

Carlson, Brigance & Doering, Inc.

Civil Engineering Surveying

WATER POLLUTION ABATEMENT PLAN

for

UNIVERSITY SUNRISE SUBDIVISION SECTION 2, BLOCK B, LOT 8C ROUND ROCK, WILLIAMSON COUNTY, TEXAS

Prepared For:

KPG COMMERCIAL

Attn: TYLER DUTTON

115 WILD BASIN ROAD, SUITE 210

AUSTIN, TEXAS 78746

Prepared By:

CARLSON, BRIGANCE & DOERING, INC.

CHRISTIAN DOWDLE, P.E.

2007 Sam Bass Rd, Ste 200, Round Rock, TX 78681 (512) 280-5160 Firm #F3791

CHRISTIAN DOWDLE

B. 143643

CENSED ON AL ELECTRICAL STATE OF TELESTICS

CHRISTIAN DOWDLE

B. 143643

CENSED ON AL ELECTRICAL STATE OF TELESTICS

CONTRACTOR OF TELESTICS

CHRISTIAN DOWDLE

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CBD No. 5658 March 2025

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Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

- Edwards Aquifer applications must be deemed administratively complete before a technical review can begin. To be considered administratively complete, the application must contain completed forms and attachments, provide the requested information, and meet all the site plan requirements. The submitted application and plan sheets should be final plans. Please submit one full-size set of plan sheets with the original application, and half-size sets with the additional copies.
 - To ensure that all applicable documents are included in the application, the program has developed tools to guide you and web pages to provide all forms, checklists, and guidance. Please visit the below website for assistance: http://www.tceq.texas.gov/field/eapp.
- 2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.
- 3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.
- 4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.
 - An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.
- 5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.
- 6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

- When an application is deemed administratively complete, the technical review period begins. The regional
 office will distribute copies of the application to the identified affected city, county, and groundwater
 conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days
 to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.
- 2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: 4151 Sunrise Road				2. Regulated Entity No.: RN				
3. Customer Name: 4151 Sunrise LP				4. Customer No.: CN				
5. Project Type: (Please circle/check one)	New	Modif	ication	1	Exter	nsion	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-residentia		al	8. Sit	e (acres):	1.044	
9. Application Fee:	\$4,000	10. P	10. Permanent BM			s):	One Sand Filter	r WQP
11. SCS (Linear Ft.):	N/A	12. AST/UST (No			o. Tar	. Tanks): N/A		
13. County:	Williamson	14. Watershed:					Brazos River	

Application Distribution

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

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

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

Austin Region				
County:	Hays	Travis	Williamson	
Original (1 req.)	_	_	X	
Region (1 req.)	_	_	X	
County(ies)	_	_	X	
Groundwater Conservation District(s)	Edwards Aquifer AuthorityBarton Springs/ Edwards AquiferHays TrinityPlum Creek	Barton Springs/ Edwards Aquifer	NA	
City(ies) Jurisdiction	AustinBudaDripping SpringsKyleMountain CitySan MarcosWimberleyWoodcreek	AustinBee CavePflugervilleRollingwoodRound RockSunset ValleyWest Lake Hills	AustinCedar ParkFlorenceGeorgetownJerrellLeanderLiberty HillPflugerville X Round Rock	

San Antonio Region					
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)	_			_	
Region (1 req.)	_	_			
County(ies)					
Groundwater Conservation District(s)	Edwards Aquifer Authority Trinity-Glen Rose	Edwards Aquifer Authority	Kinney	EAA Medina	EAA Uvalde
City(ies) Jurisdiction	Castle HillsFair Oaks RanchHelotesHill Country VillageHollywood ParkSan Antonio (SAWS)Shavano Park	Bulverde Fair Oaks Ranch Garden Ridge New Braunfels Schertz	NA	San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the app application is hereby submitted to TCEQ for administ	
application is hereby submitted to TCEQ for administ.	ative review and technical review.
4151 SUNRISE, LP/ CARLSON, BRIGANCE & DOERIN	NG, INC.
Print Name of Customer/Authorized Agent	
(hristians)	4/8/2025
Signature of Customer/Authorized Agent	Date

FOR TCEQ INTERNAL USE ONLY	7	
Date(s)Reviewed:	Date A	Administratively Complete:
Received From:	Correc	ct Number of Copies:
Received By:	Distril	bution Date:
EAPP File Number:	Compl	lex:
Admin. Review(s) (No.):	No. Al	R Rounds:
Delinquent Fees (Y/N):	Review	w Time Spent:
Lat./Long. Verified:	SOS C	Customer Verification:
Agent Authorization Complete/Notarized (Y/N):	Fee	Payable to TCEQ (Y/N):
Core Data Form Complete (Y/N):	Check	s: Signed (Y/N):
Core Data Form Incomplete Nos.:		Less than 90 days old (Y/N):

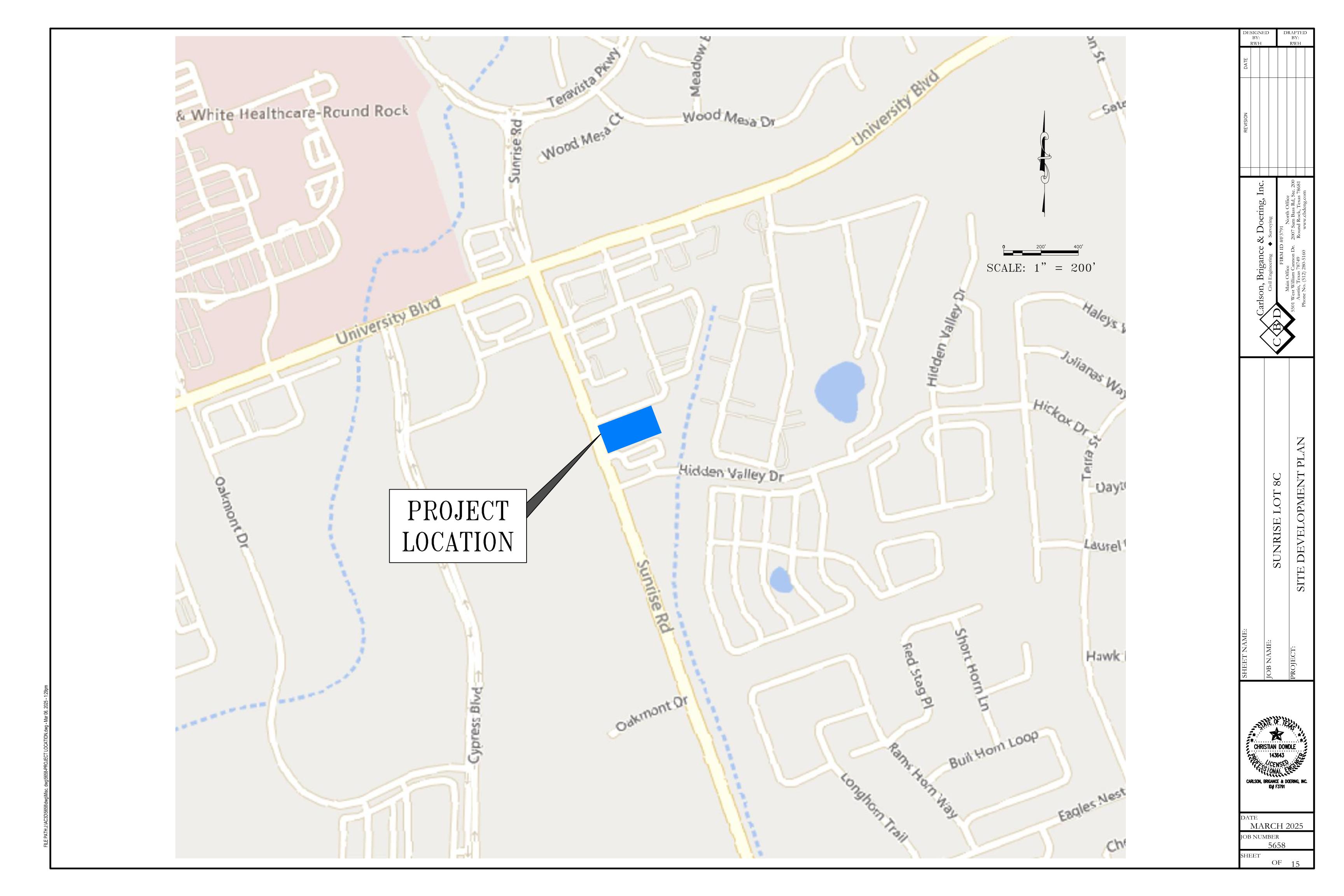


UNIVERSITY SUNRISE SUBDIVISION SECTION 2, BLOCK B, LOT 8C ROUND ROCK, WILLIAMSON COUNTY, TEXAS

WATER POLLUTION ABATEMENT PLAN

General Information Form TCEQ-0587

ATTACHMENT A: ROAD MAP





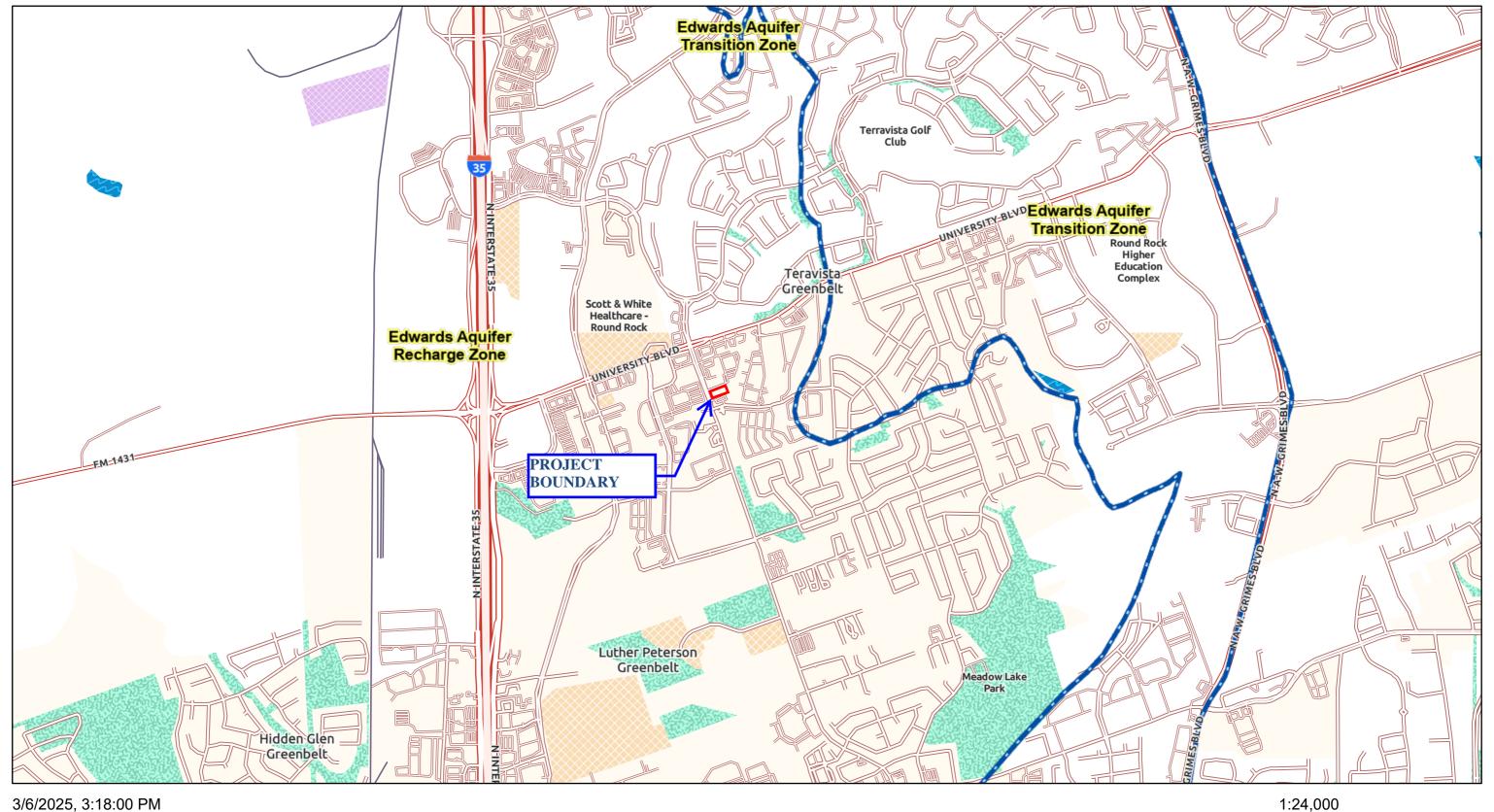
UNIVERSITY SUNRISE SUBDIVISION SECTION 2, BLOCK B, LOT 8C ROUND ROCK, WILLIAMSON COUNTY, TEXAS

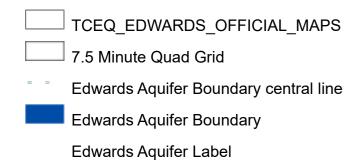
WATER POLLUTION ABATEMENT PLAN

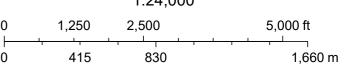
General Information Form TCEQ-0587

ATTACHMENT B: USGS / EDWARDS AUQUIFER RECHARGE ZONE MAP

4151 Sunrise Rd. Round Rock, TX









Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, TCEQ

Round Rock Quadrangle



UNIVERSITY SUNRISE SUBDIVISION SECTION 2, BLOCK B, LOT 8C ROUND ROCK, WILLIAMSON COUNTY, TEXAS

WATER POLLUTION ABATEMENT PLAN

General Information Form TCEQ-0587

ATTACHMENT C: PROJECT DESCRIPTION

The proposed project, 4151 Sunrise, is on a 1.044-acre site generally located south of University Boulevard and east of Sunrise Road in Round Rock, Texas, Williamson County. The site is one of two outparcels that were platted alongside the Gold's Gym development. The site, Lot 8C, is cleared with trees around the perimeter. The proposed project is one building subdivided into two spaces with one space being a veterinarian clinic and the other space being retail. The site contains 71.8% Impervious Cover.

Drainage for this site was contemplated during permitting Gold's Gym in March 2017, SDP 1601-0001. Stormwater run-off will sheet flow south and east to a proposed concrete drainage ditch that is eventually conveyed through an existing 24" stub out on the northeast corner of the property. Gold's Gym drainage plan calculated a 25-YR and 100-YR peak flow of 10.28 cfs and 12.74 cfs, respectively for Lot 8C.

The proposed drainage has been calculated with the rational method in accordance with DACS. Rainfall data is based on NOAA Atlas 14 for the 25-yr and 100-yr design storms and the proposed rate of runoff is 8.1 cfs and 11.4 cfs, respectively, which is below the runoff calculated during the permitting of Gold's Gym.

4151 Sunrise is located in the Edwards Aquifer Recharge zone. The detention and water quality pond permitted with Gold's Gym in March 2017, SDP 1601-0001 with the City of Round Rock, contemplated the proposed drainage conditions from Lot 8C however, Gold's Water Pollution Abatement Plan (WPAP) only showed Gold's Gym impervious cover. The WPAP associated with Gold's Gym Round Roc 4201 Sunrise Road can be located under RN# 109992619 or the Edwards Aquifer Protection Program ID No. 11000079. In this WPAP application, the TSS Removal spreadsheet includes the impervious cover for the full build out conditions including the Gold's Gym site plan, Lot 8B outparcel, and this project, Lot 8C outparcel. The regional detention and water quality pond was appropriately sized for full build-out conditions.

General Information Form

Texas Commission on Environmental Quality

Print Name of Customer/Agent: Christian Dowdle P.E.

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

Date: 3/21/2025

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:

Sig	nature of Customer/Agent:
	(hristians)
Pi	roject Information
1.	Regulated Entity Name: 4151 Sunrise Road
2.	County: Williamson County
3.	Stream Basin: <u>Brazos River</u>
4.	Groundwater Conservation District (If applicable): N/A
5.	Edwards Aquifer Zone:
	Recharge Zone Transition Zone
6.	Plan Type:
	WPAPSCS☐ Modification☐ AST☐ UST☐ Exception Request

7.	Customer (Applicant):	
	Contact Person: TYLER DUTTON Entity: 4151 SUNRISE, LP Mailing Address: 115 WILD BASIN RD. S., STE. 210 City, State: AUSTIN, TX Telephone: (512) 441-1062 Email Address: tyler@kpgcommercial.com	Zip: <u>78746</u> FAX: <u>N/A</u>
8.	Agent/Representative (If any):	
	Contact Person: Christian Dowdle Entity: CARLSON, BRIGANCE & DOERING, INC. Mailing Address: 2007 Sam Bass Rd, Ste 200 City, State: Round Rock, TX Telephone: 512 280 5160 Email Address: cdowdle@cbdeng.com	Zip: <u>78681</u> FAX: <u>N/A</u>
9.	Project Location:	
	 ☐ The project site is located inside the city limits of the project site is located outside the city limits jurisdiction) of ☐ The project site is not located within any city's limits and the project site is not located within any city's limits. 	but inside the ETJ (extra-territorial
10.	The location of the project site is described belongeral and clarity so that the TCEQ's Regional st boundaries for a field investigation.	
	The project is located NE of the intersection of and south of University blvd. The site is bou south by commercial development and to twest by Sunrise road.	nd to the north by vacant lot, to the
11.	Attachment A – Road Map. A road map showing project site is attached. The project location and the map.	
12.	Attachment B - USGS / Edwards Recharge Zone USGS Quadrangle Map (Scale: 1" = 2000') of the The map(s) clearly show:	
	 ☑ Project site boundaries. ☑ USGS Quadrangle Name(s). ☑ Boundaries of the Recharge Zone (and Tran ☑ Drainage path from the project site to the boundaries 	
13.	The TCEQ must be able to inspect the project s	

	boundaries and alignment of the regulated activities and the geologic or manmade tures noted in the Geologic Assessment.
⊠ Sur	vey staking will be completed by this date: 10/24/2024
nar	rative description of the proposed project. The project description is consistent oughout the application and contains, at a minimum, the following details:
	Area of the site Offsite areas Impervious cover Permanent BMP(s) Proposed site use Site history Previous development Area(s) to be demolished
15. Existing	g project site conditions are noted below:
	Existing commercial site Existing industrial site Existing residential site Existing paved and/or unpaved roads Undeveloped (Cleared) Undeveloped (Undisturbed/Uncleared) Other:
Prohib	ited Activities
	n aware that the following activities are prohibited on the Recharge Zone and are not posed 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
, ,	New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).
, ,	New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.
	n aware that the following activities are prohibited on the Transition Zone and are 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	e fee for the plan(s) is based on:
	For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur. For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines. For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems. A request for an exception to any substantive portion of the regulations related to the protection of water quality. A request for an extension to a previously approved plan.
19.	Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:
	 ☐ TCEQ cashier ☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties) ☐ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)
20.	Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regiona office.
21. 🔀	No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

Geologic Assessment

Texas Commission on Environmental Quality

For Regulated Activities on The Edwards Aquifer Recharge/transition Zones and Relating to 30 TAC §213.S(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:	Douglas McGookey, P.G.	Telephone: <u>(21</u>	0) 694-4545
Date: December 2, 2015	Fax:	(210) 694-4577	
Representing: Medin	a Consulting Co., Inc. TBPG N	No.50118	TATE OF TEL
Signature of Geologist:			1.3
Dy Mic			Douglas A. McGookey
Regulated Entity Name: _	Gold's Gym Round Rock		Geologist License Number 368
Project Informati	on		ONALY GEOSCI
1. Date(s) Geologic As	sessment was performed:	November 24, 2015	Dylnie
2. Type of Project:			12-2-15
		☐ AST	
SCS		UST	
3. Location of Project:			
⊠ Recharge Zone			
☐ Transition Zone	within the Transition Zees		
Contributing Zone	within the Transition Zone		

- 4. Attachment A Geologic Assessment Table. Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.
- 5. Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group	Thickness(feet)
Heiden clay	С	6.7
Houston black clay	С	6.7
Austin silty clay	С	4.75

- * Soil Group Definitions (Abbreviated)
 - A. Soils having a high infiltration rate when thoroughly wetted.
 - B. Soils having a moderate infiltration rate when thoroughly wetted.
 - C. Soils having a slow infiltration rate when thoroughly wetted.
 - D. Soils having a very slow infiltration rate when thoroughly wetted.
- 6. Attachment B Stratigraphic Column. A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.
- 7. Attachment C Site Geology. A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.
- 8. Attachment D Site Geologic Map(s). The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'

Applicant's Site Plan Scale: 1" = ______40'

Site Geologic Map Scale: 1" = _____40'

Site Soils Map Scale (if more than 1 soil type): 1" = __40'

9. Method of collecting positional data:

Global Positioning System (GPS) technology.

Other method(s). Please describe method of data collection: _____

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

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

12.	Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
	Geologic or manmade features were not discovered on the project site during the field investigation.
13.	igstyle igstyle igstyle The Recharge Zone boundary is shown and labeled, if appropriate.
14.	All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.
	There are(#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.) The wells are not in use and have been properly abandoned. The wells are not in use and will be properly abandoned. The wells are in use and comply with 16 TAC Chapter 76. There are no wells or test holes of any kind known to exist on the project site.
A	dministrative Information
15	. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

ATTACHMENTS

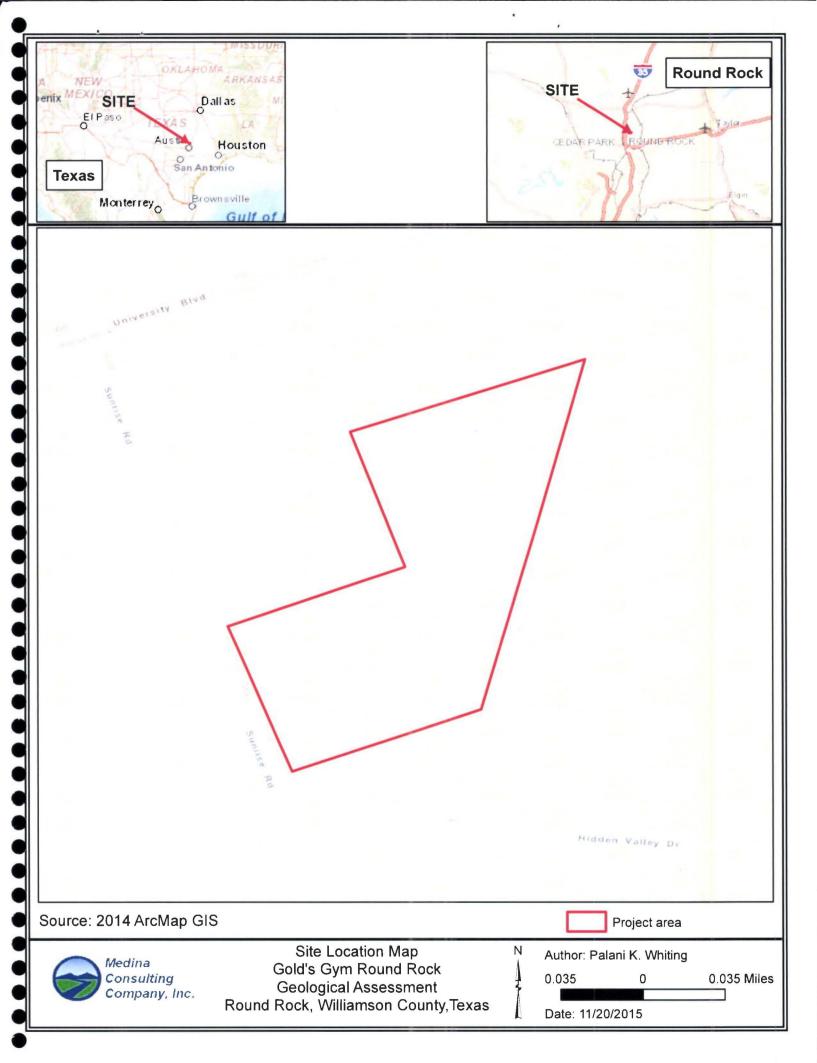


UNIVERSITY SUNRISE SUBDIVISION SECTION 2, BLOCK B, LOT 8C ROUND ROCK, WILLIAMSON COUNTY, TEXAS

Water Pollution Abatement Plan Application TCEQ-0585 GEOLOGIC ASSESSMENT

The geologic assessment for Gold's Gym, Round Rock (4201 Sunrise Road, Round Rock, TX) Regulated Entity No. RN108926619 and Edwards Aquifer Protection Program ID No. 11000079 includes the area for 4151 Sunrise Road, Round Rock, TX. The geologic assessment is included below.

ATTACHMENT A – FIGURES





Source: 2014 ArcMap GIS.

Proj

Project area

Medina Consulting Company, Inc. Site and Vicinity Map Gold's Gym Round Rock Geological Assessment Round Rock, Williamson County,Texas

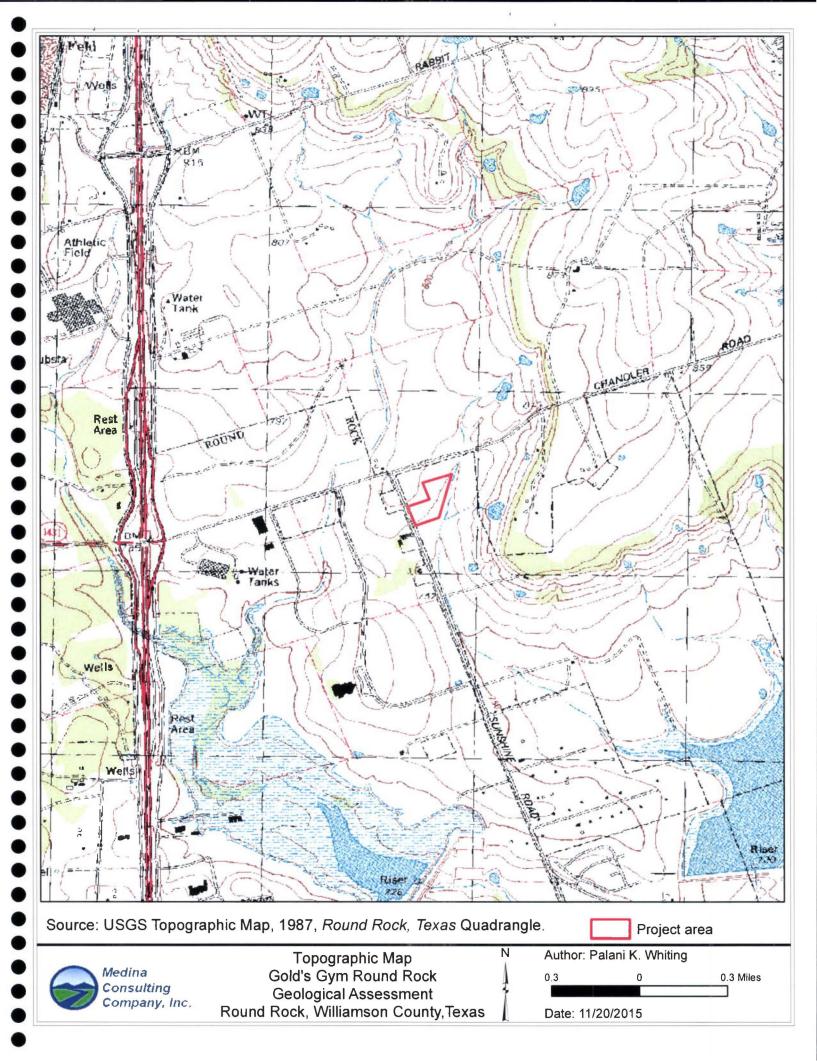
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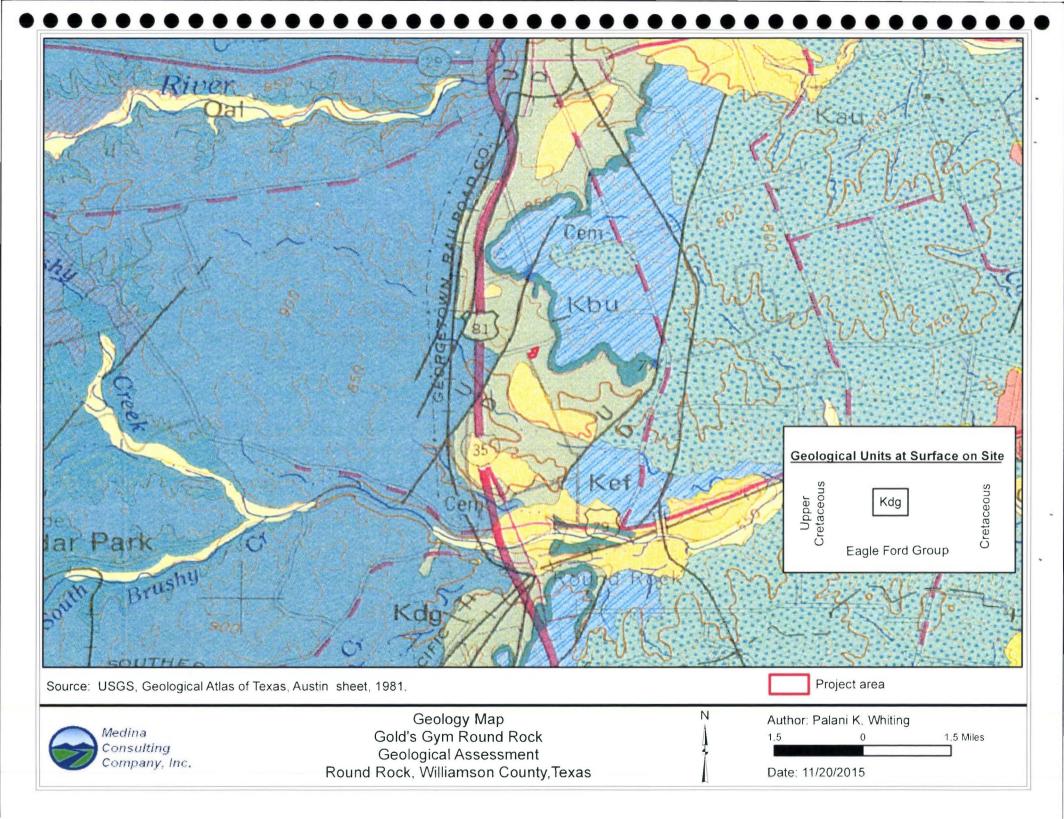
Author: Palani K. Whiting

0.045 0

0.045 Miles

Date: 11/20/2015





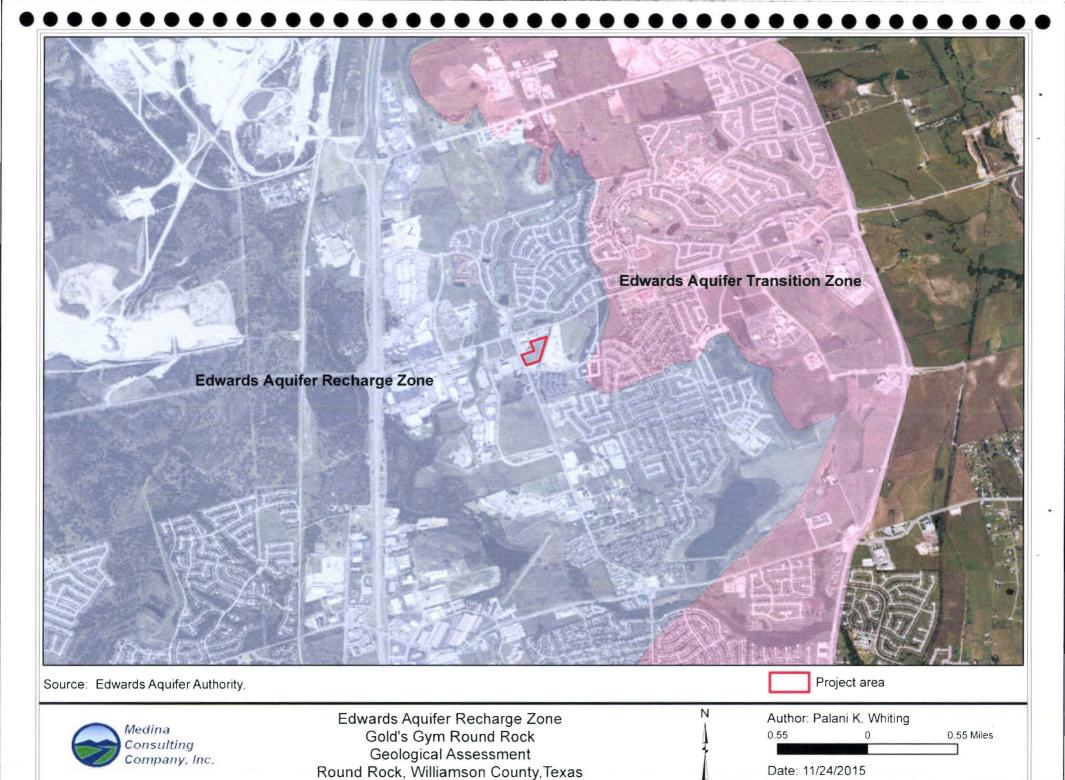


Medina Consulting Company, Inc. Soil Map Gold's Gym Round Rock Geological Assessment Round Rock, Williamson County,Texas

Author: Palani K. Whiting

0.085 0.085 Miles

Date: 11/24/2015



ATTACHMENT B – GEOLOGIC ASSESSMENT TABLE

LOCATION				FEATURE CHARACTERISTICS								EVA	LUATI	ON	Р	HYSICAL	SETTING			
1A 1B" 1C"			2A	2A 2B 3			4		5	5A	6	7	8A	88	9	_	10	1		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	ATURE POINTS	FORMATION	DIMENSIONS (FEE		(FEET)	ET) TREND (DEGREES)		DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL			CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	≥40	<1.6	≥1,6	
MB1	30°33'35 90"	-97"40'44 72"	MB	30	Georgetn/Del Rio	NA	NA	NA	NA	0	1	0	N	0	30	х		х		Hillside
MB2	30°33′41 07'	-97"40"38.28"	MB	30	Georgetn/Del Rio	NA	NA	NA	NA	0	1	0	N	0	30	x		x		Hillside
															_		\vdash			
															_					
								_									\vdash			
							_										\vdash			

DATUM WGS 84

2A TYPE	TYPE	28 POINTS
C	Cave	30
sc	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
0	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

	8A INFILLING
N	None, exposed rock
C	Coarse - cobbles, breakdown, sand, gravel
0	Loose or soft mud or soil, organics, leaves, 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.

Douglas McGookey, P.G. Douglas McGookey, P.G.

Sheet <u>1</u> of 1

Douglas A. McGookey

Geologist
License Number 388

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12 - 7-15

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

ATTACHMENT C – STRATIGRAPHIC COLUMN

STRATIGRAPHIC COLUMN

Site Name:

Gold's Gym Round Rock

Location:

4201 Sunrise Road, Round Rock, Williamson County, Texas

				SIR	ATIGRAF	HIC CO	LUMN		
Time Period (Era)	Hydrologic Subdivision	Group Formation/ Member			Hydrologic Function	Lithology		Cavern Development	Porosity/ Permeability type
					Erosiono	al Surface			
Upper Cretaceous	Del Rio Clay and Georgetown Fm, Undivided			CU	50-60	Del Rio: Blue-green to yellow brown clay Georgetown: Reddish brown, gray to light tan marly limestone	None	Low porosity/low permeability	
Lower Cretaceous				Cyclic & marine members undivided	AQ	80-100	Mudstone to packstone, miliolid grainstone, chert	Many subsurface	Laterally extensive, water yielding
	Edwards Aquifer		Person Fm	Leached and collapsed members	AQ	80-100	Limestone: Crystalline, mudstone to grainstone, chert, collapsed breccia	Extensive lateral development, large rooms	Permeable, most not fabri porosity
		ą.			Regional dense member	CU	20-24	Limestone: dense argillaceous mudstone	Very few, only vertical fracture development
		Edwards Group		Grainstone member	AQ	50-60	Limestone: miliolid grainstone, mudstone to wackestone, chert	Few	Not fabric, recrystallizatio reduces permeability
		ω .	Kainer Fm	Kirschberg evaporite member	AQ	50-60	Limestone: highly altered, crystalline, chalky mudstone, chert	Probably extensive cave development	Most fabric, one of the mo- permeable
				Dolomitic member	AQ	110-130	Limestone: mudstone to grainstone, crystalline, chert	Caves related to structure or bedding planes	Mostly not fabric, some bedding plane fabric
				Basal nodular member	Karst AQ	50-60	Limestone: shaly, nodular, mudstone to miliolid grainstone	Large lateral caves at surface	Fabric, stratigraphical controlled
	Lower Confining Unit	Glen E X S		Upper Member Glen Rose Limestone	CU	350-500	Limestone: yellowish tan, thinly bedded, marl	Some surface cave development	Relatively impermeable

Notes: CU = Confining Unit; AQ = Aquifer

Source: Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone,

Bexar County, Texas: US Geological Survey, Water Resource hvestigations Report (95-4030).

Douglas A. McGookey 32
Geologist
License Number 388

ATTACHMENT D – SITE GEOLOGY

GEOLOGY NARRATIVE

Site Name: Gold's Gym Round Rock

Location: 4201 Sunrise Road, Round Rock, Williamson County, Texas

Narrative of Site Specific Soils

The Site lies on the Recharge Zone of the Edwards Aquifer. The attached figures show the location of the Site and geologic units.

Site Specific Soils - Literature Review:

Soil Units: The project site lies on three soils. Most of the central part of the Site lies on Heiden clay, the area along the drainage channel and on the east central part of the Site is on Houston black clay, and part of the western area of the Site is on Austin silty clay. These three soil types are described in more detail below.

Soil Descriptions (most of the following paragraphs are directly quoted from the <u>Soil Survey of Williamson County, Texas</u>):

Heiden clay (3 to 5 percent slopes, eroded) (HeC2): This is a gently undulating soil on uplands. Areas are generally long and narrow and range from 30 to 60 acres. Water erosion, mostly from rains of high intensity, has created gullies from 1 to 4 feet deep and 800 to 1,000 feet apart. Also, the surface layer has been thinned by soil removal; the thinnest areas are near the gullies. Generally, one-fourth to one-half of the original surface layer has been removed. Most gullies are crossable with farm equipment.

Typically, the upper layer is dark grayish brown clay about 16 inches thick. The next layer, which extends down to about 42 inches, is olive clay. The underlying layer to 60 inches is mottled, pale olive clay. The soil is calcareous and moderately alkaline throughout.

This soil is well drained. Permeability is very slow. Runoff is rapid. When this soil is dry, deep cracks form; when wet, the soil swells and the cracks close. The available water capacity is high. Fertility is low in many places. Erosion is a severe hazard.

Houston Black clay, 1 to 3 percent slopes (HuB): This gently sloping soil is on smooth uplands. The areas are irregular in shape and range from 50 to 250 acres. Typically, the upper layer is dark gray clay about 32 inches thick. The layer below that is dark grayish brown clay to about 54 inches. The underlying layer to about 62 inches is mottled, grayish brown clay. The soil is calcareous and moderately alkaline throughout.

This soil is moderately well drained. Permeability is very slow. When the soil is dry and cracked, water

enters it rapidly. When the soil is wet and the cracks are closed, infiltration is very slow. Runoff is medium. The available water capacity is high. Erosion is a moderate hazard. Included in mapping are small areas of soils that have brownish colors or are noncalcareous in the upper layer but are otherwise similar to the Houston Black soil. The included soils make up less than 15 percent of the map unit.

Austin silty clay, 1 to 3 percent slopes (AuB): This gently sloping soil is on uplands. Areas are irregular in shape and range from 20 to about 100 acres. Typically, this soil has a dark grayish brown silty clay surface layer about 13 inches thick. The subsoil extends to a depth of 34 inches. In the upper 12 inches it is brown silty clay, and in the lower part it is yellowish brown silty clay. The underlying material is slightly weathered chalk or chalk interbedded with chalky marl. The soil is calcareous and moderately alkaline throughout. This soil is well drained. The available water capacity is medium. Permeability is moderately slow. Runoff is medium. Erosion is a slight hazard.

Included in mapping are small areas of Houston Black soils along narrow, intermittent drainage ways and a few small areas of Castephen and Eddy soils on some knolls and on breaks in the slope. Also included are a few areas of soils similar to this Austin soil except that they have a grayish surface layer or have chalk at a depth of more than 40 inches. The included soils make up less than 15 percent of the map unit.

<u>Site Specific Soils - Observations:</u> Most of the Site is covered with short, mowed grass and short weeds. Small trees are present in the drainage channel on the east side of the property. The soils on the Project Site have been previously disturbed as part of the grading and leveling of the Site. The surface soils are clay soils with gravel lag in a few places. Silty clay and clay soils have been deposited in the drainage on the east side of the property along with flood debris that is mostly wood from downed trees.

Narrative of Site Specific Geology:

Literature Review: The attached figure and the Site Specific Geologic map show geology of the area from the *Geologic Atlas of Texas, Austin Sheet*, 1981. The Site is mapped in the Del Rio Clay and Georgetown Limestone, undivided (the Georgetown Limestone is a Lower Cretaceous unit and the Del Rio Clay is an Upper Cretaceous unit). On the attached *Site Specific Geology* map, the Site is shown mapped in the Del Rio Clay and Georgetown Limestone as separate units based on the *Geologic Atlas of Texas, Austin Sheet*, accessed digitally from http://www.beg.utexas.edu/mainweb/services/GISdatabases.htm for inclusion into the Geologic Database of Texas, accessed November 2015.

Georgetown Limestone – The Georgetown Limestone is composed mostly of white limestone with marl. It is fine grained, argillaceous, nodular, moderately indurated, light gray. Some of the limestone is brittle and thick bedded and includes some shale, is marly, and soft. The Georgetown includes marine megafossils including *Kingena wacoensis* and *Gryphaea washitaensis*, which are marine

marine megafossils including *Kingena wacoensis* and *Gryphaea washitaensis*, which are marine bivalve clams. The thickness ranges from 30 to 80 feet.

Del Rio Clay – The Del Rio clay consists of calcareous and gypsiferous clay. Pyrite is common. The rocks are blocky, medium gray and weathers to light gray to yellow-gray clay. It contains some thin lenses of highly calcareous siltstone. Marine megafossils include *Exogyra arietina* and other pelecypods. The thickness ranges from 40 to 70 feet.

<u>Site Specific Geology - Observations:</u> The surface of the Site is graded and leveled, and has herbaceous vegetation and occasional trees present at the surface. A few white limestone rocks that are likely from the Georgetown Limestone are exposed at the surface across the Site but they may have been moved during grading and leveling. The drainage channel on the east side of the Site contains mostly silty clay and clay, but gravel and limestone rocks are also present in a few locations (Attachment E). They were likely deposited during storm events and are part of the alluvial sediments along the drainage.

Two features were identified that are included on the Geologic Assessment Table:

MB1 is an upright pipe that is likely connected to an underground utility (Photograph 3).

MB2 are manhole covers for underground sewer utilities (Photograph 6).

The features are manmade utilities that are unlikely to provide conduits for stormwater flow to the subsurface.

No voids that indicated a karst origin were observed on the Site. No faults, fractures, or other structural elements are shown on the Geologic map or observed in the field. No water wells were observed on the Site. There was no evidence that recharge is occurring to the Edwards aquifer at the Site. If features are discovered during construction, work should stop and the Texas Commission on Environmental Quality (TCEQ) notified so that the feature can be evaluated.

Photographs are attached to show the Site.

ATTACHMENT E – PHOTOS





Location

Photograph 1. View to the southeast across the Site from a driveway west of the Site. The Site is covered with mowed, herbaceous vegetation and occasional trees.





Location

Photograph 2. Soil at the Site was observed where vegetation was not present. The soil was observed to be mostly dark brown clay with a few pieces of gravel scattered across the surface.





Location

Photograph 3. An upright pipe that evidently marks an underground utility was observed on the northwest part of the Site. It is identified as MB1 in the Geologic Assessment Table.





Location

Photograph 4. View across the Site from the north-central part of the Site.





Location

Photograph 5. Gravel observed at the surface may have been dumped at the location.





Location

Photograph 6. Manhole covers for underground utilities are present in the northeast part of the Site. These utilities are MB2 on the Geologic Assessment Table.





Location

Photograph 7. The drainage channel on the east side of the Site contains alluvial sediments deposited by storm events that are mostly silty clay and clay but also include gravel and rock.





Location

Photograph 8. Gavel and rock were deposited as part of the alluvial sediments in the drainage channel on the east side of the Site.

REFERENCES

Site Name: Gold's Gym Round Rock

Location: 4201 Sunrise Road, Round Rock, Williamson County, Texas

Barnes V.L. 1981, *Geologic Atlas of Texas, Austin, Sheet*, Bureau of Economic Geology, the University of Texas at Austin, Texas accessed digitally from http://www.beg.utexas.edu/mainweb/services/GISdatabases.htm for inclusion into the Geologic Database of Texas, accessed November 2015.

Blome, Charles D. and others, Geologic Map of the Edwards Aquifer Recharge Zone, South-Central Texas, USGS, 2005.

ESRI, ArcMap GIS, accessed November 2015.

Google Earth, Image of Site, accessed November 2015.

Google Maps, Images of Site, accessed November 2015.

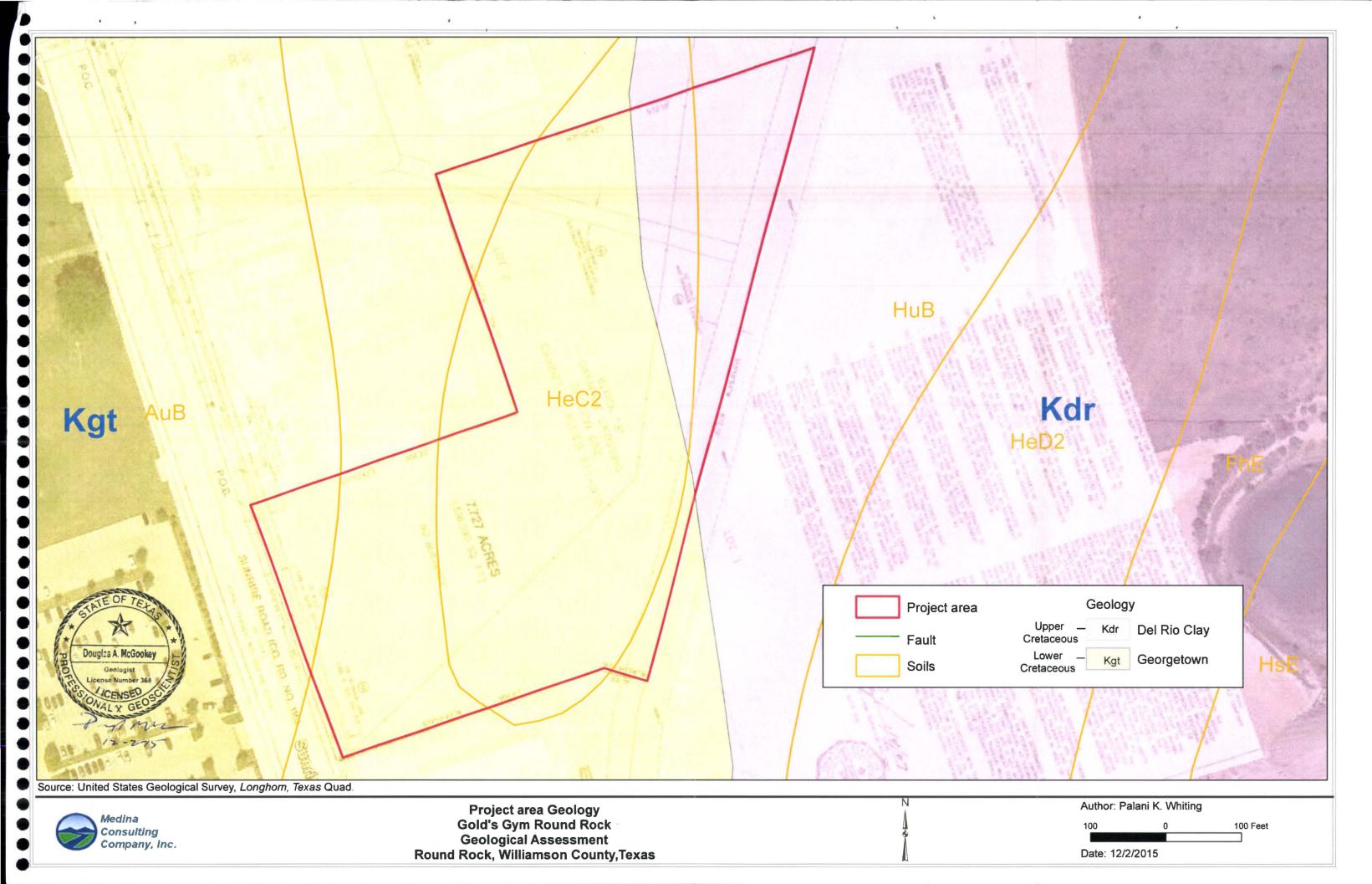
Texas Commission on Environmental Quality, (TCEQ), *Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge Zone*, TCEQ-0585-Instructions (Rev. 10-01-04).

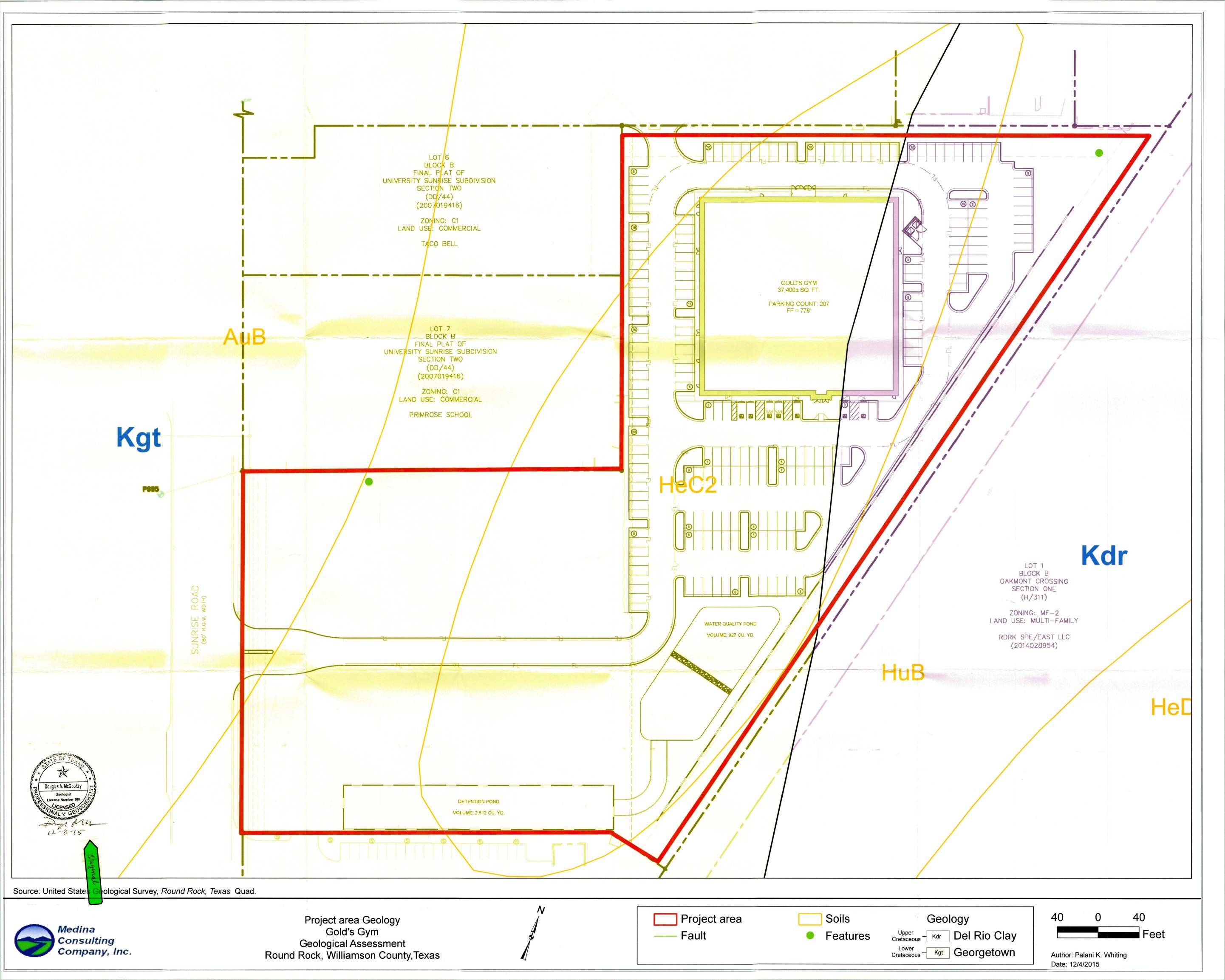
United States Department of Agriculture, *Soil Survey of Bexar County, Texas*. Web Soil Survey 1.1, Natural Resource Conservation Service. WebSoilSurvey.aspx, accessed November 2014.

United Stated Geologic Survey, Castle Hills Quadrangle, USGS, Denver, Colorado, 1992.

Veni, George, 2005, Lithology as a Predictive Tool of Conduit Morphology and Hydrology in Environmental Impact Assessments and the Engineering and Environmental Impacts of Karst, abstract, 2005 American Society of Civil Engineers.

ATTACHMENT F – SITE GEOLOGIC MAP





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: Christian Dowdle P.E
Date: <u>3/21/25</u>
Signature of Customer/Agent:
(hristians)

Regulated Entity Name: 4151 Sunrise Road

Regulated Entity Information

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

- 2. Total site acreage (size of property): 1.044
- 3. Estimated projected population:N/A
- 4. The amount and type of impervious cover expected after construction are shown below:

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	8210.22	÷ 43,560 =	0.189
Parking	16552.80	÷ 43,560 =	0.380
Other paved surfaces	7874.046	÷ 43,560 =	0.181
Total Impervious Cover	32637.08	÷ 43,560 =	0.750

Total Impervious Cover $\underline{0.750}$ ÷ Total Acreage $\underline{1.044}$ X 100 = $\underline{71.8}$ % Impervious Cover

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

For Road Projects Only

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

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

12.	Maintenance and repair of existing roadways the TCEQ Executive Director. Modifications to exist roads/adding shoulders totaling more than one lane require prior approval from the TCEQ.	ng roadways such as widening
Stor	ormwater to be generated by th	e Proposed Project
13.	Attachment B - Volume and Character of Storm volume (quantity) and character (quality) of the occur from the proposed project is attached. To quality and quantity are based on the area and runoff coefficient of the site for both pre-constr	stormwater runoff which is expected to ne estimates of stormwater runoff type of impervious cover. Include the
Was	stewater to be generated by th	e Proposed Project
14. Th	he character and volume of wastewater is shown	below:
<u>10</u>	. <u>00</u> % Domestic % Industrial % Commingled TOTAL gallons/day <u>7,000</u>	7,000Gallons/dayGallons/dayGallons/day
15. Wa	Vastewater will be disposed of by:	
	On-Site Sewage Facility (OSSF/Septic Tank):	
	Attachment C - Suitability Letter from Authority will be used to treat and dispose of the was licensing authority's (authorized agent) write the land is suitable for the use of private set the requirements for on-site sewage facilities relating to On-site Sewage Facilities. Each lot in this project/development is at lessize. The system will be designed by a license sanitarian and installed by a licensed installed 285.	tewater from this site. The appropriate ten approval is attached. It states that wage facilities and will meet or exceed es as specified under 30 TAC Chapter 285 ast one (1) acre (43,560 square feet) in sed professional engineer or registered
\boxtimes	Sewage Collection System (Sewer Lines):	
	Private service laterals from the wastewater to an existing SCS. Private service laterals from the wastewater 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 be installed prior to Executive Director approaches. 	e owner is aware that the SCS may not

	The sewage collection system will convey the wastewater to the <u>Brushy Creek Regional</u> <u>Wastewater</u> (name) Treatment Plant. The treatment facility is:
	Existing. Proposed.
16.	All private service laterals will be inspected as required in 30 TAC §213.5.
Site	Plan Requirements
Items 1	17 – 28 must be included on the Site Plan.
17. 🔀	The Site Plan must have a minimum scale of 1" = 400'.
Site	e Plan Scale: 1" = <u>20</u> '.
18. 100	O-year floodplain boundaries:
The	Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled. No part of the project site is located within the 100-year floodplain. 100-year floodplain boundaries are based on the following specific (including date of sterial) sources(s): FIRM MAP # 48491C0491F eff. 12/20/2019
	The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, open space, etc. are shown on the plan.
	The layout of the development is shown with existing contours at appropriate, but not greater than ten-foot intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, open space, etc. are shown on the site plan.
20. All	known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):
	There are (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)
	 The wells are not in use and have been properly abandoned. The wells are not in use and will be properly abandoned. The wells are in use and comply with 16 TAC §76.
\boxtimes	There are no wells or test holes of any kind known to exist on the project site.
21. Ge	ologic or manmade features which are on the site:
	 □ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled. □ No sensitive geologic or manmade features were identified in the Geologic Assessment. □ Attachment D - Exception to the Required Geologic Assessment. A request and
	iustification for an exception to a portion of the Geologic Assessment is attached.

22. 🔀] The drainage patterns and approximate slopes anticipated after major grading activities
23. 🔀	Areas of soil disturbance and areas which will not be disturbed.
24. 🔀	Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
25. 🔀	Locations where soil stabilization practices are expected to occur.
26	Surface waters (including wetlands).
\geq] N/A
27	Locations where stormwater discharges to surface water or sensitive features are to occur.
\boxtimes	There will be no discharges to surface water or sensitive features.
28. 🔀	Legal boundaries of the site are shown.
Adn	ninistrative Information
29. 🔀	Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
30. 🔀	Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

Water Pollution Abatement Plan Application TCEQ-0584 Attachment A: Factors Affecting Water Quality

During Construction

Non-Stormwater Discharges: The Following non-stormwater discharges may occur from the site during the construction period:

- Utility water line flushing during the initial line testing must use uncontaminated water that is not hyperchlorinated.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred)
- Water used to wash vehicles or control dust must be accomplished using potable water without detergents.
- Materials that are expected to be used on site during construction that could be a potential source of contamination include the following:
 - Concrete and Masonry Materials
 - Wood, plastic and metal Materials
 - Tar and hydrocarbons from paving operations
 - Oil, Grease, fuel and hydraulic fluid from construction equipment and vehicle drippings
 - Fertilizers, Herbicides and Pesticides
 - Cleaning solutions and detergents
 - Miscellaneous construction trash and debris

All non-stormwater discharge will be directed to the temporary Erosion and Sedimentation Controls (Best Management Practices) to remove any suspended solids contained therein.

Stormwater during construction will remove loose material and transport it downstream.

Post Construction

Non-stormwater discharges, after construction has been completed, can affect water quality include:

- Pollutants generated from vehicles utilizing the site
- Fertilizers, herbicides and pesticides used to maintain landscaping
- Miscellaneous trash and debris generated from the public.

Post Construction stormwater discharges typically transport sediment in the form of dirt and dust accumulated on the streets and other impervious flatwork, rooftops, and sediment from erosion of grassy areas. That material will be transported through the storm sewer system to the wet basins, where most of the pollutants will be removed.

Water Pollution Abatement Plan Application TCEQ-0584 Attachment B: VOLUME AND CHARACTER OF STORMWATER

Existing and developed hydrology calculations were developed using the rational method since the drainage area is under 100 acres for the 25-year and 100-year Atlas 14 design storm events. See below for specific methodology and input variables.

The rational method equation and all associated input variables and equations were calculated using the Round Rock Design and Construction Standards (DACS).

The formula for the Rational Method is: Qp =CiA

Where:

Qp = peak runoff in cubic feet per second
C = coefficient of runoff
I = average intensity of rainfall in inches per hour
A = area in acres

The runoff coefficients used in both the existing and proposed conditions were determined using Table 2-1 in DACS. For the existing conditions, the pasture/range was assumed; for the proposed conditions, asphaslt and good condition grass was assumed as appropriate.

The rainfall intensity was determined utilizing the National Oceanic and Atmospheric Administration (NOAA) Atlas 14 precipitation frequency estimates in Round Rock for the Brushy Creek Watershed.

Time of concentration was calculated utilizing the NRCS method for sheet, shallow concentrated, and channel flow. A maximum of 100 feet was used for sheet flow calculations and the time of concentration could not be less than 5 minutes.

TC = Tt(sheet) + Tt(shallow concentrated) + Tt(channel)

Sheet Flow:

Tt = 0.42(nLi)0.8 / ((P2)0.5 s0.4)

Shallow Concentrated Flow:

Unpaved Tt = Li / (60(16.1345) (s)0.5)Paved Tt = Li/ (60(20.3282) (s)0.5)

Channel/Pipe Flow:

 $Tt = \Sigma (Li /60 Vi)$

Where, Tt = Travel time in minutes Li = Length of the reach in ft.

n = Manning's n

P = 2-year, 24-hour rainfall in inches (3.99 inches)

s = Slope of the ground in ft/ft

V = Velocity (ft/s)



Table 1. Manning's n-Values

Sheet Flow & Shallow Overland Flow				
Surface Description	n			
Short-grass prairie	0.15			
Asphalt	0.016			

EXISTING DRAINAGE CONDITIONS

The existing drainage conditions are represented with one drainage boundary. There is no existing impervious cover. The rational method was used to estimate the 25-year and 100-year rate of runoff. The PDS based precipitation frequency estimates for Round Rock, Texas for a 7.8-minute time of concentration are:

Tc (min)	25-yr (in/hr)	100-yr (in/hr)
7.8	9.61	12.4

The inputs and results from the rational method for the existing drainage boundary are in Table 2 below.

Table 2. Pre-Project Inputs and Results

Drainage Basin	Area (acres)	Impervious Cover (%)	Tc (min)	C25	C100	i 25-YR (in/hr)	i 100-YR (in/hr)	Q 25-YR (cfs)	Q 100-YR (cfs)
E1	1.24	0.0	7.8	0.42	0.49	9.61	12.4	5.0	7.5

PROPOSED DRAINAGE CONDITIONS

The proposed drainage conditions are represented with five drainage boundaries equal in area to the existing drainage boundary. Areas D1 and D2 flow to the existing stub-out provided during the permitting of Gold's Gym under SDP 1601-0001. The proposed rate of runoff for the 100-year storm is 11.4 cfs to the existing storm stub-out as compared to the 12.74 cfs assumed. The PDS based precipitation frequency estimates for Round Rock, Texas based on time of concentration are:

Tc (min)	25-yr (in/hr)	100-yr (in/hr)
6.2	10.5	13.5
5	11.1	14.2

The inputs and results for the proposed drainage improvements are in Table 3 below.

Table 3. Post-Project Inputs and Results

Drainage	Area	Impervious	Тс	C25	C100	i 25-YR	i 100-YR	Q 25-YR	Q 100-
Basin	(acres)	Cover (%)	(min)			(in/hr)	(in/hr)	(cfs)	YR (cfs)
D1	0.65	87	5.0	0.80	0.89	11.10	14.20	5.8	8.2
D2	0.27	74	5.0	0.75	0.82	11.10	14.20	2.2	3.2
D3	0.17	3	6.2	0.43	0.48	10.50	13.50	0.8	1.1
D4	0.03	100	5.0	0.86	0.95	11.10	14.20	0.3	0.4
D5	0.12	0	5.0	0.46	0.51	11.10	14.20	0.6	0.9

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: <u>Christian Dowdle, P.</u>	E
Date: <u>03/21/25</u>	
Signature of Customer/Agent:	
Christians	

Project Information

Regulated Entity Name: 4151 Sunrise Road

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.

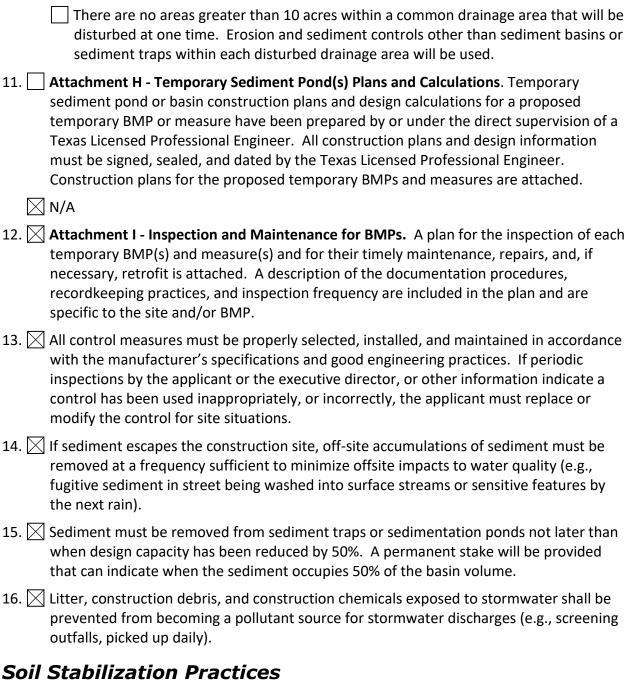
	 Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year. Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
	Evels and hazardous substances will not be stored on the site.
2.	Attachment A - Spill Response Actions. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.
3.	Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
4.	Attachment B - Potential Sources of Contamination. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.
S	equence of Construction
5.	Attachment C - Sequence of Major Activities. A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.
	 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: <u>Unnamed Tributary of Chandler Branch</u>

Temporary Best Management Practices (TBMPs)

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

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

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



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

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

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

Administrative Information

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



Temporary Stormwater Section TCEQ-0602 Attachment A: SPILL RESPONSE ACTION

- Contain the spill.
- Immediately stake off area.
- Notify Hazardous Material team (if necessary); Notify TCEQ: (512) 339-2929 or Emergency # 1-800-832-8224
- Take necessary steps to clean up, i.e. notify the remediation contractor if large spills or small spills will be cleaned by the construction contractor.

All site personnel will be made aware of the manufacturers' recommended methods for spill cleanup, and the location of the information and cleanup supplies.

Spills will be reported according to the Reportable Quantity, attached on the following page.

Materials and equipment necessary for spill cleanup will be kept onsite in an accessible location known to site personnel.

All Spills will be cleaned up immediately upon discovery. Any spill of hydrocarbons or hazardous substances greater than 25 gallons will require notification to the fire Department Hazardous Materials Team and TCEQ. As with all spills, an effort shall be made to prevent material from entering surface streams and storm drains by using rock or earth berms to contain the material.



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 🗳	
iazai uous substaille	into water	"Final RQ" or 100 lbs, whichever is less	30 IAC 327	
Any oil	coastal waters	as required by the Texas General Land Office	Texas General Land Office	
Crude oil, oil that is neither a	onto land	210 gallons (five barrels)	20 74 0 007 🛂	
petroleum product nor used oil	directly into water	enough to create a sheen	30 TAC 327 [☑]	
Petroleum product, used oil	onto land, from an exempt PST facility	210 gallons (five barrels)		
	onto land, or onto land from a non- exempt PST facility	25 gallons	30 TAC 327 🗗	
	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 [™]	



1.4.16 Spill Prevention and Control

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

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

Education

- (1) Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when spill must be reported to the TCEQ. Information available in 30 TAC 327.4 and 40 CFR 302.4.
- (2) Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
- (3) Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
- (4) Establish a continuing education program to indoctrinate new employees.
- (5) Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

- (1) To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
- (2) Store hazardous materials and wastes in covered containers and protect from vandalism.
- (3) Place a stockpile of spill cleanup materials where it will be readily accessible.
- (4) Train employees in spill prevention and cleanup.
- (5) Designate responsible individuals to oversee and enforce control measures.
- (6) Spills should be covered and protected from stormwater runon during rainfall to the extent that it doesn't compromise clean up activities.
- (7) Do not bury or wash spills with water.
- (8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- (9) Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
- (10)Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- (11)Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
- (12)Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

- (1) Clean up leaks and spills immediately.
- (2) Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
- (3) Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.



Minor Spills

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

Semi-Significant Spills

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

Spills should be cleaned up immediately:

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

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

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

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



Vehicle and Equipment Maintenance

- (1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the run on of stormwater and the runoff of spills.
- (2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately
- (3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
- (4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- (5) Place drip pans or absorbent materials under paving equipment when not in use.
- (6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- (7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
- (8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
- (9) Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

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



Water Pollution Abatement Plan Application TCEQ-0602 Attachment B: POTENTIAL SOURCES FOR CONTAMINATION

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

Presentative Measures: Vehicle maintenance will be performed withing the construction staging area or a local maintenance shop.

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

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

Potential Source: Silt leaving the site.

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

Potential Source: Construction Debris.

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

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

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

Potential Source: Sediment from soil, sand, gravel and excavated materials stockpiled on site. **Preventative Measures:** Silt-fence shall be installed on the downgradient side of the stockpiled materials. Reinforced rock berms shall be installed at all downstream discharge locations.

Potential Source: Portable toilet spill.

Preventative Measures: Toilets on the site will be emptied on a regular basis by the contracted

toilet company.



Water Pollution Abatement Plan Application TCEQ-0602 Attachment C: SEQUENCE OF MAJOR ACTIVITIES

- Install and maintain Erosion Control and Tree Protection per the Approved Plans and specifications prior to any clearing and grubbing, grading, excavating, etc. Notify Construction Inspection Division when installed.
- Prior to beginning construction, the owner or his representative shall hold a Pre-Construction
 Conference between TCEQ, Williamson County, Contractor, and any other affected parties. Notify
 TCEQ at least 48 hours prior to the time of the conference and 48 hours prior to beginning
 construction. Prior to Pre-Construction Conference.
- 3. Hold Pre-Construction Conference with contractor, TCEQ, EV Inspector, Engineer, and owner or his representative.
- 4. Installation of Temporary BMPs. (Estimate of disturbed area= 1.044 ac)
- 5. Initiate Grubbing Topsoil Stripping of Site. (1.044 ac)
- 6. Rough subgrade Preparation (earthwork, grading, street, and drainage excavation and embankment: 1.044 ac)
- 7. Wet and Dry Utility Construction (0.0459 ac)
- 8. Final Subgrade Preparation (0.481 ac)
- 9. Building Construction (0.189 ac)
- 10. Paving Activities (0.481 ac)
- 11. Site cleanup and Removal of Temporary BMPs (1.044 ac)
- 12. Clean site and revegetate all disturbed area according to the plans and specifications. (0.2842 ac)
- 13. Stabilization measures should include seeding and/or mulching. (0.2842 ac)
- 14. Complete permanent erosion control and restoration of site vegetation. (0.2842 ac)
- 15. Project Engineer to provide a written concurrence letter, and scheduling final inspection with EV
- 16. Inspection, prior to the removal of erosion controls.
- 17. Remove and dispose of temporary erosion/sedimentation control measures.
- 18. Complete any necessary final dress up of areas disturbed by Item 16.
- 19. Conduct a final inspection and complete all punch list items.



Water Pollution Abatement Plan Application TCEQ-0602 Attachment D: TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

Install temporary erosion control measures, stabilized construction entrance, concrete washout area, inlet protection according to the plans and specifications prior to any clearing and grubbing, grading, excavating, etc. Upgradient stormwaters during construction crossing disturbed areas will be filtered utilizing standard Best Management Practices, such as erosion logs and silt fences, prior to leaving the site. The silt fences will be placed along down gradient areas of the site to prevent any sediment from entering storm sewers or surface streams.

Geological features on this site are located outside of the Limits of Construction and no stormwater from the disturbed areas will drain to the geological features.



Water Pollution Abatement Plan Application TCEQ-0602 Attachment F: STRUCTURAL PRACTICES

The project area is less than 10 acres within a common drainage area disturbed at one time, a combination of a sediment basin and other erosion control measures, such as silt fences and rock berms, will be provided. For any areas not draining to sediment ponds, silt fences shall be provided.

Structural erosion control and pollution prevention practices shall be implemented to limit runoff discharge of pollutants from exposed soils. The structural practices utilized include:

Silt Fence

- Barrier consisting of geotextile fabric supported by metal posts to prevent soil and sediment loss from a site.
- 1) Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
- 2) Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Ybar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft2, and Brindell hardness exceeding 140.
- 3) Woven wire backing to support the fabric should be galvanized 2" x 4" welded wire, 12 gauge minimum.

Fiber Rolls

- Placed at the toe and on the face of slopes to intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and provide removal of sediment from the runoff.
- 1) Core material: Core material should be biodegradable or recyclable. Material may be compost, mulch, aspen wood fibers, chipped site vegetation, agricultural rice or wheat straw, coconut fiber, 100% recyclable fibers, or similar materials.
- 2) Containment Mesh: Containment mesh should be 100% biodegradable, photodegradable or recyclable such as burlap, twine, UV photodegradable plastic, polyester, or similar material. When the fiber role will remain in place as part of a vegetative system use biodegradable or photodegradable mesh. For temporary installation recyclable mesh is recommended.

Stabilized Construction Entrance

- Stabilized pad of crushed stone located at any point traffic will be entering or leaving the construction site from a public right-of-way, street, alley, sidewalk or parking area.
- 1) The aggregate should consist of 4 to 8 inch washed stone over a stable foundation as specified in the plan.
- 2) The aggregate should be placed with a minimum thickness of 8 inches.



- 3) The geotextile fabric should be designed specifically for use as a soil filtration media with an approximate weight of 6 oz/yd2, a mullen burst rating of 140 lb/in2, and an equivalent opening size greater than a number 50 sieve.
- 4) If a washing facility is required, a level area with a minimum of 4 inch diameter washed stone or commercial rack should be included in the plans. Divert wastewater to a sediment trap or basin.

Inlet Protection

- Filter barrier protection installed around stormwater inlets that provide protection against silt transport or accumulation in storm sewer systems.
- 1) Filter fabric should be a nylon reinforced polypropylene fabric which meets the following minimum criteria: Tensile Strength, 90 lbs.; Puncture Rating, 60 lbs.; Mullen Burst Rating, 280 psi; Apparent Opening Size, U.S. Sieve No. 70.
- 2) Posts for fabric should be 2" x 4" pressure treated wood stakes or galvanized steel, tubular in cross-section or they may be standard fence "T" posts.
- 3) Concrete blocks should be standard 8" x 8" x 16" concrete masonry units.
- 4) Wire mesh should be standard hardware cloth or comparable wire mesh with an opening size not to exceed 1/2 inch.

Concrete Washout

- Prevent or reduce the discharge of pollutants to stormwater from concrete waste by conducting washout offsite, performing washout in a designated area, and training employees and subcontractors.
- 1) Plastic lining material should be a minimum of 10 mil in polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.

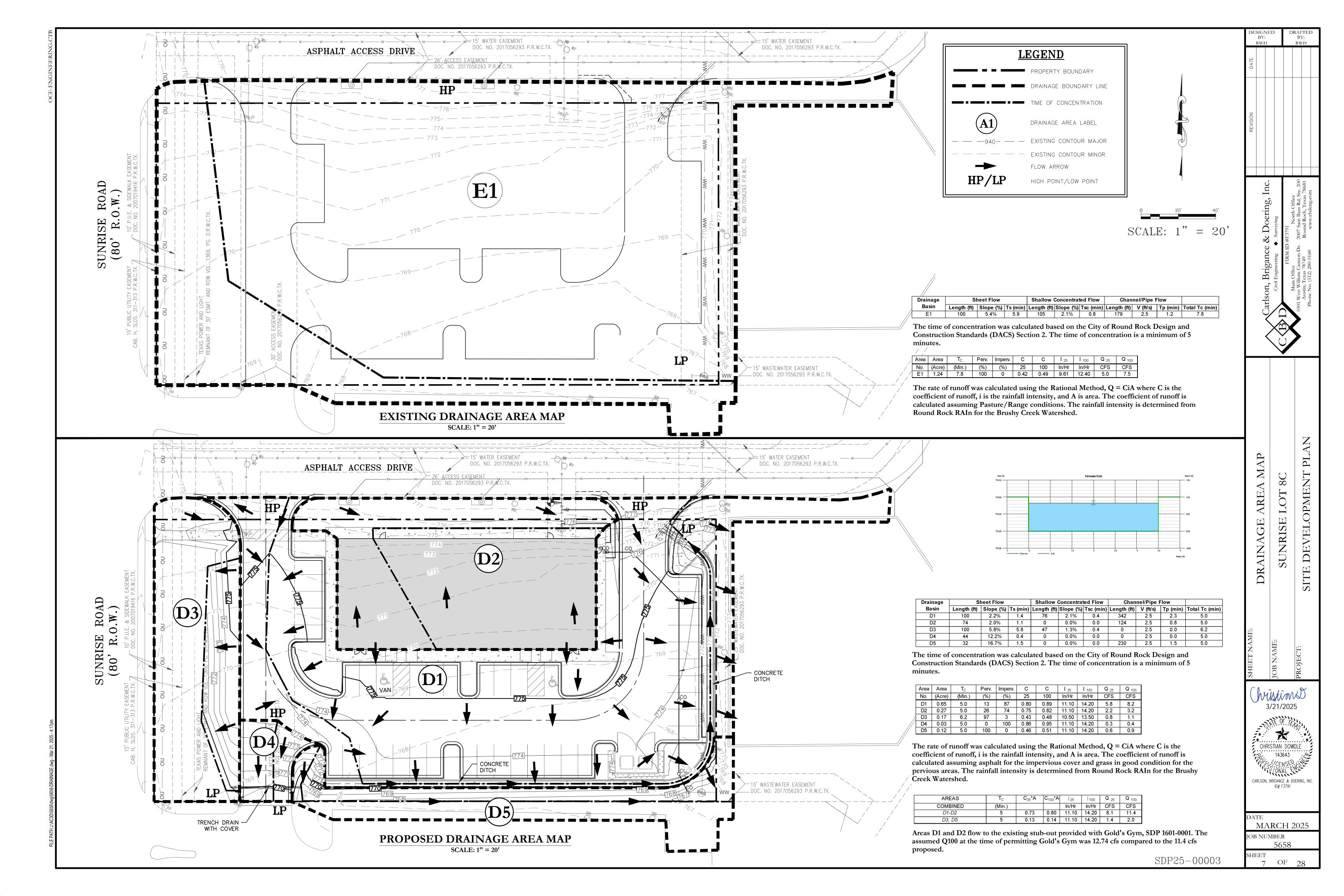
Rock Berm

- Serve as a check dam in areas of concentrated flow, to intercept sediment-laden runoff, detain the sediment and release the water in sheet flow.
- 1) The berm structure should be secured with a woven wire sheathing having maximum opening of 1 inch and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.
- 2) Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.



Water Pollution Abatement Plan Application TCEQ-0602 Attachment G: DRAINAGE AREA MAP

An overall drainage area map is included within the plan set submitted with this application.



Water Pollution Abatement Plan Application TCEQ-0602

Attachment I: INSPECTION AND MAINTENANCE FOR BEST MANAGEMENT PRACTICES

The Best Management Practices installed during construction will be maintained in accordance with the requirements of the EPA's NPDES/TPDES storm water pollution prevention program (SWPPP). The following maintenance procedures shall be followed until permanent stabilization is complete.

Silt Fence

- Inspect weekly or after each rainfall event and repair or replacement shall be made promptly as needed.
- 2) Silt Fence shall be removed when the site is completely stabilized so as to not block or impede storm flow or drainage.
- 3) Accumulated silt shall be removed when it reaches a depth of 6 inches. The Silt shall be disposed of on an approved site and in such a manner that will not contribute to additional siltation.

Fiber Rolls

- 1) Inspect prior to forecast rain, daily during extended rain events, after rain events, and weekly.
- 2) Repair of replace split, torn, unraveling, or slumping fiber rolls.
- 3) If the fiber roll is used as a sediment capture device, or as an erosion control device to maintain sheet flows, sediment that accumulates behind the role shall be periodically removed tin order to maintain its effectiveness. Sediment shall be removed when the accumulation reaches one-half the designated sediment storage depth, usually one-half the distance between the top of the fiber roll and the adjacent ground surface. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed of at an appropriate location.

Stabilized Construction Entrance

- 1) The entrance shall be maintained in a condition that will prevent tracking or flowing of sediment onto a public roadway. This may require periodic top dressing with additional stone as conditions demand, as well as repair and clean out of any devices used to trap sediment.
- Entrance must be properly graded to incorporate a drain swale or similar measure to prevent runoff from leaving the construction site.



Inlet Protection

- 1) Inspection shall be made weekly or after each rainfall event and replacement or repair shall be made promptly as needed.
- 2) Accumulated silt shall be removed when it reaches a depth of 6 inches. The Silt shall be disposed of on an approved site and in such a manner that will not contribute to additional siltation
- 3) The dyke shall be removed when the site is completely stabilized so as to not block or impede storm flow or drainage.

Concrete Washout

- 1) Inspection shall be made daily or after each rainfall event to check for leaks, identify any plastic linings and sidewalls which have been damaged by construction activities.
- 2) When the washout container is filled over 75 % of its capacity, the washwater should be vacuumed off or allowed to evaporate to avoid overflows. When the remaining cementitious solids have hardened, they should be removed and recycled.
- 3) Damages to the container should be repaired promptly and as needed.
- 4) Before heavy rains, the washout containers liquid level should be lowered or the container should be covered to avoid an overflow during the rain event.

The owner shall hire an E&S compliance company to inspect E&S measures and keep reports of onsite inspections with deficiencies and solutions.



Water Pollution Abatement Plan Application TCEQ-0602 Attachment J: SCHEDULE OF INTERIM AND PERMANENT SOIL STABLIZATION PRACTICES

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

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

Records of the following shall be maintained:

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

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

Soil Stabilization for all disturbed areas shall be accomplished by hydraulic planting. Following is an outline to accomplish the required stabilization.

Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practical.

Where construction activity on a portion of the site is temporarily ceased and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of the site.

In arid areas (areas with an average rainfall of 0-10 inches), semiarid areas (areas with an average annual rainfall of 10 to 20 inches), and areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practical.



Stabilization Activities Log

Date Activity Initiated	Description of Activity	Description of Stabilization Measure and Location	Date When Stabilization Measures Initiated	Date Activity Ceased (Indicate Temporary or Permanent)

Stabilization and erosion control practices may include but are not limited to establishing temporary or permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, and protecting existing trees and vegetation. List practices used where they are located, when they will be implemented, and whether they are temporary (interim) or permanent.

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: Christian Dowdle, P.E. Date: 03/21/2025

Signature of Customer/Agent

Regulated Entity Name: 4151 Sunrise Road

Permanent Best Management Practices (BMPs)

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

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

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

	A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is:
	□ N/A
3.	Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.
	□ N/A
4.	Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.
	The site will be used for low density single-family residential development and has20% 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 multifamily residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.
	Attachment A - 20% or Less Impervious Cover Waiver. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached. The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
	The site will not be used for multi-family residential developments, schools, or small business sites.
6.	Attachment B - BMPs for Upgradient Stormwater.

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

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



Water Pollution Abatement Plan Application TCEQ-0600 Attachment B: BMPs FOR UPGRADIENT STORMWATER

The storm water that originates up gradient from the site is already being captured by existing storm drains from existing surrounding developments. The existing grades and storm systems prevent the up gradient storm water from flowing across the site and coming into contact with the proposed impervious cover. The impervious areas inside the site boundaries will be constructed to drain into an onsite storm drainage system. The first flush of stormwater will be treated by a Sand Filter System, the chosen permanent BMP. The pervious area that are draining away from the proposed impervious areas of the site will be allowed to sheet flow from the site untreated. Please refer to the proposed Drainage Area Map (Exhibit 5 attached) for evidence of the statement above.



Water Pollution Abatement Plan Application TCEQ-0600 Attachment C: BMPs FOR ON-SITE STORMWATER

A Sand Filter will be utilized as the permanent Best Management Practice on the site. All storm water runoff from impervious areas will be collected by an underground storm sewer system and routed through a splitter box structure to provide the required overall removal of 80% of the increase in Total Suspended Solids. Construction plans, calculations and specifications are provided which are provided below.



Water Pollution Abatement Plan Application TCEQ-0600 Attachment D: BMPs FOR SURFACE STREAMS

There are no existing surface streams or sensitive features on site. All permanent BMP's have been designed to remove 80% of the increase in Total Suspended Solids as per current TCEQ requirements.



Water Pollution Abatement Plan Application TCEQ-0600 Attachment F: CONSTRUCTION PLANS

Construction Plans for the erosion and sedimentation control measures proposed with this development are included at the end of this report.

Calculations for the load removal requirements for the site and the load removal provided by the permanent BMP's are provided in Attachment C which has been signed and sealed by a professional engineer licensed in the state of Texas. The load removal requirements are derived from the equations from the technical guidance manual based upon project area and increase in impervious cover. All storm water runoff from impervious area will be treated by the proposed permanent BMP to provide the overall required removal of 80% of the increase in Total Suspended Solids. Provided within the calculations is a summary of the amount of pollutant load required to be removed from the drainage areas and the amount of removal provided by the permanent BMP.

Construction plans, details, specifications, calculations and construction notes are provided below.



Water Pollution Abatement Plan Application TCEQ-0600 Attachment G: INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

Permanent BMPs

The permanent BMP's will be owned, operated, and maintained by Gold's Gym Round Rock (located at 4201 Sunrise Road), whose WPAP was permitted with TCEQ under RN #109992619. The regional detention and water quality pond are appropriately sized for full build out conditions as shown with the TSS Removal Calculations. Attached below is Attachment G of TCEQ-0600 form that was completed during the permitting of Gold's Gym with TCEQ.

GOLD'S GYM
WATER POLLUTION ABATEMENT PLAN

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

PROJECT NAME: Gold's Gym – Round Rock

ADDRESS: The project is located at 4201 Sunrise Rd.

CITY, STATE: Round Rock, TX

PERMANENT BMP'S

SAND FILTER SYSTEM

- Inspections. The BMP facilities must be inspected semi-annually (once during or immediately after wet weather) and repairs should be made if necessary.
- Sediment Removal. Remove sediment from inlet structure and sedimentation chamber at least annually, or when depth reaches 6 inches, or proper functioning is impaired; remove sediment from basin at least every 5 years.
- Media Replacement. More extensive maintenance of the filter media is required when the draw-down time begins to exceed the target time of 48 hours. When this occurs, the upper layer of sand should be removed and replaced with new material meeting the original specifications. Any discolored sand should also be removed and replaced. In filters that have been regularly maintained, this should be limited within the top 2 to 3 inches.
- Debris and Litter Removal. Accumulated paper, trash and debris should be removed during regular mowing operations and inspections, or as necessary.
- Filter Underdrain. Clean underdrain piping network to remove any sediment buildup as needed to maintain design drawdown time.
- Mowing. Grass areas in and around basins must be mowed at least twice annually to limit vegetation height to 18 inches. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. When mowing is performed, a mulching mower should be used, or grass clippings should be caught and removed.

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

Maintenance records shall be kept on the installation, maintenance, or removal of items necessary for the proper operation of the facilities.

All inspections shall be documented.

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

Responsible Party:

RBR Real Estate Holdings, LLC.

Mailing Address:

4001 Maple Avenue, Suite 600

City, State:

Dallas, TX

Zip: 75219

Telephone:

(214) 283-8578

Fax:

I, the owner, have read and understand the requirements of the attached Inspection and Maintenance Plan for the proposed Permanent Best Management Practice for my project. I acknowledge that I will maintain responsibility for the implementation and execution of the plan until the responsibility is transferred to or assumed by another party in writing through a binding legal instrument.

Signature of Responsible Party

Date 12/1

This Maintenance Plan is based on TCEQ Maintenance Guidelines.

By: Ving P.F.

Date 12/11/15

EDWARDS AQUIFER WPAP STORMWATER QUALITY MAINTENANCE LOG

INSTA	LLATION	MAINT	ENANCE	REMOVAL		
DATE	CONTROL TYPE	DATE	CONTROL TYPE	DATE	CONTROL TYPE	
				Calantala Car DMD2-		

Note: Reference Contributing Zone Application Attachment N Maintenance Plan and Schedule for BMP's

ATTACHMENT G
PERMANENT STORMWATER SECTION

EDWARDS AQUIFER WPAP STORMWATER QUALITY MAINTENANCE LOG

INSTALLATION		MAINT	ENANCE	REMOVAL			
DATE	CONTROL TYPE	DATE	DATE CONTRO				

Operation and Maintenance Inspection Form Sand Filter

Inspector Name:	_ c	omm	unity:			
Inspection Date:		Add	ress:			
Type of BMP:						
Watershed:	-		10			
	-		10			
Ham Inquested	CI	necke	d	Mainte	enance	Observations and Notes:
Item Inspected	Yes	No	N/A	Yes	No	Observations and Notes:
Accessibility						
Adequate maintenance access						
2. Vehicular access from public right-of-way						
3. Ingress/egress to structure						
4. Manholes, frames and covers						
5. Vents (if applicable)						
6. Ladders secure						
7. Top slab, cracks or spalling						
8. Parging						
9. Erosion around structure						
10. Structure obstructed by objects						
11. Throat trash rack opening > 4" (debris)						
12. Other (specify)						
Sedimentation Chamber						
1. Throat opening support block less than 6"						
2. Trash, debris, or sediment blocks more than 10% of chamber						
3. Cracks or displacements						
4. Minor spalling or parging (<1")						
5. Major spalling (exposed rebar)						
6. Joint failure						
7. Loss of joint material						
8. Water tightness						
9. Gutter pan spalling						
10. Scour present						
11. Other (specify)						
Pretreatment (if applicable)						
1. Maintenance access						
2. Less than 18" of sediment						
3. Debris/ trash accumulated on orifice or standpipe						
4. Standpipe condition						
5. Dewater time less than 36 hours						

Operation and Maintenance Inspection Form Sand Filter

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Excessive sediment/trash/debris deposits End walls, headwalls, and end sections condition					
2. End walls, headwalls, and end sections condition					
Page 2 of 3	2. End walls, headwalls, and end sections condition				

Operation and Maintenance Inspection Form Sand Filter

3. Outfall pipes							
4. Displaced rip-rap							
5. Undercut outlet			_				
6. Erosion at outfall							
7. Other (specify)							
Flow Splitter Chamber							
Excessive sediment/trash/debris deposits							
2. Cracks or displacements							
3. Minor spalling or parging (<1")							
4. Major spalling (exposed rebar)							
5. Joint failure							
6. Loss of joint material							
7. Water tightness							
8. Gutter pan spalling							
9. Scour present							
10. Corrosion							
11. Metal grate							
12. Condition of inflow/outflow pipes							
13. Other (specify)							
Miscellaneous							
Encroachments on basin or easement area							
Complaints from local residents							
3. Aesthetics							
a. Trash removal required							
b. Graffiti removal required							
c. Other					_		
4. Public hazards							
5. Maintenance access							
6. Unauthorized modifications							
7. Significant engineering/design flaws							
8. Other (specify)							
					•		
Summary							
Inspector's Remarks:							
Inspector's Remarks.							
Overall Condition of Facility (Check One): Acceptable Unacceptable							



Water Pollution Abatement Plan Application TCEQ-0600 Attachment I: MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

Surface streams do not exist on site. Therefore, 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 not provided at the end of this form. All disturbed areas will be revegetated as soon as possible.



Water Pollution Abatement Plan Application Appendix A: TCEQ TSS REMOVAL CALCULATIONS

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: 4151 Sunrise Rd

Date Prepared: 2/25/2025

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 * = 7.73 acres

Predevelopment impervious area within the limits of the plan * = 0.00 acres

Total post-development impervious area within the limits of the plan * = 4.79 acres

Total post-development impervious cover fraction * = 0.62

P = 32 inches

 $L_{M TOTAL PROJECT} = 4170$ lbs.

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 = 7.73 acres

Predevelopment impervious area within drainage basin/outfall area = 0.00 acres
Post-development impervious area within drainage basin/outfall area = 4.79 acres

Post-development impervious fraction within drainage basin/outfall area = **0.62**

 $L_{M THIS BASIN} = 4170$ lbs.





Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

3. Indicate the proposed BMP Code for this basin.

CHRISTIAN DOWDLE

Project Name: 4151 Sunrise Rd

Date Prepared: 2/25/2025

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

$\underline{\text{4. Calculate Maximum TSS Load Removed } (L_{\text{\tiny R}}) \text{ for this Drainage Basin by the selected BMP Type.}}\\$

RG-348 Page 3-33 Equation 3.7: $L_R = (BMP \text{ efficiency}) \times P \times (A_1 \times 34.6 + A_2 \times 0.54)$

where:

 A_{C} = Total On-Site drainage area in the BMP catchment area

 A_{l} = 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

 $A_{C} =$ 7.73 acres $A_{I} =$ 4.79 acres $A_{P} =$ 2.94 acres $A_{R} =$ 4766 lbs

(hristians)

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: 4151 Sunrise Rd

Date Prepared: 2/25/2025

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

Desired $L_{M THIS BASIN} = 4170$ lbs.

F = **0.87**

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 = 1.44 inches

Post Development Runoff Coefficient = 0.44

On-site Water Quality Volume = 17582 cubic feet

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

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = 21098 cubic feet

Minimum filter basin area = 1758 square feet

Maximum sedimentation basin area = 7033 square feet For minimum water depth of 2 feet

Minimum sedimentation basin area = 440 square feet For maximum water depth of 8 feet

CHRISTIAN DOWDLE 4/25/2025

	WATER QUALITY VOLUME	BASIN HT	SEDIMENTATION AREA (H=5 FT)	FILTRATION AREA	
	CU. FT	FT	SQ FT	SQ FT	
REQUIRED	21,096	5	1,759	1,758	
PROVIDED	30,672	J	2,100	2,100	

The total required WQV, sedimentation area, and filtration area is based on the full build-out conditions for Gold's Gym [4201 Sunrise Road] (RN #108926619), University Sunrise Subdivision Lot 8B, and this outparcel, Lot 8C which are all draining to the regional pond.

Agent Authorization Form

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

	Tyler Dutton	
11	Print Name	
	Director of Development	
//	Title - Owner/President/Other	
of	4151 Sunrise LP	
	Corporation/Partnership/Entity Name	
have authorized	Christian Dowdle, P.E.	
	Print Name of Agent/Engineer	
of	Carlson, Brigance & Doering, Inc.	
	Print Name of Firm	

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

I also understand that:

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

SIGNATURE PAGE:

Applicant's Signature Date

THE STATE OF Texas §

County of TRAVIS §

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 9th day of April , 2025.

P. DIANNE HERNANDEZ Notary Public, State of Texas Comm. Expires 09-19-2027 Notary ID 128743957 NOTARY PUBLIC

P. Dianne Hernande.
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 09-19-2027

Application Fee Form

Texas Commission on Environme									
Name of Proposed Regulated Entity: <u>4151 Sunrise Road</u>									
Regulated Entity Location: 4151 Su	unrise Road, Round Roc	k, Texas 78665							
Name of Customer: 4151 Sunrise L	<u>P</u>								
Contact Person: Christian Dowdle,	P.E. Phone	e: <u>512-280-5160</u>							
Customer Reference Number (if is	sued):CN								
Regulated Entity Reference Numb	er (if issued):RN								
Austin Regional Office (3373)									
Hays	Travis	⊠ Wil	liamson						
San Antonio Regional Office (336)	2)								
Bexar	Medina	□Uva	alde						
Comal	Kinney								
Application fees must be paid by o	heck, certified check, o	r money order, payabl	e to the Texas						
Commission on Environmental Qu	uality. Your canceled ch	neck will serve as your	receipt. This						
form must be submitted with you	ır fee payment. This pa	yment is being submit	ted to:						
Austin Regional Office	☐ Sa	n Antonio Regional Of	fice						
Mailed to: TCEQ - Cashier	□ 0\	vernight Delivery to: TCEQ - Cashier							
Revenues Section	12	2100 Park 35 Circle							
Mail Code 214	Вι	uilding A, 3rd Floor							
P.O. Box 13088	Αι	ustin, TX 78753							
Austin, TX 78711-3088	(5	12)239-0357							
Site Location (Check All That App	ly):								
Recharge Zone	Contributing Zone	Transit	ion Zone						
Type of Pla	an	Size	Fee Due						
Water Pollution Abatement Plan,	Contributing Zone								
Plan: One Single Family Resident	ial Dwelling	Acres	\$						
Water Pollution Abatement Plan,	Contributing Zone								
Plan: Multiple Single Family Resid	Acres	\$							
Water Pollution Abatement Plan,									
Plan: Non-residential	1.044 Acres	\$ 4,000							
Sewage Collection System	L.F.	\$							
Lift Stations without sewer lines		Acres	\$						
Underground or Aboveground St	orage Tank Facility	Tanks	\$						
Piping System(s)(only)		Each	\$						
Exception		Each	\$						
Extension of Time	Each	\$							

Date: 3/21/2024

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

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	Fee
Exception Request	\$500

Extension of Time Requests



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.

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New Per New Per	mit, Regis	tration or Authori	zation (Core Data	Form sho	ould be	submitte	d with	the prog	ram application	n.)	
	•		be submitted with	the renev	wal form	<u> </u>	Oth				
2. Customer	Referenc	e Number <i>(if i</i> ss		or CN or RN Central F	N numbe	rs in	3. Reg	julated E	ntity Referend	ce Number	(if issued)
SECTION	II: Cu	stomer Info	<u>ormation</u>								
4. General C	ustomer l	nformation	5. Effective Da	te for Cus	stomer	Informa	tion U	Jpdates (mm/dd/yyyy)		
New Cust		ma (Varifiable wit		late to Cu					•	•	Entity Ownership
			th the Texas Secr								active with the
			or Texas Con	•			•			iront and	active with the
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4151 Sunr		,	· ·		, ,				•		
7. TX SOS/CI		Number	8. TX State Tax	ID (11 digit	te)		9 F	ederal T	ax ID (9 digits)	10 DUNS	S Number (if applicable)
080566051	_	Humber	3209631482	, ,	13)			-45746		N/A	э тчиттыст (п аррпсаые)
11. Type of C		: Corporati	I		Individu	ıal		Partne	rship: 🔲 Gener	al 🔲 Limited	
Government: City County Federal State Other Sole Proprietorship Other: Limited Partnership											
12. Number ○ 0-20	12. Number of Employees 13. Independently Owned and Operated?										
			- as it relates to the							following:	
⊠Owner □ Occupatio	nal Licens	Opera	tor onsible Party			Operato Cleanu		licant	Other:		
	115 W	ild Basin Ro	ad								
15. Mailing Address:	Suite 2	210									
Addicoo.	City	Austin		State	TX	Z	IP	78746		ZIP + 4	3347
16. Country I	Mailing In	formation (if outs	ide USA)			17. E-M	ail Ad	ddress (if	applicable)		
						tyler@	ykpg	gcomme	ercial.com		
18. Telephon	e Numbe	r	19	. Extensi	on or C	ode		20). Fax Numbe	r (if applicat	ole)
(512)41	(512)411-1062										
SECTION	III: Re	egulated En	tity Inform	ation							
		_			ty" is sel	lected be	elow th	his form s	hould be acco	mpanied by	a permit application)
⊠ New Regu	ılated Enti	ty 🔲 Update	to Regulated Enti	ty Name	U	Ipdate to	Regu	ılated Ent	ity Information		
_		•	mitted may be as Inc, LP, or	•	ed in o	order t	o me	et TCE	Q Agency D	ata Stan	dards (removal
			of the site where the		d action is	s takina n	lace.)				
4151 Sunr		·		0		<u>5 F</u>	,				

TCEQ-10400 (04/15) Page 1 of 2

23. Street Address of	4151 S	4151 Sunrise Road											
the Regulated Entity:													
(No PO Boxes)	City	Round Ro	ock	State	TX	ZIP	786	565	ZIP + 4	N/A			
24. County	Willian	nson				•			•	•			
	Eı	nter Physical L	ocatio	n Descriptio	n if no s	treet addres	s is prov	ided.					
25. Description to Physical Location:	The pro	oject is locat th of Unive	ed N	E of the in					dden Val	ley Drive			
26. Nearest City							State	ļ	Nea	rest ZIP Code			
Round Rock							TX		786	665			
27. Latitude (N) In Deci	mal:	30.55924			2	8. Longitud	e (W) In	Decimal:	-97.67880)			
Degrees	Minutes		Secor	nds		egrees		Minutes		Seconds			
30		33 33.264				97		4()	43.68			
29. Primary SIC Code (4 d	ligits) 30	. Secondary SI	C Cod	le (4 digits)	31. Pr (5 or 6 d	imary NAICS	S Code	32. Sec (5 or 6 dig	ondary NAI	CS Code			
0742 / 5399						10 / 45999			,				
33. What is the Primary E	Business of	this entity?	(Do not	repeat the SIC o	n NAICS de	escription.)							
Veterinarian Clinic				.,		,							
					415 ⁻	1 Sunrise Ro	oad						
34. Mailing													
Address:	City	Round Ro	nck	k State TX		7IP	ZIP 78665		ZIP + 4				
35. E-Mail Address	<u> </u>	- Tround Ito	/ U.K	0.0.0	.,	·							
36. Telepho		r		37. Extensi	on or Co	ode	3	8. Fax Numb	er (if applica	nble)			
()	-							()	•	•			
39. TCEQ Programs and ID form. See the Core Data Form ir	Numbers C	Check all Programs	s and v	vrite in the perr	mits/regist	ration number	s that will be	e affected by th	e updates sub	mitted on this			
Dam Safety	Districts			Edwards Aquif	er	☐ Emissi	ons Invento	ory Air	Industrial Ha	zardous Waste			
				000079				,					
☐ Municipal Solid Waste	☐ New So	Source Review Air OSSF				☐ Petrole	eum Storage	e Tank	☐ PWS				
Sludge	☐ Storm V	Nater		Title V Air		Tires			Used Oil				
			<u> </u>										
☐ Voluntary Cleanup	☐ Waste	Water		Wastewater Aç	griculture	re Water Rights			Other:				
SECTION IV: Pre	parer In	<u>formation</u>	i .				1						
40. Name: Christian	Dowdle,	P.E.				41. Title:	Proje	ct Enginee	r				
42. Telephone Number	43. Ext	:./Code 4	44. Fa	x Number		45. E-Mail A	Address						
(512)280-5160		(512) 280-516:	5	cdowdle	@cbder	ng.com					
SECTION V: Autl	horized	C: 4											
46. By my signature below,	IOTIZCU	<u>Signature</u>											

 Name(In Print):
 Christian Dowdle P.E.
 Phone:
 (512) 280-5160

 Signature:
 Date:
 3/15/2024

Job Title:

Project Engineer

Company:

Carlson, Brigance & Doering, Inc.

TCEQ-10400 (04/15) Page 2 of 2

SUNRISE LOT 8C

SITE DEVELOPMENT IMPROVEMENTS 4151 SUNRISE ROAD ROUND ROCK, TEXAS 78665

ACCEPTED FOR CONSTRUCTION:

CITY OF ROUND ROCK, TEXAS PLANNING AND DEVELOPMENT SERVICES DEPARTMENT

DATE

SDP25-00003

PERMIT NUMBER

STATE OF TEXAS

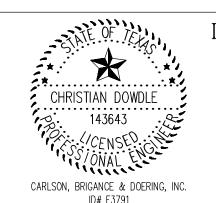
COUNTY OF WILLIAMSON

I, CHRISTIAN DOWDLE, 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.

3/21/2025

CHRISTIAN DOWDLE, P.E.

REGISTERED PROFESSIONAL ENGINEER REGISTRATION NO. 143643 CARLSON, BRIGANCE & DOERING, INC., FIRM ID #3791 2007 SAM BASS ROAD, SUITE 200 ROUND ROCK, TEXAS 78681 (512) 280-5160 FAX: (512) 280-5165



- 1. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF ROUND ROCK MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
- 2. NO PORTION OF THIS PROJECT IS LOCATED WITHIN THE FEMA 100-YR FLOODPLAIN ACCORDING TO INFORMATION FROM FEDERAL FLOOD INSURANCE RATE MAP (FIRM) PANEL NO. 48491C0491F, FOR WILLIAMSON COUNTY, TEXAS AND INCORPORATED AREAS, MAP DATED 12/20/2019.
- 3. THIS PROJECT IS LOCATED WITHIN THE BRUSHY CREEK WATERSHED.
- 4. THIS PROJECT IS LOCATED WITHIN THE EDWARDS AQUIFER RECHARGE ZONE. ON-SITE DETENTION AND WATER QUALITY WILL BE PROVIDED PER CITY AND TCEQ REQUIREMENTS FOR THIS PROJECT. TCEQ APPROVAL REQUIRED BEFORE PRE-CONSTRUCTION MEETING. DOCUMENTATION OF APPROVAL IS REQUIRED.

LEGAL DESCRIPTION:

LOT 8C, REPLAT OF LOT 8, BLOCK B, FINAL PLAT OF UNIVERSITY SUNRISE SUBDIVISION, SECTION TWO ACCORDING TO THE PLAT THEREOF RECORDED IN DOCUMENT NUMBER 2017056293 OF THE PLAT RECORDS OF WILLIAMSON COUNTY TEXAS

<u>LOT AREA:</u> 1.044 ACRES

"C-1" - GENERAL COMMERCIAL

PROPOSED USE: VETERINARY/RETAIL

<u>IMPERVIOUS AREA:</u>

EXISTING: 0.00 AC. (0.00 SF) - 0.00% IMPERVIOUS AREA PROPOSED: 0.75 AC. (32,707 SF) - 71.84% IMPERVIOUS AREA

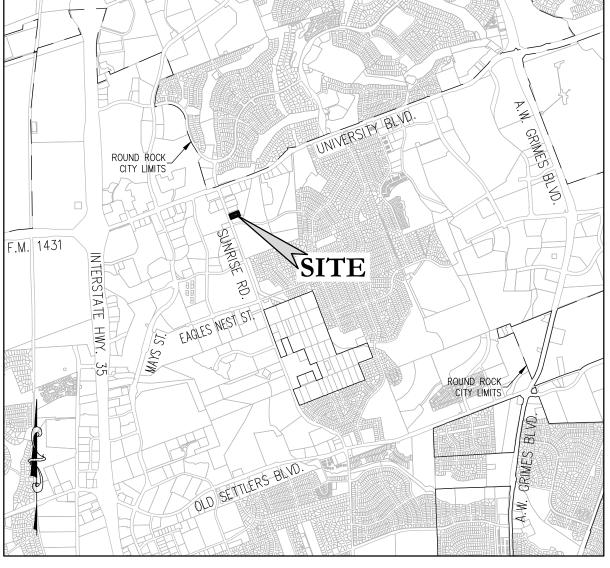
DISTURBED AREA:

1.02 AC. (44,431 SF)

BENCHMARKS:

BM #A: SQUARE IN CURBLINE, \pm 85' EAST OF CL OF SUNRISE ROAD, \pm 1085' SOUTH OF THE INTERSECTION OF UNIVERSITY BLVD. - ELEV. = 769.43' NAVD '88

DATE APPROVED



LOCATION MAP N.T.S.

OWNER/DEVELOPER: 4151 SUNRISE LP 115 WILD BASIN RD. S., STE. 210 CARLSON, BRIGANCE & DOERING, INC. LEVY ARCHITECTS AUSTIN, TEXAS 78746

(512) 437-6404

ENGINEER: CHRISTIAN DOWDLE, P.E. ROUND ROCK, TEXAS 78681

(512) 280-5160

ARCHITECT: MAURICIO FELDSBERG 2007 SAM BASS ROAD, STE. 200 2438 WEST ANDERSON LANE, STE. B-2 1405 W. KOENIG LN. AUSTIN, TEXAS 78757 (512) 342-9177

LANDSCAPE ARCHITECT:

KENDRICK YEH

AUSTIN, TX 78756

(830) 302-0969

ARTIS

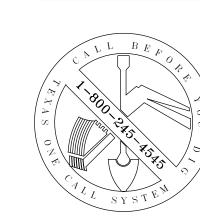
SHEET INDEX

- 1 COVER SHEET 2 - FINAL PLAT (1 OF 3)
- 3 FINAL PLAT (2 OF 3) 4 - FINAL PLAT (3 OF 3)
- 5 GENERAL NOTES
- 6 EXISTING CONDITIONS AND TREE SURVEY
- 7 DRAINAGE AREA MAP 8 - EROSION AND SEDIMENTATION CONTROL PLAN
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- 24 TYPICAL IRRIGATION DETAILS (1 OF 2)
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- 27 ELECTRICAL/PLUMBING SITE PLAN

28 - SITE PLAN PHOTOMETRIC

Know what's **below.**

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.



SUNRISE

Call before you dig.



MARCH 2025

hristians

3/21/2025

CHRISTIAN DOWDLE

143643

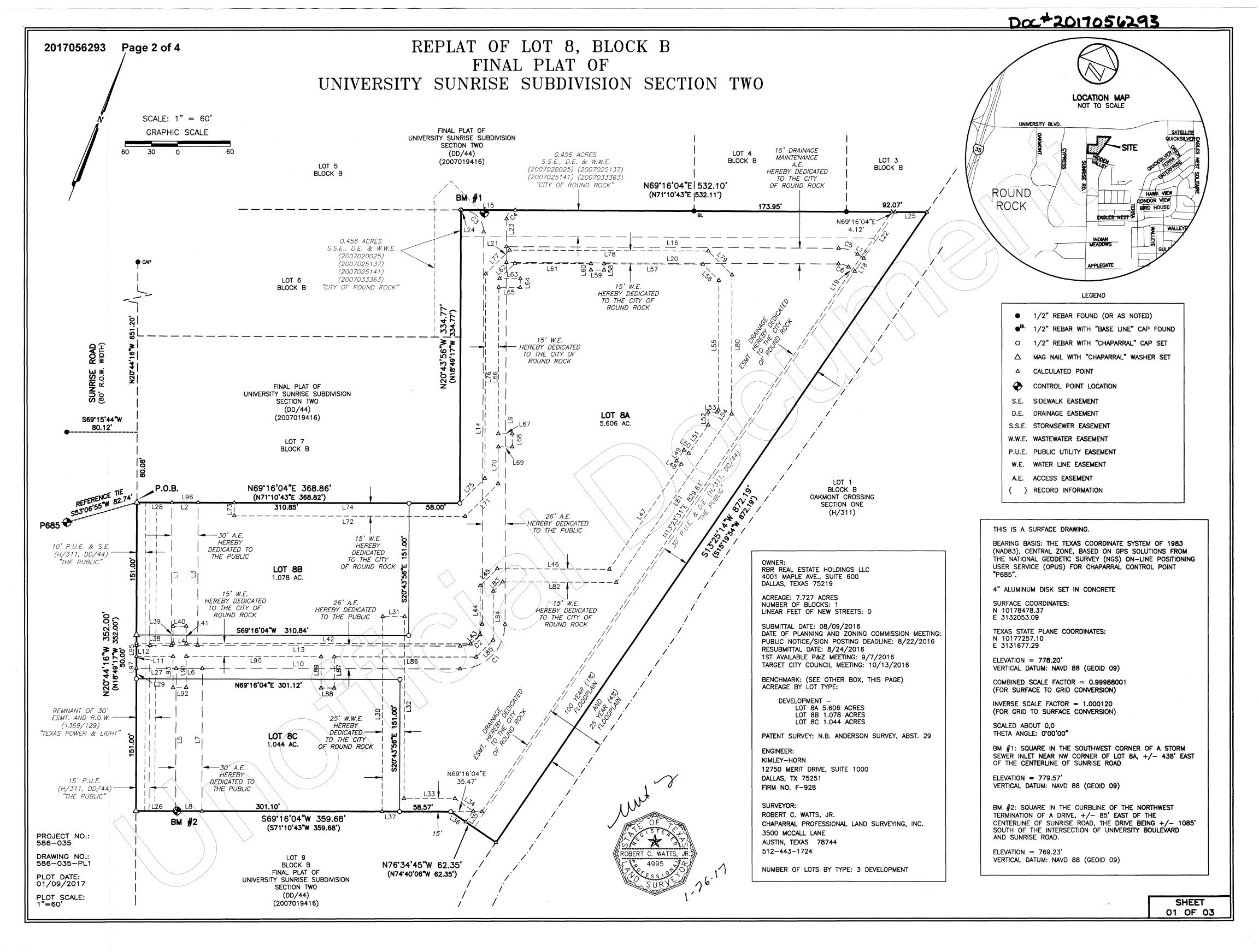
CARLSON, BRIGANCE & DOERING, INC.

ID# F3791

OB NUMBER 5658 SHEET OF 28

DESCRIPTION

SDP25-00003



OWNER'S DEDICATION:

2017056293 Page 3 of 4

STATE OF TEXAS §

KNOW ALL MEN BY THE PRESENTS:

THAT RBR REAL ESTATE HOLDINGS, LLC, OWNER OF 7.727 ACRES OF LAND, BEING ALL OF LOT 8, BLOCK B, FINAL PLAT OF UNIVERSITY SUNRISE SUBDIVISION, SECTION TWO, A SUBDIVISION OF RECORD IN CABINET DD, SLIDE 44 OF THE PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS, CONVEYED IN DOCUMENT NO. 2015073899 THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS;

DO RESUBDIVIDE SAID LOT 8, BLOCK B, IN ACCORDANCE WITH THE MAP OR PLAT ATTACHED HERETO. TO BE

REPLAT OF LOT 8, BLOCK B, FINAL PLAT OF UNIVERSITY SUNRISE SUBDIVISION, SECTION TWO

AND DO HEREBY DEDICATE TO THE PUBLIC THE USE OF ALL STREETS AND EASEMENTS SHOWN HEREON, SUBJECT TO ANY AND ALL EASEMENTS OR RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED.

WITNESS MY HAND THIS THE 23 DAY OF SANUARY

MICHAEL G. SMYTH RBR REAL ESTATE HOLDINGS LLC 4001 MAPLE AVE., SUITE 600 DALLAS, TEXAS 75219

THE STATE OF TEXAS § COUNTY OF WILLIAMSON \$

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THE 23rd DAY OF January

HII ARY TREST

Notary Public, State of Texas

Notary ID 13015266-2

By Hilary Trest NOTARY PUBLIC, STATE OF TEXAS

PRINTED NAME: HI LOUN TYOST

Comm. Expires 03-12-2019 MY COMMISSION EXPIRES: 3/12/19

STATE OF TEXAS § COUNTY OF WILLIAMSON \$

PLANNING AND ZONING COMMISSION APPROVAL:

APPROVED THIS THE DAY OF September, 2016, BY THE CITY PLANNING AND ZONING COMMISSION OF THE CITY OF ROUND ROCK, TEXAS, AND AUTHORIZED TO BE FILED FOR RECORD BY THE COUNTY CLERK OF WILLIAMSON COUNTY, JEXAS.

me Cevaria DAVID PAVLISKA, CHAIRMAN

SURVEYOR'S CERTIFICATE:

THE STATE OF TEXAS \$ COUNTY OF WILLIAMSON §

THAT I, ROBERT C. WATTS, JR., DO HEREBY CERTIFY THAT I PREPARED THIS PLAT FROM AN ACTUAL AND ACCURATE ON-THE-GROUND SURVEY OF THE LAND AND THAT THE CORNER MONUMENTS SHOWN THEREON WERE PROPERLY PLACED UNDER MY PERSONAL SUPERVISION, IN ACCORDANCE WITH CHAPTER 36, SUBDIVISIONS, CODE OF ORDINANCES, CITY OF ROUND ROCK, 2010 EDITION AS AMENDED.

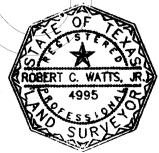
1-26-17

DATE OF SURVEY: 2/27/2015

ROBERT C. WATTS, JR., R.P.L.S. 4995

SURVEYING BY: CHAPARRAL PROFESSIONAL LAND SURVEYING, INC. 3500 MCCALL LANE

AUSTIN, TEXAS 78744 512-443-1724 TBPLS Firm No. 10124500



ENGINEER'S CERTIFICATE:

THE STATE OF TEXAS \$ COUNTY OF WILLIAMSON §

THAT I, SARAH SCOTT, DO HEREBY CERTIFY THAT THE INFORMATION CONTAINED ON THIS PLAT COMPLIES WITH CHAPTER 36, SUBDIVISIONS, CODE OF ORDINANCES, CITY OF ROUND ROCK, 2010 EDITION AS AMENDED, AND THE DESIGN AND CONSTRUCTION STANDARDS ADOPTED BY THE CITY OF ROUND ROCK, TEXAS.

ENGINEERING BY: KIMLEY-HORN 12750 MERIT DRIVE, SUITE 1000 **DALLAS, TX 75251** FIRM NO. F-928

SARAH E. SCOTT

COUNTY CLERK:

STATE OF TEXAS \$

KNOW ALL MEN BY THESE PRESENTS \$

COUNTY OF WILLIAMSON §

I. NANCY RISTER, CLERK OF THE COUNTY COURT OF WILLIAMSON COUNTY, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT IN WRITING, WITH ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR

RECORD IN MY OFFICE, ON THIS THE 215 DAY OF JUNE 2018, A.D., AT 10:30 O'CLOCK A.M., AND DULY RECORDED THIS THE 2151 DAY OF JUNE 2018, A.D., AT 10:590'CLOCK AM., IN THE PLAT RECORDS, OF SAID COURT IN DOCUMENT NO. 2017056293

WITNESS MY HAND AND SEAL OF THE COUNTY COURT OF SAID COUNTY, AT MY OFFICE IN GEORGETOWN, TEXAS, THE LAST DATE SHOWN ABOVE WRITTEN, WANDY, RISTER, CLERK, COUNTY COURT, WILLIAMSON

PLAT NOTES:

1. BUILDING SETBACKS SHALL BE IN ACCORDANCE WITH CHAPTER 46, ZONING, CODE OF ORDINANCES, CITY OF ROUND ROCK, TEXAS 2010, AS AMENDED.

2. 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.

3. RECORDATION OF ALL SEPARATE INSTRUMENT EASEMENTS SHALL OCCUR BEFORE OR IN TANDEM WITH THE RECORDATION OF THIS PLAT.

4. ALL EASEMENTS SHOWN HEREON WERE ORIGINALLY DEDICATED TO THE PUBLIC, UNLESS OTHERWISE NOTED.

5. ALL SLAB ELEVATIONS SHALL BE A MINIMUM OF TWO FEET (2') ABOVE THE ULTIMATE 1% ANNUAL CHANCE FLOODPLAIN. LOT 8A MIN. FINISHED FLOOR ELEVATION: 779.0'

6. SIDEWALKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 36, SUBDIVISIONS, CODE OF ORDINANCES, CITY OF ROUND ROCK, TEXAS, 2010 EDITION, AS AMENDED, AS AMENDED, AND WITH THE DESIGN AND CONSTRUCTION

7. A TEN FOOT (10') PUE AND SIDEWALK EASEMENT ABUTTING AND ALONG THE STREET SIDE PROPERTY LINE IS HEREBY DEDICATED FOR ALL STREET SIDE PROPERTY LOTS SHOWN HEREON.

8. THE TRACT SHOWN HEREON LIES WITHIN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN), AS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. NATIONAL FLOOD INSURANCE PROGRAM, AS SHOWN ON MAP NO. 48491C0495E, DATED SEPTEMBER 26, 2008, FOR WILLIAMSON COUNTY, TEXAS AND INCORPORATED AREAS.

REPLAT OF LOT 8, BLOCK B FINAL PLAT OF UNIVERSITY SUNRISE SUBDIVISION SECTION TWO

THE PERPETUAL EASEMENT, RIGHT-OF-WAY, RIGHTS, AND PRIVILEGES HEREIN GRANTED SHALL BE USED FOR THE PURPOSES OF LOCATION, PLACEMENT, RELOCATION, CONSTRUCTION, OPERATION, ENLARGEMENT, MAINTENANCE, ALTERATION, REPAIR, REBUILDING, REMOVAL, AND PATROL OF UTILITIES AND ASSOCIATED FACILITIES INCLUDING BUT NOT LIMITED TO: PIPES, VALVES, VAULTS, MANHOLES, CHANNELS, INLETS, STRUCTURES, ACCESS FACILITIES, CONDUITS, APPURTENANCES, AND ANY NECESSARY ACCESSORIES THERETO (COLLECTIVELY THE FACILITIES).

THIS CONVEYANCE IS MADE AND ACCEPTED SUBJECT TO ANY AND ALL CONDITIONS AND RESTRICTIONS, IF ANY, RELATING TO THE HEREINABOVE DESCRIBED PROPERTY TO THE EXTENT, AND ONLY TO THE EXTENT, THAT THE SAME MAY STILL BE IN FORCE AND EFFECT AND SHOWN OF RECORD IN THE OFFICE OF THE COUNTY CLERK OF WILLIAMSON COUNTY, TEXAS.

EXCEPT AS OTHERWISE NOTED, THE EASEMENT, RIGHTS, AND PRIVILEGES HEREIN GRANTED SHALL BE PERPETUAL, PROVIDED HOWEVER THAT SAID EASEMENT, RIGHTS AND PRIVILEGES SHALL CEASE AND REVERT TO GRANTORS IN THE EVENT THE UTILITIES ARE ABANDONED OR SHALL CEASE TO BE IN OPERATION, FOR A PERIOD OF FIVE (5) CONSECUTIVE YEARS.

THE PERPETUAL EASEMENT, RIGHT-OF-WAY, RIGHTS, AND PRIVILEGES GRANTED HEREIN ARE EXCLUSIVE, AND GRANTOR COVENANTS NOT TO CONVEY ANY OTHER EASEMENT OR CONFLICTING RIGHTS WITHIN THE PREMISES COVERED BY THIS GRANT, WITHOUT THE EXPRESS WRITTEN CONSENT OF GRANTEE, WHICH CONSENT SHALL NOT BE UNREASONABLY WITHHELD. GRANTEE SHALL HAVE THE RIGHT TO REVIEW ANY PROPOSED EASEMENT OR CONFLICTING USE TO DETERMINE THE EFFECT, IF ANY, ON THE FACILITIES CONTEMPLATED HEREIN. PRIOR TO GRANTING ITS CONSENT FOR OTHER EASEMENTS, GRANTEE MAY REQUIRE REASONABLE SAFEGUARDS TO PROTECT THE INTEGRITY OF THE FACILITIES THEREON.

GRANTOR FURTHER GRANTS TO GRANTEE:

(a) THE RIGHT TO INSTALL ADDITIONAL FACILITIES ON THE EASEMENT TRACT:

THE RIGHT TO GRADE THE EASEMENT FOR THE FULL WIDTH THEREOF AND TO EXTEND THE CUTS AND FILLS FOR SUCH GRADING INTO AND ONTO THE LAND ALONG AND OUTSIDE THE EASEMENT TO SUCH EXTENT AS GRANTEE MAY FIND REASONABLY NECESSARY;

THE RIGHT OF INGRESS TO AND EGRESS FROM THE EASEMENT OVER AND ACROSS GRANTOR'S PROPERTY BY MÉANS OF ROADS AND LANES THEREON, IF SUCH EXIST; OTHERWISE BY SUCH ROUTE OR ROUTES AS SHALL OCCASION THE LEASE PRACTICABLE DAMAGE AND INCONVENIENCE TO GRANTOR; PROVIDED THAT SUCH RIGHT OF INGRESS AND EGRESS SHALL NOT EXTEND TO ANY PORTION OF GRANTOR'S PROPERTY WHICH IS ISOLATED FROM THE EASEMENT BY ANY PUBLIC HIGHWAY OR ROAD NOW CROSSING OR HEREAFTER CROSSING THE PROPERTY; THE FOREGOING RIGHT OF INGRESS AND EGRESS INCLUDES THE RIGHT OF THE GRANTEE AND ASSIGNED EMPLOYEES OF GRANTEE TO DISASSEMBLE, REMOVE TAKE DOWN, AND CLEAR AWAY ANY FENCE. BARRICADE, OR OTHER STRUCTURE WHICH OBSTRUCTS, PREVENTS, OR HINDERS GRANTEE'S INGRESS TO AND EGRESS FROM THE GRANTOR'S PROPERTY, AND SHOULD GRANTEE DEEM IT NECESSARY TO SO DISASSEMBLE, REMOVE, TAKE DOWN, OR CLEAR AWAY ANY SUCH FENCE, BARRICADE, OR OTHER STRUCTURE, GRANTEE SHALL, AS SOON AS IS REASONABLY FEASIBLE, REPLACE OR RESTORE GRANTOR'S PROPERTY TO AS SIMILAR A CONDITION AS REASONABLY PRACTICABLE AS EXISTED IMMEDIATE PRIOR TO GRANTEE'S ACTIONS PURSUANT TO THIS PROVISION, UNLESS SAID FENCE, BARRICADE, OR OTHER STRUCTURE IS INCONSISTENT WITH THE RIGHTS CONVERTED TO GRANTEE HEREIN;

(d) THE RIGHT OF GRADING FOR, CONSTRUCTION, MAINTAINING AND USING SUCH ROADS ON AND ACROSS THE PROPERTY AS GRANTEE MAY DEEM NECESSARY IN THE EXERCISE OF THE RIGHT OF INGRESS AND EGRESS OR TO PROVIDE ACCESS TO PROPERTY ADJACENT TO THE EASEMENT.

THE RIGHT FROM TIME TO TIME TO TRIM AND TO CUT DOWN AND CLEAR AWAY ANY AND ALL TREES AND BRUSH NOW OR HEREAFTER ON THE EASEMENT AND TO TRIM AND TO CUT DOWN AND CLEAR AWAY ANY TRESS ON EITHER SIDE OF THE EASEMENT WHICH NOW OR HEREAFTER IN THE OPINION OF GRANTEE MAY BE A HAZARD TO ANY PIPELINE; VALVES, APPLIANCES, FITTINGS, OR OTHER IMPROVEMENTS BY REASON OF THE DANGER OF FALLING THEREON OR ROOT INFILTRATION THEREIN, OR WHICH MAY OTHERWISE INTERFERE WITH THE EXERCISE OF GRANTEE'S RIGHTS HEREUNDER: PROVIDED HOWEVER, THAT ALL TREES WHICH GRANTEE IS HEREBY AUTHORIZED TO CUT AND REMOVE, IF VALUABE FOR TIMBER OR FIREWOOD, SHALL CONTINUE TO BE THE PROPERTY OF GRANTOR, BUT ALL TOPS, LOPS, BRUSH AND REFUSE WOOD SHALL BE BURNED OR REMOVED BY GRANTEE:

(f) The right to mark the location of the easement by suitable markers set in the ground: provided THAT SUCH MARKERS SHALL BE PLACED IN FENCES OR OTHER LOCATIONS WHICH WILL NOT INTEREFRECE WITH ANY REASONABLE USE GRANTOR SHALL MAKE OF

GRANTEE HEREBY COVENANTS AND AGREES:

(a) GRANTEE SHALL NOT FENCE THE EASEMENT;

GRANTEE SHALL PROMPTLY BACKFILL ANY TRENCH MADE BY IT ON THE EASEMENT AND REPAIR ANY DAMAGE IT SHALL DO TO GRANTOR PRIVATE ROADS OR LANES ON THE LANDS;

(c) TO THE EXTENT ALLOWED BY LAW, GRANTEE SHALL INDEMNIFY GRANTOR AGAINST ANY LOSS AND DAMAGE WHICH SHALL BE CAUSED BY THE EXERCISE OF THE RIGHTS OF INGRESS AND EGRESS OR BY ANY WRONGFUL OR NEGLIGENT ACT OR OMISSION OF GRANTEE'S AGENTS OR EMPLOYEES IN THE COURSE OF THEIR EMPLOYMENT. IT IS UNDERSTOOD AND AGREED THAT ANY AND ALL EQUIPMENT PLACED UPON SAID PROPERTY SHALL REMIN THE PROPERTY OF GRANTEE.

GRANTOR HEREBY DEDICATES THE EASEMENT FOR THE PURPOSE STATED HEREIN.

TO HAVE AND TO HOLD THE RIGHTS AND INTERESTS DESCRIBED UNTO GRANTEE AND ITS SUCCESSORS AND ASSIGNS, FOREVER, TOGETHER WITH ALL AND SINGULAR ALL USUAL AND CUSTOMARY RIGHTS THERETO IN ANYWISE BELONGING, AND TOGETHER WITH THE RIGHT AND PRIVILEGE AT ANY AND ALL TIMES TO ENTER SAID PREMISES, OR ANY PART THEREOF, FOR THE PURPOSE OF CONSTRUCTING OR MAINTAINING SAID UTILITIES AND FOR MAKING CONNECTIONS THEREWITH, AND GRANTOR DOES HERBY BIND ITSELF, ITS'S SUCCESSORS AND ASSIGNS AND LEGAL REPRESENTATIVES, TO WARRANT AND FOREVER DEFEND, ALL AND SINGULAR, THE SAID EASEMENT AND RIGHTS AND INTEREST UNTO THE CITY OF ROUND ROCK, TEXAS, ITS SUCCESSORS AND ASSIGNS, AGAINST EVERY PERSON WHOMSOEVER LAWFULLY CLAIMING OR TO CLAIM THE SAME OR ANY PART THEREOF.

REPLAT OF LOT 8, BLOCK B FINAL PLAT OF UNIVERSITY SUNRISE SUBDIVISION SECTION TWO

7.727 ACRES, PERIMETER DESCRIPTION WILLIAMSON COUNTY, TEXAS

A DESCRIPTION OF 7.727 ACRES BEING ALL OF LOT 8, BLOCK B, FINAL PLAT OF UNIVERSITY SUNRISE SUBDIVISION SECTION TWO, A SUBDIVISION OF RECORD IN CABINET DD, SLIDE 44 OF THE PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS, CONVEYED TO RBR REAL ESTATE HOLDINGS, LLC, IN A SPECIAL WARRANTY DEED DATED AUGUST 17, 2015 AND RECORDED IN DOCUMENT NO. 2015073899 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID 7.727 BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a Mag nail with "Chaparral" washer set in the east right—of—way line of Sunrise Road (80' right—of—way width), being the westernmost northwest corner of said Lot 8, and also being the southwest corner of Lot 7, Block B, said Final Plat of University Sunrise Subdivision Section Two;

THENCE North 69°16'04" East, with the common line of Lot 8 and said Lot 7, Block B, a distance of 368.86 feet to a 1/2" rebar with "Chaparral" cap set for the southeast corner of Lot 7;

THENCE North 20°43′56″ West, with the common line of Lot 8 and Lot 7, and continuing with the common line of Lot 8 and Lot 6, Block B of said Final Plat of University Sunrise Subdivision Section Two, a distance of 334.77 feet to a 1/2″ rebar with "Chaparral" cap set in the south line of Lot 5, Block B of said Final Plat of University Sunrise Subdivision Section Two, for the northeast corner of said Lot 6, and a northwest corner of Lot 8:

THENCE North 69°16'04" East, with the north line of Lot 8, being also the south line of Lots 3, 4 and 5, Block B of said Final Plat of University Sunrise Subdivision Section Two, a distance of 532.10 feet to a calculated point in the west line of Lot 1, Block B of Oakmont Crossing Section One, a subdivision of record in Cabinet—H, Slide 311 of the Plat Records of Williamson County, Texas, for the southeast corner of Lot 3, being the northeast corner of Lot 8;

THENCE South 13°25'14" West, with the east line of Lot 8, being also the west line of said Lot 1, Block B, a distance of 872.19 feet to a calculated point for the southeast corner of Lot 8, being also the northeast corner of Lot 9, Block B of said Final Plat of University Sunrise Subdivision Section Two;

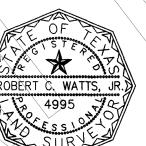
THENCE with the south line of Lot 8, being also the north line of Lot 9, the following two (2) courses and distances:

- 1. North 76°34'45" West, a distance of 62.35 feet to a 1/2" rebar found;
- 2. South 69°16'04" West, a distance of 359.68 feet to a Mag nail with "Chaparral" washer set in the east right—of—way line of Sunrise Road, for the northwest corner of Lot 9, being also the southeast corner of Lot 8;

THENCE North 20°44'16" West, with the east line of Sunrise Road, being also the west line of Lot 8, a distance of 352.00 feet to the POINT OF BEGINNING, containing 7.727 acres of land, more or less.

Surveyed on the ground February 27, 2015. Bearing Basis: The Texas Coordinate System of 1983 (NAD83), Central Zone, based on GPS Solutions from The National Geodetic Survey (NGS) On—Line Positioning User Service (OPUS).

Robert C. Watts, Jr.
Registered Professional Land Surveyor
State of Texas No. 4995
TBPLS Firm No. 10124500



1-26-17

	LINE TABLE	
LINE	BEARING	DISTANCE
<u>L1</u>	N20°43′56″W	163,00
L2	N69'16'04"E	30.00'
L3	S20'43'56"E	163.00'
L4	S69'16'04"W	30.00'
L5	N20'43'56"W	163.00'
L6	N69'16'04"E	30.00'
L7	S20'43'56"E	163.00'
L8 /	S69*16'04"W	30.00'
<u>L9</u> /	S20'43'56"E	462.76
L10	S69'16'04"W	369.84'
<u>L11\</u>	N20'44'16"W	26.00'
L12	N69*15'44"E	15.70'
L13	N69'16'04"E	354.14'
L14	N20'43'56"W	447.77
L15	N69'16'04"E	61.02'
L16	N69'15'47"E	379.35'
L17	S76°34'46"E	8.59'
Ľ18	S13'25'14"W	18.00'
L19	N76°34'46"W	8.59'
L20	S69*15'47"W	379.35'
L21	N20°43'56"W	18.00'
L22	N13°25'14"E	64.21
L23	N20°43'56"W	31.78'
L24	S69*16'07"W	0.98'
L25	N69*16'04"E	36.25
L26	S69°16'04"W	45.38'
L27	N69'16'04"E	45.39'
L28	S69°16'04"W	39.98
L29	N20'43'33"W	12.00'
<u>L30</u>	N20°43′56″W	222.50'
L31	N69'16'04"E	25.00'
L32	S20°43'56"E	207.50'
<u>L33</u>	N69°16'04"E	58.11'
<u>L34</u>	S76°34'45"E	25.47'
L33 L34 L35	S13'25'15"W	15.00'
L36	N76'34'45"W	20.86'
L37	S69'16'09"W	19.93'
L38	N69'16'04"E	41.94'
L39	N20°43'56"W	19.50'
L40	N69*16'04"E	15.00
L41	S20°43'56"E	19.50'
L42	N69'16'04"E	324.80'
L43	N24°16'04"E	15.00'
L44	N20'43'56"W	55.80'
L45	N24°16'04"E	27.43'
L46	N69*16'04"E	128.04'
L47	N13'25'14"E	145.50'
L48	N76'54'16"W	6.61
L49	N13'05'44"E	15.00′

	LINE TABLE	
LINE	BEARING	DISTANCE
L50	S7 6 °54'16"E	6.70'
<u>L51</u>	N13°25'14"E	39.29'
L52	N20'44'04"W	14.84'
L53	N69"15'56"E	10.07
L54	N13°25'14"E	2.77'
L55	N20°44'13"W	147.89'
L56	N65°44'00"W	25.98'
L57	S69'15'47"W	112.77
L58	S20'44'13"E	7.17'
L59	S69°15'47"W	15.00'
L60	N20°44'13"W	7.17'
L61	S69'15'47"W	86.72'
L62	S24'16'09"W	24.84'
L63	N69°16'04"E	23.83'
L64	S20°43'56"E	10.00'
L65	S69°16'04"W	24.61
L66	S20°43'56"E	166.86
L67	N69°16'04"E	16.00'
L68	S20°43'56"E	15.00'
L69	S69°16'04"W	16.00
L70	S20'43'56"E	42.29 '
L71	S24'16'04"W	52.73 ′
L72	S69'16'04"W	263.78 ′
L72 L73	N20'43'38"W	15.00'
L73 L74	N69'16'04"E	257.57
L75	N24'16'04"E	40.31
L76	N20°43'56"W	233.38'
L77	N24'16'09"E	38.37'
L78	N69'15'47"E	226.92
L79	S65'44'00"E	38.41'
L80	S20'44'13"E	158.71
L81	S13°25'14"W	233.05'
L82	S69°16'04"W	120.79
	S24'16'04 W	129.78'
L83	S20°43'56"E	15.00' 55.80'
<u>L84</u> L85	S24*16'04"W	22.80
L86	S60'16'04'W	27.43'
	S69'16'04"W	162.01'
L87	S20°43'52"E	35.50'
L88	\$69'16'08"W	15.00'
L89	N20'43'52"W	35.50'
L90	S69'16'04"W	154.00'
L91	S20°43'52"E	35.50
L92	S69'16'08"W	15.00'
L93	N20'43'52"W	35. 5 0'
L94	S69'16'04"W	41.94'
L95	N20"44'16"W	15.00'
L96	S69°16'04"W	111.29'
L97	N20°44'16"W	25.50'

	CURVE TABLE											
CURVE	RADIUS	DELTA	ARC	BEARING	CHORD							
C1	51.00'	90,00,00,	80.11	S24'16'04"W	72.12'							
C2	25.00'	90.00,00,	39.27'	N24'16'04"E	35.36'							
C3	25.00'	90'02'17"	39.29'	N65'45'04"W	35.37'							
C4	10.00'	90'03'56"	15.72'	S24'14'06"W	14.15'							
C5	38.00'	34'09'27"	22.65'	N86'20'30"E	22.32'							
C6	20.00'	34'09'27"	11.92'	S86'20'30"W	11.75'							



Firm No. 10124500

DEPARTMENT -PDS)

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

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 12. AVAILABLE PERMANENT BENCHMARKS (CITY OF ROUND ROCK DATUM) WITH VERTICAL DATUM INFORMATION

BM #2: SQUARE IN CURBLINE, ± 85' EAST OF CL OF SUNRISE ROAD, ± 1085' SOUTH OF THE INTERSECTION OF UNIVERSITY BLVD. - ELEV. = 769.43' NAVD '88

THAT MAY BE UTILIZED FOR THE CONSTRUCTION OF THIS PROJECT AND ARE DESCRIBED AS FOLLOWS:

*AS PUBLISHED ON THE REPLAT RECORDED IN DOC. NO. 2017056293

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

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. STREET AND DRAINAGE NOTES

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

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 ILL. ALL PUBLIC RCP SHALL BE A MINIMUM OF 18-INCHES IN DIAMETER.

STREET AND DRAINAGE NOTES (CONT.):

8. THE SUBGRADE MATERIAL FOR THE STREETS SHOWN HEREIN WAS TESTED BY TERRACON CONSULTANTS INC. ON THIS DATE: 9/21/2021 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:

	Asphaltic Cone	crete Design					
Thickness (inches)						Value	
Layer	DI	-1	DI-2		ltem	Value	
	Option 1A	Option 1B	Option 2A	Option 2B	Hot Mix Asphaltic Concrete	Plant mixed, hot laid Type D (Fine-Grade Surface Course) meetin	
Asphaltic Concrete (HMAC)	2.0	2.0	2.5	2.5	(HMAC)	the specifications in TxDOT Item 340.	
Crushed Limestone Base	8.0	10.0	10.0	12.0	Reinforced Portland Cement	28-day flexural strength (third-point loading) ≥ 500 psi, or	
Lime Treated Subgrade	8.0	-	8.0	-	Concrete (PCC)	28-day compressive strength ≥ 3.500 psi	
Moisture Conditioned Subgrade	_	6.0	-	6.0	001101010 (1 00)		
-					Crushed Limestone Base [≥]	TxDOT Item 247, Type A, Grade 1-2 compacted as outlined in Earthwork.	
F	ortland Cement C	Concrete Design				If soil subgrade consists of high PI (≥30) with ≤ 15% gravel, limit	
1		Thicknes	s (inches)		Lime Treated Subgrade 3,4 treatment as per TxDOT Item 260 is applicable either the		
Layer		DI-1)I-2 ···	•	placement or slurry placement.	
Reinforced Concrete (PCC)		5		6	Moisture Conditioned Subgrade 5	As outlined in Earthwork.	
Moisture Conditioned Subgrade		6		6	Woodan Conditioned Cappiago		

Pavement Area	Traffic Design Index	Description
Parking Areas (Passenger Vehicles Only)	DI-1	Light traffic – (ESALs ¹ <5) Passenger cars and pickup trucks, no regular use by heavily loaded two axle trucks or lightly loaded larger vehicles.
Driveways (and Dumpster Enclosures)	DI-2 ²	Light to medium traffic – (5≤ESALs≤20) Passenger cars and pickup trucks with no more than 50 heavily loaded two-axle trucks or lightly loaded three axle trucks per day. No regular use by heavily loaded trucks with three or more axles.

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

2. For Fire Lanes to withstand the occasional HS-20 loading of 32,000 pounds per axle and up to 90,000-

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.

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 _{oot} +3%	

18-kip equivalent single axle load applications.

pound gross truck weight, use DI-2 pavements or thicker.

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 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

<u>EROSION AND SEDIMENTATION CONTROL NOTES:</u> 1. EROSION CONTROL MEASURES, SITE WORK, AND RESTORATION WORK SHALL BE IN ACCORDANCE WITH THE CITY OF ROUND ROCK DESIGN AND CONSTRUCTION STANDARDS (DACS) AND CODE OF ORDINANCES.

2. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVÉD GRASS, GRASS MIXTURES, OR GROUND COVER THAT IS SUITABLE TO THE AREA AND THE 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. INSTALLATION AND CONDITION 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 REVEGETATION HAS BEEN ESTABLISHED AND APPROVAL RECEIVED FROM THE CIVIL INSPECTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE ALL ONCE APPROVED

TO DO SO BY THE CIVIL INSPECTOR. 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.

ROUND ROCK FIRE DEPARTMENT NOTES:

1. GENERAL: ALL DEVELOPMENTS SHALL COMPLY WITH THE CURRENT FIRE CODE, APPENDICES, AND ANY LOCAL AMENDMENTS AS ADOPTED BY THE CITY OF ROUND ROCK. 2. COMBUSTIBLE MATERIALS ON-SITE: ALL-WEATHER ACCESS ROADS/DRIVES (ASPHALT/CONCRETE CAPABLE

OF SUPPORTING 80,000 LB. APPARATUS LOADING) SHALL BE CONSTRUCTED, AND ALL WATER LINES SHALL BE TESTED AND FIRE HYDRANTS IN-SERVICE, PRIOR TO BRINGING COMBUSTIBLE MATERIALS (WOOD, PACKAGING, PLASTICS, ETC.) ON ANY JOB SITE. BASE MATERIAL IS NOT ACCEPTABLE FOR FIRE ACCESS ROADS/DRIVES. 3. FIRE LANES: FIRE APPARATUS ACCESS ROADS/DRIVES SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF (20) FEET. WHERE TRAFFIC IS TWO-WAY DIRECTIONAL, BUILDINGS EXCEED (30) FEET OR THREE STORIES IN HEIGHT, TOTAL BUILDING AREA EXCEEDS 62,000 SQUARE FEET, OR WHERE HYDRANTS ARE LOCATED ALONG THE FIRE ACCESS ROADS, THE MINIMUM WIDTH SHALL BE (26) FEET. IF RAISED CURBING OR MEDIANS COMPROMISE MINIMUM WIDTH, CURBING SHALL BE MOUNTABLE AND RAISED AREA SHALL CONTAIN NO OBSTRUCTIONS SUCH

AS LANDSCAPING, SIGNAGE, GROUND-MOUNTED EQUIPMENT, ETC. 4. ALL-WEATHER SURFACE: THE PAVEMENT STRUCTURE FOR FIRE ACCESS ROADS/DRIVES MUST BE ALLWEATHER SURFACE (ASPHALT/CONCRETE) DESIGNED TO SUPPORT AN 80,000 LB. APPARATUS LOADING. 5. GRADE: THE GRADE THROUGH THE FIRE LANE ACCESS SHALL NOT EXCEED 7% AND NO GRADE BREAKS SHALL

6. TURNING RADII: TURNING RADII SHALL BE A MINIMUM OF 25-FTT INSIDE AND 50-FT OUTSIDE AS MEASURED FROM FACE-OF-CURB (WHEN PRESENT) OR ON DRIVABLE, PAVED SURFACE.

7. VERTICAL CLEARANCE: THE VERTICAL CLEARANCE OVER A DESIGNATED FIRE LANE SHALL NOT BE LESS THAN

8. EMERGENCY RESPONDER RADIO COVERAGE: ADEQUATE EMERGENCY RESPONDER RADIO COVERAGE SHALL BE REQUIRED FOR ALL NEW BUILDINGS. A PRE-ENHANCEMENT RADIO SURVEY SHALL BE REQUIRED AT THE 80% CONSTRUCTION PHASE FOR CERTAIN BUILDING TYPES BASED ON THE SIZE OF THE BUILDING. PREENHANCEMENT RADIO SURVEY REQUIREMENTS INCLUDE THE FOLLOWING BUILDING TYPES:

• GREATER THAN (5) STORIES

•BELOW GRADE PLANE • WOOD FRAMED CONSTRUCTION GREATER THAN 50,000 SF

• CONCRETE OR METAL FRAMED CONSTRUCTION GREATER THAN 25,000 SF

9. REQUIRED FIRE FLOWS: A PROJECT'S MINIMUM FIRE FLOW FOR THE LARGEST BUILDING SHALL BE MEASURED AT (20) PSI RESIDUAL PRESSURE THAT IS AVAILABLE FOR FIREFIGHTING PER THE FLOWS ON TABLES B105.1 OR B105.2 OF THE INTERNATIONAL FIRE CODE (IFC), APPENDIX B. DISCLAIMER: IT IS THE RESPONSIBILITY OF THE DEVELOPER AND ENGINEER TO ENSURE THESE MINIMUM FIRE FLOW REQUIREMENTS FOR THE SITE ARE MET VIA FLOW TESTING AND WATER MODELING.

10. SPRINKER SYSTEMS: BUILDINGS EQUIPPED WITH ANY FIRE DEPARTMENT CONNECTIONS (FDC) SHALL HAVE A FIRE HYDRANT LOCATED WITHIN 100'OF THE FDC (REMOTE FDC IS PERMISSIBLE). FDC SHALL BE IDENTIFIED ON THE SITE VIA SIGNAGE.

11. GATES: IF GATES ARE PROVIDED ALONG ANY FIRE ACCESS ROAD/DRIVE, MINIMUM PASSABLE WIDTH SHALL NOT BE LESS THAN (20) FEET AND SHALL COMPLY WITH IFC APPENDIX D AND ROUND ROCK CODE OF ORDINANCES REGARDING EMERGENCY ACCESS SYSTEMS. GATES WILL REQUIRE A KNOX-BOX®KEY BOX THAT SHALL CONTAIN KEYS TO GAIN NECESSARY ACCESS AS REQUIRED BY THE FIRE CODE OFFICIAL.

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CARLSON, BRIGANCE & DOERING, INC. ID# F3791

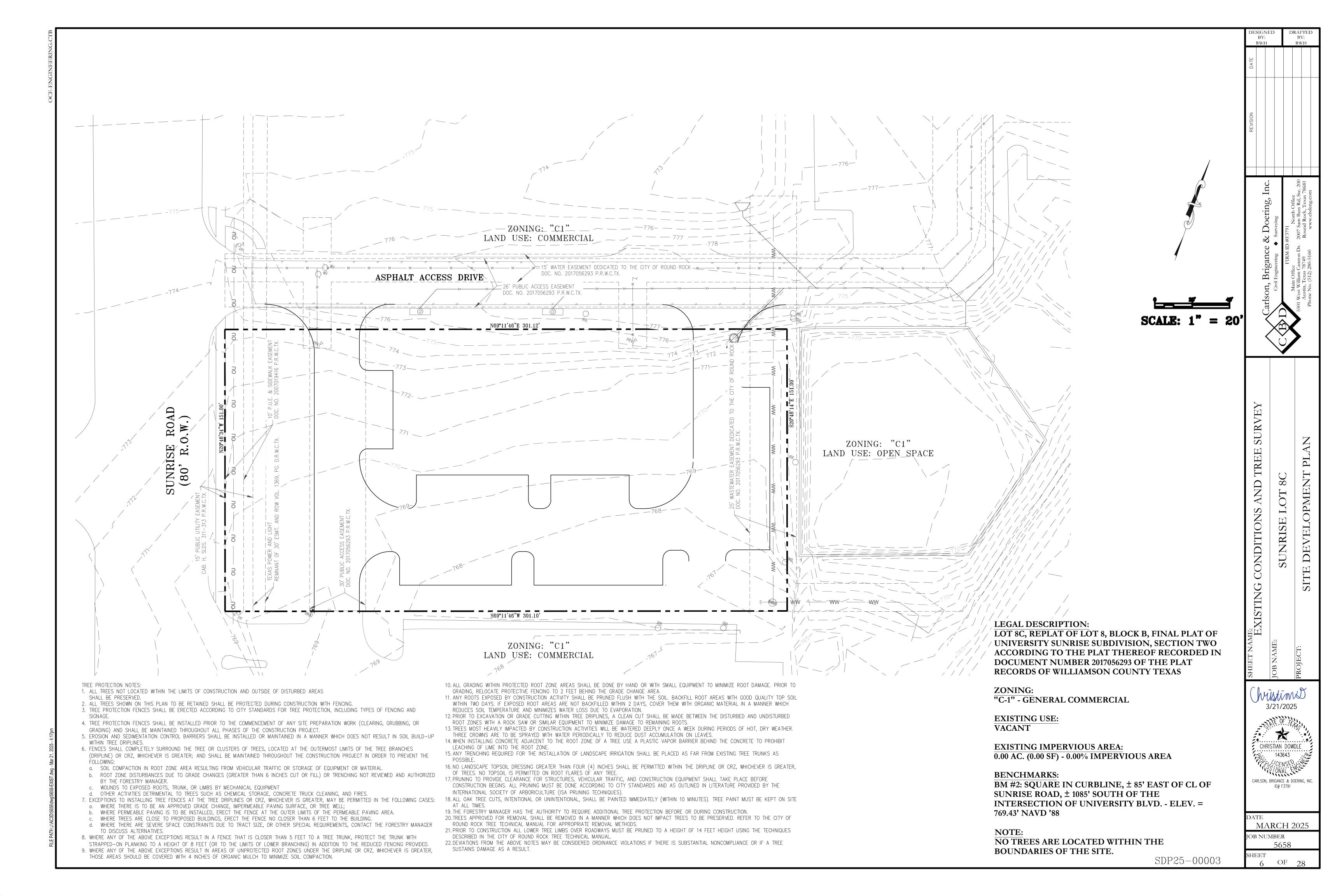
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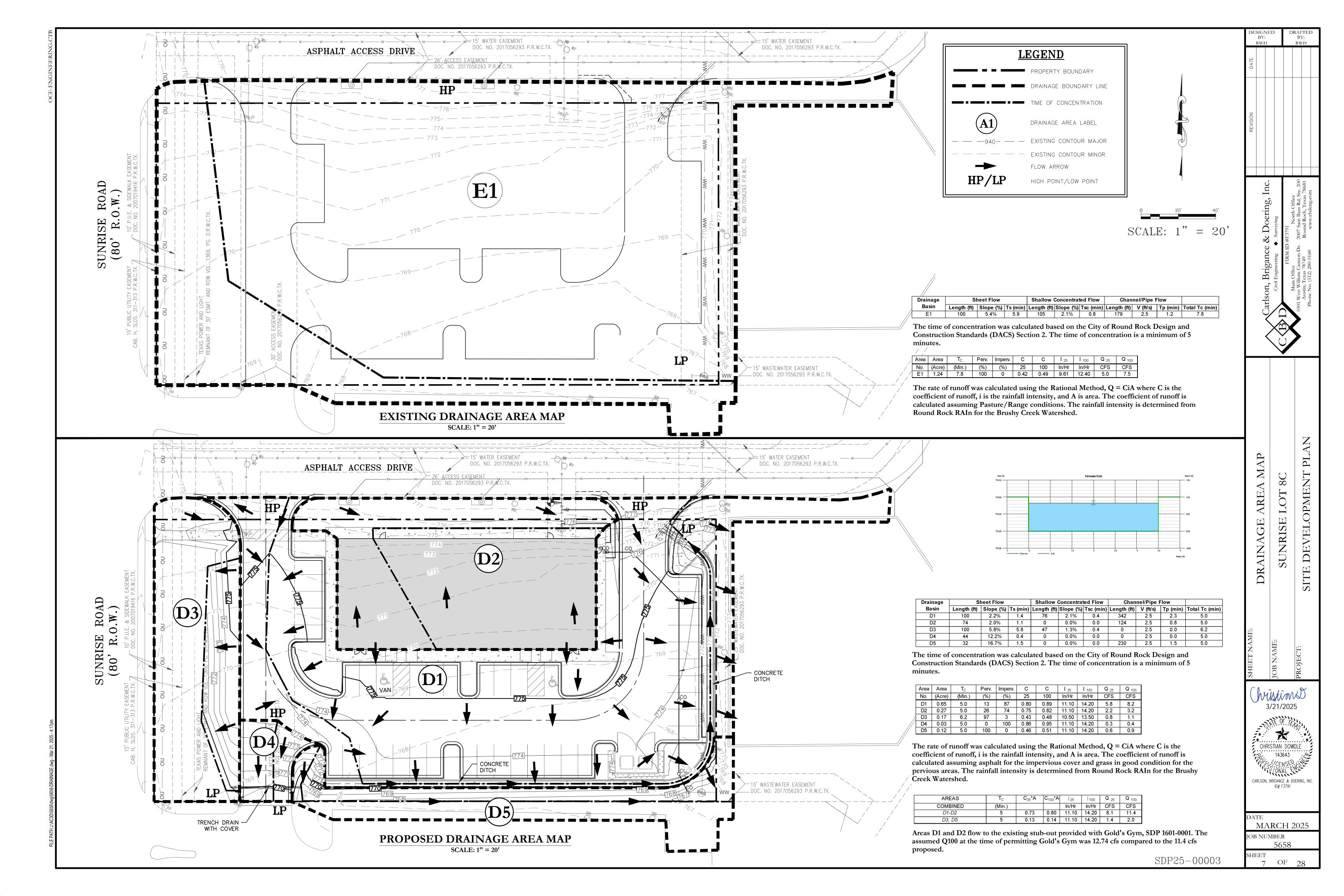
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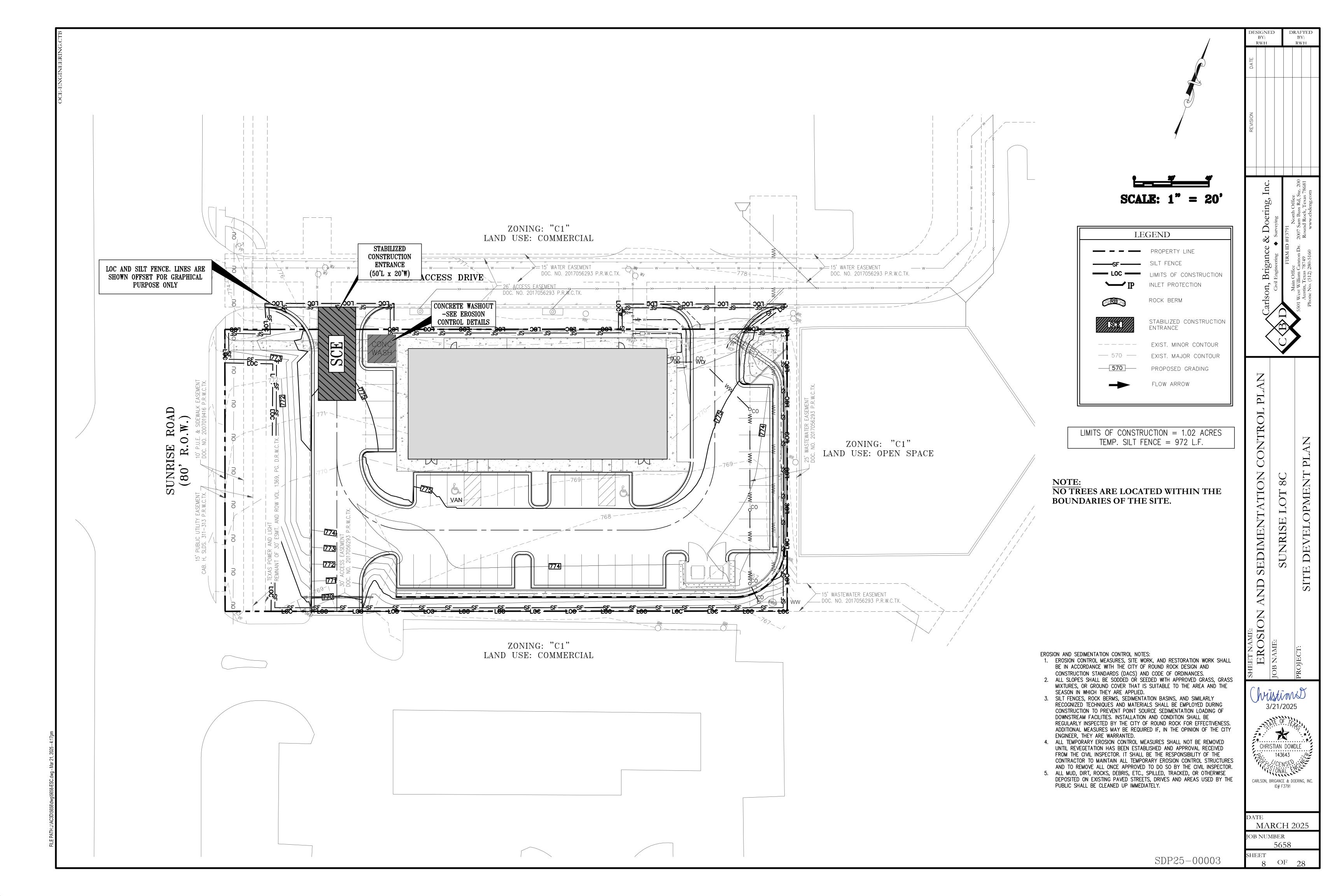
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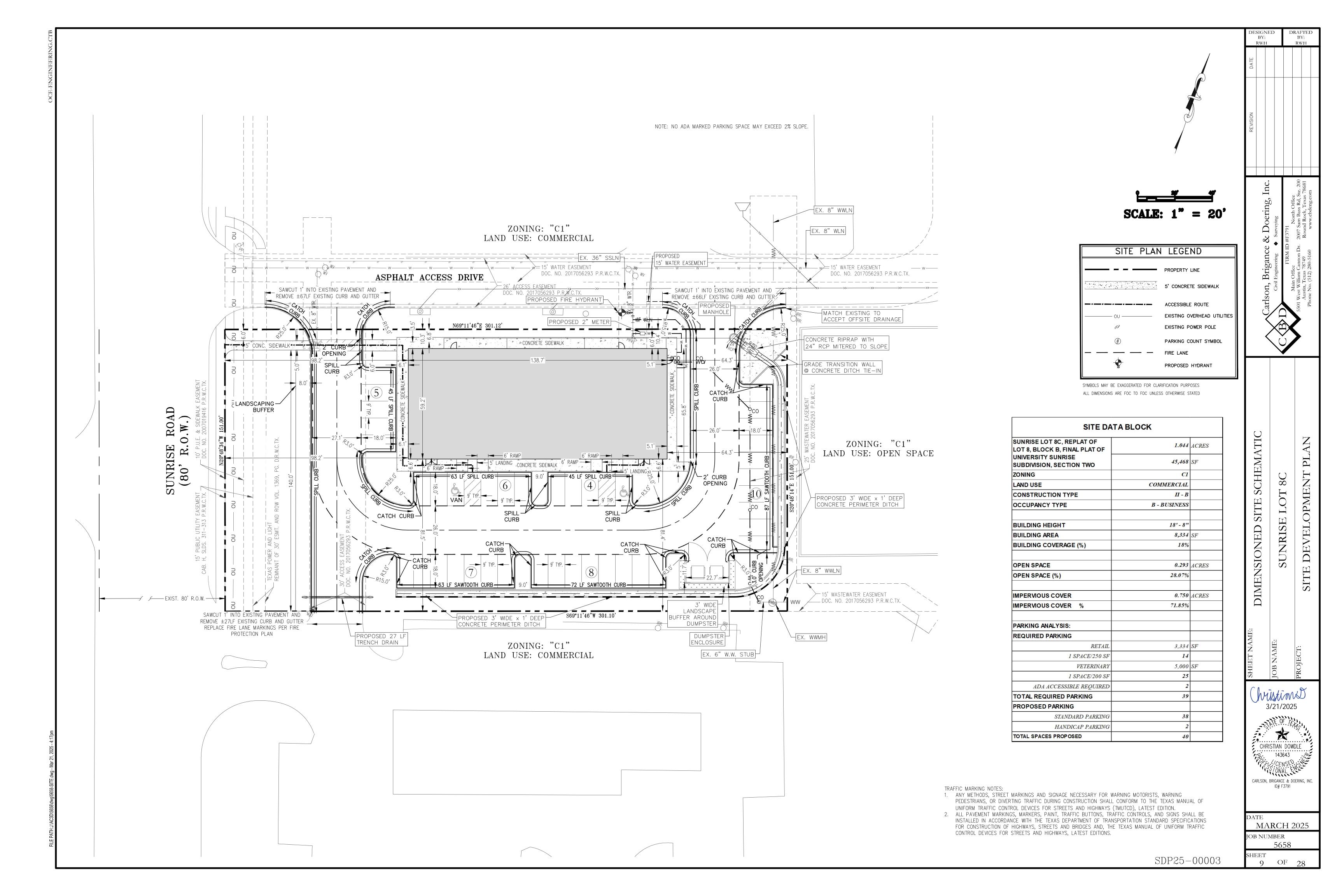
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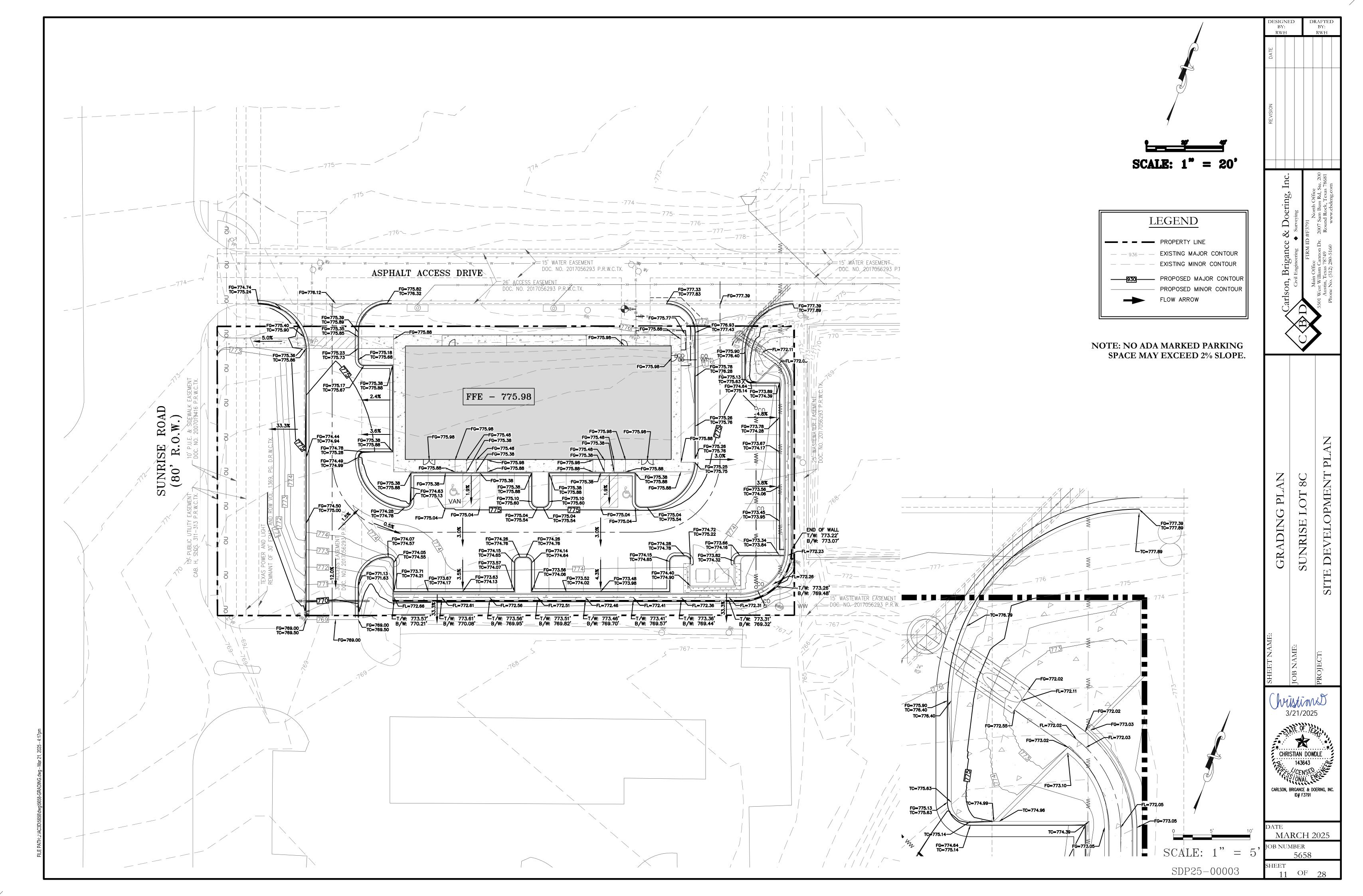
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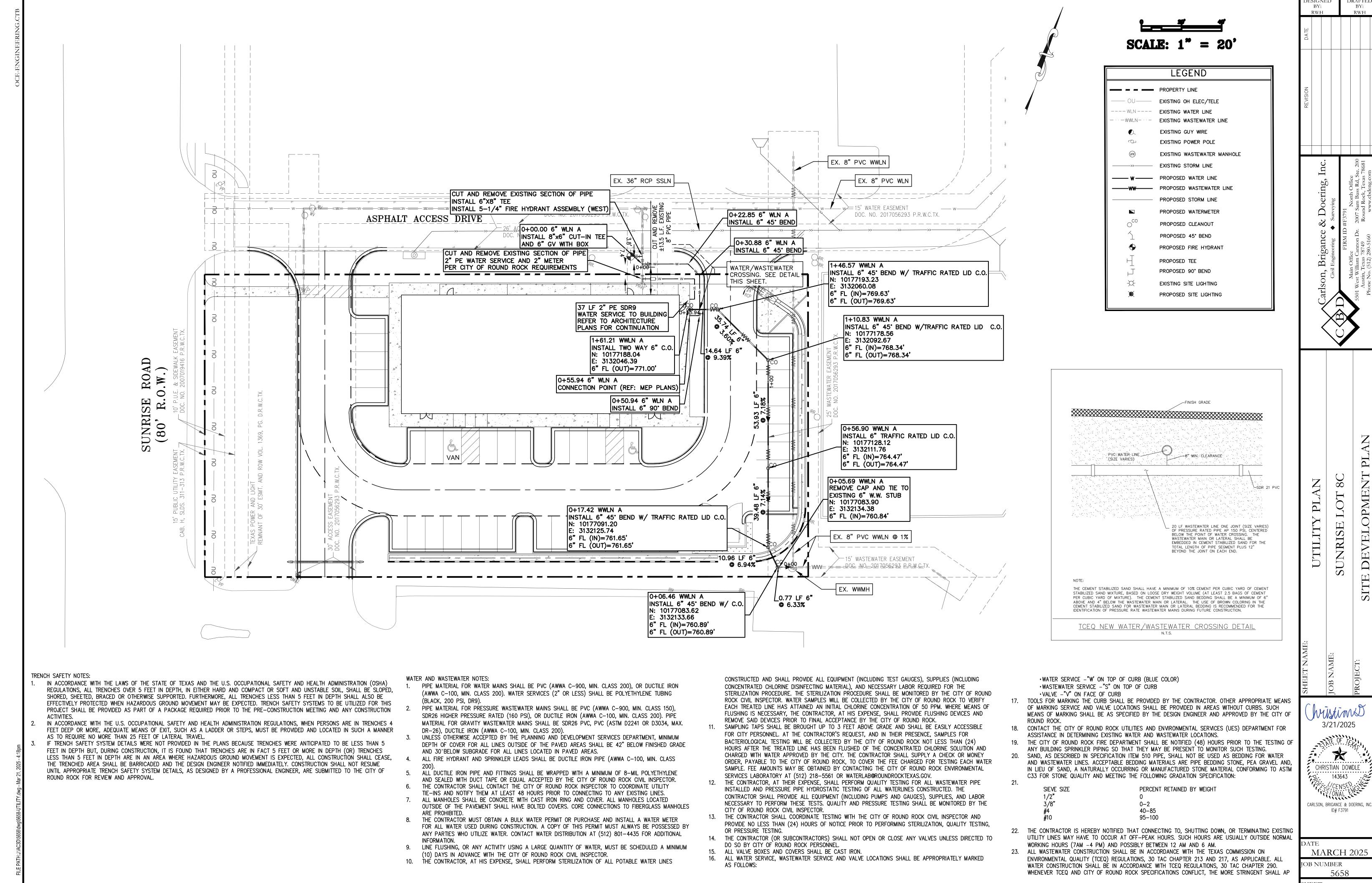




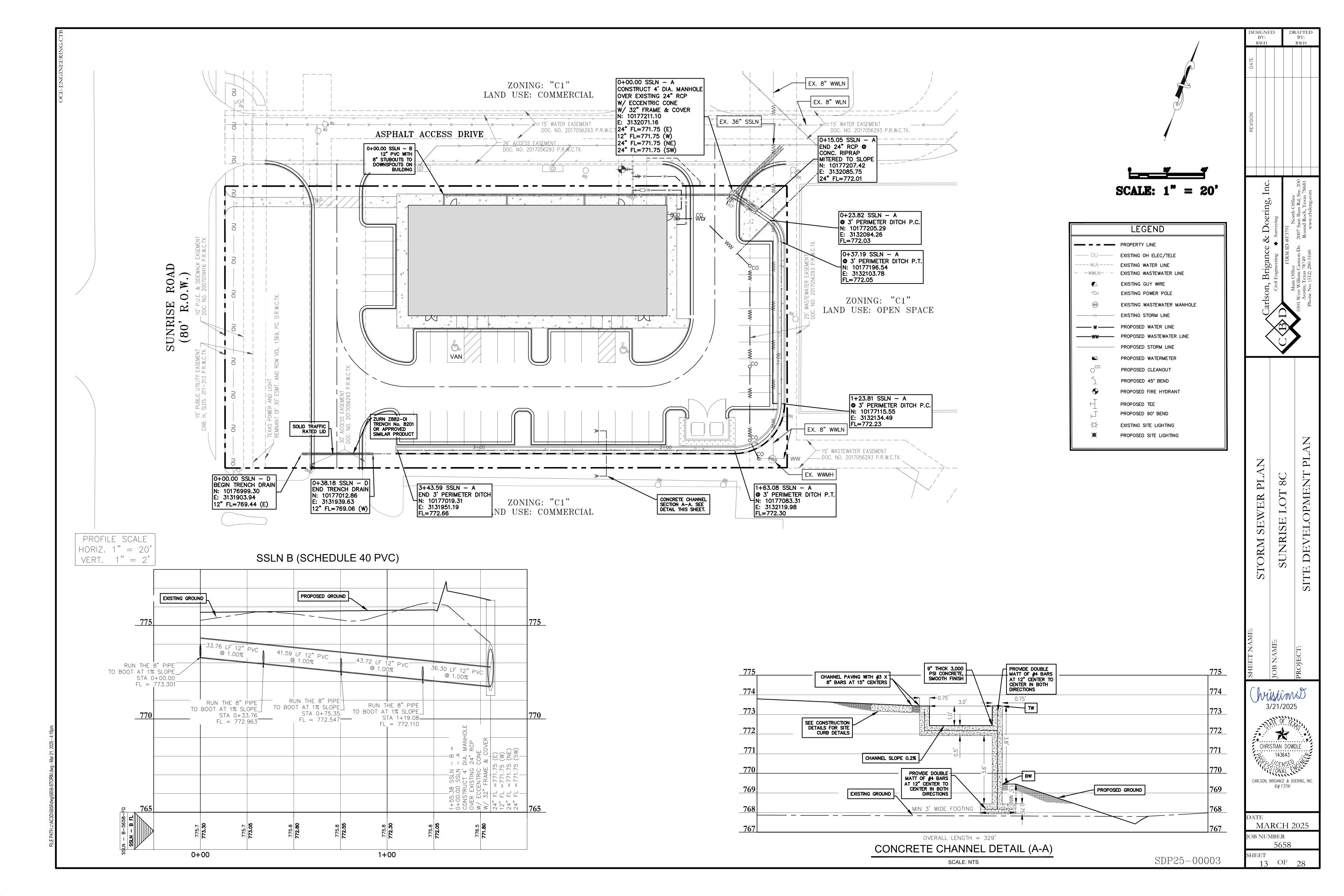


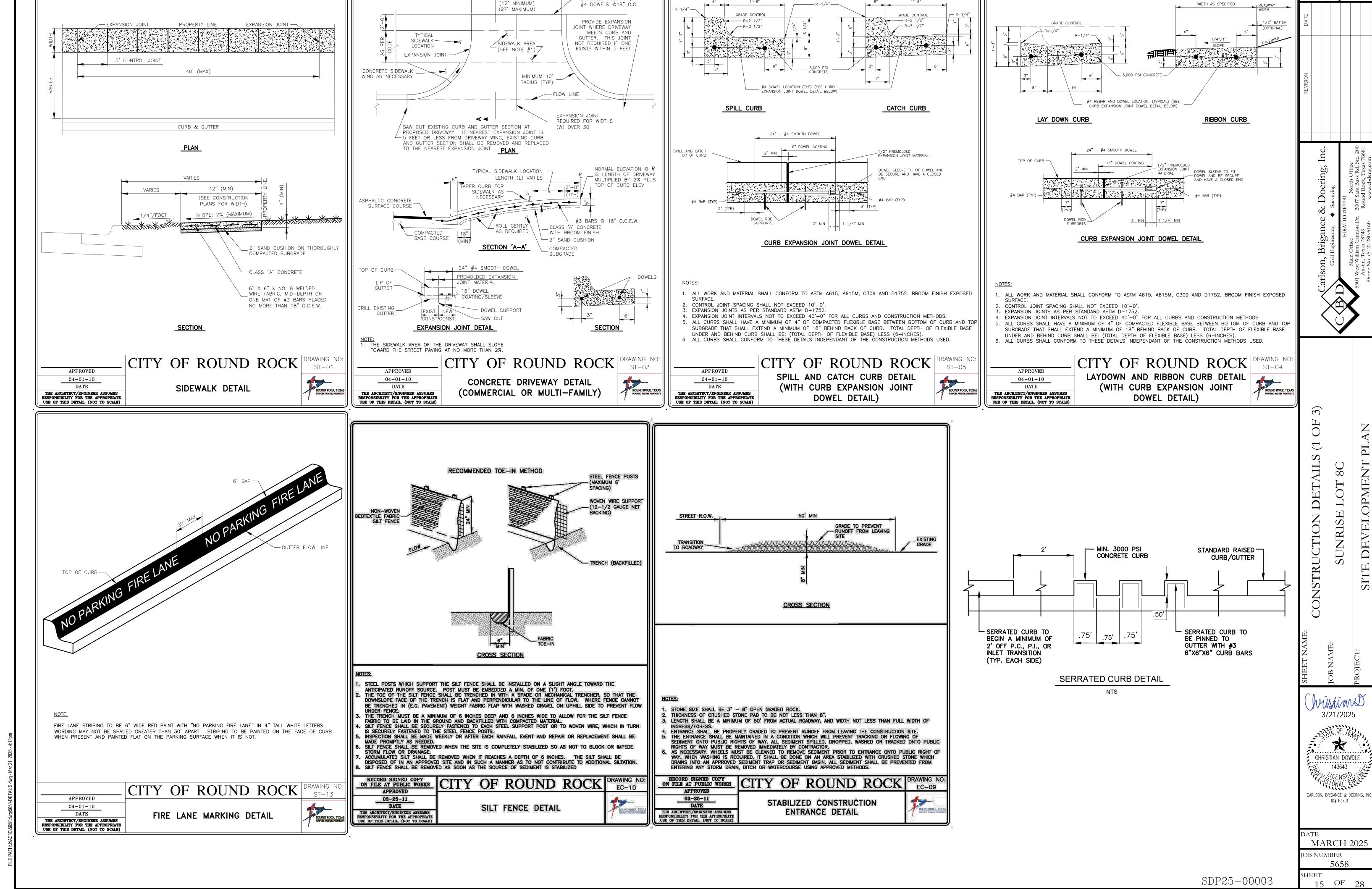






SDP25-00003 SHEET 9 OF 28

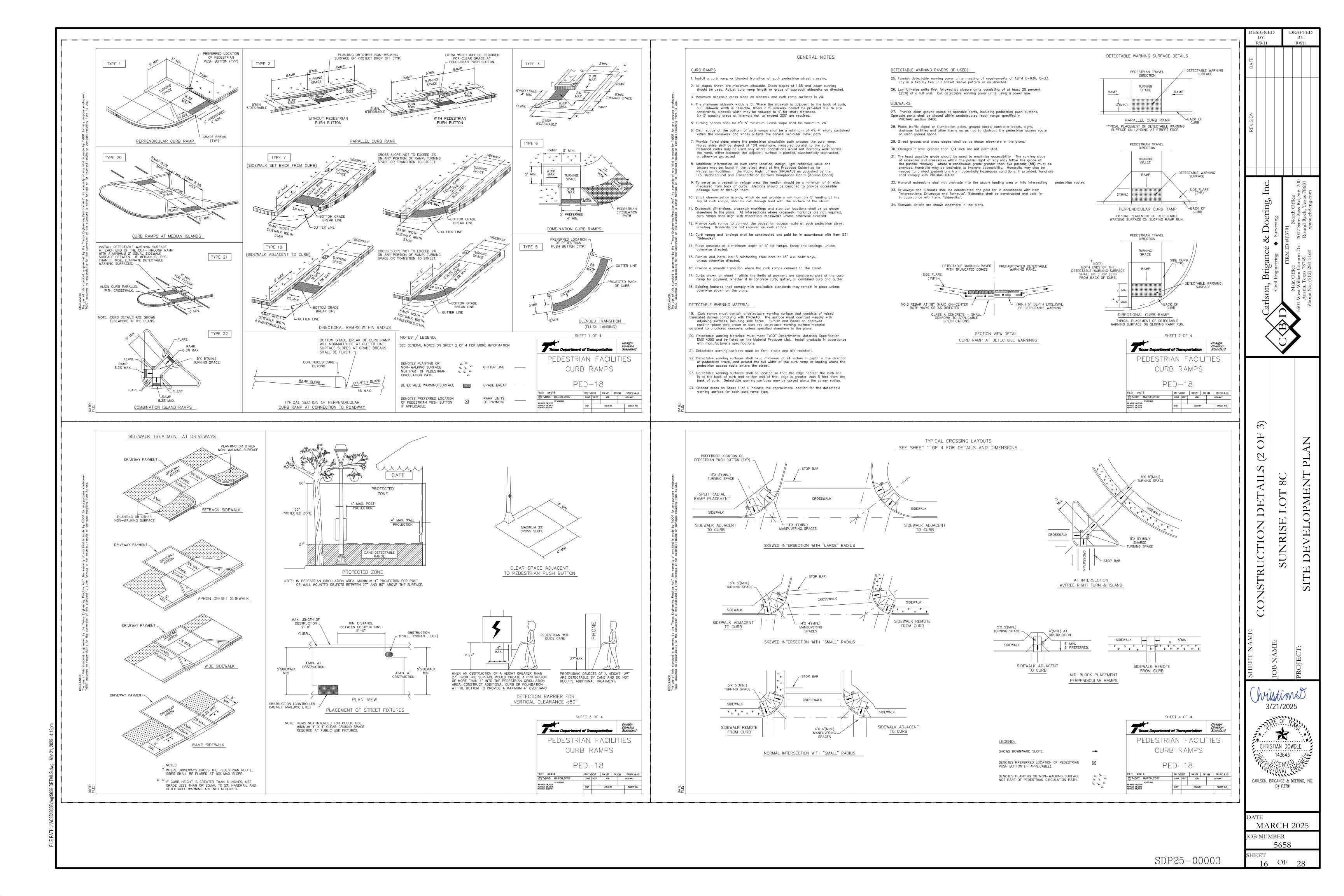


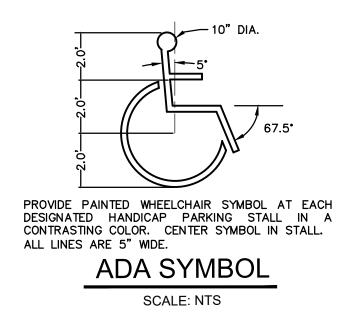


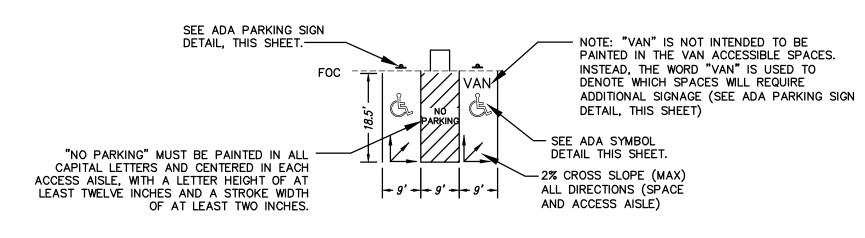
1" WOLMANIZED WOOD

- EXPANSION JOINT W/

WIDTH VARIES



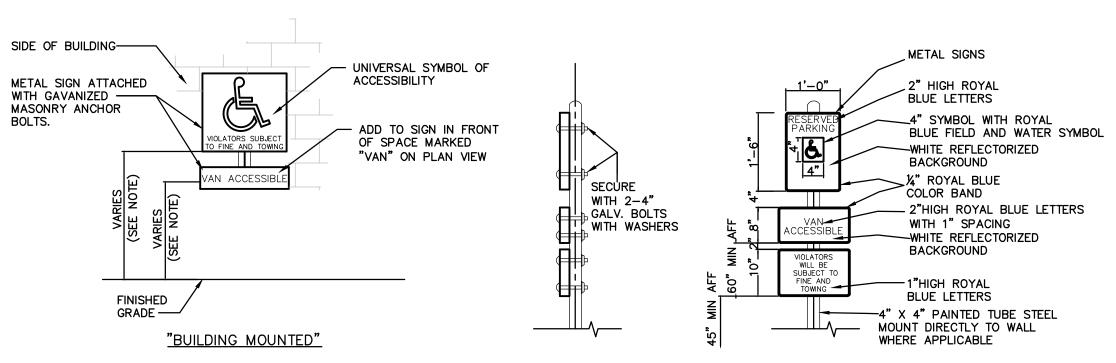




WARNING!! EXCEEDING 2 PERCENT SLOPE IN ANY DIRECTION COULD BE CAUSE FOR REJECTION OF SPACE. CONTRACTOR IS TO VERIFY SPOT ELEVATIONS PRIOR TO CONSTRUCTION AND ENSURE 2% IS NOT EXCEEDED.

TYPICAL ADA PARKING SPACE

SCALE: NTS



NOTE: THE HEIGHT FROM FINISHED GRADE TO EITHER THE LOWEST SYMBOL OR THE LOWEST LETTERING MUST BE A MINIMUM OF 60 INCHES. SIGN CONTENTS AND HEIGHT REQUIREMENTS ALSO APPLY TO WALL MOUNTED SIGNAGE.

NOTE: ALL LETTERING TO BE FHWA SERIES 'B' ALPHABET. ALL LETERING TO BE ROYAL BLUE ON WHITE REFLECTORIZED BACKGROUND (TYP).

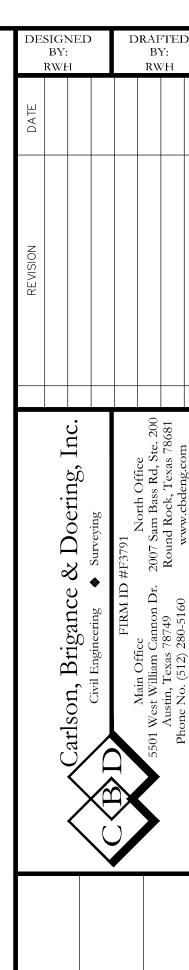
BACKGROUND: SUPER ENGINEER GRADE ON HIGH INTENSITY SHEETING.

SUBSTRATE: 0.080 GAUGE TREATED ALUMINUM.

"POLE MOUNTED"

ADA PARKING SIGN

SCALE: NTS (POLE OR WALL MOUNTED)



(3)8C SUNRISE

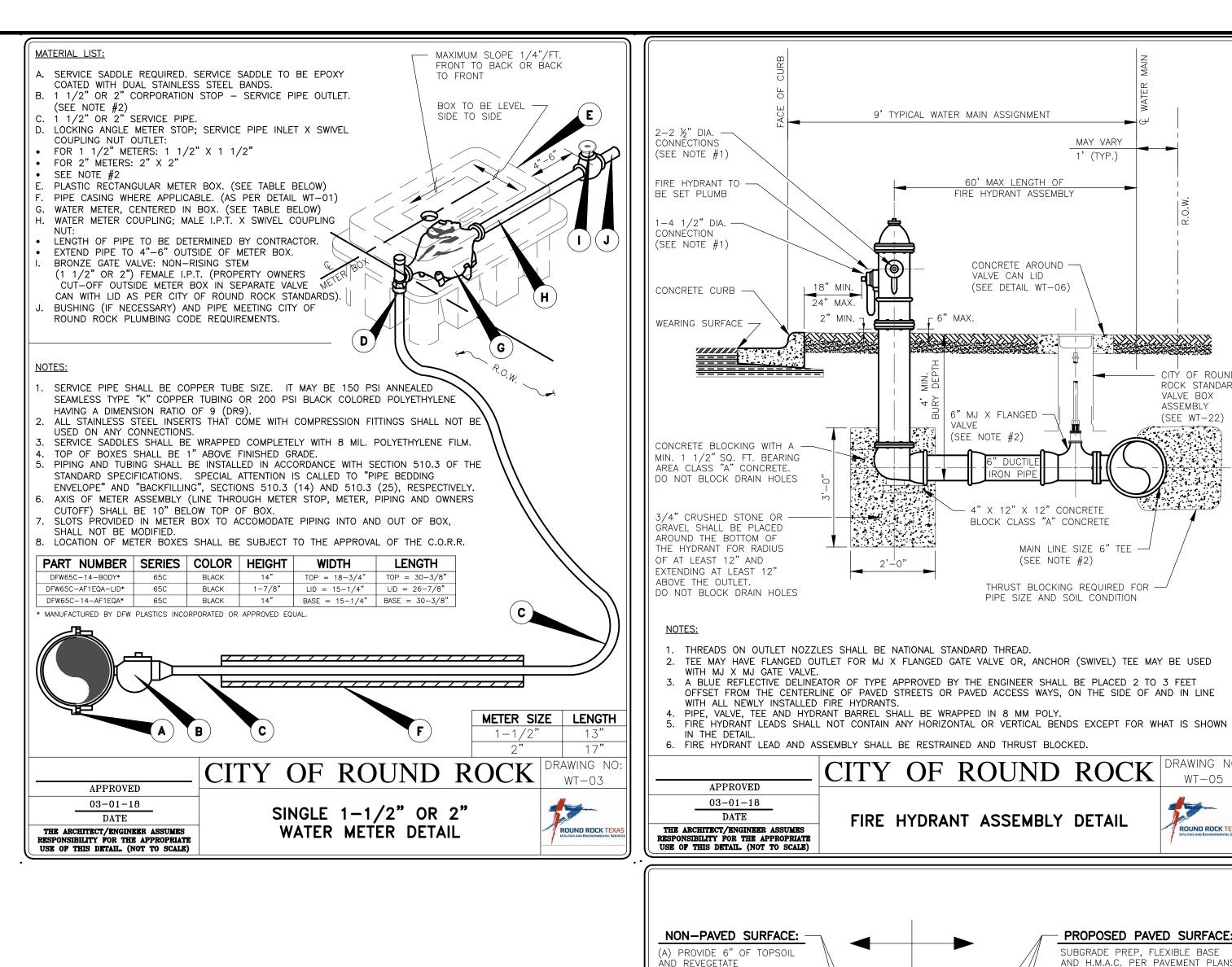
DEVELOPMENT

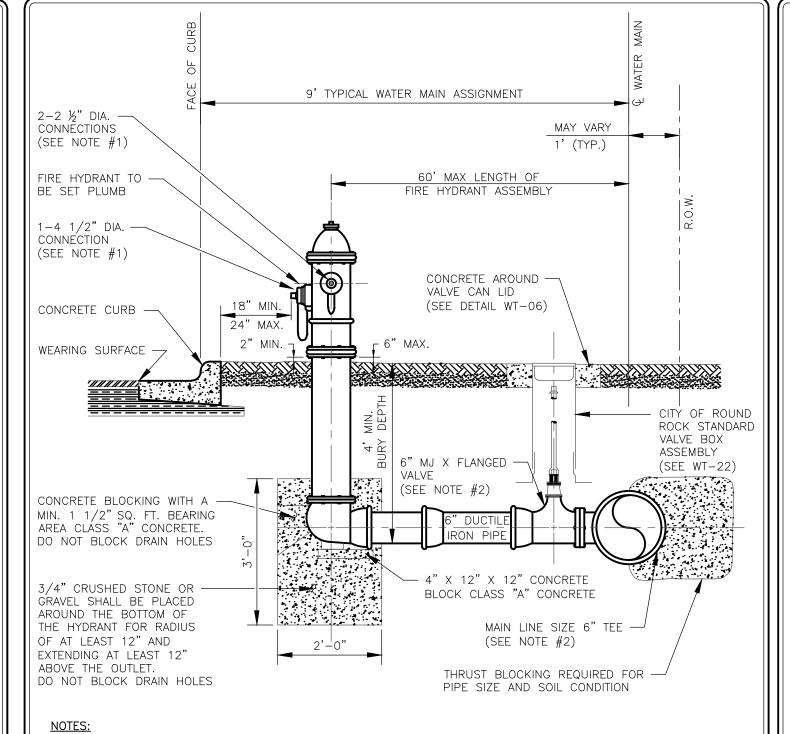


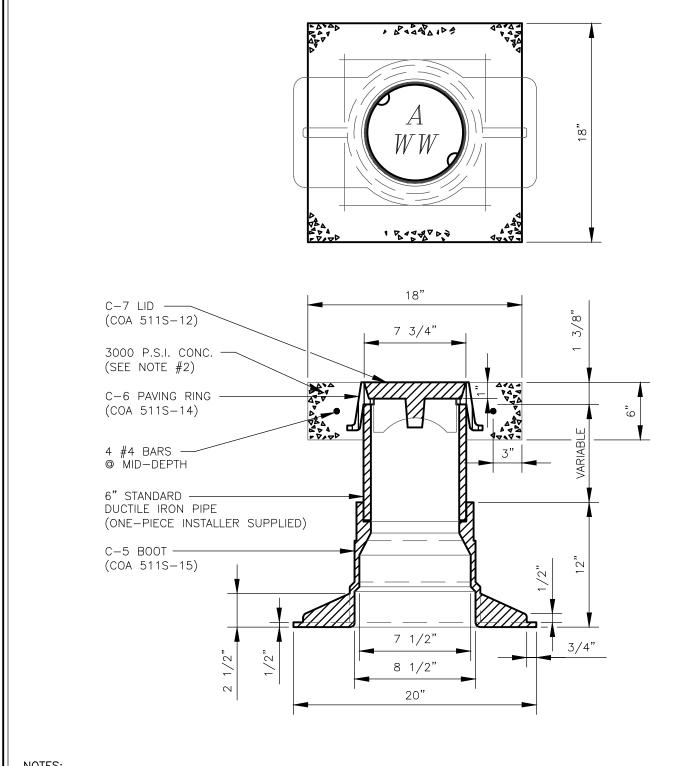


MARCH 2025 OB NUMBER

5658 SHEET 17 OF 28







NUMBERED CASTINGS STANDARDS SHOWN IN PARENTHESES ARE REFERENCES TO THE CITY OF AUSTIN STANDARDS

VALVE BOX ASSEMBLY DETAIL

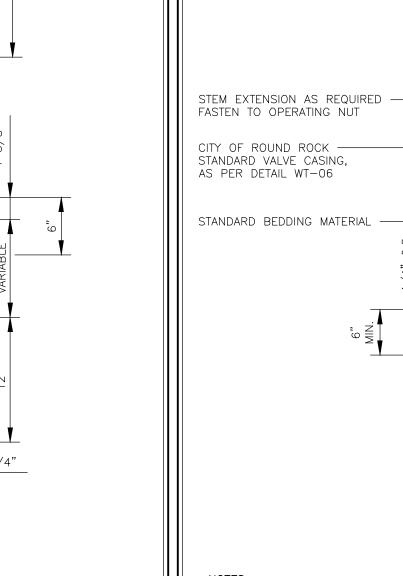
CITY OF ROUND ROCK | DRAWING NO: WT-06

2. DELETE CONCRETE AND REBAR WHEN VALVE IS WITHIN PAVED STREET.

APPROVED

03-01-18

DATE



ROUND ROCK TEX

TOP OF BOX LID TO BE -

FLUSH WITH FINISHED SURFACE

APPROVED

03 - 01 - 18

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. CITY OF ROUND ROCK DRAWING NO WT-11 VERTICAL VALVE

CITY OF ROUND ROCK

AS PER DETAIL WT-06

6" DUCTILE IRON PIPE.

OPERATING NUT

ONE PIECE CENTERED ON

COMPACT BACKFILL AROUND VALVE BOX, AS PER DETAIL WT-06

VERTICAL VALVE WRAPPED WITH

CONCRETE BLOCK UNDER BODY OF

FOR VALVES 10" AND SMALLER,

12" AND LARGER OR PRE-MIX

AS REQUIRED

CONCRETE SACKS CAN BE USED,

BURIED VALVES: 8" X 8" X 6" MINIMUM

12" X 12" X 6" MINIMUM FOR VALVES

Briga

8C

SUNRISE

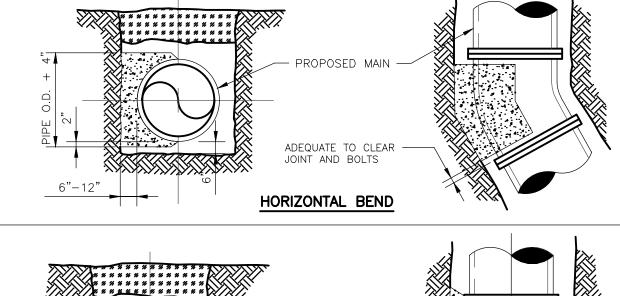
ATER

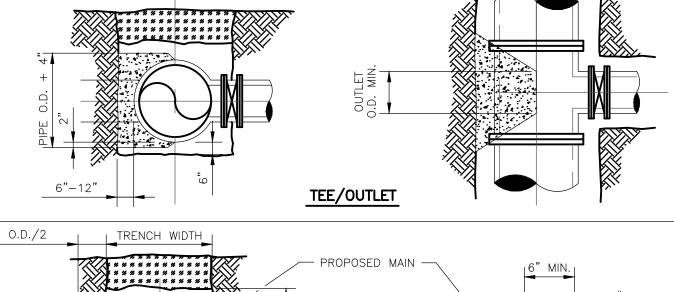
VELC

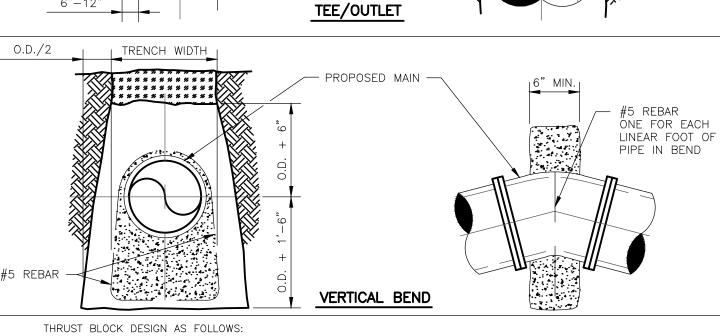
8 MIL. POLYETHYLENE FILM

STANDARD VALVE BOX RING,

DATE INSTALLATION DETAIL THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)







PRESSURE OF 150 P.S.I. (ACTUAL IF HIGHER) + 50% SURGE ALLOWANCE MAXIMUM SOIL BEARING:

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

1500 LBS./SQ. FT. CITY OF ROUND ROCK | DRAWING NO WT-25

CARLSON, BRIGANCE & DOERING, INC. ROUND ROCK TE.

MARCH 2025 OB NUMBER

3/21/2025

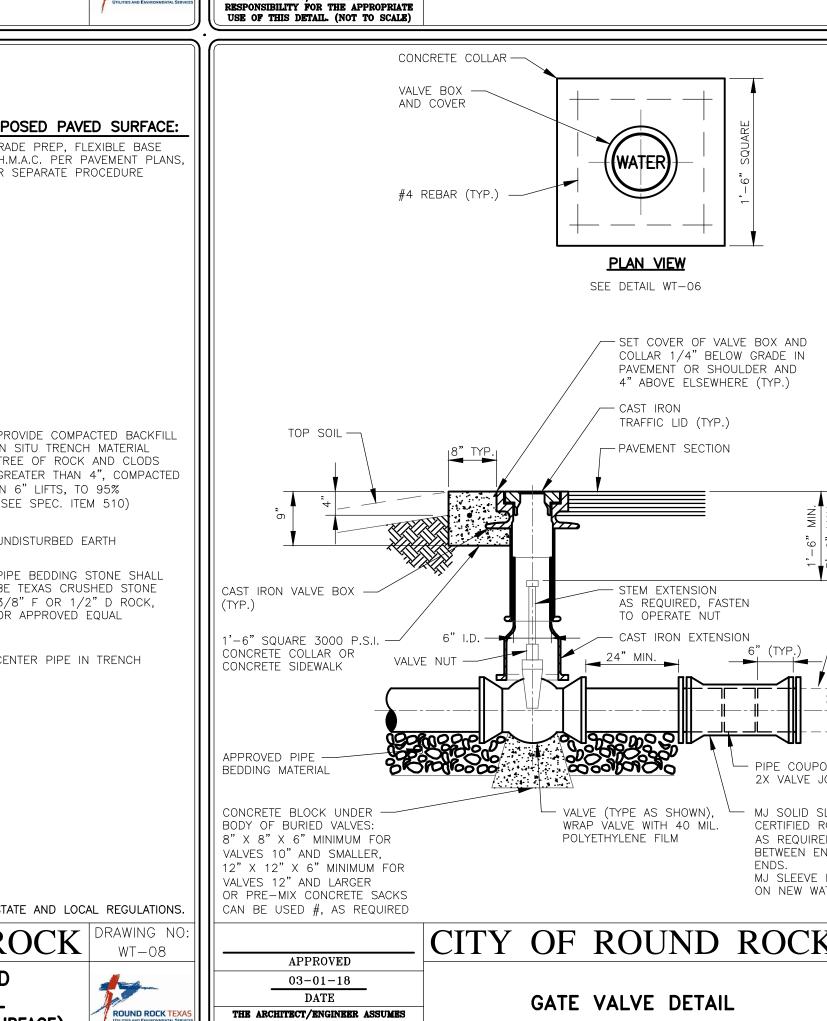
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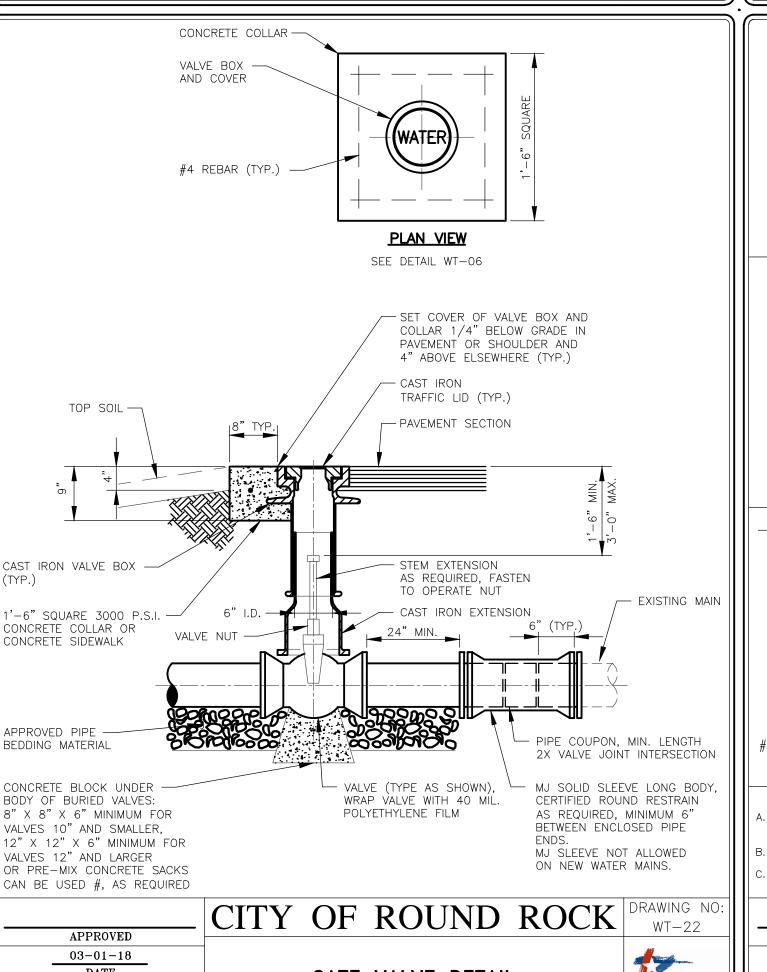
143643

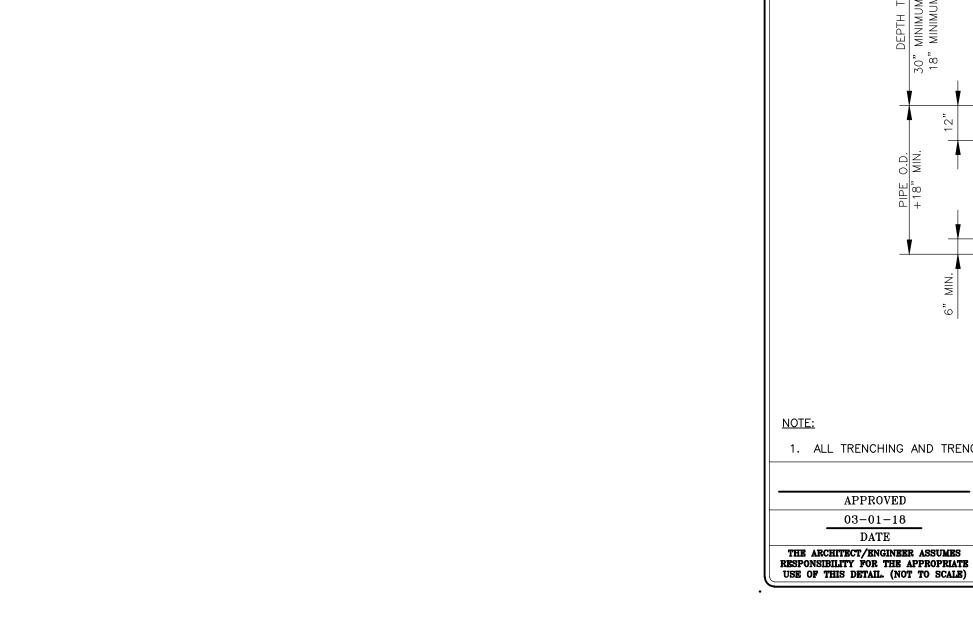
ID# F3791

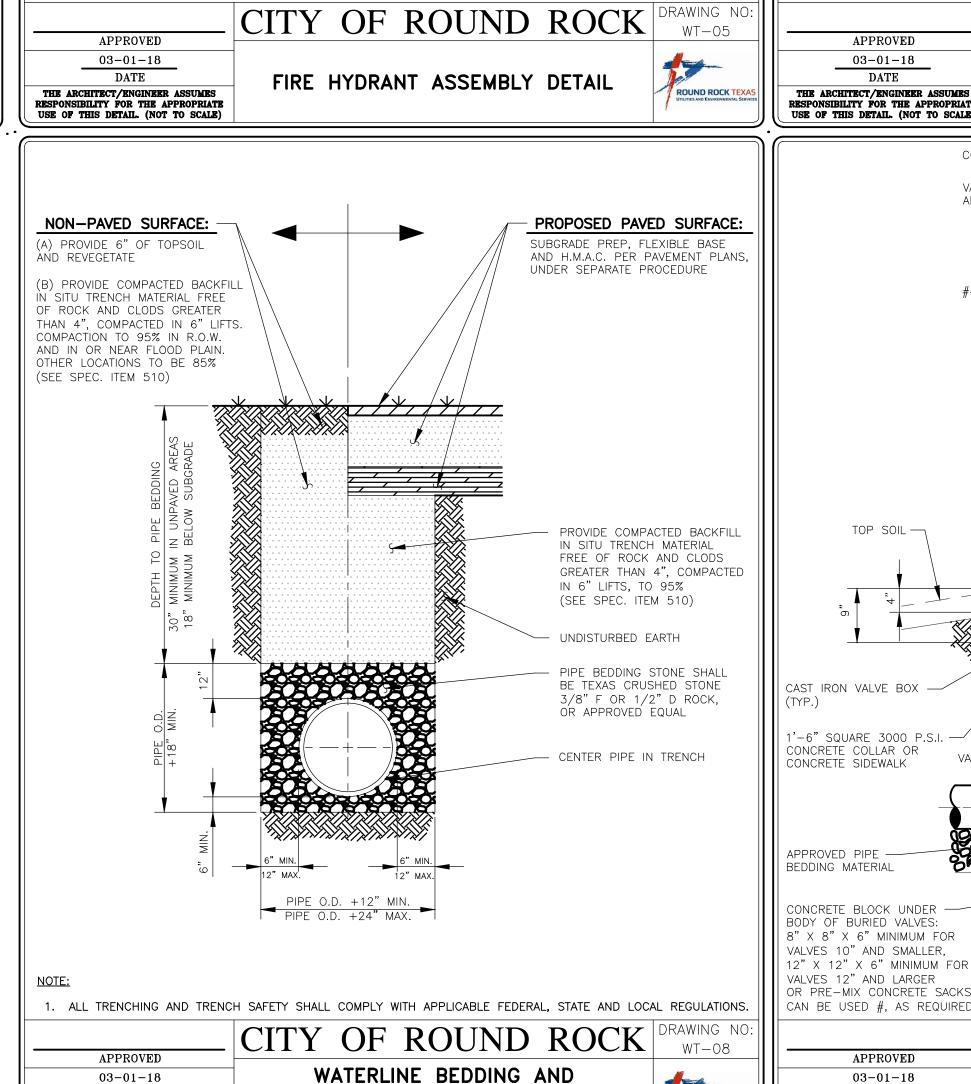
CHRISTIAN DOWDLE

SDP25-00003

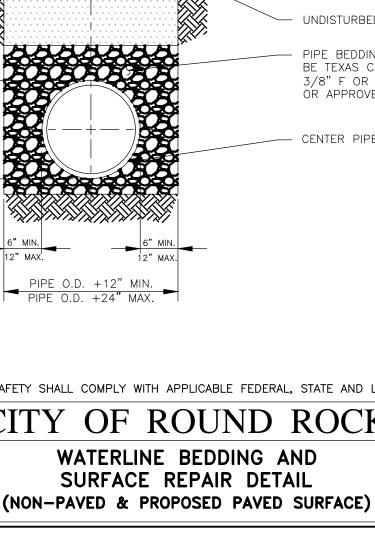








DATE



. ALL PIPE & FITTING TO BE WRAPPED WITH 40 PLASTIC MIL.

GATE VALVE DETAIL THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)

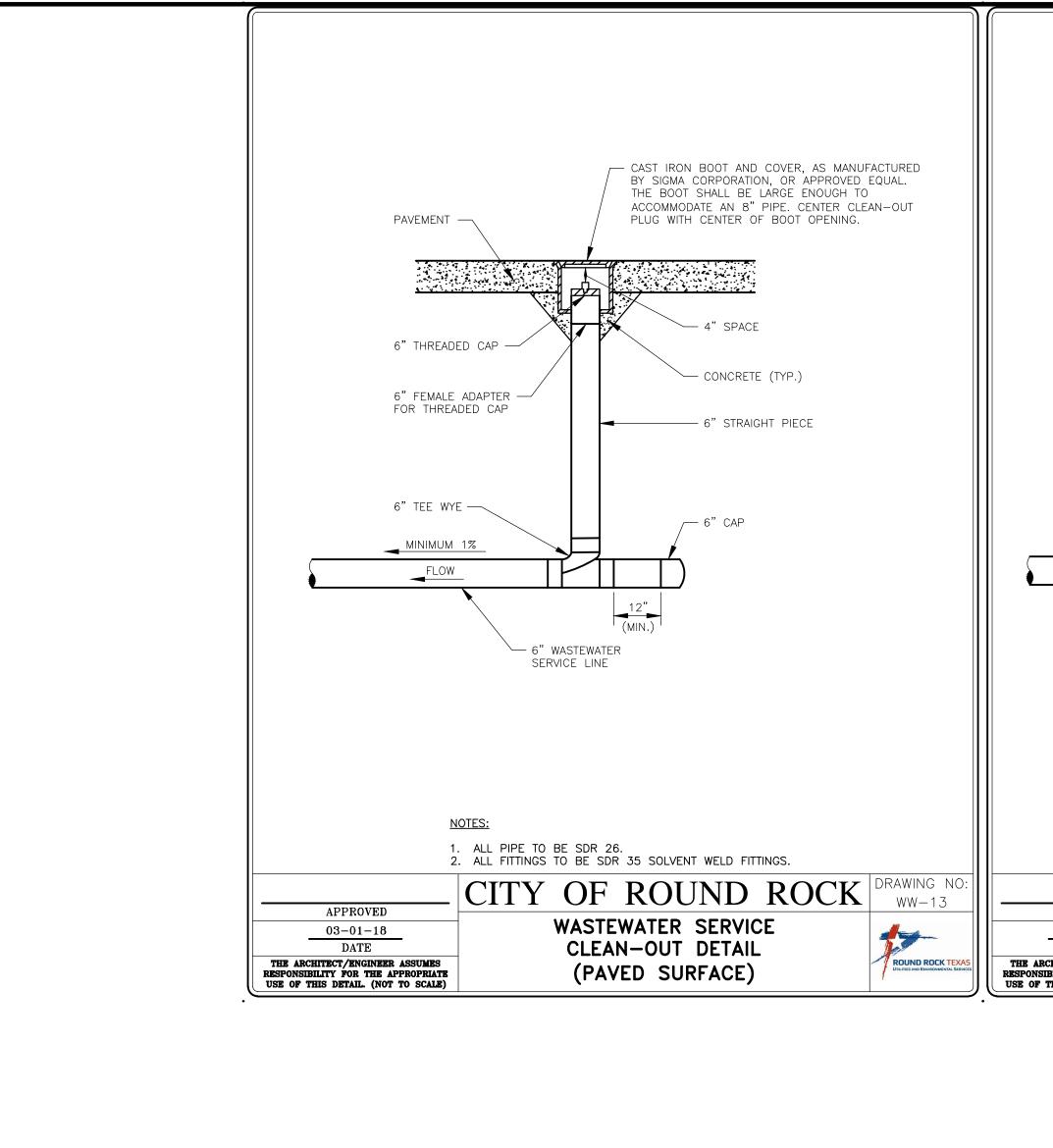
ROUND ROCK TEX

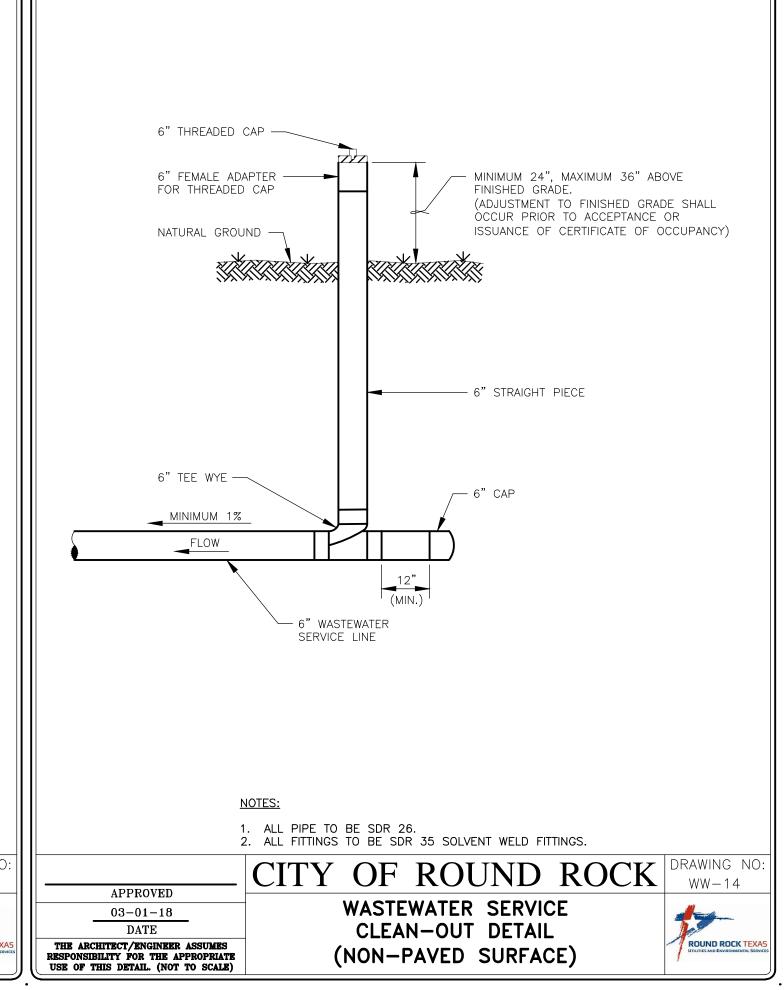
APPROVED 03-01-18 DATE THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)

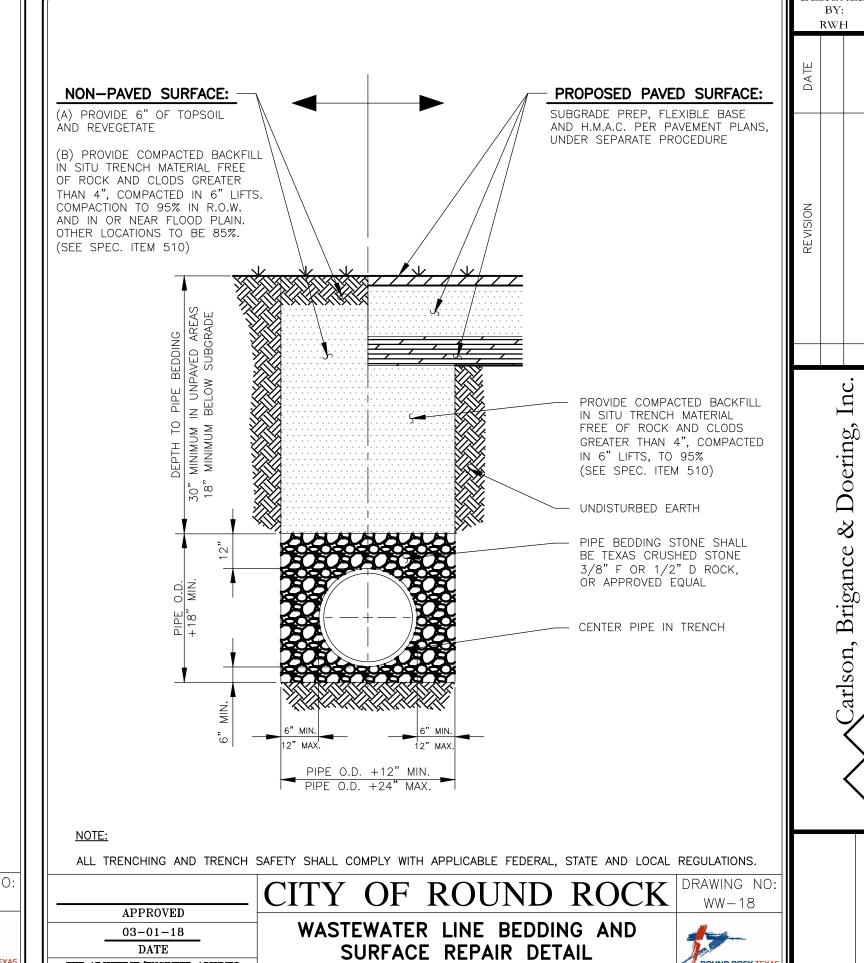
THRUST BLOCK DETAIL

5658

SHEET 18 OF 28







(NON-PAVED & PROPOSED PAVED SURFACE)

THE ARCHITECT/ENGINEER ASSUMES
RESPONSIBILITY FOR THE APPROPRIATE
USE OF THIS DETAIL. (NOT TO SCALE)

WASTEWATER DETA SUNRISE LOT 8C

DEVELOPMENT

ROUND ROCK TEXA





MARCH 2025 JOB NUMBER

5658

sнеет 19 ^{ОF} 28

SDP25-00003