

ANNUNCIATION MATERNITY HOME

At

3610 Shell Road Georgetown, Texas 78628

Water Pollution Abatement Plan Application

Williamson County

Submitted to:

TCEQ

Austin Regional Office

June 19, 2024

Halff AVO 56152.001



TBPELS Engineering Firm No. 312 13620 Briarwick Drive, Building C, Suite 100 Austin, TX 78729

Water Pollution Abatement Plan/Organized Sewage Collection System

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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

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

Technical Review

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

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Annunciation Maternity Home				2. Regulated Entity No.: 105199822					
3. Customer Name: John Ratcliff				4. Customer No.: 603174640					
5. Project Type: (Please circle/check one)	New Modification		Extension Exception		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)	Resider	ntial	Non-residential		8. Sit		e (acres):	23.68	
9. Application Fee:	\$6500.	00	10. Permanent I			BMP(s): Ba		Batch Detention	
11. SCS (Linear Ft.):			12. AST/UST (No			o. Tar	o. Tanks): N/A		
13. County:	William	ison	14. W	14. Watershed:				Berry Creek –	Lower Berry Creek

Application Distribution

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

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

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

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

	Sa	an 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	BulverdeFair Oaks RanchGarden RidgeNew BraunfelsSchertz	NA	San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.			
Jason Bass - Halff			
Print Name of Customer/Authorized Agent			
2	5/3/2024		
Signature of Customer/Authorized Agent	Date		

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

Section I General Information Form (TCEQ-0587)

General Information Form

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Jason Bass, P.E. Date: 4/29/2024 Signature of Customer/Agent: **Project Information** 1. Regulated Entity Name: Annunciation Maternity Home 2. County: Williamson 3. Stream Basin: San Gabriel River 4. Groundwater Conservation District (If applicable): N/A 5. Edwards Aquifer Zone: Recharge Zone Transition Zone 6. Plan Type: WPAP **AST** SCS **UST** Modification **Exception Request**

7.	Customer (Applicant):	
	Contact Person: John Ratcliff Entity: Annunciation Maternity Home Mailing Address: 3610 Shell Road City, State: Georgetown, TX Telephone: (512) 864-7755 Email Address: jratcliff66@yahoo.com	Zip: <u>78628</u> FAX:
8.	Agent/Representative (If any):	
	Contact Person: <u>Jason Bass, P.E.</u> Entity: <u>Halff</u> Mailing Address: <u>13620 Briarwick Drive, Building Color, State: Austin, TX</u> Telephone: <u>(512) 777-4615</u> Email Address: <u>JBass@halff.com</u>	<u>r, Suite 100</u> Zip: <u>78729</u> FAX:
9.	Project Location:	
	 ☐ The project site is located inside the city limits ☐ The project site is located outside the city limit jurisdiction) of Georgetown, TX. ☐ The project site is not located within any city's 	s but inside the ETJ (extra-territorial
10.	The location of the project site is described be detail and clarity so that the TCEQ's Regional s boundaries for a field investigation.	
	Get on I-35 N from N I-35 Frontage Road and of left onto TX-195 in about 1.6 miles. Turn le left onto American Elm Drive in about 0.5 miles. Maternity Home in 0.3 miles.	ft onto Shell Road in about 2.2 miles. Turi
11.	Attachment A – Road Map. A road map show project site is attached. The project location are the map.	
12.	Attachment B - USGS / Edwards Recharge Zon USGS Quadrangle Map (Scale: 1" = 2000') of the map(s) clearly show:	
	 ☑ Project site boundaries. ☑ USGS Quadrangle Name(s). ☑ Boundaries of the Recharge Zone (and Trangle Drainage path from the project site to the left) 	
13.	The TCEQ must be able to inspect the project	

	the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment.
	Survey staking will be completed by this date:
14. 🔀	Attachment C – Project Description. Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:
	 ✓ Area of the site ✓ Offsite areas ✓ Impervious cover ✓ Permanent BMP(s) ✓ Proposed site use ✓ Site history ✓ Previous development ✓ Area(s) to be demolished
15. Ex	isting 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:
Pro	hibited Activities
16. 🔀	I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:
	 Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
	(2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
	(3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;
	(4) The use of sewage holding tanks as parts of organized collection systems; and
	(5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).
	(6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.
17. 🔀	I am aware that the following activities are prohibited on the Transition Zone and are

- (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 f	ree for the plan(s) is based on:
w Fo fo no A	or a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur. or an Organized Sewage Collection System Plan or Modification, the total linear potage of all collection system lines. or a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total umber of tanks or piping systems. I request for an exception to any substantive portion of the regulations related to the rotection of water quality. I request for an extension to a previously approved plan.
fe co	pplication fees are due and payable at the time the application is filed. If the correct ee is not submitted, the TCEQ is not required to consider the application until the orrect fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been ent 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)
no co co	ubmit one (1) original and one (1) copy of the application, plus additional copies as eeded for each affected incorporated city, groundwater conservation district, and ounty in which the project will be located. The TCEQ will distribute the additional opies to these jurisdictions. The copies must be submitted to the appropriate regional ffice.
· · · · · · · · · · · · · · · · · · ·	lo person shall commence any regulated activity until the Edwards Aquifer Protection lan(s) for the activity has been filed with and approved by the Executive Director.





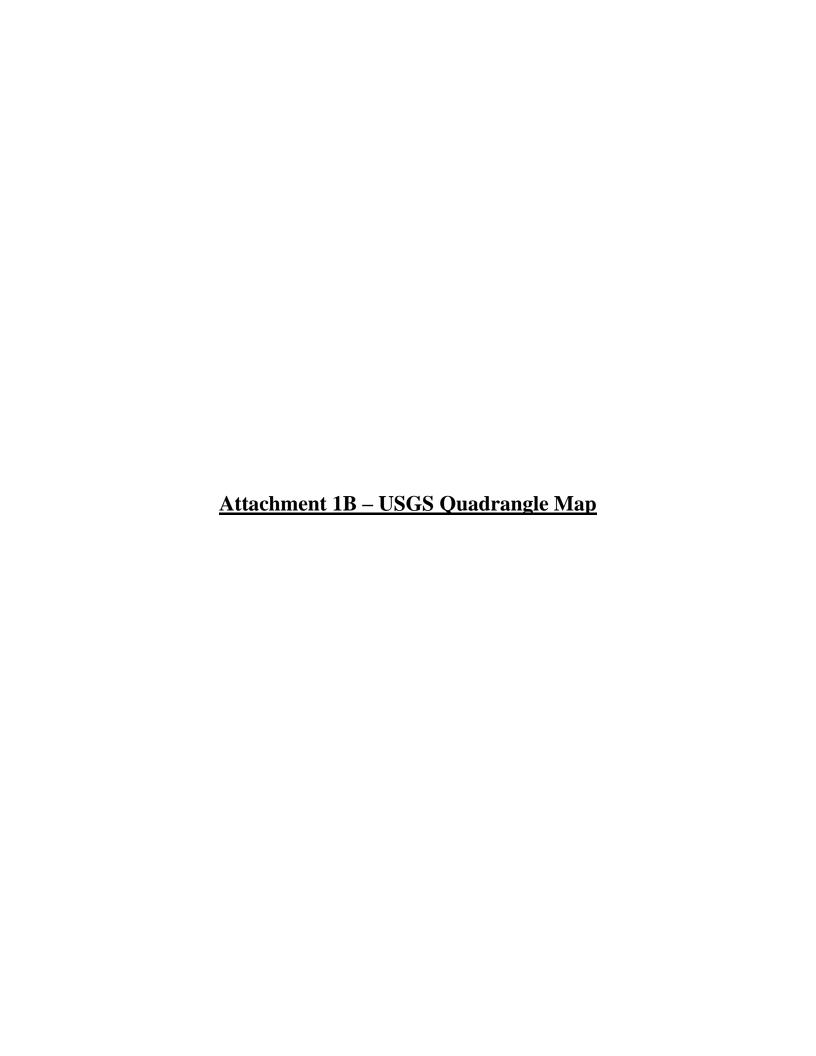
N.T.S

Annunciation Maternity Home

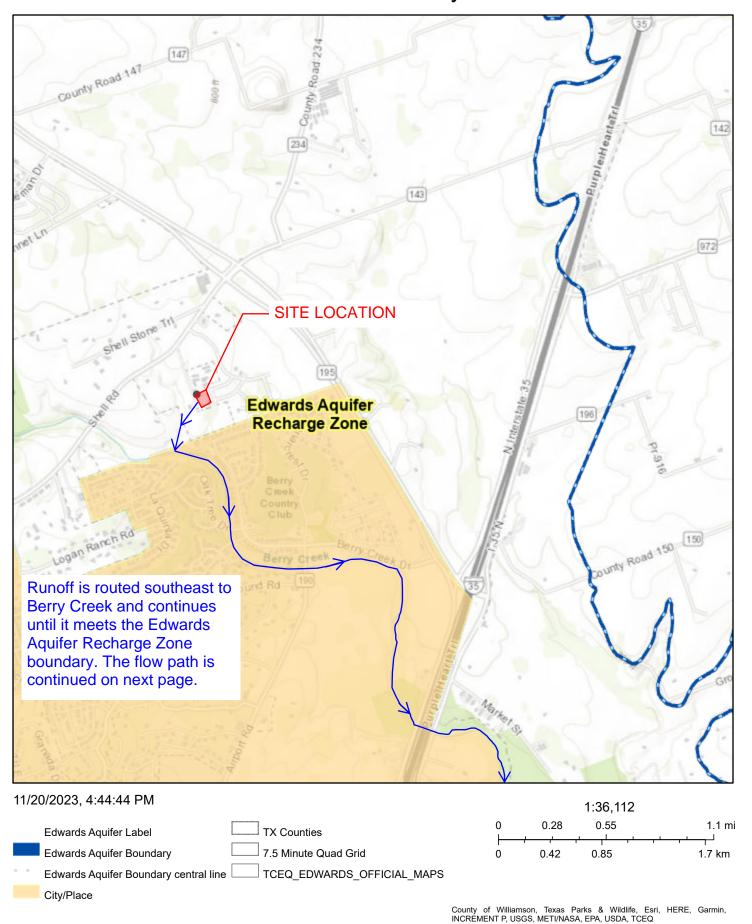
3610 Shell Road Georgetown, Texas 78628 AVO #56152.001

Directions from TCEQ Austin Regional Office

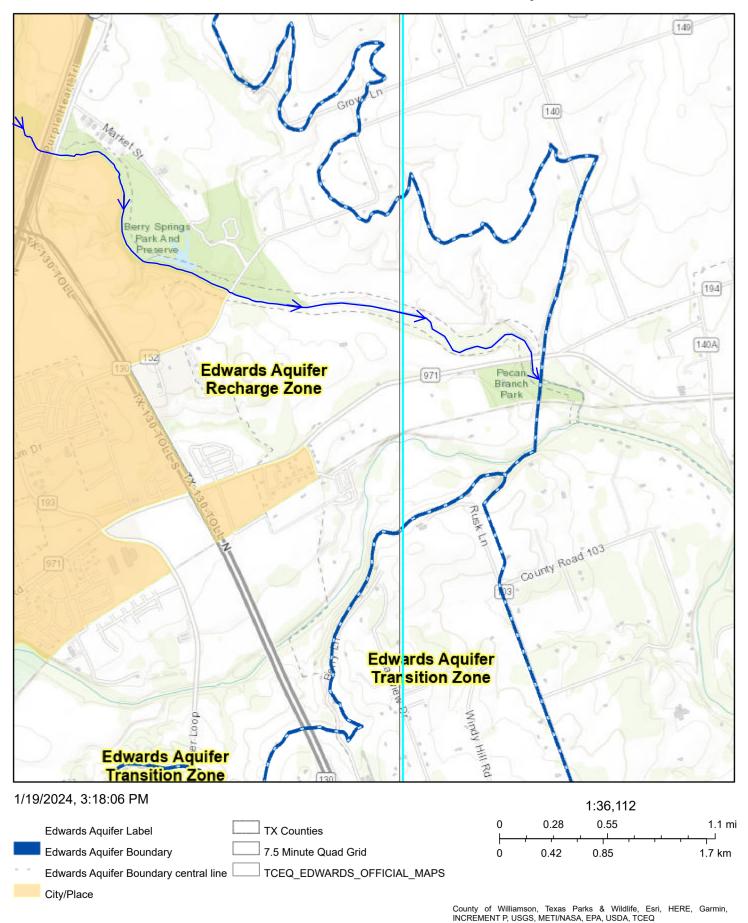
- Get on I-35 N from N I-35 Frontage Rd. and continue to Exit 266 (18.9 Miles)
- Turn left on TX-195 (1.6 miles)
- Turn left onto Shell Road (2.1 Miles)
- Turn left onto American Elm Drive (0.5 Miles)
- Turn left into drive
- Site is on the right



Annunciation Maternity Home



Downstream - Annunciation Maternity Home



<u>Attachment 1C – Project Description</u>

The 23.68-acre site containing the Annunciation Maternity Home facility is located southwest State Highway 195, approximately 1,500 feet south of the intersection of Shell Road and American Elm Drive and on the west side of American Elm Drive. The project will consist of six new adult homes, a community center and an infant development center with associated drives, parking, sidewalks, drainage, utilities, and water quality BMPs. The table below includes the site's impervious cover areas.

Impervio	ous Cover	
Building	36,473 S.F.	0.84 AC.
Pavement	90,454 S.F.	2.08 AC.
Sidewalk	25,819 S.F.	0.59 AC.

The existing site is partially developed with several existing buildings with associated parking, sidewalks, and utilities in the northern portion of the site; the remainder of the property is undeveloped. Approximately 17 acres of the property generally slopes from north to south with an average grade of approximately 2%. The rest of the site generally slopes from east to west at an average grade of 1%. The project is in the City of Georgetown ETJ and located over the Edwards Aquifer Recharge Zone. Development of this project is designed in accordance with the City of Georgetown Unified Development Code (UDC) and the TCEQ RG-348 Technical Guidance Manual.

Temporary water quality controls will be provided during construction of the site improvements and will consist of silt fence, rock riprap, tree protection, concrete truck washout pits, and stabilized construction entrances.

Permanent water quality controls will be provided for this site by a batch detention pond that will be in the southern portion of the site. The pond will utilize the bottom 1.1 feet of depth for batch detention storage for water quality. The water quality is controlled by a concrete overflow weir and an 8" circular orifice with the orifice invert set at the batch water quality elevation. The water quality volume stored below the orifice will have a controlled discharge by a valve connected to a perforated riser pipe. This discharge will merge with the weir discharge and exit the site. The pond is designed to remove 80% TSS from the contributing drainage basin per TCEQ mandates.

Wastewater from the site will be routed to a proposed On-Site Sewage Facility. The wastewater from the site will produce approximately 2,764 gallons per day in wet weather conditions. Approximately 179 linear feet of 6-inch PVC pipe and 538 linear feet of 8-inch PVC pipe will be constructed through the Annunciation Maternity Home site to the proposed septic field. Therefore, an Organized Sewage Collection System Application is not required with this Water Pollution Abatement Plan Application.

Water for the site will be provided by two existing 8-inch water lines, one located north of the site just east of American Elm Drive and the other located where Monterey Oak Trail is cut off at the site's property boundary. The proposed water main "WL-A" consists of approximately 2,238 linear feet of 8" PVC pipe. Approximately 402 linear feet of 8" ductile iron pipe, "WL-B", will tie into WL-A from which 6" ductile iron fire services and 1.5" domestic will service each of the proposed adult homes. Three fire hydrant assemblies are also proposed with the water improvements.

The partially developed site will be cleared and grubbed for construction. The items being demolished include two existing culverts on American Elm Drive, approximately 27,200 SF of concrete pavement, 2,980 SF of miscellaneous concrete, 3,050 SF of concrete sidewalk, approximately 10,450 total SF of gravel, and four trees. Other items being removed include an irrigation control valve, a wastewater cleanout, some overhead electric lines, and some fencing. See sheets 4-8 of the Construction Plans for the Existing Conditions & Demolition Plans.

Section II Geologic Assessment Form (TCEQ-0585)

Geologic Assessment

Texas Commission on Environmental Quality

For Regulated Activities on The Edwards Aquifer Recharge/transition Zones and Relating to 30 TAC §213.5(b)(3), Effective June 1, 1999

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

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

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Telephone: 512-535-4368

Date: 01/30/2024 Fax: 512-535-4451

Representing: Capitol Environmental, Inc TBPG Firm Registration #50389 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:

Regulated Entity Name: Annunciation Maternity Home (AMH)

Project Information

Print Name of Geologist: D Bryan Pairsh

1. Date(s) Geologic Assessment was performed: January 11, 2024

Recharge Zone
Transition Zone
Contributing Zone within the Transition Zone



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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Eckrant-Rock outcrop (ErE), rolling	D	1-10'
Georgetown stony clay loam (GsB), 1- 3% slopes	D	1-10'
Eckrant extremely stoney clay (EeB) 0-3% slopes	D	1-10'

Soil Name	Group*	Thickness(feet)

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

Applicant's Site Plan Scale: 1" = 90' Site Geologic Map Scale: 1" = 90'

Site Soils Map Scale (if more than 1 soil type): 1" = 90'

- 9. Method of collecting positional data:
 - Global Positioning System (GPS) technology.

Other method(s). Please describe method of data collection:
10. $igotimes$ The project site and boundaries are clearly shown and labeled on the Site Geologic Map
11. $igwidz$ 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. \square The Recharge Zone boundary is shown and labeled, if appropriate.
14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.
 There are (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.) The wells are not in use and have been properly abandoned. The wells are not in use and will be properly abandoned. The wells are in use and comply with 16 TAC Chapter 76. There are no wells or test holes of any kind known to exist on the project site.
Administrative Information

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

Geologic Assessment Annunciation Maternity Home (AMH) 3610 Shell Road Georgetown, Williamson, Texas

Capitol Environmental, Inc. Registered Geosciences Firm Texas Registration No. 50389

Attachment A – Geologic Table

	EVALUATION PHYSICAL SETTING	12	!	TOPOGRAPHY	TOPOGRAPHY	TOPOGRAPHY	тороскарну	тородварну Ніштор Ніштор	TOPOGRAPHY Hilltop Hilltop	TOPOGRAPHY Hilltop Hilltop Hilltop	TOPOGRAPHY Hilltop Hilltop Hilltop Hilltop	TOPOGRAPHY Hilltop Hilltop Hilltop Hilltop Hilltop	TOPOGRAPHY Hilltop Hilltop Hilltop Hilltop Hilltop Hilltop	Hilltop Hilltop Hilltop Hilltop Hilltop Hilltop Hilltop Hilltop Hilltop	Hilltop	Hilltop	Hilltop	Hilltop	Hilltop	Hilltop	Hilltop
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	2B POINTS	30	20	20	20	2	30	30	20	2	30
*DATUM: NAD 83 StatePlane Texas Central	TYPE 28	Cave	Solution cavity	Solution-enlarged fracture(s)	Fault	Other natural bedrock features	Manmade feature in bedrock	Swallow hole	Sinkhole	Non-karst closed depression	Zone, clustered or aligned features
*DATUM: Î	2A TYPE	O	SC	SF	ш	0	MB	SW	R	8	Z

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

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

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

1/30/2024 Date:

Sheet:

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

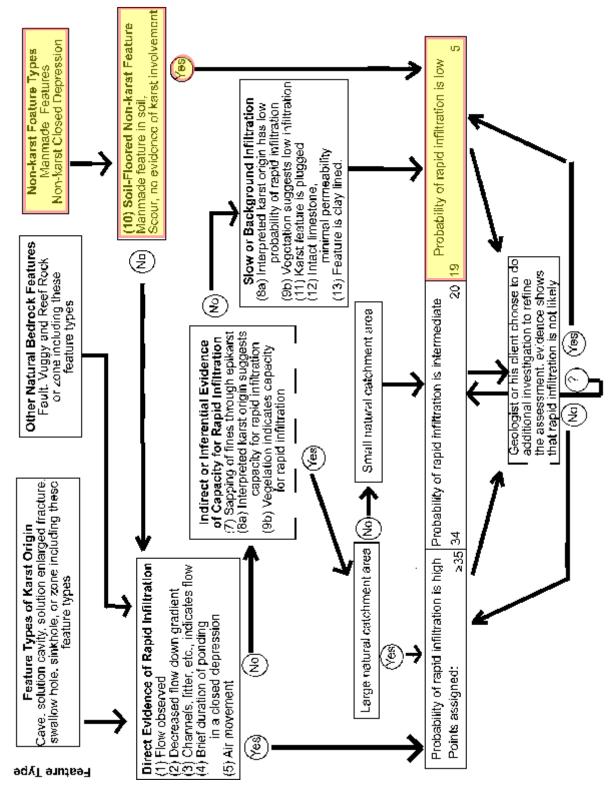
Feature F-1: Surface Outcrop

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Figure 1: Assessing the Probabily that Kapid Intitration May Occur at a Feature

Feature: F-2 (Non-karst Closed Depression)

Figure 1: Assessing the Probabily that Kapid Intitration May Occur at a Feature



Feature F-3, F-4, F-5, F-6, F-7, F-8, F-9: Surface Outcrop

Figure 1: Assessing the Probabily that Kapid Intitration May Occur at a Feature

Scour, no evidence of karst involvement (10) Soil-Floored Non-karst Feature Manmade feature in soil, Non-karst Closed Depression Non-karst Foature Types Probability of rapid infiltration is low Manmade Features (9b) Vogotation suggests low infiltration (11) Karst feature is plugged Slow or Background Infiltration (8a) Interpreted karst origin has low probability of rapid infiltration minimal permeability (13) Feature is clay lined. (12) Intact limestone, Other Natural Bedrock Features 2 Fault. Vuggy and Reef Rock or zone including these Geologist or his client choose to do 9 the assessment, evidence shows additional investigation to refine that rapid infiltration is not likely 2 Probability of rapid infiltration is high | Probability of rapid infiltration is intermediate feature types Small natural catchment area -1882 Sapping of fines through epikarst of Capacity for Rapid Infiltration Indirect or Inferential Evidence (9b) Vegetation indicates capacity for rapid infiltration 2 **Ses** Cave, solution cavity, solution enlarged fracture, swallow hole, sinkhole, or zone including these Feature Types of Karst Origin 8 Large natural catchment area <u>8</u> Direct Evidence of Rapid Infiltration Channels, litter, etc., indicates flow feature types (2) Decreased flow down gradient(3) Channels, litter, etc., indicates(4) Brief duration of ponding in a closed depression (5) Air movement \$ € Points assigned: (1) Flow observed Zee Feature Type

FEATURE (S-44) - Stream

Scour, no evidence of karst involvement (10) Soil-Floored Non-karst Feature Mannade feature in soil, Non-karst Closed Depression Non-karst Foature Types Probability of rapid infiltration is low Manmade Features (9b) Vogotation suggests low infiltration (11) Karst feature is plugged Slow or Background Infiltration (8a) Interpreted karst origin has low probability of rapid infiltration minimal permeability (13) Feature is clay lined. (12) Intact limestone, Other Natural Bedrock Features 2 Fault. Vuggy and Reef Rock or zone including these Geologist or his client choose to do 9 the assessment, evidence shows additional investigation to refine that rapid infiltration is not likely (§ Probability of rapid infiltration is high | Probability of rapid infiltration is intermediate feature types Small natural catchment area - (See) of Capacity for Rapid Infiltration
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Figure 1: Assessing the Probabily that Kapid Intitration May Occur at a Feature

Feature (F-11): Excavation (Test/ Borrow Pit)

Figure 1: Assessing the Probabily that Kapid Infitration May Occur at a Feature

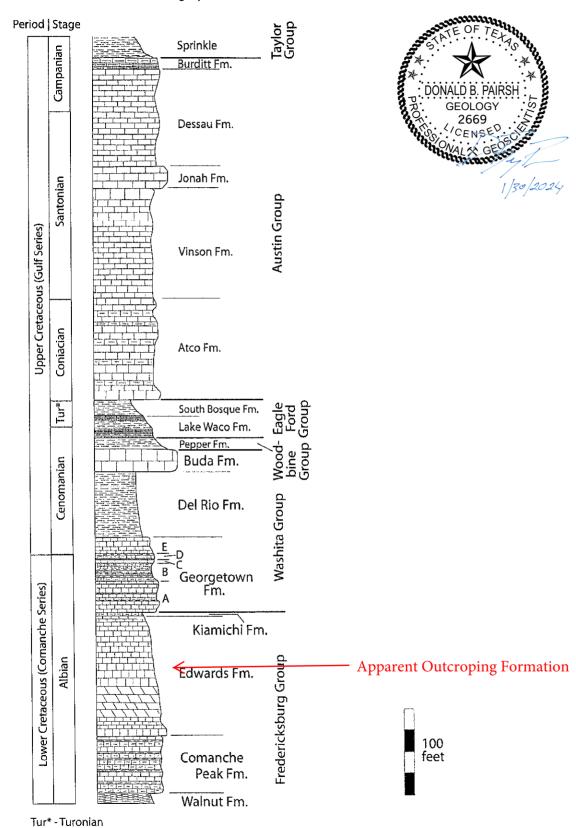
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Geologic Assessment Annunciation Maternity Home (AMH) 3610 Shell Road Georgetown, Williamson, Texas

Capitol Environmental, Inc. Registered Geosciences Firm Texas Registration No. 50389

Attachment B – Stratigraphic Column

Generalized Stratigraphic Column of the Round Rock Area



urce:

Source:
Bedrock Geology of Round Rock and Surrounding Areas, Williamson and Travis Counties, Texas By: Todd B. Housh

Geologic Assessment Annunciation Maternity Home (AMH) 3610 Shell Road Georgetown, Williamson, Texas

Capitol Environmental, Inc. Registered Geosciences Firm Texas Registration No. 50389

Attachment C - Site Geology

Capitol Environmental, Inc. Registered Geosciences Firm Texas Registration No. 50389

NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY ANNUNCIATION MATERNITY HOME (AMH) 23+ ACRE TRACT GEORGETOWN, WILLIAMSON COUNTY, TEXAS 01/11/2024

LOCATION

The subject site is an approximate 23+ acres, more or less, tract of land located at 3610 Shell Road in Georgetown, Williamson County, Texas at approximately 30.7160° North Latitude and approximately -97.6757° West Longitude. This location lies within the designated Edwards Aquifer Recharge Zone. Therefore, future intended development of the site must conform to criteria in accordance with the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Protection Program Rules in accordance with Title 30 of the Texas Administrative Code, Section 213 (30 TAC§ 213).

EXPLANATION OF ASSESSMENT

This assessment follows general guidelines contained in Texas Commission on Environmental Quality (TCEQ) "Instruction for Geologist for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones" (TCEQ Guidance 0585). The site is located on an area of the recharge zone that may contain karst features formed by selective solutioning of limestone minerals by water. Karst features may be expressed as surface features but more commonly tend to persist with depth. This assessment documents the presence or absence of site conditions that were present at the time the site visit that was performed on 01/11/2024. The site visit consisted of a walk through survey that consisted of a non-intrusive visual observation or survey of readily accessible, easily visible surface property conditions that were present on the subject property at the time of the site visit. Intrusive subsurface testing such as excavation, cave mapping, infiltrometer test, geophysical studies or tracer studies are not required for the geologic assessment of any feature in accordance with this practice.

A sensitive geologic or manmade feature, for the purpose of this practice is a feature on the recharge zone or transition zone of the Edwards Aquifer with a <u>superficial</u> appearance that suggest a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer and that has the apparent potential for rapid infiltration into the subsurface.

PHYSICAL DESCRIPTION OF SITE

The subject site is currently a partially developed 23-acre tract operated as Annunciation Maternity Home (AMH)..

SURFACE DRAINAGE

After reviewing the project site topographic survey, storm water runoff appears to flow toward the Southwest.

Geologic Assessment Annunciation Maternity Home (AMH) 3610 Shell Road Georgetown, Williamson, Texas Capitol Environmental, Inc. Registered Geosciences Firm Texas Registration No. 50389

SOIL DESCRIPTION

The site soil is composed of:

Eckrant extremely stony clay, 0 to 3 percent slopes (EeB), Hydrologic Group D

The Eckrant series consists of soils that are very shallow and shallow to indurated limestone bedrock and interbedded cryptocrystalline quartz, chert, marl, and chalk. These well drained soils formed in residuum derived from limestone. These nearly level to very steep soils are on summits, shoulders, and backslopes of ridges on dissected plateaus. Slope ranges from 1 to 60 percent. Mean annual air temperature is about 20 degrees C (68 degrees F), and the mean annual precipitation is about 668 mm (26 in). Well drained. Permeability is moderately slow. Runoff is very low on 1 to 3 percent slopes, low on 3 to 5 percent slopes, medium on 5 to 20 percent slopes, and high on 20 to 60 percent slopes.

Eckrant-Rock outcrop complex, rolling (ErE), Hydrologic Group D

The Eckrant series consists of soils that are very shallow and shallow to indurated limestone bedrock and interbedded cryptocrystalline quartz, chert, marl, and chalk. These well drained soils formed in residuum derived from limestone. These nearly level to very steep soils are on summits, shoulders, and backslopes of ridges on dissected plateaus. Slope ranges from 1 to 60 percent. Mean annual air temperature is about 20 degrees C (68 degrees F), and the mean annual precipitation is about 668 mm (26 in). Well drained. Permeability is moderately slow. Runoff is very low on 1 to 3 percent slopes, low on 3 to 5 percent slopes, medium on 5 to 20 percent slopes, and high on 20 to 60 percent slopes.

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

The Georgetown series consists of moderately deep, well drained, very slowly permeable soils that have formed over indurated limestone of Cretaceous age. These soils occur on nearly level to very gently sloping dissected plateaus. Slope ranges from 0 to 3 percent. Mean annual air temperature is about 19 degrees C (66 degrees F), and mean annual precipitation is about 864 mm (34 in). Well drained. Runoff is very high. Permeability is very slow.

GEOLOGY

The site is located on the:

Edwards Limestone (Ked)

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

STRUCTURAL TREND and FEATURES:

The subject site is located on the Edwards Plateau within the Balcones / Ouachita structural province in central Texas. The Balcones / Ouachita structural province is an arcuate band of mostly down-to-the-coast normal faults that sub-parallels the Gulf of Mexico. In Williamson County, the regional structural trend of the Balcones / Ouachita province is generally southwest to northeast.

(Source: "Lineament Analysis and Inference of Geologic Structure-Examples from the Balcones/Ouachita Trend of Texas." Curan, Woodfruff, Jr, and Thompson, 1982)

The site is <u>not</u> located in the vicinity of mapped regional faulting. No surface expressions of local structural features were observed during this assessment.

SITE SPECIFIC GEOLOGIC FEATURE DESCRIPTIONS Identified 01/11/2024

To the extent that surface property features were readily accessible and observable at the time the site was evaluated on 01/11/2024 no geologic features were identified on the subject tract of land that has observed potential to affect recharge to the Edwards Aquifer except for the following:

F-1 O: Other Natural Bedrock Feature - Surface Out Crop: This feature is a weathered limestone surface located in a zone of apparent Epikarst. Epikarst is used herein to identify the zone of weathering at the upper surface of a limestone that includes the solutionally modified (karren) bedrock surface and the overlying regolith. The extent of weathering and dissolution within the Epikarst will diminish with depth. This feature, as observed at the time of the assessment, is relatively shallow, soil floored with evidence of activity around opening indicative of an animal burrow.

Conditions observed in connection with this feature are not believed to persist in the subsurface at depth and do not appear to have a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer. Therefore, this feature is <u>not</u> identified as a sensitive feature at this time.

F-2 CD: Closed Depression. This feature appears to be a natural, soil floored topographic depression. Closed Depressions are immature karst features that are associated with surficial weathering of limestone or the weathered zone at the soil/bedrock interface. This Closed Depressions, as observed at the time of the assessment, is located in a zone of apparent Epikarst. Epikarst is used herein to identify the zone of weathering at the upper surface of a limestone that includes the solutionally modified (karren) bedrock surface and the overlying regolith. The extent of weathering and dissolution within the Epikarst will diminish with depth.

Surface conditions observed in connection with this feature are not believed to persist in the subsurface at depth and do not appear to have a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer. Therefore, this feature is not identified as a sensitive feature at this time.

<u>F-3 O</u>: Other Natural Bedrock Feature - Surface Out Crop: This feature appears to be a localized surface area of enhanced solutioning associated with fractured slabs or blocks of limestone in the weathering profile. Dis-solution of limestone in connection with this feature appears to have been controlled by localized bedding and shallow fracturing of exposed limestone bedrock located in a zone of apparent Epikarst. Epikarst is used herein to identify the zone of weathering at the upper

surface of a limestone that includes the solutionally modified (karren) bedrock surface and associated regolith. The extent of weathering and dissolution diminishes with depth at this feature and, when probed with a rod, terminates in apparent consolidated bedrock. This feature, as observed at the time of the assessment, has evidence of activity around an opening indicative of an animal burrow.

Conditions observed in connection with this feature are not believed to persist in the subsurface at depth and do not appear to have a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer. Therefore, this feature is <u>not</u> identified as a sensitive feature at this time.

<u>F-4 O</u>: Other Natural Bedrock Feature - Surface Out Crop: This feature is a weathered limestone surface located in a zone of apparent Epikarst. Epikarst is used herein to identify the zone of weathering at the upper surface of a limestone that includes the solutionally modified (karren) bedrock surface and the overlying regolith. The extent of weathering and dissolution within the Epikarst will diminish with depth. This feature, as observed at the time of the assessment, is relatively shallow, soil floored with evidence of activity around opening indicative of an animal burrow.

Conditions observed in connection with this feature are not believed to persist in the subsurface at depth and do not appear to have a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer. Therefore, this feature is not identified as a sensitive feature at this time.

<u>F-5 O</u>: Other Natural Bedrock Feature - Surface Out Crop: This feature is a weathered limestone surface located in a zone of apparent Epikarst. Epikarst is used herein to identify the zone of weathering at the upper surface of a limestone that includes the solutionally modified (karren) bedrock surface and the overlying regolith. The extent of weathering and dissolution within the Epikarst will diminish with depth. This feature, as observed at the time of the assessment, is relatively shallow, soil floored with evidence of activity around opening indicative of an animal burrow.

Conditions observed in connection with this feature are not believed to persist in the subsurface at depth and do not appear to have a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer. Therefore, this feature is <u>not</u> identified as a sensitive feature at this time.

<u>F-6 O</u>: Other Natural Bedrock Feature - Surface Out Crop: This feature is a weathered limestone surface located in a zone of apparent Epikarst. Epikarst is used herein to identify the zone of weathering at the upper surface of a limestone that includes the solutionally modified (karren) bedrock surface and the overlying regolith. The extent of weathering and dissolution within the Epikarst will diminish with depth. This feature, as observed at the time of the assessment, is relatively shallow, soil floored with evidence of activity around opening indicative of an animal burrow.

Conditions observed in connection with this feature are not believed to persist in the subsurface at depth and do not appear to have a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer. Therefore, this feature is not identified as a sensitive feature at this time.

F-7 O: Other Natural Bedrock Feature - Surface Out Crop: This feature is a weathered limestone surface located in a zone of apparent Epikarst. Epikarst is used herein to identify the zone of weathering at the upper surface of a limestone that includes the solutionally modified (karren) bedrock surface and the overlying regolith. The extent of weathering and dissolution within the Epikarst will diminish with depth. This feature, as observed at the time of the assessment, is relatively shallow, soil floored with evidence of activity around opening indicative of an animal burrow.

Conditions observed in connection with this feature are not believed to persist in the subsurface at depth and do not appear to have a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer. Therefore, this feature is not identified as a sensitive feature at this time.

<u>F-8 O</u>: Other Natural Bedrock Feature - Surface Out Crop: This feature appears to be a localized surface area of enhanced solutioning associated with fractured slabs or blocks of limestone in the weathering profile. Dis-solution of limestone in connection with this feature appears to have been controlled by localized bedding and shallow fracturing of exposed limestone bedrock located in a zone of apparent Epikarst. Epikarst is used herein to identify the zone of weathering at the upper surface of a limestone that includes the solutionally modified (karren) bedrock surface and associated regolith. The extent of weathering and dissolution diminishes with depth at this feature and, when probed with a rod, terminates in apparent consolidated bedrock. This feature, as observed at the time of the assessment, has evidence of activity around an opening indicative of an animal burrow.

Conditions observed in connection with this feature are not believed to persist in the subsurface at depth and do not appear to have a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer. Therefore, this feature is not identified as a sensitive feature at this time.

<u>F-9 O</u>: Other Natural Bedrock Feature - Surface Out Crop: This feature is a weathered limestone surface located in a zone of apparent Epikarst. Epikarst is used herein to identify the zone of weathering at the upper surface of a limestone that includes the solutionally modified (karren) bedrock surface and the overlying regolith. The extent of weathering and dissolution within the Epikarst will diminish with depth. This feature, as observed at the time of the assessment, is relatively shallow, soil floored with evidence of activity around opening indicative of an animal burrow.

Conditions observed in connection with this feature are not believed to persist in the subsurface at depth and do not appear to have a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer. Therefore, this feature is not identified as a sensitive feature at this time.

<u>F-10 O:</u>

Other Natural Bedrock Feature - Streambed: This feature is a natural drainage way designated as an Intermittent Stream by the USGS National Hydrography Dataset (NHD). An Intermittent Stream is a dry drainage way that flows only at certain times of the year and does not flow continuously. In accordance with TCEQ Edwards Aquifer Protection Program Guidance, Streambeds, including dry drainages, are significant because runoff is focused to them. Not only are features

in streambeds and natural drainage ways likely to receive large volumes of recharge, but they are likely to be part of hydrologically integrated flow paths because past flow has preferentially enlarged and maintained conduits. No indication of sensitive karst features such as open fractures, swallets or swallow holes observed within the streambed at the time of the assessment.

Conditions observed in connection with this feature do not appear to have a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer. Therefore, this feature is not identified as a sensitive feature at this time.

Although there was no indication of sensitive / recharge features (swallets or swallow holes) observed within the streambed at the time the site was evaluated, features in streambeds can be obscured by transported soil or gravel so diligence with protective measures during future construction activities in the area is strongly recommended.

F-11 MB:

Manmade Feature – Excavation (Test or Borrow Pit): The feature is an open excavation that is possibly a test pit for a septic system leachability study or a borrow pit. The feature is soil floored located in a zone that consists of weathered red, clay and limestone cobbles that have no observed connectivity with the subsurface. Conditions observed in connection with this feature do not appear to have a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer. Based on the above findings, this feature is <u>not</u> identified as a sensitive feature.

OBSERVATIONS

To the extent that surface property features were readily accessible and observable at the time the site was evaluated on <u>01/11/2024</u> no sensitive features were identified on the subject tract of land that has observed potential to affect recharge to the Edwards Aquifer.

CONCLUDING STATEMENTS

The Client understands that no non-intrusive visual observation or survey can wholly eliminate uncertainty regarding the possible presence of geologic conditions in connection with the subject property. Due to the inherent limits in connection with the agreed Scope of Work, this report does not address uncertainty about site conditions across those portions of the subject property not specifically addressed in this report.

Development of the site is planned. Additional modification of site surface conditions can be expected as construction proceeds. Unsuspected solution enlarged fractures, caves and cavities may be discovered during construction operations.

This assessment does not address the possible presence of subsurface conditions that may be exposed during construction operations. Should solution features or conditions be exposed during construction operations that indicate a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer, operations in the vicinity of the feature should be halted and the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Protection Program should be contacted immediately in accordance with 30 TAC §213.5(f)(2).

Geologic Assessment Annunciation Maternity Home (AMH) 3610 Shell Road Georgetown, Williamson, Texas Capitol Environmental, Inc. Registered Geosciences Firm Texas Registration No. 50389

Respectfully,

D Bryan Pairsh, P.G.

Project Geologist

Capitol Environmental, Inc
TBPG Firm Registration #50389

Austin, Texas



Capitol Environmental, Inc. Registered Geosciences Firm Texas Registration No. 50389

DISCLAIMER:

Under standard geologic assessment practice, this assessment is an assessment of surface property conditions that were readily accessible and easily visible at the time of the assessment.

Services performed under this contract were conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. Under standard geologic assessment practice, information developed in this report represents an assessment of environmental conditions observed as present or absent on portions of the surface of the subject property at the time of the assessment. The field observations, measurements and research reported in this report are considered sufficient in detail and scope to form a contained assessment of discrete portions of the subject property. Capitol warrants that the findings and conclusions contained in this report have been prepared in accordance with generally accepted methods normal for the subject site described in this report.

Not every property will warrant the same level of assessment. Consistent with good commercial and customary practice, the appropriate level of assessment will be guided by the type of property subject to assessment, the expertise and risk tolerance of the Client and information developed in the course of the inquiry. The Assessment has been developed to provide the Client with information regarding apparent indications of the presence of absence of geologic conditions relating to the surface of the subject site. The Geologic Assessment report is necessarily limited to the conditions observed and to the information available at the time the work was performed. Due to the limited nature of the work, there is a possibility that conditions may exist in connection with the subject site which could not be identified within the scope of this assessment practice or which were not easily visible or not disclosed at the time the report was prepared.

It is also possible that assessment methods employed at the time the report was prepared may be later superseded by more discrete assessment methods. The definition of a "sensitive geologic feature" and / or a "critical environmental feature" can also change statutorily over time. Capitol does not warrant the content or findings of this report in the event of changes in conditions in connection with the subject property; in the event of changes in assessment methods; or in the event of changes in statute that may apply to the subject property in the future.

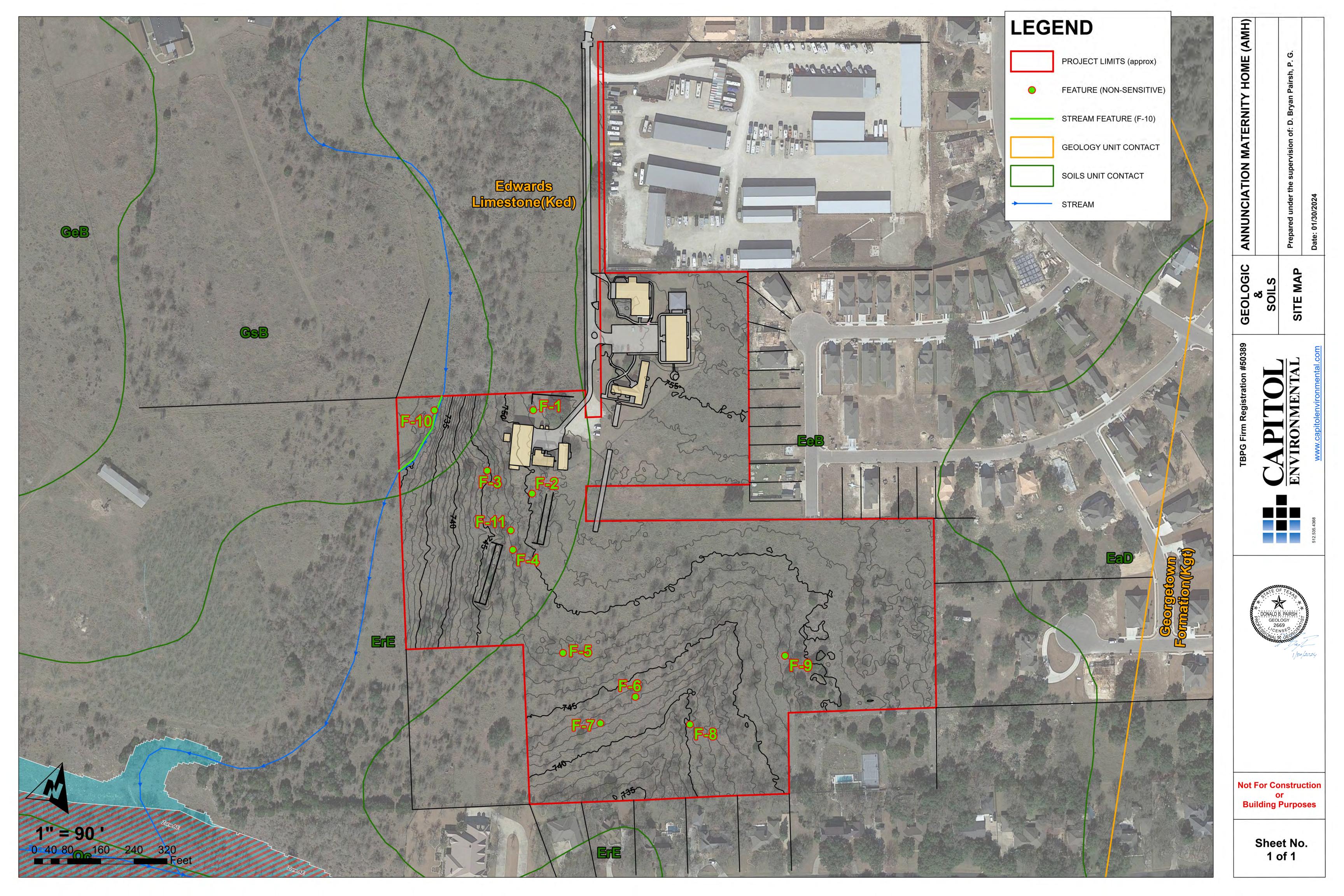
In preparing this report, Capitol has relied on information derived from third party sources and personal interviews, as well as other investigative work. Except as set forth in this report, Capitol has made no independent investigation as to the accuracy or completeness of the information derived from third party sources.

This report does not address uncertainty about site conditions across those portions of the subject property not specifically assessed in this report. The Client understands that no surface assessment can wholly eliminate uncertainty regarding the possible presence of geologic conditions at depth in connection with the subject property. The Client should recognize that conditions elsewhere in the assessment area may differ from those at the study /sample locations, and that surface conditions described in the assessment practice herein may change at depth. This assessment should not to be used as a basis for engineering design.

This report was prepared for the Client, to identify the presence or absence of geologic conditions on surface portions of the subject property. Any use of this report for other purposes or any use of information presented in this report by other parties other than the Client is the Client's responsibility.

Capitol Environmental, Inc. Registered Geosciences Firm Texas Registration No. 50389

Attachment D – Site Geologic Map & Site Soil Site Map



NARRATIVE DESCRIPTION OF ADDITIONAL INVESTIGATION ANNUNCIATION MATERNITY HOME (AMH) 23+ ACRE TRACT CITY OF GEORGETOWN EDWARDS AQUIFER RECHARGE ZONE WATER QUALITY ORDINANCE

PROJECT INFORMATION

The subject site is an approximate 23+ acres, more or less, tract(s) of land located at 3610 Shell Road in Georgetown, Williamson County, Texas at approximately 30.7160° North Latitude and approximately -97.6757° West Longitude. This proposed development project location lies within the designated Edwards Aquifer Recharge Zone and the mapped limits of the City of Georgetown.

The City of Georgetown recently adopted the Edwards Aquifer Recharge Zone Water Quality Ordinance (the Ordinance). The Ordinance applies to all property within the corporate limits of the City of Georgetown and the within the limit of its ETJ. The Ordinance adopted local regulations intended to protect water quality for spring and stream features in the Edwards Aquifer recharge zone and to identify and protect habitat of the Georgetown Salamander.

City of Georgetown Edwards Aquifer Recharge Zone Water Quality Ordinance:

Information found in this assessment addresses site conditions that were observed by Capitol Environmental on <u>01/11/2024</u>. In accordance with the City of Georgetown Edwards Aquifer Recharge Zone Water Quality Ordinance (Ordinance), the following matters are respectfully addressed:

- [a] Identify the presence or absence of all springs and streams on the subject property or; Certify that no springs or streams exist as "Springs" and "Streams" as these terms are defined in the Ordinance.
 - Comment: No "Springs" are identified in connection with the subject property.
 - <u>Comment</u>: Capitol observed a natural drainage way that transects the northwest corner of the subject property. For the purpose of this assessment, this feature <u>is</u> identified as a "Stream" in accordance with the Ordinance.
- **[b]** Describe, if any, each spring and/or stream on a site as defined in the Ordinance, including determining the location of any spring outlet or stream.
 - Comment: No "Springs" are identified in connection with the subject property.
 - <u>Comment:</u> The "Stream" feature was identified as an Intermittent Stream (unnamed) by the United States Geologic Survey's (USGS's) National Hydrography Dataset (NHD). An Intermittent Stream is a dry drainage way that only flows for brief periods following rain events. On 01/11/2024, there was no flow observed through this feature.
- [c] For Occupied Sites identified in Section 2 of the Ordinance, delineate the No-Disturbance Zone and the Minimal- Disturbance Zone as described in Section 4 of The Ordinance.

- <u>Comment</u>: The subject property <u>is not</u> located within an "Occupied Site" as defined in the Ordinance and as shown on Exhibit A, attached thereto.
- <u>Comment</u>: The subject property, therefore, <u>is not</u> located within a City of Georgetown mapped No-Disturbance Zone (Red Zone), therefore, the establishment of a City of Georgetown "Minimal-Distance Zone (Orange Zone) is not warranted.
- [d] Spring Buffer and Stream Buffer Protection of Non-Occupied Sites. The subject property <u>is</u> identified as a "Non-Occupied Site" as defined in the Ordinance and as shown on Exhibit A, attached thereto.
 - Comment: No "Springs" are identified in connection with the subject property.
 - Comment: Stream Buffer: Capitol observed the presence of a natural drainage way transecting the northwest corner of the subject property. For the purpose of this assessment, this feature is identified as a "Stream" in accordance with the Ordinance. This Stream drains an estimated more than 320 acres but less than 640 acres. Therefore, the establishment and maintenance of a "Stream Buffer" where the boundaries of the "Stream Buffer" coincide with the boundaries of the FEMA 1% floodplain or a calculated 1% floodplain, whichever is smaller, is warranted. In the absence of FEMA or calculated floodplain, buffer shall be a minimum of 300 feet wide with at least 100 feet from the centerline of the stream. If a property owner only controls one side of a Stream, then the minimum buffer shall be 150 feet from the centerline of a Stream, or along the FEMA 1% floodplain or a calculated 1% floodplain, if available.
- [e] All Red Zones, Orange Zones and spring and stream buffers as required in the Ordinance will be shown on all Plats, Site Plan and infrastructure Construction Plans.
 - <u>Comment</u>: Buffer(s) as described above are required to be shown on all Plats, Site Plans and infrastructure Construction Plans provided by the Development Engineer in response to this submittal

CONCLUDING STATEMENTS

This Letter Report is prepared in response to City of Georgetown Ordinance Number 2013-59. As such, it is necessarily a stand apart document that does not conform to, nor is it a required part of a Geologic Assessment as required by Title 30, Texas Administrative Code Chapter 213.5.

The Client understands that no survey can wholly eliminate uncertainty regarding the possible presence of geologic conditions in connection with the subject property. Due to the inherent limits in connection with the agreed Scope of Work, this report does not address uncertainty about site conditions across those portions of the subject property not specifically addressed in this report.

Development of the site is planned. Additional modification of site surface conditions can be expected as construction proceeds. Unsuspected solution enlarged fractures, caves and cavities may be discovered during construction operations.

This investigation does not address the possible presence of subsurface conditions that may be exposed during construction operations. Should solution features or conditions be exposed during construction operations that indicate a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer, operations in the vicinity of the feature should be halted and

the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Protection Program should be contacted immediately in accordance with 30 TAC $\S213.5(f)(2)$.

Prepared by:

D Bryan Pairsh, P.G.

Project Geologist

Capitol Environmental, Inc.

TBPG Firm Registration #50389

Austin, Texas



Section III Modification of a Previously Approved Plan (TCEQ-0590)

Modification of a Previously Approved Plan

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Transition Zone and Relating to 30 TAC 213.4(j), Effective June 1, 1999

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

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

Signature

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

Print Name of Customer/Agent: <u>Jason Bass, P.E.</u>

Date: <u>June 19, 2024</u>

Signature of Customer/Agent:

Project Information

1.	Current Regulated Entity Name: Annunciation Maternity Home
	Original Regulated Entity Name: Annunciation Maternity Home
	Regulated Entity Number(s) (RN): 105199822
	Edwards Aquifer Protection Program ID Number(s): 11-07041202, 11-07041202A
	The applicant has not changed and the Customer Number (CN) is: 603174640
	The applicant or Regulated Entity has changed. A new Core Data Form has been provided.
	provided.

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

 A modification of a previously approved plan is requested for (check all that apply): Physical or operational modification of any water pollution abatement structure(including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures; Change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer; Development of land previously identified as undeveloped in the original water pollution abatement plan; Physical modification of the approved organized sewage collection system; Physical modification of the approved underground storage tank system; Physical modification of the approved aboveground storage tank system. Summary of Proposed Modifications (select plan type being modified). If the approve plan has been modified more than once, copy the appropriate table below, as 					
	e the information for each ac				
WPAP Modification	Approved Project	Proposed Modification			
Summary					
Acres	<u>5.44</u>	23.68			
Type of Development	Commercial	<u>Commercial</u>			
Number of Residential	<u>N/A</u>	<u>50</u>			
Lots					
Impervious Cover (acres)	<u>0.82</u>	<u>3.51</u>			
Impervious Cover (%	<u>15</u>	<u>14.8</u>			
Permanent BMPs	<u>None</u>	Batch Detention Pond			
Other					
SCS Modification	Approved Project	Proposed Modification			
Summary					
Linear Feet					
Pipe Diameter					

Other

AST Mo	odification	Approved Project	Proposed Modification
Summa	ıry		
Numbe	r of ASTs		
Volume	e of ASTs		
Other			
UST Mo	odification	Approved Project	Proposed Modification
Summa	ıry		
Numbe	r of USTs		
Volume	e of USTs		
Other			
	the nature of the proposed	of Proposed Modification. A deta d modification is attached. It discu difications, and how this proposed	isses what was approved,
_	the existing site developm modification is attached. In modification is required el modification is required el The approved construction any subsequent modification that the approved construction illustrates that the site The approved construction illustrates that the site The approved construction that the site The approved construction attachment C illustrates The approved construction illustrates that the site The approved construction illustrates that the site The approved construction in the approved construction is attached. In the approved construction is attached in the approved construction is attached. In the approved construction is attached in the approved construct	ction has not commenced. The original transfer include ication approval letters are include	e time this application for roposed in the submitted ginal approval letter and ed as Attachment A to n completed. Attachment Concepted. Attachment Concepted as approved. Eructed as approved.
	provided for the new acre	ed plan has increased. A Geologic age. ed to or removed from the approv	
	needed for each affected i county in which the project	d one (1) copy of the application, p ncorporated city, groundwater con ct will be located. The TCEQ will di ns. The copies must be submitted	nservation district, and stribute the additional

<u>Attachment 3A – Original Approval Letter and Approved</u>
<u>Modification Letters</u>

Kathleen Hartnett White, Chairman Larry R. Soward, Commissioner H. S. Buddy Garcia, Commissioner Glenn Shankle, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 10, 2007

Mr. Mike Aaronson The Annunciation Maternity Home, Inc. 3610 Shell Road Georgetown, Texas 78628

Edwards Aquifer, Williamson County Re:

NAME OF PROJECT: The Annunciation Maternity Home; 3610 Shell Road; Georgetown

E.T.J., Texas

TYPE OF PLAN: Request for Approval of a Water Pollution Abatement Plan (WPAP); 30

Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program ID No. 11-07041202

Dear Mr. Aaronson:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project submitted to the Austin Regional Office by Steger & Bizzell Engineering, Inc. on behalf of The Annunciation Maternity Home, Inc. on April 12, 2007. Final review of the WPAP submittal was completed after additional material was received on May 9, 2007. As presented to the TCEQ, the Temporary Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed, and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer protection plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

PROJECT DESCRIPTION

The proposed multi-family residential project will be located at the existing 5.44 acre site for The Annunciation Maternity Home. The project will include the construction of a 5,151 square foot

REPLY TO: REGION 11 • 2800 S. INTERSTATE HWY. 35, STE. 100 • AUSTIN, TEXAS 78704-5700 • 512-339-2929 • FAX 512-339-3795

Mr. Mike Aaronson Page 2 May 10, 2007

convent building that will be built in two phases. The impervious cover after construction is complete will be 0.816 acres (14.9 percent). Since this multi-family residential project will not have more than 20 percent impervious cover, an exemption from permanent BMPs is approved. An existing on site sewage facility will be utilized to treat and dispose of domestic wastewater.

GEOLOGY

According to the geologic assessment submitted with the application, the Edwards Limestone outcrops on the site. There were no geologic or manmade features identified. The Austin Regional Office site investigation of May 4, 2007, revealed that the site is generally as described by the geologic assessment.

SPECIAL CONDITIONS

- I. If the impervious cover ever increases above 20 percent or the land use changes, the exemption for the whole site may no longer apply and the property owner must notify the Austin Regional Office of these changes.
- II. Intentional discharges of sediment laden stormwater during construction are not allowed. If dewatering excavated areas and/or areas of accumulated stormwater becomes necessary, the discharge shall be filtered through appropriately selected temporary best management practices. These may include vegetative filter strips, sediment traps, rock berms, silt fence rings, etc.
- III. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 4 below.

STANDARD CONDITIONS

1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

Prior to Commencement of Construction:

2. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the applicant must submit to the Austin Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the

Mr. Mike Aaronson Page 3 May 10, 2007

county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.

- 3. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 4. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 5. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the Austin Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
- 6. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. The water quality pond shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.
- 7. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

Mr. Mike Aaronson Page 4 May 10, 2007

During Construction:

- 8. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 9. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the Austin Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
- 10. No wells exist on the project. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 11. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
- 12. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 13. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

Mr. Mike Aaronson Page 5 May 10, 2007

After Completion of Construction:

- 14. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
- 15. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the Austin Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 16. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

If you have any questions or require additional information, please contact Ms. Heather L. Beatty, P.G. of the Edwards Aquifer Protection Program of the Austin Regional Office at (512)339-2929.

Sincerely,

Glenn Shankle

Executive Director

Texas Commission on Environmental Quality

GS/hlb

Enclosure:

Deed Recordation Affidavit, TCEQ-0625

cc: Mr. Perry C. Steger, P.E., Steger & Bizzell Engineering, Inc.

Mr. Tom Benz, P.E., System Engineering Manager, City of Georgetown

The Honorable Dan A. Gattis, County Judge, Williamson County

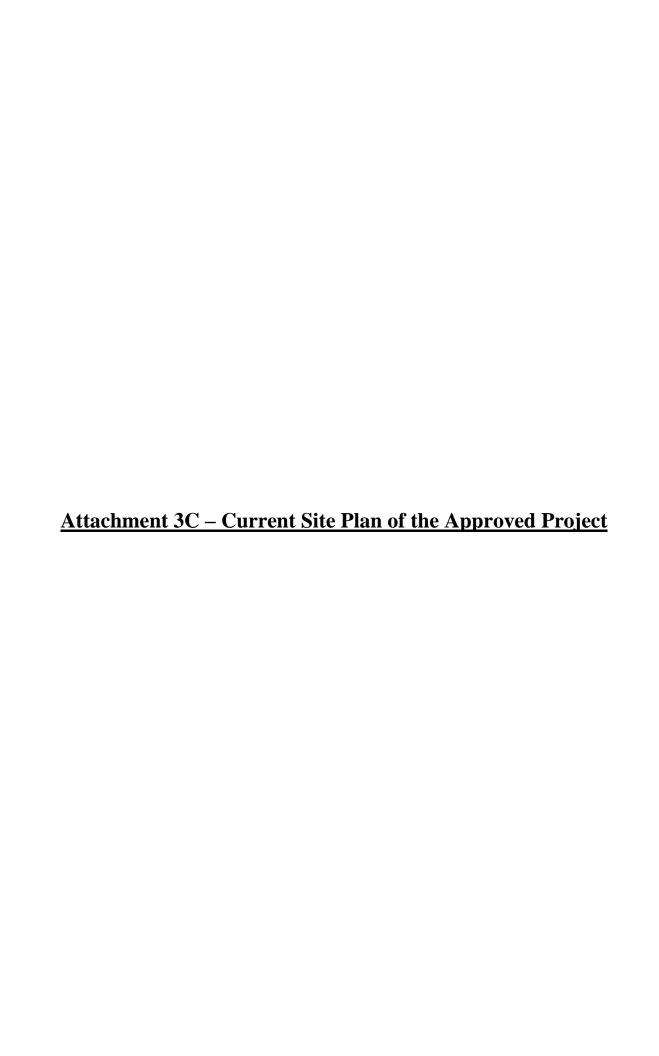
Mr. Paulo C. Pinto, B.S., R.S., Director of Environmental Services, Williamson County & Cities Health District

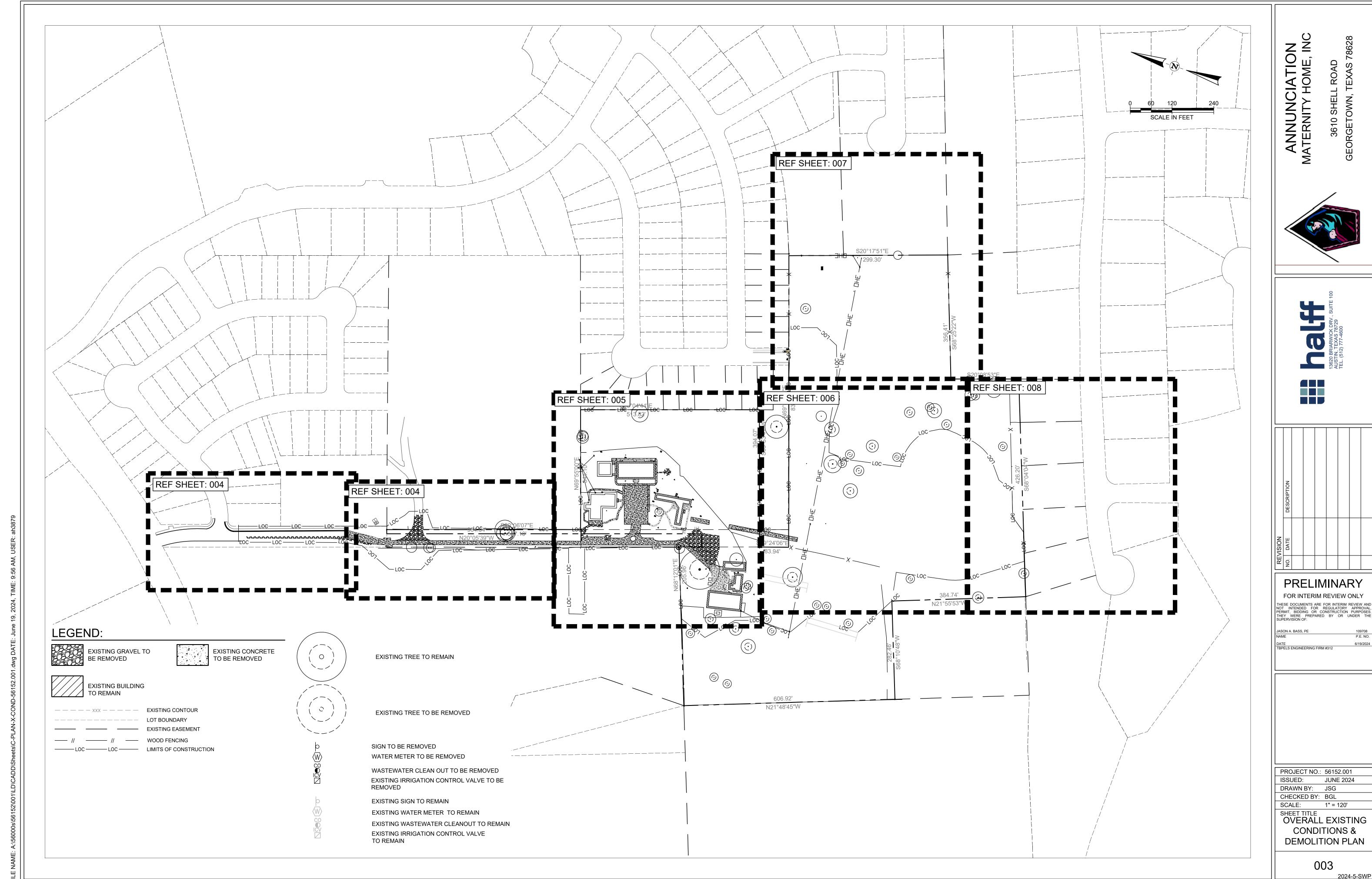
Central Records, TCEQ Information Resources Division, Austin

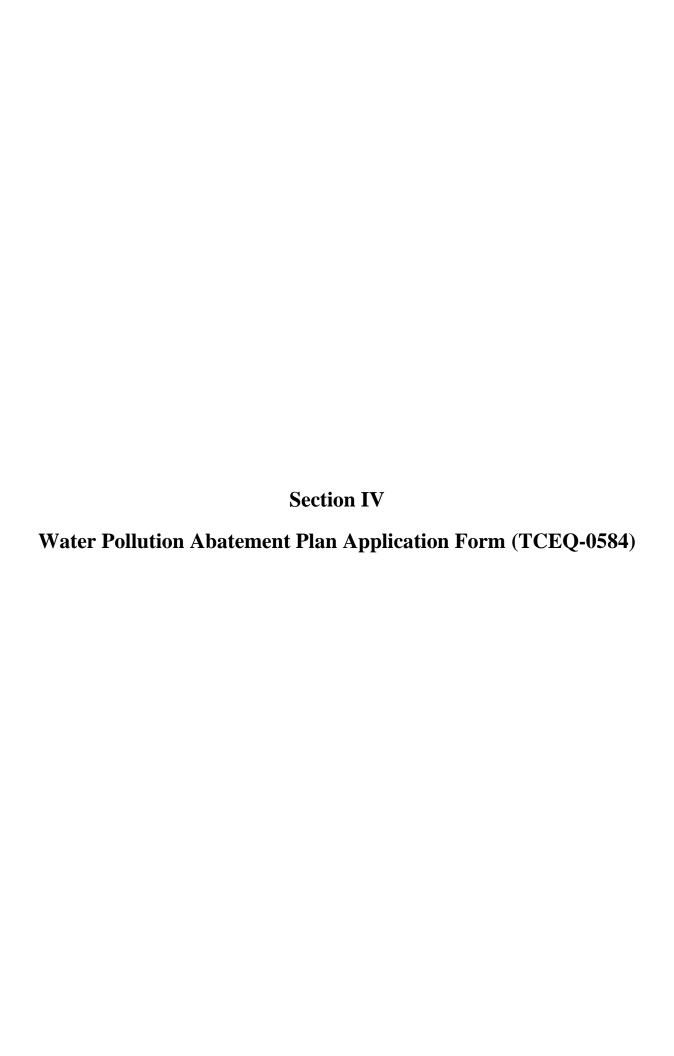
Attachment 3B – Narrative of Proposed Modification

The Annunciation Maternity Home project was first approved by TCEQ for an exemption from permanent BMPs back in May 2007. The only proposed construction was a 5,151 square foot convent building, and the impervious cover after construction was to be 0.82 acres. With the site's total acreage being 5.44 acres, the total impervious cover percentage amounted to 14.9%. Because the site was not projected to exceed 20% impervious cover, an exemption from water quality BMPs was approved.

The proposed modification will change the approved plan in several ways. Firstly, the site's total acreage has increased from 5.44 acres to 23.68 acres. Secondly, six new adult homes, a community center, and an infant development center with associated drives, parking, and sidewalks will increase the site's impervious cover from 0.82 acres to 3.51 acres. However, with the increase in site acreage, the impervious cover percentage has decreased from 15.0% to 14.8%. Although the site would qualify for the less than 20% impervious cover exemption from permanent water quality BMPs, the owner has decided to install a batch detention pond in advance of future development that may one day result in the site exceeding 20% impervious cover.







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: <u>Jason Bass, P.E.</u>
Date: <u>April 29, 2024</u>
Signature of Customer/Agent:
4-6

Regulated Entity Name: Annunciation Maternity Home

Regulated Entity Information

•	The type of project is:
	Residential: Number of Lots: Residential: Number of Living Unit Equivalents:
	Commercial
	Industrial
	Other:

- 2. Total site acreage (size of property): 23.68
- 3. Estimated projected population: 50
- 4. The amount and type of impervious cover expected after construction are shown below:

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	36,473	÷ 43,560 =	0.84
Parking	90,454	÷ 43,560 =	2.08
Other paved surfaces	25,819	÷ 43,560 =	0.59
Total Impervious Cover	152,746	÷ 43,560 =	3.51

Total Impervious Cover $3.51 \div$ Total Acreage $23.68 \times 100 = 14.8 \%$ 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.

TCEQ Executive Director. N	existing roadways that do not require approval from the Modifications to existing roadways such as widening taling more than one-half (1/2) the width of one (1) existing I from the TCEQ.		
Stormwater to be gei	nerated by the Proposed Project		
volume (quantity) and char occur from the proposed p quality and quantity are ba	nd Character of Stormwater. A detailed description of the racter (quality) of the stormwater runoff which is expected to project is attached. The estimates of stormwater runoff ased on the area and type of impervious cover. Include the te for both pre-construction and post-construction conditions		
Wastewater to be ge	nerated by the Proposed Project		
14. The character and volume of v	vastewater is shown below:		
100% Domestic% Industrial% Commingled TOTAL gallons/day 2,764	<u>2,764</u> Gallons/day Gallons/day Gallons/day		
15. Wastewater will be disposed o	of by:		
On-Site Sewage Facility (OS	SSF/Septic Tank):		
Attachment C - Suitability Letter from Authorized Agent. An on-site sewage facil will be used to treat and dispose of the wastewater from this site. The appropria licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter relating to On-site Sewage Facilities. Each lot in this project/development is at least one (1) acre (43,560 square feet) i size. The system will be designed by a licensed professional engineer or registere sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.			
Sewage Collection System	(Sewer Lines):		
to an existing SCS.	from the wastewater generating facilities will be connected from the wastewater generating facilities will be connected		

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

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

<u>Attachment 4A – Factors Affecting Water Quality</u>

The factors affecting water quality as a result of proposed site improvement areas are as follows:

The site's expansion will include six new adult homes and an infant development center with associated parking, roads, drainage, utilities, and water quality batch detention ponds. The increased impervious cover will cause an increase in Total Suspended Solids (TSS) from rainfall events which is typical of an increase to impervious cover. Factors contributing to the contamination of the surface and groundwater are generated from man-made pollutants such as pesticides, fertilizers, loose trash and debris, and automotive fluids.

Attachment 4B – Volume and Character of Stormwater

The volume and character of stormwater at the project site for both existing and postdevelopment conditions are as follows:

The existing site is partially developed with several existing buildings with associated parking, sidewalks, and utilities in the northern portion of the site; the remainder of the property is undeveloped. Approximately 17 acres of the property generally slopes from north to south with an average grade of approximately 2%. The rest of the site generally slopes from east to west at an average grade of 1%. Four study points (SP) were selected to be sure to obtain storm drainage leaving the site do not exceed existing flow rates. The quality of runoff from the site can be characterized as mostly clean water because the runoff will mostly be infiltrated into the soils.

The table below provides calculations related to each drainage area. Time of concentrations (Tc) were derived using the TR-55 method and the values were adjusted to not be less than 6 minutes. Composite runoff (CN) were computed using the area weighted formula. The SCS 24-hour storm was utilized using precipitation values from NOAA Atlas 14. The SCS Storm was of Type III distribution with a time interval of two minutes.

EXISTING DRAINAGE CONDITIONS								
D4 1D	AREA	IC	CN	Тс	Q-2	Q-10	Q-25	Q-100
DA - ID	ACRES	ACRES	-	MIN	CFS	CFS	CFS	CFS
EX-1	17.12	0.38	80	18.5	37.4	70.1	92.5	130.3
SP-1	1	-	1	-	37.4	70.1	92.5	130.3
EX-2	6.84	0.61	82	15.0	17.6	32.0	41.7	58.0
SP-2	1	-	ı	-	17.6	32.0	41.7	58.0
EX-3	0.83	0.00	80	9.7	2.3	4.3	5.7	7.9
SP-3	1	-	1	-	2.3	4.3	5.7	7.9
EX-4	2.05	0.83	89	8.8	8.0	13.1	16.5	22.0
SP-4	-	-	-	-	8.0	13.1	16.5	22.0

The proposed 23.56-acre site will be developed with an infant development center, new adult homes, and associated parking, paving, and utilities. The maximum allowable impervious cover for non-residential development larger than 5 acres is 70% for the first five acres and 55% for the remaining acreage. Thus, for this site, the maximum allowable impervious cover is 5 acres x (0.70) + 18.22 acres x (0.55) = 13.52 acres. The proposed impervious cover is 3.51 acres.

Stormwater that falls onsite will be routed via sheet flow and a storm sewer system to the proposed detention pond located in the southern portion of the site, which will mitigate developed flows to at or below existing runoff rates. All proposed stormwater management systems will be designed to convey runoff from the development limits in accordance with the City of Georgetown guidelines.

The majority of the site's developed area will be routed through an onsite storm sewer system to the proposed detention pond located south of the site. The pond will utilize the lower 1.1 feet of depth for batch detention storage for water quality and was calculated to ensure 80% removal of the increase in total suspended solids. The water detained by the batch detention storage is discharged through a perforated riser pipe before exiting the site. The discharge is controlled by a motor actuated valve that is wired to a controller than opens the valve 12 hours after a rainfall event and closes once the pond has drained. The controller will include previsions for a manual override switch. The quality of runoff leaving the site after the permanent water quality BMP is expected to be mostly clean and clear water.

The table below provides calculations related to each drainage area. Time of Concentrations (Tc) were derived using the TR-55 method and the values were adjusted to a minimum value of 6 minutes. Composite Runoff Numbers (CN) were computed using the area weighted formula. The SCS 24-hour storm was utilized using precipitation values from NOAA Atlas 14. The SCS Storm was of Type III distribution with a time interval of two minutes.

PROPOSED DRAINAGE CONDITIONS									
DA - ID	DESTINATION	AREA	IC	CN	Тс	Q-2	Q-10	Q-25	Q-100
	-	ACRES	ACRES	-	MIN	CFS	CFS	CFS	CFS
PR-1A	SP-1 (via Pond)	17.07	3.60	84	14.3	52.0	88.9	113.1	153.5
POND	SP-1	-	-	ı	-	12.3	34.1	59.6	104.3
PR-1B	SP-1	2.77	0.00	80	12.4	7.1	13.3	17.5	24.6
SP-1	1	-	-	ı	-	14.5	38.9	68.2	119.7
PR-2	SP-2	5.41	0.28	81	12.0	14.5	26.8	35.1	49.1
SP-2	-	-	-	-	-	14.5	26.8	35.1	49.1
PR-3	SP-3	0.83	0.00	80	9.7	2.3	4.3	5.7	7.9
SP-3	-	-	-	-	-	2.3	4.3	5.7	7.9
PR-4	SP-4	0.77	0.46	91	6.0	3.4	5.5	6.8	9.1
SP-4	-	-	-	-	-	3.4	5.5	6.8	9.1



Department of Infrastructure County Engineer's Office 3151 SE Inner Loop, Ste B Georgetown, TX 78626 T: 512.943.3330

T: 512.943.3330 F: 512.943.3335

J. Terron Evertson, PE, DR, CFM



June 12, 2024

RE:

3610 Shell Road, Georgetown, Texas 78628 AW0524 AW0524 – Roberts, Wm. Sur., ACRES 5.257 AW0524 AW0524 – Roberts, Wm. Sur., ACRES 17.98

The above referenced property is located within the Edwards Aguifer Recharge Zone.

Based on the surrounding subdivisions and the soil survey for Williamson County and planning material received, this office is able to determine that the soil and site conditions of this lot is suitable to allow the use of on-site sewage facilities (OSSF). It should be noted that this office has not actually studied the physical properties of this site. Site specific conditions such as OSSF setbacks, recharge features, drainage, soil conditions, etc..., will need taken into account in planning any OSSF.

These OSSF's will have to be designed by a professional engineer or a registered sanitarian. An Edwards Aquifer protection plan shall be approved by the appropriate TCEQ regional office before an authorization to construct an OSSF may be issued. The owner will be required to inform each prospective buyer, lessee or renter of the following in writing:

- That an authorization to construct shall be required before an OSSF can be constructed in the subdivision;
- That a notice of approval shall be required for the operation of an OSSF;
- Whether an application for a water pollution abatement plan as defined in Chapter 213 has been made, whether it has been approved and if any restrictions or conditions have been placed on the approval.

If this office can be of further assistance, please do not hesitate to call.

Sincerely.

Christoper Moreno, OS 35962 Williamson County - OSSF

<u>Attachment 4D – Exception to the Required Geologic Assessment</u>

A Geologic Assessment has been included with this application; therefore, this attachment has been omitted.

Section not applicable to this project.

Section V

Temporary Stormwater Section (TCEQ-0602)

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>Jason Bass, P.E.</u>
Date: April 29, 2024

Signature of Customer/Agent:

Regulated Entity Name: Annunciation Maternity Home

Project Information

Potential Sources of Contamination

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

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

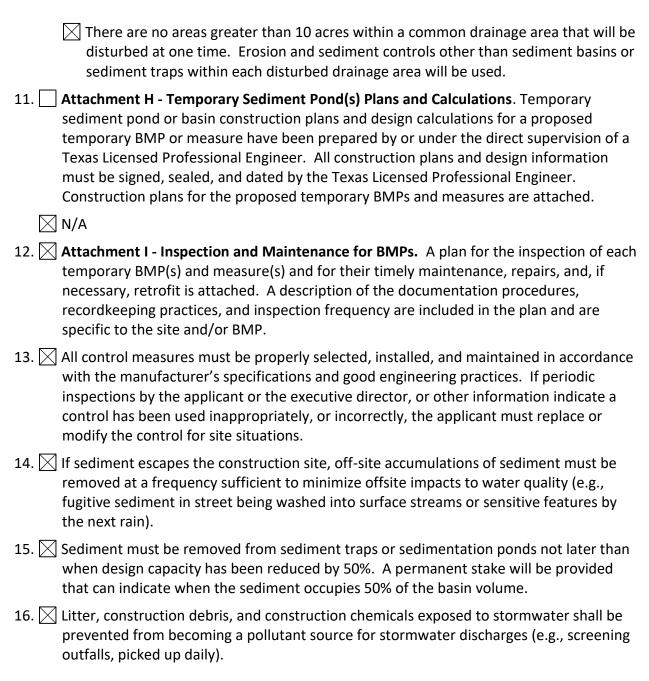
	 Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year. Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
	$igthered{igwedge}$ Fuels and hazardous substances will not be stored on the site.
2.	Attachment A - Spill Response Actions. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.
3.	Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
4.	Attachment B - Potential Sources of Contamination. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.
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: South Fork San Gabriel River

Temporary Best Management Practices (TBMPs)

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

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

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



Soil Stabilization Practices

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

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

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

Administrative Information

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

<u>Attachment 5A – Spill Response Actions</u>

No spills of hydrocarbons or hazardous substances are expected. However, in the event such an incidence does occur, the contractor should carefully follow the TCEQ guidelines outlined below:

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.

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:
- Contain the spread of the spill.
- Recover spilled materials.
- 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:

From any event, the Reportable Quantity (RQ) = for highly toxic materials the RQ>25 gals. For petroleum/hydrocarbon liquids, spills the RQ>250 gallons (on land) or that which creates "a sheen" on water. Only certified Hazmat teams will be responsible for handling the material at the site.

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. Additionally in the event of a hazardous material spill, local Williamson County and/or City of Georgetown police, fire and potentially EMS should be contacted in order to initiate the hazardous material response team.
- (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 of which one copy is to be kept onsite in the report binder and one copy provided to the TCEQ.
- (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: http://www.tceq.state.tx.us/response/spills.html

Attachment 5B – Potential Sources of Contamination

No particular activity or process during construction of the facility is anticipated to present a significant risk of being a potential source of contamination. However, during regular construction operations, several common and minor risks of contamination are anticipated. Should the unforeseeable mishap occur during construction or regular operation of the facility, the contractor shall follow the guidelines set forth in "Attachment 5A – Spill Response Plan."

Potential sources of sediment to stormwater runoff:

- Clearing and grubbing
- Grading and excavation
- Vehicle Tracking
- Topsoil stripping and stockpiling
- Landscaping

Potential pollutants and sources, other than sediment, to stormwater runoff:

- Combined Staging Area small fueling, minor equipment maintenance, sanitary facility.
- Materials Storage Area solvents, adhesives, paving materials, aggregates, trash, etc.
- Construction Activities paving, concrete pouring
- Concrete washout area

Potential onsite pollutants:

- Fertilizer
- Concrete
- Glue, adhesives
- Gasoline, diesel fuel, hydraulic fluids, antifreeze
- Sanitary toilets

Attachment 5C – Sequence of Major Activities

- 1. Temporary erosion and sedimentation controls are to be installed as indicated on the approved site plan or subdivision construction plan and in accordance with the stormwater pollution prevention plan (SWPPP) that is required to be posted on the site. Estimated quantities of each are below:
 - 3,533 LF of Silt Fence 1,493 LF of Tree Protection, 142 SF Rock Berm, 13 Inlet Protections, 2
 Stabilized Construction Entrances, 1 Staging & Spoils Area, 1 Concrete Washout
- 2. The environmental project manager, and/or site supervisor, and/or designated responsible party, and the general contractor will follow the storm water pollution prevention plan (SWPPP) posted on the site. Temporary erosion and sedimentation controls will be revised, if needed, to comply with city inspectors' directives, and revised construction schedule relative to the water quality plan requirements and the erosion and sedimentation control plan. Estimated quantities of each are below:
 - 3,533 LF of Silt Fence, 1,493 LF of Tree Protection, 142 SF Rock Berm, 13 Inlet Protections, 2
 Stabilized Construction Entrances, 1 Staging & Spoils Area, 1 Concrete Washout
- 3. Temporary erosion and sedimentation controls will be inspected and maintained in accordance with the storm water pollution prevention plan (SWPPP) posted on the site. Estimated quantities of each are below:
 - 3,533 LF of Silt Fence, 1,493 LF of Tree Protection, 142 SF Rock Berm, 13 Inlet Protections, 2
 Stabilized Construction Entrances, 1 Staging & Spoils Area, 1 Concrete Washout
- 4. Begin site clearing/construction (or demolition) activities.
 - 15.36 acres (limits of construction include offsite utilities)
- 5. Complete construction, including excavation, filling, utilities, paving, and buildings, and start revegetation and landscaping of the site.
 - 15.36 acres (limits of construction include offsite utilities)
- 6. Upon completion of the site construction and revegetation of a project site, the design engineer shall submit an engineer's letter of concurrence to Williamson County indicating that construction, including revegetation, is complete and in substantial conformity with the approved plans. After receiving this letter, a final inspection will be scheduled by the appropriate city inspector.
 - 15.36 acres (limits of construction include offsite utilities)
- 7. After construction is complete and all disturbed areas have been revegetated per plan to at least 90 percent established, remove the temporary erosion and sedimentation controls and complete any necessary final revegetation resulting from removal of the controls. Conduct any maintenance and rehabilitation of the water quality ponds or controls.
 - 15.36 acres (limits of construction include offsite utilities)

Attachment 5D – Temporary Best Management Practices and Measures

Prior to the commencement of any construction activity whatsoever, the contractor shall install the silt fencing, the stabilized construction entrance, the rock berms, the concrete washout controls, tree protection, and inlet protections per the Erosion and Sedimentation Control Plan. All BMPs shall be installed per TCEQ and local requirements. The proposed temporary BMPs, such as silt fencing, tree protection fencing, and inlet protection, are intended to control increased TSS from construction activities in the following manner:

Additional notes regarding temporary BMPs:

- A. Some upgradient flows will bypass the site via proposed culverts and will be treated with the existing onsite BMPs. The upgradient drainage, coming from properties just north of the site, will be treated by two rock berms placed at the downstream ends of the bypass culverts underneath American Elm Drive. See Drainage Area Maps for upgradient flows.
- B. The temporary BMPs proposed during construction activities will prevent pollution of surface water by filtering the increased sediment loads and other pollutant sources listed in "Attachment 5B, Potential Sources of Contamination". The primary method of treating sediment-laden stormwater runoff is through silt control fencing and a stabilized construction entrance. The silt control fencing will be placed per plan along the downslope edges of the project area to filter runoff before passing offsite and in strategic locations of drainage. The stabilized construction entrance will assist in removing debris and sediment caught up within construction vehicles tires exiting the site. Rock berm will be used to retain sediment from concentrated flows as they exit stormwater outfall structures, as well as to decrease the velocity of concentrated flows. As a final measure to mitigate stormwater contamination, inlet protection for proposed inlets will be implemented. A concrete washout area will be located on the site to prevent contaminated rinse water from concrete trucks from leaving the site.
- C. The control measures in place are silt fences, rock berm, and inlet protection for upgradient storm sewer systems. Stabilized construction exits will supplement the control of off-site tracking of material. After construction is complete, the site will be stabilized by permanent landscaping vegetation throughout the project area.
- D. According to the geologic assessment, there are no naturally occurring features identified on this site that need stormwater runoff to be maintained.

<u>Attachment 5E – Request to Temporarily Seal a Feature</u>

No temporary sealing of naturally occurring sensitive features on the site are proposed.

Section not applicable to this project.

<u>Attachment 5F – Structural Practices</u>

The following temporary BMP structural practices will be employed on the site:

- A. Silt Fence used as barrier protection around the downslope perimeter of the project. The fence retains sediment primarily by retarding flow and promoting deposition on the uphill side of the slope. Runoff is filtered as is passes through the geotextile.
- B. Inlet Protection will be provided around all existing and proposed storm sewer inlets during construction. Locations are indicated on the construction plans. These measures will trap and settle out pollutants from the onsite runoff before the runoff enters the storm drain system and exits the site.
- C. Stabilized Construction Exits Anti-tracking pads consisting of stone will be installed at the exit to each phase of construction to prevent the off-site transport of sediment by construction vehicles. The anti-tracking pads will be at least 50 feet long, a minimum width to match the entrance, with transitions at each side, and will consist of a minimum 8-inch-thick layer of crushed stone. The crushed stone will be placed over a layer of geotextile filter fabric to reduce the mitigation of sediment from the underlying soil.
- D. Rock Berms Serve as a check dam in areas of concentrated flow. The berm retains sediment by retarding flow in areas where the volumetric flow rate of runoff is too high for silt fence.
- E. Concrete Washout Area Prevent or reduce the discharge of pollutants from concrete waste by designating a specific armored area to perform onsite concrete washouts.

The placement of structural practices in the floodplain has been avoided.

<u>Attachment 5G – Drainage Area Map</u>

A proposed drainage area map	for the project area and	l encompassing basir	are provided	in the
construction documents.				

<u>Attachment 5H – Temporary Sediment Pond(s) Plans and Calculations</u>

No temporary sediment ponds are proposed on site.

Section not applicable to this project.

Attachment 5I – Inspection and Maintenance for BMPs

The inspection and maintenance of temporary BMP's will be made according to TCEQ RG-348, Complying with the Edwards Aquifer Rules Technical Guidance on Best Management Practices, July 2005 Revision.

Inspection Personnel:

Inspections shall be conducted by qualified representatives of the contractor acting on behalf of the owner or a designated party if hired separately by the owner. Each operator must delegate authority to the specifically described position or person performing inspections, as provided by 30 TAC 305.128, as an authorized person for signing reports and performing certain activities requested by the director or required by the TPDES general permit. This delegation of authority must be provided to the director of TCEQ in writing and a copy shall be kept along with the signed effective copy of the SWP3.

Inspection Schedule and Procedures - Inspections must comply with the following:

An inspection shall occur weekly and after any rain event.

The authorized party shall inspect all disturbed areas of the site, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site.

Disturbed areas and areas used for storage of materials that are exposed to precipitation or within limits of the 1% annual chance (100 year) floodplain must be inspected for evidence of, or the potential for, pollutants entering the runoff from the site. Erosion and sediment control measures identified in the plan must be observed to ensure that they are operating correctly. Observations can be made during wet or dry weather conditions. Where discharge locations or points are accessible, they must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. This can be done by inspecting receiving waters to see whether any signs or erosion or sediment are associated with the discharge location. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.

Based on the results of the inspection, the site description and the pollution prevention measures identified in the plan must be revised as soon as possible after an inspection that reveals inadequacies. The inspection and plan review process must provide for timely implementation of any changes to the plan with 7 calendar days following the inspection.

An inspection report that summarizes the scope of the inspection, name(s) and qualifications of personnel conducting the inspection, the dates of the inspection, major observations relating to the

implementation of the SWP3. Major observations shall include as a minimum location of discharges of sediment or other pollutants from the site, location of BMPs that need to be maintained, location of BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where BMPs are needed. Actions taken as a result of the inspections must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and the TPDES general permit. The report must be signed by the authorized representative delegated by the operators in accordance with TAC 305.128.

Maintenance and Corrective Actions - Maintenance of erosion control facilities shall consist of the minimum requirements as follows:

- A. In ongoing construction areas inspect erosion control improvements to confirm facilities are in place and operable. Where facilities have been temporarily set aside or damaged due to construction activity, place facilities in service before leaving job site.
- B. If weather forecast predicts possibility of rain, check entire facilities throughout site to assure facilities are in place and operable. If job site weather conditions indicate high probability of rain, make special inspection of erosion control facilities.
- C. After rainfall events review erosion control facilities as soon as site is accessible. Clean rock berms, berm/swales and other structural facilities. Determine where additional facilities or alternative techniques are needed to control sediment leaving site.
- D. After portions of site have been seeded, review these areas on regular basis in accordance with project specifications to assure proper watering until grass is established. Reseed areas where grass is not well established.
- E. Spills are to be handled as specified by the manufacturer of the product in a timely safe manner by personnel. The site superintendent will be responsible for coordinating spill prevention and cleanup operations.
- F. Concrete trucks will discharge extra concrete or wash out drum only at an approved location on site. Residual product shall be properly disposed of.
- G. Inspect vehicle entrance and exits for evidence of off-site tracking and correct as needed.
- H. Remove sediment from traps/ponds no later than when the design capacity has been reduced by 50%.

- I. If sediment escapes the site, the contractor where feasible and where access is available shall collect and remove sedimentation material by appropriate non-damaging methods. Additionally, the contractor shall correct the condition causing discharges.
- J. If inspections or other information sources reveal a control has been used incorrectly, or that a control is performing inadequately, the contractor must replace, correct or modify the control as soon as practical after discovery of the deficiency.

<u>Attachment 5J – Schedule of Interim and Permanent Soil Stabilization Practices</u>

The schedule of interim and permanent soil stabilization practices will be according to the following general schedule. The contractor shall keep adequate records at the site detailing the dates of 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.

Prior to Disturbance – Install all temporary erosion and sedimentation control features including but not limited to silt fencing, stabilized construction entrances, rock berms, tree protection, inlet protection, and sediment pond.

During Construction – Maintain all temporary erosion and sedimentation control structures. Inspect all temporary erosion and sedimentation control structures on a weekly basis and after rain events. Any stockpiles of topsoil or other earthen piles left undisturbed for 14 days or more must be revegetated.

After Completion of Permanent Erosion and Sediment Controls – Stabilize and restore all areas disturbed during construction. Permanent seeding will be applied immediately after the final design grades are achieved on portions of the site but no later than 14 days after construction activities have permanently ceased. After the entire site is stabilized, any sediment that has accumulated will be removed and hauled off-site for disposal. Construction debris, trash and temporary BMPs including silt fences, material storage areas, sanitary toilets, etc. will also be removed and any areas disturbed during removal will be seeded immediately.

Section VI Permanent Stormwater Section (TCEQ-0600)

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: Jason Bass, P.E.

Date: 4/29/2024

Signature of Customer/Agent

Regulated Entity Name: Annunciation Maternity Home

Permanent Best Management Practices (BMPs)

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

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

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

		 □ 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.
	\boxtimes	N/A
9.		The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.
		 The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed. Attachment E - Request to Seal Features. A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.
10.		Attachment F - Construction Plans . All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:
		 ☑ Design calculations (TSS removal calculations) ☑ TCEQ construction notes ☑ All geologic features ☑ All proposed structural BMP(s) plans and specifications
		N/A

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

Attachment 6A – 20% or Less Impervious Cover Waiver

Improvements proposed for the subject property will not increase impervious cover in excess of twenty percent; however, future development is anticipated that will cause the impervious cover percentage to exceed twenty percent.

<u>Attachment 6B – BMPs for Upgradient Stormwater</u>

As shown via the existing topography on the Existing Drainage Area Map within the Construction Documents, stormwater originates upgradient of the project site.

The areas to the northeast are existing development upgradient to the site. The runoff from the upgradient sites will be captured in two bypass culverts such that it will all be captured and released on the west side of American Elm Drive such that it does not converge with on-site stormwater. The proposed site creates no increase in pollution as no upgradient stormwater will flow on top of any proposed (or existing) paved surface; thus, no permanent BMPs are required for upgradient stormwater.

Attachment 6C - BMPs for On-site Stormwater

The subject site is Annunciation Maternity Home, in Georgetown, Texas. The proposed 23.68-acre site will be developed with one elementary school building, associated parking, paving, and utilities. A sediment batch detention pond will be designed to meet BMP measures to control increased Total Suspended Solids (TSS) from the proposed site.

The maximum allowable impervious cover for non-residential development larger than 5 acres (70% for the first five acres and 55% for the remaining acreage), thus for this site, the maximum allowable increases in impervious cover, total allowable impervious cover is 5 acres x (0.70) + 18.22 acres x (0.55) = 13.52 acres. The total proposed impervious cover is 3.51 acres.

The offsite runoff will be collected by two proposed culverts constructed discharged offsite to the west. Stormwater that falls onsite will be routed via a storm sewer system to a proposed detention pond in the southern portion of the site, which will mitigate developed flows to at or below existing runoff rates. All proposed stormwater management systems will be designed to convey runoff from the development limits in accordance with the City of Georgetown guidelines.

The majority of the site's developed area will be routed through an onsite storm sewer system to the proposed detention pond located south of the site. The pond will utilize the lower 1.1 feet of depth for batch detention storage for water quality and was calculated to ensure 80% removal of the increase in total suspended solids. The water detained by the batch detention storage is discharged through a perforated riser pipe before exiting the site. The discharge is controlled by a motor actuated valve that is wired to a controller than opens the valve 12 hours after a rainfall event and closes once the pond has drained. The controller will include previsions for a manual override switch. The quality of runoff leaving the site after the permanent water quality BMP is expected to be mostly clean and clear water.

The TSS load that is required to be removed from this proposed development to meet the minimum 80% removal rate is 1,685 pounds. Per TCEQ RG-348 TSS removal calculation, the required water quality volume for the sediment batch detention pond is 6,202 cubic feet for 80% removal rate. The proposed detention pond was designed to detain the onsite storm drainage due to a 100-year storm event while maintaining the required .5-foot freeboard. The lowest elevation of the pond will be 736.60 feet and will extend to 742.00 feet.

<u>Attachment 6D – BMPs for Surface Streams</u>

There were not any features identified as sensitive in the Geologic Assessment on this site.

Section not applicable to this project.

<u>Attachment 6E – Request to Seal Features</u>

The permanent sealing of or diversion of flow from a naturally-occurring "sensitive" or "possibly sensitive" feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed for any naturally-occurring "sensitive" or "possibly sensitive" features on this site.

Section not applicable to this project.

<u>Attachment 6F – Construction Plans</u>

Full-sized	copies of	the cor	nstruction	plans are	submitted	separatel	y. Calcula	ations fo	or the	BMPs are
shown in	the const	ruction	plans.							

<u>Attachment 6G – Inspection, Maintenance, Repair</u> and Retrofit Plan

The following are recommended maintenance procedures for Batch Detention basins as outlined in TCEQ's RG-348 Technical Guidance Addendum.

Maintenance Guidelines for Batch Detention Basins:

Batch detention basins may have somewhat higher maintenance requirements than an extended detention basin since they are active stormwater controls. The maintenance activities are identical to those of extended detention basins with the addition of maintenance and inspections of the automatic controller and the valve at the outlet.

1. Inspections:

- a. Inspections should take place a minimum of twice a year. One inspection should take place during wet weather to determine if the basin is meeting the target detention time of 12 hours and a drawdown time of no more than 48 hours. The remaining inspections should occur between storm events so that manual operation of the valve and controller can be verified. The level sensor in the basin should be inspected and any debris or sediment in the area should be removed. The outlet structure and the trash screen should be inspected for signs of clogging. Debris and sediment should be removed from the orifice and outlet(s) as described in previous sections. Debris obstructing the valve should be removed. During each inspection, erosion areas inside and downstream of this BMP should be identified and repaired/revegetated immediately. Inspections of the Permanent BMPs will be documented on inspection reports that will be kept on record for three years and will include the following:
 - Date of inspection
 - Name and qualification of inspector
 - Noted condition
 - Noted problems
 - Records to be retained on site
 - If any issues are listed that are potentially not in compliance, forward the report immediately to your supervisor. Corrective actions must be taken immediately.

2. Mowing:

a. The basin must be mowed to prevent woody growth and control weeds. A mulching mower should be used, or the grass clippings should be caught and removed. Mowing should take place at least twice a year, or more frequently if vegetation exceeds 18 inches in height. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas.

3. Litter and Debris Removal:

a. Litter and debris removal should take place at least twice a year, as part of the periodic mowing operations and inspections. Debris and litter should be removed from the surface of the basin. Particular attention should be paid to floatable debris around the outlet

structure. The outlet should be checked for possible clogging or obstructions and any debris removed.

4. Erosion Control:

a. The basin side slopes and embankment all may periodically suffer from slumping and erosion. To correct these problems, corrective action, such as regrading and revegetation, may be necessary. Correction of erosion control should take place whenever required based on the periodic inspections.

5. Nuisance Control:

a. Standing water or soggy conditions may occur in the basin. Some standing water may occur after a storm event since the valve may close with 2 to 3 inches of water in the basin. Some flow into the basin may also occur between storms due to spring flow and residential water use that enters the storm sewer system. Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.).

6. Structural Repairs and Replacement:

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

7. Sediment Removal:

a. A properly designed batch detention basin will accumulate quantities of sediment over time. The accumulated sediment can detract from the appearance of the facility and reduce the pollutant removal performance of the facility. The sediment also tends to accumulate near the outlet structure and can interfere with the level sensor operation. Sediment shall be removed from the basin at least every 5 years, when sediment depth exceeds 6 inches, when the sediment interferes with the level sensor or when the basin does not drain within 48 hours. A gated maintenance ramp has been provided in the southeast corner of the pond to provide access for maintenance equipment.

8. Logic Controller:

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

These guidelines outlined above for inspection, maintenance, repair and retrofit are agreed to be followed by the land owner:

Name

President

Date

5/30/2024

<u>Attachment 6H - Pilot-Scale Field Testing Plan</u>

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

Section not applicable to this project.

<u>Attachment 6I – Measures for Minimizing Surface Stream Contamination</u>

The project will be utilizing a batch detention pond to reduce the effect of the increased runoff factor and to mitigate stream flashing, excessive velocities and to control erosion produced by increased imperviousness of the site. To minimize stream bank erosion at the points of discharge and to dissipate the storm water velocities, mortared rock riprap is proposed at the storm sewer outfalls, pond discharge, and spaced throughout the bypass ditch. Vegetation will be planted for the pond to help prevent erosion. The proposed detention pond will be placed above the water quality volume elevation of the batch detention pond to control the runoff during the 2-, 10-, 25-, and 100-year design storms.

Section VII Agent Authorization Form (TCEQ-0599)

Agent Authorization Form

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

	John Ratcliff	
	Print Name	
	B. H. H	
	President	
	Title - Owner/President/Other	
of	Annunciation Maternity Home	
Approximately and the control of the forest control of the control	Corporation/Partnership/Entity Name	
have authorized	Jason Bass, P.E.	
	Print Name of Agent/Engineer	
of	Halff	
UI	D'(Al (E'	
	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:

Applicants Signature

 $\frac{4/26/2024}{\text{Date}}$

THE STATE OF Texas §

County of Williamsons

BEFORE ME, the undersigned authority, on this day personally appeared John Poto 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 26 day of April , 2024

NOTARY PUBLIC

 $\frac{\sqrt{i}}{\text{Type}}$

Victor a Mongo 7

Typed or Printed Name of Notary

VICTORIA MUNGUIA Notary Public, State of Texas Comm. Expires 03-16-2026 Notary ID 133649211

MY COMMISSION EXPIRES: 03-16-2026

Section VIII Application Fee Form (TCEQ-0574)

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: <u>Annunciation Maternity Home</u> Regulated Entity Location: 3610 Shell Rd, Georgetown, TX 78628

Name of Customer: Annunciation Maternity Home

Contact Person: John Ratcliff Phone: (512) 864-7755

Customer Reference Number (if issued):CN 603174640

Regulated Entity Reference Number (if issued):RN 105199822

Austin Regional Office (3373)	ilber (ii issueu).kiv <u>10313:</u>	5022
Hays	Travis	Williamson
San Antonio Regional Office (3	362)	
Bexar	Medina	Uvalde
Comal	Kinney	
• •	Quality. Your canceled cl	r money order, payable to the Texa sheck will serve as your receipt. This ayment is being submitted to:
☐ Austin Regional Office☐ Mailed to: TCEQ - Cashier	=	an Antonio Regional Office vernight Delivery to: TCEQ - Cashier
Revenues Section Mail Code 214		2100 Park 35 Circle uilding A, 3rd Floor
P.O. Box 13088 Austin, TX 78711-3088		ustin, TX 78753 512)239-0357
Site Location (Check All That A	oply):	
Recharge Zone	Contributing Zone	Transition Zone

	· 	
Type of Plan	Size	Fee Due
Water Pollution Abatement Plan, Contributing Zone		
Plan: One Single Family Residential Dwelling	Acres	\$
Water Pollution Abatement Plan, Contributing Zone		
Plan: Multiple Single Family Residential and Parks	Acres	\$
Water Pollution Abatement Plan, Contributing Zone		
Plan: Non-residential	23.68 Acres	\$ \$6,500
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	Tanks	\$
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature: _	In the	Date: 4/29/2024
		

Application Fee Schedule

Texas Commission on Environmental Quality

Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	Fee
Exception Request	\$500

Extension of Time Requests

Project	Fee
Extension of Time Request	\$150

Section IX Core Data Form (TCEQ-10400)



TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason fo	r Submis	sion (If other is c	hecked please de	escribe in s	space p	orovide	d.)				
New Per New Per	mit, Regis	tration or Authori	zation (Core Data	a Form sho	ould be	submi	tted w	rith the p	program applicatio	n.)	
Renewa	l (Core Da	ta Form should b	e submitted with	the renew	al form)		Other			
2. Customer Reference Number (if issued) Follow this link to search 3. Regulated Entity Reference Number (if issued)											
CN 603174640 for CN or RN numbers in Central Registry** RN 105199822											
SECTION	II: Cu	stomer Info	<u>ormation</u>								
4. General C	ustomer l	nformation	5. Effective Da	te for Cus	stomer	· Inforr	natio	n Update	es (mm/dd/yyyy)		
		ne (Verifiable witl	•	late to Cus				troller of	Change in Public Accounts)	J	Entity Ownership
									·		active with the
Texas Sec	retary of	State (SOS)	or Texas Con	nptroller	of Pu	ublic	4 <i>cc</i> o	unts (CPA).		
6. Customer	Legal Nar	me (If an individual	, print last name fir	st: eg: Doe,	John)		<u>II</u>	new Cu	stomer, enter previ	ious Custome	er below:
ANNUNC	CIATIO	N MATERN	ІТҮ НОМЕ								
7. TX SOS/C	PA Filing	Number	8. TX State Tax	x ID (11 digi	ts)		9	. Federa	al Tax ID (9 digits)	10. DUNS	S Number (if applicable)
11. Type of C	Customer:		on		Individ	ual		Pai	rtnership: 🔲 Gene	al Limited	
Government:	City (County 🔲 Federal 🗌	State Other		Sole P	ropriet	orship		Other:		
12. Number 0 0-20	of Employ 21-100	ees 101-250	<u> 251-500</u>	501 ar	nd high	er		3. Indep ⊠ Yes	pendently Owned	l and Opera	ted?
14. Custome	r Role (Pro	oposed or Actual) –	as it relates to the	Regulated	Entity li	isted on	this fo	rm. Pleas	se check one of the	following	
⊠Owner		Operat	or	O	wner &	Opera	tor				
Occupatio	nal Licens	ee 🗌 Respo	nsible Party	☐ Vo	oluntar	y Clear	nup Ap	oplicant	Other:		
	ANNU	JNCIATION	MATERNIT	TY HON	ИE						
15. Mailing Address:	3610 \$	SHELL ROA	D								
110001	City	GEORGET	OWN	State	TX		ZIP	7862	28	ZIP + 4	9246
16. Country	Mailing In	formation (if outsi	de USA)	•		17. E	-Mail	Addres	S (if applicable)		
18. Telephor	e Numbe	ſ	19	. Extensi	on or (Code			20. Fax Numbe	r (if applicat	ole)
(512)75	1-4534								()	-	
SECTION	III: R	egulated En	tity Inform	ation							
					'v" is se	elected	belov	v this for	m should be acco	mpanied by	a permit application)
	ulated Enti	-	to Regulated Ent		-				Entity Information		и ретигорительного
The Regula	ated Ent	ity Name sub	mitted may b	e update	ed in (order	to m	eet TC	CEQ Agency D	ata Stano	lards (removal
		ndings such							- •		
22. Regulate	d Entity N	ame (Enter name	of the site where th	e regulated	action	is takin	g place	e.)			
ANNUNC	CIATIO	N MATERNI	TY HOME								

TCEQ-10400 (02/21) Page 1 of 2

23 Street Addres	Street Address of 3610 SHELL RO				ROAD									
the Regulated En														
(No PO Boxes)		City		Geo	rgetowr	1	State	TX	ZIF	,	78628		ZIP + 4	9246
24. County		WII	LLIA	MSO	N	•								
			Eı	nter Ph	ysical Lo	cati	on Descriptio	n if no str	eet a	ddress is	s provided.			
25. Description to Physical Location														
26. Nearest City										S	tate		Nea	rest ZIP Code
27. Latitude (N) In	n Decir				Lo		1-			tude (W)	In Decimal:			Occasion
Degrees		Minute	S		56	econ	as	Degre	es		Minutes			Seconds
29. Primary SIC C	Code (4	digits)	30.	Second	lary SIC C	Code	e (4 aigits)	31. Prima (5 or 6 digit	s)	AICS Cod		2. Seco	ondary NAI	CS Code
8661	_							813110						
33. What is the Pr	rimary	Busine	ess of	f this er	ntity? (D	o no	t repeat the SIC o	or NAICS des	criptior	1.)				
CONVENT								3610 9	HELL	L ROAD				
34. Mailing								3010 0	HILL	LINOAD				
Address:		C	ity	GEO	RGETOW	N	State	TX		ZIP	78628		ZIP + 4	9246
35. E-Mail Ac	ddress			OLOI	COLION		Otate	IX		Z II	70020		211 1 4	3240
		one Nu	ımber	•			37. Extension	n or Code			38. Fax	Numb	er (if appli	cable)
(512)	751-45	34									()	-	
39. TCEQ Programs form. See the Core Data	and II a Form	O Numb	oers C	Check all r additior	Programs nal guidanc	and e.	write in the perr	mits/registra	tion n	umbers tha	at will be affec	cted by	the updates	submitted on this
☐ Dam Safety			District	S		\boxtimes	Edwards Aquif	er		Emissions	Inventory Air	·	Industrial	Hazardous Waste
_							-07041202(A	A)						
☐ Municipal Solid W	/aste		New So	ource Re	view Air		OSSF			Petroleum	Storage Tan	k	☐ PWS	
Sludge			Storm \	Water		П	Title V Air			Tires			Used Oil	
			201111	vvator		<u> </u>	1140 7 741			11100				
☐ Voluntary Cleanup	p	□ v	Vaste '	Water			Wastewater Ag	griculture		Water Rig	hts	1	Other:	
SECTION IV	: Pre	epare	r In	form	ation									
40. Name: JASON					<u> </u>			41. Title:		SR. PR	OJECT I	MAN	IAGER	
42. Telephone Nun	nber	43. Ext	./Cod	le	44. Fax	Nur	nber	45. E-M	ail A	ddress				
(512)777-461	5				()		-	JBAS	S@1	HALFF	F.COM			
SECTION V:	Aut	thori	zed	Signa	ature									
46. By my signature signature authority to dentified in field 39.	submi													
Company:	HALF	F						Job Title	e:	SR. PR	OJECT MAN	IAGEF	₹	
Name (In Print):	JASO	N BAS	S	,							Phone:	(:	512) 777- 4	1615

TCEQ-10400 (02/21) Page 2 of 2

Signature:

5/3/2024

Date:

TEL: 512-864-7755

CIVIL ENGINEER

HALFF ASSOCIATES, INC. 13620 BRIARWICK DRIVE, SUITE 100 **AUSTIN, TX 78729** CONTACT: JASON A. BASS EMAIL: JBASS@HALFF.COM TEL: 512-777-4600 FIRM/ BUSINESS NO.: TBPELS #F-312 STATE: TX

SURVEYOR

NAME: LANDESIGN SERVICES, INC. STREET: 10090 W HIGHWAY 29 CITY, STATE ZIP: LIBERTY HILL, TX 78624 TEL: 512-238-7901 FIRM/ BUSINESS NO.: 10001800

LANDSCAPE ARCHITECT

HALFF ASSOCIATES, INC. 13620 BRIARWICK DRIVE, SUITE 100 AUSTIN, TX 78729 TEL: 512-777-4600 FIRM/ BUSINESS NO.: TBPELS #F-312 STATE: TX

SURVEYED DATE:

JANUARY 30, 2024

LEGAL DESCRIPTION:

BEING 23.22 ACRES OF LAND, SURVEYED BY LANDESIGN SERVICES, INC., SITUATED IN THE WILLIAM ROBERTS SURVEY NO. 4, ABSTRACT NO. 524, IN WILLIAMSON COUNTY, TEXAS; BEING COMPRISED OF ALL OF THE REMAINDER OF A CALLED 5.44 ACRE TRACT OF LAND DESCRIBED AS TRACT ONE IN A GENARAL WARRANTY DEED (ASSUMPTION) TO THE ANNUNCIATION MATERNITY HOME, INC., RECORDED IN DOCUMENT NO. 2023093867 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.T.), AND ALL OF A CALLED 17.98 ACRE TRACT OF LAND DESCRIBED AS TRACT ONE IN A WARRANTY DEED WITH VENDOR'S LIEN TO ANNUNCIATION MATERNITY HOME, INC., RECORDED IN DOCUMENT NO. 2008054708,

LAND USE SUMMARY:

1. THE SUBJECT OF THE SITE IS CURRENTLY DEVELOPED WITH HOUSING AND SUPPORT SERVICES FOR PREGNANT WOMEN.

FLOOD PLAIN NOTE:

THE PROJECT IS LOCATED WITHIN THE 100-YR FLOODPLAIN AS IDENTIFIED BY THE FLOOD INSURANCE RATE MAP NO. 48491C0283F. REVISED DECEMBER 20, 2019

NOTE:

- 1. THIS PROJECT IS SUBJECT TO ALL CITY STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS IN EFFECT AT THE TIME OF SUBMITTAL OF THE PROJECT TO THE CITY.
- 2. WHERE NO EXISTING OVERHEAD INFRASTRUCTURE, UNDERGROUND ELECTRIC UTILITY LINES SHALL BE LOCATED ALONG THE STREET AND WITHIN THE SITE. WHERE EXISTING OVERHEAD INFRASTRUCTURE IS TO BE RELOCATED. IT SHALL BE RE-INSTALLED UNDERGROUND AND THE EXISTING FACILITIES SHALL BE REMOVED AT THE DISCRETION OF THE DEVELOPMENT ENGINEER.
- 3. ALL ELECTRIC AND COMMUNICATION INFRASTRUCTURE SHALL COMPLY WITH UDC SECTION 13.06.
- 4. THE PROPERTY SUBJECT TO THIS APPLICATION IS SUBJECT TO THE WATER QUALITY REGULATIONS OF THE CITY OF GEORGETOWN.
- 5. A GEOLOGICAL ASSESSMENT, IN ACCORDANCE WITH THE CITY OF GEORGETOWN WATER QUALITY REGULATION WAS COMPLETED ON JANUARY 11, 2024.
- 6. THESE PLANS WERE PREPARED, SEALED, SIGNED AND DATED BY A TEXAS LICENSED PROFESSIONAL ENGINEER. THEREFORE, BASED ON THE ENGINEER'S CONCURRENCE OF COMPLIANCE, THE PLANS FOR CONSTRUCTION FOR THE PROPOSED PROJECT ARE HEREBY APPROVED SUBJECT TO THE STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS MANUAL AND ALL OTHER APPLICABLE CITY. STATE AND FEDERAL REQUIREMENTS AND CODES.

	TF	RAFFI	c coun	IT TABL	.E						
		Total	Generate	d Trips		То	tal Distri	bution	of Trips		
Land Use (Density)	EXPECTED UNITS	Daily	AM Hour	PM Hour	AM In	AM Out	Pass-By	PMIn	PM Out	Pass-By	
Congragate Care Facility 253	60	121	4	10	2	1	0	6	5		0
Church [560]	6.286	57	4	0	2	1	0	0	0		0
Total	-	178	7	10	4	3	0	6	5		0

APPROVAL SIGNATURE

DATE

DESCRIPTION

MEP ENGINEER

CEN-TEX ENGINEERING 805 NORTH MAIN ST. UNIT G **SALADO, TX 76571** TEL: 972-832-5721 FIRM/ BUSINESS NO.: 11794 STATE: TX

ARCHITECT

MOD ARCHITECTURE & DESIGN 409 W MAIN ST. ROUND ROCK, TX, 78664 TEL: (512) 771-0596

BENCHMARK(S):

E: 3131828.80

ELEVATION: 756.18

1, CP IRSC 1/2 LSI CONTROL N: 10234977.86 E: 3132021.32 ELEVATION: 753.00 2, CP IRSC 1/2 LSI CONTROL N: 10235441.22

SITE DEVELOPMENT PLAN FOR

ANNUNCIATION MATERNITY HOME

3610 SHELL ROAD GEORGETOWN, TX 78626 **JUNE 2024**

CASE NUMBER: 2024-5-SWP



LOCATION MAP



13620 BRIARWICK DRIVE, SUITE 100 AUSTIN, TX 78729 TEL. 512-777-4600 FAX (512) 252-8141 www.halff.com

FOR PERMIT REVIEW



TBPELS FIRM #F-312

SUBMITTED FOR APPROVAL BY:

June 19, 2024

ENGINEER OF RECORD

I, JASON A. BASS, PE, DO HEREBY CONFIRM THAT ANY NEW PUBLIC WORKS AND DRAINAGE IMPROVEMENTS DESCRIBED HEREIN, HAVE BEEN DESIGNED IN COMPLIANCE WITH THE STORMWATER DRAINAGE POLICY ADOPTED BY THE CITY OF GEORGETOWN

DISCLAIMER:

THE SEAL(S) APPEARING ON THIS CONSTRUCTION SET WERE AUTHORIZED BY: JASON A. BASS (109708), NAME (NUMBER), ON 6/19/2024.

ALTERATION OF SEALED DOCUMENTS WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT. THE RECORD COPY OF THIS DRAWING IS ON FILE AT THE OFFICES OF:

HALFF ASSOCIATES, INC 13620 BRIARWICK DRIVE, SUITE 100 AUSTIN, TX 78729 FIRM / BUSINESS NO.: TBPELS #F-312 STATE: TX

APPROVED BY: DATE CITY OF GEORGETOWN ENGINEERING DATE CITY OF GEORGETOWN FIRE DEPARTMENT DATE WILLIAMSON COUNTY ADDRESSING COORDINATOR

CITY OF GEORGETOWN APPROVAL STAMP



THE INFORMATION SHOWN ON THESE DRAWINGS INDICATING SIZE, TYPE AND LOCATION OF UNDERGROUND, SURFACE, AND AERIAL UTILITIES IS NOT GUARANTEED TO BE EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT THE "TEXAS 811" SYSTEM AT 1-800-344-8377 (DIG TESS) 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION FOR EXISTING UTILITY LOCATIONS. THE CONTRACTOR SHALL ALSO BE FULLY RESPONSIBLE FOR FIELD VERIFYING LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES AFFECTED BY CONSTRUCTION FOR THIS PROJECT IN ORDER TO AVOID DAMAGING THOSE UTILITIES, AND SHALL IMMEDIATELY ARRANGE FOR REPAIR AND RESTORATION OF CONTRACTOR-DAMAGED UTILITIES TO THE UTILITY Know what's below. Company's approval at the expense of the contractor.

Sheet List Table

Sheet Title

COVER SHEET

GENERAL NOTES

OVERALL EXISTING CONDITIONS & DEMOLITION PLAN

EXISTING CONDITIONS & DEMOLITION SHEET (1 OF 5)

EXISTING CONDITIONS & DEMOLITION SHEET (2 OF 5

EXISTING CONDITIONS & DEMOLITION SHEET (3 OF 5

EXISTING CONDITIONS & DEMOLITION SHEET (4 OF 5)

EXISTING CONDITIONS & DEMOLITION SHEET (5 OF 5

EROSION & SEDIMENTATION CONTROL PLAN (1 OF 3

EROSION & SEDIMENTATION CONTROL PLAN (2 OF 3

EROSION & SEDIMENTATION CONTROL PLAN (3 OF 3

SITE PLAN (1 OF 3)

SITE PLAN (2 OF 3)

SITE PLAN (3 OF 3)

PAVING PLAN (1 OF 2)

PAVING PLAN (2 OF 2)

GRADING PLAN (1 OF 3)

GRADING PLAN (2 OF 3)

GRADING PLAN (3 OF 3)

OVERALL UTILITY PLAN

WATER PLAN (1 OF 3)

WATER PLAN (2 OF 3)

WATER PLAN (3 OF 3)

PROPOSED WASTEWATER PLAN (1 OF 2)

PROPOSED WASTEWATER PLAN (2 OF 2)

EXISTING DRAINAGE AREA MAP

PROPOSED DRAINAGE AREA MAP

DRAINAGE CALCULATIONS

INLET DRAINAGE AREA MAP

INLET CALCULATIONS

STORM DRAIN PLAN (1 OF 2)

STORM DRAIN PLAN (2 OF 2)

4'x2' CULVERT PLAN & PROFILE

4'x2' CULVERT CALCULATIONS NORTH 4'x2' CULVERT PLAN & PROFILE

> POND PLAN POND SECTION

POND DETAILS

SITE DETAILS (1 OF 3)

SITE DETAILS (2 OF 3)

SITE DETAILS (3 OF 3)

EROSION CONTROL DETAILS (1 OF 2)

EROSION CONTROL DETAILS (2 OF 2)

WATER DETAILS (1 OF 3)

WATER DETAILS (2 OF 3) WATER DETAILS (3 OF 3) WASTEWATER DETAILS

STORM DETAILS (1 OF 7)

STORM DETAILS (2 OF 7)

STORM DETAILS (3 OF 7)

STORM DETAILS (4 OF 7)

STORM DETAILS (5 OF 7)

STORM DETAILS (6 OF 7)

STORM DETAILS (7 OF 7)

OVERALL LANDSCAPE COMPLIANCE PLAN

LANDSCAPE COMPLIANCE PLAN

EXISTING TREE LIST

LANDSCAPE NOTES, DETAILS, AND CALCULATIONS

PHOTOMETRIC PLAN

Sheet Number

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E-01

Call before you dig.

AVO: 56152.001 DATE: JUNE 2024

REVISION

PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:

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

AUSTIN REGIONAL OFFICE

12100 PARK 35 CIRCLE, BLDG. A Austin, Texas 78753-1808 Fax (512) 339-3795

GENERAL SITE DEVEOPMENT NOTES:

- 1. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER, AND SUCCESSORS TO THE CURRENT PROPERTY OWNER, TO ENSURE THE SUBJECT PROPERTY AND ANY IMPROVEMENTS ARE MAINTAINED IN CONFORMANCE WITH THIS
- . THIS DEVELOPMENT SHALL COMPLY WITH ALL STANDARDS OF THE UNIFIED DEVELOPMENT CODE (UDC), THE CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND SPECIFICATIONS MANUAL, THE DEVELOPMENT MANUAL AND ALL OTHER APPLICABLE CITY STANDARDS.
- THIS SITE DEVELOPMENT PLAN SHALL MEET THE UDC STORMWATER REQUIREMENTS.
- 4. ALL SIGNAGE REQUIRES A SEPARATE APPLICATION AND APPROVAL FROM THE INSPECTION SERVICES
- DEPARTMENT. NO SIGNAGE IS APPROVED WITH THE SITE DEVELOPMENT PLAN. 5. SIDEWALKS SHALL BE PROVIDED IN ACCORDANCE WITH THE UDC.
- 6. DRIVEWAYS WILL REQUIRE APPROVAL BY THE DEVELOPMENT ENGINEER OF THE CITY OF GEORGETOWN.
- 7. OUTDOOR LIGHTING SHALL COMPLY WITH SECTION 7.04 OF THE UDC.

8 OF THE UDC.

- 8. SCREENING OF MECHANICAL EQUIPMENT, DUMPSTERS AND PARKING SHALL COMPLY WITH CHAPTER 8 OF THE
- UDC. THE SCREENING IS SHOWN ON THE LANDSCAPE AND ARCHITECTURAL PLANS, AS APPLICABLE. 9. THE COMPANION LANDSCAPE PLAN HAS BEEN DESIGNED AND PLANT MATERIALS SHALL BE INSTALLED TO MEET
- 10. ALL MAINTENANCE OF REQUIRED LANDSCAPE SHALL COMPLY WITH THE MAINTENANCE STANDARDS OF CHAPTER
- 11. A SEPARATE IRRIGATION PLAN SHALL BE REQUIRED AT THE TIME OF BUILDING PERMIT APPLICATION.
- 12. FIRE FLOW REQUIREMENT OF 1,500 GPM CONSTRUCTION TYPE II-B ARE BEING MET BY THIS PLAN WITH SPRINKLE
- 13. ANY HERITAGE TREE NOTED ON THIS SITE DEVELOPMENT IS SUBJECT, IN PERPETUITY, TO THE MAINTENANCE, CARE, PRUNING AND REMOVAL REQUIREMENTS OF THE UNIFIED DEVELOPMENT CODE.
- 14. THE CONSTRUCTION PORTION OF THESE PLANS WERE PREPARED, SEALED, SIGNED AND DATED BY A TEXAS LICENSED PROFESSIONAL ENGINEER. THEREFORE, BASED ON THE ENGINEER'S CONCURRENCE OF COMPLIANCE, THE CONSTRUCTION PLANS FOR CONSTRUCTION OF THE PROPOSED PROJECT ARE HEREBY APPROVED SUBJECT TO THE STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS MANUAL AND ALL OTHER APPLICABLE CITY, STATE AND FEDERAL REQUIREMENTS AND CODES.

GENERAL CONSTRUCTION NOTES

- 1. THE CONSTRUCTION PORTION OF THESE PLANS WERE PREPARED, SEALED, SIGNED AND DATED BY A TEXAS LICENSED PROFESSIONAL ENGINEER. THEREFORE, BASED ON THE ENGINEER'S CONCURRENCE OF COMPLIANCE, THE CONSTRUCTION PLANS FOR CONSTRUCTION OF THE PROPOSED PROJECT ARE HEREBY APPROVED SUBJECT TO THE STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS MANUAL AND ALL OTHER APPLICABLE CITY, STATE AND FEDERAL REQUIREMENTS AND CODES.
- 2. THIS PROJECT IS SUBJECT TO ALL CITY STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS IN EFFECT AT THE TIME OF SUBMITTAL OF THE PROJECT TO THE CITY.
- 3. THE SITE DEVELOPMENT PLAN SHALL MEET THE UDC STORMWATER REQUIREMENTS.
- 4. WASTEWATER MAINS AND SERVICE LINES SHALL BE SDR 26 PVC.
- WASTEWATER MAINS SHALL BE INSTALLED WITHOUT HORIZONTAL OR VERTICAL BENDS.
- 6. MAXIMUM DISTANCE BETWEEN WASTEWATER MANHOLES IS 500 FEET.
- 7. WASTEWATER MAINS SHALL BE LOW PRESSURE AIR TESTED AND MANDREL TESTED BY THE CONTRACTOR ACCORDING TO CITY OF GEORGETOWN AND TCEQ REQUIREMENTS.
- 8. WASTEWATER MANHOLES SHALL BE VACUUM TESTED AND COATED BY THE CONTRACTOR ACCORDING TO CITY OF GEORGETOWN AND TCEQ REQUIREMENTS.
- 9. WASTEWATER MAINS SHALL BE CAMERA TESTED BY THE CONTRACTOR AND SUBMITTED TO THE CITY ON DVD FORMAT PRIOR TO PAVING THE STREETS.
- 10. PRIVATE WATER SYSTEM FIRE LINES SHALL BE TESTED BY THE CONTRACTOR TO 200 PSI FOR 2 HOURS.
- 11. PRIVATE WATER SYSTEM FIRE LINES SHALL BE DUCTILE IRON PIPING FROM THE WATER MAIN TO THE BUILDING SPRINKLER SYSTEM, AND 200 PSI C900 PVC FOR ALL OTHERS. 12. PUBLIC WATER SYSTEM MAINS SHALL BE 150 PSI C900 PVC AND TESTED BY THE CONTRACTOR AT 200 PSI
- FOR 15 MINUTES AND 150 PSI FOR 2 HOURS. 13. ALL BENDS AND CHANGES IN DIRECTION ON WATER MAINS SHALL BE RESTRAINED AND THRUST BLOCKED.
- 14. LONG FIRE HYDRANT LEADS SHALL BE RESTRAINED.
- 15. ALL WATER LINES ARE TO BE BACTERIA TESTED BY THE CONTRACTOR ACCORDING TO THE CITY STANDARDS AND SPECIFICATIONS.
- 16. WATER AND SEWER MAIN CROSSINGS SHALL MEET ALL REQUIREMENTS OF THE TCEQ AND THE CITY.
- 17. FLEXIBLE BASE MATERIAL FOR PUBLIC STREETS SHALL BE TXDOT TYPE A GRADE 1 18. HOT MIX ASPHALTIC CONCRETE PAVEMENT SHALL BE TYPE D UNLESS OTHERWISE SPECIFIED AND SHALL
- BE A MINIMUM OF 2 INCHES THICK ON PUBLIC STREETS AND ROADWAYS. 19. ALL SIDEWALK RAMPS ARE TO BE INSTALLED WITH THE PUBLIC INFRASTRUCTURE.
- 20. A MAINTENANCE BOND IS REQUIRED TO BE SUBMITTED TO THE CITY PRIOR TO ACCEPTANCE OF THE PUBLIC IMPROVEMENTS. THIS BOND SHALL BE ESTABLISHED FOR 2 YEARS IN THE AMOUNT OF 10% OF THE COST OF THE PUBLIC IMPROVEMENTS AND SHALL FOLLOW THE CITY FORMAT
- 21. RECORD DRAWINGS OF THE PUBLIC IMPROVEMENTS SHALL BE SUBMITTED TO THE CITY BY THE DESIGN ENGINEER PRIOR TO ACCEPTANCE OF THE PROJECT. THESE DRAWINGS SHALL BE A PDF EMAILED TO THE CITY DEVELOPMENT ENGINEER.
- 22. THE PROPERTY SUBJECT TO THIS APPLICATION IS SUBJECT TO THE WATER QUALITY REGULATIONS OF THE CITY OF GEORGETOWN
- 23. A GEOLOGIC ASSESSMENT, IN ACCORDANCE WITH THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS WAS COMPLETED ON 01/20/2024. ANY SPRINGS AND STREAMS IDENTIFIED IN THE GEOLOGIC ASSESSMENT ARE SHOWN HEREIN
- 24. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER, AND SUCCESSORS TO THE CURRENT PROPERTY OWNER, TO ENSURE THE SUBJECT PROPERTY AND ANY IMPROVEMENTS ARE MAINTAINED IN
- CONFORMANCE WITH THIS SITE DEVELOPMENT PLAN. 25. THIS DEVELOPMENT SHALL COMPLY WITH ALL STANDARDS OF THE UNIFIED DEVELOPMENT CODE (UDC), THE CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND SPECIFICATIONS MANUAL, THE
- 26. THIS SITE DEVELOPMENT PLAN SHALL MEET THE UDC STORMWATER REQUIREMENTS
- 27. ALL SIGNAGE REQUIRES A SEPARATE APPLICATION AND APPROVAL FROM THE INSPECTION SERVICES DEPARTMENT. NO SIGNAGE IS APPROVED WITH THE SITE DEVELOPMENT PLAN.
- 28. SIDEWALKS SHALL BE PROVIDED IN ACCORDANCE WITH THE UDC.
- 29. DRIVEWAYS WILL REQUIRE APPROVAL BY THE DEVELOPMENT ENGINEER OF THE CITY OF GEORGETOWN.
- 30. OUTDOOR LIGHTING SHALL COMPLY WITH SECTION 7.04 OF THE UDC

DEVELOPMENT MANUAL AND ALL OTHER APPLICABLE CITY STANDARDS.

- 31. SCREENING OF MECHANICAL EQUIPMENT, DUMPSTERS AND PARKING SHALL COMPLY WITH CHAPTER 8 OF THE UDC. THE SCREENING IS SHOWN ON THE LANDSCAPE AND ARCHITECTURAL PLANS, AS APPLICABLE.
- 32. THE COMPANION LANDSCAPE PLAN HAS BEEN DESIGNED AND PLANT MATERIALS SHALL BE INSTALLED TO MEET ALL REQUIREMENTS OF THE UDC.
- 33. ALL MAINTENANCE OF REQUIRED LANDSCAPE SHALL COMPLY WITH THE MAINTENANCE STANDARDS OF CHAPTER 8 OF THE UDC.
- 34. A SEPARATE IRRIGATION PLAN SHALL BE REQUIRED AT THE TIME OF BUILDING PERMIT APPLICATION.
- 35. BASED ON 2015 IBC CONSTRUCTION TYPE OF II-B AND GROSS FLOOR AREA OF 41.815 SQUARE FEET PROVIDED BY MOD ARCHITECTURE. THE RESULTANT UNREDUCED REQUIRED FIRE FLOW IS 4.250 GPM. A FULL NFPA 13 AUTOMATIC SPRINKLER SYSTEM WILL BE PROVIDED BY OTHERS, WHICH ALLOWS FOR A 75% REDUCTION IN THE FIRE FLOW REQUIREMENT, BUT IN NO CASE SHALL THE REQUIRED FIRE FLOW BE BELOW 1,500 GPM. GEORGETOWN ENGINEERING HAS NOTIFIED THE PROJECT TEAM THAT THE PUBLIC WATER INFRASTRUCTURE WILL OPERATE AT A PRESSURE OF 20 PSI WHEN ANTICIPATED TO DELIVER 1,500 GPM. THE FIRE PROTECTION DESIGNER WILL ENSURE THAT A SYSTEM PRESSURE OF 20 PSI IS TAKEN INTO ACCOUNT WHEN DESIGNING THE FIRE PROTECTION SYSTEM.
- 36. ANY HERITAGE TREE NOTED ON THIS SITE DEVELOPMENT PLAN IS SUBJECT. IN PERPETUITY. TO THE MAINTENANCE, CARE, PRUNING AND REMOVAL REQUIREMENTS OF THE UNIFIED DEVELOPMENT CODE.
- 37. WHERE NO EXISTING OVERHEAD INFRASTRUCTURE, UNDERGROUND ELECTRIC UTILITY LINES SHALL BE LOCATED ALONG THE STREET AND WITHIN THE SITE. WHERE EXISTING OVERHEAD INFRASTRUCTURE IS TO BE RELOCATED, IT SHALL BE RE-INSTALLED UNDERGROUND AND THE EXISTING FACILITIES SHALL BE REMOVED AT THE DISCRETION OF THE DEVELOPMENT ENGINEER.

FIRE PROTECTION NOTES

- 1. APPROVAL OF THIS SITE PLAN DOES NOT IMPLY APPROVAL TO INSTALL UNDERGROUND FIRE LINES. PRIOR TO INSTALLATION OF UNDERGROUND FIRE LINES, A SEPARATE PERMIT SHALL BE SUBMITTED, UNDER GROUND FIRE LINE
- 2. BACKFLOW PROTECTION WILL BE PROVIDED IN ACCORDANCE WITH THE CITY OF GEORGETOWN REQUIREMENTS WHEN REQUIRED. BACKFLOW PROTECTION WILL BE INSTALLED IN ACCORDANCE WITH THE DETAIL PROVIDED IN THE UTILITY
- 3. ALL PRIVATE FIRE LINES AND WHAT THEY PROVIDE SERVICE TO WILL BE INSTALLED IN ACCORDANCE WITH NFPA 24 INSTALLATION OF PRIVATE SERVICE MAINS AND THEIR APPURTENANCES.
- 4. ALL TEES, PLUGS, CAPS, BENDS, REDUCERS, VALVES SHALL BE RESTRAINED AGAINST MOVEMENT. THRUST BLOCKING WILL BE INSTALLED IN ACCORDANCE WITH NFPA 24.
- 5. ALL UNDERGROUND SHALL REMAIN UNCOVERED UNTIL A VISUAL INSPECTION IS CONDUCTED BY THE GEORGETOWN FIRE MARSHAL'S OFFICE (FMO). ALL JOINTS AND THRUST BLOCKING SHALL BE UNCOVERED FOR VISUAL INSPECTION.
- 6. ALL UNDERGROUND SHALL BE FLUSHED PER THE REQUIREMENTS OF NFPA STANDARD 24 AND WITNESSED BY GEORGETOWN FMO.
- 7. ALL UNDERGROUND SHALL PASS A HYDROSTATIC TEST WITNESSED BY GEORGETOWN FMO. ALL JOINTS SHALL BE UNCOVERED FOR HYDROSTATIC TESTING. ALL PIPING AND ATTACHMENTS SUBJECTED TO SYSTEM WORKING
- 8. FENCES, LANDSCAPING, AND OTHER ITEMS WILL NOT BE INSTALLED WITHIN 3 FT, AND WHERE THEY WILL OBSTRUCT THE VISIBILITY OR ACCESS TO HYDRANTS, OR REMOTE FDCS.

PRESSURE SHALL BE TESTED AT 200 PSI. OR 50 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE, WHICHEVER IS

- 9. LICENSE REQUIREMENTS OF EITHER RME-U OR G. WHEN CONNECTING BY UNDERGROUND TO THE WATER PURVEYOR'S MAIN FROM THE POINT OF CONNECTION OR VALVE WHERE THE PRIMARY PURPOSE OF WATER IS FOR FIRE PROTECTION SPRINKLER SYSTEM
- 10. A SEPARATE PERMIT IS REQUIRED FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR

GREATER, AND SHALL MAINTAIN THAT PRESSURE + OR -5 PSI FOR 2 HOURS.

EROSION AND SEDIMENTATION CONTROL NOTES

- 1. PRIOR TO ANY SITE PREPARATION WORK, THE CONTRACTOR SHALL INSTALL EROSION CONTROLS IN ACCORDANCE WITH THE EROSION & SEDIMENTATION CONTROL PLAN.
- 2. SEDIMENTATION AND TEMPORARY EROSION CONTROLS SHALL BE PROVIDED IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION G-6.
- 3. REVEGETATION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION G-7 AND AS FURTHER SHOWN ON THIS SET OF PLANS.

STREET AND DRAINAGE CONSTRUCTION NOTES

- 1. ROADWAY EXCAVATION, EMBANKMENT, AND SUBGRADE PREPARATION SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATIONS SD-2, ROADWAY EXCAVATION, AND SD-3 EMBANKMENT AND SUBGRADE.
- 2. CONTRACTOR TO FILL BEHIND CURBS AND WALKS AND SHAPE TO INSURE PROPER DRAINAGE.
- 3. CONSTRUCTION JOINTS TO EXISTING PAVEMENT SHALL BE MADE BY EITHER CUTTING BACK EXISTING TO PRODUCE A SLIGHTLY BEVELED EDGE FOR THE FULL THICKNESS OF THE WEARING COURSE OR A SUITABLE LAP JOINT SHALL BE MADE. SAW CUTTING REQUIRED.
- 4. NO TRAFFIC SHALL BE ALLOWED ON THE FINISHED WEARING SURFACE UNTIL AT LEAST 12 HOURS AFTER COMPLETION OF ROLLING.
- 5. HOT MIX CONCRETE TRANSPORT TRUCKS TO BE EQUIPPED WITH CANVAS COVERS TO BE UTILIZED DURING MATERIAL HAULING. MATERIAL DELIVERED TO SITE AT IMPROPER TEMPERATURE SHALL BE REJECTED. HOT MIX SHALL BE LAID AT A MINIMUM TEMPERATURE OF 225°F.
- 6. ANY SETTLEMENT UNDER PAVEMENT DUE TO INADEQUATE COMPACTION OF UTILITY LINE BACK FILL SHALL BE CAUSE FOR RECOMPACTION OF TRENCH AND REPLACEMENT OF PAVEMENT SECTION.
- 7. ALL STORM DRAIN PIPING SHALL MEET CITY OF GEORGETOWN SPECIFICATION C-8, REINFORCED CONCRETE PIPE AND SHALL BE CLASS III RCP UNLESS NOTED OTHERWISE IN THE PLANS.
- 8. ALL PROPOSED STORM SEWER MANHOLES SHALL MEET CITY OF GEORGETOWN STANDARD SPECIFICATION SD-6, 9. PIPE EXCAVATION, TRENCHING, EMBEDMENT, ENCASEMENT AND BACKFILLING SHALL BE DONE IN ACCORDANCE
- WITH CITY OF GEORGETOWN STANDARD SPECIFICATION G-4 AND G-5 UNLESS OTHERWISE SPECIFIED. 10. TRENCH EXCAVATION SAFETY SYSTEMS SHALL BE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION
- 11. CONTRACTOR SHALL REFERENCE THE GEOTECHNICAL REPORT FOR SOILS AND PAVEMENT INFORMATION. ANY DISCREPANCY BETWEEN THESE CONSTRUCTION PLANS AND THE GEOTECHNICAL REPORT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION. THE PROPOSED PAVEMENT SECTION

HOT MIX ASPHALT CO	RIGID PAVEMENT		
LAYER	THICKNE	THICKNESS (INCHES)	
LATER	PASSENGER VEHICLES	HEAVY DUTY	HEAVY DUTY
HOT MIX ASPHALT PAVEMENT (HMAC)	2.0	2.0	6.0
CRUSHED LIMESTONE BASE (CLB)	8.0	10.0	-

- 12. THE SUBGRADE SOILS SHOULD BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO AT LEAST 95 PERCENT IN THE MAXIMUM DRY DENSITY AS DETERMINED BY TXDOT 114-E. THE SOIL SHOULD BE MOISTURE CONDITIONED TO BETWEEN OPTIMUM AND PLUS THREE PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT JUST PRIOR TO COMPACTION. WHERE CEMENTED LIMESTONE OR MARL BEDROCK IS ENCOUNTERED AT THE SUBGRADE ELEVATION AND VERIFIED BY ECS, THESE MATERIALS NEED NOT BE RIPPED OR COMPACTED.
- 13. ALL EMBANKMENT, SUBGRADE, TRENCH BACKFILL, BASE, ASPHALT, AND TESTING SHALL MEET THE CITY OF GEORGETOWN SPECIFICATIONS AND STANDARDS.
- 14. THESE PAVEMENT THICKNESS DESIGNS ARE INTENDED TO TRANSFER THE LOAD FROM THE ANTICIPATED TRAFFIC
- 15. RIGID PAVEMENT SHALL HAVE MINIMUM NO. 3 BARS AT 18 INCHES ON CENTER EACH WAY, CENTERED IN SLAB OR AS DETERMINED BY THE ACI "DRAG FORMULA." WATERLINE CONSTRUCTION NOTES
- 1. ALL WATER & WASTEWATER COLLECTION LINE CROSSINGS TO BE CONSTRUCTED IN ACCORDANCE WITH TCEQ REGULATION, CHAPTER 290 & 217.
- 2. ALL WATERLINE CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATIONS W1 THRU W4. ALL WATERLINE TESTING SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION CIP-12, TESTING OF PIPELINES AND MANHOLES.
- 3. PIPE EXCAVATION, TRENCHING, EMBEDMENT, ENCASEMENT AND BACKFILLILING SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN STANDARD SPECIFICATIONS G-4 AND G-5. 4. TRENCH EXCAVATION SAFETY SYSTEMS SHALL BE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION
- 5. CONTRACTOR TO INFORM BOTH CITY AND PROPERTY OWNER A MIN OF 48 HOURS PRIOR TO INTERRUPTION OF

WATER SERVICE. ANY INTERRUPTION SHALL NOT BE DURING PEAK USAGE TIME OR FOR MORE THAN 4 HOURS.

6. ALL PROPOSED PVC PIPE SHALL BE C900-DR18 AND MEET MANUFACTURER'S RECOMMENDATIONS FOR PIPE DEFLECTION. ALL PROPOSED FITTINGS, TEES, AND BENDS SHALL BE DOMESTICALLY MANUFACTURED DUCTILE

- 7. ALL GATE VALVES SHALL BE RESILIENT SEATED MEETING CITY OF GEORGETOWN SPECIFICATION W-3, VALVES,
- 8. CONTRACTOR TO INSTALL TRACER WIRE PER STANDARD DETAILS FOR ALL PROPOSED WATER MAINS.
- 9. ALL PROPOSED WATER LINES SHALL BE THRUST BLOCKED PER STANDARD DETAILS AND SPECIFICATIONS.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONTRACTOR OUTSIDE OF THE DESIGNATED WORK AREA WITH EQUAL OR BETTER QUALITY MATERIAL AT THE CONTRACTOR'S EXPENSE.
- 11. WET CONNECTIONS 4" DIAMETER AND LARGER SHALL INCLUDE AN APPROPRIATELY SIZED DUCTILE IRON SLEEVE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. DUCTILE IRON SLEEVE SHALL BE SUBSIDIARY TO WET
- 12. CONTRACTOR TO MARK CURBS AS DETAILED FOR WATER SERVICES AND VALVES

WASTEWATER COLLECTION LINE CONSTRUCTION NOTES

- 1. ALL CROSSING OF WASTEWATER COLLECTION LINES AND WATERLINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TCEQ REGULATIONS CHAPTER 290 AND 217.
- 2. ALL PROPOSED WASTEWATER LINES SHALL BE SDR 26 PIPE MATERIAL (UNLESS OTHERWISE NOTED), IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION WW-2.
- 3. PROPOSED WASTEWATER MANHOLES SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF GEORGETOWN
- 4. TESTING OF WASTEWATER LINES SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION CIP-12, TESTING OF PIPELINES AND MANHOLES.
- 5. CONTRACTOR TO PROVIDE DEFLECTION TEST IN ACCORDANCE WITH TCEQ CHAPTER 217.57 (B.) MANDREL TO BE PULLED IN BOTH DIRECTIONS.
- 6. CONTRACTOR TO PROVIDE LOW PRESSURE AIR TEST IN ACCORDANCE WITH TCEQ CHAPTER 271.57 (a), (1). 30 DAYS AFTER INSTALLATION. NO WATER TEST ALLOWED.
- 7. CONTRACTOR TO PROVIDE LEAKAGE TEST FOR MANHOLE IN ACCORDANCE WITH TCEQ CHAPTER 217.57 (a) OF THE STATE WASTEWATER CODE. NO WATER TEST ALLOWED.
- 8. PIPE EXCAVATION, TRENCHING, EMBEDMENT, ENCASEMENT AND BACKFILLING SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN STANDARD SPECIFICATIONS G-4 AND G-5.
- 9. TRENCH EXCAVATION SAFETY SYSTEMS SHALL BE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION
- 10. CONTRACTOR TO MARK CURBS AS DETAILED FOR WASTEWATER SERVICES. 11. NO WATER JETTING ALLOWED, MECHANICAL COMPACTION REQUIRED

DEVELOPER'S CONSTRUCTION NOTES:

- 1. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF GEORGETOWN'S STANDARD SPECIFICATIONS AND DETAILS, UNLESS SPECIFICALLY DIRECTED OTHERWISE WITHIN THIS SET OF CONSTRUCTION DOCUMENTS. IN THE EVENT OF A DISCREPANCY, ENGINEER SHALL BE NOTIFIED VIA REQUEST FOR INFORMATION (RFI) TO PROVIDE CLARITY.
- 2. IN THE EVENT THAT DISCREPANCIES ARE FOUND IN THE FIELD CONTRADICTORY TO THESE CONSTRUCTION PLANS WITH REGARD TO EXISTING UTILITIES, EXISTING TOPOGRAPHY, EXISTING IMPROVEMENTS, TREES, OR ANY OTHER FEATURE AFFECTING CONSTRUCTION, THE ENGINEER OF RECORD SHALL BE NOTIFIED IMMEDIATELY AND DISCREPANCY SHALL BE DOCUMENTED VIA A REQUEST FOR INFORMATION (RFI).
- 3. ALL DISTURBED AREAS SHALL BE COMPLETELY REVEGETATED BY THE CONTRACTOR. IN DISTURBED AREAS NOT DESIGNATED ON LANDSCAPE PLANS AND WITHIN THE PRIVATE MULTI-FAMILY PROJECT SITE, CONTRACTOR SHALL REVEGETATE WITH HYDROMULCH, BERMUDA SEED, OR SOD, CONTRACTOR IS RESPONSIBLE FOR TEMPORARY IRRIGATION AND ESTABLISHING 100% VEGETATIVE COVER OVER THE SITE PRIOR TO ENGINEER'S FINAL CONCURRENCE. CONTRACTOR MAY ELECT TO UTILIZE EROSION CONTROL MATTING ON SLOPES TO OBTAIN REVEGETATION. NO PORTIONS OF SLOPES OR DISTURBED AREAS SHALL REMAIN UNVEGETATED FOR MORE THAN 14 DAYS. SUBMIT EROSION CONTROL MATTING TO ENGINEER OF RECORD FOR REVIEW PRIOR TO CONSTRUCTION.
- 4. ALL EXISTING UTILITIES SHALL BE LOCATED BY CONTRACTOR PRIOR TO COMMENCEMENT OF WORK. IS ANY PROBLEMS ARE ENCOUNTERED DURING THE EARTHWORK OPERATIONS, OR IF SITE CONDITIONS DEVIATE FROM THOSE ENCOUNTERED DURING SUBSURFACE EXPLORATION, ECS SHOULD BE NOTIFIED IMMEDIATELY TO DETERMINE THE EFFECT ON RECOMMENDATIONS EXPRESSED IN THE GEOTECHNICAL
- 5. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH CITY OF GEORGETOWN REQUIREMENTS. IN THE CASE OF NO GUIDANCE OR APPLICABLE TRAFFIC AND DETAILS SHALL BE UTILIZED.
- 6. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH OCCUPATIONAL SAFETY AND HEALTH
- 7. ALL SUBMITTALS SHALL BE REVIEWED BY THE ENGINEER OF RECORD OR DESIGNATED REPRESENTATIVE PRIOR TO CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, WATER, STORM, AND SANITARY SEWER PIPES AND APPLIRTENANCES FARTHWORK MATERIALS. TRENCH MATERIALS, PAVEMENTS, AND SIGNAGE. ALL PAVEMENT MIX DESIGNS SHALL BE SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS. ALL SUBMITTALS NECESSARY FOR PUBLIC PROJECTS IN THE CITY OF GEORGETOWN SHALL BE APPLICABLE SUBMITTALS FOR THIS PROJECT.
- 8. ALL EARTHWORK OPERATIONS, MATERIALS, AND PAVING OPERATIONS OUTSIDE OF BUILDING ENVELOPES, INCLUDING BUT NOT LIMITED TO. DEMOLITION, CLEARING, GRUBBING, SCARIFYING, EXCAVATION, FILL. COMPACTION, SUBGRADE PREPARATION, BASE MATERIALS, AND CONCRETE PLACEMENT SHALL BE PERFORMED AND PROVIDED IN ACCORDANCE WITH THE MLA GEOTECHNICAL ENGINEERING JOB NO. 23106100.168 FOR ANNUNCIATION MATERNITY HOME - DATED JANUANRY, 2024. ALL EARTHWORK OPERATIONS WITHIN BUILDING ENVELOPE LIMITS SHALL BE CHECKED/VERIFIED WITH DEVELOPER/OWNER PRIOR TO CONSTRUCTION. THESE CIVIL ENGINEERING PLANS DO NOT ADDRESS EARTHWORK WITHIN THE BUILDING ENVELOPES. OTHER GEOTECHNICAL ENGINEERING REPORT(S) APPLY FOR BUILDING ENVELOPES.
- 9. ALL EARTHWORK, MATERIALS, AND PAVEMENT TESTING SHALL BE PERFORMED BY A QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF TEXAS. ALL TESTING METHODS AND FREQUENCY/SCHEDULE SHALL BE PERFORMED IN ACCORDANCE WITH THE MLA GEOTECHNICAL ENGINEERING JOB NO. 23106100.168 FOR ANNUNCIATION MATERNITY HOME - DATED JANUANRY. 2024 AND SUBSEQUENT ADDENDUM LETTERS TO THIS REPORT, AND AS AGREED UPON BETWEEN DEVELOPER AND GEOTECHNICAL ENGINEER. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATIONS AT A MINIMUM AND SHALL INCLUDE PROCTORS. MOISTURE AND DENSITY TESTING, GRADATIONS, CONCRETE CYLINDERS, SLUMP TESTS, AND OTHER TESTS RECOMMENDED BY GEOTECHNICAL ENGINEER. ALL TEST RESULTS AND REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF
- 10. ALL UTILITIES SHALL BE TESTED IN ACCORDANCE WITH CITY OF GEORGETOWN TESTING REQUIREMENTS WHETHER THEY ARE PRIVATE UTILITIES OR PUBLIC. ALL TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS APPLY TO THIS PROJECT. ALL TEST RESULTS AND REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD.
- 11. THE CONTRACTOR SHALL HIRE AN INDEPENDENT THIRD PARTY TO CONDUCT NECESSARY INSPECTIONS FOR TEMPORARY BEST MANAGEMENT PRACTICES. CONTRACTOR IS RESPONSIBLE FOR PREPARING THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMITTING NOTICE OF INTENT AND NOTICE OF TERMINATION.
- 12. ALL STANDARD CITY OF GEORGETOWN NOTES AND DETAILS APPLY FOR THE WORK ASSOCIATED WITH THIS PLAN SET, UNLESS SPECIFICALLY WRITTEN OTHERWISE BY ENGINEER OF RECORD IN THIS PLAN SET OR DURING CONSTRUCTION PHASE.

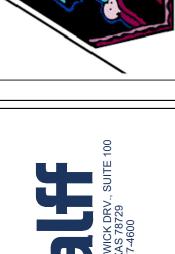
TRAFFIC CONTROL AND PAVEMENT MARKINGS NOTES

ADMINISTRATION LAWS AND REGULATIONS.

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE STANDARDS OF THE TEXAS DEPARTMENT OF TRANSPORTATION AND THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

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PROJECT NO.: 56152.001

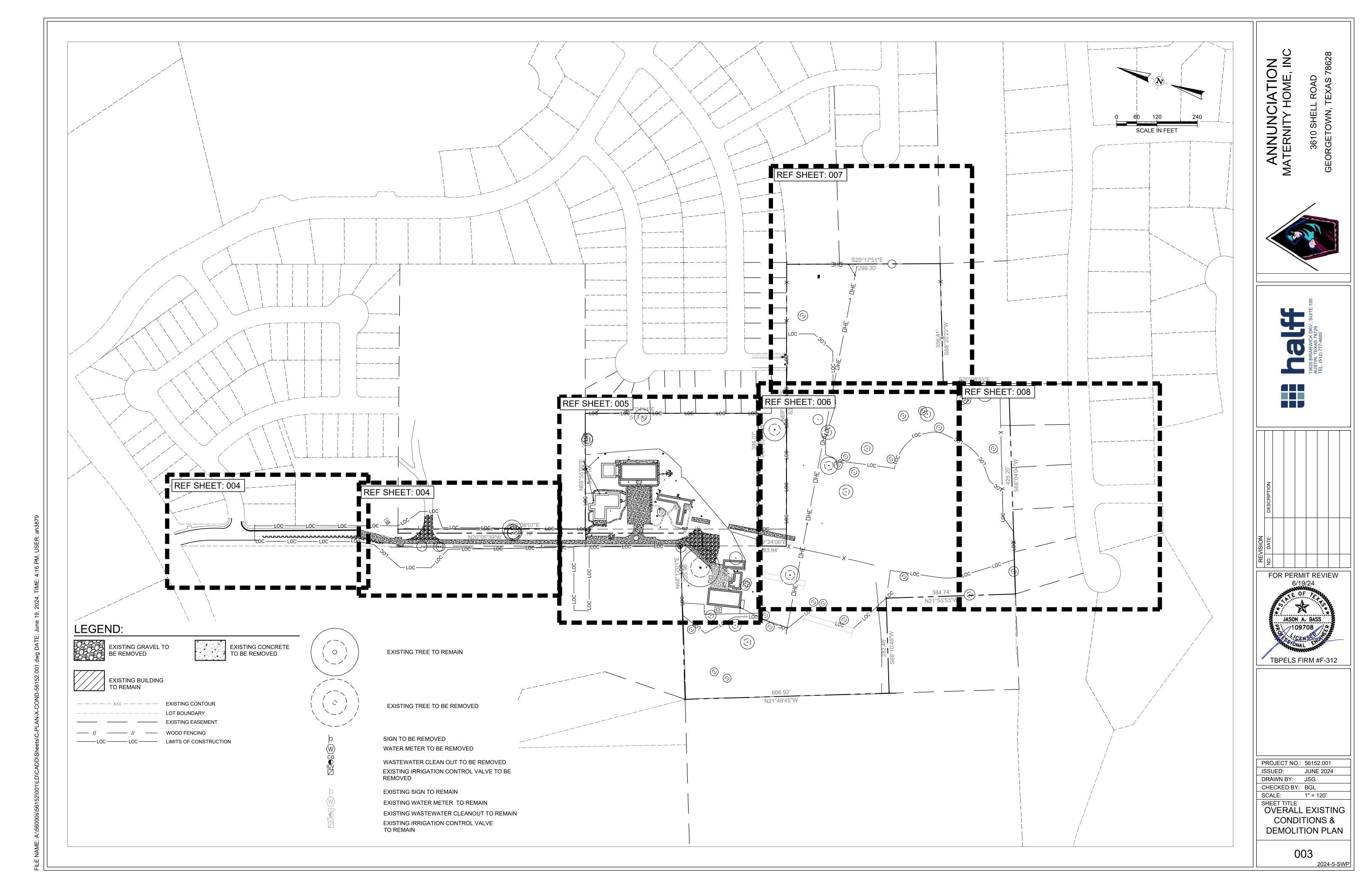
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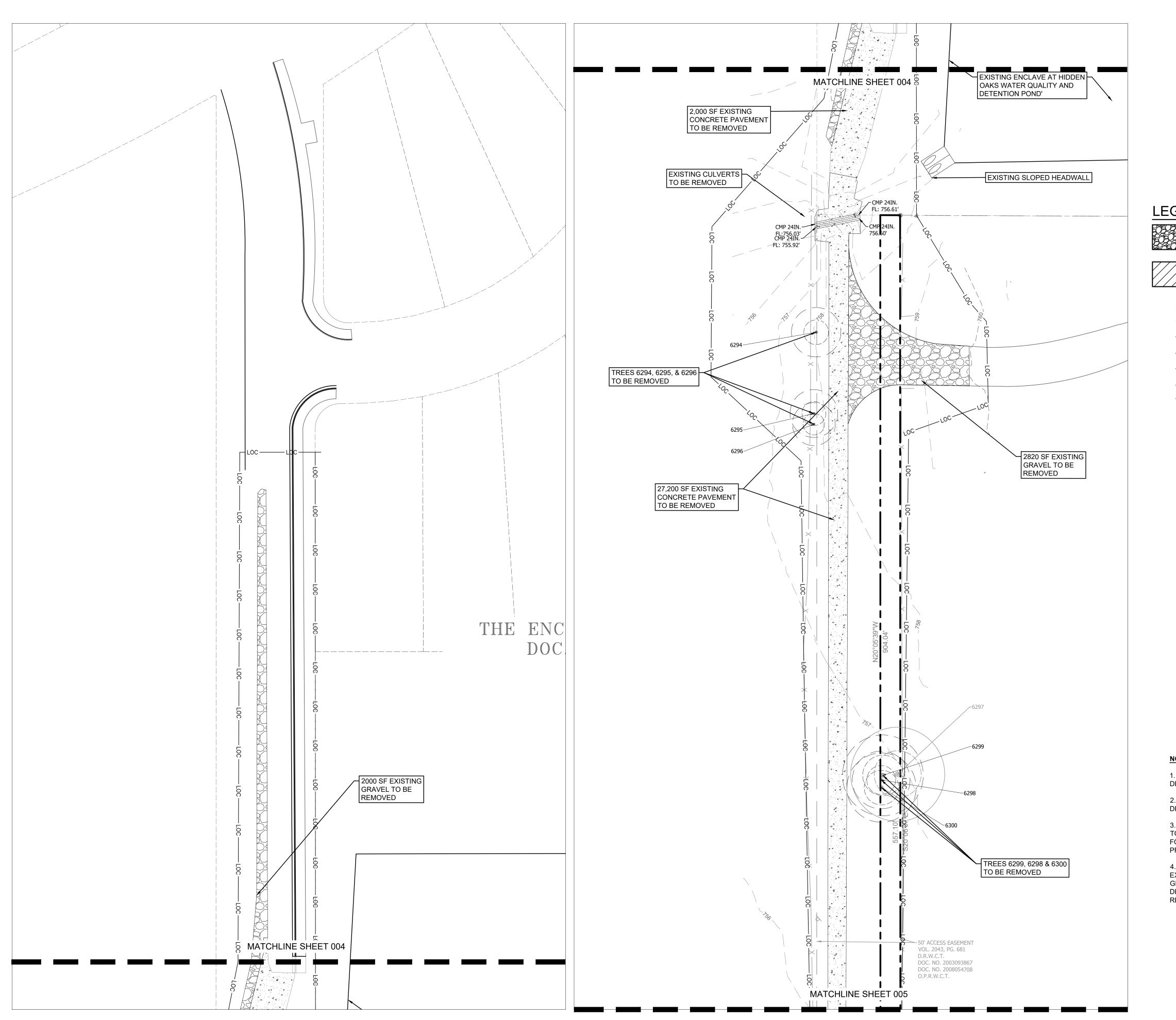
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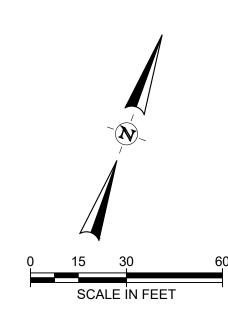
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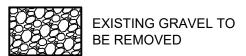
GENERAL NOTES

NONE







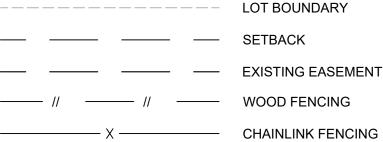


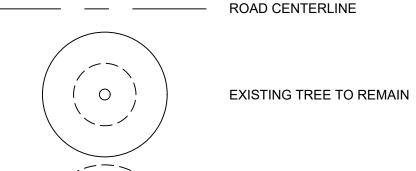


EXISTING CONCRETE TO BE REMOVED



---- EXISTING CONTOUR





EXISTING TREE TO BE REMOVED

SIGN TO BE REMOVED WATER METER TO BE REMOVED WASTEWATER CLEAN OUT TO BE REMOVED EXISTING IRRIGATION CONTROL VALVE TO BE

REMOVED EXISTING SIGN TO REMAIN EXISTING WATER METER TO REMAIN

> EXISTING WASTEWATER CLEANOUT TO REMAIN EXISTING IRRIGATION CONTROL VALVE TO REMAIN

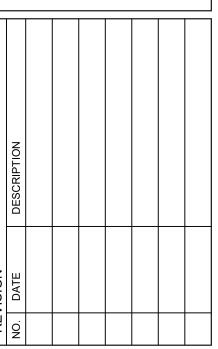
NOTES:

- 1. CONTRACTOR SHALL COORDINATE WITH ELECTRIC COMPANIES TO DE-ENERGIZE AND REMOVE NECESSARY POWER POLES AND WIRES.
- 2. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY DEMOLITION PERMITS.
- 3. ALL EXISTING UTILITIES SHALL BE LOCATED BY CONTRACTOR PRIOR TO COMMENCEMENT OF ANY DEMOLITION ACTIVITIES. ANY DISCREPANCIES FOUND FROM THE PLAN SET SHALL BE SENT TO ENGINEER OF RECORD PRIOR TO CONSTRUCTION OR DEMOLITION.
- 4. ALL REMNANTS OF EXISTING FOUNDATIONS SHALL BE COMPLETELY EXCAVATED AND REMOVED TO AT LEAST 2 FEET BELOW FINISHED FLOOR GRADES. IF ANY UNUSUAL ITEMS ARE UNEARTHED DURING OR AFTER DEMOLITION, THE GEOTECHNICAL ENGINEER AND THE CIVIL ENGINEER OF RECORD SHALL BE CONTACTED IMMEDIATELY.







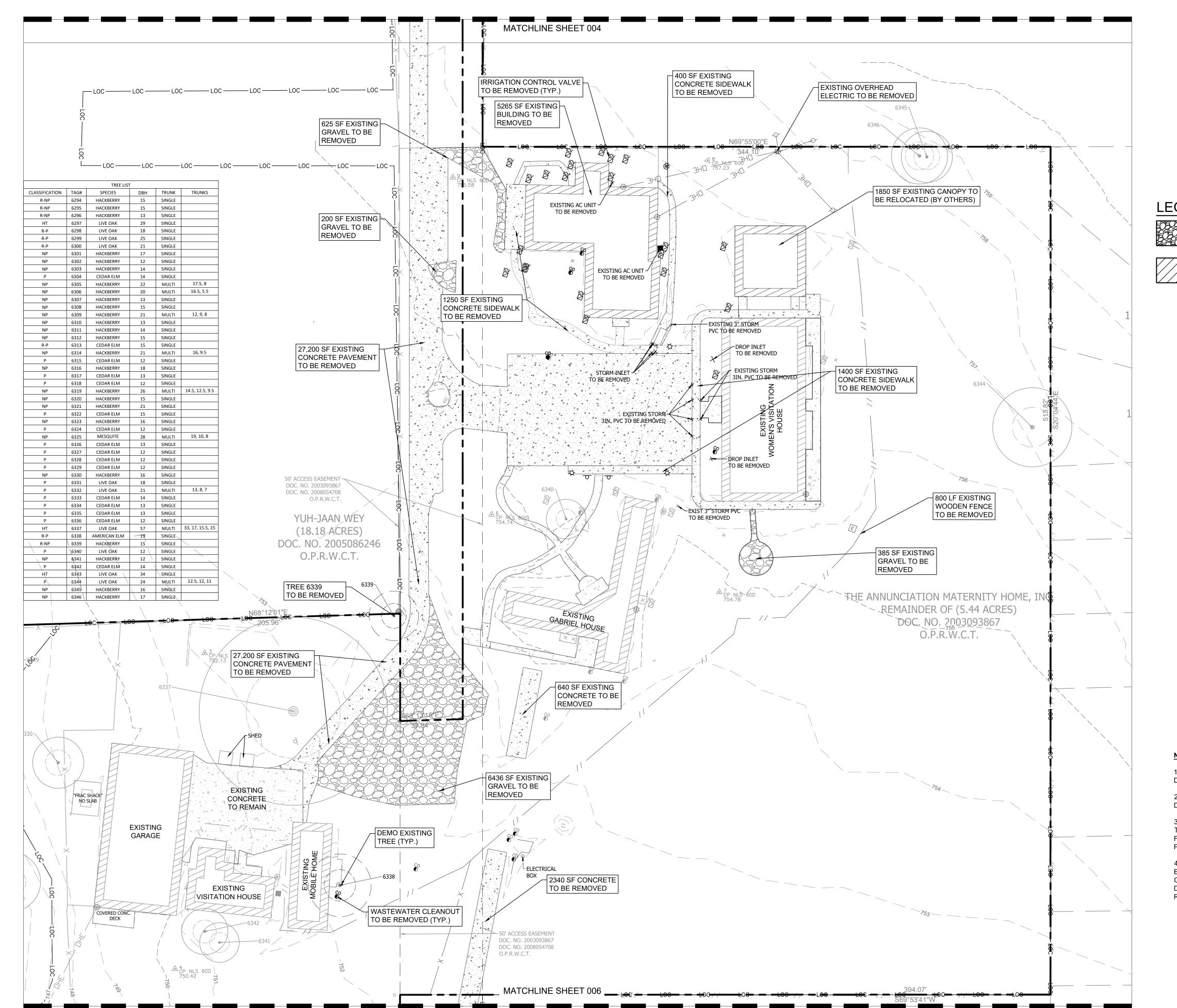


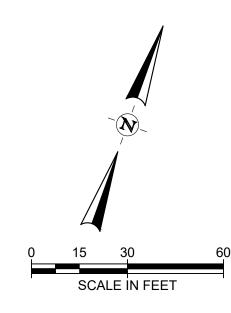
FOR PERMIT REVIEW JASON A. BASS TBPELS FIRM #F-312

PROJECT NO.:	56152.001
ISSUED:	JUNE 2024
DRAWN BY:	AB

CHECKED BY: BGL SCALE: 1" = 30' SHEET TITLE EXISTING CONDITIONS & DEMOLITION SHEET

(1 OF 5)







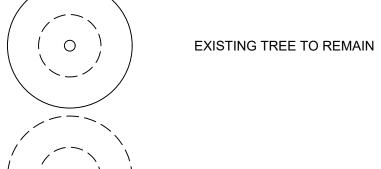
EXISTING CONCRETE TO BE REMOVED

EXISTING BUILDING TO BE REMOVED

> ---- EXISTING CONTOUR ---- LOT BOUNDARY — EXISTING EASEMENT

WOOD FENCING CHAINLINK FENCING

ROAD CENTERLINE OHE — OHE — EXISTING OVERHEAD ELECTRIC



EXISTING TREE TO BE REMOVED

SIGN TO BE REMOVED WATER METER TO BE REMOVED WASTEWATER CLEAN OUT TO BE REMOVED

EXISTING IRRIGATION CONTROL VALVE TO BE EXISTING LIGHT POLE TO BE REMOVED

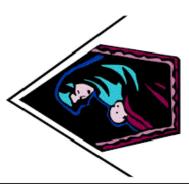
EXISTING SIGN TO REMAIN EXISTING WATER METER TO REMAIN

> EXISTING WASTEWATER CLEANOUT TO REMAIN EXISTING IRRIGATION CONTROL VALVE TO REMAIN

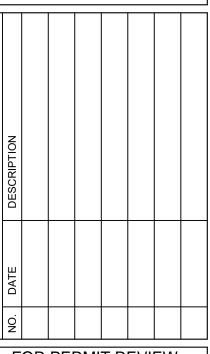
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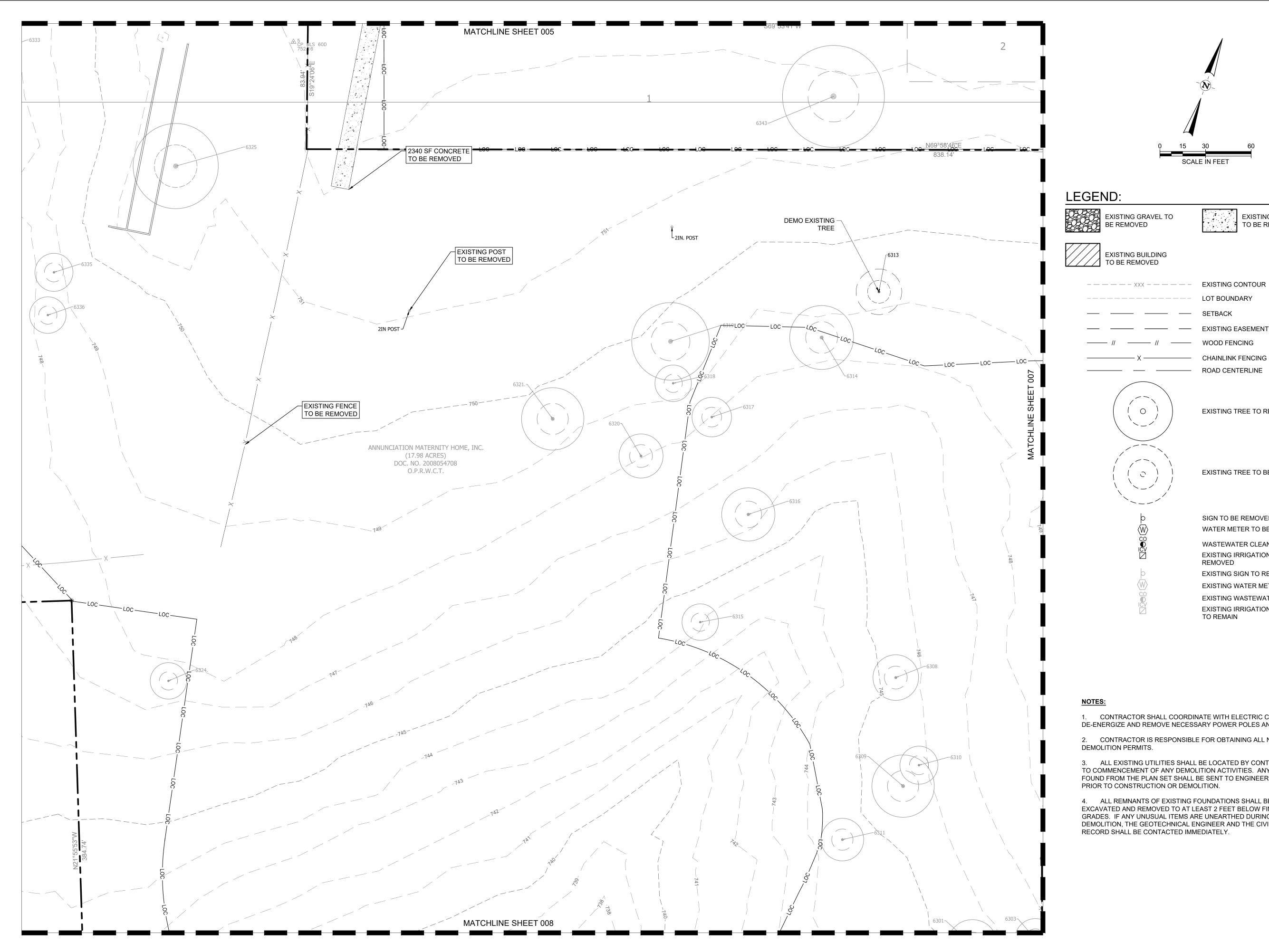
FOR PERMIT REVIEW JASON A. BASS 109708

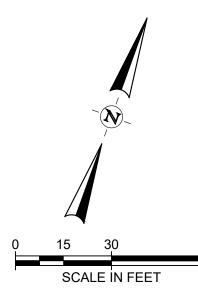
TBPELS FIRM #F-312

PROJECT NO.: 56152.001 ISSUED: **JUNE 2024** DRAWN BY: AB CHECKED BY: BGL SCALE: 1" = 30' SHEET TITLE

EXISTING CONDITIONS & DEMOLITION SHEET

(2 OF 5)







EXISTING CONCRETE
TO BE REMOVED

LOT BOUNDARY

EXISTING EASEMENT

WOOD FENCING CHAINLINK FENCING

——— ROAD CENTERLINE EXISTING TREE TO REMAIN



SIGN TO BE REMOVED WATER METER TO BE REMOVED WASTEWATER CLEAN OUT TO BE REMOVED

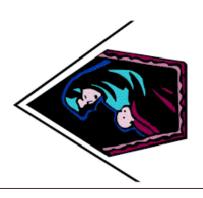
EXISTING IRRIGATION CONTROL VALVE TO BE REMOVED

EXISTING SIGN TO REMAIN EXISTING WATER METER TO REMAIN

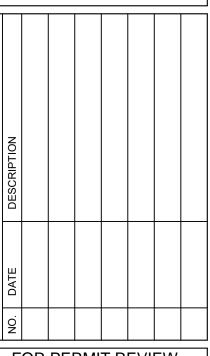
EXISTING WASTEWATER CLEANOUT TO REMAIN EXISTING IRRIGATION CONTROL VALVE TO REMAIN

- 1. CONTRACTOR SHALL COORDINATE WITH ELECTRIC COMPANIES TO DE-ENERGIZE AND REMOVE NECESSARY POWER POLES AND WIRES.
- 2. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY
- 3. ALL EXISTING UTILITIES SHALL BE LOCATED BY CONTRACTOR PRIOR TO COMMENCEMENT OF ANY DEMOLITION ACTIVITIES. ANY DISCREPANCIES FOUND FROM THE PLAN SET SHALL BE SENT TO ENGINEER OF RECORD PRIOR TO CONSTRUCTION OR DEMOLITION.
- 4. ALL REMNANTS OF EXISTING FOUNDATIONS SHALL BE COMPLETELY EXCAVATED AND REMOVED TO AT LEAST 2 FEET BELOW FINISHED FLOOR GRADES. IF ANY UNUSUAL ITEMS ARE UNEARTHED DURING OR AFTER DEMOLITION, THE GEOTECHNICAL ENGINEER AND THE CIVIL ENGINEER OF RECORD SHALL BE CONTACTED IMMEDIATELY.









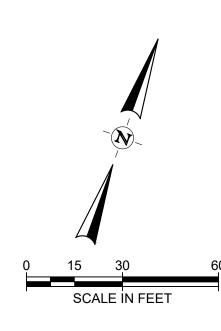
FOR PERMIT REVIEW JASON A. BASS TBPELS FIRM #F-312

PROJECT NO.: 56152.001 ISSUED: JUNE 2024 DRAWN BY: AB

CHECKED BY: BGL SCALE: SHEET TITLE

EXISTING CONDITIONS & DEMOLITION SHEET

(3 OF 5)







EXISTING CONCRETE
TO BE REMOVED

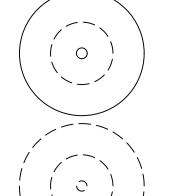


EXISTING BUILDING TO BE REMOVED

---- EXISTING CONTOUR ---- LOT BOUNDARY

— WOOD FENCING

CHAINLINK FENCING ROAD CENTERLINE



EXISTING TREE TO REMAIN

EXISTING TREE TO BE REMOVED

SIGN TO BE REMOVED WATER METER TO BE REMOVED WASTEWATER CLEAN OUT TO BE REMOVED

EXISTING IRRIGATION CONTROL VALVE TO BE REMOVED EXISTING SIGN TO REMAIN

EXISTING WATER METER TO REMAIN

EXISTING WASTEWATER CLEANOUT TO REMAIN EXISTING IRRIGATION CONTROL VALVE TO REMAIN

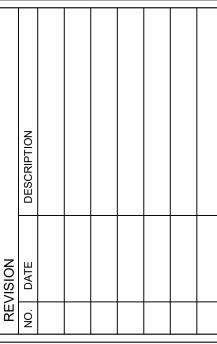
NOTES:

- 1. CONTRACTOR SHALL COORDINATE WITH ELECTRIC COMPANIES TO DE-ENERGIZE AND REMOVE NECESSARY POWER POLES AND WIRES.
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- 3. ALL EXISTING UTILITIES SHALL BE LOCATED BY CONTRACTOR PRIOR TO COMMENCEMENT OF ANY DEMOLITION ACTIVITIES. ANY DISCREPANCIES FOUND FROM THE PLAN SET SHALL BE SENT TO ENGINEER OF RECORD PRIOR TO CONSTRUCTION OR DEMOLITION.
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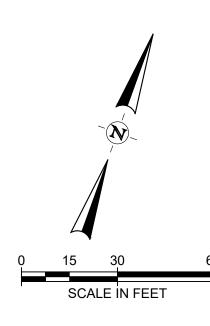


FOR PERMIT REVIEW JASON A. BASS TBPELS FIRM #F-312

PROJECT NO.: 56152.001 ISSUED: JUNE 2024 DRAWN BY: JSG CHECKED BY: BGL SCALE: 1" = 30'

SHEET TITLE EXISTING CONDITIONS & DEMOLITION SHEET (4 OF 5)





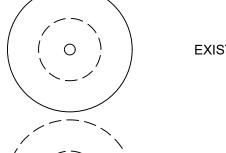




EXISTING CONCRETE
TO BE REMOVED



ROAD CENTERLINE



EXISTING TREE TO REMAIN



SIGN TO BE REMOVED

WATER METER TO BE REMOVED

WASTEWATER CLEAN OUT TO BE REMOVED EXISTING IRRIGATION CONTROL VALVE TO BE REMOVED

EXISTING SIGN TO REMAIN

EXISTING WATER METER TO REMAIN

EXISTING WASTEWATER CLEANOUT TO REMAIN EXISTING IRRIGATION CONTROL VALVE

TO REMAIN

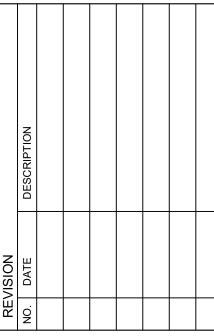
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- 1. CONTRACTOR SHALL COORDINATE WITH ELECTRIC COMPANIES TO DE-ENERGIZE AND REMOVE NECESSARY POWER POLES AND WIRES.
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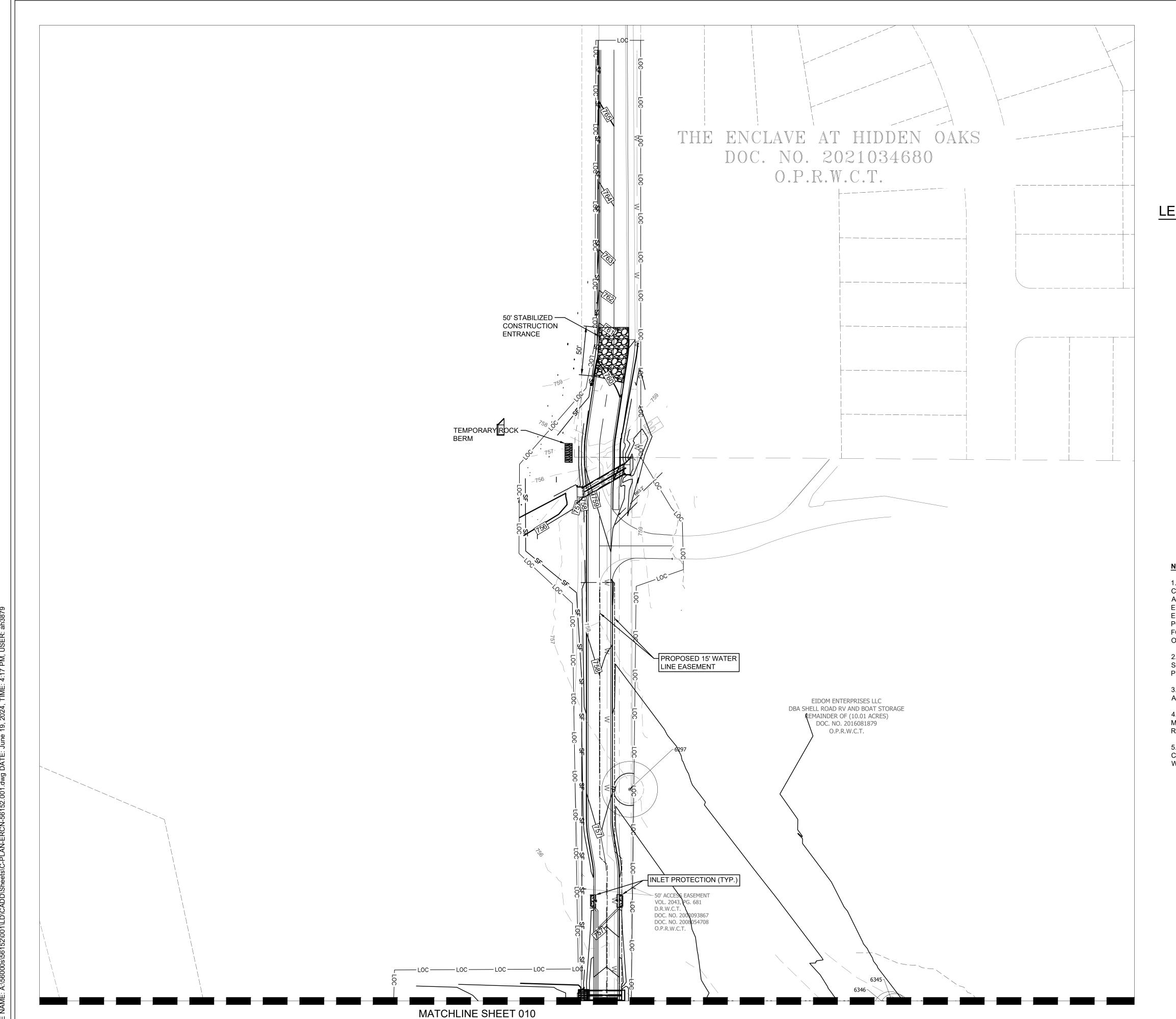


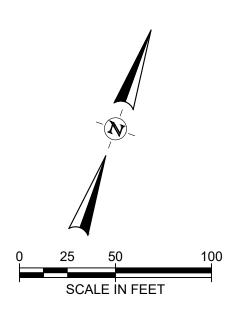


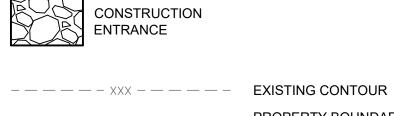
FOR PERMIT REVIEW TBPELS FIRM #F-312

PROJECT NO.:	56152.001
ISSUED:	JUNE 2024
DRAWN BY:	JSG
CHECKED BY:	BGL

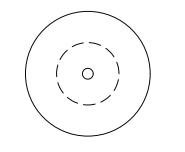
SCALE: 1" = 30' SHEET TITLE EXISTING CONDITIONS & DEMOLITION SHEET (5 OF 5)







— IP —— IP —— INLET PROTECTION



EXISTING TREE

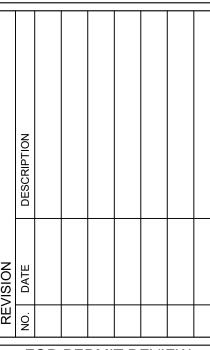
NOTEO

- 1. ALL DISTURBED AREAS SHALL BE COMPLETELY REVEGETATED BY THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY IRRIGATION AND ESTABLISHING 100% VEGETATIVE COVER OVER THE SITE PRIOR TO ENGINEER'S FINAL CONCURRENCE. CONTRACTOR MAY ELECT TO UTILIZE EROSION CONTROL MATTING ON SLOPES TO OBTAIN REVEGETATION. NO PORTIONS OF SLOPES OR DISTURBED AREAS SHALL REMAIN UNVEGETATED FOR MORE THAN 14 DAYS. SUBMIT EROSION CONTROL MATTING TO ENGINEER OF RECORD FOR REVIEW PRIOR TO CONSTRUCTION.
- 2. THE CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING SITE CONSTRUCTION SUCH AS WATERING WITH TRUCKS AND MULCHING AS PER CITY STANDARDS.
- 3. THE CONTRACTOR SHALL CLEAN UP SPOILS THAT MIGRATE ONTO ROADS A MINIMUM OF ONCE DAILY.
- 4. TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL.
- 5. PLACEMENT OF SILT FENCE IS SHOWN SCHEMATICALLY ONLY.
 CONTRACTOR SHALL DETERMINE EXACT LOCATION OF SILT FENCE TO BEST
 WORK WITH GRADING OPERATIONS.









JASON A. BASS

JOSTON

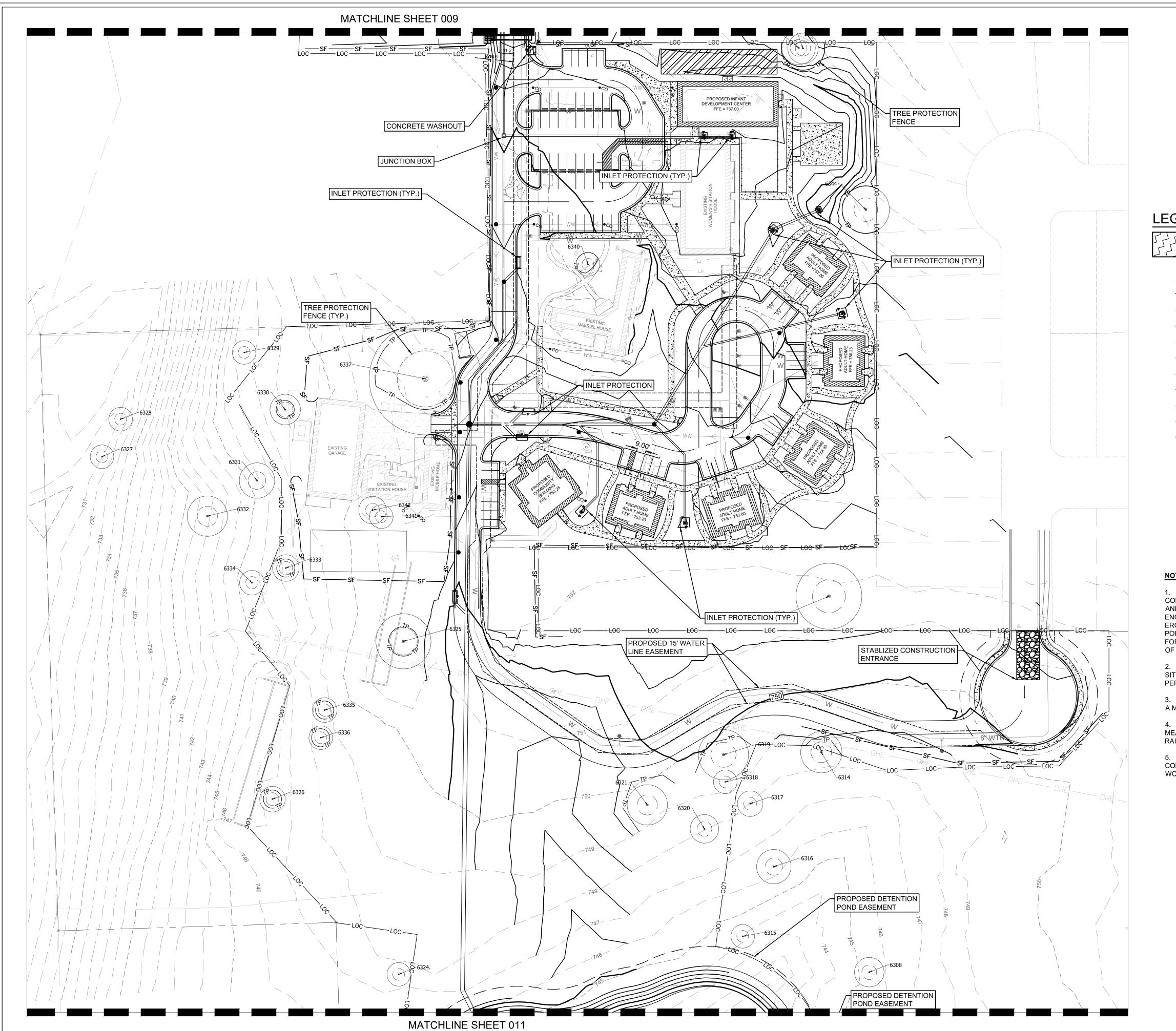
JASON A. BASS

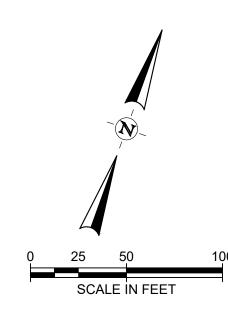
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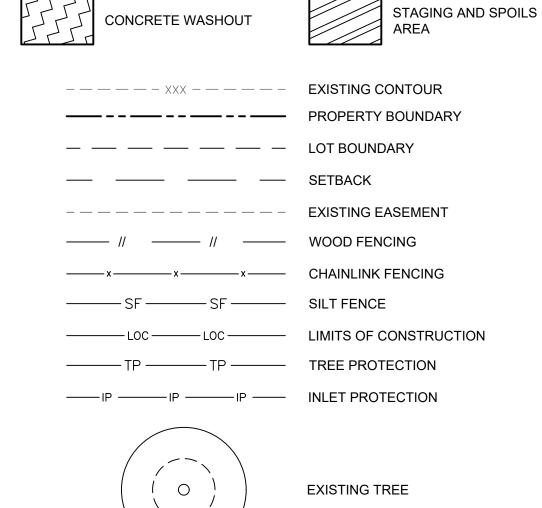
TBPELS FIRM #F-312

PROJECT NO.:	56152.001
ISSUED:	JUNE 2024
DRAWN BY:	AB
CHECKED BY:	BGL
SCALE:	1" = 50'
SHEET TITLE	

EROSION &
SEDIMENTATION
CONTROL PLAN (1 OF 3)

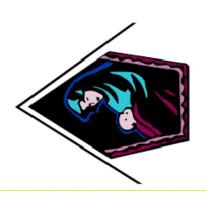




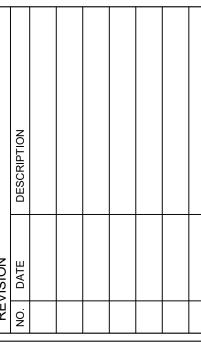


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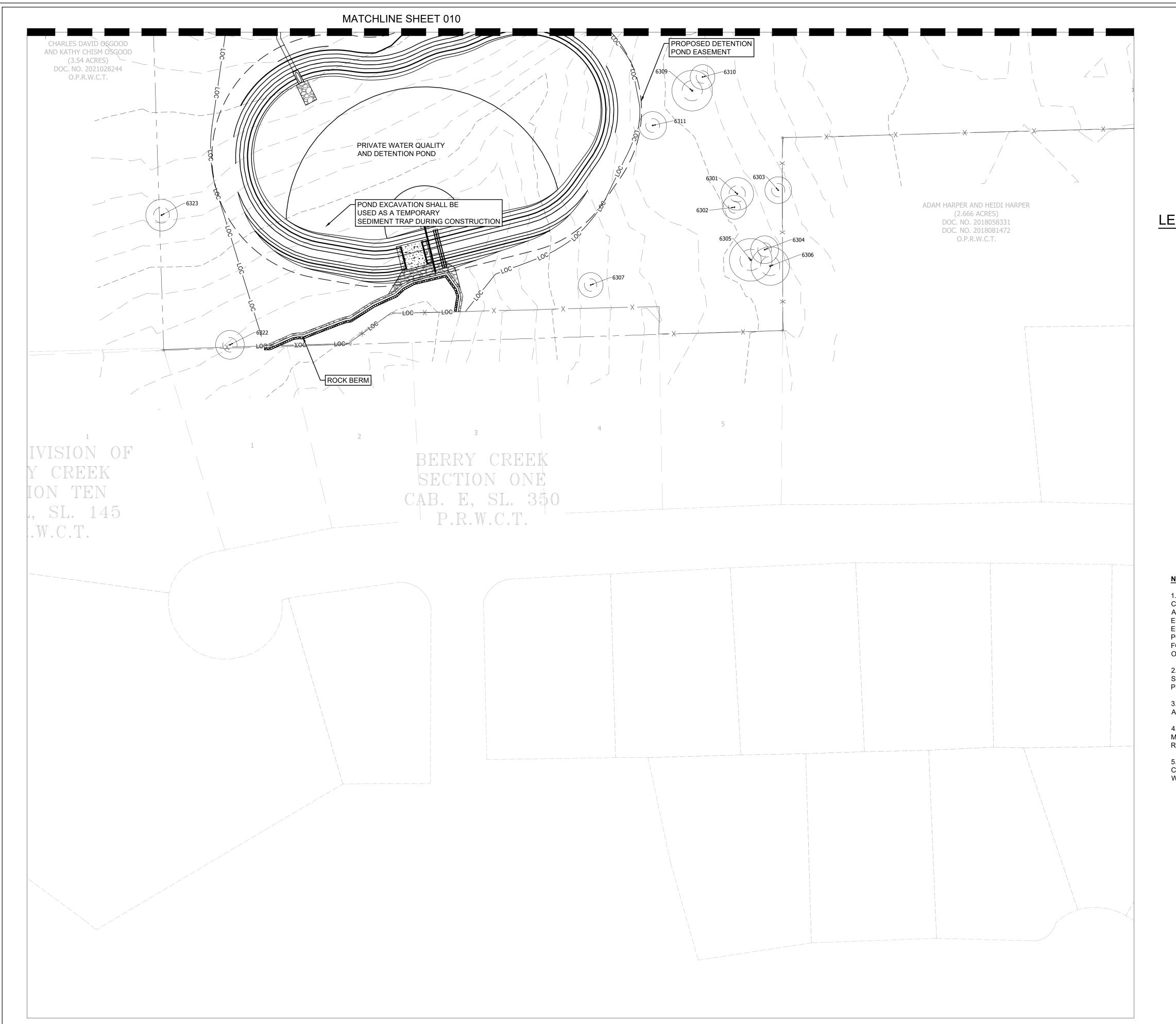


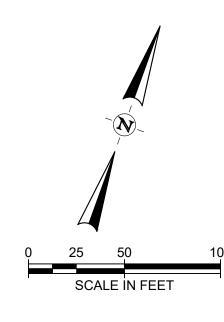


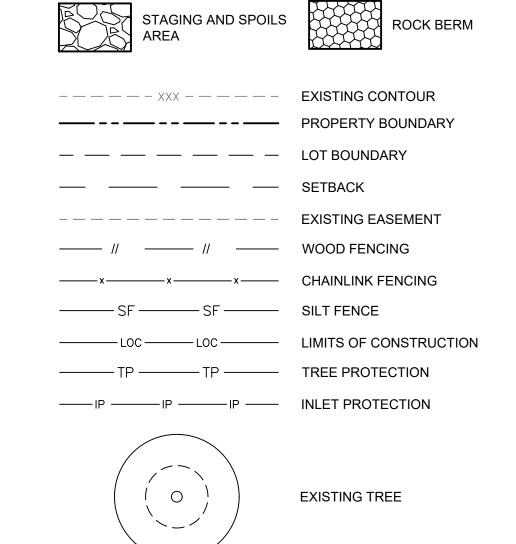


PROJECT NO.:	56152.001
ISSUED:	JUNE 2024
DRAWN BY:	JSG
CHECKED BY:	BGL
SCALE:	1" = 50'
SHEET TITLE	
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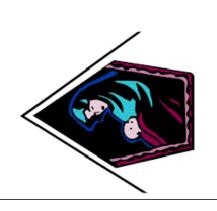
SEDIMENTATION CONTROL PLAN (2 OF 3)



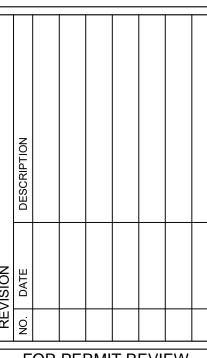




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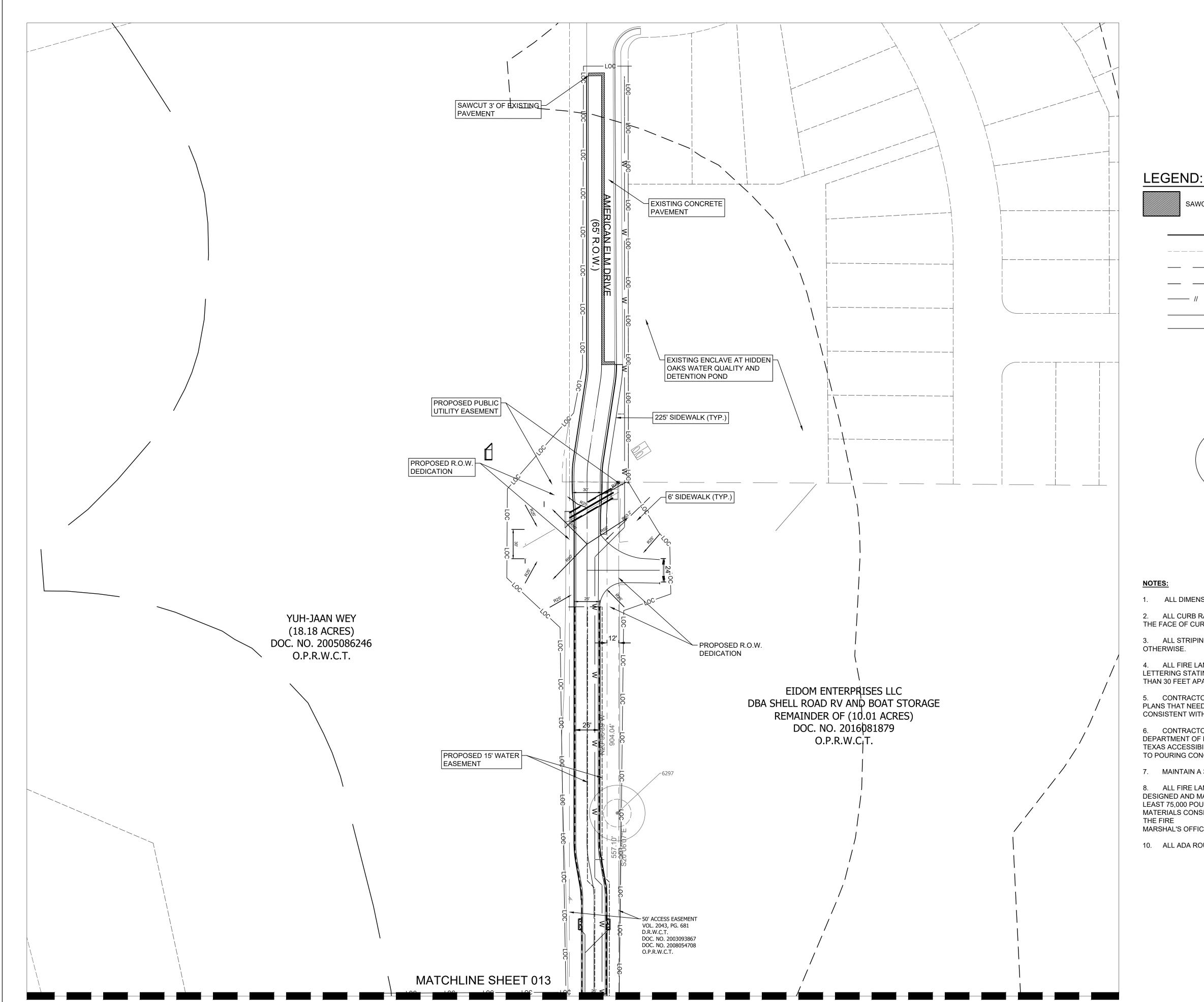


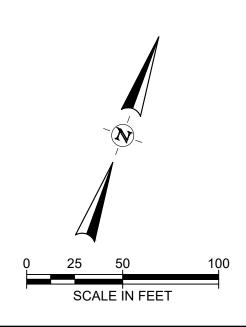


PROJECT NO.: 56152.001 ISSUED: JUNE 2024 DRAWN BY: JSG CHECKED BY: BGL

SHEET TITLE **EROSION &** SEDIMENTATION CONTROL PLAN (3 OF 3)

SCALE: 1" = 50'





PROPERTY BOUNDARY

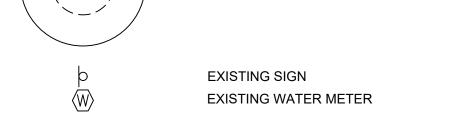
SAWCUT PAVEMENT

LOT BOUNDARY — EXISTING EASEMENT WOOD FENCING CHAINLINK FENCING ROAD CENTERLINE PROPOSED CURB INLET

PROPOSED GRADE INLET

PROPOSED FIRE HYDRANT WASTEWATER MANHOLE WASTEWATER CLEANOUT

10



EXISTING TREE TO REMAIN

EXISTING WASTEWATER CLEAN OUT

EXISTING IRRIGATION CONTROL VALVE

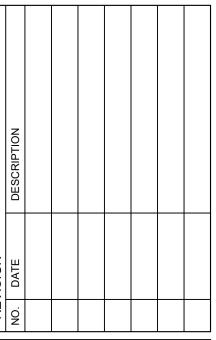
- 1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- 2. ALL CURB RADII ARE 3.0' UNLESS OTHERWISE NOTED AND ARE MEASURED TO THE FACE OF CURB.
- 3. ALL STRIPING SHALL BE 4-INCH WIDE WHITE PAINT, UNLESS MARKED
- 4. ALL FIRE LANE CURBS AND CURB END SHALL BE PAINTED RED WITH WHITE LETTERING STATING "NO PARKING - FIRE LANE" WORDING MAY NOT BE SPACED MORE THAN 30 FEET APART.
- 5. CONTRACTOR SHALL CONTACT THE ENGINEER WITH ANY ITEMS ON THESE PLANS THAT NEED CLARIFICATION OR ANY ITEMS FOUND IN THE FIELD THAT ARE NOT CONSISTENT WITH THESE PLANS.
- 6. CONTRACTOR SHALL VERIFY ACCESSIBLE FEATURES MEET THE TEXAS DEPARTMENT OF LICENSING AND REGISTRATION ARCHITECTURAL BARRIERS ACT AND TEXAS ACCESSIBILITY STANDARDS (CURRENT AT THE TIME OF CONSTRUCTION) PRIOR TO POURING CONCRETE.
- 7. MAINTAIN A 3' MINIMUM CLEAR SPACE AROUND ALL FIRE HYDRANTS.
- 8. ALL FIRE LANES, INCLUDING THE EMERGENCY ACCESS DRIVE SHALL BE DESIGNED AND MAINTAINED TO SUPPORT A FIRE APPARATUS VEHICLE WEIGHING AT LEAST 75,000 POUNDS. ALL FIRE LANES SHALL BE CONSTRUCTED OF ALL-WEATHER MATERIALS CONSISTENT WITH ASPHALT OR CONCRETE AND SHALL BE APPROVED BY MARSHAL'S OFFICE.
- 10. ALL ADA ROUTE SIDEWALK SHALL BE BUILT WITH SITE IMPROVEMENTS.



ANNUNCIATION MATERNITY HOME, INC





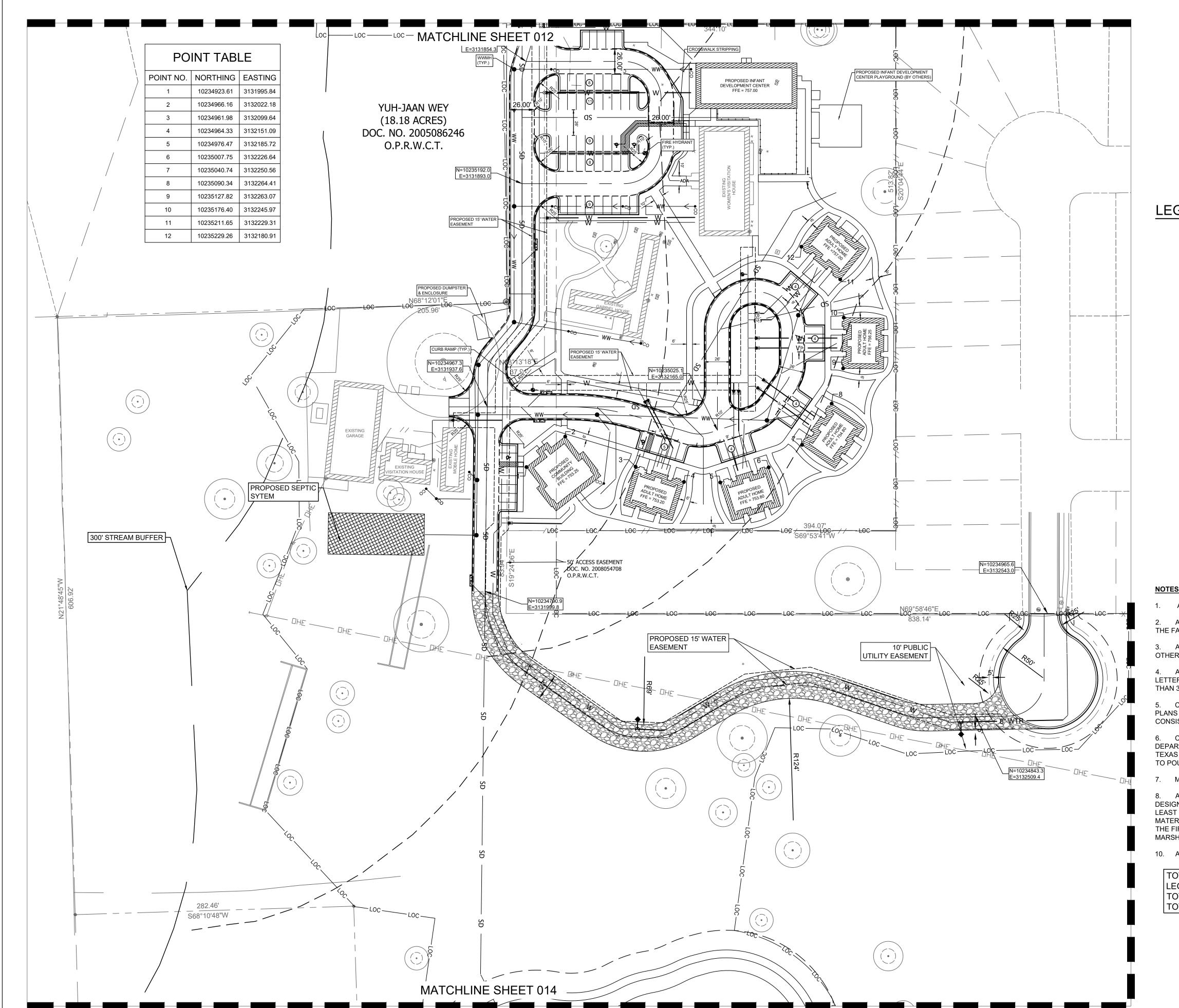


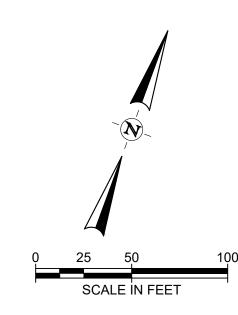


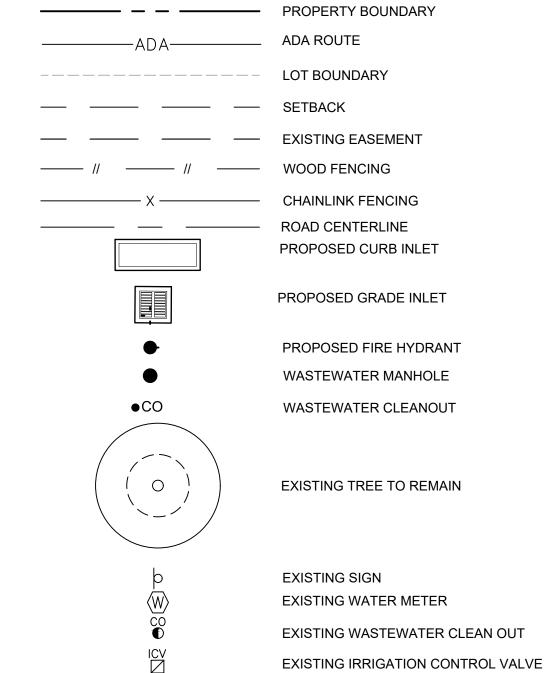
ROJECT NO.:	56152.001
SSUFD:	JUNE 2024

DRAWN BY: JSG CHECKED BY: BGL SCALE: 1" = 50'

SHEET TITLE SITE PLAN (1 OF 3)







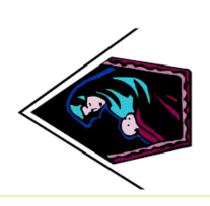
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- 10. ALL ADA ROUTE SIDEWALK SHALL BE BUILT WITH SITE IMPROVEMENTS

TOTAL ACREAGE: 23.22

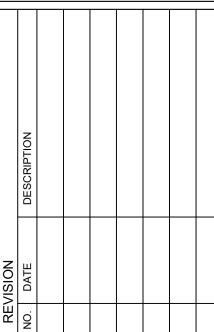
LEGAL DESCRIPTION: AW0524 AW0524 - Roberts, Wm. Sur., ACRES 5.257 TOTAL EXISTING IMPERVIOUS COVER: 1.29 AC

TOTAL PROPOSED IMPERVIOUS COVER: 4.90 AC

ANNUNCIATION MATERNITY HOME, INC







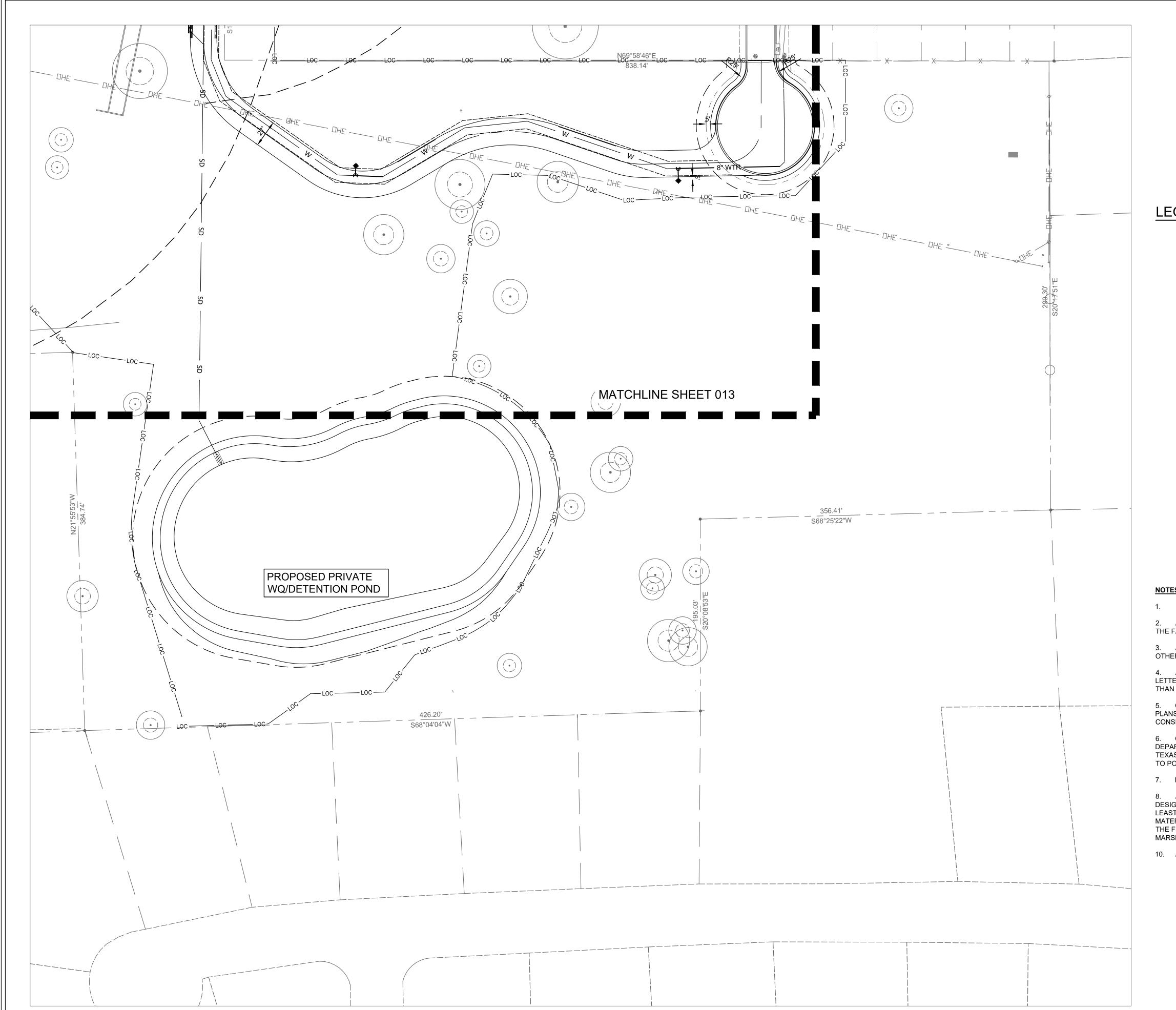


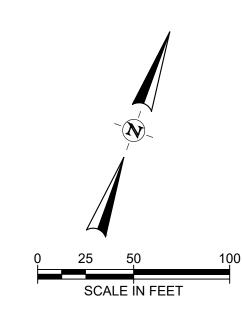
PROJECT NO.: 56152.001

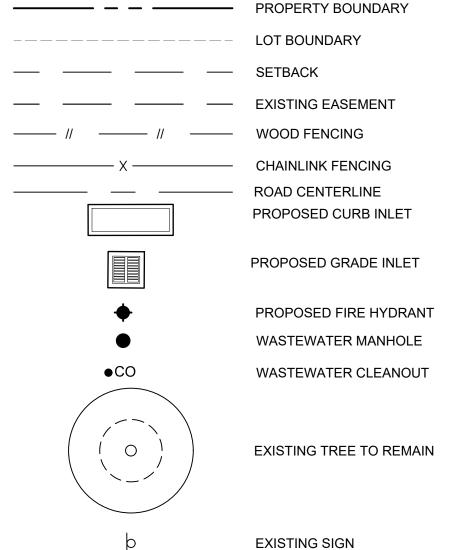
ISSUED: JUNE 2024 DRAWN BY: JG CHECKED BY: BGL SCALE: 1" = 30'

SHEET TITLE SITE PLAN

(2 OF 3)







- 1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- 2. ALL CURB RADII ARE 3.0' UNLESS OTHERWISE NOTED AND ARE MEASURED TO THE FACE OF CURB.

EXISTING WATER METER

EXISTING WASTEWATER CLEAN OUT

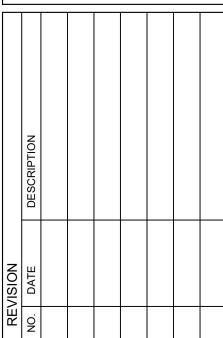
EXISTING IRRIGATION CONTROL VALVE

- 3. ALL STRIPING SHALL BE 4-INCH WIDE WHITE PAINT, UNLESS MARKED OTHERWISE.
- 4. ALL FIRE LANE CURBS AND CURB END SHALL BE PAINTED RED WITH WHITE LETTERING STATING "NO PARKING FIRE LANE" WORDING MAY NOT BE SPACED MORE THAN 30 FEET APART.
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- 6. CONTRACTOR SHALL VERIFY ACCESSIBLE FEATURES MEET THE TEXAS DEPARTMENT OF LICENSING AND REGISTRATION ARCHITECTURAL BARRIERS ACT AND TEXAS ACCESSIBILITY STANDARDS (CURRENT AT THE TIME OF CONSTRUCTION) PRIOR TO POURING CONCRETE.
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- 10. ALL ADA ROUTE SIDEWALK SHALL BE BUILT WITH SITE IMPROVEMENTS.

ANNUNCIATION MATERNITY HOME, INC









PROJECT NO.:	56152.001
ISSUED:	JUNE 2024

DRAWN BY: JSG

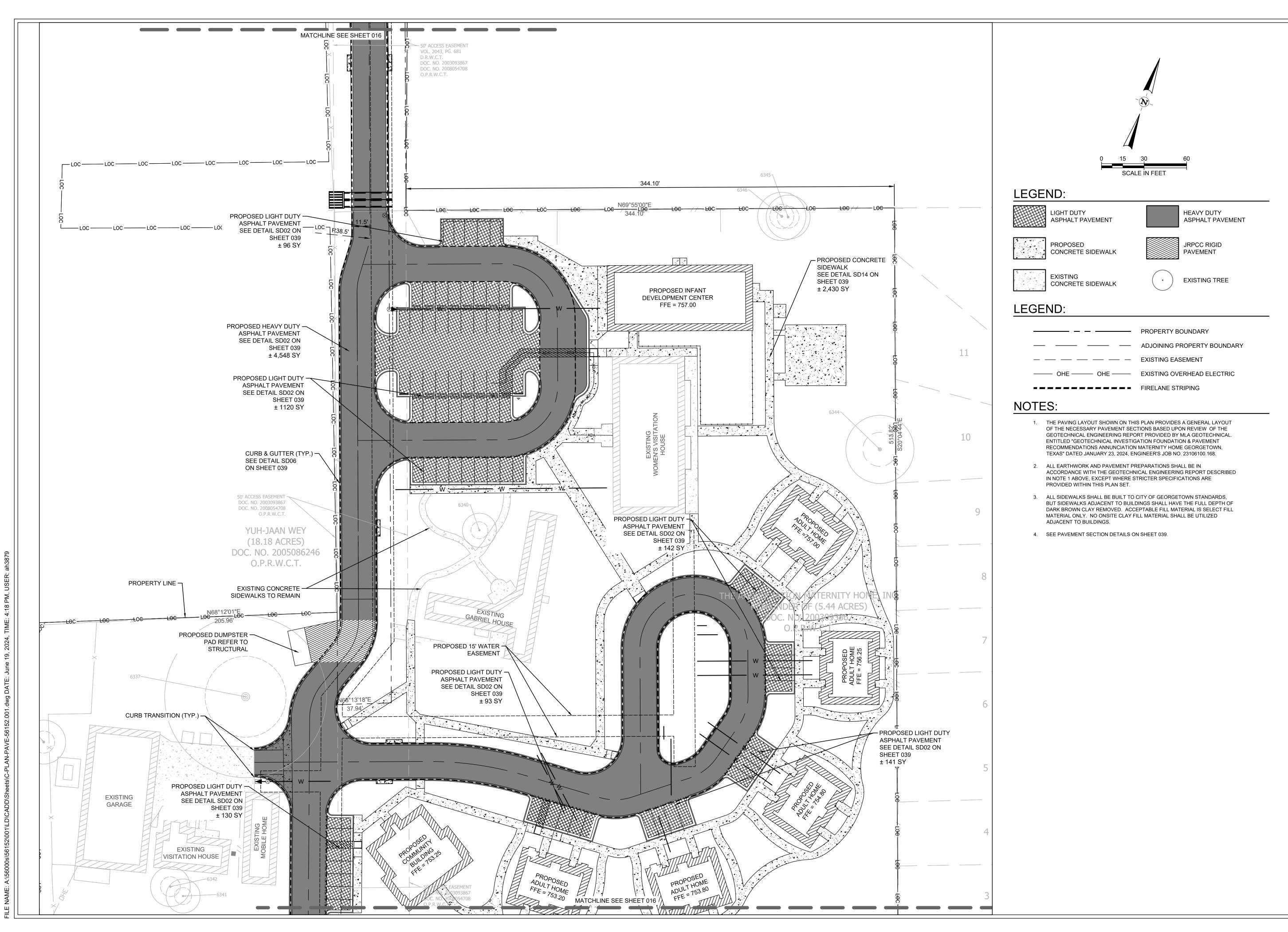
CHECKED BY: BGL

SCALE: 1" = 50'

SHEET TITLE
SITE PLAN

(3 OF 3)

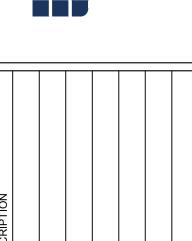
044



ANNUNCIATION
MATERNITY HOME, INC



13620 BRIARWICK DRV., SUITE 100 AUSTIN, TEXAS 78729 TEL. (512) 777-4600



FOR PERMIT REVIEW
6/19/24

JASON A. BASS
3: 109708

TBPELS FIRM #F-312

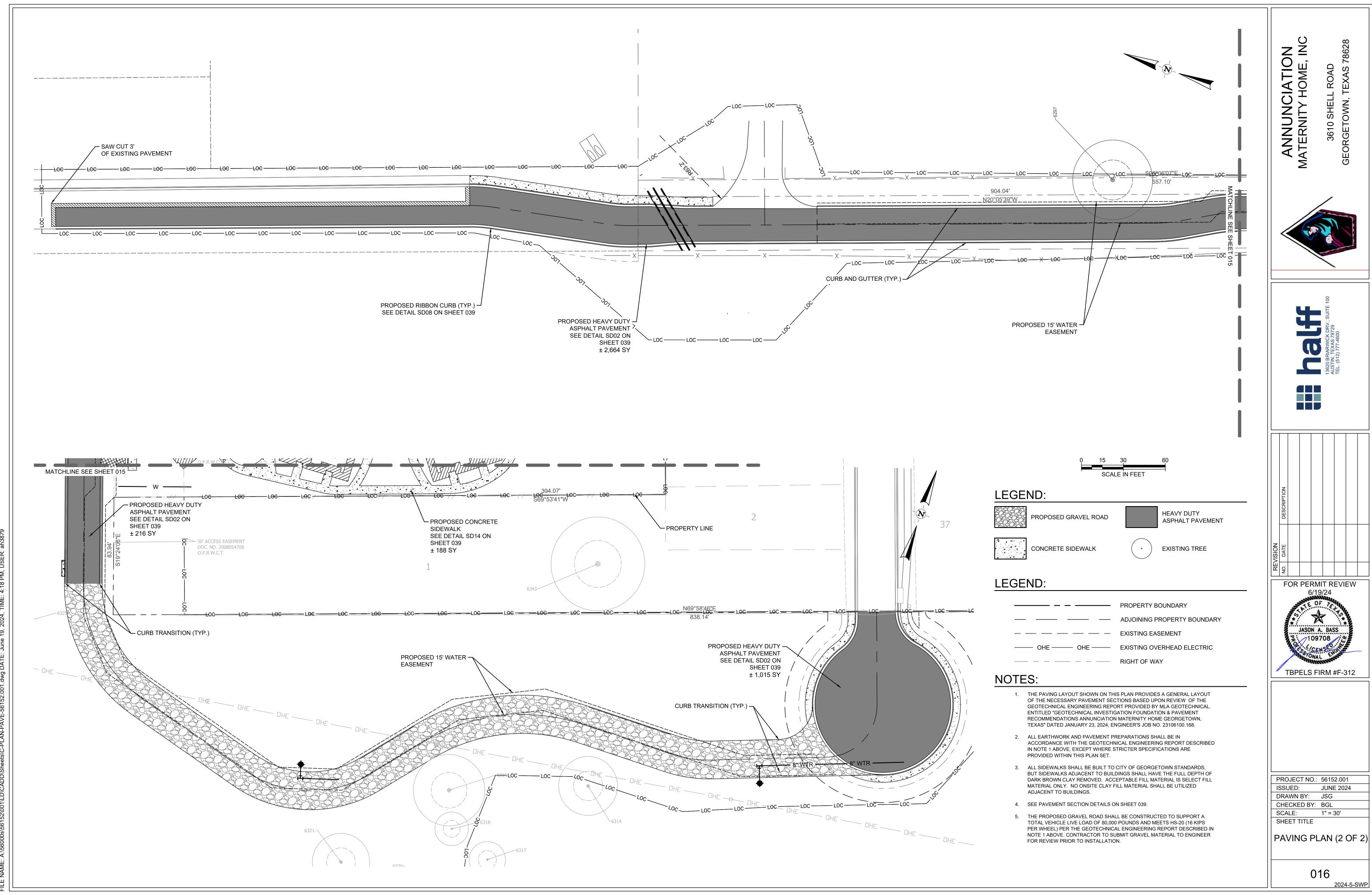
PROJECT NO.: 56152.001

ISSUED: JUNE 2024
DRAWN BY: AB
CHECKED BY: BGL
SCALE: 1" = 30'

PAVING PLAN (1 OF 2)

015

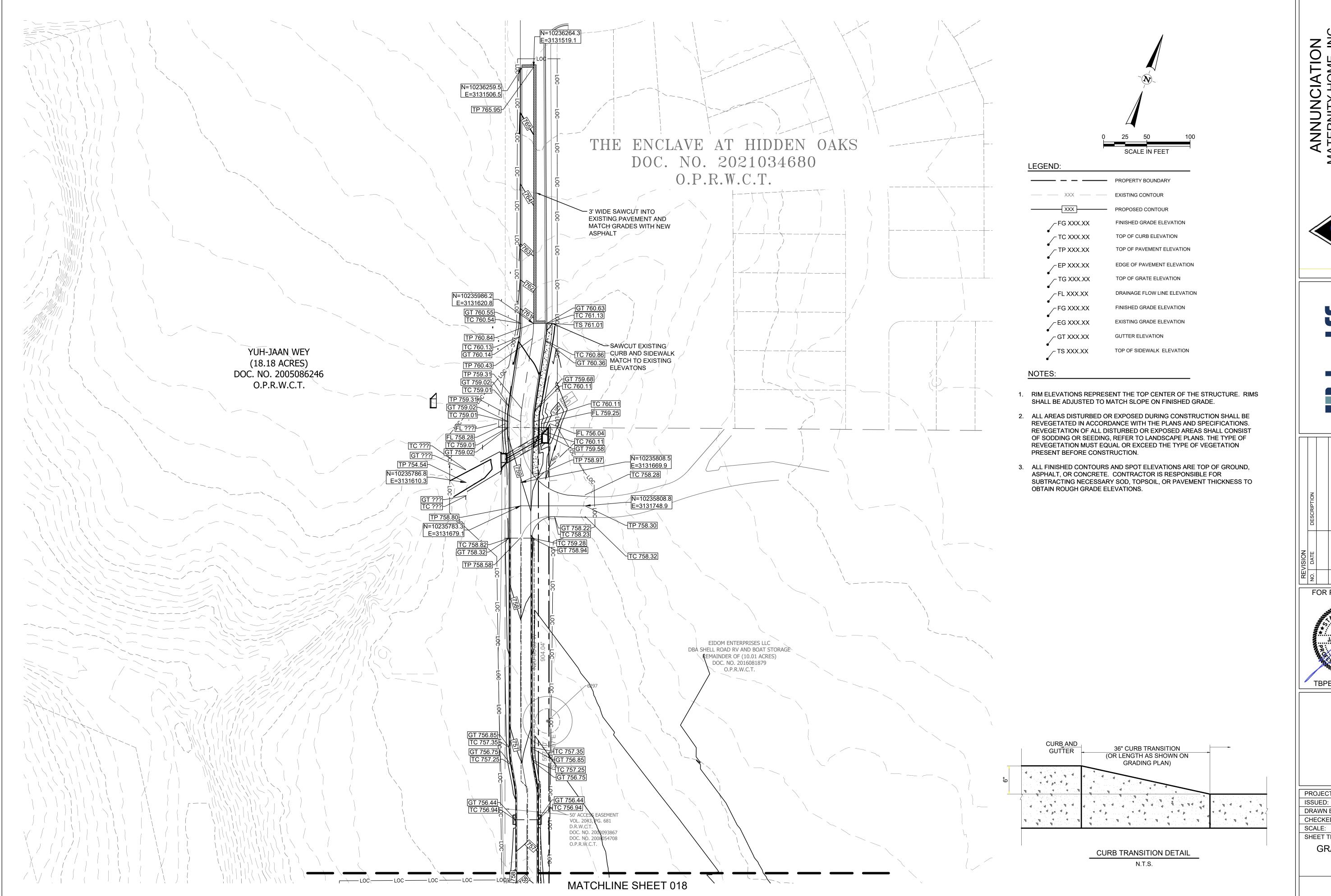
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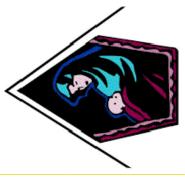
FOR PERMIT REVIEW TBPELS FIRM #F-312

JUNE 2024

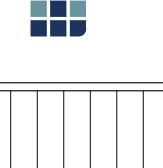


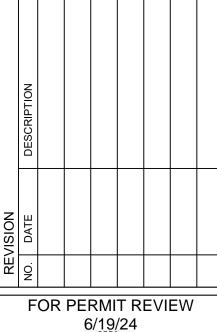
ANNUNCIATION
MATERNITY HOME, INC

MAIEKNII 3610 SF GFORGETOW







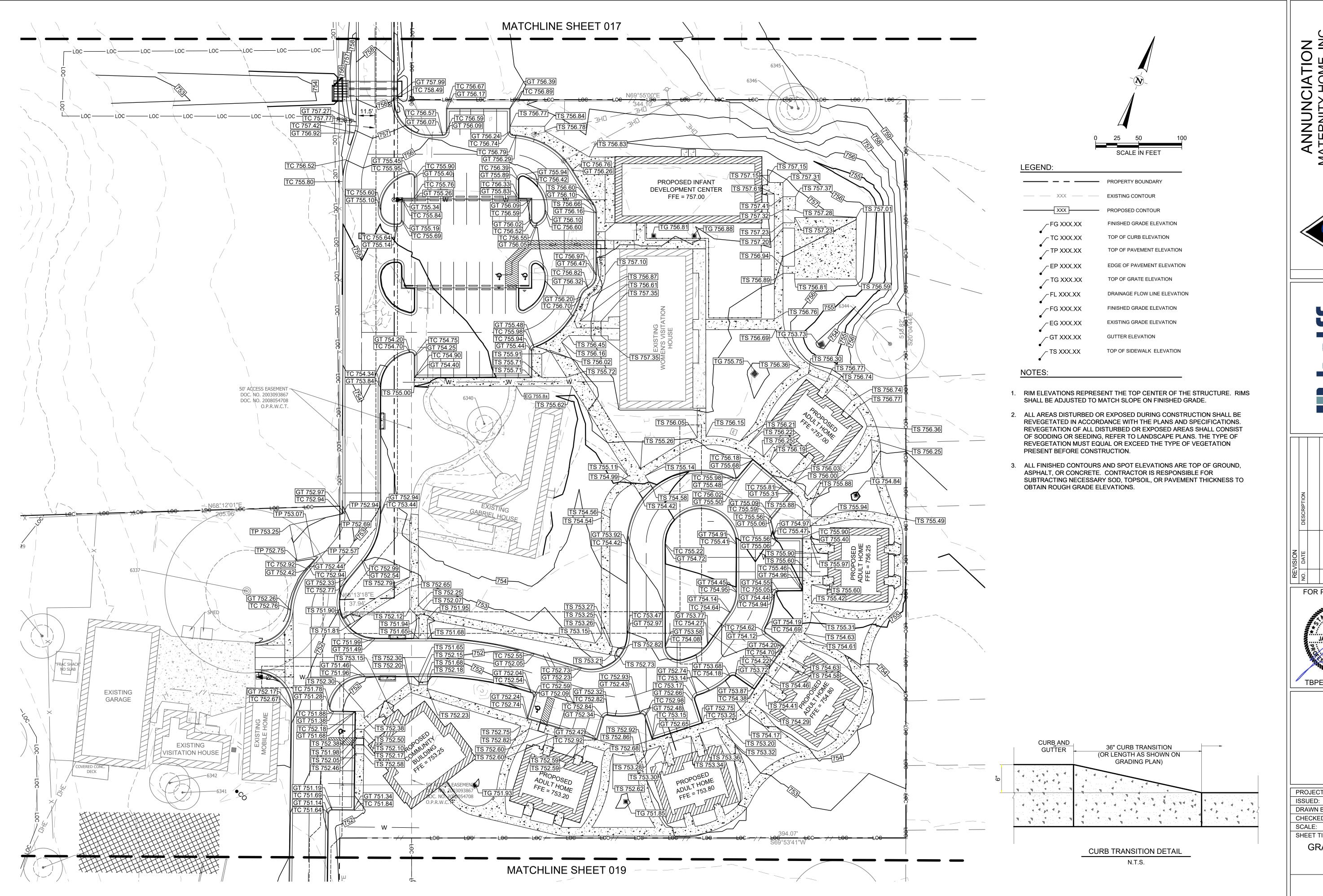




PROJECT NO.: 56152.001
ISSUED: JUNE 2024
DRAWN BY: JSG
CHECKED BY: BGL

GRADING PLAN (1 OF 3)

017



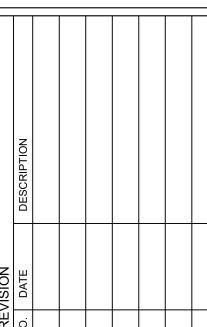
UNCIALION

IITY HOME, INC

3610 SHELL ROAD







JASON A. BASS

JASON A. BASS

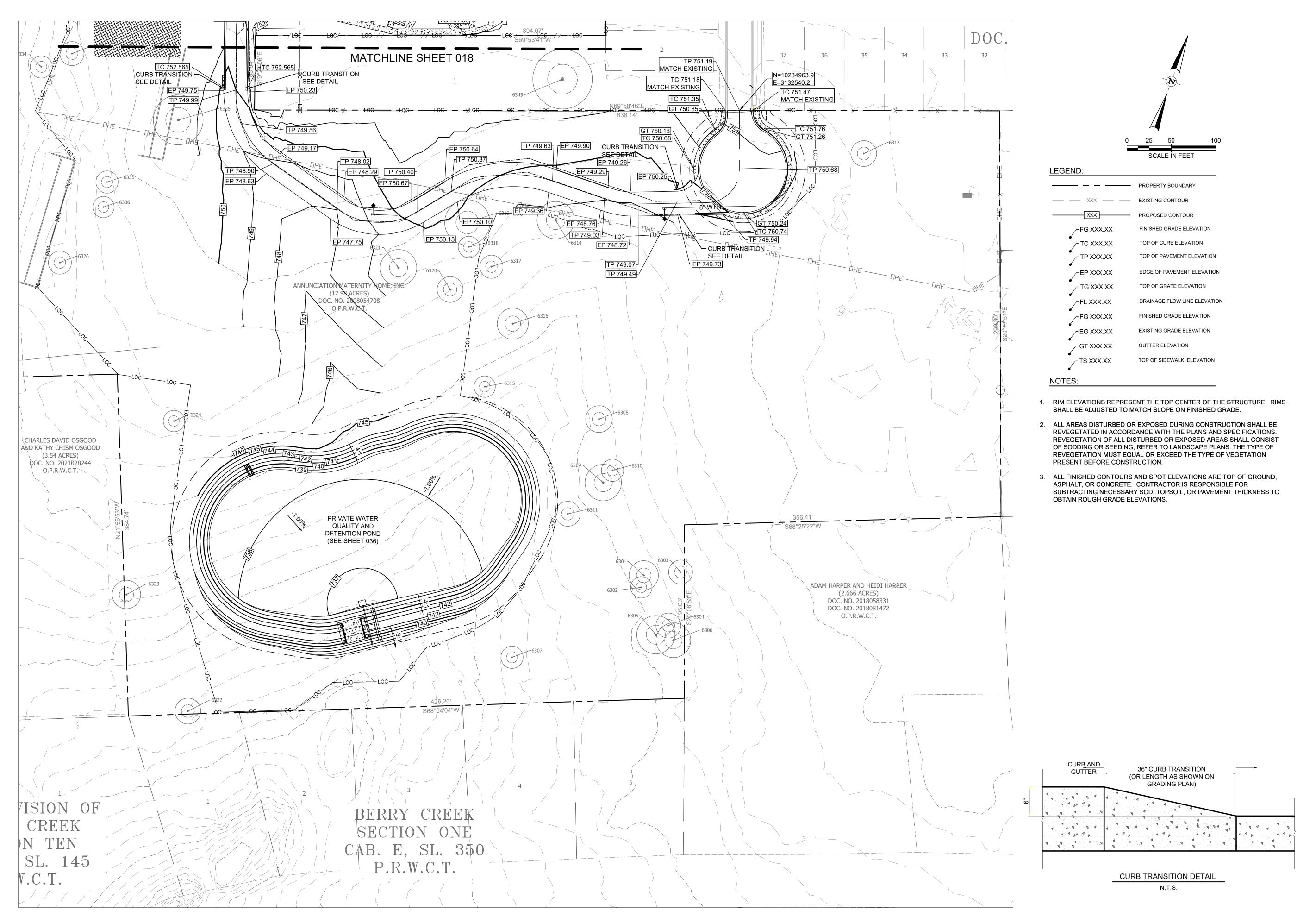
JOURNAL

TBPELS FIRM #F-312

PROJECT NO.: 56152.001
ISSUED: JUNE 2024
DRAWN BY: JSG
CHECKED BY: BGL

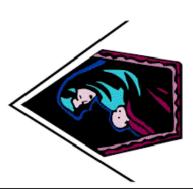
GRADING PLAN (2 OF 3)

018



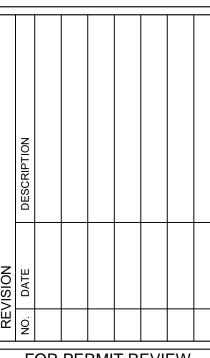


3610 SHELL ROAD GEORGETOWN, TEXAS 786











PROJECT NO.: 56152.001 ISSUED: 6/19/2024

ISSUED: 6/19/202
DRAWN BY: JSG
CHECKED BY: BGL
SCALE: 1" =50'

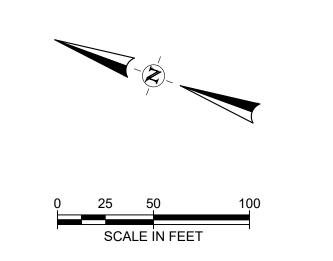
SHEET TITLE

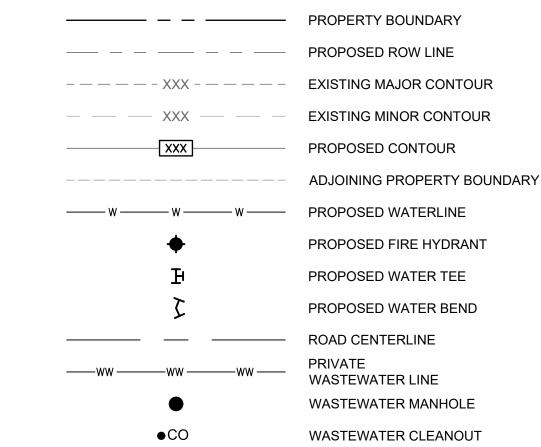
GRADING PLAN

019

3 OF 3

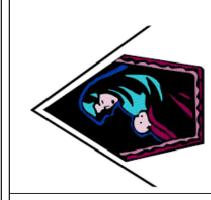
2024-5-SWF



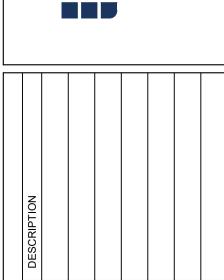


NOTES:

- 1. ALL WATERLINES SHALL BE PVC C-900 (DR-18)
- 2. ALL FIRE HYDRANT LEADS SHALL BE DUCTILE IRON
- 3. GATE VALVES SHALL BE MEGA-LUGGED OR BOLTED TO TEE
- 4. ALL WATERLINE FITTINGS SHALL BE RESTRAINED AND THRUST BLOCKED
- 5. WATERLINES SHALL BE CONSTRUCTED TO RUN ON TOP OF WASTEWATER LINES AT CROSSINGS WITH A MIN. OF 6 INCHES IN CLEARANCE FROM PIPE O.D. TO PIPE O.D. WHEN THE WASTEWATER MAIN IS PRESSURE RATED TO 150 PSI MINIMUM. THIS INCLUDES SERVICE LINES.
- 6. ALL WATERLINE CROSSINGS WASTEWATER LINES SHALL HAVE ONE SEGMENT OF PIPE CENTERED AND PERPENDICULAR TO THE WASTEWATER LINE OR LATERAL. THE CROSSING SHALL BE CENTERED BETWEEN THE JOINTS OF THE NEW LINE OR LATERAL.
- 7. ALL MANHOLES SHALL BE COATED AND VACCUM TESTED.
- 8. ALL WASTEWATER PIPE CROSSING BELOW WATERLINES WITHIN 9 FEET SHALL HAVE ONE 20-FOOT LINK O F160-PSI ASTM D2241 PRESSURE RATED PIPE CENTERED AT THE CROSSING. THE WASTEWATER LINE SEGMENT SHALL BE EMBEDDED IN CEMENT STABILIZED SAND PER TCEQ CHAPTER 290.44.







FOR PERMIT REVIEW
6/19/24

JASON A. BASS
109708

TBPELS FIRM #F-312

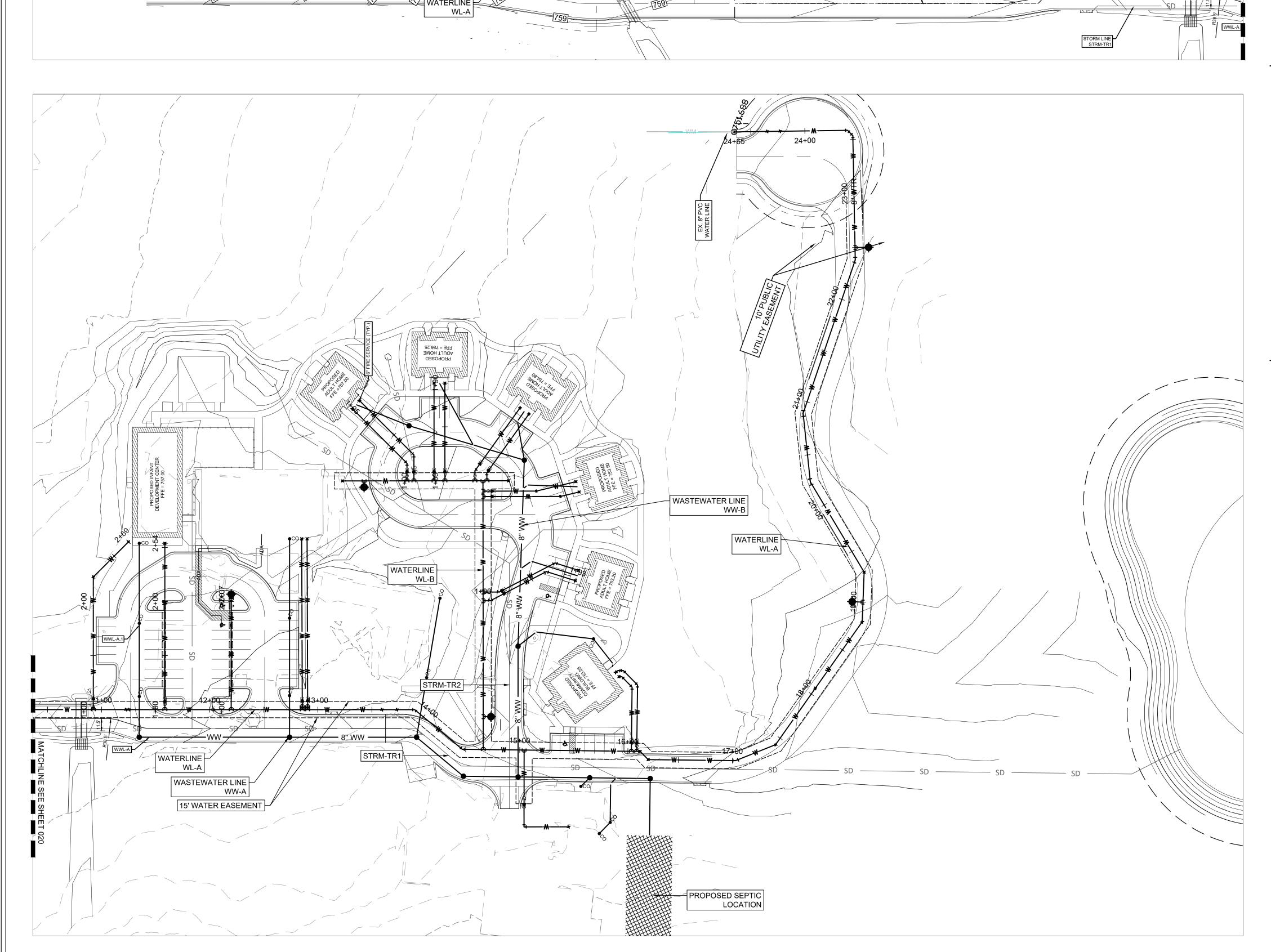
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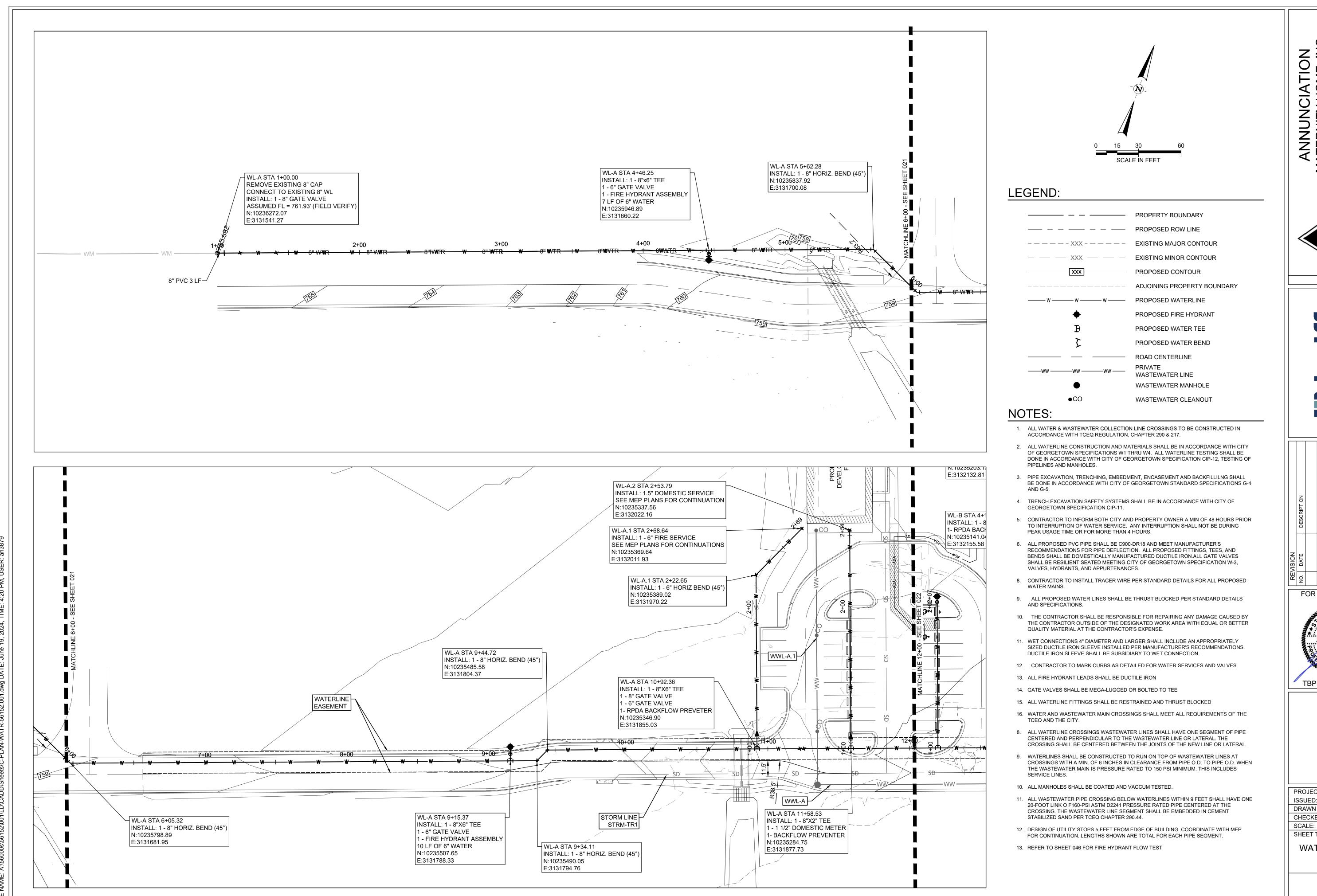
PROJECT NO.: 56152.001
ISSUED: JUNE 2024
DRAWN BY: AB

SCALE: 1" = 5
SHEET TITLE

OVERALL UTILITY PLAN

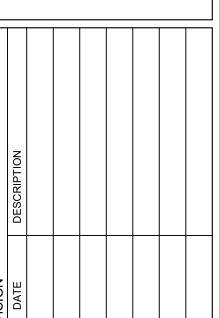
20





ERNITY HOME, IN
3610 SHELL ROAD

13620 BRIARWICK DRV., SUITE 100 AUSTIN, TEXAS 78729 TEL. (512) 777-4600



FOR PERMIT REVIEW
6/19/24

JASON A. BASS
109708

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TBPELS FIRM #F-312

PROJECT NO.: 56152.001

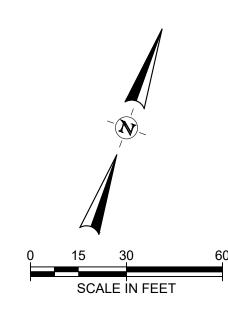
ISSUED: JUNE 2024
DRAWN BY: AB
CHECKED BY: BGL

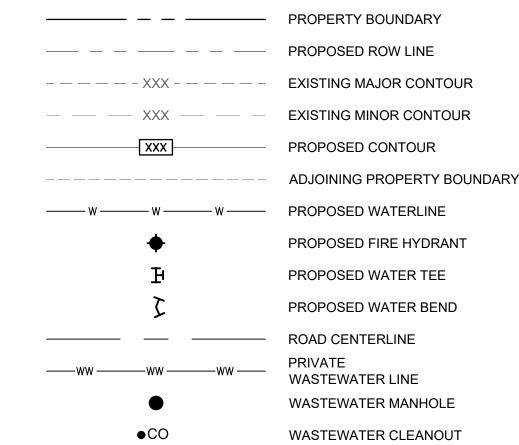
SHEET TITLE

WATER PLAN (1 OF

021

2024-5-5\//





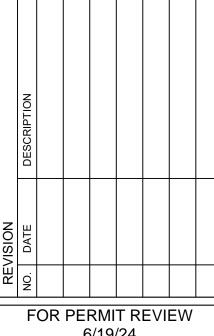
NOTES:

- 1. ALL WATER & WASTEWATER COLLECTION LINE CROSSINGS TO BE CONSTRUCTED IN ACCORDANCE WITH TCEQ REGULATION, CHAPTER 290 & 217.
- 2. ALL WATERLINE CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATIONS W1 THRU W4. ALL WATERLINE TESTING SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION CIP-12, TESTING OF PIPELINES AND MANHOLES.
- 3. PIPE EXCAVATION, TRENCHING, EMBEDMENT, ENCASEMENT AND BACKFILLILING SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN STANDARD SPECIFICATIONS G-4
- 4. TRENCH EXCAVATION SAFETY SYSTEMS SHALL BE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION CIP-11.
- CONTRACTOR TO INFORM BOTH CITY AND PROPERTY OWNER A MIN OF 48 HOURS PRIOR
 TO INTERRUPTION OF WATER SERVICE. ANY INTERRUPTION SHALL NOT BE DURING
 PEAK USAGE TIME OR FOR MORE THAN 4 HOURS.
- 6. ALL PROPOSED PVC PIPE SHALL BE C900-DR18 AND MEET MANUFACTURER'S RECOMMENDATIONS FOR PIPE DEFLECTION. ALL PROPOSED FITTINGS, TEES, AND BENDS SHALL BE DOMESTICALLY MANUFACTURED DUCTILE IRON.ALL GATE VALVES SHALL BE RESILIENT SEATED MEETING CITY OF GEORGETOWN SPECIFICATION W-3, VALVES, HYDRANTS, AND APPURTENANCES.
- 8. CONTRACTOR TO INSTALL TRACER WIRE PER STANDARD DETAILS FOR ALL PROPOSED WATER MAINS.
- 9. ALL PROPOSED WATER LINES SHALL BE THRUST BLOCKED PER STANDARD DETAILS AND SPECIFICATIONS.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONTRACTOR OUTSIDE OF THE DESIGNATED WORK AREA WITH EQUAL OR BETTER QUALITY MATERIAL AT THE CONTRACTOR'S EXPENSE.
- 11. WET CONNECTIONS 4" DIAMETER AND LARGER SHALL INCLUDE AN APPROPRIATELY SIZED DUCTILE IRON SLEEVE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. DUCTILE IRON SLEEVE SHALL BE SUBSIDIARY TO WET CONNECTION.
- 12. CONTRACTOR TO MARK CURBS AS DETAILED FOR WATER SERVICES AND VALVES.
- 13. ALL FIRE HYDRANT LEADS SHALL BE DUCTILE IRON
- 14. GATE VALVES SHALL BE MEGA-LUGGED OR BOLTED TO TEE
- 15. ALL WATERLINE FITTINGS SHALL BE RESTRAINED AND THRUST BLOCKED
- WATER AND WASTEWATER MAIN CROSSINGS SHALL MEET ALL REQUIREMENTS OF THE TCEQ AND THE CITY.
- 8. ALL WATERLINE CROSSINGS WASTEWATER LINES SHALL HAVE ONE SEGMENT OF PIPE CENTERED AND PERPENDICULAR TO THE WASTEWATER LINE OR LATERAL. THE CROSSING SHALL BE CENTERED BETWEEN THE JOINTS OF THE NEW LINE OR LATERAL.
- 9. WATERLINES SHALL BE CONSTRUCTED TO RUN ON TOP OF WASTEWATER LINES AT CROSSINGS WITH A MIN. OF 6 INCHES IN CLEARANCE FROM PIPE O.D. TO PIPE O.D. WHEN THE WASTEWATER MAIN IS PRESSURE RATED TO 150 PSI MINIMUM. THIS INCLUDES
- 10. ALL MANHOLES SHALL BE COATED AND VACCUM TESTED.
- 11. ALL WASTEWATER PIPE CROSSING BELOW WATERLINES WITHIN 9 FEET SHALL HAVE ONE 20-FOOT LINK O F160-PSI ASTM D2241 PRESSURE RATED PIPE CENTERED AT THE CROSSING. THE WASTEWATER LINE SEGMENT SHALL BE EMBEDDED IN CEMENT STABILIZED SAND PER TCEQ CHAPTER 290.44.
- 12. DESIGN OF UTILITY STOPS 5 FEET FROM EDGE OF BUILDING. COORDINATE WITH MEP FOR CONTINUATION. LENGTHS SHOWN ARE TOTAL FOR EACH PIPE SEGMENT.
- 13. REFER TO SHEET 046 FOR FIRE HYDRANT FLOW TEST









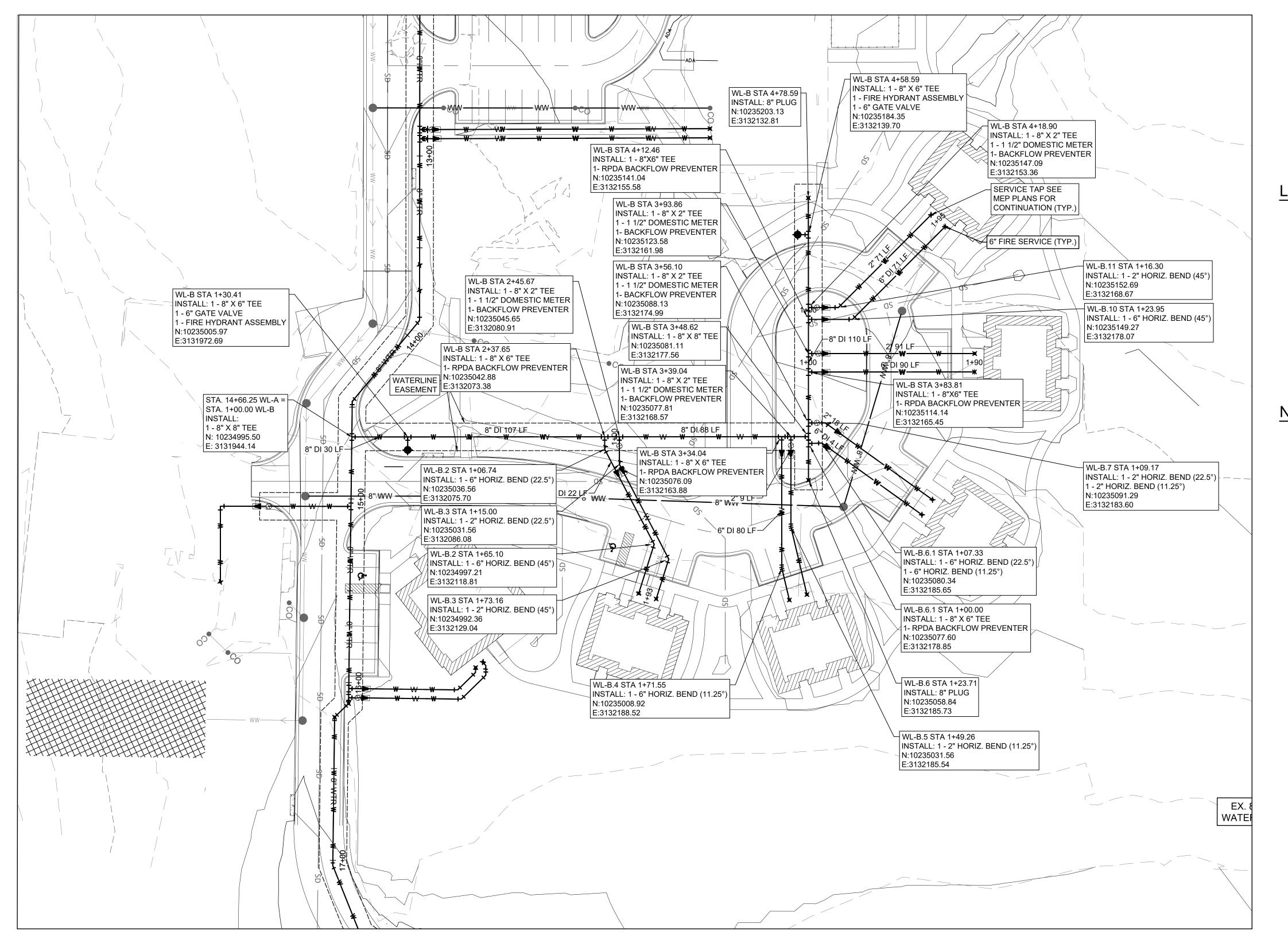


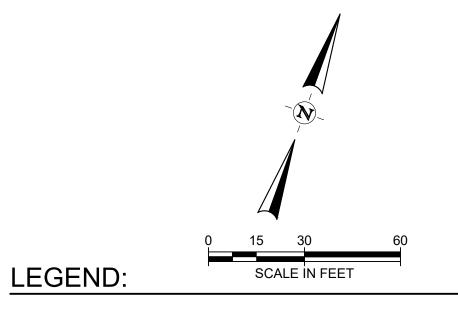
PROJECT NO.: 56152.001
ISSUED: JUNE 2024
DRAWN BY: AB

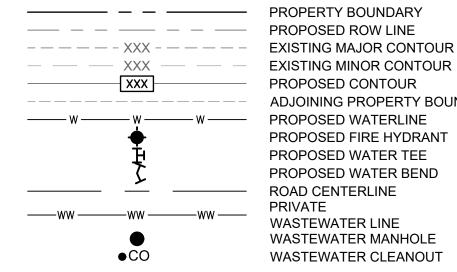
DRAWN BY: AB
CHECKED BY: BGL
SCALE: 1" = 30

SHEET TITLE
WATER PLAN (2 OF

022







PROPERTY BOUNDARY PROPOSED ROW LINE EXISTING MINOR CONTOUR PROPOSED CONTOUR ADJOINING PROPERTY BOUNDARY PROPOSED WATERLINE PROPOSED FIRE HYDRANT PROPOSED WATER TEE PROPOSED WATER BEND ROAD CENTERLINE PRIVATE WASTEWATER LINE WASTEWATER MANHOLE

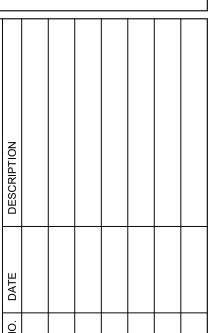
NOTES:

- 1. ALL WATER & WASTEWATER COLLECTION LINE CROSSINGS TO BE CONSTRUCTED IN ACCORDANCE WITH TCEQ REGULATION, CHAPTER 290 & 217.
- 2. ALL WATERLINE CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATIONS W1 THRU W4. ALL WATERLINE TESTING SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION CIP-12, TESTING OF PIPELINES AND MANHOLES.
- 3. PIPE EXCAVATION, TRENCHING, EMBEDMENT, ENCASEMENT AND BACKFILLILING SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN STANDARD SPECIFICATIONS G-4
- 4. TRENCH EXCAVATION SAFETY SYSTEMS SHALL BE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION CIP-11.
- 5. CONTRACTOR TO INFORM BOTH CITY AND PROPERTY OWNER A MIN OF 48 HOURS PRIOR TO INTERRUPTION OF WATER SERVICE. ANY INTERRUPTION SHALL NOT BE DURING PEAK USAGE TIME OR FOR MORE THAN 4 HOURS.
- 6. ALL PROPOSED PVC PIPE SHALL BE C900-DR18 AND MEET MANUFACTURER'S RECOMMENDATIONS FOR PIPE DEFLECTION. ALL PROPOSED FITTINGS, TEES, AND BENDS SHALL BE DOMESTICALLY MANUFACTURED DUCTILE IRON.ALL GATE VALVES SHALL BE RESILIENT SEATED MEETING CITY OF GEORGETOWN SPECIFICATION W-3, VALVES, HYDRANTS, AND APPURTENANCES.
- 8. CONTRACTOR TO INSTALL TRACER WIRE PER STANDARD DETAILS FOR ALL PROPOSED
- ALL PROPOSED WATER LINES SHALL BE THRUST BLOCKED PER STANDARD DETAILS AND SPECIFICATIONS.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONTRACTOR OUTSIDE OF THE DESIGNATED WORK AREA WITH EQUAL OR BETTER QUALITY MATERIAL AT THE CONTRACTOR'S EXPENSE.
- 11. WET CONNECTIONS 4" DIAMETER AND LARGER SHALL INCLUDE AN APPROPRIATELY SIZED DUCTILE IRON SLEEVE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. DUCTILE IRON SLEEVE SHALL BE SUBSIDIARY TO WET CONNECTION.
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- 14. GATE VALVES SHALL BE MEGA-LUGGED OR BOLTED TO TEE
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- 16. WATER AND WASTEWATER MAIN CROSSINGS SHALL MEET ALL REQUIREMENTS OF THE TCEQ AND THE CITY.
- 8. ALL WATERLINE CROSSINGS WASTEWATER LINES SHALL HAVE ONE SEGMENT OF PIPE CENTERED AND PERPENDICULAR TO THE WASTEWATER LINE OR LATERAL. THE CROSSING SHALL BE CENTERED BETWEEN THE JOINTS OF THE NEW LINE OR LATERAL.
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- 10. ALL MANHOLES SHALL BE COATED AND VACCUM TESTED.
- 11. ALL WASTEWATER PIPE CROSSING BELOW WATERLINES WITHIN 9 FEET SHALL HAVE ONE 20-FOOT LINK O F160-PSI ASTM D2241 PRESSURE RATED PIPE CENTERED AT THE CROSSING. THE WASTEWATER LINE SEGMENT SHALL BE EMBEDDED IN CEMENT STABILIZED SAND PER TCEQ CHAPTER 290.44.
- 12. DESIGN OF UTILITY STOPS 5 FEET FROM EDGE OF BUILDING. COORDINATE WITH MEP FOR CONTINUATION. LENGTHS SHOWN ARE TOTAL FOR EACH PIPE SEGMENT.
- 13. REFER TO SHEET 046 FOR FIRE HYDRANT FLOW TEST









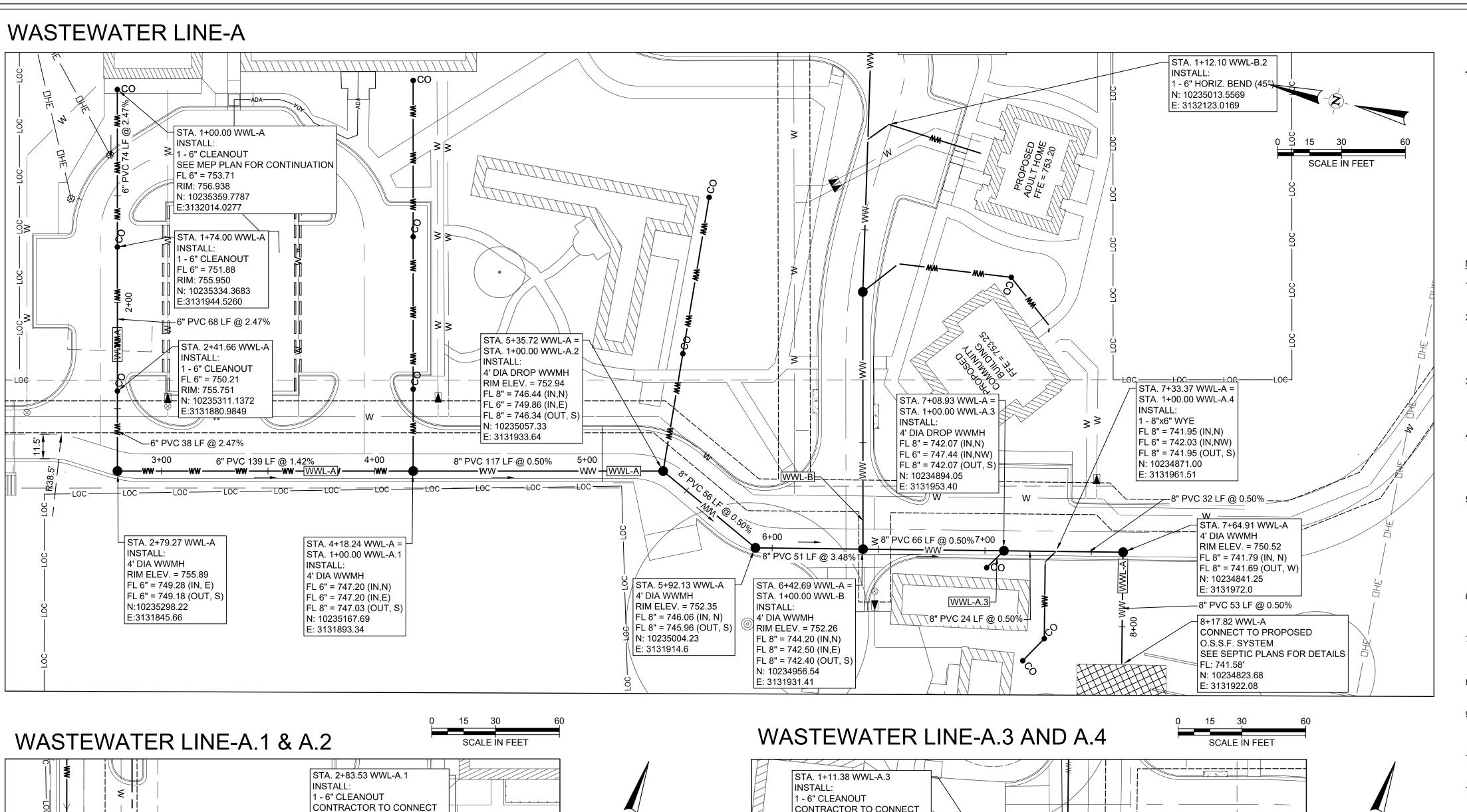


PROJECT NO.: 56152.001 JUNE 2024

ISSUED: DRAWN BY: AB CHECKED BY: BGL

SCALE: SHEET TITLE

> WATER PLAN (3 OF 3)



EXISTING BUILDING SERVICES

TO PROPOSED WASTEWATER

SERVICE LINES

E:3132065.7230

6" PVC 73 LF @ 3.96%

STA. 2+30.41 WWL-A.2

CONTRACTOR TO CONNECT

EXISTING BUILDING SERVICES

TO PROPOSED WASTEWATER

- 6" CLEANOUT

SERVICE LINES

FL 6" = 752.09

RIM: 754.626 N: 10235081.1800

E:3132061.8500

INSTALL:

FL 6" = 754.47

RIM: 757.338

N: 10235230.6500

STA. 1+55.92 WWL-A.2

∜INSTALL:

6" PVC 74 LF @ 1.71%

CLEANOUT

N: 10235067.5595

E: 3131988.6234

├ STA. 1+38.47 WWL-A.1

INSTALL:

CLEANOUT

N: 10235205.4635

E: 3131996.7668

STA. 2+10.11 WWL-A.1

CLEANOUT

6" PVC 38 LF @ 3.96% | 6" PVC 72 LF @ 3.96%

STA. 4+18.24 WWL-A

FL 6" = 747.20 (IN,N)

FL 6" = 747.20 (IN,E) FL 8" = 747.03 (OUT, S)

| STA. 5+35.72 WWL-A = |

STA. 1+00.00 WWL-A.2

4' DIA DROP WWMH

FL 8" = 746.44 (IN,N)

FL 6'' = 749.86 (IN,E)FL 8" = 746.34 (OUT, S)

N: 10235057.33

E: 3131933.64

INSTALL:

4' DIA WWMH

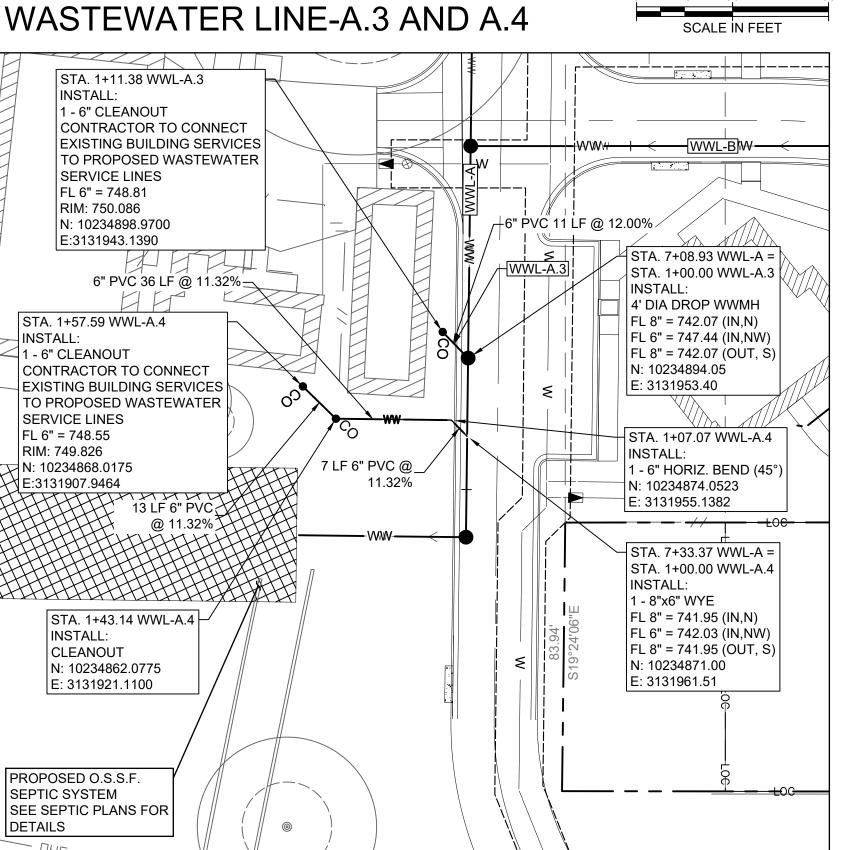
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E: 3131893.34

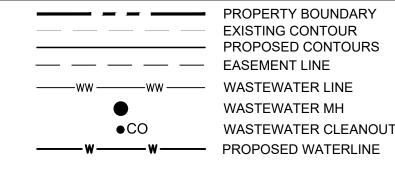
INSTALL:

N: 10235180.8826

E: 3131929.4689



LEGEND:

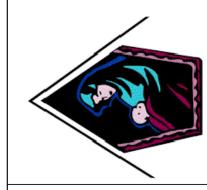


- 1. ALL WASTEWATER MAIN PIPE AND SERVICES SHALL BE SDR-26 PVC CONFORMING TO ASTM D3034 OR ASTM F679.
- 2. ALL WASTE WATER PIPE CROSSINGS BELOW WATERLINES WITHIN 9 FEET SHALL HAVE ONE 20-FOOT LINK OF 160-PSI ASTM D2241 PRESSURE RATED PIPE CENTERED AT THE CROSSING. THE WASTEWATER LINE SEGMENT SHALL BE EMBEDDED IN CEMENT STABILIZED SAND PER TCEQ CHAPTER
- THE EXISTING UTILITIES SHOWN ON THE THESE PLANS ARE BASED ON RECORD DRAWINGS FROM THE CITY OF GEORGETOWN REFERENCING ENCLAVE AT HIDDEN OAKS PROJECT. HIDDEN OAKS AT BERRY CREEK PHASE 1 PROJECT AND SHELL ROAD WATER MAIN EXTENSION PROJECT
- THE LOCATION AND DEPTH OF ALL UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THERE MAY BE OTHER UNKNOWN EXISTING UTILITIES NOT SHOWN IN THE PLANS, ALL EXISTING UTILITIES SHALL BE FIELD VERIFIED, AND IF NOT DESIGNATED FOR REMOVAL, SHALL BE PROTECTED FROM DAMAGE PRIOR TO THE START OF CONSTRUCITON.
- PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL UNCOVER AND FIELD LOCATE THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES CROSSED BY PROPOSED WATER, WASTEWATER, ELECTRIC AND GAS AND SHALL FIELD LOCATE POINTS OF CONNECTION TO EXISTING UTILITIES. CONTRACTOR SHALL NOTE ACTUAL LOCATION FOUND UTILITY FOR INCLUSION IN THE AS-BUILT DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL IDENTIFIED OR POTENTIAL CONFLICTS, AND SHALL NOT COMMENCE CONSTRUCTION UNTIL PLANS ARE REVISED TO RESOLVE ALL CONFLICTS.
- ALL CROSSING OF WASTEWATER COLLECTION LINES AND WATERLINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TCEQ REGULATIONS CHAPTER 290 AND 217.
- 7. ALL PROPOSED WASTEWATER LINES SHALL BE SDR 26 PIPE MATERIAL (UNLESS OTHERWISE NOTED), IN ACCORDANCE WITH CITY OF **GEORGETOWN SPECIFICATION WW-2.**
- PROPOSED WASTEWATER MANHOLES SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION WW-1
- 9. TESTING OF WASTEWATER LINES SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION CIP-12, TESTING OF PIPELINES AND MANHOLES.
- 10. CONTRACTOR TO PROVIDE DEFLECTION TEST IN ACCORDANCE WITH TCEQ CHAPTER 217.57 (B.) MANDREL TO BE PULLED IN BOTH DIRECTIONS
- 11. CONTRACTOR TO PROVIDE LOW PRESSURE AIR TEST IN ACCORDANCE WITH TCEQ CHAPTER 271.57 (a), (1). 30 DAYS AFTER INSTALLATION. NO WATER TEST ALLOWED.
- 12. CONTRACTOR TO PROVIDE LEAKAGE TEST FOR MANHOLE IN ACCORDANCE WITH TCEQ CHAPTER 217.57 (a) OF THE STATE WASTEWATER CODE. NO WATER TEST ALLOWED.
- 13. PIPE EXCAVATION, TRENCHING, EMBEDMENT, ENCASEMENT AND BACKFILLING SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN STANDARD SPECIFICATIONS G-4 AND G-5.
- 14. TRENCH EXCAVATION SAFETY SYSTEMS SHALL BE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION CIP-11.
- 15. CONTRACTOR TO MARK CURBS AS DETAILED FOR WASTEWATER SERVICES.
- 16. NO WATER JETTING ALLOWED, MECHANICAL COMPACTION REQUIRED.

Call before you dig.

LOCATION OF UNDERGROUND, SURFACE, AND AERIAL UTILITIES IS NOT GUARANTEED TO BE EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT THE "TEXAS 811" SYSTEM AT 1-800-344-8377 (DIG TESS) 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION FOR EXISTING UTILITY LOCATIONS. THE CONTRACTOR SHALL ALSO BE FULLY RESPONSIBLE FOR FIELD VERIFYING LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES AFFECTED BY CONSTRUCTION FOR THIS PROJECT IN ORDER TO AVOID DAMAGING THOSE UTILITIES, AND SHALL IMMEDIATELY ARRANGE FOR REPAIR AND RESTORATION OF CONTRACTOR-DAMAGED UTILITIES TO THE UTILITY Know what's below. COMPANY'S APPROVAL AT THE EXPENSE OF THE CONTRACTOR.

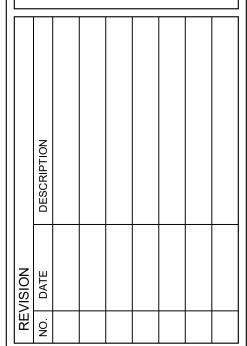
THE INFORMATION SHOWN ON THESE DRAWINGS INDICATING SIZE, TYPE AND



ZZ









PROJECT NO.: 56152.001 ISSUED: 6/19/2024

DRAWN BY: AB CHECKED BY: BGL SCALE: 1" = 30'

SHEET TITLE PROPOSED WASTEWATER PLAN (1 OF 2)

2024-5-SWF

STA. 1+00.00 WWL-B =

STA. 6+42.69 WWL-A

RIM ELEV. = 752.26

FL 8" = 744.20 (IN,N)

FL 8" = 742.50 (IN,E)

N: 10234956.54

E: 3131931.41

WWL-A

FL 8" = 742.40 (OUT, S)

コINSTALL:

4' DIA WWMH

STA. 2+92.58 WWL-B =

STA. 1+00.00 WWL-B.2

FL 8" = 746.93 (IN,E)

FL 6" = 747.01 (IN,SE)

FL 8" = 746.93 (OUT, W)

INSTALL:

1 - 8"x6" WYE

N: 10235043.49

E: 3132183.36

STA. 1+05.19 WWL-B.3

N: 10235041.1443

E: 3132187.9829

STA. 3+66.56 WWL-B =

STA. 1+00.00 WWL-B.3

FL 8" = 748.30 (IN,E)

FL 6" = 748.38 (IN,SE)

FL 8" = 748.30 (OUT, W)

⊢8" PVC 27 LF @ 1.84%

STA. 3+93.16 WWL-B

RIM ELEV. = 753.44

FL 8" = 748.89 (IN, N)

FL 6" = 748.89 (IN, NE)

FL 8" = 748.79 (OUT, W)

4' DIA WWMH

N: 10235051.77

E: 3132208.6

╡STA. 1+51.87 WWL-B.3│

1 - 6" SEE MEP PLANS

FOR CONTINUATION

FL 6" = 750.80

RIM: 751.370 N: 10234996.7833 E:3132202.5319

INSTALL:

1 - 8"x6" WYE

N: 10235020.43

E: 3132113.06

STA. 2+20.87 WWL-B

RIM ELEV. = 751.96

FL 6" = 745.78 (IN, SE)

FL 8" = 745.51 (OUT, W)

STA. 1+74.69 WWL-B.1

STA. 1+57.40 WWL-B.2

1 - 6" SEE MEP PLANS

STA. 1+12.10 WWL-B.2

1 - 6" HORIZ. BEND (45°)

N: 10235013.5569

E: 3132123.0169

FOR CONTINUATION

FL 6" = 750.20

RIM: 750.770

INSTALL:

N: 10234968.3053

E:3132125.0841

INSTALL:

CLEANOUT

N: 10234934.9110

E: 3132075.2681

FL 8" = 745.61 (IN, E)

N: 10234998.08

E: 3132044.9

STA. 1+21.33 WWL-B.1

1 - 6" HORIZ. BEND (45°

N: 10234986.8539

E: 3132063.0547

STA. 2+03.73 WWL-B.1

N: 10234910.2237

E: 3132059.9803

STA. 2+07.97 WWL-B.1

1 - 6" SEE MEP PLANS

FOR CONTINUATION

FL 6" = 750.17

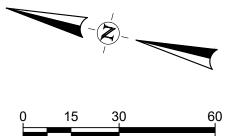
N: 10234909.2526

E:3132055.8502

RIM: 750.737

1 - 6" HORIZ. BEND (45°)

4' DIA WWMH



-6" PVC 53 LF @ 5.35%

STA. 5+04.44 WWL-B

RIM ELEV. = 755.16

FL 6" = 751.17 (IN, N)

FL 8" = 751.07 (OUT, S)

4' DIA WWMH

N: 10235162.85

E: 3132201.9

₩—8" PVC 62 LF @ 1.96%

STA. 4+42.52 WWL-B =

STA. 1+00.00 WWL-B.5

FL 6" = 749.94 (IN,NE)

FL 8" = 749.85 (OUT, S)

√STA. 1+36.59 WWL-B.4

1 - 6" HORIZ. BEND (45°)

STA. 1+48.72 WWL-B.4

1 - 6" SEE MEP PLANS

FOR CONTINUATION

FL 6" = 751.80

N: 10235067.0140

E:3132252.0031

RIM: 752.370

N: 10235070.1306

E: 3132240.2785

FL 8" = 749.85 (IN,N)

1 - 8"x6" WYE

N: 10235101.04

E: 3132205.63

INSTALL:

INSTALL:

STA. 5+57.36 WWL-B

1 - 6" SEE MEP PLANS

FOR CONTINUATION

INSTALL:

FL 6" = 754.00

RIM: 754.570

N: 10235215.7458

E:3132203.4311

STA. 1+65.16 WWL-B.5

1 - 6" SEE MEP PLANS

FOR CONTINUATION

FL 6" = 751.37

N: 10235149.9791

E:3132248.6470

LEGEND:

PROPERTY BOUNDARY **EXISTING CONTOUR** PROPOSED CONTOURS EASEMENT LINE WASTEWATER LINE WASTEWATER MH WASTEWATER CLEANOUT **──₩ ──** PROPOSED WATERLINE

- 1. ALL WASTEWATER MAIN PIPE AND SERVICES SHALL BE SDR-26 PVC
- 2. ALL WASTEWATER MAIN PIPE AND SERVICES SHALL BE SDR-26 PVC
- ALL WASTE WATER PIPE CROSSINGS BELOW WATERLINES WITHIN 9 FEET SHALL HAVE ONE 20-FOOT LINK OF 160-PSI ASTM D2241 PRESSURE RATED PIPE CENTERED AT THE CROSSING. THE WASTEWATER LINE SEGMENT SHALL BE EMBEDDED IN CEMENT STABILIZED SAND PER TCEQ CHAPTER
- THE EXISTING UTILITIES SHOWN ON THE THESE PLANS ARE BASED ON RECORD DRAWINGS FROM THE CITY OF GEORGETOWN REFERENCING ENCLAVE AT HIDDEN OAKS PROJECT. HIDDEN OAKS AT BERRY CREEK

- CHAPTER 290 AND 217.
- (UNLESS OTHERWISE NOTED), IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION WW-2.
- 10. TESTING OF WASTEWATER LINES SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION CIP-12, TESTING OF PIPELINES AND
- 11. CONTRACTOR TO PROVIDE DEFLECTION TEST IN ACCORDANCE WITH TCEQ CHAPTER 217.57 (B.) MANDREL TO BE PULLED IN BOTH DIRECTIONS.
- 12. CONTRACTOR TO PROVIDE LOW PRESSURE AIR TEST IN ACCORDANCE WITH TCEQ CHAPTER 271.57 (a), (1). 30 DAYS AFTER INSTALLATION. NO WATER TEST ALLOWED.
- ACCORDANCE WITH TCEQ CHAPTER 217.57 (a) OF THE STATE WASTEWATER CODE. NO WATER TEST ALLOWED.
- CITY OF GEORGETOWN SPECIFICATION CIP-11.



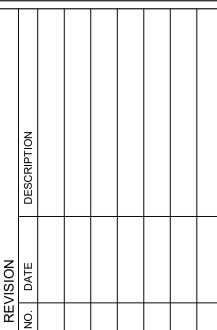
- CONFORMING TO ASTM D3034 OR ASTM F679.
- CONFORMING TO ASTM D3034 OR ASTM F679.
- PHASE 1 PROJECT AND SHELL ROAD WATER MAIN EXTENSION PROJECT
- THE LOCATION AND DEPTH OF ALL UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THERE MAY BE OTHER UNKNOWN EXISTING UTILITIES NOT SHOWN IN THE PLANS, ALL EXISTING UTILITIES SHALL BE FIELD VERIFIED, AND IF NOT DESIGNATED FOR REMOVAL, SHALL BE PROTECTED FROM DAMAGE PRIOR TO THE START OF CONSTRUCITON.
- PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL UNCOVER AND FIELD LOCATE THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES CROSSED BY PROPOSED WATER, WASTEWATER, ELECTRIC AND GAS AND SHALL FIELD LOCATE POINTS OF CONNECTION TO EXISTING UTILITIES. CONTRACTOR SHALL NOTE ACTUAL LOCATION FOUND UTILITY FOR INCLUSION IN THE AS-BUILT DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL IDENTIFIED OR POTENTIAL CONFLICTS, AND SHALL NOT COMMENCE CONSTRUCTION UNTIL PLANS ARE REVISED TO RESOLVE ALL CONFLICTS.
- ALL CROSSING OF WASTEWATER COLLECTION LINES AND WATERLINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TCEQ REGULATIONS
- 8. ALL PROPOSED WASTEWATER LINES SHALL BE SDR 26 PIPE MATERIAL
- 9. PROPOSED WASTEWATER MANHOLES SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF GEORGETOWN SPECIFICATION WW-1.
- MANHOLES.
- 13. CONTRACTOR TO PROVIDE LEAKAGE TEST FOR MANHOLE IN
- 14. PIPE EXCAVATION, TRENCHING, EMBEDMENT, ENCASEMENT AND BACKFILLING SHALL BE DONE IN ACCORDANCE WITH CITY OF GEORGETOWN STANDARD SPECIFICATIONS G-4 AND G-5.
- 15. TRENCH EXCAVATION SAFETY SYSTEMS SHALL BE IN ACCORDANCE WITH
- 16. CONTRACTOR TO MARK CURBS AS DETAILED FOR WASTEWATER SERVICES.
- 17. NO WATER JETTING ALLOWED, MECHANICAL COMPACTION REQUIRED.

Call before you dig.

THE INFORMATION SHOWN ON THESE DRAWINGS INDICATING SIZE, TYPE AND LOCATION OF UNDERGROUND, SURFACE, AND AERIAL UTILITIES IS NOT GUARANTEED TO BE EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT THE "TEXAS 811" SYSTEM AT 1-800-344-8377 (DIG TESS) 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION FOR EXISTING UTILITY LOCATIONS. THE CONTRACTOR SHALL ALSO BE FULLY RESPONSIBLE FOR FIELD VERIFYING LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES AFFECTED BY CONSTRUCTION FOR THIS PROJECT IN ORDER TO AVOID DAMAGING THOSE UTILITIES, AND SHALL IMMEDIATELY ARRANGE FOR REPAIR AND RESTORATION OF CONTRACTOR-DAMAGED UTILITIES TO THE UTILITY Know what's below. COMPANY'S APPROVAL AT THE EXPENSE OF THE CONTRACTOR.

ANNUNCIATION MATERNITY HOME, INC



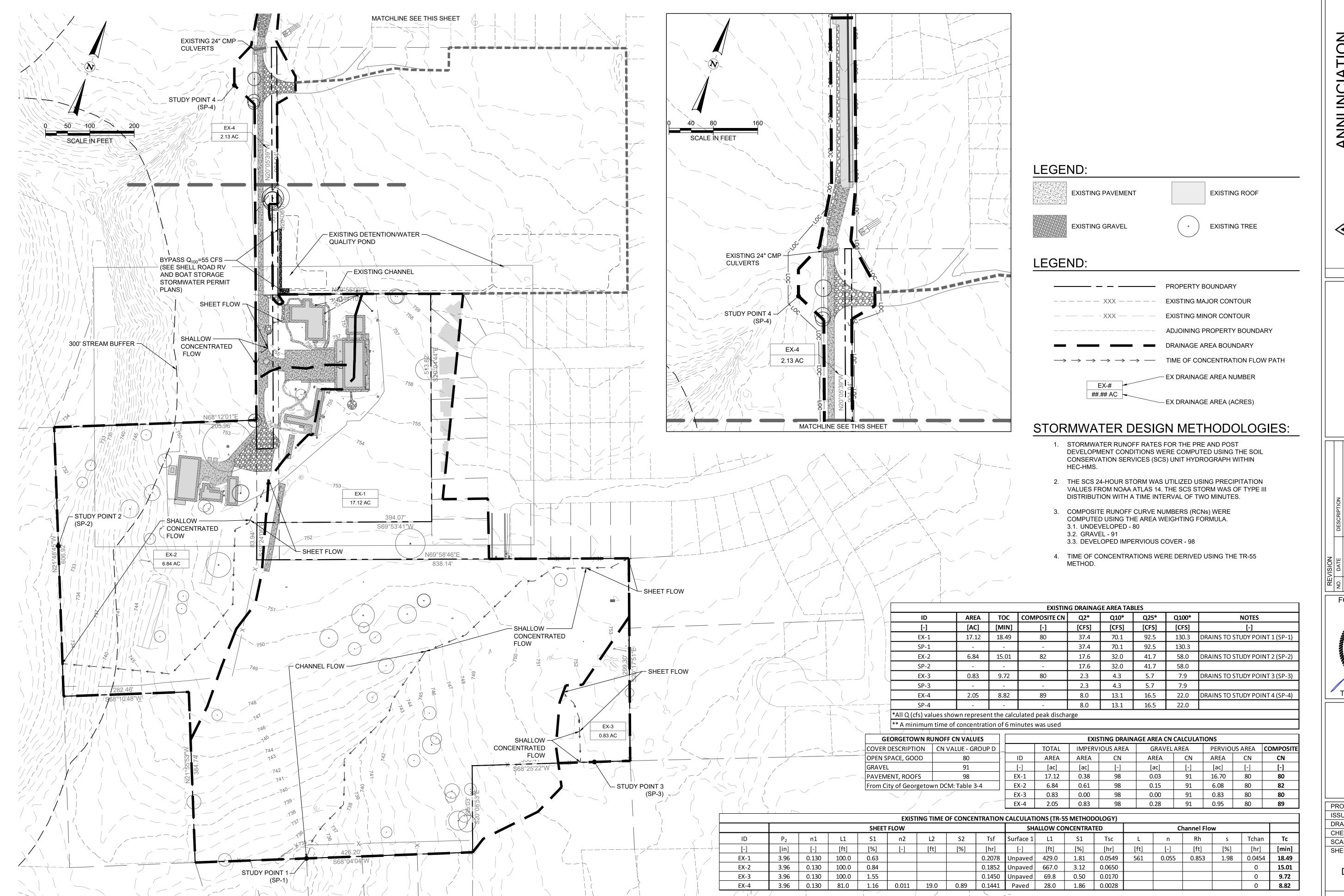




PROJECT NO.: 56152.001

ISSUED: 6/19/2024 DRAWN BY: AB CHECKED BY: BGL SCALE: 1" = 30'

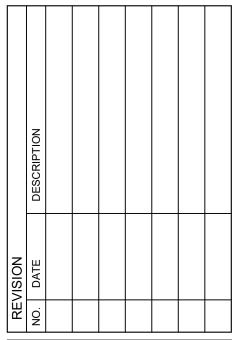
SHEET TITLE PROPOSED WASTEWATER PLAN (2 OF 2)



ANNUNCIATION
MATERNITY HOME, INC
3610 SHELL ROAD







FOR PERMIT REVIEW
6/19/24

FOR PERMIT REVIEW
6/19/24

JASON A. BASS
109708

TBPELS FIRM #F-312

OJECT NO.:	56152.001
SUED:	6/19/2024
AVAIN DV	KD

DRAWN BY: KD

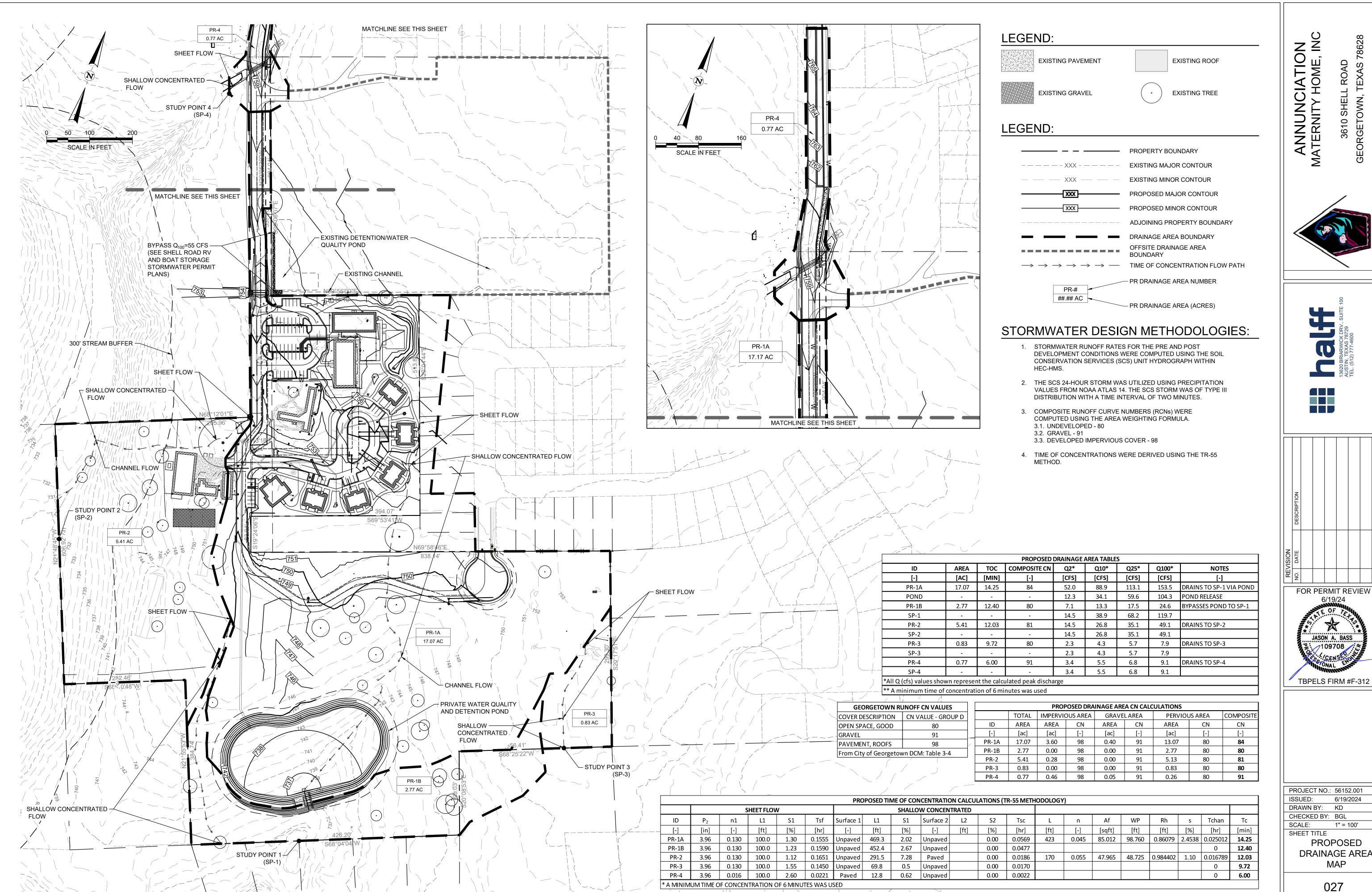
CHECKED BY: BGL

SCALE: 1" = 80'

SHEET TITLE

EXISTING DRAINAGE AREA MAP

> 026 2024-5-SWF



ISSUED: 6/19/2024 DRAWN BY: KD CHECKED BY: BGL

TBPELS FIRM #F-312

SHEET TITLE PROPOSED DRAINAGE AREA

MAP

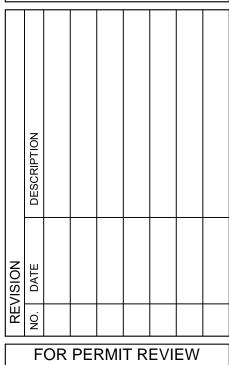
1" = 100'

Texas Commission on Environmental Quality

ANNUNCIATION
MATERNITY HOME, INC
3610 SHELL ROAD
GEORGETOWN, TEXAS 78628







JASON A. BASS

JOSTON

JASON A. BASS

JOSTON

TBPELS FIRM #F-312

PROJECT NO.: 56152.001

 ISSUED:
 6/19/2024

 DRAWN BY:
 JSG

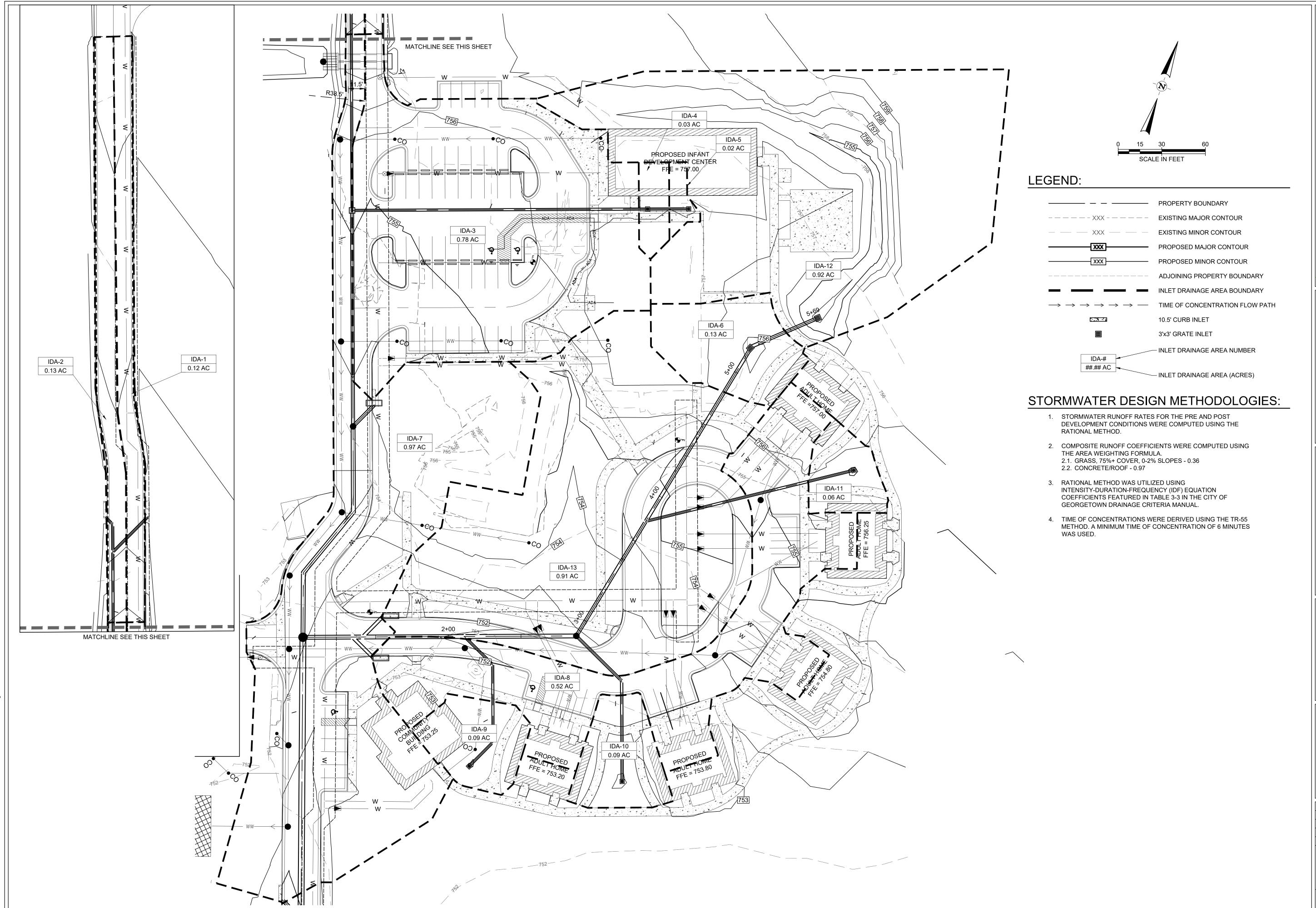
 CHECKED BY:
 BGL

 SCALE:
 1" = ##'

SHEET TITLE

DRAINAGE CALCULATIONS

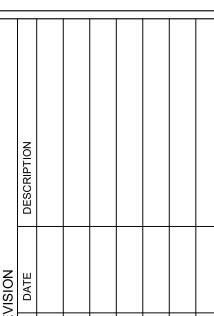
028



ANNUNCIATION
MATERNITY HOME, INC







JASON A. BASS

JASON A. BASS

109708

TBPELS FIRM #F-312

PROJECT NO.: 56152.001 ISSUED: 6/19/2024

DRAWN BY: JSG
CHECKED BY: BGL

SCALE: SHEET TITLE

> INLET DRAINAGE AREA MAP

> > 029

100-YEAR CURB INLET CALCULATIONS

INLET ID	AREA (AC)	INLET TIME (MIN)	RUNOFF COEFF.	Q (CFS)	Q (CAPTURED) (CFS)	Q (BYPASSED) (CFS)	INLET TYPE	CURB HEIGHT (IN)	CURB LENGTH (FT)	GUTTER SLOPE (FT/FT)	GUTTER WIDTH (FT)	Sw (ft/ft)	Sx (ft/ft)	INLET DEPTH (FT)	BYPASS DEPTH (FT)	BYPASS SPREAD (FT)	GUTTER DEPTH (FT)	GUTTER SPREAD (FT)
IDA-1	0.12	6	0.97	1.31	1.31	0	10' CURB INLET	6	10.5	Sag	1.5	0.05	0.02	0.17	-	-	0.17	6.14
IDA-2	0.13	6	0.97	1.43	1.43	0	10' CURB INLET	6	10.5	Sag	1.5	0.05	0.02	0.18	-	-	0.18	6.53
IDA-3	0.78	6	0.90	8.03	2.79	5.25	10' CURB INLET	6	10.5	0.02	1.5	0.05	0.02	0.3	0.26	10.65	0.30	12.57
IDA-7	0.97	6	0.76	8.41	2.85	5.53	10' CURB INLET	6	10.5	0.02	1.5	0.05	0.02	0.3	0.24	10.87	0.30	12.78
IDA-8	0.52	6	0.84	5.01	2.14	2.86	10' CURB INLET	6	10.5	0.02	1.5	0.05	0.02	0.25	0.21	8.36	0.25	10.45
IDA-13	0.91	6	0.62	6.46	2.41	4.01	10' CURB INLET	6	10.5	0.02	1.5	0.05	0.02	0.28	0.24	9.57	0.28	11.56

	100-YEAR STORM												
DESIG	N CALCUL	ATION			CARRYOVER			INLET SPECIFIC				PONDING	
INLET	AREA	С	l100	Q100	FROM UPSTREAM	Q100 TOTAL	SLOPE	INLET SIZE	OPEN AREA	CLOG FACTOR	REDUCED AREA	DEPTH	BYPASS
LOCATION	(AC)		(IN/HR)	(CFS)	(CFS)	(CFS)	(FT/FT)	(FTXFT)	(SF)	(%)	(SF)	(IN)	(CFS)
IDA-4	0.03	0.79	11.4983	0.27	0	0.27	0.0400	2X2	1.50	35%	0.98	0.12	0
IDA-5	0.02	0.68	11.4983	0.12	0	0.12	0.0400	2X2	1.50	35%	0.98	0.08	0
IDA-6	0.13	0.61	11.4983	0.91	0	0.91	0.0400	3X3	2.26	35%	1.47	0.30	0
IDA-9	0.09	0.62	11.4983	0.62	0	0.62	0.0400	2X2	1.50	35%	0.98	0.17	0
IDA-10	0.09	0.50	11.4983	0.52	0	0.52	0.0400	2X2	1.50	35%	0.98	0.15	0
IDA-11	0.06	0.58	11.4983	0.40	0	0.40	0.0400	2X2	1.50	35%	0.98	0.15	0
IDA-12	0.92	0.48	11.4983	5.11	0	5.11	0.0400	3x3	2.26	35%	1.47	0.47	0

	Sub Basin Runoff Calculations												
ID	IC	AREA	TOC	C25	125	Q25	C100	I100	Q100				
[-]	[%]	[AC]	[MIN]	[-]	[IN/HR]	[CFS]	[-]	[IN/HR]	[CFS]				
IDA-1	100.00	0.12	6.0	0.97	9.51	1.08	0.97	11.50	1.31				
IDA-2	100.00	0.13	6.0	0.97	9.51	1.19	0.97	11.50	1.43				
IDA-3	88.35	0.78	6.0	0.89	9.51	6.60	0.90	11.50	8.03				
IDA-4	70.57	0.03	6.0	0.78	9.51	0.22	0.79	11.50	0.27				
IDA-5	52.43	0.02	6.0	0.66	9.51	0.10	0.68	11.50	0.12				
IDA-6	40.77	0.13	6.0	0.58	9.51	0.72	0.61	11.50	0.91				
IDA-7	65.08	0.97	6.0	0.74	9.51	6.80	0.76	11.50	8.41				
IDA-8	79.04	0.52	6.0	0.83	9.51	4.09	0.84	11.50	5.01				
IDA-9	43.21	0.09	6.0	0.60	9.51	0.49	0.62	11.50	0.62				
IDA-10	22.57	0.09	6.0	0.46	9.51	0.40	0.50	11.50	0.52				
IDA-11	36.86	0.06	6.0	0.55	9.51	0.32	0.58	11.50	0.40				
IDA-12	20.45	0.92	6.0	0.44	9.51	3.88	0.48	11.50	5.11				
IDA-13	42.21	0.91	6.0	0.59	9.51	5.09	0.62	11.50	6.46				

3610 SHELL ROAD GEORGETOWN, TEXAS 78628





		DESCRIPTION				
	REVISION	DATE				
	RE	ON.			·	
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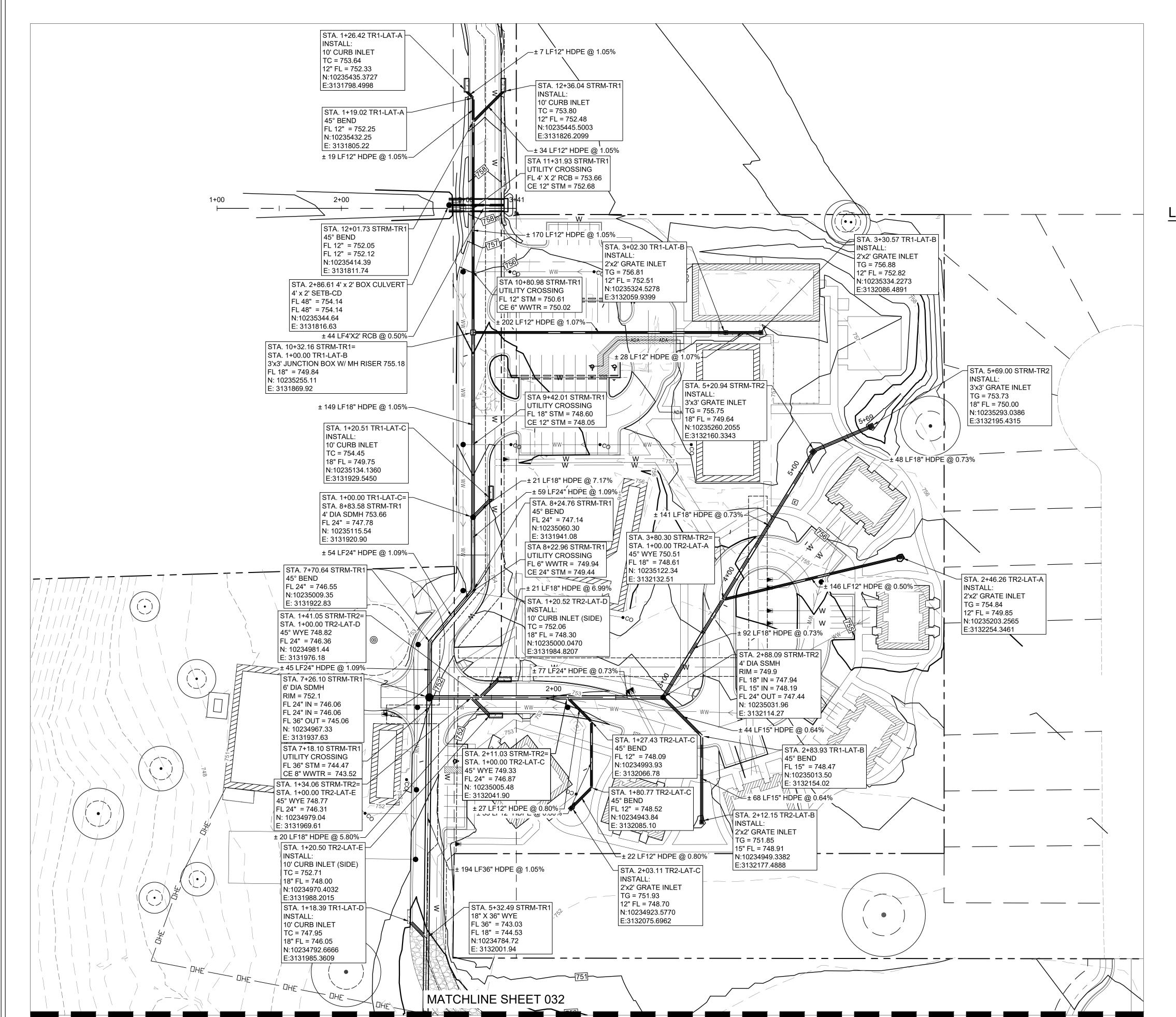
PROJECT NO.: 56152.001

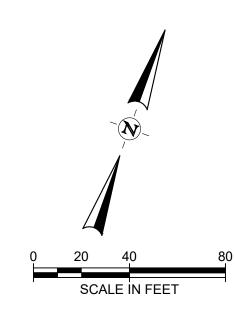
ISSUED: 6/19/2024
DRAWN BY: JSG
CHECKED BY: BGL

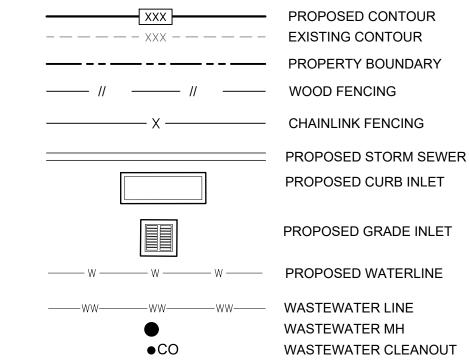
SCALE: 1" = ##'
SHEET TITLE

INLET CALCULATIONS

3034.5



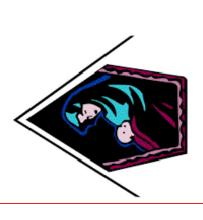




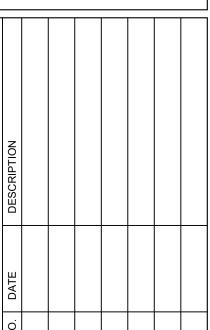
NOTES:

- CONTRACTOR SHALL UTILIZE REDUCERS, AS NECESSARY, AT WYE CONNECTIONS. REDUCERS NOT CALLED OUT ON PLANS.
- 2. CONTRACTOR SHALL USE ONLY PRE-FABRICATED BENDS, REDUCERS, FITTINGS, ETC. GROUTED CONNECTIONS ARE NOT ACCEPTABLE.
- 3. ALL HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL HAVE GASKETED, WATER-TIGHT JOINTS AND SHALL STRICTLY FOLLOW THE MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION AND TRENCH SECTIONS, REGARDLESS OF OTHER STANDARD CITY DETAILS SHOWN IN THE CONSTRUCTION PLAN SET FOR STANDARD TRENCH DETAILS. HDPE PIPE REQUIRES MINIMUM OF 6 INCHES OF BEDDING MATERIAL ABOVE THE TOP OF DIDE
- 4. INSTALLATION OF HDPE PIPE SHALL BE IN ACCORDANCE WITH ASTM D2321 AND MANUFACTURERS RECOMMENDED GUIDELINES.
- 5. ACCEPTABLE HDPE PIPE MATERIALS ARE ADS DUAL WALL N-12 WT IB PIPE OR APPROVED EQUAL MEETING ASTM F2648 SPECIFICATIONS. JOINTS AND FITTINGS SHALL MEET ASTM D3212, ASTM F2306, ASTM F2487, AND ASTM F1417 SPECIFICATIONS. GASKETS SHALL MEET ASTM F477 SPECIFICATIONS. STRUCTURAL STRENGTH SHALL SUPPORT H-25 LOADS. CONTRACTOR SHALL PROVIDE SUBMITTALS TO ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
- 6. ALL FITTINGS, COUPLINGS, BENDS, WYES, TEES, ETC. SHALL BE PRE-FABRICATED. GROUTED CONNECTIONS ARE NOT PERMITTED FOR HDPE PIPE MATERIALS. HDPE FITTINGS SHALL MEET ASTM F2306 SPECIFICATIONS. CONTRACTOR SHALL PROVIDE SUBMITTALS TO
- ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. CONNECTIONS TO MANHOLES, INLETS, AND JUNCTION BOXES SHALL UTILIZE A SPIGOT END ADAPTOR FITTING AND A PRECAST MANHOLE SEAL TO AVOID LEAKAGE AT THESE CONNECTIONS. SEE ADS TECHNICAL NOTE 5.04
- AND STD-201. CONTRACTOR SHALL SUBMIT TYPE OF CONNECTION TO BE USED TO ENGINEER PRIOR TO CONSTRUCTION.

ANNUNCIATION
MATERNITY HOME, INC









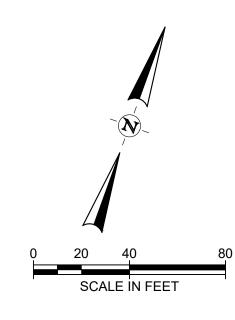
PROJECT NO.: 56152.001

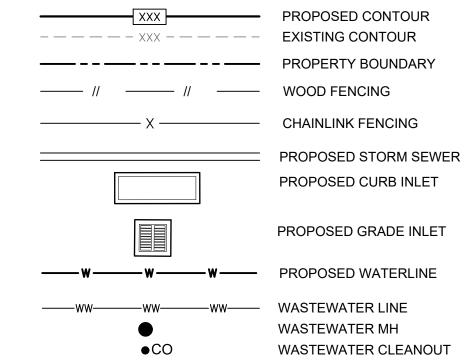
ISSUED: JUNE 2024
DRAWN BY: AB
CHECKED BY: BGL
SCALE: 1" = 50'

SHEET TITLE

STORM DRAIN PLAN (1 OF 2)

031

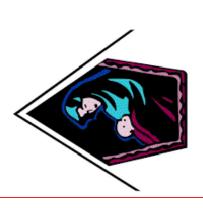




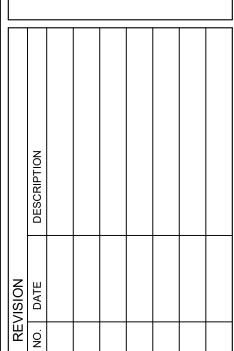
NOTES:

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- 2. CONTRACTOR SHALL USE ONLY PRE-FABRICATED BENDS, REDUCERS, FITTINGS, ETC. GROUTED CONNECTIONS ARE NOT ACCEPTABLE.
- 3. ALL HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL HAVE GASKETED, WATER-TIGHT JOINTS AND SHALL STRICTLY FOLLOW THE MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION AND TRENCH SECTIONS, REGARDLESS OF OTHER STANDARD CITY DETAILS SHOWN IN THE CONSTRUCTION PLAN SET FOR STANDARD TRENCH DETAILS. HDPE PIPE REQUIRES MINIMUM OF 6 INCHES OF BEDDING MATERIAL ABOVE THE TOP OF
- 4. INSTALLATION OF HDPE PIPE SHALL BE IN ACCORDANCE WITH ASTM D2321 AND MANUFACTURERS RECOMMENDED GUIDELINES.
- 5. ACCEPTABLE HDPE PIPE MATERIALS ARE ADS DUAL WALL N-12 WT IB PIPE OR APPROVED EQUAL MEETING ASTM F2648 SPECIFICATIONS. JOINTS AND FITTINGS SHALL MEET ASTM D3212, ASTM F2306, ASTM F2487, AND ASTM F1417 SPECIFICATIONS. GASKETS SHALL MEET ASTM F477 SPECIFICATIONS. STRUCTURAL STRENGTH SHALL SUPPORT H-25 LOADS. CONTRACTOR SHALL PROVIDE SUBMITTALS TO ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
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 CONNECTIONS TO MANHOLES, INLETS, AND JUNCTION BOXES
 SHALL UTILIZE A SPIGOT END ADAPTOR FITTING AND A PRECAST
 MANHOLE SEAL TO AVOID LEAKAGE AT THESE CONNECTIONS.
 SEE ADS TECHNICAL NOTE 5.04
- AND STD-201. CONTRACTOR SHALL SUBMIT TYPE OF CONNECTION TO BE USED TO ENGINEER PRIOR TO CONSTRUCTION.

NUNCIATION ERNITY HOME, INC









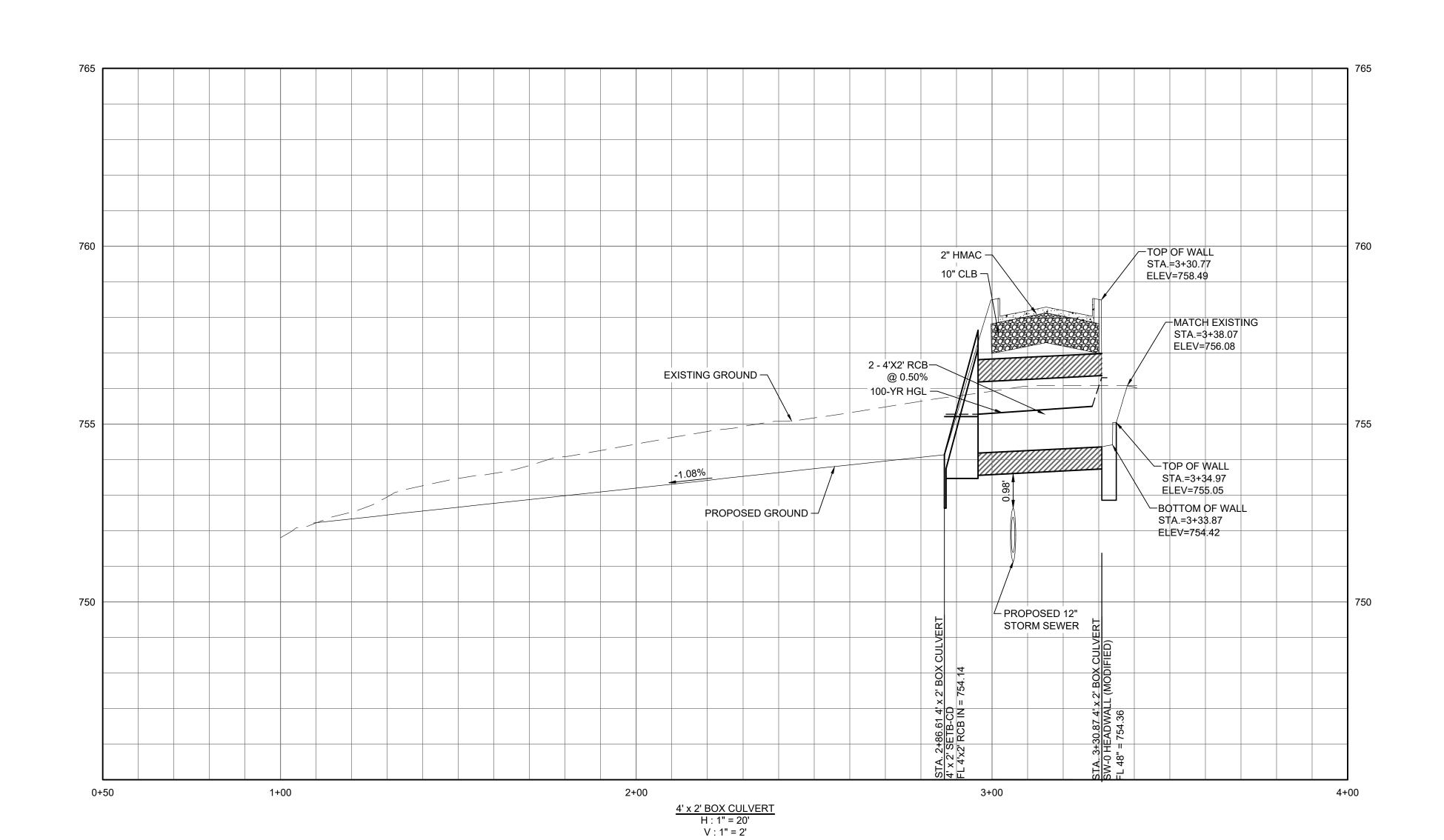
PROJECT NO.: 56152.001

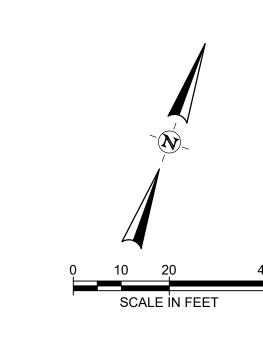
ISSUED: JUNE 2024
DRAWN BY: JSG
CHECKED BY: BGL

SCALE: 1" = 50'
SHEET TITLE

STORM DRAIN PLAN (2 OF 2)

032

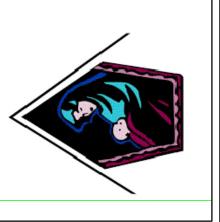


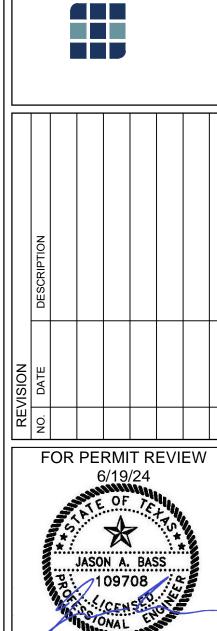


XXX	PROPOSED CONTOUR
	EXISTING CONTOUR
	PROPERTY BOUNDARY
// //	WOOD FENCING
X	CHAINLINK FENCING
	PROPOSED STORM SEWER
w w	PROPOSED WATERLINE



3610 SHELL ROAD GEORGETOWN, TEXAS 786





PROJECT NO.: 56152.001
ISSUED: JUNE 2024
DRAWN BY: JSG

TBPELS FIRM #F-312

CHECKED BY: JAB

SCALE: 1" = 2

SHEET TITLE
4'X2' CULVERT

033

PLAN & PROFILE

Friday, Jun 7 2024

= 55.00

= 55.00

= 55.00

= 55.00

= 0.00

= 6.43

= 6.04

= 755.21

= 755.50 = 756.30

= Inlet Control

= 0.97

= 755.08

Calculations

Qmin (cfs)

Qmax (cfs)

Highlighted Qtotal (cfs)

Qpipe (cfs)

Qovertop (cfs)

Veloc Dn (ft/s)

Veloc Up (ft/s)

HGL Dn (ft)

HGL Up (ft)

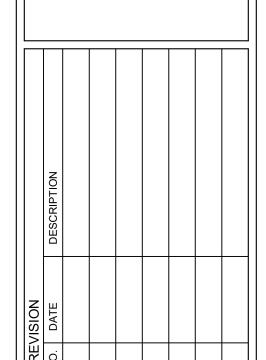
Hw Elev (ft)

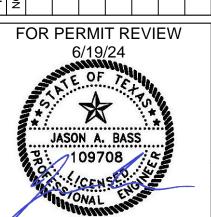
Flow Regime

Hw/D (ft)

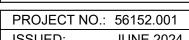
Tailwater Élev (ft)







TBPELS FIRM #F-312



ISSUED: JUNE 2024 DRAWN BY: JSG CHECKED BY: JAB

SCALE: 1" = 20' SHEET TITLE

> 4'X2' CULVERT CALCULATIONS

Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Friday, Jun 7 2024 **Culvert Report**

Invert Elev Dn (ft)

Pipe Length (ft) Slope (%)

Rise (in)

Span (in)

n-Value

No. Barrels

Shape

Invert Elev Up (ft)

Culvert Type Culvert Entrance

Coeff. K,M,c,Y,k

Embankment

Top Width (ft)

Crest Width (ft)

Top Elevation (ft)

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

= 754.14

= 42.12

= 0.52

= 754.36

= 24.0

= Box

= 48.0

= 0.013

= 757.41 = 27.00

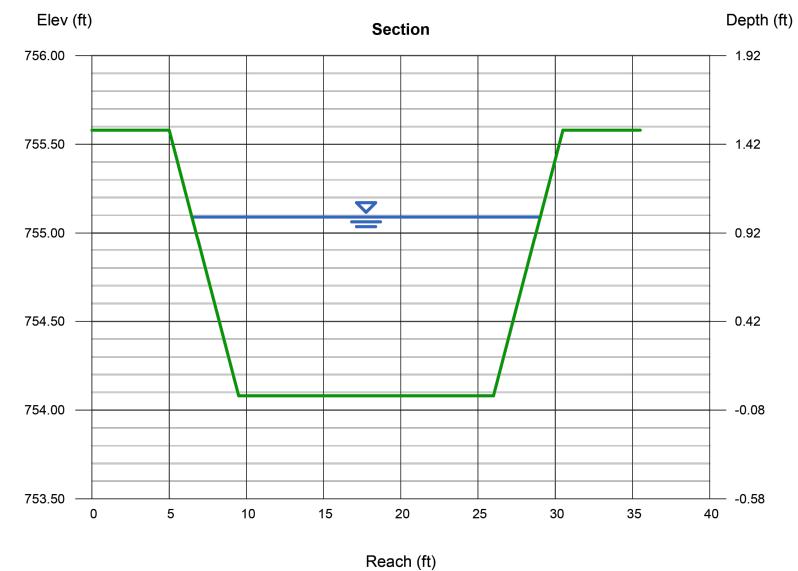
= 100.00

= Flared Wingwalls = 0D wingwall flares = 0.061, 0.75, 0.0423, 0.82, 0.7

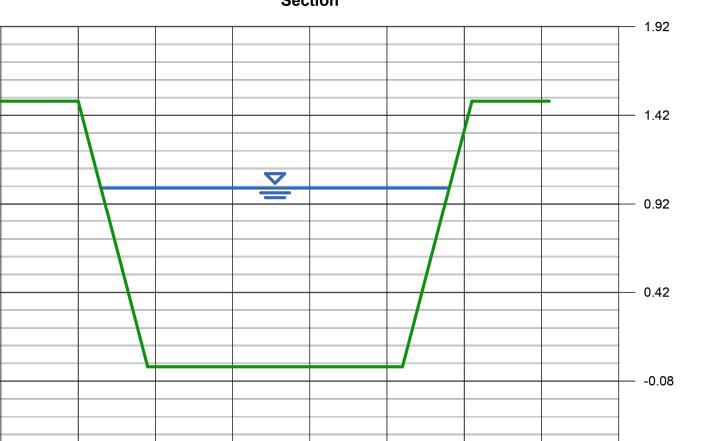
= 2

100-YR 4' x 2' CULVERT CALC

100-YR CHANNEL CALC



Trapezoidal		Highlighted	
Bottom Width (ft)	= 16.50	Depth (ft)	= 1.01
Side Slopes (z:1)	= 3.00, 3.00	Q (cfs)	= 55.00
Total Depth (ft)	= 1.50	Area (sqft)	= 19.73
Invert Elev (ft)	= 754.08	Velocity (ft/s)	= 2.79
Slope (%)	= 1.08	Wetted Perim (ft)	= 22.89
N-Value	= 0.050	Crit Depth, Yc (ft)	= 0.68
		Top Width (ft)	= 22.56
Calculations		EGL (ft)	= 1.13
Compute by:	Known Q		
Known Q (cfs)	= 55.00		



1+00

CROSS SECTION A-A H: 1" = 20'

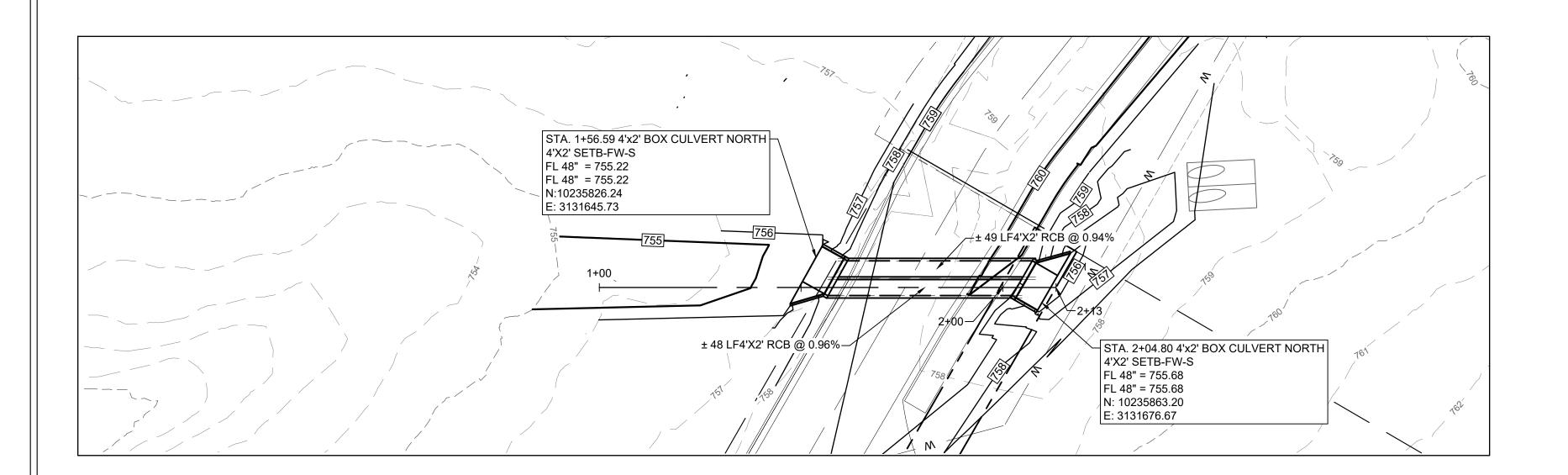
V : 1" = 2'

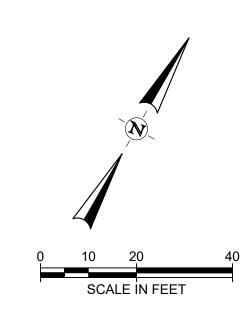
16.50'

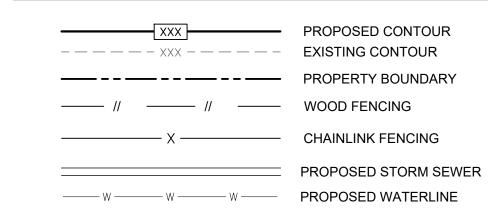
PROPOSED GROUND

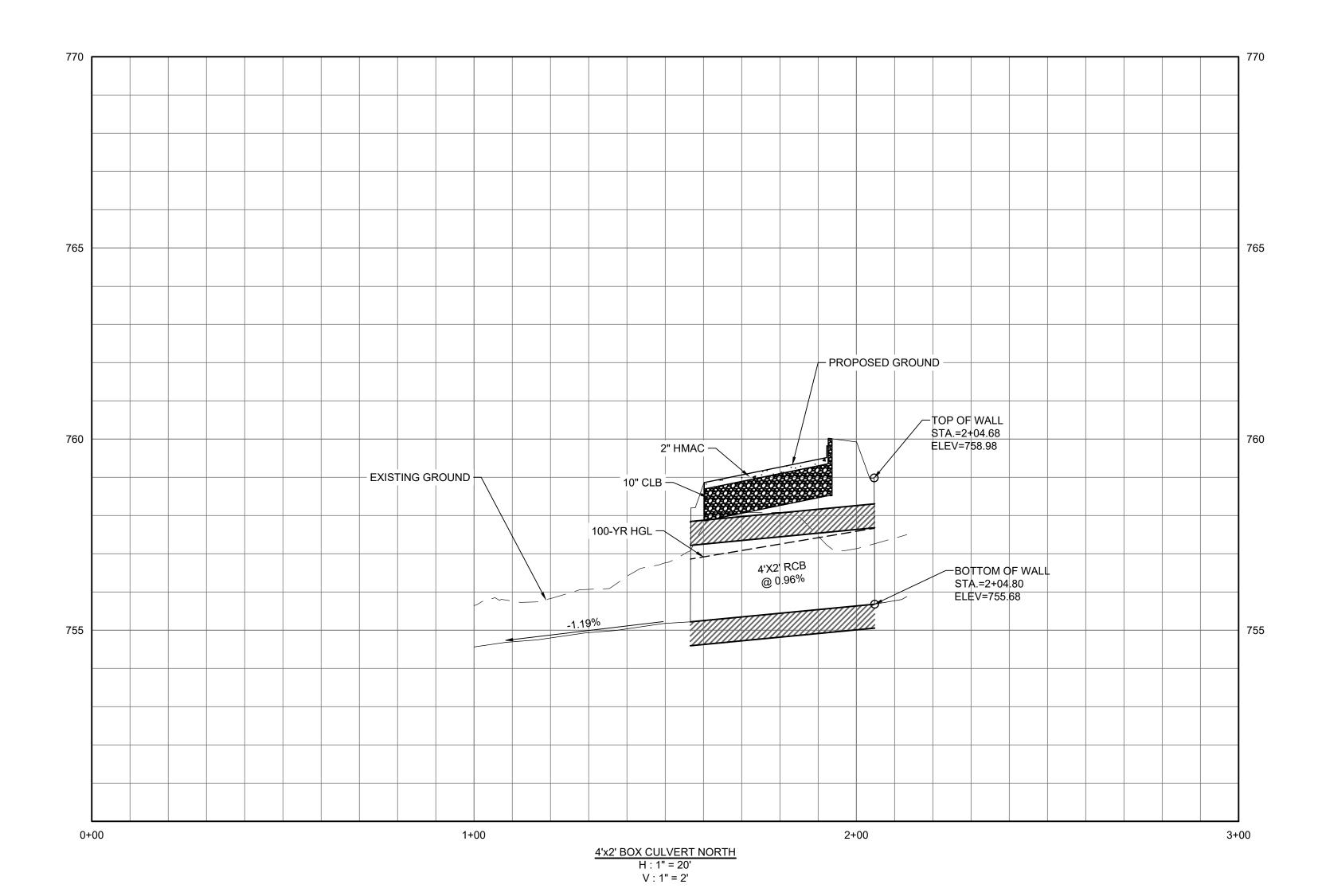
EXISTING GROUND —

100-YR HGL=755.08-









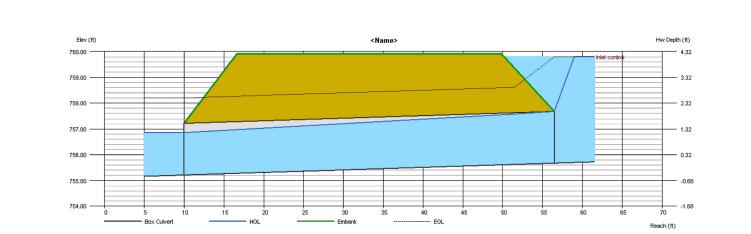
Culvert Report

Crest Width (ft)

= 30.00

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Friday, Jun 14 2024

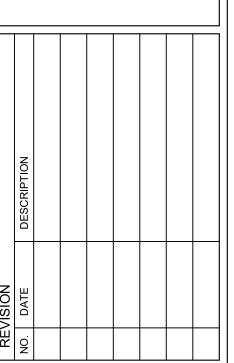
Box Culvert			
Invert Elev Dn (ft)	= 755.22	Calculations	
Pipe Length (ft)	= 46.47	Qmin (cfs)	= 127.20
Slope (%)	= 0.99	Qmax (cfs)	= 127.20
Invert Elev Up (ft)	= 755.68	Tailwater Élev (ft)	= Normal
Rise (in)	= 24.0	,	
Shape	= Box	Highlighted	
Span (in)	= 48.0	Qtotal (cfs)	= 127.20
No. Barrels	= 2	Qpipe (cfs)	= 127.20
n-Value	= 0.013	Qovertop (cfs)	= 0.00
Culvert Type	= Flared Wingwalls	Veloc Dn (ft/s)	= 9.70
Culvert Entrance	= 90D and 15D wingwall flares	Veloc Up (ft/s)	= 8.00
Coeff. K,M,c,Y,k	= 0.061, 0.75, 0.04, 0.8, 0.5	HGL Dn (ft)	= 756.86
		HGL Up (ft)	= 757.67
Embankment		Hw Elev (ft)	= 759.80
Top Elevation (ft)	= 759.91	Hw/D (ft)	= 2.06
Top Width (ft)	= 33.20	Flow Regime	= Inlet Control
O	00.00	=	



ANNUNCIATION MATERNITY HOME, INC





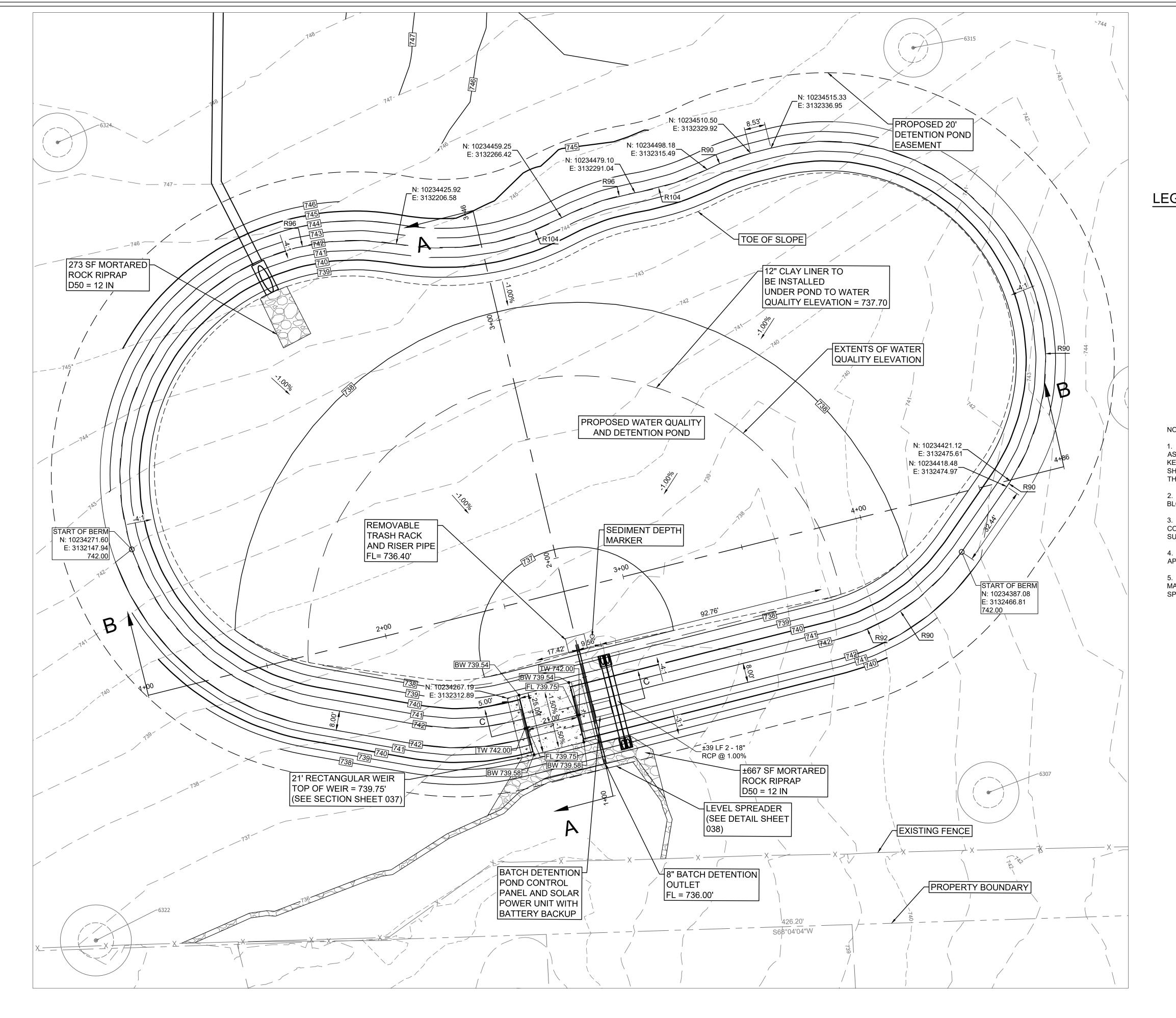


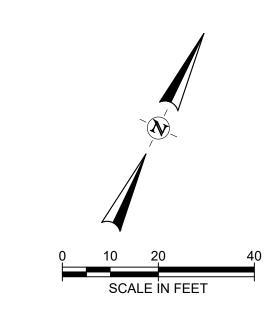


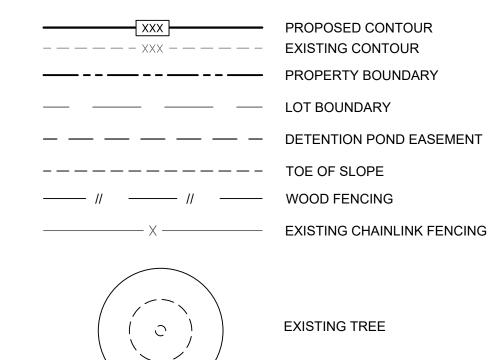
PROJECT NO.: 56152.001 ISSUED: JUNE 2024

DRAWN BY: JSG CHECKED BY: JAB SCALE: 1" = 20'

> SHEET TITLE NORTH 4'X2' CULVERT PLAN & **PROFILE**





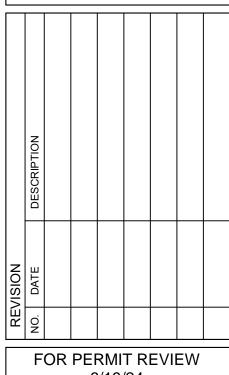


- 1. 12" CLAY LINER SHOULD BE INSTALLED IN LIFTS NO GREATER THAN 6" AND AS RECOMMENDED BY A LICENSED GEOTECHNICAL ENGINEER AND SHALL BE KEPT MOIST AT ALL TIMES TO AVOID CRACKING. THE GEOTECHNICAL ENGINEER SHALL MONITOR THE INSTALLATION OF THE CLAY LINER AND TEST IT TO CERTIFY THAT IT WILL NOT LEAK. SPECIFICATIONS ARE LISTED ON SHEET 038.
- 2. SEE SHEET 038 FOR BATCH DETENTION POND LOGIC CONTROLLER AND BLOCK DIAGRAMS.
- 3. CLEARLY VISIBLE ALARM SYSTEM TO BE PROVIDED WITH BATCH DETENTION CONTROLLER TO INDICATE SYSTEM MALFUNCTION. ALARM SYSTEM TO FEATURE SUNLIGHT VISIBLE LED ALARM LIGHT.
- 4. SIGN TO BE POSTED WITH PHONE NUMBERS OF THE OWNER AND APPROPRIATE TCEQ REGIONAL OFFICE.
- 5. SEE TXDOT SPECIAL SPECIFICATIONS 7130 FOR BATCH DETENTION MATERIAL, EQUIPMENT, AND CONSTRUCTION. A COPY OF TXDOT SPECIAL SPECIFICATION 7130 IS INCLUDED IN THE WPAP FOR THIS PROJECT.









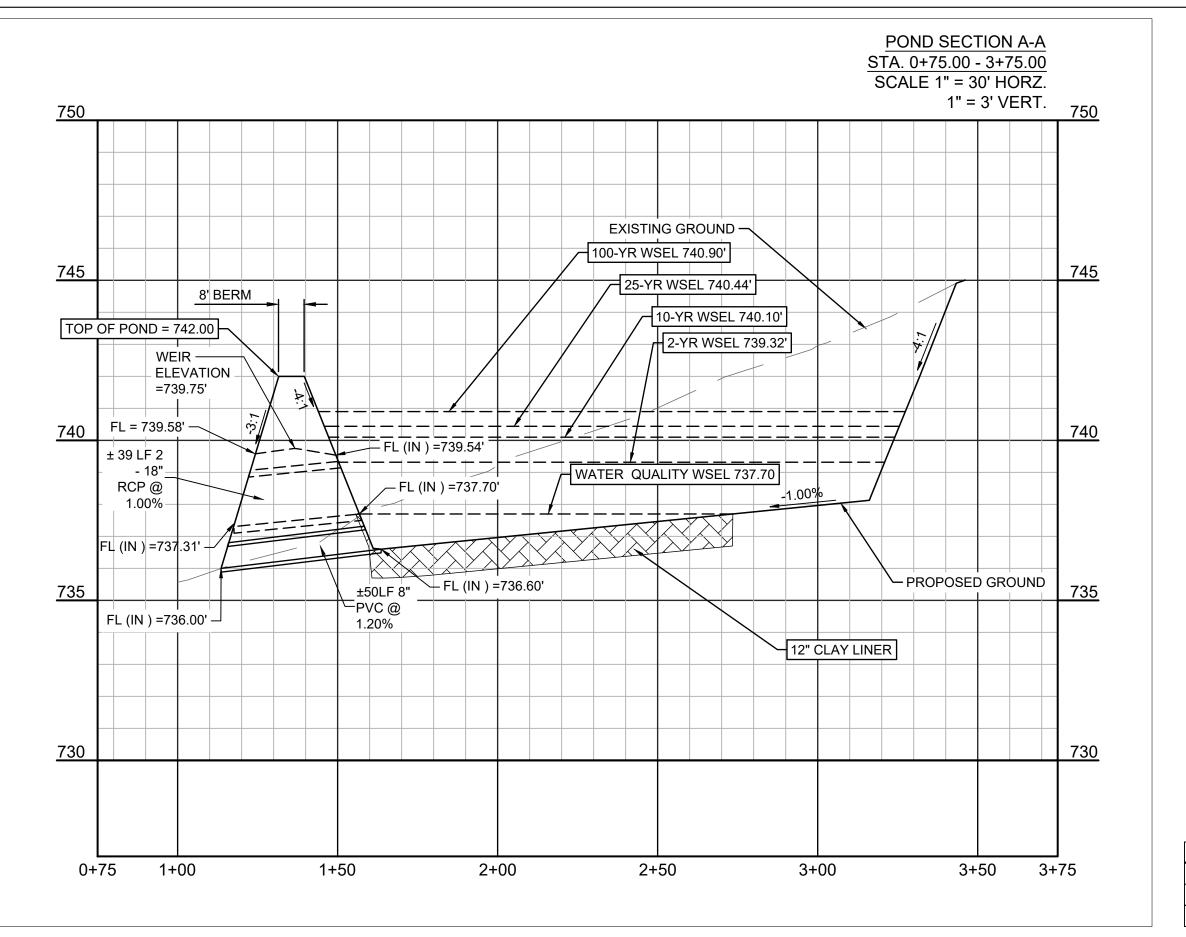


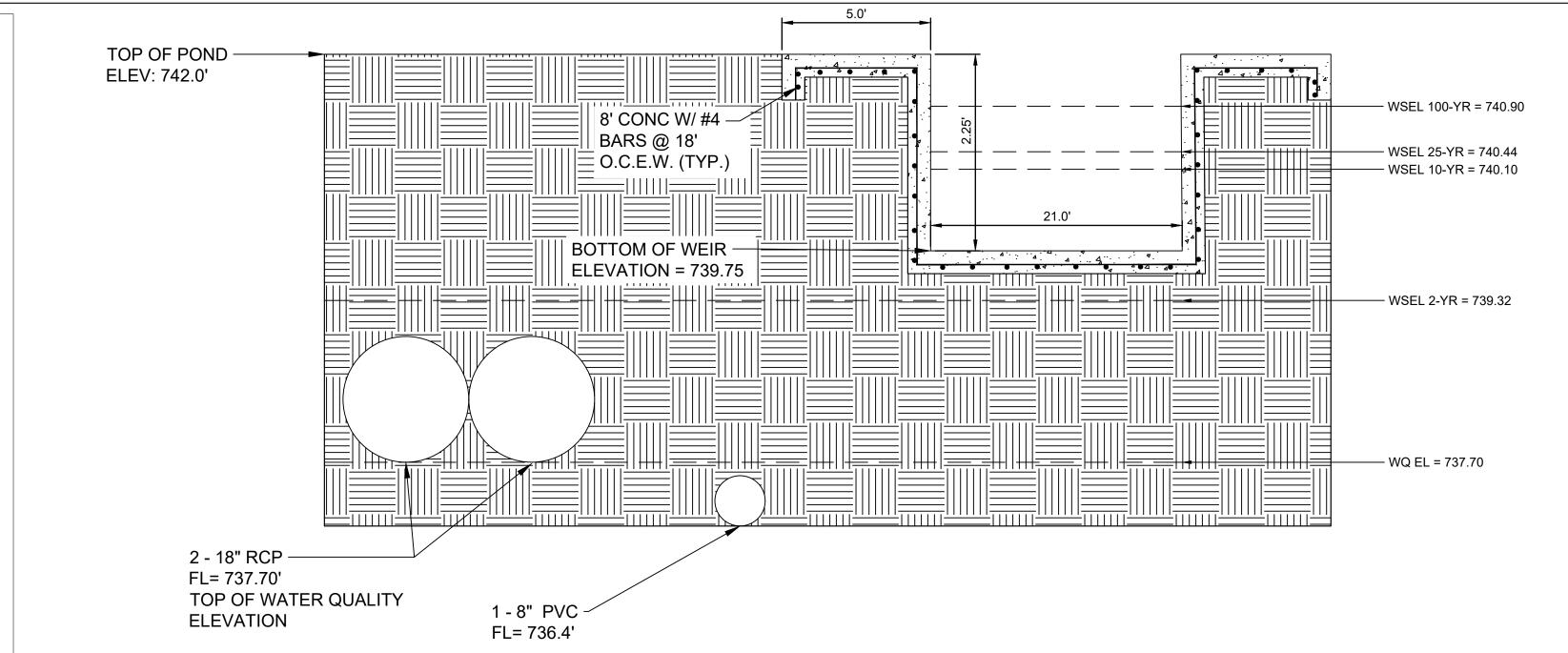
PROJECT NO.: 56152.001 ISSUED: JUNE 2024 DRAWN BY: JSG CHECKED BY: BGL SCALE: 1" = 30'

POND PLAN

SHEET TITLE

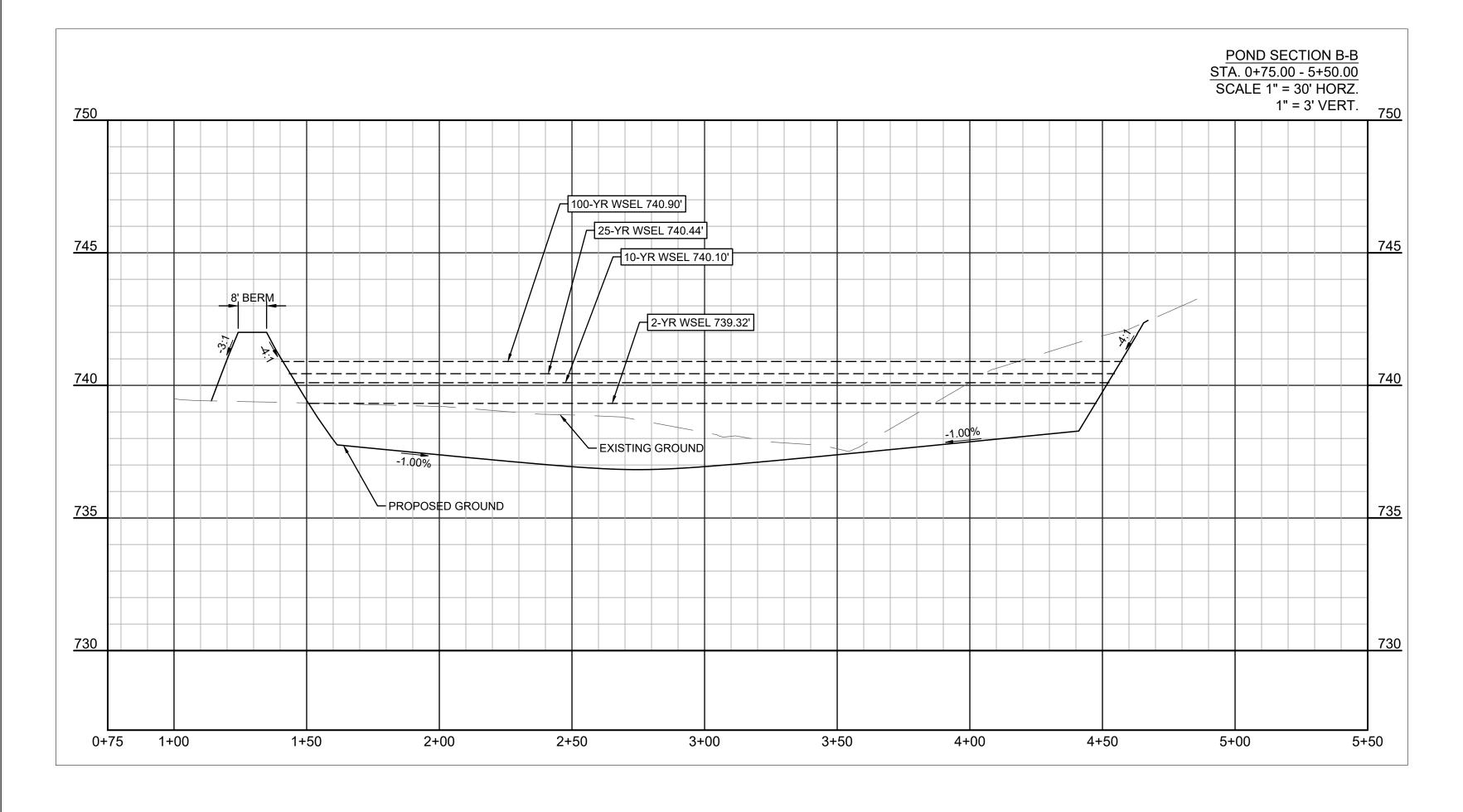
036





SECTION C-C EMERGENCY OVERFLOW WEIR (N.T.S.)

Emergency Overflow Calcs											
ID	CW	hmax	L total	Qcap							
[-]	[-]	[ft]	[ft]	[CFS]							
OUTFALL WEIR	2.67	1.96	21	153.50							



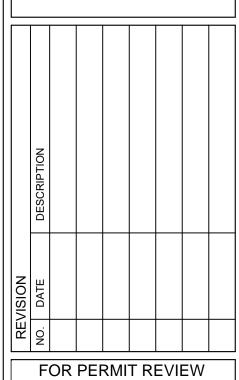
			PONE) (PROPOS	ED)					
	Γ			AVG END	•		CONIC			
Elevation	Contour Area	Δh	inc Storage	Storage	Storage	inc Storage	Storage	Storage	Contour Area	
[ft]	[SF]	[ft]	[CF]	[CF]	[ac-ft]	[CF]	[CF]	[ac-ft]	[ac]	
736.6	0	- [,	-	-	-	- [4.]	-	-	0	
736.7	211.99	0.1	10.5995	10.5995	0.000243	7.06633333	7 066333	0.000162	0.004866621	
736.8	754.55	0.1	48.327	58.9265	0.001353	45.5495438		0.00102	0.017322084	
			119.0575	177.984						
736.9	1626.6	0.1	1			116.300292			0.037341598	
737	2827.33	0.1	222.6965	400.6805					0.064906566	
737.1	4347.84	0.1	358.7585	759.439		356.042529			0.099812672	
737.2	6174.14	0.1	526.099	1285.538		523.437208		0.029117	0.141738751	
737.3	8292.07	0.1	723.3105	2008.848	0.046117	720.712535		0.045662	0.190359734	
737.4	10696.74	0.1	949.4405	2958.289	0.067913	946.892592	2935.949	0.0674	0.245563361	
737.5	13388.77	0.1	1204.2755	4162.565	0.095559	1201.76023	4137.709	0.094989	0.307363866	
737.6	16368.2002	0.1	1487.84851	5650.413	0.129716	1485.35627	5623.066	0.129088	0.375762172	
737.7	19633.41	0.1	1800.08051	7450.494	0.17104	1797.60756	7420.673	0.170355	0.450721074	→ WQ EL = 737.70
737.8	23167.88	0.1	2140.0645	9590.558	0.220169	2137.62808	9558.301	0.219428	0.531861341	
737.9	26943.46	0.1	2505.567	12096.13		2503.19307		0.276894	0.618536731	
738	30929.53	0.1	2893.6495	14989.77	0.344118	2891.3589	14952.85	0.34327	0.710044307	
738.1	35090.53	0.1	3301.003			3298.81539		0.419001	0.805567723	
738.2	39087.57	0.1	3708.905	21999.68		3707.10888		0.504104	0.897327135	
738.3	42695.73	0.1	4089.165	26088.85		4087.8378	26046.62	0.597948	0.980159091	
738.4	45958.69	0.1	4432.721	30521.57		4431.71987			1.055066345	
738.5	48811.66	0.1	4738.5175	35260.09	0.80946	4737.80162			1.120561524	
738.6	50922.76	0.1	4986.721	40246.81	0.92394	4986.34857			1.169025712	
738.7	52551.81	0.1	5173.7285	45420.54	1.042712	5173.51476	45376	1.04169	1.206423554	
738.8	53980.54	0.1	5326.6175	50747.15	1.164994	5326.45782	50702.46	1.163968	1.239222681	
738.9	55049.02	0.1	5451.478	56198.63	1.290143	5451.39074	56153.85	1.289115	1.263751607	
739	55463.99	0.1	5525.6505	61724.28	1.416995	5525.63752	61679.49	1.415966	1.273278007	
739.1	55831.28	0.1	5564.7635	67289.05	1.544744	5564.7534	67244.24	1.543715	1.281709826	
739.2	56199.48	0.1	5601.538	72890.58		5601.52792			1.290162534	
739.3	56568.6	0.1	5638.404	78528.99		5638.39393			1.298636364	
739.4	56938.63	0.1	5675.3615			5675.35145			1.307131084	
739.5	57309.57	0.1	5712.41			5712.39996			1.315646694	
739.6			5749.55	95666.31		5749.53998			1.324183425	
	57681.43	0.1								
739.7	58054.21	0.1	5786.782	101453.1		5786.77199			1.332741276	
739.8	58427.89	0.1	5824.105	107277.2		5824.09501			1.341319789	
739.9	58802.49	0.1	5861.519	113138.7		5861.50902			1.349919421	
740	59178.01	0.1	5899.025	119037.7	2.73273	5899.01504		2.7317	1.358540174	
740.1	59554.44	0.1	5936.6225	124974.4	2.869017	5936.61255	124929.5	2.867986	1.367181818	
740.2	59931.78	0.1	5974.311	130948.7	3.006168	5974.30107	130903.8	3.005137	1.375844353	
740.3	60310.04	0.1	6012.091	136960.8	3.144187	6012.08108	136915.8	3.143155	1.384528007	
740.4	60689.21	0.1	6049.9625	143010.7	3.283075	6049.9526	142965.8	3.282043	1.393232553	
740.5	61069.3	0.1	6087.9255	149098.7	3.422834	6087.91561	149053.7	3.421802	1.401958219	
740.6	61450.29	0.1	6125.9795	155224.6	3.563467	6125.96963	155179.7	3.562435	1.410704545	
740.7	61832.21	0.1	6164.125	161388.8	3.704976	6164.11514	161343.8	3.703944	1.419472222	
740.8	62215.04	0.1	6202.3625	167591.1		6202.35265		3.84633	1.42826079	
740.9	62598.78	0.1	6240.691		3.990629	6240.68117			1.437070248	
741	62983.44	0.1	6279.111			6279.10118			1.445900826	100-YR WSEL = 740.93
741.1	63369.01	0.1	6317.6225	186428.5			186383.5		1.454752296	710.00
741.1	63755.49	0.1	6356.225	192784.8					1.463624656	
741.3	64142.89	0.1	6394.919	199179.7	4.572536	6394.90922		4.571503	1.472518136	
741.4	64531.2	0.1	6433.7045	205613.4		6433.69473		4.7192	1.481432507	
741.5	64920.43	0.1	6472.5815	212086	4.868824	6472.57175		4.86779	1.490367998	
741.6	65310.57	0.1	6511.55			6511.54026			1.49932438	
741.7	65701.62	0.1	6550.6095	225148.1	5.16869	6550.59977			1.508301653	
741.8	66093.59	0.1	6589.7605	231737.9	5.31997				1.517300046	
741.9	66486.48	0.1	6629.0035	238366.9	5.472151	6628.9938	238321.8	5.471116	1.526319559	
742	66970.4077	0.1	6672.844385	245039.7	5.625338				1.537429011	

ANNUNCIATION MATERNITY HOME, INC





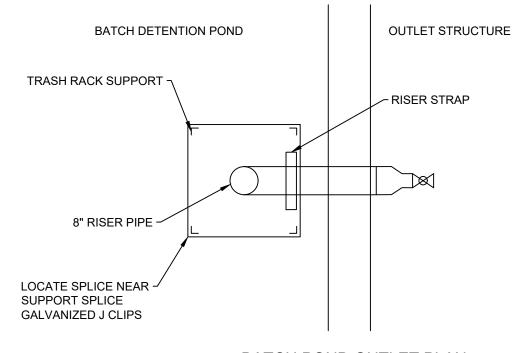




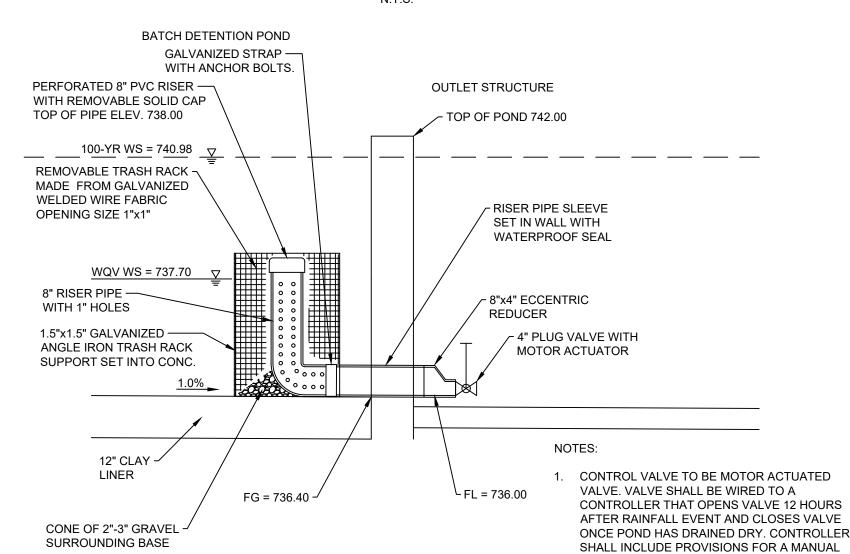


PROJECT NO.: 56152.001 ISSUED: DRAWN BY: JSG CHECKED BY: BGL SCALE: 1" = 30' SHEET TITLE

> POND SECTION



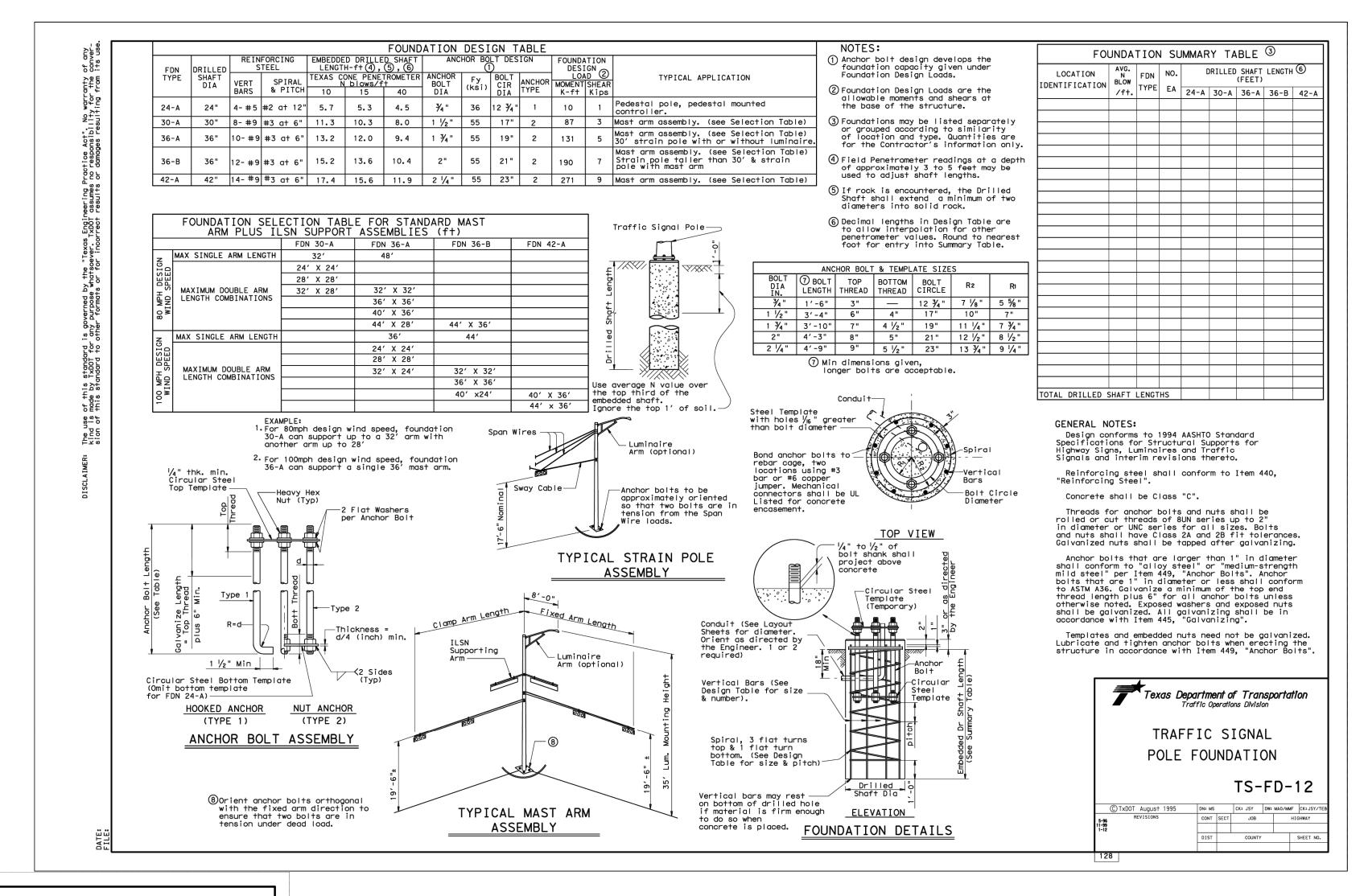
BATCH POND OUTLET PLAN



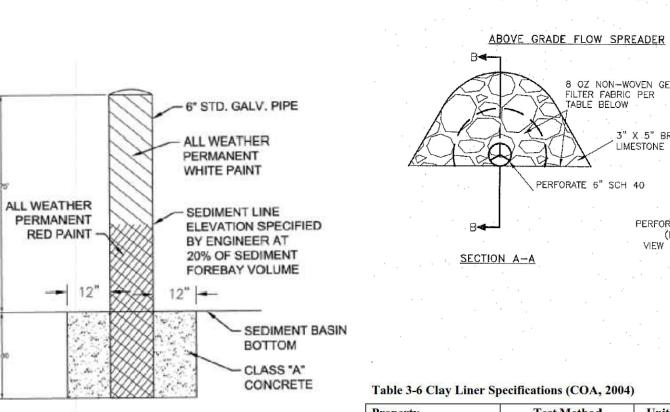
2. 8" PERFORATED RISER PIPE SHALL INCLUDED PERFORATIONS AT THE FLOWLINE OF THE PIPE.

OVERRIDE SWITCH.

BATCH POND OUTLET DETAIL



MOTOR OPERATOR REMOTE HAND STATION OPEN VALVE (MOTOR OPERATOR) FLOWMETER MOTOR OPERATOR RELAY BOX NOT FOR CONSTRUCTION LEVEL PROBE SET 2 HR TIMER (WAIT 2 HR) SCOT LAUN No. 92540 m\bility@ CLOSE VALVE (MOTOR OPERATOR: 9500 AMBERGLEN B BLDG F, SUITE 125 AUSTIN, TEXAS 7872 TEL (5/12) 777-4600 FAX (5/12) 252-28141 TEXAS REGISTERED ENGINEERING FIRM F-IH 35 BATCH DETENTION DETAILS POND LEVEL CONTROL FLOW DIAGRAM POND CONTROL BLOCK DIAGRAM



CONCRETE FILLED FIXED

SEDIMENT MARKER

Table 3-6 Clay Liner Specifications (COA, 2004) **Test Method** Specification Permeability ASTM D-2434 1 x 10⁻⁶ Plasticity Index of Clay | ASTM D-423 & D-424 | % Liquid Limit of Clay Not less than 30 ASTM D-422 Not less than 30 Clay Particles Passing

ASTM D-2216

Clay Compaction

TABLE BELOW

NOTES:

- 1) INSTALL COMPONENTS FOR SOLAR PHOTOVOLTAIC SYSTEM IN ACCORDANCE WITH NEC.
- 2) INSTALL ALL ABOVE GRADE CABLING IN RIGID METALLIC CONDUIT UNLESS OTHERWISE SPECIFICALLY IDENTIFIED BY THE MANUFACTURER AS DETRIMENTAL TO SIGNAL STRENGTH.
- 3) EQUIPMENT WITHIN DASHED LINES IS CONTAINED WITHIN THE SOLAR CONTROL PANEL OR BATTERY ENCLOSURE.
- 4) REFER TO SPECIAL SPECIFICATION 7130 BATCH DETENTION POND FOR SOLAR CONTROL PANEL EQUIPMENT REQUIREMENTS.
- REFER TO TXDOT DETAILS BDS(1) AND TS-FD-12 FOR POLE MOUNTED SOLAR POWER SYSTEM.

PROJECT NO.: 56152.001 ISSUED: JUNE 2024 DRAWN BY: JSG

1" = 30'

FOR PERMIT REVIEW

JASON A. BASS

109708

TBPELS FIRM #F-312

 $\mathbf{Z} \overset{\circ}{\underline{\mathbf{Z}}}$

EXAS

3610

POND DETAILS

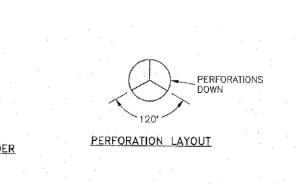
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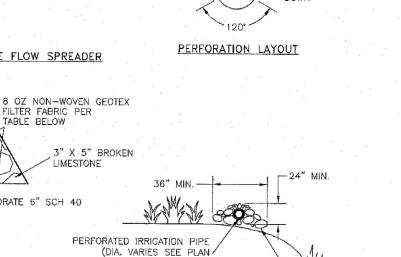
SCALE:

SHEET TITLE

038

2024-5-SWF



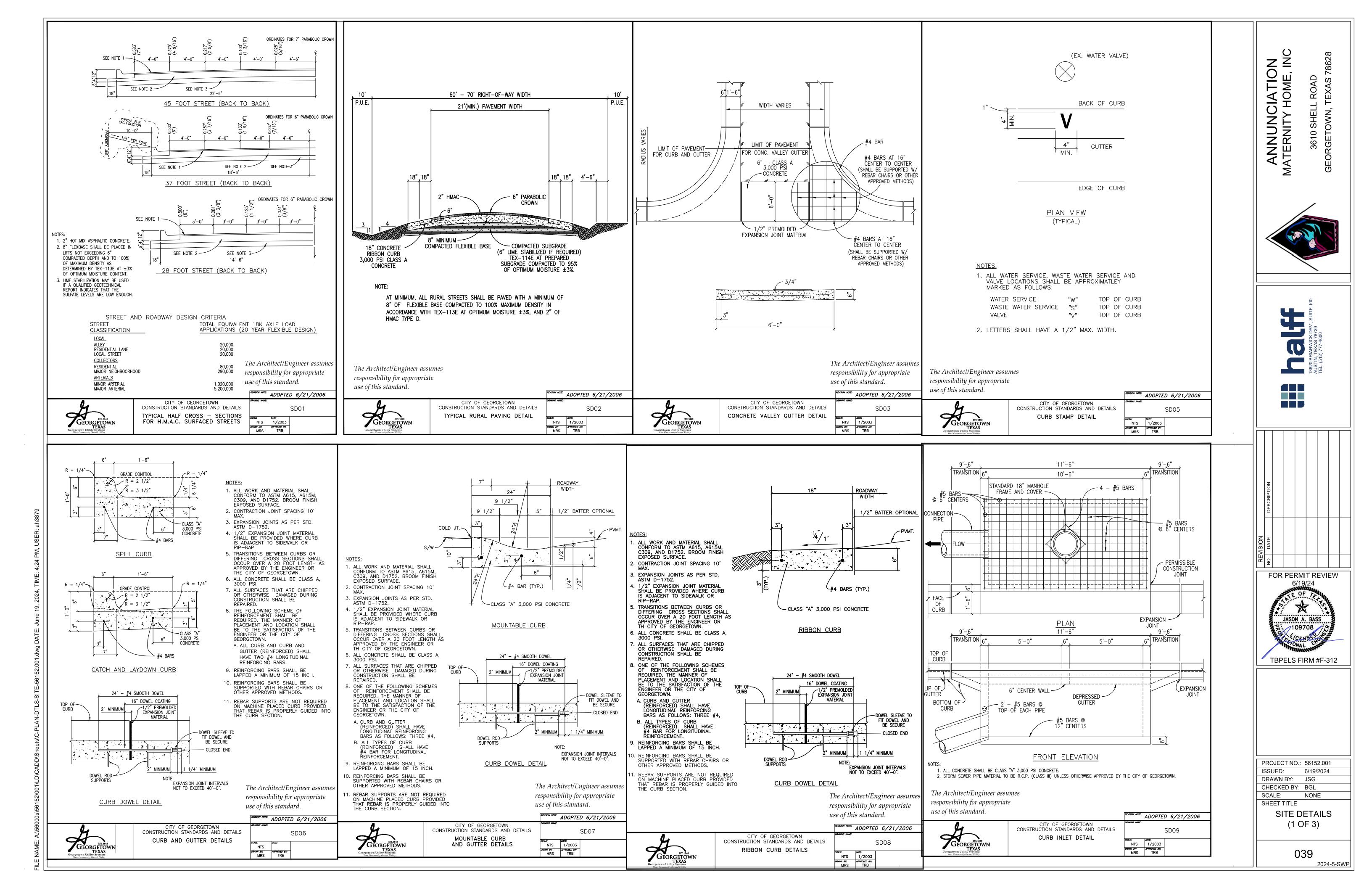


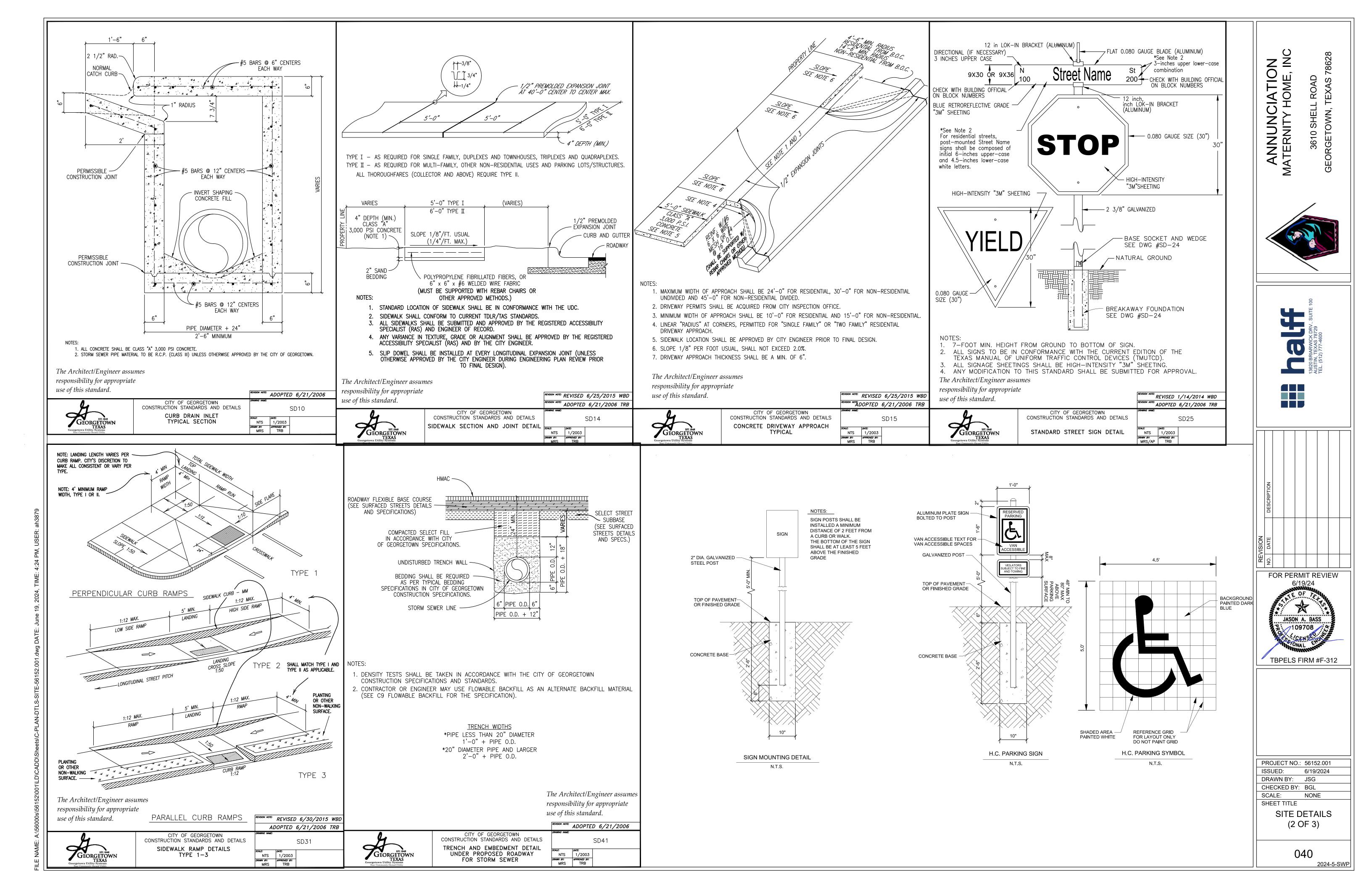
NOTE MUST BE LEVEL ALONG ENTIRE PERFORATED LENGTH

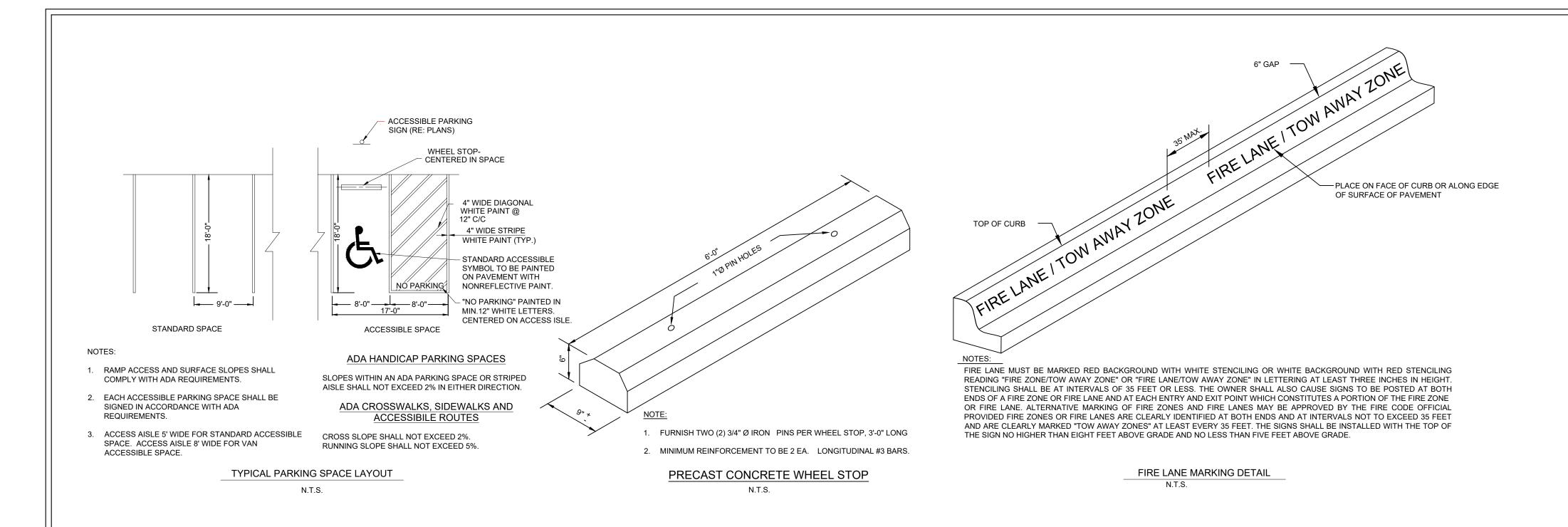
95% of Standard Proctor

HAND PLACED 6"

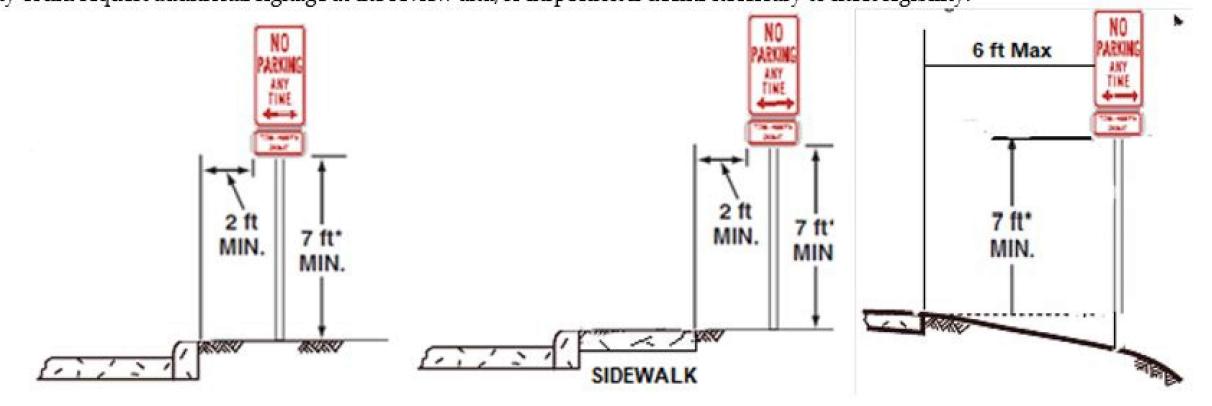
VIEW & TABLE THIS SHEET)



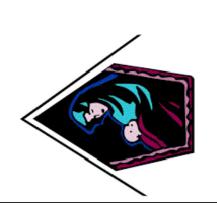




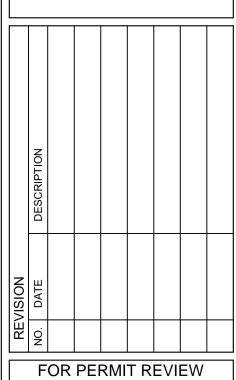
- 1. Where there is a requirement for a Fire no parking lane on a public right of way:
 - a. The "FIRE LANE TOW AWAY ZONE" shall be replace with the signs R7-1 "No Parking at any Time" with double arrows and the supplemental plaque R7-201aP "Tow Away zone".
 - b. The sign shall be mounted on a crash rated break away pole.
 - c. Angled 45 degrees toward traffic and in accordance with Sec 2B of both, the TxMUTCD and MUTCD.
 - d. The sign should be:
 - i. 7 feet from top of curb (TOC) or finish grade if no curb, to the bottom of the lowest sign
 - ii. minimum 2 feet or a maximum of from the back of curb (BOC), edge of pavement (EOP) if no curb, edge of back of sidewalk, to the edge of sign.
 - e. The signs shall be place at the beginning and end of each segment, not to exceed 250 feet spacing in between signs.
 - f. Engineer/Architect must ensure signage meet sight distance at horizontal and/or vertical curbs.
 - g. The city could request additional signage at the review and/or inspection if deems necessary to meet legibility.



ANNUNCIATION MATERNITY HOME, INC









PROJECT NO.: 56152.001
ISSUED: 6/19/2024
DRAWN BY: JSG
CHECKED BY: BGL

SCALE:

SHEET TITLE
SITE DETAILS
(3 OF 3)

041

GUIDELINES FOR DESIGN AND INSTALLATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROLS

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

* FOR ROCK BERM DESIGN WHERE PARAMETERS ARE OTHER THAN STATED, DRAINAGE AREA CALCULATIONS AND ROCK BERM DESIGN MUST BE SUBMITTED FOR REVIEW.

** HIGH SERVICE ROCK BERMS MAY BE REQUIRED IN AREAS OF ENVIRONMENTAL SIGNIFICANCE AS DETERMINED BY THE CITY OF GEORGETOWN.

NOTE: THIS SECTION IS INTENDED TO ASSIST THOSE PERSONS PREPARING WATER POLLUTION ABATEMENT PLANS (WPAP) OR STORM WATER POLLUTION PREVENTION PLANS (SW3P) THAT COMPLY WITH FEDERAL, STATE AND/OR LOCAL STORM WATER REGULATIONS.

1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO

REMOVE EROSION/SEDIMENTATION CONTROLS AT THE COMPLETION OF PROJECT AND GRASS RESTORATION. 2. ALL PROJECTS WITHIN THE RECHARGE ZONE OF THE EDWARD'S AQUIFER SHALL SUBMIT A BEST MANAGEMENT PRACTICES AND WATER POLLUTION AND ABATEMENT PLAN TO THE TNRCC FOR APPROVAL PRIOR TO ANY CONSTRUCTION. 3. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS TO BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN AND WATER POLLUTION ABATEMENT PLAN. DEVIATIONS FROM THE APPROVED PLAN

MUST BE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE. 4. ALL PLANTING SHALL BE DONE BETWEEN MAY 1 AND SEPTEMBER 15 EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING. IF PLANTING IS AUTHORIZED TO BE DONE OUTSIDE THE DATES SPECIFIED, THE SEED SHALL BE PLANTED WITH THE ADDITION OF WINTER FESCUE (KENTUCKY 31) AT A RATE OF 1001b/ACRE. GRASS SHALL BE COMMON BERMUDA GRASS, HULLED, MINIMUM 82% PURE LIVE SEED. ALL GRASS SEED SHALL BE FREE FROM NOXIOUS WEED, GRADE "A" RECENT CROP, RECLEANED AND TREATED WITH APPROPRIATE FUNGICIDE AT TIME OF MIXING. SEED SHALL BE FURNISHED IN SEALED, STANDARD CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS.

5. ALL DISTURBED AREAS TO BE RESTORED AS NOTED IN THE WATER POLLUTION ABATEMENT PLAN. 6. THE PLANTED AREA TO BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF FOUR (4) INCHES. THE IRRIGATION TO OCCUR AT 10—DAY INTERVALS DURING THE FIRST TWO MONTHS TO INSURÈ GERMINATION AND ESTABLISHMENT OF THE GRASS . RAINFALL

OCCURRENCES OF 1/2 INCH OR GREATER TO POSTPONE THE WATERING SCHEDULE ONE WEEK. 7. RESTORATION TO BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 25 SQUARE FEET EXIST.

9. THE CONTRACTOR TO HYDROMULCH OR SOD (AS SHOWN ON PLANS) ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION.

10. EROSION AND SEDIMENTATION CONTROLS TO BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILDUP WITHIN TREE DRIPLINE. 11. TO AVOID SOIL COMPACTION, CONTRACTOR SHALL NOT ALLOW VEHICULAR TRAFFIC, PARKING, OR STORAGE OF

8. A MINIMUM OF FOUR (4) INCHES OF TOPSOIL TO BE PLACED IN ALL AREAS DISTURBED BY CONSTRUCTION.

EQUIPMENT OR MATERIALS IN THE TREE DRIPLINE AREAS. 12. WHERE A FENCE IS CLOSER THAN FOUR (4) FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF EIGHT (8) FEÈT´(OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE FENCING.

13. TREES TO BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED. 14. ANY ROOT EXPOSED BY CONSTRUCTION ACTIVITY TO BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS

15. CONTRACTOR TO PRUNE VEGETATION TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.). ALL FINISHED PRUNING TO BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE "NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES").

16. THE CONTRACTOR IS TO INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY RAINFALL EXCEEDING 1/4 INCH TO VERIFY THAT THEY HAVE NOT BEEN SIGNIFICANTLY DISTURBED. ANY ACCUMULATED SEDIMENT AFTER A SIGNIFICANT RAINFALL TO BE REMOVED AND PLACED IN THE OWNER DESIGNATED SPOIL DISPOSAL SITE. THE CONTRACTOR TO CONDUCT PERIODIC INSPECTIONS OF ALL EROSION/SEDIMENTATION CONTROLS AND TO MAKE ANY REPAIRS OR MODIFICATIONS NECESSARY TO ASSURE CONTINUED EFFECTIVE OPERATION OF EACH DEVICE.

17. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH DEVELOPMENT IMMEDIATELY ADJACENT TO A PROTECTED TREE, ERECT THE FENCE APPROXIMATELY TWO TO FOUR

FEET (2'-4') BEHIND THE AREA IN QUESTION. 18. NO ABOVE AND/OR BELOW GROUND TEMPORARY FUEL STORAGE FACILITIES TO BE STORED ON THE PROJECT SITE. 19. IF EROSION AND SEDIMENTATION CONTROL SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS. OWNER'S

REPRESENTATIVE AND THE CONTRACTOR TO EXAMINE THE EXISTING EROSION AND SEDIMENTATION CONTROL SYSTEMS FOR DAMAGE PRIOR TO CONSTRUCTION. ANY DAMAGE TO PREEXISTING EROSION AND SEDIMENTATION CONTROLS NOTED

O BE REPAIRED AT OWNERS EXPENSE. 20. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM ACCIDENTAL SPILL TO BE REMOVED AND DISPOSED OF PROPERLY.

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

responsibility for appropriate ANGLE 48" MIN. HEAVY WEIGHT T-POST use of this standard. · 24" TALL MIN., 2" X 4" 12 GAUGE GALVANIZED WIRE MESH - 4.5 OZ. MIN. NON-WOVEN GEOTEXTILE FILTER FABRIC 42" WIDE EXTENSION OF FABRIC INTO TRENCH SOIL LEVEL INSPECTION AND MAINTENANCE GUIDELINES: - INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL - REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES. TRENCH REPLACE ANY TORN FABRIC. REPLACE OR REPAIR ANY SECTIONS CRUSHED OR CROSS SECTION COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. GEOTEXTILE -2" X 4" WIRE MESH LAYOUT THE SILT FENCE FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR. CLEAR THE GROUND OF DEBRIS, ROCKS, PLANTS (INCLUDING GRASSES TALLER THAN 2") TO PROVIDE A SMOOTH FLOW APPROACH SURFACE. EXCAVATE 6" DEEP X 6" WIDE TRENCH ON UPSTREAM SIDE OF FACE PER PLANS.

- CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION. - GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE, RUNOFF FROM THE STABILIZED CONSTRUCTION

AGGREGATE

GEOTEXTILE FABRIC

TO STABILIZE FOUNDATION -

- DIVERSION RIDGE

EXISTING ROAD

- PLACE GEOTEXTILE FABRIC AS APPROVED BY THE CITY. - PLACE ROCK AS APPROVED BY THE CITY.

GEOTEXTILE FABRIC

AS APPROVED BY THE CITY

INSPECTIONS AND MAINTENANCE GUIDELINES:

- THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. - ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR

WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN

- ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

The Architect/Engineer assumes

responsibility for appropriate

use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS EST. 10 STABILIZED CONSTRUCTION ENTRANCE

REVISION NOTE: ADOPTED 6/21/2006 EC06 NTS 1/2003

use of this standard. GEORGETOWN

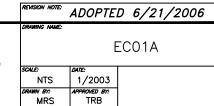
The Architect/Engineer assumes

responsibility for appropriate

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TEMPORARY EROSION AND SEDIMENTATION CONTROL GUIDELINES NTS 1/2003

REVISION NOTE: ADOPTED 6/21/2006 APPROVED BY: TRB

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES



-2" X 4" WOOD SLATS

1. WHERE ANY EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN FOUR FEET (4'-0") TO A TREE TRUNK; PROTECT THE TRUNK WITH STRAPPED-ON-PLANKING TO A HEIGHT OF EIGHT FEET (8'-0"), OR TO THE

2. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL

ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT

BACKFILLED WITHIN TWO (2) DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES

3. PRIOR EXCAVATION OR GRADE CUTTING WITHIN TREE DRIPLINE. MAKE A CLEAN CUT BETWEEN THE DISTURBED

AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT, TO MINIMIZE DAMAGE TO

4. TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES SHOULD BE WATERED DEEPLY ONCE A WEEK

5. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR

6. NO LANDSCAPE TOPSOIL DRESSING GREATER THE FOUR INCHES (4") SHALL BE PERMITTED WITHIN THE

7. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE

DURING PERIODS OF HOT, DRY WEATHER. TREE CROWNS SHOULD BE SPRAYED WITH WATER PERIODICALLY

LIMITS OF LOWER BRANCHING IN ADDITION TO THE REDUCED FENCING PROVIDED.

SOIL TEMPERATURE, AND MINIMIZES WATER LOSS DUE TO EVAPORATION.

TO REDUCE DUST ACCUMULATION ON THE LEAVES.

FROM EXISTING TREE TRUNKS AS POSSIBLE.

BEFORE CONSTRUCTION BEGINS.

The Architect/Engineer assumes

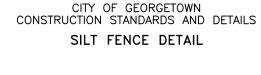
responsibility for appropriate

BOTTOM AS NEAR TO GROUND AS ROOTS ALLOW



FLOW OR DRAINAGE.

TIED AT LEAST 6 TIMES WITH HOG RINGS.



EXTEND 2'-0" MIN BEYOND INLET OPENING AT EACH END

DRIVE THE HEAVY DUTY T-POST AT LEAST 12 INCHES INTO THE GROUND AND AT A SLIGHT ANGLE TOWARDS THE FLOW.

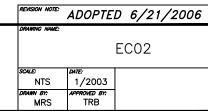
ATTACH THE 2" X 4" 12 GAUGE WELDED WIRE MESH TO THE T-POST WITH 11 1/2 GAUGE GALVANIZED T-POST CLIPS. THE TOP OF THE WIRE TO BE 24" ABOVE GROUND LEVEL. THE WELDED WIRE MESH TO BE OVERLAPPED 6" AND

THE SILT FENCE TO BE INSTALLED WITH A SKIRT A MINIMUM OF 6" WIDE PLACED ON THE UPHILL SIDE OF THE FENCE INSIDE EXCAVATED TRENCH. THE FABRIC TO OVERLAP THE TOP OF THE WIRE BY 1".

GEOTEXTILE SPLICES SHOULD BE A MINIMUM OF 18" WIDE ATTACHED IN AT LEAST 6 PLACES. SPLICES IN CONCENTRATED

SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM

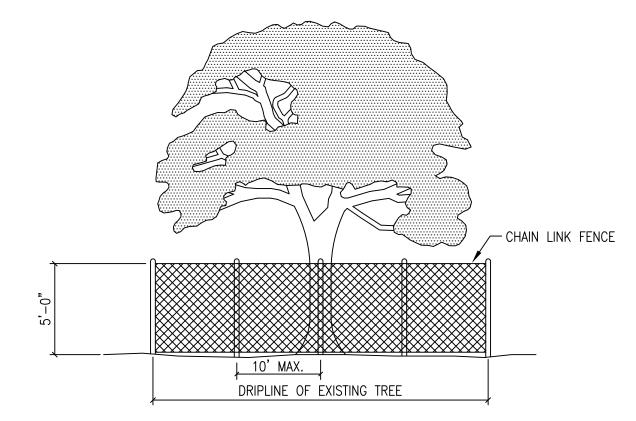
ANCHOR THE SILT FENCE BY BACKFILLING WITH EXCAVATED DIRT AND ROCKS (NOT LARGER THAN 2").



The Architect/Engineer assumes



MRS



NOTES:

- 1. TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING).
- 2. FENCES SHALL COMPLETELY SURROUND THE TREE, OR CLUSTERS OF TREES; WILL BE LOCATED AT THE OUTERMOST LIMIT OF THE TREE BRANCHES (DRIPLINE), AND WILL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVENT THE FOLLOWING:
- A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC, OR STORAGE OF

B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN SIX INCHES (6") CUT OR FILL,

- OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY. C. WOUNDS TO EXPOSED ROOTS, TRUNKS OR LIMBS BY MECHANICAL EQUIPMENT. D. OTHER ACTIVITIES DETRIMENTAL TO TREES, SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING
- AND FIRE. 3. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES:
- PERMEABLE PAVING AREA. B. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE NO CLOSER THAN SIX FEET (6'-0") TO BUILDING.

A. WHERE PERMEABLE PAVING IS TO BE INSTALLED, ERECT THE FENCE AT THE OUTER LIMITS OF THE

The Architect/Engineer assumes

GEORGETOWN

responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TREE PROTECTION -CHAIN LINK FENCE

REVISION NOTE: ADOPTED 6/21/2006 EC09 NTS 1/2003 DRAWN BY: APPROVED BY:

MRS TRB

GEORGETOWN TEXAS Wellity Systems

use of this standard.

REMAINING ROOTS

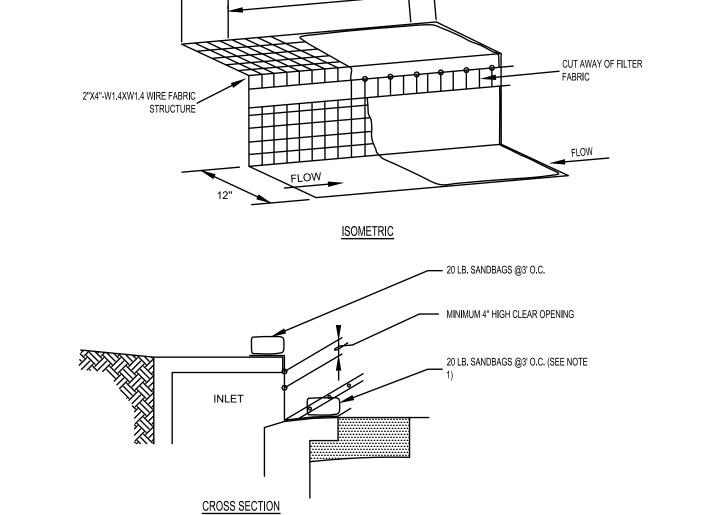
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TREE PROTECTION - WOOD SLATS

DRIPLINE OF A TREE. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.

REVISION NOTE: ADOPTED 6/21/2006 NTS 1/2003

DRAWN BY: APPROVED BY:

MRS TRB



- WHERE MINIMUM CLEARANCES CAUSE TRAFFIC TO DRIVE IN THE GUTTER, THE CONTRACTOR MAY SUBSTITUTE A 1" X 4" BOARD SECURED WITH CONCRETE NAILS 3' O.C. NAILED INTO THE GUTTER IN LIEU OF SANDBAGS TO HOLD THE FILTER DIKE IN PLACE. UPON REMOVAL, CLEAN ANY DIRT/DEBRIS FROM NAILING LOCATIONS, APPLY CHEMICAL SANDING AGENT AND APPLY NON-SHRINK GROUT FLUSH WITH SURFACE OF GUTTER. A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. FABRIC MUST BE
- SECURED TO WIRE BACKING WITH CLIPS OR HOG RINGS AT THIS LOCATION. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2"
- CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE
- INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

03-25-11

DATE

THE ARCHITECT/ENGINEER ASSUMES

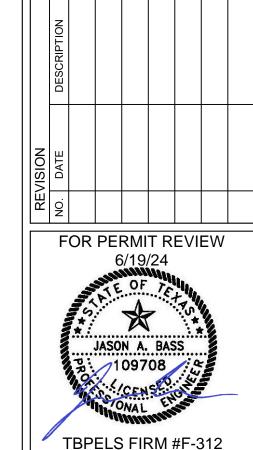
USE OF THIS DETAIL. (NOT TO SCALE)

RESPONSIBILITY FOR THE APPROPRIATE

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS CITY OF ROUND ROCK

CURB INLET PROTECTION DETAIL





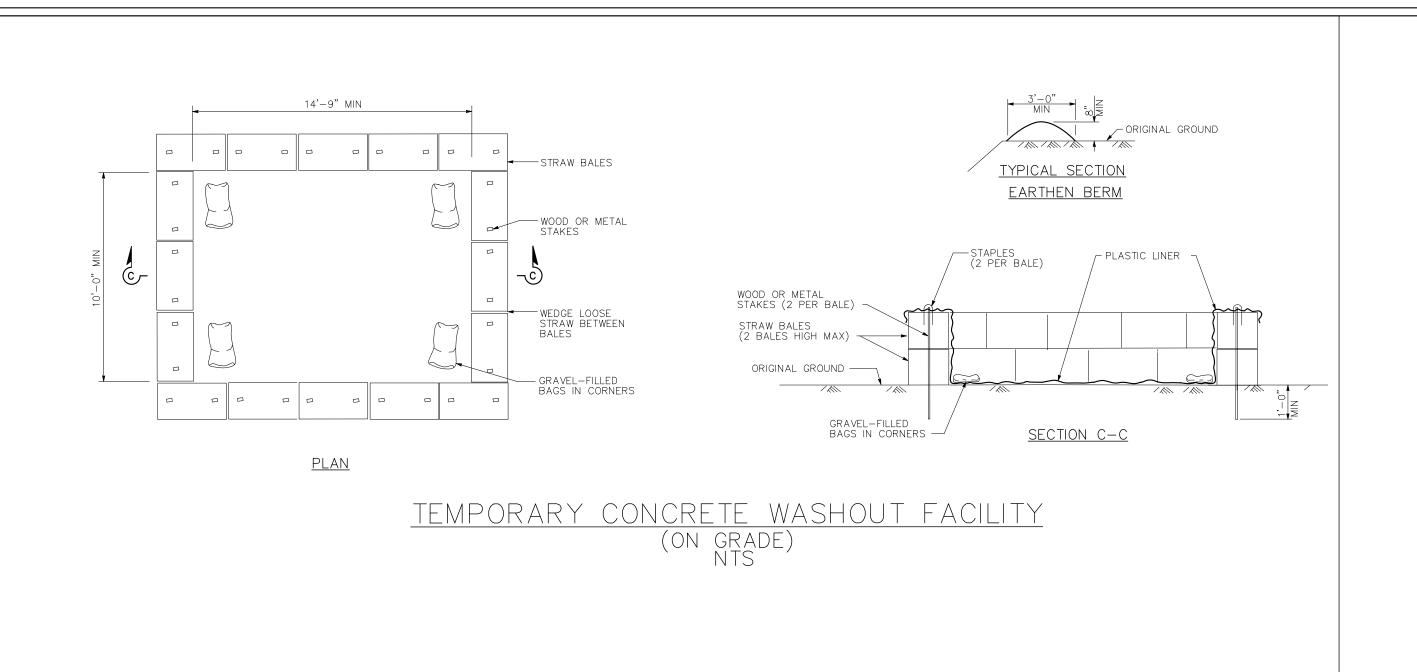
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RGE

PROJECT NO.: 56152.001 ISSUED: 6/19/2024 DRAWN BY: JSG CHECKED BY: BGL

SCALE: SHEET TITLE **EROSION** CONTROL DETAILS (1 OF 2)

2024-5-SWI

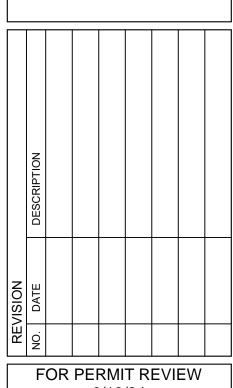


ANNUNCIATION MATERNITY HOME, INC

3610 SHELL ROAD GEORGETOWN, TEXAS 78628









PROJECT NO.: 56152.001

ISSUED: 6/19/2024

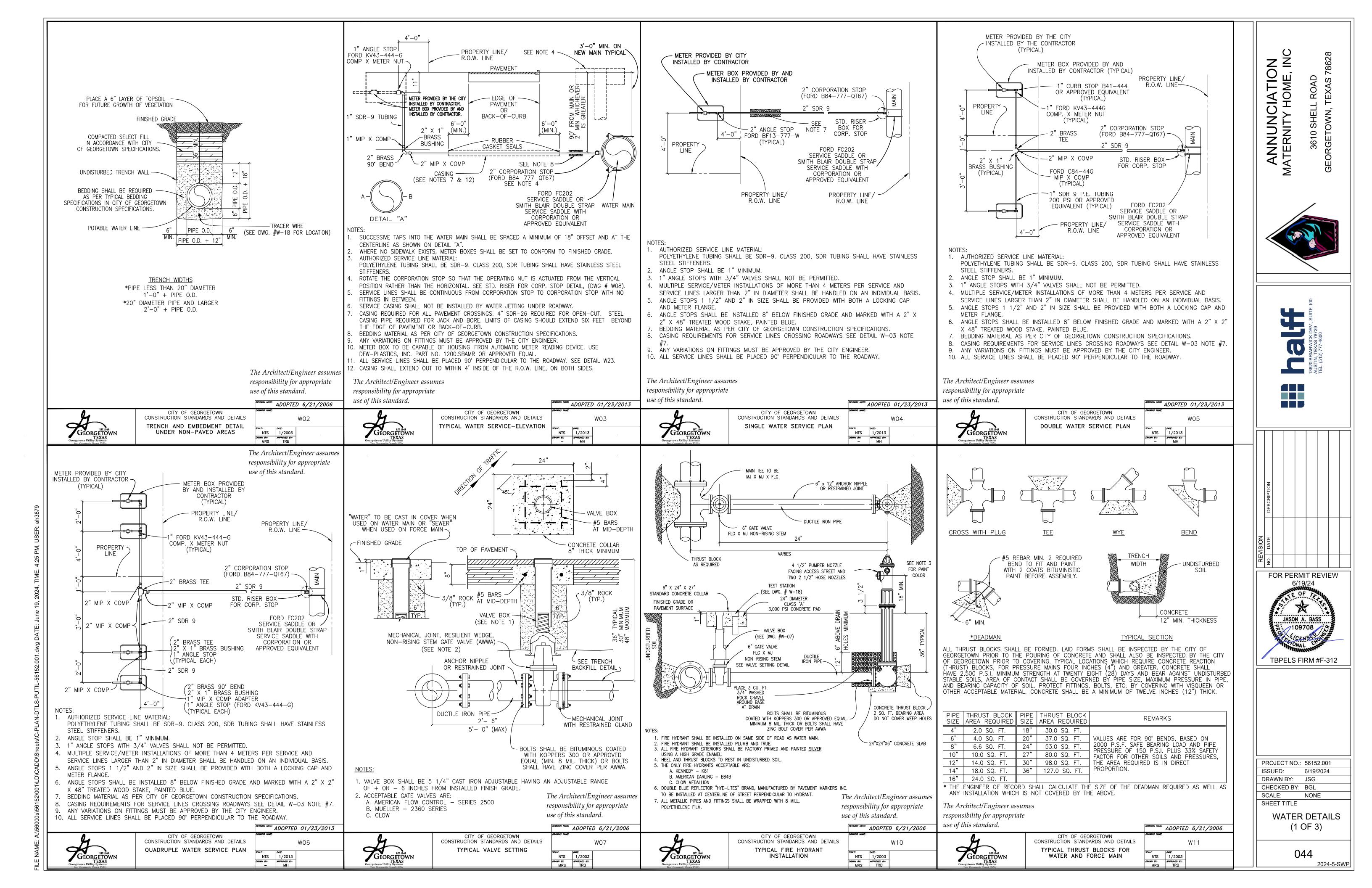
DRAWN BY: JSG

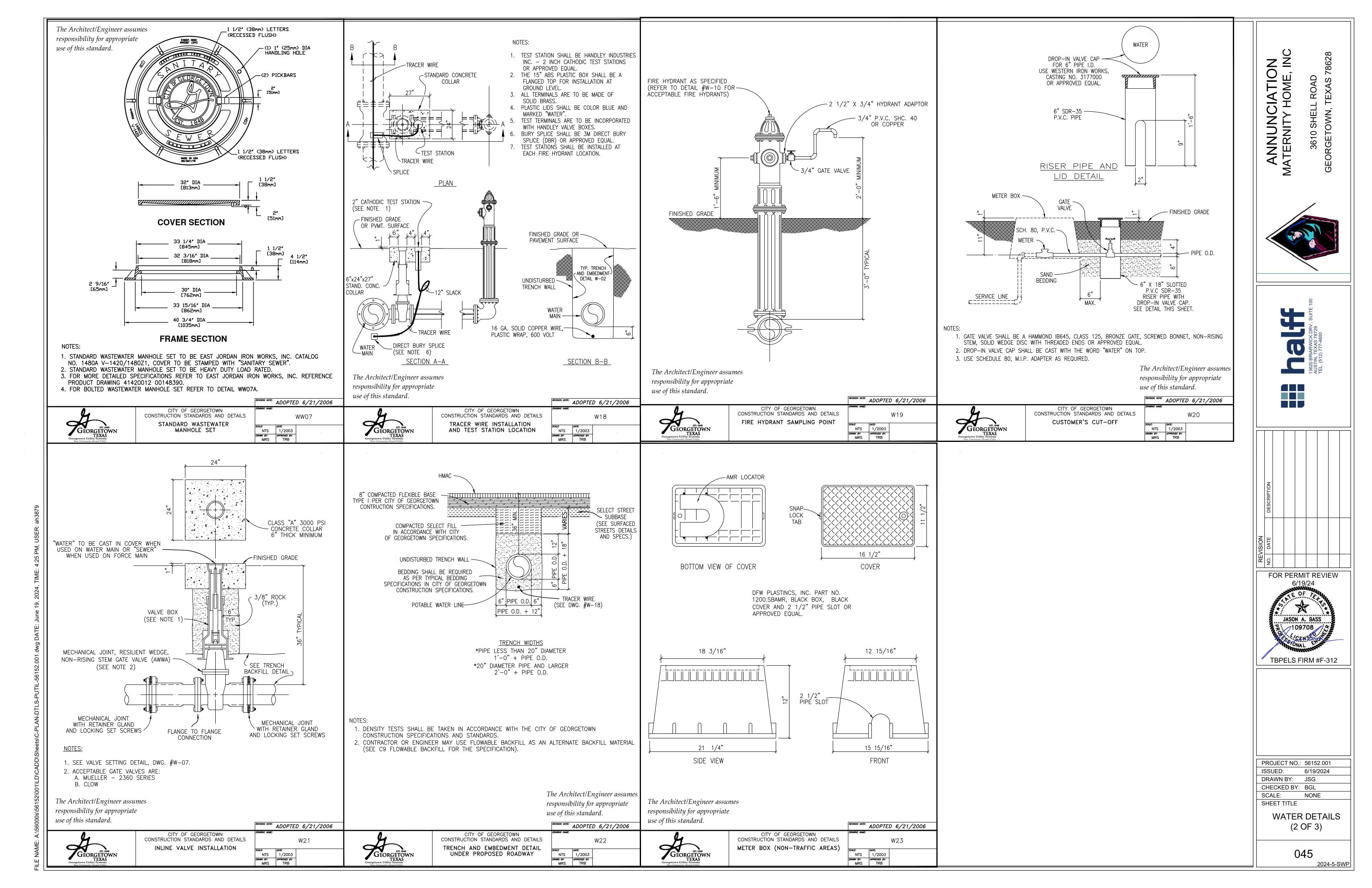
CHECKED BY: BGL

SCALE: NONE

SHEET TITLE
EROSION
CONTROL
DETAILS (2 OF 2)

043



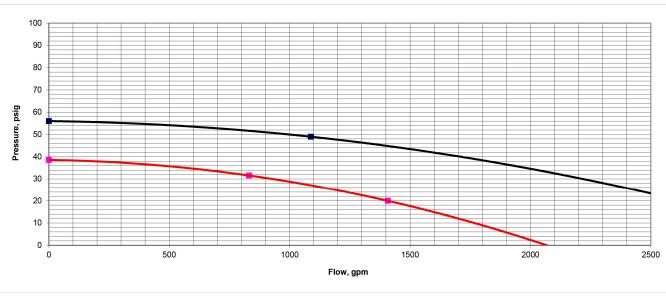




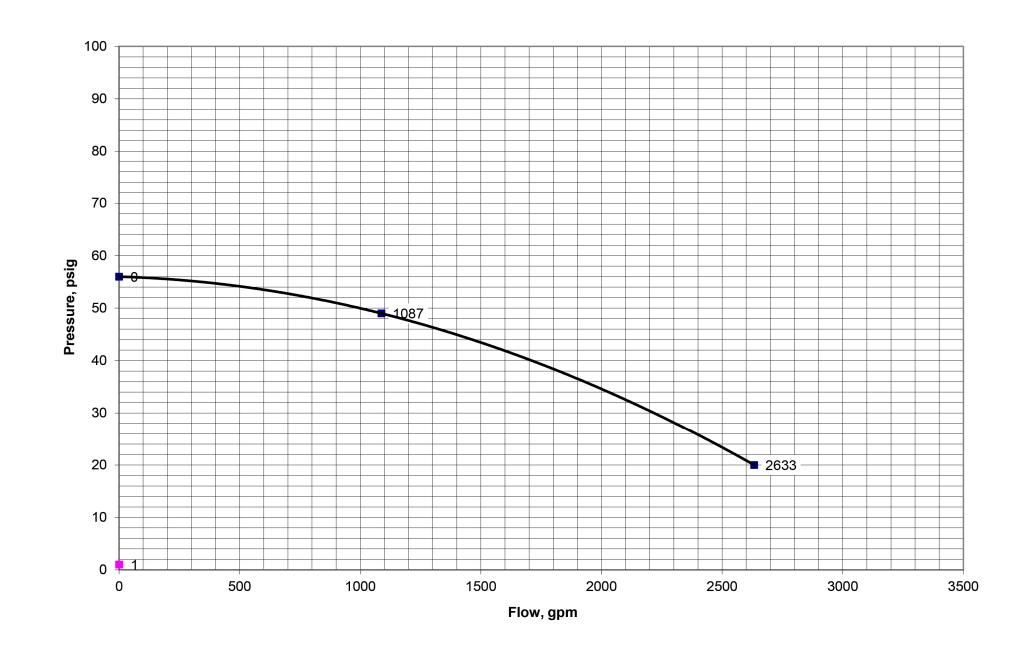
Georgetown Fire Department 3500 DB Wood Georgetown, Texas 78628 512-930-3473 Fax: 512-450-3897

			Water Flo	w Test	Report			
LOCATION	3610 Shell Rd.						TEST DATE	2/12/2024
TEST BY:	Capital Hydrants				TIME:	2:00 PM		
WATER SUPPLIED BY:	COG							
PURPOSE OF TEST:	New Construction F	Project				MAIN SIZE:		8"
FLOW HYDRANT(S)			A1		A2		A3	
	SIZE OPENING:		2.5	_	2.5	_	2.5	_
	COEFFICIENT:		0.9		0.9	_	0.9	_
	PITOT READING:		42		0		0	
	GPM:		1087	_	0	_	0	_
						A1 Flow	A2 Flow	A3 Flow
TOTAL FLOW DURING 1			1087	_GPM	ADJ. TOTAL FLOW:	831	0	0
TOWER LEVEL @ TIME	OF TEST:		150.7		TOWER LOW	110.5		
STATIC READING:		56	PSI		RESIDUAL:	49	PSI	
ADJ. STATIC:	_	38.55	PSI		AJD. RESIDUAL:	31.55	PSI	
ADJ. FLOW:	831	GPM			ADJ. PITOT:	24.55	0.00	0.00
FLO	OW AT 20 PSI RE	SIDUAL	1407	GPM	TOTAL FL	OW	2089	9 GPM

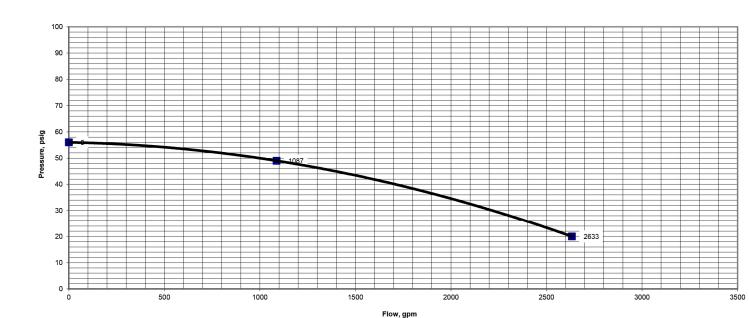
Please be advised that the Georgetown Fire Marshal's Office requires that all fire protection plan submittals be accompanied the waterflow (fire hydrant flow) test information. This report must be included with plan submittal. The Fire Sprinkler Contractor must design the applicable fire sprinkler system, based on the minimum water supply available, in accordance with the requirements of NFPA 13. Please also note that the 10-psi safety factor required by Section 903.3.5 of the Fire Code still applies to the fire protection system design.



WATER FLOW TEST CHART



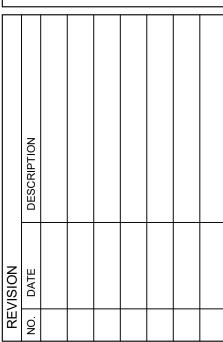
WATER FLOW TEST CHART



INUNCIATIO ERNITY HOME.









PROJECT NO.: 56152.001 ISSUED: 6/19/2024

DRAWN BY: JSG

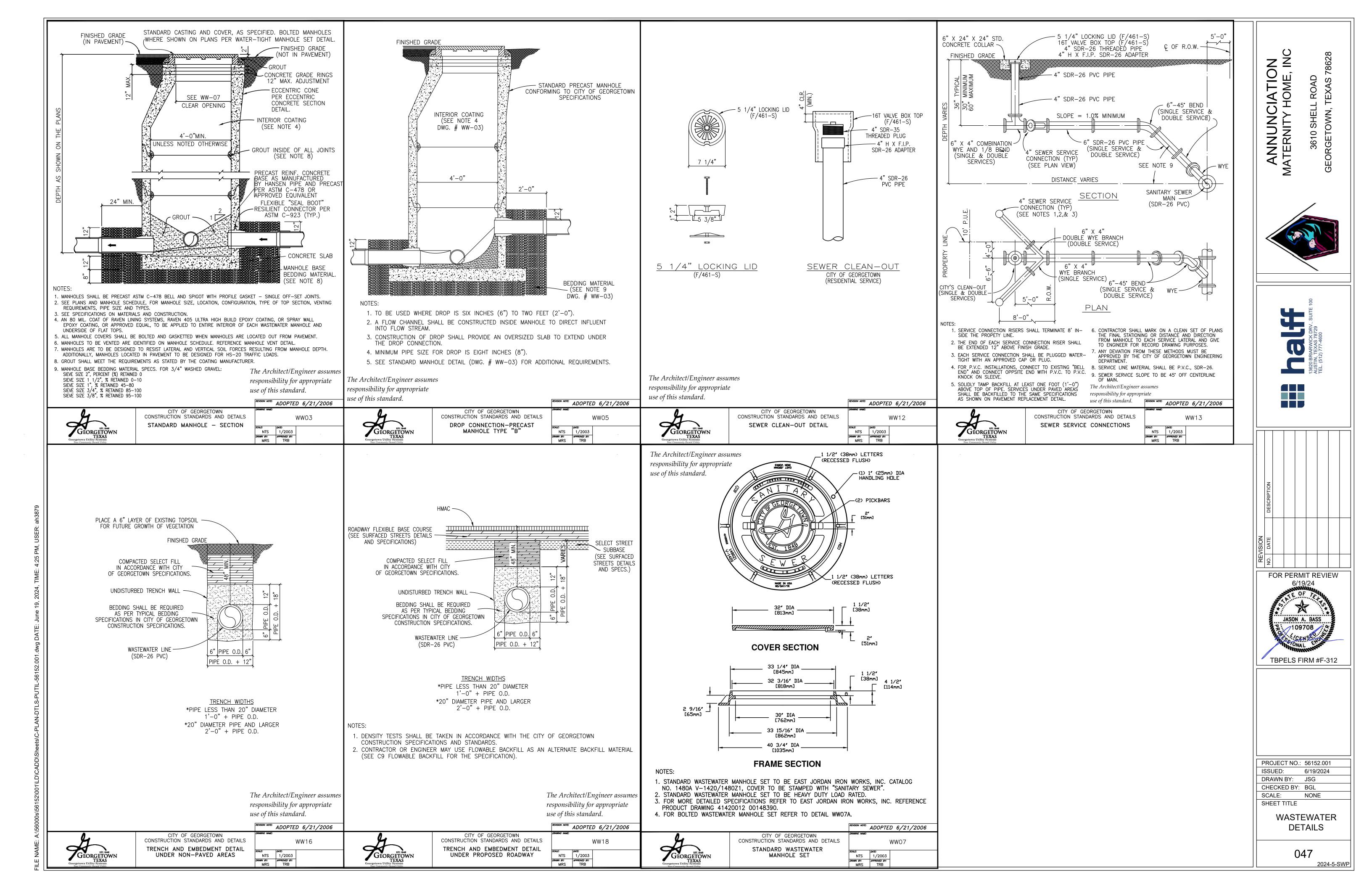
CHECKED BY: BGL

SCALE: NONE

SHEET TITLE

WATER DETAILS (3 OF 3)

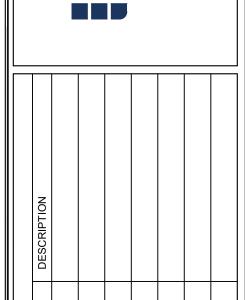
)46





GEORGETOWN,





FOR PERMIT REVIEW JASON A. BASS

TBPELS FIRM #F-312

PROJECT NO.: 56152.001 ISSUED: 6/19/2024 DRAWN BY: JSG CHECKED BY: BGL SCALE: NONE

SHEET TITLE STORM DETAILS (1 OF 7)

2024-5-SWF

(1) 0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail or curbs taller than 1'-0", refer to the Extended Curb Details (ECD) standard sheet. For structures with T631 or T631LS bridge rail, refer to the Mounting Details for T631 & T631LS Rails (T631-CM) standard sheet. Refer to the Rail Anchorage Curb (RAC) standard sheet for structures with bridge rail other than T631 or T631LS. (2) For vehicle safety, the following requirements must be met: • For structures without bridge rail, construct curbs no more than 3" above • For structures with bridge rail, construct curbs flush with finished grade. Reduce curb heights, if necessary, to meet the above requirements. No changes will

be made in quantities and no additional compensation will be allowed for this work.

(3) For curbs less than 1'-0" high, tilt Bars K or reduce bar height as necessary to maintain cover. For curbs less than 3" high, Bars K may be omitted.

(4) 1'-0" typical. 2'-3" when the Rail Anchorage Curb (RAC) standard sheet is referred to elsewhere in the plans.

The Contractor may replace Bars B, C, D, E, F1, F2, M, Y, and/or Z with deformed welded wire reinforcement (WWR) meeting the requirements of ASTM A1064. The area of required reinforcement may be reduced by the ratio of 60 ksi / 70 ksi. Spacing of WWR is limited to 4" Min and 18" Max. When required, provide lap splices in the WWR of the same length required for the equivalent bar size, rounded up for wire sizes between conventional bar sizes. The lap length required for WWR is never less than the lap length required for uncoated #4 bars.

Example conversion: Replacing No. 6 Gr 60 at 6" Spacing with WWR Required WWR = $(0.44 \text{ sq. in. per } 0.5 \text{ ft.}) \times (60 \text{ ksi} / 70 \text{ ksi}) = 0.755 \text{ sq. in. per ft.}$ If D30.6 wire is used to meet the 0.755 sq. in. per ft. requirement in this example, the required spacing = $(0.306 \text{ sq. in.}) / (0.755 \text{ sq. in. per ft.}) \times (12 \text{ in. per ft.}) = 4.86$ " Max spacing. Required lap length for the provided D30.6 wire is 2'-1" (the same minimum lap length required for uncoated #5 bars, as listed under MATERIAL NOTES).

CONSTRUCTION NOTES:

Do not use permanent forms.

Chamfer the bottom edge of the top slab 3" at the entrance.

Optionally, raise construction joints shown at the flow line by a maximum of 6". If this option is taken, Bars M may be cut off or raised, Bars C and D may be reversed, and Bars Y and Z may be reversed.

MATERIAL NOTES:

Provide Grade 60 reinforcing steel.

Provide galvanized reinforcing steel if required elsewhere in the plans. Provide Class C concrete (f'c = 3,600 psi) for culvert barrel and curb, with the following exceptions: provide Class S concrete (f'c = 4,000 psi) for top slabs of:

culverts with overlay,

culverts with 1-to-2 course surface treatment, or

• culverts with the top slab as the final riding surface. Provide bar laps, where required, as follows:

 Uncoated or galvanized ~ #4 = 1'-8" Min Uncoated or galvanized ~ #5 = 2'-1" Min

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications for the range of fill heights shown.

See the Multiple Box Culverts Cast-In-Place Miscellaneous Detail (MC-MD) standard sheet for details pertaining to skewed ends, angle sections, and lengthening.

Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bar.

> Use this standard only when lengthening existing multiple box culverts.

HL93 LOADING SHEET 1 OF 2

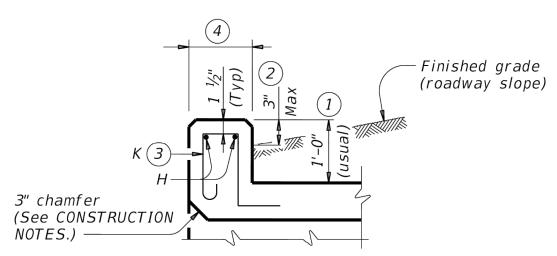
Bridge Division Texas Department of Transportation Standard

MULTIPLE BOX CULVERTS CAST-IN-PLACE 4'-0" SPAN 0' TO 23' FILL FOR LENGTHENING ONLY

MC-4-23

DN: TBE CK: TAR DW: TXDOT ILE: CD-MC423-20.dgn ck: TxD0T C)TxDOT February 2020 HIGHWAY CONT SECT REVISIONS SHEET NO.

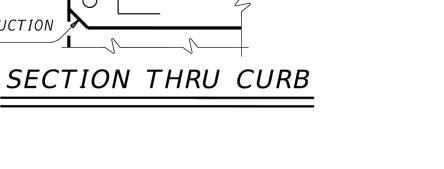
Length of box -Bars F2 (Top & bottom) Bars F2 ~ Equal Spacing (Typ) Bars D Bars M construction joint (Typ) Bars H Bars B (Top) Bars Z Bars E (Bottom) -Bars F2 $\overline{(Typ)}$ —Bars F2 (Typ) -Bars F2 (Typ)Bars B -Construction joint (Typ) (Bottom) -Bars F1 (Bottom) BOTTOM SLAB TOP SLAB

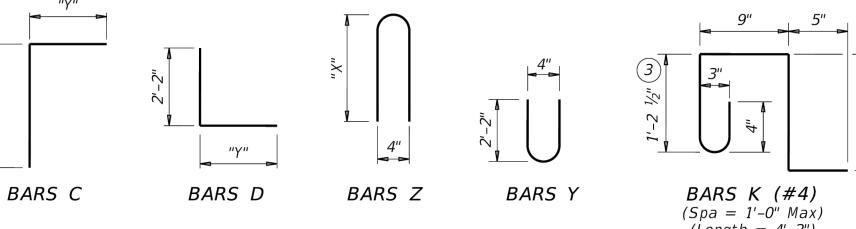


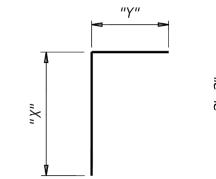
TYPICAL SECTION

	TABLE O DIMENS	•
Н	"X"	"γ"
2'-0"	2'-6 ½"	3'-0"
3'-0"	3'-6 ½"	3'-0"
4'-0"	4'-0 ½"	3'-0"

PART PLANS







(Length = 4'-2'')

048

TBPELS FIRM #F-312

PROJECT NO.: 56152.001 6/19/2024 DRAWN BY: JSG

CHECKED BY: BGL

SCALE: SHEET TITLE STORM DETAILS (2 OF 7)

049

2024-5-SWP

Bridge Division Standard

SPANS	DIMENCIONS											C	QUANTITIES															
SER OF	D)	IMENS	10NS)		Bars B			Bars	rs C & D			Bars E		Bars F1 ~ #	4 Bars F2 ~	· #4	Bars M	~ #4		Bars Y	& Z ~ #4	Bars H 4 ~ #4	Bars K	Per Foot of Barrel	Curb	Total	
NUMB	5	Н	Т	U	No. Size	Length	Wt No	Size	Bars Length	 	Bars Length		ov. Size	Length	Wt	No. 8 Length	Wt No. ed Lengt	h Wt	No. ed Ler	ngth Wt	No.	Bars Length		Lenath Wt	No. Wt	Conc Reni (CY) (Lb)	Conc Reni (CY) (Lb)	f Conc Renf (CY) (Lb)
2	4' - 0"	2' - 0"	8"	7"	108 #5 9	9'' 9' - 6''	1,070 162	2 #4 6"	5' - 8''	613	5' - 4"	577	108 #5 9"	7' - 4"	826	6 18" 39' - 9"	159 36 18" 39' - 9	" 956	108 9" 2'	- 0" 144	54 9'	" 4' - 7"	165 5' - 3"	189 9' - 6" 25	22 61	0.611 117.	5 0.7 86	25.2 4,785
3	4' - 0''	2' - 0"	8"	7"	108 #5 9	9" 14' - 1"	1,586 162	2 #4 6"	5' - 8''	613	5' - 4''	577	108 #5 9"	11' - 11"	1,342	9 18" 39' - 9"	239 51 18" 39' - 9	" 1,354	108 9" 2'	- 0" 144	108 9'	" 4' - 7"	331 5' - 3"	379 14' - 1" 38	32 89	0.881 164.	1 1.1 127	36.3 6,692
4	4' - 0''	2' - 0"	8"	7"	108 #5 9	9'' 18' - 8''	2,103 162	2 #4 6"	5' - 8''	613	5' - 4''	577	108 #5 9"	16' - 6''	1,859	12 18" 39' – 9"	319 66 18'' 39' - 9	" 1,752	108 9" 2'	- 0" 144	162 9'	" 4' - 7"	496 5' - 3"	568 18' - 8" 50	40 111	1.150 210.	3 1.4 161	47.4 8,592
5	4' - 0''	2' - 0"	8"	7"	108 #5 9	9" 23' - 3"	2,619 162	2 #4 6"	5' - 8''	613	5' - 4''	577	108 #5 9"	21' - 1"	2,375	15 18" 39' – 9"	398 81 18" 39' - 9	" 2,151	108 9" 2'	- 0" 144	216 9'	" 4' - 7"	661 5' - 3"	758 23' - 3" 62	50 139	1.420 257.	4 1.7 201	58.5 10,497
6	4' - 0''	2' - 0"	8"	7"	108 #5 9	9'' 27' - 10'	3,135 162	2 #4 6"	5' - 8''	613	5' - 4''	577	108 #5 9"	25' - 8"	2,891	18 18" 39' – 9"	478 96 18" 39' - 9	" 2,549	108 9" 2'	- 0" 144	270 9'	" 4' - 7"	827 5' - 3"	947 27' - 10" 74	58 161	1.689 304.	2.1 235	69.6 12,396
2	4' - 0''	3' - 0"	8"	7"	108 #5 9	9'' 9' - 6''	1,070 162	2 #4 6"	6' - 8''	721	5' - 4''	577	108 #5 9"	7' - 4"	826	6 18" 39' – 9"	159 42 18" 39' - 9	I I		- 0" 216	54 9'	" 4' - 7"	165 7' - 3"	262 9' - 6" 25	22 61	0.676 127.	3 0.7 86	27.8 5,197
3	4' - 0"	3' - 0"	8"	7"	108 #5 9	9'' 14' - 1''	1,586 162	2 #4 6"	6' - 8''	721	5' - 4''	577	108 #5 9"	11' - 11"	1,342	9 18" 39' - 9"	239 59 18" 39' - 9	" 1,567	108 9" 3'	- 0" 216	108 9'	" 4' - 7"	331 7' - 3"	523 14' - 1" 38	32 89	0.967 177.	5 1.1 127	39.7 7,229
4	4' - 0"	3' - 0"	8"	7"	108 #5 9	9'' 18' - 8''	2,103 162	2 #4 6"	6' - 8''	721	5' - 4''	577	108 #5 9"	16' - 6''	1,859	12 18" 39' – 9"	319 76 18" 39' - 9	" 2,018	108 9" 3'	- 0" 216	162 9'	" 4' - 7"	496 7' - 3"	785 18' - 8'' 50	40 111	1.258 227.	4 1.4 161	51.7 9,255
5	4' - 0"	3' - 0"	8"	7"	108 #5 9	9" 23' - 3"	2,619 162	2 #4 6"	6' - 8''	721	5' - 4''	577	108 #5 9"	21' - 1"	2,375	15 18" 39' – 9"	398 93 18" 39' - 9	" 2,469	108 9" 3'	-0" 216	216 9'	" 4' - 7"	661 7' - 3"	1,046 23' - 3" 62	50 139	1.549 277.	1 1.7 201	63.7 11,283
6	4' - 0''	3' - 0"	8"	7"	108 #5 9	9'' 27' - 10'	3,135 162	2 #4 6"	6' - 8''	721	5' - 4''	577	108 #5 9"	25' - 8"	2,891	18 18" 39' – 9"	478 110 18" 39' - 9	" 2,921	108 9" 3'	- 0" 216	270 9'	" 4' - 7"	827 7' - 3"	1,308 27' - 10" 74	58 161	1.841 326.	9 2.1 235	75.7 13,309
2	4' - 0"	4' - 0"	8"	7"	108 #5 9	9'' 9' - 6''	1,070 162	2 #4 6"	7' - 8''	830	5' - 4''	577	108 #5 9"	7' - 4"	826	6 18" 39' - 9"	159 42 18" 39' - 9	" 1,115	108 9" 4'	- 0" 289	54 9'	" 4' - 7"	165 9' - 3"	334 9' - 6" 25	22 61	0.741 134.	1 0.7 86	30.4 5,451
3	4' - 0"	4' - 0"	8"	7"	108 #5 9	9'' 14' - 1''	1,586 162	2 #4 6"	7' - 8''	830	5' - 4''	577	108 #5 9"	11' - 11''	1,342	9 18" 39' – 9"	239 59 18" 39' - 9	" 1,567	108 9" 4'	- 0" 289	108 9'	" 4' - 7"	331 9' - 3"	667 14' - 1" 38	32 89	1.053 185.	7 1.1 127	43.2 7,555
4	4' - 0''	4' - 0"	8"	7"	108 #5 9	9'' 18' - 8''	2,103 162	2 #4 6"	7' - 8''	830	5' - 4''	577	108 #5 9"	16' - 6"	1,859	12 18" 39' – 9"	319 76 18" 39' - 9	" 2,018	108 9" 4'	- 0" 289		" 4' - 7"	496 9' - 3"	1,001 18' - 8" 50	40 111	1.366 237.	3 1.4 161	56.0 9,653
5	4' - 0"	4' - 0"	8"	7"	108 #5 9	9" 23' - 3"	2,619 162	2 #4 6"	7' - 8''	830	5' - 4''	577	108 #5 9"	21' - 1"	2,375	15 18" 39' – 9"	398 93 18" 39' - 9	" 2,469	108 9" 4'	- 0'' 289	216 9'	" 4' - 7"	661 9' - 3"	1,335 23' - 3" 62	50 139	1.679 288.	3 1.7 201	68.9 11,754
6	4' - 0"	4' - 0"	8"	7"	108 #5 9	9'' 27' - 10''	3,135 162	2 #4 6"	7' - 8''	830	5' - 4''	577	108 #5 9"	25' - 8"	2,891	18 18'' 39' - 9''	478 110 18" 39' - 9	" 2,921	108 9" 4'	- 0" 289	270 9'	" 4' - 7"	827 9' - 3"	1,668 27' - 10" 74	58 161	1.992 340.	4 2.1 235	81.8 13,851

Use this standard only when lengthening existing multiple box culverts.

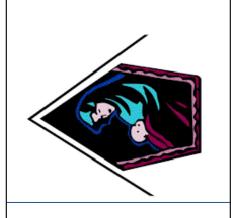
HL93 LOADING SHEET 2 OF 2



MULTIPLE BOX CULVERTS CAST-IN-PLACE 4'-0" SPAN 0' TO 23' FILL

FOR LENGTHENING ONLY MC-4-23

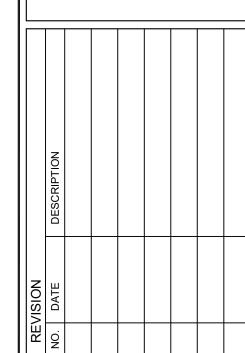
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	REVISIONS							
		DIST		COUNT	Υ			SHEET NO.



GEORGETOWN,

3610





FOR PERMIT REVIEW JASON A. BASS /109708 /

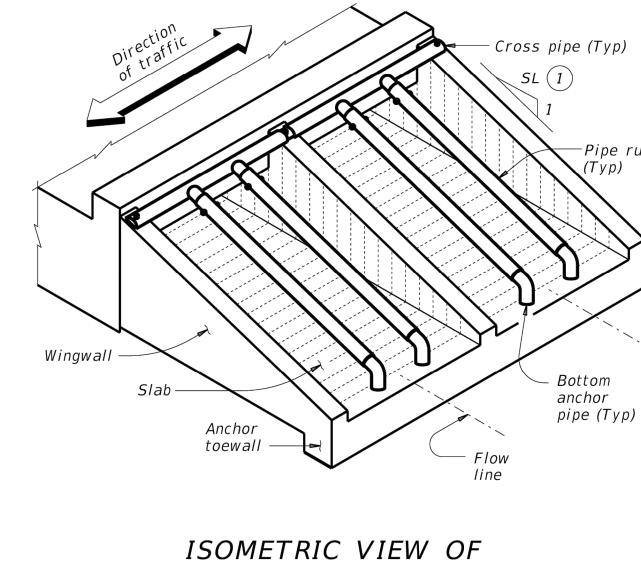
TBPELS FIRM #F-312

PROJECT NO.: 56152.001 ISSUED: 6/19/2024

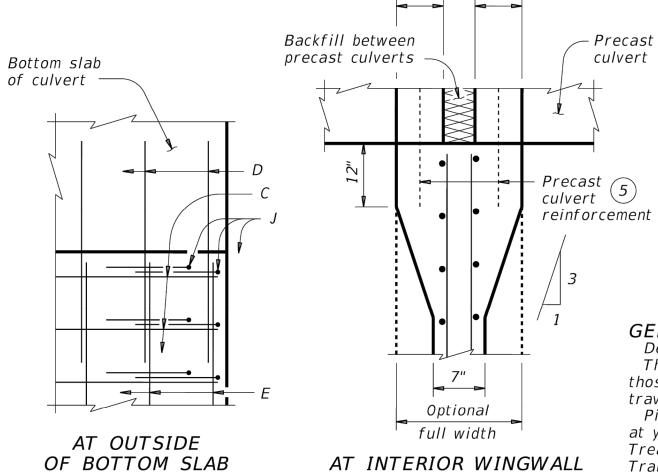
DRAWN BY: JSG CHECKED BY: BGL SCALE: NONE SHEET TITLE

STORM DETAILS (3 OF 7)

2024-5-SWP



ISOMETRIC VIEW OF TYPICAL INSTALLATION



AT INTERIOR WINGWALL (Precast culvert)

of culvert-- Wingwall G or F

AT TOP OF EXTERIOR WINGWALL (Cast-in-place culvert)

TABLE OF

REINFORCING BAR

SIZES AND SPACING

Spacing

10" Max

1'-0" Max

1'-3" Max

As shown

10" Max

1'-0" Max

As shown

Match F and E

Bar | Size |

D

F

G

J

Κ

#4

#4

#4

#4

#6

#4

#4

#4

Varies

Top slab

AT TOP OF

INTERIOR WINGWALL (Cast-in-place culvert)

(Cast-in-place culvert)

PLAN VIEWS OF CORNER DETAILS

- 1) Recommended values of slope are: 3:1, 4:1, and 6:1. Provide 3:1 or flatter slope.
- 2) O" Min to 5'-O" Max. Estimated curb heights are shown elsewhere in the plans. For structures without railing and curbs taller than 1'-0", refer to the Extended Curb Details (ECD) standard sheet.
- 3 Wingwall and slab thicknesses may be the same as the adjacent culvert wall and slab thicknesses (7" minimum). If thicknesses greater than the minimum (7") are used, no changes will be made in quantities and no additional compensation will be allowed.
- 4 For vehicle safety, reduce curb height, if necessary, to provide a maximum 3" projection. No changes will be made in quantities and no additional compensation will be allowed for this work.
- (5) For culverts with C = 0", the precast culvert reinforcing may extend 1'-0" minimum into wingwall. Wingwall Bars D and R may be omitted. Otherwise, refer to the Wingwall Connection detail on the Box Culvert Precast Miscellaneous Details (SCP-MD) standard sheet.

WING DIMENSION CALCULATIONS:

HW = H + T + C - 0.250'Lw = (Hw - 0.333') (SL)

For cast-in-place culverts: Atw = (N)(S) + (N + 1)(U)For precast culverts:

Atw = (N) (2U + S) + (N - 1) (0.500')

Total Wingwall Area (SF) = (0.5) (Hw + 0.333') (Lw) (N + 1)Total Concrete Volume (CY)

> = [(Wingwall Area) (0.583') +(Lw) (Atw) (0.583') + $(Atw) (1.167') (1.167' - 0.583')] \div (27)$

PIPE RUNNER DIMENSION CALCULATIONS:

Pipe Runner Length = (Lw) (K1) - (1.917')Total Reinforcing (Lb) = (1.55) (Lw) (Atw) +(4.43) (Atw) + $(K2) (Hw) (N + 1) (\sqrt{Lw})$

= Height of curb above top of top slab (feet) Hw = Height of wingwall (feet)

K = Constant value for use in formulas Slope SL:1 K1 K2 3:1 ~ 1.054 ~ 7.45

4:1 ~ 1.031 ~ 8.49 6:1 ~ 1.014 ~ 10.30 Atw = Anchor toewall length (feet)

Lw = Length of wingwall (feet)N = Number of culvert barrels

SL:1 = Side slope ratio (horizontal : 1 vertical) See applicable box culvert standard for H, S,

T, and U values.

MATERIAL NOTES:

Provide Grade 60 reinforcing steel.

Provide galvanized reinforcing steel if required elsewhere in the plans.

Adjust reinforcing as necessary to provide a minimum clear cover of $1^{1/2}$ ".

Provide Class "C" concrete (f`c = 3,600 psi).

Provide pipe runners, cross pipes, and anchor pipes meeting the requirements of ASTM A53 (Type E or S, Gr B), ASTM A500 Gr B, or API 5LX52.

Provide ASTM A307 bolts.

Galvanize all steel components, except the concrete reinforcing, unless required elsewhere in the plans, after fabrication. Repair galvanizing damaged during transport or construction in accordance with the Item 445, "Galvanizing."

GENERAL NOTES:

– Precast

culvert

Designed according to AASHTO LRFD Bridge Design Specifications. The safety end treatments shown herein are intended for use in those installations where out of control vehicles are likely to traverse the openings approximately perpendicular to the pipe runners. Pipe runners are designed for a traversing load of 1,800 pounds at yield as recommended by Research Report 280-1, "Safety Treatment of Roadside Cross-Drainage Structures", Texas

Transportation Institute, March 1981. The quantities for pipe runners, reinforcing steel, and concrete resulting from the formulas given herein are for Contractor's information only.

See the Box Culvert Supplement (BCS) standard sheet for additional dimensions and information.

Alternate design drawings bearing the seal of a professional engineer will be acceptable for precast construction of the safety end treatments.

> Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing dimensions are out-to-out of bars.

> > SHEET 1 OF 2



SAFETY END TREATMENT FOR 0° SKEW BOX CULVERTS (MAXIMUM Hw = 7'-0")TYPE I ~ CROSS DRAINAGE

SETB-CD

Bridge Division

Standard

FILE: CD-SE	TBCD-20.dgn	DN: GAF	=	CK: CA	<i>AT</i> Du	v: TxD0T		ск: TxD0T	
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	REVISIONS								
		DIST		СС	OUNTY			SHEET NO.	

Finished

Permissible

construction —

D

2'-0"

Atw

Тур

1'-0" Max

SECTION A-A

(Showing typical wingwall and wing slab

reinforcing. Pipe runners not shown for clarity.)

1'-10 ½"

1'-2" 8 1/2"

BARS K

(Length = 4'-3")

2'-0"

(Typ)

1'-2"

BARS J

Bars J and C ~ Spa at 10' Max

TYPICAL WINGWALL ELEVATION

(Pipe runners not shown for clarity.)

- Construction |

2'-0"

BARS R

Conforms to slope

perpendicular to roadway (1)

050

FOR PERMIT REVIEW JASON A. BASS

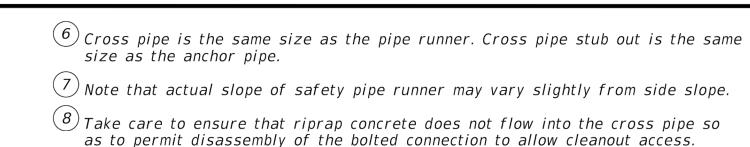
TBPELS FIRM #F-312

PROJECT NO.: 56152.001 ISSUED: 6/19/2024 DRAWN BY: JSG

CHECKED BY: BGL SCALE: NONE SHEET TITLE STORM DETAILS (4 OF 7)

051

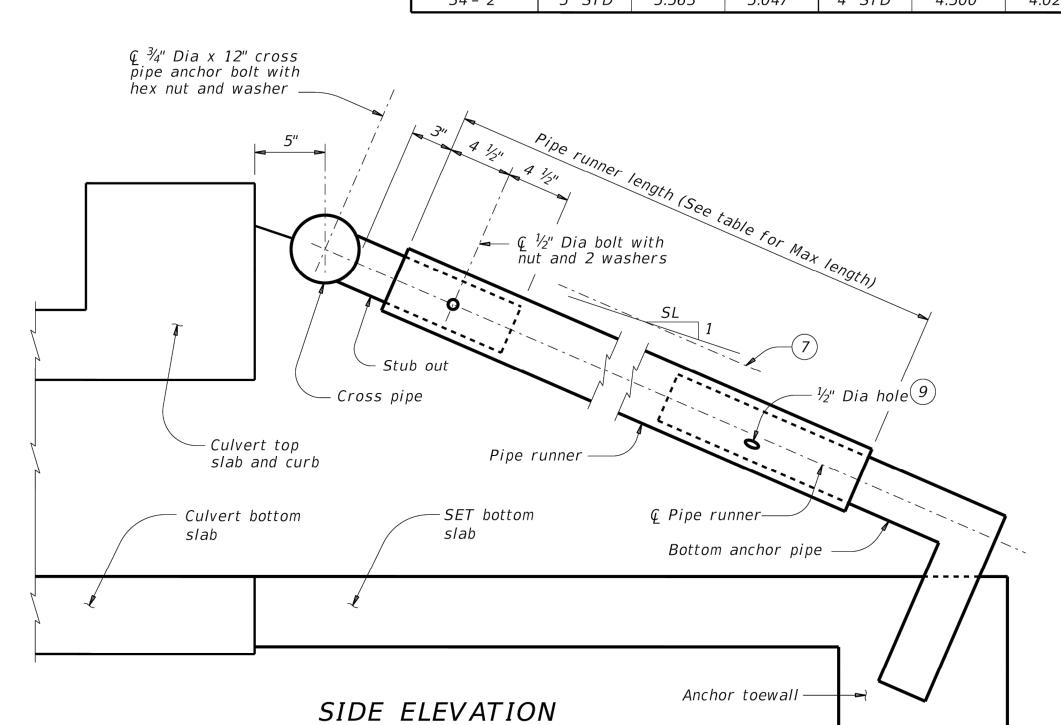
2024-5-SWP



9 After installation, inspect the 1#2" hole to ensure that the lap of the safety pipe runner with the bottom anchor pipe is adequate.

(10) At fabricator's option, a heat bend to a smooth 5" radius or a manufactured elbow (of the same material as the runner) may be substituted for the mitered and welded joint in the bottom anchor pipe.

MAXIMUM PIPE RUNNER LENGTHS AND (6) REQUIRED PIPE RUNNER AND ANCHOR PIPE SIZES Required Anchor Required Pipe Maximum Runner Size Pipe Size Pipe Runner Pipe 0.D. Pipe I.D. Pipe 0.D. Pipe I.D. Pipe Pipe Length Size Size 10'- 0" 3" STD 3.500" 3.068" 2" STD 2.375" 2.067" 19'- 8" 4" STD 4.500" 4.026" 3" STD 3.500" 3.068" 5" STD *5.563*" 5.047" 4" STD 4.500" 4.026" *34'- 2*"



(Showing pipe runner with Cross Pipe Connection Option A1 and Bottom Anchor Toewall Option B2. Wingwall not shown for clarity.)

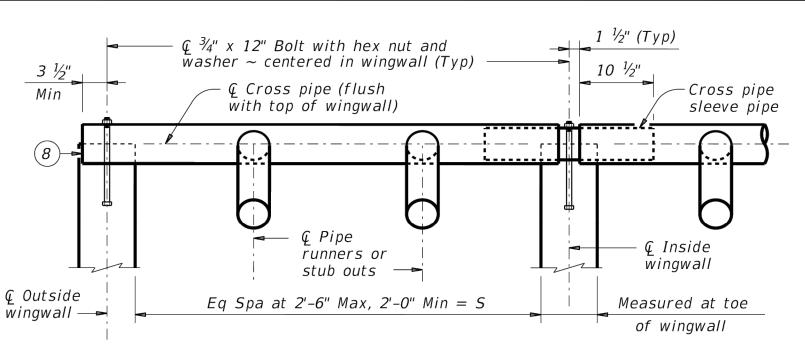
SHEET 2 OF 2 Texas Department of Transportation

SAFETY END TREATMENT FOR 0° SKEW BOX CULVERTS (MAXIMUM Hw = 7'-0")TYPE I ~ CROSS DRAINAGE

SETB-CD

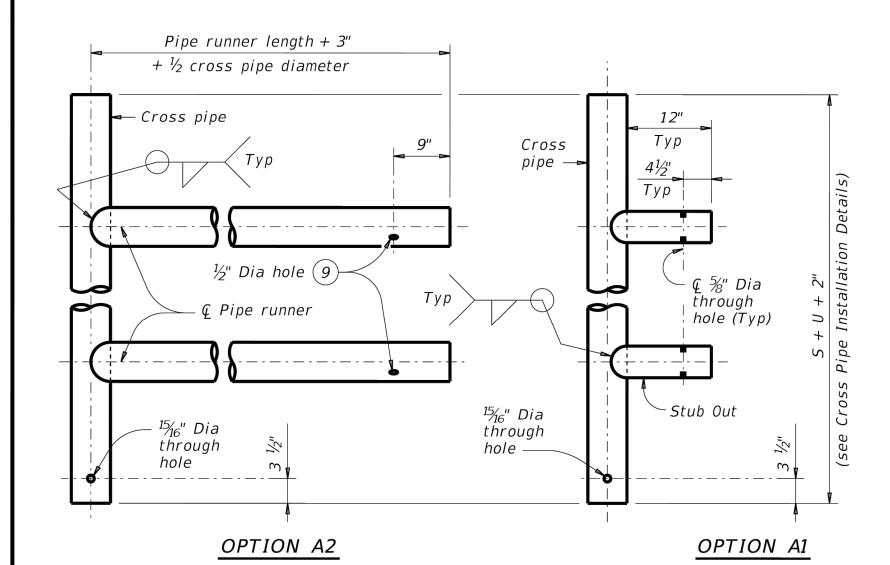
Bridge Division Standard

				- <i>. D</i>	<u> </u>		
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©TxD0T	February 2020	CONT	SECT	JOB		HI	GHWAY
	REVISIONS						
		DIST		COUNTY			SHEET NO.

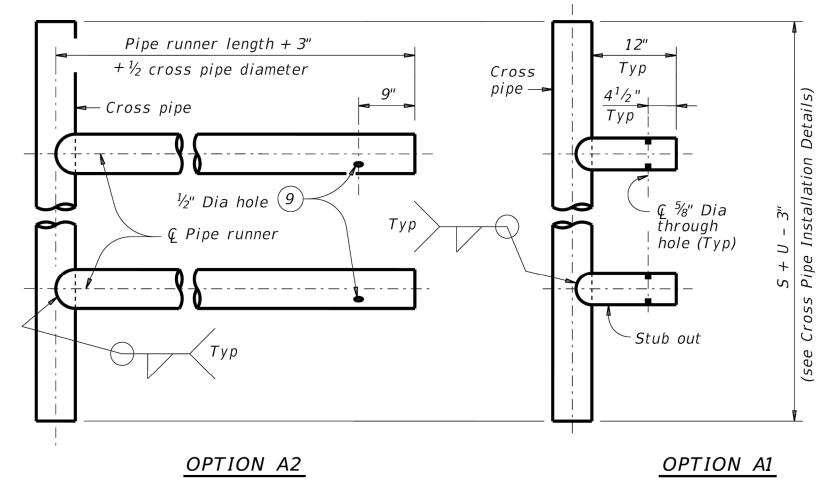


NOTE: At Contractor's option, make the cross pipe continuous across the inside wingwalls. If option is selected, omit the sleeve pipe and make a $^{15}\!\!/_{16}$ " diameter through hole in the cross pipe to accept the anchor bolt at the centerline of each inside wingwall.

CROSS PIPE INSTALLATION DETAILS

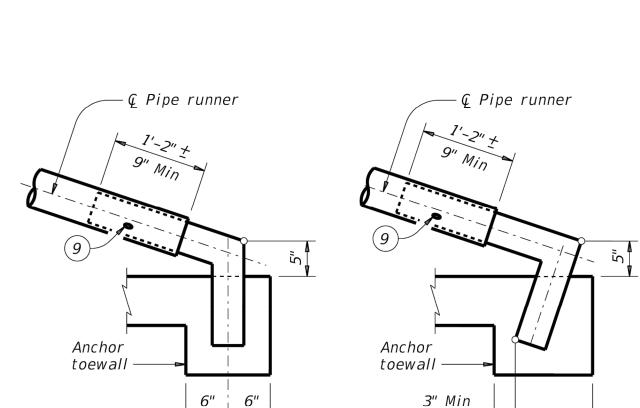


FOR USE IN OUTSIDE CULVERT BAY



FOR USE IN INSIDE CULVERT BAY

CROSS PIPE AND CONNECTIONS DETAILS



BOTTOM ANCHOR PIPE DETAILS

2'-0"

OPTION B1

12"

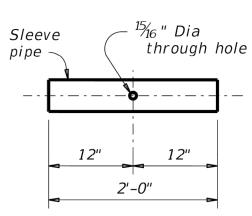
OPTION A

OPTION B2

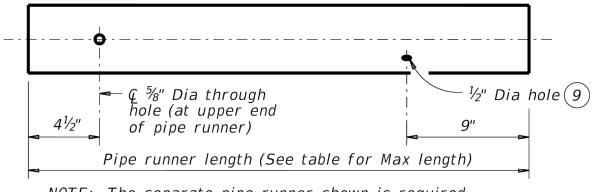
clear

BOTTOM ANCHOR TOEWALL DETAILS

(Wingwall not shown for clarity.)



CROSS PIPE SLEEVE PIPE DETAILS



NOTE: The separate pipe runner shown is required when Cross Pipe Connection Option A1 is used.

rned by for the

PIPE RUNNER DETAILS

TBPELS FIRM #F-312

PROJECT NO.: 56152.001 ISSUED: 6/19/2024 DRAWN BY: JSG CHECKED BY: BGL SCALE: NONE

SHEET TITLE STORM DETAILS (5 OF 7)

> 052 2024-5-SWF

WING DIMENSION FORMULAS:

(All values are in feet.)

HW = H + T + C - 0.250'Lw = (Hw - 0.333') (SL)

For cast-in-place culverts: Ltw = (N)(S) + (N + 1)(U)

For precast culverts: Ltw = (N) (2U + S) + (N - 1) (0.5')

Total Wingwall Area (two wings $\sim SF$) = (Hw + 0.333') (Lw)

Hw = Height of wingwall

See Corner

Details.—

Length of wings

based on SL:1 slope along

Toe of

slope

this line.

SL:1 = Side slope ratio (horizontal:1 vertical)

Ltw

PLAN

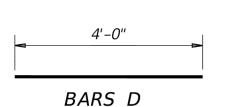
Lw = Length of wingwall

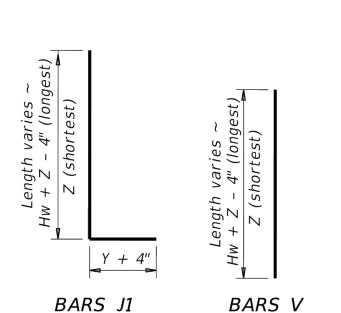
Ltw = Culvert toewall length

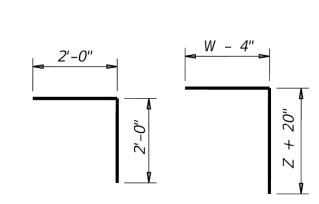
N = Number of culvert spans

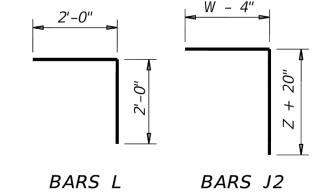
See applicable box culvert standard sheet for H, S, T, and U values.

BARS R

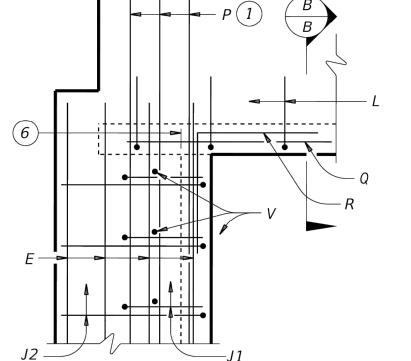


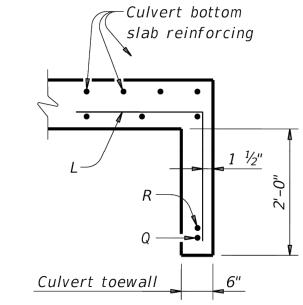






(Showing dimensions.) Culvert bottom





SECTION B-B

Conforms to slope perpendicular to roadway 4

TABLE OF DIMENSIONS AND REINFORCING STEEL

(Wings for one structure end)

Bars J1

Spa

Dimensions

2'-5" 1'-0"

2'-5" 1'-0"

2'-5" | 1'-0" |

| 3'-2" | 1'-6" | 1'-0" |

3'-2" | 1'-6" | 1'-0"

3'-2" | 1'-6" | 1'-0"

3'-2" | 1'-6" | 1'-0"

3'-8" | 1'-9" | 1'-3"

4'-2" | 2'-0" | 1'-6"

4'-8" | 2'-3" | 1'-9"

5'-2" | 2'-6" | 2'-0"

5'-8" | *2'-9"* | *2'-3"*

6'-2" | 3'-0" | 2'-6"

16'-0" 8'-2" 4'-6" 3'-0" 1'-3"

6'-8" | 3'-3" | 2'-9" |

7'-2" | 3'-6" | 3'-0" | 1'-0"

7'-8" | 4'-0" | 3'-0" | 1'-1" |

Maximum

Wingwall

Height

4'-6"

5'-0"

6'-0"

7'-0"

9'-0"

10'-0"

11'-0"

12'-0"

14'-0"

15'-0"

by the

Variable Reinforcing

#4 | 1'-0" | #4 | 1'-0"

#4 | 1'-0" | #4 | 1'-0"

#4 | 1'-0" | #4 | 1'-0"

#4 1'-0" #4 1'-0"

#4 | 1'-0" | #4 | 1'-0"

#4 | 1'-0" | #4 | 1'-0"

#4 1'-0" #4 1'-0"

#5 | 1'-0" | #4 | 1'-0"

#5

#6

#9

#9

8"

8"

11"

- Finished grade

(roadway slope)

6" | #4 |

6" | #4

6" | #5

6" | #5

6" | #5

6" | #6

6" | #6

Bars J2

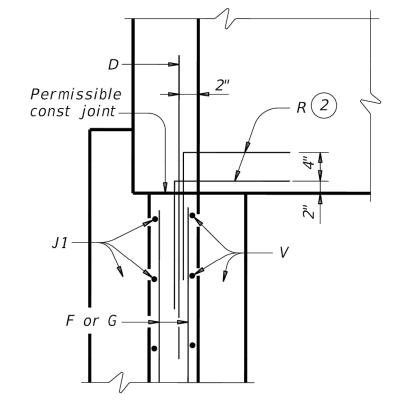
Spa

#4 | 1'-0" | #4 | 1'-0" | 41.75 | 0.330

INSIDE ELEVATION

toewall reinforcing not shown for clarity.) Permissible const joint-

(Showing reinforcing. Culvert and culvert



WINGWALL

TABLE OF WINGWALL

REINFORCING

(2~wings)

Bar | Size | No. | Spa

~

4

4

~

~ 1'-0"

~ 1'-6"

2.45

0.037

6

1'-0"

1'-0"

1'-0"

#5

#4

#4

#6

#4

#4

#5

#4

#4

Q #4

Reinf (Lb/Ft)

Conc (CY/Ft)

TABLE OF ESTIMATED

CULVERT TOEWALL

QUANTITIES

Bar | Size | No. | Spa

D

Ε

G

Estimated

Quantities

per ft of

wing length

(2~wings)

Reinf Conc

Lb/Ft) (CY/Ft)

33.73 0.248

37.74 0.273

45.09 0.343

45.75 0.355

46.42 0.367

60.19 0.486

81.49 0.535

133.65 0.634

0.414

0.584

0.721

0.856

0.959

1.068

0.261

37.07

52.77

97.25

162.29

178.80

216.78

283.06

297.02

FOOTING AND TOEWALL

CORNER DETAILS

 $(\,3\,)$ Quantities shown are based on an average wing height for two wings (one structure end). To determine total quantities for two wings, multiply the tabulated values by Lw.

(1) Extend Bars P 3'-0" minimum into bottom slab of

(2) Adjust as necessary to maintain 1 1#2" clear

cover and 4" minimum between bars.

box culvert.

(4) Recommended values of side slope are: 2:1, 3:1, 4:1, and 6:1.

(5) When shown elsewhere on the plans, construct 5" deep concrete riprap. Payment for riprap is as required by Item 432, "Riprap." Unless otherwise shown on the plans or directed by the Engineer, provide a 6" wide by 1'-6" deep reinforced concrete toewall along all edges of the riprap adjacent to natural ground; reinforce the toewall by extending typical riprap reinforcing into the toewall; and extend construction joints or grooved joints oriented in the direction of flow across the full distance of the riprap at intervals of approximately 20'. When such riprap is provided, the culvert toewall shown in SECTION B-B will not be required.

(6) At Contractor's option, culvert toewall may be ended flush with wingwall toewall. Adjust reinforcing as needed.

(7)0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail or curbs taller than 1'-0, refer to the Extended Curb Details (ECD) standard sheet. For structures with T631 or T631LS bridge rail, refer to the Mounting Details for T631 & T631LS Rails (T631-CM) standard sheet. Refer to the Box Culvert Rail Mounting Details (RAC) standard sheet for structures with bridge rail other than T631 or T631LS.

(8) For vehicle safety, the following requirements must be met: For structures without bridge rail, construct curbs no more than 3" above finished grade.

• For structures with bridge rail, construct curbs flush with finished grade.

Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.

MATERIAL NOTES:

Provide Class C concrete (f'c=3,600 psi). Provide Grade 60 reinforcing steel. Provide galvanized reinforcing steel if required elsewhere in the plans.

In riprap concrete, synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing unless noted otherwise.

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications.

When structure is founded on solid rock, depth of toewalls for culverts and wingwalls may be reduced or eliminated as directed by the Engineer. See Box Culvert Supplement (BCS) standard sheet for additional dimensions and information.

The quantities for concrete and reinforcing steel resulting from the formulas given on this sheet are for Contractor's information only.

Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing dimensions are out-to-out of bars.



CONCRETE WINGWALLS WITH STRAIGHT WINGS FOR 0° SKEW BOX CULVERTS

SW-0

CK: CAT DW: TXDOT CK: TXDOT DN: GAF ILE: CD-SW0-20.dgn C)TxDOT February 2020 HIGHWAY CONT | SECT REVISIONS SHEET NO COUNTY

Bridge Division

Standard

Const joint-Wingwall toewall

SECTION A-A

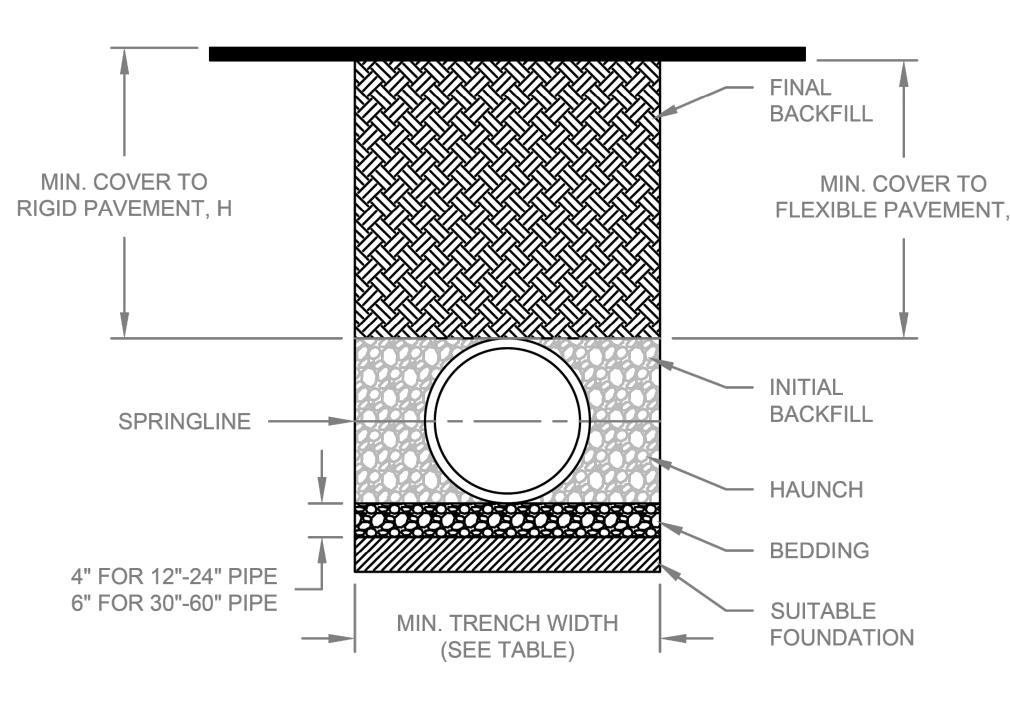
TBPELS FIRM #F-312

6/19/2024 DRAWN BY: JSG CHECKED BY: BGL SCALE:

> SHEET TITLE STORM DETAILS (6 OF 7)

053

RECOMMENDED MINIMUM TRENCH WIDTHS



		WINNING WITH ENGLISHED			
	PIPE DIAM.	MIN. TRENCH WIDTH			
	4"	21"			
	(100mm)	(533mm)			
	6"	23"			
	(150mm)	(584mm)			
, H	8"	26"			
	(200mm)	(660mm)			
	10"	28"			
	(250mm)	(711mm)			
	12"	30"			
	(300mm)	(762mm)			
	15"	34"			
	(375mm)	(864mm)			
	18"	39"			
	(450mm)	(991mm)			
	24"	48"			
	(600mm)	(1219mm)			
	30"	56"			
	(750mm)	(1422mm)			
	36"	64"			
	(900mm)	(1626mm)			
	42"	72"			
	(1050mm)	(1829mm)			
	48"	80" (2022mm)			
	(1200mm)	(2032mm)			
	60"	96" (2438mm)			
	(1500mm)	(2438mm)			

NOTES:

- 1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION
- 2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- 3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- 4. <u>BEDDING:</u> SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).
- 5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING TO THE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- 6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS. MINIMUM COVER. H. IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. FOR TRAFFIC APPLICATIONS WITH LESS THAN FOUR FEET OF COVER, EMBEDMENT OF THE PIPE SHALL BE USING ONLY A CLASS I OR CLASS II BACKFILL.

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ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DEPICT THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEERS RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

MINIMUM RECOMMENDED COVER BASED ON **VEHICLE LOADING CONDITIONS****

	SURFACE LIVE LOADING CONDITION			
PIPE DIAM.	H-25	HEAVY CONSTRUCTION (75T AXLE LAOD) *		
12" - 48"	12"	48"		
(300mm - 1200mm)	(305mm)	(1219mm)		
60" (1500mm)	24" (610mm)	60" (1524mm)		

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER **SEE BACKFILL REQUIREMENTS IN NOTE 6.

MAXIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS

PIPE DIAM.	CLASS I		CLA	CLASS III	
PIPE DIAIVI.	COMPACTED	DUMPED	95%	90%	95%
4"	37	18	25	18	18
(100mm)	(11.3m)	(5.5m)	(7.6m)	(5.5m)	(5.5m)
6"	44	20	29	20	21
(150mm)	(13.4m)	(6.1m)	(8.8m)	(6.1m)	(6.4m)
8"	32	15	22	15	16
(200mm)	(9.8m)	(4.6m)	(6.7m)	(4.6m)	(4.9m)
10"	38	18	26	18	18
(250mm)	(11.6m)	(5.5m)	(7.9m)	(5.5m)	(5.5m)
12"	35	17	24	17	17
(300mm)	(10.7m)	(5.2m)	(7.3m)	(5.2m)	(5.2m)
15"	38	17	25	17	18
(375mm)	(11.6m)	(5.2m)	(7.6m)	(5.2m)	(5.5m)
18"	36	17	24	17	17
(450mm)	(11.0m)	(5.2m)	(7.3m)	(5.2m)	(5.2m)
24"	28	13	20	13	14
(600mm)	(8.5m)	(4.0m)	(6.1m)	(4.0m)	(4.3m)
30"	28	13	20	13	14
(750mm)	(8.5m)	(4.0m)	(6.1m)	(4.0m)	(4.3m)
36"	26	12	18	13	13
(900mm)	(7.9m)	(3.7m)	(5.5m)	(4.0m)	(4.0m)
42"	23	11	16	11	11
(1050mm)	(7.0m)	(3.4m)	(4.9m)	(3.4m)	(3.4m)
48"	25	11	17	11	12
(1200mm)	(7.6m)	(3.4m)	(5.2m)	(3.4m)	(3.7m)
60"	25	11	17	11	12
(1500mm)	(7.6m)	(3.4m)	(5.2m)	(3.4m)	(3.7m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS: NO HYDROSTATIC PRESSURE, UNIT WEIGHT OF SOIL (Ys) = 120 PCF

6	INITIAL BACKFILL	JAB	04/02/20	
REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D

TRENCH INSTALLATION DETAIL (N-12 PER AASHTO)

NTS 1 OF 1

TJR

12/29/16

STD-101 DRAWING NUMBER:

DROP INLET 3'-0"x3'-0"x2'-0" (NOMINAL INSIDE DIMENSIONS) WITH 18"x18" THINWALL KNOCKOUTS GALVANIZED FRAME AND GRATE ASSEMBLY AVAILABLE— IN H-20 TRAFFIC AND PEDESTRIAN LOAD RATINGS 363606 RISER OPTIONAL_ 363612 RISER MAXİMUM STACK HEIGHT 9'-0" THINWALL KNOCKOUTS -CENTERED IN EXTERIOR WALLS 4 TOTAL

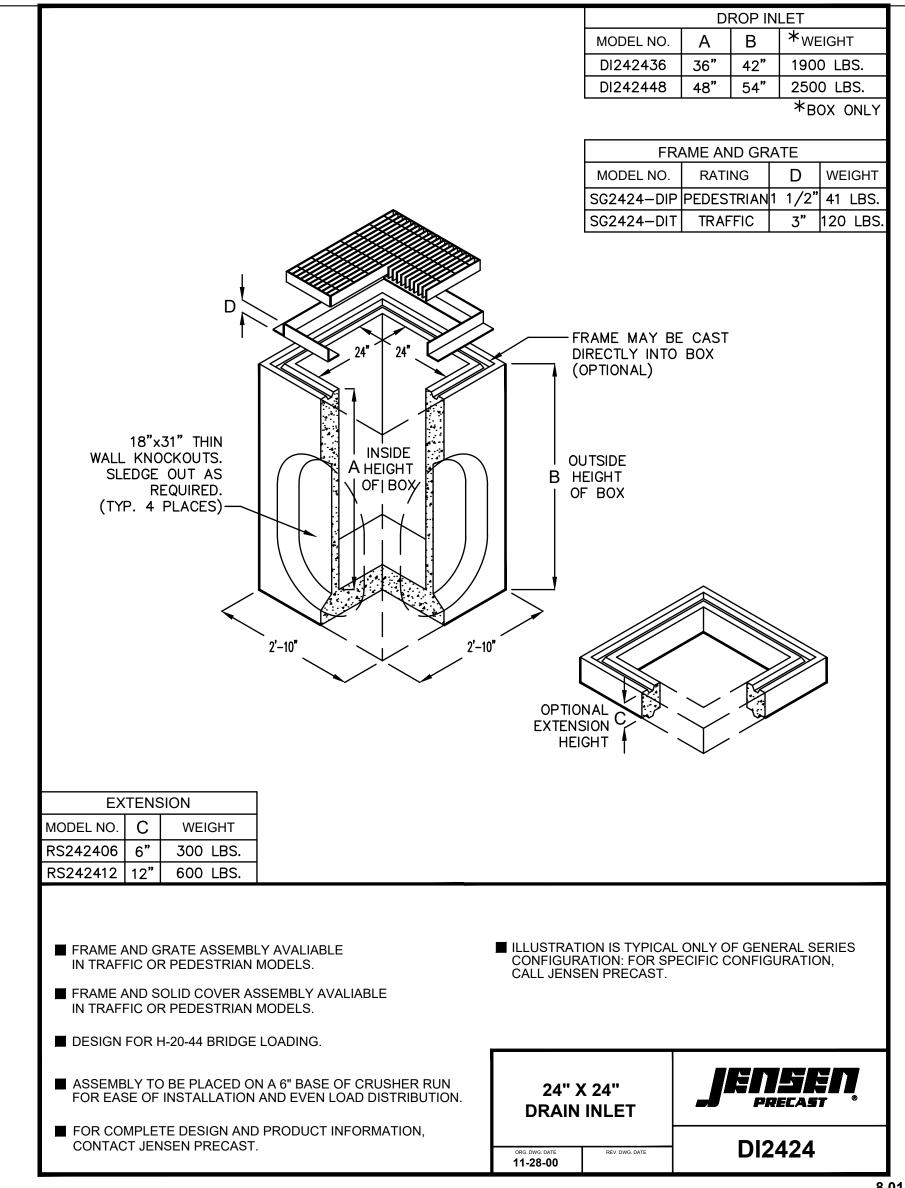
BOX DESIGN LOAD: H-20 TRAFFIC.

WATER TABLE ASSUMED TO BE BELOW BOTTOM OF STRUCTURE.

FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT JENSEN PRECAST.

Jensen Precast reserves the right to make changes to product design and/or dimensions without notice. Please contact Jensen Precast whenever necessary for confirmation or advice on product design. 7/21/2010 nece: C-PLAN-DTLS-STRM-56152.001.DWG © 2010

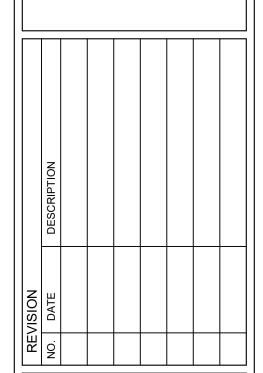
LTR	DESCRIPTION	DATE	REV BY
Α	CREATE DRAWING REF. 1007-4146-PA	07/19/10	MLR
В	MAX. STACK HEIGHT	07/21/10	MLR



ANNUNCIATION MATERNITY HOME, INC









PROJECT NO.: 56152.001 ISSUED: 6/19/2024

DRAWN BY: JSG CHECKED BY: BGL SCALE: NONE

SHEET TITLE

STORM DETAILS (7 OF 7)