Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

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

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

Technical Review

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

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

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

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.

4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: St Alphonsa Church						**2. Regulated Entity No.:**			
3. Customer Name: St Alphonsa Church						**4. Customer No.:**			
5. Project Type: **(Please circle/check one)**	New		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		Non-residential			**8. Site (acres):**			5.00
9. Application Fee:	$5,000		**10. Permanent BMP(s):**					Sand Filter	
11. SCS (Linear Ft.):			**12. AST/UST (No. Tanks):**						
13. County:	Williamson		**14. Watershed:**					Brushy Creek	

Application Distribution

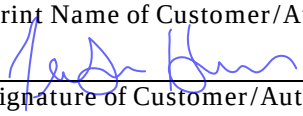
Instructions: Use the table below to determine the number of applications required. One original and one copy of the application, plus additional copies (as needed) for each affected incorporated city, county, and groundwater conservation district are required. Linear projects or large projects, which 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.)	__	__	__
Region (1 req.)	__	__	__
County(ies)	__	__	__
Groundwater Conservation District(s)	__Edwards Aquifer Authority __Barton Springs/ Edwards Aquifer __Hays Trinity __Plum Creek	__Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	__Austin __Buda __Dripping Springs __Kyle __Mountain City __San Marcos __Wimberley __Woodcreek	__Austin __Bee Cave __Pflugerville __Rollingwood __Round Rock __Sunset Valley __West Lake Hills	__Austin __Cedar Park __Florence __Georgetown __Jerrell X Leander __Liberty Hill __Pflugerville __Round Rock

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

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review. Jen Henderson, PE
Print Name of Customer/Authorized Agent  5/2/2025 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.

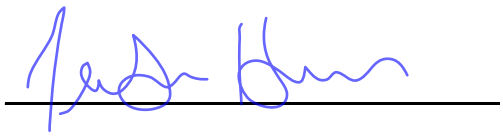
Signature

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: Jen Henderson

Date: 5/2/2025

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: St Alphonsa Church
2. County: Williamson
3. Stream Basin: Brushy Creek
4. Groundwater Conservation District (If applicable): _____
5. Edwards Aquifer Zone:

   [X] Recharge Zone
   [ ] Transition Zone

6. Plan Type:

   [X] WPAP
   [ ] SCS
   [ ] Modification
   [ ] AST
   [ ] UST
   [ ] Exception Request

7. Customer (Applicant):

Contact Person: Manesh Antony
Entity: St Alphonsa Church
Mailing Address: 3600 CR 175
City, State: Leander, TX Zip: 78641
Telephone: 512.826.2180 FAX: _____
Email Address: manesh007@gmail.com

8. Agent/Representative (If any):

Contact Person: Jen Henderson, P.E.
Entity: Henderson Professional Engineers
Mailing Address: 600 Round Rock West Drive, Suite 604
City, State: Round Rock, Texas Zip: 78681
Telephone: 737-203-8953 FAX: _____
Email Address: HPE@HendersonPE.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.

3600 Co Rd 175, Leander, TX 78641

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. [X] **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:

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

15. Existing project site conditions are noted below:

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

Prohibited Activities

16. [X] 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. [X] 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.



EXHIBIT
TO SERVE

ST ALPHONSA CHURCH

3600 COUNTY ROAD 175
LEANDER, TX 78641

ROAD MAP

Henderson Professional Engineers

HPE Civil Engineering

600 ROUND ROCK WEST DRIVE, SUITE 604
ROUND ROCK, TX 78681
512.350.6228
PELS FIRM #F-22208
www.hendersonpe.com

WBE210166 | HUB 1853873845300

Edwards Aquifer Viewer Custom Print



10/30/2023, 1:52:42 PM

1:2,257

0 0.01 0.03 0.06 mi

0 0.03 0.05 0.1 km

Edwards Aquifer Label

7.5 Minute Quad Grid

TX Counties

TCEQ_EDWARDS_OFFICIAL_MAPS

Austin Community College, City of Austin, County of Williamson, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA, TCEQ

Web AppBuilder for ArcGIS

Austin Community College, City of Austin, County of Williamson, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA | TCEQ |

HPE
Civil Engineering

Project Description

The project site is 5.00 acres located west of County Road 175 and west of the Southwest Williamson County Park Pond. The address is 3600 County Road 175, Leander, TX 78641. The project site is located within the ETJ of the City of Round Rock, Williamson County, Texas. No portion of the project site is located in the 1% annual chance (100-year) floodplain per the FEMA map panel 48491C0470F effective December 20, 2019. The project site is located within the Edwards Aquifer Recharge Zone. Hydrologic soil group information came from digital information served by the United States Department of Agriculture Natural Resources Conservation Service through the Web Soil Survey 2.0 portal. The project site is entirely type ‘D’ soil.

The project site is currently residential property. There is an existing single-story stone building, a gravel driveway, and a shed. There are trees apparent on the property and the western and southwest side of the site is mostly open grass. The existing impervious cover of the project site is 4.36% and the proposed is about 70%.

The proposed development of this project includes adding an 20,500 square foot building and a 12,000 square foot building, a parking lot with ADA spaces and a single access to County Road 175, and a fire hydrant. A detention pond is planned for this project and a sedimentation and filtration basin to treat the water going into the pond. Demolition of the existing residential building and gravel driveway is planned.

WCAD

Property	Owner	Property Address	Tax Year	2025 Market Value
R031498	JOY ALAPPATT, BISHOP OF ST. ALPHONSA SYRO-MALABAR CATHOLIC CHURCH, AUSTIN, TEXAS	3600 CR 175, LEANDER, TX 78641	2025	$1,322,919

Page: Property Details

2025 GENERAL INFORMATION

Property Status	Active
Property Type	Residential
Legal Description	AW0016 ANDERSON, J.D. SUR., ACRES 5.000
Neighborhood	L010D82C - Leander Williamson Abstracts le 20 Acres
Account	R-17-W001-6000-0009-B005
Map Number	4-4208
Effective Acres	-

2025 OWNER INFORMATION

Owner Name	JOY ALAPPATT, BISHOP OF ST. ALPHONSA SYRO-MALABAR CATHOLIC CHURCH, AUSTIN, TEXAS
Owner ID	
Exemptions	Exempt Property (Active)
Percent Ownership	100%
Mailing Address	3600 CR 175 LEANDER, TX 78641-1600
Agent	-

2025 VALUE INFORMATION

MARKET VALUE

Improvement Homesite Value	N
Improvement Non-Homesite Value	N
Total Improvement Market Value	$336,7
Land Homesite Value	N
Land Non-Homesite Value	N
Land Agricultural Market Value	N
Land Timber Market Value	N
Total Land Market Value	$986,1
Total Market Value	$1,322,9

ASSESSED VALUE

Total Improvement Market Value	$336,7
Land Homesite Value	N
Land Non-Homesite Value	N
Agricultural Use	
Timber Use	
Total Appraised Value	$1,322,9
Homestead Cap Loss	-
Circuit Breaker Limit Cap Loss	-
Total Assessed Value	$1,322,9

N/A values are not applicable toward to val

2025 ENTITIES & EXEMPTIONS

Special Exemptions **EX - Exempt Property**

TAXING ENTITY	EXEMPTIONS	EXEMPTIONS AMOUNT	TAXABLE VALUE	TAX RATE PER 100
CAD- Williamson CAD		-	$0	0
F09- Wmsn ESD #9		-	$0	0.097704
GWI- Williamson CO		-	$0	0.35567
J01- Aus Comm Coll		-	$0	0.1013
RFM- Wmsn CO FM/RD		-	$0	0.044329
SLE- Leander ISD		-	$0	1.0869
W09- Upper Brushy Creek WCID		-	$0	0.017
TOTALS				**1.702903**

2025 IMPROVEMENTS

Expand/Collapse

Improvement #1	State Code	Homesite	Total Main Area (Exterior Measured)	Market Value
-	XV - Other Exemptions	No	1,847 Sq. Ft	N/A

RECORD	TYPE	YEAR BUILT	SQ. FT	VALUE	ADD'L INFO
1	Main Area	1975	1,847	N/A	Details
2	Garage	-	621	N/A	Details
3	Open Porch	-	120	N/A	Details
4	Open Porch	-	100	N/A	Details
5	Fireplace	1975	1	N/A	Details
6	Patio	-	287	N/A	Details
7	Site Improvement	-	1	N/A	Details
8	Out Bldg	2022	396	N/A	Details
9	Out Bldg	2022	30	N/A	Details
10	Canopy	2022	500	N/A	Details

2025 LAND SEGMENTS

LAND SEGMENT TYPE	STATE CODE	HOMESITE	MARKET VALUE	AG USE	TIM USE	LAND SIZE
1 - Residential	XV - Other Exemptions	No	N/A	$0	$0	5.000000 acres
TOTALS						**217,800 Sq. ft / 5.000000 acres**

VALUE HISTORY

YEAR	IMPROVEMENT	LAND	MARKET	AG MARKET	AG USE	TIM MARKET	TIM USE	APPRAISED	HS CAP LOSS	CBL CAP LOSS	ASSESSE
2024	$294,771	$884,081	$1,178,852	$0	$0	$0	$0	$1,178,852	$0	$0	$1,178,8
2023	$125,989	$1,203,188	$1,329,177	$0	$0	$0	$0	$1,329,177	$0	$0	$1,329,1
2022	$167,674	$1,125,563	$1,293,237	$0	$0	$0	$0	$1,293,237	$0	$0	$1,293,2
2021	$0	$627,366	$627,366	$0	$0	$0	$0	$627,366	$0	$0	$627,3
2020	$136,578	$424,277	$560,855	$0	$0	$0	$0	$560,855	$0	$0	$560,8

SALES HISTORY

DEED DATE	SELLER	BUYER	INSTR #	VOLUME/PAGE
10/10/2023	CASEY FAMILY INVESTMENTS LLC	JOY ALAPPATT, BISHOP OF ST. ALPHONSA SYRO-MALABAR CATHOLIC CHURCH, AUSTIN, TEXAS	2023086320	
9/14/2023	ROUND ROCK RAIDERS CHRISTIAN ATHLETICS	CASEY FAMILY INVESTMENTS LLC	2023077231	
6/8/2019	CASEY FAMILY INVESTMENTS LLC	ROUND ROCK RAIDERS CHRISTIAN ATHLETICS	2020085778	
6/7/2019	LCRA TRANSMISSION SERVICES CORPORATION	CASEY FAMILY INVESTMENTS LLC	2019051708	
6/30/2016	MOORE, ROBERT BENTON	LCRA TRANSMISSION SERVICES CORPORATION	2016058562	
	VETERANS LAND BOARD OF TEXAS	MOORE, ROBERT BENTON	-	648/238

1.0 TCEQ FORM 0585

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: Michael Trojan, PG Telephone: (512) 917-3695

Representing: M. Trojan & Associates Fax:

Signature of Geologist:



_____



Michael Trojan, PG
Certified Professional Geoscientist #1109 (TX)

Regulated Entity Name: 5.0-Acre Undeveloped Tract (Note: No known regulated entity at this time)
3600 CR-175, Leander, Williamson Co., Texas 78641

Project Information

1. Date(s) Geologic Assessment was performed: June 6, 2019

2. Type of Project:

X	WPAP		AST
	SCS		UST

3. Location of Project:

X	Recharge Zone
	Transition Zone
	Contributing Zone within the Transition Zone

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

5. X 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 (refer to Attachment D).

Table 1 – Soil Units, Infiltration, Characteristics and Thickness

Soil Units, Infiltration Characteristics & Thickness		
Soil Name	Group*	Thickness (feet)
Crawford clay, 1 – 3% slopes (CfB)	D	up to 2.25
Georgetown Stony Clay Loam, 1 – 3% slopes (GsB)	C	up to 2.9

* 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. [X] **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. [X] **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. [X] **Attachment D – Site Geologic Map(s)**. The Site Geologic Map must be the same scale as the applicant's Site Plan.

   Applicant's Site Plan Scale: unknown
   Site Geologic Map Scale: 1" = 200'
   Site Soils Map Scale (if more than 1 soil type): 1" = 200'

9. Method of collecting positional data:

   [X] 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. [X] Surface geologic units are shown and labeled on the Site Geologic Map.

12. [X] 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. [X] 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

    [X] There are 1 (#) 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.

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

GEOLOGIC ASSESSMENT TABLE — PROJECT NAME: 5.0-Acre Partially Developed Tract

LOCATION			FEATURE CHARACTERISTICS												EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
ONSITE																				
MB-1	30.553959	-97.768188	MB	30	Ked			unk					X	0	30	X		N/A	N/A	hillside
MB-2	30.554059	-97.767717	MB	30	Ked	unk	unk						X	0	30	X		N/A	N/A	hillside
OFFSITE																				
MB-3	unk	unk	MB	30	Ked	unk	unk	unk					X	0	30	X		N/A	N/A	hillside
MB-4	unk	unk	MB	30	Ked	unk	unk	unk					X	0	30	X		N/A	N/A	hillside
MB-4	30.555194	-97.766697	MB	30	Ked	700	250	unk					X	5	35	X			X	drainage

* DATUM:_____

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

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

12 TOPOGRAPHY

Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed



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

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

_____ Date: June 10, 2019

Sheet 1 of 1

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

SYSTEM	SERIES	GROUP	FORMATION	LITHOLOGY/ THICKNESS
QUATERNARY				TERRACE AND ALLUVIUM SAND, SILT, CLAY, AND GRAVEL THICKNESS NOT REPORTED
CRETACEOUS	UPPER CRETACEOUS (GULFIAN)	AUSTIN		CHALK, MARL, AND LIMESTONE 325–420 FEET THICK
		EAGLE FORD	EAGLE FORD	SHALE AND SILTY LIMESTONE TO CALCAREOUS SILTSTONE 25–65 FEET THICK
			BUDA	LIMESTONE UP TO 45 FEET THICK
			DEL RIO	CLAY 40–70 FEET THICK
			GEORGETOWN	LIMESTONE AND MARL 30–80 FEET THICK
	LOWER CRETACEOUS (COMANCHEAN)	FREDERICKSBURG	EDWARDS	LIMESTONE AND DOLOSTONE 60–350 FEET THICK
			COMANCHE PEAK	LIMESTONE AND MARL UP TO 80 FEET THICK
			WALNUT FORMATION	LIMESTONE AND MARL UP TO 130 FEET THICK
			PALUXY SAND	SAND UP TO 10 FEET THICK

Geologic unit that directly underlies the subject property



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(512) 917-3695

Scale: No Scale
Date: June 10, 2019
Project: TCEQ Geologic Assessment
MTA Project: HDK-19-013

STRATIGRAPHIC COLUMN

5.0-ACRE PARTIALLY DEVELOPED TRACT
3600 CR-175
LEANDER, WILLIAMSON COUNTY, TEXAS 78641

TOPOGRAPHY AND SURFACE WATER HYDROLOGY

According to the USGS 7.5-minute, 5934991 Leander, Texas Quadrangle Map, the study area slopes relatively gently to the southeast (refer to Figure 3 of Attachment D). Topographic elevations on the property range between approximately 895 and 881 feet above mean sea level (msl), with the highest elevations located along the west-northwest property boundary segments and the lowest elevations near the southeast property corner.

As is depicted on Figure 3 of Attachment D, majority of stormwater runoff generated on the tract flows toward the southeast and discharges directly onto the neighboring property to the south as well as into a drainage ditch along CR-175. The subject property lies in the Brushy Creek watershed. Brushy Creek lies approximately one mile to the west-southwest of the tract. According to review of a FEMA Flood Insurance Rate Map and the Williamson County GIS, no portion of the property lies within the 100-year floodplain. Moreover, no portion of the property lies within an area designated as a waterway setback zone.

SOILS

According to the *Soil Survey of Williamson County, Texas*, the soils that are reported to cover the study area are as follows (also refer to Figure 4 of Attachment D for soil type locations):

Soil Name:	Crawford clay, 1 – 3% slopes (CfB)
Soil Surface Texture:	Brown to dark reddish brown clay to approximately 27 inches; surface layer may crack when dry
Hydrologic Group:	Permeability is very slow when soil is wet and rapid when soil is dry; available water capacity is low
Soil Drainage Class:	Well drained
Soil Name:	Georgetown stony clay loam, 1 – 3% slopes (GsB)
Soil Surface Texture:	Brown stony clay loam to about seven inches; subsoil is reddish brown clay and cobbly clay to about 35 inches; the underlying material is indurated limestone
Hydrologic Group:	Permeability is slow; surface runoff is medium
Soil Drainage Class:	Well drained

Based on the *Soil Survey* and as is depicted on Figure 4 of Attachment D, the Crawford clay soils are reported to generally cover the west-northwest portion of the property, and the Georgetown stony clay loam soils to cover the east-southeast part of the property. Shallow excavations were made at various locations across the property and

observations of the soil characteristics confirmed the presence of soils similar to those described in the *Soil Survey*. The soils were found to be relatively thick and generally fine-grained, with a modest to high concentration of gravel-size rock fragments, as well as larger rock fragments (up to 12 inches in size) embedded in the soil profile. There was no evidence observed of any significant soil erosion.

GEOLOGY

The study area is reported to be underlain by the Edwards Formation (Ked) (refer to Figures 5 and 6 of Attachment D and the stratigraphic column in Attachment B). This formation is described as follows:

> Edwards Formation
>
> The Edwards Formation consists of limestone and dolomite that is light gray to tan and medium gray to grayish brown, aphanitic to fine grained, massive to thin bedded, soft to hard, and with common rudistid biostromes and nodular chert. Portions of the Edwards are commonly recrystallized, "honeycombed," and cavernous forming an aquifer. The formation forms flat areas and plateaus bordered by scarps. The Formation is overlain by the Georgetown Formation and underlain by the Comanche Peak Formation. The thickness is reported to range 60 to 350 feet, and the formation thins northward.

Given the consistent soil cover over the entire study area, no true geologic rock outcrops were observed at ground surface. However, loose bedrock fragments embedded in surface soils were observed across the property (refer to photograph in Attachment E). A few, offsite (intact) outcrops were observed in the drainage ditch along CR-175. All rock fragments and outcrops were observed to consist of light to dark gray, fine-grained and relatively hard limestone.

The entire study area is reported to lie over the Edwards Aquifer Recharge Zone (refer to Figure 5 of Attachment D). The western-most boundary of the Recharge Zone is located approximately 2,500 to 3,000 feet to the west of the study area.

Onsite Features

The field reconnaissance of the study area included search for and identification of sensitive karst and manmade features, as defined by TCEQ, and to note potential ground recharge points that may be associated with such features. The field reconnaissance entailed walking 25-foot spaced transects across the entire study area. The results of the reconnaissance are provided below.

Caves

Based on TCEQ criteria, a cave is a natural underground open (or filled) space formed by dissolution of limestone that is large enough for an average-sized person to enter. When a surface cave opening is encountered, then the subsurface extent of the cave is relevant in terms of subsurface recharge.

Based on observations made across the entire study area, no cave openings/caves were identified.

Solution Cavities

Based on TCEQ criteria, a solution cavity is a natural cavity or depression formed as a result of dissolution of limestone. This category is designed to capture features that are not large enough for a normal-sized person to enter but appear to be part of a system of interconnected voids that connect the surface with the subsurface. The size and geometry of the feature is defined by in-place bedrock. Solution cavities also include areas where dissolution has increased the opening size and permeability along bedding planes as well as fractures.

Based on observations made across the entire study area, no solution cavities were identified.

Solution-Enlarged Fractures

Based on TCEQ criteria, a solution-enlarged fracture is one that shows evidence of being locally enlarged by dissolution of limestone, recognized by measurable (larger than hairline) openings and miss-matched fracture surface shapes.

Based on observations made across the entire study area, no solution-enlarged fractures were identified.

Faults

Based on TCEQ criteria, a fault is defined as a fracture along which there has been displacement of one side of the fracture relative to the other side. Displaced geologic materials and/or an abrupt change in surface topography can both be indicative of the presence of a fault.

Based on observations made across the entire study area, no field evidence of the presence of faults was observed.

Manmade Features in Bedrock

Based on TCEQ criteria, manmade features in bedrock may include water wells, sanitary sewer lines, storm sewer lines, trenches, quarries, and other cultural features that intersect bedrock and can potentially increase the rate of recharge to the subsurface.

Based on observations made across the entire study area, the following manmade features in bedrock were identified:

Onsite Manmade Feature in Bedrock MB-1

Latitude: 30.553959
Longitude: -97.768188
Dimensions: depth unknown

Onsite Feature MB-1 represents a water well located adjacent to the shed on the study area (refer to the Geologic Assessment Table in Attachment A, Figure 6 of Attachment D and photograph in Attachment E). The well is functional and is utilized for potable water production for the onsite residence. The well appeared to be properly sealed to ground surface and to comply with 16 TAC Chapter 76. In the event that the well is utilized as part of future development, it is assessed that development on the study area will not have an impact on this feature. However, in the event that the well will not be utilized in the future, the well will require proper plugging and abandonment per regulatory requirements.

Onsite Manmade Feature in Bedrock MB-2

Latitude: 30.554059
Longitude: -97.767717
Dimensions: unknown

Note: While this feature is suspected to be at this location, the site reconnaissance could not confirm any field evidence of exact location and orientation.

Onsite Feature MB-2 represents an underground septic system directly south-southeast of the single-family home ((refer to the Geologic Assessment Table in Attachment A and Figure 6 of Attachment D). The tank

and drain field are assumed to be functional. This feature is engineered, fully-enclosed and installed in bedrock that presumably showed no evidence of karst features during the installation process. While the septic system can likely be utilized, in the event that the system will not be used in the future, the system will require abandonment per regulatory requirements.

Swallet or Swallow Holes

Based on TCEQ criteria, a swallet or swallow hole may include a focused recharge feature in an intermittent drainage or stream in karst terrain. Some swallow holes have a surface expression, for example, a cave opening or formation of a whirlpool in the stream at high flow. The general case is that fine soil and sediment as well as gravel are deposited over the bedrock feature during falling stages of flow, thereby intermittently or frequently obscuring the feature.

Based on observations made across the entire study area, no swallet or swallow holes were identified.

Sinkholes

Based on TCEQ criteria, a sinkhole represents a shallow, broad topographic depression formed in response to karst processes. Sinkholes are pragmatically defined as features greater than six (6) feet in diameter with more than six (6) inches of topographic relief. Sinkholes are usually circular in map view. In cross section they may be subtle swales or funnel-shaped pits and some have exposed rimrock at the perimeter. The presence of a sinkhole implies that processes including collapse, subsidence, and soil sapping over geologic time have caused the land surface to sink below the surrounding area.

Based on observations made across the entire study area, no sinkholes were identified.

Other Natural Bedrock Features

Based on TCEQ criteria, other natural bedrock features include vuggy rock and reef deposits that may contain large holes or vugs.

Based on observations made across the entire study area, no other natural bedrock features were identified.

Non-karst Closed Depressions

Based on TCEQ criteria, a non-karst closed depression is a natural or non-natural topographic depression that is not formed by karst processes and is not bedrock floored. A feature larger than six (6) feet in at least one direction and with six (6) inches or more of topographic relief should be considered as a feature.

Based on observations made across the entire study area, no non-karst closed depressions were identified.

Zones

Based on TCEQ criteria, a zone is an area in which any type of karst feature occurs along a trend or in a cluster. Clustered or aligned features are more likely to be an indicator of an integrated flow system at depth than isolated features. Alignment is expected in areas where conduit flow is strongly influenced by structurally controlled fractures.

Based on observations made across the entire study area, no zones were identified.

Offsite Features

The field reconnaissance also included inspection of neighboring properties a distance of approximately 200 feet (as practical) from all boundaries of the study area for identification of offsite sensitive karst and manmade features that could be deemed as significant in terms of development on the study area. The inspection identified the following offsite features.

Offsite Manmade Features in Bedrock MB-3 and MB-4

Offsite Features represented by MB-3 and MB-4 include areas of potential water wells and underground septic systems on properties to the northwest and southeast of the study area. Due to limited access to these neighboring properties, the site reconnaissance could not confirm the exact locations of the features; however, the general areas are depicted on Figure 6 of Attachment D and included on the Geologic Assessment Table in Attachment A. These features are not believed to be significant in terms of future development on the study area.

Offsite Manmade Feature in Bedrock MB-5

Latitude: 30.555194 (center of feature)
Longitude: -97.766697 (center of feature
Dimensions: 700' X 250'

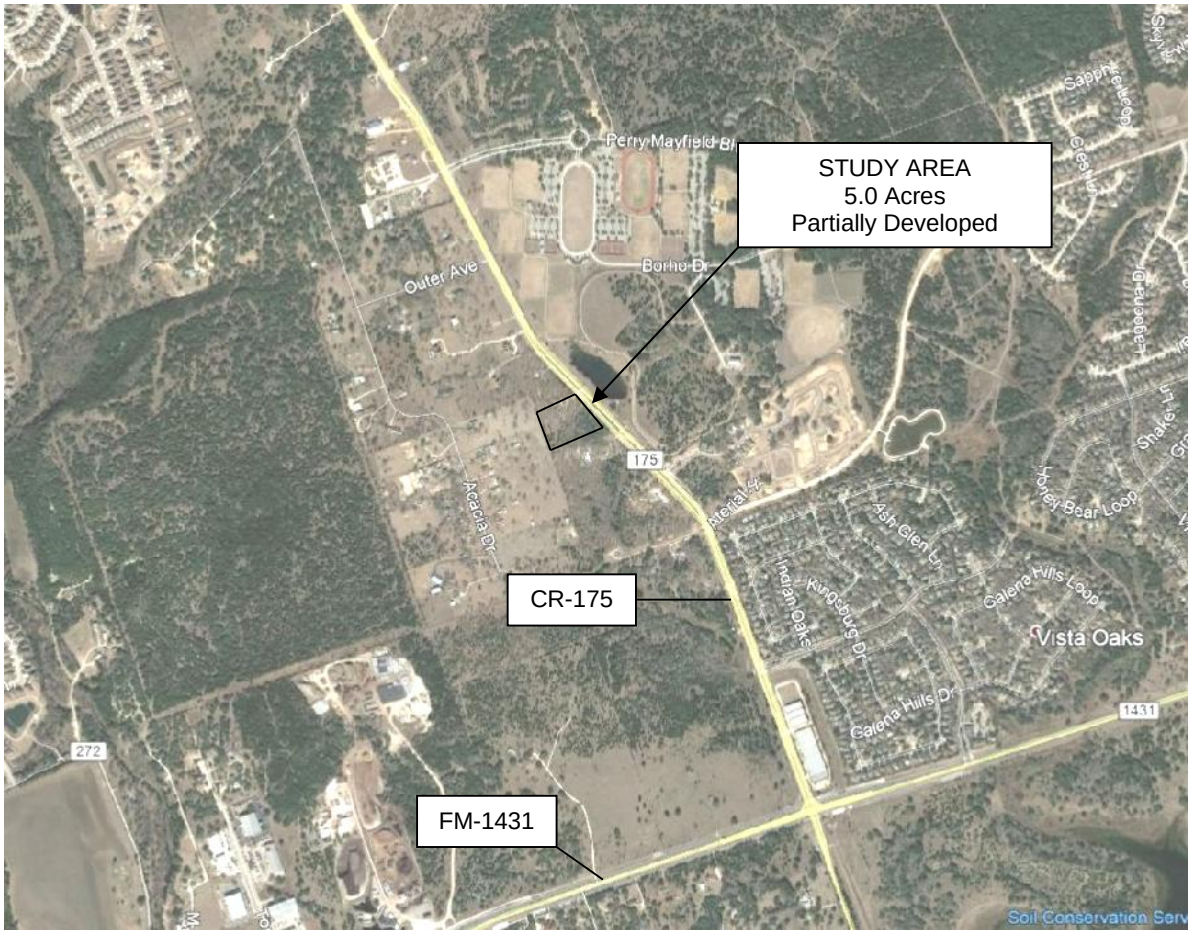
Offsite Feature MB-5 represents a manmade pond directly to the northeast of, and across CR-175 from the study area (refer to the Geologic Assessment Table in Attachment A and Figure 6 of Attachment D). This feature is not believed to be significant in terms of future development on the study area.

POTENTIAL FOR FLUID MOVEMENT TO THE SUBSURFACE

Based on review of available information and visual observations made during the field reconnaissance, this *Geologic Assessment* presents the following observations regarding the potential for recharge of the subsurface within the study area:

- Characteristics of soils that cover the study area are the primary factors that influence potential subsurface recharge on the property. Based on the *Soil Survey of Williamson County*, the Crawford clay and Georgetown stony clay loam are reported to cover the property. These soils are generally fine-grained, relatively thick and exhibit slow to very slow permeability. Thus, this *Geologic Assessment* assesses that percolation via soils to the subsurface is generally slow.

- No significant, "defined" karst recharge points with focused recharge potential were observed to be located on the study area.



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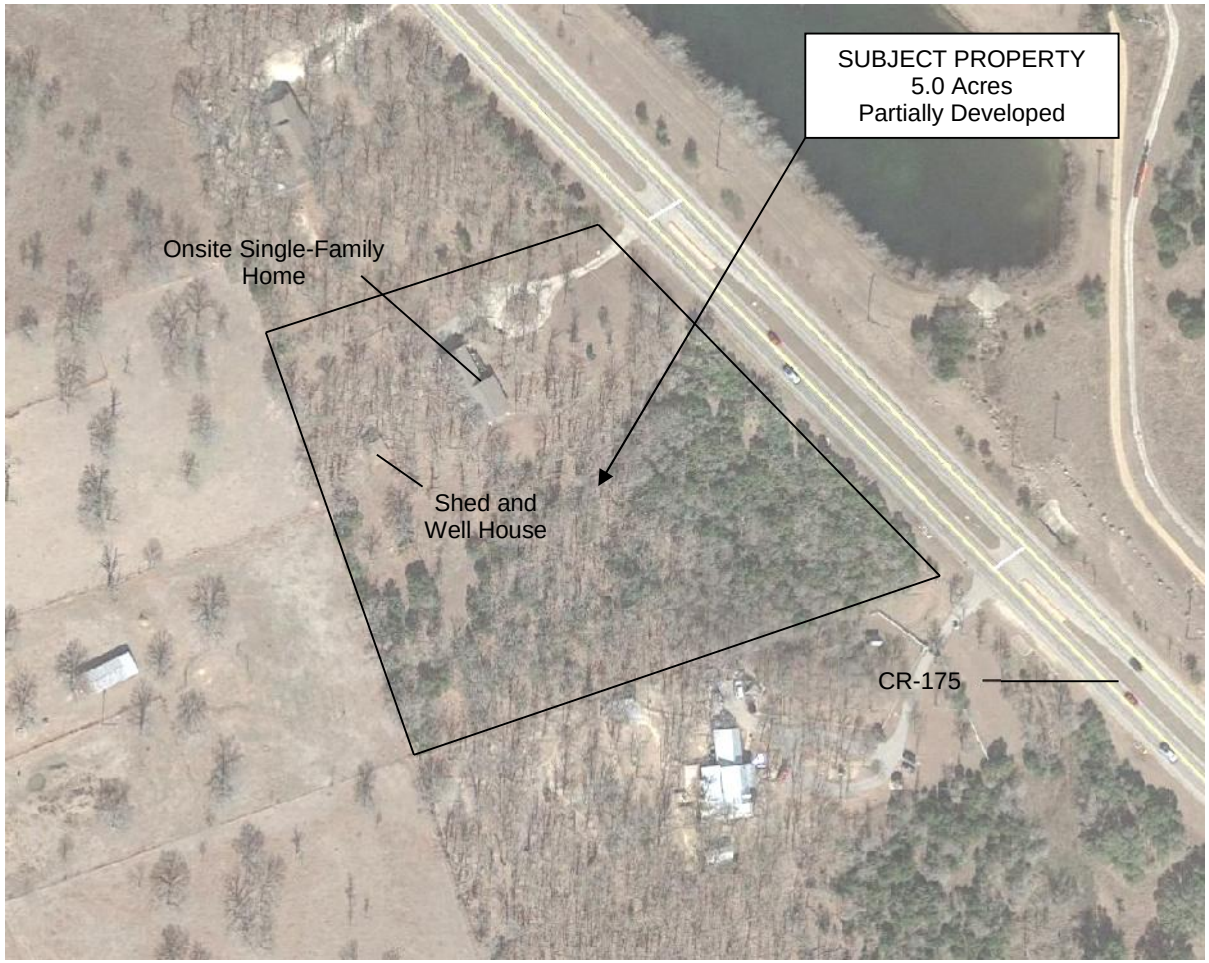
P.O. Box 338
Thorndale, Texas 76577
(512) 917-3695

Scale:	No Scale
Date:	June 10, 2019
Project:	TCEQ Geologic Assessment
MTA Project:	HDK-19-013

FIGURE 1

SITE LOCATION MAP

5.0-ACRE PARTIALLY DEVELOPED TRACT
3600 CR-175
LEANDER, WILLIAMSON COUNTY, TEXAS 78641



01/13/2018 Aerial Photograph

M. TROJAN & ASSOCIATES
Environmental Consultants

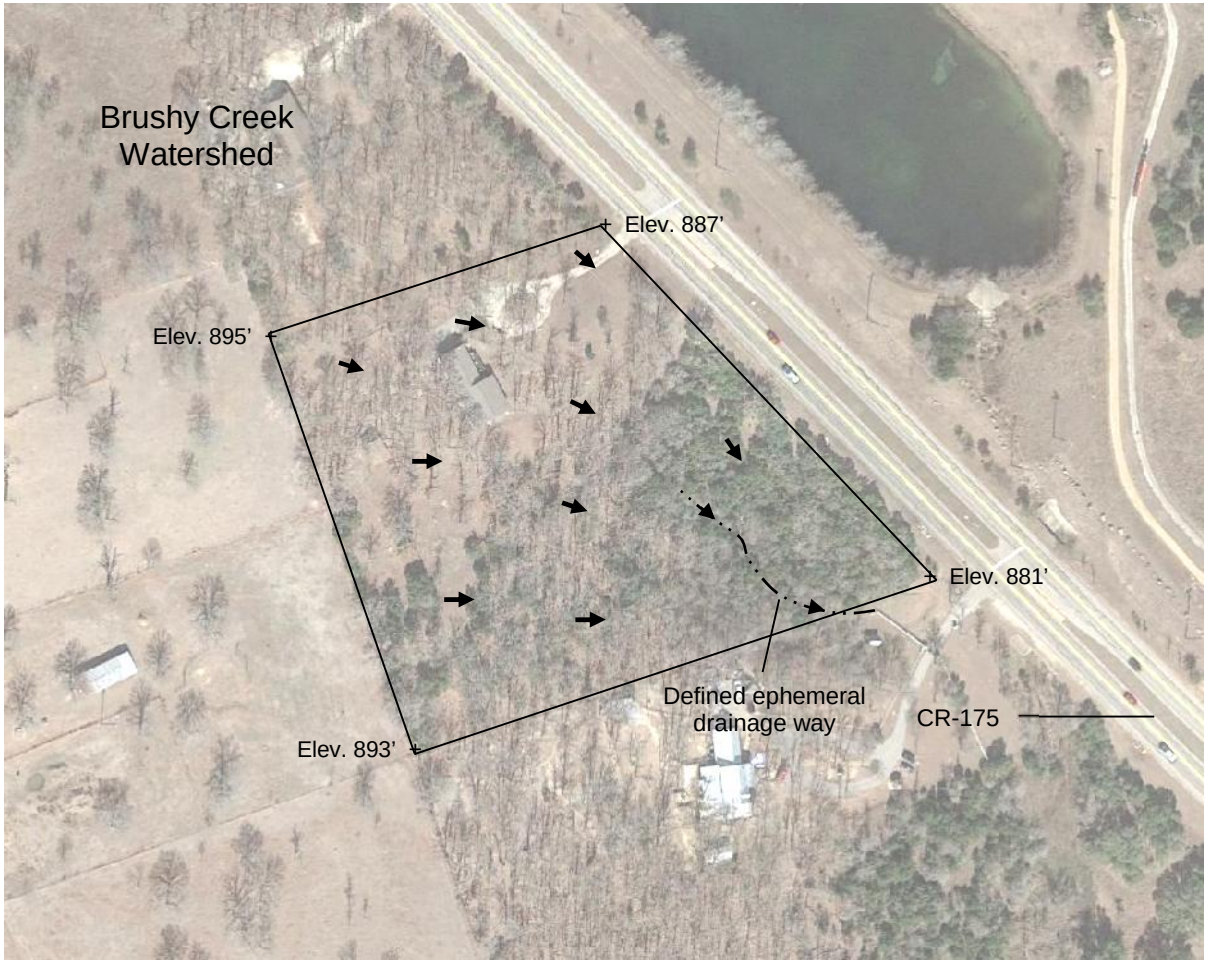
P.O. Box 338
Thorndale, Texas 76577
(512) 917-3695

Scale:	1" = 200' (approx.)
Date:	June 10, 2019
Project:	TCEQ Geologic Assessment
MTA Project:	HDK-19-013

FIGURE 2

SITE AERIAL PHOTOGRAPH

5.0-ACRE PARTIALLY DEVELOPED TRACT
3600 CR-175
LEANDER, WILLIAMSON COUNTY, TEXAS 78641



Note: Topographic elevations depicted are approximate

Stormwater Runoff

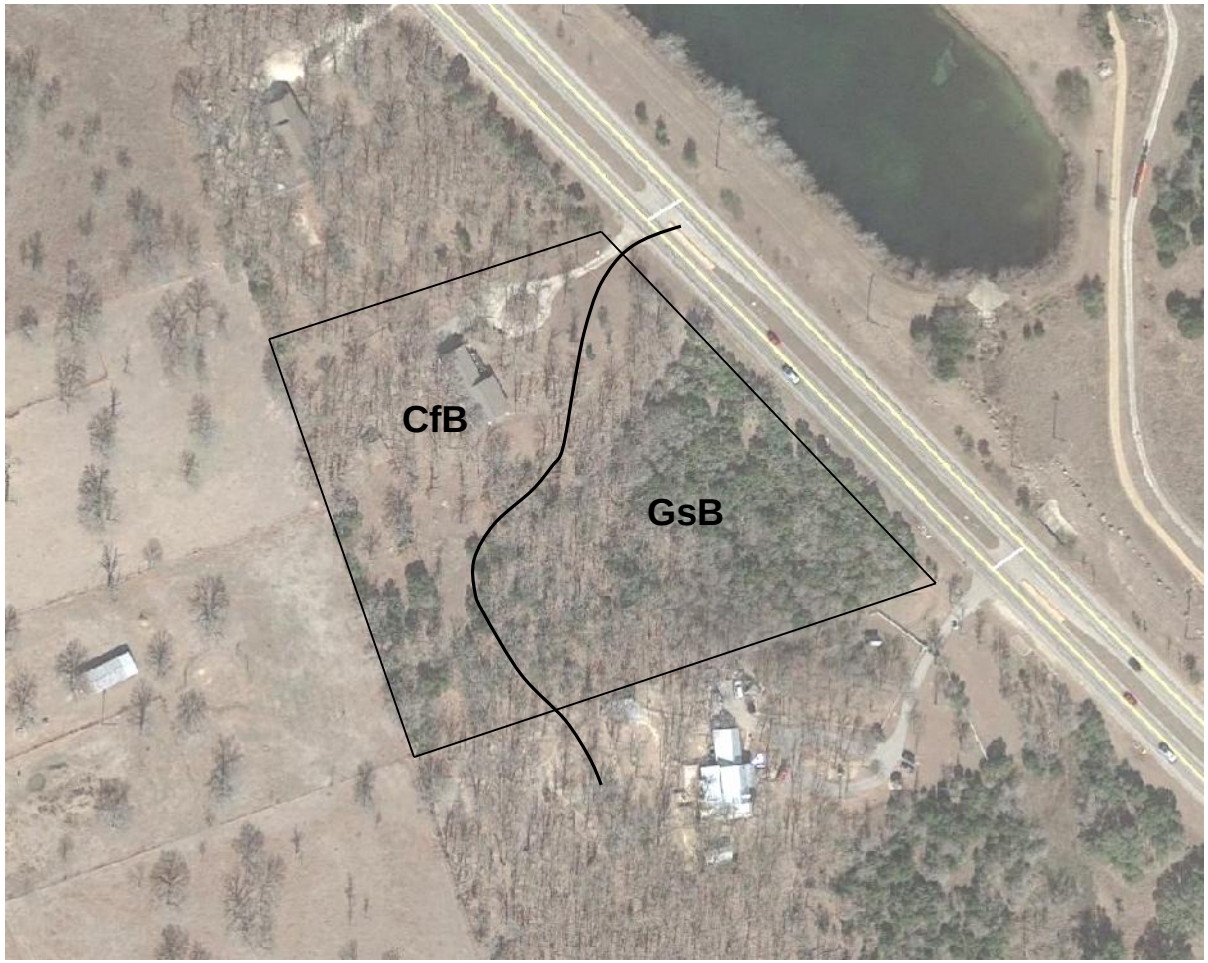
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Scale:	1" = 200' (approx.)
Date:	June 10, 2019
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FIGURE 3

SURFACE WATER HYDROLOGY

5.0-ACRE PARTIALLY DEVELOPED TRACT
3600 CR-175
LEANDER, WILLIAMSON COUNTY, TEXAS 78641







CfB – Crawford clay, 1-3% slopes / GsB – Georgetown stony clay loam, 1-3% slopes

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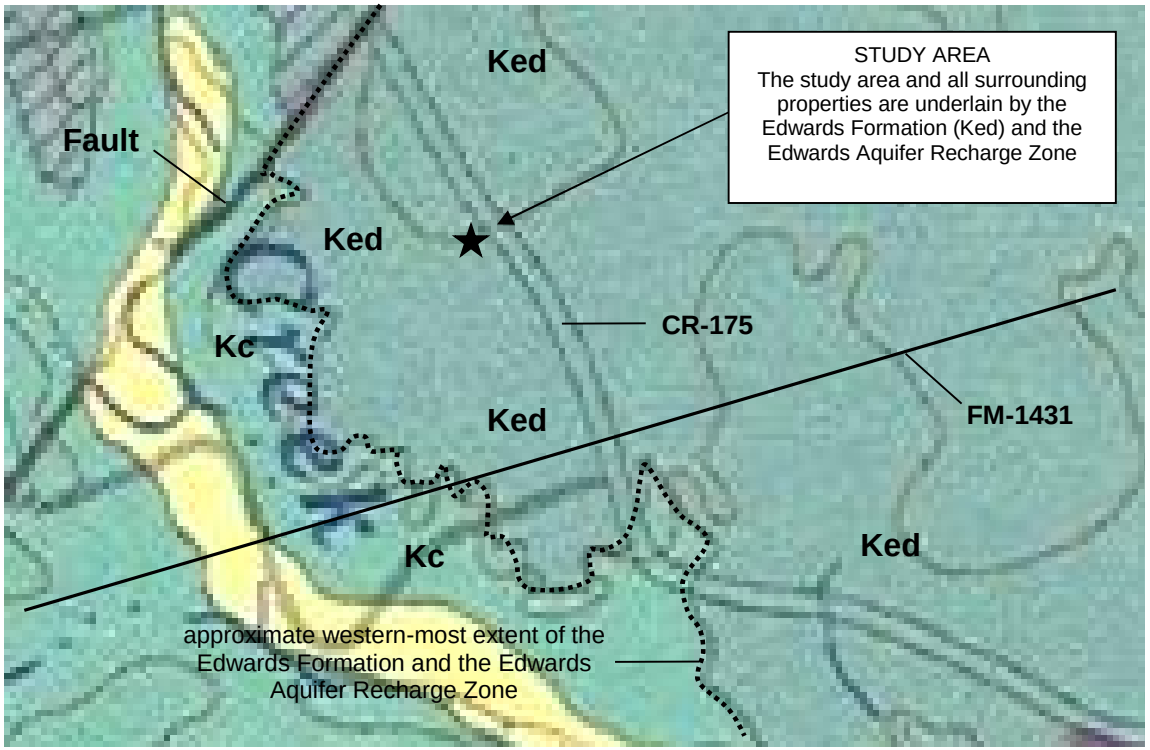
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Scale: 1" = 200' (approx.)
Date: June 10, 2019
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FIGURE 4

SITE SOILS MAP

5.0-ACRE PARTIALLY DEVELOPED TRACT
3600 CR-175
LEANDER, WILLIAMSON COUNTY, TEXAS 78641



STATE OF TEXAS
MICHAEL TROJAN
GEOLOGY
No. 1109
LICENSED
PROFESSIONAL GEOSCIENTIST

Kc – Comanche Peak Limestone / Ked – Edwards Formation

Note: Study area location is approximate
Source: Geologic Atlas of Texas, Austin Sheet, The University of Texas at Austin, Bureau of Economic Geology

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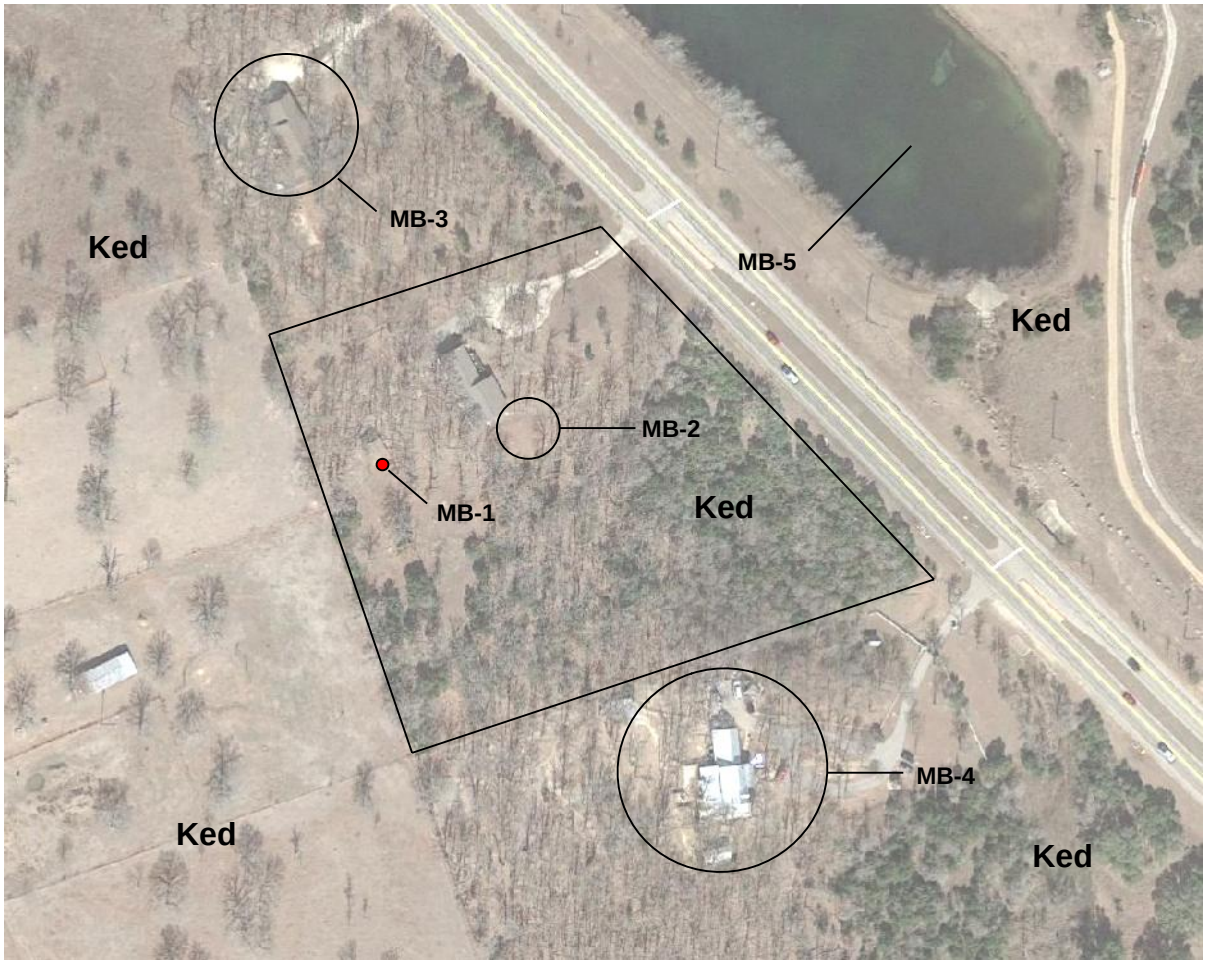
Scale: No Scale
Date: June 10, 2019
Project: TCEQ Geologic Assessment
MTA Project: HDK-19-013

FIGURE 5

GENERAL GEOLOGIC MAP

5.0-ACRE PARTIALLY DEVELOPED TRACT
3600 CR-175
LEANDER, WILLIAMSON COUNTY, TEXAS 78641

STUDY AREA
The study area is underlain by the Edwards Formation (Ked) and the Edwards Aquifer Recharge Zone



ONSITE FEATURES

MB-1: Manmade feature in bedrock (water well)

MB-2: Manmade feature in bedrock (septic)

OFFSITE FEATURES (within 200 feet)

MB-3: area of potential manmade features in bedrock (water well and septic); exact locations not confirmed in the field

MB-4: area of potential manmade features in bedrock (water well and septic); exact locations not confirmed in the field

MB-5: manmade feature in bedrock (pond)

N

STATE OF TEXAS
MICHAEL TROJAN
GEOLOGY
No. 1109
LICENSED
PROFESSIONAL GEOSCIENTIST

NO ONSITE KARST FEATURES IDENTIFIED

NOTES

Ked – Edwards Formation

Sources: Geologic Atlas of Texas, Austin Sheet, The University of Texas at Austin, Bureau of Economic Geology

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Thorndale, Texas 76577
(512) 917-3695

Scale: 1" = 200' (approx.)
Date: June 10, 2019
Project: TCEQ Geologic Assessment
MTA Project HDK-19-013

FIGURE 6

SITE GEOLOGIC MAP

5.0-ACRE PARTIALLY DEVELOPED TRACT
3600 CR-175
LEANDER, WILLIAMSON COUNTY, TEXAS 78641

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.

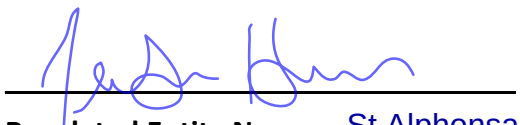
Signature

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: Jen Henderson, P.E.

Date: 5/2/2025

Signature of Customer/Agent:



Regulated Entity Name: St Alphonsa Church

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): 5.00

3. Estimated projected population:_____

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	32,500	÷ 43,560 =	0.746
Parking	33,858	÷ 43,560 =	0.777
Other paved surfaces	86,102	÷ 43,560 =	1.976
Total Impervious Cover	152,460	÷ 43,560 =	3.50

Total Impervious Cover 3.50 **÷ Total Acreage** 5.00 **X 100 =** 70 **% Impervious Cover**

5. [X] **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. [X] Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

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

7. Type of project:

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

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

   [ ] Concrete
   [ ] Asphaltic concrete pavement
   [ ] Other: _____

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

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

10. Length of pavement area: _____ feet.

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

11. [ ] A rest stop will be included in this project.

    [ ] A rest stop will not be included in this project.

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

_____% 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.

[X] The sewage collection system will convey the wastewater to the _____ (name) Treatment Plant. The treatment facility is:

- [X] 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. [X] 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.
- [X] No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA Flood Map 48491C0470F Dated December 20, 2019.

19. [X] 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.):

[X] There are 1 (#) 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.
- [X] 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:

- [X] 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. [X] The drainage patterns and approximate slopes anticipated after major grading activities.
23. [X] Areas of soil disturbance and areas which will not be disturbed.
24. [X] Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
25. [X] Locations where soil stabilization practices are expected to occur.
26. [ ] Surface waters (including wetlands).

    [X] N/A
27. [ ] Locations where stormwater discharges to surface water or sensitive features are to occur.

    [X] There will be no discharges to surface water or sensitive features.
28. [X] Legal boundaries of the site are shown.

Administrative Information

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

Factors Affecting Surface Water Quality

The construction activities associated with the St Alphonsa Church plan of development could result in additional Total Suspended Solids (TSS) loads during the construction of the site improvements. This potential increased locating will be mitigated with the use of silt fencing that is to be placed downgradient of the active construction areas and the placement of stabilized construction entrances at the entrance of the project, located on County Road 175. Rock berms may be used in areas of concentrated flows during construction activities.

The overall impervious cover of the site will be approximately 70%, 3.5-acres of the 5.00-acre site. The runoff from the site will be treated by sedimentation and filtration basin. The permanent stormwater control calculations have been provided on the plan set and demonstrate the functionality of the proposed stormwater Best Management Practices. The proposed stormwater conveyance system will protect the water quality of the local receiving stream that ultimately discharges to Dry Fork Creek.

Volume and Character of Stormwater

The peak storm water before construction for St. Alphonsa Church improvements has been calculated to be 23.965 cfs for the 25-yr storm event and 36.881 cfs for the 100-yr storm event. This is given that the project site is currently 5.00 acres of land that is open space in fair condition over soils group D at mostly 0 - 3 percent slopes and a percent impervious cover of 4.36%. The character of existing runoff is that of a property with a residential building and driveway.

After construction the character of the runoff will change such that hydrocarbon residues from vehicles, buildings, and other contamination typical of a property hosting a church may be present. The peak storm water discharges post-construction has been calculated to be 21.188 cfs for the 25-yr storm event and 35.752 cfs for the 100-yr storm event, given that the proposed impervious cover percentage of 70% and after detention. A proposed water quality pond with sedimentation and filtration basins on the site will capture most of the foreign elements. A proposed detention pond will detain the peak runoff for the 2-, 10-, 25-, and 100-year storms and releases are designed to be less than the existing conditions.

Detailed calculations will be shown within the construction plan set sheet set.

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.

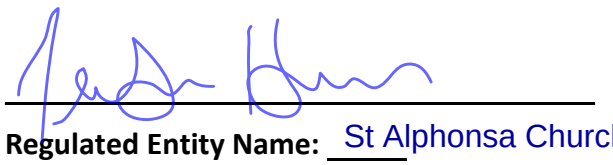
Signature

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: Jen Henderson

Date: 5/2/2025

Signature of Customer/Agent:



Regulated Entity Name: St Alphonsa Church

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: Brushy Creek

Temporary Best Management Practices (TBMPs)

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

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

- [X] 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.
- [X] 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.
- [X] A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.
- [X] 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. [X] 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.
   - [X] There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. [X] **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. [X] **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.

[X] 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.

    [X] N/A

12. [X] **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. [X] 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. [X] 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. [X] 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. [X] 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. [X] **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. [X] 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. [X] Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

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

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

Attachment A – Spill Response Actions

The first steps that should be taken in the event of a spill are keeping people safe, identifying what has been spilled, and determining if warning signs are needed. The next step is to call the State of Texas Spill-Reporting Hotline and the SERC: 1-800-832-8224 no later than 24 hours after the discovery of the spill or discharge. The local TCEQ office shall also be contacted at 512-339-2929. All clean-up will follow the Spill Prevention and Control guidance outlined in Chapter 327 of the Texas Administrative Code.

Reasonable Response Actions:

1. Arrival of the responsible person or response personnel hired by the responsible person at the time of the discharge/spill
2. Make an effort to stop the spill or discharge
3. Minimizing the impact of the spill on public health and the environment
4. Neutralizing the effects of the incident
5. Removing the discharged or spilled substances
6. Managing the wastes

Kind of spill	Where discharged	Reportable quantity	Rule, statute, or responsible agency
Hazardous substance	onto land	"Final RQ" in Table 302.4 in **40 CFR 302.4** (PDF)	**30 TAC 327**
	into water	"Final RQ" or 100 lbs, whichever is **less**	
Any oil	coastal waters	as required by the Texas General Land Office	**Texas General Land Office**
Crude oil, oil that is neither a petroleum product nor used oil	onto land	210 gallons (five barrels)	**30 TAC 327**
	directly into water	enough to create a sheen	
Petroleum product, used oil	onto land, from an exempt PST facility	210 gallons (five barrels)	**30 TAC 327**
	onto land, or onto land from a non-exempt PST facility	25 gallons	
	directly into water	enough to create a sheen	
Associated with the exploration, development and production of oil, gas, or geothermal resources	under the jurisdiction of the Railroad Commission of Texas	as required by the Railroad Commission of Texas	**Railroad Commission of Texas**
Industrial solid waste or other substances	into water	100 lbs	**30 TAC 327**
From petroleum storage tanks, underground or aboveground	into water	enough to create a sheen on water	**30 TAC 334** .75-81
From petroleum storage tanks, underground or aboveground	onto land	25 gallons or equal to the RQ under **40 CFR 302**	**30 TAC 327**
Other substances that may be useful or valuable and are not ordinarily considered to be waste, but will cause pollution if discharged into water in the state	into water	100 lbs	**30 TAC 327**

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

If a spill or accidental discharge is to occur it will be promptly contained by the responsible persons. Any spills will be excavated and properly disposed of.

Attachment B – Potential Sources of Contamination

There are a few potential sources of contamination with the construction of this project. A potential source of contamination is fuel for the equipment that will be utilized for excavation and other construction activities on the site. Concrete paving as well as a concrete curb and gutter will also take place on the site to construct the buildings, driveway, and parking lot. Paving can introduce a potential for surface water contamination.

Attachment C – Sequence of Major Activities

Below is a list of the major activities that will take place for the site development. The nearest receiving water ultimately discharges to Brushy Creek.

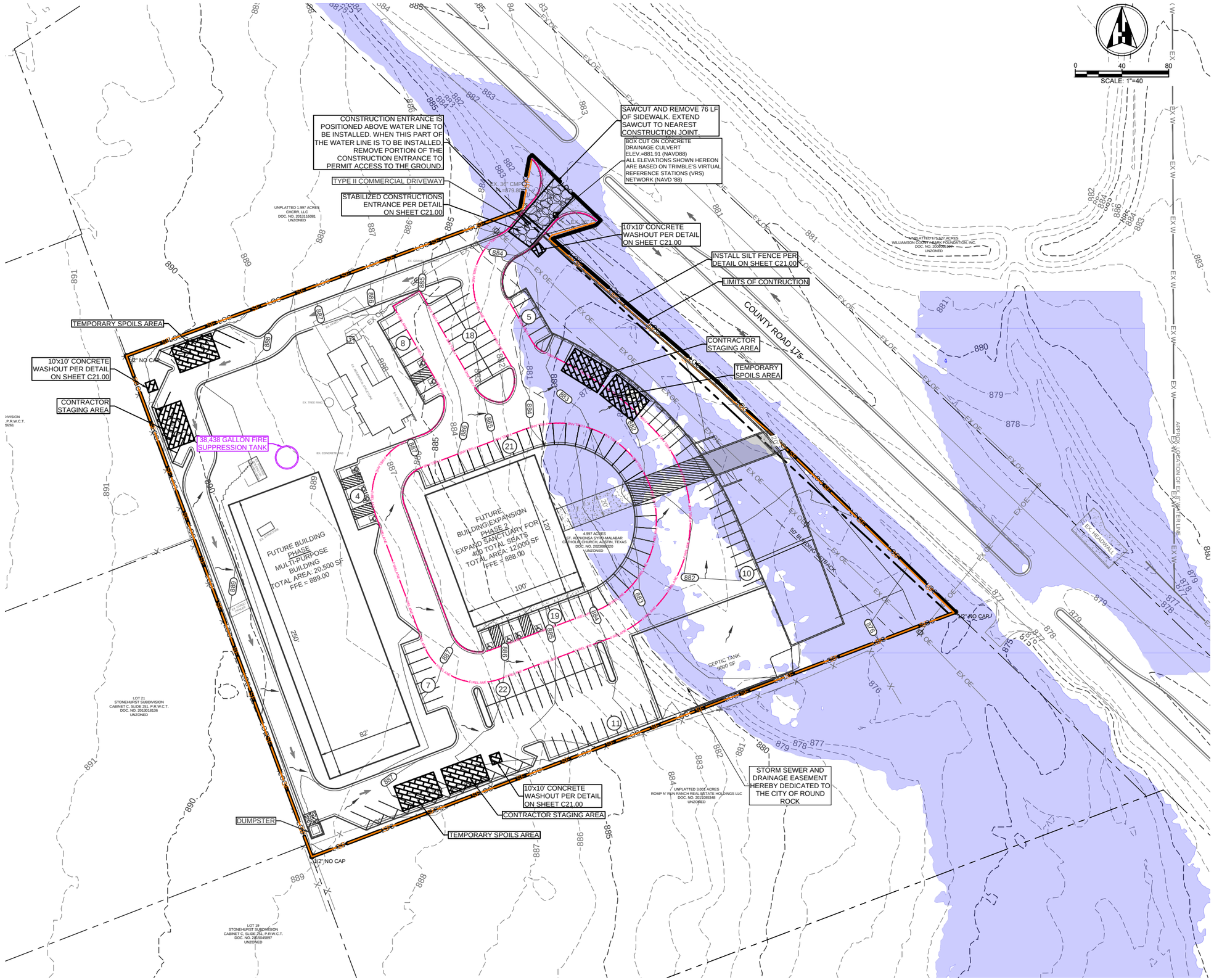
1. There will be clearing and grubbing where the construction will take place. Approximately 5.00 acres of the site will be cleared of brush and trees. Silt fence will be put in place along the perimeter of the limits of construction to ensure that any soil loosened in the process will be contained on the site in the event of a storm. Tree protection will be installed before other trees are removed.
2. Excavation and utility installation will take place after the clearing and grubbing. The silt fence will still be in place from the initial installation and will be inspected to ensure it is still intact. Any damaged portions will be removed and replaced. A stabilized construction entrance will be used to prevent track out from the site.
3. After the utilities are installed the construction of the buildings, parking lots, driveways, and other developments will proceed. All previously mentioned erosion and sediment controls will be incorporated into the site development. Additional silt fencing will be put in place downstream if necessary. A concrete washout will be utilized for concrete waste.

Attachment D – Temporary Best Management Practices and Measures

Several temporary BMPs will be utilized on the project site. A silt fence will be placed along the perimeter of the site to prevent flows from picking up sediment and discharging from the site. A stabilized construction entrance will also be provided in order to prevent any vehicles entering or exiting the site from tracking out sediment into the street. Flows from the site will be contained in order to prevent them from entering surface streams, sensitive features, or the aquifer. There is 1 manmade feature identified on the site by the geologic survey, a water well. There have not been any naturally occurring sensitive features identified on the site by the geologic survey.

HPE
Civil Engineering

Attachment F – Structural Practices



LEGEND	
LOC	LIMITS OF CONSTRUCTION (5.06 Ac.)
IP	INLET PROTECTION
SF	SILT FENCE
FD	FILTER DIKE
TP	TREE PROTECTION FENCE
	FLOW ARROW
EX W	EXISTING WATER LINE
EX WW	EXISTING WASTEWATER LINE
EX SD	EXISTING STORMWATER LINE
529	EXISTING CONTOUR
529	CONTOUR
O.P.R.T.C.T.	OFFICIAL PUBLIC RECORDS TRAVIS COUNTY TEXAS
D.R.W.C.T.	DEED RECORDS WILLIAMSON COUNTY TEXAS
P.R.W.C.T.	PLAT RECORDS WILLIAMSON COUNTY TEXAS
VOL./PG/INST#	VOLUME/PAGE/INSTRUMENT NUMBER
	BUILDING SETBACK
	SUBJECT PROPERTY
	SANITARY SEWER MANHOLE
GAS	NATURAL GAS LINE
EX OE	EXISTING OVERHEAD ELECTRIC
	EXISTING FENCE
	BENCHMARK
	WATER VALVE
	IRON ROD FOUND (IRF)
	FIRE HYDRANT
	EXISTING ELECTRIC POWER POLE
	LIGHT POLE

NOTES:
1. NO ENVIRONMENTALLY SENSITIVE AREAS ARE LOCATED ON OR DOWNSTREAM OF THIS PROJECT SITE.
2. THIS PROJECT WILL NOT REQUIRE ANY FORM OF PHASING OR SLOPE STABILIZATION.
3. REFER TO LANDSCAPE PLANS FOR RESEEDING AND REVEGETATION REQUIREMENTS.
4. NO PERMANENT EROSION CONTROL MEASURES WILL BE INSTALLED WITH THIS PROJECT.
5. REFER TO SHEET C21.00 FOR STANDARD DETAILS - ESC.
6. ALL MUD, DIRT, ROCKS, DEBRIS, ETC., SPILLED, TRACKED OR OTHERWISE DEPOSITED ON EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY.
7. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF THE PROJECT BY THE ENGINEER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE ENGINEER.
8. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS, GRASS MIXTURES OR GROUND COVER SUITABLE TO THE AREA AND SEASON IN WHICH THEY ARE APPLIED.
9. ALL DISTURBED AREAS SHALL BE RE-VEGETATED TO MEET THE REQUIREMENTS OF THE CITY OF ROUND ROCK ORDINANCES.
10. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY THE INSPECTOR AT THE TIME OF CONSTRUCTION.

WOMEN OWNED
CERTIFIED BY | WOMEN'S BUSINESS ENTERPRISE NATIONAL COUNCIL

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www.hendersonpe.com
Civil Engineering
WBE2101066 | HUB 1853873845300

No.	REVISION
1	
2	
3	
4	
5	

SITE DEVELOPMENT PLANS TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

EROSION AND SEDIMENTATION CONTROL PLAN

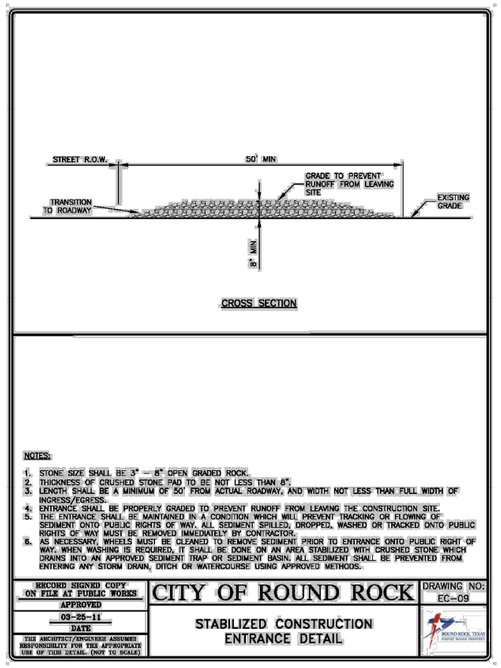
STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	
04/29/2025	
DRAWN BY: AR	
CHECKED BY: DR	
APPROVED BY: JH	

C08.00

CITY PERMIT NUMBER

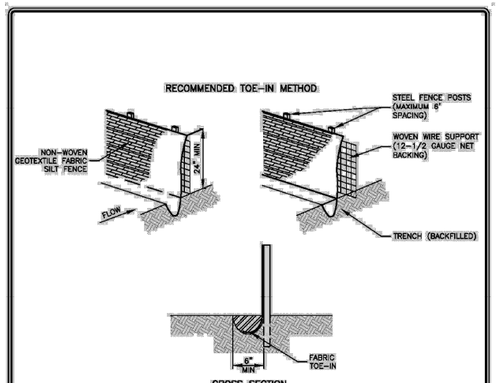
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NOTES:

1. STONE SIZE SHALL BE 3" – 8" OPEN GRADED ROCK.
2. THICKNESS OF CRUSHED STONE PAD TO BE NOT LESS THAN 8".
3. LENGTH SHALL BE A MINIMUM OF 50' FROM ACTUAL ROADWAY, AND WIDTH NOT LESS THAN FULL WIDTH OF INGRESS/EGRESS.
4. ENTRANCE SHALL BE PROPERLY GRADED TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
5. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS OF WAY MUST BE REMOVED IMMEDIATELY BY CONTRACTOR.
6. AS NECESSARY, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.

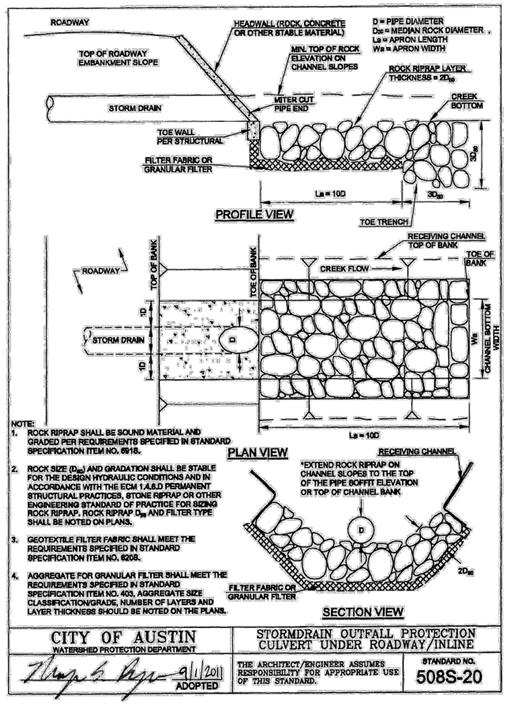
RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO.: EC-09
APPROVED 03-25-11 DATE	STABILIZED CONSTRUCTION ENTRANCE DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		



NOTES:

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MIN. OF ONE (1) FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G. PAVEMENT) WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 8 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHALL BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS SECURELY FASTENED TO THE STEEL FENCE POSTS.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
8. SILT FENCE SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED

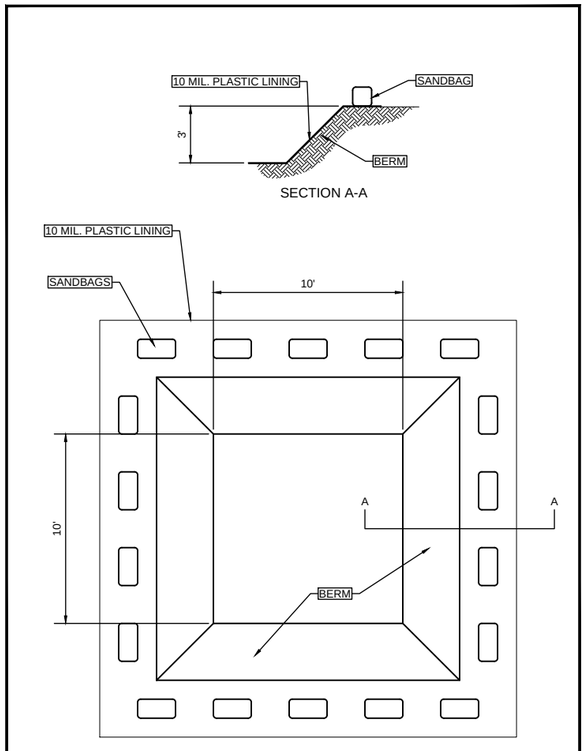
RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO.: EC-10
APPROVED 03-25-11 DATE	SILT FENCE DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		



NOTE:

1. ROCK RIPRAP SHALL BE SOUND MATERIAL AND GRADED PER REQUIREMENTS SPECIFIED IN STANDARD SPECIFICATION ITEM NO. 6918.
2. ROCK SIZE (D_{50}) AND GRADATION SHALL BE STABLE FOR THE DESIGN HYDRAULIC CONDITIONS AND IN ACCORDANCE WITH THE ECM 1.4.6.D PERMANENT STRUCTURAL PRACTICES. STONE RIPRAP OR OTHER ENGINEERING STANDARD OF PRACTICE FOR SIZING ROCK RIPRAP. ROCK RIPRAP D_{50} AND FILTER TYPE SHALL BE NOTED ON PLANS.
3. GEOTEXTILE FILTER FABRIC SHALL MEET THE REQUIREMENTS SPECIFIED IN STANDARD SPECIFICATION ITEM NO. 6208.
4. AGGREGATE FOR GRANULAR FILTER SHALL MEET THE REQUIREMENTS SPECIFIED IN STANDARD SPECIFICATION ITEM NO. 403. AGGREGATE SIZE CLASSIFICATION/GRADE, NUMBER OF LAYERS AND LAYER THICKNESS SHOULD BE NOTED ON THE PLANS.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STORMDRAIN OUTFALL PROTECTION CULVERT UNDER ROADWAY/INLINE	
9/1/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-20



01 CONCRETE WASHOUT
SCALE: 1/4" = 1'-0"

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SITE DEVELOPMENT PLANS TO SERVE
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LEANDER, TX 78641

STANDARD DETAILS - ESC

STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

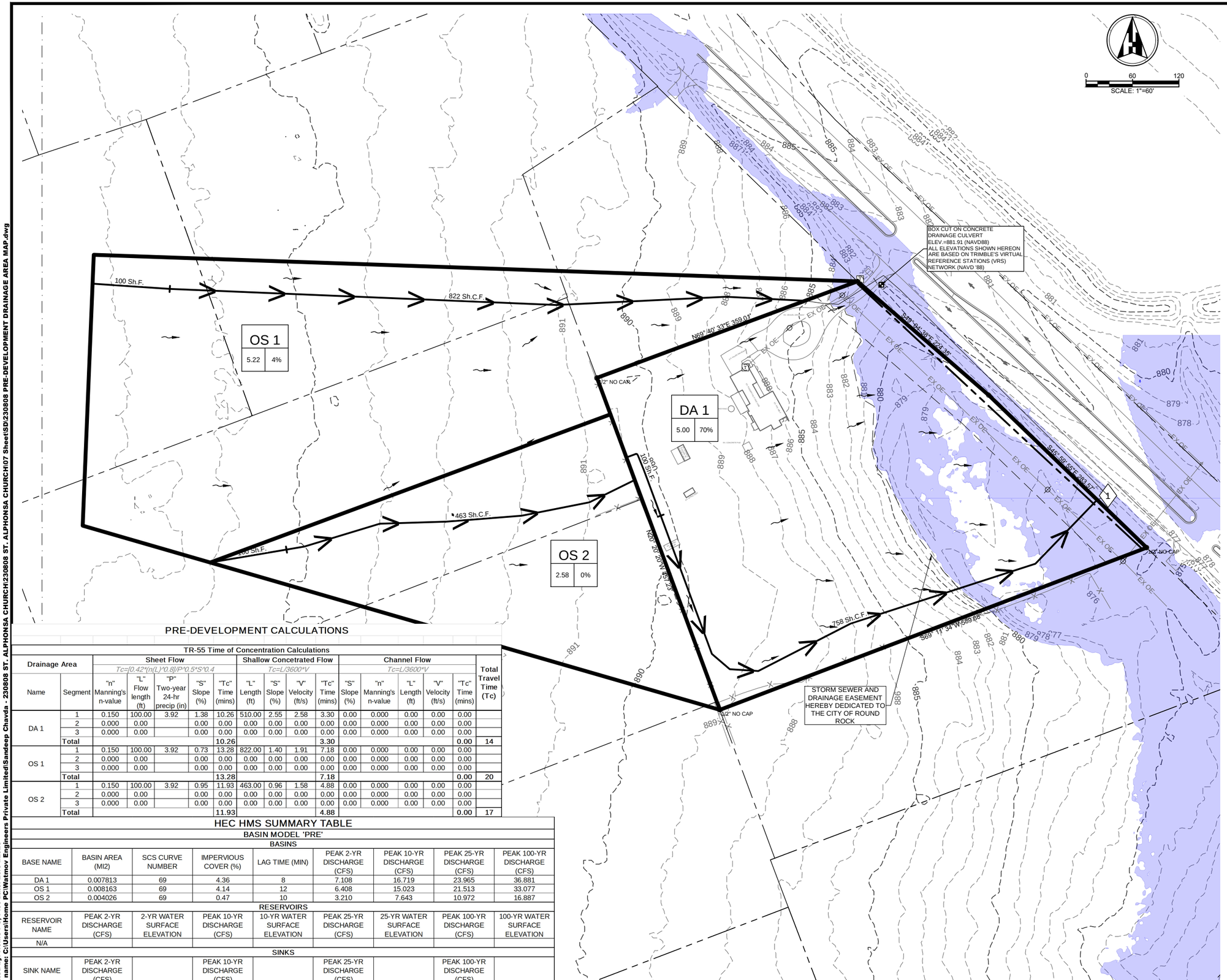
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Attachment G – Drainage Area Map



LEGEND	
DA 1 / 0.90 Ac. / 0%	DRAINAGE AREA LABEL AREA NAME, AREA (ACRES), IMPERVIOUS COVER PERCENTAGE
X	ANALYSIS POINT
100 LF Sh.F.	SHEET FLOW SEGMENT OF TIME OF CONCENTRATION (Tc) PATH
500 LF Sh.C.F.	SHALLOW CONCENTRATED FLOW SEGMENT OF Tc PATH
500 LF Ch.F.	CHANNELIZED FLOW SEGMENT OF Tc PATH
	FLOW ARROW

PRE-DEVELOPMENT CALCULATIONS

TR-55 Time of Concentration Calculations

Drainage Area		Sheet Flow Tc=[0.42*(n(L)^0.8)/P^0.5*S^0.4					Shallow Concetrated Flow Tc=L/3600*V				Channel Flow Tc=L/3600*V					Total Travel Time (Tc)
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two-year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)	
DA 1	1	0.150	100.00	3.92	1.38	10.26	510.00	2.55	2.58	3.30	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**10.26**				**3.30**					**0.00**	**14**
OS 1	1	0.150	100.00	3.92	0.73	13.28	822.00	1.40	1.91	7.18	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**13.28**				**7.18**					**0.00**	**20**
OS 2	1	0.150	100.00	3.92	0.95	11.93	463.00	0.96	1.58	4.88	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**11.93**				**4.88**					**0.00**	**17**

HEC HMS SUMMARY TABLE

BASIN MODEL 'PRE'

BASINS

BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)
DA 1	0.007813	69	4.36	8	7.108	16.719	23.965	36.881
OS 1	0.008163	69	4.14	12	6.408	15.023	21.513	33.077
OS 2	0.004026	69	0.47	10	3.210	7.643	10.972	16.887

RESERVOIRS

RESERVOIR NAME	PEAK 2-YR DISCHARGE (CFS)	2-YR WATER SURFACE ELEVATION	PEAK 10-YR DISCHARGE (CFS)	10-YR WATER SURFACE ELEVATION	PEAK 25-YR DISCHARGE (CFS)	25-YR WATER SURFACE ELEVATION	PEAK 100-YR DISCHARGE (CFS)	100-YR WATER SURFACE ELEVATION
N/A								

SINKS

SINK NAME	PEAK 2-YR DISCHARGE (CFS)		PEAK 10-YR DISCHARGE (CFS)		PEAK 25-YR DISCHARGE (CFS)		PEAK 100-YR DISCHARGE (CFS)	
Analysis 1	14.674		34.464		49.584		76.579	

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SITE DEVELOPMENT PLANS TO SERVE
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3600 COUNTY ROAD 175
LEANDER, TX 78641

EXISTING CONDITIONS DRAINAGE AREA MAP

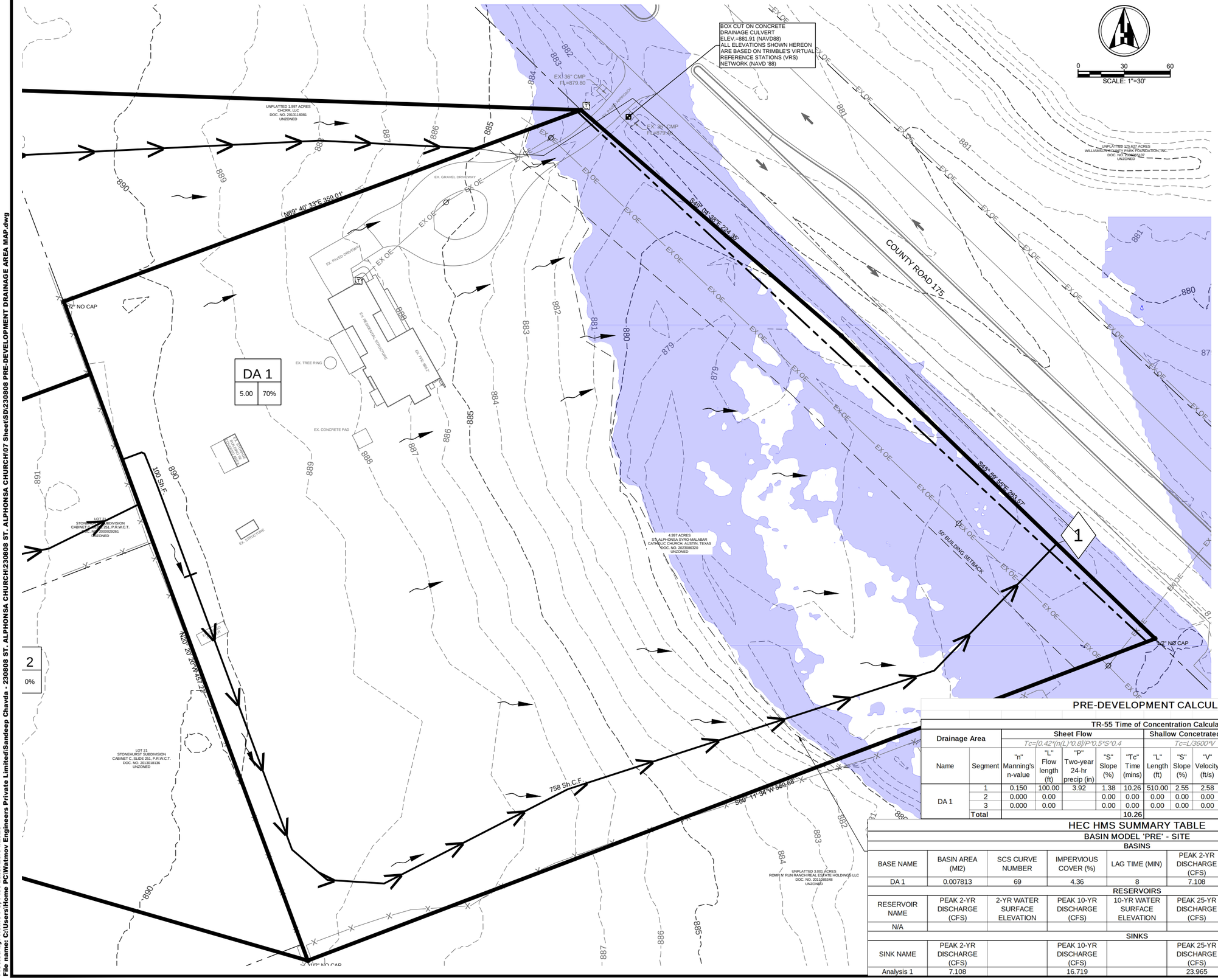


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LEGEND	
DA 1 / 0.90 Ac. / 0%	DRAINAGE AREA LABEL AREA NAME, AREA (ACRES), IMPERVIOUS COVER PERCENTAGE
X	ANALYSIS POINT
100 LF Sh.F.	SHEET FLOW SEGMENT OF TIME OF CONCENTRATION (Tc) PATH
500 LF Sh.C.F.	SHALLOW CONCENTRATED FLOW SEGMENT OF Tc PATH
500 LF Ch.F.	CHANNELIZED FLOW SEGMENT OF Tc PATH
	FLOW ARROW

PRE-DEVELOPMENT CALCULATIONS

TR-55 Time of Concentration Calculations

Drainage Area		Sheet Flow Tc=[0.42*(n(L)^0.8]/[P^0.5*S^0.4					Shallow Concetrated Flow Tc=L/3600*V				Channel Flow Tc=L/3600*V					Total Travel Time (Tc)
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two-year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)	
DA 1	1	0.150	100.00	3.92	1.38	10.26	510.00	2.55	2.58	3.30	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**10.26**				**3.30**					**0.00**	**14**

HEC HMS SUMMARY TABLE

BASIN MODEL 'PRE' - SITE

BASINS

BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)
DA 1	0.007813	69	4.36	8	7.108	16.719	23.965	36.881

RESERVOIRS

RESERVOIR NAME	PEAK 2-YR DISCHARGE (CFS)	2-YR WATER SURFACE ELEVATION	PEAK 10-YR DISCHARGE (CFS)	10-YR WATER SURFACE ELEVATION	PEAK 25-YR DISCHARGE (CFS)	25-YR WATER SURFACE ELEVATION	PEAK 100-YR DISCHARGE (CFS)	100-YR WATER SURFACE ELEVATION
N/A								

SINKS

SINK NAME	PEAK 2-YR DISCHARGE (CFS)		PEAK 10-YR DISCHARGE (CFS)		PEAK 25-YR DISCHARGE (CFS)		PEAK 100-YR DISCHARGE (CFS)	
Analysis 1	7.108		16.719		23.965		36.881	

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SITE DEVELOPMENT PLANS TO SERVE
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PROJECT SITE-EXISTING CONDITIONS DRAINAGE AREA MAP

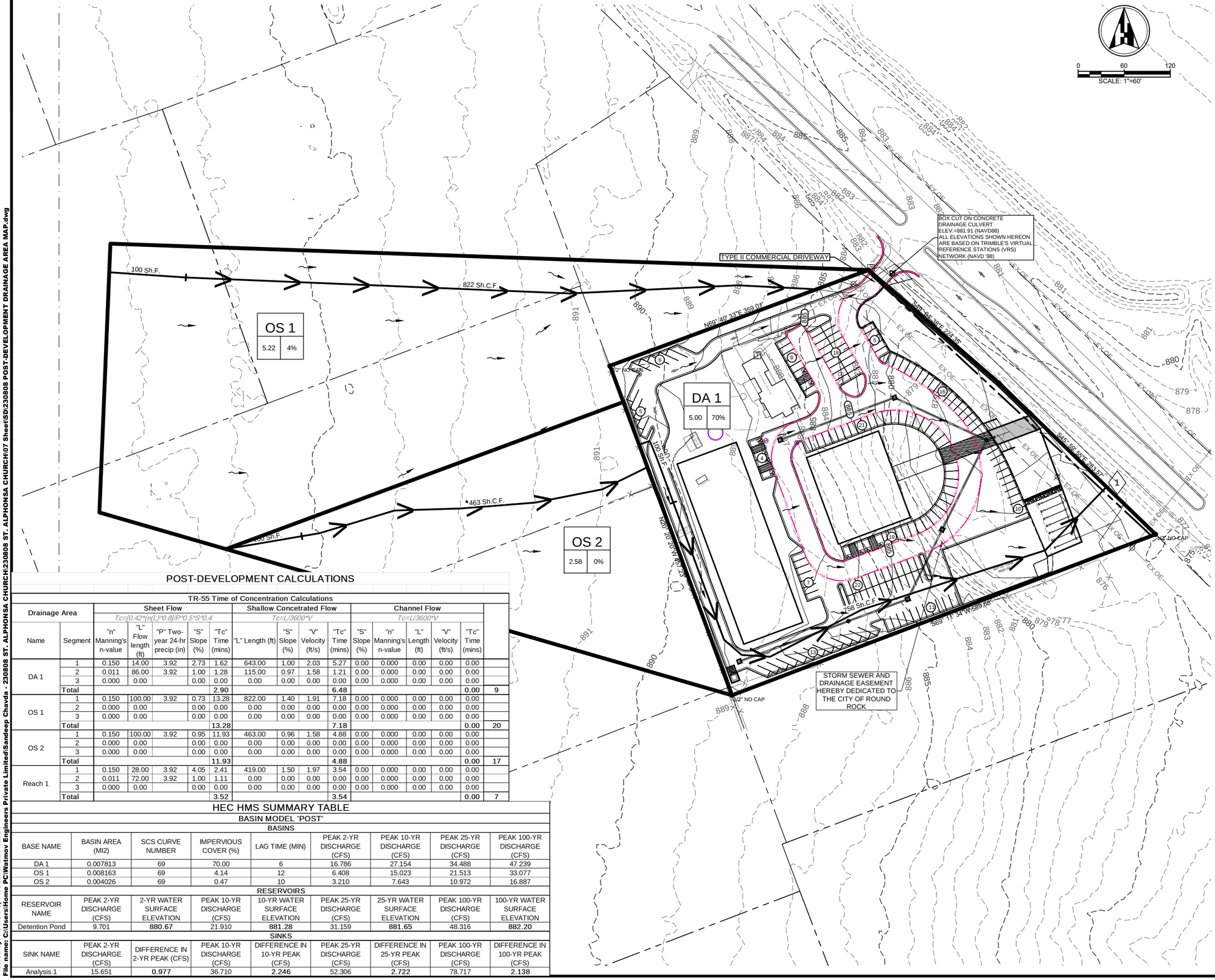
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JENNIFER L. HENDERSON
116883
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	04/29/2025
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CHECKED BY:	DR
APPROVED BY:	JH

C13.00

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POST-DEVELOPMENT CALCULATIONS

TR-55 Time of Concentration Calculations

Drainage Area		Sheet Flow					Shallow Concetrated Flow				Channel Flow					
		Tc=[0.42*(n(L)^0.8)/P^0.5*S^0.4					Tc=L/3600*V				Tc=L/3600*V					
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two-year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)	
DA 1	1	0.150	14.00	3.92	2.73	1.62	643.00	1.00	2.03	5.27	0.00	0.000	0.00	0.00	0.00	
	2	0.011	86.00	3.92	1.00	1.28	115.00	0.97	1.58	1.21	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**2.90**				**6.48**					**0.00**	**9**
OS 1	1	0.150	100.00	3.92	0.73	13.28	822.00	1.40	1.91	7.18	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**13.28**				**7.18**					**0.00**	**20**
OS 2	1	0.150	100.00	3.92	0.95	11.93	463.00	0.96	1.58	4.88	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**11.93**				**4.88**					**0.00**	**17**
Reach 1	1	0.150	28.00	3.92	4.05	2.41	419.00	1.50	1.97	3.54	0.00	0.000	0.00	0.00	0.00	
	2	0.011	72.00	3.92	1.00	1.11	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**3.52**				**3.54**					**0.00**	**7**

HEC HMS SUMMARY TABLE

BASIN MODEL 'POST'

BASINS

BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)
DA 1	0.007813	69	70.00	6	16.786	27.154	34.488	47.239
OS 1	0.008163	69	4.14	12	6.408	15.023	21.513	33.077
OS 2	0.004026	69	0.47	10	3.210	7.643	10.972	16.887

RESERVOIRS

RESERVOIR NAME	PEAK 2-YR DISCHARGE (CFS)	2-YR WATER SURFACE ELEVATION	PEAK 10-YR DISCHARGE (CFS)	10-YR WATER SURFACE ELEVATION	PEAK 25-YR DISCHARGE (CFS)	25-YR WATER SURFACE ELEVATION	PEAK 100-YR DISCHARGE (CFS)	100-YR WATER SURFACE ELEVATION
Detention Pond	9.701	**880.67**	21.910	**881.28**	31.159	**881.65**	48.316	**882.20**

SINKS

SINK NAME	PEAK 2-YR DISCHARGE (CFS)	DIFFERENCE IN 2-YR PEAK (CFS)	PEAK 10-YR DISCHARGE (CFS)	DIFFERENCE IN 10-YR PEAK (CFS)	PEAK 25-YR DISCHARGE (CFS)	DIFFERENCE IN 25-YR PEAK (CFS)	PEAK 100-YR DISCHARGE (CFS)	DIFFERENCE IN 100-YR PEAK (CFS)
Analysis 1	15.651	**0.977**	36.710	**2.246**	52.306	**2.722**	78.717	**2.138**

LEGEND	
DA 1 / 0.90 Ac. / 0%	DRAINAGE AREA LABEL AREA NAME, AREA (ACRES), IMPERVIOUS COVER PERCENTAGE
X	ANALYSIS POINT
100 LF Sh.F.	SHEET FLOW SEGMENT OF TIME OF CONCENTRATION (Tc) PATH
500 LF Sh.C.F.	SHALLOW CONCENTRATED FLOW SEGMENT OF Tc PATH
500 LF Ch.F.	CHANNELIZED FLOW SEGMENT OF Tc PATH
	FLOW ARROW

NOTES:
1. THE FLOW OFF THE SITE HAS NOT BEEN INSCREASED FROM THE PRE-DEVELOPED CONDITION.

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3600 COUNTY ROAD 175
LEANDER, TX 78641

DEVELOPED CONDITIONS DRAINAGE AREA MAP

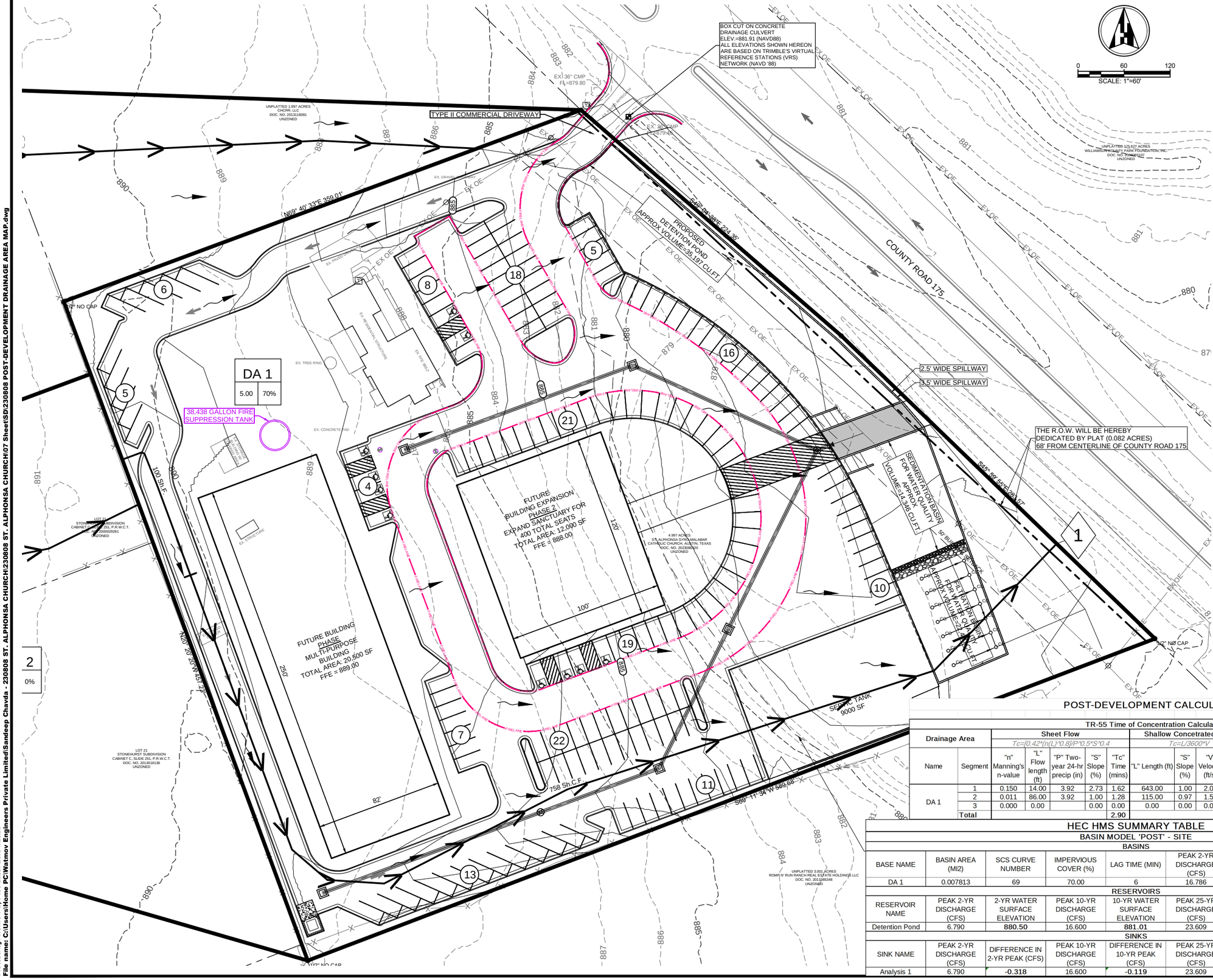


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APPROVED BY: JH

C14.00

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LEGEND	
DA 1 / 0.90 Ac. / 0%	DRAINAGE AREA LABEL AREA NAME, AREA (ACRES), IMPERVIOUS COVER PERCENTAGE
X	ANALYSIS POINT
100 LF Sh.F.	SHEET FLOW SEGMENT OF TIME OF CONCENTRATION (Tc) PATH
500 LF Sh.C.F.	SHALLOW CONCENTRATED FLOW SEGMENT OF Tc PATH
500 LF Ch.F.	CHANNELIZED FLOW SEGMENT OF Tc PATH
	FLOW ARROW

NOTES:
1. THE FLOW OFF THE SITE HAS NOT BEEN INSCREASED FROM THE PRE-DEVELOPED CONDITION.

POST-DEVELOPMENT CALCULATIONS

TR-55 Time of Concentration Calculations

Drainage Area		Sheet Flow					Shallow Concetrated Flow				Channel Flow					
		Tc=[0.42*(n(L)^0.8)/P^0.5*S^0.4					Tc=L/3600*V				Tc=L/3600*V					
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two-year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)	
DA 1	1	0.150	14.00	3.92	2.73	1.62	643.00	1.00	2.03	5.27	0.00	0.000	0.00	0.00	0.00	
	2	0.011	86.00	3.92	1.00	1.28	115.00	0.97	1.58	1.21	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					2.90				6.48					0.00	9

HEC HMS SUMMARY TABLE

BASIN MODEL 'POST' - SITE

BASINS

BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)
DA 1	0.007813	69	70.00	6	16.786	27.154	34.488	47.239

RESERVOIRS

RESERVOIR NAME	PEAK 2-YR DISCHARGE (CFS)	2-YR WATER SURFACE ELEVATION	PEAK 10-YR DISCHARGE (CFS)	10-YR WATER SURFACE ELEVATION	PEAK 25-YR DISCHARGE (CFS)	25-YR WATER SURFACE ELEVATION	PEAK 100-YR DISCHARGE (CFS)	100-YR WATER SURFACE ELEVATION
Detention Pond	6.790	**880.50**	16.600	**881.01**	23.609	**881.35**	36.754	**881.84**

SINKS

SINK NAME	PEAK 2-YR DISCHARGE (CFS)	DIFFERENCE IN 2-YR PEAK (CFS)	PEAK 10-YR DISCHARGE (CFS)	DIFFERENCE IN 10-YR PEAK (CFS)	PEAK 25-YR DISCHARGE (CFS)	DIFFERENCE IN 25-YR PEAK (CFS)	PEAK 100-YR DISCHARGE (CFS)	DIFFERENCE IN 100-YR PEAK (CFS)
Analysis 1	6.790	**-0.318**	16.600	**-0.119**	23.609	**-0.356**	36.754	**-0.127**

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SITE DEVELOPMENT PLANS TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

PROJECT SITE-DEVELOPED CONDITIONS DRAINAGE AREA MAP

STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

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File name: C:\Users\Home PC\Watmov Engineers Private Limited\Sandeep Chavda - 230808 ST. ALPHONSA CHURCH\230808 ST. ALPHONSA CHURCH\07 Sheet\SD\230808 POST-DEVELOPMENT DRAINAGE AREA MAP.dwg

Attachment I – Inspection and Maintenance for BMPs

The following inspection plan has been laid out for each BMP:

1. Silt fence
    a. Silt fence will be inspected monthly and after large rainfall events to ensure there are not any compromised points. If it is found that the silt fence is damaged it will be removed and replaced with new fence.
2. Stabilized Construction Entrance
    a. A stabilized construction entrance will be provided for the site. The construction entrance will be inspected on a monthly basis. If the aggregate becomes damaged or no longer prevents track out, it will be removed and replaced with new aggregate.
3. Concrete Washout
    a. A concrete washout will be provided for any excess concrete and for truck cleaning. The washout will be inspected on a monthly basis and at the end of the day on concrete pours. Once the washout is full, it will be disposed of properly and either replaced with a new washout or emptied fully.
4. Tree Protection
    a. Tree protection will be installed at the beginning of the project. All tree protection will be inspected on a monthly basis. If the protection is damaged at any point during the construction process it will be replaced with adequate protection.

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

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

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Tree Protection	Date	Signature
If the soil has become compacted over the root zone of any tree, the ground should be aerated by punching holes with an iron bar. The bar should be driven 1- foot deep and then moved back and forth until the soil is loosened. This procedure should be repeated every 18 inches until all of the compacted soil beneath the crown of the tree has been loosened.		
Any damage to the crown, trunk, or root system of any tree retained on the site should be repaired immediately.		
Whenever major root or bark damage occurs, remove some foliage to reduce the demand for water and nutrients.		
Damaged roots should immediately be cut off cleanly inside the exposed or damaged area. Cut surfaces should be painted with approved tree paint, and moist peat moss, burlap, or topsoil should be spread over the exposed area.		
To treat bark damage, carefully cut away all loosened bark back into the undamaged area, taper the cut at the top and bottom, and provide drainage at the base of the wound.		
All tree limbs damaged during construction or removed for any other reason should be cut off above the collar at the preceding branch junction.		

Care for serious injuries should be prescribed by a forester or a tree specialist.		
Broadleaf trees that have been stressed or damaged should receive a heavy application of fertilizer to aid their recovery. Trees should be fertilized in the late fall (after November 1) or the early spring (until April 1). Fall applications are preferred, as the nutrients will be made available over a longer period of time. Fertilizer should be applied to the soil over the feeder roots. In no case should it be applied closer than 3 feet to the trunk. Fertilizer should be applied using approved fertilization methods and equipment.		
Maintain a ground cover of organic mulch around trees that is adequate to prevent erosion, protect roots, and hold water.		

Sediment Basins	Date	Signature
Inspection should be made weekly and after each rainfall. Check the embankment, spillways, and outlet for erosion damage, and inspect the embankment for piping and settlement. Repair should be made promptly as needed by the contractor.		
Trash and other debris should be removed after each rainfall to prevent clogging of the outlet structure.		
Accumulated silt should be removed and the basin should be re-graded to its original dimensions at such point that the capacity of the impoundment has been reduced to 75% of its original storage capacity.		
The removed sediment should be stockpiled or redistributed in areas that are protected from erosion.		

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

The following inspection plan has been laid out for each soil stabilization practices:

1. Tree Protection
    a. Tree protection will be installed at the beginning of the project. All tree protection will be inspected on a monthly basis. If the protection is damaged at any point during the construction process it will be replaced with adequate protection.
2. Permanent Vegetation
    a. At the conclusion of construction, all disturbed areas will be re-seeded with permanent grass/vegetation.
    b. Bare soils should be seeded or otherwise stabilized within 14 calendar days after final grading or where construction activity has temporarily ceased for more than 21 days.

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: Jen Henderson

Date: 5/2/2025

Signature of Customer/Agent

Regulated Entity Name: St Alphonsa Church

Permanent Best Management Practices (BMPs)

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

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

   [ ] N/A

2. [X] 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.

   [X] 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. [X] **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:

    [X] Prepared and certified by the engineer designing the permanent BMPs and measures
    [X] Signed by the owner or responsible party
    [X] Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit
    [X] 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.

    [X] 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.

    [X] N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

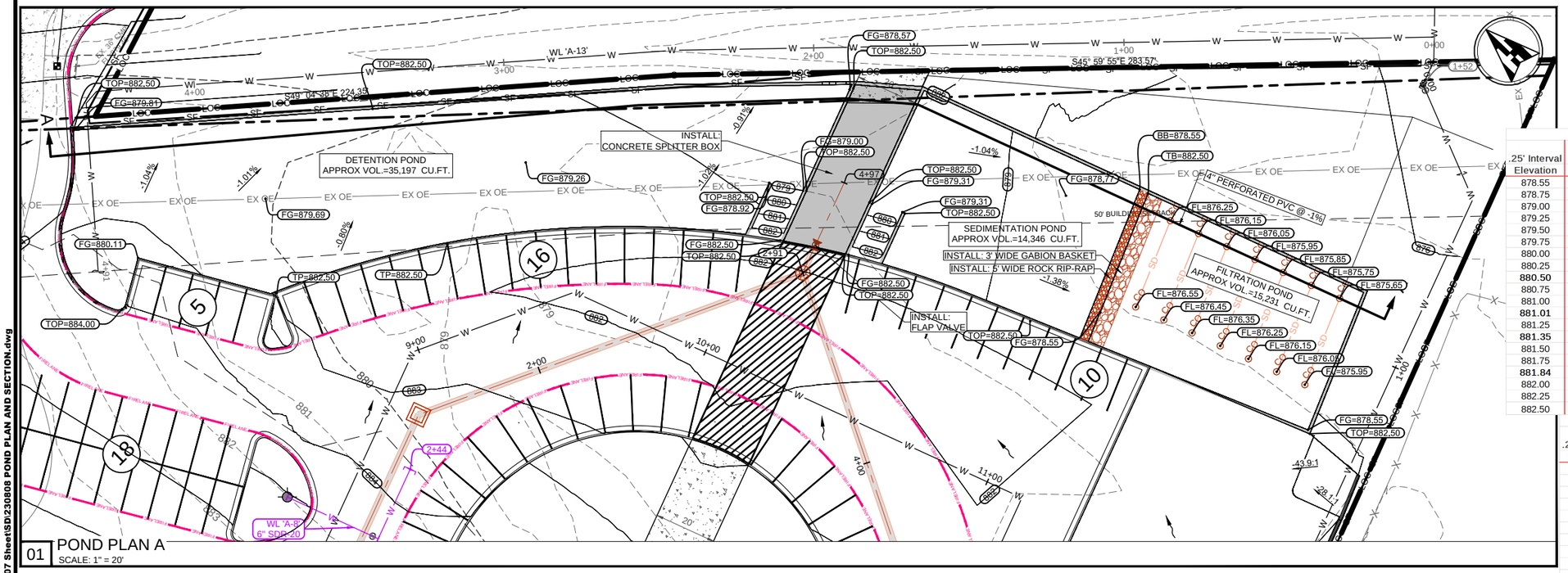
    [ ] N/A

Attachment B - BMPs for Upgradient Stormwater

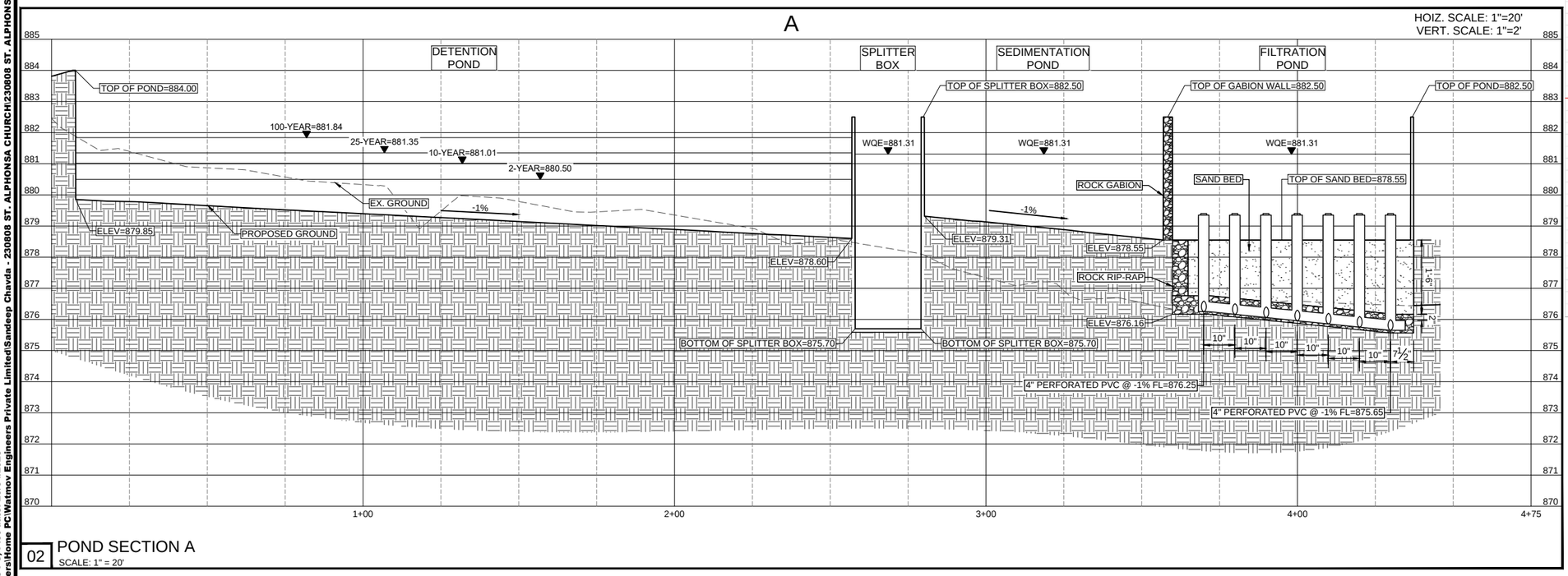
No BMPs for upgradient stormwater runoff will be necessary with the proposed development.

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Attachment C - BMPs for On-site Stormwater



01 POND PLAN A
SCALE: 1" = 20'



02 POND SECTION A
SCALE: 1" = 20'

Detention Pond Stage-Storage

.25' Interval Elevation	Area S.F.	Area AC.	Storm Event	Avg. End Area Method	Accumulated Volume	Discharge (cfs)
878.55	0.00	0.0		0	-	0
878.75	369.55	0.008484		36.955	36.955	0
879.00	1822.33	0.041835		273.985	310.94	0
879.25	3928.02	0.090175		718.79375	1029.73375	1.314
879.50	6186.25	0.142017		1264.28375	2294.0175	3.195
879.75	8673.44	0.199115		1857.46125	4151.47875	4.405
880.00	10739.87	0.246553		2426.66375	6578.1425	5.318
880.25	11419.77	0.262162		2769.955	9348.0975	6.151
880.50	11435.79	0.26253	2-yr	2811.23368	12159.33118	**6.790**
880.75	11450.02	0.262856		2906.49767	15065.82885	12.059
881.00	11465.18	0.263204		2864.4	17930.22885	16.399
881.01	11466.27	0.263229	10-yr	103.191545	18033.42039	**16.600**
881.25	11480.38	0.263553		2765.07186	20798.49225	20.567
881.35	11487.21	0.26371	25-yr	1194.31455	21992.8068	**23.609**
881.50	11495.62	0.263903		1677.74641	23670.55321	27.496
881.75	11510.90	0.264254		2875.815	26546.36821	34.313
881.84	11516.53	0.264383	100-yr	1013.2071	27559.57531	**36.754**
882.00	11526.21	0.264605		1866.46227	29426.03758	
882.25	11541.56	0.264958		2883.47125	32309.50883	
882.50	11556.95	0.265311		2887.31375	35196.82258	

Sedimentation Basin Stage-Storage

.25' Interval Elevation	Area S.F.	Area AC.	Note	Avg. End Area Method	Accumulated Volume
878.55	0.00	0.0		0	-
878.75	882.74	0.020265		88.274	88.274
879.00	1996.97	0.045844		359.96375	448.23775
879.25	3388.4	0.077787		673.17125	1121.409
879.50	4009.22	0.092039		924.7025	2046.1115
879.75	4024.27	0.092385		1004.18625	3050.29775
880.00	4039.33	0.09273		1007.95	4058.24775
880.25	4054.4	0.093076		1011.71625	5069.964
880.50	4069.48	0.093422		1015.485	6085.449
880.75	4084.58	0.093769		1019.2575	7104.7065
881.00	4099.69	0.094116		1023.03375	8127.74025
881.25	4114.82	0.094463		1026.81375	9154.554
881.31	4118.46	0.094547	WQE	246.998424	9401.552424
881.50	4129.99	0.094812		783.602826	10185.15525
881.75	4145.2	0.095161		1034.39875	11219.554
882.00	4160.43	0.09551		1038.20375	12257.75775
882.25	4175.7	0.095861		1042.01625	13299.774
882.50	4191.01	0.096212		1045.83875	14345.61275

Filtration Basin Stage-Storage

.25' Interval Elevation	Area S.F.	Area AC.	Note	Avg. End Area Method	Accumulated Volume
878.55	6398.46	0.1		0	-
878.75	3784.07	0.08687		1018.253	1018.253
879.00	3784.87	0.086889		946.1175	1964.3705
879.25	3785.66	0.086907		946.31625	2910.68675
879.50	3786.46	0.086925		946.515	3857.20175
879.75	3787.26	0.086944		946.715	4803.91675
880.00	3788.05	0.086962		946.91375	5750.8305
880.25	3788.85	0.08698		947.1125	6697.943
880.50	3789.65	0.086998		947.3125	7645.2555
880.75	3790.45	0.087017		947.5125	8592.768
881.00	3791.24	0.087035		947.71125	9540.47925
881.25	3792.04	0.087053		947.91	10488.38925
881.31	3792.23	0.087058	WQE	227.52816	10715.91741
881.50	3792.84	0.087072		720.58184	11436.49925
881.75	3793.64	0.08709		948.31	12384.80925
882.00	3794.44	0.087108		948.51	13333.31925
882.25	3795.23	0.087126		948.70875	14282.028
882.50	3796.03	0.087145		948.9075	15230.9355

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WBE210166 | HUB 1853873845300

No.	REVISION
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SITE DEVELOPMENT PLANS TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

POND PLAN AND SECTION 1

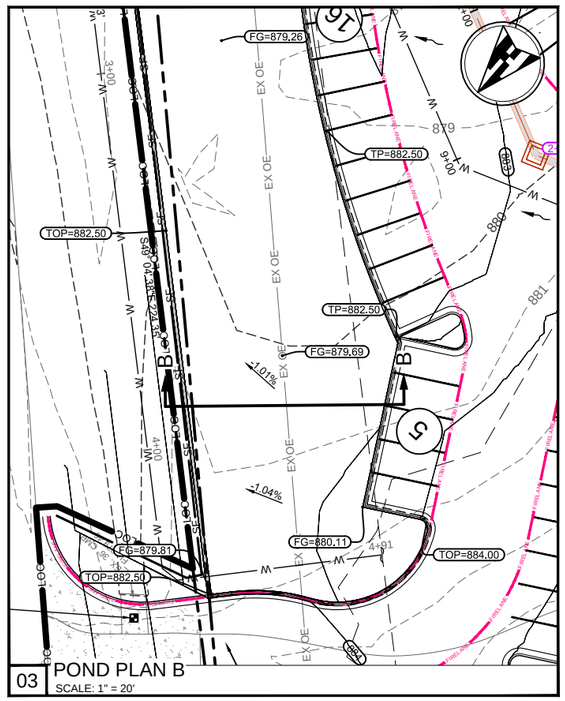
STATE OF TEXAS
JENNIFER L HENDERSON
116883
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PROFESSIONAL ENGINEER
05/09/2025

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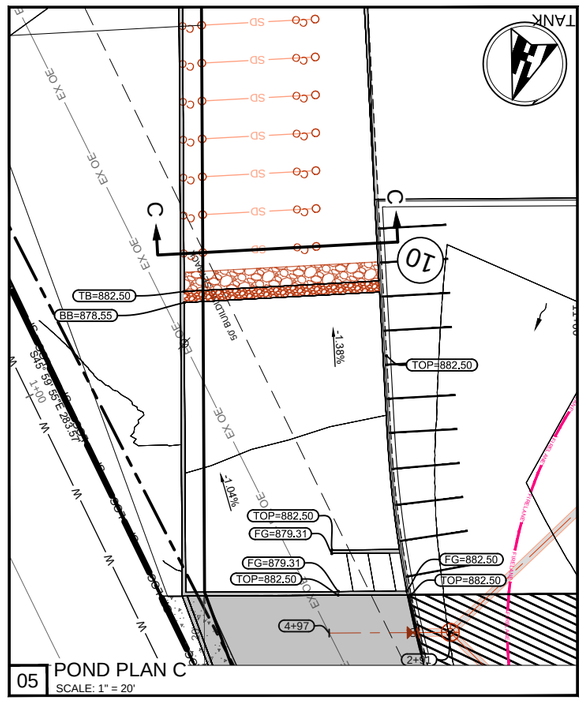
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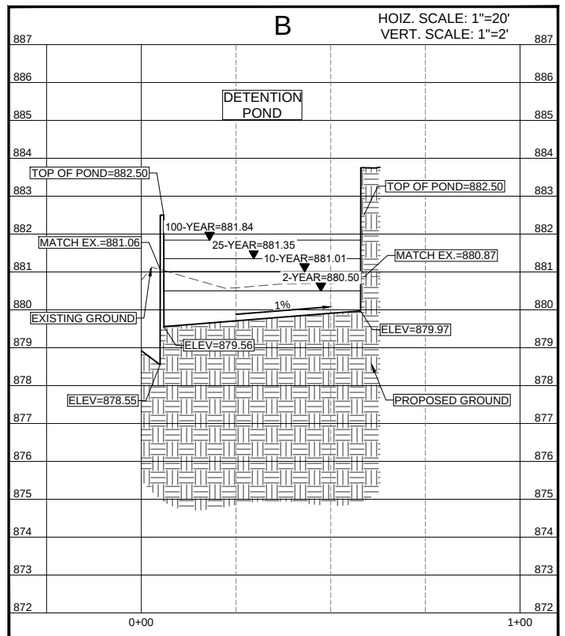
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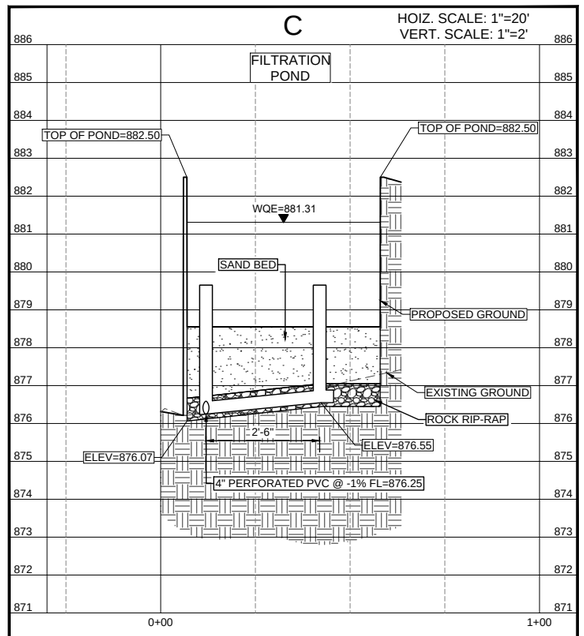
03 POND PLAN B
SCALE: 1" = 20'



05 POND PLAN C
SCALE: 1" = 20'



04 POND SECTION B
SCALE: 1" = 20'



06 POND SECTION C
SCALE: 1" = 20'

Detention Pond Stage-Storage

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Filtration Basin Stage-Storage

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SITE DEVELOPMENT PLANS
TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

POND PLAN AND SECTION 2

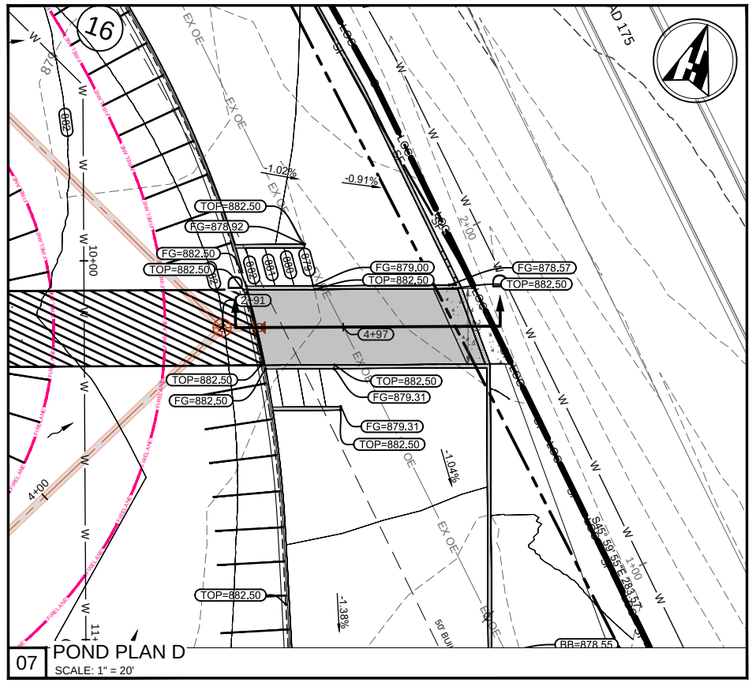
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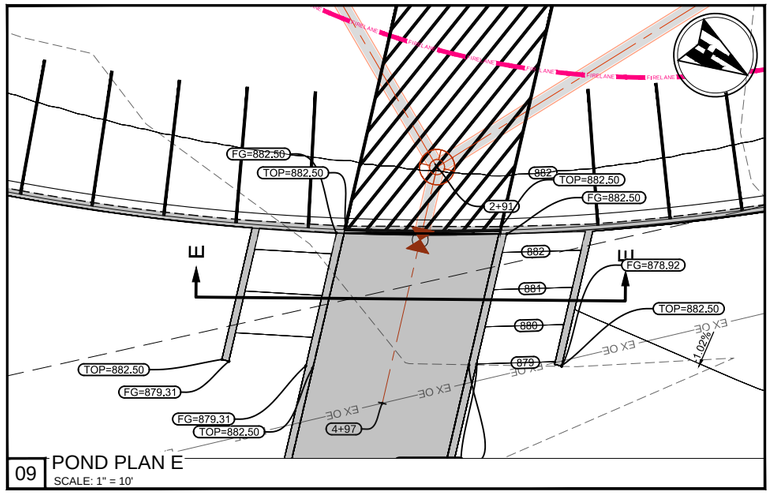
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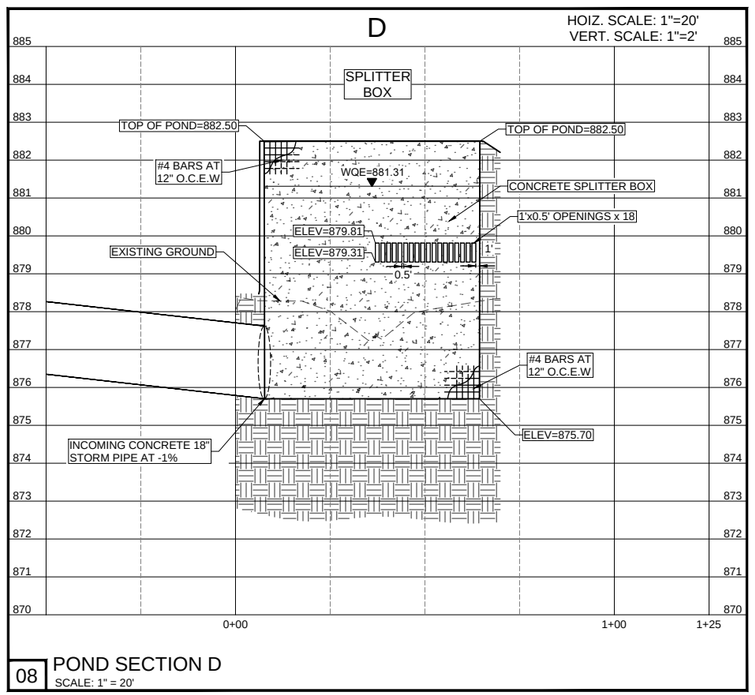
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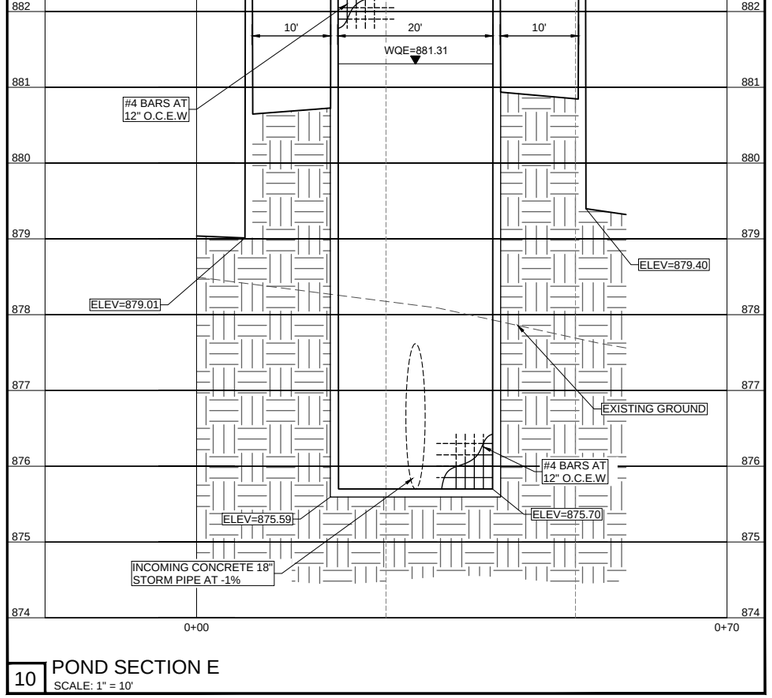
07 POND PLAN D
SCALE: 1" = 20'



09 POND PLAN E
SCALE: 1" = 10'



08 POND SECTION D
SCALE: 1" = 20'



10 POND SECTION E
SCALE: 1" = 10'

Detention Pond Stage-Storage

.25' Interval Elevation	Area S.F.	Area AC.	Storm Event	Avg. End Area Method	Accumulated Volume	Discharge (cfs)
878.55	0.00	0.0		0	-	0
878.75	369.55	0.008484		36.955	36.955	0
879.00	1822.33	0.041835		273.985	310.94	0
879.25	3928.02	0.090175		718.79375	1029.73375	1.314
879.50	6186.25	0.142017		1264.28375	2294.0175	3.195
879.75	8673.44	0.199115		1857.46125	4151.47875	4.405
880.00	10739.87	0.246553		2426.66375	6578.1425	5.318
880.25	11419.77	0.262162		2769.955	9348.0975	6.151
880.50	11435.79	0.26253	**2-yr**	2811.23368	12159.33118	**6.790**
880.75	11450.02	0.262856		2906.49767	15065.82885	12.059
881.00	11465.18	0.263204		2864.4	17930.22885	16.399
881.01	11466.27	0.263229	**10-yr**	103.191545	18033.42039	**16.600**
881.25	11480.38	0.263553		2765.07186	20798.49225	20.567
881.35	11487.21	0.26371	**25-yr**	1194.31455	21992.8068	**23.609**
881.50	11495.62	0.263903		1677.74641	23670.55321	27.496
881.75	11510.90	0.264254		2875.815	26546.36821	34.313
881.84	11516.53	0.264383	**100-yr**	1013.2071	27559.57531	**36.754**
882.00	11526.21	0.264605		1866.46227	29426.03758	
882.25	11541.56	0.264958		2883.47125	32309.50883	
882.50	11556.95	0.265311		2887.31375	35196.82258	

Sedimentation Basin Stage-Storage

.25' Interval Elevation	Area S.F.	Area AC.	Note	Avg. End Area Method	Accumulated Volume
878.55	0.00	0.0		0	-
878.75	882.74	0.020265		88.274	88.274
879.00	1996.97	0.045844		359.96375	448.23775
879.25	3388.4	0.077787		673.17125	1121.409
879.50	4009.22	0.092039		924.7025	2046.1115
879.75	4024.27	0.092385		1004.18625	3050.29775
880.00	4039.33	0.09273		1007.95	4058.24775
880.25	4054.4	0.093076		1011.71625	5069.964
880.50	4069.48	0.093422		1015.485	6085.449
880.75	4084.58	0.093769		1019.2575	7104.7065
881.00	4099.69	0.094116		1023.03375	8127.74025
881.25	4114.82	0.094463		1026.81375	9154.554
881.31	4118.46	0.094547	**WQE**	246.998424	9401.552424
881.50	4129.99	0.094812		783.602826	10185.15525
881.75	4145.2	0.095161		1034.39875	11219.554
882.00	4160.43	0.09551		1038.20375	12257.75775
882.25	4175.7	0.095861		1042.01625	13299.774
882.50	4191.01	0.096212		1045.83875	14345.61275

Reservoir | Outlet 1 | Options

Basin Name: Post - Site
Element Name: Pond

Method:	Orifice Outlet
Direction:	Main
Number Barrels:	1
*Center Elevation (FT)	879.175
*Area (FT2)	1.2272
*Coefficient:	0.6

15-inch (1.25 feet) diameter circular orifice
Invert elevation 878.55'

Reservoir | Outlet 2 | Options

Basin Name: Post - Site
Element Name: Pond

Method:	Orifice Outlet
Direction:	Main
Number Barrels:	2
*Center Elevation (FT)	880.625
*Area (FT2)	1.2272
*Coefficient:	0.6

Two 15-inch (1.25 feet) diameter circular orifices
Invert elevation 880.00'

Reservoir | Spillway 1 | Options

Basin Name: Post - Site
Element Name: Pond

Method:	Broad-Crested Spillway
Direction:	Main
*Elevation (FT)	880.75
*Length (FT)	3.25
*Coefficient (FT^0.5/S)	3
Gates:	0

Reservoir | Spillway 2 | Options

Basin Name: Post - Site
Element Name: Pond

Method:	Broad-Crested Spillway
Direction:	Main
*Elevation (FT)	881.25
*Length (FT)	2.25
*Coefficient (FT^0.5/S)	3
Gates:	0

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3600 COUNTY ROAD 175
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POND PLAN AND SECTION 3

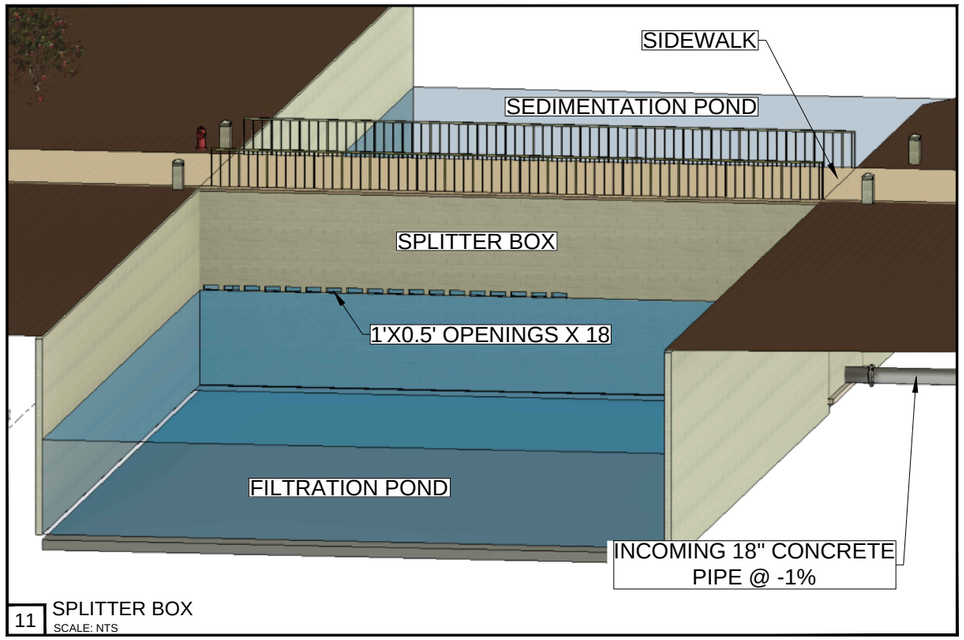
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JENNIFER L HENDERSON
116883
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PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

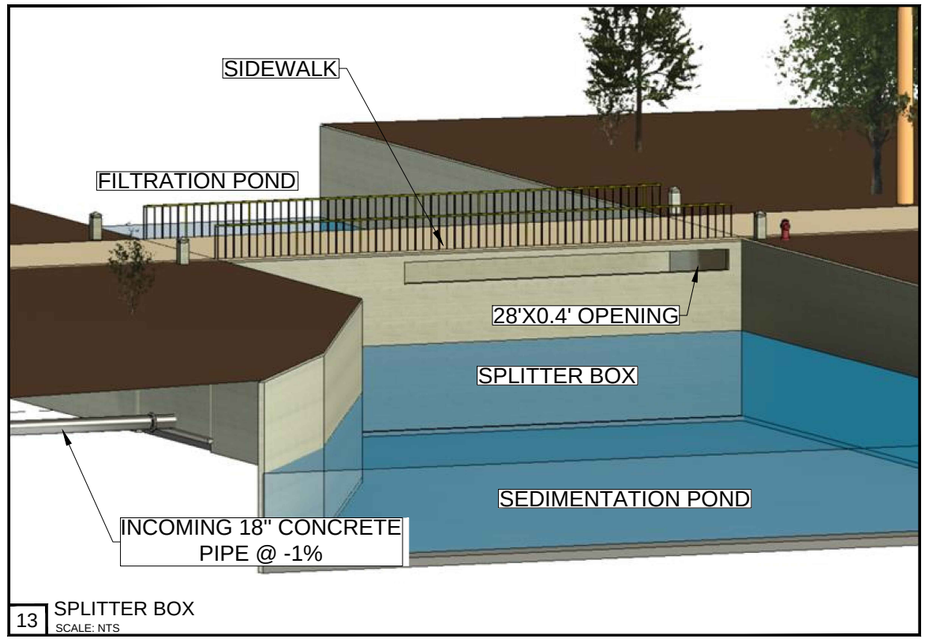
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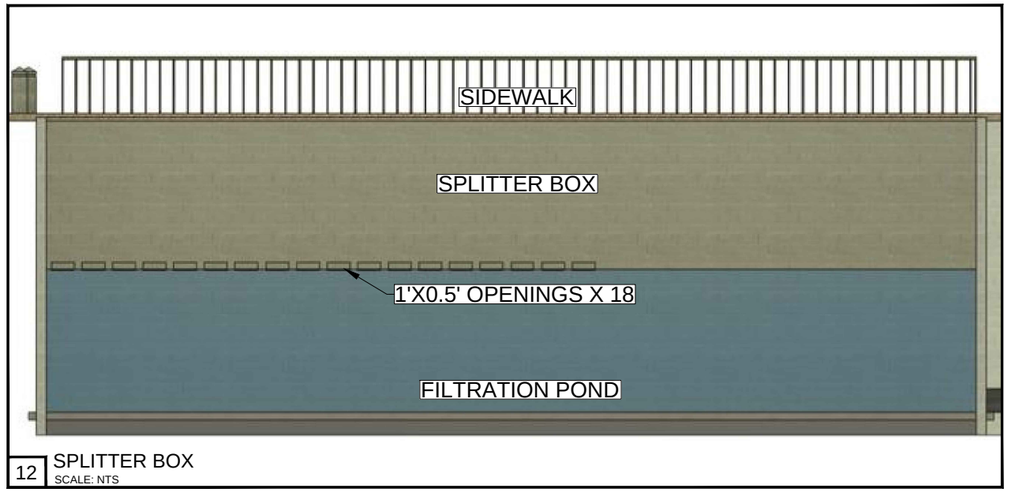
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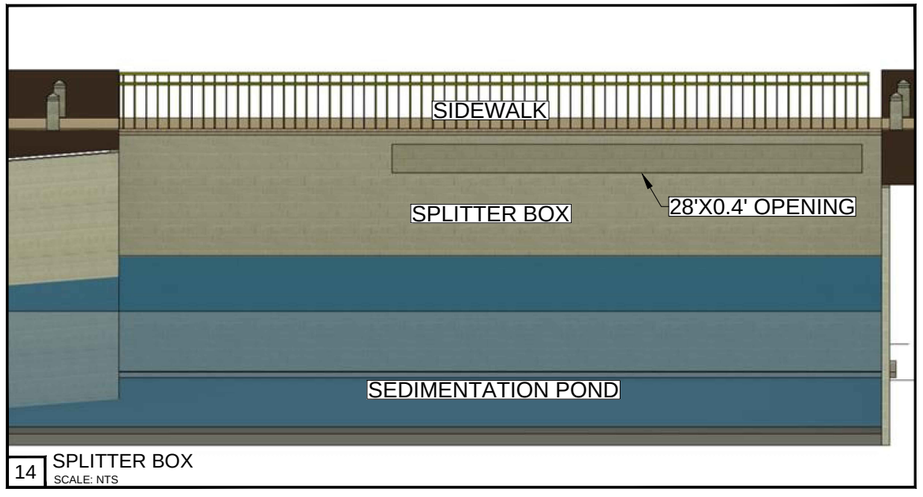
11 SPLITTER BOX
SCALE: NTS



13 SPLITTER BOX
SCALE: NTS



12 SPLITTER BOX
SCALE: NTS



14 SPLITTER BOX
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SITE DEVELOPMENT PLANS
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POND PLAN AND SECTION 4

STATE OF TEXAS
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Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: St Alphonsa Church
Date Prepared: 3/7/2025

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

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

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

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

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

County =	Williamson	
Total project area included in plan * =	5.00	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	3.50	acres
Total post-development impervious cover fraction * =	0.70	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	3046	lbs.

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

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

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

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	5.00	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	3.50	acres
Post-development impervious fraction within drainage basin/outfall area =	0.70	
$L_{M\ THIS\ BASIN}$ =	3046	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter
Removal efficiency = 89 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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) x P x (A_I x 34.6 + A_P x 0.54)

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

A_C =	5.00	acres
A_I =	3.50	acres
A_P =	1.50	acres
L_R =	3472	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 3046 lbs.

F = 0.88

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

Rainfall Depth =	1.50	inches
Post Development Runoff Coefficient =	0.51	
On-site Water Quality Volume =	13767	cubic feet

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

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site Runoff Coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	2753	
Total Capture Volume (required water quality volume(s) x 1.20) =	16520	cubic feet

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

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	16520	cubic feet	
Minimum filter basin area =	765	square feet	
Maximum sedimentation basin area =	6883	square feet	For minimum water depth of 2 feet
Minimum sedimentation basin area =	1721	square feet	For maximum water depth of 8 feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	16520	cubic feet	
Minimum filter basin area =	1377	square feet	
Maximum sedimentation basin area =	5507	square feet	For minimum water depth of 2 feet
Minimum sedimentation basin area =	344	square feet	For maximum water depth of 8 feet

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SITE DEVELOPMENT PLANS TO SERVE
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WATER QUALITY CALCULATIONS

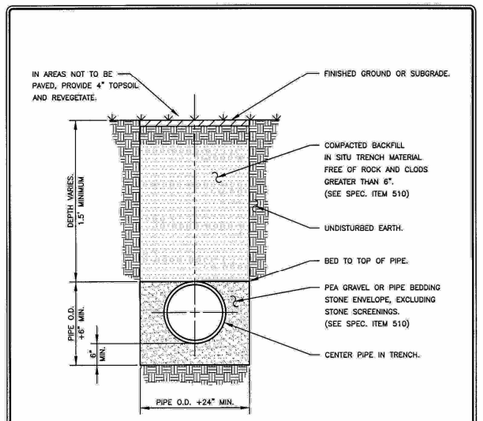
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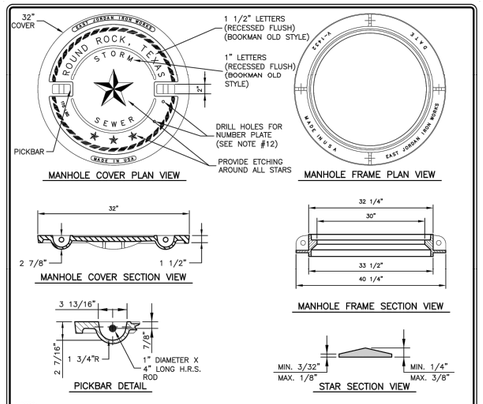
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NOTE:

ALL TRENCHING AND TRENCH SAFETY SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: D-02
APPROVED 08-21-03 DATE	STORM SEWER LINE BEDDING DETAIL (NON-PAVED SURFACE)	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		



NOTES:

1. COVER AND FRAME SHALL COMPLY WITH STANDARD SPECIFICATIONS FOR DRAINAGE, SEWER, UTILITY AND RELATED CASTINGS: AASHTO DESIGNATION M306-04.
2. MANHOLE COVER SHALL BE MODEL NUMBER: V-1432-3 (PRODUCT NUMBER: 41432058), AS MANUFACTURED BY EAST JORDAN IRON WORKS, INCORPORATED, OR APPROVED EQUAL.
3. MANHOLE FRAME SHALL BE MODEL NUMBER: V-1432 (PRODUCT NUMBER: 41432010), AS MANUFACTURED BY EAST JORDAN IRON WORKS, INCORPORATED, OR APPROVED EQUAL.
4. MANHOLE COVER AND FRAME ASSEMBLY, IF ORDERED AS A SET, SHALL BE MODEL NUMBER: V-1432 (PRODUCT NUMBER: 41432080), AS MANUFACTURED BY EAST JORDAN IRON WORKS, INCORPORATED, OR APPROVED EQUAL.
5. ALL CORNERS AND EDGES SHALL HAVE A 1/16" MINIMUM AND 1/8" MAXIMUM RADIUS.
6. MANHOLE COVERS SHALL BE CAST WITH TWO 1" DIAMETER STEEL PICKBARS.
7. MANHOLE COVER WEIGHT SHALL BE 175 LBS. FOR DUCTILE IRON. WEIGHT SHALL BE CAST ON BOTH TOP AND BOTTOM OF COVER.
8. MANUFACTURER SHALL CERTIFY THAT EACH MANHOLE COVER MEETS HS-20 LOADING.
9. FILLETS SHALL BE 1/4" RADIUS UNLESS OTHERWISE SPECIFIED.
10. MANUFACTURER SHALL REMOVE EXCESS IRON AND MACHINE FINISH SEATING SURFACES TO NOTED DIMENSIONS.
11. COVER SHALL BE DIPPED IN A WATER-BASED ASPHALTIC COATING, PRIOR TO SHIPMENT FROM FOUNDRY.
12. MANUFACTURER SHALL DRILL 2-3/16"X1/2" DEEP HOLES FOR A MANHOLE NUMBER PLATE TO BE PROVIDED BY THE CITY OF ROUND ROCK. THE TOP HOLE SHALL BE DRILLED 1" O.C. FROM THE BOTTOM OF THE PICKBAR AND THE BOTTOM HOLE SHALL BE DRILLED 4" O.C. FROM THE TOP HOLE.

RECORD SIGNED COPY ON FILE AT U&BS DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: DR-06
APPROVED 04-01-10 DATE	NON-BOLTED STORMSEWER MANHOLE COVER AND FRAME DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		

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SITE DEVELOPMENT PLANS TO SERVE
ST ALPHONSA CHURCH
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LEANDER, TX 78641

STANDARD DETAILS - STORM

STATE OF TEXAS
JENNIFER L HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

C21.03

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Civil Engineering

Attachment F - Construction Plan

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

STATE OF TEXAS
COUNTY OF WILLIAMSON

I, JENNIFER L. HENDERSON, 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 STORMWATER DRAINAGE POLICY ADOPTED BY THE CITY OF ROUND ROCK, TEXAS.

_____
JENNIFER L. HENDERSON, P.E. DATE

ACCEPTED FOR CONSTRUCTION:

_____
CITY OF LEANDER, TEXAS DATE
PLANNING AND DEVELOPMENT SERVICES DEPARTMENT

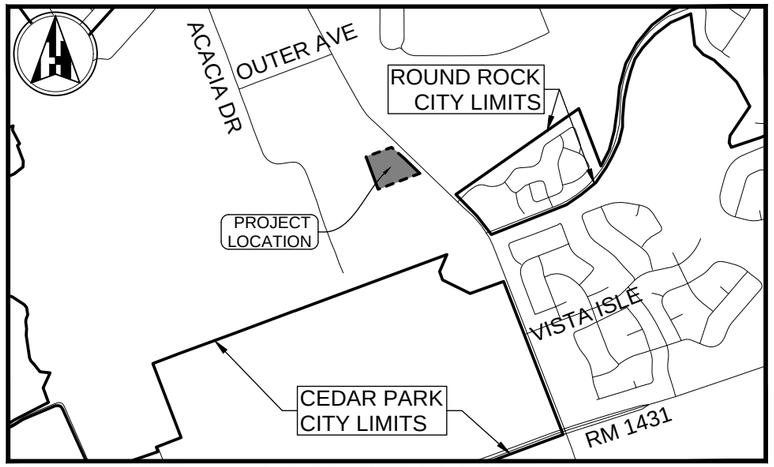
THIS SITE DEVELOPMENT PERMIT COMPLIES WITH THE CITY OF ROUND ROCK CODE OF ORDINANCES.

SITE DEVELOPMENT PLANS

TO SERVE

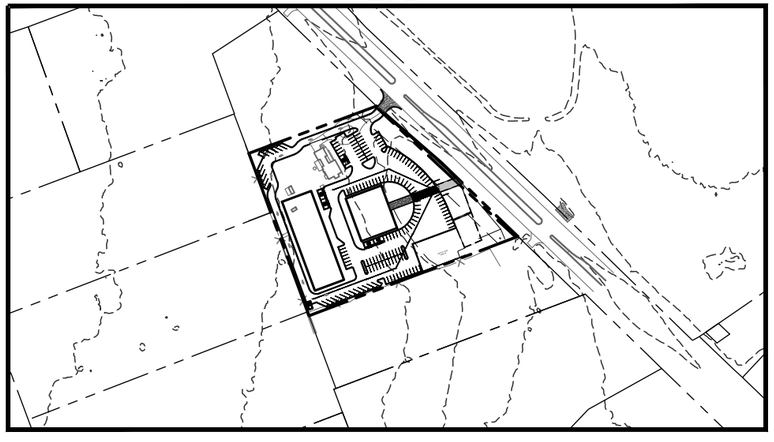
ST ALPHONSA CHURCH

3600 COUNTY ROAD 175
LEANDER, TX 78641



VICINITY MAP

SCALE: 1"=1,000'



SITE PREVIEW

SCALE: 1"=200'

SHEET INDEX	
NUMBER	SHEET TITLE
C00.00	COVER SHEET
C01.00	GENERAL NOTES
C01.01	CONSTRUCTION NOTES
C01.02	LEGEND AND ABBREVIATIONS
C02.00	PLAT
C02.01	PLAT
C03.00	SITE PLAN
C04.00	EXISTING CONDITIONS PLAN
C05.00	DEMOLITION PLAN
C06.00	SLOPE MAP EXHIBIT
C07.00	CUT AND FILL EXHIBIT
C08.00	EROSION AND SEDIMENTATION CONTROL PLAN
C09.00	OVERALL UTILITY PLAN
C10.01	WATER PLAN AND PROFILE
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C11.01	STORM SEWER PLAN & PROFILE
C11.02	STORM SEWER PLAN & PROFILE
C11.03	STORM SEWER PLAN & PROFILE
C12.00	EXISTING CONDITIONS DRAINAGE AREA MAP
C13.00	PROJECT SITE-EXISTING CONDITIONS DRAINAGE AREA MAP
C14.00	DEVELOPED CONDITIONS DRAINAGE AREA MAP
C15.00	PROJECT SITE-DEVELOPED CONDITIONS DRAINAGE AREA MAP
C16.00	DIMENSION CONTROL PLAN
C17.00	PAVING AND STRIPING PLAN
C18.00	GRADING PLAN
C19.00	POND PLAN AND SECTION 1
C19.01	POND PLAN AND SECTION 2
C19.02	POND PLAN AND SECTION 3
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C20.00	FIRE PROTECTION PLAN
C21.00	STANDARD DETAILS - ESC
C21.01	STANDARD DETAILS - WATER
C21.02	STANDARD DETAILS - WATER 2
C21.03	STANDARD DETAILS - PAVING
C21.04	STANDARD DETAILS - PAVING 2
C21.05	STANDARD DETAILS - BICYCLE
C21.06	STANDARD DETAILS - DUMPSTER

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THE DRAWING AND WRITTEN MATERIAL HEREIN CONSTITUTE ORIGINAL WORK OF THE ENGINEER, AND AS THE INTELLECTUAL PROPERTY AND INSTRUMENTS OF SERVICE ARE SUBJECT TO COPYRIGHT AND MAY NOT BE REPRODUCED, DISTRIBUTED PUBLISHED OR USED IN ANY WAY WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE ENGINEER.

PROJECT DATA		
LEGAL DESCRIPTION:	AW0016 ANDERSON, J.D. SUR., ACRES 5.000	
LOT ACREAGE:	5.00 ACRES	
CITY PROJECT NUMBER:	SDP-00047	
BENCHMARKS:	BM #1 BOX CUT BY SURVEYOR N=10174826.3378 E=3104144.9252 ELEV.=881.91	
PROPOSED USE:	PLACE OF WORSHIP WITH PARKING AND DETENTION	
IMPERVIOUS COVER TABLE		
EXISTING IMPERVIOUS COVER	9,493 S.F.	4.36%
NEW IMPERVIOUS COVER	137,741 S.F.	63.24%
TOTAL IMPERVIOUS COVER	141,681 S.F.	65.05%
DISTURBED GROUND		
TOTAL DISTURBED GROUND	20,253 S.F.	100%
UTILITY PROVIDERS		
WATER	CITY OF ROUND ROCK	
WASTEWATER	CITY OF ROUND ROCK	
ELECTRIC	ONCOR 350 TEXAS AVE. ROUND ROCK, TEXAS 78665 888.313.6862	
GAS	ATMOS ENERGY 800.460.3030	
PROJECT TEAM		
OWNER/DEVELOPER:	SAINT ALPHONSA SYRO-MALABAR CATHOLIC CHURCH AUSTIN 3600 COUNTY ROAD 175 LEANDER, TX 78641 JOY ALAPPATT, BISHOP PHONE 512-718-6405	
ARCHITECT:	MOD ARCHITECTURE AND DESIGN CAL OTERO, DESIGN DIRECTOR/PARTNER 409 W. MAIN STREET, SUITE 201 ROUND ROCK, TEXAS 78664 PHONE 512.255.2021	
ENGINEER:	HENDERSON PROFESSIONAL ENGINEERS FIRM # F-22208 600 ROUND ROCK WEST DRIVE, SUITE 604 ROUND ROCK, TEXAS 78681 JENNIFER L. HENDERSON, P.E. PHONE 512.350.6228	
LANDSCAPE ARCHITECT:		

NOTES:
1. THIS SITE IS LOCATED ON THE EDWARDS AQUIFER RECHARGE ZONE.
2. NO PORTION OF THE PROJECT SITE IS WITHIN A FLOOD HAZARD AREA AS DELINEATED ON THE FEMA FLOOD INSURANCE RATE MAP PANEL #48491C0470F FOR WILLIAMSON COUNTY, TEXAS AND INCORPORATED AREAS, EFFECTIVE DATE 12/20/2019.
3. THIS PROJECT WILL PROVIDE ON-SITE DETENTION.

GENERAL INFORMATION					
BUILDING SUMMARY (# OF BLDGS)	FLOOR AREA (BLDG S.F.)	# OF STORIES/ BUILDING HEIGHT	USE & OCCUPANCY CLASSIFICATION (PER IBC)	TYPE OF CONSTRUCTION (PER IBC)	IF APPLICABLE TYPE OF AUTOMATIC FIRE SPRINKLER SYSTEM (NFPA 13R OR NFPA 13)
BUILDING #1	20,500	1-15 FEET	A-3	II-B	NONE
BUILDING #2	12,000	1-15 FEET	A-3	II-B	NONE

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

PLAN SUBMITTALS		
NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVAL SIGNATURE
1			
2			
3			
4			
5			

STATE OF TEXAS
JENNIFER L HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

SHEET C00.00

Henderson Professional Engineers
HPE
600 ROUND ROCK WEST DRIVE, SUITE 604
ROUND ROCK, TX 78681
512.350.6228
PELS FIRM #F-22208
Civil Engineering www.hendersonpe.com
WBE210166 | HUB 1853873845300

CITY PERMIT NUMBER

CITY OF ROUND ROCK GENERAL NOTES

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ROUND ROCK (CORR) DESIGN AND CONSTRUCTION STANDARDS (DACS) SPECIFICATIONS MANUAL.
2. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC. (NOT PLANNED FOR DEMOLITION OR REMOVAL) THAT ARE DAMAGED OR REMOVED, SHALL BE REPAIRED, OR REPLACED, AT THE CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION ACTIVITIES. ANY DISCREPANCIES WITH THE CONSTRUCTION PLANS FOUND IN THE FIELD SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER WHO SHALL BE RESPONSIBLE FOR REVISING THE PLANS AS APPROPRIATE. FAILURE TO COMPLETE THIS STEP PRIOR TO COMMENCEMENT OF CONSTRUCTION MAY RESULT IN SIGNIFICANT DELAYS AND/OR EXPENDITURES FOR WHICH THE CITY SHALL NOT BE HELD LIABLE.
4. MANHOLE FRAMES, COVERS, VALVES, CLEANOUTS, ETC. SHALL BE RAISED TO FINISHED GRADE PRIOR TO FINAL PAVING CONSTRUCTION.
5. THE CONTRACTOR SHALL PROVIDE THE CITY OF ROUND ROCK WITH A 48-HOUR NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION. TELEPHONE (512) 218-5428 (PLANNING AND DEVELOPMENT SERVICES DEPARTMENT – PDS)
6. ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THIS INCLUDES ANY AREAS LOCATED OUTSIDE OF THE DEFINED LIMITS OF CONSTRUCTION (LOC), IN RIGHTS-OF-WAY (ROW), OR LOCATED ON ADJACENT PROPERTIES. REVEGETATION OF ALL DISTURBED OR EXPOSED AREAS SHALL CONSIST OF SODDING OR SEEDING, AT THE CONTRACTOR'S DISCREPANCY, AS OUTLINED IN THE CITY'S DESIGN AND CONSTRUCTION STANDARDS. THE TYPE OF REVEGETATION PROVIDED MUST BE EQUIVALENT TO OR EXCEED THE TYPE OF VEGETATION PRESENT PRIOR TO CONSTRUCTION.
7. PRIOR TO ANY CONSTRUCTION, A PRE-CONSTRUCTION MEETING SHALL BE HELD BETWEEN THE CITY OF ROUND ROCK, THE DESIGN ENGINEER, THE CONTRACTOR, SUBCONTRACTORS, OTHER UTILITY COMPANIES, AND ANY AFFECTED PARTIES OR OTHER ENTITY THE CITY OR DESIGN ENGINEER DEEM NECESSARY.
8. THE CONTRACTOR AND THE DESIGN ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE PLANS. CHANGES TO APPROVED, CONSTRUCTION-STAMPED PLANS WILL REQUIRE A REVISION FROM THE DESIGN ENGINEER THAT IS APPROVED BY THE CITY PRIOR TO FIELD USE. THE DESIGN ENGINEER SHALL FURNISH THE CITY OF ROUND ROCK ACCURATE "AS-BUILT" RECORD DRAWINGS FOLLOWING COMPLETION OF ALL CONSTRUCTION. THESE "AS- BUILT" RECORD DRAWINGS SHALL MEET WITH THE SATISFACTION OF THE PLANNING AND DEVELOPMENT SERVICES DEPARTMENT PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.
9. THE CITY OF ROUND ROCK SHALL NOT BE PETITIONED FOR ACCEPTANCE UNTIL ALL NECESSARY EASEMENT DOCUMENTS HAVE BEEN SIGNED AND RECORDED.
10. WHENEVER CONSTRUCTION ACTIVITIES ARE TAKING PLACE WITHIN AN EXISTING EASEMENT, THE CONTRACTOR SHALL CONFINE THEIR WORK TO WITHIN THE BOUNDS OF SAID EASEMENT. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN ANY PERMANENT OR TEMPORARY EASEMENTS. CLEAN-UP SHALL BE TO THE SATISFACTION OF THE CITY OF ROUND ROCK CIVIL INSPECTOR AND/OR THE CITY ENGINEER.
11. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL APPLY FOR AND SECURE ALL PROPER PERMITS FROM THE APPROPRIATE AUTHORITIES.
12. AVAILABLE PERMANENT BENCHMARKS (CITY OF ROUND ROCK DATUM) WITH VERTICAL DATUM INFORMATION THAT MAY BE UTILIZED FOR THE CONSTRUCTION OF THIS PROJECT AND ARE DESCRIBED AS FOLLOWS:

TBM #1- MNS "JPH BENCHMARK"- 707.76' NAVD'88 (GEOID 18)
TBM #2- MNS "JPH BENCHMARK"- 699.72' NAVD'88 (GEOID 18)

TRENCH SAFETY NOTES:

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

WATER AND WASTEWATER NOTES:

1. PIPE MATERIAL FOR WATER MAINS SHALL BE PVC (AWWA C-900, MIN. CLASS 200), OR DUCTILE IRON (AWWA C-100, MIN. CLASS 200). WATER SERVICES (2" OR LESS) SHALL BE POLYETHYLENE TUBING (BLACK, 200 PSI, DR 9).
2. PIPE MATERIAL FOR PRESSURE WASTEWATER MAINS SHALL BE PVC (AWWA C-900, MIN. CLASS 150), SDR26 HIGHER PRESSURE RATED (160 PSI), OR DUCTILE IRON (AWWA C-100, MIN. CLASS 200). PIPE MATERIAL FOR GRAVITY WASTEWATER MAINS SHALL BE SDR26 PVC, PVC (ASTM D2241 OR D3034, MAX. DR-26), DUCTILE IRON (AWWA C-100, MIN. CLASS 200).
3. UNLESS OTHERWISE ACCEPTED BY THE PLANNING AND DEVELOPMENT SERVICES DEPARTMENT, MINIMUM DEPTH OF COVER FOR ALL LINES OUTSIDE OF THE PAVED AREAS SHALL BE 42" BELOW FINISHED GRADE AND 30" BELOW SUBGRADE FOR ALL LINES LOCATED IN PAVED AREAS.
4. ALL FIRE HYDRANT AND SPRINKLER LEADS SHALL BE DUCTILE IRON PIPE (AWWA C-100, MIN. CLASS 200).
5. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH A MINIMUM OF 8-MIL POLYETHYLENE AND SEALED WITH DUCT TAPE OR EQUAL ACCEPTED BY THE CITY OF ROUND ROCK CIVIL INSPECTOR.
6. THE CONTRACTOR SHALL CONTACT THE CITY OF ROUND ROCK INSPECTOR TO COORDINATE UTILITY TIE-INS AND NOTIFY THEM AT LEAST 48 HOURS PRIOR TO CONNECTING TO ANY EXISTING LINES.
7. ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON RING AND COVER. ALL MANHOLES LOCATED OUTSIDE OF THE PAVEMENT SHALL HAVE BOLTED COVERS. CORE CONNECTIONS TO FIBERGLASS MANHOLES ARE PROHIBITED.
8. THE CONTRACTOR MUST OBTAIN A BULK WATER PERMIT OR PURCHASE AND INSTALL A WATER METER FOR ALL WATER USED DURING CONSTRUCTION. A COPY OF THIS PERMIT MUST ALWAYS BE POSSESSED BY ANY PARTIES WHO UTILIZE WATER. CONTACT WATER DISTRIBUTION AT (512) 801-4435 FOR ADDITIONAL INFORMATION.
9. LINE FLUSHING, OR ANY ACTIVITY USING A LARGE QUANTITY OF WATER, MUST BE SCHEDULED A MINIMUM (10) DAYS IN ADVANCE WITH THE CITY OF ROUND ROCK CIVIL INSPECTOR.
10. THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM STERILIZATION OF ALL POTABLE WATER LINES CONSTRUCTED AND SHALL PROVIDE ALL EQUIPMENT (INCLUDING TEST GAUGES), SUPPLIES (INCLUDING CONCENTRATED CHLORINE DISINFECTING MATERIAL), AND NECESSARY LABOR REQUIRED FOR THE STERILIZATION PROCEDURE. THE STERILIZATION PROCEDURE SHALL BE MONITORED BY THE CITY OF ROUND ROCK CIVIL INSPECTOR. WATER SAMPLES WILL BE COLLECTED BY THE CITY OF ROUND ROCK TO VERIFY EACH TREATED LINE HAS ATTAINED AN INITIAL CHLORINE CONCENTRATION OF 50 PPM. WHERE MEANS OF FLUSHING IS NECESSARY, THE CONTRACTOR, AT HIS EXPENSE, SHALL PROVIDE FLUSHING DEVICES AND REMOVE SAID DEVICES PRIOR TO FINAL ACCEPTANCE BY THE CITY OF ROUND ROCK.
11. SAMPLING TAPS SHALL BE BROUGHT UP TO 3 FEET ABOVE GRADE AND SHALL BE EASILY ACCESSIBLE FOR CITY PERSONNEL. AT THE CONTRACTOR'S REQUEST, AND IN THEIR PRESENCE, SAMPLES FOR BACTERIOLOGICAL TESTING WILL BE COLLECTED BY THE CITY OF ROUND ROCK NOT LESS THAN (24) HOURS AFTER THE TREATED LINE HAS BEEN FLUSHED OF THE CONCENTRATED CHLORINE SOLUTION AND CHARGED WITH WATER APPROVED BY THE CITY. THE CONTRACTOR SHALL SUPPLY A CHECK OR MONEY ORDER, PAYABLE TO THE CITY OF ROUND ROCK, TO COVER THE FEE CHARGED FOR TESTING EACH WATER SAMPLE. FEE AMOUNTS MAY BE OBTAINED BY CONTACTING THE 11 CITY OF ROUND ROCK ENVIRONMENTAL SERVICES LABORATORY AT (512) 218-5561 OR WATERLAB@ROUNDROCKTEXAS.GOV.
12. THE CONTRACTOR, AT THEIR EXPENSE, SHALL PERFORM QUALITY TESTING FOR ALL WASTEWATER PIPE INSTALLED AND PRESSURE PIPE HYDROSTATIC TESTING OF ALL WATERLINES CONSTRUCTED. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT (INCLUDING PUMPS AND GAUGES), SUPPLIES, AND LABOR NECESSARY TO PERFORM THESE TESTS. QUALITY AND PRESSURE TESTING SHALL BE MONITORED BY THE CITY OF ROUND ROCK CIVIL INSPECTOR.
13. THE CONTRACTOR SHALL COORDINATE TESTING WITH THE CITY OF ROUND ROCK CIVIL INSPECTOR AND PROVIDE NO LESS THAN (24) HOURS OF NOTICE PRIOR TO PERFORMING STERILIZATION, QUALITY TESTING, OR PRESSURE TESTING.
14. THE CONTRACTOR (OR SUBCONTRACTORS) SHALL NOT OPEN OR CLOSE ANY VALVES UNLESS DIRECTED TO DO SO BY CITY OF ROUND ROCK PERSONNEL.
15. ALL VALVE BOXES AND COVERS SHALL BE CAST IRON.
16. ALL WATER SERVICE, WASTEWATER SERVICE AND VALVE LOCATIONS SHALL BE APPROPRIATELY MARKED AS FOLLOWS:
    - WATER SERVICE "W" ON TOP OF CURB (BLUE COLOR)
    - WASTEWATER SERVICE "S" ON TOP OF CURB
    - VALVE "V" ON FACE OF CURB
17. 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 DESIGN ENGINEER AND APPROVED BY THE CITY OF ROUND ROCK.
18. CONTACT THE CITY OF ROUND ROCK UTILITIES AND ENVIRONMENTAL SERVICES (UES) DEPARTMENT FOR ASSISTANCE IN DETERMINING EXISTING WATER AND WASTEWATER LOCATIONS.
19. THE CITY OF ROUND ROCK FIRE DEPARTMENT SHALL BE NOTIFIED (48) HOURS PRIOR TO THE TESTING OF ANY BUILDING SPRINKLER PIPING SO THAT THEY MAY BE PRESENT TO MONITOR SUCH TESTING.
20. SAND, AS DESCRIBED IN SPECIFICATION ITEM 510 PIPE, SHALL NOT BE USED AS BEDDING FOR WATER AND WASTEWATER LINES. ACCEPTABLE BEDDING MATERIALS ARE PIPE BEDDING STONE, PEA GRAVEL AND, IN LIEU OF SAND, A NATURALLY OCCURRING OR MANUFACTURED STONE MATERIAL CONFORMING TO ASTM C33 FOR STONE QUALITY AND MEETING THE FOLLOWING GRADATION SPECIFICATION:

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

21. THE CONTRACTOR IS HEREBY NOTIFIED THAT CONNECTING TO, SHUTTING DOWN, OR TERMINATING EXISTING UTILITY LINES MAY HAVE TO OCCUR AT OFF-PEAK HOURS. SUCH HOURS ARE USUALLY OUTSIDE NORMAL WORKING HOURS (7AM – 4 PM) AND POSSIBLY BETWEEN 12 AM AND 6 AM.
22. ALL WASTEWATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) REGULATIONS, 30 TAC CHAPTER 213 AND 217, AS APPLICABLE. ALL WATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH TCEQ REGULATIONS, 30 TAC CHAPTER 290. WHENEVER TCEQ AND CITY OF ROUND ROCK SPECIFICATIONS CONFLICT, THE MORE STRINGENT SHALL APPLY.

TRAFFIC MARKING NOTES:

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

EROSION AND SEDIMENTATION CONTROL NOTES:

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

WATER			
PIPE SIZE	TYPE	LENGTH (LF)	VOL. (GAL.)
1.5"	BLACK POLY	1250	114.74

VALVES		
SIZE	TOTAL	BRAND
1.5"	4	MUELLER CO.

SIDEWALK	
TOTAL	LF
20'	60

FIRE HYDRANTS	
TOTAL	BRAND
2	AMERICAN STANDARD

STREET AND DRAINAGE NOTES:

1. ALL TESTING SHALL BE DONE BY AN INDEPENDENT LABORATORY AT THE OWNER'S EXPENSE. ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR. A CITY INSPECTOR SHALL BE PRESENT DURING ALL TESTS. TESTING SHALL BE COORDINATED WITH THE CITY INSPECTOR, AND THEY SHALL BE GIVEN A MINIMUM 24-HOUR NOTICE PRIOR TO ANY TESTING.
2. PUBLIC ROADWAYS CONSTRUCTED AS PART OF ANY DEVELOPMENT PERMIT SHALL BE FREE FROM DEFECTS, PATCHES, OR REPAIRS PRIOR TO ACCEPTANCE BY THE CITY OF ROUND ROCK. ROADWAYS SHALL HAVE A CLEAR SURFACE FREE FROM ANY GOUGES, MARRING, OR CRACKING TO BE CONSIDERED SUITABLE TO THE CITY OF ROUND ROCK TRANSPORTATION DEPT. NO NEW ROADWAYS SHALL BE ACCEPTED UNTIL ALL CONSTRUCTION TRAFFIC RELATED TO THIS OR ANY ASSOCIATED PERMIT HAS CEASED, AND THE ROADWAY IS OPEN TO AND EXCLUSIVELY USED BY THE GENERAL PUBLIC.
3. BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF 95% MAXIMUM DENSITY TO WITHIN 3" OF TOP OF CURB. MATERIAL USED SHALL BE PRIMARILY GRANULAR WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE REMAINING 3" SHALL BE CLEAN TOPSOIL FREE FROM ALL CLUMPS AND SUITABLE FOR SUSTAINING PLANT LIFE.
4. THE DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT INCLUDING GAS, ELECTRIC, TELEPHONE, CABLE TV, WATER SERVICES, ETC. SHALL BE A MINIMUM OF 30" BELOW SUBGRADE.
5. STREET RIGHTS-OF-WAY SHALL BE GRADED AT A SLOPE OF 1/4" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED. HOWEVER, IN NO CASE SHALL THE WIDTH OF RIGHT-OF-WAY AT 1/4" PER FOOT SLOPE BE LESS THAN 10 FEET UNLESS A SPECIFIC REQUEST FOR AN ALTERNATE GRADING SCHEME IS SUBMITTED TO AND APPROVED BY THE CITY OF ROUND ROCK PLANNING AND DEVELOPMENT SERVICES DEPARTMENT.
6. BARRICADES, BUILT TO CITY OF ROUND ROCK STANDARDS, SHALL BE CONSTRUCTED ON ALL DEAD-END STREETS AND, AS NECESSARY, DURING CONSTRUCTION TO MAINTAIN JOB AND PUBLIC SAFETY.
7. ALL REINFORCED CONCRETE PIPE (RCP) SHALL BE MINIMUM CLASS III. ALL PUBLIC RCP SHALL BE A MINIMUM OF 18-INCHES IN DIAMETER.
8. THE SUBGRADE MATERIAL FOR THE STREETS SHOWN HEREIN WAS TESTED BYALEXANDER CONSULTING ENGINEERS, INC. (F-1967) ON DECEMBER 22, 2022 BY MICHAEL ALEXANDER, P.E. (39253), AND THE PAVING SECTIONS DESIGNED IN ACCORDANCE WITH THE CURRENT CITY OF ROUND ROCK DESIGN CRITERIA. THE PAVING SECTIONS ARE TO BE CONSTRUCTED AS FOLLOWS:

STREET NAME	STATIONING	FLEX.BASE THICKNESS	HMAC THICKNESS	LIME STAB. THICKNESS
LOOP ROAD			5"	6"
PARKING LOT			5"	6"

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

9. WHERE PLASTICITY INDEX (PI) IS OVER 20, SUBGRADES MUST BE STABILIZED UTILIZING A METHOD ACCEPTABLE TO THE PLANNING AND DEVELOPMENT SERVICES DEPARTMENT. THE GEOTECHNICAL ENGINEER SHALL RECOMMEND AN APPROPRIATE SUBGRADE STABILIZATION IF SULFATES ARE DETERMINED TO BE PRESENT. WHEN UTILIZING LIME FOR SOIL STABILIZATION, PLACEMENT SHALL BE IN THE FORM OF LIME SLURRY, NOT PELLETS.
10.

FIELD DENSITY CONTROL REQUIREMENTS		
SOIL DESCRIPTION	DENSITY,PERCENT	MOISTURE CONTENT
	TEX-115-E	
PI < 15	≥ 98% D_A* AND ≤ 105% D_A	N/A
15 ≤ PI ≤ 35	≥ 98% D_A* AND ≤ 102% D_A	≥ W_{OPT} + 3%
PI > 35	≥ 95% D_A* AND ≤ 100% D_A	≥ W_{OPT} + 3%

WOMEN OWNED
CERTIFIED BY | WOMEN'S BUSINESS ENTERPRISE NATIONAL COUNCIL

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Henderson Professional Engineers
600 ROUND ROCK WEST DRIVE, SUITE 604
ROUND ROCK, TX 78681
512.350.6228
PELS FIRM #F-22208
www.hendersonpe.com
HPE
Civil Engineering
WBE210166 | HUB 1853873845300

No.	REVISION
1	
2	
3	
4	
5	

SITE DEVELOPMENT PLANS TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

GENERAL NOTES

STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

C01.00

CITY PERMIT NUMBER

Plotted by: Home PC, Plot date: 29/04/2025
File name: C:\Users\Home PC\Watmov Engineers Private Limited\Sandeep Chavda - 230808 ST. ALPHONSA CHURCH\230808 ST. ALPHONSA CHURCH\07 SHEET\SD\230808 NOTES AND LEGEND.dwg

GENERAL NOTES:

1. ENGINEER OF RECORD SHALL BE NOTIFIED IN WRITING 48-HOURS PRIOR TO THE START OF CONSTRUCTION
2. BLASTING IS NOT PERMITTED ON THIS PROJECT UNDER ANY CIRCUMSTANCE. SHOULD BLASTING BE NECESSARY PLEASE NOTIFY THE ENGINEER OF RECORD.
3. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
4. THESE PLANS DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE REGISTERED PROFESSIONAL ENGINEER(S) HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED IN THE WORK.
5. THE TRENCH EXCAVATION AND SHORING SAFETY SYSTEM, AS OUTLINED IN THE TECHNICAL SPECIFICATIONS, WILL BE REQUIRED AS A MINIMUM TRENCH SAFETY MEASURE.
6. CONTRACTOR SHALL ASSURE HIMSELF THAT ALL CONSTRUCTION PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF WORK. REQUIRED PERMITS THAT CAN ONLY BE ISSUED TO CONTRACTOR ARE TO BE OBTAINED AT THE CONTRACTORS EXPENSE.
7. CONTRACTOR SHALL GIVE A MINIMUM OF 48 HOURS NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES AFFECTED BY HIS OPERATIONS PRIOR TO COMMENCEMENT OF WORK.
8. CONTRACTOR SHALL TAKE ALL DUE PRECAUTIONS TO PROTECT EXISTING FACILITIES FROM DAMAGE. ANY DAMAGE TO EXISTING FACILITIES INCURRED AS A RESULT OF THESE CONSTRUCTION OPERATIONS ARE TO BE REPAIRED IMMEDIATELY BY THE CONTRACTOR TO AT LEAST THE PRE-EXISTING CONDITION AT NO ADDITIONAL COST TO OWNER.
9. LOCATION OF EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE. NO WARRANTY IS IMPLIED AS TO THE ACTUAL LOCATION OF EXISTING UTILITIES. CONTRACTOR MUST FIELD VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
10. WHEN UNLOCATED OR INCORRECTLY LOCATED UNDERGROUND PIPING OR A BREAK IN A LINE OR OTHER UTILITIES AND SERVICES ARE ENCOUNTERED DURING SITE WORK OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITY COMPANY IMMEDIATELY TO OBTAIN PROCEDURE DIRECTIONS. THE CONTRACTOR SHALL COOPERATE WITH THE APPLICABLE UTILITY COMPANY IN MAINTAINING ACTIVE SERVICES IN OPERATION.
11. THE CONTRACTOR SHALL MAINTAIN ACCESS TO PUBLIC AND PRIVATE FACILITIES DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES TO BE COORDINATED WITH THE OWNER.
12. THE CONTRACTOR SHALL COORDINATE INTERRUPTIONS OF ALL UTILITIES AND SERVICES WITH APPLICABLE UTILITY COMPANY OR COMPANIES. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY COMPANY OR AGENCY INVOLVED.
13. 1THE CONTRACTOR SHALL LOCATE, PROTECT, AND MAINTAIN BENCHMARKS, MONUMENTS, AND CONTROL POINTS. RE-ESTABLISH DISTURBED OR DESTROYED ITEMS BY REGISTERED PUBLIC SURVEYOR IN THE STATE OF TEXAS AT NO ADDITIONAL COST TO OWNER.
14. EXISTING PAVING, BUILDING, AND OTHER ITEMS SHOWN ON THESE PLANS NOT SPECIFICALLY RELATED TO THE WORK OF THE CONTRACTOR IS FOR INFORMATION ONLY.
15. DEMOLITION PERMITS (IF NEEDED) ARE TO BE OBTAINED BY THE CONTRACTOR.
16. EXISTING SURFACE AND SUBSURFACE STRUCTURES (GAS MAINS, WATER MAINS, STORM SEWER, TELEPHONE CABLES, ETC.) ARE SHOWN ON THE PLANS IF THEIR LOCATION HAS BEEN DETERMINED, BUT IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO AVOID DAMAGING THESE EXISTING STRUCTURES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. THE OWNER AND ENGINEER ASSUME NO RESPONSIBILITY FOR FAILURE TO SHOW ANY OR ALL OF THESE STRUCTURES ON THE PLANS OR TO SHOW THEM IN THEIR EXACT LOCATION. IF ANY STRUCTURE IS DAMAGED BY THE CONTRACTOR, IT SHALL BE HIS RESPONSIBILITY TO REPAIR THE DAMAGE AT HIS EXPENSE AND RESTORE THE STRUCTURE TO IT'S ORIGINAL CONDITION.
17. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY LOCATIONS, ELEVATIONS AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCE, IF REQUIRED. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM THE CONTRACTORS OPERATIONS SHALL BE RESTORED AT HIS EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES.
18. ALL CONCEPTS, IDEAS, DESIGNS, ARRANGEMENTS, AND PLANS INDICATED OR REPRESENTED BY THESE INSTRUMENTS, AS OUTLINED ON THE TITLE SHEET INDEX, AND BY ANY ADDENDUM ARE OWNED BY AND ARE THE PROPERTY OF HENDERSON PROFESSIONAL ENGINEERS, L.L.C. AND WERE CREATED AND DEVELOPED FOR THE USE ON AND IN CONNECTION WITH THE SPECIFIED PROJECT. THESE CONCEPTS, IDEAS, DESIGN, ARRANGEMENTS, OR PLANS SHALL NOT BE USED BY ANY PERSON, FIRM OR CORPORATION FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION AND CONSENT OF HENDERSON PROFESSIONAL ENGINEERS WHOSE CONTACT INFO IS FOUND IN THE TITLE BLOCK OF EVERY PLAN SHEET.
19. A PRE-CONSTRUCTION CONFERENCE IS TO BE HELD PRIOR TO BEGINNING CONSTRUCTION. THE CONFERENCE SHALL TAKE PLACE EITHER VIRTUALLY OR AT A LOCATION AND TIME SELECTED BY OWNER AND ENGINEER. CONTRACTOR TO ARRANGE ENGINEER, OWNER AND PERTINENT SUB CONTRACTOR ATTENDANCE AT THIS MEETING.
20. CONTRACTOR SHALL NOTIFY THE TEXAS ONE CALL CENTER PRIOR TO ANY CONSTRUCTION.
21. IN THE EVENT OF A DISCREPANCY WITHIN THE PLANS OR BETWEEN THE PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL BE REQUIRED TO PERFORM THE MOST INVOLVED WORK TO SATISFY THE INTENT OF THE PROJECT.
22. TOPSOIL REPLACEMENT IS REQUIRED IN ALL AREAS. AREAS OF BACKFILL, EXCAVATION, OR GRADING SHALL BE BROUGHT TO WITHIN SIX INCHES OF FINAL GRADE AND BROUGHT TO GRADE WITH COMPACTED TOP SOIL. DISTURBED AREA BETWEEN ROW AND EDGE OF PAVEMENT TO BE VEGETATED ACCORDING TO COSA ITEM 516 "HYDROMULCH."
23. MAIL SERVICE SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. PAYMENT FOR REMOVAL, TEMPORARY RELOCATION AND PERMANENT LOCATION OF ALL MAILBOXES SHALL CONSIDERED SUBSIDIARY TO OTHER ITEMS OF WORK.
24. EXISTING SIGNS TO BE RELOCATED TO WITHIN A MINIMUM OF SEVEN FEET FROM THE PROPOSED EDGE OF PAVEMENT.
25. SHOULD HENDERSON PROFESSIONAL ENGINEERS INSTALL SIGNAGE AT THE CONSTRUCTION SITE THEN ANY DAMAGES OR ISSUES SHOULD BE IMMEDIATELY CONVEYED TO THE ENGINEER OF RECORD FOR REMEDIATION.

GENERAL ENVIRONMENTAL NOTES:

1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS REGARDING EXCESS AND WASTE MATERIALS, INCLUDING METHODS OF HANDLING AND DISPOSAL.
2. CONTRACTOR SHALL LOCATE MATERIAL STORAGE AREAS AWAY FROM STORM WATER CONVEYANCE SYSTEMS. PROVIDE PROTECTED STORAGE AREAS FOR CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS, AND OTHER POTENTIALLY TOXIC MATERIALS.
3. FUEL STORAGE IS ALLOWED ON THIS PROJECT AND SHALL BE IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS.
4. THE CONTRACTOR SHALL ADVISE OWNER IMMEDIATELY, VERBALLY AND IN WRITING, OF ANY FUEL OR TOXIC MATERIALS SPILLS WITHIN THE PROJECT/CONSTRUCTION AREA AND THE ACTIONS TO BE TAKEN TO REMEDY THE PROBLEM.
5. THE CONTRACTOR SHALL DISPOSE OF FUELS, HAZARDOUS MATERIALS, AND CONTAMINATED EXCAVATIONS IN A LEGALLY APPROVED MANNER.
6. NO OPEN BURNING IS ALLOWED ON THIS PROJECT.

STORM WATER NOTES:

1. THROUGHOUT THE CONSTRUCTION, AND AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL ASSURE THAT DRAINAGE OF STORM WATER RUNOFF IS NOT BLOCKED.
2. MODIFICATIONS TO ANY STORM CONVEYANCE SYSTEM MUST BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD TO ENSURE GENERAL CONFORMANCE WITH APPLICABLE PERMITS.
3. CONSTRUCTION MEANS AND METHODS SHALL BE USED TO ENSURE RUNOFF FROM THE SITE IS CONTROLLED THROUGH THE DURATION OF THE PROJECT. PONDS MAY BE ROUGH CUT WHEN NECESSARY.

SITE GRADING NOTES:

1. THE CONTRACTOR SHALL CONTROL DUST CAUSED BY THE WORK AND COMPLY WITH POLLUTION CONTROL REGULATIONS OF GOVERNING AUTHORITIES.
2. ALL EXCESS EXCAVATED MATERIAL IS TO BE REMOVED FROM THE SITE. THE EXCESS EXCAVATION MATERIAL SHALL NOT BE STOCKPILED.
3. ADJUST MANHOLES COVERS, VALVE BOXES, ELECTRICAL MANHOLES, ETC. TO MATCH PROPOSED FINISHED GRADE (NO SEPARATE PAY).

PAVING NOTES / TRAFFIC CONTROL NOTES:

1. ANY EXISTING PAVEMENT, CURBS, AND/OR SIDEWALK DAMAGED OR REMOVED BY THE CONTRACTOR ARE TO BE REPAIRED BY THE CONTRACTOR TO AT LEAST THE PRE-EXISTING CONDITION AT HIS EXPENSE BEFORE ACCEPTANCE OF THE WORK.
2. TRAFFIC CONTROLS DURING CONSTRUCTION TO BE CONTRACTORS RESPONSIBILITY AND INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
3. THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE TRAFFIC LANE OPEN AT ALL TIMES DURING CONSTRUCTION (ALL AFFECTED STREETS).

CONCRETE CONSTRUCTION NOTES:

1. ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH AS NOTED IN THE PLANS.
2. ALL REINFORCING BARS SHALL CONFORM TO ASTM A-305 AND ASTM A-316, GRADE 60.
3. ALL CONCRETE AND REINFORCING STEEL SHALL CONFORM TO CURRENT A.C.I. CODE.
4. ALL BAR SPLICES, CORNER DOWELS, AND JOINT DOWELS SHALL HAVE A MINIMUM LAP LENGTH OF 40 BAR DIAMETERS OR 30", WHICHEVER IS GREATER.
5. NO FLY ASH ADDITIVES WILL BE PERMITTED IN STRUCTURAL CONCRETE.

UTILITY NOTES:

1. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION OF THE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND AVOIDING ALL EXISTING UTILITIES.
2. ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND VERIFIED BY THE OWNER'S TESTING PROVIDER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE. EACH MATERIAL SHALL BE COMPACTED AS SPECIFIED AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS TEX-113-E, TEX-114-E, TEX-115-E. THE NUMBER OF LOCATIONS OF REQUIRED TESTS SHALL BE DETERMINED BY THE ENGINEER, APPROVED BY THE STREET INSPECTOR AND AGREED TO AT THE PRE-CONSTRUCTION MEETING. UPON COMPLETION OF TESTING THE OWNER'S TESTING PROVIDER SHALL PROVIDE THE STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

SAFETY FENCE NOTES:

1. SAFETY FENCE, WHEN NECESSARY, SHALL BE USED TO PROTECT ALL EXCAVATIONS AND TO SEPARATE CONSTRUCTION ACTIVITIES FROM PEDESTRIAN, DURING THE ENTIRE CONSTRUCTION PERIOD.
2. ALL SAFETY FENCING SHALL BE PLASTIC, 4' MINIMUM HEIGHT AND ORANGE IN COLOR.
3. SAFETY FENCE USED WITHIN THE ROADWAY SHALL BE REFLECTORIZED WITH A MINIMUM OF TWO (2) STRIPS OF RETROREFLECTIVE MATERIAL. A MINIMUM OF 1' WIDE THE LENGTH OF THE FENCE OR DELINEATED BY CHANNELIZING DEVICES.
4. SAFETY FENCE USED TO SEPARATE SIDEWALKS FROM CONSTRUCTION ACTIVITIES SHALL HAVE MINIMUM ENCROACHMENT TO THE SIDEWALK.
5. FENCE MATERIAL SHALL BE SUPPORTED FROM 1/4" DIA. NYLON ROPE FROM POSTS SPACED ON A MAXIMUM 8 FT. CENTERS. POSTS SHALL EXTEND 4' ABOVE NATURAL GROUND. FENCE MATERIAL SHALL BE SECURED TO POSTS W/ PLASTIC WIRE TIES, MINIMUM 3 PER POST.
6. POST SHALL INCLUDE SUPPORT BRACES SUFFICIENT TO HANDLE ALL LOADS.
7. PAYMENT FOR SECURITY FENCE SHALL BE BASED ON A LUMP SUM FOR EACH EXTENSION INCLUDING ALL INCIDENTAL WORK (LABOR, MATERIALS, EQUIPMENT, ETC.)

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL SAFETY/EQUIPMENT CONSULTANT, IF ANY SHALL REVIEW THESE PLANS AND ANY GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

SPECIAL CONDITIONS AND NOTES:

1. EXISTING UTILITIES IN THE AREA ARE SHOWN IN ACCORDANCE WITH ASCE 38-02 "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA" AS SPECIFIED IN THE SIGNED CONTRACT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE TEXAS ONE CALL CENTER PRIOR TO THE START OF ANY CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.
2. ALL UTILITY SYMBOLS SHOWN REPRESENT APPROXIMATE LOCATIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REFER TO THE APPROPRIATE AGENCY'S STANDARD SPECIFICATIONS AND INSTALLATION DETAILS FOR ACTUAL LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. IN THE EVENT THESE NOTES CONTRADICT OR ARE IN CONFLICT WITH THE MUNICAPLITY NOTES, THE MORE STRINGENT REQUIREMENT SHALL BE FOLLOWED.
4. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO THE PRE-CONSTRUCTION MEETING AND A COPY SHALL BE AVAILABLE ON-SITE AT ALL TIMES.

TCEQ GENERAL CONSTRUCTION NOTES:

1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
   - THE NAME OF THE APPROVED PROJECT;
   - THE ACTIVITY START DATE; AND
   - THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
4. NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.
5. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
6. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.
7. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN TCEQ-0592 (REV. JULY 15, 2015) PAGE 2 OF 2 WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.
8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.
10. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.
11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:
   - THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
   - THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND
   - THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
   A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;
   B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
   C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

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No.	REVISION
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SITE DEVELOPMENT PLANS
TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

CONSTRUCTION NOTES



PROJECT NO. 230808	
04/29/2025	
DRAWN BY: AR	
CHECKED BY: DR	
APPROVED BY: JH	

C01.01

CITY PERMIT NUMBER

Plotted by: Home PC, Plot date: 29/04/2025
File name: C:\Users\Home PC\Watmov Engineers Private Limited\Sandeep Chavda - 230808 ST. ALPHONSA CHURCH\230808 ST. ALPHONSA CHURCH\07 Sheet\SD\230808 NOTES AND LEGEND.dwg

LEGEND

EXISTING WROUGHT IRON FENCE

EXISTING CHAIN LINK FENCE

EXISTING WIRE FENCE

EXISTING WOOD FENCE

EX OE — EXISTING OVERHEAD ELECTRIC LINE

EX UE — EXISTING UNDERGROUND ELECTRIC LINE

EX FOC — EXISTING FIBER OPTIC LINE

EX GAS — EXISTING GAS LINE

EX WW — EXISTING WASTEWATER LINE
(THICKNESS INDICATES INNER PIPE DIAMETER)

EX SD — EXISTING STORM SEWER LINE
(THICKNESS INDICATES INNER PIPE DIAMETER)

EX OT — EXISTING OVERHEAD TELEPHONE LINE

EX UT — EXISTING UNDERGROUND TELEPHONE LINE

EX W — EXISTING WATER LINE
(THICKNESS INDICATES INNER PIPE DIAMETER)

599 / 600 — EXISTING CONTOURS,
WITH ELEVATION LABELED

EXISTING CURB AND GUTTER

EXISTING WASTEWATER MANHOLE
(DRAWN TO SCALE)

EX. CO — EXISTING WASTEWATER CLEANOUT

D — EXISTING STORM SEWER MANHOLE

D — EXISTING CURB INLET

EXISTING FDC

EXISTING FIRE HYDRANT

EXISTING GATE VALVE

EXISTING LIGHT POLE

TAG / TAG — EXISTING TREES / HERITAGE TREES
(SIZE ADJUSTED PER TREE)
TAG REFERS TO TREE SURVEY DATA TABLE

WM — EXISTING WATER METER

W — EXISTING WATER WELL

EXISTING HOSE BIB/FAUCET

EXISTING UTILITY POLE

SIGN TEXT — EXISTING SIGN (TEXT VARIES)

T — EXISTING TELEPHONE RISER

CATV — EXISTING CABLE/TV BOX

GM — EXISTING GAS METER

PB — EXISTING PULL BOX

E — EXISTING ELECTRIC METER

EXISTING GUY WIRE

MB — EXISTING MAILBOX

FOUND PIN

SET PIN

W — NEW WATER LINE

W — NEW FIRE LINE

NEW WASTEWATER LINE (WIDTH REPRESENTS PIPE O.D.)

NEW STORM SEWER LINE (WIDTH REPRESENTS PIPE O.D.)

NEW WROUGHT IRON FENCE

NEW CHAIN LINK FENCE

NEW WIRE FENCE

NEW WOOD FENCE

NEW CURB AND GUTTER

LOC — LIMITS OF CONSTRUCTION

ADA — ACCESSIBLE ROUTE

NEW WASTEWATER MANHOLE
(DRAWN TO SCALE)

NEW WASTEWATER CLEANOUT

NEW GATE VALVE

NEW LIGHT POLE

NEW FIRE DEPARTMENT CONNECTION

NEW FIRE HYDRANT

NEW GRATE INLET

8 — PARKING LABEL

512 — PROPOSED CONTOUR

ABBREVIATIONS LEGEND

EX.	EXISTING
O.C.E.W.	ON CENTER, EACH WAY
TYP.	TYPICAL
APPROX.	APPROXIMATE
O.P.R.W.C.	OFFICIAL PUBLIC RECORD WILLIAMSON COUNTY
O.P.R.T.C.	OFFICIAL PUBLIC RECORD TRAVIS COUNTY
A.D.A.	AMERICANS WITH DISABILITIES ACT
O.D.	OUTSIDE DIAMETER (PIPE)
R.O.W.	RIGHT-OF-WAY
DOC. NO.	DOCUMENT NUMBER
VOL/PG.	VOLUME/PAGE
A.D.T.	AVERAGE DAILY TRAFFIC
M.P.H.	MILES PER HOUR
AC.	ACRE
SQ. FT.	SQUARE FEET
L.F.	LINEAR FEET

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SITE DEVELOPMENT PLANS
TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

LEGEND AND ABBREVIATIONS

STATE OF TEXAS
JENNIFER L HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/08/2025

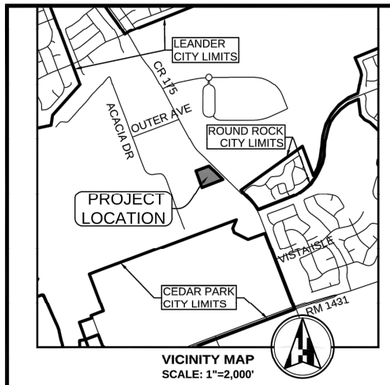
PROJECT NO. 230808	
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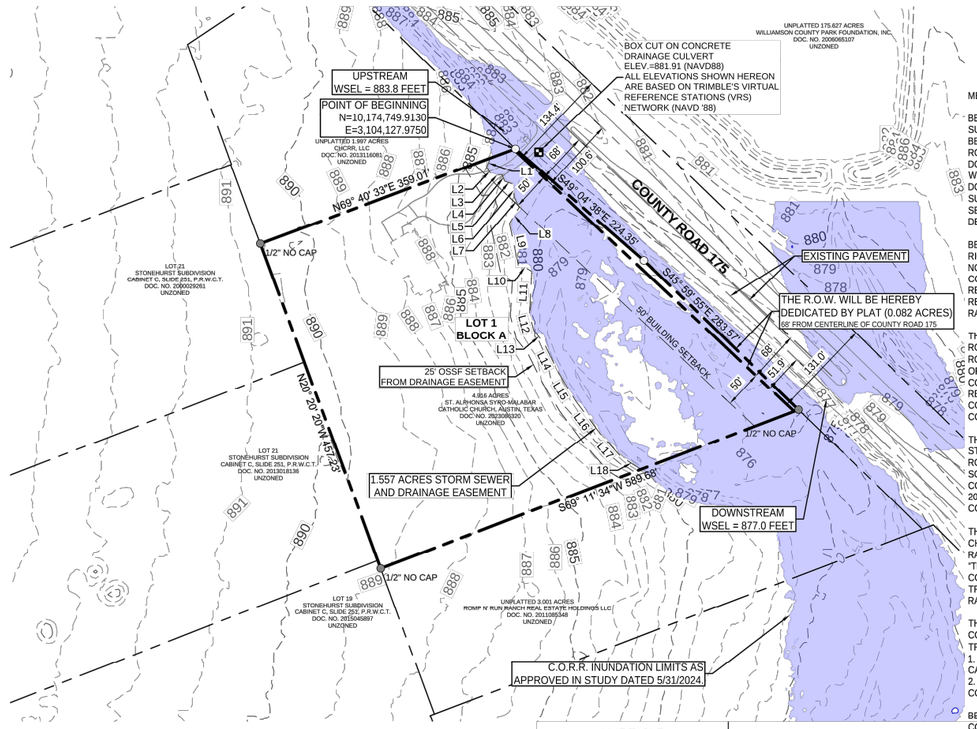
FINAL PLAT
OF
SAINT ALPHONSA CATHOLIC CHURCH



VICINITY MAP
SCALE: 1"=2,000'

LEGEND

○	IRON ROD SET, CAPPED "TLS"
◉	IRON ROD FOUND
⊡	BENCHMARK
———	PROPERTY LINE
——— – – ———	ADJOINING PROPERTY LINE
——— – – ———	EXISTING ROAD CENTERLINE
———	EXISTING ASPHALT
— — — —	BUILDING SETBACK
— — — —	OSSF SETBACK
OPRWC	OFFICIAL PUBLIC RECORDS WILLIAMSON COUNTY
DOC. NO.	DOCUMENT NUMBER



0 100 200
SCALE: 1"=100'

BEARINGS CITED HEREON BASED ON STATE PLANE COORDINATES, GRID NORTH, CENTRAL ZONE, TEXAS NAD 83 (93).

METES AND BOUNDS:

BEING 4.916 ACRES OF LAND SITUATED IN THE JOHN D. ANDERSON SURVEY, ABSTRAT NO. 16 IN WILLIAMSON COUNTY, TEXAS, AND BEING THAT TRACT CALLED 5.00 ACRES CONVEYED TO ROUND ROCK RAIDERS CHRISTIAN ATHLETICS, LLC, RECORDED AS DOCUMENT NO. 2020085778, OFFICIAL PUBLIC RECORDS, WILLIAMSON COUNTY, TEXAS, BEING FULLY DESCRIBED IN DOCUMENT NO. 2019051708, SAID OFFICIAL PUBLIC RECORDS, AS SURVEYED ON THE GROUND ON THIS THE 18TH DAY OF SEPTEMBER, 2023 BY TEXAS LAND SURVEYING, INC., AND FURTHER DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING: AT A 1/2" IRON ROD FOUND IN THE SOUTHWEST RIGHT-OF-WAY MARGIN OF COUNTY ROAD 175, FOR THE NORTHWEST CORNER OF THAT TRACT DESCRIBED AS 3.001 ACRES CONVEYED TO ROMP N' RUN RANCH REAL ESTATE HOLDINGS. LLC, RECORDED AS DOCUMENT NO. 2011085348, SAID OFFICIAL PUBLIC RECORDS, BEING THE SOUTHEAST CORNER OF SAID ROUND ROCK RAIDERS TRACT AND THIS TRACT;

THENCE: S 69°11'34" W, 589.68 FEET WITH THE NORTH LINE OF SAID ROMP N' RUN RANCH TRACT AND THE SOUTH LINE OF SAID ROUND ROCK RAIDERS TRACT TO A 1/2" IRON ROD FOUND IN THE EAST LINE OF STONEHURST, A SUBDIVISION SITUATED IN WILLIAMSON COUNTY, TEXAS, RECOEDED IN CABINET C, SLIDE 251, PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS, FOR THE NORTHWEST CORNER OF SAID ROMP N' RUN RANCH TRACT, THE SOUTHWEST CORNER OF SAID ROUND ROCK RAIDERS TRACT AND THIS TRACT;

THENCE: N 20°20'20" W, 457.23 FEET WITH THE EAST LINE OF SAID STONEHURST SUBDIVISION AND THE WEST LINE OF SAID ROUND ROCK RAIDERS TRACT TO A 1/2" IRON ROD FOUND FOR THE SOUTHWEST CORNER OF THAT TRACT DESCRIBED AS 1.997 ACRES CONVEYED TO CHCRR, LLC, RECORDED AS DOCUMENT NO. 2013116081, SAID OFFICIAL PUBLIC RECORDS, FOR THE NORTHWEST CORNER OF SAID ROUND ROCK RAIDERS TRACT AND THIS TRACT;

THENCE: N 69°40'33" E, 359.01 FEET WITH THE SOUTH LINE OF SAID CHCRR TRACT AND THE NORTH LINE OF SAID ROUND ROCK RAIDERS TRACT TO A 1/2" IRON ROD WITH PLASTIC CAP STAMPED "TLS" SET IN THE SOUTHWEST RIGHT =OF-WAY MARGIN OF SAID COUNTY ROAD, FOR THE SOUTHEAST CORNER OF SAID CHCRR TRACT, BEING THE NORTHEAST CORNER OF SAID ROUND ROCK RAIDERS TRACT AND THIS TRACT;

THENCE: WITH THE SOUTHWEST RIGHT-OF-WAY MARGIN OF SAID COUNTY ROAD AND THE EAST LINE OF SAID ROUND ROCK RAIDERS TRACT THE FOLLOWING TWO (2) CALLS:
1. S 49°04'38" E, 224.35 FEET TO A 1/2" IRON ROD WITH PLASTIC CAP STAMPED "TLS" SET,
2. S 45°59'55" E, 283.57 FEET TO THE POINT OF BEGINNING, AND CONTAINNING 4.916 ACRES OF LAND MORE OR LESS.

BEARINGS CITED HEREIN BASED ON: TEXAS STATE PLANE COORDINATE SYSTEM, GRID NORTH, CENTRAL ZONE, (4203) NAD 83.

OWNER: JOY ALAPPATT, BISHOP
SAINT ALPHONSA SYRO-MALABAR CATHOLIC CHURCH AUSTIN
3600 COUNTY ROAD 175
LEANDER, TX 78641
PHONE 512-718-6405

SURVEYOR: WILLIAM C. STEWART, RPLS No. 5785
TEXAS LAND SUVEYING, INC.
FIRM: 10056200
3613 WILLIAMS DRIVE, SUITE 903
GEORGETOWN, TEXAS 78628
PHONE 512.930.1600

ENGINEER: JENNIFER HENDERSON, PE 116883
HENDERSON PROFESSIONAL ENGINEERS
PELS FIRM F-22208
600 ROUND ROCK WEST DRIVE, SUITE 604
ROUND ROCK, TEXAS 78681
PHONE 737.203.8953

PATENT SURVEY: JOHN D. ANDERSON SURVEY
ABSTRACT NO. 16

NEW STREETS: NO NEW STREETS ARE PLANNED

TOTAL ACREAGE: 4.916 ACRES

ACREAGE BY LOT: 4.916 ACRES - DEVELOPMENT

LOTS: 1 - DEVELOPMENT

BLOCKS: 1

CONNECTIVITY INDEX: N/A

BENCHMARK: BOX CUT ON CONCRETE DRAINAGE CULVERT
ELEV=881.91 (NAVD88)
ALL ELEVATIONS SHOWN HEREON AREA BASED ON TRIMBLE'S VIRTUAL REFERENCE STATIONS (VRS) NETWORK (NAVD '88)
VERTICAL DATUM: TRIMBLE'S VIRTUAL REFERENCE STATIONS (VRS) NETWORK (NAVD '88)
GEOID: GEOID 18 (CONUS) FIXED (G18US.GFF)

NOTES:

1. NO PORTION OF THIS TRACT IS ENCROACHED BY ANY SPECIAL FLOOD HAZARD AREAS INUNDATED BY THE 1% ANNUAL CHANCE FLOOD AS IDENTIFIED BY THE U.S. FEDERAL EMERGENCY MANAGEMENT AGENCY BOUNDARY MAP (FLOOD INSURANCE RATE MAP) COMMUNITY PANEL NUMBER 48491C0470F, EFFECTIVE DATE 12/20/2019.
2. BUILDING SETBACKS SHALL BE IN ACCORDANCE WITH PART III, ZONING AND DEVELOPMENT CODE, CHAPTER 2, ZONING DISTRICTS AND USE REGULATIONS, CITY OF ROUND ROCK, TEXAS, 2018, AS AMENDED.
3. SIDEWALKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH PART III, ZONING AND DEVELOPMENT CODE, SECTION 6-26, CITY OF ROUND ROCK, TEXAS, 2018, AS AMENDED.
4. A TEN FOOT (10') PUE AND SIDEWALK EASEMENT ABUTTING AND ALONG THE STREET SIDE PROPERTY LINE IS HEREBY CONVEYED FOR ALL STREET SIDE PROPERTY LOTS SHOWN HEREON. ANY PRIVATE IMPROVEMENTS WITHIN THE PUE OR RIGHT-OF-WAY SHALL REQUIRE WRITTEN APPROVAL FROM THE UTILITIES DIRECTOR PRIOR TO INSTALLATION.
5. C12.5 THIS SUBDIVISION IS SUBJECT TO STORM-WATER MANAGEMENT CONTROLS AS REQUIRED BY WILLIAMSON COUNTY SUBDIVISION REGULATIONS SECTION B11.1, ON NEW DEVELOPMENT THAT WOULD EVOKE SUCH CONTROLS BEYOND EXISTING CONDITIONS.
6. ALL SLAB ELEVATIONS SHALL BE A MIN OF 2' ABOVE THE ULTIMATE 1% ANNUAL CHANCE FLOODPLAIN.
7. THE 100-YR FLOODPLAIN SHOWN ON THE PLAT IS AN ATLAS-14 FLOODPLAIN AND WAS DETERMINED BY A STUDY BY HPE CIVIL ENGINEERING, 04/22/2024.
8. ALL SIDEWALKS SHALL BE MAINTAINED BY THE PROPERTY OWNERS.
9. NO BUILDINGS ARE ALLOWED TO ENCROACH WITHIN A BUILDING SETBACK AREA OF NO LESS THAN 50' FROM THE EDGE OF THE RIGHT-OF-WAY.
10. NO OBSTRUCTIONS, INCLUDING BUT NOT LIMITED TO FENCING OR STORAGE, SHALL BE PERMITTED IN ANY DRAINAGE EASEMENTS SHOWN HEREON.
11. A PORTION OF THIS TRACT IS ENCROACHED BY THE ULTIMATE 1% ANNUAL CHANCE FLOODPLAIN.
12. NO FENCES, STRUCTURES, STORAGE, OR FILL SHALL BE PLACED WITHIN THE LIMITS OF THE ULTIMATE 1% ANNUAL CHANCE FLOODPLAIN; UNLESS APPROVED BY THE CITY ENGINEER. FILL MAY ONLY BE PERMITTED BY THE CITY ENGINEER AFTER APPROVAL OF THE PROPER ANALYSIS.

LINE TABLE

LINE #	LENGTH	DIRECTION
L1	13.07	S18° 31' 47"W
L2	12.47	S31° 45' 37"E
L3	13.52	N85° 06' 27"E
L4	9.09	S21° 52' 41"E
L5	11.17	S70° 51' 21"E
L6	18.02	S07° 28' 12"E
L7	14.24	S25° 58' 29"E
L8	24.41	S31° 12' 33"W
L9	53.64	S11° 55' 02"E
L10	21.35	S59° 03' 45"E
L11	57.09	S03° 03' 24"W
L12	21.90	S14° 28' 54"E
L13	21.37	S38° 48' 09"E
L14	44.49	S26° 44' 19"E
L15	42.71	S31° 11' 19"E
L16	53.68	S36° 52' 30"E
L17	40.53	S41° 30' 48"E
L18	32.00	S57° 44' 58"E

LOT 1 ACREAGE REDUCTION TABLE FOR OSSF

ROW DEDICATION	3,576.32 SF
DRAIN. ESMT	67,832.30 SF
NET AREA	146,287.35 SF
	3.358 AC.

SHEET 01 OF 02

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HPE Civil Engineering
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ROUND ROCK, TX 78681
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www.hendersonpe.com
WBE210166 | HUB 1853873845300

CITY ROUND ROCK TRACKING NUMBER:_____

CITY PERMIT NUMBER

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SITE DEVELOPMENT PLANS TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

PLAT

STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

C02.00

Plotted by: Harry. Plot date: 08/03/2025, File name: h:\02 projects\2023\230808 st alphonsa church\07 Sheet\FP\230808 FINAL PLAT.dwg

Plotted by: Home PC. Plot date: 29/04/2025
File name: C:\Users\Home PC\Watmov Engineers Private Limited\Sandeep Chavda - 230808 ST. ALPHONSA CHURCH\230808 ST. ALPHONSA CHURCH\07 Sheet\SD\230808 PLAT.dwg

FINAL PLAT
OF
SAINT ALPHONSA CATHOLIC CHURCH

WILLIAMSON COUNTY PLAT NOTES:

THE FOLLOWING PLAT NOTES SHALL BE INCLUDED ON ALL PLATS THAT LIE OUTSIDE OF THE CITY LIMITS OF ROUND ROCK, TEXAS BUT LIE WITHIN PORTIONS OF THE ROUND ROCK EXTRATERRITORIAL JURISDICTION (ETJ) AND WITHIN WILLIAMSON COUNTY, TEXAS (AS PER THE ADOPTED INTERLOCAL AGREEMENT BETWEEN ROUND ROCK AND WILLIAMSON COUNTY).

1. RIGHTS OF WAY OR EASEMENTS FOR WIDENING ROADWAYS OR IMPROVING DRAINAGE SHALL BE MAINTAINED BY THE LANDOWNER UNTIL ROAD OR DRAINAGE IMPROVEMENTS ARE ACTUALLY CONSTRUCTED ON THE PROPERTY. THE COUNTY HAS THE RIGHT AT ANY TIME TO TAKE POSSESSION OF ANY ROAD WIDENING EASEMENT FOR THE CONSTRUCTION, IMPROVEMENT OR MAINTENANCE OF THE ADJACENT ROAD. THE LANDOWNER ASSUMES ALL RISKS ASSOCIATED WITH IMPROVEMENTS LOCATED IN THE RIGHT-OF-WAY OR ROAD WIDENING EASEMENTS. BY PLACING ANYTHING IN THE RIGHT-OF-WAY OR ROAD WIDENING EASEMENTS.

   THE LANDOWNER SHALL INDEMNIFY AND HOLD THE COUNTY, ITS OFFICERS, AND EMPLOYEES HARMLESS FROM ANY LIABILITY OWING TO PROPERTY DEFECTS OR NEGLIGENCE NOT ATTRIBUTABLE TO THE COUNTY, ITS OFFICERS, AND EMPLOYEES AND ACKNOWLEDGES THAT THE IMPROVEMENTS MAY BE REMOVED BY THE COUNTY AND THAT THE OWNER OF THE IMPROVEMENT WILL BE RESPONSIBLE FOR THE RELOCATION AND/OR REPLACEMENT OF THE IMPROVEMENT.

2. THE CONSTRUCTION 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 PROPERTY COVERED BY THIS PLAT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS PRESCRIBED BY THE COMMISSIONERS' COURT OF WILLIAMSON COUNTY, TEXAS. SAID COMMISSIONERS' COURT ASSUMES NO OBLIGATION TO BUILD ANY OF THE STREETS, ROADS, OR OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT OR OF CONSTRUCTING ANY OF THE BRIDGES OR DRAINAGE IMPROVEMENTS IN CONNECTION THEREWITH. THE COUNTY WILL ASSUME NO RESPONSIBILITY FOR DRAINAGE WAYS OR EASEMENTS IN THE SUBDIVISION, OTHER THAN THOSE DRAINAGE OR PROTECTING THE ROAD SYSTEMS AND STREETS.

   THE COUNTY ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF REPRESENTATION 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.

3. ALL PUBLIC ROADWAYS, RIGHTS-OF-WAY AND EASEMENTS SHOWN ON THIS PLAT ARE FREE OF LIENS.

4. WHERE RURAL MAIL BOXES ARE IN USE, SUCH BOXES SHALL BE SET THREE FEET FROM THE EDGE OF THE PAVEMENT OR BEHIND CURBS, WHEN USED. ALL MAILBOXES WITHIN COUNTY ARTERIAL RIGHT-OF-WAY SHALL MEET THE CURRENT TXDOT STANDARDS. ANY MAILBOX THAT DOES NOT MEET THIS REQUIREMENT MAY BE REMOVED.

STATE OF TEXAS §
COUNTY OF WILLIAMSON §

I, SAINT ALPHONSA SYRO-MALABAR CATHOLIC CHURCH AUSTIN OWNER OF LOT 1 BLOCK A (4.916 ACRES), SHOWN HEREON AND DESCRIBED IN A DEED RECORDED IN DOCUMENT NO. 2023086320 OF THE OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS, AND DO HEREBY SUBDIVIDE, SAID TRACT AS SHOWN HEREON, AND DO HEREBY CONSENT TO ALL PLAT NOTE REQUIREMENTS SHOWN HEREON, AND DO HEREBY FOREVER DEDICATE TO THE PUBLIC THE ROADS, ALLEYS, RIGHTS-OF-WAY, EASEMENTS AND PUBLIC PLACES SHOWN HEREON FOR SUCH PUBLIC PURPOSES AS WILLIAMSON COUNTY MAY DEEM APPROPRIATE, AND DO HEREBY STATE THAT ALL PUBLIC ROADWAYS AND EASEMENTS AS SHOWN ON THIS PLAT ARE FREE OF LIENS. THIS SUBDIVISION IS TO BE KNOWN AS FINAL PLAT, ST ALPHONSA CHURCH.

_____
JOY ALAPPATT, BISHOP
SAINT ALPHONSA SYRO-MALABAR CATHOLIC CHURCH AUSTIN

STATE OF TEXAS §
COUNTY OF WILLIAMSON §

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THE___ DAY OF_____,

_____
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

PRINTED NAME:_____

MY COMMISSION EXPIRES ON:_____

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

I, WILLIAM C. STEWART, REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECTLY MADE FROM AN ACTUAL SURVEY MADE ON THE GROUND OF THE PROPERTY LEGALLY DESCRIBED HEREON, AND THAT THERE ARE NO APPARENT DISCREPANCIES, CONFLICTS, OVERLAPPING OF IMPROVEMENTS, VISIBLE UTILITY LINES OR ROADS IN PLACE, EXCEPT AS SHOWN ON THE ACCOMPANYING PLAT, AND THAT THE CORNER MONUMENTS SHOWN HEREON WERE PROPERLY PLACED UNDER MY SUPERVISION IN ACCORDANCE WITH WILLIAMSON COUNTY REGULATIONS.

TO CERTIFY WHICH, WITNESS MY HAND AND SEAL THIS _____ DAY OF _____, 20____.

_____
WILLIAM C. STEWART DATE
REGISTERED PROFESSIONAL LAND SURVEYOR, NO. 5785
STATE OF TEXAS

STATE OF TEXAS §
COUNTY OF WILLIAMSON §

I, JENNIFER L. HENDERSON, DO HEREBY CERTIFY THAT THE INFORMATION CONTAINED ON THIS PLAT COMPLIES WITH CHAPTER 4 – SUBDIVISION DESIGN AND CONSTRUCTION, PART III ZONING AND DEVELOPMENT CODE, CODE OF ORDINANCES, CITY OF ROUND ROCK, 2018 EDITION AS AMENDED, AND THE DESIGN AND CONSTRUCTION STANDARDS ADOPTED BY THE CITY OF ROUND ROCK, TEXAS.

_____
JENNIFER L. HENDERSON DATE
REGISTERED PROFESSIONAL ENGINEER, NO. 116883
STATE OF TEXAS

APPROVED THIS _____ DAY OF _____ , 20___ , BY THE CITY PLANNING AND DEVELOPMENT SERVICES DEPARTMENT OF THE CITY OF ROUND ROCK, TEXAS, AND AUTHORIZED TO BE FILED FOR RECORD BY THE COUNTY CLERK OF WILLIAMSON COUNTY, TEXAS.

THE PROPERTY COVERED BY THIS PLAT IS WITHIN THE CITY LIMITS OF THE CITY OF ROUND ROCK.

_____
BRADLEY DUSHKIN, DIRECTOR
CITY OF ROUND ROCK PLANNING & DEVELOPMENT SERVICES DEPARTMENT

STATE OF TEXAS §
COUNTY OF WILLIAMSON §

I, NANCY RISTER, CLERK OF THE COUNTY COURT OF SAID COUNTY, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT IN WRITING, WITH ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE ON THE ____ DAY OF_____, 20___ A.D., AT ____O'CLOCK, ___.M., AND DULY RECORDED THIS THE ____ DAY OF _____, 20___ A.D., AT ___O'CLOCK, ___.M., IN THE OFFICIAL PUBLIC RECORDS OF SAID COUNTY IN INSTRUMENT NO._____.

TO CERTIFY WHICH, WITNESS MY HAND AND SEAL AT THE COUNTY COURT OF SAID COUNTY, AT MY OFFICE IN GEORGETOWN, TEXAS THE DATE LAST SHOWN ABOVE WRITTEN.

_____
NANCY RISTER, CLERK COUNTY COURT
OF WILLIAMSON COUNTY, TEXAS
BY_____DEPUTY

SHEET 02 OF 02

Henderson Professional Engineers
HPE Civil Engineering
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ROUND ROCK, TX 78681
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5	

SITE DEVELOPMENT PLANS
TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

PLAT

STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

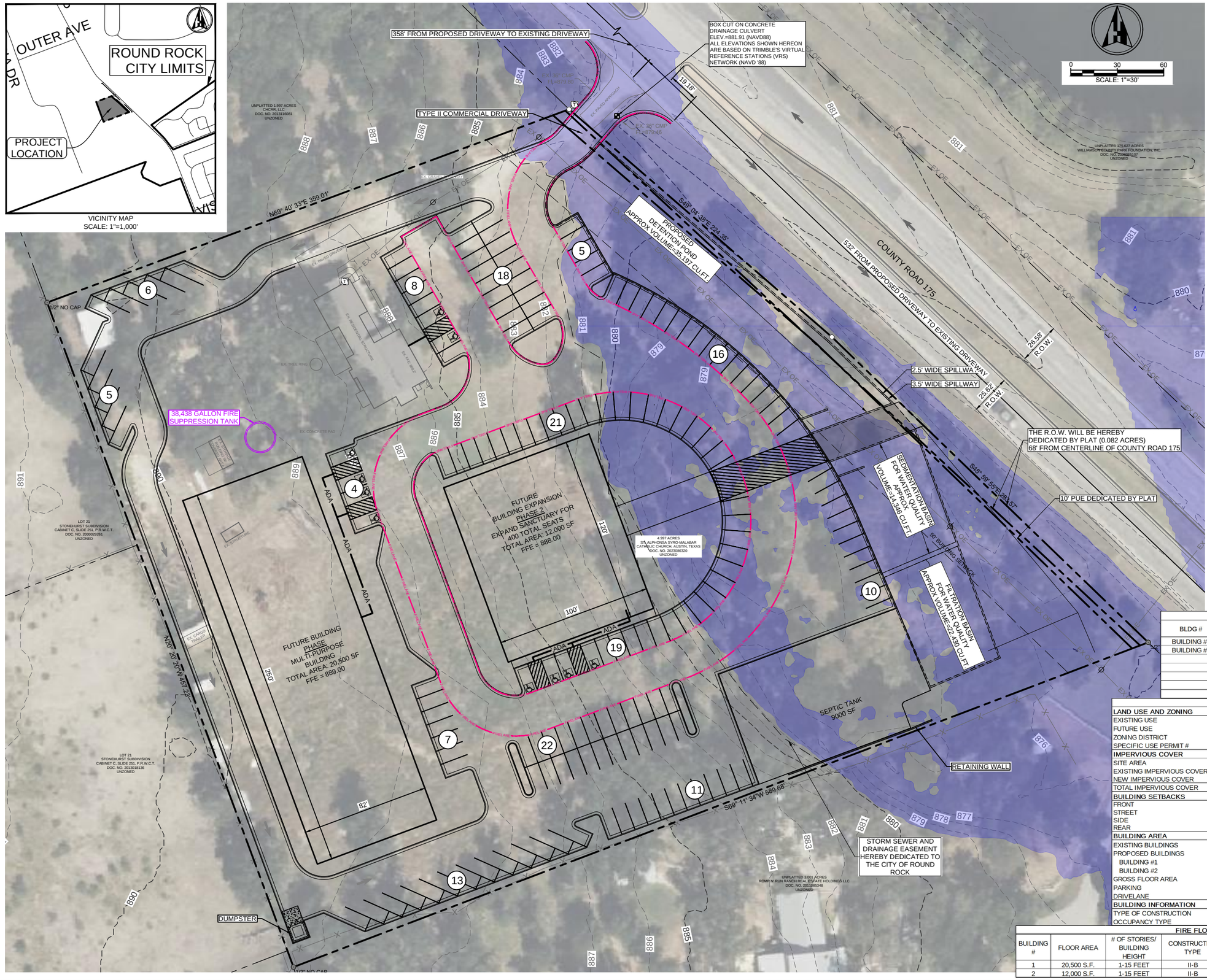
C02.01

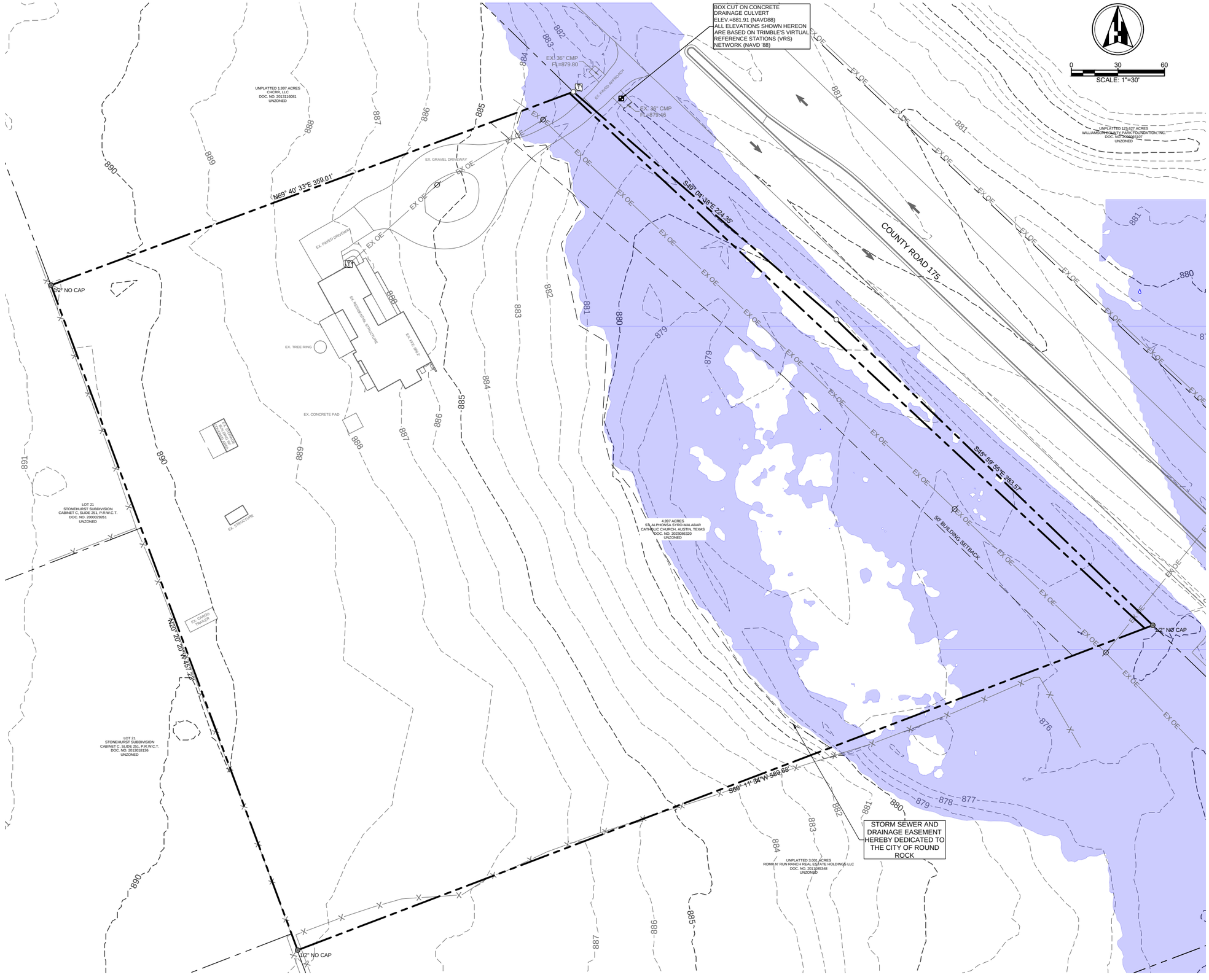
CITY PERMIT NUMBER

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File name: C:\Users\Home PC\Watmoy Engineers Private Limited\Sandeep Chavda - 230808 ST. ALPHONSA CHURCH\230808 ST. ALPHONSA CHURCH\07 Sheet\SD\230808 PLAT.dwg

VICINITY MAP
SCALE: 1"=1,000'


358' FROM PROPOSED DRIVEWAY TO EXISTING DRIVEWAY
BOX CUT ON CONCRETE DRAINAGE CULVERT ELEV.=881.91 (NAVD88) ALL ELEVATIONS SHOWN HEREON ARE BASED ON TRIMBLE'S VIRTUAL REFERENCE STATIONS (VRS) NETWORK (NAVD '88)
TYPE II COMMERCIAL DRIVEWAY
EX. 35" CMP FL=879.80
EX. 20" CMP FL=879.46
19.18'
UNPLATTED 1.997 ACRES CHORI, LLC DOC. NO. 2013116081 UNZONED
UNPLATTED 175.627 ACRES WILLIAMSON COUNTY PARK FOUNDATION, INC. DOC. NO. 2006042107 UNZONED
N69° 40' 33"E 359.01'
S46° 04' 39"E 224.85'
PROPOSED DETENTION POND APPROX VOLUME=35,197 CU.FT.
532' FROM PROPOSED DRIVEWAY TO EXISTING DRIVEWAY
COUNTY ROAD 175
26.68' R.O.W.
2.5' WIDE SPILLWAY
3.5' WIDE SPILLWAY
25.68' R.O.W.
THE R.O.W. WILL BE HEREBY DEDICATED BY PLAT (0.082 ACRES) 68' FROM CENTERLINE OF COUNTY ROAD 175
S45° 39' 55"E 288.37'
10' PUE DEDICATED BY PLAT
SEDIMENTATION BASIN FOR WATER QUALITY APPROX VOLUME=1,346 CU.FT.
FILTRATION BASIN FOR WATER QUALITY APPROX VOLUME=22,480 CU.FT.
90' BUILDING SETBACK
EX. PAVED DRIVEWAY
EX. PAVED APPROACH
EX. RESIDENTIAL STRUCTURE
EX. TREE RING
EX. TREE WELL
EX. CONCRETE PAD
EX. CARPORT STRUCTURE
EX. GARAGE STRUCTURE
EX. CARPORT STRUCTURE
EX. GAZEBO
EX. SHED



LEGEND	
LOC	LIMITS OF CONSTRUCTION
ADA	ACCESSIBLE ROUTE OF TRAVEL
3	PARKING COUNT
EX W	EXISTING WATER LINE
W	PROPOSED WATER LINE
EX WW	EXISTING WASTEWATER LINE
	PROPOSED WASTEWATER LINE
EX SD	EXISTING STORMWATER LINE
	PROPOSED STORMWATER LINE
529	EXISTING CONTOUR
529	PROPOSED CONTOUR

NOTES:
NO TREES WERE LOCATED WITHIN THE LIMITS OF THIS PROJECT SITE.

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3	
4	
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LEANDER, TX 78641

EXISTING CONDITIONS PLAN

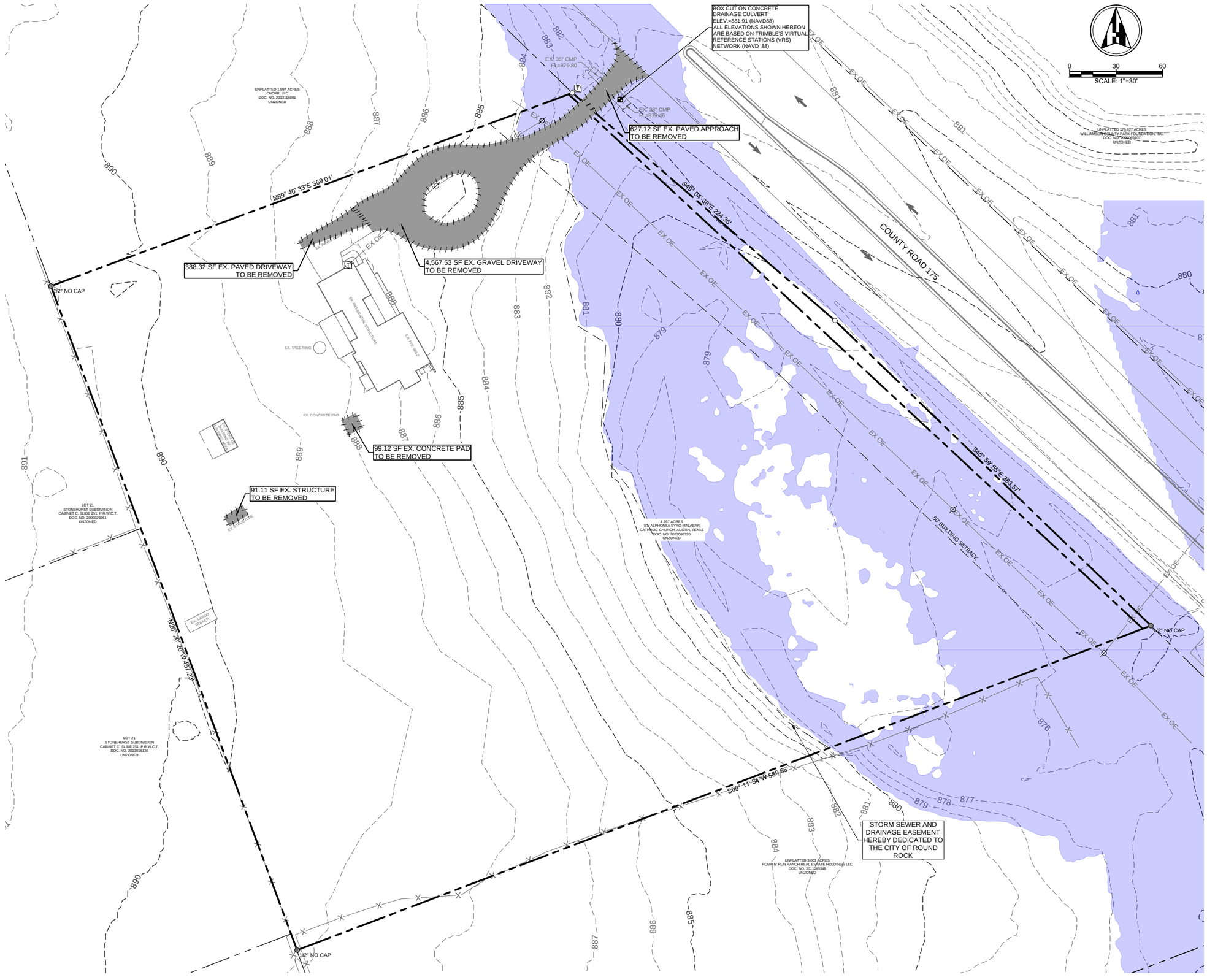
STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	
04/29/2025	
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LEGEND

	AREA OF PAVEMENT TO BE REMOVED
	LINEAR FEATURE TO BE REMOVED
	TREE TO BE REMOVED

WOMEN OWNED
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SITE DEVELOPMENT PLANS
TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

DEMOLITION PLAN

STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

C05.00

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Slopes Table			
Number	Minimum Slope	Maximum Slope	Color
1	0.00%	2.00%	
2	2.00%	5.00%	
3	5.00%	10.00%	
4	10.00%	Vertical	

BOX CUT ON CONCRETE DRAINAGE CULVERT ELEV.=881.91 (NAVD88) ALL ELEVATIONS SHOWN HEREON ARE BASED ON TRIMBLE'S VIRTUAL REFERENCE STATIONS (VRS) NETWORK (NAVD '88)

TYPE II COMMERCIAL DRIVEWAY

EX 36" CMP FL=879.80

EX 36" CMP FL=879.45

PROPOSED DETENTION POND APPROX VOLUME=35,197 CU.FT.

N69° 40' 33"E 359.01'

S49° 04' 39"E 224.35'

COUNTY ROAD 175

2.5' WIDE SPILLWAY

3.5' WIDE SPILLWAY

THE R.O.W. WILL BE HEREBY DEDICATED BY PLAT (0.082 ACRES) 68' FROM CENTERLINE OF COUNTY ROAD 175

S45° 59' 55"E 283.57'

SEDIMENTATION BASIN FOR WATER QUALITY APPROX VOLUME=14,356 CU.FT.

FILTRATION BASIN FOR WATER QUALITY APPROX VOLUME=22,430 CU.FT.

60' BUILDING SETBACK

FUTURE BUILDING EXPANSION PHASE 2 EXPAND SANCTUARY FOR 400 TOTAL SEATS TOTAL AREA: 12,000 SF FFE = 888.00

FUTURE BUILDING MULTI-PURPOSE BUILDING TOTAL AREA: 20,500 SF FFE = 889.00

38,438 GALLON FIRE SUPPRESSION TANK

SEPTIC TANK 9000 SF

DUMPSTER

STORM SEWER AND DRAINAGE EASEMENT HEREBY DEDICATED TO THE CITY OF ROUND ROCK

UNPLATTED 1.997 ACRES CHOPR, LLC DOC. NO. 2013116081 UNZONED

UNPLATTED 125.627 ACRES WILLIAMSON COUNTY PARK FOUNDATION, INC. DOC. NO. 2004021027 UNZONED

4.997 ACRES ST. ALPHONSA SYRO-MALABAR CATHOLIC CHURCH, AUSTIN, TEXAS DOC. NO. 2023086320 UNZONED

UNPLATTED 3.001 ACRES ROMI N' RUN RANCH REAL ESTATE HOLDINGS LLC DOC. NO. 2011085348 UNZONED

LOT 21 STONEHURST SUBDIVISION CABINET C, SLIDE 251, P.R.W.C.T. DOC. NO. 2000029261 UNZONED

LOT 21 STONEHURST SUBDIVISION CABINET C, SLIDE 251, P.R.W.C.T. DOC. NO. 2013018136 UNZONED

N20° 20' 20"W 457.74'

S69° 11' 34"W 589.66'

82'

250'

1/2" NO CAP

0 30 60
SCALE: 1"=30'

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SITE DEVELOPMENT PLANS TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

SLOPE MAP EXHIBIT

STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

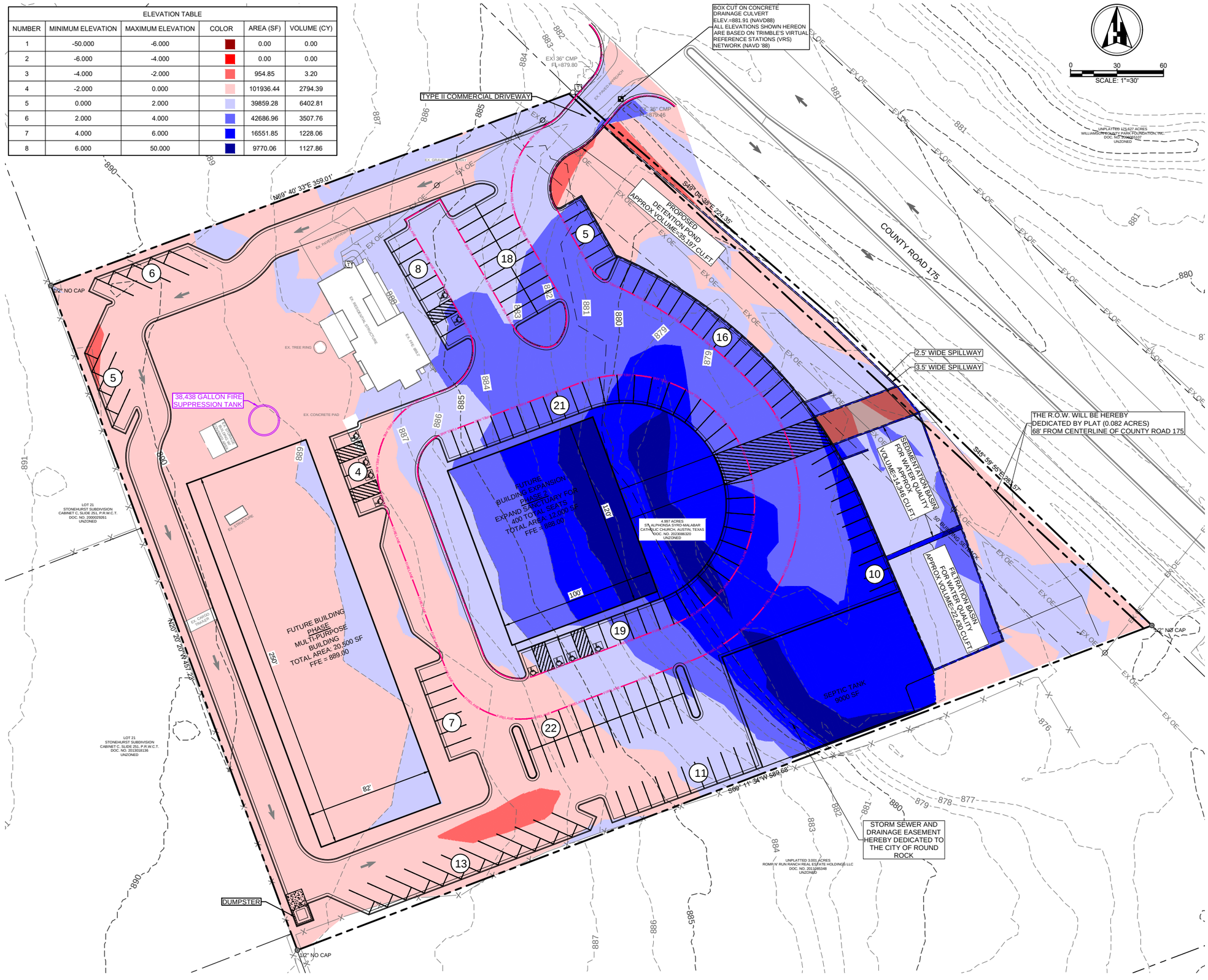
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C06.00

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ELEVATION TABLE					
NUMBER	MINIMUM ELEVATION	MAXIMUM ELEVATION	COLOR	AREA (SF)	VOLUME (CY)
1	-50.000	-6.000		0.00	0.00
2	-6.000	-4.000		0.00	0.00
3	-4.000	-2.000		954.85	3.20
4	-2.000	0.000		101936.44	2794.39
5	0.000	2.000		39859.28	6402.81
6	2.000	4.000		42686.96	3507.76
7	4.000	6.000		16551.85	1228.06
8	6.000	50.000		9770.06	1127.86



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SITE DEVELOPMENT PLANS TO SERVE
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CUT AND FILL EXHIBIT

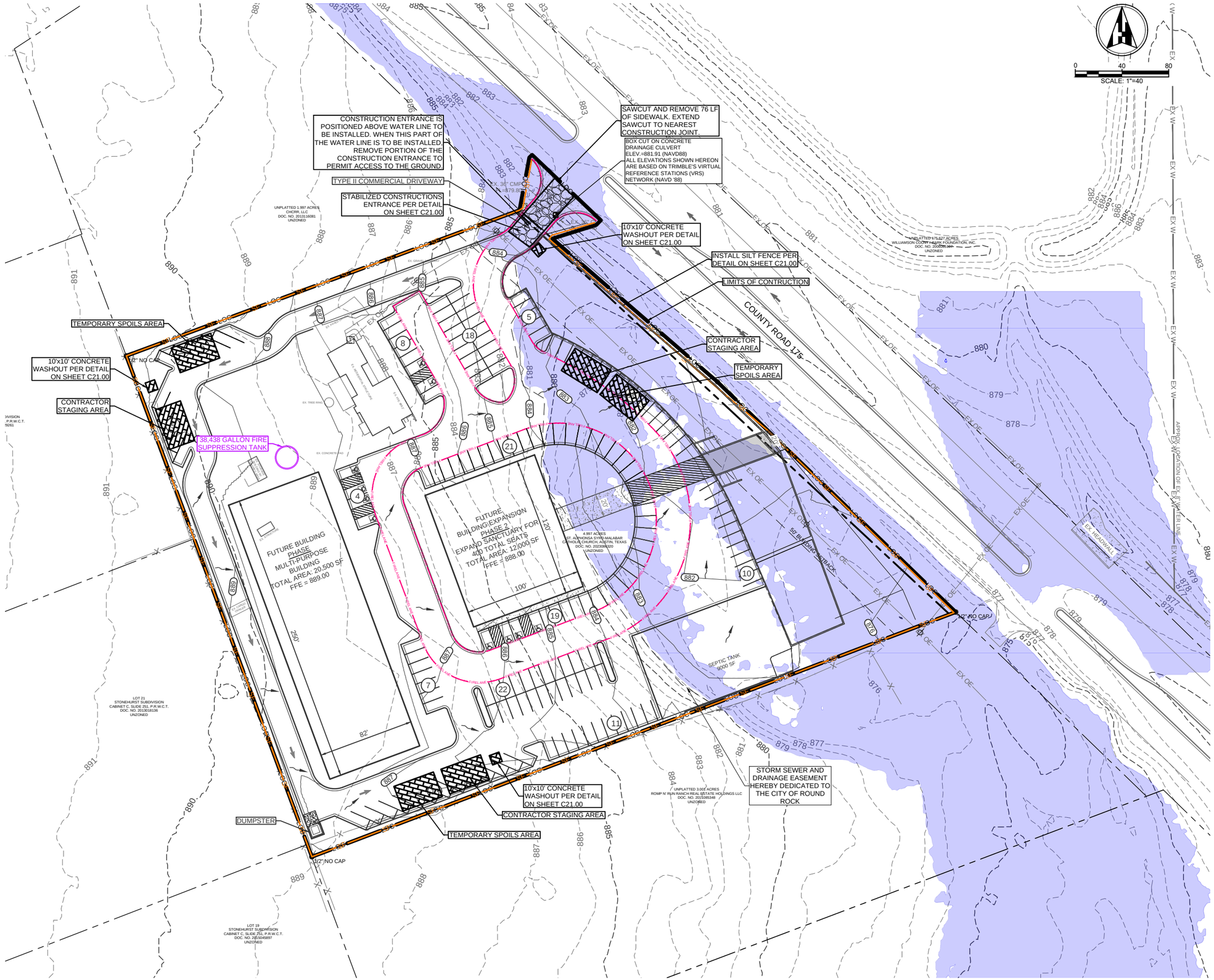
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C07.00

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LEGEND	
LOC	LIMITS OF CONSTRUCTION (5.06 Ac.)
IP	INLET PROTECTION
SF	SILT FENCE
FD	FILTER DIKE
TP	TREE PROTECTION FENCE
	FLOW ARROW
EX W	EXISTING WATER LINE
EX WW	EXISTING WASTEWATER LINE
EX SD	EXISTING STORMWATER LINE
529	EXISTING CONTOUR
529	CONTOUR
O.P.R.T.C.T.	OFFICIAL PUBLIC RECORDS TRAVIS COUNTY TEXAS
D.R.W.C.T.	DEED RECORDS WILLIAMSON COUNTY TEXAS
P.R.W.C.T.	PLAT RECORDS WILLIAMSON COUNTY TEXAS
VOL./PG/INST#	VOLUME/PAGE/INSTRUMENT NUMBER
	BUILDING SETBACK
	SUBJECT PROPERTY
	SANITARY SEWER MANHOLE
GAS	NATURAL GAS LINE
EX OE	EXISTING OVERHEAD ELECTRIC
	EXISTING FENCE
	BENCHMARK
	WATER VALVE
	IRON ROD FOUND (IRF)
	FIRE HYDRANT
	EXISTING ELECTRIC POWER POLE
	LIGHT POLE

NOTES:
1. NO ENVIRONMENTALLY SENSITIVE AREAS ARE LOCATED ON OR DOWNSTREAM OF THIS PROJECT SITE.
2. THIS PROJECT WILL NOT REQUIRE ANY FORM OF PHASING OR SLOPE STABILIZATION.
3. REFER TO LANDSCAPE PLANS FOR RESEEDING AND REVEGETATION REQUIREMENTS.
4. NO PERMANENT EROSION CONTROL MEASURES WILL BE INSTALLED WITH THIS PROJECT.
5. REFER TO SHEET C21.00 FOR STANDARD DETAILS - ESC.
6. ALL MUD, DIRT, ROCKS, DEBRIS, ETC., SPILLED, TRACKED OR OTHERWISE DEPOSITED ON EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY.
7. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF THE PROJECT BY THE ENGINEER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE ENGINEER.
8. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS, GRASS MIXTURES OR GROUND COVER SUITABLE TO THE AREA AND SEASON IN WHICH THEY ARE APPLIED.
9. ALL DISTURBED AREAS SHALL BE RE-VEGETATED TO MEET THE REQUIREMENTS OF THE CITY OF ROUND ROCK ORDINANCES.
10. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY THE INSPECTOR AT THE TIME OF CONSTRUCTION.

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SITE DEVELOPMENT PLANS TO SERVE
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LEANDER, TX 78641

EROSION AND SEDIMENTATION CONTROL PLAN

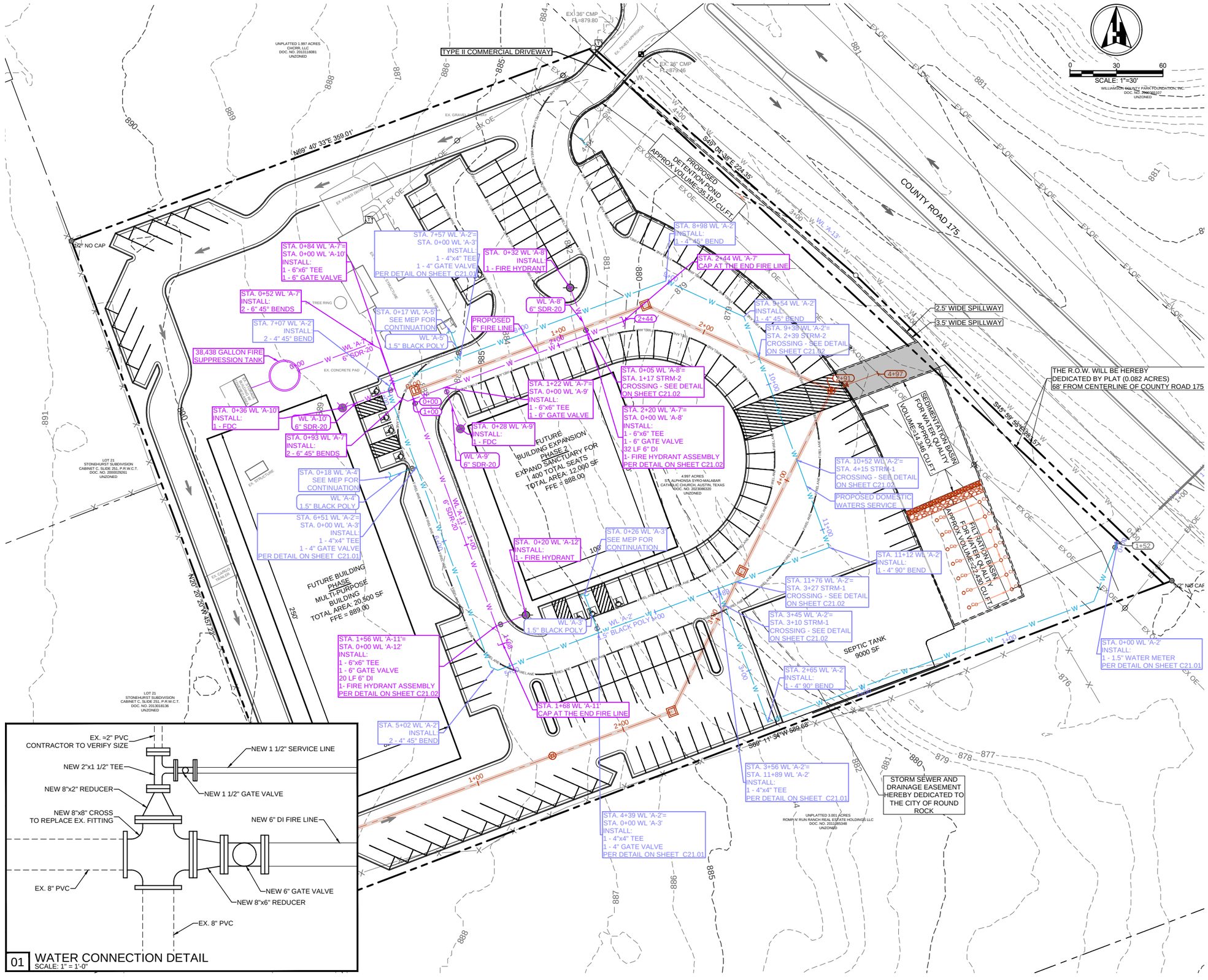
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JENNIFER L HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

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C08.00

CITY PERMIT NUMBER

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01 WATER CONNECTION DETAIL
SCALE: 1" = 1'-0"

LEGEND	
EX W	EXISTING WATER LINE
W	WATER LINE
W	FIRE LINE
	WASTEWATER LINE
EX SD	EXISTING STORMWATER LINE
	STORMWATER LINE
	BUILDING SETBACK
	SUBJECT PROPERTY
GAS	NATURAL GAS LINE
EX OE	EXISTING OVERHEAD ELECTRIC
	WATER VALVE
	IRON ROD FOUND (IRF)
	FIRE HYDRANT
	EXISTING ELECTRIC POWER POLE
	LIGHT POLE

NOTES:
1. REFER TO SHEETS C21.01- C21.02 FOR DETAILS.
2. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. ALL EXISTING GROUND LEVEL APPURTENANCES ARE SUBJECT TO ELEVATION CHANGES AND SHALL BE ADJUSTED TO FINAL GRADE.
4. ALL WASTEWATER MANHOLES SHALL BE COATED AND VACUUM-TESTED.
5. ALL NON-CITY INFRASTRUCTURE INCLUDING GAS, ELECTRIC CABLE, AND TELECOMMUNICATIONS SHALL TRAVERSE UNDERNEATH CITY INFRASTRUCTURE, INCLUDING BUT NOT LIMITED TO WATERLINES, WASTEWATER LINES, AND STORM SEWERS, WITH A MINIMUM OUTSIDE-TO-OUTSIDE CLEARANCE OF 18" WHERE NON-CITY INFRASTRUCTURE WOULD HAVE TO BE PLACED AT A DEPTH OF 8' OR GREATER TO MEET THE PRECEDING REQUIREMENT, TRAVERSING ABOVE CITY INFRASTRUCTURE MAY BE ALLOWED, SUBJECT TO THE APPROVAL OF THE CITY ENGINEER, BUT ONLY IN CONFORMANCE WITH CROSS-SECTIONS, PROFILES, AND / OR OTHER DETAILED INFORMATION INCORPORATED IN THESE PLANS.
6. CONTRACTOR TO STAKEOUT WATERLINE EASEMENT PRIOR TO THE INSTALLATION OF THE WATERLINE, FOR INSTALLATION ACCURACY.
7. FOR ALL POINTS WHERE A WASTEWATER GRAVITY OR FORCE MAIN LINE CROSSES UNDER A PUBLIC WATER SUPPLY OR WATER SERVICE:
   7.1. VERTICAL SEPARATION MUST BE AT LEAST TWO FEET FROM OUTSIDE DIAMETERS OF PIPES.
   7.2. WASTEWATER PIPE WITH A MINIMUM PRESSURE RATING OF 150 PSI.
   7.3. ONE SEGMENT OF WATER LINE SHALL BE CENTERED ON CROSSING.
8. FOR ALL POINTS WHERE A WASTEWATER GRAVITY OR FORCE MAIN LINE CROSSES OVER A PUBLIC WATER SUPPLY OR WATER SERVICE:
   8.1. VERTICAL SEPARATION MUST BE AT LEAST TWO FEET FROM OUTSIDE DIAMETERS OF PIPE.
   8.2. WATER SHALL BE PLACED IN AN ENCASEMENT 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.
   8.3. ONE SEGMENT OF WATERLINE SHALL BE CENTERED ON CROSSING.
9. FOR WASTEWATER OR FORCE MAIN LINES THAT PARALLEL PUBLIC WATER OR WATER SERVICES:
   9.1. SEPARATION MUST BE AT LEAST NINE FEET FROM OUTSIDE DIAMETERS OF PIPE IN ANY DIRECTION.
10. ALL WATER LINE FITTINGS SHALL BE RESTRAINED AND THRUST BLOCKED.
11. PROVIDE 3' CLEAR AREA AROUND FIRE HYDRANTS.
12. ALL NON-CITY INFRASTRUCTURE (INCLUDING BUT NOT LIMITED TO GAS, ELECTRIC, CABLE, AND TELECOMMUNICATIONS) SHALL TRAVERSE UNDERNEATH CITY INFRASTRUCTURE (INCLUDED BUT NOT LIMITED TO WATERLINES, WASTEWATER LINES, AND STORMWATER LINES) WITH A MINIMUM OUTSIDE-TO-OUTSIDE CLEARANCE OF 18". WHERE NON-CITY INFRASTRUCTURE WOULD HAVE TO BE PLACED AT A DEPTH OF 8' OR GREATER TO MEET THE PRECEDING REQUIREMENT, TRAVERSING ABOVE THE CITY INFRASTRUCTURE MAY BE ALLOWED, SUBJECT TO THE PROPOSAL OF THE PLANNING & DEVELOPMENT SERVICES ENGINEERING REVIEWER, BUT ONLY IN CONFORMANCE WITH CROSS-SECTIONS, PROFILES, AND OR OTHER DETAILED INFORMATION INCORPORATED IN THESE PLANS.

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SITE DEVELOPMENT PLANS
TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

OVERALL UTILITY PLAN

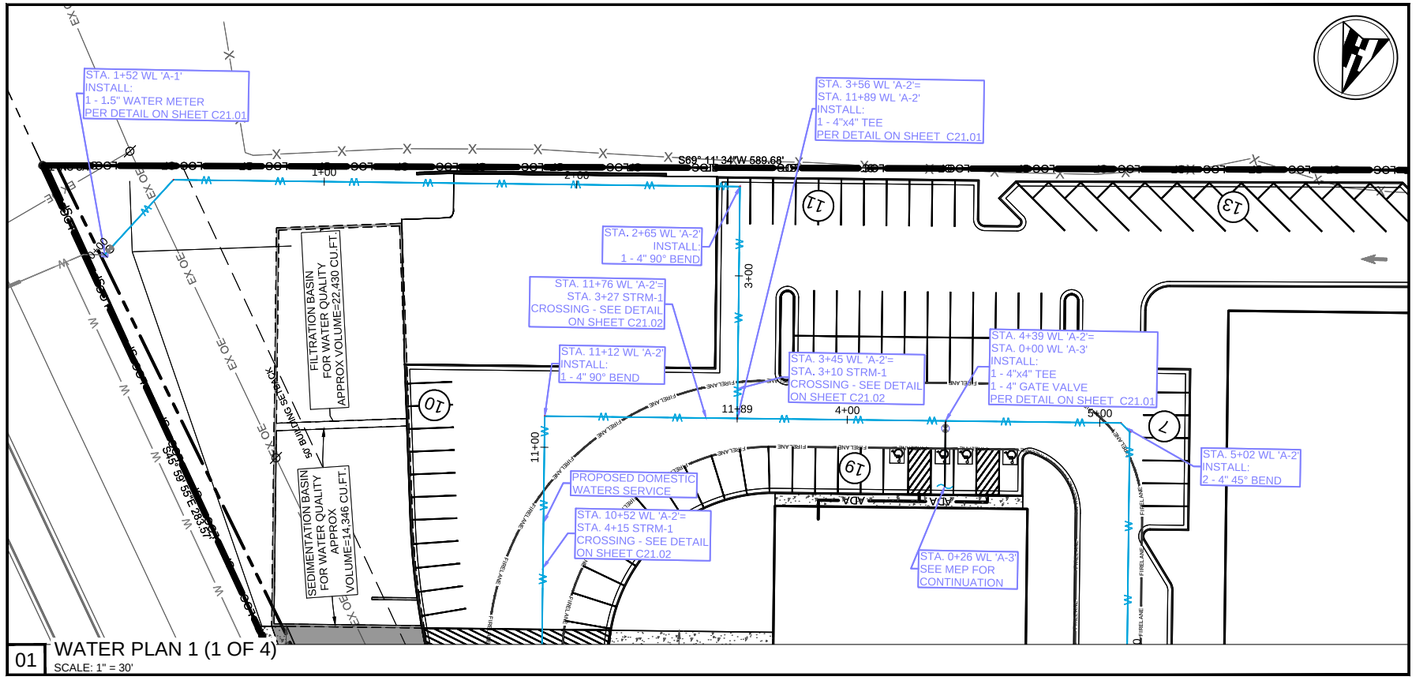
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JENNIFER L. HENDERSON
116883
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PROFESSIONAL ENGINEER
05/09/2025

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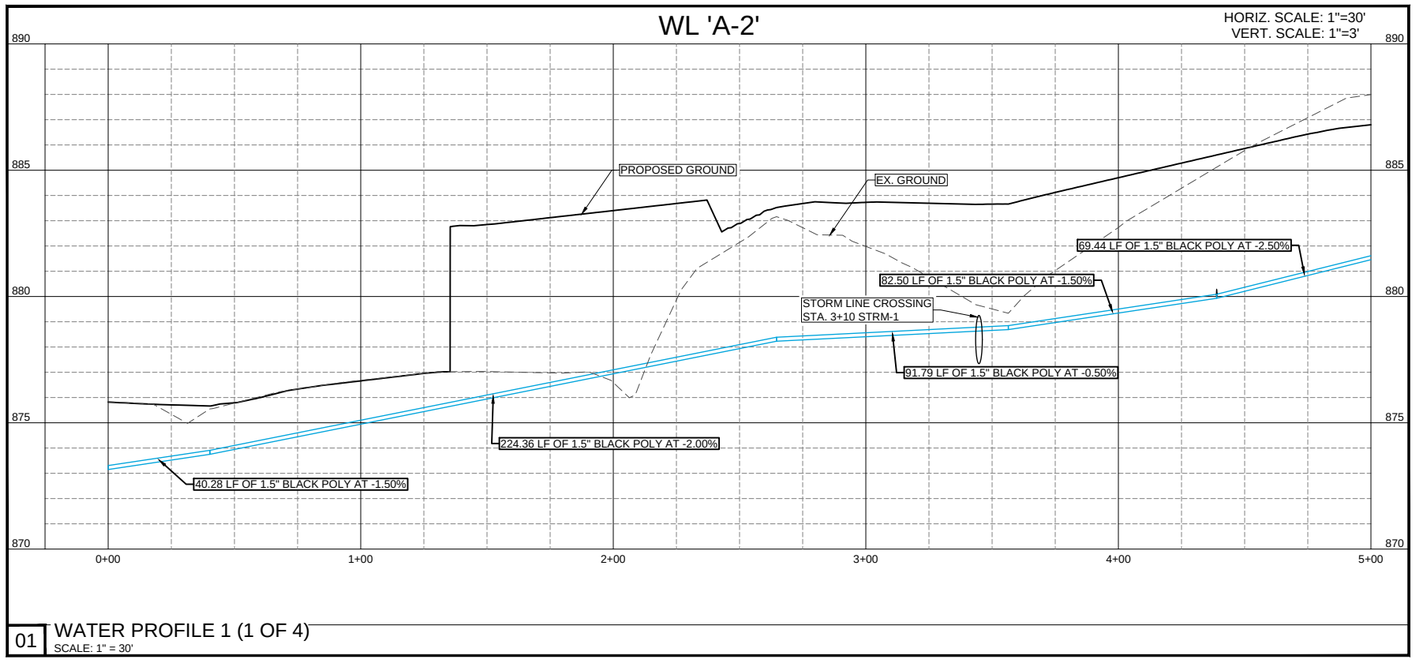
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01 WATER PLAN 1 (1 OF 4)
SCALE: 1" = 30'



01 WATER PROFILE 1 (1 OF 4)
SCALE: 1" = 30'

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SITE DEVELOPMENT PLANS
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WATER PLAN AND PROFILE

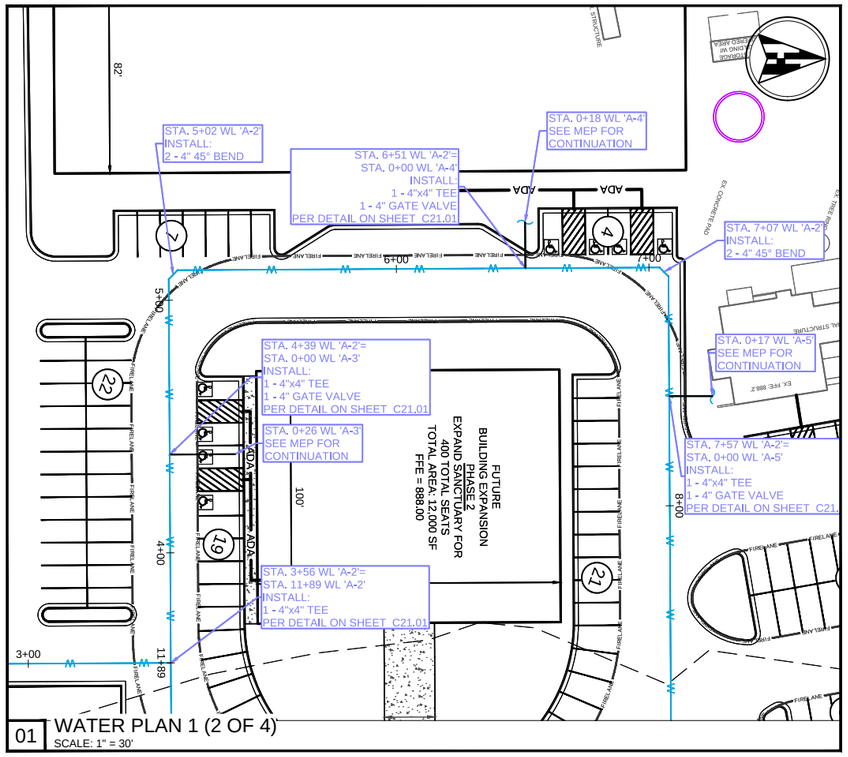
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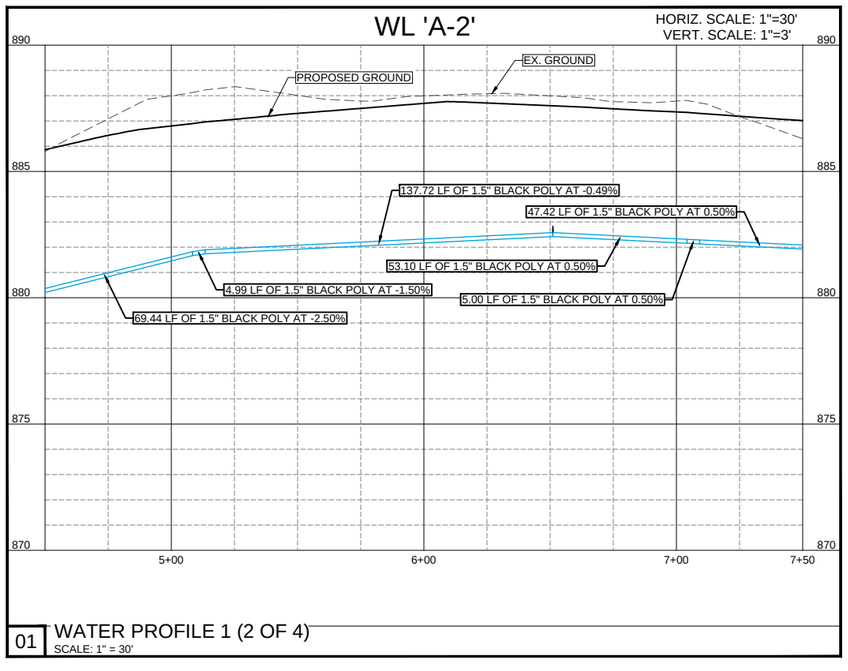
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01 WATER PLAN 1 (2 OF 4)
SCALE: 1" = 30'



01 WATER PROFILE 1 (2 OF 4)
SCALE: 1" = 30'

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WATER PLAN AND PROFILE

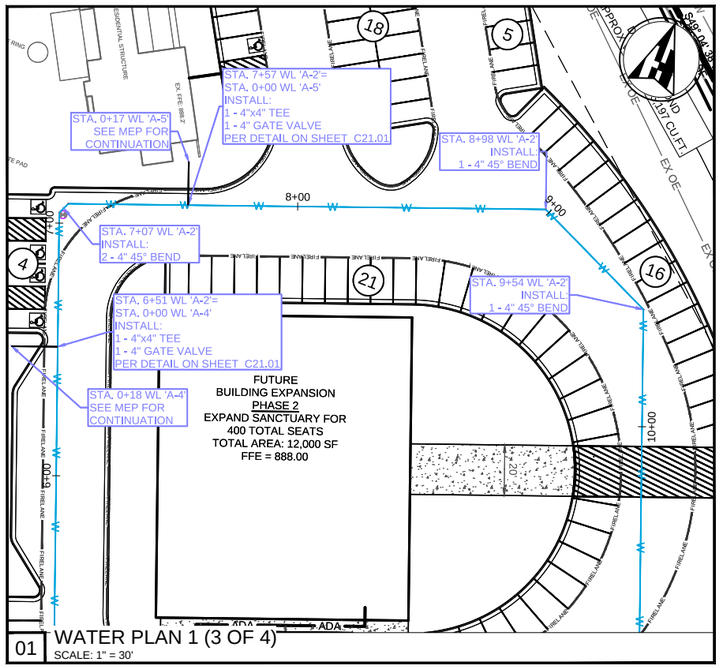
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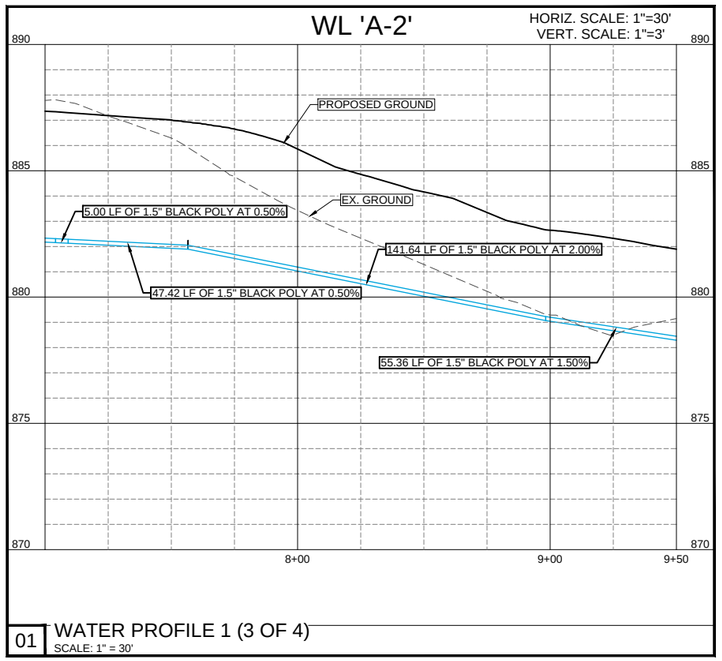
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01 WATER PLAN 1 (3 OF 4)
SCALE: 1" = 30'



01 WATER PROFILE 1 (3 OF 4)
SCALE: 1" = 30'

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WATER PLAN AND PROFILE

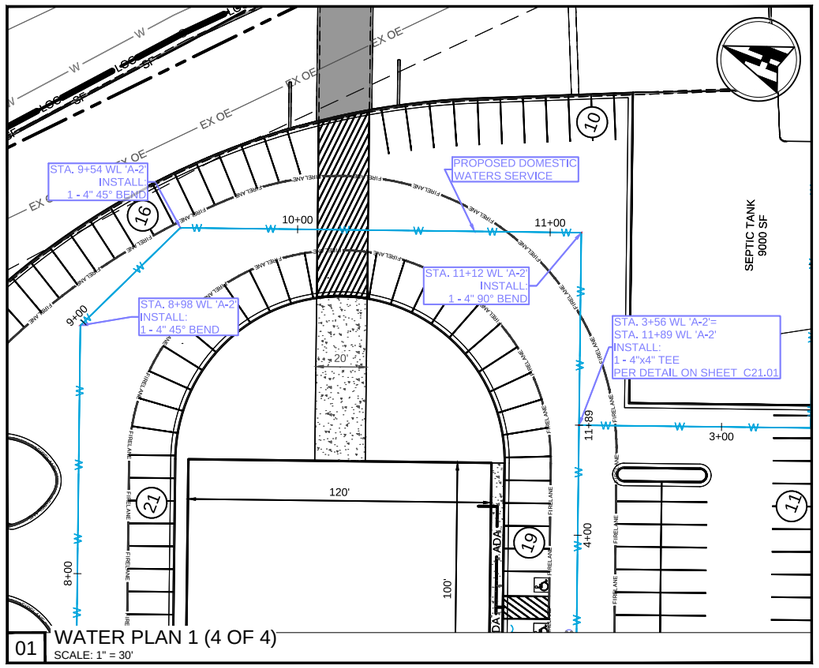
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PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

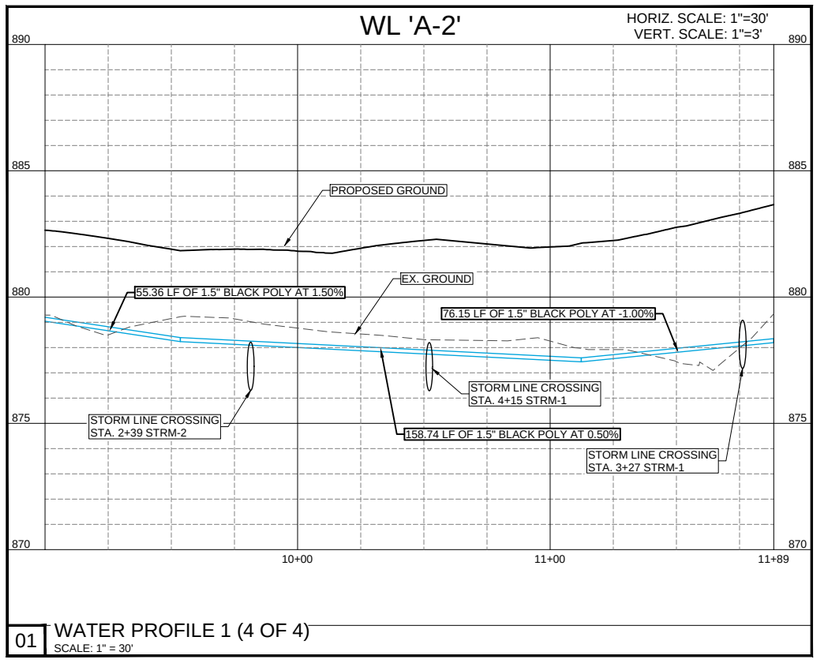
C10.03

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01 WATER PLAN 1 (4 OF 4)
SCALE: 1" = 30'



01 WATER PROFILE 1 (4 OF 4)
SCALE: 1" = 30'

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WATER PLAN AND PROFILE

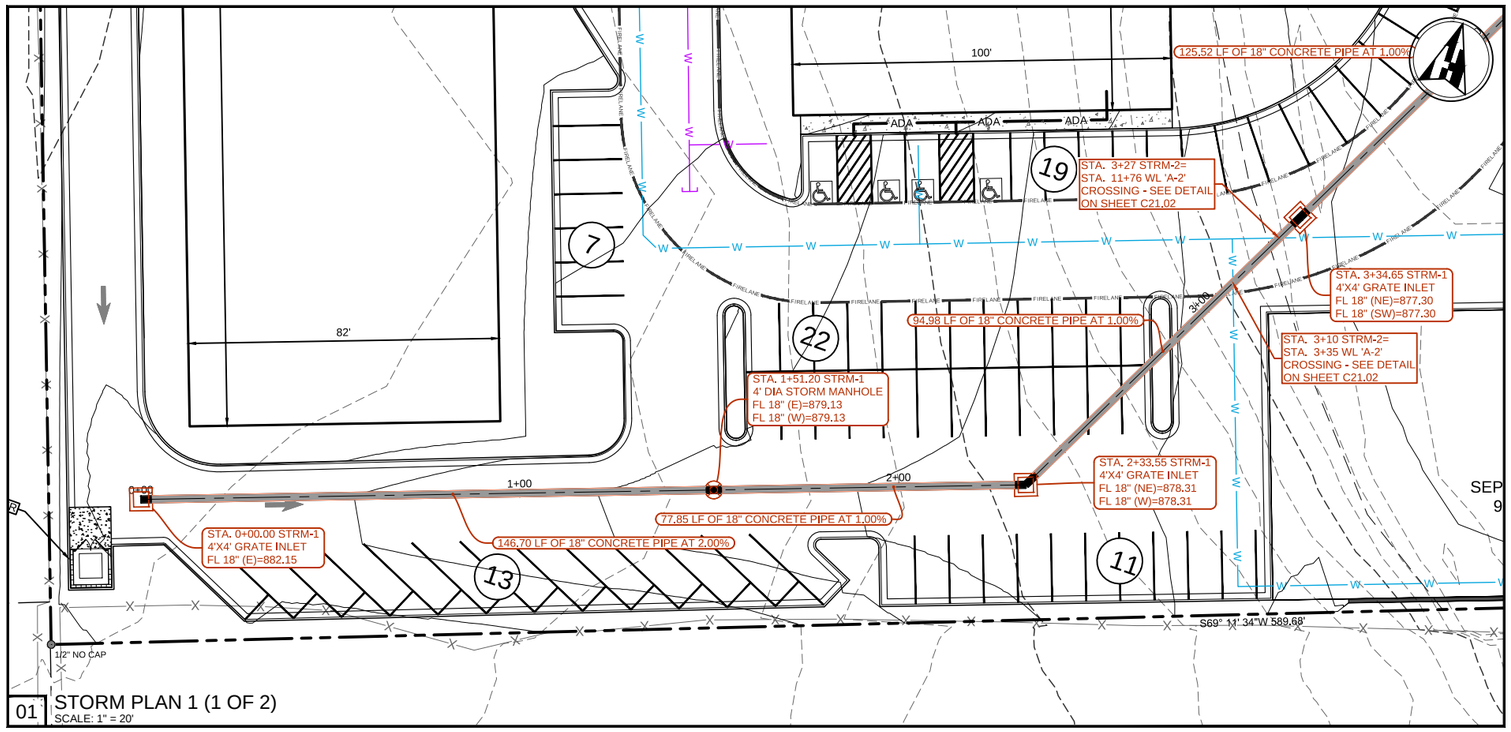
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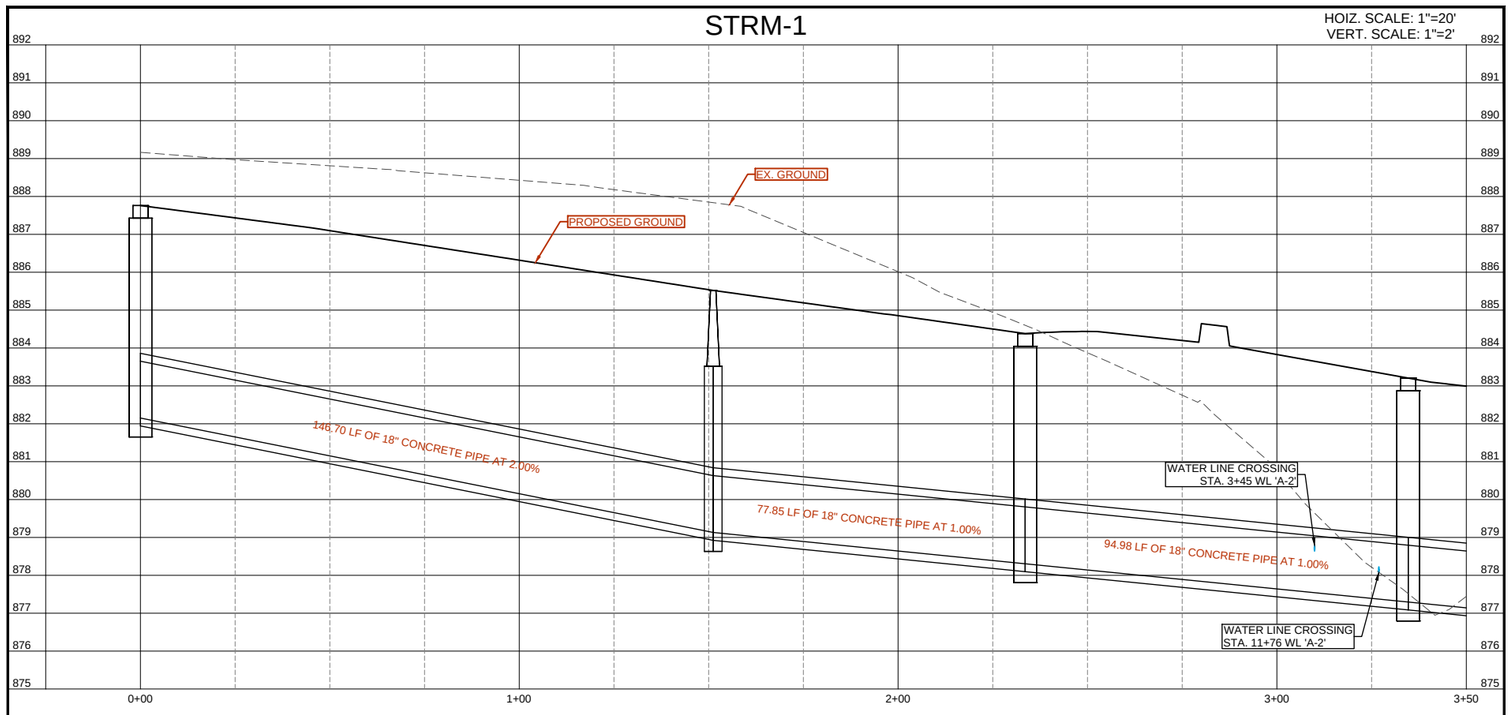
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01 STORM PLAN 1 (1 OF 2)
SCALE: 1" = 20'



01 STORM PROFILE 1 (1 OF 2)
SCALE: 1" = 20'

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SITE DEVELOPMENT PLANS
TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

STORM SEWER PLAN & PROFILE

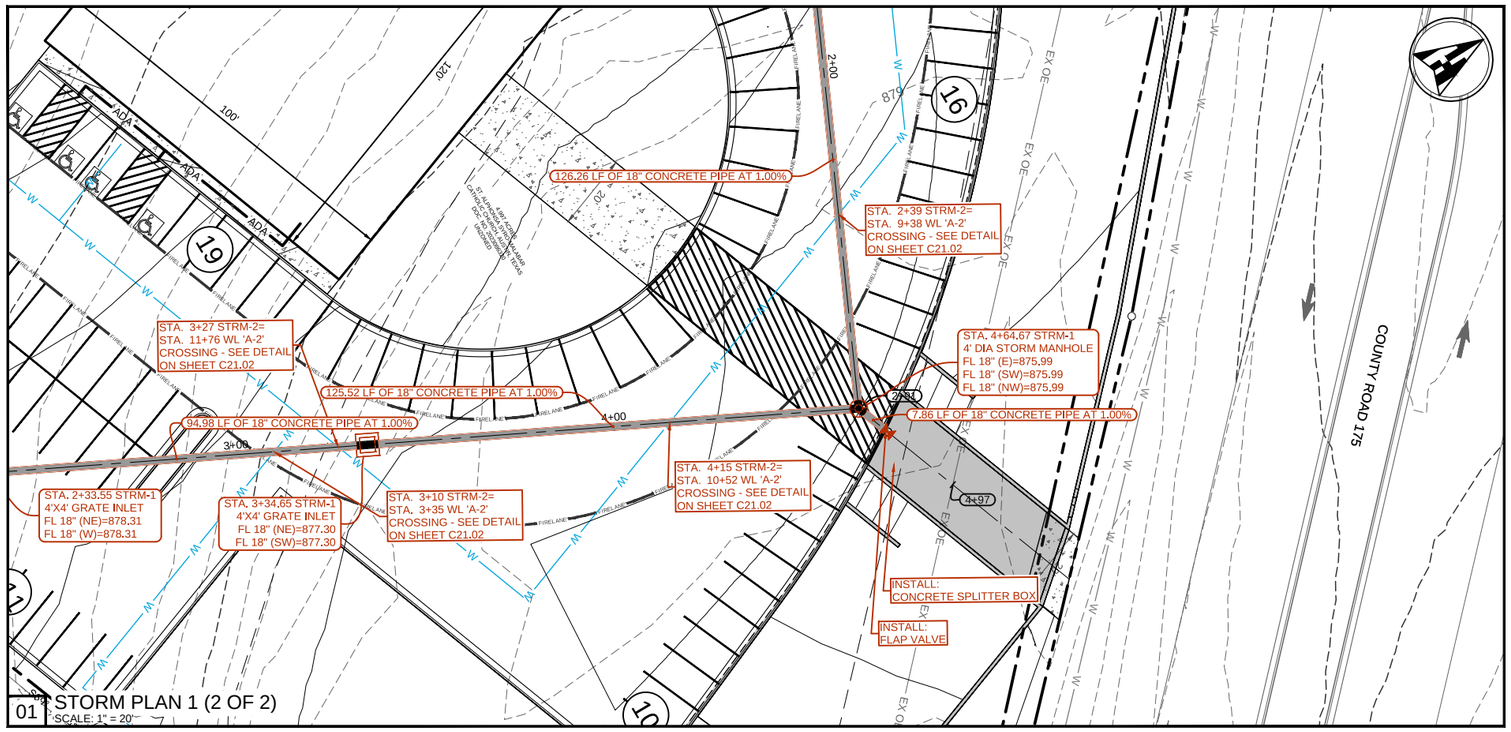
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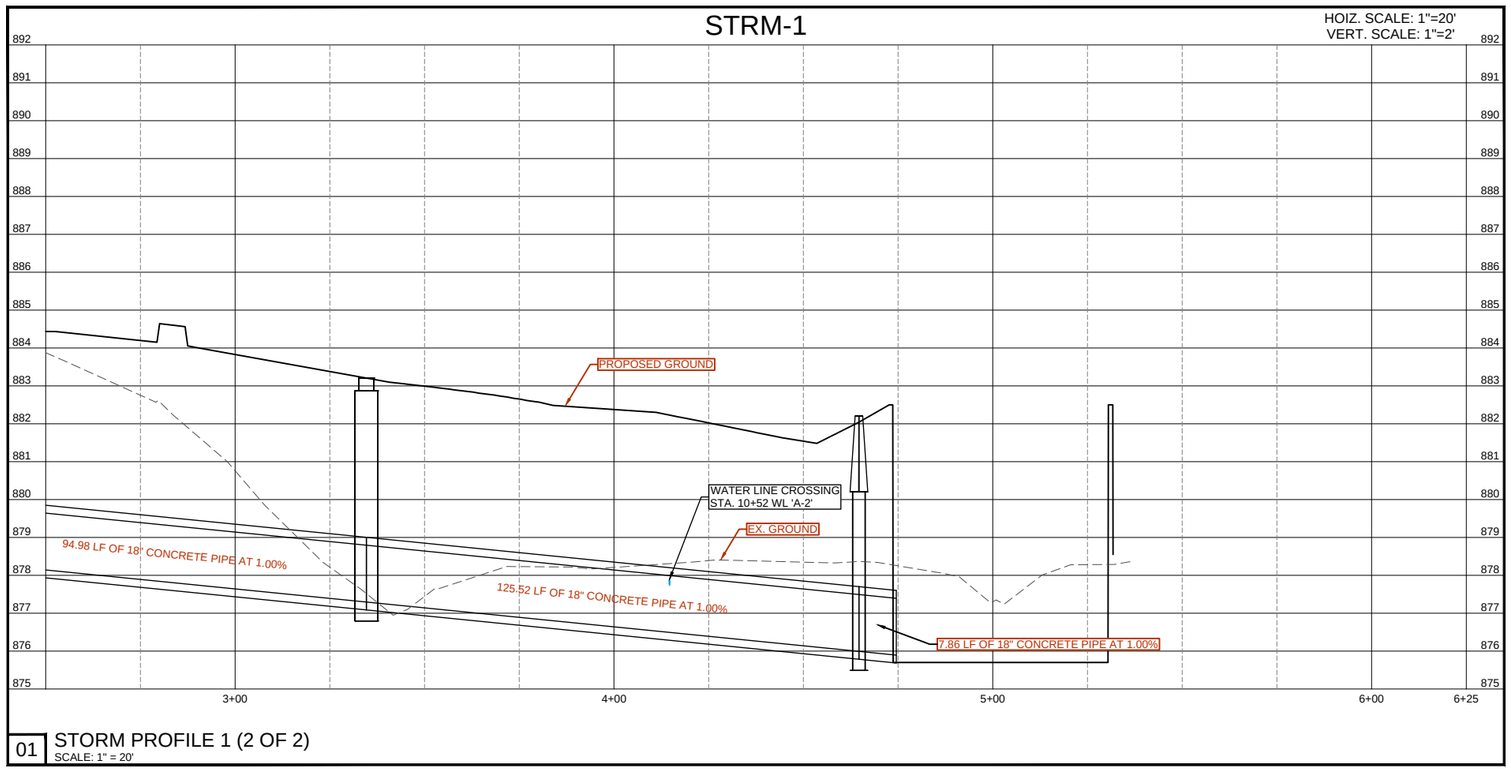
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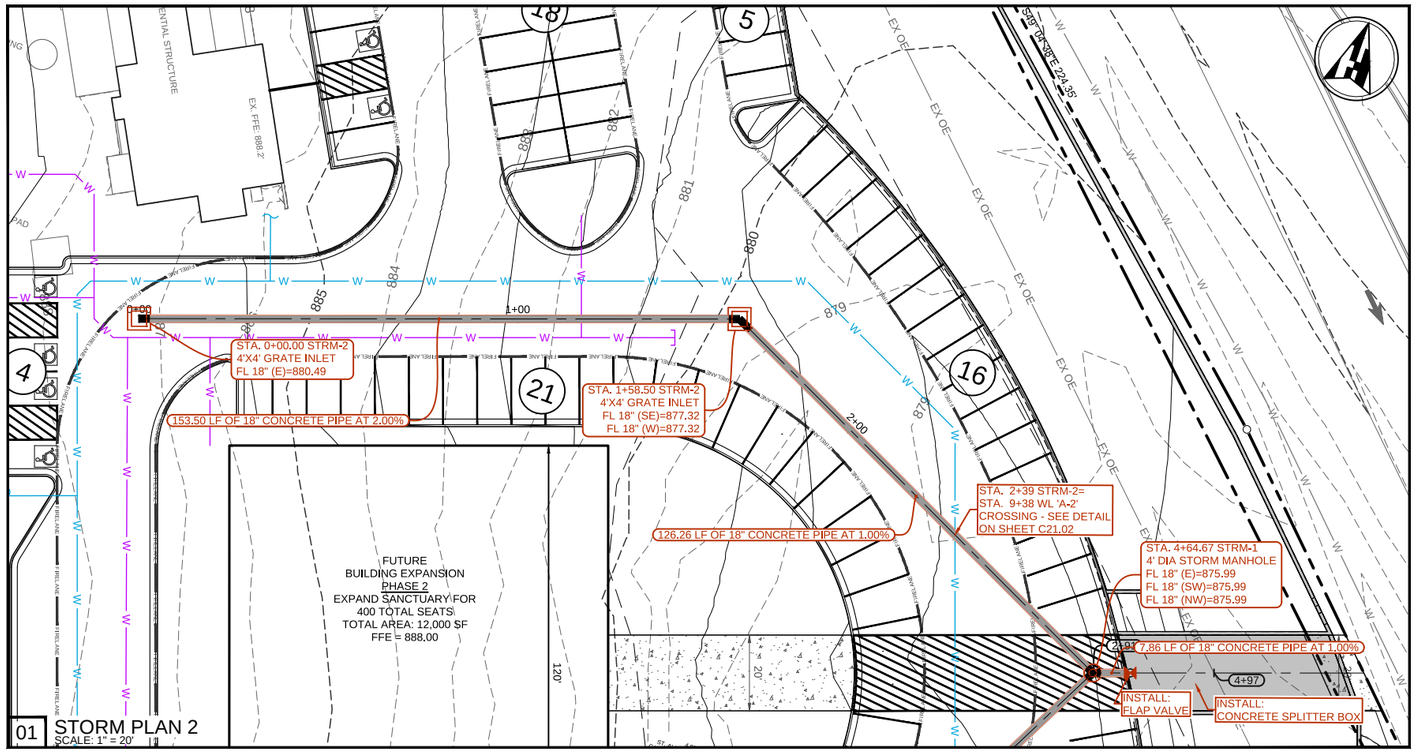
STORM SEWER PLAN & PROFILE

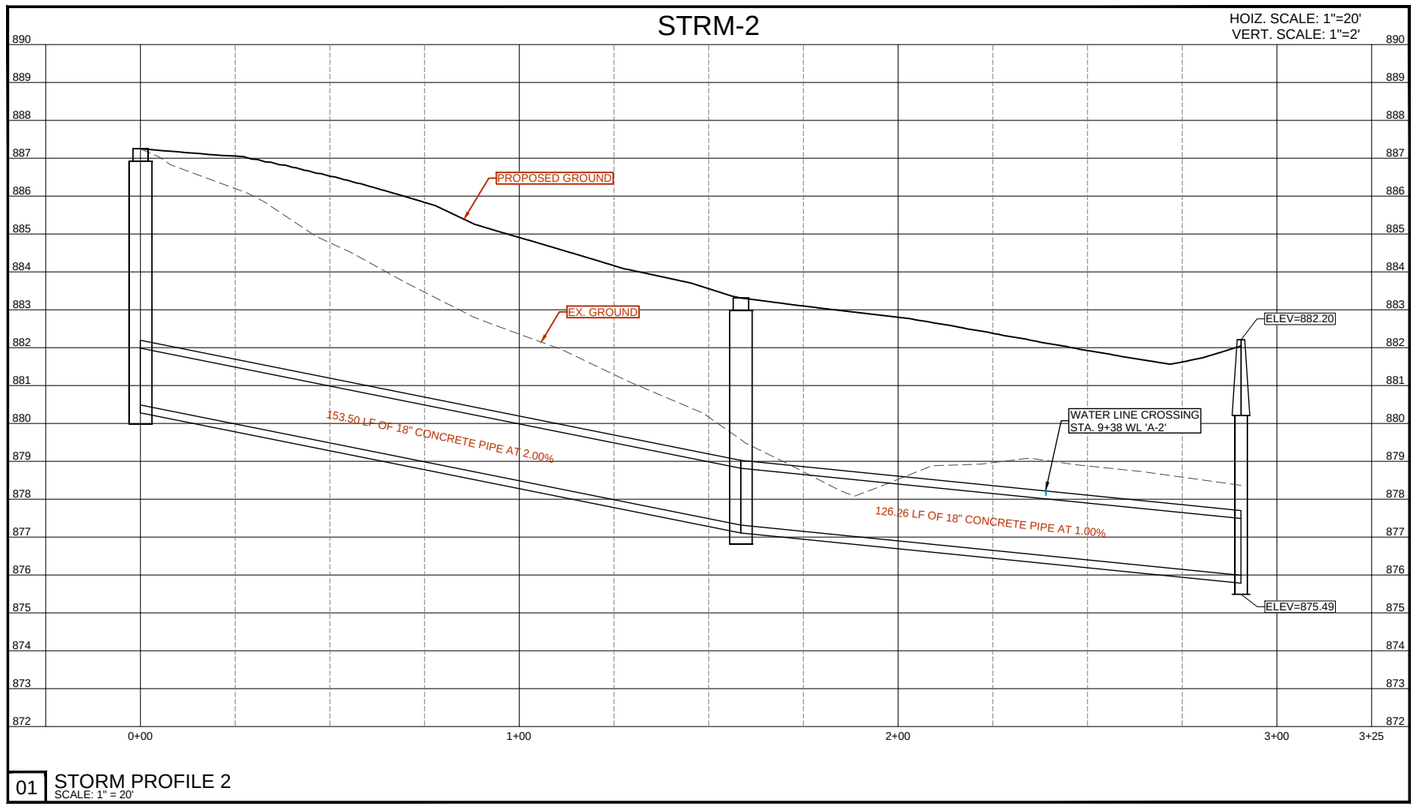
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STORM SEWER PLAN & PROFILE

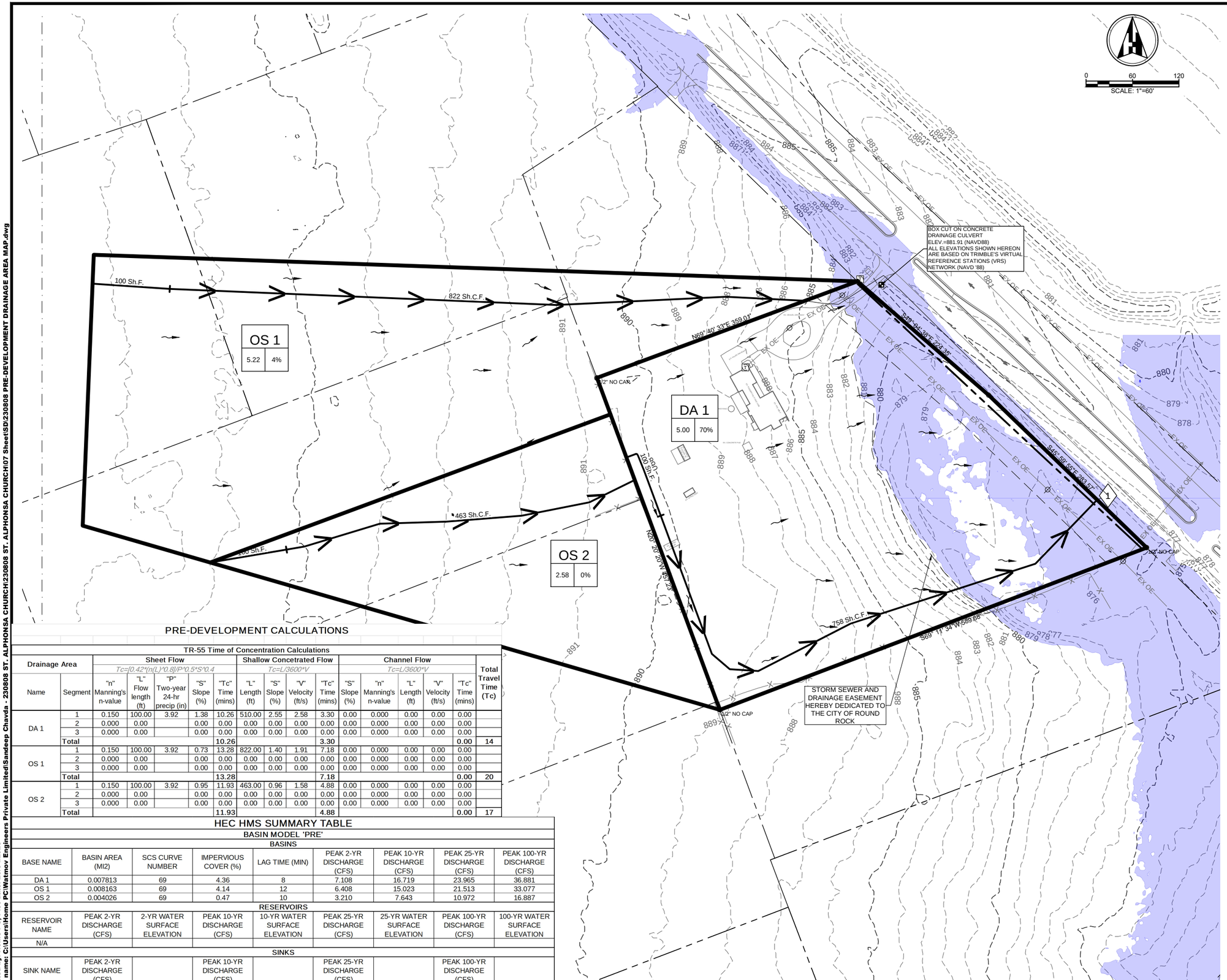
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LEGEND	
DA 1 / 0.90 Ac. / 0%	DRAINAGE AREA LABEL AREA NAME, AREA (ACRES), IMPERVIOUS COVER PERCENTAGE
X	ANALYSIS POINT
100 LF Sh.F.	SHEET FLOW SEGMENT OF TIME OF CONCENTRATION (Tc) PATH
500 LF Sh.C.F.	SHALLOW CONCENTRATED FLOW SEGMENT OF Tc PATH
500 LF Ch.F.	CHANNELIZED FLOW SEGMENT OF Tc PATH
	FLOW ARROW

PRE-DEVELOPMENT CALCULATIONS

TR-55 Time of Concentration Calculations

Drainage Area		Sheet Flow Tc=[0.42*(n(L)^0.8)/P^0.5*S^0.4					Shallow Concetrated Flow Tc=L/3600*V				Channel Flow Tc=L/3600*V					Total Travel Time (Tc)
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two-year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)	
DA 1	1	0.150	100.00	3.92	1.38	10.26	510.00	2.55	2.58	3.30	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**10.26**				**3.30**					**0.00**	14
OS 1	1	0.150	100.00	3.92	0.73	13.28	822.00	1.40	1.91	7.18	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**13.28**				**7.18**					**0.00**	20
OS 2	1	0.150	100.00	3.92	0.95	11.93	463.00	0.96	1.58	4.88	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**11.93**				**4.88**					**0.00**	17

HEC HMS SUMMARY TABLE

BASIN MODEL 'PRE'

BASINS

BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)
DA 1	0.007813	69	4.36	8	7.108	16.719	23.965	36.881
OS 1	0.008163	69	4.14	12	6.408	15.023	21.513	33.077
OS 2	0.004026	69	0.47	10	3.210	7.643	10.972	16.887

RESERVOIRS

RESERVOIR NAME	PEAK 2-YR DISCHARGE (CFS)	2-YR WATER SURFACE ELEVATION	PEAK 10-YR DISCHARGE (CFS)	10-YR WATER SURFACE ELEVATION	PEAK 25-YR DISCHARGE (CFS)	25-YR WATER SURFACE ELEVATION	PEAK 100-YR DISCHARGE (CFS)	100-YR WATER SURFACE ELEVATION
N/A								

SINKS

SINK NAME	PEAK 2-YR DISCHARGE (CFS)		PEAK 10-YR DISCHARGE (CFS)		PEAK 25-YR DISCHARGE (CFS)		PEAK 100-YR DISCHARGE (CFS)	
Analysis 1	14.674		34.464		49.584		76.579	

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EXISTING CONDITIONS DRAINAGE AREA MAP

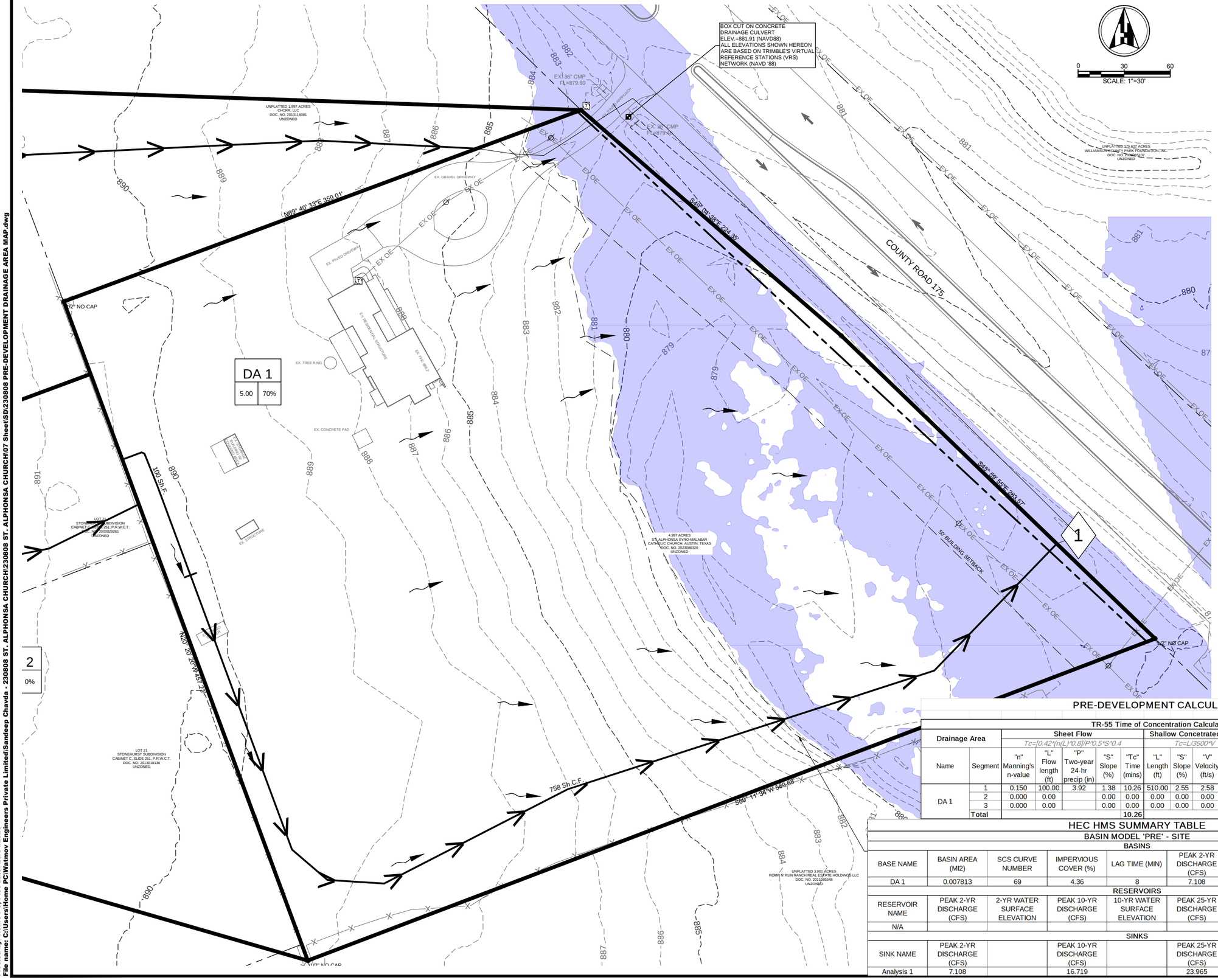
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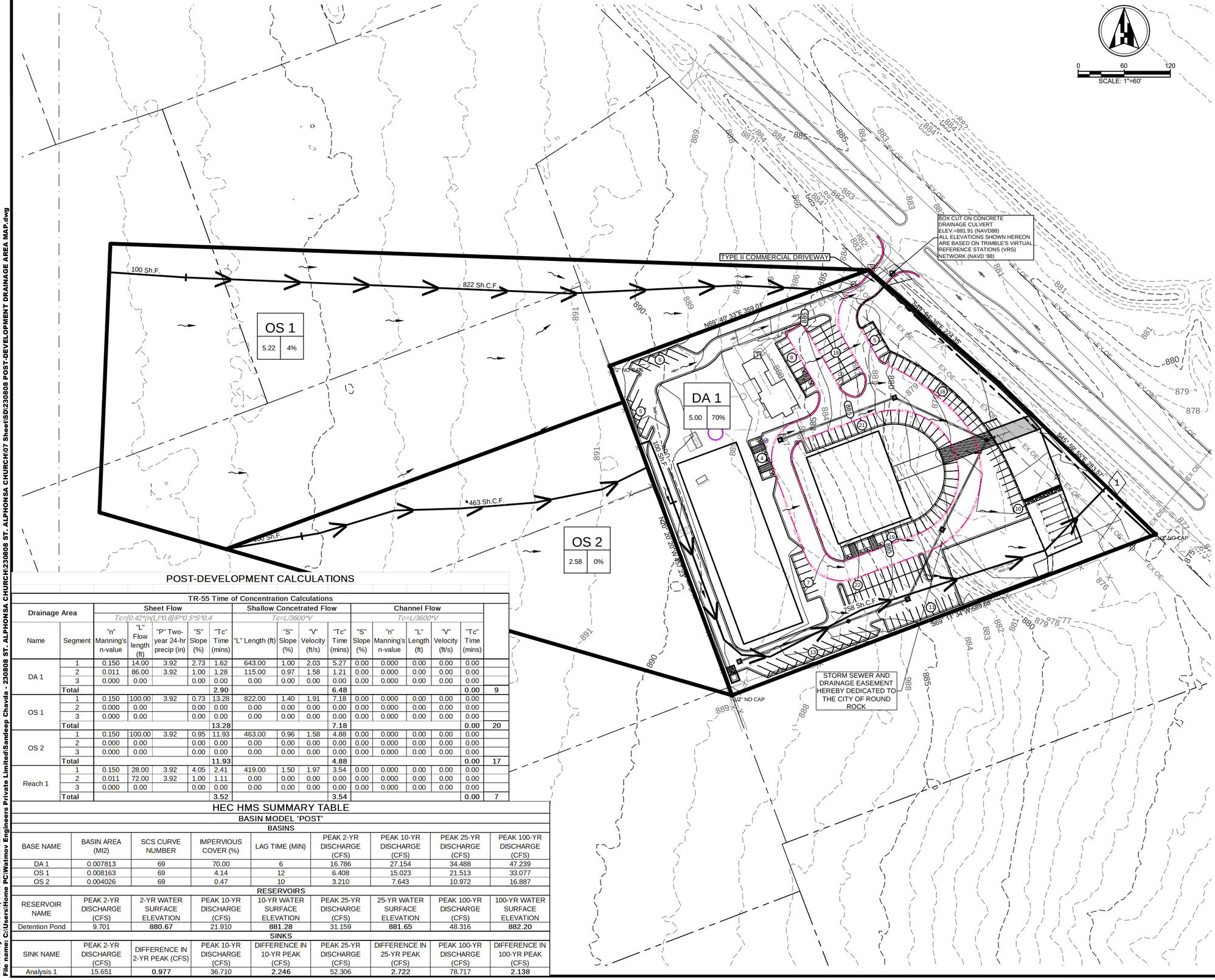
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BOX CUT ON CONCRETE DRAINAGE CULVERT ELEV.=881.91 (NAVD88) ALL ELEVATIONS SHOWN HEREON ARE BASED ON TRIMBLE'S VIRTUAL REFERENCE STATIONS (VRS) NETWORK (NAVD '88)
EX. 36" CMP FL=879.80
EX. 30" CMP FL=879.65
EX. 4'WIDE HEADWALL
EX. 4'WIDE HEADWALL
EX. GRAVEL DRIVEWAY
EX. PAVED DRIVEWAY
EX. PERMANENT STRUCTURE
EX. FFE 886.2'
EX. TREE RING
EX. CONCRETE PAD
EX. STRUCTURE
EX. STRUCTURE
EX. OE
EX. OE
EX. O



POST-DEVELOPMENT CALCULATIONS

TR-55 Time of Concentration Calculations

Drainage Area		Sheet Flow					Shallow Concetrated Flow				Channel Flow					
		Tc=[0.42*(n(L)^0.8)/P^0.5*S^0.4					Tc=L/3600*V				Tc=L/3600*V					
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two-year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)	
DA 1	1	0.150	14.00	3.92	2.73	1.62	643.00	1.00	2.03	5.27	0.00	0.000	0.00	0.00	0.00	
	2	0.011	86.00	3.92	1.00	1.28	115.00	0.97	1.58	1.21	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**2.90**				**6.48**					**0.00**	**9**
OS 1	1	0.150	100.00	3.92	0.73	13.28	822.00	1.40	1.91	7.18	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**13.28**				**7.18**					**0.00**	**20**
OS 2	1	0.150	100.00	3.92	0.95	11.93	463.00	0.96	1.58	4.88	0.00	0.000	0.00	0.00	0.00	
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**11.93**				**4.88**					**0.00**	**17**
Reach 1	1	0.150	28.00	3.92	4.05	2.41	419.00	1.50	1.97	3.54	0.00	0.000	0.00	0.00	0.00	
	2	0.011	72.00	3.92	1.00	1.11	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					**3.52**				**3.54**					**0.00**	**7**

HEC HMS SUMMARY TABLE

BASIN MODEL 'POST'

BASINS

BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)
DA 1	0.007813	69	70.00	6	16.786	27.154	34.488	47.239
OS 1	0.008163	69	4.14	12	6.408	15.023	21.513	33.077
OS 2	0.004026	69	0.47	10	3.210	7.643	10.972	16.887

RESERVOIRS

RESERVOIR NAME	PEAK 2-YR DISCHARGE (CFS)	2-YR WATER SURFACE ELEVATION	PEAK 10-YR DISCHARGE (CFS)	10-YR WATER SURFACE ELEVATION	PEAK 25-YR DISCHARGE (CFS)	25-YR WATER SURFACE ELEVATION	PEAK 100-YR DISCHARGE (CFS)	100-YR WATER SURFACE ELEVATION
Detention Pond	9.701	**880.67**	21.910	**881.28**	31.159	**881.65**	48.316	**882.20**

SINKS

SINK NAME	PEAK 2-YR DISCHARGE (CFS)	DIFFERENCE IN 2-YR PEAK (CFS)	PEAK 10-YR DISCHARGE (CFS)	DIFFERENCE IN 10-YR PEAK (CFS)	PEAK 25-YR DISCHARGE (CFS)	DIFFERENCE IN 25-YR PEAK (CFS)	PEAK 100-YR DISCHARGE (CFS)	DIFFERENCE IN 100-YR PEAK (CFS)
Analysis 1	15.651	**0.977**	36.710	**2.246**	52.306	**2.722**	78.717	**2.138**

LEGEND	
DA 1 / 0.90 Ac. / 0%	DRAINAGE AREA LABEL AREA NAME, AREA (ACRES), IMPERVIOUS COVER PERCENTAGE
X	ANALYSIS POINT
100 LF Sh.F.	SHEET FLOW SEGMENT OF TIME OF CONCENTRATION (Tc) PATH
500 LF Sh.C.F.	SHALLOW CONCENTRATED FLOW SEGMENT OF Tc PATH
500 LF Ch.F.	CHANNELIZED FLOW SEGMENT OF Tc PATH
	FLOW ARROW

NOTES:
1. THE FLOW OFF THE SITE HAS NOT BEEN INSCREASED FROM THE PRE-DEVELOPED CONDITION.

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DEVELOPED CONDITIONS DRAINAGE AREA MAP

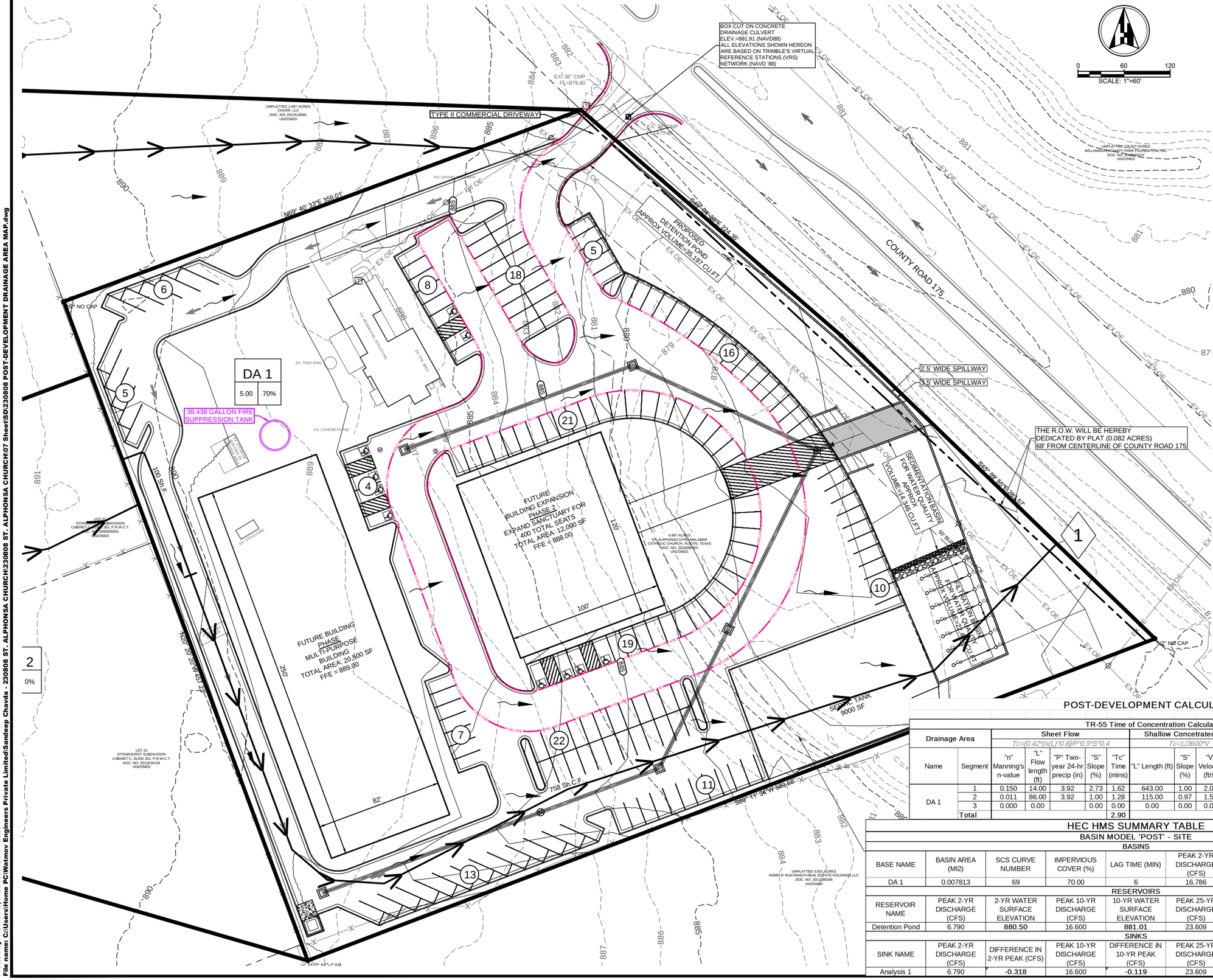
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C14.00

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LEGEND	
DA 1 / 0.90 Ac. / 0%	DRAINAGE AREA LABEL AREA NAME, AREA (ACRES), IMPERVIOUS COVER PERCENTAGE
X	ANALYSIS POINT
100 LF Sh.F.	SHEET FLOW SEGMENT OF TIME OF CONCENTRATION (Tc) PATH
500 LF Sh.C.F.	SHALLOW CONCENTRATED FLOW SEGMENT OF Tc PATH
500 LF Ch.F.	CHANNELIZED FLOW SEGMENT OF Tc PATH
	FLOW ARROW

NOTES:
1. THE FLOW OFF THE SITE HAS NOT BEEN INSCREASED FROM THE PRE-DEVELOPED CONDITION.

POST-DEVELOPMENT CALCULATIONS

TR-55 Time of Concentration Calculations

Drainage Area		Sheet Flow					Shallow Concetrated Flow				Channel Flow					
		Tc=[0.42*(n(L)^0.8)/P^0.5*S^0.4					Tc=L/3600*V				Tc=L/3600*V					
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two-year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)	
DA 1	1	0.150	14.00	3.92	2.73	1.62	643.00	1.00	2.03	5.27	0.00	0.000	0.00	0.00	0.00	
	2	0.011	86.00	3.92	1.00	1.28	115.00	0.97	1.58	1.21	0.00	0.000	0.00	0.00	0.00	
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	
	Total					2.90				6.48					0.00	9

HEC HMS SUMMARY TABLE

BASIN MODEL 'POST' - SITE

BASINS

BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)
DA 1	0.007813	69	70.00	6	16.786	27.154	34.488	47.239

RESERVOIRS

RESERVOIR NAME	PEAK 2-YR DISCHARGE (CFS)	2-YR WATER SURFACE ELEVATION	PEAK 10-YR DISCHARGE (CFS)	10-YR WATER SURFACE ELEVATION	PEAK 25-YR DISCHARGE (CFS)	25-YR WATER SURFACE ELEVATION	PEAK 100-YR DISCHARGE (CFS)	100-YR WATER SURFACE ELEVATION
Detention Pond	6.790	**880.50**	16.600	**881.01**	23.609	**881.35**	36.754	**881.84**

SINKS

SINK NAME	PEAK 2-YR DISCHARGE (CFS)	DIFFERENCE IN 2-YR PEAK (CFS)	PEAK 10-YR DISCHARGE (CFS)	DIFFERENCE IN 10-YR PEAK (CFS)	PEAK 25-YR DISCHARGE (CFS)	DIFFERENCE IN 25-YR PEAK (CFS)	PEAK 100-YR DISCHARGE (CFS)	DIFFERENCE IN 100-YR PEAK (CFS)
Analysis 1	6.790	**-0.318**	16.600	**-0.119**	23.609	**-0.356**	36.754	**-0.127**

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SITE DEVELOPMENT PLANS TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

PROJECT SITE-DEVELOPED CONDITIONS DRAINAGE AREA MAP

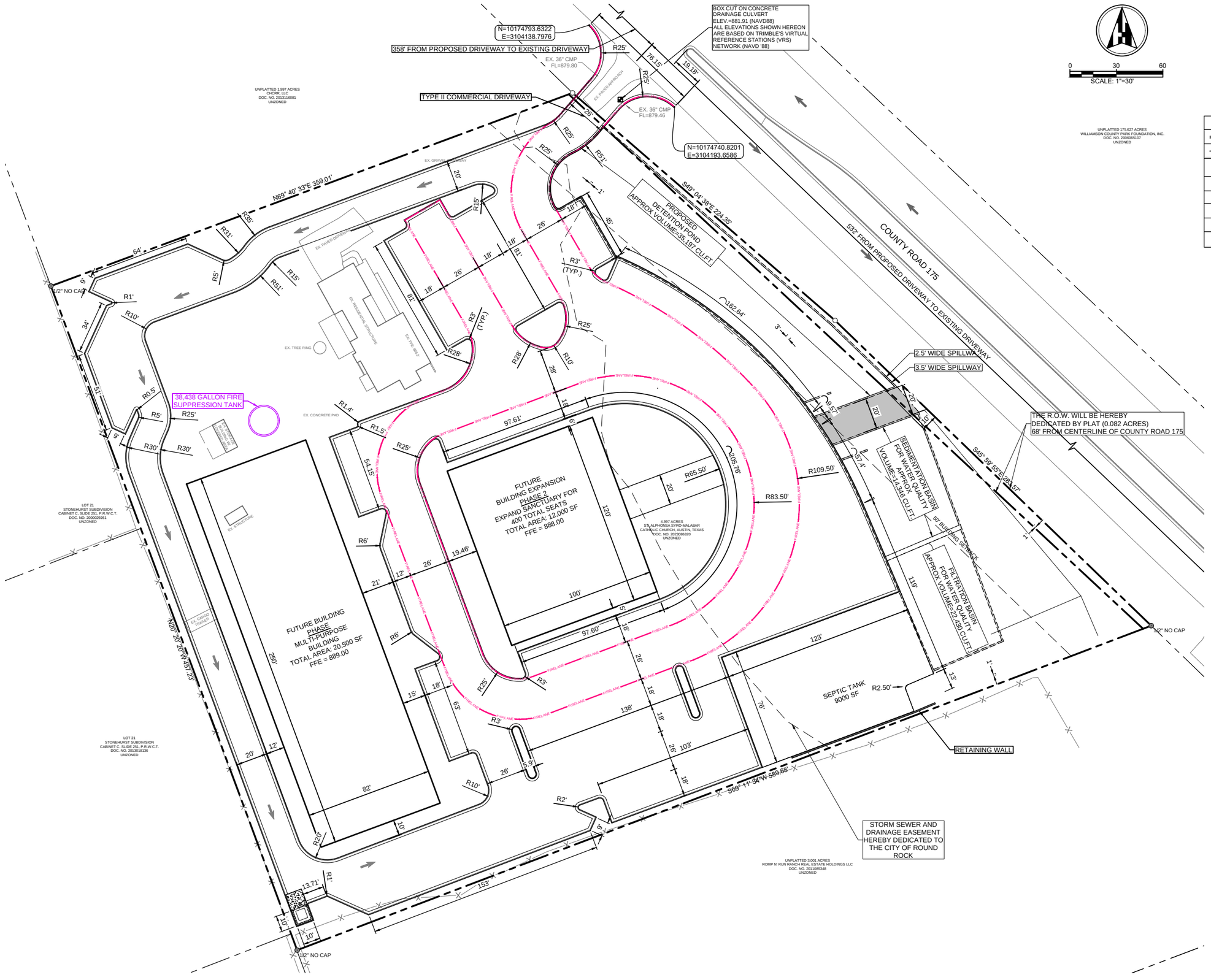
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JENNIFER L. HENDERSON
116883
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PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

C15.00

CITY PERMIT NUMBER

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LEGEND	
EX SD	EXISTING STORMWATER LINE
	SUBJECT PROPERTY
	EXISTING WASTEWATER MANHOLE
	WASTEWATER MANHOLE
	WATER VALVE
	IRON ROD FOUND (IRF)
	FIRE HYDRANT
	BACKFLOW PREVENTER

NOTES:
1. ALL DIMENSIONS ARE TO THE BACK OF CURB, UNLESS OTHERWISE NOTED.
2. ALL CURB RETURN RADII ARE 2'-6" (AT BACK OF CURB), UNLESS OTHERWISE NOTED.
3. REFER TO SHEET C21.04 C21.05 FOR PAVING AND STRIPING DIMENSIONS.

PARKING TABLE				
BLDG #	BUILDING (OR AREA) USE	BUILDING (OR AREA) S.F.	REQUIRED PARKING RATIO	REQUIRED PARKING #'S
STANDARD PARKING PROVIDED				157
ADA SPACES REQUIRED				5
ADA SPACED PROVIDED				8
TOTAL PARKING PROVIDED				165

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DIMENSION CONTROL PLAN

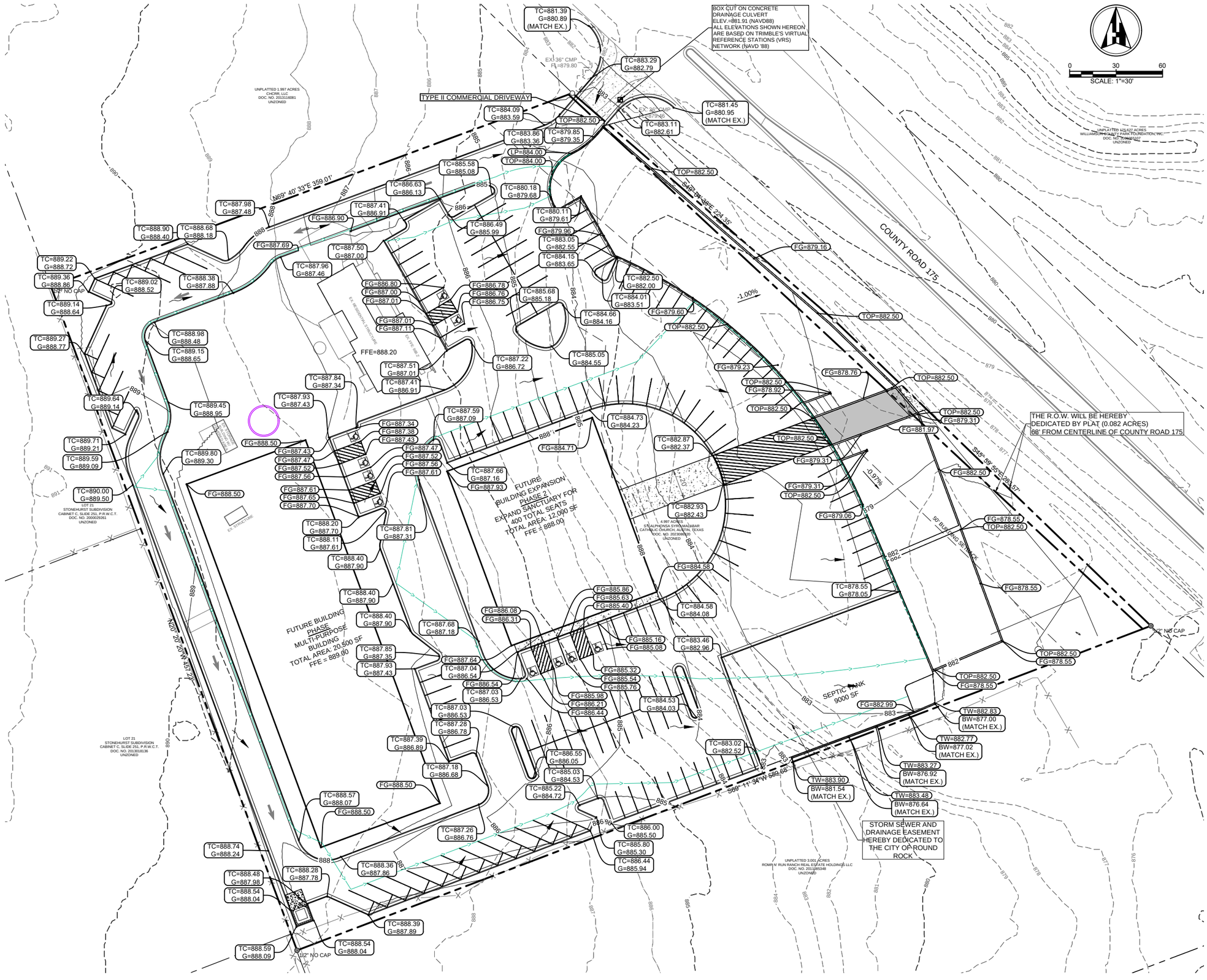
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PROJECT NO. 230808	
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APPROVED BY: JH	

C16.00

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LEGEND	
ADA	ACCESSIBLE ROUTE OF TRAVEL
TC	TOP OF CURB
G	GUTTER
TW	TOP OF WALL
BW	BOTTOM OF WALL
FG	FINISHED GRADE
FL	FLOWLINE
TP	TOP OF PAVEMENT
TOP	TOP OF POND
TI	TOP OF INLET
EG	EXISTING GRADE
	FLOW LINE
	FLOW ARROWS

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 TDLR 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.

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SITE DEVELOPMENT PLANS TO SERVE
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GRADING PLAN

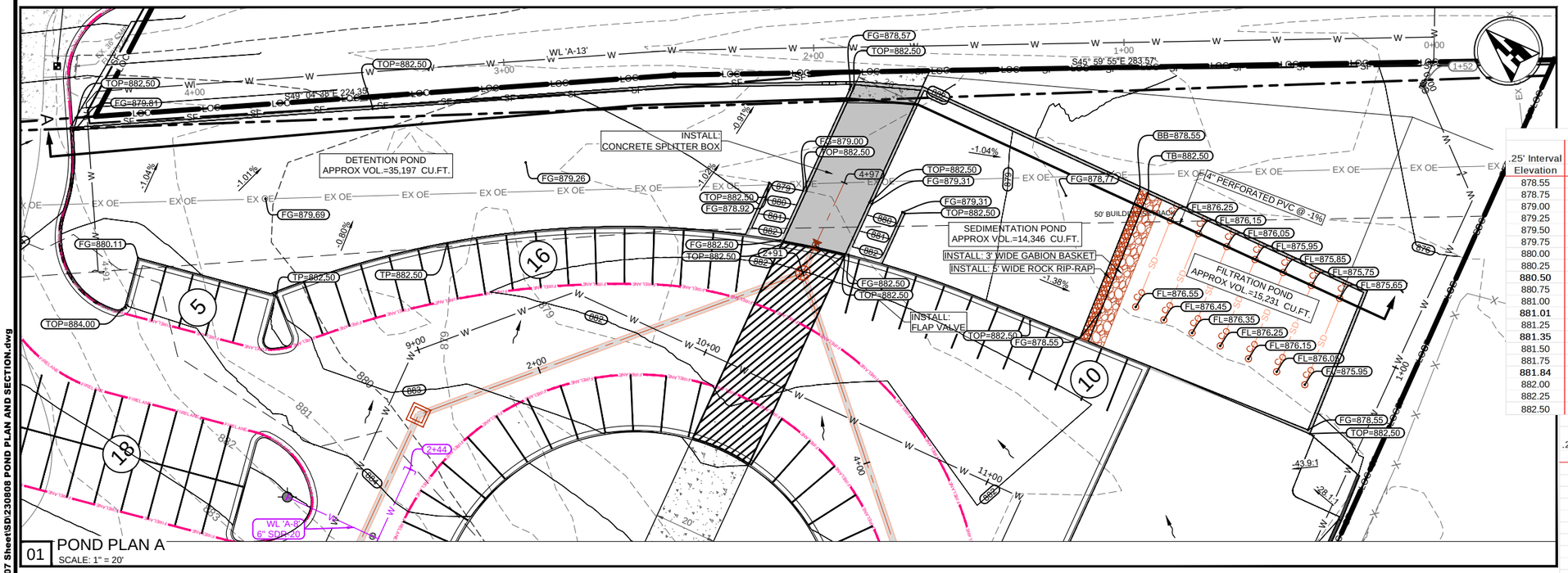
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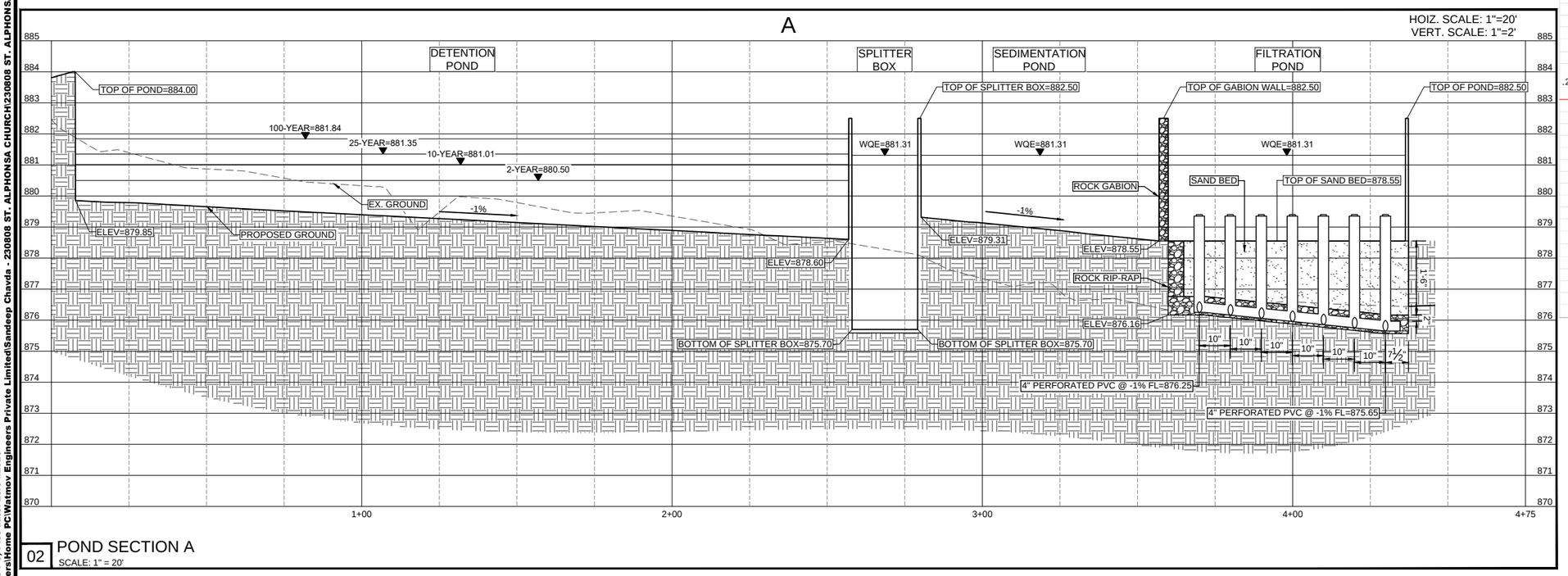
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CITY PERMIT NUMBER

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01 POND PLAN A
SCALE: 1" = 20'



02 POND SECTION A
SCALE: 1" = 20'

Detention Pond Stage-Storage

.25' Interval Elevation	Area S.F.	Area AC.	Storm Event	Avg. End Area Method	Accumulated Volume	Discharge (cfs)
878.55	0.00	0.0		0	-	0
878.75	369.55	0.008484		36.955	36.955	0
879.00	1822.33	0.041835		273.985	310.94	0
879.25	3928.02	0.090175		718.79375	1029.73375	1.314
879.50	6186.25	0.142017		1264.28375	2294.0175	3.195
879.75	8673.44	0.199115		1857.46125	4151.47875	4.405
880.00	10739.87	0.246553		2426.66375	6578.1425	5.318
880.25	11419.77	0.262162		2769.955	9348.0975	6.151
880.50	11435.79	0.26253	2-yr	2811.23368	12159.33118	**6.790**
880.75	11450.02	0.262856		2906.49767	15065.82885	12.059
881.00	11465.18	0.263204		2864.4	17930.22885	16.399
881.01	11466.27	0.263229	10-yr	103.191545	18033.42039	**16.600**
881.25	11480.38	0.263553		2765.07186	20798.49225	20.567
881.35	11487.21	0.26371	25-yr	1194.31455	21992.8068	**23.609**
881.50	11495.62	0.263903		1677.74641	23670.55321	27.496
881.75	11510.90	0.264254		2875.815	26546.36821	34.313
881.84	11516.53	0.264383	100-yr	1013.2071	27559.57531	**36.754**
882.00	11526.21	0.264605		1866.46227	29426.03758	
882.25	11541.56	0.264958		2883.47125	32309.50883	
882.50	11556.95	0.265311		2887.31375	35196.82258	

Sedimentation Basin Stage-Storage

.25' Interval Elevation	Area S.F.	Area AC.	Note	Avg. End Area Method	Accumulated Volume
878.55	0.00	0.0		0	-
878.75	882.74	0.020265		88.274	88.274
879.00	1996.97	0.045844		359.96375	448.23775
879.25	3388.4	0.077787		673.17125	1121.409
879.50	4009.22	0.092039		924.7025	2046.1115
879.75	4024.27	0.092385		1004.18625	3050.29775
880.00	4039.33	0.09273		1007.95	4058.24775
880.25	4054.4	0.093076		1011.71625	5069.964
880.50	4069.48	0.093422		1015.485	6085.449
880.75	4084.58	0.093769		1019.2575	7104.7065
881.00	4099.69	0.094116		1023.03375	8127.74025
881.25	4114.82	0.094463		1026.81375	9154.554
881.31	4118.46	0.094547	WQE	246.998424	9401.552424
881.50	4129.99	0.094812		783.602826	10185.15525
881.75	4145.2	0.095161		1034.39875	11219.554
882.00	4160.43	0.09551		1038.20375	12257.75775
882.25	4175.7	0.095861		1042.01625	13299.774
882.50	4191.01	0.096212		1045.83875	14345.61275

Filtration Basin Stage-Storage

.25' Interval Elevation	Area S.F.	Area AC.	Note	Avg. End Area Method	Accumulated Volume
878.55	6398.46	0.1		0	-
878.75	3784.07	0.08687		1018.253	1018.253
879.00	3784.87	0.086889		946.1175	1964.3705
879.25	3785.66	0.086907		946.31625	2910.68675
879.50	3786.46	0.086925		946.515	3857.20175
879.75	3787.26	0.086944		946.715	4803.91675
880.00	3788.05	0.086962		946.91375	5750.8305
880.25	3788.85	0.08698		947.1125	6697.943
880.50	3789.65	0.086998		947.3125	7645.2555
880.75	3790.45	0.087017		947.5125	8592.768
881.00	3791.24	0.087035		947.71125	9540.47925
881.25	3792.04	0.087053		947.91	10488.38925
881.31	3792.23	0.087058	WQE	227.52816	10715.91741
881.50	3792.84	0.087072		720.58184	11436.49925
881.75	3793.64	0.08709		948.31	12384.80925
882.00	3794.44	0.087108		948.51	13333.31925
882.25	3795.23	0.087126		948.70875	14282.028
882.50	3796.03	0.087145		948.9075	15230.9355

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SITE DEVELOPMENT PLANS TO SERVE
ST ALPHONSA CHURCH
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LEANDER, TX 78641

POND PLAN AND SECTION 1

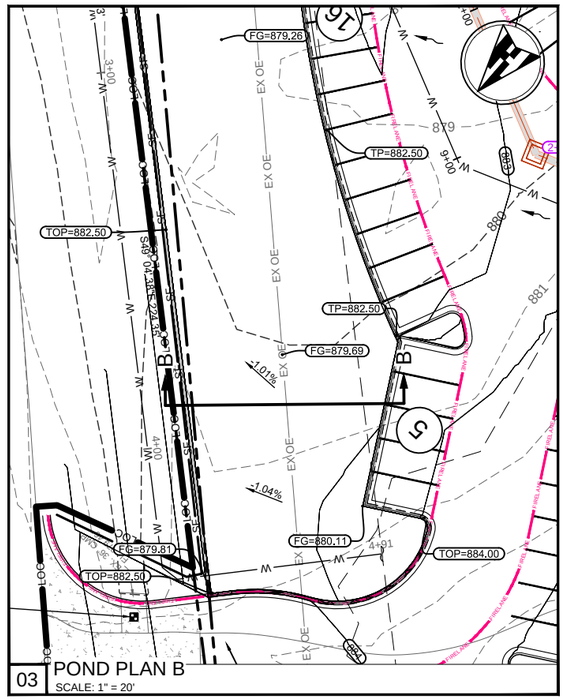
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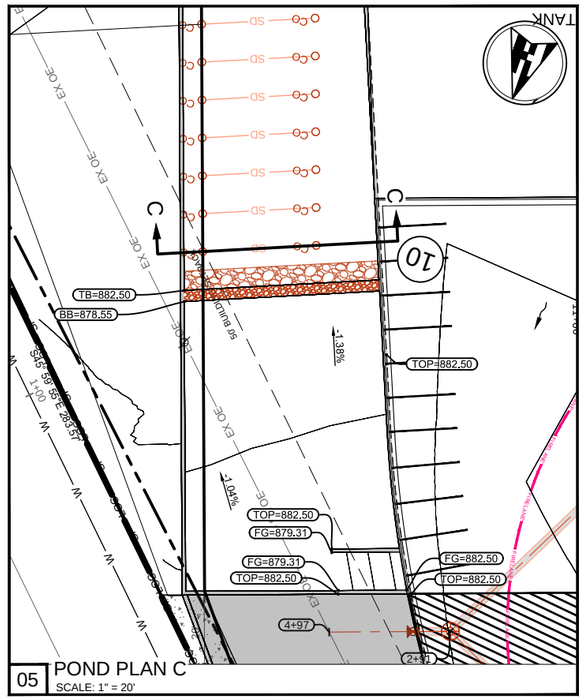
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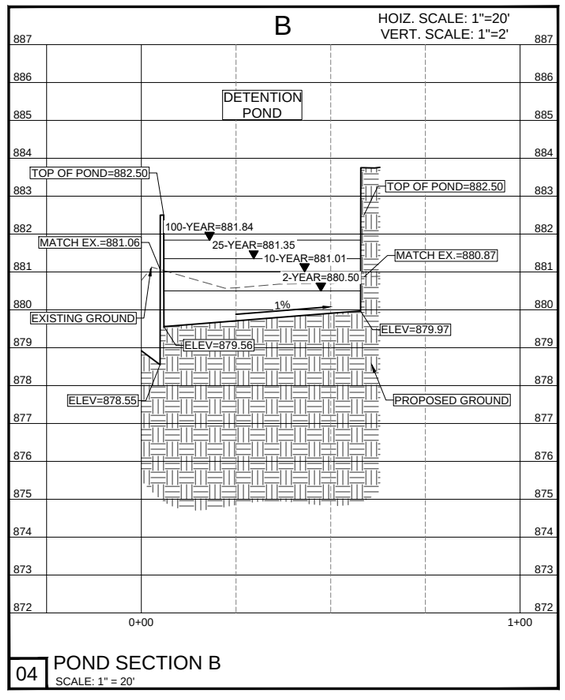
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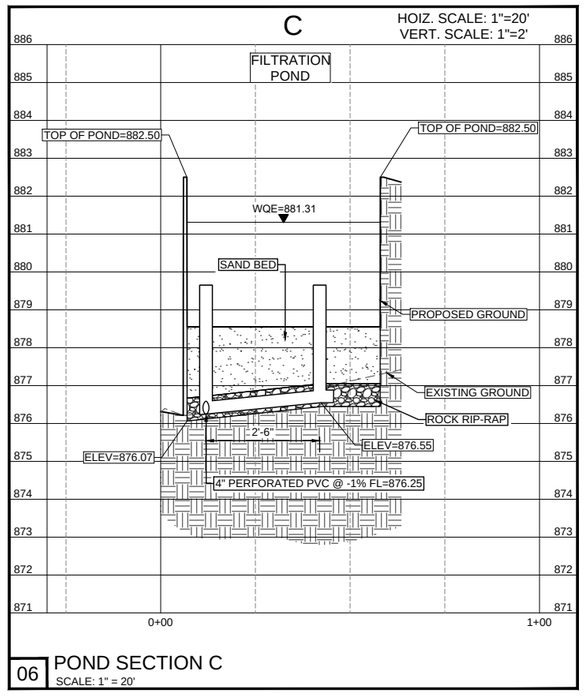
03 POND PLAN B
SCALE: 1" = 20'



05 POND PLAN C
SCALE: 1" = 20'



04 POND SECTION B
SCALE: 1" = 20'



06 POND SECTION C
SCALE: 1" = 20'

Detention Pond Stage-Storage

.25' Interval Elevation	Area S.F.	Area AC.	Storm Event	Avg. End Area Method	Accumulated Volume	Discharge (cfs)
878.55	0.00	0.0		0	-	0
878.75	369.55	0.008484		36.955	36.955	0
879.00	1822.33	0.041835		273.985	310.94	0
879.25	3928.02	0.090175		718.79375	1029.73375	1.314
879.50	6186.25	0.142017		1264.28375	2294.0175	3.195
879.75	8673.44	0.199115		1857.46125	4151.47875	4.405
880.00	10739.87	0.246553		2426.66375	6578.1425	5.318
880.25	11419.77	0.262162		2769.955	9348.0975	6.151
880.50	11435.79	0.26253	**2-yr**	2811.23368	12159.33118	**6.790**
880.75	11450.02	0.262856		2906.49767	15065.82885	12.059
881.00	11465.18	0.263204		2864.4	17930.22885	16.399
881.01	11466.27	0.263229	**10-yr**	103.191545	18033.42039	**16.600**
881.25	11480.38	0.263553		2765.07186	20798.49225	20.567
881.35	11487.21	0.26371	**25-yr**	1194.31455	21992.8068	**23.609**
881.50	11495.62	0.263903		1677.74641	23670.55321	27.496
881.75	11510.90	0.264254		2875.815	26546.36821	34.313
881.84	11516.53	0.264383	**100-yr**	1013.2071	27559.57531	**36.754**
882.00	11526.21	0.264605		1866.46227	29426.03758	
882.25	11541.56	0.264958		2883.47125	32309.50883	
882.50	11556.95	0.265311		2887.31375	35196.82258	

Filtration Basin Stage-Storage

.25' Interval Elevation	Area S.F.	Area AC.	Note	Avg. End Area Method	Accumulated Volume
878.55	6398.46	0.1		0	-
878.75	3784.07	0.08687		1018.253	1018.253
879.00	3784.87	0.086889		946.1175	1964.3705
879.25	3785.66	0.086907		946.31625	2910.68675
879.50	3786.46	0.086925		946.515	3857.20175
879.75	3787.26	0.086944		946.715	4803.91675
880.00	3788.05	0.086962		946.91375	5750.8305
880.25	3788.85	0.08698		947.1125	6697.943
880.50	3789.65	0.086998		947.3125	7645.2555
880.75	3790.45	0.087017		947.5125	8592.768
881.00	3791.24	0.087035		947.71125	9540.47925
881.25	3792.04	0.087053		947.91	10488.38925
881.31	3792.23	0.087058	WQE	227.52816	10715.91741
881.50	3792.84	0.087072		720.58184	11436.49925
881.75	3793.64	0.08709		948.31	12384.80925
882.00	3794.44	0.087108		948.51	13333.31925
882.25	3795.23	0.087126		948.70875	14282.028
882.50	3796.03	0.087145		948.9075	15230.9355

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SITE DEVELOPMENT PLANS
TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

POND PLAN AND SECTION 2

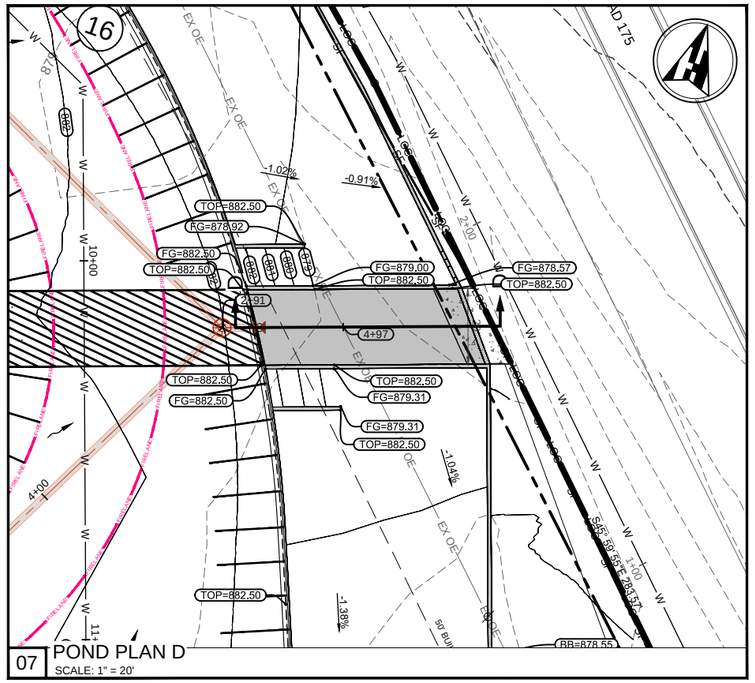
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STATE OF TEXAS
05/09/2025

PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

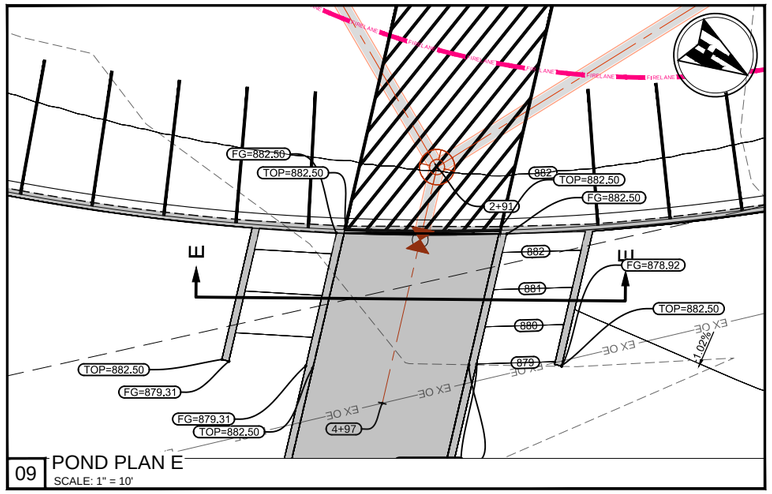
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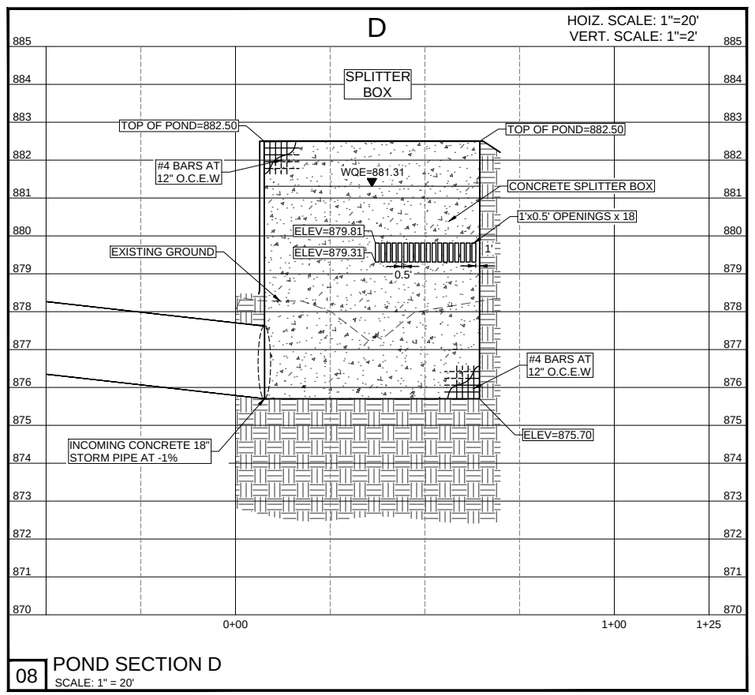
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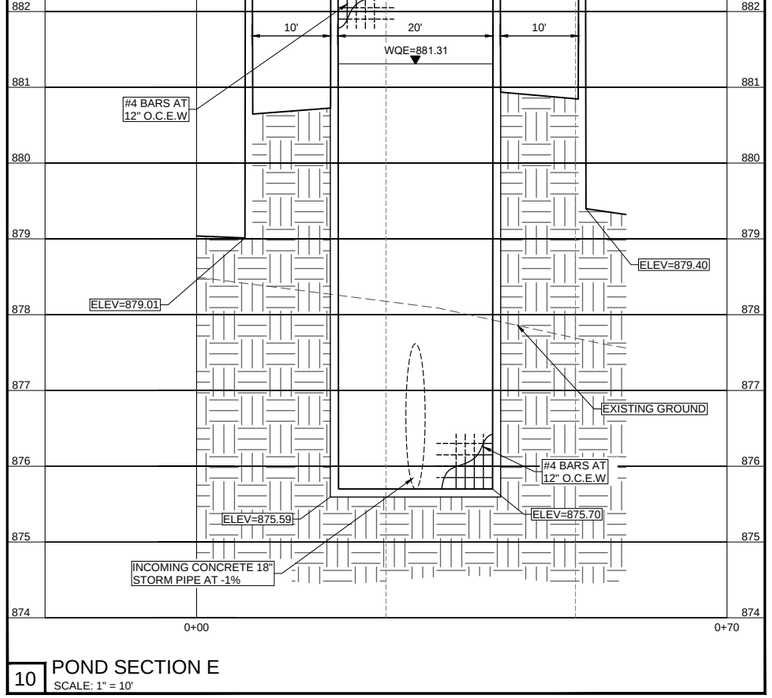
07 POND PLAN D
SCALE: 1" = 20'



09 POND PLAN E
SCALE: 1" = 10'



08 POND SECTION D
SCALE: 1" = 20'



10 POND SECTION E
SCALE: 1" = 10'

Detention Pond Stage-Storage

.25' Interval Elevation	Area S.F.	Area AC.	Storm Event	Avg. End Area Method	Accumulated Volume	Discharge (cfs)
878.55	0.00	0.0		0	-	0
878.75	369.55	0.008484		36.955	36.955	0
879.00	1822.33	0.041835		273.985	310.94	0
879.25	3928.02	0.090175		718.79375	1029.73375	1.314
879.50	6186.25	0.142017		1264.28375	2294.0175	3.195
879.75	8673.44	0.199115		1857.46125	4151.47875	4.405
880.00	10739.87	0.246553		2426.66375	6578.1425	5.318
880.25	11419.77	0.262162		2769.955	9348.0975	6.151
880.50	11435.79	0.26253	**2-yr**	2811.23368	12159.33118	**6.790**
880.75	11450.02	0.262856		2906.49767	15065.82885	12.059
881.00	11465.18	0.263204		2864.4	17930.22885	16.399
881.01	11466.27	0.263229	**10-yr**	103.191545	18033.42039	**16.600**
881.25	11480.38	0.263553		2765.07186	20798.49225	20.567
881.35	11487.21	0.26371	**25-yr**	1194.31455	21992.8068	**23.609**
881.50	11495.62	0.263903		1677.74641	23670.55321	27.496
881.75	11510.90	0.264254		2875.815	26546.36821	34.313
881.84	11516.53	0.264383	**100-yr**	1013.2071	27559.57531	**36.754**
882.00	11526.21	0.264605		1866.46227	29426.03758	
882.25	11541.56	0.264958		2883.47125	32309.50883	
882.50	11556.95	0.265311		2887.31375	35196.82258	

Sedimentation Basin Stage-Storage

.25' Interval Elevation	Area S.F.	Area AC.	Note	Avg. End Area Method	Accumulated Volume
878.55	0.00	0.0		0	-
878.75	882.74	0.020265		88.274	88.274
879.00	1996.97	0.045844		359.96375	448.23775
879.25	3388.4	0.077787		673.17125	1121.409
879.50	4009.22	0.092039		924.7025	2046.1115
879.75	4024.27	0.092385		1004.18625	3050.29775
880.00	4039.33	0.09273		1007.95	4058.24775
880.25	4054.4	0.093076		1011.71625	5069.964
880.50	4069.48	0.093422		1015.485	6085.449
880.75	4084.58	0.093769		1019.2575	7104.7065
881.00	4099.69	0.094116		1023.03375	8127.74025
881.25	4114.82	0.094463		1026.81375	9154.554
881.31	4118.46	0.094547	**WQE**	246.998424	9401.552424
881.50	4129.99	0.094812		783.602826	10185.15525
881.75	4145.2	0.095161		1034.39875	11219.554
882.00	4160.43	0.09551		1038.20375	12257.75775
882.25	4175.7	0.095861		1042.01625	13299.774
882.50	4191.01	0.096212		1045.83875	14345.61275

Reservoir | Outlet 1 | Options

Basin Name: Post - Site
Element Name: Pond

Method:	Orifice Outlet
Direction:	Main
Number Barrels:	1
*Center Elevation (FT)	879.175
*Area (FT2)	1.2272
*Coefficient:	0.6

15-inch (1.25 feet) diameter circular orifice
Invert elevation 878.55'

Reservoir | Outlet 2 | Options

Basin Name: Post - Site
Element Name: Pond

Method:	Orifice Outlet
Direction:	Main
Number Barrels:	2
*Center Elevation (FT)	880.625
*Area (FT2)	1.2272
*Coefficient:	0.6

Two 15-inch (1.25 feet) diameter circular orifices
Invert elevation 880.00'

Reservoir | Spillway 1 | Options

Basin Name: Post - Site
Element Name: Pond

Method:	Broad-Crested Spillway
Direction:	Main
*Elevation (FT)	880.75
*Length (FT)	3.25
*Coefficient (FT^0.5/S)	3
Gates:	0

Reservoir | Spillway 2 | Options

Basin Name: Post - Site
Element Name: Pond

Method:	Broad-Crested Spillway
Direction:	Main
*Elevation (FT)	881.25
*Length (FT)	2.25
*Coefficient (FT^0.5/S)	3
Gates:	0

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POND PLAN AND SECTION 3

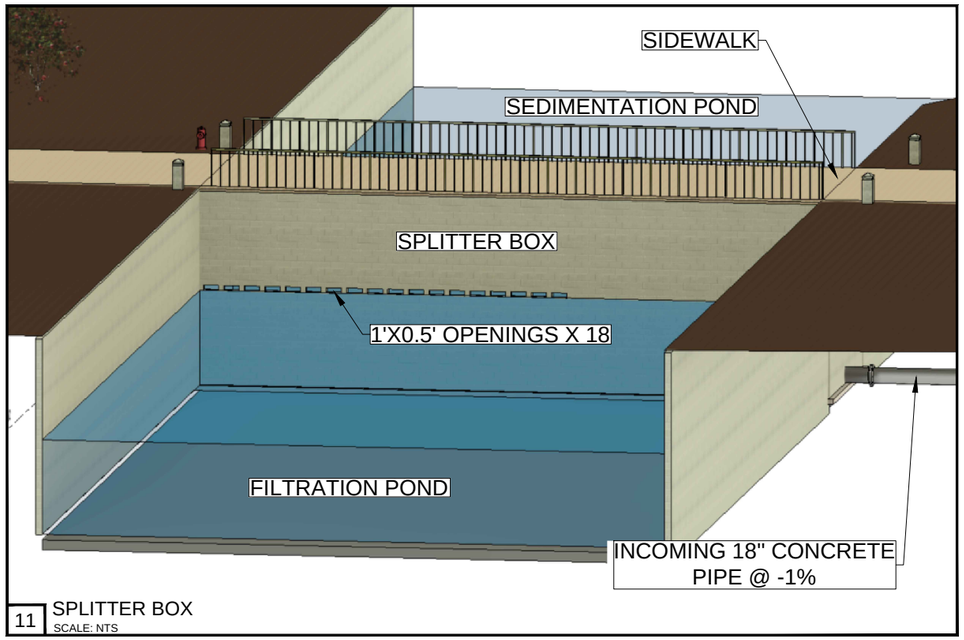
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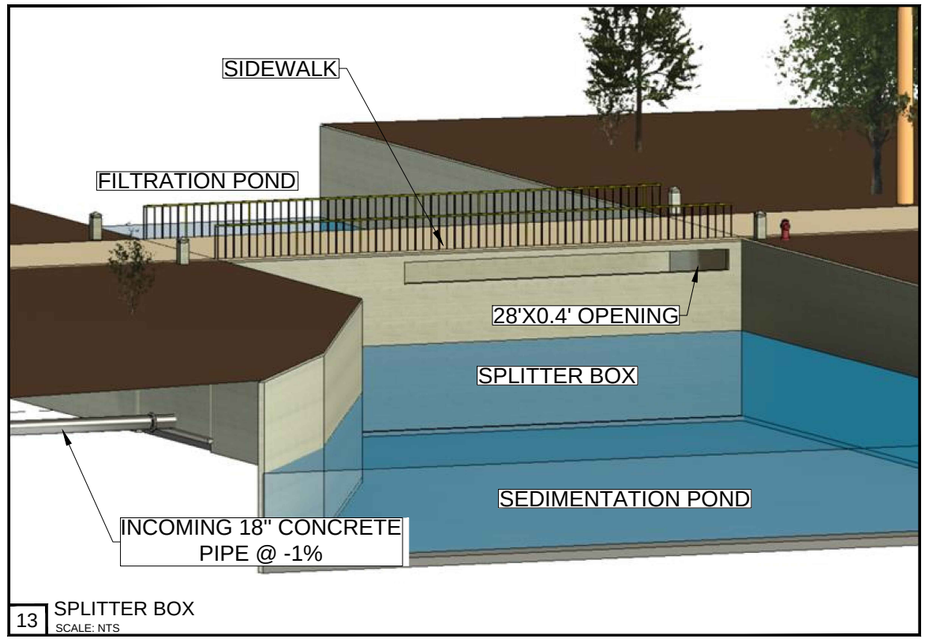
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CITY PERMIT NUMBER

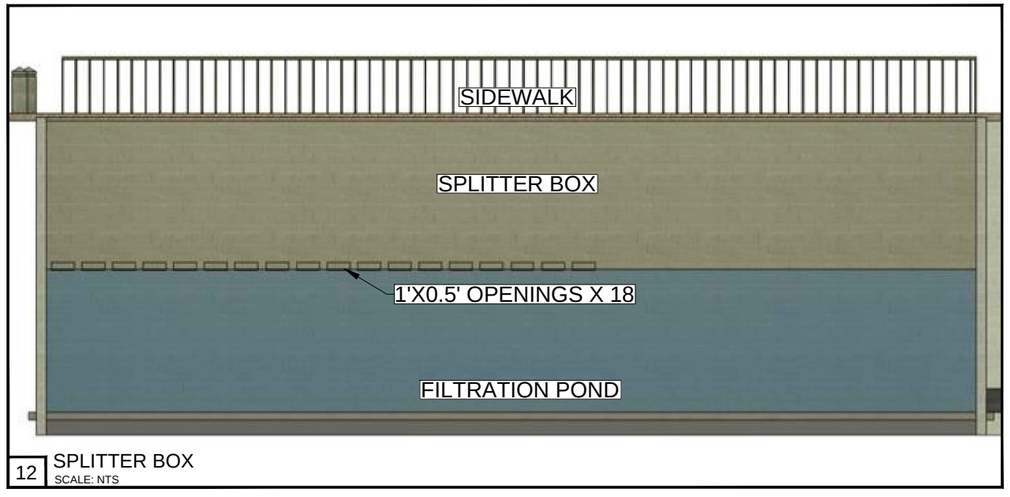
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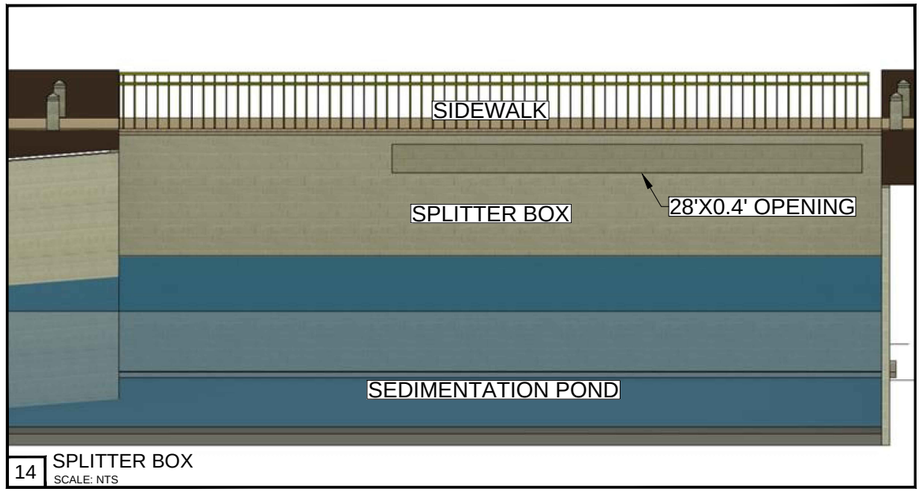
11 SPLITTER BOX
SCALE: NTS



13 SPLITTER BOX
SCALE: NTS



12 SPLITTER BOX
SCALE: NTS



14 SPLITTER BOX
SCALE: NTS

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SITE DEVELOPMENT PLANS
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POND PLAN AND SECTION 4

STATE OF TEXAS
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C19.03

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Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: St Alphonsa Church
Date Prepared: 3/7/2025

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

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

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

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

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

County =	Williamson	
Total project area included in plan * =	5.00	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	3.50	acres
Total post-development impervious cover fraction * =	0.70	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	3046	lbs.

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

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

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

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	5.00	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	3.50	acres
Post-development impervious fraction within drainage basin/outfall area =	0.70	
$L_{M\ THIS\ BASIN}$ =	3046	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter
Removal efficiency = 89 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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) x P x (A_I x 34.6 + A_P x 0.54)

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

A_C =	5.00	acres
A_I =	3.50	acres
A_P =	1.50	acres
L_R =	3472	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 3046 lbs.

F = 0.88

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

Rainfall Depth =	1.50	inches
Post Development Runoff Coefficient =	0.51	
On-site Water Quality Volume =	13767	cubic feet

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

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site Runoff Coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	2753	
Total Capture Volume (required water quality volume(s) x 1.20) =	16520	cubic feet

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

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	16520	cubic feet	
Minimum filter basin area =	765	square feet	
Maximum sedimentation basin area =	6883	square feet	For minimum water depth of 2 feet
Minimum sedimentation basin area =	1721	square feet	For maximum water depth of 8 feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	16520	cubic feet	
Minimum filter basin area =	1377	square feet	
Maximum sedimentation basin area =	5507	square feet	For minimum water depth of 2 feet
Minimum sedimentation basin area =	344	square feet	For maximum water depth of 8 feet

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WATER QUALITY CALCULATIONS

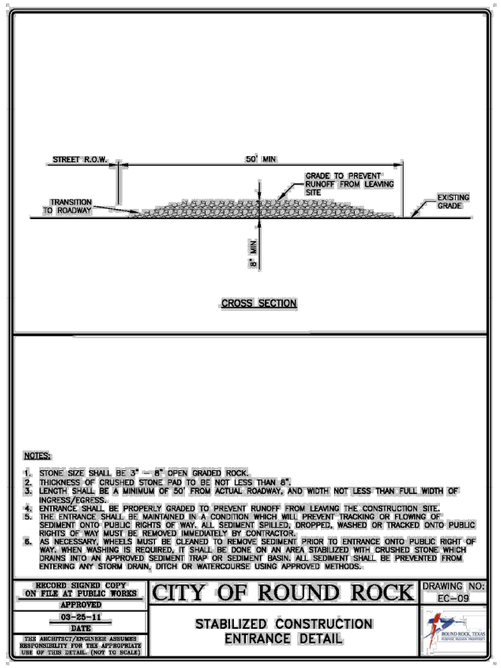
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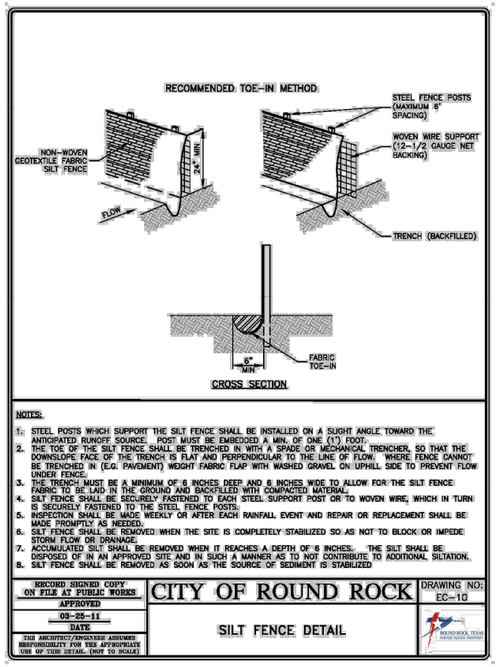
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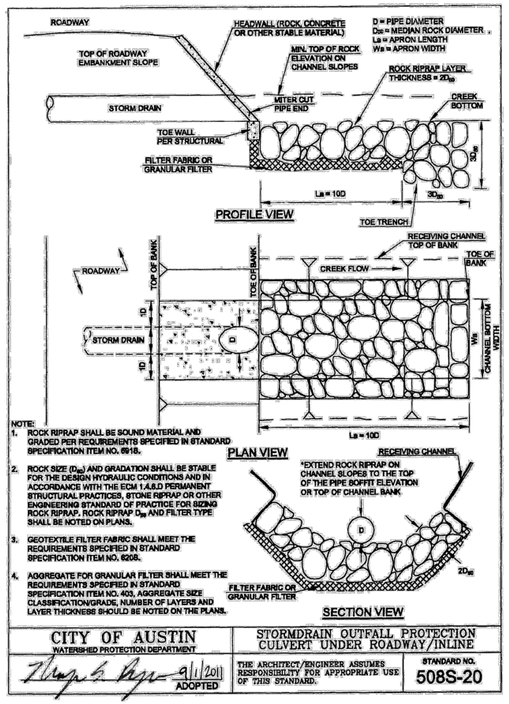
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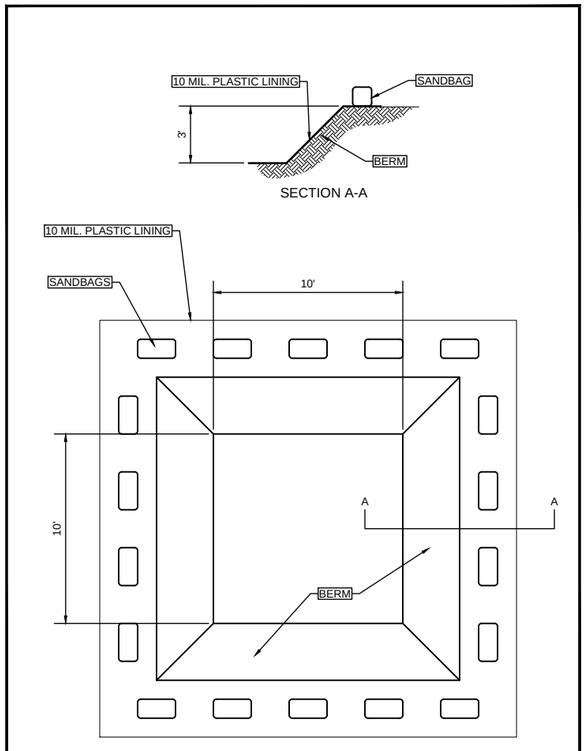
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01 CONCRETE WASHOUT
SCALE: 1/4" = 1'-0"

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STANDARD DETAILS - ESC

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C21.00

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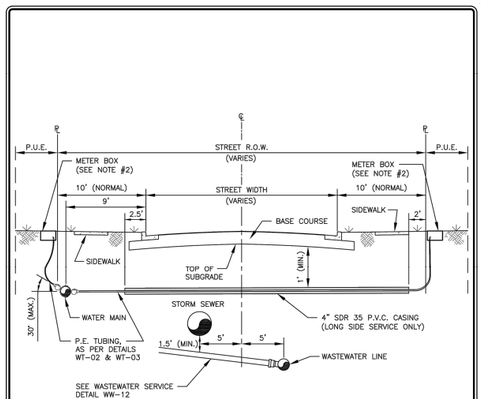
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NOTES:

1. REFER TO "STANDARD INSTALLATION DETAIL FOR ONE OR TWO METERS" FOR SERVICE SPECIFICS.
2. METER BOXES SHALL BE SET AS CLOSE TO R.O.W. (℄) AS POSSIBLE, WITH NO PART OF BOX WITHIN R.O.W. METER BOXES SHALL BE LEVEL FROM SIDE TO SIDE AND NO MORE THAN 1/4"/FT. SLOPE FROM FRONT TO BACK (OR BACK TO FRONT). GRADING IN P.U.E. AROUND METER BOX SHALL BE 3:1 MAXIMUM AND SHALL BLEND TO OTHER UTILITY APPURTENANCES WITHOUT ABRUPT ELEVATION CHANGES.

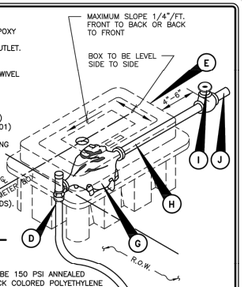
RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: WT-01
APPROVED 03-01-18 DATE	WATER SERVICE CASING DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		ROUND ROCK TEXAS

MATERIAL LIST:

A. SERVICE SADDLE REQUIRED. SERVICE SADDLE TO BE EPOXY COATED WITH DUAL STAINLESS STEEL BANDS.
B. 1 1/2" OR 2" CORPORATION STOP – SERVICE PIPE OUTLET. (SEE NOTE #2)
C. 1 1/2" OR 2" SERVICE PIPE.
D. LOCKING ANGLE METER STOP; SERVICE PIPE INLET X SWIVEL COUPLING NUT OUTLET:
- FOR 1 1/2" METERS: 1 1/2" X 1 1/2"
- FOR 2" METERS: 2" X 2"
- SEE NOTE #2

E. PLASTIC RECTANGULAR METER BOX. (SEE TABLE BELOW)
F. PIPE CASING WHERE APPLICABLE. (AS PER DETAIL WT-01)
G. WATER METER, CENTERED IN BOX. (SEE TABLE BELOW)
H. WATER METER COUPLING; MALE I.P.T. X SWIVEL COUPLING NUT:
- LENGTH OF PIPE TO BE DETERMINED BY CONTRACTOR.
- EXTEND PIPE TO 4"–6" OUTSIDE OF METER BOX.

I. BRONZE GATE VALVE: NON–RISING STEM (1 1/2" OR 2") FEMALE I.P.T. (PROPERTY OWNERS CUT–OFF OUTSIDE METER BOX IN SEPARATE VALVE CAN WITH LID AS PER CITY OF ROUND ROCK STANDARDS)
J. BUSHING (IF NECESSARY) AND PIPE MEETING CITY OF ROUND ROCK PLUMBING CODE REQUIREMENTS.



NOTES:

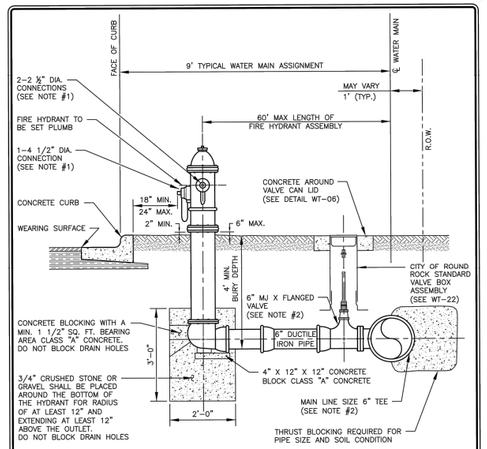
1. SERVICE PIPE SHALL BE COPPER TUBE SIZE. IT MAY BE 150 PSI ANNEALED SEAMLESS TYPE "K" COPPER TUBING OR 200 PSI BLACK COLORED POLYETHYLENE HAVING A DIMENSION RATIO OF 9 (DR9).
2. ALL STAINLESS STEEL INSERTS THAT COME WITH COMPRESSION FITTINGS SHALL NOT BE USED ON ANY CONNECTIONS.
3. SERVICE SADDLES SHALL BE WRAPPED COMPLETELY WITH 8 MIL. POLYETHYLENE FILM.
4. TOP OF BOXES SHALL BE 1" ABOVE FINISHED GRADE.
5. PIPING AND TUBING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 510.3 OF THE STANDARD SPECIFICATIONS. SPECIAL ATTENTION IS CALLED TO "PIPE BEDDING ENVELOPE" AND "BACKFILLING", SECTIONS 510.3 (14) AND 510.3 (25), RESPECTIVELY.
6. AXIS OF METER ASSEMBLY, LINE THROUGH METER STOP, METER, PIPING AND OWNERS CUTOFF) SHALL BE 10" BELOW TOP OF BOX.
7. SLOTS PROVIDED IN METER BOX TO ACCOMODATE PIPING INTO AND OUT OF BOX, SHALL NOT BE MODIFIED.
8. LOCATION OF METER BOXES SHALL BE SUBJECT TO THE APPROVAL OF THE C.O.R.R.

PART NUMBER	SERIES	COLOR	HEIGHT	WIDTH	LENGTH
DFW65C–14–BOO1*	65C	BLACK	14"	TOP = 18–3/4"	TOP = 30–3/8"
DFW65C–MF1EA–LID*	65C	BLACK	1–7/8"	LID = 15–1/4"	LID = 28–7/8"
DFW65C–14–AF1EQA*	65C	BLACK	14"	BASE = 15–1/4"	BASE = 30–3/8"

* MANUFACTURED BY DFW PLASTICS INCORPORATED OR APPROVED EQUAL.

METER SIZE	LENGTH
1–1/2"	13"
2"	17"

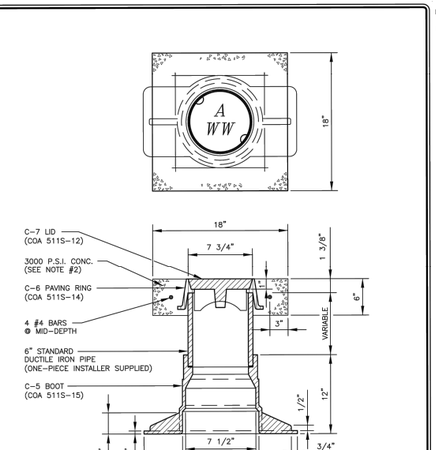
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APPROVED 03–01–18 DATE	SINGLE 1–1/2" OR 2" WATER METER DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		ROUND ROCK TEXAS



NOTES:

1. THREADS ON OUTLET NOZZLES SHALL BE NATIONAL STANDARD THREAD.
2. TEE MAY HAVE FLANGED OUTLET FOR MJ X FLANGED GATE VALVE OR, ANCHOR (SWIVEL) TEE MAY BE USED WITH MJ X MJ GATE VALVE.
3. A BLUE REFLECTIVE DELINEATOR OF TYPE APPROVED BY THE ENGINEER SHALL BE PLACED 2 TO 3 FEET OFFSET FROM THE CENTERLINE OF PAVED STREETS OR PAVED ACCESS WAYS, ON THE SIDE OF AND IN LINE WITH ALL NEWLY INSTALLED FIRE HYDRANTS.
4. PIPE, VALVE, TEE AND HYDRANT BARREL SHALL BE WRAPPED IN 8 MM POLY.
5. FIRE HYDRANT LEADS SHALL NOT CONTAIN ANY HORIZONTAL OR VERTICAL BENDS EXCEPT FOR WHAT IS SHOWN IN THE DETAIL.
6. FIRE HYDRANT LEAD AND ASSEMBLY SHALL BE RESTRAINED AND THRUST BLOCKED.

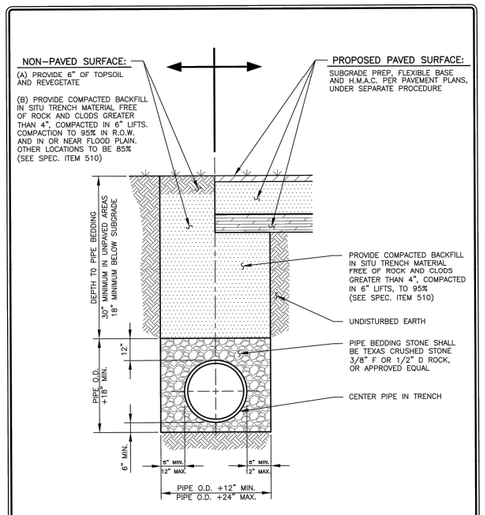
RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: WT–05
APPROVED 03–01–18 DATE	FIRE HYDRANT ASSEMBLY DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		ROUND ROCK TEXAS



NOTES:

1. NUMBERED CASTINGS STANDARDS SHOWN IN PARENTHESES ARE REFERENCES TO THE CITY OF AUSTIN STANDARDS CRITERIA MANUAL.
2. DELETE CONCRETE AND REBAR WHEN VALVE IS WITHIN PAVED STREET.

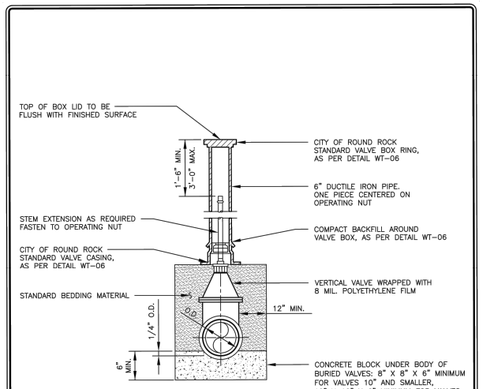
RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: WT–06
APPROVED 03–01–18 DATE	VALVE BOX ASSEMBLY DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		ROUND ROCK TEXAS



NOTE:

1. ALL TRENCHING AND TRENCH SAFETY SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

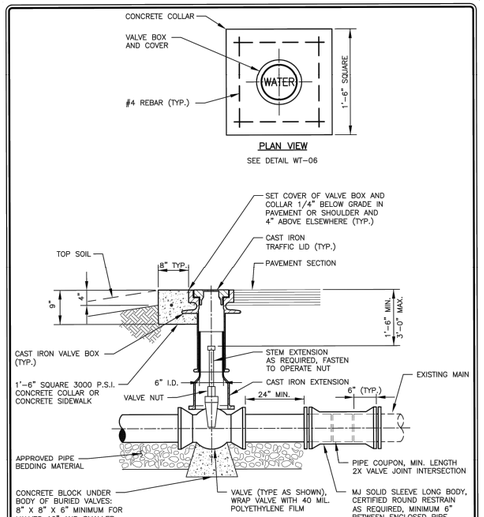
RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: WT–08
APPROVED 03–01–18 DATE	WATERLINE BEDDING AND SURFACE REPAIR DETAIL (NON–PAVED & PROPOSED PAVED SURFACE)	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		ROUND ROCK TEXAS



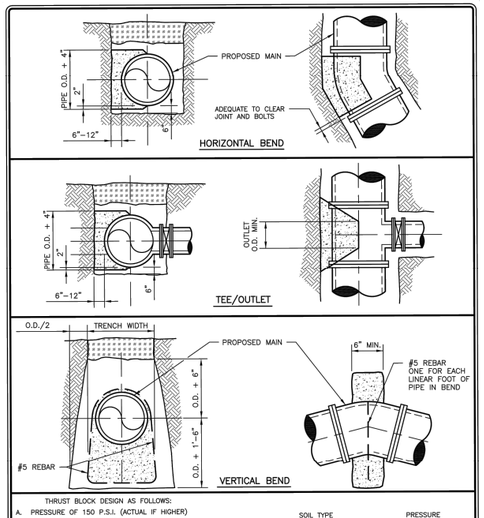
NOTES:

1. ALL VALVES AND VALVE CANS SHALL BE ACCESSIBLE FOR OPERATION ONCE THE NEW WATERLINE IS PUT INTO SERVICE. BURYING LINE VALVES IS PROHIBITED.
2. ALL VALVE LOCATIONS SHALL BE APPROPRIATELY MARKED "V" ON FACE OF CURB.

RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: WT–11
APPROVED 03–01–18 DATE	VERTICAL VALVE INSTALLATION DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		ROUND ROCK TEXAS



RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: WT–22
APPROVED 03–01–18 DATE	GATE VALVE DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		ROUND ROCK TEXAS



THRUST BLOCK DESIGN AS FOLLOWS:

A. PRESSURE OF 150 P.S.I. (ACTUAL IF HIGHER) + 50% SURGE ALLOWANCE
B. MAXIMUM SOIL BEARING:
C. ALL PIPE & FITTING TO BE WRAPPED WITH 40 PLASTIC MIL.

SOIL TYPE	PRESSURE
LIMESTONE	4000 LBS./SQ. FT.
UNDISTURBED SOIL, CALICHE	2000 LBS./SQ. FT.
LOOSE OR SPONGY SOIL	1500 LBS./SQ. FT.

RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: WT–25
APPROVED 03–01–18 DATE	THRUST BLOCK DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		ROUND ROCK TEXAS

SITE DEVELOPMENT PLANS TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

STANDARD DETAILS - WATER

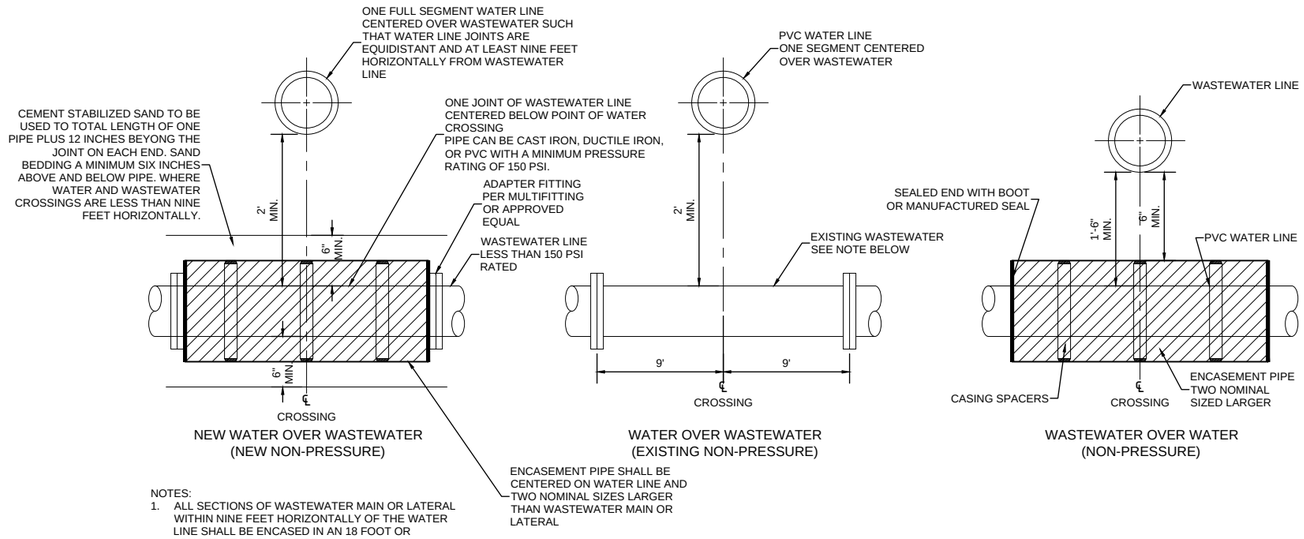


PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

C21.01

CITY PERMIT NUMBER

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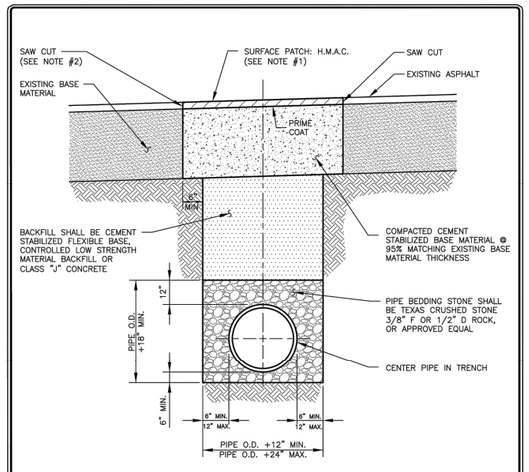


NOTES:
1. ALL SECTIONS OF WASTEWATER MAIN OR LATERAL WITHIN NINE FEET HORIZONTALLY OF THE WATER LINE SHALL BE ENCASED IN AN 18 FOOT OR LONGER SECTION OF PIPE.
2. ENCASEMENT PIPE IS ONLY REQUIRED WHERE WASTEWATER PIPE IS LESS THAN 18 FEET IN LENGTH.
3. CENTER THE ENCASEMENT PIPE ON THE CROSSING.
4. WHERE CEMENT STABILIZED SAND SHALL HAVE A MINIMUM 10% CEMENT PER CUBIC YARD OF STABILIZED SAND MIXTURE ON LOOSE DRY WEIGHT VOLUME (2.5 BAGS OF CEMENT PER CUBIC YARD OF MIXTURE).
5. ENCASED WASTEWATER LINE AND JOINTS SHALL HAVE A MINIMUM PRESSURE RATING OF 150 PSI.

NOTE:
IF THE EXISTING WASTEWATER LINE IS DISTURBED OR LEACHING, REPLACE AT LEAST NINE FEET IN EACH DIRECTION OF THE CROSSING WITH MINIMUM150 PSI PIPE.

NOTE:
THE MINIMUM LENGTH OF ENCASEMENT PIPE SHALL BE 18 FEET AND TWO NOMINAL SIZES LARGER THAN THE NEW WATER LINE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE FOOT INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASEMENT PIPE SHOULD BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH NON-SHRINK CEMENT GROUT OR MANUFACTURED SEAL. ENCASEMENT PIPE SHALL BE STEEL OR PVC WITH A PIPE STIFFNESS OF 115 PSI AT 5.0% DEFLECTION.

01 WATER CROSSING DETAILS
SCALE: 1" = 1'-0"



NOTES:
1. H.M.A.C. THICKNESS SHALL MATCH EXISTING ASPHALT THICKNESS AND NOT LESS THAN 2".
2. THE CONTRACTOR SHALL SAW CUT, REMOVE AND REPLACE EXISTING PAVEMENT AND FLEXIBLE BASE A MINIMUM OF 6" BEYOND EITHER THE EDGE OF THE WATERLINE TRENCH OR THE POINT WHERE EXISTING PAVEMENT IS DAMAGED DUE TO TRENCHING OPERATIONS, WHICHEVER IS GREATER. FINISHED PATCH SHALL BE NEAT AND UNIFORM.
3. INSTALLATION OF BACKFILL, SAW CUTTING AND REMOVAL OF EXISTING PAVEMENT AND SURFACE PATCH SHALL NOT BE PAID FOR SEPARATELY. COSTS FOR THESE ITEMS SHALL BE INCLUDED IN UNIT PRICE BID FOR WATERLINE PIPE.
4. THE CONTRACTOR SHALL PROVIDE STEEL PLATES TO SPAN THE TRENCH AS NECESSARY OR TO ALLOW BACKFILL TO CURE. SUCH PLATES SHALL BE SUITABLE FOR VEHICLE PASSAGE OVER THE TRENCH AND SHALL BE SATISFACTORILY ANCHORED IN PLACE. COSTS FOR THIS ITEM SHALL BE INCLUDED IN UNIT PRICE BID FOR WATERLINE PIPE.
5. ALL TRENCHING AND TRENCH SAFETY SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

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THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)	WATERLINE BEDDING AND SURFACE REPAIR DETAIL (EXISTING PAVED SURFACE)	ROUND ROCK TEXAS

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Civil Engineering
WBE210166 | HUB 1853873845300

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ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

STANDARD DETAILS - WATER 2

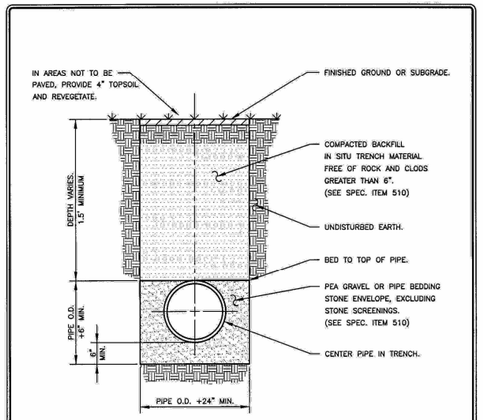
STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

C21.02

CITY PERMIT NUMBER

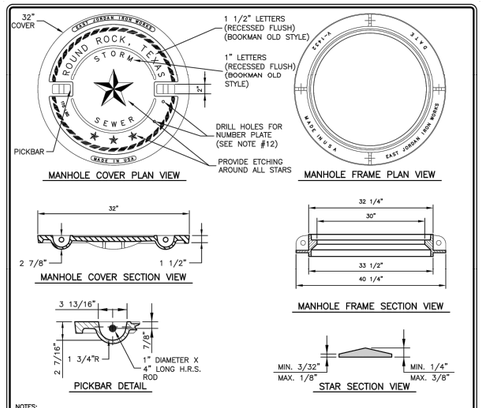
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NOTE:

ALL TRENCHING AND TRENCH SAFETY SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: D-02
APPROVED 08-21-03 DATE	STORM SEWER LINE BEDDING DETAIL (NON-PAVED SURFACE)	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		



NOTES:

1. COVER AND FRAME SHALL COMPLY WITH STANDARD SPECIFICATIONS FOR DRAINAGE, SEWER, UTILITY AND RELATED CASTINGS: AASHTO DESIGNATION M306-04.
2. MANHOLE COVER SHALL BE MODEL NUMBER: V-1432-3 (PRODUCT NUMBER: 41432058), AS MANUFACTURED BY EAST JORDAN IRON WORKS, INCORPORATED, OR APPROVED EQUAL.
3. MANHOLE FRAME SHALL BE MODEL NUMBER: V-1432 (PRODUCT NUMBER: 41432010), AS MANUFACTURED BY EAST JORDAN IRON WORKS, INCORPORATED, OR APPROVED EQUAL.
4. MANHOLE COVER AND FRAME ASSEMBLY, IF ORDERED AS A SET, SHALL BE MODEL NUMBER: V-1432 (PRODUCT NUMBER: 41432080), AS MANUFACTURED BY EAST JORDAN IRON WORKS, INCORPORATED, OR APPROVED EQUAL.
5. ALL CORNERS AND EDGES SHALL HAVE A 1/16" MINIMUM AND 1/8" MAXIMUM RADIUS.
6. MANHOLE COVERS SHALL BE CAST WITH TWO 1" DIAMETER STEEL PICKBARS.
7. MANHOLE COVER WEIGHT SHALL BE 175 LBS. FOR DUCTILE IRON. WEIGHT SHALL BE CAST ON BOTH TOP AND BOTTOM OF COVER.
8. MANUFACTURER SHALL CERTIFY THAT EACH MANHOLE COVER MEETS HS-20 LOADING.
9. FILLETS SHALL BE 1/4" RADIUS UNLESS OTHERWISE SPECIFIED.
10. MANUFACTURER SHALL REMOVE EXCESS IRON AND MACHINE FINISH SEATING SURFACES TO NOTED DIMENSIONS.
11. COVER SHALL BE DIPPED IN A WATER-BASED ASPHALTIC COATING, PRIOR TO SHIPMENT FROM FOUNDRY.
12. MANUFACTURER SHALL DRILL 2-3/16"X1/2" DEEP HOLES FOR A MANHOLE NUMBER PLATE TO BE PROVIDED BY THE CITY OF ROUND ROCK. THE TOP HOLE SHALL BE DRILLED 1" O.C. FROM THE BOTTOM OF THE PICKBAR AND THE BOTTOM HOLE SHALL BE DRILLED 4" O.C. FROM THE TOP HOLE.

RECORD SIGNED COPY ON FILE AT U&BS DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: DR-06
APPROVED 04-01-10 DATE	NON-BOLTED STORMSEWER MANHOLE COVER AND FRAME DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		

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1	
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SITE DEVELOPMENT PLANS
TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

STANDARD DETAILS - STORM

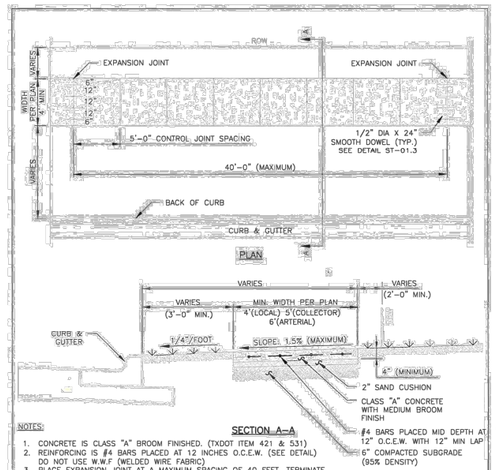
STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

C21.03

CITY PERMIT NUMBER

Plotted by: Home PC, Plot date: 29/04/2025
File name: C:\Users\Home PC\Watmov Engineers Private Limited\Sandeep Chavda - 230808 ST. ALPHONSA CHURCH\230808 ST. ALPHONSA CHURCH\07 Sheet\SD\230808 STANDARD DETAILS.dwg



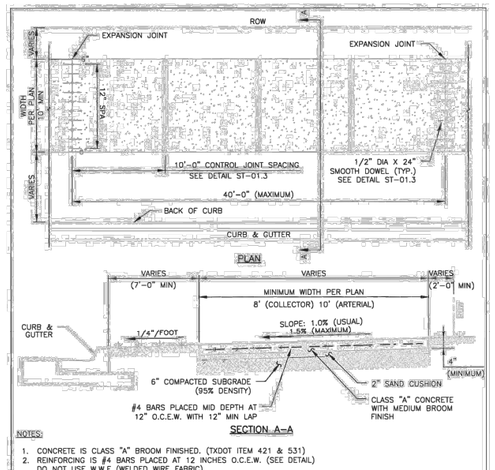
SECTION A–A

NOTES:

1. CONCRETE IS CLASS "A" BROOM FINISHED. (TXDOT ITEM 421 & 531)
2. REINFORCING IS #4 BARS PLACED AT 12 INCHES O.C.E.W. (SEE DETAIL) DO NOT USE W.W.F (WELDED WIRE FABRIC)
3. PLACE EXPANSION JOINT AT A MAXIMUM SPACING OF 40 FEET. TERMINATE WORKDAY PRODUCTION AT AN EXPANSION JOINT.
4. PLACE 1/2 INCH WIDE EXPANSION MATERIAL WHERE SIDEWALK ABUTS AN EXISTING STRUCTURE, DRIVEWAY, OR OBSTRUCTION PROTRUDING THROUGH THE SIDEWALK.
5. FORM CONTROL JOINTS, 1/4 INCH WIDE AND 3/4 INCH DEEP AT A MAXIMUM SPACING OF 5 FEET. JOINT SPACING SHALL BE PROPORTIONAL TO WIDTH OF SIDEWALK.
6. ROUND OUTER EDGES AND JOINTS TO A 1/4 INCH RADIUS
7. CONSTRUCT CURB RAMPS IN ACCORDANCE WITH TXDOT STANDARD "PEDESTRIAN FACILITIES CURB RAMPS".
8. WHEN SIDEWALK IS A DESIGNATED SHARED USE PATH, CURB RAMP CLEAR WIDTH SHALL MATCH THE WIDTH OF THE SHARED USE PATH.
9. SIDEWALKS SHALL BE CONSTRUCTED PER CURRENT ADA STANDARDS.
10. SIDEWALKS WITHIN 3'–0" OF CURB SHALL BE A MINIMUM OF 5 FEET WIDE.

SCALE: NTS

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	DRAWING NO: ST–01.1
APPROVED 01–28–21 DATE	SIDEWALK DETAIL	SHEET 1 of 3
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		ROUND ROCK TEXAS



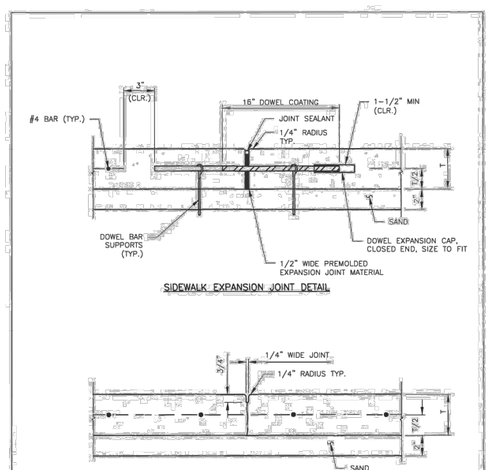
SECTION A–A

NOTES:

1. CONCRETE IS CLASS "A" BROOM FINISHED. (TXDOT ITEM 421 & 531)
2. REINFORCING IS #4 BARS PLACED AT 12 INCHES O.C.E.W. (SEE DETAIL) DO NOT USE W.W.F (WELDED WIRE FABRIC)
3. PLACE EXPANSION JOINT AT A MAXIMUM SPACING OF 40 FEET. TERMINATE WORKDAY PRODUCTION AT AN EXPANSION JOINT.
4. PLACE 1/2 INCH WIDE EXPANSION MATERIAL WHERE SIDEWALK ABUTS AN EXISTING STRUCTURE, DRIVEWAY, OR OBSTRUCTION PROTRUDING THROUGH THE SIDEWALK.
5. FORM CONTROL JOINTS, 1/4 INCH WIDE AND 3/4 INCH DEEP AT A MAXIMUM SPACING OF 10 FEET. JOINT SPACING SHALL BE PROPORTIONAL TO WIDTH OF SIDEWALK.
6. ROUND OUTER EDGES AND JOINTS TO A 1/4 INCH RADIUS
7. CONSTRUCT CURB RAMPS IN ACCORDANCE WITH TXDOT STANDARD "PEDESTRIAN FACILITIES CURB RAMPS".
8. WHEN SIDEWALK IS A DESIGNATED SHARED USE PATH, CURB RAMP CLEAR WIDTH SHALL MATCH THE WIDTH OF THE SHARED USE PATH.
9. SIDEWALKS SHALL BE CONSTRUCTED PER CURRENT ADA STANDARDS.

SCALE: NTS

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	DRAWING NO: ST–01.2
APPROVED 01–28–21 DATE	SHARED USE PATH DETAIL	SHEET 2 of 3
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		ROUND ROCK TEXAS



SIDEWALK EXPANSION JOINT DETAIL

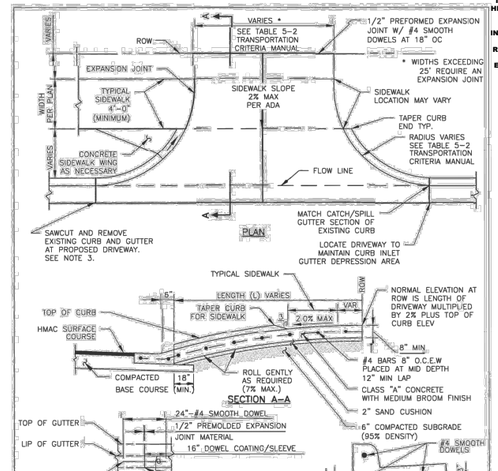
CONTROL JOINT DETAIL

NOTES:

1. SIDEWALKS SHALL BE CONSTRUCTED PER CURRENT ADA STANDARDS.
2. PROPER CHAIRS SHALL BE USED TO SUPPORT THE STEEL REINFORCEMENT.

SCALE: NTS

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	DRAWING NO: ST–01.3
APPROVED 01–28–21 DATE	SIDEWALK & SHARED USE PATH DETAIL	SHEET 3 of 3
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		ROUND ROCK TEXAS

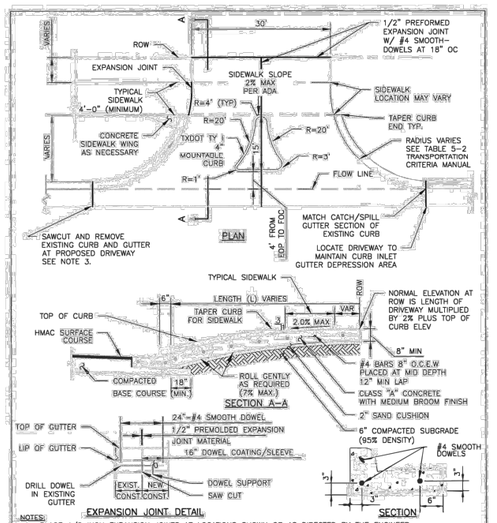


NOTES:

1. PLACE 1/2 INCH EXPANSION JOINTS AT LOCATIONS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. FORM CONTROL JOINTS 1/4 INCH WIDE AND 3/4 INCH DEEP AT A MAXIMUM SPACING OF 10'. ROUND JOINT EDGES TO A MINIMUM 1/4" RADIUS.
3. IF THE NEAREST EXISTING EXPANSION JOINT IS 5 FEET OR LESS FROM THE DRIVEWAY RADIUS, THEN REMOVE AND REPLACE CURB AND GUTTER TO THE NEAREST EXPANSION JOINT. SAWCUT BETWEEN EXISTING CURB/ASPHALT SO THAT NO DAMAGE OCCURS TO EXISTING ROADWAY.
4. PROPER CHAIRS SHALL BE USED TO SUPPORT STEEL REINFORCEMENT.

SCALE: NTS

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	DRAWING NO: ST–03.1
APPROVED 01–28–21 DATE	CONCRETE DRIVEWAY DETAIL TYPE II COMMERCIAL OR MULTIFAMILY	SHEET 1 of 2
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		ROUND ROCK TEXAS

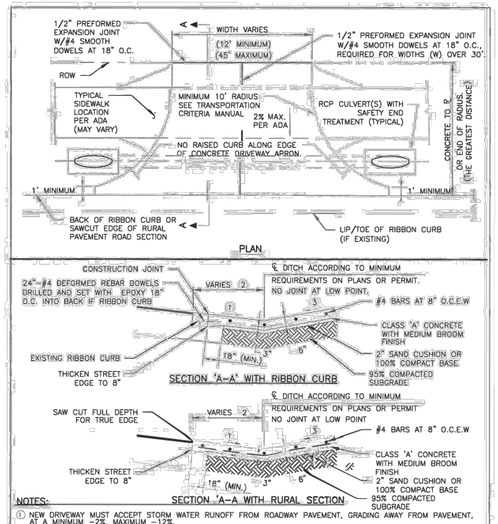


NOTES:

1. PLACE 1/2 INCH EXPANSION JOINTS AT LOCATIONS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. FORM CONTROL JOINTS 1/4 INCH WIDE AND 3/4 INCH DEEP AT A MAXIMUM SPACING OF 10'. ROUND JOINT EDGES TO A MINIMUM 1/4" RADIUS.
3. IF THE NEAREST EXISTING EXPANSION JOINT IS 5 FEET OR LESS FROM THE DRIVEWAY RADIUS, THEN REMOVE AND REPLACE CURB AND GUTTER TO THE NEAREST EXPANSION JOINT. SAWCUT BETWEEN EXISTING CURB/ASPHALT SO THAT NO DAMAGE OCCURS TO EXISTING ROADWAY.
4. PROPER CHAIRS SHALL BE USED TO SUPPORT STEEL REINFORCEMENT.

SCALE: NTS

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	DRAWING NO: ST–03.2
APPROVED 01–28–21 DATE	CONCRETE DRIVEWAY DETAIL TYPE II COMMERCIAL WITH ISLAND	SHEET 2 of 2
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		ROUND ROCK TEXAS



NOTES:

① NEW DRIVEWAY MUST ACCEPT STORM WATER RUNOFF FROM ROADWAY PAVEMENT, GRADING AWAY FROM PAVEMENT, AT A MINIMUM –2%, MAXIMUM –12%.

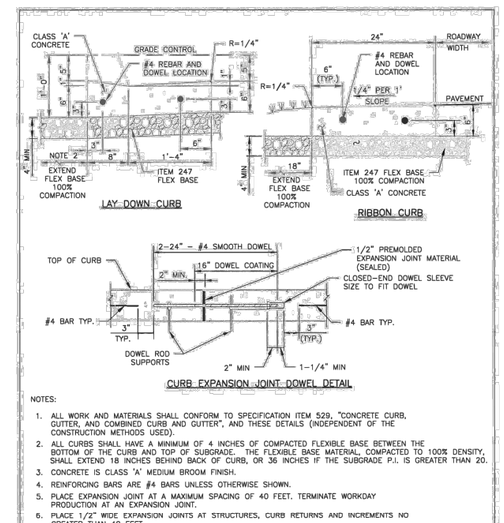
② GRADE BACK DISTANCES MUST BE AT A MINIMUM OF 12' OR ℄ OF BAR DITCH IF GREATER THAN 12' OR TO THE DISTANCE REQUIRED IN THE PERMIT. (SHORTER OR LONGER)

③ GRADE OF DRIVEWAY PAST THE 12' POINT MAY CHANGE MULTIPLE TIMES AND BE POSITIVE OR NEGATIVE TO THE BACK SIDE OF THE APRON, BUT CAN BE NO GREATER THAN 2R IN THE AREA WHERE THE SIDEWALK IS TO CROSS.

④ PROPER CHAIRS SHALL BE USED TO SUPPORT THE STEEL REINFORCEMENT.

SCALE: NTS

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	DRAWING NO: ST–04.1
APPROVED 01–28–21 DATE	CONCRETE DRIVEWAY DETAIL (RIBBON CURB OR RURAL SECTION)	SHEET 1 of 1
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		ROUND ROCK TEXAS



NOTES:

1. ALL WORK AND MATERIALS SHALL CONFORM TO SPECIFICATION ITEM 529, "CONCRETE CURB, GUTTER, AND COMBINED CURB AND GUTTER", AND THESE DETAILS (INDEPENDENT OF THE CONSTRUCTION METHODS USED).
2. ALL CURBS SHALL HAVE A MINIMUM OF 4 INCHES OF COMPACTED FLEXIBLE BASE BETWEEN THE BOTTOM OF THE CURB AND TOP OF SUBGRADE. THE FLEXIBLE BASE MATERIAL, COMPACTED TO 100% DENSITY, SHALL EXTEND 18 INCHES BEHIND BACK OF CURB, OR 36 INCHES IF THE SUBGRADE P.I. IS GREATER THAN 20.
3. CONCRETE IS CLASS 'A' MEDIUM BROOM FINISH.
4. REINFORCING BARS ARE #4 BARS UNLESS OTHERWISE SHOWN.
5. PLACE EXPANSION JOINT AT A MAXIMUM SPACING OF 40 FEET. TERMINATE WORKDAY PRODUCTION AT AN EXPANSION JOINT.
6. PLACE 1/2" WIDE EXPANSION JOINTS AT STRUCTURES, CURB RETURNS AND INCREMENTS NO GREATER THAN 40 FEET.
7. FORM CONTROL JOINTS, 1/4 INCH WIDE AND 3/4 INCH DEEP AT A MAXIMUM SPACING OF 10 FEET. WHEN CURB ABUTS CONCRETE PAVEMENT, MATCH PAVEMENT JOINT SPACING.
8. ROUND EXPOSED EDGES AND JOINTS TO A 1/4 INCH RADIUS.
9. COAT 16 INCHES OF 24 INCH LONG DOWELS WITH GREASE OR APPROVED DEBONDING LUBRICANT, INSTALL DOWEL CAP ON LUBRICATED END OF THE DOWELS.

SCALE: NTS

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	DRAWING NO: ST–05
APPROVED 01–28–21 DATE	LAYDOWN AND RIBBON CURB DETAIL (WITH EXPANSION JOINT DOWEL DETAIL)	SHEET 1 of 1
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		ROUND ROCK TEXAS

WOMEN OWNED
CERTIFIED BY | WOMEN'S BUSINESS ENTERPRISE NATIONAL COUNCIL

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Henderson Professional Engineers
600 ROUND ROCK WEST DRIVE, SUITE 604
ROUND ROCK, TX 78681
512.350.6228
PELS FIRM #F-22208
www.hendersonpe.com
Civil Engineering
WBE210166 | HUB 1853873845300

No.	REVISION
1	
2	
3	
4	
5	

SITE DEVELOPMENT PLANS TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

STANDARD DETAILS - PAVING

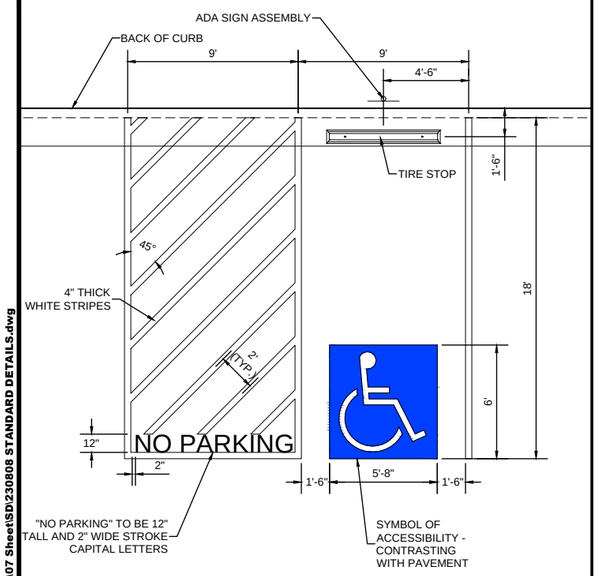


PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

C21.04

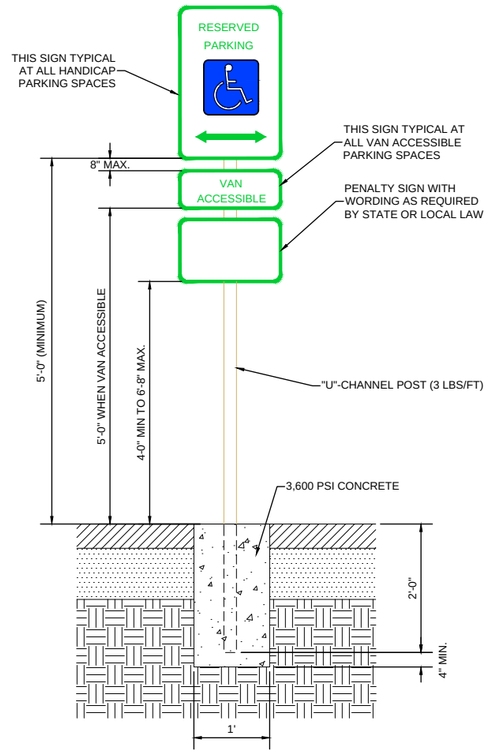
CITY PERMIT NUMBER

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File name: C:\Users\Home PC\Watmov Engineers Private Limited\Sandeep Chavda - 230808 ST. ALPHONSA CHURCH\230808 ST. ALPHONSA CHURCH\07 Sheet\SD\230808 STANDARD DETAILS.dwg



01 ADA PARKING

SCALE: 1/4" = 1'-0"



02 ADA SIGN ASSEMBLY

SCALE: 1" = 1'-0"

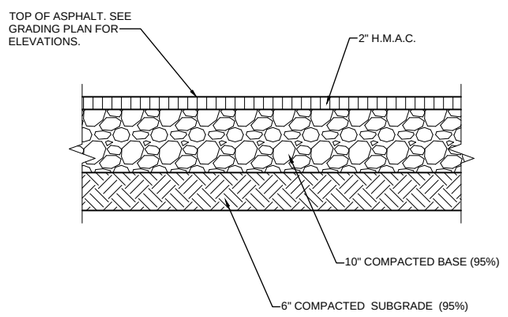


COLORS:

- LEGEND AND BORDER - GREEN
- WHITE SYMBOL ON BLUE BACKGROUND
- BACKGROUND - WHITE

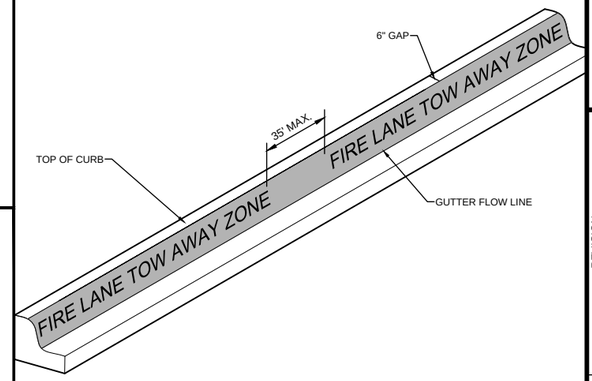
03 ADA SIGN AND SYMBOL

SCALE: 3" = 1'-0"



04 ASPHALT SECTION

SCALE: 1" = 1'-0"



NOTES:
FIRE LANE STRIPING TO BE 6" WIDE RED PAINT WITH "FIRE LANE TOW AWAY ZONE" IN 4" TALL WHITE LETTERS. WORDING MAY NOT BE SPACED GREATER THAN 35' APART. STRIPING TO BE PAINTED ON THE FACE OF CURB WHEN PRESENT AND PAINTED FLAT ON THE PARKING SURFACE WHEN IT IS NOT.

05 FIRE LANE STRIPING

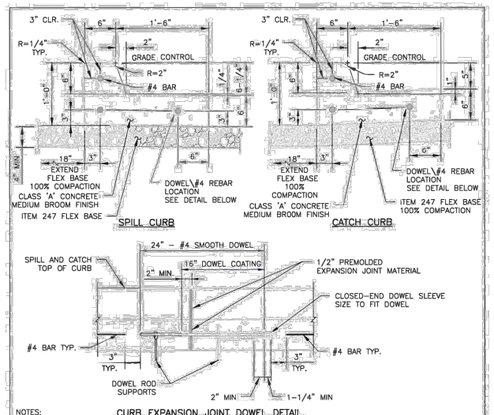
SCALE: 12" = 1-0"

WOMEN OWNED
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No.	REVISION
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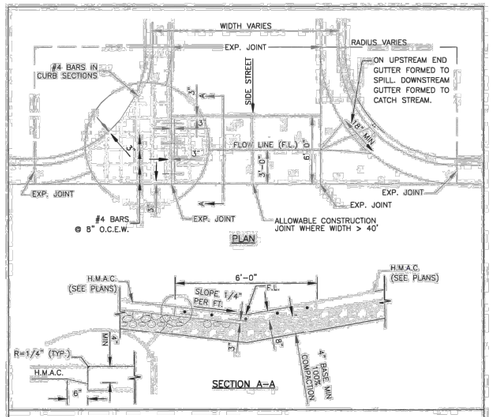
CURB EXPANSION JOINT DOWEL DETAIL

NOTES:

1. ALL WORK AND MATERIALS SHALL CONFORM TO SPECIFICATION ITEM 529, "CONCRETE CURB, GUTTER, AND COMBINED CURB AND GUTTER", AND THESE DETAILS (INDEPENDENT OF THE CONSTRUCTION METHODS USED)
2. ALL CURBS SHALL HAVE A MINIMUM OF 4 INCHES OF COMPACTED FLEXIBLE BASE BETWEEN THE BOTTOM OF THE CURB AND TOP OF SUBGRADE. THE FLEXIBLE BASE MATERIAL, COMPACTED TO 100% DENSITY, SHALL EXTEND 18 INCHES BEHIND BACK OF CURB, OR 36 INCHES IF THE SUBGRADE P.I. IS GREATER THAN 20.
3. CONCRETE IS CLASS "A" MEDIUM BROOM FINISH.
4. REINFORCING BARS ARE #4 BARS UNLESS OTHERWISE SHOWN.
5. PLACE EXPANSION JOINT AT A MAXIMUM SPACING OF 40 FEET. TERMINATE WORKDAY PRODUCTION AT AN EXPANSION JOINT.
6. PLACE 1/2" WIDE EXPANSION JOINTS AT STRUCTURES, CURB RETURNS AND INCREMENTS NO GREATER THAN 40 FEET.
7. FORM CONTROL JOINTS, 1/4 INCH WIDE AND 3/4 INCH DEEP AT A MAXIMUM SPACING OF 10 FEET. WHEN CURB ABUTS CONCRETE PAVEMENT, MATCH PAVEMENT JOINT SPACING.
8. ROUND EXPOSED EDGES AND JOINTS TO A 1/4 INCH RADIUS.
9. COAT 16 INCHES OF 24 INCH LONG DOWELS WITH GREASE OR APPROVED DEBONDING LUBRICANT, INSTALL DOWEL CAP ON LUBRICATED END OF THE DOWELS.

SCALE: NTS

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	DRAWING NO: ST-06 SHEET 1 of 1
APPROVED 01-28-21 DATE	SPILL AND CATCH CURB DETAIL (WITH CURB EXPANSION JOINT DOWEL DETAIL)	ROUND ROCK TEXAS
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		

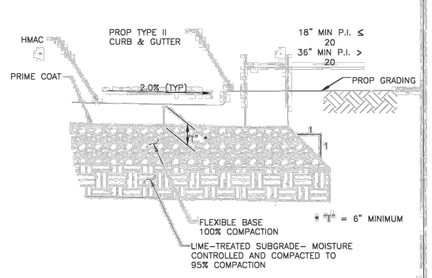


NOTES:

1. CONSTRUCTION METHODS SHALL CONFORM TO THE CITY OF ROUND ROCK STANDARD SPECIFICATION ITEM NO. R.R. 436 CONCRETE VALLEY GUTTERS.
2. CONCRETE SHALL BE CLASS "A", IN ACCORDANCE WITH ITEM NO. 421 HYDRAULIC CEMENT CONCRETE WITH MEDIUM BROOM FINISH.
3. MONOLITHIC CURB & GUTTER SHALL BE MEASURED BY PLAN SQUARE YARD AND PAID AS VALLEY GUTTER.
4. THE UPSTREAM CURB MID POINT MUST BE AT OR LOWER THAN THE BEGINNING P.C. AND 0.5% (MIN.) HIGHER THAN THE OPPOSING MID POINT.
5. ALLOWABLE CONSTRUCTION JOINT AT ℄ WHEN TRAFFIC FLOW MUST BE MAINTAINED, CONSTRUCTED AS A CONTROL JOINT. PROVIDE EXPANSION JOINT AT ℄ FOR WIDTHS GREATER THAN 40 FEET.
6. ALL EXPANSION JOINTS SHALL BE CONSTRUCTED WITH 1/2" PREMOLDED EXPANSION JOINT MATERIAL AND DOWELS AND CAPS (SEE STANDARD CURB DOWEL DETAIL). DOWELS SHALL BE 24"–#4 SMOOTH DOWELS SPACED AT 12" O.C. AT MID–DEPTH.

SCALE: NTS

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	DRAWING NO: ST-07 SHEET 1 of 1
APPROVED 01-28-21 DATE	CONCRETE VALLEY GUTTER DETAIL	ROUND ROCK TEXAS
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		

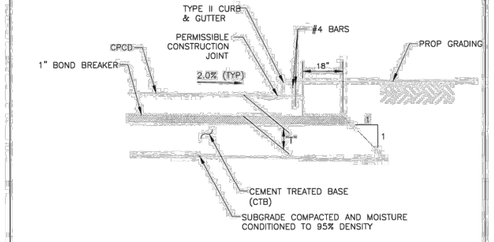


NOTES:

1. REFER TO TYPICAL SECTIONS FOR FURTHER DETAILS.
2. ALL UNPAVED AREAS WITHIN LIMITS OF CONSTRUCTION SHALL BE SODDED OR SEEDED AS SHOWN ON THE PLANS.
3. SLOPES OF STREET PAVEMENT SHALL BE PER TRANSPORTATION CRITERIA MANUAL.
4. ALL PAVEMENT LAYER THICKNESSES SHALL BE BASED ON PROJECT PAVEMENT DESIGN REPORT. REFER TO THE TRANSPORTATION CRITERIA MANUAL.

SCALE: NTS

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	DRAWING NO: ST-14 SHEET 1 of 1
APPROVED 01-28-21 DATE	TYPICAL SECTION HMAC	ROUND ROCK TEXAS
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		



NOTES:

1. REFER TO TYPICAL SECTIONS FOR FURTHER DETAILS.
2. CPCD TO BE CONSTRUCTED IN ACCORDANCE WITH TXDOT STANDARD "CONCRETE PAVEMENT DETAILS CONTRACTION DESIGN T = 6 TO 12 INCHES" (CPCD).
3. ALL PAVEMENT LAYER THICKNESSES SHALL BE BASED ON PROJECT PAVEMENT DESIGN REPORT. REFER TO THE TRANSPORTATION CRITERIA MANUAL.

SCALE: NTS

RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	DRAWING NO: ST-15 SHEET 1 of 1
APPROVED 01-28-21 DATE	TYPICAL SECTION CPCD (CONCRETE PAVEMENT CONTRACTION DESIGN)	ROUND ROCK TEXAS
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		

SITE DEVELOPMENT PLANS
TO SERVE
ST ALPHONSA CHURCH
3600 COUNTY ROAD 175
LEANDER, TX 78641

STANDARD DETAILS - PAVING 2

STATE OF TEXAS
JENNIFER L HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

PROJECT NO. 230808	04/29/2025	DRAWN BY: AR	CHECKED BY: DR	APPROVED BY: JH

C21.05

CITY PERMIT NUMBER

Plotted by: Home PC, Plot date: 29/04/2025
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Attachment G - Inspection, Maintenance, Repair and Retrofit Plan.

STORMWATER MAINTENANCE PLAN

It is the responsibility of the property owner's association to maintain detention ponds on nonresidential property, unless otherwise approved by the City. If regular maintenance and inspections are not undertaken, the detention pond will not achieve its intended purposes and can create nuisance conditions for nearby residents. This page provides guidance on maintenance and inspection activities that are typically required for detention ponds, along with a suggested frequency for each activity.

Inspection Activities	Suggested Schedule
After several storm events or an extreme storm event, inspect for: bank stability; signs of erosion; and damage to, or clogging of, the outlet structures and pilot channels.	As Needed
Note excessive erosion of pond banks or bottom; trash and debris; clogging of the outlet structures and any pilot channels; sediment accumulation in the pond and inlet/outlet structures; tree growth on pond walls; the presence of burrowing animals; standing water where there should be none; vigor and density of the grass turf on the pond side slopes and floor; differential settlement; cracking; leakage; and slope stability.	Semi-annually
Inspect that the outlet structures, pipes, level spreaders, and downstream and pilot channels are free of debris and are operational.	Annually
Note signs of pollution, such as oil sheens, discolored water, or unpleasant odors.	Annually
Check for sediment accumulation in the facility.	Annually

Maintenance Activities	Suggested Schedule
Mowing the facility. Mulch the grass or catch and remove the grass clippings.	Monthly or As Needed
Debris and litter removal.	Monthly or As Needed
Seed or sod to restore dead or damaged ground cover.	Annual or As Needed
Repair and revegetate eroded or undercut areas. Repair any damage to the structural elements of the pond.	As Needed
Remove vegetation that may hinder the operation of the pond.	As Needed
Monitor sediment accumulations and remove sediment when the pond volume has been reduced by 20%.	10-years or As Needed

Additional Maintenance Notes:

Besides the detention pond, outlet structures, pipes, level spreader, and channels that are mentioned in the suggested maintenance plan, any other components of stormwater management should also be checked periodically and kept in full working order. Furthermore, ensure that any potential sources of debris on the property does not contribute to the deterioration of the stormwater management structures. Failure to do so could not only cause maintenance issues to the aforementioned stormwater management structures, but negatively impact the ability of the property as a whole to handle storm events.

Recommended Frequency of Service:

Potential sources of debris on the property include, but are not limited to, the townhome building, garage, and workshop. Other components of stormwater management include, but are not limited to, roof gutters and roof leaders. Ultimately, the frequency of inspection and service cleaning of these sources and components depends on the amount of runoff, pollutant loading, and interference from debris (leaves, vegetation, trash, etc.). It is recommended that they are to be inspected and cleaned at least four times a year (especially during the fall, when leaves have fallen from the trees), both to maintain the function of those components and appearances of the property.

Suggested Service Procedures:

Roof gutters: The roof gutters of the house shall be inspected and cleared of any leaves, twigs, debris, etc. This shall be done at in the early spring, and late fall after all of the leaves have fallen from trees.

Roof Leaders: The maintenance of the roof leaders shall be in accordance with the aforementioned suggested schedule and shall include the inspection of the leaders via the cleanouts and removal of any debris, obstruction and sediment.

Reporting:

A maintenance log shall be kept of each inspection outlining the items inspected and the maintenance performed. These logs should be kept on file by the Owner and must be shared with the City upon request.

HPE
Civil Engineering

DRY POND INSPECTION AND MAINTENANCE CHECKLIST

Facility:			
Location/Address:			
Date:	**Time**:	**Weather Conditions**:	**Date of Last Inspection**:
Inspector:		**Title**:	
Rain in Last 48 Hours: ☐ **Yes** ☐ **No**		**If yes, list amount and timing**:	
Pretreatment: ☐ **vegetated filter strip** ☐ **swale** ☐ **forebay** ☐ **other, specify:**			
Site Plan or As-Built Plan Available: ☐ **Yes** ☐ **No**			

Inspection Item		Comment	Action Needed
1. PRETREATMENT			
Sediment has accumulated.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
Trash and debris have accumulated.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
2. DEWATERING			
The water quality orifice is visible.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
3. INLETS			
Inlets are in poor structural condition.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
Sediment has accumulated and/or is blocking the inlets.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
Erosion is occurring around the inlets.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
4. EMBANKMENT			
Sinkholes or cracks are visible in the embankment.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
Trees or woody vegetation present on the dam or embankment.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
5. POND AREA			
Trash and debris have accumulated.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
Invasive plants are present.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
Erosion is evident on the pond floor or low flow channel.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
The micro-pool has sediment accumulation.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
Sinkholes or animal borrows are present.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
6. SIDE WALLS AND EMBANKMENT			
Erosion is evident.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
Sinkholes, animal borrows, or instability are present.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
7. OUTLETS AND OVERFLOW STRUCTURE			
Outlets or overflow structures in poor structural condition.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
Sediment, trash or debris is blocking the outlets or overflow structure.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
Erosion is occurring around the outlets or overflow structure.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**
Joints are not watertight and/or leaks are visible.	☐**Yes** ☐**No** ☐**N/A**		☐**Yes** ☐**No**

Per the *"Permanent Stormwater Section" 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 a plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is provided herein.*

This plan has been prepared and certified by the engineer designing the permanent BMPs and measures. This plan has been signed by the owner or responsible party. The plan includes procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofits as well as a discussion of record keeping procedures.

I, Jen Henderson, a Professional Engineer duly licensed to practice in the State of Texas do hereby certify that the information presented in this document was prepared under my direction and supervision and complies with the proper inspection and maintenance requirements determined by the manufacturer.

Signature: _____ Date: 5/2/2025

License Number:
Address:

Phone Number:

STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED
PROFESSIONAL ENGINEER
05/09/2025

Engineers Seal and Signature

I, Manesh Antony (Name), acting as Convenor (Officer Position) for St. Alphonsa Church (Permittee's Name), have read the Recommended StormTrooper Maintenance Plan, as well as the associated drawings, and agree to implement the requirements described herein.

Signature: _____ Date: **07/15/2024**

Address: **3600 CO RD 175, Leander TX 78641**

Phone Number: **512 826 2180**

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

I **George Antoo Alappat**,
Print Name

Vicar,
Title - Owner/President/Other

of **St Alphonsa Syro-Malabar Catholic Church**,
Corporation/Partnership/Entity Name

have authorized Jen Henderson, P.E.
Print Name of Agent/Engineer

of Henderson Professional Engineers
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Applicant's Signature

07/02/2024
Date

THE STATE OF Texas §

County of Williamson §

GEORGE AMTOD ALAPPAT

BEFORE ME, the undersigned authority, on this day personally appeared _____ 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 2 day of July, 2024.

NOTARY PUBLIC

ASHLEY ERIN NELSON
Notary Public, State of Texas
Comm. Expires 02-01-2028
Notary ID 134741742

Ashley Nelson
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 02/01/2028

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: St Alphonsa Church
Regulated Entity Location: 3600 Co Rd 175, Leander, TX 78641
Name of Customer: St Alphonsa Church
Contact Person: Manesh Antony Phone: 512.826.2180
Customer Reference Number (if issued):CN _____
Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☐ Travis ☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

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

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

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

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	5.00 Acres	$ 5,000
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 07/02/2024

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

TCEQ Core Data Form

TCEQ Use Only

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

SECTION I: General Information

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

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

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

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

SECTION II: Customer Information

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

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

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

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

St Alphonsa Church

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (*if applicable*)
0802040537		47-1531675	

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

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

13. Independently Owned and Operated?
☒ **Yes** ☐ **No**

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

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

15. Mailing Address: 3600 CR 175

City	Leander	State	TX	ZIP	78641	ZIP + 4	

16. Country Mailing Information (*if outside USA*)	17. E-Mail Address (*if applicable*)
	manesh007@gmail.com

18. Telephone Number	19. Extension or Code	20. Fax Number (*if applicable*)
(512) 826-2180		( ) -

SECTION III: Regulated Entity Information

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

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

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

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

St Alphonsa Church

23. Street Address of the Regulated Entity: *(No PO Boxes)*	3600 County Road 175							
	City	Leander	**State**	TX	**ZIP**	78641	**ZIP + 4**	
24. County	Williamson							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**
Leander			TX		78641
27. Latitude (N) In Decimal:	30.554181135441304		**28. Longitude (W) In Decimal:**	-97.76786973207749	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
8661		236220	

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

Place of worship

34. Mailing Address:	**3600 CR 175**							
	City	**Leander**	**State**	**TX**	**ZIP**	**78641**	**ZIP + 4**	

35. E-Mail Address:	**manesh007@gmail.com**	
36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(512)826-2180		( ) -

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

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

SECTION IV: Preparer Information

40. Name:	Jen Henderson, P.E.	**41. Title:**	President & CEO

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(737) 203-8953		( ) -	hpe@hendersonpe.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:	St Alphonsa Church	**Job Title:**	**Convenor**
Name *(In Print):*	Manesh Antony	**Phone:**	(512) 826- **2180**
Signature:		**Date:**	**07/02/2024**