development impervious fraction within drainage basin/outfall area	1.00
L_d lbs./acre	61

3. Indicate the proposed BMP Code for this basin:

Proposed BMP	JF	abbreviation
Removal efficiency	84.6	percent

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

RG-348 Page 3-33 Equation 3.27
 $L_d = (\text{BMP efficiency}) \times P \times (A_i \times 34.6 + A_p \times 0.54)$

A_i = Total On-Site drainage area in the BMP catchment area	0.18	acres
A_p = Impervious area proposed in the BMP catchment area	0.00	acres
A_p = Previous area remaining in the BMP catchment area	0.00	acres
L_d = TSS Load removed from this catchment area by the proposed BMP	68	lbs.

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

Desired L_d lbs./acre	61
F	0.900

6. Calculate Treated Flow required by the BMP Type for this drainage basin / outfall area:

Offsite area draining to BMP	0.00	acres
Offsite impervious cover draining to BMP	0.00	acres
Rainfall Intensity	1.40	inches per hour
Effective Area	0.07	acres
Cartridge Length	24	inches
Peak Treatment Flow Required	0.07	cubic feet per second

7. Jellyfish
Designed as Required in RG-348 Section 3.2.22

Flow Through Jellyfish Size	75	microns
Jellyfish Size for Flow-Based Configuration	JF50404-1-1	microns
Jellyfish Treatment Flow Rate	0.27	cfs

DEVELOPED CONDITIONS DRAINAGE SUMMARY

Area No.	Area (SF)	Acres	%IC	Tc (Minutes)	Remarks
DA A	9,305.50	0.21	87.21%	6	
DA B	9,612.82	0.22	92.54%	6	
DA C-1	2,604.35	0.06	95.73%	6	
DA C-2	7,789.86	0.18	91.93%	6	
DA C-3	9,426.35	0.22	34.58%	6	
DA C-4	6,021.080	0.138	93.52%	6	
Total	44,759.96	1.03	77.29		

Texas Commission on Environmental Quality
TSS Removal Calculations 04-20-2009

Project Name: **FRONTIER BANK OFFICE LEAS**
Date Prepared: **6/30/2022**

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 indicates 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 Page 3-27 to 3-30
Equation 3.3: $L_d = 27.2(A_i \times P)$

where:
 L_d = Required TSS removal resulting from the proposed development = 80% of increased load
 A_i = 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
Total project area included in plan	1.33 acres
Predevelopment impervious area within the limits of the plan	0.00 acres
Total post-development impervious area within the limits of the plan	0.30 acres
Total post-development impervious cover fraction	0.23
Impervious project	0.30 acres
Number of drainage basins / outfalls areas leaving the plan area	3

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

Drainage Basin/Outfall Area No.	A,B,C-2
Total drainage basin/outfall area	0.81 acres
Predevelopment impervious area within drainage basin/outfall area	0.00 acres
Post-development impervious area within drainage basin/outfall area	0.81 acres
Post-development impervious fraction within drainage basin/outfall area	1.00
L_d lbs./acre	463

3. Indicate the proposed BMP Code for this basin:

Proposed BMP	89	percent
Removal efficiency	89	percent

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

RG-348 Page 3-33 Equation 3.27
 $L_d = (\text{BMP efficiency}) \times P \times (A_i \times 34.6 + A_p \times 0.54)$

A_i = Total On-Site drainage area in the BMP catchment area	0.81	acres
A_p = Impervious area proposed in the BMP catchment area	0.00	acres
A_p = Previous area remaining in the BMP catchment area	0.00	acres
L_d = TSS Load removed from this catchment area by the proposed BMP	525	lbs.

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

Desired L_d lbs./acre	463
F	0.89

6. Calculate Treated Flow required by the BMP Type for this drainage basin / outfall area:

Offsite area draining to BMP	0.00	acres
Offsite impervious cover draining to BMP	0.00	acres
Rainfall Intensity	1.50	inches per hour
Effective Area	0.71	acres
Cartridge Length	24	inches
Peak Treatment Flow Required	0.63	cubic feet per second

7. Jellyfish
Designed as Required in RG-348 Section 3.2.22

Flow Through Jellyfish Size	75	microns
Jellyfish Size for Flow-Based Configuration	JF50404-1-1	microns
Jellyfish Treatment Flow Rate	0.27	cfs

Context Engineering Solutions Calculations for Texas Commission on Environmental Quality TSS Removal Calculations

Project Name: **Frontier Bank - Round Rock**
Date Prepared: **01/20/2022**

1. The Required Load Reduction for the total project:
Calculations from RG-348 Page 3-27 to 3-30
Equation 3.3: $L_d = 27.2(A_i \times P)$

where:
 L_d = Required TSS removal resulting from the proposed development = 80% of increased load
 A_i = 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
Total project area included in plan	1.33 acres
Predevelopment impervious area within the limits of the plan	0.00 acres
Total post-development impervious area within the limits of the plan	0.30 acres
Total post-development impervious cover fraction	0.23
Impervious project	0.30 acres
Number of drainage basins / outfalls areas leaving the plan area	3

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

Drainage Basin/Outfall Area No.	DA-C-3
Total drainage basin/outfall area	0.22 acres
Predevelopment impervious area within drainage basin/outfall area	0.00 acres
Post-development impervious area within drainage basin/outfall area	0.22 acres
Post-development impervious fraction within drainage basin/outfall area	1.00
L_d lbs./acre	61

3. Indicate the proposed BMP Code for this basin:

Proposed BMP	JF	abbreviation
Removal efficiency	84.6	percent

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

RG-348 Page 3-33 Equation 3.27
 $L_d = (\text{BMP efficiency}) \times P \times (A_i \times 34.6 + A_p \times 0.54)$

A_i = Total On-Site drainage area in the BMP catchment area	0.22	acres
A_p = Impervious area proposed in the BMP catchment area	0.00	acres
A_p = Previous area remaining in the BMP catchment area	0.00	acres
L_d = TSS Load removed from this catchment area by the proposed BMP	68	lbs.

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

Desired L_d lbs./acre	61
F	0.900

6. Calculate Treated Flow required by the BMP Type for this drainage basin / outfall area:

Offsite area draining to BMP	0.00	acres
Offsite impervious cover draining to BMP	0.00	acres
Rainfall Intensity	1.40	inches per hour
Effective Area	0.07	acres
Cartridge Length	24	inches
Peak Treatment Flow Required	0.07	cubic feet per second

7. Jellyfish
Designed as Required in RG-348 Section 3.2.22

Flow Through Jellyfish Size	75	microns
Jellyfish Size for Flow-Based Configuration	JF50404-1-1	microns
Jellyfish Treatment Flow Rate	0.27	cfs

Depth Vs Storage Filtration Pond

Elevation	Depth	Accumul. Area	Volume	Accumul. Volume	Remarks	Sed/Fil Combined Volume
806	0	0	0	0		0
807	1	1	289.15	144.575		188.325
808	1	2	684	486.575		1060.65
809	1	3	448.8	566.400		2311.05
809.5	0.5	3.5	448.8	224.400	1422 > WQ Vol.	3006.45
				0.000	1421.95	3006.45
				0.000	1421.95	3006.45
				0.000	1421.95	3006.45

Depth Vs Storage Sedimentation Pond

Elevation	Depth	Accumul. Area	Volume	Accumul. Volume	Remarks	Sed/Fil Combined Volume	
806	0	0	0	0		0	
807	1	1	87.5	43.75		43.75	
808	1	2	684	385.75		429.5	
809	1	3	684	684		1113.5	
809.5	0.5	3.5	1200	471	1584.5 > WQ Vol.	3006.45	
				3.5	0	1584.5	
				0	3.5	0	1584.5
				0	3.5	0	1584.5

Prop. Detention Pond Depth v. Storage v. Outflow (Atlas 14)

Elevation (ft.)	Depth (ft.)	Accumul. Volume (ac-ft.)	Accumul. Volume	Outflow (cfs)	Remarks
804.55	0	0	0.00	0.00	0.00
805.4	0.85	0.85	0.01	0.01	0.33
806.84	1.44	2.29	0.05	0.06	1.21 2 yr
806.99	0.15	2.44	0.05	0.11	1.41
807.36	0.37	2.81	0.08	0.19	1.94 10 yr
807.63	0.27	3.08	0.10	0.29	2.38
807.67	0.04	3.12	0.10	0.29	2.46 25 yr
808.08	0.41	3.53	0.12	0.41	3.20
808.17	0.09	3.62	0.13	0.42	3.36 100 yr

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

STATE OF TEXAS
REGISTERED PROFESSIONAL ENGINEER
52960
TERRY R. HAGOOD

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JOB NO. 22-001 | C 2022 | HEA, Inc.
DATE SIGNED: 08/18/2023
ISSUED FOR: AGENCY REVIEW

SITE DEVELOPMENT PLANS FOR FRONTIER BANK LEASE BUILDING
7509 O'CONNOR DR.
ROUND ROCK, TEXAS 78681

REVISIONS

NO.	DATE	DESCRIPTION

HEA PROJECT NO. 22-001
ISSUED DATE: 08/18/2023

PROPOSED DRAINAGE AREA

SHEET NO. **PDA**
07

Aug 15, 2023 5:03pm Z:\HEA\HEA Projects\22-0002-001 Frontier Bank Lease Building\CAD Files\Civil\SD\22-001_PDA.dwg
Aug 15, 2023 5:03pm Z:\HEA\HEA Projects\22-0002-001 Frontier Bank Lease Building\CAD Files\Civil\SD\22-001_PDA.dwg

HYDROLOGIC SUMMARY for DA A												
TR-55 SCS Lag Time (hours)					Flow Summary							
Segment #1	Segment #2		Segment #3		Area	Tc	Cn	Q2	Q10	Q25	Q100	
Sheet Flow	Shallow Concent		Channelized		acres	hours	-	cfs	cfs	cfs	cfs	
Mannings "n"	0.0244	Unpaved	No	Mannings "n"	0	0.21	0.1	79	0.83	1.23	1.5	1.95
Length (ft)	100	Length (ft)		Length (ft)	0							
Slope (%)	2.44	Slope (%)		Slope (%)	0							
2-yr, 3 hr rainfall				Velocity (fps)	0							
segment total	0.016	segment total	0.014	segment total	0							
USER DEFINED				time of conc.(hrs)	0.1							
					SCS Lag Time (.6 x Tc) = 0.06 hours							

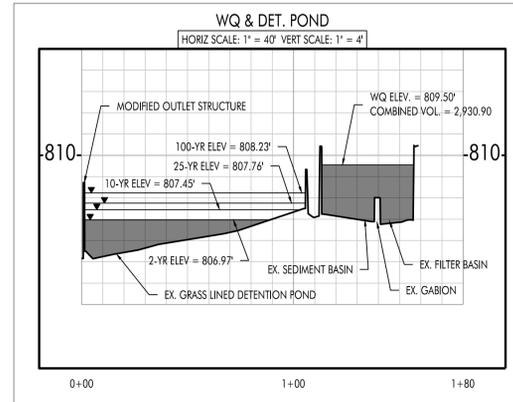
HYDROLOGIC SUMMARY for DA B												
TR-55 SCS Lag Time (hours)					Flow Summary							
Segment #1	Segment #2		Segment #3		Area	Tc	Cn	Q2	Q10	Q25	Q100	
Sheet Flow	Shallow Concent		Channelized		acres	hours	-	cfs	cfs	cfs	cfs	
Mannings "n"	0.011	Unpaved	No	Mannings "n"	0	0.22	0.1	79	0.85	1.28	1.57	2.04
Length (ft)	100	Length (ft)	86	Length (ft)	0							
Slope (%)	2.04	Slope (%)		Slope (%)	0							
2-yr, 3 hr rainfall				Velocity (fps)	0							
segment total	0.018	segment total	0.009	segment total	0							
USER DEFINED				time of conc.(hrs)	0.1							
					SCS Lag Time (.6 x Tc) = 0.06 hours							

HYDROLOGIC SUMMARY for DA C-1												
TR-55 SCS Lag Time (hours)					Flow Summary							
Segment #1	Segment #2		Segment #3		Area	Tc	Cn	Q2	Q10	Q25	Q100	
Sheet Flow	Shallow Concent		Channelized		acres	hours	-	cfs	cfs	cfs	cfs	
Mannings "n"	0.011	Unpaved	N/A	Mannings "n"	0	0.06	0.1	79	0.24	0.35	0.42	0.54
Length (ft)	42	Length (ft)		Length (ft)	0							
Slope (%)	1.26	Slope (%)		Slope (%)	0							
2-yr, 3 hr rainfall				Velocity (fps)	0							
segment total	0.011	segment total		segment total	0							
USER DEFINED				time of conc.(hrs)	0.1							
					SCS Lag Time (.6 x Tc) = 0.06 hours							

HYDROLOGIC SUMMARY for DA C-2												
TR-55 SCS Lag Time (hours)					Flow Summary							
Segment #1	Segment #2		Segment #3		Area	Tc	Cn	Q2	Q10	Q25	Q100	
Sheet Flow	Shallow Concent		Channelized		acres	hours	-	cfs	cfs	cfs	cfs	
Mannings "n"	0.011	Unpaved	No	Mannings "n"	0	0.18	0.1	79	0.68	1.01	1.22	1.58
Length (ft)	100	Length (ft)	38	Length (ft)	0							
Slope (%)	3.07	Slope (%)	0.0113	Slope (%)	0							
2-yr, 3 hr rainfall				Velocity (fps)	0							
segment total	0.015	segment total	0.005	segment total	0							
USER DEFINED				time of conc.(hrs)	0.1							
					SCS Lag Time (.6 x Tc) = 0.06 hours							

HYDROLOGIC SUMMARY for DA C-3												
TR-55 SCS Lag Time (hours)					Flow Summary							
Segment #1	Segment #2		Segment #3		Area	Tc	Cn	Q2	Q10	Q25	Q100	
Sheet Flow	Shallow Concent		Channelized		acres	hours	-	cfs	cfs	cfs	cfs	
Mannings "n"	0.011	Unpaved	No	Mannings "n"	0	0.22	0.1	69	0.18	0.33	0.43	0.6
Length (ft)	100	Length (ft)	130	Length (ft)	0							
Slope (%)	2.05	Slope (%)	0.73	Slope (%)	0							
2-yr, 24 hr rainfall				Velocity (fps)	0							
segment total	0.018	segment total	0.021	segment total	0							
USER DEFINED				time of conc.(hrs)	0.1							
					SCS Lag Time (.6 x Tc) = 0.06 hours							

HYDROLOGIC SUMMARY for DA C-4												
TR-55 SCS Lag Time (hours)					Flow Summary							
Segment #1	Segment #2		Segment #3		Area	Tc	Cn	Q2	Q10	Q25	Q100	
Sheet Flow	Shallow Concent		Channelized		acres	hours	-	cfs	cfs	cfs	cfs	
Mannings "n"	0.011	Unpaved	No	Mannings "n"	0	0.14	0.1	79	0.57	0.84	1.02	1.31
Length (ft)	100	Length (ft)	118	Length (ft)	0							
Slope (%)	1.87	Slope (%)	1.62	Slope (%)	0							
2-yr, 3 hr rainfall				Velocity (fps)	0							
segment total	0.018	segment total	0.013	segment total	0							
USER DEFINED				time of conc.(hrs)	0.1							
					SCS Lag Time (.6 x Tc) = 0.06 hours							



HAGOOD
ENGINEERING ASSOCIATE

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

STATE OF TEXAS
TERRY R. HAGOOD
52960
REGISTERED PROFESSIONAL ENGINEER

Terry R. Hagood

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DATE SIGNED: 08/18/2023
ISSUED FOR: AGENCY REVIEW

**SITE DEVELOPMENT PLANS FOR
FRONTIER BANK LEASE BUILDING
7509 O'CONNOR DR.
ROUND ROCK, TEXAS 78681**

NO.	DATE	DESCRIPTION	REVISIONS

HEA PROJECT NO: 22-001
ISSUED DATE: 08/18/2023

**PROPOSED
DRAINAGE AREA
CALCULATIONS**

SHEET NO.
PDA-2
08

**GENERAL M.U.D.
WATER AND WASTEWATER NOTES:**

(SOURCE: BRUSHY CREEK MUD STAFF, MARCH 2002)

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ROUND ROCK OR CITY OF AUSTIN SPECIFICATIONS AS ADAPTED AND AMENDED BY THE CITY OF ROUND ROCK OR CITY OF AUSTIN AND AS MODIFIED BY THE BRUSHY CREEK MUNICIPAL UTILITY DISTRICT.
- PRIOR TO BEGINNING CONSTRUCTION, THE OWNER OR HIS/HER AUTHORIZED REPRESENTATIVE SHALL CONVENE A PRE-CONSTRUCTION CONFERENCE BETWEEN THE CONSULTING ENGINEER, CONTRACTORS, COUNTY ENGINEER, (IF APPROPRIATE), BRUSHY CREEK M.U.D., AND ANY OTHER AFFECTED PARTIES. NOTIFY ALL SUCH PARTIES AT LEAST 48 HOURS PRIOR TO THE TIME OF THE CONFERENCE AND 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR SHALL GIVE THE M.U.D. A MINIMUM OF 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION INCLUDING CONNECTION TO EXISTING WASTEWATER LINES AND ANY TESTING PHASE. TELEPHONE 255-7871 X 212.
- NO BLASTING IS ALLOWED.
- MANHOLE FRAMES, COVERS, AND WATER VALVES WILL BE RAISED TO FINISHED PAVEMENT GRADE BY THE UTILITY CONTRACTOR. ALL UTILITY ADJUSTMENTS SHALL BE COMPLETED PRIOR TO FINAL PAVING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY EXACT DEPTH AND LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO OR REMOVAL OF EXISTING UTILITIES, DRIVEWAYS, PAVEMENT, CURBS AND GUTTER, SIDEWALKS, ETC. SHALL BE REPAIRED BY THE CONTRACTOR, OR THE UTILITY, AT UTILITIES OPTION, AND SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE BEFORE ACCEPTANCE OF THE PROJECT OR C.O. IS ISSUED.
- ALL FILL AREAS NOT UNDER PROPOSED ROAD AND OVER ALL UTILITIES, SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY IN ACCORDANCE WITH TEX. 113-E METHOD.
- CRUSHED STONE MEETING THE CITY OF ROUND ROCK OR CITY OF AUSTIN STANDARD SPECIFICATIONS IS TO BE USED AS BEDDING MATERIAL FOR ALL WATER AND/OR WASTEWATER MAINS.
- WATER AND WASTEWATER ALIGNMENTS SHOWN ON THE PLANS SHOULD BE ACHIEVED BY DEFLECTION WITHIN THE MANUFACTURERS SPECIFICATIONS, EXCEPT WHERE SPECIFIC FITTINGS ARE CALLED FOR ON THE PLANS. NOTE: NO PIPE DEFLECTIONS ARE PROPOSED ON THIS PROJECT.
- IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING UTILITIES SUCH AS GAS LINES, WATERLINES, VALVE BOXES, FIRE HYDRANTS, STRUCTURES, AND OTHER APPURTENANCES THAT ARE WITHIN THE RIGHT-OF-WAY OR EASEMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR ALL UTILITIES, DRIVEWAYS, PAVEMENT, CURB AND GUTTER, SIDEWALKS, FENCES, AND ANY OTHER ITEMS DAMAGED DURING CONSTRUCTION REGARDLESS OF WHETHER ALL ITEMS ARE SHOWN ON THE PLANS AT HIS SOLE EXPENSE. THE LOCATIONS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES IS APPROXIMATE. IN ADDITION TO NORMAL PRECAUTIONS WHEN EXCAVATING, TAKE EXTRA CAUTION WHEN EXCAVATING WITHIN 25 FT. OF ANY UTILITIES SHOWN ON THE PLANS.
- WHENEVER EXISTING UTILITIES, NOT INDICATED ON THE PLANS, PRESENT OBSTRUCTIONS TO GRADE AND ALIGNMENT OF PIPE, NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION. WHERE NECESSARY TO MOVE SERVICES, POLES, GUY WIRES, PIPES, ETC., AS DETERMINED BY THE ENGINEERS, THE CONTRACTOR WILL MAKE ARRANGEMENTS WITH THE OWNER OF THE UTILITY TO BE MOVED AND HAVE IT MOVED.
- THE CONTRACTOR SHALL INCLUDE ADDITIONAL FLUSHING VALVES AND TEST CONNECTIONS NECESSARY TO PERFORM TEST AND STERILIZATION OPERATION.
- ALL CONSTRUCTION ACTIVITIES, INCLUDING ACCESS, EGRESS, TRAVEL, STOCKPIILING, ETC. ARE TO BE CONFINED TO AREAS IDENTIFIED BY THE ENGINEER.
- REFER TO THE PLANS FOR DETAILS ON "PIPE BEDDING AND BACKFILL," "CONCRETE ENCASEMENT," "CONCRETE THRUST BLOCKING," AND "HORIZONTAL AND VERTICAL BENDS," "FIRE HYDRANT ASSEMBLY," AND OTHER DETAILS.
- TREE DAMAGES AND CLEARING OUTSIDE THE RIGHT-OF-WAY OR EASEMENTS ARE EXPRESSLY PROHIBITED.
- PIPE FITTINGS AND JOINTS - WATER - PVC (AWWA C-900, MIN. CLASS 200), WITH BOLTLESS GASKETED JOINTS AND D.I., M.J. OR FLANGE FITTINGS UNLESS OTHERWISE SHOWN ON THE PLANS. GRAVITY SEWER - ASTM D2241 OR D3034, MAX. DR-35), DUCTILE IRON (AWWA C-100, MIN. CLASS 50) OR CONCRETE (ASTM C-76) WITH O-RING JOINT DESIGN WITH BOLTLESS DUCTILE IRON, CLASS 50, MECHANICAL JOINTS AND CI (DI ENDS) FITTINGS, UNLESS OTHERWISE SHOWN ON THE PLANS.
- ALL GATE VALVES SHALL HAVE RESILIENT VALVE SEATS.
- AT ALL LOCATIONS WHERE A WATERLINE CROSSES A WASTEWATER LINE, THE CONSTRUCTION SHALL STRICTLY COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ).
- THE CONTRACTOR SHALL FURNISH THE ENGINEER ONE SET OF "AS-BUILT" PLANS REFLECTING ALL CHANGES MADE IN THE FIELD, AND TWO MEASUREMENTS TO ALL VALVES AND MANHOLES INSTALLED FROM PERMANENT OBJECTS.
- ALL MANHOLES MUST BE VACUUM TESTED AND WATER-TIGHT AND COATED TO CITY OF AUSTIN SPECIFICATIONS.
- ALL NEW WATER LINES SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH AWWA C600-87 AND DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C651.
- UNLESS OTHERWISE DIRECTED BY THE ENGINEER, DEPTH OF COVER FOR ALL LINES OUT OF THE PAVEMENT SHALL BE 42" MIN., AND DEPTH OF COVER FOR ALL LINES UNDER PAVEMENT SHALL BE A MIN. OF 30" BELOW SUB-GRADE.
- ALL FIRE HYDRANT LEADS SHALL BE DUCTILE IRON PIPE (AWWA C-100, MIN. CLASS 200).
- ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH MINIMUM 8-MIL. POLYETHYLENE AND SEALED WITH DUCT TAPE.
- ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON RING AND COVER. ALL MANHOLES LOCATED OUTSIDE OF THE PAVEMENT SHALL HAVE BOLTED COVERS. TAPPING OF FIBERGLASS MANHOLES SHALL NOT BE ALLOWED.
- THE CONTRACTOR MUST OBTAIN A CONSTRUCTION WATER METER FROM THE M.U.D.
- LINE FLUSHING OR ANY ACTIVITY USING A LARGE QUANTITY OF WATER MUST BE SCHEDULED WITH THE WATER AND WASTEWATER SUPERINTENDENT. TELEPHONE 255-7871.
- THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM STERILIZATION OF ALL POTABLE WATER LINES CONSTRUCTED AND SHALL PROVIDE ALL EQUIPMENT (INCLUDING TEST GAUGES), SUPPLIES (INCLUDING CONCENTRATED CHLORINE DISINFECTING MATERIAL), AND NECESSARY LABOR REQUIRED FOR THE STERILIZATION PROCEDURE. THE STERILIZATION PROCEDURE SHALL BE MONITORED BY BRUSHY CREEK M.U.D. WATER SAMPLES WILL BE COLLECTED BY THE BRUSHY CREEK M.U.D. TO VERIFY EACH TREATED LINE ATTAINED AN INITIAL CHLORINE CONCENTRATION OF 50 PPM. WHERE MEANS OF FLUSHING IS NECESSARY, THE CONTRACTOR, AT HIS EXPENSE, SHALL PROVIDE FLUSHING DEVICES AND REMOVE SAID DEVICES PRIOR TO FINAL ACCEPTANCE BY THE M.U.D.
- THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM QUALITY TESTING FOR ALL WASTEWATER PIPE INSTALLED AND PRESSURE PIPE HYDROSTATIC TESTING OF ALL WATER LINES CONSTRUCTED AND SHALL PROVIDE ALL EQUIPMENT (INCLUDING PUMPS AND GAUGES), SUPPLIES AND LABOR NECESSARY TO PERFORM THE TESTS. QUALITY AND PRESSURE TESTING SHALL BE MONITORED BY BRUSHY CREEK M.U.D.
- CONTRACTOR SHALL NOT OPEN OR CLOSE ANY VALVES UNLESS AUTHORIZED BY THE BRUSHY CREEK M.U.D.
- ALL VALVE BOXES AND COVERS SHALL BE CAST IRON.
- ALL WATER SERVICE, WASTEWATER SERVICE AND VALVE LOCATIONS SHALL BE APPROPRIATELY MARKED AS FOLLOWS:

WATER SERVICE	4" ON TOP OF CURB
WASTEWATER SERVICE	3" ON TOP OF CURB
VALVE	1" FACE OF CURB

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

GENERAL NOTES

ALL WORK PERFORMED AND ALL PRODUCTS FURNISHED UNDER THE PROVISION OF THE CONTRACT SHALL COMPLY WITH REQUIREMENTS WHICH PERTAIN TO THE VARIOUS ITEMS OF WORK INCLUDED AS STANDARD SPECIFICATION FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES OF THE TEXAS DEPARTMENT OF TRANSPORTATION, ADOPTED JUNE 1, 2004, AND AS AMENDED AND/OR UPDATED.

ALL CONSTRUCTION EQUIPMENT INVOLVED IN ROADWAY WORK SHALL BE EQUIPPED, UNLESS APPROVED OTHERWISE BY THE CONSTRUCTION OBSERVER, WITH A PERMANENTLY MOUNTED 360 DEGREE REVOLVING OR STROBE WARNING LIGHT WITH AMBER LENS. THIS LIGHT SHALL HAVE A MINIMUM LENS HEIGHT OF 5' AND A DIAMETER OF 5". THE LIGHT SHALL HAVE A MOUNTING HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE ROADWAY SURFACE AND SHALL BE VISIBLE FROM ALL SIDES. THIS EQUIPMENT SHALL ALSO HAVE ATTACHED AT EACH SIDE OF THE REAR END OF THE VEHICLE AN APPROVED ORANGE WARNING FLAG MOUNTED NOT LESS THAN 6 FEET ABOVE THE ROADWAY SURFACE.

ENTRY INTO AND PROTECTION OF ADJACENT PROPERTIES

DESIGN OF THIS PROJECT DID NOT CONTEMPLATE A NEED TO ENTER ADJACENT PROPERTIES EXCEPT WHERE EITHER PERMANENT OR TEMPORARY WORKING EASEMENTS ARE SHOWN ON THE PLANS. SHOULD IT BE NECESSARY DURING CONSTRUCTION OF THE WORK TO ENTER ON ADJACENT PROPERTIES, THE COUNTY SHALL BE NOTIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ARRANGEMENTS TO ENTER AND SHALL BE LIABLE FOR FEENCES AND RESTORATION OF ANY PROPERTY DAMAGE OUTSIDE OF THE RIGHT OF WAY AND EASEMENTS SHOWN IN THE PLANS.

LOCATION AND PROTECTION OF UTILITIES

NOTWITHSTANDING ANY OTHER PROVISION OF THIS CONTRACT, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ANY AND ALL PUBLIC AND/OR PRIVATE UTILITY LINES AND UTILITY CUSTOMER SERVICE LINES IN THE WORK AREA. THE CONTRACTOR SHALL EXERCISE DUE CARE TO LOCATE AND TO MARK, UNCOVER OR OTHERWISE PROTECT ALL SUCH LINES IN THE CONSTRUCTION ZONE, AND ANY OF THE CONTRACTORS WORK OR STORAGE AREAS. UPON REQUEST, THE COUNTY MAY PROVIDE SUCH INFORMATION THAT IT HAS ABOUT THE LOCATION AND GRADE OF WATER, GAS, TELEPHONE, CABLE TV AND ELECTRIC LINES AND OTHER UTILITIES IN THE WORK AREA, BUT SUCH INFORMATION SHALL NOT RELIEVE OR BE DEEMED TO BE IN SATISFACTION OF THE CONTRACTORS OBLIGATION HEREUNDER, WHICH SHALL BE PRIMARY AND NONDELEGABLE. ANY SUCH LINES DAMAGED BY THE CONTRACTORS OPERATIONS SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR OR HE SHALL CAUSE SUCH DAMAGE TO BE REPAIRED AT HIS EXPENSE. CONTRACTOR SHALL CONTACT DIG-TESS AT 1-800-344-8377, FOR UTILITY VERIFICATION, PRIOR TO BEGINNING CONSTRUCTION.

SURPLUS MATERIAL

EXCAVATED OR SURPLUS NATURAL SOIL AND ROCK MATERIAL, UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS, SHALL BE KNOWN AS 'SPOIL' AND PROPERLY DISPOSED OF BY THE CONTRACTOR OFF-SITE AT HIS SOLE EXPENSE. ANY PERMITS NECESSARY FOR THE DISPOSAL OF SUCH MATERIAL SHALL BE ACQUIRED BY THE CONTRACTOR AT HIS EXPENSE.

ANY SURPLUS MATERIAL DEFINED AS 'SOLID WASTE' UNDER THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY MUNICIPAL SOLID WASTE REGULATIONS SHALL BE DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE SOLID WASTE MANAGEMENT REGULATIONS.

RESTORATION/REVEGETATION

ALL DISTURBED AREAS WITHIN THE RIGHT OF WAY, EASEMENTS, AND LIMITS OF CONSTRUCTION SHALL BE RESTORED. RESTORATION SHALL INCLUDE ALL TOPSOIL, SEEDING, WATERING, FERTILIZER, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. RESTORATION SHALL BE INSTALLED AND VEGETATION ESTABLISHED PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, OR AS APPROVED BY THE COUNTY.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR REVEGETATION OF ALL AREAS DAMAGED OR DESTROYED BY CONSTRUCTION. CONTRACTOR WILL BE HELD LIABLE AND RESPONSIBLE FOR SUCH AREAS UNTIL GROWTH IS REESTABLISHED TO THE SATISFACTION OF THE COUNTY.

ORNAMENTAL LANDSCAPE PLANTINGS OF TREES, SHRUBS AND GRASSES THAT ARE DAMAGED OR DESTROYED DURING CONSTRUCTION SHALL BE REPLACED WITH PLANT MATERIAL OF COMPARABLE SIZE AND QUALITY APPROVED BY THE COUNTY.

REVEGETATION MEASURES WILL BEGIN AS SOON AS PRACTICAL. THE COUNTY RESERVES THE RIGHT TO REQUIRE THE IMMEDIATE INSTALLATION OF REVEGETATION MEASURES WHENEVER DEEMED NECESSARY.

THE COUNTY RESERVES THE RIGHT TO REQUIRE ADDITIONAL REVEGETATION MEASURES DEEMED NECESSARY AT ANY TIME AFTER CONSTRUCTION HAS BEGUN UNTIL THE COUNTY HAS ACCEPTED THE EROSION CONTROL MEASURES AND REVEGETATION MEASURES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING, REPAIRING OR REPLACING ALL EROSION CONTROL DEVICES AS MAY BE DIRECTED BY THE CONSTRUCTION OBSERVER. THIS WORK WILL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MOWING AND THE REMOVAL OF ALL LITTER ON THE RIGHT OF WAY WITHIN THE PROJECT LIMITS SO AS TO KEEP THE SITE OF THE WORK IN A NEAT AND PRESENTABLE CONDITION AT ALL TIMES, AS DIRECTED BY THE COUNTY. THIS WORK WILL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT ALL LOCATIONS USED FOR STORING CONSTRUCTION EQUIPMENT, MATERIALS, AND STOCKPILES OF ANY TYPE WITHIN THE RIGHT OF WAY SHALL BE APPROVED BY THE CONSTRUCTION OBSERVER. USE OF THE RIGHT OF WAY FOR THESE PURPOSES WILL BE RESTRICTED TO THOSE LOCATIONS WHERE DRIVER SIGHT DISTANCE TO BUSINESSES AND SIDE STREET INTERSECTIONS IS NOT OBSTRUCTED AND AT OTHER LOCATIONS WHERE AN UNSIGHTLY APPEARANCE, AS DETERMINED BY THE CONSTRUCTION OBSERVER, WILL NOT EXIST.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING EVERY 100 FOOT STATION, AND SHALL MAINTAIN THE MARKINGS FOR THE DURATION OF THE PROJECT. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.

AN ENGLISH-SPEAKING SUPERINTENDENT SHALL BE AVAILABLE ON THE PROJECT AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE CONTRACTOR SHALL PROVIDE THE CONSTRUCTION OBSERVER WITH CONTACT INFORMATION FOR THE SUPERINTENDENT.

CONTRACT TIME CHARGES SHALL CONTINUE TO ACCRUE THROUGH SUBSTANTIAL COMPLETION OF THE PROJECT, AS DEFINED BY THE CONTRACT DOCUMENTS.

IF ANY ABANDONED WELLS EXIST ON THE SITE OR ARE FOUND DURING CONSTRUCTION OF THE PROPOSED DEVELOPMENT, THEY SHALL BE PLUGGED IN COORDINATION WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ). THE CONTRACTOR SHALL CEASE CONSTRUCTION OPERATIONS IN THIS AREA AND NOTIFY THE CONSTRUCTION OBSERVER, WHO WILL COORDINATE THE PROPER PLUGGING PROCEDURES WITH TCEQ.

IF ANY SIGNIFICANT RECHARGE FEATURES, SUCH AS SINKHOLES, CAVES, OR ANY OTHER SUBTERRANEAN OPENINGS ARE DISCOVERED DURING CONSTRUCTION OR CORE SAMPLING, ALL ACTIVITIES NEAR THE FEATURE MUST BE IMMEDIATELY SUSPENDED. THE CONSTRUCTION OBSERVER MUST BE CONTACTED FOR EVALUATION. THE DISCOVERY MAY REQUIRE TCEQ REVIEW AND APPROVAL FOR THE METHODS PROPOSED TO PROTECT THE AQUIFER FROM ANY POTENTIAL ADVERSE IMPACTS.

ANY DRILL HOLES RESULTING FROM CORE SAMPLING ON-SITE OR DOWN-GRADIENT OF THE SITE SHALL BE PLUGGED WITH CONCRETE, FROM THE BOTTOM OF THE HOLE TO THE TOP OF THE HOLE, SO AS NOT TO ALLOW WATER OR CONTAMINANTS TO ENTER THE SUBSURFACE ENVIRONMENT.

CONSTRUCTION VEHICLES MAY BE RESTRICTED FROM TRAVERSING OR UTILIZING EXISTING ROADWAYS, UNPROTECTED CONSTRUCTION AREAS, AND AREAS WITH VEGETATIVE COVER, AS DETERMINED BY THE CONSTRUCTION OBSERVER.

VEHICLES SHALL NOT BE MAINTAINED ON-SITE DURING CONSTRUCTION, EXCEPT AT DESIGNATED MAINTENANCE SITES AS APPROVED BY THE CONSTRUCTION OBSERVER.

ANY SOILS CONTAMINATED DURING CONSTRUCTION OF THE PROPOSED PROJECT SHALL BE TRANSPORTED FROM THE SITE AND PROPERLY DISPOSED OF OFF-SITE, OFF THE CONTRIBUTING ZONE, AND OFF ANY DRAINING TO THE RECHARGE ZONE OF THE EDWARDS AQUIFER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.

DURING CONSTRUCTION, WASTEWATER GENERATED ON-SITE SHALL BE COLLECTED BY CHEMICAL TOILETS AND SHALL BE TRANSPORTED OFF THE PROJECT SITE.

ABOVE-GROUND STORAGE TANKS KEPT ON-SITE FOR CONSTRUCTION PURPOSES SHALL BE LOCATED OVER BERMED IMPERVIOUS LINERS SO AS NOT TO ALLOW ANY LEAKAGE INTO UNDERLYING SOILS. ADDITIONALLY, THE CONTAINMENT SHALL BE SIZED TO CAPTURE 150% OF THE TOTAL VOLUME OF FLUIDS STORED ON-SITE WITHIN THE STORAGE AREA. NO GAS STORAGE TANKS SHALL BE ALLOWED ON-SITE.

NO BLASTING WILL BE ALLOWED WITHIN 300 FEET OF A GEOLOGIC FEATURE OF SIGNIFICANT RECHARGE POTENTIAL. KNOWN LOCATIONS OF THESE FEATURES MAY BE OBTAINED FROM THE COUNTY OR ITS REPRESENTATIVES. ALL BLASTING ACTIVITIES MUST BE COORDINATED WITH THE CONSTRUCTION OBSERVER. BLASTING IN AREAS WHERE THE WATER TABLE IS WITHIN 24 INCHES OF THE SUBGRADE MUST BE APPROVED BY THE CONSTRUCTION OBSERVER.

ENDANGERED SPECIES AND HISTORIC PRESERVATION INFORMATION IS REFERENCED IN THE PROJECT'S ENVIRONMENTAL DOCUMENT AND/OR THE APPLICABLE SPECIAL PROVISION.

EXCAVATION AND EMBANKMENT QUANTITIES ARE MEASURED TO THE BOTTOM OF THE TOPSOIL (4" BELOW THE PROPOSED GRADE. TO THE EXTENT POSSIBLE, ALL EXISTING TOPSOIL SHALL BE SALVAGED, STOCKPILED AND REDISTRIBUTED TO THE GRADED AREAS IN ACCORDANCE WITH THE PLANS. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE OTHER BID ITEMS.

ELECTRIC POWER FOR RAILROAD CROSSING SAFETY SYSTEMS, TRAFFIC SIGNALS OR OTHER SUCH FACILITIES SHALL BE PAID FOR UNDER ITEM 628 ELECTRICAL SYSTEMS.

THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER AS SOON AS THE ROW IS STAKED AND PRIOR TO CLEARING OPERATIONS. UPON NOTIFICATION, THE OBSERVER WILL SCHEDULE A WALK-THROUGH WITH THE CONTRACTOR AND DESIGNATE ALL TREES AND OTHER FEATURES TO BE PROTECTED DURING CONSTRUCTION. THE CONTRACTOR SHALL NOT BEGIN ANY CLEARING OF THE RIGHT-OF-WAY PRIOR TO THIS WALK-THROUGH. THE DESIGNATED TREES SHALL BE PROTECTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, OR AS DIRECTED BY THE OBSERVER. NO FENCES SHALL BE REMOVED WITHOUT NOTIFICATION TO THE OBSERVER.

REMOVAL OF ANY OBSTRUCTIONS ON THE RIGHT OF WAY THAT ARE NOT SHOWN ON THE PLANS IS INCLUDED UNDER PREPARING RIGHT OF WAY.

BURNING OF BRUSH WILL NOT BE PERMITTED, UNLESS OTHERWISE DIRECTED BY THE COUNTY.

ALL RIGHT OF WAY CLEARING OPERATIONS WILL BE COORDINATED WITH THE PROJECT'S SWP AND AS DIRECTED OR APPROVED BY THE CONSTRUCTION OBSERVER.

THE CONTRACTOR MAY BE REQUIRED TO TRIM AND REMOVE BRUSH AND TREES IN ORDER TO CONSTRUCT THE PROJECT OR TO PROVIDE A HORIZONTAL CLEARANCE OF APPROXIMATELY 2 FEET INSIDE THE RIGHT OF WAY LINE AND A VERTICAL CLEARANCE OF AT LEAST 12 FEET. FOR THIS OPERATION, NO VERTICAL FALUING EQUIPMENT SHALL BE USED AND THE METHOD SHALL BE APPROVED BY THE CONSTRUCTION OBSERVER.

ALL MATERIALS NOT USED FOR CONSTRUCTION SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR AT HIS SOLE EXPENSE.

PRIOR TO CONTRACT LETTING, PROSPECTIVE BIDDERS MAY OBTAIN A FREE COMPUTER DISKETTE OR A COMPUTERIZED TRANSFER OF OUTPUT FILES THAT CONTAINS THE EARTHWORK DATA INFORMATION IN A FORMAT CONVENIENT FOR PRODUCING BY THE ENGINEER. NO EXTRAORDINARY OR OTHERWISE SPECIAL EFFORT WILL BE MADE TO PROVIDE THE INFORMATION IN A DIFFERENT FORMAT.

THE CONSTRUCTION OBSERVER SHALL BE NOTIFIED TO INSPECT ALL TOPSOIL SOURCES BEFORE DIGGING BEGINS. ALL OFF-SITE TOPSOIL SHALL HAVE A MINIMUM PI OF 20. THE ACTUAL DEPTH OF THE TOPSOIL SOURCE SHALL BE AS APPROVED BY THE CONSTRUCTION OBSERVER.

HYDRAULIC MULCHES USED FOR THIS PROJECT MUST BE ON THE APPROVED PRODUCT LIST FOR HYDRAULIC MULCHES LISTED ON WWW.DOT.STATE.TX.US/WMT/EROSION/CONTENTS.HTM. MULCH SHALL BE APPLIED AT 3500 LBS/ACRE. THE CONTRACTOR MUST FURNISH THE CONSTRUCTION OBSERVER WITH THE EMPTY MULCH BAGS TO ENSURE THE ABOVE RATES ARE BEING USED.

FERTILIZER SHALL BE OF THE XX-XX-XX ANALYSIS.

THE CONTRACTOR SHALL OBTAIN WATER AT A SOURCE THAT IS METERED OR SHALL FURNISH THE MANUFACTURER'S SPECIFICATIONS SHOWING TANK CAPACITY FOR EACH TRUCK USED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER PRIOR TO WATERING SO THAT THE CONSTRUCTION OBSERVER MAY VERIFY METER READINGS OR TRUCK COUNTS.

ANY ADJUSTMENTS OR CHANGES MADE TO A JOB MIX FORMULA MUST BE SUBMITTED AND APPROVED PRIOR TO PRODUCTION OF THE NEW JOB MIX FORMULA.

IN ALL RIPRAP SLOPES, 3 INCH DIAMETER WEEP HOLES SHALL BE PROVIDED AT 10 FOOT MAXIMUM SPACING AND BACKED WITH LOOSE GRADED GRAVEL OR CRUSHED STONE AND GALVANIZED HARDWARE CLOTH AS DIRECTED/APPROVED BY THE CONSTRUCTION OBSERVER. PAYMENT FOR THIS WORK SHALL BE SUBSIDIARY TO ITEM 432. IN AREAS WHERE GUARD FENCE POSTS ARE TO BE PLACED IN RIPRAP, THE RIPRAP SHALL HAVE BLOCKED OUT AREA (ROUND OR SQUARE) IN ACCORDANCE WITH THE DIMENSION SHOWN ON THE PLANS.

ALL ARMOR JOINTS SHALL RECEIVE PROTECTION SYSTEM I OR II.

IF PRE-CAST UNITS ARE USED, THE FILL MATERIAL BETWEEN THE BOXES SHALL CONSIST OF CONCRETE AGGREGATE WITH TWO SACKS OF PORTLAND CEMENT PER CUBIC YARD (TWO SACK CONCRETE). THE TWO SACKS OF CEMENT ARE PART OF THE BOX CULVERT WORK AND WILL NOT BE PAID FOR DIRECTLY.

REMOVAL OF EXISTING HEADWALLS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.

"MATERIALS ON HAND" PAYMENTS WILL NOT BE CONSIDERED IN DETERMINING PERCENTAGES USED TO COMPUTE PAYMENT FOR ITEM "MOBILIZATION".

ACCESS TO AL SIDE STREETS AND DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR.

A FIELD OFFICE FOR THIS PROJECT IS OPTIONAL. ALL COSTS ASSOCIATED WITH FURNISHING AND MAINTAINING A FIELD OFFICE SHALL BE INCLUDED IN THE PRICE FOR MOBILIZATION.

EACH NEW MAILBOX INSTALLATION SHALL BE SUPPLEMENTED WITH A TYPE 2 OBJECT MARKER PLACED ON THE MAILBOX SUPPORT IN A VERTICAL POSITION 6" BELOW THE BOTTOM OF THE MAILBOX. ON TUBULAR SUPPORTS, REFLECTIVE TAPE MAY BE USED TO SIMULATE A TYPE 2 MARKER. IF REFLECTIVE TAPE IS USED IT SHALL MEET THE REQUIREMENTS OF DEPARTMENTAL SPECIFICATION, D-9-8600. THE SIMULATED MARKER SHALL CONSIST OF THREE (3) 2 3/4" X 2 3/4" PEECES OF YELLOW HIGH INTENSITY TAPE SPACED 1" APART. ALL LABOR AND MATERIALS SHALL BE CONSIDERED SUBSIDIARY TO ITEM 560.

ALL PERMANENT SIGNS MOUNTED ON TRAFFIC SIGNAL WIRES, TRAFFIC SIGNAL POLES, OR TRAFFIC SIGNAL MAST ARMS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THE COST OF THE SIGNS, HARDWARE, AND ERECTING THE SIGNS SHALL BE SUBSIDIARY TO ITEM 680, "INSTALLATION OF HIGHWAY TRAFFIC SIGNALS".

ALL SIGN SIGNS NOT DETAILED IN THE PLANS SHALL BE BUILT IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS. WHERE A SIGN SIZE OR PARTICULAR LEGEND IS SHOWN AND SUCH SIGN SIZE OR LEGEND IS NOT SHOWN IN THE PUBLICATION, THE CONTRACTOR SHALL FURNISH THE SIGN AS DETAILED IN THE PLANS.

TCEQ WPAP NOTES

(TCEQ-0592 Rev. 07/15/15)
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER POLLUTION ABATEMENT PLAN
GENERAL CONSTRUCTION NOTES

- A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
 - THE NAME OF THE APPROVED PROJECT;
 - THE ACTIVITY START DATE; AND
 - THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.
- ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
- IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
- NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM IS INSTALLED WITHIN 150 FEET OF A DOMESTIC, INDUSTRIAL, IRRIGATION, OR PUBLIC WATER SUPPLY WELL, OR OTHER SENSITIVE FEATURE.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. CONTROLS SPECIFIED IN THE TEMPORARY STORM WATER SECTION OF THE APPROVED EDWARDS AQUIFER PROTECTION PLAN ARE REQUIRED DURING CONSTRUCTION. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THE CONTROLS MUST REMAIN IN PLACE UNTIL DISTURBED AREAS ARE REVEGETATED AND THE AREAS HAVE BECOME PERMANENTLY STABILIZED.
- ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.
- SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS NOT LATER THAN WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.
- LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
- 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.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARY OR PERMANENTLY CEASE IS PRECLUDED BY WEATHER CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE. IN AREAS EXPERIENCING DROUGHTS WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SEASONAL ARID CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
- 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.
- 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:
 - ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;
 - ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
 - ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

LEGEND

●	○	IRON ROD FOUND/SET
■	□	CONCRETE MONUMENT FOUND/SET
▲	△	NAIL FOUND/SET
⊙		PIPE FOUND
⊕	⊗	STORMWATER MANHOLE (DRAWN TO SCALE)
⊕	⊗	JUNCTION BOX (DRAWN TO SCALE)
⊕	⊗	GRATE INLET (DRAWN TO SCALE)
⊕	⊗	WASTEWATER MANHOLE (DRAWN TO SCALE)
⊕	⊗	WASTEWATER CLEANOUT
⊕	⊗	GAS TEST STATION
⊕	⊗	GAS METER
⊕	⊗	ELECTRIC METER
⊕	⊗	LIGHT POLE
⊕	⊗	SIGNAL LIGHT POLE
⊕	⊗	UTILITY POLE
⊕	⊗	TELEPHONE MANHOLE
⊕	⊗	FIRE HYDRANT
⊕	⊗	GATE VALVE
⊕	⊗	IRRIGATION CONTROL VALVE
⊕	⊗	WATER METER
⊕	⊗	EXISTING CONTOURS
⊕	⊗	PROPOSED CONTOUR
⊕	⊗	PROPOSED CURB AND GUTTER
⊕	⊗	PROPOSED ASPHALT
⊕	⊗	X" GAS LINE
⊕	⊗	X" STORM SEWER LINE
⊕	⊗	PROPOSED X' DIA. STORM SEWER LINE
⊕	⊗	X" WASTEWATER LINE
⊕	⊗	PROPOSED X' DIA. WASTEWATER LINE
⊕	⊗	X" WATER LINE
⊕	⊗	PROPOSED X' DIA. WATER LINE
⊕	⊗	EXISTING CHAIN LINK FENCE
⊕	⊗	EXISTING WIRE FENCE
⊕	⊗	EXISTING WOOD FENCE
⊕	⊗	SETBACK LINE
⊕	⊗	EASEMENT LINE
⊕	⊗	EXISTING ASPHALT
⊕	⊗	EXISTING OVERHEAD ELECTRIC LINE
⊕	⊗	EXISTING UNDERGROUND ELECTRIC LINE
⊕	⊗	EXISTING OVERHEAD TELEPHONE LINE
⊕	⊗	EXISTING UNDERGROUND TELEPHONE LINE
⊕	⊗	EXISTING WATER LINE (SIZE VARIES)
⊕	⊗	EXISTING WASTEWATER LINE (SIZE VARIES)
⊕	⊗	EXISTING FORCE MAIN (SIZE VARIES)
⊕	⊗	EXISTING FIBER OPTIC LINE
⊕	⊗	EXISTING GAS LINE (SIZE VARIES)
⊕	⊗	BENCHMARK LOCATION
⊕	⊗	EXISTING TREE TO REMAIN (SIZE VARIES)
⊕	⊗	EXISTING TREE TO BE REMOVED (SIZE VARIES)
⊕	⊗	MONARCH/HERITAGE TREE (SIZE VARIES)
⊕	⊗	PARKING COUNT
⊕	⊗	PARCEL LINES
⊕	⊗	HANDICAP ACCESS LINES
⊕	⊗	CONCRETE PAVING
⊕	⊗	ASPHALT PAVING
⊕	⊗	CONCRETE SIDEWALK



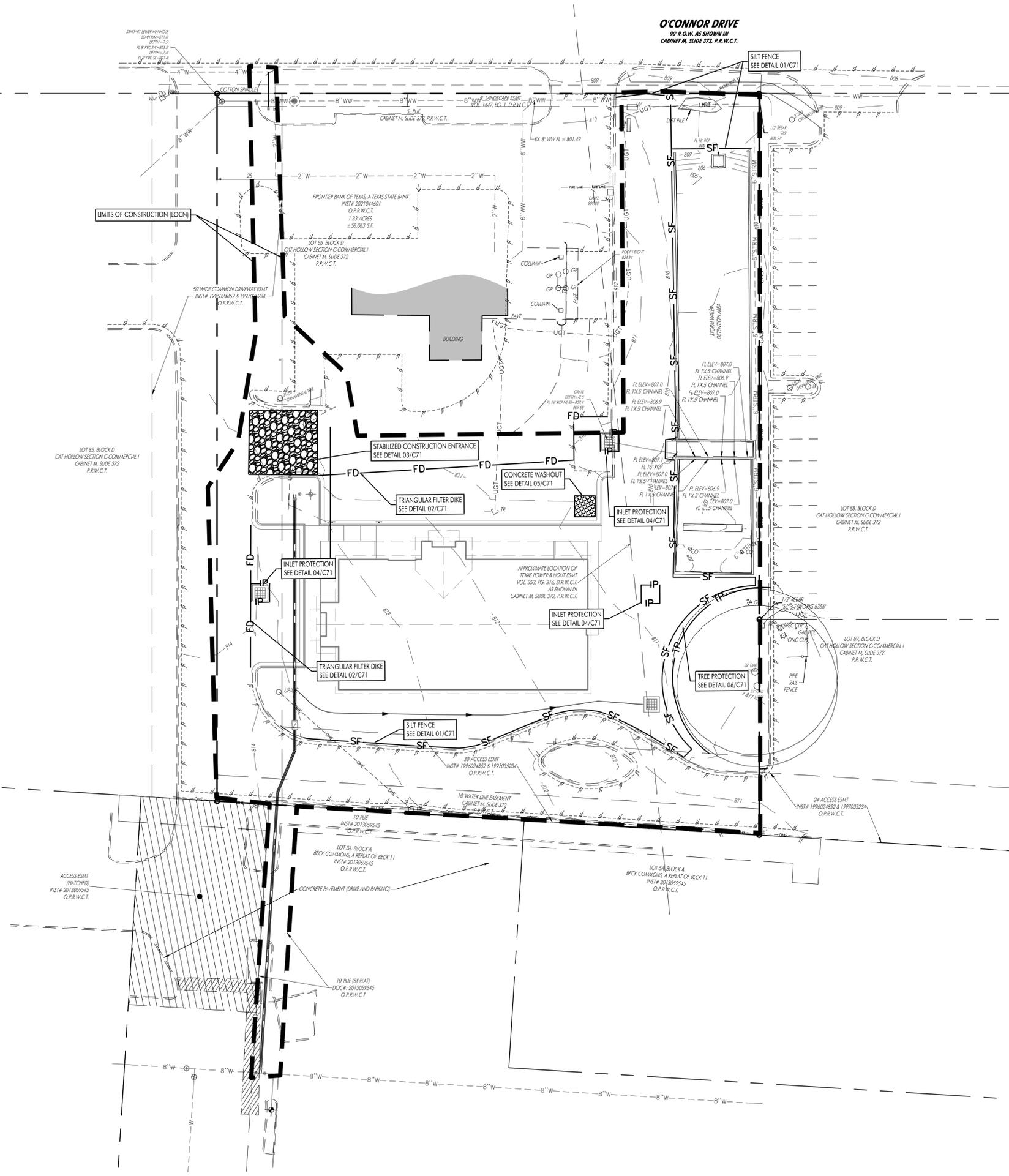
900 E. Main Street
Round Rock, TX 78664
Phone (512) 244-1546
Fax (512) 244-1010
www.hagood.com
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**SITE DEVELOPMENT PLANS FOR
FRONTIER BANK LEASE BUILDING
7509 O'CONNOR DR.
ROUND ROCK, TEXAS 78681**

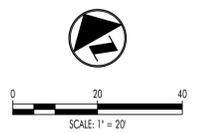
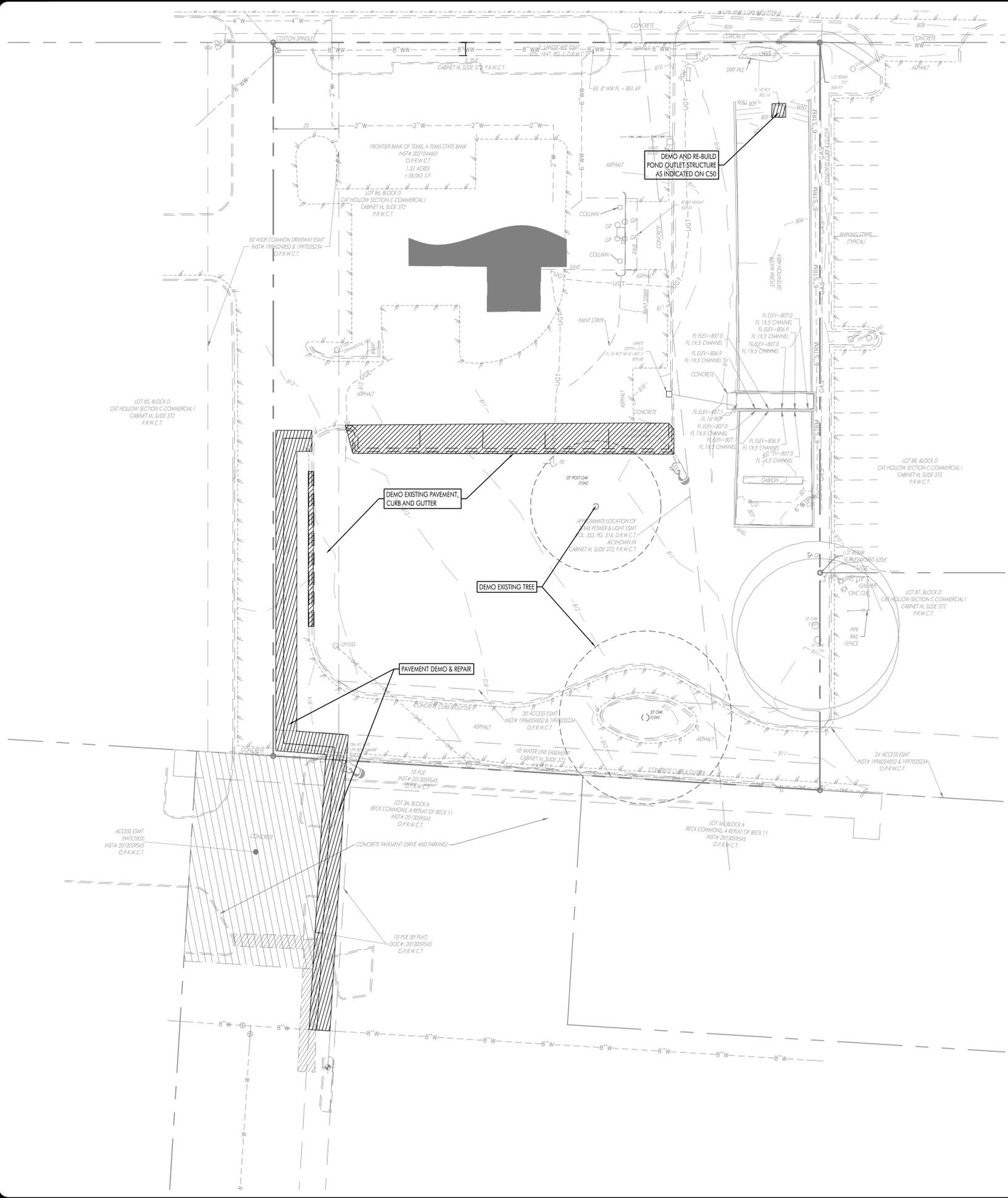
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- NOTES:
- CONTRACTOR TO ENSURE AT ALL TIMES, CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THROUGH A STABILIZED CONSTRUCTION ENTRANCE.
 - ALL DIRT, MUD, ROCKS, DEBRIS, ETC. SPILLED, TRACKED, OR OTHERWISE DEPOSITED ON ANY EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY.
 - CONTRACTOR TO IMPLEMENT TRAFFIC CONTROL MEASURES AS REQUIRED WHEN NECESSARY.
 - EROSION CONTROLS SHALL BE IN PLACE PRIOR TO ANY DEMOLITION.
 - THE CONTRACTOR SHALL CONSTRUCT AN ALL WEATHER SURFACE ACCESS DRIVE PRIOR TO GOING VERTICAL WITH THE BUILDING STRUCTURE. DIRT WORK AND FOUNDATION WORK MAY BE DONE PRIOR TO THE CONSTRUCTION OF THIS REQUIREMENT. ALL WEATHER SURFACE IS DEFINED AS ASPHALT, CONCRETE OR CHIP SEAL OVER AN ENGINEERED COMPACTED BASE.
 - ALL DISTURBED AREAS SHALL BE REVEGETATED AND ESTABLISHED PER CITY OF ROUND ROCK AND TCEQ REQUIREMENTS PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
 - DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY THE SITE INSPECTOR.

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HAGOOD
ENGINEERING ASSOCIATE

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

STATE OF TEXAS
REGISTERED PROFESSIONAL ENGINEER
52960
TERRY R. HAGOOD

Terry R. Hagood

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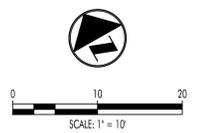
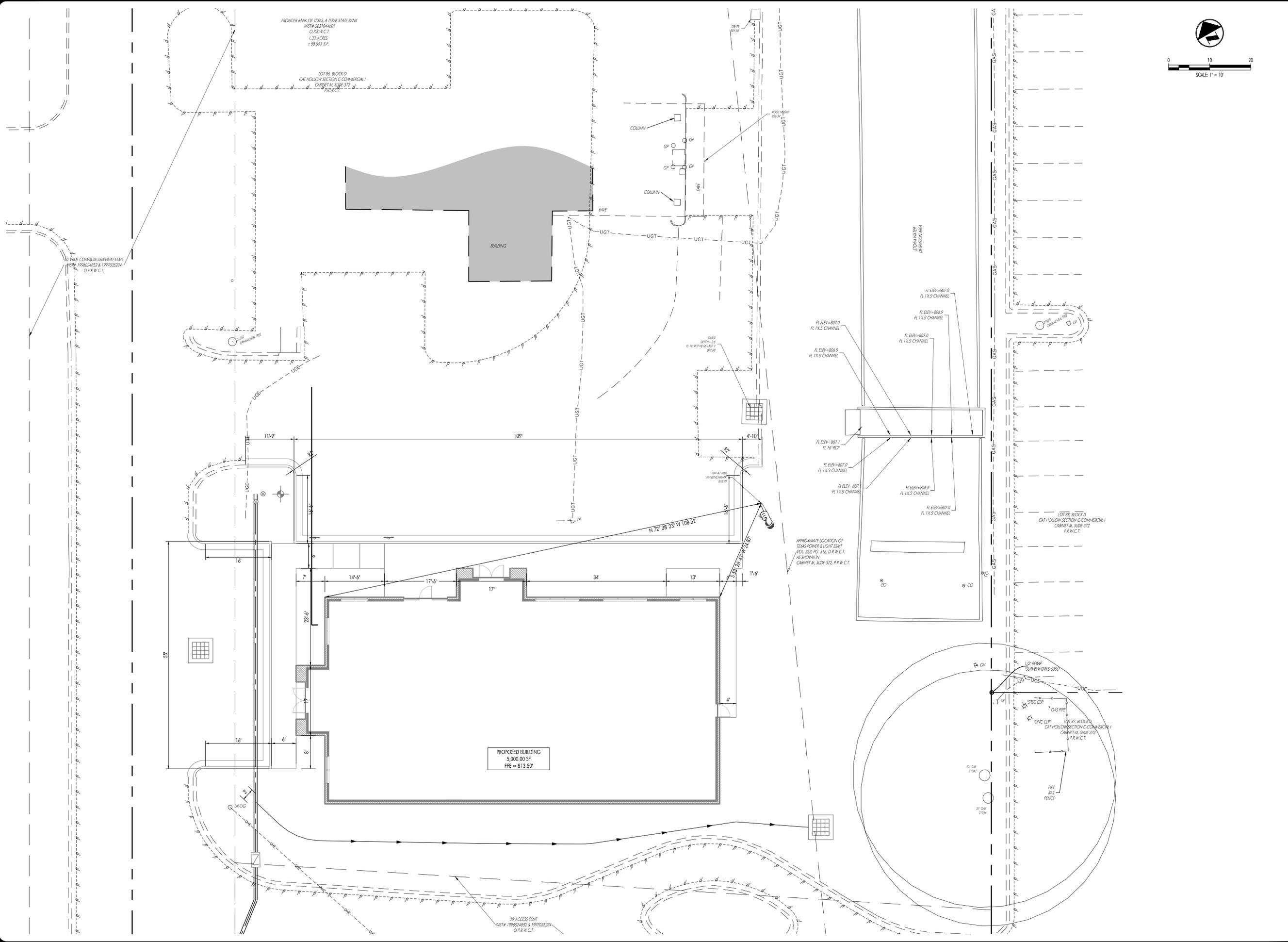
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DEMOLITION PLAN

SHEET NO.
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HAGOOD
ENGINEERING ASSOCIATE

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

STATE OF TEXAS
TERRY R. HAGOOD
52960
REGISTERED
PROFESSIONAL ENGINEER

Terry R. Hagood

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DIMENSION CONTROL PLAN

SHEET NO.
C20

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

TERRY R. HAGOOD
PROFESSIONAL ENGINEERING

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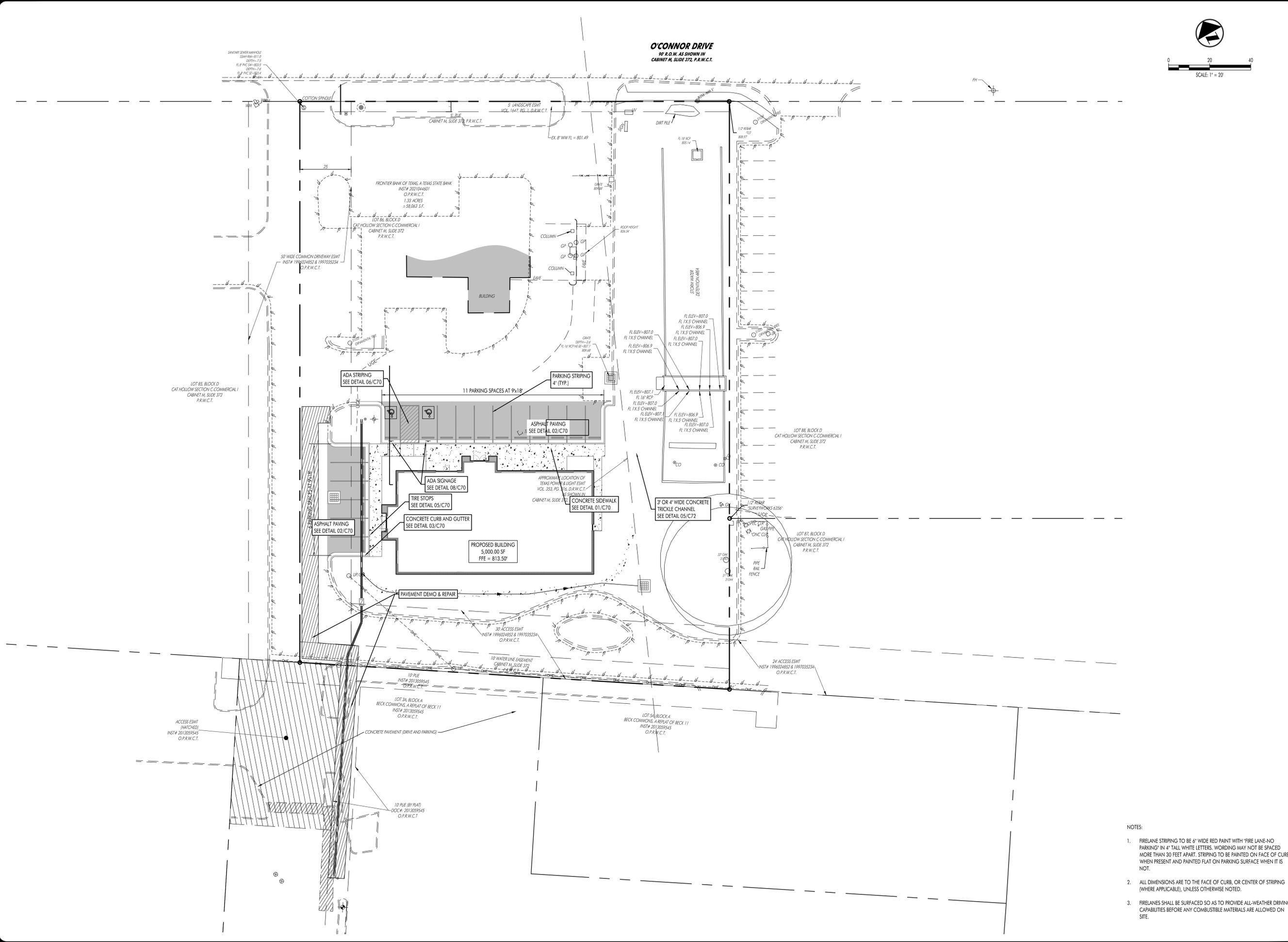
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ISSUED DATE: 08/18/2023

PAVING AND STRIPING PLAN

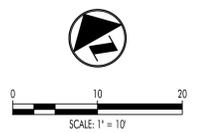
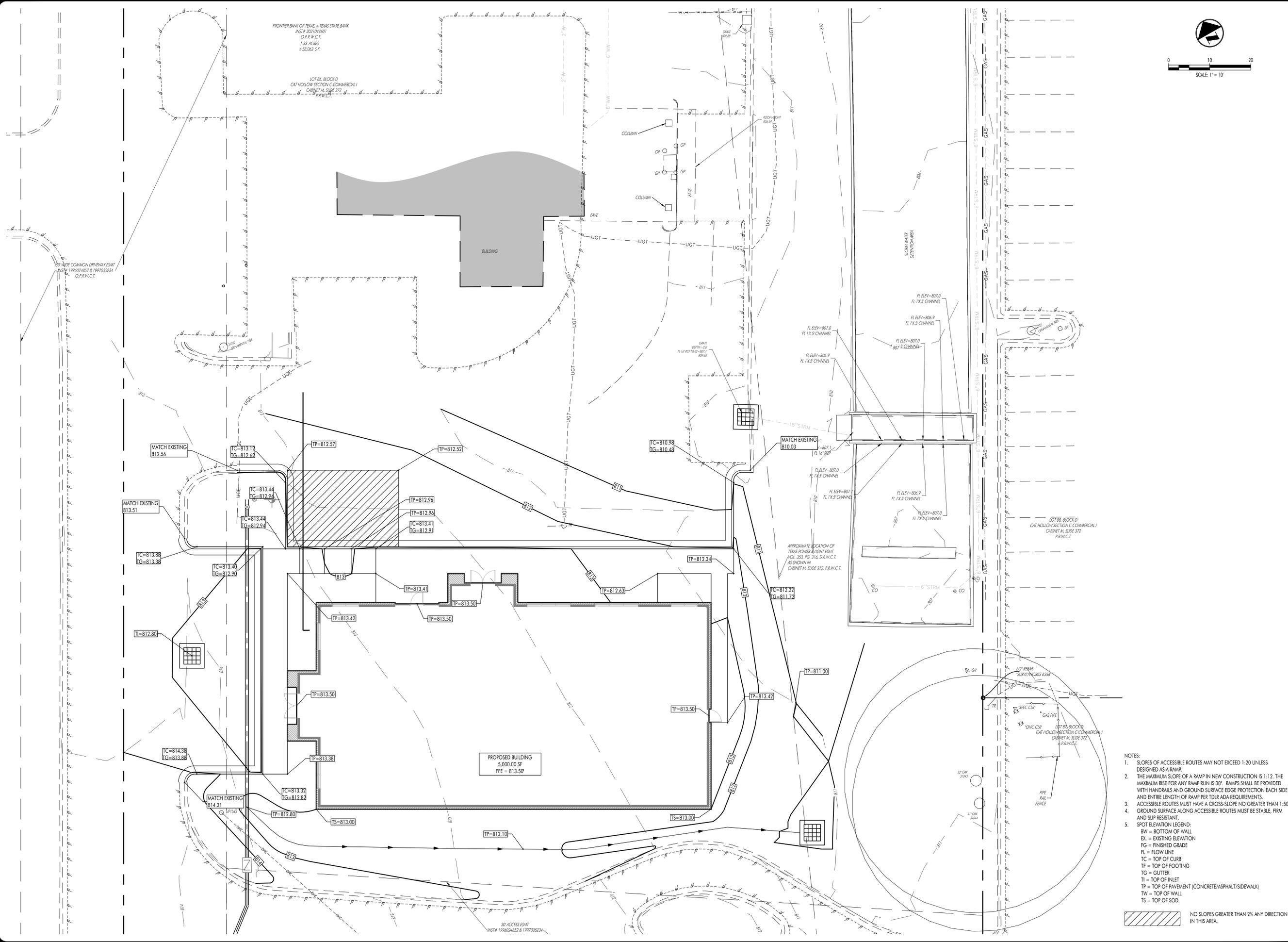
SHEET NO.
C30

13



- NOTES:
- FIRELANE STRIPING TO BE 6" WIDE RED PAINT WITH "FIRE LANE-NO PARKING" IN 4" TALL WHITE LETTERS. WORDING MAY NOT BE SPACED MORE THAN 30 FEET APART. STRIPING TO BE PAINTED ON FACE OF CURB WHEN PRESENT AND PAINTED FLAT ON PARKING SURFACE WHEN IT IS NOT.
 - ALL DIMENSIONS ARE TO THE FACE OF CURB, OR CENTER OF STRIPING (WHERE APPLICABLE), UNLESS OTHERWISE NOTED.
 - FIRELANES SHALL BE SURFACED SO AS TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES BEFORE ANY COMBUSTIBLE MATERIALS ARE ALLOWED ON SITE.

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FRONTIER BANK OF TEXAS, A TEXAS STATE BANK
 INST# 202104601
 C/P.R.W.C.T.
 1.33 ACRES
 ± 58,063 S.F.

LOT 88, BLOCK D
 CAT HOLLOW SECTION C-COMMERCIAL I
 CABINET M, SLIDE 372
 P.R.W.C.T.

PROPOSED BUILDING
 5,000.00 SF
 FFE = 813.50'

- NOTES:
1. SLOPES OF ACCESSIBLE ROUTES 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 RUN IS 30". RAMPS SHALL BE PROVIDED WITH HANDRAILS AND GROUND SURFACE EDGE PROTECTION EACH SIDE AND ENTIRE LENGTH OF RAMP PER ADA REQUIREMENTS.
 3. ACCESSIBLE ROUTES MUST HAVE A CROSS-SLOPE NO GREATER THAN 1:50.
 4. GROUND SURFACE ALONG ACCESSIBLE ROUTES MUST BE STABLE, FIRM AND SLIP RESISTANT.
 5. SPOT ELEVATION LEGEND:
 BW = BOTTOM OF WALL
 EX = EXISTING ELEVATION
 FG = FINISHED GRADE
 FL = FLOW LINE
 TC = TOP OF CURB
 TF = TOP OF FOOTING
 TG = GUTTER
 TI = TOP OF INLET
 TP = TOP OF PAVEMENT (CONCRETE/ASPHALT/SIDEWALK)
 TW = TOP OF WALL
 TS = TOP OF SOD

NO SLOPES GREATER THAN 2% ANY DIRECTION IN THIS AREA.

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

TERRY R. HAGOOD
 LICENSED PROFESSIONAL ENGINEER

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JOB NO. 22-001 © 2022 HEA, Inc.
 DATE SIGNED: 08/18/2023
 ISSUED FOR: AGENCY REVIEW

**SITE DEVELOPMENT PLANS FOR
 FRONTIER BANK LEASE BUILDING
 7509 O'CONNOR DR.
 ROUND ROCK, TEXAS 78681**

NO.	DATE	DESCRIPTION	REVISIONS

HEA PROJECT NO. 22-001
 ISSUED DATE: 08/18/2023

GRADING PLAN

SHEET NO.
C40
 14

Project Name: **Frontier Bank - Round Rock**
Date Prepared: **10/20/2022**

1. The Required Load Reduction for the total project:

Calculations from RG-348 Page 3-29 Equation 3.3: $L_d = 27.2(A_d \times P)$
Pages 3-27 to 3-30

L_d TOTAL PROJECT = Required TSS removal resulting from the proposed development = 80% of increased load
 A_d = 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	acres
Total project area included in plan *	1.33	acres
Predevelopment impervious area within the limits of the plan *	0.00	acres
Total post-development impervious area within the limits of the plan *	0.67	acres
Total post-development impervious cover fraction *	0.50	
P	32	inches
L_d TOTAL PROJECT	583	lbs.
Number of drainage basins / outfalls areas leaving the plan area =	3	

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

Drainage Basin/Outfall Area No. =	DA C-1	
Total drainage basin/outfall area =	0.06	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	0.06	acres
Post-development impervious fraction within drainage basin/outfall area =	1.00	
L_d THIS BASIN =	58	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	JF	abbreviation
Removal efficiency =	86.0	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:
 $L_r = (BMP\ efficiency) \times P \times (A_d \times 34.6 + A_p \times 0.54)$

A_c = Total On-Site drainage area in the BMP catchment area
 A_d = 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 =	0.06	acres
A_d =	0.06	acres
A_p =	0.00	acres
L_r =	57	lbs.

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

Desired L_r THIS BASIN =	58	lbs.
F =	0.914	

6. Calculate Treated Flow required by the BMP Type for this drainage basin / outfall area.

Offsite area draining to BMP =	0.00	acres
Offsite impervious cover draining to BMP =	0.00	acres

Rainfall Intensity =	1.12	inches per hour
Effective Area =	0.03	acres
Cartridge Length =	54	inches
Peak Treatment Flow Required =	0.063	cubic feet per second

7. Jellyfish

Designed as Required in RG-348 Section 3.2.22

Flow Through Jellyfish Size	75mic
Jellyfish Size for Flow-Based Configuration =	JFS10404-1-1
Jellyfish Treatment Flow Rate =	0.27 cfs

Project Name: **Frontier Bank - Round Rock**
Date Prepared: **10/20/2022**

1. The Required Load Reduction for the total project:

Calculations from RG-348 Page 3-29 Equation 3.3: $L_d = 27.2(A_d \times P)$
Pages 3-27 to 3-30

L_d TOTAL PROJECT = Required TSS removal resulting from the proposed development = 80% of increased load
 A_d = 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	acres
Total project area included in plan *	1.33	acres
Predevelopment impervious area within the limits of the plan *	0.00	acres
Total post-development impervious area within the limits of the plan *	0.67	acres
Total post-development impervious cover fraction *	0.50	
P	32	inches
L_d TOTAL PROJECT	583	lbs.
Number of drainage basins / outfalls areas leaving the plan area =	3	

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

Drainage Basin/Outfall Area No. =	DA C-3	
Total drainage basin/outfall area =	0.22	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	0.07	acres
Post-development impervious fraction within drainage basin/outfall area =	0.32	
L_d THIS BASIN =	61	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	JF	abbreviation
Removal efficiency =	84.6	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:
 $L_r = (BMP\ efficiency) \times P \times (A_d \times 34.6 + A_p \times 0.54)$

A_c = Total On-Site drainage area in the BMP catchment area
 A_d = 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 =	0.22	acres
A_d =	0.07	acres
A_p =	0.15	acres
L_r =	68	lbs.

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

Desired L_r THIS BASIN =	61	lbs.
F =	0.900	

6. Calculate Treated Flow required by the BMP Type for this drainage basin / outfall area.

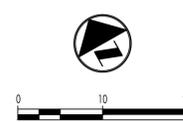
Offsite area draining to BMP =	0.00	acres
Offsite impervious cover draining to BMP =	0.00	acres

Rainfall Intensity =	1.10	inches per hour
Effective Area =	0.07	acres
Cartridge Length =	54	inches
Peak Treatment Flow Required =	0.07	cubic feet per second

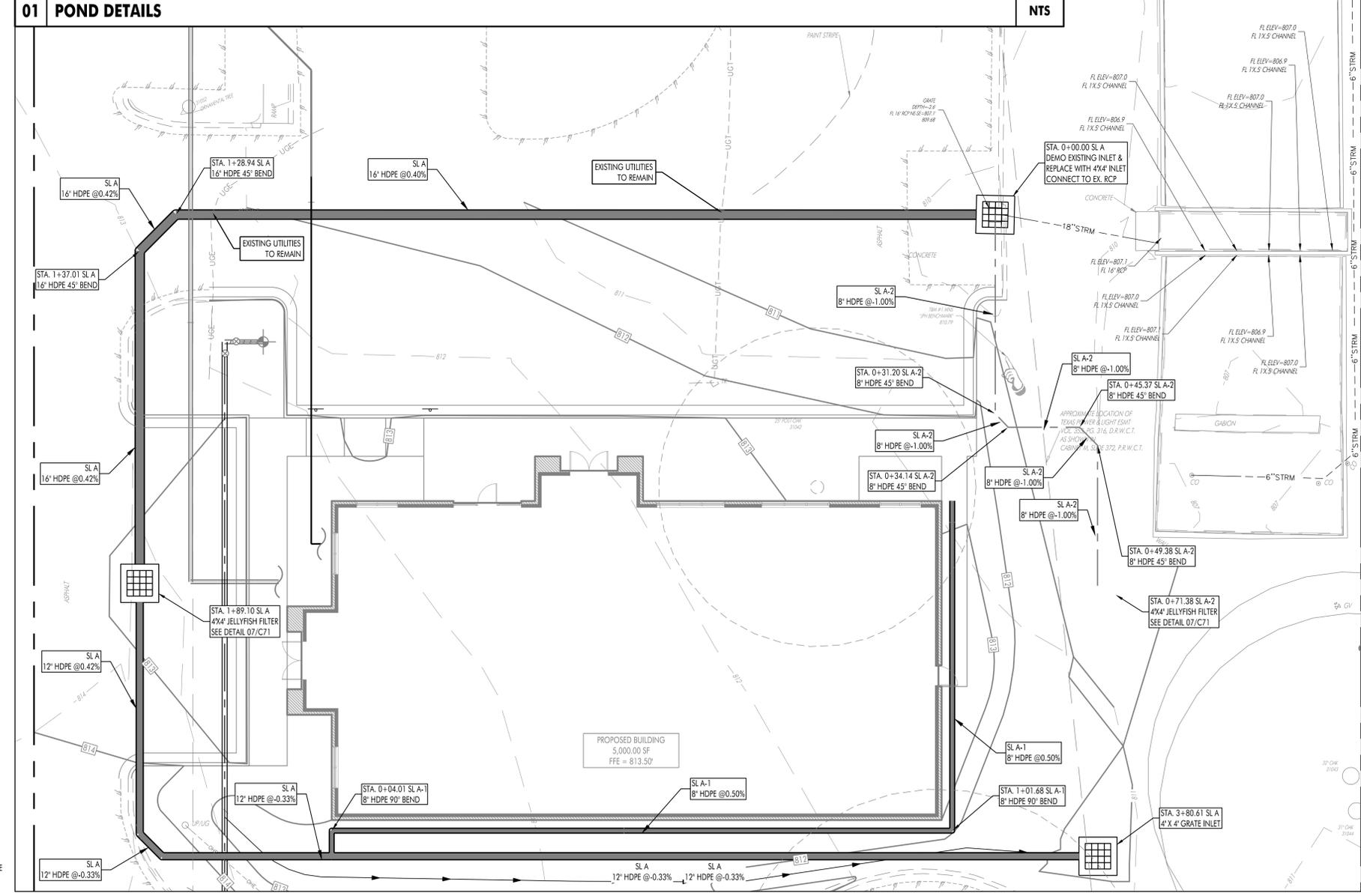
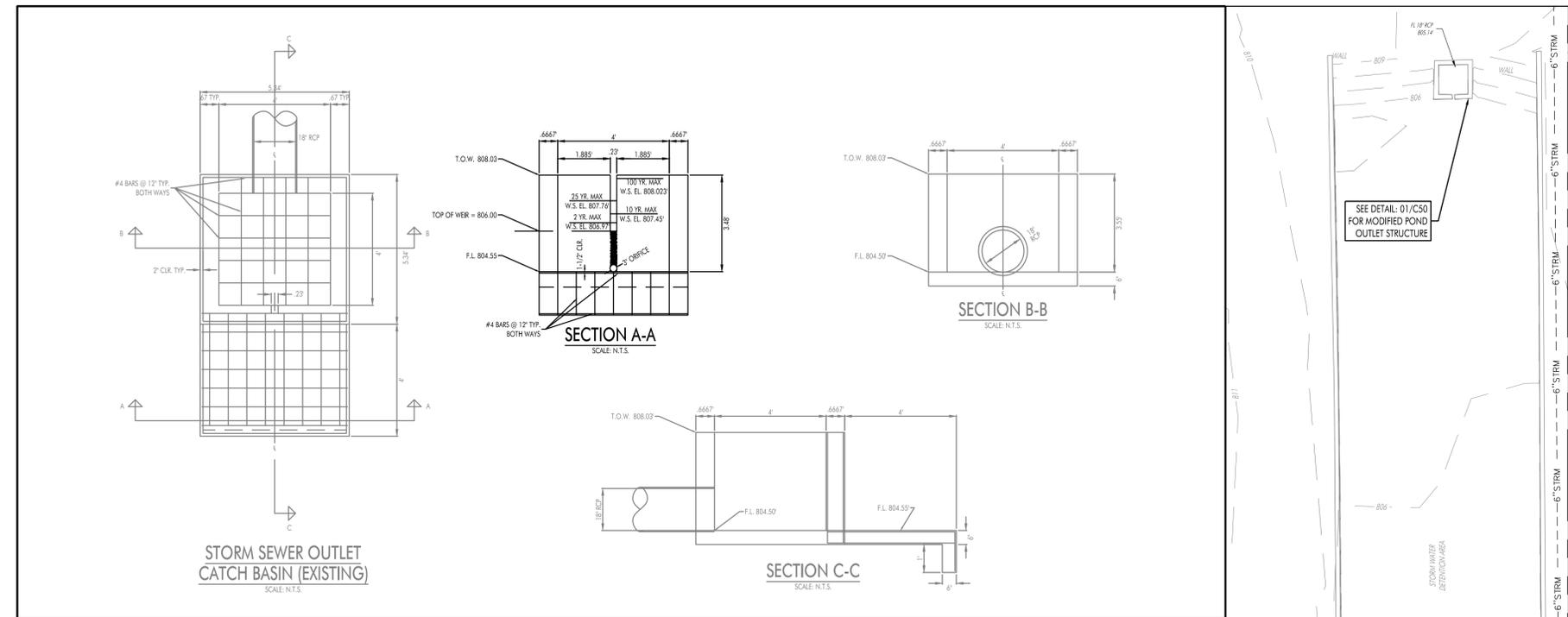
7. Jellyfish

Designed as Required in RG-348 Section 3.2.22

Flow Through Jellyfish Size	75mic
Jellyfish Size for Flow-Based Configuration =	JFS10404-1-1
Jellyfish Treatment Flow Rate =	0.27 cfs



NOTES:
1. ALL STORM SEWER WYES, BENDS AND PIPE SIZE TRANSITIONS SHALL BE PREFABRICATED AND FREE FROM DEFECTS.



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

Terry R. Hagood
Professional Engineer
No. 52960

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DATE SIGNED: 08/18/2023
ISSUED FOR: AGENCY REVIEW

**SITE DEVELOPMENT PLANS FOR
FRONTIER BANK LEASE BUILDING
7509 O'CONNOR DR.
ROUND ROCK, TEXAS 78681**

NO.	DATE	DESCRIPTION

HEA PROJECT NO: 22-001
ISSUED DATE: 08/18/2023

DRAINAGE PLAN

SHEET NO.
C50
15

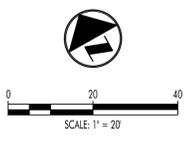
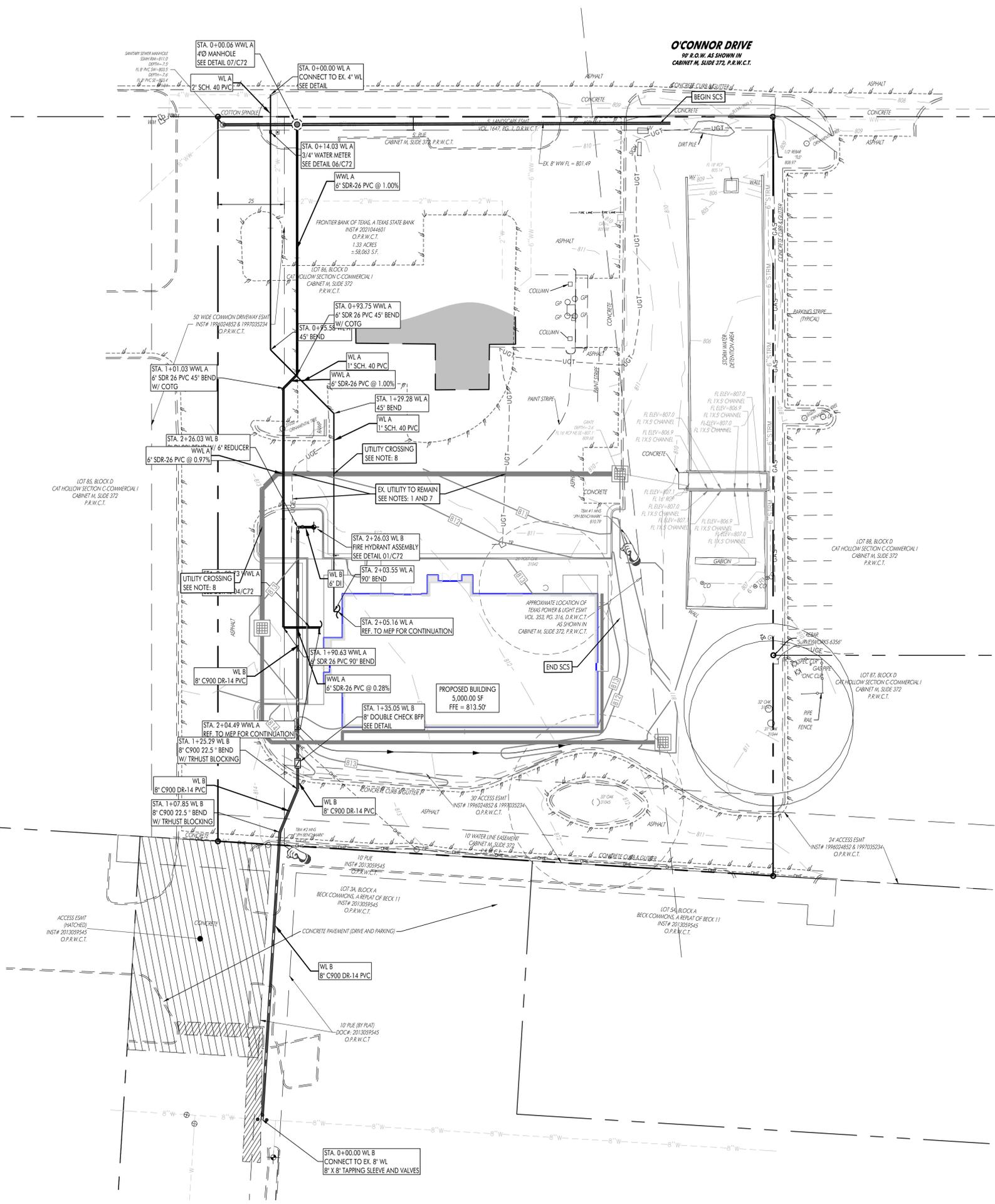
**SITE DEVELOPMENT PLANS FOR
FRONTIER BANK LEASE BUILDING
7509 O'CONNOR DR.
ROUND ROCK, TEXAS 78681**

NO.	DATE	DESCRIPTION

HEA PROJECT NO. 22-001
ISSUED DATE: 08/18/2023

UTILITY PLAN

SHEET NO.
C60
16

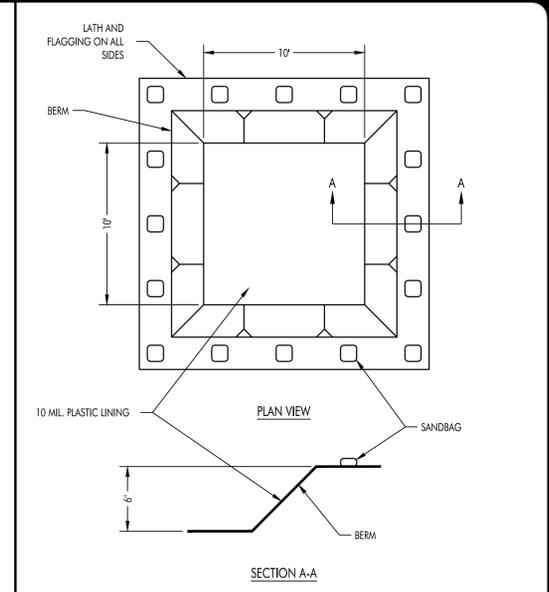
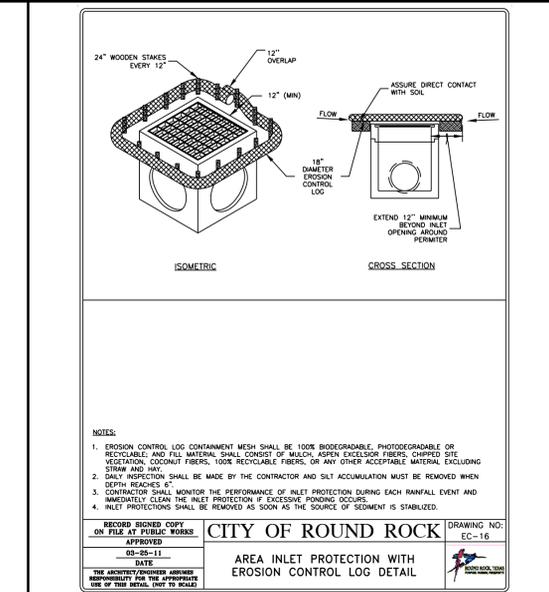
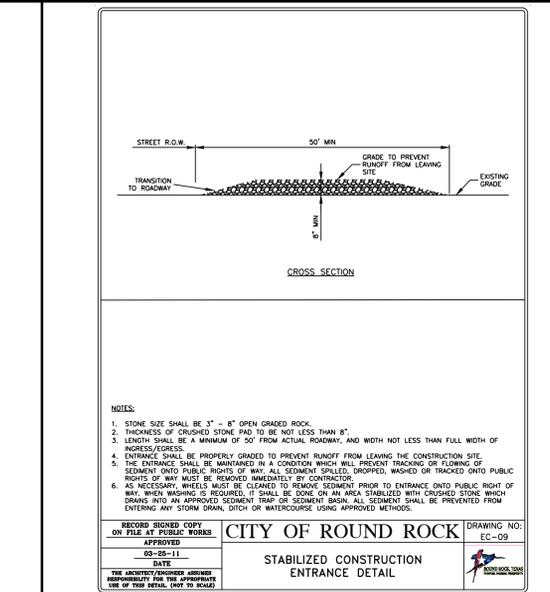
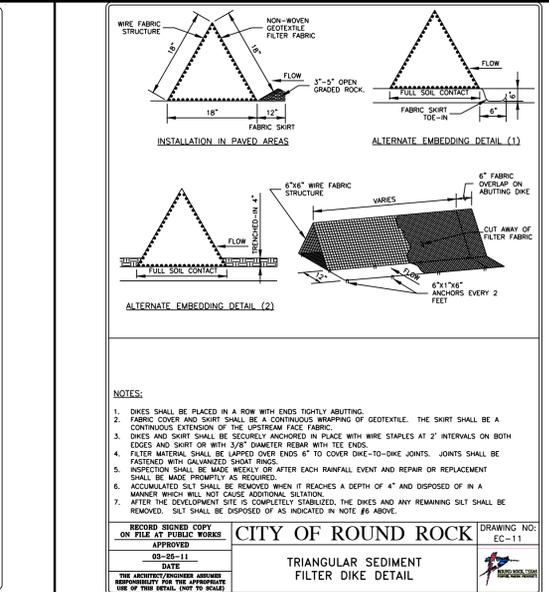
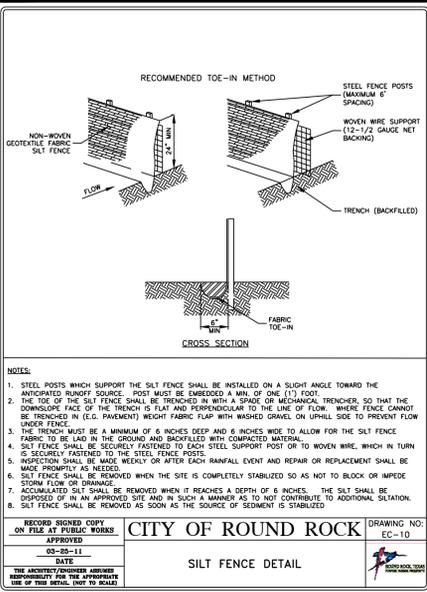


LEGEND

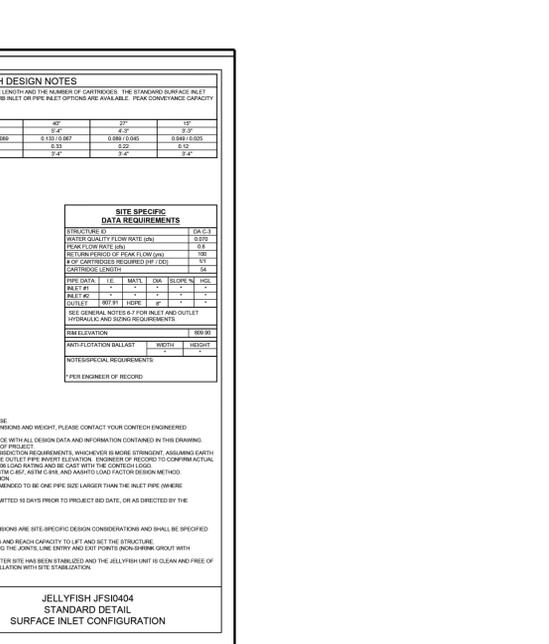
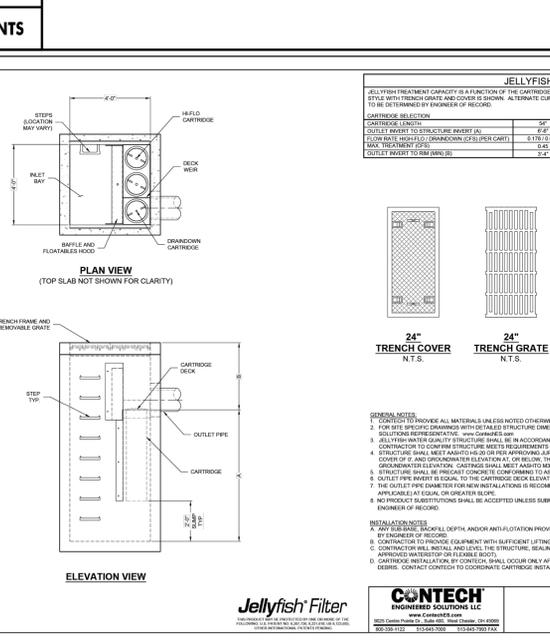
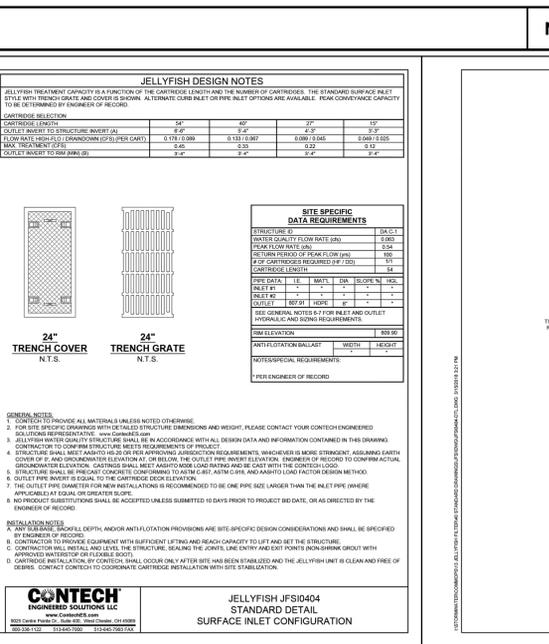
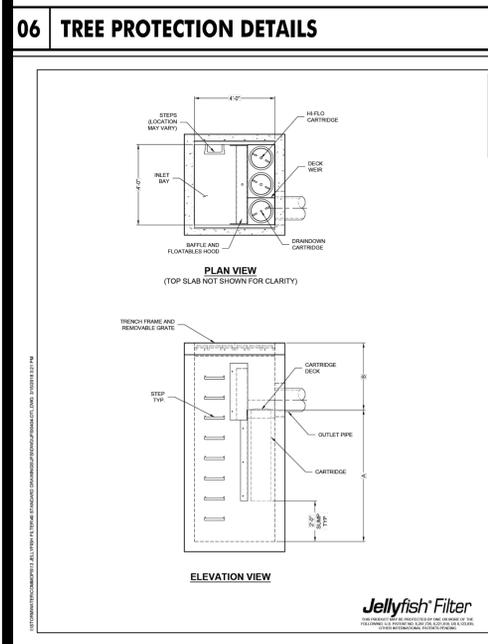
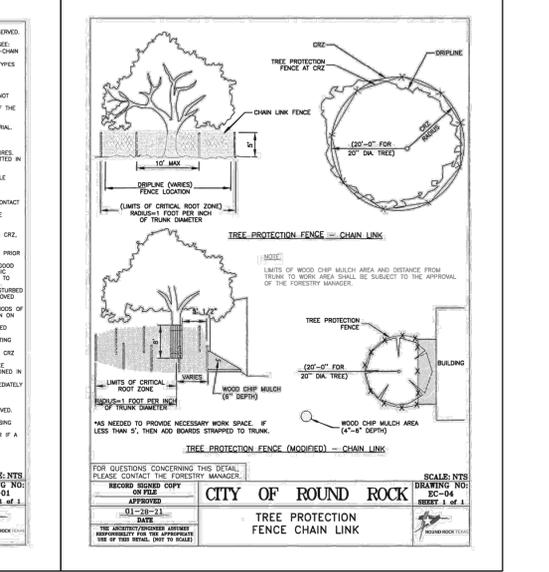
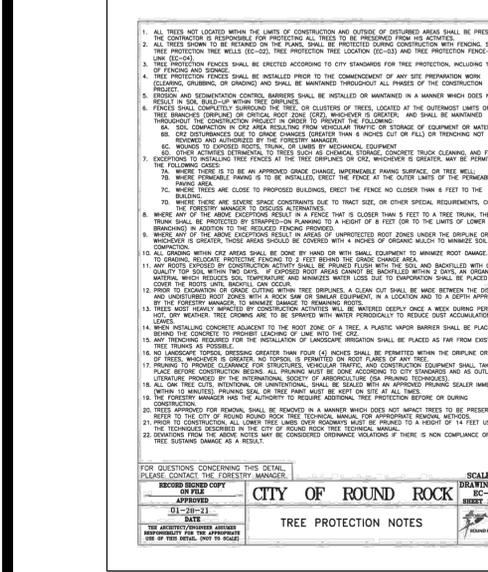
●	○	IRON ROD FOUND/SET
■	□	CONCRETE MONUMENT FOUND/SET
▲	△	NAIL FOUND/SET
⊙	⊙	STORMWATER MANHOLE (DRAWN TO SCALE)
⊕	⊕	JUNCTION BOX (DRAWN TO SCALE)
⊖	⊖	GRATE INLET (DRAWN TO SCALE)
⊗	⊗	WASTEWATER MANHOLE (DRAWN TO SCALE)
⊘	⊘	GAS TEST STATION
⊙	⊙	GAS METER
⊙	⊙	ELECTRIC METER
⊙	⊙	LIGHT POLE
⊙	⊙	SIGNAL LIGHT POLE
⊙	⊙	UTILITY POLE
⊙	⊙	TELEPHONE MANHOLE
⊙	⊙	FIRE HYDRANT
⊙	⊙	GATE VALVE
⊙	⊙	IRRIGATION CONTROL VALVE
⊙	⊙	WATER METER
—	—	EXISTING CONTOURS
—	—	PROPOSED CONTOUR
—	—	PROPOSED CURB AND GUTTER
—	—	PROPOSED ASPHALT
—	—	PROPOSED X" DIA. GAS LINE
—	—	PROPOSED X" DIA. STORM SEWER LINE
—	—	PROPOSED X" DIA. WASTEWATER LINE
—	—	PROPOSED X" DIA. WATER LINE
—	—	EXISTING CHAIN LINK FENCE
—	—	EXISTING WIRE FENCE
—	—	EXISTING WOOD FENCE
—	—	SETBACK LINE
—	—	EASEMENT LINE
—	—	EXISTING ASPHALT
—	—	EXISTING OVERHEAD ELECTRIC LINE
—	—	EXISTING UNDERGROUND ELECTRIC LINE
—	—	EXISTING OVERHEAD TELEPHONE LINE
—	—	EXISTING UNDERGROUND TELEPHONE LINE
—	—	EXISTING WATER LINE (SIZE VARIES)
—	—	EXISTING WASTEWATER LINE (SIZE VARIES)
—	—	EXISTING FORCE MAIN (SIZE VARIES)
—	—	EXISTING FIBER OPTIC LINE
—	—	EXISTING GAS LINE (SIZE VARIES)
⊙	⊙	BENCHMARK LOCATION
⊙	⊙	EXISTING TREE TO REMAIN (SIZE VARIES)
⊙	⊙	EXISTING TREE TO BE REMOVED (SIZE VARIES)
⊙	⊙	MONARCH/HERITAGE TREE (SIZE VARIES)
⊙	⊙	PARKING COUNT
—	—	PARCEL LINES
—	—	HANDICAP ACCESS LINES
—	—	CONCRETE PAVING
—	—	ASPHALT PAVING
—	—	CONCRETE SIDEWALK

- NOTES:**
- CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - ALL EXISTING GROUND LEVEL APPURTENANCES ARE SUBJECT TO ELEVATION CHANGES AND SHALL BE ADJUSTED TO FINAL GRADE.
 - ALL WASTEWATER MANHOLES SHALL BE COATED AND VACUUM TESTED.
 - MANHOLES OUTSIDE OF PAVEMENT SHALL HAVE BOLTED COVERS.
 - ALL GRAVITY WASTEWATER LINES ARE TO BE CONSTRUCTED OF SDR-26. ALL NON-CITY/NON-MUD INFRASTRUCTURE INCLUDING GAS, ELECTRIC CABLE, AND TELECOMMUNICATIONS SHALL TRAVERSE UNDERNEATH CITY/MUD INFRASTRUCTURE, INCLUDING BUT NOT LIMITED TO WATERLINES, WASTEWATER LINES, AND STORM SEWERS, WITH A MINIMUM OUTSIDE-TO-OUTSIDE CLEARANCE OF 18" WHERE NON-CITY/NON-MUD INFRASTRUCTURE WOULD HAVE TO BE PLACED AT A DEPTH OF 8' OR GREATER TO MEET THE PRECEDING REQUIREMENT, TRAVERSING ABOVE CITY/MUD INFRASTRUCTURE MAY BE ALLOWED, SUBJECT TO THE APPROVAL OF THE CITY/MUD ENGINEER, BUT ONLY IN CONFORMANCE WITH CROSS-SECTIONS, PROFILES, AND / OR OTHER DETAILED INFORMATION INCORPORATED IN THESE PLANS.
 - WHERE EXISTING NON-CITY/NON MUD UTILITIES ARE ENCOUNTERED, THEY ARE TO REMAIN AND, IF NEEDED, TO BE ROUTED UNDER UTILITY PROVIDER OVERSIGHT AND DUE PROCESS.
 - MAINTAIN MIN. 18" OF CLEARANCE OUTSIDE-TO-OUTSIDE WITH STORM SEWER PIPE WHERE WATERLINE CROSSES UNDER STORM SEWER UTILITY.
 - CONTRACTOR TO STAKEOUT WATERLINE EASEMENT PRIOR TO THE INSTALLATION OF THE WATERLINE, FOR INSTALLATION ACCURACY.
 - FOR ALL POINTS WHERE A WASTEWATER GRAVITY OR FORCE MAIN LINE CROSSES UNDER A PUBLIC WATER SUPPLY OR WATER SERVICE:
 - VERTICAL SEPARATION MUST BE AT LEAST TWO FEET FROM OUTSIDE DIAMETERS OF PIPES.
 - WASTEWATER PIPE WITH A MINIMUM PRESSURE RATING OF 150 PSI.
 - ONE SEGMENT OF WATER LINE SHALL BE CENTERED ON CROSSING.
 - FOR ALL POINTS WHERE A WASTEWATER GRAVITY OR FORCE MAIN LINE CROSSES OVER A PUBLIC WATER SUPPLY OR WATER SERVICE:
 - VERTICAL SEPARATION MUST BE AT LEAST TWO FEET FROM OUTSIDE DIAMETERS OF PIPE.
 - WATER SHALL BE PLACED IN AN ENCASMENT CENTERED ON THE CROSSING, SEALED AT BOTH ENDS WITH CEMENT GROUT OR MANUFACTURED SEAL, AT LEAST TWO NOMINAL SIZES LARGER, AND SUPPORTED BY SPACERS AT 5' INTERVALS.
 - ONE SEGMENT OF WATERLINE SHALL BE CENTERED ON CROSSING.
 - FOR WASTEWATER OR FORCE MAIN LINES THAT PARALLEL PUBLIC WATER OR WATER SERVICES:
 - SEPARATION MUST BE AT LEAST NINE FEET FROM OUTSIDE DIAMETERS OF PIPE IN ANY DIRECTION.
 - ALL WATER LINE FITTINGS SHALL BE RESTRAINED AND THRUST BLOCKED, UNLESS OTHERWISE SPECIFIED. ALL WATER MAINS SHALL BE CONSTRUCTED OF C900 DR-14 PVC.
 - PROVIDE 3' CLEAR AREA AROUND FIRE HYDRANTS.
 - ALL FIRE SERVICE LEADS SHALL BE DUCTILE IRON.
 - VALVES SHALL BE AMERICAN DARLING BRAND.
 - FIRE HYDRANTS SHALL BE AMERICAN DARLING BRAND.
 - CONTRACTOR SHALL PATCH ALL PAVEMENT PER DETAIL VIEWNUMBER/SHEETTITLE.

Aug 15, 2023 5:04pm Z:\HEA\HEA Projects\Projects 22-0002\2-001 Frontier Bank Lease Building\CAD Files\Civil\SD\22-001_C60.dwg
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01 SILT FENCE NTS **02 TRIANGULAR FILTER DIKE** NTS **03 STABILIZED CONSTRUCTION ENTRANCE** NTS **04 AREA INLET PROTECTION** NTS **05 CONCRETE WASHOUT** NTS



07 JELLYFISH FILTER NTS

HAGOOD ENGINEERING ASSOCIATES

900 E. Main Street
Round Rock, TX 78664
Phone (512) 244-1546
Fax (512) 244-1010
www.heagood.com
TERRI R. HAGOOD
PROFESSIONAL ENGINEER
REG. NO. 52960

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THE SIGNATURE AND SEAL ARE REQUIRED TO BE IN THE PRESENCE OF THE ENGINEER AND ARCHITECT TO BE ACCORDANCE WITH THE RULES OF THE TEXAS BOARD OF PROFESSIONAL ENGINEERS.

DATE: 05-05-11
ISSUED FOR: AGENCY REVIEW

JOB NO. 22-001 C 2022 HEA, INC.
DATE: 05-05-11 05/18/2022

SITE DEVELOPMENT PLANS FOR FRONTIER BANK LEASE BUILDING

7509 O'CONNOR DR.

ROUND ROCK, TEXAS 78681

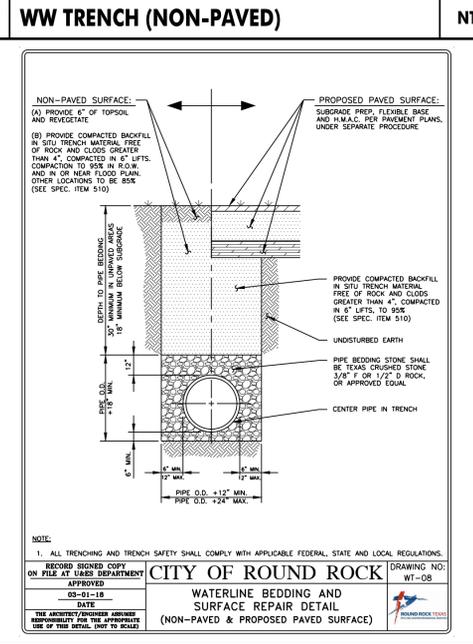
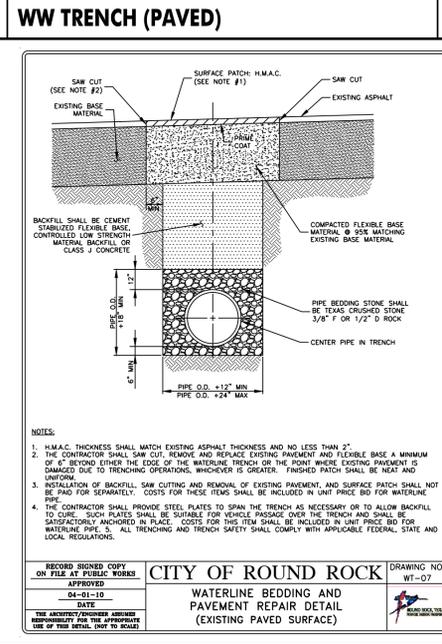
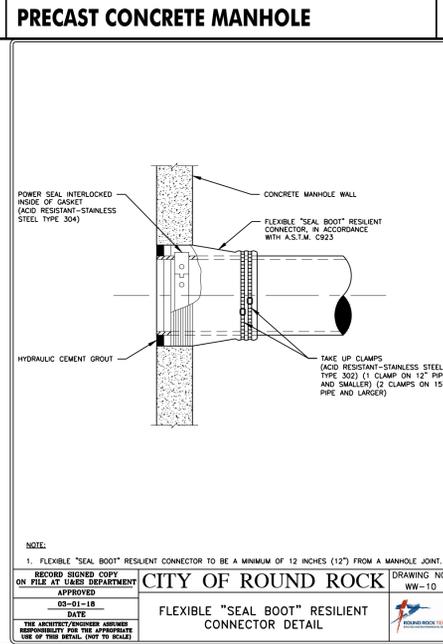
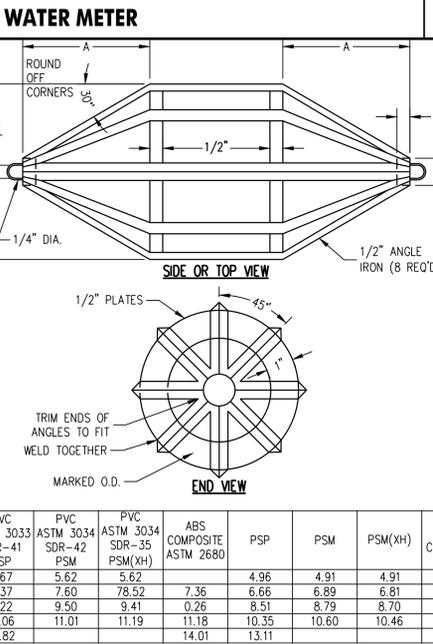
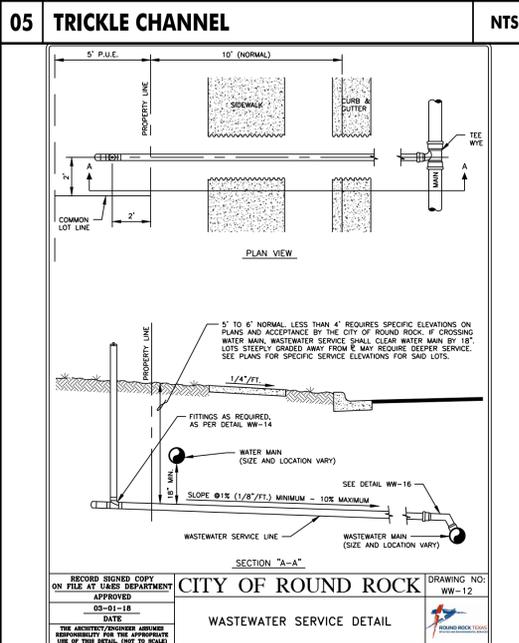
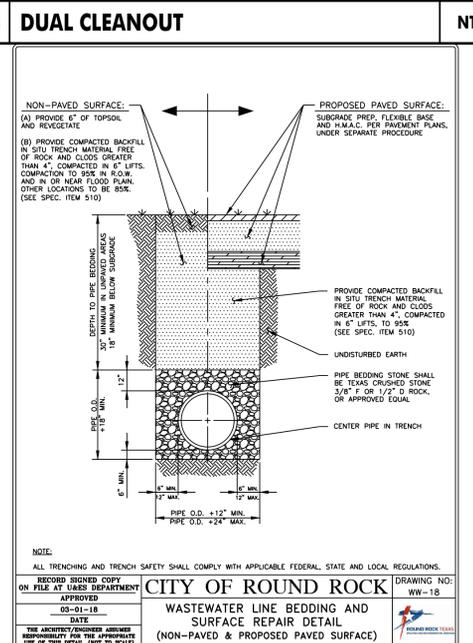
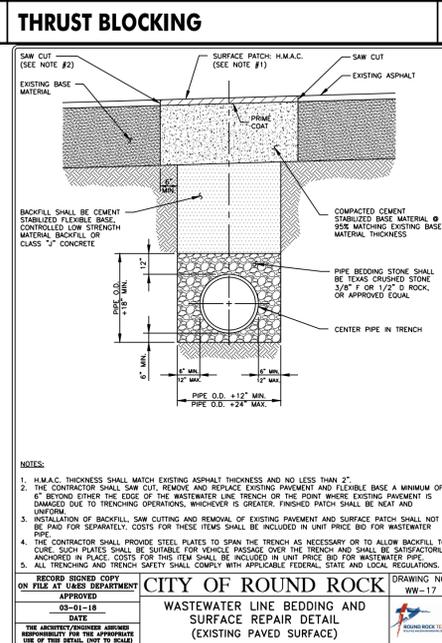
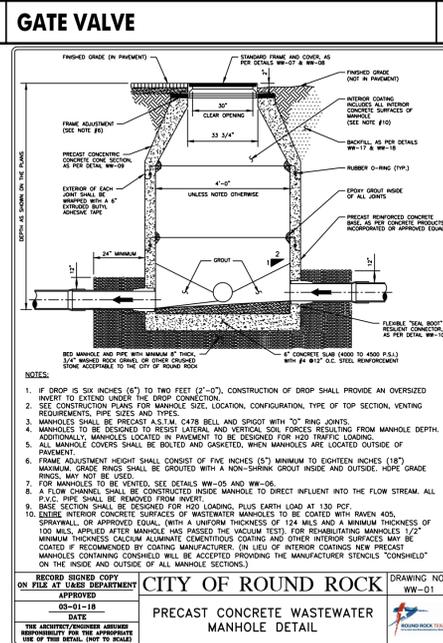
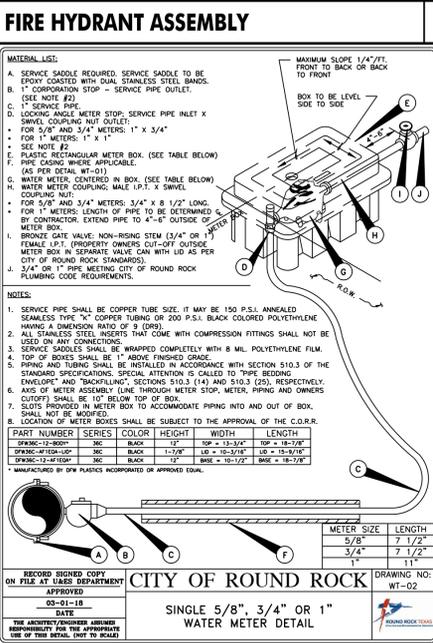
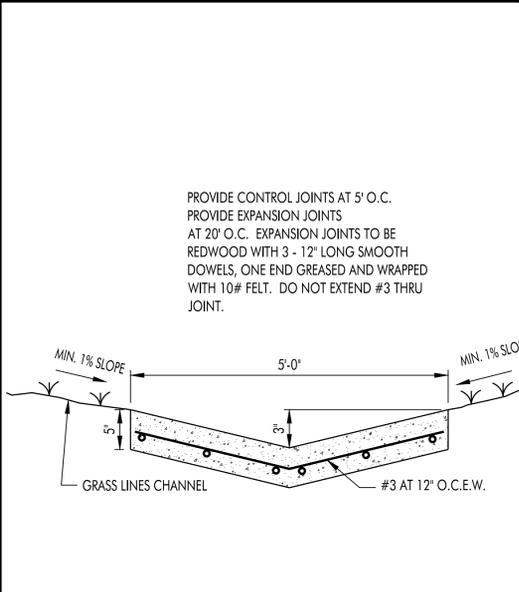
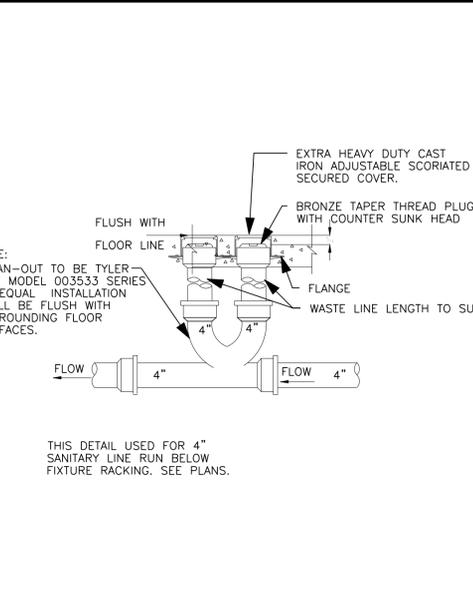
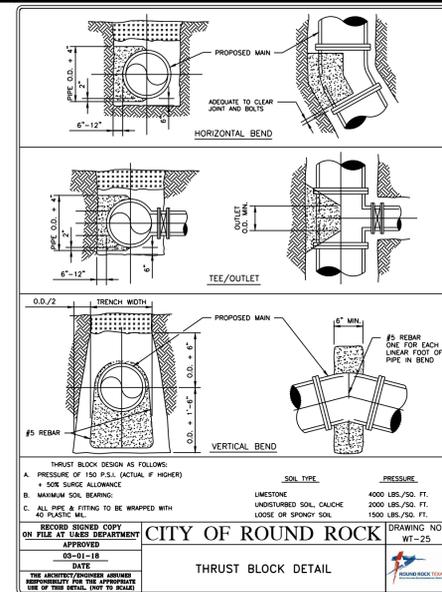
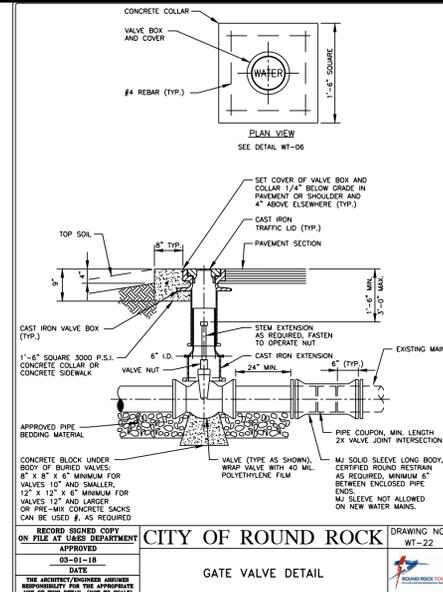
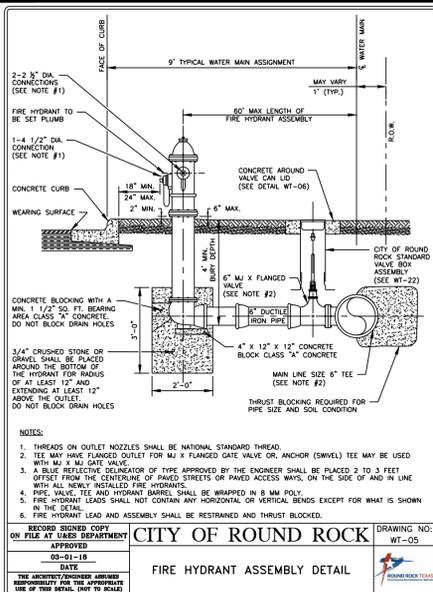
NO. DATE DESCRIPTION

HEA PROJECT NO: 22-001
ISSUED DATE: 08/18/2023

EROSION DETAILS

SHEET NO. **C71**

19



MANDREL	NTS
PVC ASTM 3033 SDR-41	5.67
PVC ASTM 3034 SDR-42	7.37
PSP	7.60
ABS COMPOSITE ASTM 2680	7.52
PSM	7.36
PSM(XH)	6.66
ABS COMPOSITE	6.89
	6.81
	6.65
	8.55
	8.70
	10.45
	10.45
	13.30

FLEXIBLE 'SEAL BOOT' RESILIENT CONNECTOR	NTS
	5.62
	4.96
	4.91
	4.91
	6.65
	8.55
	8.70
	10.45
	10.45
	13.30

WATERLINE TRENCH PAVED	NTS
	5.67
	7.37
	7.60
	7.52
	7.36
	6.66
	6.89
	6.81
	6.65
	8.55
	8.70
	10.45
	10.45
	13.30

WATERLINE TRENCH NON-PAVED	NTS
	5.67
	7.37
	7.60
	7.52
	7.36
	6.66
	6.89
	6.81
	6.65
	8.55
	8.70
	10.45
	10.45
	13.30

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

PROVIDE CONTROL JOINTS AT 5' O.C.
 PROVIDE EXPANSION JOINTS AT 20' O.C. EXPANSION JOINTS TO BE REDWOOD WITH 3 - 1/2" LONG SMOOTH DOWELS, ONE END GREASED AND WRAPPED WITH 10# FELT. DO NOT EXTEND #3 THRU JOINT.

MIN. 1% SLOPE
 5'-0"
 MIN. 1% SLOPE
 #3 AT 12" O.C.E.W.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGOOD, P.E. (512) 244-1010
 THE SIGNATURE AND TITLE REQUIRED WITHIN THE EXERCISE WITHIN CONSENT OF THE ENGINEER AND ARCHITECT IN ACCORDANCE WITH THE RULES OF THE BOARD OF ENGINEERING PRACTICE ACT.

JOB NO. 22-001
 DATE SIGNED: 08/18/2023
 ISSUED FOR: AGENCY REVIEW

SITE DEVELOPMENT PLANS FOR FRONTIER BANK LEASE BUILDING
 7509 O'CONNOR DR.
 ROUND ROCK, TEXAS 78681

REVISIONS

NO.	DATE	DESCRIPTION

HEA PROJECT NO. 22-001
 ISSUED DATE: 08/18/2023

UTILITY DETAILS

SHEET NO. **C72**

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