Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

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

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

Technical Review

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

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

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

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

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Liberty Hill Elementary School #9					**2. Regulated Entity No.:**				
3. Customer Name: Liberty Hill ISD					**4. Customer No.: 600788483**				
5. Project Type: **(Please circle/check one)**	New		Modification		Extension		Exception		
6. Plan Type: **(Please circle/check one)**	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		Non-residential			**8. Site (acres):**		13.50	
9. Application Fee:	$6,500		**10. Permanent BMP(s):**			Batch Detention			
11. SCS (Linear Ft.):			**12. AST/UST (No. Tanks):**						
13. County:	Williamson		**14. Watershed:**			North Fork San Gabriel River			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	___	___	_X_
Region (1 req.)	___	___	_X_
County(ies)	___	___	_X_
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	___	___	___	___
Region (1 req.)	___	___	___	___	___
County(ies)	___	___	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	___Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch ___Helotes ___Hill Country Village ___Hollywood Park ___San Antonio (SAWS) ___Shavano Park	___Bulverde ___Fair Oaks Ranch ___Garden Ridge ___New Braunfels ___Schertz	NA	___San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review. Jack Garner, PE
Print Name of Customer/Authorized Agent
Signature of Customer/Authorized Agent — Date: 12.05.2025

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

ELECTRONICALLY RECORDED 2025093848
Williamson County, Texas Total Pages: 9

SPECIAL WARRANTY DEED

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

THAT, **PULTE HOMES OF TEXAS, L.P.**, a Texas limited partnership ("**Grantor**"), for and in consideration of the sum of Ten and No/100 Dollars ($10.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, paid to Grantor by **LIBERTY HILL INDEPENDENT SCHOOL DISTRICT**, a public independent school district and political subdivision of the State of Texas, having an address at 301 Forest St., Liberty Hill, Texas 78642 ("**Grantee**"), has GRANTED, BARGAINED, SOLD and CONVEYED, and by these presents does GRANT, BARGAIN, SELL and CONVEY unto Grantee, that certain land (the "**Land**") situated in Williamson County, Texas, more particularly described on **Exhibit A** attached hereto and incorporated herein by reference for all purposes, TOGETHER WITH all improvements on or under the Land ("**Improvements**") TOGETHER WITH Grantor's rights, title and interest, if any, in and to all easements, tenements, hereditaments, privileges and appurtenances in any way benefitting the Land, including, without limitation, (A) a proportionate part of any land to the midpoint of the bed of any highway, street, alley, road or avenue, open or proposed, in front of, abutting, or adjoining such Land; (B) a proportionate part of any land lying in or under the bed of any creek, stream, bayou or river running through, abutting or adjacent to such Land; (C) any surface waters on the Land; (D) the present or future use of utilities or utility facilities on the Land; (E) any strips, gores or pieces of property abutting, bounding or which are adjacent or contiguous to the Land; (F) any reversionary interests benefiting the Land; (G) any rights-of-way, rights of ingress or egress, or other interests in, on or to any land, highway, street, road or avenue, open or proposed, in, on, across, in front of, abutting or adjoining the Land; (H) all the oil, gas, sulfur, and other minerals (whether similar or dissimilar) in, on, under and that may be produced from the Land and all royalty rights, executive rights, and other rights related to the minerals; (I) all water and water rights in, on, under and that may be produced from the Land; (J) any awards made, or to be made in lieu thereof, and in and to any unpaid awards for damage thereto in any way benefitting such Land; (K) any easement across, adjacent to or benefiting the Land, existing or abandoned; and (L) any other rights and benefits pertaining to the Land (clauses (A) through (L) being referred to as the "**Appurtenances**") PROVIDED, HOWEVER, that (x) Grantor conveys the Appurtenances only to the extent they pertain to the Land and do not pertain to other property owned by Grantor, (y) the Appurtenances and Property do not include, and Grantee shall not be entitled to receive, any payments, reimbursements, proceeds, credits or offsets of any kind or character to which Grantor is or may become entitled pursuant to any agreements between Grantor and any municipal utility district ("**MUD**") or pursuant to any amendment, supplement or other similar agreement between Grantor and the MUD, and (z) Grantor conveys only such interest as Grantor may have in the Appurtenances, without warranty, whether express, implied, statutory or otherwise, and only to the extent Grantor has the right to do so without the joinder of any other person or entity except with regard to the LUEs described in the previously mentioned assignment. The Land, the Improvements and the Appurtenances are collectively called the "**Property**".

This conveyance and the warranties of title herein are expressly made subject to all encumbrances, easements and other matters filed of record and the matters described on the attached **Exhibit B**.

TO HAVE AND TO HOLD the Property (subject to the foregoing) unto Grantee and Grantee's successors and assigns forever, and Grantor does hereby bind Grantor and Grantor's successors and assigns to WARRANT and FOREVER DEFEND, all and singular, title to the Land unto Grantee and Grantee's successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through or under Grantor, but not otherwise.

OTHER THAN THE limited warranty of title to the Land set forth above, GRANTEE ACKNOWLEDGES AND AGREES THAT GRANTOR HAS NOT MADE, AND SPECIFICALLY NEGATES AND DISCLAIMS ALL REPRESENTATIONS, WARRANTIES, PROMISES, COVENANTS, AGREEMENTS OR GUARANTIES OF ANY KIND OR CHARACTER WHATSOEVER, WHETHER EXPRESS OR IMPLIED, ORAL OR WRITTEN, PAST, PRESENT OR FUTURE, OF, AS TO, CONCERNING OR WITH RESPECT TO (i) THE VALUE, NATURE, QUALITY OR CONDITION OF THE PROPERTY, INCLUDING, WITHOUT LIMITATION, THE WATER, SOIL AND GEOLOGY, (ii) THE INCOME TO BE DERIVED FROM THE PROPERTY, (iii) THE SUITABILITY OF THE PROPERTY FOR ANY AND ALL ACTIVITIES AND USES WHICH GRANTEE MAY CONDUCT THEREON, (iv) THE COMPLIANCE OF GRANTOR WITH REGARD TO THE PROPERTY OR THE PROPERTY ITSELF WITH ANY LAWS, RULES, ORDINANCES, ZONING REQUIREMENTS OR REGULATIONS OF ANY APPLICABLE GOVERNMENTAL AUTHORITY OR BODY OR WITH ANY APPLICABLE DEED RESTRICTIONS, (v) THE HABITABILITY, MERCHANTABILITY, MARKETABILITY, PROFITABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PROPERTY, (vi) THE MANNER, QUALITY, STATE OF REPAIR OR LACK OF REPAIR OF THE PROPERTY, (vii) THE ABILITY OF GRANTEE TO DEVELOP UNDER ANY PARTICULAR ORDINANCES OR REGULATIONS, OR (viii) ANY OTHER MATTER WITH RESPECT TO THE PROPERTY, AND SPECIFICALLY, THAT GRANTOR HAS NOT MADE, DOES NOT MAKE, AND SPECIFICALLY DISCLAIMS ANY REPRESENTATIONS REGARDING COMPLIANCE WITH ANY ENVIRONMENTAL LAWS OR THE EXISTENCE ON OR IN THE PROPERTY OF HAZARDOUS MATERIALS. GRANTEE FURTHER ACKNOWLEDGES AND AGREES THAT HAVING BEEN GIVEN THE OPPORTUNITY TO INSPECT THE PROPERTY, EXCEPT FOR THE EXPRESS WARRANTY OF TITLE IN THIS DEED, GRANTEE IS RELYING SOLELY UPON ITS OWN INVESTIGATION OF THE PROPERTY AND NOT ON ANY INFORMATION PROVIDED OR TO BE PROVIDED BY GRANTOR, AND ACCEPTS THE PROPERTY AND WAIVES ALL OBJECTIONS OR CLAIMS AGAINST GRANTOR (INCLUDING BUT NOT LIMITED TO ANY RIGHT OR CLAIM OF CONTRIBUTION) ARISING FROM OR RELATED TO THE PROPERTY OR TO ANY HAZARDOUS MATERIALS ON THE PROPERTY. GRANTEE ALSO AGREES THAT ANY INFORMATION PROVIDED AND TO BE PROVIDED WITH RESPECT TO THE PROPERTY WAS OBTAINED FROM A VARIETY OF SOURCES, THAT GRANTOR HAS NOT MADE ANY INDEPENDENT INVESTIGATION OR VERIFICATION OF SUCH INFORMATION, AND THAT GRANTOR MAKES NO REPRESENTATIONS AS TO THE ACCURACY OR COMPLETENESS OF SUCH INFORMATION. GRANTOR IS NOT LIABLE OR BOUND IN ANY MANNER BY ANY VERBAL OR WRITTEN STATEMENTS,

REPRESENTATIONS OR INFORMATION PERTAINING TO THE PROPERTY, OR THE OPERATION THEREOF FURNISHED BY ANY REAL ESTATE BROKER, AGENT, EMPLOYEE, SERVANT OR OTHER PERSON. GRANTEE FURTHER ACKNOWLEDGES AND AGREES THAT TO THE MAXIMUM EXTENT PERMITTED BY LAW, **THE SALE OF THE PROPERTY AS PROVIDED FOR HEREIN IS MADE ON AN "AS IS" CONDITION AND BASIS WITH ALL FAULTS**, EXCEPT FOR THE LMITED WARRANTY OF TITLE IN THIS DEED. THE PURCHASE PRICE FOR THE PROPERTY HAS BEEN ADJUSTED BY PRIOR NEGOTIATION TO REFLECT THAT THE PROPERTY IS SOLD BY GRANTOR AND PURCHASED BY GRANTEE SUBJECT TO THE FOREGOING.

In the event that Grantee does not commence construction of a school on the Property within 60 months following recording this deed or Grantee (or Grantee's governing board) decides at any time within 10 years after the date of recording this deed, not to use the Property as a public school, then Grantor shall have the exclusive and irrevocable option and right to repurchase the Property from Grantee at the original Purchase Price paid by Grantee to Grantor at the closing of the Property related to this deed (the "Repurchase Option"). Grantee shall promptly notify Grantor upon the occurrence of either condition described above. Grantor may exercise this Repurchase Option by delivering written notice to Grantee within 90 days after receiving from Grantee written notice of either condition described above or the actual occurrence of either event. It is the intention of Grantee and Grantor that the Property be used for a public school. If Grantor elects to exercise the Repurchase Option, then Grantor shall deliver written notice of such election to Grantee within 90 days after the expiration of the 60-month period or at any time before the expiration of the 10-year period described above. Upon delivery of such notice, a binding contract for the sale of the Property from Grantee to Grantor shall be deemed formed on substantially the same terms as the contract between Grantor and Grantee at time of acquisition of the Property by Grantee from Grantor, the purchase price for the repurchase shall be the original Purchase Price paid by Grantee to Grantor at the closing of the Property, the closing of the repurchase shall occur within 120 days after Grantor's delivery of the repurchase notice, and Grantee shall convey the Property to Grantor on an "AS IS, WHERE IS" basis subject only to the Permitted Exceptions and such other matters as may be approved by Grantee. If Grantor does not timely deliver written notice of its election to exercise the Repurchase Option within the ninety (90) day period, then Grantor's Repurchase Option and all obligations under this Repurchase Option shall automatically terminate and be of no further force or effect.

EXECUTED to be effective as of the 17th day of November, 2025.

GRANTOR:

PULTE HOMES OF TEXAS, L.P.,
a Texas limited partnership

By: Pulte Nevada I LLC,
a Delaware limited liability company
Its: general partner

By: _____
Bryan Bell
Its: VP of Land Acquisition

STATE OF TEXAS §
§
COUNTY OF Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared November 17, 2025 Bryan Bell, VP of Land Acq of Pulte Nevada I LLC, a Delaware limited liability company, on behalf of said limited liability company, in its capacity as general partner of Pulte Homes of Texas, L.P., a Texas limited partnership, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, as the act and deed of the limited partnership, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 17th day of November, 2025.

[SEAL]

_____
Notary Public in and for the State of Texas

My Commission Expires:

7-11-2027

AMBER ELAINE LAKE
Notary Public, State of Texas
Comm. Expires 07-11-2027
Notary ID 132083537

EXHIBIT A
TO
SPECIAL WARRANTY DEED
LEGAL DESCRIPTION OF THE LAND

BEING A 13.497 ACRE TRACT OF LAND SITUATED IN THE B. MANLOVE SURVEY, ABSTRACT NUMBER 417, WILLIAMSON COUNTY, TEXAS, BEING A PORTION OF A CALLED 311.079 ACRE TRACT OF LAND CONVEYED TO PULTE HOMES OF TEXAS, L.P. BY DEED RECORDED IN DOCUMENT NUMBER 2022032756, OFFICIAL PUBLIC RECORDS, WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.TX.), SAID 13.497 ACRE TRACT OF LAND BEING MORE FULLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a capped 1/2 inch iron rod set stamped "CBD SETSTONE" for the southeast corner and **POINT OF BEGINNING** of the herein described tract, from which a capped 1/2 inch iron rod found stamped "CBD SETSTONE" at the northwest corner of Lot 11, Block X, Saddleback at Santa Rita Ranch Phase 1, Section 2A, a subdivision recorded in Document Number 2023072615, O.P.R.W.C.TX., being the southwest corner of Lot 10, Block X, said Saddleback at Santa Rita Ranch Phase 1, Section 2A, bears S83°44'24"E, a distance of 475.32 feet,

THENCE over and across said 311.079 acre tract, the following ten (10) courses and distances, numbered 1 through 10,

1) S89°00'25"W, a distance of 500.39 feet to a capped 1/2 inch iron rod set stamped "CBD SETSTONE",
2) S88°01'21"W, a distance of 54.15 feet to a capped 1/2 inch iron rod set stamped "CBD SETSTONE" for the southwest corner of the herein described tract, from which a 1/2 inch iron rod found on the west line of said 311.079 acre tract, being at the southeast corner of a called 1.00 acre tract conveyed to Mark Christopher Kuhaneck, et al. by deed recorded in Document Number 2014036419, O.P.R.W.C.TX., same being the northeast corner of Lot 1, Block A, Final Plat Cole Subdivision, a subdivision recorded in Document Number 2021166245, O.P.R.W.C.TX, bears N74°41'35"W, a distance of 1307.28 feet,
3) N09°18'21"W, a distance of 195.05 feet to a capped 1/2 inch iron rod set stamped "CBD SETSTONE",
4) N03°28'24"E, a distance of 873.73 feet to a capped 1/2 inch iron rod set stamped "CBD SETSTONE" at the beginning of a curve to the left, for the northwest corner of the herein described tract, from which a capped 1/2 inch iron rod found stamped "WALKER" on the south right-of-way line of County Road 258 (R.O.W. varies), being the northwest corner of said 311.079 acre tract, same being the northeast corner of the remainder of Lot 1, The Amended Larry R. Johnson Subdivision, a subdivision recorded in Cabinet G, Slide 167, Plat Records of Williamson County, Texas, same also being the southeast corner of a called 0.247 acre tract (Parcel 31) conveyed to Williamson County, Texas by deed recorded in Document Number 2015060666, O.P.R.W.C.TX., bears N89°39'50"W, a distance of 1558.41 feet,

5) Along said curve to the left, having a radius of 1,140.00 feet, an arc length of 432.09 feet, and a chord that bears S80°55'01"E, a distance of 429.50 feet to a capped 1/2 inch iron rod set stamped "CBD SETSTONE",
6) N88°13'29"E, a distance of 84.58 feet to a capped 1/2 inch iron rod set stamped "CBD SETSTONE" at the beginning of a curve to the right,
7) Along said curve to the right, having a radius of 15.00 feet, an arc length of 22.63 feet, and a chord that bears S48°32'49"E, a distance of 20.55 feet to a capped 1/2 inch iron rod set stamped "CBD SETSTONE", from which a capped 1/2 inch iron rod found stamped "CBD SETSTONE" at the northwest corner of Lot 1, Block X, said Saddleback at Santa Rita Ranch Phase 1, Section 2A, bears S59°50'45"E, a distance of 744.77 feet,
8) S05°19'09"E, a distance of 515.03 feet to a capped 1/2 inch iron rod set stamped "CBD SETSTONE" at the beginning of a curve to the right,
9) Along said curve to the right, having a radius of 1,020.00 feet, an arc length of 243.80 feet, and a chord that bears S01°31'41"W, a distance of 243.22 feet to a capped 1/2 inch iron rod set stamped "CBD SETSTONE", and

S08°22'31"W, a distance of 221.70 feet to the **POINT OF BEGINNING** and containing 13.497 acres of land, as shown on the attached title survey.

EXHIBIT B
TO
SPECIAL WARRANTY DEED
PERMITTED EXCEPTIONS

Taxes for the year 2025 and subsequent years.

All matters that would be disclosed by a current accurate survey of the Land.

1. Notice regarding Ordinance No. 05-O-50 recorded in Document No. 2005066224, Official Public Records, Williamson County, Texas.

2. An undivided mineral and/or royalty interest recorded in Volume 353, Page 148, Official Public Records, Williamson County, Texas. Title to said interest has not been investigated subsequent to the date of the aforesaid instrument.

3. An undivided mineral and/or royalty interest recorded in Volume 353, Page 149, Official Public Records, Williamson County, Texas. Title to said interest has not been investigated subsequent to the date of the aforesaid instrument.

4. An undivided mineral and/or royalty interest recorded in Volume 357, Page 571, Official Public Records, Williamson County, Texas. Title to said interest has not been investigated subsequent to the date of the aforesaid instrument.

5. An undivided mineral and/or royalty interest recorded in Volume 381, Page 245, Official Public Records, Williamson County, Texas. Title to said interest has not been investigated subsequent to the date of the aforesaid instrument.

6. Any portion of subject property lying within the boundaries of a public or private roadway whether dedicated or not.

7. Subject property lies within the boundaries of the Municipal Utility District No. 19H and may be subject to standby fees and tax assessments by said district.

8. Dannheim, RPLS# 6075, on behalf of Carlson, Brigance & Doering, Inc., dated June 5, 2025 with reference to 5619\Survey\TITLE SURVEY - 13.497 Acres - LHISD TRACT, including overhead electric lines running east to west across the center of the parcel and running north to south in the north easterly portion of the parcel.

9. Terms and conditions of that certain Williamson County Municipal Utility District No. 19H Amended and Restated Information Form recorded in Document No. 2025066941, Official Public Records, Williamson County, Texas and Certificate of Order recorded in Document No. 2025066942, Official Public Records, Williamson County, Texas.

10. Terms and conditions of the documents recorded in the Official Public Records of Williamson County, Texas as Documents Numbered 2016067674, 2016067892, 2018096903, 2020027754, 2021087040, 2021088116, 2022013817, 2022040213, 2024028179, 2016068329, 2022052288.

11. Notice of Limited Applicability, Addition of Land, and Amendment to Santa Rita Ranch Amended and Restated Mater Covenant [school tract No. 5] Document 2025092771 and Development Area Declaration [School Tract No. 5] Document 2025093487 to be recorded concurrently in the Official Public Records of Williamson County, Texas.

AFTER RECORDING RETURN TO:

Liberty Hill Independent School District
Attn: Rossanna Guerrero, CFO
301 Forest Street
Liberty Hill, Texas 78642

ELECTRONICALLY RECORDED
OFFICIAL PUBLIC RECORDS

2025093848

Pages: 9 Fee: $53.00
11/26/2025 08:04 AM
OSALINAS

Nancy E. Rister, County Clerk
Williamson County,Texas

Contributing Zone Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Contributing Zone to the Edwards Aquifer and Relating to 30 TAC §213.24(1), 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.

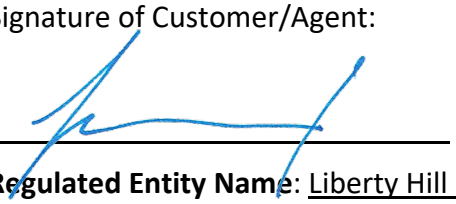
Signature

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 **Contributing Zone Plan Application** is hereby submitted for TCEQ review and Executive Director approval. The application was prepared by:

Print Name of Customer/Agent: Jack Garner, PE

Date: 12/05/2025

Signature of Customer/Agent:



Regulated Entity Name: Liberty Hill Elementary School #9

Project Information

1. County: Williamson
2. Stream Basin: North Fork, San Gabriel River
3. Groundwater Conservation District (if applicable): _____
4. Customer (Applicant):

   Contact Person: Dustin Akin
   Entity: Liberty Hill ISD
   Mailing Address: 301 Forrest St.
   City, State: Liberty Hill, Tx Zip: 78642
   Telephone: 512.260.5580 Fax: 512.260.5581
   Email Address: dakin@libertyhill.txed.net

5. Agent/Representative (If any):

Contact Person: Jack Garner, PE
Entity: Langan Engineering
Mailing Address: 9606 N. Mopac Expressway, Suite 110
City, State: Austin, TX Zip: 78759
Telephone: 737.289.7800 Fax: 737.289.7801
Email Address: jgarner@langan.com

6. Project Location:

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

7. ☒ The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

The school site is located at 1703 Tower Road about 1.3 miles east of 183 and 0.1 miles south of CR 258.

8. ☒ **Attachment A - Road Map**. A road map showing directions to and the location of the project site is attached. The map clearly shows the boundary of the project site.

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

☒ Project site boundaries.
☒ USGS Quadrangle Name(s).

10. ☒ **Attachment C - Project Narrative**. A detailed narrative description of the proposed project is attached. 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

11. Existing project site conditions are noted below:

☐ Existing commercial site
☐ Existing industrial site

☐ Existing residential site
☐ Existing paved and/or unpaved roads
☐ Undeveloped (Cleared)
☒ Undeveloped (Undisturbed/Not cleared)
☐ Other: _____

12. The type of project is:

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

13. Total project area (size of site): 13.50 Acres

Total disturbed area: 13.50 Acres

14. Estimated projected population: 1,000

15. The amount and type of impervious cover expected after construction is complete is shown below:

Table 1 - Impervious Cover

Impervious Cover of Proposed Project	***Sq. Ft.***	***Sq. Ft./Acre***	***Acres***
Structures/Rooftops	81,287	÷ 43,560 =	1.87
Parking	206,142	÷ 43,560 =	4.73
Other paved surfaces	53,353	÷ 43,560 =	1.22
Total Impervious Cover	340,782	÷ 43,560 =	7.82

Total Impervious Cover 7.82 **÷ Total Acreage** 13.50 **X 100 =** 57.9**% Impervious Cover**

16. ☒ **Attachment D - Factors Affecting Surface Water Quality**. A detailed description of all factors that could affect surface water quality is attached. If applicable, this includes the location and description of any discharge associated with industrial activity other than construction.

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

For Road Projects Only

Complete questions 18 - 23 if this application is exclusively for a road project.

☐ N/A

18. 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.

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

- ☐ Concrete
- ☐ Asphaltic concrete pavement
- ☐ Other: _____

20. Right of Way (R.O.W.):

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

21. Pavement Area:

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

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

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

25. ☒ Wastewater is to be discharged in the contributing zone. Requirements under 30 TAC §213.6(c) relating to Wastewater Treatment and Disposal Systems have been satisfied.

☐ N/A

26. Wastewater will be disposed of by:

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

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

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

☒ Sewage Collection System (Sewer Lines):

The sewage collection system will convey the wastewater to the South Fork WWTP (name) Treatment Plant. The treatment facility is:

☒ Existing.
☐ Proposed.

☐ N/A

Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons

Complete questions 27 - 33 if this project includes the installation of AST(s) with volume(s) greater than or equal to 500 gallons.

☒N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
1			
2			
3			
4			
5			

Total x 1.5 = _____ Gallons

28. ☐ The AST will be placed within a containment structure that is sized to capture one and one-half (1 1/2) times the storage capacity of the system. For facilities with more than

one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems.

☐ **Attachment G - Alternative Secondary Containment Methods**. Alternative methods for providing secondary containment are proposed. Specifications showing equivalent protection for the Edwards Aquifer are attached.

29. Inside dimensions and capacity of containment structure(s):

Table 3 - Secondary Containment

Length (L)(Ft.)	*Width(W)(Ft.)*	*Height (H)(Ft.)*	*L x W x H = (Ft3)*	*Gallons*

Total: _____ Gallons

30. Piping:

☐ All piping, hoses, and dispensers will be located inside the containment structure.
☐ Some of the piping to dispensers or equipment will extend outside the containment structure.
☐ The piping will be aboveground
☐ The piping will be underground

31. ☐ The containment area must be constructed of and in a material impervious to the substance(s) being stored. The proposed containment structure will be constructed of: _____.

32. ☐ **Attachment H - AST Containment Structure Drawings**. A scaled drawing of the containment structure is attached that shows the following:

☐ Interior dimensions (length, width, depth and wall and floor thickness).
☐ Internal drainage to a point convenient for the collection of any spillage.
☐ Tanks clearly labeled
☐ Piping clearly labeled
☐ Dispenser clearly labeled

33. ☐ Any spills must be directed to a point convenient for collection and recovery. Spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill.

☐ In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly.

☐ In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.

Site Plan Requirements

Items 34 - 46 must be included on the Site Plan.

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

    Site Plan Scale: 1" = 40'.

35. 100-year floodplain boundaries:

    ☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.

    ☒ No part of the project site is located within the 100-year floodplain.

    The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA FIRM Map 48491C0275F, last revised 09/26/2008 .

36. ☒ 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, etc. are shown on the site plan.

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

37. ☒ A drainage plan showing all paths of drainage from the site to surface streams.

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

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

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

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

42. ☐ Surface waters (including wetlands).

    ☒ N/A

43. ☐ Locations where stormwater discharges to surface water.

    ☒ There will be no discharges to surface water.

44. ☐ Temporary aboveground storage tank facilities.

    ☒ Temporary aboveground storage tank facilities will not be located on this site.

45. ☐ Permanent aboveground storage tank facilities.

☒ Permanent aboveground storage tank facilities will not be located on this site.

46. ☒ Legal boundaries of the site are shown.

Permanent Best Management Practices (BMPs)

Practices and measures that will be used during and after construction is completed.

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

☐ N/A

48. ☒ 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

49. ☒ 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

50. 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.

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

    ☐ **Attachment I - 20% or Less Impervious Cover Waiver**. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.

    ☒ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.

    ☐ The site will not be used for multi-family residential developments, schools, or small business sites.

52. ☒ **Attachment J - BMPs for Upgradient Stormwater**.

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

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

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

53. ☒ **Attachment K - 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.

54. ☐ **Attachment L - BMPs for Surface Streams**. A description of the BMPs and measures that prevent pollutants from entering surface streams is attached.

    ☒ N/A

55. ☒ **Attachment M - Construction Plans**. Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMPs and measures are

attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.

☐ N/A

56. ☐ **Attachment N - Inspection, Maintenance, Repair and Retrofit Plan**. A site and BMP specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all of the following:

☐ Prepared and certified by the engineer designing the permanent BMPs and measures
☒ Signed by the owner or responsible party
☐ Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit.
☐ Contains a discussion of record keeping procedures

☐ N/A

57. ☐ **Attachment O - 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

58. ☐ **Attachment P - 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 result in water quality degradation.

☒ N/A

Responsibility for Maintenance of Permanent BMPs and Measures after Construction is Complete.

59. ☐ 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.

60. ☐ 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.

Administrative Information

61. ☒ 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.

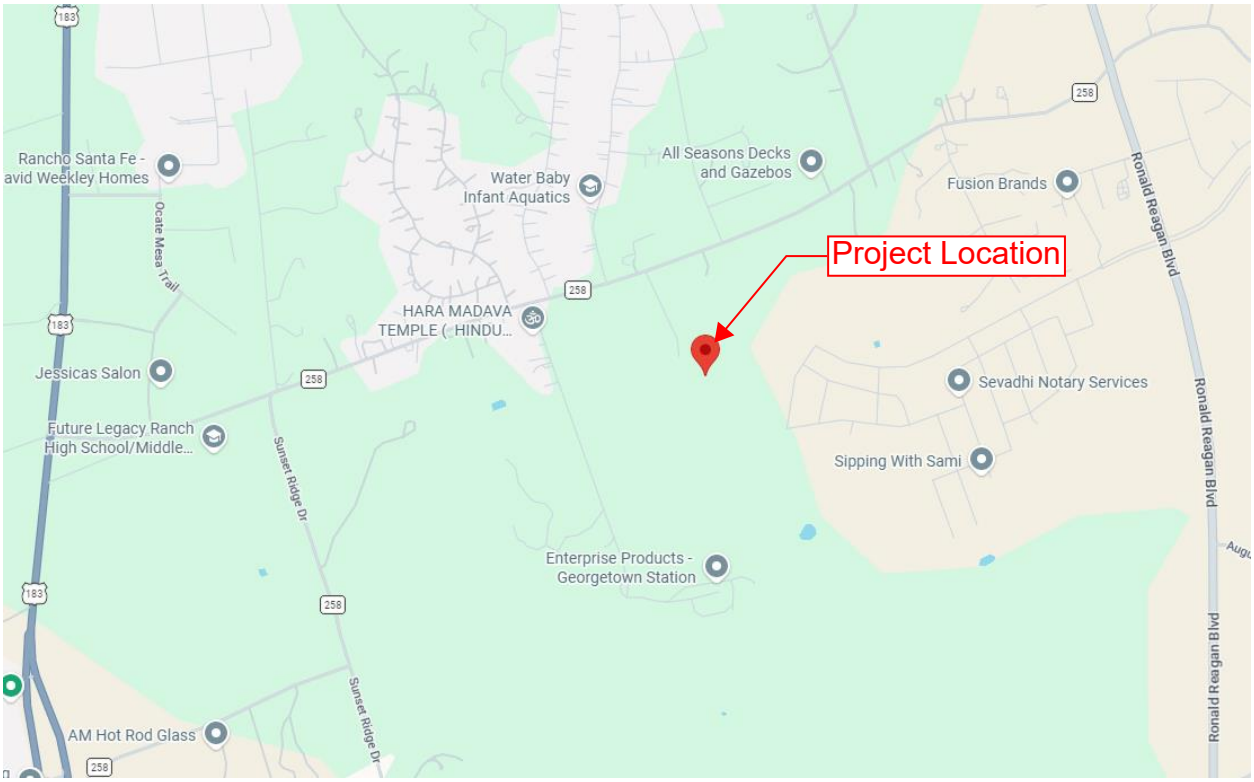
62. ☒ Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.

63. ☐ The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements of 30 TAC §213.24(1-5) have been met by the SWPPP document.

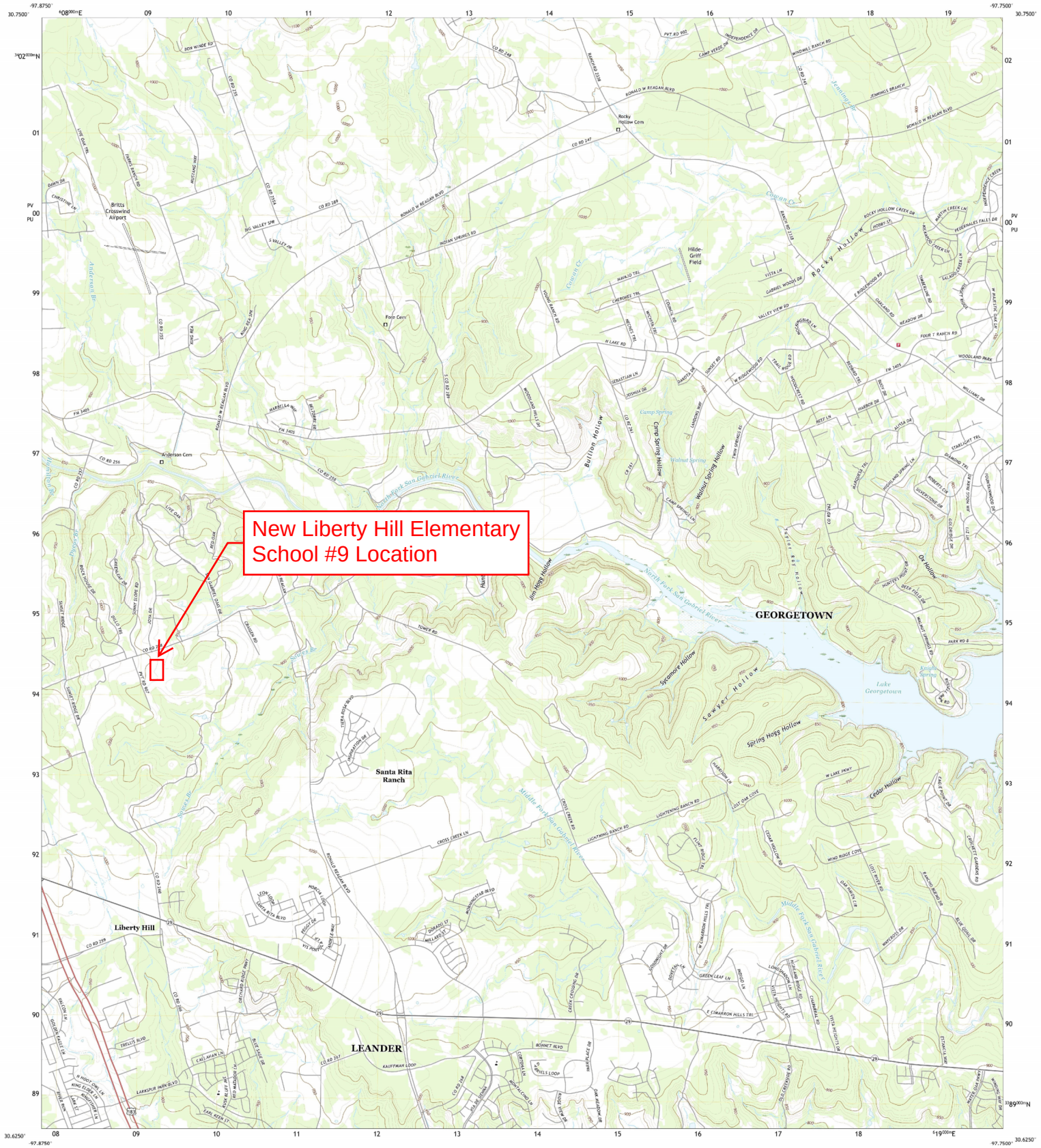
☒ The Temporary Stormwater Section (TCEQ-0602) is included with the application.

Contributing Zone Application - TCEQ Form 10257

Attachment A: Road Map



ATTACHMENT B


New Liberty Hill Elementary School #9 Location
GEORGETOWN
LEANDER
Liberty Hill
Santa Rita Ranch
Lake Georgetown
Britts Crosswind Airport
Rocky Hollow Cem
Hilde-Griff Field
Fore Cem
Anderson Cem
Middle Fork San Gabriel River
North Fork San Gabriel River
Rocky Hollow
Buffalo Hollow
Camp Spring Hollow
Walnut Spring Hollow
Sycamore Hollow
Sawyer Hollow
Spring Hogg Hollow
Cedar Hollow
Dry Hollow
Jim Hogg Hollow
Jennings Br
Anderson Br
Duck Br
Spices Br
Scotts Br
Cougar Cr
Camp Spring
Walnut Spring
Knight Spring
Ronald W Reagan Blvd
Lightning Ranch Rd
Cross Creek Ln
Bonnet Blvd
Kauffman Loop
Tower Rd
Co Rd 255
Co Rd 259
Co Rd 257
Co Rd 248
Co Rd 247
Co Rd 245
Co Rd 243
Co Rd 241
Co Rd 239
Co Rd 237
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Co Rd 25
Co Rd 23
Co Rd 21
Co Rd 19
Co Rd 17
Co Rd 15
Co Rd 13
Co Rd 11
Co Rd 9
Co Rd 7
Co Rd 5
Co Rd 3
Co Rd 1
FM 3405
FM 1431
FM 2243
FM 971
FM 1869
FM 1460
FM 1105
FM 1105
FM 1105

Contributing Zone Application - TCEQ Form 10257

Attachment C: Project Narrative

The proposed project, Liberty Hill ISD Elementary School #9 (ES #9), is a school building and campus to be built on a 13.50-acre site located at 1703 Tower Road which is about 1.3 miles east of US Highway 183 and 0.1 miles south of County Road 258. The site is located within a larger master planned development known as Saddleback at Santa Rita Ranch Phase 2, Section 1.

The plans for the subdivision were prepared by CBD. The school's storm water will drain to a regional water quality pond which is part of Phase 2 Section 1 of Saddleback Ranch. The TCEQ Edwards Aquifer Protections Program has reviewed and approved the water quality pond under project number EAPP ID #11004092 on 13 September 2024. The school's sanitary sewer system will route to the South Fork Wastewater Treatment Plant which is maintained by the city of Liberty Hill.

The site drains from the northwest to the southeast in the existing conditions. There are no off-site areas included in the project. Please see the existing drainage area map shown on plan C6.00.

There are no prior land uses of this site other than agriculture. The impervious cover proposed for the construction of the school project includes rooftops, drives, and parking areas, and totals 7.82 acres or 57.9% of the site. We have coordinated with the owner of the off-site regional detention pond to include 60% impervious cover, or 8.10 acres, for the school.

The proposed site consists of a two-story building, parking lots, access roads, a play field, and other play areas. Site runoff will flow to a subsurface stormwater drainage collection system and discharge to an existing 48" stub which flows to a proposed off-site regional water quality/detention pond located to the north of ES #9, adjacent to County Road 258.

Note that design point 1 is located at a storm manhole in the intersection of Saddleback Parkway and Tower Road. This design point was chosen as all runoff from the site will route through this point both in the existing and proposed conditions. This includes the proposed drainage areas UD-1, UD-2, and UD3 which flow into the roadway but are collected by curb inlets which route to the manhole and regional water quality pond. The pond will be a batch detention pond and is to be built and maintained by others. This regional off-site detention pond will also be utilized as a temporary sediment pond during construction activities at the school site. Discharge from this pond will ultimately be to the North Fork of the San Gabriel River.

REGIONAL BATCH DETENTION POND APPROVAL LETTER

Jon Niermann, *Chairman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 13, 2024

Mr. Stephen Ashlock
Pulte Homes of Texas, LP
9401 Amberglen Blvd., Bldg. I, Ste. 150
Austin, Texas 78729-1192

Re: Approval of a Contributing Zone Plan (CZP)
Saddleback at Santa Rita Ranch Phase 2 Section 1; Located West of Ronald Reagan Blvd. and Tower Rd.; Liberty Hill (ETJ), Williamson County, Texas
Edwards Aquifer Protection Program ID: 11004092; Regulated Entity No. RN111283701

Dear Mr. Ashlock:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the CZP application for the above-referenced project submitted to the Edwards Aquifer Protection Program (EAPP) by Carlson, Brigance & Doering, Inc. on behalf of the applicant, Pulte Homes of Texas, LP, on July 31, 2024.

As presented to the TCEQ, the application was prepared in general compliance with the requirements of 30 Texas Administrative Codes (TAC) Chapter §213. The permanent best management practices (BMPs) and measures represented in the application were prepared by a Texas licensed professional engineer (PE). All construction plans and design information were sealed, signed, and dated by a Texas licensed PE. Therefore, the application for the construction of the proposed project and methods to protect the Edwards Aquifer are approved, subject to applicable state rules and the conditions in this letter.

This approval expires two 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 officially requested. This approval or extension will expire, and no extension will be granted if more than 50 percent of the project has not been completed within ten years from the date of 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 contributing zone plan or modification to a plan. A motion for reconsideration must be filed in accordance with 30 TAC §50.139.

BACKGROUND

The Saddleback at Santa Rita Ranch Phase 1 Section 1 CZP approved by letter dated August 13, 2021 (EAPP ID No. 11002565), included the construction of three batch detention basins (Ponds S1, S2, and S3).

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 17.23 acres. The project will include the development of an amenity center, roadways, and utilities. The impervious cover will be 5.85 acres (33.95 percent). Project wastewater will be conveyed to the existing Liberty Hill Wastewater Treatment Plant.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, two existing (Ponds S2 and S3; EAPP ID No. 11002565) and one proposed batch detention basin (pond S5), designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be utilized/constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 5,092 pounds of TSS generated from the 5.85 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

STANDARD CONDITIONS

1. The plan holder (applicant) must comply with all provisions of 30 TAC Chapter §213 and all technical specifications in the approved plan. The plan holder should also acquire and comply with additional and separate approvals, permits, registrations or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, Dam Safety, Underground Injection Control) as required based on the specifics of the plan.
2. In addition to the rules of the Commission, the plan holder must also comply with state and local ordinances and regulations providing for the protection of water quality as applicable.

Prior to Commencement of Construction:

3. The plan holder of any approved contributing zone plan must notify the EAPP and obtain approval from the executive director prior to initiating any modification to the activities described in the referenced application following the date of the approval.
4. The plan holder must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the EAPP no later than 48 hours prior to commencement of the regulated activity. Notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person.
5. Temporary erosion and sedimentation (E&S) controls as described in the referenced application, 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 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.

During Construction:

6. The application must indicate the placement of permanent aboveground storage tanks facilities for static hydrocarbons and hazardous substances with cumulative storage capacity of 500 gallons or more. Subsequent permanent storage tanks on this project site require a modification to be submitted and approved prior to installation.
7. 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.
8. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge must be filtered through appropriately selected BMPs.
9. 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.

10. 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.

After Completion of Construction:

11. Owners of permanent BMPs and temporary measures must ensure that the BMPs and measures are constructed and function as designed. A Texas licensed PE **must certify** in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the EAPP within 30 days of site completion.
12. The applicant shall be 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 or the ownership of the property is transferred to the entity. A copy of the transfer of responsibility must be filed with the executive director through the EAPP within 30 days of the transfer. TCEQ form, Change in Responsibility for Maintenance on Permanent BMPs and Measures (TCEQ-10263), may be used.

The holder of the approved contributing zone plan is responsible for compliance with Chapter §213 subchapter B and any condition of the approved plan through all phases of plan implementation. Failure to comply with any condition within this approval letter is a violation of Chapter §213 subchapter B and is subject to administrative rule or orders and penalties as provided under §213.25 of this title (relating to Enforcement). Such violations may also be subject to civil penalties and injunction. Upon legal transfer of this property, the new owner is required to comply with all terms of the approved contributing zone plan.

This action is taken as delegated by the executive director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Ms. Mihaela (Miki) Chilarescu, P.E. of the Edwards Aquifer Protection Program at 512-239-6175 or the regional office at 512-339-2929.

Sincerely,

Monica Reyes

Monica Reyes, Section Manager
Edwards Aquifer Protection Program
Texas Commission on Environmental Quality

MR/mec

cc: Steven P. Cates, P.E. - Carlson, Brigance & Doering, Inc.

Contributing Zone Plan Application - TCEQ Form 10257
Attachment D: Factors Affecting Surface Water Quality

The potential factors affecting **construction period surface water quality** from this site are: sediment runoff from disturbed areas, petroleum products runoff from drips from construction equipment, pesticides and fertilizers from landscaping activities, and high pH washwater from concrete and masonry cleanup/ washout facilities. Sediment runoff will be significantly reduced during construction by the use of an onsite temporary sedimentation ponds. The high pH washwater potential will be controlled by requiring the use of appropriately sized, plastic-lined containment areas for concrete and masonry cement washout and cleanup activities. The petroleum and pesticide/ fertilizer sources will be minimized by the use of good housekeeping procedures and inspections by trained personnel to ensure that all construction activities follow the procedures given on sheet C2.00 Erosion and Sediment Control Plan included as part of the construction drawings prepared for the site.

The potential factors affecting **post-construction surface water quality** from this site are: pesticide and fertilizer runoff from vegetated areas, petroleum products runoff from parking areas and drives. Sediment runoff from the site will be significantly reduced by the action of the water quality/ detention pond with sand filter permanent BMP. Pesticide/ fertilizer runoff will be minimized by education of the school employees or outside landscaping firm relative to acceptable landscaping practices after construction activities are completed.

Contributing Zone Plan Application TCEQ Form 10257
Attachment E: Volume and Character of Stormwater

Please refer to Plan Sheets C-600, C-601, & C-608 of the construction plans for more details on the information presented below.

Pre-construction conditions: The total drainage area is 13.50 acres. Existing drainage flows from the northwest to the southeast across the site. The existing drainage areas can be found on sheet C-600. The total calculated discharge rate for the drainage areas is as shown on sheet C-608. Calculations are based on the Rational Method Q = C*I*A, as presented in the 2020 Round Rock Drainage Criteria Manual. Total peak discharge rate is calculated using the time of concentration as shown below.

PRE-DEVELOPMENT DRAINAGE AREA CALCULATIONS

Drainage Area Designation	Drainage Area	Runoff Coefficient "C"				Time of Concentration	2-Year Rainfall Intensity (I2)	2-Year Peak Discharge (Q2)	10-Year Rainfall Intensity (I10)	10-Year Peak Discharge (Q10)	25-Year Rainfall Intensity (I25)	25-Year Peak Discharge (Q25)	100-Year Rainfall Intensity (I100)	100-Year Peak Discharge (Q100)	
-	(ac)	2- Yr	10- Yr	25- Yr	100- Yr	(min)	(in/hr)	(cfs)	(in/hr)	(cfs)	(in/hr)	(cfs)	(in/hr)	(cfs)	Comments
EX-01	13.50	0.35	0.41	0.44	0.51	14	4.33	20.5	6.46	35.8	7.94	47.3	10.45	72.1	

Note: Calculations based on the Rational Method: Q = C*I*A

Post-construction conditions: The peak discharge rates for post-construction are increased leaving the site and discharge into an existing batch detention/water quality pond (EAPP 11004092). Runoff rates are mitigated in this pond and reduced to below existing conditions. The direct runoff summary from this site is shown below.

PEAK DISCHARGE AT DESIGN POINT

Design Point	Existing Conditions					Proposed Conditions				
	2-Year (cfs)	10-Year (cfs)	25-Year (cfs)	100-Year (cfs)	Comments	5-Year (cfs)	10-Year (cfs)	25-Year (cfs)	100-Year (cfs)	Comments
1	20.5	35.8	47.3	72.1	EX-01	32.1	54.1	70.7	104.3	UD-1 + UD-2 + UD-3
Total	**20.5**	**35.8**	**47.3**	**72.1**		**32.1**	**54.1**	**70.7**	**104.3**	

Contributing Plan Application TCEQ Form 10257
Attachment J: BMPs for Upgradient Stormwater

A small amount of off-site stormwater runoff upgradient of the site flows across the site. The runoff is from the residential lots and runoff has been coordinated to be captured by a wye inlet located on the school's site. The wye inlet is routed to the stormwater infrastructure which discharges into the regional water quality pond where it will be treated by the TCEQ approved pond. The design calculations and plans for the regional pond are included in EAPP 11004092.

Contributing Plan Application TCEQ Form 10257
Attachment K: BMPs for onsite stormwater

Construction Phase
Please refer to Plan Sheets C-200 (Erosion Control Plan), C-601 (Proposed Drainage Area Map), and C-800 (Erosion Control Details) of the construction plans for this construction site for more information and details about the information presented below.

Stabilization practices for this site include:

1. Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed
2. Frequent watering of excavation and fill areas to minimize wind erosion during construction.
3. Permanent seeding and planting of all unpaved areas.
4. Use of stabilization fabric for all slopes having a slope of 1V:3H or greater
5. For all disturbed areas where construction activities have temporarily or permanently ceased for more than 14 days, stabilization activities shall commence no later than the 14th day after cessation of construction activities.

Structural practices for this site include:

1. Inlet protection using block and gravel filled bags and silt fence
2. Perimeter protection using silt fencing and/or erosion control logs
3. Stabilized construction access point
4. Contractor shall provide sufficient velocity dissipation devices in the form of rock check dams and/or rock rip rap for velocity dissipation at areas with existing or potential channelized flow.

Permanent phase: water quality/ batch detention pond

An off-site water quality/ batch detention pond will be utilized as the temporary and permanent sediment pond. The pond has been designed by others in accordance with the TCEQ Edwards Aquifer Compliance Technical Guidance Manual on Best Management Practices and will be constructed by the Owner of the Santa Rita Ranch development for use as a permanent water quality and water quantity control system. The pond has been sized to have sufficient capacity to accommodate the elementary school and has been permitted under EAPP 11004092. All storm water runoff from the school site will be routed to inlets in the subsurface storm water collection system and to the batch detention pond. The pond will ultimately discharge to the North Fork San Gabriel River.

Contributing Plan Application TCEQ Form 10257
Attachment L: BMPs for surface streams

Not Applicable

Contributing Plan Application TCEQ Form 10257
Attachment M: Construction Plans

Please refer to construction plans, prepared by others, which are part of EAPP 11004092 for the off-site detention pond, for which stormwater runoff from this site has been included.

APPROVED: 11/15/2024

SADDLEBACK AT SANTA RITA RANCH PHASE 2 SECTION 1

WILLIAMSON COUNTY, TEXAS CONSTRUCTION PLANS

LOCATION MAP
SCALE: 1" = 500'

THIS PROJECT IS LOCATED WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE
A CONTRIBUTING ZONE PLAN WAS APPROVED BY TCEQ ON SEPTEMBER 13, 2024
30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 213
EDWARDS AQUIFER PROTECTION PROGRAM ID NO. 11004092
THE WASTEWATER SYSTEM WAS APPROVED BY THE TCEQ ON OCTOBER 1, 2024
30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 217
PERMIT NO. WQ0014477-001 WWPR LOG NO. 1024/004

OWNER:

PULTE HOMES OF TEXAS, LP
9401 AMBERGLEN BLVD.
BLDG. I, SUITE 150
AUSTIN, TX. 78729

ENGINEER & SURVEYOR:
CARLSON, BRIGANCE & DOERING, INC.
5501 WEST WILLIAM CANNON DRIVE
AUSTIN, TEXAS 78749
(512) 280-5160 phone
(512) 280-5165 fax

TOTAL ACREAGE: 17.139 AC
SURVEY: B. MANLOVE SURVEY,
ABSTRACT NO. 417

F.E.M.A. MAP NO. 48491C 0275E
WILLIAMSON COUNTY, TEXAS AND
INCORPORATED AREAS.
DATED: SEPTEMBER 26, 2008

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

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

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 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.

SUBMITTED BY:

9-20-2024

STEVEN P. CATES, P.E. — *DATE*
REGISTERED PROFESSIONAL ENGINEER No. 93648

ACCEPTED FOR CONSTRUCTION (PROJECT 2024-148-WD):

GEORGETOWN TEXAS *more than welcome*
City of Georgetown Water Approval Only

Approved for construction by the City of Georgetown staff on:
11/15/2024
This plan set will expire 24 months from the date of approval if the applicable conditions of UDC Section 3.17.050 are not met.

CITY OF GEORGETOWN (WATER SYSTEM ONLY) — *DATE*

ACCEPTED FOR CONSTRUCTION (PROJECT 2024-11-CON):

12/19/2024
James Herrera, Interim Public Works Director — *DATE*
(WASTEWATER SYSTEM PLAN)

12/3/2024
PAUL BRANDENBURG, CITY MANAGER — *DATE*
(WASTEWATER SYSTEM PLAN)

CITY OF LIBERTY HILL PLANNING DEPARTMENT

Based on the design engineer's certification of compliance with all applicable City, State and Federal regulations the plans and specifications contained herein have been reviewed and are found to be in compliance with the requirements of the City of Liberty Hill.

REVIEWED FOR COMPLIANCE WITH COUNTY REQUIREMENTS (WCSR 2021B):

Doug Woodall, P.E. — 11/21/2024
FOR WILLIAMSON COUNTY — *DATE*

Robert W. Pugh, P.E. — 11/22/2024
WILLIAMSON COUNTY M.U.D. #19H — *DATE*

REV. NO.	SHT. NO.	DESCRIPTION OF REVISION	ACCEPTED	DATE	ACCEPTED	DATE	ACCEPTED	DATE	ACCEPTED	DATE
			WILLIAMSON COUNTY		CITY OF GEORGETOWN		CITY OF LIBERTY HILL		W.C. M.U.D. #19H	

SHEET INDEX

1 – COVER SHEET
2 – GENERAL NOTES (1 OF 2)
3 – GENERAL NOTES (2 OF 2)
4 – DRAFT PLAT (1 OF 2)
5 – DRAFT PLAT (2 OF 2)
6 – EROSION CONTROL PLAN
7 – EROSION CONTROL NOTES & DETAILS
8 – EXISTING HYDROLOGY MAP
9 – DEVELOPED OVERALL HYDROLOGY MAP
10 – DEVELOPED SITE HYDROLOGY MAP
11 – TCEQ PROJECT AND DRAINAGE AREA MAP
12 – DRAINAGE PLAN
13 – DRAINAGE CALCS
14 – GRADING PLAN
15 – TRAFFIC CONTROL PLAN
16 – TOWER ROAD (0+00 TO 3+00)
17 – TOWER ROAD (3+00 TO 7+80)
18 – TOWER ROAD (7+80 TO END)
19 – SADDLEBACK PARKWAY (0+00 TO 2+50)
20 – SADDLEBACK PARKWAY (2+50 TO 5+00)
21 – SADDLEBACK PARKWAY (5+00 TO END)
22 – POND PLAN
23 – POND DETAILS
24 – OVERALL STORMSEWER PLAN
25 – STORMSEWER LINE A (0+00 TO END)
26 – STORMSEWER LINE B & C (0+00 TO END)
27 – STORMSEWER LINE D & E (0+00 TO END)
28 – STORMSEWER LINE F & G (0+00 TO END)
29 – STORMSEWER LATERALS
30 – OVERALL WATER PLAN
31 – WATERLINE A (0+00 TO END)
32 – WATERLINE B (0+00 TO 7+00)
33 – WATERLINE B (7+00 TO END)
34 – WASTEWATER LINE A (0+00 TO END)
35 – CONSTRUCTION DETAILS (1 OF 4)
36 – CONSTRUCTION DETAILS (2 OF 4)
37 – CONSTRUCTION DETAILS (3 OF 4)
38 – CONSTRUCTION DETAILS (4 OF 4)
39 – WATER DETAILS
40 – WASTEWATER DETAILS

ELECTRICAL DRAWING INDEX

41 – (E1.0) ELECTRICAL NOTES, SYMBOLS & ABBREVIATIONS
42 – (E1.1) ELECTRICAL SPECIFICATIONS
43 – (E2.0) ELECTRICAL SITE PLAN – NEW BATCH POND S5
44 – (E3.0) ELECTRICAL LADDER DIAGRAM
45 – (E4.0) ELECTRICAL DETAILS

DESIGNED BY: SPC | DRAFTED BY: CEL

DATE | REVISION

Carlson, Brigance & Doering, Inc.
Civil Engineering ◆ Surveying
FIRM ID #F-5791
Main Office: 5501 West William Cannon Dr. Austin, Texas 78749
North Office: 12129 RR 620 N., Ste. 600 Austin, Texas 78750
Phone No. (512) 280-5160 Fax No. (512) 280-5165

SHEET NAME: COVER SHEET
JOB NAME: SADDLEBACK AT SANTA RITA RANCH PHASE 2 SECTION 1
PROJECT: STREET, DRAINAGE, WATER, AND WASTEWATER IMPROVEMENTS

STATE OF TEXAS
STEVEN P. CATES
93648
LICENSED PROFESSIONAL ENGINEER
CARLSON, BRIGANCE & DOERING, INC.
F-5791
9-20-2024

DATE: JUNE 2024
JOB NUMBER: 5619
SHEET: 1 OF 45
SHEET NO.: 1

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LEGEND

- SF — SILT FENCE
- JH — SILT FENCE J-HOOK
- LOC — LIMITS OF CONSTRUCTION
- IP — INLET PROTECTION
- RB — ROCK BERM
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- DIVERSION BERM
- SEEDING & TOPSOIL (PERMANENT) WITHIN THE ROW ONLY
- ROLLED EROSION CONTROL MATTING, SEEDING & TOPSOIL (PERMANENT) FOR SLOPES 5:1 & STEEPER
- SEEDING & TOPSOIL (PERMANENT) FOR EASEMENTS, OPEN SPACE LOTS, AND VEGETATIVE FILTER STRIPS ON ALL SLOPES FLATTER THAN 5:1
- TOPSOIL AND DRILL SEED

*ALL AREAS DISTURBED OUTSIDE OF THE SINGLE FAMILY LOTS ARE REQUIRED TO BE REVEGETATED BY THE CONTRACTOR

0 60' 120'

SCALE: 1" = 60'

DESIGNED BY: SPC | DRAFTED BY: CEL

DATE | REVISION

Carlson, Brigance & Doering, Inc.
Civil Engineering ◆ Surveying
FIRM ID #F3791
Main Office: 5501 West William Cannon Dr. Austin, Texas 78749 Phone No. (512) 280-5160
North Office: 12129 RR 620 N. Suite 600 Austin, Texas 78750 Fax No. (512) 280-5165

SHEET NAME: EROSION CONTROL PLAN

JOB NAME: SADDLEBACK AT SANTA RITA RANCH PHASE 2 SECTION 1

PROJECT: STREET, DRAINAGE, WATER, AND WASTEWATER IMPROVEMENTS

STATE OF TEXAS
STEVEN P. CATES
93648
LICENSED PROFESSIONAL ENGINEER
CARLSON, BRIGANCE & DOERING, INC.
ID F3791
12-6-2024

DATE: JUNE 2024

JOB NUMBER: 5619

SHEET: 6 OF 45

SHEET NO.: 6

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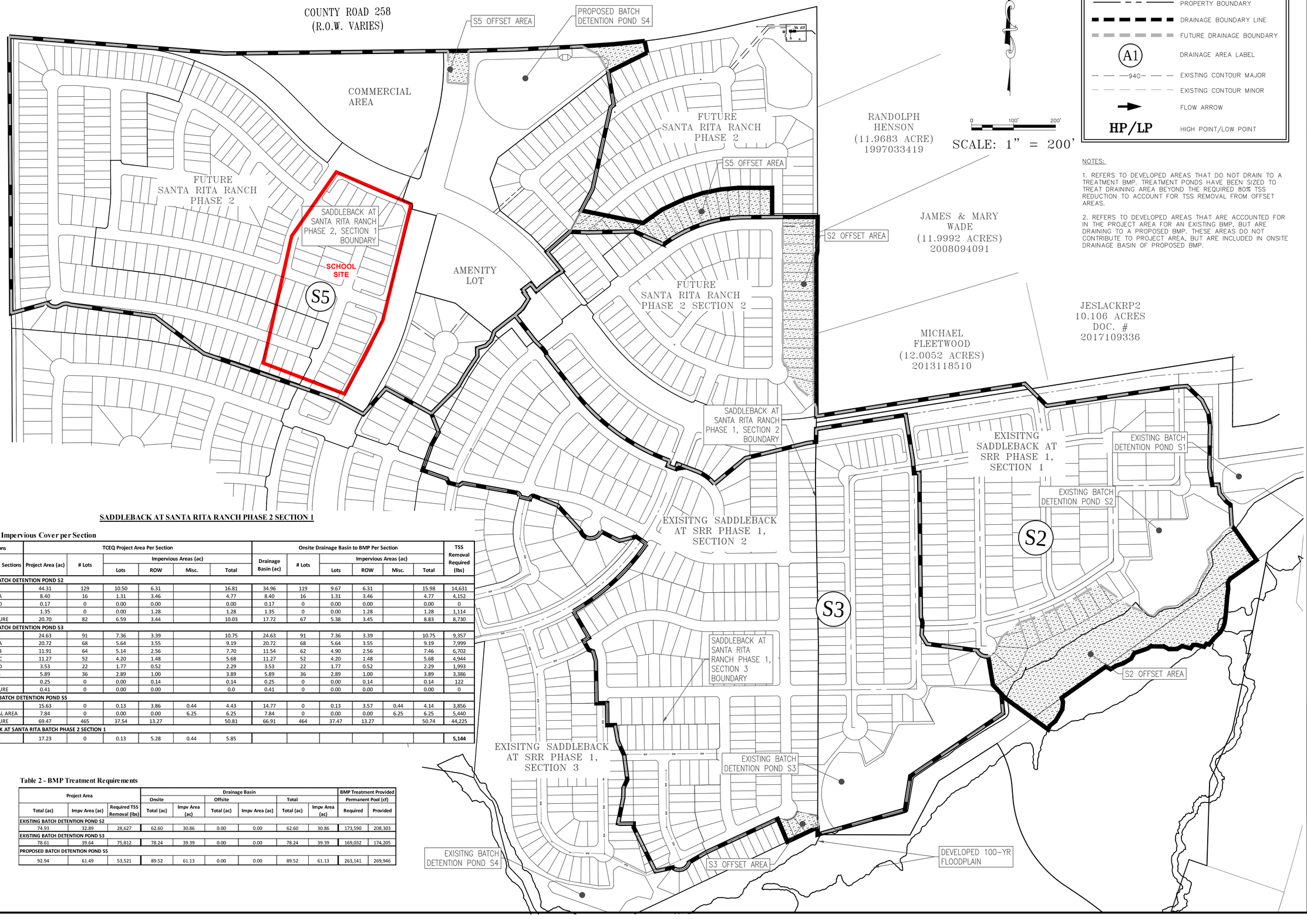

LEGEND

- PROPERTY BOUNDARY
- DRAINAGE BOUNDARY LINE
- FUTURE DRAINAGE BOUNDARY
- (A1) DRAINAGE AREA LABEL
- —940— EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- FLOW ARROW
- HP/LP HIGH POINT/LOW POINT

NOTES:

1. REFERS TO DEVELOPED AREAS THAT DO NOT DRAIN TO A TREATMENT BMP. TREATMENT PONDS HAVE BEEN SIZED TO TREAT DRAINING AREA BEYOND THE REQUIRED 80% TSS REDUCTION TO ACCOUNT FOR TSS REMOVAL FROM OFFSET AREAS.

2. REFERS TO DEVELOPED AREAS THAT ARE ACCOUNTED FOR IN THE PROJECT AREA FOR AN EXISTING BMP, BUT ARE DRAINING TO A PROPOSED BMP. THESE AREAS DO NOT CONTRIBUTE TO PROJECT AREA, BUT ARE INCLUDED IN ONSITE DRAINAGE BASIN OF PROPOSED BMP.

SADDLEBACK AT SANTA RITA RANCH PHASE 2 SECTION 1

Table 1 - Impervious Cover per Section

Sections	TCEQ Project Area Per Section						Onsite Drainage Basin to BMP Per Section						TSS Removal Required (lbs)
Contributing Sections	Project Area (ac)	# Lots	Impervious Areas (ac)				Drainage Basin (ac)	# Lots	Impervious Areas (ac)				
			Lots	ROW	Misc.	Total			Lots	ROW	Misc.	Total	
EXISTING BATCH DETENTION POND S2													
1-1	44.31	129	10.50	6.31		16.81	34.96	119	9.67	6.31		15.98	14,631
1-2A	8.40	16	1.31	3.46		4.77	8.40	16	1.31	3.46		4.77	4,152
1-2D	0.17	0	0.00	0.00		0.00	0.17	0	0.00	0.00		0.00	0
2-1	1.35	0	0.00	1.28		1.28	1.35	0	0.00	1.28		1.28	1,114
2-FUTURE	20.70	82	6.59	3.44		10.03	17.72	67	5.38	3.45		8.83	8,730
EXISTING BATCH DETENTION POND S3													
1-1	24.63	91	7.36	3.39		10.75	24.63	91	7.36	3.39		10.75	9,357
1-2A	20.72	68	5.64	3.55		9.19	20.72	68	5.64	3.55		9.19	7,999
1-2B	11.91	64	5.14	2.56		7.70	11.54	62	4.90	2.56		7.46	6,702
1-2C	11.27	52	4.20	1.48		5.68	11.27	52	4.20	1.48		5.68	4,944
1-2D	3.53	22	1.77	0.52		2.29	3.53	22	1.77	0.52		2.29	1,993
1-3	5.89	36	2.89	1.00		3.89	5.89	36	2.89	1.00		3.89	3,386
2-1	0.25	0	0.00	0.14		0.14	0.25	0	0.00	0.14		0.14	122
2-FUTURE	0.41	0	0.00	0.00		0.0	0.41	0	0.00	0.00		0.00	0
PROPOSED BATCH DETENTION POND S5													
2-1	15.63	0	0.13	3.86	0.44	4.43	14.77	0	0.13	3.57	0.44	4.14	3,856
COMERCIAL AREA	7.84	0	0.00	0.00	6.25	6.25	7.84	0	0.00	0.00	6.25	6.25	5,440
2-FUTURE	69.47	465	37.54	13.27		50.81	66.91	464	37.47	13.27		50.74	44,225
SADDLEBACK AT SANTA RITA BATCH PHASE 2 SECTION 1													
2-1	17.23	0	0.13	5.28	0.44	5.85							**5,144**

Table 2 - BMP Treatment Requirements

Project Area			Drainage Basin						BMP Treatment Provided	
			Onsite		Offsite		Total		Permanent Pool (cf)	
Total (ac)	Impv Area (ac)	Required TSS Removal (lbs)	Total (ac)	Impv Area (ac)	Total (ac)	Impv Area (ac)	Total (ac)	Impv Area (ac)	Required	Provided
EXISTING BATCH DETENTION POND S2										
74.93	32.89	28,627	62.60	30.86	0.00	0.00	62.60	30.86	173,590	208,303
EXISTING BATCH DETENTION POND S3										
78.61	39.64	75,812	78.24	39.39	0.00	0.00	78.24	39.39	169,032	174,205
PROPOSED BATCH DETENTION POND S5										
92.94	61.49	53,521	89.52	61.13	0.00	0.00	89.52	61.13	263,141	269,946

DESIGNED BY: SPC | DRAFTED BY: CEL

DATE

REVISION

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SHEET NAME: TCEQ PROJECT AND DRAINAGE AREA MAP

JOB NAME: SADDLEBACK AT SANTA RITA RANCH PHASE 2 SECTION 1

PROJECT: STREET, DRAINAGE, WATER, AND WASTEWATER IMPROVEMENTS

STATE OF TEXAS
STEVEN P. CATES
93648
LICENSED PROFESSIONAL ENGINEER
CARLSON, BRIGANCE & DOERING, INC.
ID# F3791

11-13-2024

DATE: JUNE 2024

JOB NUMBER: 5619

SHEET: 11 OF 45

SHEET NO.: 11

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FUTURE SADDLEBACK AT SANTA RITA RANCH COMMERCIAL TRACT

FUTURE SADDLEBACK AT SANTA RITA RANCH PHASE 2 SECTION 3

FUTURE SADDLEBACK AT SANTA RITA RANCH PHASE 2 SECTION 4

PROPOSED SADDLEBACK AT SANTA RITA RANCH AMENITY CENTER

SADDLEBACK PARKWAY

TOWER ROAD

CRESTED BIRD BEND

CASCABEL LOOP

ADMORE STREET

961.205

LEGEND

- PROPERTY BOUNDARY
- DRAINAGE BOUNDARY LINE
- FUTURE DRAINAGE BOUNDARY
- (A1) DRAINAGE AREA LABEL
- 940 EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- FLOW ARROW
- HP/LP HIGH POINT/LOW POINT

0 100' 200'

SCALE: 1" = 60'

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DESIGNED BY: SPC

DRAFTED BY: CEL

DATE

REVISION

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12129 RR 620 N. Ste. 600
Austin, Texas 78750
Fax No. (512) 280-5165

SHEET NAME: DRAINAGE PLAN

JOB NAME: SADDLEBACK AT SANTA RITA RANCH PHASE 2 SECTION 1

PROJECT: STREET, DRAINAGE, WATER, AND WASTEWATER IMPROVEMENTS

STATE OF TEXAS
STEVEN P. GATES
93648
LICENSED PROFESSIONAL ENGINEER

CARLSON, BRIGANCE & DOERING, INC.
ID# F3791

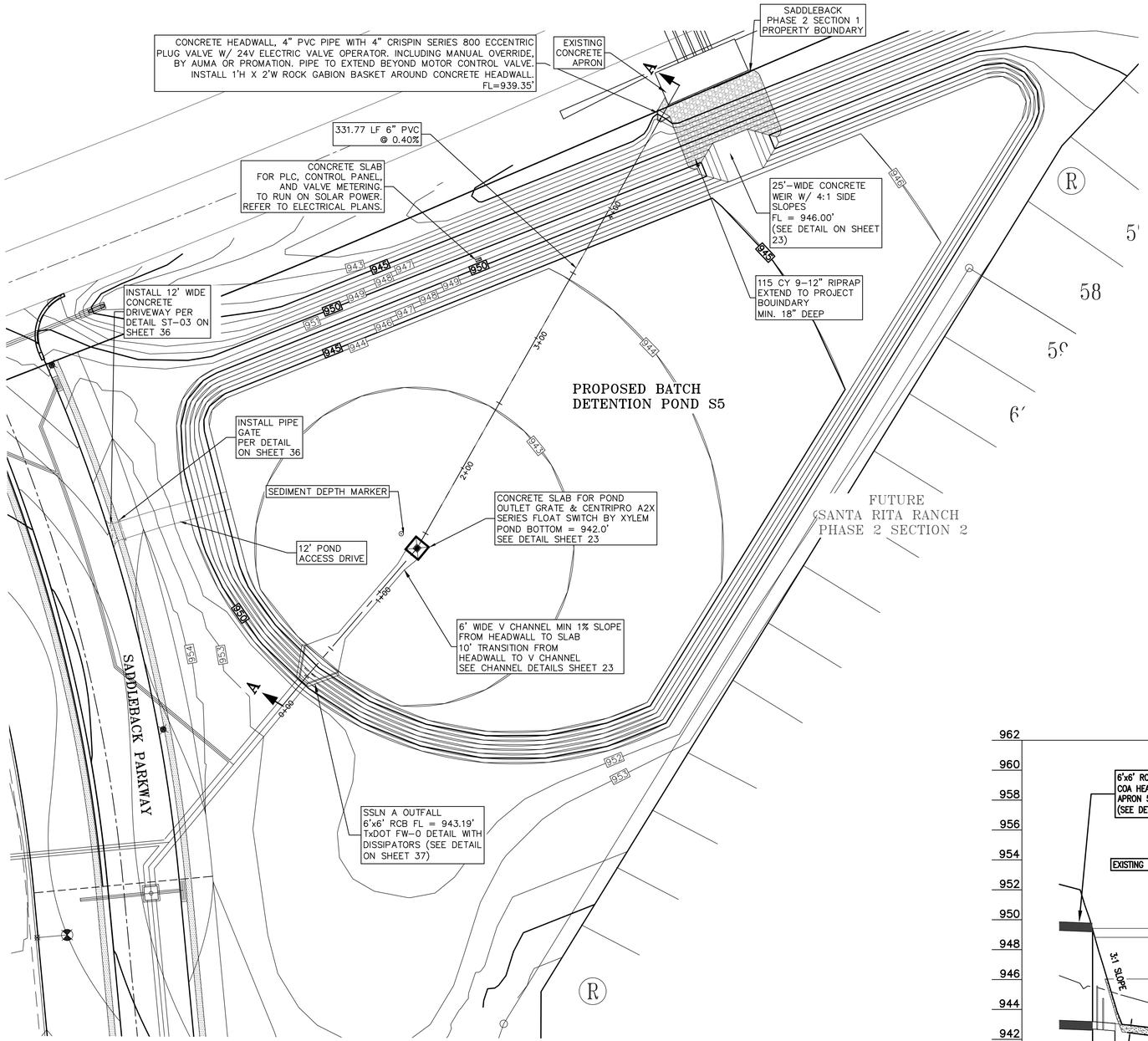
12-6-2024

DATE: JUNE 2024

JOB NUMBER: 5619

SHEET: 12 OF 45

SHEET NO.: 12



Pond S5 Stage-Storage

Stage	Area (sf)	Area (ac)	Incremental Storage (cf)	Cumulative Storage (cf)	Cumulative Storage (ac-ft)	
942.00	182	0.00	0	0	0.00	Pond Bottom
943.00	34,979	0.80	17,581	17,581	0.40	
944.00	77,026	1.77	56,003	73,583	1.69	
945.00	99,864	2.29	88,445	162,028	3.72	
946.00	115,971	2.66	107,918	**269,946**	6.20	WQV Provided
947.00	126,010	2.89	120,990	390,936	8.97	
948.00	130,723	3.00	128,366	519,302	11.92	
949.00	135,484	3.11	133,104	652,406	14.98	
950.00	140,288	3.22	137,886	790,292	18.14	
951.00	145,133	3.33	142,711	933,002	21.42	Top of Berm

*Pond S5 Stage-Storage per Saddleback at Santa Rita Ranch Phase 2, Section 1 Construction Plans

24-HR STORM EVENT	BATCH DETENTION POND 5			
	PEAK Qin (cfs)	PEAK Qout (cfs)	PEAK STORAGE (ac-ft)	PEAK ELEVATION (ft)
2-YR	189.9	116.3	10.0	947.3
10-YR	345.0	269.8	13.0	948.3
25-YR	436.2	350.8	14.4	948.8
100-YR	578.0	477.9	16.4	949.4

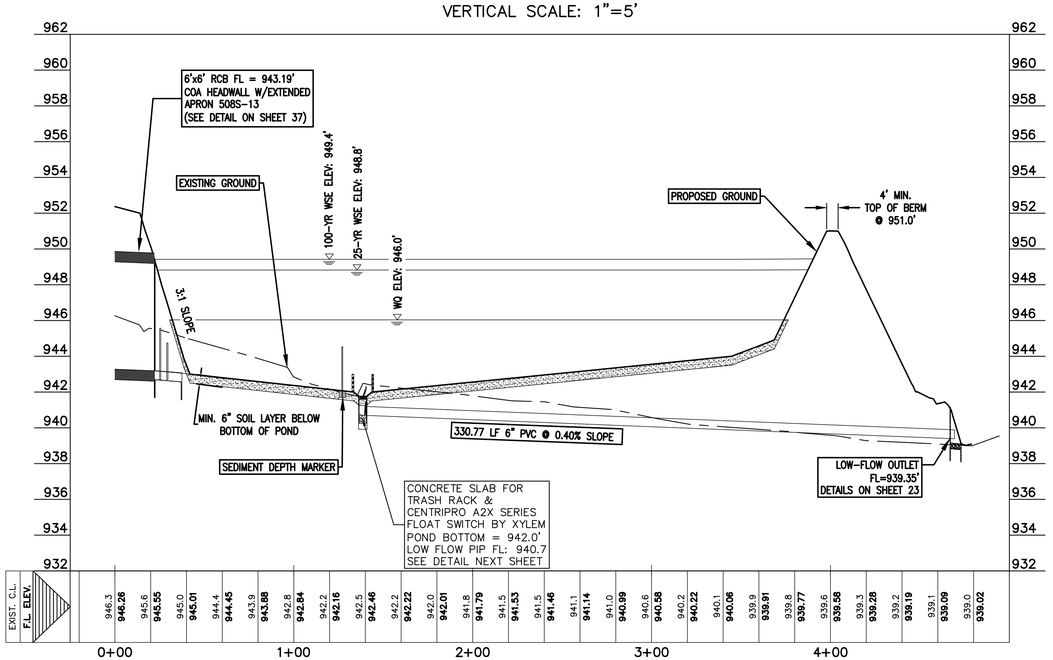
BATCH POND 1 LOW-FLOW ORIFICE CALCULATION

Orifice Equation: $Q = C_0 A^* (2^*g^*h)^{0.5}$

WQ Volume (cf) =	269,946
WQ Elevation (ft) =	946.00
Max. Drawdown Time (hr) =	48
Orifice Coefficient =	0.60
Orifice Diameter (in) =	6.00
Center Elev. At Discharge (ft) =	939.97
Head at 1/2 Volume (ft) =	4.72
Qavg (cfs) =	2.05
Drain Time (hr) =	**36.5**

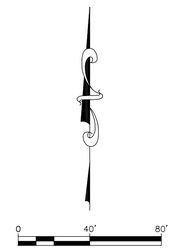
POND SECTION A-A

HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'



LEGEND

- 936 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 930 PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- FLOW ARROW



SCALE: 1" = 40'

NOTES:

1. THIS BATCH DETENTION POND WILL REQUIRE AN IMPERMEABLE LINER ACCORDING TO SECTION 3.4.2. OF TCEQ PUBLICATION RG 348. SEE SHEET 23 FOR IMPERMEABLE LINER & PROTECTIVE SOIL LAYER NOTES AND SPECIFICATIONS.

DESIGNED BY: SPC | DRAFTED BY: CEL

DATE

REVISION

Carlson, Brigance & Doering, Inc.
Civil Engineering ◆ Surveying
FIRM ID #F3791
Main Office: 5501 West William Cannon Dr. Austin, Texas 78749 Phone No. (512) 280-5160
North Office: 12129 RR 620 N. Suite 600 Austin, Texas 78750 Fax No. (512) 280-5165

SHEET NAME: POND PLAN

JOB NAME: SADDLEBACK AT SANTA RITA RANCH PHASE 2 SECTION 1

PROJECT: STREET, DRAINAGE, WATER, AND WASTEWATER IMPROVEMENTS

STATE OF TEXAS
STEVEN P. CATES
93648
LICENSED PROFESSIONAL ENGINEER

CARLSON, BRIGANCE & DOERING, INC.
ID# F3791

3-4-2025

DATE: JUNE 2024

JOB NUMBER: 5619

SHEET: 22 OF 45

SHEET NO.: 22

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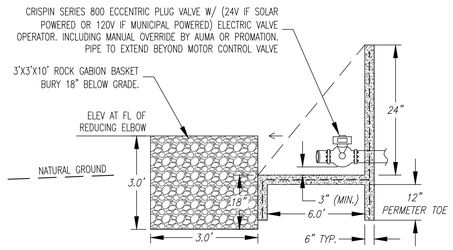
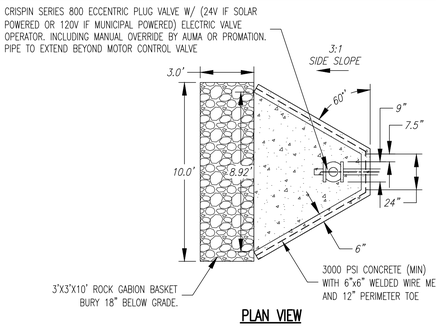


PROFILE VIEW

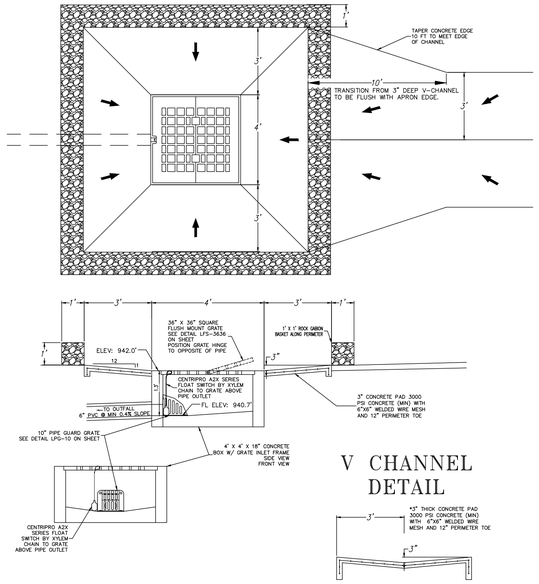


PLAN VIEW

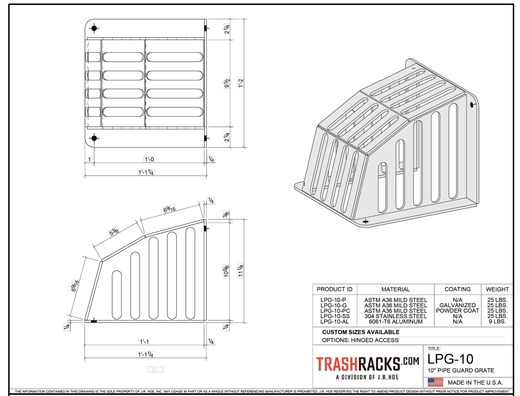
HEADWALL WITH PLUG VALVE DETAIL

N.T.S.

POND OUTLET GRATE DETAIL N.T.S.



V CHANNEL DETAIL



PRODUCT ID	MATERIAL	COATING	WEIGHT
LPG-10-P	ASTM A36 MILD STEEL	N/A	25 LBS.
LPG-10-G	ASTM A36 MILD STEEL	GALVANIZED	25 LBS.
LPG-10-PC	ASTM A36 MILD STEEL	POWDER COAT	25 LBS.
LPG-10-SS	304 STAINLESS STEEL	N/A	25 LBS.
LPG-10-AL	6061-T6 ALUMINUM	N/A	9 LBS.

CUSTOM SIZES AVAILABLE
OPTIONS: HINGED ACCESS

TRASHRACKS.COM — A DIVISION OF J.R.HOE

TITLE: LPG-10
10" PIPE GUARD GRATE

MADE IN THE U.S.A.

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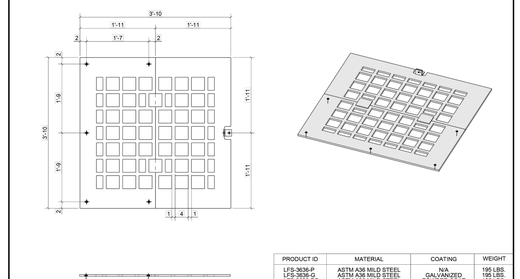


PRODUCT ID	MATERIAL	COATING	WEIGHT
LFS-3636-P	ASTM A36 MILD STEEL	N/A	195 LBS.
LFS-3636-PC	ASTM A36 MILD STEEL	GALVANIZED POWDER COAT	195 LBS.
LFS-3636-SS	304 STAINLESS STEEL	N/A	195 LBS.
LFS-3636-AL	6061-T6 ALUMINUM		66 LBS.

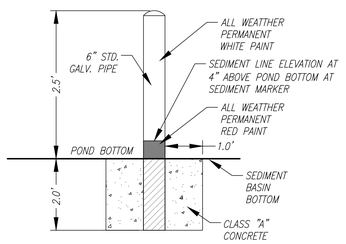
CUSTOM SIZES AVAILABLE
OPTIONS: HINGED ACCESS, ANTI-VORTEX PLATE

TRASHRACKS.COM — A DIVISION OF J.R.HOE

TITLE: LFS-3636
36" X 36" SQUARE FLUSH MOUNT GRATE

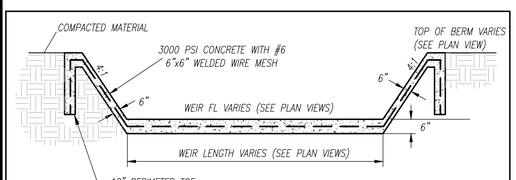
MADE IN THE U.S.A.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF J.R. HOE, INC. ANY USAGE IN PART OR AS A WHOLE WITHOUT REFERENCING MANUFACTURER IS PROHIBITED. J.R. HOE RESERVES THE RIGHT TO MAKING PRODUCT DESIGN WITHOUT PRIOR NOTICE FOR PRODUCT IMPROVEMENT



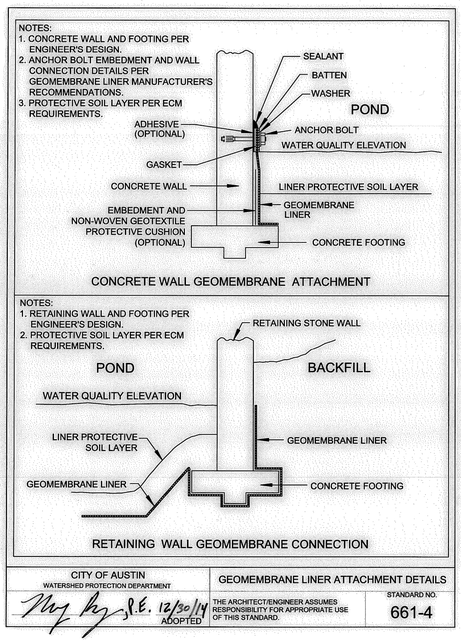
CONCRETE FILLED FIXED SEDIMENT MARKER

N.T.S.

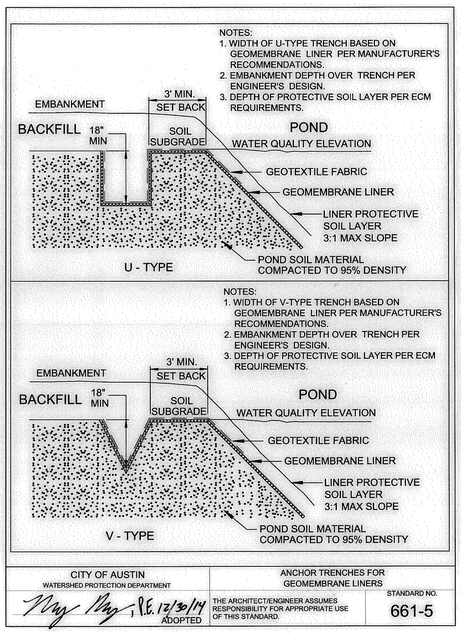


WEIR DETAIL

N.T.S.



CITY OF AUSTIN — WATERSHED PROTECTION DEPARTMENT	GEOMEMBRANE LINER ATTACHMENT DETAILS
ADOPTED 12/30/14	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
	STANDARD NO. 661-4



CITY OF AUSTIN — WATERSHED PROTECTION DEPARTMENT	ANCHOR TRENCHES FOR GEOMEMBRANE LINERS
ADOPTED 12/30/14	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
	STANDARD NO. 661-5

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN:

TEMPORARY BMP'S:

BEST MANAGEMENT PRACTICES (BMP' S) INSTALLED DURING CONSTRUCTION WILL BE MAINTAINED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EPA'S NPDES STORMWATER POLLUTION PREVENTION PROGRAM. THE CONSTRUCTION SUPERINTENDENT WILL INSPECT TEMPORARY EROSION CONTROLS ON A REGULAR BASIS AND ADJUST THE CONTROLS AND/OR REMOVE ANY SEDIMENT BUILDUP IN ACCORDANCE WITH THE EROSION/SEDIMENTATION CONTROL NOTES AND AS OTHERWISE DIRECTED BY THE OWNER OR HIS DESIGNATED REPRESENTATIVE. TEMPORARY EROSION CONTROLS SHOULD BE INSPECTED, MAINTAINED, AND REPAIRED, AT A MINIMUM, EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS OF A STORM OF 0.5 INCHES OR MORE RAINFALL DEPTH. SEDIMENT SHALL BE REMOVED FROM CONTROLS WHEN 50% OF THE DESIGN HEIGHT IS EXCEEDED. FOLLOWING INSPECTION OF THE BMP'S, DEFICIENCIES SHALL BE NOTED AND CORRECTED BY THE CONTRACTOR.

PERMANENT BMP:

BATCH DETENTION BASINS

- INSPECTIONS. BASINS SHOULD BE INSPECTED AT LEAST TWICE A YEAR (ONCE DURING OR IMMEDIATELY FOLLOWING WET WEATHER) TO EVALUATE FACILITY OPERATION. WHEN POSSIBLE, INSPECTIONS SHOULD BE CONDUCTED DURING WET WEATHER TO DETERMINE IF THE POND IS MEETING THE TARGET DETENTION TIME OF 12 HOURS AND A DRAWDOWN OF NO MORE THAN 48 HOURS. IN PARTICULAR, THE DETENTION CONTROL DEVICE SHOULD BE REGULARLY INSPECTED FOR EVIDENCE OF CLOGGING, OR CONVERSELY, FOR TOO RAPID A RELEASE. IF THE DETENTION TIME IS LESS THAN 12 HOURS OR THE DRAWDOWN TIME IS EXCEEDED BY MORE THAN 24 HOURS, THEN REPAIRS SHOULD BE SCHEDULED IMMEDIATELY. DURING EACH INSPECTION, EROSION AREAS INSIDE AND DOWNSTREAM OF THE BMP SHOULD BE IDENTIFIED AND REPAIRED OR REVEGETATED IMMEDIATELY.
- MOWING. THE BASIN, SIDE SLOPES, EMBANKMENT, AND EMERGENCY SPILLWAY OF A BATCH DETENTION BASIN MUST BE MOWED REGULARLY TO DISCOURAGE WOODY GROWTH AND CONTROL WEEDS. GRASS AREAS IN AND AROUND BASINS SHOULD BE MOWED AT LEAST TWICE ANNUALLY TO LIMIT VEGETATION HEIGHT TO 18 INCHES. MORE FREQUENT MOWING TO MAINTAIN AESTHETIC APPEAL MAY BE NECESSARY IN LANDSCAPED AREAS. WHEN MOWING OF GRASS IS PERFORMED, A MULCHING MOWER SHOULD BE USED, OR GRASS CLIPPINGS SHOULD BE CAUGHT AND REMOVED.
- DEBRIS AND LITTER REMOVAL. DEBRIS AND LITTER WILL ACCUMULATE NEAR THE DETENTION CONTROL DEVICE AND SHOULD BE REMOVED DURING REGULAR MOWING OPERATIONS AND INSPECTIONS. PARTICULAR ATTENTION SHOULD BE PAID TO FLOATING DEBRIS THAT CAN EVENTUALLY CLOG THE CONTROL DEVICE OR RISER.
- EROSION CONTROL. THE BASIN SIDE SLOPES, EMERGENCY SPILLWAY, AND EMBANKMENT ALL MAY PERIODICALLY SUFFER FROM SLUMPING AND EROSION, ALTHOUGH THIS SHOULD NOT OCCUR OFTEN IF THE SOILS ARE PROPERLY COMPACTED DURING CONSTRUCTION. REGRADING AND REVEGETATION MAY BE REQUIRED TO CORRECT THE PROBLEMS.
- STRUCTURAL REPAIRS AND REPLACEMENT. WITH EACH INSPECTION, ANY DAMAGE TO THE STRUCTURAL ELEMENTS OF THE SYSTEM (PIPES, CONCRETE DRAINAGE STRUCTURES, RETAINING WALLS, ETC.) SHOULD BE IDENTIFIED AND REPAIRED IMMEDIATELY. THESE REPAIRS SHOULD INCLUDE PATCHING OF CRACKED CONCRETE, SEALING OF VOIDS, AND REMOVAL OF VEGETATION FROM CRACKS AND JOINTS. THE VARIOUS INLET/OUTLET AND RISER WORKS IN A BASIN WILL EVENTUALLY DETERIORATE AND MUST BE REPLACED. PUBLIC WORKS EXPERTS HAVE ESTIMATED THAT CORRUGATED METAL PIPE (CMP) HAS A USEFUL LIFE OF ABOUT 25 YR, WHEREAS REINFORCED CONCRETE BARRELS AND RISERS MAY LAST FROM 50 TO 75 YR.
- NUISANCE CONTROL. STANDING WATER MAY OCCUR AFTER A STORM EVENT SINCE THE VALVE MAY CLOSE WITH 2 TO 3 INCHES OF WATER IN THE BASIN. FLOW SUCH AS SPRING FLOW AND RESIDENTIAL WATER USE MAY DISCHARGE INTO THE BASIN BETWEEN STORM EVENTS THAT DO NOT ENGAGE THE LEVEL SENSOR. STANDING WATER CAN CREATE NUISANCE CONDITIONS FOR NEARBY RESIDENTS. ODORS, MOSQUITOES, WEEDS, AND LITTER ARE ALL OCCASIONALLY PERCEIVED TO BE PROBLEMS. MOST OF THESE PROBLEMS ARE GENERALLY A SIGN THAT REGULAR INSPECTIONS AND MAINTENANCE ARE NOT BEING PERFORMED (E.G., MOWING, DEBRIS REMOVAL, CLEARING THE OUTLET CONTROL DEVICE). TWICE A YEAR, THE FACILITY SHOULD BE EVALUATED FOR NUISANCE CONTROL.
- SEDIMENT REMOVAL. WHEN PROPERLY DESIGNED, BATCH DETENTION BASINS WILL ACCUMULATE QUANTITIES OF SEDIMENT OVER TIME. SEDIMENT ACCUMULATION IS A SERIOUS MAINTENANCE CONCERN IN BATCH DETENTION PONDS FOR SEVERAL REASONS. FIRST, SEDIMENT ACCUMULATION CAN MAKE BATCH DETENTION BASINS VERY UNSIGHTLY. SECOND, THE SEDIMENT DEPOSITION GRADUALLY REDUCES AVAILABLE STORAGE CAPACITY RESERVED FOR POLLUTANT REMOVAL AND DETENTION WITHIN THE BASIN. THIRD, SEDIMENT TENDS TO ACCUMULATE AROUND THE OUTLET CONTROL DEVICE. THIS INCREASES THE RISK OF CLOGGING THE ORIFICE OR INTERFERING WITH THE LEVEL SENSOR, WHICH CAN IN TURN REDUCE THE TREATMENT EFFICACY OF THE FACILITY. SEDIMENT CAN BE RESUSPENDED IF ALLOWED TO ACCUMULATE OVER TIME AND ESCAPE THROUGH THE HYDRAULIC CONTROL TO DOWNSTREAM CHANNELS AND STREAMS. FOR THESE REASONS, ACCUMULATED SEDIMENT NEEDS TO BE REMOVED FROM THE BASIN WHEN SEDIMENT DEPTH EXCEEDS 6 INCHES, WHEN SEDIMENT INTERFERES WITH THE LEVEL SENSOR, WHEN THE BASIN DOES NOT DRAIN WITHIN 48 HOURS, OR AT LEAST EVERY 5 YEARS.
- LOGIC CONTROLLER. THE LOGIC CONTROLLER SHOULD BE INSPECTED AS PART OF THE TWICE YEARLY INSPECTIONS. 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.

ULTIMATELY, THESE FACILITIES WILL BE OWNED, OPERATED AND MAINTAINED BY THE PROPOSED WILLIAMSON COUNTY MUD NO. 19C UNTIL THE OWNERSHIP OF FACILITIES IS TRANSFERRED TO THE MUD, SANTA RITA C7 INVESTMENTS LLC WILL BE RESPONSIBLE FOR MAINTENANCE OF THESE FACILITIES IN ACCORDANCE WITH THE ABOVE STATED REQUIREMENTS.

PROTECTIVE SOIL LAYER NOTES

THE WET AND BATCH DETENTION PONDS WILL BE CONSTRUCTED WITH A MINIMUM DEPTH OF 6" OF A PROTECTION SOIL LAYER

MATERIAL SHOULD CONSIST OF SOIL THAT CLASSIFIES PER USDA STANDARDS AS A SANDY CLAY LOAM, SANDY CLAY, OR CLAY LOAM. THE SOIL SHALL BE FREE OF ORGANICS AND ANGULAR/SHARP MATERIALS, AND SHALL CONTAIN NO MATERIALS GREATER THAN 1" IN DIAMETER. MATERIAL TO BE PLACED AND COMPACTED IN TWO UNIFORM LIFTS.

TABLE 3-6 CLAY LINER SPECIFICATIONS (COA, 2004)

PROPERTY	TEST METHOD	UNIT	SPECIFICATION (MIN.)
PERMEABILITY	ASTM D-2434	%	1×10^{-6}
PLASTICITY INDEX OF CLAY	ASTM D-423 & D-424	%	NOT LESS THAN 15
LIQUID LIMIT OF CLAY	ASTM D-2216	%	NOT LESS THAN 30
CLAY PARTICLES PASSING	ASTM D-422	%	NOT LESS THAN 30
CLAY COMPACTION	ASTM D-2216	%	95% OF STANDARD PROCTOR DENSITY

IF A GEOMEMBRANE LINER IS USED IT SHOULD HAVE A MINIMUM THICKNESS OF 30 MILS AND BE ULTRAVIOLET RESISTANT. THE GEOTEXTILE FABRIC (FOR PROTECTION OF GEOMEMBRANE) SHOULD BE NONWOVEN GEOTEXTILE FABRIC AND MEET THE SPECIFICATIONS IN TABLE 3-7.

TABLE 3-7 GEOTEXTILE FABRIC SPECIFICATIONS (COA, 2004)

PROPERTY	TEST METHOD	UNIT	SPECIFICATION (MIN.)
UNIT WEIGHT		OZ/YD²	8
FILTRATION RATE		IN/SEC	0.0800
PUNCTURE STRENGTH	ASTM D-751*	lb	125
MULLEN BURST STRENGTH	ASTM-D751	psi	400
TENSILE STRENGTH	ASTM D-1682	lb	200
EQUIV. OPENING SIZE	US STANDARD SIEVE	No.	80
	*MODIFIED		

PROTECTIVE SOIL LAYER NOTES

THE WET AND BATCH DETENTION PONDS WILL BE CONSTRUCTED WITH A MINIMUM OF 12" OF A PROTECTION SOIL LAYER ABOVE THE SELECTED IMPERMEABLE LINER SO THAT PLANTINGS CAN BE PROPERLY INSTALLED ABOVE THE LINER AND LINER INTEGRITY CAN BE MAINTAINED.

MATERIAL PLACED OVER LINER TO CONSIST OF SOIL THAT CLASSIFIES PER USDA STANDARDS AS A SANDY CLAY LOAM, SANDY CLAY, OR CLAY LOAM. THE SOIL SHALL BE FREE OF ORGANICS AND ANGULAR/SHARP MATERIALS, AND SHALL CONTAIN NO MATERIALS GREATER THAN 1" IN DIAMETER. MATERIAL TO BE PLACED AND COMPACTED IN TWO UNIFORM LIFTS.

DESIGNED BY: SPC | DRAFTED BY: CEL

DATE | REVISION

Carlson, Brigance & Doering, Inc.
Civil Engineering ◆ Surveying
FIRM ID #F3791
Main Office: 5501 West William Cannon Dr. Austin, Texas 78749 | Phone No. (512) 280-5160
North Office: 12129 Rib House Dr. #600 Austin, Texas 78758 | Fax No. (512) 280-5165

SHEET NAME: POND DETAILS

JOB NAME: SADDLEBACK AT SANTA RITA RANCH PHASE 2 SECTION 1

PROJECT: STREET, DRAINAGE, WATER, AND WASTEWATER IMPROVEMENTS

STATE OF TEXAS — STEVEN P. CATES — 93648 — LICENSED PROFESSIONAL ENGINEER

CARLSON, BRIGANCE & DOERING, INC. ID# F3791

3-4-2025

DATE: JUNE 2024

JOB NUMBER: 5619

SHEET: 23 OF 45

SHEET NO.: 23

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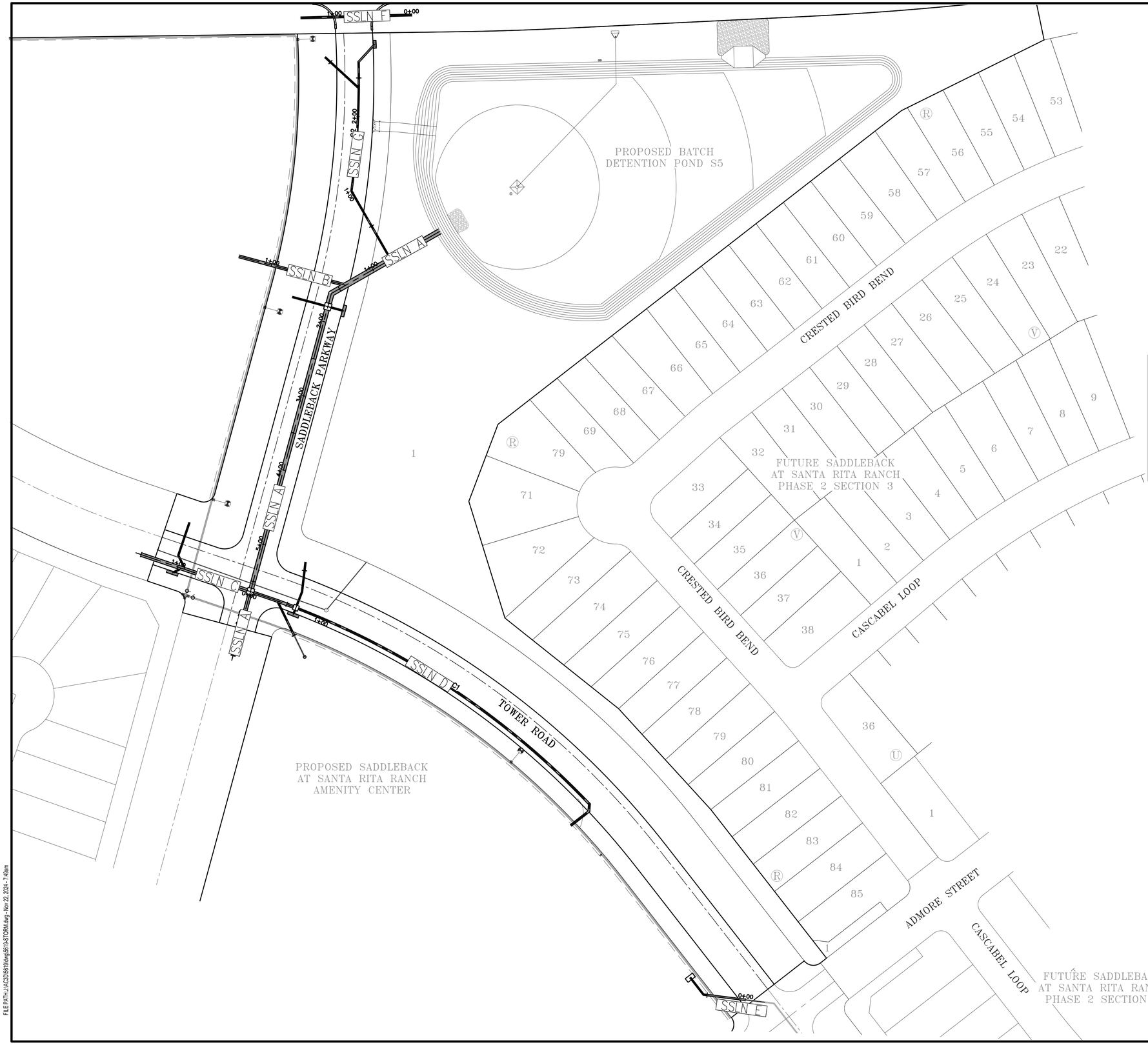

0 60' 120'

SCALE: 1" = 60'

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24 – HOURS PRIOR TO COMMENCING CONSTRUCTION.

NOTES:

1. THE DESIGN INTENT OF THESE PLANS IS FOR ALL CONNECTIONS, BENDS, AND REDUCTIONS TO BE MADE WITH PRE-CAST FITTINGS MANUFACTURED IN ACCORDANCE WITH ASTM C-76, CLASS 3 REQUIREMENTS. IF THE CONTRACTOR ELECTS TO USE ALTERNATE CONNECTION METHODS THEN A SUBMITTAL SHALL BE APPROVED BY THE ENGINEER AND WILLIAMSON COUNTY PRIOR TO COMMENCING PIPE LAYING OPERATIONS.
2. WHERE STORM DRAINAGE IS SHOWN TO BE INSTALLED ON A CURVE THE CONTRACTOR SHALL SUBMIT A LAYING SCHEDULE DEMONSTRATING ANTICIPATED JOINT SEPARATIONS USING 8' JOINTS, A COMBINATION OF 8' AND 4' JOINTS, OR LONG RADIUS PIPE TO ACHIEVE THE NECESSARY RADIUS WITHOUT EXCESSIVE JOINT SEPARATION. PROPOSED INSTALLATION METHOD SHALL BE APPROVED BY THE ENGINEER AND WILLIAMSON COUNTY PRIOR TO COMMENCING PIPE LAYING OPERATIONS.

DESIGNED BY: SPC	DRAFTED BY: CEL

DATE	REVISION

Carlson, Brigance & Doering, Inc.
Civil Engineering ◆ Surveying
FIRM ID #F3791
Main Office: 5501 West William Cannon Dr. Austin, Texas 78749 Phone No. (512) 280-5160
North Office: 1212 RR 620 N, Suite 600 Austin, Texas 78750 Fax No. (512) 280-5165

SHEET NAME: OVERALL STORMSEWER PLAN

JOB NAME: SADDLEBACK AT SANTA RITA RANCH PHASE 2 SECTION 1

PROJECT: STREET, DRAINAGE, WATER, AND WASTEWATER IMPROVEMENTS

STATE OF TEXAS
STEVEN P. CATES
93648
LICENSED PROFESSIONAL ENGINEER
CARLSON, BRIGANCE & DOERING, INC.
ID# F3791

11-14-2024

DATE: JUNE 2024

JOB NUMBER: 5619

SHEET: 24 OF 45

SHEET NO.: 24

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Contributing Plan Application TCEQ Form 10257
Attachment N: Inspection, maintenance, repair, and retrofit plan for sand filter

The Owner of the off-site stormwater detention pond, which is part of EAPP 11004092, is responsible for the inspection, maintenance, repair, and record keeping procedures for the detention pond designed to serve this site.

FOR REGIONAL DETENTION POND BY OTHERS

Contributing Zone Plan Application

ATTACHMENT N

TCEQ CZP APPLICATION

Saddleback at Santa Rita Ranch Phase 1 Section 3

Williamson County, Texas

Inspection, Maintenance, Repair and Retrofit Plan:

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.

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

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

- ***Litter and Debris Removal***. Litter and debris removal should take place at least twice a year, as part of the periodic mowing operations and inspections. Debris and litter should be removed from the surface of the basin. Particular attention should be paid to floatable debris around the outlet structure. The outlet should be checked for possible clogging or obstructions and any debris removed.

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

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

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

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

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

Ultimately, these facilities will be owned, operated and maintained by the proposed Williamson County MUD No. 19C. Until the ownership of facilities is transferred to the MUD, SRFV Development, LLC. will be responsible for maintenance of these facilities in accordance with the above stated requirements.

Acknowledged by: _____

Stephen Ashlock
Pulte Homes of Texas, LP.

BMP DESIGN FIRM INFORMATION

Carlson, Brigance & Doering, Inc.
Mr. Steven P. Cates, P.E.
Phone: (512) 280-5160
5501 West William Cannon
Austin, TX 78749

The above Inspection, Maintenance, Repair, and Retrofit Plan has been prepared by the undersigned Engineer, and I hereby certify that the above Plan conforms with the minimum requirements of the TCEQ Technical Guidance on Best Management Practices, RG-348.

Steven P. Cates, P.E.

7-5-2024
Date

STATE OF TEXAS
STEVEN P. CATES
93648
LICENSED
PROFESSIONAL ENGINEER
CARLSON, BRIGANCE & DOERING, INC.
ID# F-3791

Contributing Plan Application TCEQ Form 10257
Attachment P: Measures for minimizing surface stream contamination

An Owner's representative shall visually inspect all roof drains and drive/ parking area inlets in the collection system at a minimum interval of every 3 months, and at least once during or immediately following wet weather. Specific items to be observed are: the amount of sediment and/or trash buildup at inlets (removal required if > 10% of the inlet opening is blocked), the presence of standing water or soggy conditions, indicative of poor drainage, and damage to structural components (pipes, curb inlets, grate inlets, etc…)

The stormwater runoff from this site will flow into an on-site water quality/ detention pond built and maintained by others (see EAPP 11004092), before passing into the North Fork San Gabriel River. These combined on-site and off-site practices will provide effective measures to minimize surface stream contamination.

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.

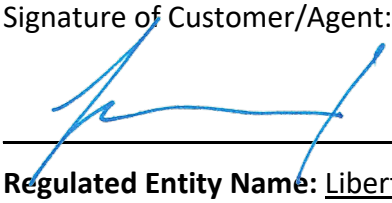
Signature

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: Jack Garner, PE

Date: 12/05/2025

Signature of Customer/Agent:



Regulated Entity Name: Liberty Hill Elementary School #9

Project Information

Potential Sources of Contamination

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

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

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

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

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

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

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

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

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

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

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

Sequence of Construction

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

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

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

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

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

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

☒ N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

Temporary Stormwater Management Practices TCEQ Form 0602
Attachment A Spill Response Actions

SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN

1 MATERIALS COVERED

The following materials or substances with known hazardous properties are expected to be present onsite during construction:

Concrete	Cleaning solvents
Detergents	Petroleum based products
Paints	Pesticides
Paint solvents	Acids
Fertilizers	Concrete additives
Soil stabilization additives	

2 MATERIAL MANAGEMENT PRACTICES

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff.

2.1 Good Housekeeping

The following good housekeeping practices will be followed onsite during the construction project.

A. An effort will be made to store only enough product required to do the job.

B. All materials stored onsite will be stored in a neat, orderly manner and, if possible, under a roof or other enclosure.

C. Products will be kept in their original containers with the original manufacturer's label in legible condition.

D. Substances will not be mixed with one another unless recommended by the manufacturer.

E. Whenever possible, all of a product will be used up before disposing of the container.

F. Manufacturer's recommendations for proper use and disposal will be followed.

G. The job site superintendent will be responsible for daily inspections to ensure proper use and disposal of materials.

2.2 Hazardous Products
These practices will be used to reduce the risks associated with hazardous materials.

A. Products will be kept in original containers with the original labels in legible condition.

B. Original labels and material safety data sheets (MSDS's) will be procured and used for each material.

C. If surplus product must be disposed of, manufacturers or local/state/federal recommended methods for proper disposal will be followed.

D. A spill control and containment kit (containing, for example, absorbent such as kitty litter or sawdust, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided at the storage site.

E. All of the product in a container will be used before the container is disposed of. All such containers will be triple rinsed with water prior to disposal. The rinse water used in these containers will be disposed of in a manner in compliance with state and federal regulations and will not be allowed to mix with stormwater discharges.

2.3 Product Specific Practices

The following product specific practices will be followed on the job site.

A. Petroleum Products

All onsite vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any petroleum storage tanks used onsite will have a dike or berm containment structure constructed around it to contain any spills which may occur. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.

B. Fertilizers

Fertilizers will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked in the soil to limit exposure to stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

C. Paints, Paint Solvents, and Cleaning Solvents

All containers will be tightly sealed and stored when not in use. Excess paint and solvents will not be discharged to the storm sewer system but will be properly disposed of according to manufacturer's instructions or state and federal regulations.

D. Concrete Trucks

The CGP authorizes the land disposal of wash out water from concrete trucks at construction sites that are regulated under the CGP, as long as the discharge is in compliance with the restrictions given in Section 3.02.4.B of this SWPPP. This authorization is limited to the land disposal of wash out water from concrete trucks only. Any other direct discharge of concrete production waste water is not authorized by the CGP and must be authorized under a separate TCEQ General Permit or individual permit.

2.4 Spill Prevention Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup.

A. Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be trained regarding these procedures and the location of the information and cleanup supplies.

B. Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite in spill control and containment kit (containing, for example, absorbent such as kitty litter or sawdust, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.).

C. All spills will be cleaned up immediately after discovery.

D. The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with the hazardous substances.

E. Spills of toxic or hazardous materials will be reported to the appropriate federal, state, and/or local government agency, regardless of the size of the spill. Spills of amounts that exceed Reportable Quantities of certain substances specifically mentioned in federal regulations (40 CFR 302 list and oil) will be immediately reported to the TCEQ National Response Center, telephone **1-800-832-8224**. Reportable Quantities of some substances which may be used at the job site are as follows:

oil - appearance of a film or sheen on water
pesticides - usually 1 lb.
acids - 5000 lb.
solvents, flammable - 100 lb.

F. The SPCC plan will be adjusted to include measures to prevent this type of spill from recurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included. If the spill exceeds a

Reportable Quantity, all federal regulations regarding reports of the incident will be complied with.

G. The job site superintendent will be the spill prevention and cleanup coordinator. He will designate the individuals who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of these personnel will be posted in the material storage area and in the office trailer onsite.

Questions or Comments:
oce@tceq.texas.gov

Spills: Reportable Quantities

The RQ depends on the substance released and where released. Use this table to determine whether you must report and under what rule.

In Texas, upon determining that a reportable discharge or spill has occurred, the responsible person must notify the state. The threshold quantity that triggers the requirement to report a spill is called the **reportable quantity (RQ).** The reportable quantity depends on the type of substance released and where released (e.g. into water vs. on land); different kinds of spills are subject to different provisions of state and federal rules.

Kind of spill	Where discharged	Reportable quantity	Rule, statute, or responsible agency
Hazardous substance	onto land	"Final RQ" in Table 302.4 in **40 CFR 302.4**	**30 TAC 327**
	into water	"Final RQ" or 100 lbs, whichever is **less**	
Any oil	coastal waters	as required by the Texas General Land Office	**Texas General Land Office**
Crude oil, oil that is neither a petroleum product nor used oil	onto land	210 gallons (five barrels)	**30 TAC 327**
	directly into water	enough to create a sheen	
Petroleum product, used oil	onto land, from an exempt PST facility	210 gallons (five barrels)	**30 TAC 327**

	onto land, or onto land from a non-exempt PST facility	25 gallons	
	directly into water	enough to create a sheen	
Associated with the exploration, development and production of oil, gas, or geothermal resources	under the jurisdiction of the Railroad Commission of Texas	as required by the Railroad Commission of Texas	**Railroad Commission of Texas**
Industrial solid waste or other substances	into water	100 lbs	**30 TAC 327**
From petroleum storage tanks, underground or aboveground	into water	enough to create a sheen on water	**30 TAC 334** .75-81
From petroleum storage tanks, underground or aboveground	onto land	25 gallons or equal to the RQ under **40 CFR 302**	**30 TAC 327**
Other substances that may be useful or valuable and are not ordinarily considered to be waste, but will cause pollution if discharged into water in the state	into water	100 lbs	**30 TAC 327**

Emergency Response Home

Spills, Discharges, and Releases

Hurricanes

Drought

Tornados

Wildfires

Floods

Winter Storms

How are we doing? Take our customer satisfaction survey

Reportable Quantity, all federal regulations regarding reports of the incident will be complied with.

G. The job site superintendent will be the spill prevention and cleanup coordinator. He will designate the individuals who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of these personnel will be posted in the material storage area and in the office trailer onsite.

Temporary Stormwater Management Practices TCEQ Form 0602
Attachment B Potential Sources of Contamination

The following are the potential pollutants and their sources which may occur at this construction site: offsite vehicle tracking of mud from vehicle traffic through inadequate construction exit, petroleum based products from vehicle/ equipment leaks and drips (maintenance and petroleum storage areas will not be allowed on the construction site), pesticides and fertilizers from landscaping activities, and high pH washwater from concrete and masonry cleanup/ washout facilities.

Temporary Stormwater Management Practices TCEQ Form 0602
Attachment C Sequence of Major Activities

The Contractor will be responsible for implementing the following erosion and sediment control and stormwater management control structures. The Contractor may designate these tasks to certain subcontractors as he sees fit, but the ultimate responsibility for implementing these controls and ensuring their proper functioning remains with the general contractor. The order of activities will be as follows (refer to Plan Sheet C-200 Erosion Control Plan contained in the Construction Plans for the project for details):

A. Install silt fence around perimeter of property and disturbed areas as shown on the C-200 Erosion Control Plan sheet. (Approx. 0.13 acres)

B. Install inlet protection for all existing grate inlets, curb inlets, and at the end of all exposed storm sewer pipes, if present. (Approx. 0.10 acres)

C. Construct temporary construction exit (Approx. 0.02 acres)

D. Commence grubbing and removal of vegetation in area to receive cut or fill. (Approx. 12.42 acres)

E. Commence grading operation for building pad preparation (Approx. 1.87 acres)

F. Install all underground utilities (Approx. 1.5 acres)

G. Finalize pavement subgrade preparation (Approx. 5.96 acres)

H. Install all proposed storm sewer pipes and install inlet protection silt fences at ends of exposed pipes (Approx. 0.40 acres)

I. Construct all grate inlets and drainage structures. Inlet protection silt fences may be removed temporarily for this construction (Approx. 0.10 acres)

J. Remove silt fences around inlets and manholes no more than 48 hours prior to placing stabilized base course. (Approx. 0.10 acres)

K. Install base material as required for pavement, curb and gutter. (Approx. 5.96 acres)

L. Install all paving, curb and gutter. (Approx. 5.96 acres)

M. Complete planting and/or seeding of vegetated areas to accomplish stabilization, in accordance with the landscaping plan. (Approx. 5.68 acres)

N. Remove temporary construction exit, erosion control logs, inlet protection, and all other temporary sediment controls. (Approx. 0.02 acres)

Temporary Stormwater Management Practices TCEQ Form 0602
Attachment D Temporary Best Management Practices

The following temporary best management practices will be used on the construction site

Stabilization Practices

1. Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed

2. Silt fence to be installed around the perimeter of the site and adjusted as necessary during the course of construction. Silt fence to be inspected and maintained per TCEQ RG-348:

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

3. Frequent watering of excavation and fill areas to minimize wind erosion during construction.

4. Use of stabilization fabric for all slopes having a slope of 1V:3H or greater.

5. Permanent seeding and planting of all unpaved areas.

6. For all disturbed areas where construction activities have temporarily or permanently ceased for more than 14 days, stabilization activities shall commence no later than the 14th day after cessation of construction activities or after final grades have been achieved.

Temporary Stormwater Management Practices TCEQ Form 0602
Attachment F Structural Practices

The following structural best management practices will be used on the construction site

1. Inlet protection using gravel filled bags and silt fence.

2. Perimeter protection using silt fencing and/or erosion control logs

3. Stabilized construction exit point

4. Temporary concrete washout area

Temporary Stormwater Management Practices TCEQ Form 0602
Attachment G Drainage Area Map

Please refer to Plan Sheets C-600 Existing Drainage Area Map and C-601 Proposed Drainage Area Map of the Construction Plans for this project.

Temporary Stormwater Management Practices TCEQ Form 0602
Attachment I Inspection/ Maintenance for BMPs

I. Erosion and Sediment Control Maintenance and Inspection Practices

A. The following is a list of erosion and sediment controls to be used on this site during construction practice.

1. Stabilization practices for this site include:

   A. Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed

   B. Frequent watering of excavation and fill areas to minimize wind erosion during construction.

   C. Use of stabilization fabric for all slopes having a slope of 1V:3H or greater.

   D. Permanent seeding and planting of all unpaved areas.

   E. For all disturbed areas where construction activities have temporarily or permanently ceased for more than 14 days, soil stabilization activities shall commence as soon as practicable but no later than the 14th day after cessation of construction activities.

2. Structural practices for this site include:

   A. Inlet protection using block and gravel-filled bags and fabric filter material

   B. Perimeter protection using silt fencing and/or straw roll wattles

   C. Stabilized construction exit point

   D. Temporary sediment pond with outlet structure and Faircloth skimmer for dewatering

Velocity Dissipation: Contractor shall provide sufficient velocity dissipation devices to prevent soil erosion at discharge points where concentrated flow occurs or is expected to occur.

B. The following inspection and maintenance practices will be used to maintain erosion and sediment controls.

   1. All control measures will be inspected weekly and after each rainfall event.

2. All measures will be maintained in good working order; if repairs are found to be necessary, they will be initiated within 24 hours of report and completed prior to the next anticipated rainfall event. If completion of required repairs cannot be accomplished prior to the next anticipated rainfall event, the reason shall be documented in the SWPPP for the site and completion shall be accomplished as soon as practicable.

3. Built up sediment will be removed from silt fence when it has reached one-third the height of the fence.

4. Silt fences will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are securely in the ground.

5. The sediment basin, if present, will be inspected for depth of sediment, and built up sediment will be removed when it reaches 50 percent of the design capacity. **Contractor shall install a depth gauge in the sediment basin to use in evaluating the depth of accumulated sediment to determine when sediment removal is required.**

6. Temporary and permanent seeding will be inspected for bare spots, washouts, and healthy growth.

7. A maintenance inspection report will be made after each inspection. Copies of the report forms to be completed by the inspector are included in the SWPPP for the site.

8. The job site superintendent will be responsible for selecting and training the individuals who will be responsible for these inspections, maintenance and repair activities, and filling out inspection and maintenance reports.

9. Personnel selected for the inspection and maintenance responsibilities will receive training from the job site superintendent. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls that are used onsite in good working order. They will also be trained in the completion of, initiation of actions required by, and the filing of the inspection forms. Documentation of the qualifications of inspection personnel must be kept in the SWPPP for the site.

II. Inspection and Maintenance Report Forms

Once installation of any required or optional erosion control device or measure has been implemented, weekly inspections of each measure shall be performed by the Contractor's inspection personnel. The Inspection and Maintenance Reports found in the SWPPP for the site (or other forms which the Contractor desires to use that have been approved by

the Engineer) shall be used by the inspectors to inventory and report the condition of each measure to assist in maintaining the erosion and sediment control measures in good working order.

Based on the results of the periodic inspections, necessary control modifications shall be initiated within 24 hours and completed prior to the next anticipated rain event. These inspection reports shall be kept on file as part of the Storm Water Pollution Prevention Plan for at least three years from the date of completion and submission of the Notice of Termination.

These report forms shall become an integral part of the SWPPP for the site and shall be made readily accessible to TCEQ inspection officials, the Civil Engineering Consultant, and the Owner for review upon request during visits to the project site. In addition, copies of the reports shall be provided to any of these persons, upon request, via mail or facsimile transmission.

The following forms shall be utilized by inspectors to report on the incremental status and condition of the control measures used on the site:

III. Summary of Erosion and Sediment Control Maintenance/Inspection Procedures

- ☐ All control measures will be at least weekly and after each rainfall event.
- ☐ All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of report and completed prior to the next anticipated rain event.
- ☐ Built-up sediment will be removed from silt fences when it has reached one-third the height of the fence.
- ☐ Silt fences will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- ☐ Sediment basins, if present, will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 50% of the design capacity or at the end of the job. **Contractor shall install a depth gauge in the sediment basin to use in evaluating the depth of accumulated sediment to determine when sediment removal is required.**
- ☐ Diversion dikes, if present, will be inspected and any breaches promptly repaired.
- ☐ If sediment escapes the site, accumulations will be removed at a frequency to minimize further negative effects, and whenever feasible, prior to the next forecasted rain event.
- ☐ Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.

- ☐ A maintenance inspection report will be made after each inspection. Copies of the report forms to be used are included in the SWPPP for the site.

- ☐ The site job superintendent will select the individuals who will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance reports.

- ☐ Personnel selected for inspection and maintenance responsibilities will receive training from the site job superintendent. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order. Records documenting the training and experience qualifications of each and every inspector shall be kept with the Inspection Record Forms in the SWPPP for the site.

IV. Construction/Implementation Checklist

1. Maintain Records of Construction Activities, including:

- ☐ Dates when major grading activities occur

- ☐ Dates when construction activities temporarily cease on a portion of the site

- ☐ Dates when construction activities permanently cease on a portion of the site

- ☐ Dates when stabilization measures are initiated on the site

- ☐ Dates of rainfall events and post-rainfall inspections

2. Prepare Inspection Reports summarizing:

- ☐ Name of inspector

- ☐ Qualifications of Inspector

- ☐ Control measures/areas inspected

- ☐ Observed conditions and areas of non-compliance

- ☐ Location of any discharges of sediments or other pollutants from the site

- ☐ Recommended remedial actions and action on previously recommended remedial actions

- ☐ Statement that the site is or is not in compliance with the Permit/SWPPP

- ☐ Changes necessary to the SWPPP for the site

3. Report Releases of Reportable Quantities of Oil or Hazardous Materials (if they occur):

- ☐ Notify TCEQ Spill Response Center (**1-800-832-8224**) immediately
- ☐ Notify permitting authority in writing within 14 days
- ☐ Modify the pollution prevention plan to include:
    - the date of release
    - circumstances leading to the release
    - steps taken to prevent recurrence of the release

4. Modify Pollution Prevention Plan as necessary to:

- ☐ Comply with the minimum permit requirements when notified by TCEQ that the plan does not comply
- ☐ Address a change in design, construction operation, or maintenance which has an effect on the potential for discharge of pollutants
- ☐ Prevent recurrence of reportable quantity releases of a hazardous material or oil

Temporary Stormwater Management Practices TCEQ Form 0602
Attachment J Interim/ permanent soil stabilization practices

Final Stabilization/Termination Checklist

- ☐ All soil disturbing activities are complete
- ☐ Temporary erosion and sediment control measures have been removed or will be removed at an appropriate time
- ☐ All areas of the construction site not otherwise covered by a permanent pavement or structure have been stabilized with a uniform perennial vegetative cover with a density of 70% or equivalent measures have been employed
- ☐ Bare soils should be seeded or otherwise stabilized within 14 calendar days after final grading or where construction activity has temporarily ceased for more than 21 days.

Copy of Notice of Intent (NOI)

The successful General Contractor will be required to prepare a SWPPP and file the NOI, in accordance with the Contributing Zone Permit, the Temporary Stormwater Section, Erosion Control Plan contained in the construction plans and Texas NPDES Program.

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

I Dustin Akin,
Print Name

Executive Director of Construction,
Title - Owner/President/Other

of Liberty Hill Independent School District,
Corporation/Partnership/Entity Name

have authorized Jack Garner, PE
Print Name of Agent/Engineer

of Langan Engineering
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:

Dustin Akin
Applicant's Signature

11/19/2025
Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared Dustin Akin 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 19th day of November, 2025

Melanie Perkins
NOTARY PUBLIC

Melanie Perkins
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 10-14-2029

MELANIE PERKINS
Notary Public, State of Texas
Comm. Expires 10-14-2029
Notary ID 133392540

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Liberty Hill Elementary School #9
Regulated Entity Location: 1703 Tower Road, Liberty Hill, TX 78642
Name of Customer: Liberty Hill ISD
Contact Person: Dustin Akin Phone: 512-260-5580
Customer Reference Number (if issued):CN 600788483
Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☐ Travis ☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

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

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

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

Site Location (Check All That Apply):

☐ Recharge Zone ☒ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	13.5 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: _____ Date: 12.05.2025

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

TCEQ Core Data Form

TCEQ Use Only

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

SECTION I: General Information

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

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

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

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 600788483		RN

SECTION II: Customer Information

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

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

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

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

Liberty Hill Independent School District

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

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ State ☒ Other ☐ Sole Proprietorship ☒ Other: ISD

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

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

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

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

15. Mailing Address:

301 Forrest Street							
City	Liberty Hill	**State**	TX	**ZIP**	78642	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*
	dakin@libertyhill.txed.net

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(512) 260-5580		(512) 260-5581

SECTION III: Regulated Entity Information

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

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

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

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

Liberty Hill Elementary School #9

23. Street Address of the Regulated Entity: *(No PO Boxes)*	1703 Tower Road						
	City	Liberty Hill	**State**	TX	**ZIP**	78642	**ZIP + 4**
24. County	Williamson						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	Approximately 1.3 miles east of 183 and 0.1 miles south of County Road 258.

26. Nearest City	**State**	**Nearest ZIP Code**
Liberty Hill	TX	78642

27. Latitude (N) In Decimal:	30.678028	**28. Longitude (W) In Decimal:**	-97.85622

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	40	40.9	97	51	22.4

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
8211		611110	

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

Public Education

34. Mailing Address:	**301 Forrest St.**							
	City	**Liberty Hill**	**State**	**TX**	**ZIP**	**78642**	**ZIP + 4**	

35. E-Mail Address:	**dakin@libertyhill.txed.net**

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(512) 260-5580		**(512) 260-5581**

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

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

SECTION IV: Preparer Information

40. Name:	Jack Garner, PE	**41. Title:**	Consulting Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(737) 289-7810		(737) 289-7801	jgarner@langan.com

SECTION V: Authorized Signature

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

Company:	Langan Engineering	**Job Title:**	Associate Principal
Name *(In Print):*	Jack Garner, PE	**Phone:**	(737) 289- **7810**
Signature:		**Date:**	12.05.2025

0"
1"

COVER SHEET
C-100
FOR BLUEBEAM LABELING/OCR:

INDEPENDENT SCHOOL DISTRICT
LIBERTY HILL ISD
301 FORREST STREET
LIBERTY HILL, TX 78642
CONTACT: DUSTIN AKIN
PHONE: (512) 260-5580
EMAIL: DAKIN@LIBERTYHILL.TXED.NET

ARCHITECT
PBK ARCHITECTS, INC.
6300 BRIDGE POINT PKWY, #1-350
AUSTIN, TX 78730
CONTACT: JAMES FAUVER, AIA, NCARB
PHONE: (512) 340-0676
EMAIL: JAMES.FAUVER@PBK.COM

CIVIL ENGINEER
LANGAN ENGINEERING AND
ENVIRONMENTAL SERVICES, LLC.
9606 N. MOPAC EXPRESSWAY, SUITE 110
AUSTIN, TX 78759
CONTACT: JACK GARNER, JR., PE
PHONE: (737) 289-7800
EMAIL: JGARNER@LANGAN.COM

LANDSCAPE ARCHITECT
LANGAN ENGINEERING AND
ENVIRONMENTAL SERVICES, LLC.
9606 N. MOPAC EXPRESSWAY, SUITE 110
AUSTIN, TX 78759
CONTACT: BEN HENRY,PLA, LEED AP BD+C
PHONE: (737) 289-7800
EMAIL: BHENRY@LANGAN.COM

SURVEYOR
LANGAN ENGINEERING AND
ENVIRONMENTAL SERVICES, LLC.
9606 N. MOPAC EXPRESSWAY, SUITE 110
AUSTIN, TX 78759
CONTACT: MICHAEL JACK NEEDHAM, RPLS
PHONE: (737) 289-7800
EMAIL: JNEEDHAM@LANGAN.COM

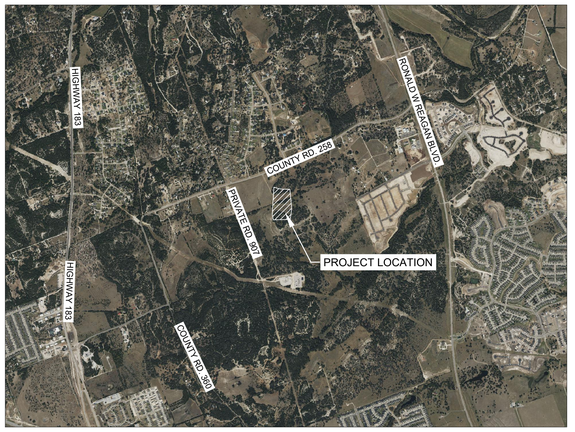
Site Civil Plans for the Construction of

LIBERTY HILL ELEMENTARY SCHOOL #9

To Serve

LIBERTY HILL I.S.D.

13.50 ACRES PORTION OF
LIBERTY HILL INDEPENDENT SCHOOL DISTRICT
INST.# 2022032756 O.P.R.W.C.T
1703 TOWER ROAD, ETJ OF LIBERTY HILL
WILLIAMSON COUNTY TX 78642



SITE MAP

2000 0 1000 2000
SCALE IN FEET

LANGAN
Langan Engineering and
Environmental Services, LLC.
9606 N. Mopac Expressway, Suite 110
Austin, TX 78759
T: 737.289.7800 F: 737.289.7801 www.langan.com
TBPE FIRM REG. #F-13709

LANGAN PROJECT NO.
531013323

DECEMBER 2025

SHEET #	SHEET TITLE
C-100	COVER SHEET
C-101	GENERAL NOTES
C-102	TCEQ NOTES & CALCULATIONS
C-103	TOPOGRAPHIC SURVEY (1 OF 2)
C-104	TOPOGRAPHIC SURVEY (2 OF 2)
C-200	EROSION & SEDIMENT CONTROL PLAN
C-201	OFF-SITE EROSION & SEDIMENT CONTROL PLAN
C-300	SITE REMOVALS PLAN
C-400	SITE PLAN
C-401	SPEED ZONE PLAN
C-500	GRADING PLAN
C-501	GRADING INSET
C-600	EXISTING DRAINAGE AREA MAP
C-601	PROPOSED DRAINAGE AREA MAP
C-602	PROPOSED ROOF DRAINAGE AREA MAP
C-603	DRAINAGE PLAN
C-604	ROOF DRAINAGE PLAN
C-605	DRAINAGE PROFILES (1 OF 3)
C-606	DRAINAGE PROFILES (2 OF 3)
C-607	DRAINAGE PROFILES (3 OF 3)
C-608	DRAINAGE CALCULATIONS
C-700	UTILITY PLAN
C-701	SANITARY SEWER PROFILE
C-800	EROSION CONTROL DETAILS
C-801	WATER DETAILS (1 OF 2)
C-802	WATER DETAILS (2 OF 2)
C-803	SANITARY SEWER DETAILS
C-804	DRAINAGE DETAILS
C-805	PAVING DETAILS (1 OF 2)
C-806	PAVING DETAILS (2 OF 2)
C-807	SITE DETAILS (1 OF 2)
C-808	SITE DETAILS (2 OF 2)
L-100	LANDSCAPE PLAN
L-101	PLAYGROUND PLAN
L-102	LANDSCAPE DETAILS
L-200	IRRIGATION PLAN
L-201	IRRIGATION DETAILS

NOTES:

1. THE CONTRACTOR SHALL OBTAIN A "NOTICE OF PROPOSED INSTALLATION OF UTILITY LINE" PERMIT FROM WILLIAMSON COUNTY FOR ANY WORK PERFORMED IN THE EXISTING COUNTY RIGHT-OF-WAY (DRIVEWAY APRON, WATER MAIN TIE-IN, ETC.) THIS PERMIT APPLICATION WILL REQUIRE A LIABILITY AGREEMENT, A CONSTRUCTION COST ESTIMATE FOR WORK WITHIN THE RIGHT-OF-WAY INCLUDING PAVEMENT REPAIR (IF NEEDED), A PERFORMANCE BOND, CONSTRUCTION PLANS AND, IF NECESSARY, A TRAFFIC CONTROL PLAN. AN INSPECTION FEE, AND A PRE-CONSTRUCTION MEETING MAY ALSO BE REQUIRED, DEPENDING ON THE SCOPE OF WORK. THE PERMIT WILL BE REVIEWED AND APPROVED BY THE COUNTY ENGINEER, AND MUST ALSO BE APPROVED BY THE WILLIAMSON COUNTY COMMISSIONERS COURT IF ANY ROAD CLOSURE IS INVOLVED.
2. ADEQUACY OF THESE PLANS FOR CONSTRUCTION IS THE RESPONSIBILITY OF THE SIGNING/SEALING ENGINEER.

CERTIFICATE OF COMPLIANCE (C OF C) EARLY GRADING PERMIT NUMBER _____

CERTIFICATE OF COMPLIANCE (C OF C) SITE AND DRAINAGE PERMIT NUMBER _____

DRIVEWAY PERMIT NUMBER _____

DRIVEWAY PERMIT NUMBER _____

TEMPORARY DRIVEWAY PERMIT NUMBER _____

TEMPORARY DRIVEWAY PERMIT NUMBER _____

ESD #4 PERMIT NUMBER _____

TCEQ CZP PERMIT NUMBER _____

CITY OF LIBERTY HILL STORMWATER PERMIT NUMBER _____

_____ DATE
CRYSTAL MANCILLA, MAYOR
CITY OF LIBERTY HILL, TEXAS

Based on the design engineer's certification of compliance with all applicable City, State and Federal regulations, the plans and specifications contained herein have been reviewed and are found to be in compliance with the requirements of the City of Liberty Hill.

_____ DATE
ELAINE SIMPSON, CITY SECRETARY
CITY OF LIBERTY HILL, TEXAS

Based on the design engineer's certification of compliance with all applicable City, State and Federal regulations, the plans and specifications contained herein have been reviewed and are found to be in compliance with the requirements of the City of Liberty Hill.

_____ DATE
KEN NICKEL, INTERIM DIRECTOR OF PLANNING
CITY OF LIBERTY HILL, TEXAS

Based on the design engineer's certification of compliance with all applicable City, State and Federal regulations, the plans and specifications contained herein have been reviewed and are found to be in compliance with the requirements of the City of Liberty Hill.

REVIEWED FOR COMPLIANCE WITH WILLIAMSON COUNTY REQUIREMENTS. (WCSR 2021B)

_____ DATE
SIGNATURE

_____ DATE
JENNIFER GLAESS, P.E., CITY ENGINEER
PAPE-DAWSON

Based on the design engineer's certification of compliance with all applicable City, State and Federal regulations, the plans and specifications contained herein have been reviewed and are found to be in compliance with the requirements of the City of Liberty Hill.

PBK
www.pbk.com
TX FIRM: BR 1608
AUSTIN, TX
512-340-0676

ELEMENTARY SCHOOL #9
1703 Tower Road
Liberty Hill Texas 78642
75% CD PROGRESS SET

F E D
C
G A B

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
JACK N. GARNER, JR.
98447
LICENSED PROFESSIONAL ENGINEER
12.05.2025
TCEQ CZP
TBPE Registration #: 13709

CLIENT
LIBERTY HILL ISD

DATE	PROJECT NUMBER
12/05/2025	250254

DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

COVER SHEET

C-100

Plot Stamp:
Date: 12/5/2025 Time: 12:44 User: kekim Style Table: Langan.stb Layout: COVER SHEET

Document Code: 531013323-0102-GR101-0101

GENERAL NOTES

C-101

FOR BLUEBEAM LABELING/OCR:

0"

1"

CITY OF LIBERTY HILL NOTES

CITY OF LIBERTY HILL GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ROUND ROCK STANDARD SPECIFICATIONS MANUAL.
2. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., NOT PLANNED FOR DESTRUCTION OR REMOVAL THAT ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES WITH THE CONSTRUCTION PLANS FOUND IN THE FIELD SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER WHO SHALL BE RESPONSIBLE FOR REVISING THE PLANS AS APPROPRIATE.
4. MANHOLE FRAMES, COVERS, VALVES, CLEANOUTS, ETC. SHALL BE RAISED TO FINISHED GRADE PRIOR TO FINAL PAVING CONSTRUCTION.
5. THE CONTRACTOR SHALL GIVE THE CITY OF LIBERTY HILL 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION. TELEPHONE 512-778-5449 (PLANNING & DEVELOPMENT DEPARTMENT).
6. ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. REVEGETATION OF ALL DISTURBED OR EXPOSED AREAS SHALL CONSIST OF SODDING OR SEEDING, AT THE CONTRACTOR'S OPTION. HOWEVER, THE TYPE OF REVEGETATION MUST EQUAL OR EXCEED THE TYPE OF VEGETATION PRESENT BEFORE CONSTRUCTION.
7. PRIOR TO ANY CONSTRUCTION, THE ENGINEER SHALL CONVENE A PRECONSTRUCTION CONFERENCE BETWEEN THE CITY OF LIBERTY HILL, HIMSELF, THE CONTRACTOR, OTHER UTILITY COMPANIES, ANY AFFECTED PARTIES AND ANY OTHER ENTITY THE CITY OR ENGINEER MAY REQUIRE.
8. THE CONTRACTOR AND THE ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE PLANS. THE ENGINEER SHALL FURNISH THE CITY OF LIBERTY HILL ACCURATE "AS-BUILT" DRAWINGS FOLLOWING COMPLETION OF ALL CONSTRUCTION. THESE "AS-BUILT" DRAWINGS SHALL MEET WITH THE SATISFACTION OF THE PLANNING & DEVELOPMENT DEPARTMENT PRIOR TO FINAL ACCEPTANCE.
9. THE LIBERTY HILL CITY COUNCIL SHALL NOT BE PETITIONED FOR ACCEPTANCE UNTIL ALL NECESSARY EASEMENT DOCUMENTS HAVE BEEN SIGNED AND RECORDED.
10. WHEN CONSTRUCTION IS BEING CARRIED OUT WITHIN EASEMENTS, THE CONTRACTOR SHALL CONFINE CONTRACTOR'S WORK TO WITHIN THE PERMANENT AND ANY TEMPORARY EASEMENTS. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN THE PERMANENT AND TEMPORARY EASEMENTS. CLEAN-UP SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER AND/OR CITY INSPECTOR.
11. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL APPLY FOR AND SECURE ALL PROPER PERMITS FROM THE APPROPRIATE AUTHORITIES.
12. BENCHMARKS UTILIZED FOR THE CONSTRUCTION OF THIS PROJECT ARE DESCRIBED AS FOLLOWS:
    AS NOTED ON THE SURVEY BY LANGAN ENGINEERING LLC. TITLED TOPOGRAPHIC SURVEY.

CITY OF LIBERTY HILL TRENCH SAFETY NOTES:

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

CITY OF LIBERTY HILL STREET AND DRAINAGE NOTES:

1. ALL TESTING SHALL BE DONE BY AN INDEPENDENT LABORATORY AT THE OWNER'S EXPENSE. ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR. A CITY INSPECTOR SHALL BE PRESENT DURING ALL TESTS. TESTING SHALL BE COORDINATED WITH THE CITY INSPECTOR AND HE SHALL BE GIVEN A MINIMUM OF 24 HOURS NOTICE PRIOR TO ANY TESTING. TELEPHONE 512-778-5449 (INSPECTIONS).
2. BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF 95% MAXIMUM DENSITY TO WITHIN 3" OF TOP OF CURB. MATERIAL USED SHALL BE PRIMARILY GRANULAR WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE REMAINING 3" SHALL BE CLEAN TOPSOIL FREE FROM ALL CLODS AND SUITABLE FOR SUSTAINING PLANT LIFE.
3. DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT INCLUDING GAS, ELECTRIC, TELEPHONE, CABLE TV, WATER SERVICES, ETC., SHALL BE A MINIMUM OF 30" BELOW SUBGRADE.
4. STREET RIGHTS-OF-WAY SHALL BE GRADED AT A SLOPE OF 1/4" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED. HOWEVER, IN NO CASE SHALL THE WIDTH OF RIGHT-OF-WAY AT 1/4" PER FOOT SLOPE BE LESS THAN 10 FEET UNLESS A SPECIFIC REQUEST FOR AN ALTERNATE GRADING SCHEME IS MADE TO AND ACCEPTED BY THE CITY OF LIBERTY HILL PLANNING & DEVELOPMENT DEPARTMENT.
5. BARRICADES BUILT TO CITY OF LIBERTY HILL STANDARDS SHALL BE CONSTRUCTED ON ALL DEAD-END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN JOB AND PUBLIC SAFETY.
6. ALL R.C.P. SHALL BE MINIMUM CLASS III.
7. THE SUBGRADE MATERIAL FOR THE STREETS SHOWN HEREIN WAS TESTED BY LANGAN ENGINEERING, LLC. AND THE PAVING SECTIONS DESIGNED IN ACCORDANCE WITH THE CURRENT CITY OF LIBERTY HILL DESIGN CRITERIA. REFERENCE GEOTECHNICAL ENGINEERING REPORT PREPARED BY LANGAN ENGINEERING, LLC., DATED 10/17/2025.

   THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SUBGRADE FOR COMPLIANCE WITH THE DESIGN ASSUMPTIONS MADE DURING PREPARATION OF THE SOILS REPORT. ANY ADJUSTMENTS THAT ARE REQUIRED SHALL BE MADE THROUGH REVISION OF THE CONSTRUCTION PLANS.
8. WHERE PI'S ARE OVER 20, SUBGRADES MUST BE STABILIZED UTILIZING A METHOD ACCEPTABLE TO THE CITY ENGINEER. THE GEOTECHNICAL ENGINEER SHALL RECOMMEND AN APPROPRIATE SUBGRADE STABILIZATION IF SULFATES ARE DETERMINED TO BE PRESENT.

CITY OF LIBERTY HILL WASTEWATER NOTES:

1. PIPE MATERIAL FOR PRESSURE WASTEWATER MAINS SHALL BE PVC (AWWA C-900, MIN. CLASS 150), OR DUCTILE IRON (AWWA C-100, MIN. CLASS 200). PIPE MATERIAL FOR GRAVITY WASTEWATER MAINS SHALL BE PVC (ASTM D2241 OR D3034, MAX. DR-26), DUCTILE IRON (AWWA C-100, MIN. CLASS 200).
2. UNLESS OTHERWISE ACCEPTED BY THE CITY ENGINEER, DEPTH OF COVER FOR ALL LINES OUT OF THE PAVEMENT SHALL BE 42" MIN., AND DEPTH OF COVER FOR ALL LINES UNDER PAVEMENT SHALL BE A MIN. OF 30" BELOW SUBGRADE.
3. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH MINIMUM 8-MIL POLYETHYLENE AND SEALED WITH DUCT TAPE OR EQUAL ACCEPTED BY THE CITY ENGINEER.
4. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR AT 512-778-5449 TO COORDINATE UTILITY TIE-INS AND NOTIFY HIM AT LEAST 48 HOURS PRIOR TO CONNECTING TO EXISTING LINES.
5. ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON RING AND COVER. ALL MANHOLES LOCATED OUTSIDE OF THE PAVEMENT SHALL HAVE BOLTED COVERS. TAPPING OF FIBERGLASS MANHOLES SHALL NOT BE ALLOWED.
6. LINE FLUSHING OR ANY ACTIVITY USING A LARGE QUANTITY OF WATER MUST BE SCHEDULED WITH THE WATER & WASTEWATER SUPERINTENDENT, TELEPHONE 512-778-5449.
7. THE CONTRACTOR, AT CONTRACTOR'S EXPENSE, SHALL PERFORM QUALITY TESTING FOR ALL WASTEWATER PIPE INSTALLED AND PRESSURE PIPE HYDROSTATIC TESTING OF ALL WATER LINES CONSTRUCTED AND SHALL PROVIDE ALL EQUIPMENT (INCLUDING PUMPS AND GAUGES), SUPPLIES AND LABOR NECESSARY TO PERFORM THE TESTS. QUALITY AND PRESSURE TESTING SHALL BE MONITORED BY CITY OF LIBERTY HILL PERSONNEL.
8. THE CONTRACTOR SHALL COORDINATE TESTING WITH THE CITY OF LIBERTY HILL INSPECTOR AND PROVIDE NO LESS THAN 24 HOURS NOTICE PRIOR TO PERFORMING STERILIZATION, QUALITY TESTING OR PRESSURE TESTING.
9. THE CONTRACTOR SHALL NOT OPEN OR CLOSE ANY VALVES UNLESS AUTHORIZED BY THE CITY OF LIBERTY HILL.
10. ALL VALVE BOXES AND COVERS SHALL BE CAST IRON.
11. ALL WATER SERVICE, WASTEWATER SERVICE AND VALVE LOCATIONS SHALL BE APPROPRIATELY MARKED AS FOLLOWS:

WATER SERVICE	"W" ON TOP OF CURB
WASTEWATER SERVICE	"S" ON TOP OF CURB
VALVE	"V" ON FACE OF CURB.

    TOOLS FOR MARKING THE CURB SHALL BE PROVIDED BY THE CONTRACTOR. OTHER APPROPRIATE MEANS OF MARKING SERVICE AND VALVE LOCATIONS SHALL BE PROVIDED IN AREAS WITHOUT CURBS. SUCH MEANS OF MARKING SHALL BE AS SPECIFIED BY THE ENGINEER AND ACCEPTED BY THE CITY OF LIBERTY HILL.
12. CONTACT THE CITY OF LIBERTY HILL WATER & WASTEWATER SUPERINTENDENT AT 512-778-5449 FOR ASSISTANCE IN OBTAINING EXISTING WATER AND WASTEWATER LOCATIONS.
13. THE CITY OF LIBERTY HILL FIRE DEPARTMENT SHALL BE NOTIFIED 48 HOURS PRIOR TO TESTING OF ANY BUILDING SPRINKLER PIPING IN ORDER THAT THE FIRE DEPARTMENT MAY MONITOR SUCH TESTING.
14. SAND, AS DESCRIBED IN SPECIFICATION ITEM 510 PIPE, SHALL NOT BE USED AS BEDDING FOR WATER AND WASTEWATER LINES. ACCEPTABLE BEDDING MATERIALS ARE PIPE BEDDING STONE, PEA GRAVEL AND IN LIEU OF SAND, A NATURALLY OCCURRING OR MANUFACTURED STONE MATERIAL CONFORMING TO ASTM C33 FOR STONE QUALITY AND MEETING THE FOLLOWING GRADATION SPECIFICATION:
    SIEVE SIZE PERCENT RETAINED BY WEIGHT

1/2"	0
3/8"	0-2
#4	40-85
#10	95-100

15. THE CONTRACTOR IS HEREBY NOTIFIED THAT CONNECTING TO, SHUTTING DOWN, OR TERMINATING EXISTING UTILITY LINES MAY HAVE TO OCCUR AT OFF-PEAK HOURS. SUCH HOURS ARE USUALLY OUTSIDE NORMAL WORKING HOURS AND POSSIBLY BETWEEN 12 A.M. AND 6 A.M.
16. ALL WASTEWATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) REGULATIONS, 30 TAC CHAPTER 213 AND 317, AS APPLICABLE. WHENEVER TCEQ AND CITY OF LIBERTY HILL SPECIFICATIONS CONFLICT, THE MORE STRINGENT SHALL APPLY.

CITY OF LIBERTY HILL EROSION AND SEDIMENTATION CONTROL NOTES:

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

CITY OF LIBERTY HILL TRAFFIC MARKING NOTES:

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

GENERAL NOTES

1. EXISTING TOPOGRAPHIC, BOUNDARY AND UTILITY INFORMATION AS SHOWN ON THESE DESIGN DOCUMENT(S) ARE BASED ON PLAN(S) TOPOGRAPHIC SURVEY BEING A PORTION OF 8 MANLOVE SURVEY, ABSTRACT NO 417, PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, LLC. AUSTIN, TX, DATED XX/XX/2025. ACTUAL SITE CONDITIONS MAY VARY FROM THOSE ENCOUNTERED AT THE TIME THE SURVEY DATA SHOWN HEREON WAS OBTAINED. PRIOR TO ANY USE OF THIS DATA, INCLUDING BUT NOT LIMITED TO DESIGN OR CONSTRUCTION, THE APPROPRIATE DATA CONFIRMATIONS SHALL BE MADE. BASED ON THE REFERENCED INFORMATION, ALL ELEVATIONS AND ESTABLISHED GRADES SHOWN HEREON REFER TO NAVD 88 DATUM.
2. THE CONTRACTOR SHALL BEGIN WORK AS DIRECTED BY THE OWNER/CITY OR THE NOTICE TO PROCEED.
3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, AND INSPECTIONS PRIOR TO AND THROUGHOUT CONSTRUCTION.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN NEAT AND ACCURATE CONSTRUCTION RECORDS FOR THE OWNER/CITY'S USE. THE CONTRACTOR SHALL PROVIDE THE CITY CLEAN AND ACCURATE FULL SIZE REPRODUCIBLE RECORD DRAWINGS WHICH CLEARLY DESCRIBE ALL CONSTRUCTION AND ANY DEVIATIONS FROM THE PLANS.
5. ALL SHOP DRAWINGS AND SUBMITTALS SHALL BE PROOFREAD AND REVIEWED BY THE GENERAL CONTRACTOR FOR APPROVAL PRIOR TO SUBMITTAL TO THE ENGINEER. SUBCONTRACTOR / GENERAL CONTRACTOR SHALL CLEARLY INDICATE, MARK, HIGHLIGHT, AND PROPERLY CLARIFY PRODUCTS TO BE CONSIDERED FOR APPROVAL. SUBMITTALS NOT PROOFREAD OR REVIEWED OR CLARIFIED PROPERLY SHALL BE RETURNED UNREVIEWED. CONTRACTOR SHALL RESUBMIT SHOP DRAWINGS AND ALLOW FOR SUITABLE REVIEW TIME. SUITABLE REVIEW TIME SHALL BE SEVEN (7) WORKING DAYS FOR TYPICAL SUBMITTALS AND LONGER DEPENDING ON THE SIZE AND NATURE OF THE SUBMITTAL.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR QUALITY CONTROL IN THE REQUIRED CONSTRUCTION SURVEYING AND MATERIALS TESTING. DIMENSIONS SHOWN AND DIGITAL FILES PROVIDED SHALL BE USED TO LAYOUT THE SITE.
7. ALL ADJACENT PROPERTY DAMAGED BY THE PROPOSED CONSTRUCTION SHALL BE RESTORED TO EQUAL OR BETTER CONDITION THAN WHICH IT WAS FOUND BEFORE SUCH WORK WAS UNDERTAKEN (NON-PAY ITEM).
8. ALL EFFORTS SHALL BE MADE TO AVOID DAMAGE TO EXISTING TREES THAT ARE TO REMAIN. TREES SHALL BE TRIMMED AND PAINTED ONLY IF NECESSARY FOR THE SAFE MANEUVERING OF CONSTRUCTION EQUIPMENT. CONTRACTOR SHALL RECEIVE PRIOR APPROVAL FROM THE OWNER'S FIELD REPRESENTATIVE FOR REMOVAL OF ANY TREES. WHEN EXCAVATING AROUND A TREE, THE ROOTS SHALL BE CLEAN CUT PRIOR TO ANY EXCAVATION WORK. DO NOT SNAG AND TEAR TREE ROOTS
9. ALL EXISTING FENCES ARE TO REMAIN UNLESS SPECIFIED OTHERWISE BY THE OWNERS REPRESENTATIVE. ANY DAMAGE TO FENCES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE WITH NEW AND LIKE MATERIALS. TEMPORARY CONSTRUCTION SITE SECURITY FENCES ARE REQUIRED.
10. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING EXISTING DRIVEWAYS AND SIDEWALKS FREE OF MUD AND DEBRIS FROM THE CONSTRUCTION AT ALL TIMES.
11. ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED TO INCLUDE BUT NOT BE LIMITED TO ROCK, RUBBLE, DEBRIS, TRASH, ETC. UNUSABLE EXCAVATED MATERIAL AND ALL WASTE RESULTING FROM SITE CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF SITE AT THE CONTRACTOR'S EXPENSE UNLESS OTHERWISE SPECIFIED OR AGREED TO BY OWNER.
12. THE CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST. CONTRACTOR SHALL CONTROL DUST BY SPRINKLING WATER, OR BY OTHER MEANS, APPROVED BY THE CITY AND ENGINEER.
13. THE CONTRACTOR SHALL NOTIFY THE OWNER/CITY REPRESENTATIVE OF OFF-SITE EXCESS SPOILS SITES THAT ARE TO BE UTILIZED
14. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE SILT FENCES (OR OTHER METHODS APPROVED BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES FOR THE ESTABLISHMENT OF GRASS OR OTHER GROWTH TO PREVENT EROSION.
15. DISTURBED AREAS THAT ARE SEEDED SHALL BE CHECKED PERIODICALLY FOR FULL COVERAGE OF GRASS. ALL DISTURBED AREAS SHALL BE WATERED, FERTILIZED, AND SEEDED OR SODDED AS NECESSARY AND BY DEFINITION 'MAINTAINED' UNTIL AN ESTABLISHED STAND OF GRASS CAN BE RELEASED TO THE OWNER. REFERENCE LANDSCAPE/IRRIGATION PLAN (IF PROVIDED) TO COORDINATE PLANTING ENHANCEMENTS AND LIMITS OF IRRIGATION COVERAGE.
16. CONTRACTOR SHALL NOT STORE MATERIALS, EQUIPMENT OR OTHER CONSTRUCTION ITEMS ON ADJACENT PROPERTIES OR ADJACENT RIGHT-OF-WAYS WITHOUT THE PRIOR WRITTEN CONSENT OF THE PROPERTY OWNER AND THE CITY. ALL CONSTRUCTION WASTE MATERIALS TO BE REMOVED SHALL BE DISPOSED OF AT A PERMITTED LOCATION OFF SITE, UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE CITY.
17. THE CONTRACTOR SHALL SET TWO (2) PERMANENT BENCHMARKS IN THE CITY COORDINATE SYSTEM. CONTRACTOR SHALL COORDINATE WITH CITY STAFF FOR RECORDED / APPROVED LOCATIONS.

UTILITY NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PRIVATE OR PUBLIC, PRIOR TO MOBILIZATION. CONTRACTOR SHALL VISIT THE SITE AND MAKE ALL NECESSARY OBSERVATIONS AND INSPECTIONS TO FAMILIARIZE THEMSELVES WITH THE SITE AND THE SITE FACILITIES. THE INFORMATION AND DATA SHOWN WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AT OR CONTIGUOUS TO THE SITE IS APPROXIMATE AND BASED ON INFORMATION FURNISHED BY THE OWNERS OF SUCH UNDERGROUND FACILITIES OR ON PHYSICAL APPURTENANCES OBSERVED IN THE FIELD. THE OWNER AND ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY SUCH INFORMATION OR DATA; AND, THE CONTRACTOR, SHALL HAVE FULL RESPONSIBILITY FOR REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA, FOR LOCATING ALL UNDERGROUND FACILITIES, FOR COORDINATION OF THE WORK WITH THE OWNERS OF SUCH UNDERGROUND FACILITIES DURING CONSTRUCTION, FOR THE SAFETY AND PROTECTION THEREOF, AND REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE.
2. CONTRACTOR SHALL, IN BASE BID PROVIDE ALL NECESSARY FITTINGS AND APPURTENANCES REQUIRED TO COMPLETE ALL CONNECTIONS, RESOLVE UTILITY CONFLICTS AND OTHER INCIDENTAL UTILITY WORK SHOWN ON THE PLANS OR CONTEMPLATED IN THE SPECIFICATIONS CONCERNING EXISTING UTILITIES INCLUDE, BUT NOT LIMITED TO TEMPORARY SERVICES: VALVES, BOXES, METERS, BACKFLOW PREVENTERS, FIRE DEPARTMENT CONNECTIONS, ETC. INCLUDING THE REPAIR OR REPLACEMENT OF ANY EXISTING IRRIGATION SYSTEM. CONTRACTOR SHALL RAISE/LOWER OR ADJUST ALL EXISTING UTILITY MAINS IN CONFLICT WITH PROPOSED UTILITIES AS PART OF THE BASE BID FOR ALL KNOWN OR UNKNOWN LINES.
3. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 1 WEEK PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND MAKE ARRANGEMENTS FOR ANY AND ALL TEMPORARY UTILITIES, PERMITS, AND AGREEMENTS.
4. THE CONTRACTOR SHALL PROTECT ALL UTILITIES DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL GIVE THE CITY, RESIDENTS AND BUSINESSES AFFECTED BY ANY ANTICIPATED WATER OR SEWER SERVICE DISRUPTIONS AT LEAST FORTY-EIGHT (48) HOURS PRIOR NOTICE.
5. CONTRACTOR SHALL EXERCISE CAUTION AND MAINTAIN ADEQUATE CLEAR ZONE BETWEEN THE CONTRACTOR'S EQUIPMENT AND ANY POWER LINES.
6. THE CONTRACTOR SHALL PROTECT ALL EXISTING POWER POLES, SIGNS, MANHOLES, TELEPHONES RISERS, WATER VALVES, UTILITIES, ETC. DURING ALL CONSTRUCTION PHASES. CONTRACTOR WILL BE RESPONSIBLE TO REPLACE ANY DAMAGED ITEMS AND RESTORE ANY SERVICES THAT HAVE BEEN DISTURBED. ALL MANHOLES, CLEAN-OUTS, WATER VALVES, FIRE HYDRANTS AND OTHER APPURTENANCES MUST BE ADJUSTED TO FINAL GRADE BEFORE THE OWNER WILL ACCEPT THE WORK.
7. THE CONTRACTOR SHALL SALVAGE ALL EXISTING CITY UTILITIES (INCLUDING SIGNS, VALVES, FIRE HYDRANTS, ETC.) IN ACCORDANCE WITH CITY REQUIREMENTS AND PROVIDE TO THE CITY.
8. ALL UTILITIES WITHIN 5' OF PROPOSED BUILDING(S) SHALL ADHERE TO THE MEP'S RECOMMENDATIONS AND OR REQUIREMENTS. CONTRACTOR SHALL PROVIDE STORM DRAIN CONNECTIONS FOR ALL ROOF DRAIN LINES. REFER TO MEP'S PLANS AND RELATED TECHNICAL SPECIFICATIONS. CIVIL UTILITIES (WATER, SANITARY SEWER & STORM SEWER) LIMITS BEGIN 5' OUTSIDE THE BUILDING. IN THE EVENT OF OF A CONFLICT WITH THE MEP'S WITHIN THIS AREA, THE MEP'S REQUIREMENTS SHALL GOVERN.
9. TESTING OF UTILITY TRENCH BACKFILL COMPACTION SHALL BE AT 75' INTERVALS AND EACH LIFT'S BACKFILL. BACKFILL SHALL BE PROCESSED SUCH THAT NO DIRT CLODS ARE IN EXCESS OF 4" DIAMETER. ALL SANITARY SEWER LINES AND STORM SEWER LINES SHALL BE TV TESTED AT THE COMPLETION OF THE PROJECT. (IN ADDITION TO MINIMUM CODE OR OTHER REQUIREMENTS) TO CHECK FOR DAMAGE CAUSED BY OTHER TRADES, UTILITY CONFLICTS, TRENCH SETTLEMENT, ETC. THE COST OF SUCH SHALL BE INCLUDED IN THE CONTRACTORS BASE PRICE.

EARTHWORK NOTES

1. PLACE TOPSOIL TO WITHIN 0.10' OF FINISH GRADE. SEE TOPSOIL SPECIFICATION SHOULD IMPORTED MATERIAL BE NECESSARY.
2. AS A RESULT OF THE SITE GEOLOGY AND PROPOSED SITE PLAN, THE CONTRACTOR SHALL ESTABLISH A SOIL MANAGEMENT PLAN/OPERATION THROUGHOUT THE CONSTRUCTION PROCESS. ALL TOPSOIL SHALL BE SALVAGED AND STOCKPILED ON-SITE. STOCKPILED TOPSOIL MAY BECOME STERILE AND NON-FERTILE OVER TIME. THE CONTRACTOR SHALL AMEND AND SUPPLEMENT THE STOCKPILED TOPSOIL AS NECESSARY TO YIELD A FERTILE TOPSOIL SUPPLY. THE CONTRACTOR'S BID SHALL INCLUDE ALL NECESSARY TOPSOIL (IMPORT MAY BE REQUIRED) AS REQUIRED TO BACKFILL AND CROWN ALL LANDSCAPE ISLANDS AND LANDSCAPE AREAS. THE LACK OF AVAILABLE ON-SITE TOPSOIL WILL NOT BE GROUNDS FOR A CHANGE ORDER OR ADDITIONAL PAY.

SEQUENCING / TRAFFIC CONTROL NOTES

1. CONTRACTOR SHALL PREPARE, FURNISH, MAINTAIN, AND REMOVE ALL TRAFFIC CONTROL BARRICADES, WARNING SIGNS, LIGHTS, CONSTRUCTION FENCES, ETC. FOR THE WORK THROUGHOUT CONSTRUCTION. ALL BARRICADES, WARNING SIGNS, LIGHTS, DEVICES, ETC., FOR THE GUIDANCE AND PROTECTION OF TRAFFIC AND PEDESTRIANS MUST CONFORM TO THE INSTALLATION SHOWN IN THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION AS CURRENTLY AMENDED BY THE TEXAS DEPARTMENT OF TRANSPORTATION.
2. CONTRACTOR SHALL PROVIDE ACCESS TO ALL REQUIRED ENTRANCES AND EXITS AT ALL TIMES THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL AND SEQUENCING PLAN TO ALL AUTHORITIES HAVING JURISDICTION AND COORDINATE THE PLAN AND SCHEDULE WITH THE OWNER PRIOR TO THE START OF CONSTRUCTION.

DEMOLITION NOTES

1. NO EARTH-DISTURBING ACTIVITIES SHALL COMMENCE UNTIL ALL PERMITS ARE OBTAINED AND PERIMETER EROSION CONTROL MEASURES ARE IN PLACE.
2. ALL DEMOLITION SHALL BE CLOSELY COORDINATED WITH THE OWNER'S REPRESENTATIVE REGARDING ITEMS TO BE SALVAGED, THOSE TO BE REMOVED, ETC. INCLUDING ANY AND ALL TREE PRESERVATION AND TRANSPLANTING ACTIVITIES, AS OUTLINED IN THE PRE-CONSTRUCTION MEETING. REMOVAL, RELOCATION AND/OR DISPOSAL OF ANY PRE-EXISTING ON-SITE TRASH, DEBRIS, OR STOCKPILES SHALL BE INCLUDED IN THE TOTAL COST OF DEMOLITION AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AT ALL TIMES.
3. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH ALL REGULATIONS GOVERNING AGENCIES REGARDING THE DEMOLITION, REMOVAL, TRANSPORTATION AND DISPOSAL OF ALL DEMOLITION DEBRIS.
4. INGRESS AND EGRESS POINTS, PROPOSED DISPOSAL SITES, AND HAUL ROUTES MUST BE APPROVED BY CITY OFFICIALS PRIOR TO REMOVAL OF DEMOLITION DEBRIS OFF-SITE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING DISCONNECTION OF ALL UTILITIES SERVING THE EXISTING SITE WITH THE APPROPRIATE UTILITY COMPANY, AND SHALL OBTAIN APPROVAL FROM SAME TO COMMENCE DEMOLITION ACTIVITIES.
6. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS FOR EXCAVATION AND TRENCHING PROCEDURES. CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENC

0"
1"

TCEQ CZP NOTES

THIS CONSTRUCTION PROJECT IS SUBJECT TO THE CONDITIONS GIVEN IN THE EDWARDS AQUIFER PROTECTION PLAN (EAPP) APPROVED AND ISSUED FOR THIS SITE BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ). NO CONSTRUCTION ACTIVITIES MAY COMMENCE UNTIL THAT PLAN HAS BEEN ISSUED BY THE TCEQ. CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PUBLIC NOTICE POSTINGS RELATED TO THIS TCEQ PERMIT PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

CONTRACTOR AND OWNER SHALL ALSO OBTAIN COVERAGE FOR STORMWATER DISCHARGES RELATED TO CONSTRUCTION ACTIVITIES UNDER THE TEXAS GENERAL PERMIT TXR150000. CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PUBLIC NOTICE POSTINGS RELATED TO THIS TCEQ PERMIT PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY CONTRIBUTING ZONE PLAN GENERAL CONSTRUCTION NOTES:

1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY GROUND DISTURBANCE OR CONSTRUCTION ACTIVITIES. THIS NOTICE MUST INCLUDE:
   - THE NAME OF THE APPROVED PROJECT;
   - THE ACTIVITY START DATE; AND
   - THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT SHOULD BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED CONTRIBUTING ZONE PLAN (CZP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTOR(S) SHOULD KEEP COPIES OF THE APPROVED PLAN AND APPROVAL LETTER ON-SITE.
3. NO HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.
4. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. 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.
5. 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.
6. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.
7. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
8. ALL EXCAVATED MATERIAL THAT WILL BE STORED ON-SITE MUST HAVE PROPER E&S CONTROLS.
9. IF PORTIONS OF THE SITE WILL HAVE A CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.
10. THE FOLLOWING RECORDS SHOULD BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:
    - THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
    - THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND
    - THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
11. THE HOLDER OF ANY APPROVED CZP MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
    a. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY BEST MANAGEMENT PRACTICES (BMPS) OR STRUCTURE(S), INCLUDING BUT NOT LIMITED TO TEMPORARY OR PERMANENT PONDS, DAMS, BERMS, SILT FENCES, AND DIVERSIONARY STRUCTURES;
    b. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED;
    c. ANY CHANGE THAT WOULD SIGNIFICANTLY IMPACT THE ABILITY TO PREVENT POLLUTION OF THE EDWARDS AQUIFER; OR
    d. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE APPROVED CONTRIBUTING ZONE PLAN.

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Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Liberty Hill Elementary School #9
Date Prepared: 12/5/2025

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

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

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

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

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

County =	Williamson	
Total project area included in plan * =	13.50	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	7.82	acres
Total post-development impervious cover fraction * =	0.58	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	6807	lbs.

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

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

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

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	13.50	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	7.82	acres
Post-development impervious fraction within drainage basin/outfall area =	0.58	
$L_{M\ THIS\ BASIN}$ =	6807	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Batch Detention
Removal efficiency = 91 percent

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

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

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

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

A_C =	13.50	acres
A_I =	7.82	acres
A_P =	5.68	acres
L_R =	7968	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 6807 lbs.

F = 0.85

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

Rainfall Depth =	1.32	inches
Post Development Runoff Coefficient =	0.41	
On-site Water Quality Volume =	26249	cubic feet

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

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site Runoff Coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	5250	
Total Capture Volume (required water quality volume(s) x 1.20) =	31498	cubic feet

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

PBK
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TX FIRM: BR-1608
AUSTIN, TX
512-340-0676

ELEMENTARY SCHOOL #9

1703 Tower Road
Liberty Hill Texas 78642

75% CD PROGRESS SET

LIBERTY HILL INDEPENDENT SCHOOL DISTRICT

F E D
G C A B

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
JACK H. GARNER JR.
98447
LICENSED PROFESSIONAL ENGINEER
12.05.2025
TCEQ CZP
TBPE Registration #: 13709

CLIENT
LIBERTY HILL ISD

DATE	PROJECT NUMBER
12/05/2025	250254

DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

TCEQ NOTES & CALCULATIONS

C-102

TOPOGRAPHIC SURVEY (1 OF 2)
C-103
FOR BLUEBEAM LABELING/OCR:

LEGEND AND ABBREVIATIONS (NOT SHOWN TO SCALE)

SOME ITEMS MAY NOT PERTAIN TO THIS SURVEY. THE IDENTIFICATION IS SUBJECT TO INTERPRETATION, VERIFICATION MAY BE REQUIRED.

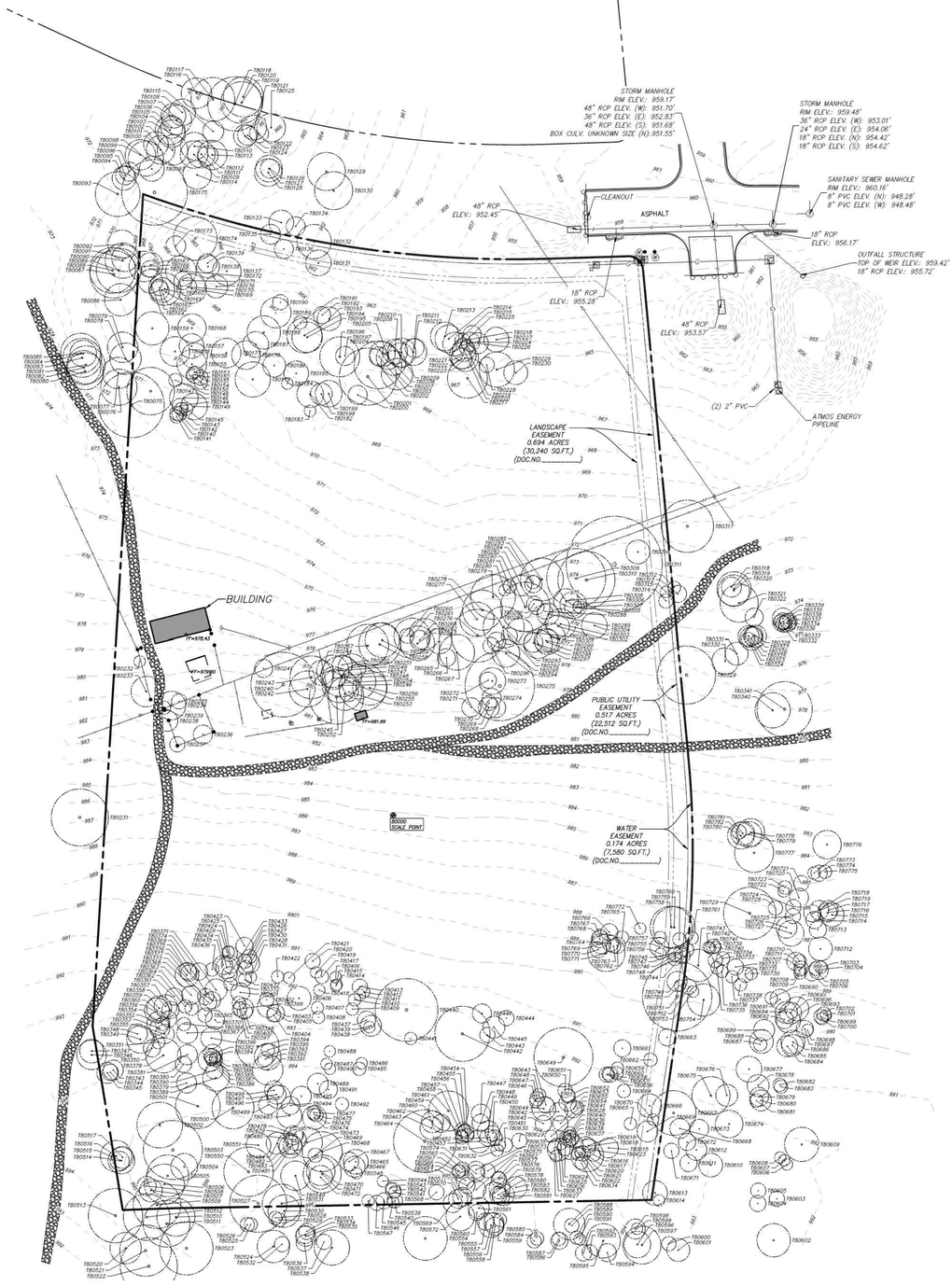
- HYDRANT
- AREA LIGHT
- POLE
- GUY WIRE
- ANCHOR POLE
- MANHOLE
- MANHOLE (DRAINAGE)
- MANHOLE (SANITARY SEWER)
- MANHOLE (ELECTRIC)
- MANHOLE (WATER)
- MANHOLE (NATURAL GAS)
- MANHOLE (TELEPHONE)
- MANHOLE (FORCE MAIN)
- MANHOLE (STEAM)
- MANHOLE (UNKNOWN UTILITY)
- WATER VALVE
- WATER METER
- GAS VALVE
- UNIDENTIFIED UTILITY
- CLEAN OUT
- IRRIGATION VALVE
- TREE
- SIGN
- FLAG POLE
- BOLLARD
- ELECTRIC BOX
- FDC — REMOTE FIRE DISCONNECT
- BENCHMARK
- ROOF DRAIN
- x322.35 — SPOT ELEVATION
- SET IRON AND CAP STAMPED "LANGAN"
- SET PK AND WASHER STAMPED "LANGAN"
- EP — EDGE OF PAVEMENT
- CC — CONCRETE CURB
- CONC — CONCRETE
- ASPH — ASPHALT
- D — STORM DRAIN
- S — SANITARY LINE
- COMB — COMBINED UTILITY LINE
- UNK — UNKNOWN UTILITY LINE
- G — GAS LINE
- W — WATER LINE
- FIRE WATER LINE
- E — ELECTRIC LINE
- T — TELEPHONE LINE
- C — CABLE TV LINE
- EDGE OF ASPHALT
- FIRE LANE
- FM — FORCE MAIN
- FO — FIBER OPTIC
- (_)* — REFERENCED UTILITY LINE (TYPE AS NOTED) BASED ON RECORD MAPPING
- OVERHEAD WIRE
- GUIDE RAIL(TYPE AS NOTED)
- X — CHAIN LINK FENCE
- EASEMENT LINE
- PROPERTY LINE
- ADJOINING TRACT
- 322 — CONTOUR LINE

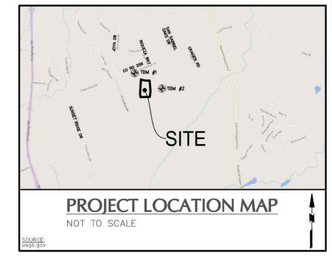
SURVEYOR'S NOTES

1. BEARINGS FOR THIS SURVEY ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83), STATE PLANE COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203). DISTANCES, AREAS, AND COORDINATES HAVE BEEN SCALED BY A SURFACE ADJUSTMENT FACTOR OF 1.000145360 1 FROM POINT NUMBER 80,000.
   (N: 10218219.25')
   (E: 3074848.40')
2. ELEVATIONS FOR THIS SITE ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), UTILIZING GEOID 18. BENCHMARKS SET AS DESCRIBED BELOW.
   BENCHMARK #1 (TBM #1) IS A MAG NAIL WITH A WASHER STAMPED "LANGAN BENCHMARK" SET IN CONCRETE CULVERT FOR DRIVEWAY ALONG THE SOUTHERLY MARGIN OF COUNTY ROAD 258, LOCATED APPROXIMATELY 430 FEET NORTHEASTERLY FROM THE INTERSECTION OF JOYA DRIVE AND COUNTY ROAD 258, AND APPROXIMATELY 885 FEET SOUTHWESTERLY FROM THE INTERSECTION OF RIQUEZA WAY AND COUNTY ROAD 258. BENCHMARK ELEVATION = 985.80' (NAVD88). SEE VICINITY MAP FOR GENERAL LOCATION.
   BENCHMARK #2 (TBM #2) IS A MAG NAIL WITH A WASHER STAMPED "LANGAN BENCHMARK" SET IN CONCRETE FOR A DRAIN INLET COVER, LOCATED APPROXIMATELY 2,230 FEET SOUTHEASTERLY FROM THE INTERSECTION OF JOYA DRIVE AND COUNTY ROAD 258 AND APPROXIMATELY 1,550 FEET SOUTHEASTERLY FROM THE INTERSECTION OF RIQUEZA WAY AND COUNTY ROAD 258. BENCHMARK ELEVATION = 610.55' (NAVD88). SEE VICINITY MAP FOR GENERAL LOCATION.
3. SITE SURFACE IS NATURAL GROUND/DIRT UNLESS NOTED OTHERWISE.
4. FIELD WORK WAS COMPLETED SEPTEMBER 25, 2025.
5. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE COMMITMENT. COMPLETE COPIES OF THE RECORD DESCRIPTION OF THE PROPERTY, ANY RECORD EASEMENTS BENEFITING THE PROPERTY, THE RECORD EASEMENTS OR SERVITUDES AND COVENANTS AFFECTING THE PROPERTY ("RECORD DOCUMENTS"), DOCUMENTS OF RECORD REFERRED TO IN THE RECORD DOCUMENTS, AND ANY OTHER DOCUMENTS CONTAINING DESIRED APPROPRIATE INFORMATION AFFECTING THE PROPERTY BEING SURVEYED AND TO WHICH THE SURVEY SHALL MAKE REFERENCE WERE NOT PROVIDED TO THIS SURVEYOR FOR NOTATION ON THE SURVEY. THEREFORE, EASEMENTS, AGREEMENTS, OR OTHER DOCUMENTS, EITHER RECORDED, OR UNRECORDED MAY EXIST THAT AFFECT THE SUBJECT PROPERTY THAT ARE NOT SHOWN ON THIS SURVEY.
6. THIS IS NOT A BOUNDARY SURVEY. BOUNDARY LINES SHOWN HEREON ARE FOR REFERENCE PURPOSES ONLY AND SHOULD NOT BE CONSTRUED AS A "BOUNDARY SURVEY" IN COMPLIANCE WITH THE TEXAS BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS MINIMUM STANDARDS OF PROCEDURES FOR BOUNDARY SURVEYS. ADJOINER INFORMATION, EASEMENTS AND OTHER MATTERS ARE NOT SHOWN HEREON AND WAS NOT RESEARCHED BY THE SURVEYOR FOR THE PURPOSES OF THIS TOPOGRAPHIC SURVEY..

MICHAEL JACK NEEDHAM
REGISTERED PROFESSIONAL
LAND SURVEYOR NO. 5183
JNEEDHAM@LANGAN.COM
October 6, 2025

STATE OF TEXAS — REGISTERED — Michael Jack Needham — 5183 — PROFESSIONAL LAND SURVEYOR





PROJECT LOCATION MAP
NOT TO SCALE

60' 0 30' 60'
SCALE: 1 INCH = 60 FEET

PRELIMINARY, THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT - §138.33E RELEASED FOR REVIEW ON 2025/10/06

LANGAN
Langan Engineering and Environmental Services, LLC
9606 N. Mopac Expressway, Suite 110
Austin, TX 78759
T: 737.289.7800 F: 737.289.7801 www.langan.com
TBPELS Firm No. 10194888

Project
LIBERTY HILL ISD
NEW E.S. #9
CITY OF LIBERTY HILL
WILLIAMSON COUNTY TEXAS

Drawing Title
TOPOGRAPHIC SURVEY

Project No.	Drawing No.
531013323	VT-01
Date: 2025/10/06	
Drawn By: A. SMITH/Z.MOORE	
Checked By: A. ROMERO/J. NEEDHAM	Sheet 1 of 2

Filename: C:\bim\langan-pw-01\d0745444\531013323-V-SEG0101.dwg Date: 10/6/2025 Time: 13:50 User: zmoore Style Table: Langan.stb Layout: TOPO PG1

LANGAN
PROJECT NO. ########

PBK
www.pbk.com
TX FIRM: BR-1608
AUSTIN, TX
512-340-0676

ELEMENTARY SCHOOL #9
1703 Tower Road
Liberty Hill Texas 78642
75% CD PROGRESS SET

F E D
G C
A B

KEY PLAN
NORTH: PLAN TRUE

CLIENT
LIBERTY HILL ISD
DATE 12/05/2025
PROJECT NUMBER 250254
DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

TOPOGRAPHIC SURVEY (1 OF 2)

C-103

Plot Stamp:
Date: 12/5/2025 Time: 12:44 User: kekim Style Table: Langan.stb Layout: C-103 TOPOGRAPHIC SURVEY (1 OF 2)

Document Code: 531013323-0102-VT001-0101

TOPOGRAPHIC SURVEY (2 OF 2)
C-104
FOR BLUEBEAM LABELING/OCR:

TREE TABLE	
POINT	SIZE & SPECIES
80075	34.5" LIVE OAK
80076	19" CEDAR ELM
80077	16.5" CEDAR ELM
80078	16.5" CEDAR ELM
80079	16" CEDAR ELM
80080	19.5" LIVE OAK
80081	20" LIVE OAK
80082	18" CEDAR ELM
80083	20.5" LIVE OAK
80084	14" LIVE OAK
80085	21" LIVE OAK
80086	17" CEDAR ELM
80087	25" LIVE OAK
80088	24" LIVE OAK
80089	23.5" LIVE OAK
80090	18.5" LIVE OAK
80091	14" LIVE OAK
80092	15" CEDAR ELM
80093	23.5" CEDAR ELM (M) 14", 10", 9"
80094	12.5" LIVE OAK (M) 9", 7"
80095	10" LIVE OAK
80096	10" LIVE OAK
80097	13" LIVE OAK
80098	18.5" LIVE OAK
80099	16" CEDAR ELM
80100	15" LIVE OAK
80101	13" LIVE OAK
80102	16" LIVE OAK (M) 12", 8"
80103	14.5" LIVE OAK (M) 8", 7", 6"
80104	15.5" LIVE OAK
80105	11.5" LIVE OAK
80106	15.5" LIVE OAK
80107	13" CEDAR ELM
80108	14" LIVE OAK
80109	14.5" CEDAR ELM
80110	14.5" CEDAR ELM
80111	14.5" LIVE OAK (M) 10", 9"
80112	10.5" LIVE OAK
80113	15.5" LIVE OAK
80114	15" CEDAR ELM
80115	11" LIVE OAK
80116	16" CEDAR ELM
80117	23" LIVE OAK (M) 17", 12"
80118	28.5" LIVE OAK
80119	22" LIVE OAK
80120	21" LIVE OAK
80121	13" CEDAR ELM (M) 9", 8"
80122	10" CEDAR ELM
80123	10.5" CEDAR ELM
80124	12" CEDAR ELM
80125	15" CEDAR ELM
80126	10" CEDAR ELM
80127	14" LIVE OAK
80128	14.5" LIVE OAK
80129	20" LIVE OAK
80130	20" LIVE OAK
80131	13.5" CEDAR ELM
80132	18" LIVE OAK
80133	13" LIVE OAK
80134	10" LIVE OAK
80135	10.5" LIVE OAK
80136	10" LIVE OAK
80137	15" LIVE OAK (M) 10", 10"
80138	12" LIVE OAK
80139	10" LIVE OAK
80140	7.5" LIVE OAK
80141	7" LIVE OAK
80142	7.5" LIVE OAK
80143	7" LIVE OAK
80144	8" LIVE OAK

TREE TABLE	
POINT	SIZE & SPECIES
80145	7" LIVE OAK
80146	15" LIVE OAK
80147	25" LIVE OAK
80148	7" LIVE OAK
80149	14" LIVE OAK (M) 11", 6"
80150	7" LIVE OAK
80151	8" LIVE OAK
80152	9" LIVE OAK (M) 7", 4"
80153	6" LIVE OAK
80154	6" LIVE OAK
80155	15.5" LIVE OAK
80156	13.5" LIVE OAK
80157	13" LIVE OAK
80158	15.5" LIVE OAK
80159	17.5" LIVE OAK
80160	17" LIVE OAK (M) 13", 8"
80161	13" LIVE OAK
80162	10" LIVE OAK
80163	8.5" LIVE OAK
80164	12.5" CEDAR ELM
80165	8.5" CEDAR ELM
80166	16" LIVE OAK (M) 11", 10"
80167	13" LIVE OAK
80168	15" CEDAR ELM
80169	15.5" LIVE OAK
80170	9.5" LIVE OAK
80171	9.5" CEDAR ELM
80172	16" LIVE OAK
80173	10.5" LIVE OAK
80174	23" LIVE OAK
80175	34.5" CEDAR ELM (M) 20", 15", 14"
80176	12" LIVE OAK
80177	15.5" LIVE OAK
80178	15" CEDAR ELM
80179	18.5" LIVE OAK
80182	14" LIVE OAK
80183	6" LIVE OAK
80184	6" LIVE OAK
80185	13" LIVE OAK
80186	12" LIVE OAK
80187	13.5" LIVE OAK
80188	17.5" LIVE OAK
80189	16" LIVE OAK
80190	8" LIVE OAK
80191	7" LIVE OAK
80192	9" LIVE OAK
80193	12.5" LIVE OAK
80194	18.5" LIVE OAK
80195	16" LIVE OAK
80196	21" LIVE OAK (M) 15", 12"
80197	10" LIVE OAK
80198	11.5" LIVE OAK
80199	14" LIVE OAK
80200	10" LIVE OAK
80201	30" LIVE OAK
80202	25" LIVE OAK
80203	10" LIVE OAK
80204	13.5" LIVE OAK
80205	12.5" LIVE OAK
80206	13" LIVE OAK
80207	16.5" LIVE OAK
80208	13" LIVE OAK
80209	13" LIVE OAK
80210	15" LIVE OAK
80211	14" LIVE OAK
80212	10" LIVE OAK
80213	15" LIVE OAK
80214	14.5" LIVE OAK
80215	12.5" LIVE OAK
80217	21" LIVE OAK

TREE TABLE	
POINT	SIZE & SPECIES
80218	8" LIVE OAK
80219	7.5" LIVE OAK
80220	12" LIVE OAK
80221	14" LIVE OAK
80222	11" LIVE OAK
80223	14" LIVE OAK
80224	10" LIVE OAK
80225	9.5" LIVE OAK
80226	11" LIVE OAK
80227	13" LIVE OAK
80228	8" LIVE OAK
80229	18.5" LIVE OAK
80230	12.5" LIVE OAK
80231	30" LIVE OAK
80232	6" HACKBERRY
80233	16" HACKBERRY
80234	15" HACKBERRY (M) 10", 10"
80235	8" HACKBERRY
80236	10" HACKBERRY
80237	8" HACKBERRY
80238	11" HACKBERRY
80239	7" HACKBERRY
80240	34" LIVE OAK
80241	9.5" HACKBERRY
80242	19" LIVE OAK
80243	22.5" LIVE OAK (M) 17", 11"
80244	13" LIVE OAK
80245	28.5" LIVE OAK
80246	18" LIVE OAK
80247	21.5" LIVE OAK
80248	12" LIVE OAK
80249	17" LIVE OAK
80250	10.5" LIVE OAK
80251	14.5" LIVE OAK
80252	17.5" LIVE OAK
80253	10" LIVE OAK
80254	18" LIVE OAK
80255	25" LIVE OAK
80256	18" LIVE OAK
80257	22" LIVE OAK
80258	22" LIVE OAK
80259	18" LIVE OAK
80260	7.5" LIVE OAK
80261	19" LIVE OAK
80262	10" LIVE OAK
80263	18" LIVE OAK
80264	16" LIVE OAK
80265	13" LIVE OAK
80266	9.5" LIVE OAK
80267	18.5" LIVE OAK
80268	10.5" LIVE OAK
80269	11" LIVE OAK
80270	8" LIVE OAK
80271	10" LIVE OAK
80272	8.5" LIVE OAK
80273	14" LIVE OAK
80274	10" LIVE OAK
80275	36.5" LIVE OAK (M) 19", 18", 17"
80276	27.5" LIVE OAK
80277	18" LIVE OAK
80278	21" LIVE OAK
80279	23.5" LIVE OAK
80280	6" LIVE OAK
80281	7" LIVE OAK
80282	11" LIVE OAK
80283	7" LIVE OAK
80284	9" LIVE OAK
80285	22.5" LIVE OAK
80286	8" LIVE OAK
80287	8" LIVE OAK

TREE TABLE	
POINT	SIZE & SPECIES
80288	8" LIVE OAK
80289	11.5" LIVE OAK
80290	26" LIVE OAK
80291	13.5" LIVE OAK
80292	8.5" LIVE OAK
80293	21.5" LIVE OAK
80294	14.5" LIVE OAK
80295	9.5" LIVE OAK
80296	8.5" LIVE OAK
80297	10" LIVE OAK
80298	15" LIVE OAK
80299	12.5" LIVE OAK
80300	13" LIVE OAK
80301	15" LIVE OAK
80302	12" LIVE OAK
80303	16" LIVE OAK
80304	13.5" LIVE OAK
80305	9" LIVE OAK
80306	14" LIVE OAK
80307	6" LIVE OAK
80308	13" LIVE OAK
80309	31" LIVE OAK
80310	30" LIVE OAK
80311	50.5" LIVE OAK (M) 35", 31"
80312	6.5" LIVE OAK
80313	9" LIVE OAK (M) 7", 4"
80314	7.5" LIVE OAK (M) 6", 3"
80315	6" LIVE OAK
80316	12.5" LIVE OAK
80317	27.5" LIVE OAK (M) 19", 17"
80318	10.5" LIVE OAK
80319	18" LIVE OAK
80320	16.5" LIVE OAK (M) 11", 11"
80321	20" LIVE OAK
80322	9.5" LIVE OAK
80323	11" LIVE OAK
80324	7" LIVE OAK
80325	12" LIVE OAK
80326	9.5" LIVE OAK
80327	9" LIVE OAK
80328	11.5" LIVE OAK
80329	30.5" LIVE OAK (M) 21", 19"
80330	14" LIVE OAK
80331	12" LIVE OAK
80332	8.5" LIVE OAK
80333	8.5" LIVE OAK
80334	7" LIVE OAK
80335	9" LIVE OAK
80336	9" LIVE OAK
80337	9" LIVE OAK
80338	8" LIVE OAK
80339	11" LIVE OAK (M) 8", 6"
80340	18.5" LIVE OAK
80341	29" LIVE OAK (M) 16", 15", 11"
80343	10.5" LIVE OAK
80344	8.5" LIVE OAK
80345	11" LIVE OAK
80346	15.5" LIVE OAK
80347	12.5" LIVE OAK (M) 9", 7"
80348	10.5" LIVE OAK
80349	14.5" LIVE OAK
80350	9" LIVE OAK
80351	7" LIVE OAK
80352	12" LIVE OAK (M) 9", 6"
80353	10.5" LIVE OAK
80354	7" LIVE OAK
80355	10" LIVE OAK
80356	8.5" LIVE OAK
80357	9" LIVE OAK
80358	12" LIVE OAK

TREE TABLE	
POINT	SIZE & SPECIES
80359	13" LIVE OAK
80360	13" LIVE OAK
80361	9" LIVE OAK
80362	7" LIVE OAK
80363	10" LIVE OAK
80364	7" LIVE OAK
80365	7.5" LIVE OAK
80366	7" LIVE OAK
80367	11" LIVE OAK
80368	9" LIVE OAK
80369	9" LIVE OAK
80370	10" LIVE OAK
80371	11.5" LIVE OAK
80372	7" LIVE OAK
80373	8.5" LIVE OAK
80374	9" LIVE OAK (M) 6", 6"
80375	9" LIVE OAK
80376	8.5" LIVE OAK
80377	12.5" LIVE OAK
80378	18.5" LIVE OAK
80379	10.5" LIVE OAK
80380	8.5" LIVE OAK
80381	10.5" LIVE OAK (M) 7", 7"
80382	10" LIVE OAK (M) 7", 6"
80383	6.5" LIVE OAK
80384	8.5" LIVE OAK
80385	6.5" LIVE OAK
80386	12" LIVE OAK (M) 6", 8"
80387	6" LIVE OAK
80388	7" LIVE OAK
80389	14" LIVE OAK
80390	9" LIVE OAK
80391	16" LIVE OAK (M) 12", 8"
80392	8" LIVE OAK
80393	14" LIVE OAK
80394	22.5" LIVE OAK
80395	7" LIVE OAK
80396	11" LIVE OAK
80397	7.5" LIVE OAK
80398	8" LIVE OAK
80399	10.5" LIVE OAK
80400	7" LIVE OAK
80401	10" LIVE OAK
80402	7.5" LIVE OAK
80403	11" LIVE OAK
80404	7.5" LIVE OAK
80405	9" LIVE OAK
80406	12.5" LIVE OAK
80407	6.5" LIVE OAK
80408	6.5" LIVE OAK
80409	6.5" LIVE OAK
80410	6.5" LIVE OAK
80411	6" LIVE OAK
80412	6.5" LIVE OAK
80413	8" LIVE OAK
80414	6" LIVE OAK
80415	6" LIVE OAK
80416	6" LIVE OAK
80417	7" LIVE OAK
80418	6" LIVE OAK
80419	6" LIVE OAK
80420	8" LIVE OAK
80421	6" LIVE OAK
80422	6.5" LIVE OAK
80423	9" LIVE OAK (M) 6", 6"
80424	6.5" LIVE OAK
80425	8" LIVE OAK
80426	7.5" LIVE OAK
80427	7.5" LIVE OAK
80428	10" LIVE OAK

TREE TABLE	
POINT	SIZE & SPECIES
80429	9.5" LIVE OAK
80430	7.5" LIVE OAK
80431	6" LIVE OAK
80432	7" LIVE OAK
80433	8" LIVE OAK
80434	11.5" LIVE OAK
80435	10" LIVE OAK
80436	7" LIVE OAK
80437	9.5" LIVE OAK (M) 5", 5", 4"
80438	6" LIVE OAK
80439	11" LIVE OAK (M) 6", 5", 5"
80440	33" LIVE OAK
80441	6.5" LIVE OAK
80442	29" LIVE OAK
80443	8" LIVE OAK
80444	8" LIVE OAK
80445	11.5" LIVE OAK
80446	10" LIVE OAK
80447	10" LIVE OAK
80448	9" LIVE OAK
80449	11.5" LIVE OAK
80450	8" LIVE OAK
80451	8" LIVE OAK
80452	9" LIVE OAK
80453	12" LIVE OAK
80454	7" LIVE OAK
80455	9" LIVE OAK
80456	7" LIVE OAK
80457	7.5" LIVE OAK
80458	6" LIVE OAK
80459	7" LIVE OAK
80460	9.5" LIVE OAK
80461	21" LIVE OAK
80462	11.5" CEDAR ELM
80463	12" CEDAR ELM
80464	33" LIVE OAK
80465	13" LIVE OAK
80466	11" LIVE OAK
80467	10" LIVE OAK
80468	21" LIVE OAK (M) 15", 12"
80469	7.5" LIVE OAK
80470	15" LIVE OAK
80471	20" LIVE OAK
80472	12.5" LIVE OAK
80473	16" LIVE OAK
80474	12.5" LIVE OAK
80475	7" LIVE OAK
80476	6.5" LIVE OAK
80477	7" LIVE OAK
80478	8" LIVE OAK
80479	10" LIVE OAK
80480	11" LIVE OAK (M) 8", 6"
80481	10" LIVE OAK
80482	11" LIVE OAK
80483	12" LIVE OAK
80484	11.5" LIVE OAK (M) 8", 7"
80485	7" LIVE OAK
80486	6" LIVE OAK
80487	6" LIVE OAK
80488	6" LIVE OAK
80489	11" LIVE OAK
80490	6" LIVE OAK
80491	9.5" LIVE OAK (M) 7", 5"
80492	7" LIVE OAK (M) 5", 4"
80493	13" LIVE OAK
80494	9.5" LIVE OAK
80495	10.5" LIVE OAK (M) 8", 5"
80496	12.5" LIVE OAK
80497	10" LIVE OAK
80498	10" LIVE OAK

TREE TABLE	
POINT	SIZE & SPECIES
80499	10" LIVE OAK
80500	22" LIVE OAK (M) 17", 10"
80501	23.5" LIVE OAK
80502	24" LIVE OAK
80503	31" LIVE OAK (M) 22", 18"
80504	14" LIVE OAK
80505	22" LIVE OAK
80506	21" LIVE OAK
80507	12" LIVE OAK
80508	10" LIVE OAK
80509	25" LIVE OAK
80510	20" LIVE OAK
80511	24.5" LIVE OAK
80512	24.5" LIVE OAK
80513	28.5" LIVE OAK
80514	10" LIVE OAK
80515	14" LIVE OAK
80516	16.5" LIVE OAK (M) 12", 9"
80517	11.5" LIVE OAK
80520	16.5" LIVE OAK
80521	27" LIVE OAK
80522	30" LIVE OAK (M) 17", 14", 12"
80523	28" LIVE OAK
80524	17" LIVE OAK
80525	7" LIVE OAK
80526	7.5" LIVE OAK
80527	30" LIVE OAK
80528	7" LIVE OAK
80529	7.5" LIVE OAK
80530	17" LIVE OAK
80531	20.5" LIVE OAK
80532	8" LIVE OAK
80533	8.5" LIVE OAK
80534	9.5" LIVE OAK
80535	10.5" LIVE OAK
80536	8.5" LIVE OAK (M) 6", 5"
80537	8" LIVE OAK
80538	18.5" LIVE OAK
80539	8" LIVE OAK
80540	6" LIVE OAK
80541	6.5" LIVE OAK
80542	8" CEDAR ELM
80543	6" LIVE OAK
80544	6" CEDAR ELM
80545	8.5" LIVE OAK
80546	8" LIVE OAK
80547	6.5" LIVE OAK
80548	6" LIVE OAK (M) 4", 4"
80549	15.5" LIVE OAK
80550	26" LIVE OAK
80551	13" LIVE OAK
80554	23" LIVE OAK
80555	9" LIVE OAK
80556	10.5" LIVE OAK
80557	13" LIVE OAK (M) 9", 8"
80558	9.5" LIVE OAK
80559	7" CEDAR ELM
80560	8.5" LIVE OAK
80561	11" LIVE OAK
80562	10" LIVE OAK
80563	8.5" LIVE OAK
80564	9.5" LIVE OAK
80565	7.5" LIVE OAK
80566	7" LIVE OAK
80567	7" CEDAR ELM
80568	8" LIVE OAK (M) 6", 4"
80569	10" LIVE OAK
80570	10" LIVE OAK
80571	10" LIVE OAK
80572	15" LIVE OAK (M) 12", 6"

TREE TABLE	
POINT	SIZE & SPECIES
80573	9" LIVE OAK
80574	9" LIVE OAK
80575	7.5" LIVE OAK
80576	8" LIVE OAK
80577	6.5" CEDAR ELM
80578	11.5" LIVE OAK (M) 9", 5"
80579	11" LIVE OAK
80580	9" LIVE OAK
80581	9" LIVE OAK
80582	11.5" LIVE OAK
80583	11.5" LIVE OAK
80584	7.5" LIVE OAK
80585	7" LIVE OAK
80586	9" LIVE OAK
80587	7" LIVE OAK
80588	16.5" LIVE OAK
80589	7.5" LIVE OAK
80590	7" LIVE OAK
80591	6" LIVE OAK
80592	8.5" LIVE OAK
80593	8" LIVE OAK
80594	9.5" LIVE OAK
80595	18" LIVE OAK
80596	14" LIVE OAK
80597	20" LIVE OAK (M) 15", 10"
80598	10.5" LIVE OAK (M) 8", 5"
80599	6" LIVE OAK
80600	7.5" LIVE OAK (M) 5", 5"
80601	12" LIVE OAK
80602	17.5" LIVE OAK
80603	8" LIVE OAK (M) 6", 4"
80604	8.5" LIVE OAK (M) 8", 5"
80605	8" LIVE OAK (M) 6", 4"
80606	6" LIVE OAK (M) 4", 4"
80607	6" LIVE OAK
80608	6" LIVE OAK
80609	18" LIVE OAK
80610	12.5" LIVE OAK
80611	9" LIVE OAK
80612	11" LIVE OAK
80613	13" LIVE OAK
80614	6" LIVE OAK
80615	10.5" LIVE OAK
80616	7" LIVE OAK
80617	17" LIVE OAK
80618	10.5" LIVE OAK (M) 7", 7"
80619	7.5" LIVE OAK (M) 5", 5"
80620	8" LIVE OAK
80621	6" LIVE OAK
80622	7" LIVE OAK
80623	13.5" LIVE OAK (M) 8", 7", 4"
80624	8.5" LIVE OAK (M) 6", 5"
80625	6" LIVE OAK
80626	12" LIVE OAK (M) 7", 6", 4"
80627	7" LIVE OAK
80628	6.5" CEDAR ELM
80629	8" LIVE OAK (M) 6", 4"
80630	7.5" LIVE OAK (M) 5", 5"
80631	6" CEDAR ELM
80632	6.5" CEDAR ELM
80633	6" LIVE OAK
80634	6.5" LIVE OAK
80635	6" LIVE OAK
80636	6.5" LIVE OAK
80637	6.5" LIVE OAK
80638	8" LIVE OAK (M) 6", 4"
80639	6.5" LIVE OAK
80640	6.5" LIVE OAK
80641	8" CEDAR ELM
80642	9.5" LIVE OAK

TREE TABLE	
POINT	SIZE & SPECIES
80643	8.5" LIVE OAK (M) 6", 5"
80644	12.5" LIVE OAK
80645	8.5" CEDAR ELM
80646	6.5" LIVE OAK
80647	7.5" LIVE OAK
80648	7" LIVE OAK
80649	31" LIVE OAK (M) 24", 14"
80650	7.5" LIVE OAK
80651	7" CEDAR ELM
80652	7.5" LIVE OAK
80653	9" LIVE OAK
80654	7" LIVE OAK
80655	9" LIVE OAK
80656	8" LIVE OAK (M) 6", 4"
80657	6.5" LIVE OAK
80658	8" LIVE OAK
80659	6.5" LIVE OAK
80660	7" LIVE OAK
80661	9" LIVE OAK
80662	7" LIVE OAK (M) 5", 4"
80663	9" LIVE OAK
80664	7" LIVE OAK
80665	6.5" LIVE OAK
80666	12.5" LIVE OAK
80667	23.5" LIVE OAK (M) 13", 11", 10"
80668	10.5" LIVE OAK
80669	11" LIVE OAK (M) 8", 6"
80670	6" LIVE OAK
80671	8" LIVE OAK
80672	9" LIVE OAK
80673	10" LIVE OAK
80674	14.5" LIVE OAK
80675	20" LIVE OAK
80676	11.5" LIVE OAK
80677	13.5" LIVE OAK
80678	11.5" LIVE OAK
80679	10" LIVE OAK
80680	11" LIVE OAK
80681	7" LIVE OAK
80682	7" LIVE OAK
80683	7" LIVE OAK (M) 5", 4"
80684	11" LIVE OAK
80685	11.5" LIVE OAK
80686	12.5" LIVE OAK
80687	7" LIVE OAK
80688	12.5" LIVE OAK
80689	11" LIVE OAK
80690	6.5" LIVE OAK
80691	10.5" LIVE OAK
80692	9.5" LIVE OAK
80693	12.5" LIVE OAK
80694	11.5" LIVE OAK
80695	11.5" LIVE OAK
80696	12.5" LIVE OAK
80697	9" LIVE OAK
80698	6" LIVE OAK
80699	7.5" LIVE OAK
80700	6.5" LIVE OAK
80701	6" LIVE OAK
80702	7.5" LIVE OAK
80703	6.5" LIVE OAK
80704	10" LIVE OAK (M) 7", 6"
80705	7" LIVE OAK
80706	8" LIVE OAK (M) 6", 4"
80707	7.5" LIVE OAK
80708	6.5" LIVE OAK
80709	6.5" LIVE OAK
80710	7" LIVE OAK
80711	9.5" LIVE OAK
80712	12.5" LIVE OAK

TREE TABLE	
POINT	SIZE & SPECIES
80713	9" LIVE OAK
80714	9" LIVE OAK
80715	12.5" LIVE OAK
80716	10" LIVE OAK
80717	10" LIVE OAK
80718	10" LIVE OAK
80719	9" LIVE OAK
80720	10" LIVE OAK
80721	8" LIVE OAK
80722	6" LIVE OAK
80723	7" LIVE OAK
80724	8" LIVE OAK
80725	8" LIVE OAK
80726	11" LIVE OAK
80727	13.5" LIVE OAK (M) 11", 5"
80728	7.5" LIVE OAK (M) 5", 5"
80729	27.5" LIVE OAK
80730	6.5" LIVE OAK
80731	8" LIVE OAK
80732	8.5" LIVE OAK
80733	7" LIVE OAK
80734	7.5" LIVE OAK
80735	6.5" LIVE OAK
80736	6.5" LIVE OAK
80737	6.5" LIVE OAK
80738	6.5" LIVE OAK
80739	7.5" LIVE OAK (M) 5", 5"
80740	6" LIVE OAK
80741	6" LIVE OAK
80742	6" LIVE OAK
80743	17" LIVE OAK
80744	8" LIVE OAK
80745	7" LIVE OAK
80746	7.5" LIVE OAK
80747	7.5" LIVE OAK
80748	7" LIVE OAK
80749	10.5" LIVE OAK (M) 7", 7"
80750	6" LIVE OAK
80751	36.5" LIVE OAK (M) 29", 15"
80752	8" LIVE OAK
80753	6" LIVE OAK
80754	17" LIVE OAK (M) 10", 7", 6"
80755	10" LIVE OAK (M) 7", 6"
80756	6" LIVE OAK
80757	6.5" LIVE OAK
80758	22" LIVE OAK
80759	22" LIVE OAK
80760	7" LIVE OAK
80761	7" LIVE OAK
80762	8.5" LIVE OAK
80763	7.5" LIVE OAK
80764	8.5" LIVE OAK
80765	7" LIVE OAK
80766	9" LIVE OAK
80767	8" LIVE OAK
80768	9" LIVE OAK
80769	10.5" LIVE OAK
80770	8.5" LIVE OAK
80771	19.5" LIVE OAK
80772	6" LIVE OAK
80773	6.5" LIVE OAK
80774	8.5" LIVE OAK
80775	7" LIVE OAK
80776	15" LIVE OAK
80777	20.5" LIVE OAK (M) 16", 9"
80778	14.5" LIVE OAK
80779	13.5" LIVE OAK
80780	14" LIVE OAK
80781	12.5" LIVE OAK
80782	7.5" LIVE OAK

LANGAN

PROJECT NO. ########

ELEMENTARY SCHOOL #9

1703 Tower Road
Liberty Hill Texas 78642

75% CD PROGRESS SET

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TBPELS Firm No. 10194888

Project
LIBERTY HILL ISD
NEW E.S. #9
CITY OF LIBERTY HILL
WILLIAMSON COUNTY TEXAS

Drawing Title
TOPOGRAPHIC SURVEY

Project No. 531013323
Date 2025/10/06
Drawn By A. SMITH
Checked By Z. MOORE

Drawing No. VT-01
Sheet 2 of 2

KEY PLAN
NORTH: PLAN TRUE

CLIENT
LIBERTY HILL ISD
DATE 12/05/2025
PROJECT NUMBER 250254

DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

TOPOGRAPHIC SURVEY (2 OF 2)

C-104

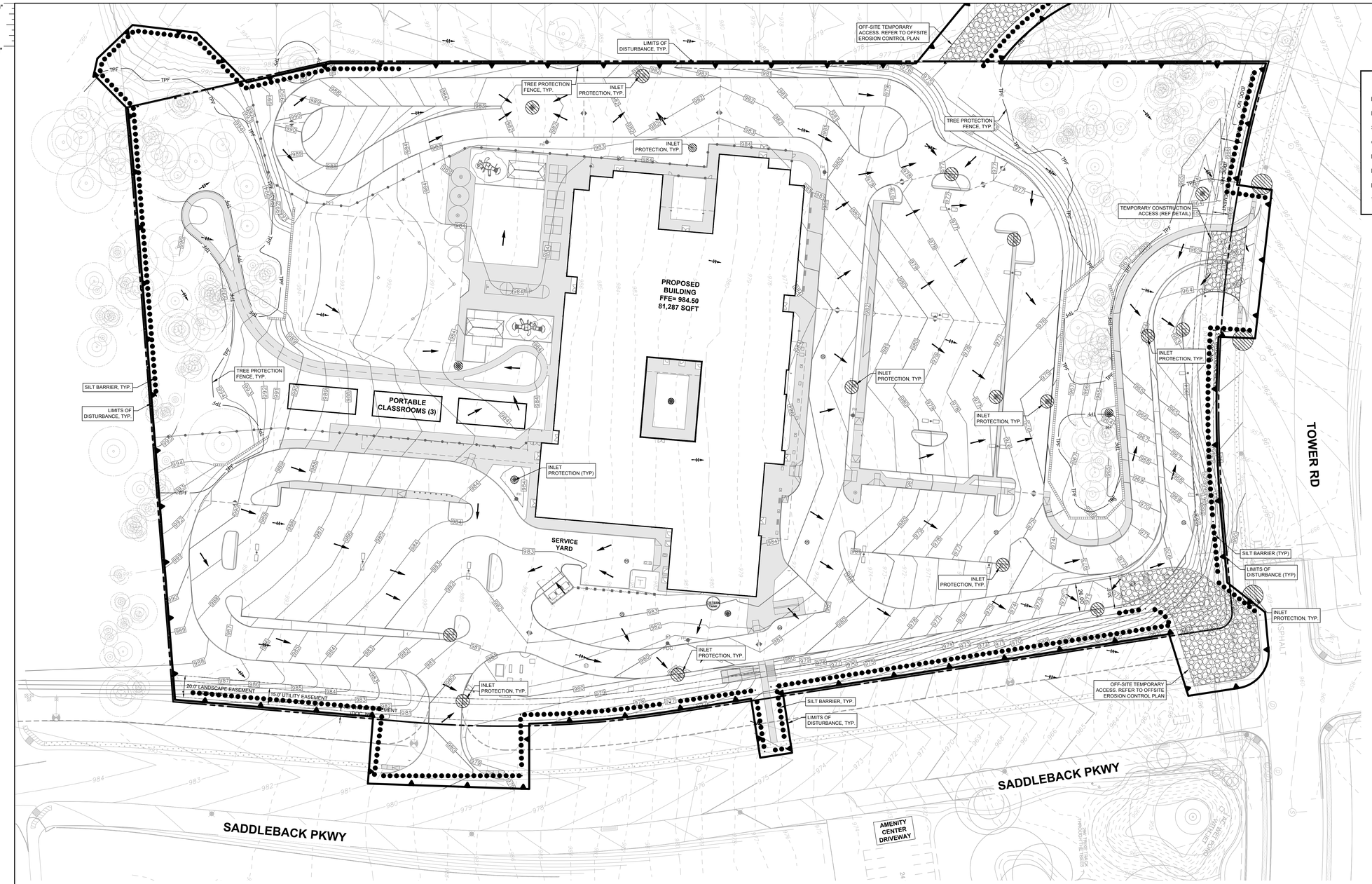
Filename: C:\bim\langan-pw-01\d0745444\531013323-V-SEG0101.dwg Date: 10/6/2025 Time: 13:50 User: zmoore Style Table: Langan.stb Layout: TOPO PG2

Plot Stamp:
Date: 12/5/2025 Time: 12:44 User: kekim Style Table: Langan.stb Layout: C-104 TOPOGRAPHIC SURVEY (2 OF 2)

Document Code: 531013323-0102-VT001-0102

0"
1"

EROSION & SEDIMENT CONTROL PLAN
C-200
FOR BLUEBEAM LABELING/OCR:



40 0 10 25 40
SCALE IN FEET

LEGEND

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- SILT BARRIER
- CONSTRUCTION ACCESS
- EXISTING FLOW ARROW
- FLOW ARROW
- INLET PROTECTION (IP)
- TREE PROTECTION FENCE — TPF —

SITE DATA

TOTAL LAND AREA: 13.50 AC
DISTURBED AREA: 15.73 AC
IMPERVIOUS: 7.82 AC
PERVIOUS: 5.68 AC
RUNOFF COEFF. PRE-DEV: 0.51
RUNOFF COEFF. POST-DEV: 0.78

WATER OF THE U.S. NOTE

THERE ARE NO IMPACTS FROM CONSTRUCTION ACTIVITIES TO THE WATERS OF THE U.S. ON THIS SITE.

SWPPP NOTE

CONTRACTOR IS RESPONSIBLE FOR PREPARING AND IMPLEMENTING A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE TPDES.

STABILIZATION NOTE

ALL DISTURBED AREAS SHALL BE WATERED, FERTILIZED, AND SEEDED OR SODDED AS NECESSARY AND BY DEFINITION 'MAINTAINED' UNTIL AN ESTABLISHED STAND OF GRASS CAN BE RELEASED TO THE OWNER. REFERENCE LANDSCAPE/IRRIGATION PLAN (IF PROVIDED) TO COORDINATE PLANTING ENHANCEMENTS AND LIMITS OF IRRIGATION COVERAGE.

MATERIAL STORAGE - NOTICE TO CONTRACTOR

THE CONTRACTOR SHALL NOTE ON SITE PLAN THE LOCATION OF ALL MATERIAL STORAGE AREAS, EQUIPMENT STORAGE AREAS, PETROLEUM TANKS, SOLID WASTE RECEPTACLES, SANITARY FACILITIES, ANY ON-SITE OR OFF-SITE BORROW OR STOCKPILE AREA, ANY ON-SITE OR OFF-SITE SUPPORT ACTIVITIES (SUCH AS ASPHALT OR CONCRETE PLANTS). CONTRACTOR SHALL ALSO PREPARE AND KEEP ON SITE, AND MAINTAIN CURRENT A LIST OF MATERIALS WITH APPROXIMATE QUANTITIES, WHICH ARE STORED ON SITE.

EROSION CONTROL NOTES

1. CONTRACTOR MUST COMPLETE A CONSTRUCTION SITE NOTICE, OBTAIN SIGNED COPIES OF NOI FORM FOR BOTH OWNER AND CONTRACTOR (IF APPLICABLE TO THIS SITE), AND POST THEM AT THE CONSTRUCTION SITE, IN ACCORDANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES (TXR150000). THE GENERAL CONTRACTOR, (AND ALL SUBCONTRACTORS INVOLVED WITH ANY CONSTRUCTION ACTIVITY RELATED TO EARTHWORK, EROSION CONTROL, ETC., OR WHICH UTILIZE POSSIBLE POLLUTANTS AS DEFINED IN THE TPDES GENERAL PERMIT) MUST BE FAMILIAR WITH THE CONTENTS OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AS WELL AS ALL THE REQUIREMENTS SET FORTH IN THE TPDES GENERAL PERMIT AND ANY APPLICABLE LOCAL PERMIT REQUIREMENTS. AND SHALL COMPLY WITH ALL SUCH REQUIREMENTS DURING ALL CONSTRUCTION ACTIVITIES.
2. THE CONTRACTOR SHALL ADHERE TO THE SEQUENCE OF OPERATIONS FOR EROSION CONTROL IMPLEMENTATION SHOWN HEREON. ANY DEVIATION FROM THIS SEQUENCE DEEMED NECESSARY BY THE CONTRACTOR MAY REQUIRE THAT THE STORMWATER POLLUTION PREVENTION PLAN BE MODIFIED IN ACCORDANCE WITH THE NPDES GENERAL PERMIT GUIDELINES.
3. THE CONTRACTOR SHALL MODIFY THIS PLAN TO SHOW LOCATIONS OF TEMPORARY WASHDOWN AREAS, PORTABLE TOILETS, EQUIPMENT MAINTENANCE/REPAIR AREAS, STOCKPILE AREAS, FUEL STORAGE AREAS, CONCRETE WASH-OUT PITS, AND POLLUTANT CONTROLS FOR EACH, AS SOON AS POSSIBLE. THE GENERAL PERMIT AUTHORIZES THE LAND DISPOSAL OF WASH OUT WATER FROM CONCRETE TRUCKS THAT ARE ASSOCIATED WITH OFF-SITE PRODUCTION FACILITIES, AS LONG AS THE DISCHARGE IS INTO SPECIFICALLY DESIGNATED DIKED AREAS WHICH HAVE BEEN PREPARED TO PREVENT CONTACT BETWEEN THE CONCRETE AND/OR WASH OUT WATER AND STORMWATER WHICH WILL BE DISCHARGED FROM THE SITE, TO PREVENT DIRECT DISCHARGE TO SURFACE WATERS (SEE CONCRETE WASHOUT DETAIL SHOWN IN PLANS). DIRECT DISCHARGE OF CONCRETE TRUCK WASH OUT WATER TO SURFACE WATERS IN THE STATE, INCLUDING DISCHARGE TO STORM SEWERS, IS PROHIBITED BY THE GENERAL PERMIT. IF A CONCRETE PLANT IS LOCATED AT CONSTRUCTION SITE, CONTRACTOR SHALL OBTAIN COVERAGE UNDER AND COMPLY WITH GENERAL PERMIT TXG110000 OR INDIVIDUAL PERMIT.
4. THE GENERAL CONTRACTOR SHALL PERFORM ALL REQUIRED INSPECTIONS OF STORMWATER CONTROLS AND PRACTICES AT FREQUENCIES GIVEN IN THE NPDES GENERAL PERMIT, AND SHALL COMPLETE AND SIGN APPROPRIATE INSPECTION FORMS.
5. OIL AND GREASE ABSORBING MATERIALS SHALL BE READILY AVAILABLE ON-SITE AND SHALL BE PROMPTLY USED TO CONTAIN AND/OR CLEAN UP ALL FUEL OR CHEMICAL SPILLS OR LEAKS.
6. DUST CONTROL SHALL BE ACCOMPLISHED BY WATERING DRY, EXPOSED AREAS ON A REGULAR BASIS. SPRAYING OF PETROLEUM BASED OR TOXIC LIQUIDS FOR THIS PURPOSE IS PROHIBITED.
7. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR AT LEAST FOURTEEN DAYS SHALL BE TEMPORARILY STABILIZED WITH VEGETATION AND MULCH.
8. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED SHALL BE PERMANENTLY SEEDED WITHIN FOURTEEN DAYS PER SEEDING OR LANDSCAPING SPECIFICATIONS.
9. ALL VEHICLES SHALL BE CLEANED AT THE CONSTRUCTION EXIT POINTS ACCORDING TO NOTES SHOWN ON THE DETAIL THEREOF. IF THE MAJORITY OF MUD OR DIRT IS NOT REMOVED FROM EXITING TRAFFIC, HOSE BIBS SHALL BE PROVIDED AT CONSTRUCTION TRAFFIC EXIT POINTS, AND VEHICLE TIRES SHALL BE WASHED BEFORE EXITING ONTO PUBLIC ROADS. SILT FROM THIS WASHING OPERATION SHALL BE INTERCEPTED AND TRAPPED BEFORE WASHWATER IS ALLOWED TO BE DISCHARGED OFF-SITE.
10. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED ONTO ADJACENT ROADWAYS BY VEHICLES EXITING THE SITE SHALL BE CLEANED OR REMOVED IMMEDIATELY.
11. CONTRACTOR SHALL PREVENT ANY SILTATION FROM ENTERING THE STORM SEWER SYSTEM. ALL INLETS AND INLET OPENINGS SHALL BE FULLY ENCIRCLED WITH APPROPRIATE INLET PROTECTION DEVICES.
12. THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SILT IN ANY TEMPORARY OR PERMANENT DETENTION PONDS, STORM SEWER INLETS AND PIPES, AND ALONG SILT FENCES, WITHIN 48 HOURS AFTER INSPECTION OF DEVICES REVEALS THE PRESENCE OF EXCESSIVE SILTATION.
13. SILT FENCES SHALL BE PLACED AROUND ANY STOCKPILES USED ON THIS SITE.
14. THE CONTRACTOR IS ADVISED TO CONSTRUCT TEMPORARY OR PERMANENT FENCING AROUND DETENTION PONDS AND SEDIMENT BASINS AT THE EARLIEST POSSIBLE TIME TO PREVENT ACCIDENTAL ACCESS BY PERSONS OR ANIMALS.
15. ANY ADDITIONAL EROSION CONTROL MEASURES REQUIRED TO ENSURE COMPLIANCE WITH THE TPDES GENERAL PERMIT OR LOCAL PERMIT REQUIREMENTS SHALL BE IMPLEMENTED BY THE CONTRACTOR, AT NO ADDITIONAL EXPENSE TO THE OWNER.
16. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE WITHIN THIRTY DAYS AFTER STABILIZATION OF ALL SURFACES.
17. THE CONTRACTOR SHALL ASSUME LIABILITY FOR DAMAGE TO ADJACENT PROPERTIES AND/OR PUBLIC RIGHT-OF-WAY RESULTING FROM FAILURE TO FULLY IMPLEMENT AND EXECUTE ALL EROSION CONTROL PROCEDURES SHOWN AND NOTED IN THESE PLANS.
18. WHENEVER DIRT, ROCK, OR OTHER MATERIALS ARE IMPORTED OR EXPORTED ON THE PRIMARY CONSTRUCTION SITE, CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR COMPLIANCE WITH ALL TCEQ STORMWATER REQUIREMENTS FOR THE REMOTE SITE. CONTRACTOR SHALL FURNISH THE ENGINEER AND THE OWNER'S CONSTRUCTION MANAGER WITH DOCUMENTATION OF COVERAGE FOR THE BORROW OR FILL SITE UNDER A NPDES PERMIT FOR STORMWATER DISCHARGES AND OF A WRITTEN AGREEMENT WITH THE LANDOWNER OF THE REMOTE SITE INDICATING EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED THEREON. AT A MINIMUM, EROSION CONTROL MEASURES MUST CONSIST OF PERIMETER CONTROLS (SILT FENCES) ON ALL DOWN SLOPES AND SIDE SLOPE BOUNDARIES OF ANY DISTURBED AREA, PLUS PROVISIONS FOR RE-VEGETATION AFTER THE FILL MATERIALS ARE IN PLACE.
19. ALL SLOPES ON SITE WHICH ARE 3:1 OR STEEPER SHALL BE STABILIZED BY TRACK WALKING (TRAVERSING UP AND DOWN THE SLOPE WITH A TRACKED VEHICLE) FOLLOWED BY INSTALLATION OF EROSION CONTROL BLANKET INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. EROSION CONTROL BLANKET SHALL BE NORTH AMERICAN GREEN S150 OR APPROVED EQUAL.

EROSION CONTROL SEQUENCE

1. INSTALL SILT BARRIER AROUND PERIMETER OF PROPERTY AND DISTURBED AREAS AS SHOWN.
2. INSTALL INLET PROTECTION FOR ALL EXISTING GRATE INLETS, CURB INLETS.
3. INSTALL ROCK CHECK DAMS AT THE ENDS OF ALL EXPOSED STORM SEWER PIPES, IF PRESENT.
4. CONSTRUCT TEMPORARY CONSTRUCTION EXIT.
5. COMMENCE GRUBBING AND REMOVAL OF VEGETATION IN AREA TO RECEIVE CUT OR FILL.
6. COMMENCE GRADING OPERATION FOR BUILDING PAD PREPARATION.
7. INSTALL ALL UNDERGROUND UTILITIES.
8. FINALIZE PAVEMENT SUBGRADE PREPARATION.
9. INSTALL ALL PROPOSED STORM SEWER PIPES AND INSTALL INLET PROTECTION SILT BARRIER AT ENDS OF EXPOSED PIPES.
10. CONSTRUCT ALL GRATE INLETS AND DRAINAGE STRUCTURES. INLET PROTECTION SILT BARRIER MAY BE REMOVED TEMPORARILY FOR THIS CONSTRUCTION.
11. REMOVE SILT BARRIER AROUND INLETS AND MANHOLES NO MORE THAN 48 HOURS PRIOR TO PLACING STABILIZED BASE COURSE.
12. INSTALL BASE MATERIAL AS REQUIRED FOR PAVEMENT, CURB & GUTTER.
13. INSTALL ALL PAVING, CURB & GUTTER.
14. COMPLETE PLANTING AND/OR SEEDING OF VEGETATED AREAS TO ACCOMPLISH STABILIZATION, IN ACCORDANCE WITH THE LANDSCAPING PLAN.
15. REMOVE TEMPORARY CONSTRUCTION EXIT, SILT BARRIER & ROCK CHECK DAMS.

EROSION CONTROL MAINTENANCE NOTES

1. ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON ON A SCHEDULE WHICH COMPLIES WITH THE GENERAL PERMIT REQUIREMENTS AND CLEANED AND REPAIRED WITHIN 48 HOURS OF THE INSPECTION IN ACCORDANCE WITH THE FOLLOWING:

1.A. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
1.B. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDED AS NEEDED.
1.C. SILT BARRIER SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT BARRIER WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT BARRIER.
1.D. THE TEMPORARY PARKING AND STORAGE AREA (IF PRESENT) SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
1.E. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS OR SEDIMENT TRAPS (IF PRESENT) SHALL BE MAINTAINED IN OPERATIONAL CONDITION AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
1.F. MAINTENANCE PROCEDURES FOR THE EROSION AND SEDIMENTATION CONTROL SYSTEMS SPECIFIED ARE GIVEN IN SECTION 5 OF THE STORM WATER POLLUTION PREVENTION PLAN.

NOTES FOR CHANGES TO SWPPP

THE TXR15000 GENERAL PERMIT REQUIRES THAT THE PERMITTEE REVISE OR UPDATE THIS SWPPP WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, OR WHENEVER THE RESULT OF AN INSPECTION INDICATES THAT THIS SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS IN STORMWATER DISCHARGES. HOWEVER, THE REGULATIONS OF THE TEXAS BOARD OF PROFESSIONAL ENGINEERS REQUIRE THAT CHANGES MADE BY THE CONTRACTOR DURING CONSTRUCTION MUST BE AUTHORIZED BY A LICENSED TEXAS ENGINEER. THESE CHANGES MAY BE AUTHORIZED BY THE ENGINEER OF RECORD THROUGH UPDATED DRAWINGS, WORK ORDER CHANGES, OR OTHER METHODS ACCEPTABLE TO THE ENGINEER; OR BY ANOTHER ENGINEER PROVIDED THAT THEY NOTIFY THE ENGINEER OF RECORD.

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

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AUSTIN, TX
512-340-0876

ELEMENTARY SCHOOL #9

1703 Tower Road
Liberty Hill Texas 78642

75% CD PROGRESS SET

LIBERTY HILL INDEPENDENT SCHOOL DISTRICT

F E D
C
G A B

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
JACK L. GARNER, JR.
98447
LICENSED PROFESSIONAL ENGINEER
12.05.2025
TCEQ CZP
TBPE Registration #: 13709

CLIENT	
LIBERTY HILL ISD	
DATE	PROJECT NUMBER
12/05/2025	250254

DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

EROSION & SEDIMENT CONTROL PLAN

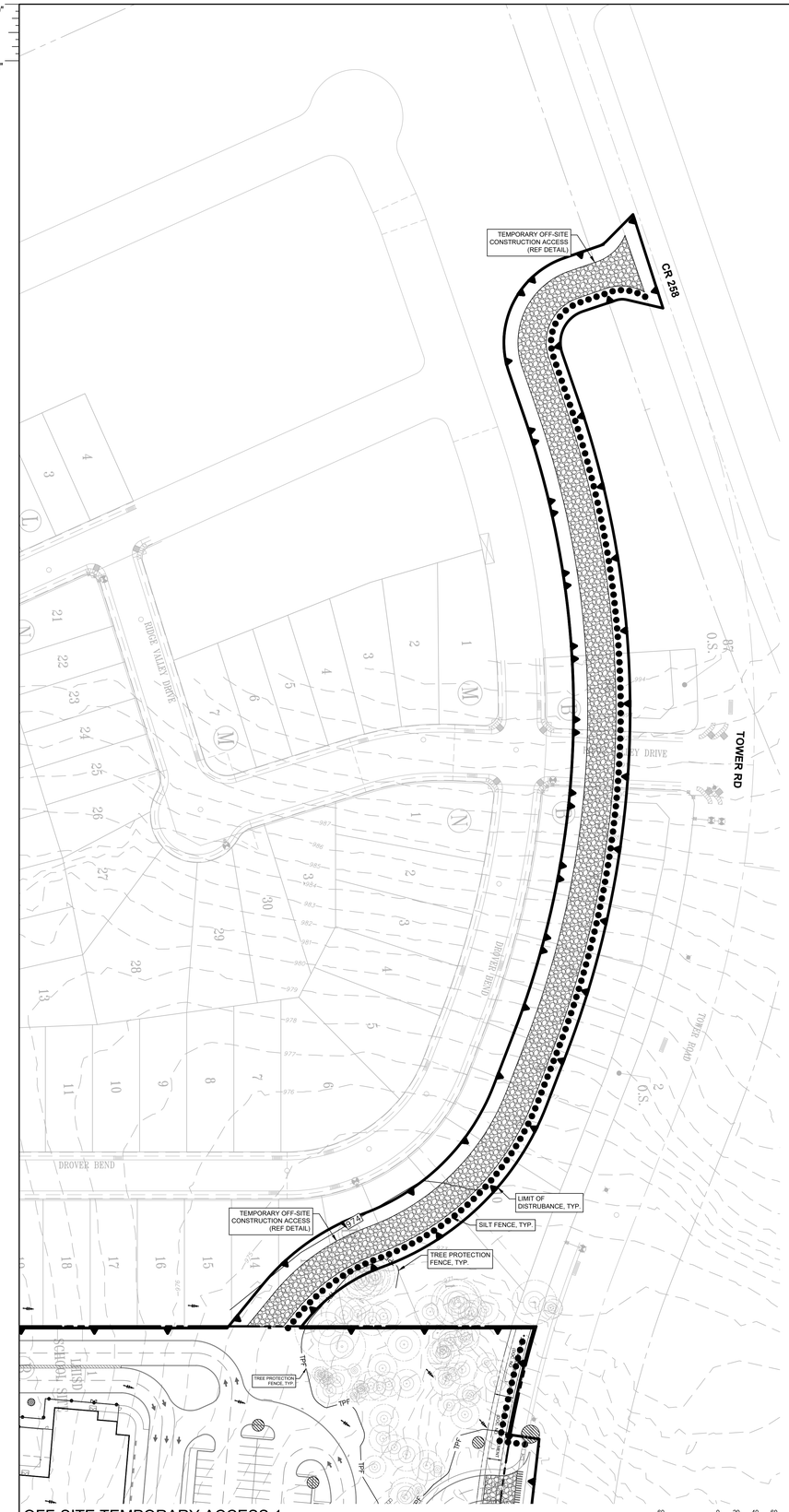
C-200

Plot Stamp:
Date: 12/5/2025 Time: 12:45 User: kekim Style Table: Langan.stb Layout: 6 C-200 EROSION & SEDIMENT CONTROL PLAN

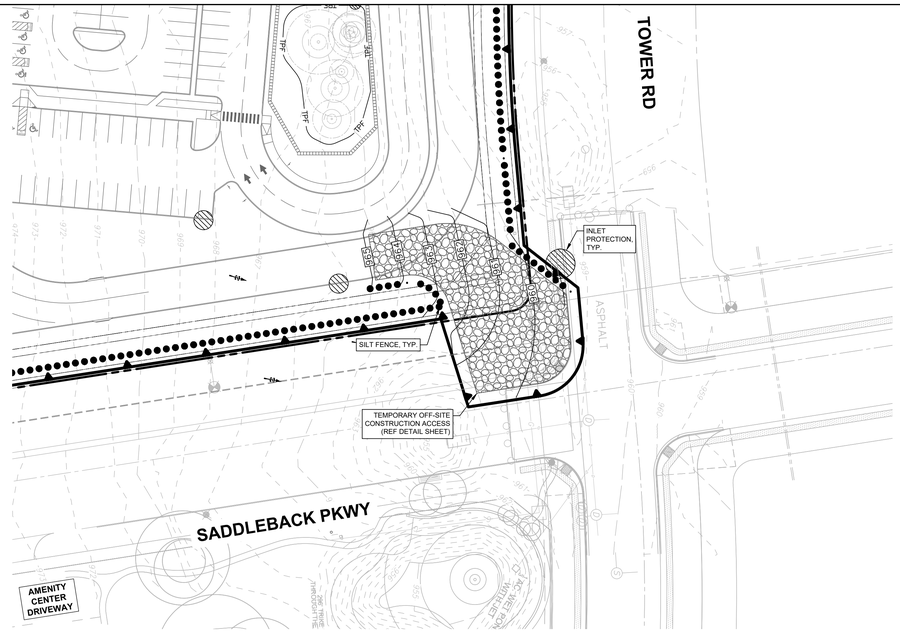
Document Code: 531013323-0102-CE101-0101

OFF-SITE EROSION & SEDIMENT CONTROL PLAN
C-201
FOR BLUEBEAM LABELING/OCR:

0"
1"



OFF-SITE TEMPORARY ACCESS 1



OFF-SITE TEMPORARY ACCESS 2

LEGEND

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- SILT BARRIER
- CONSTRUCTION ACCESS
- EXISTING FLOW ARROW
- FLOW ARROW
- INLET PROTECTION (IP)
- TREE PROTECTION FENCE — TPF

EROSION CONTROL NOTES

ALL SHEET NOTES PRESENTED ON C-2.00 APPLY EQUALLY TO THIS SHEET.

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512-340-0876

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KEY PLAN

F	E	D
G	C	
	A	B

NORTH: PLAN TRUE

STATE OF TEXAS
ANDREW RAMIREZ
98447
LICENSED PROFESSIONAL ENGINEER
12.05.2025
TCEQ CZP
TBPE Registration #: 13709

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OFF-SITE EROSION & SEDIMENT CONTROL PLAN

C-201

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Document Code: 531013323-0102-CE101-0102

SITE REMOVALS PLAN

C-300

FOR BLUEBEAM LABELING/OCR:

0"

1"

LEGEND

- SAWCUT
- PAVEMENT REMOVAL
- GRAVEL REMOVAL
- EX. TREE TO BE REMOVED
- TREE PROTECTION FENCE — TPF —

PBK

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ELEMENTARY SCHOOL #9

1703 Tower Road
Liberty Hill Texas 78642

75% CD PROGRESS SET

LIBERTY HILL INDEPENDENT SCHOOL DISTRICT

F E D
G C A B

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SITE REMOVALS PLAN

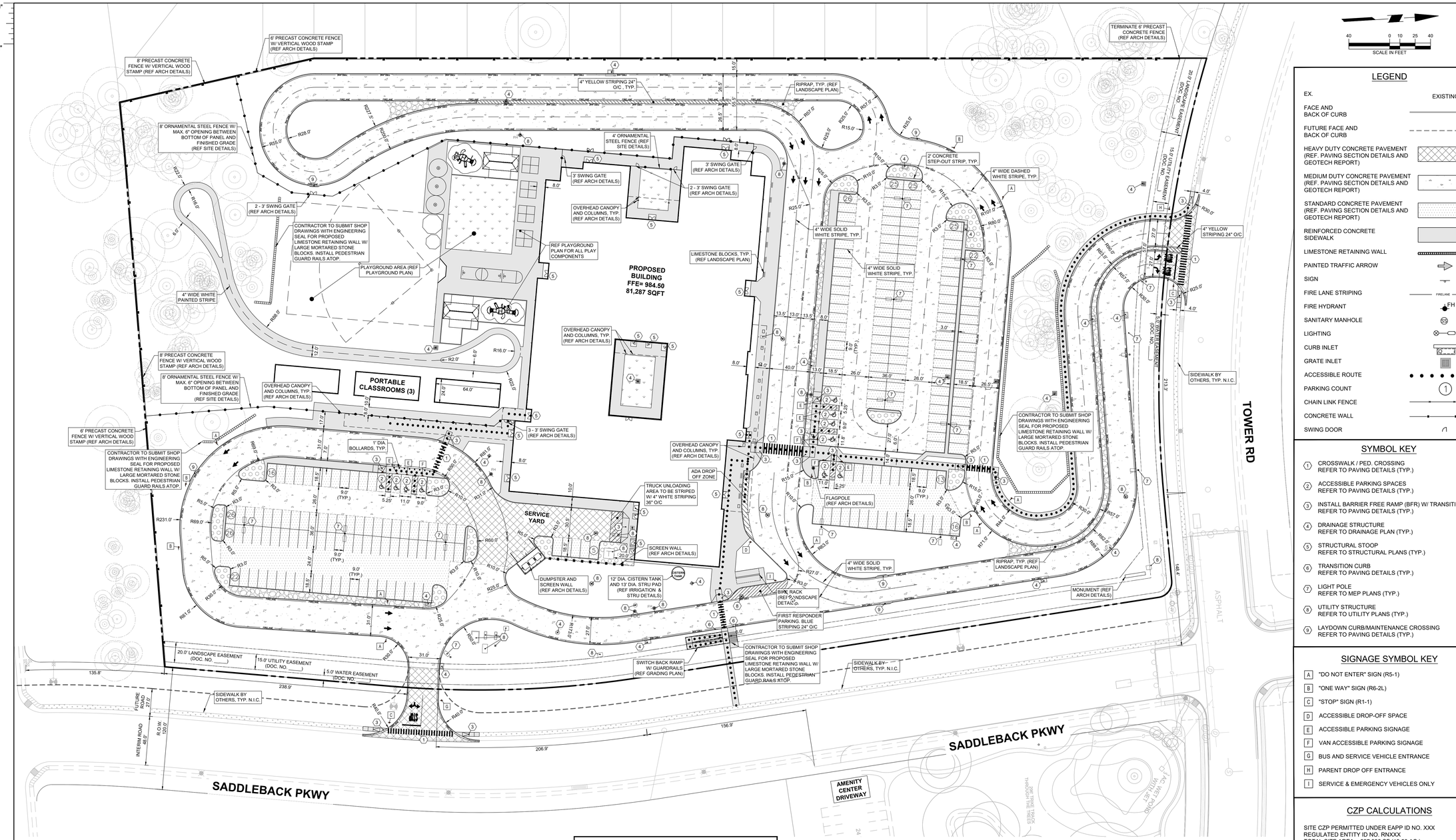
C-300

Plot Stamp:
Date: 12/5/2025 Time: 12:45 User: kekim Style Table: Langan.stb Layout: C-300 SITE REMOVALS PLAN

Document Code: 531013323-0102-CD101-0101

SITE PLAN
C-400
FOR BLUEBEAM LABELING/OCR:

0"
1"



40 0 10 25 40
SCALE IN FEET

LEGEND

EX.	EXISTING
FACE AND BACK OF CURB	
FUTURE FACE AND BACK OF CURB	
HEAVY DUTY CONCRETE PAVEMENT (REF. PAVING SECTION DETAILS AND GEOTECH REPORT)	
MEDIUM DUTY CONCRETE PAVEMENT (REF. PAVING SECTION DETAILS AND GEOTECH REPORT)	
STANDARD CONCRETE PAVEMENT (REF. PAVING SECTION DETAILS AND GEOTECH REPORT)	
REINFORCED CONCRETE SIDEWALK	
LIMESTONE RETAINING WALL	
PAINTED TRAFFIC ARROW	
SIGN	
FIRE LANE STRIPING	FIRELANE
FIRE HYDRANT	FH
SANITARY MANHOLE	SS
LIGHTING	
CURB INLET	
GRATE INLET	
ACCESSIBLE ROUTE	
PARKING COUNT	1
CHAIN LINK FENCE	
CONCRETE WALL	
SWING DOOR	

SYMBOL KEY

1. CROSSWALK / PED. CROSSING — REFER TO PAVING DETAILS (TYP.)
2. ACCESSIBLE PARKING SPACES — REFER TO PAVING DETAILS (TYP.)
3. INSTALL BARRIER FREE RAMP (BFR) W/ TRANSITION CURB — REFER TO PAVING DETAILS (TYP.)
4. DRAINAGE STRUCTURE — REFER TO DRAINAGE PLAN (TYP.)
5. STRUCTURAL STOOP — REFER TO STRUCTURAL PLANS (TYP.)
6. TRANSITION CURB — REFER TO PAVING DETAILS (TYP.)
7. LIGHT POLE — REFER TO MEP PLANS (TYP.)
8. UTILITY STRUCTURE — REFER TO UTILITY PLANS (TYP.)
9. LAYDOWN CURB/MAINTENANCE CROSSING — REFER TO PAVING DETAILS (TYP.)

SIGNAGE SYMBOL KEY

- A "DO NOT ENTER" SIGN (R5-1)
- B "ONE WAY" SIGN (R6-2L)
- C "STOP" SIGN (R1-1)
- D ACCESSIBLE DROP-OFF SPACE
- E ACCESSIBLE PARKING SIGNAGE
- F VAN ACCESSIBLE PARKING SIGNAGE
- G BUS AND SERVICE VEHICLE ENTRANCE
- H PARENT DROP OFF ENTRANCE
- I SERVICE & EMERGENCY VEHICLES ONLY

CZP CALCULATIONS

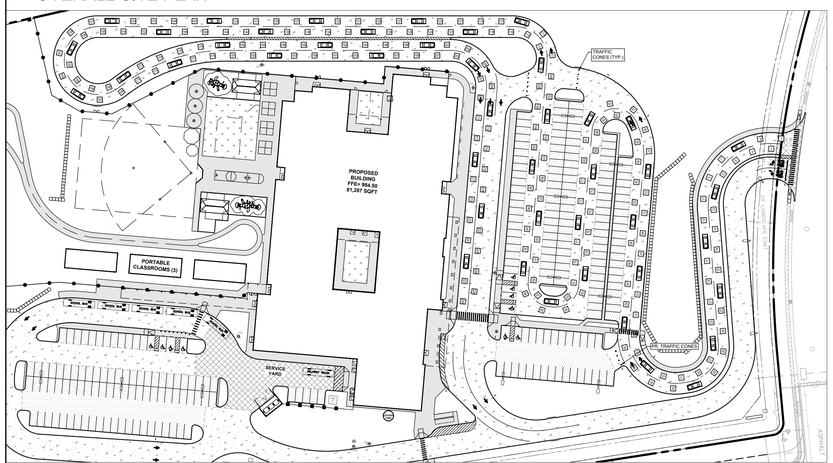
SITE CZP PERMITTED UNDER EAPP ID NO. XXX
REGULATED ENTITY ID NO. RNXXX
TOTAL SITE AREA = 587,936 SF (13.50 AC.)
EXISTING IMPERVIOUS COVER (IIC) = 1,505 SF (0.03 AC.)

PROPOSED IMPERVIOUS COVER (IC) SUMMARY
STRUCTURES/ROOFTOPS = 81,287 SF (1.87 AC.)
PARKING =206,142 SF (4.73 AC.)
OTHER PAVED SURFACES = 53,353 SF (1.22 AC.)
TOTAL PROPOSED IC = 340,782 SF (7.82 AC.)

POST PROJECT IMPROVEMENTS SUMMARY
TOTAL SITE IC = 340,782 SF (7.82 AC.)
PERCENT IC = 57.9%

OFF-SITE REGIONAL DETENTION POND HAS BEEN SIZED TO TREAT UP TO 60% IC FROM THIS SITE

OVERALL SITE PLAN



CAR & BUS STACKING N.T.S.

STANDARD ACCESSIBILITY REQUIREMENTS

PARKING:

1. ACCESSIBLE PARKING SPACES SHALL BE AS NOTED TO A MIN. 96" WIDE OR A MIN. 132" WIDE FOR VAN DESIGNATED SPACES WITH A MAXIMUM SLOPE OF 2% (IN ALL DIRECTIONS). ALL BUILDINGS SHALL CONTAIN AT LEAST ONE VAN ACCESSIBLE SPACE FOR NO LESS THAN ONE VAN SPACE FOR EVERY 6 ACCESSIBLE SPACES.
2. EACH ACCESSIBLE PARKING SPACE SHALL HAVE A VERTICALLY MOUNTED (OR SUSPENDED) SIGN SHOWING THE SYMBOL OF ACCESSIBILITY. APPROPRIATE VAN ACCESSIBLE SPACES MUST INCORPORATE "VAN-ACCESSIBLE" BELOW THE SYMBOL OF ACCESSIBILITY. SIGNS SHALL BE LOCATED AS NOTED TO 80" (MIN.) ABOVE THE ADJACENT PAVED SURFACE TO BOTTOM OF SIGN.
3. ALL ACCESS AISLES SERVING ACCESSIBLE PARKING SPACES SHALL BE AS NOTED TO A 60" WIDE MINIMUM.

RAMPS:

4. RAMPS EXCEEDING 6" IN RISE (EXCLUDING CURB RAMPS) SHALL HAVE APPROPRIATE EDGE PROTECTION WITH HANDRAILS ON EACH SIDE AT BETWEEN 34" AND 38", AND EXTEND 12" BEYOND THE TOP AND BOTTOM OF RAMP. HANDRAIL SHALL NOT DIMINISH THE CLEAR AREA REQUIRED FOR TOP AND BOTTOM LANDINGS SERVING THE RAMPS.
5. RAMPS SHALL HAVE A SURFACE ARRANGED SO THAT WATER WILL NOT ACCUMULATE. COLOR OF RAMP FINISH MATERIAL (INCLUDING CONCRETE) SHALL HAVE A LIGHT AND REFLECTIVE VALUE TO SIGNIFICANTLY CONTRAST FROM ADJACENT SURFACES OR COLORS ONLY IF REQUIRED BY LOCAL OR STATE JURISDICTION
6. LANDINGS FOR RAMPS SHALL BE AS WIDE AS THE RAMP AND 60" LONG MINIMUM (36" MINIMUM FOR CURB RAMPS)
7. RAMPS SHALL NOT EXCEED A 1:12 RUNNING SLOPE OR 30" RISE
8. RAMPS AND LANDINGS SHALL NOT EXCEED 1:48 (2% CROSS SLOPE)

SIDEWALKS AND ACCESSIBLE ROUTES:

9. SIDEWALKS MUST BE AT LEAST 36" WIDE WITH 5'X5' CLEAR PASSING OPPORTUNITIES IN INCREMENTS LESS THAN 150 LF SIDEWALK. CROSS SLOPE SHALL NOT EXCEED 1:48 (2%)
10. LONGITUDINAL SLOPE OF ANY SIDEWALK (ACCESSIBLE ROUTE) SHALL NOT EXCEED 1:20 (5%)

LANDSCAPE ELEMENTS NOTE

REFER TO LANDSCAPE PLAN AND PLAYGROUND PLAN FOR PLAYGROUND, LANDSCAPE ELEMENTS, AND MATERIALS.

PARKING COUNT SUMMARY

STAFF PARKING	
STANDARD STALLS PROVIDED	91
ADA STALLS PROVIDED	4
ADA STALLS REQUIRED	4
TOTAL STALLS	95
VISITOR/ STAFF/ EVENT PARKING	
STANDARD STALLS PROVIDED	146
ADA STALLS PROVIDED	6
ADA STALLS REQUIRED	5
TOTAL STALLS	152
TOTAL SITE PARKING	
STANDARD STALLS PROVIDED	237
ADA STALLS PROVIDED	10
ADA STALLS REQUIRED	9
TOTAL STALLS	247
CAR STACKING INSET	
STACKING LANE LENGTH	2,863 FT
CAR LENGTH AND CLEARANCE	25 FT
SINGLE STACKING = 2,863/25	115 VEHICLES
TOTAL DOUBLE STACKING	229 VEHICLES
BUS STACKING PROVIDED	
TOTAL STACKING LANE LENGTH	214 FT
SINGLE BUS LENGTH	38 FT
BUS CLEARANCE	4 FT
TOTAL STACKING = 214'/42 '	5 BUSES

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F	E	D
G	C	
	A	B

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12.05.2025
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CLIENT	
LIBERTY HILL ISD	
DATE	PROJECT NUMBER
12/05/2025	250254

DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

SITE PLAN

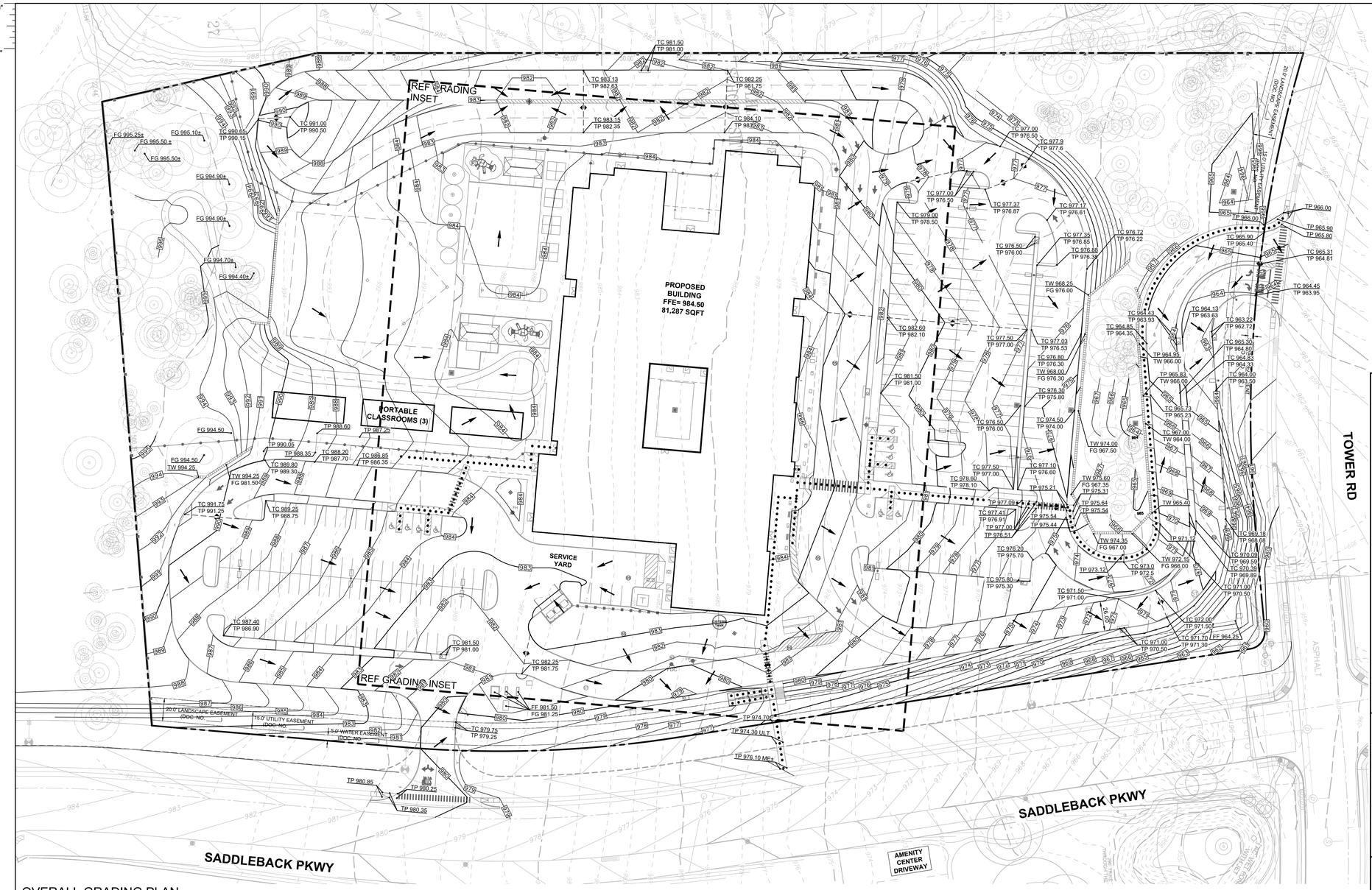
C-400

Plot Stamp:
Date: 12/5/2025 Time: 12:46 User: kekim Style Table: Langan.stb Layout: SITE PLAN

Document Code: 531013323-0102-CS101-0101

0"
1"

GRADING PLAN
C-500
FOR BLUEBEAM LABELING/OCR:


REF GRADING INSET
PROPOSED BUILDING FFE= 984.50 81,287 SQFT
PORTABLE CLASSROOMS (3)
SERVICE YARD
AMENITY CENTER DRIVEWAY
SADDLEBACK PKWY
TOWER RD
ASPHALT
20.0' LANDSCAPE EASEMENT (DOC. NO.
15.0' UTILITY EASEMENT (DOC. NO.
5.0' WATER EASEMENT (DOC. NO.
20.0' LANDSCAPE EASEMENT (DOC. NO.)
TC 981.50 TP 981.00
TC 983.13 TP 982.63
TC 982.25 TP 981.75
TC 983.15 TP 982.35
TC 984.10 TP 983.60
TC 991.00 TP 990.50
TC 990.65 TP 990.15
FG 995.25±
FG 995.50 ±
FG 995.50±
EG 995.10±
FG 994.90±
FG 994.90±
FG 994.70±
FG 994.40±
FG 994.50
TP 983.60
TP 990.05
TP 988.35
TC 986.20 TP 987.70
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FG 994.50
TW 994.25
TC 989.80 TP 989.30
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TC 991.75 TP 991.25
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TC 981.50 TP 981.00
TC 982.25 TP 981.75
FF 981.50 FG 981.25
TC 979.75 TP 979.25
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TP 980.35
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TP 974.30 ULT
TP 976.10 MEA
TC 977.00 TP 976.50
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TC 978.00 TP 978.50
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TC 978.60 TP 978.10
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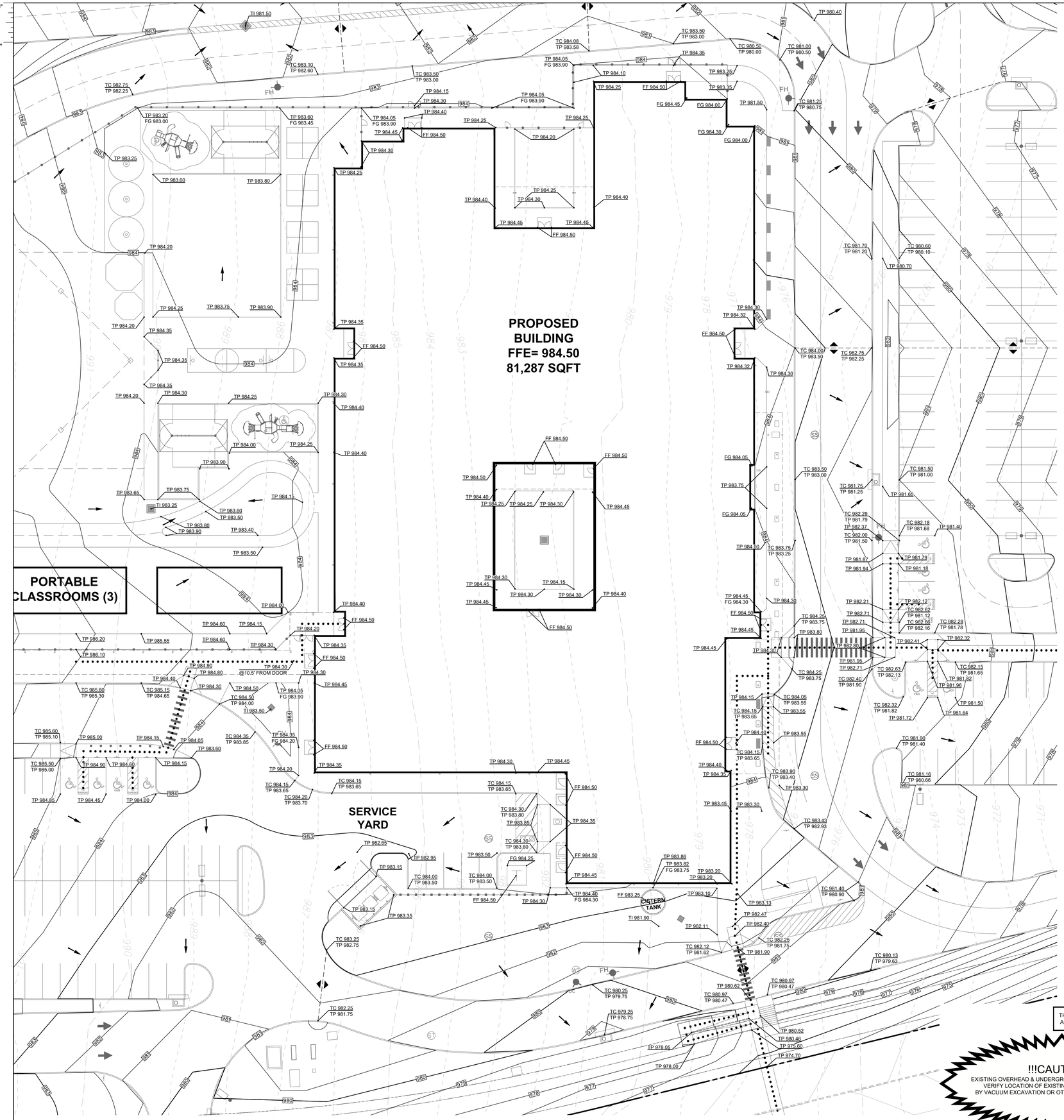
TP 975.21
TP 977.09
TC 977.41 TP 976.91
TP 975.54
TP 975.64 TP 975.54
TP 975.44
TC 977.00 TP 976.51
TW 974.35 FG 967.00
TC 976.20 TP 975.70
TP 973.12
TC 975.80 TP 975.30
TC 971.50 TP 971.00
TC 973.0 TP 972.5
TW 972.15 FG 966.00
TP 971.12
TC 971.00 TP 970.50
TC 972.00 TP 971.50
TC 971.70 TP 971.30
EF 964.25
TC 970.09 TP 969.59
TC 970.39 TP 969.89
TP 970.50
TC 971.00 TP 970.50
TP 966.00
TP 965.90 TP 965.80
TC 965.90 TP 965.40
TC 965.31 TP 964.81
TC 964.45 TP 963.95
TC 964.13 TP 963.63
TC 963.22 TP 962.72
TC 964.43 TP 963.93
TC 964.85 TP 964.35
TP 964.95 TW 966.00
TC 965.30 TP 964.80
TC 964.83 TP 964.33
TC 964.00 TP 963.50
TP 965.83 TW 966.00
TC 965.73 TP 965.23
TC 967.00 TP 964.00
TP 965.40
TC 968.18 TP 968.68
TP 969.89
TP 969.50
TP 966.00
TP 965.90
TP 965.80
TC 965.90 TP 965.40
TC 965.31 TP 964.81
TC 964.45 TP 963.95
TC 964.13 TP 963.63
TC 963.22 TP 962.72
TC 964.43 TP 963.93
TC 964.85 TP 964.35
TP 964.95 TW 966.00
TC 965.30 TP 964.80
TC 964.83 TP 964.33
TC 964.00 TP 963.50
TP 965.83 TW 966.00
TC 965.73 TP 965.23
TC 967.00 TP 964.00
TP 965.40
TC 968.18 TP 968.68
TP 969.89
TP 969.50
TC 970.09 TP 969.59
TC 970.39 TP 969.89
TP 970.50
TC 971.00 TP 970.50
TC 972.00 TP 971.50
TC 971.70 TP 971.30
EF 964.25
TC 971.00 TP 970.50
TP 966.00
TP 965.90

GRADING INSET
C-501
FOR BLUEBEAM LABELING/OCR:

0"
1"



SCALE IN FEET
20 0 5 10 20

LEGEND

EX.	EXISTING
CONTOUR	100
EX. CONTOUR	100
FLOWLINE	
GRADE BREAK	
ACCESSIBLE ROUTE	
SPOT GRADE	FG100.50
CURB INLET	
GRATE INLET	
RETAINING WALL	
FLOW ARROW	
FG	FINISHED GRADE
TP	TOP OF PAVEMENT
TC	TOP OF CURB
TW	TOP OF WALL (OR TOP OF STRUCTURED PLAY BORDER WHERE APPLICABLE)
FL	FLOWLINE
FFE	FINISHED FLOOR ELEVATION

GRADING NOTES

ALL SHEET NOTES PRESENTED ON C-501 APPLY EQUALLY TO THIS SHEET

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Liberty Hill Texas 78642

75% CD PROGRESS SET

LIBERTY HILL INDEPENDENT SCHOOL DISTRICT

F E D
F C
G A B

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
JACK H. GARNER, JR.
98447
LICENSED
PROFESSIONAL ENGINEER
12.05.2025
TCEQ CZP
TBPE Registration #: 13709

CLIENT
LIBERTY HILL ISD

DATE	PROJECT NUMBER
12/05/2025	250254

DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

GRADING INSET

C-501

Plot Stamp:
Date: 12/5/2025 Time: 13:20 User: kekim Style Table: Langan.stb Layout: 12 C-501 GRADING INSET

Document Code: 531013323-0102-CG101-0102

EXISTING DRAINAGE AREA MAP
C-600
FOR BLUEBEAM LABELING/OCR:

0"
1"

LEGEND

PROPERTY LINE	
EX. DRAINAGE BASIN	EXISTING — BASIN NAME: DA-00, ACRES: 1.00
DRAINAGE AREA	
EX. FLOW ARROW	
TIME OF CONCENTRATION PATH	

TIME OF CONCENTRATION CALCULATIONS

Drainage Area Designation	Sheet Flow					Shallow Concentrated Flow					Channel Flow				Total
	Manning's (n)	Length (L)	Slope (s)	2-Yr, 24-hr rainfall	Time (T_t)	Length (L)	Slope (s)	Cover Type	Velocity	Time (T_t)	Length (L)	Velocity	Time (T_t)		Time (T_c)
		(ft)	(ft/ft)	(in)	(min)	(ft)	(ft/ft)	-	(ft/sec)	(min)	(ft)	(ft/sec)	(min)		(min)
EX-01	0.15	100	0.026	3.94	8.0	300	0.03	Unpaved	2.59	1.9	1055	4.00	4.4		14

Note: The time of concentration for each watershed was calculated using equations given in Chapter 3 of TR-55 - Urban Hydrology for Small Watersheds. Values for each overland "n" are taken from Table 3-1 of the previously reference manual.

PRE-DEVELOPMENT DRAINAGE AREA CALCULATIONS

Drainage Area Designation	Drainage Area	Runoff Coefficient "C"				Time of Concentration	2-Year Rainfall Intensity (I2)	2-Year Peak Discharge (Q2)	10-Year Rainfall Intensity (I10)	10-Year Peak Discharge (Q10)	25-Year Rainfall Intensity (I25)	25-Year Peak Discharge (Q25)	100-Year Rainfall Intensity (I100)	100-Year Peak Discharge (Q100)	
-	(ac)	2- Yr	10- Yr	25- Yr	100- Yr	(min)	(in/hr)	(cfs)	(in/hr)	(cfs)	(in/hr)	(cfs)	(in/hr)	(cfs)	Comments
EX-01	13.50	0.35	0.41	0.44	0.51	14	4.33	20.5	6.46	35.8	7.94	47.3	10.45	72.1	

Note: Calculations based on the Rational Method: Q = C*I*A

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98447
LICENSED PROFESSIONAL ENGINEER
12.05.2025
TCEQ CZP
TBPE Registration #: 13709

CLIENT
LIBERTY HILL ISD

DATE	PROJECT NUMBER
12/05/2025	250254

DRAWING HISTORY

No.	Description	Date

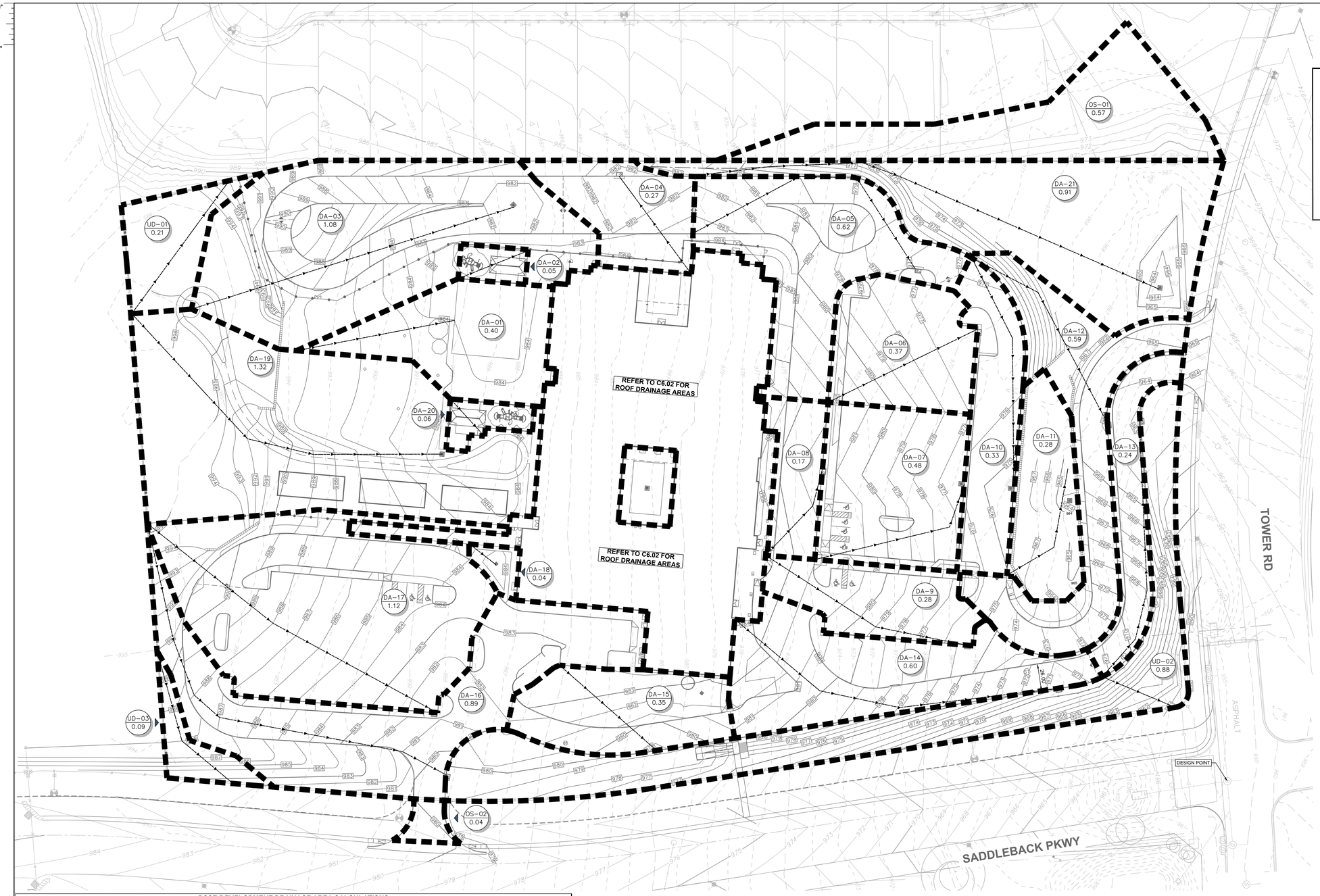
CHECKED BY: AR
DRAWN BY: KK

EXISTING DRAINAGE AREA MAP

C-600

PROPOSED DRAINAGE AREA PLAN
C-601
FOR BLUEBEAM LABELING/OCR:

0"
1"



40 0 10 25 40
SCALE IN FEET

LEGEND

PROPERTY LINE	
EX.	EXISTING
DRAINAGE BASIN	BASIN NAME — DA-00; ACRES — 1.00
DRAINAGE AREA	
EX. FLOW ARROW	
TIME OF CONCENTRATION PATH	

POST-DEVELOPMENT DRAINAGE AREA CALCULATIONS

Drainage Area	Drainage Area	Runoff Coefficient "C"				Time of Concentration	2-Year Rainfall	2-Year Peak Discharge	10-Year Rainfall	10-Year Peak	25-Year Rainfall	25-Year Peak	100-Year Rainfall	100-Year Peak	
-	(ac)	2-Yr	10-Yr	25-Yr	100-Yr	(min)	(in/hr)	(cfs)	(in/hr)	(cfs)	(in/hr)	(cfs)	(in/hr)	(cfs)	Comments
DA-01	0.40	0.62	0.69	0.74	0.82	10	5.02	1.3	7.51	2.1	9.22	2.7	12.14	4.0	
DA-02	0.05	0.75	0.83	0.88	0.97	10	5.02	0.2	7.51	0.3	9.22	0.4	12.14	0.6	
DA-03	1.08	0.51	0.58	0.62	0.70	10	5.02	2.8	7.51	4.7	9.22	6.1	12.14	9.1	
DA-04	0.27	0.62	0.69	0.73	0.82	10	5.02	0.8	7.51	1.4	9.22	1.9	12.14	2.7	
DA-05	0.62	0.67	0.74	0.79	0.87	10	5.02	2.1	7.51	3.5	9.22	4.5	12.14	6.6	
DA-06	0.37	0.73	0.80	0.85	0.94	10	5.02	1.3	7.51	2.2	9.22	2.9	12.14	4.2	
DA-07	0.48	0.72	0.80	0.85	0.94	10	5.02	1.7	7.51	2.9	9.22	3.8	12.14	5.5	
DA-08	0.17	0.74	0.82	0.87	0.96	10	5.02	0.6	7.51	1.1	9.22	1.4	12.14	2.0	
DA-09	0.28	0.75	0.83	0.88	0.97	10	5.02	1.1	7.51	1.8	9.22	2.3	12.14	3.4	
DA-10	0.33	0.73	0.80	0.85	0.94	10	5.02	1.2	7.51	2.0	9.22	2.6	12.14	3.7	
DA-11	0.28	0.35	0.41	0.44	0.51	10	5.02	0.5	7.51	0.9	9.22	1.1	12.14	1.7	
DA-12	0.59	0.61	0.68	0.72	0.81	10	5.02	1.8	7.51	3.0	9.22	3.9	12.14	5.7	
DA-13	0.24	0.69	0.76	0.81	0.90	10	5.02	0.8	7.51	1.4	9.22	1.8	12.14	2.6	
DA-14	0.60	0.60	0.67	0.71	0.80	10	5.02	1.8	7.51	3.0	9.22	4.0	12.14	5.8	
DA-15	0.35	0.54	0.60	0.64	0.72	10	5.02	0.9	7.51	1.6	9.22	2.1	12.14	3.1	
DA-16	0.89	0.60	0.67	0.72	0.80	10	5.02	2.7	7.51	4.5	9.22	5.9	12.14	8.6	
DA-17	1.12	0.69	0.77	0.82	0.91	10	5.02	3.9	7.51	6.5	9.22	8.5	12.14	12.3	
DA-18	0.04	0.49	0.56	0.60	0.67	10	5.02	0.1	7.51	0.2	9.22	0.2	12.14	0.3	
DA-19	1.32	0.42	0.49	0.52	0.60	13	4.54	2.5	6.77	4.4	8.32	5.7	10.95	8.6	
DA-20	0.06	0.75	0.83	0.88	0.97	12	4.69	0.2	6.99	0.4	8.59	0.5	11.31	0.7	
DA-21	0.91	0.35	0.41	0.44	0.51	10	5.02	1.6	7.51	2.8	9.22	3.7	12.14	5.7	
TOTAL	10.46							30.05		50.43		65.93		96.95	
UD-1	0.21	0.35	0.41	0.44	0.51	12	4.69	0.3	6.99	0.6	8.59	0.8	11.31	1.2	
UD-2	0.88	0.36	0.42	0.45	0.52	10	5.02	1.6	7.51	2.7	9.22	3.6	12.14	5.5	
UD-3	0.09	0.35	0.41	0.44	0.51	10	5.02	0.2	7.51	0.3	9.22	0.4	12.14	0.6	
TOTAL	1.17							2.08		3.64		4.80		7.31	
OS-1	0.57	0.35	0.41	0.44	0.51	10	5.02	1.0	7.51	1.6	9.22	2.3	12.14	3.5	NOT INCLUDED IN TOTAL ON-SITE AREA
OS-2	0.04	0.75	0.83	0.88	0.97	12	4.69	0.1	6.99	0.2	8.59	0.3	11.31	0.4	NOT INCLUDED IN TOTAL ON-SITE AREA
Note: Calculations based on the Rational Method: Q = C*I*A															

811
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12.05.2025
TCEQ CZP
TBPE Registration #: 13709

CLIENT
LIBERTY HILL ISD

DATE	PROJECT NUMBER
12/05/2025	250254

DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

PROPOSED DRAINAGE AREA PLAN

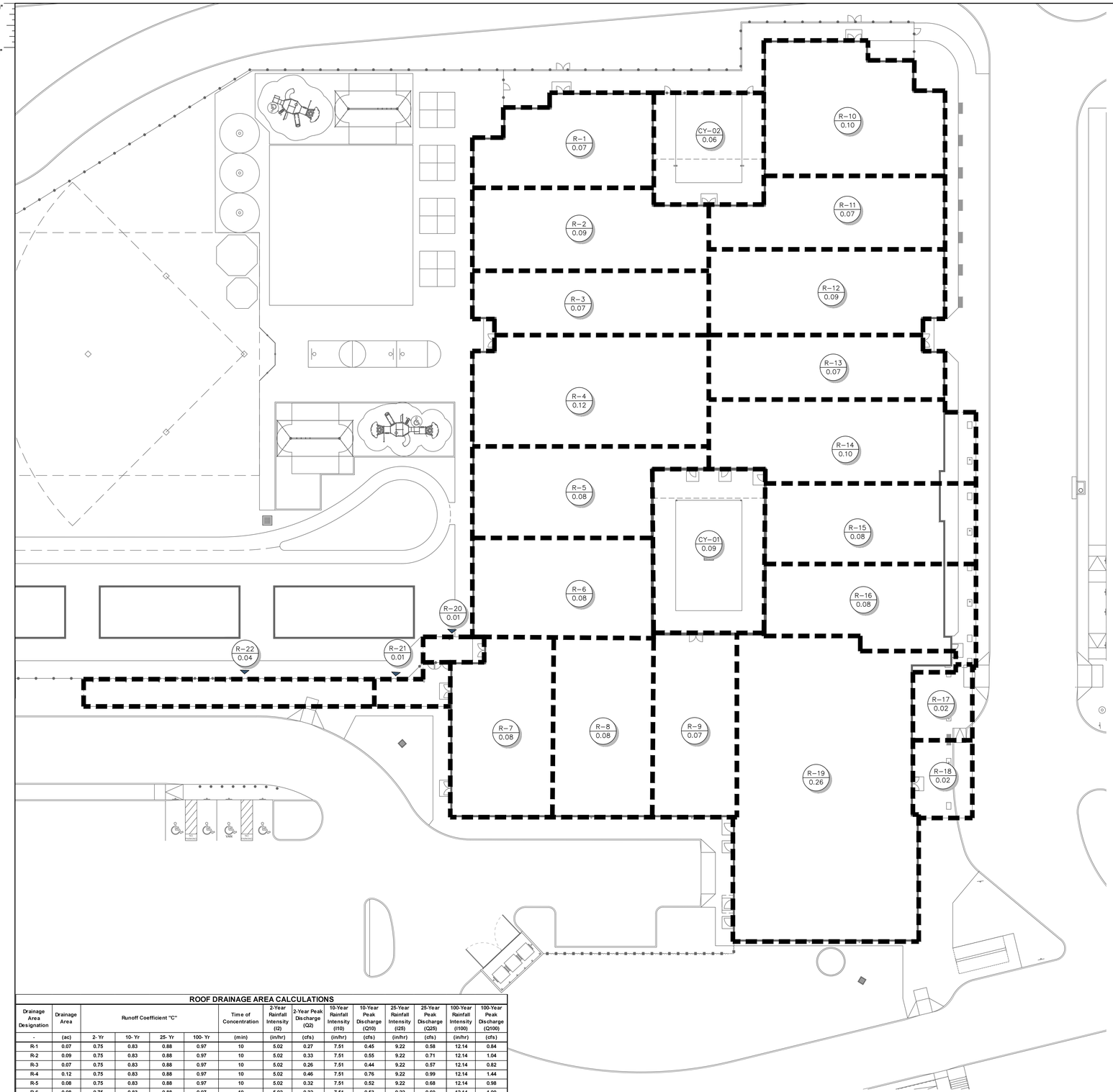
C-601

Plot Stamp:
Date: 12/5/2025 Time: 13:21 User: kekim Style Table: Langan.stb Layout: 12 C-601 PROPOSED DRAINAGE AREA MAP

Document Code: 5310133323-0102-CG104-0101

PROPOSED ROOF DRAINAGE AREA MAP
C-602
FOR BLUEBEAM LABELING/OCR:

0"
1"



20 0 5 10 20
SCALE IN FEET

LEGEND

PROPERTY LINE	
EX.	EXISTING
ROOF DRAINAGE BASIN	BASIN NAME R-00, ACRES 1.00
DRAINAGE AREA	
EX. FLOW ARROW	
TIME OF CONCENTRATION PATH	

ROOF DRAINAGE AREA CALCULATIONS

Drainage Area Designation	Drainage Area	Runoff Coefficient "C"				Time of Concentration	2-Year Rainfall Intensity (I2)	2-Year Peak Discharge (Q2)	10-Year Rainfall Intensity (I10)	10-Year Peak Discharge (Q10)	25-Year Rainfall Intensity (I25)	25-Year Peak Discharge (Q25)	100-Year Rainfall Intensity (I100)	100-Year Peak Discharge (Q100)
	(ac)	2- Yr	10- Yr	25- Yr	100- Yr	(min)	(in/hr)	(cfs)	(in/hr)	(cfs)	(in/hr)	(cfs)	(in/hr)	(cfs)
R-1	0.07	0.75	0.83	0.88	0.97	10	5.02	0.27	7.51	0.45	9.22	0.58	12.14	0.84
R-2	0.09	0.75	0.83	0.88	0.97	10	5.02	0.33	7.51	0.55	9.22	0.71	12.14	1.04
R-3	0.07	0.75	0.83	0.88	0.97	10	5.02	0.26	7.51	0.44	9.22	0.57	12.14	0.82
R-4	0.12	0.75	0.83	0.88	0.97	10	5.02	0.46	7.51	0.76	9.22	0.99	12.14	1.44
R-5	0.08	0.75	0.83	0.88	0.97	10	5.02	0.32	7.51	0.52	9.22	0.68	12.14	0.98
R-6	0.08	0.75	0.83	0.88	0.97	10	5.02	0.32	7.51	0.53	9.22	0.69	12.14	1.00
R-7	0.08	0.75	0.83	0.88	0.97	10	5.02	0.31	7.51	0.52	9.22	0.67	12.14	0.98
R-8	0.08	0.75	0.83	0.88	0.97	10	5.02	0.32	7.51	0.53	9.22	0.68	12.14	0.99
R-9	0.07	0.75	0.83	0.88	0.97	10	5.02	0.27	7.51	0.45	9.22	0.59	12.14	0.86
R-10	0.10	0.75	0.83	0.88	0.97	10	5.02	0.39	7.51	0.65	9.22	0.84	12.14	1.22
R-11	0.07	0.75	0.83	0.88	0.97	10	5.02	0.28	7.51	0.46	9.22	0.60	12.14	0.88
R-12	0.09	0.75	0.83	0.88	0.97	10	5.02	0.35	7.51	0.58	9.22	0.76	12.14	1.10
R-13	0.07	0.75	0.83	0.88	0.97	10	5.02	0.26	7.51	0.44	9.22	0.57	12.14	0.83
R-14	0.10	0.75	0.83	0.88	0.97	10	5.02	0.38	7.51	0.62	9.22	0.81	12.14	1.18
R-15	0.08	0.75	0.83	0.88	0.97	10	5.02	0.30	7.51	0.50	9.22	0.65	12.14	0.94
R-16	0.08	0.75	0.83	0.88	0.97	10	5.02	0.31	7.51	0.51	9.22	0.66	12.14	0.96
R-17	0.02	0.75	0.83	0.88	0.97	10	5.02	0.07	7.51	0.12	9.22	0.16	12.14	0.23
R-18	0.02	0.75	0.83	0.88	0.97	10	5.02	0.08	7.51	0.13	9.22	0.18	12.14	0.26
R-19	0.26	0.75	0.83	0.88	0.97	10	5.02	0.98	7.51	1.62	9.22	2.11	12.14	3.06
R-20	0.01	0.75	0.83	0.88	0.97	10	5.02	0.03	7.51	0.05	9.22	0.06	12.14	0.09
R-21	0.01	0.75	0.83	0.88	0.97	10	5.02	0.04	7.51	0.07	9.22	0.10	12.14	0.14
R-22	0.04	0.75	0.83	0.88	0.97	10	5.02	0.14	7.51	0.23	9.22	0.30	12.14	0.44
CY-01	0.09	0.75	0.83	0.88	0.97	10	5.02	0.32	7.51	0.54	9.22	0.70	12.14	1.01
CY-02	0.06	0.75	0.83	0.88	0.97	10	5.02	0.22	7.51	0.36	9.22	0.47	12.14	0.68
Total	1.87							5.30		8.76		11.41		16.55

Note: Calculations based on the Rational Method: Q = C*I*A per the 2020 Round Rock Drainage Criteria Manual

Know what's below. Call before you dig.

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ELEMENTARY SCHOOL #9

1703 Tower Road
Liberty Hill Texas 78642

75% CD PROGRESS SET

LIBERTY HILL INDEPENDENT SCHOOL DISTRICT

F E D
G C
A B

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
JACK N. GARNER, JR.
98447
LICENSED PROFESSIONAL ENGINEER
12.05.2025
TCEQ CZP
TBPE Registration #: 13709

CLIENT
LIBERTY HILL ISD

DATE	PROJECT NUMBER
12/05/2025	250254

DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

PROPOSED ROOF DRAINAGE AREA MAP

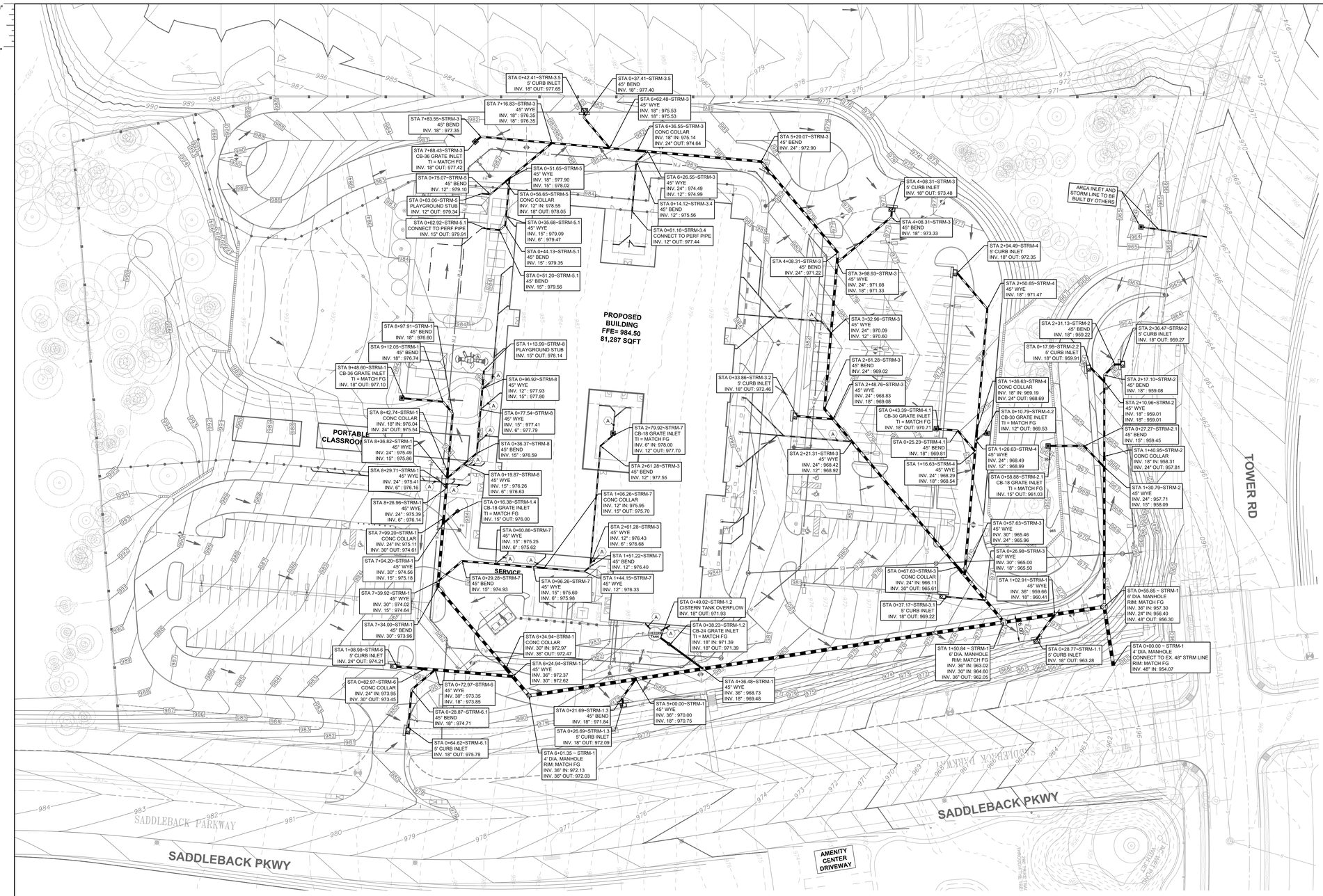
C-602

Plot Stamp:
Date: 12/5/2025 Time: 13:21 User: kekim Style Table: Langan.stb Layout: 15 C-602 PROPOSED ROOF DRAINAGE AREA MAP

Document Code: 5310133323-0102-CG104-0102

DRAINAGE PLAN
C-603
FOR BLUEBEAM LABELING/OCR:

0"
1"



40 0 10 25 40
SCALE IN FEET

LEGEND

EX.	EXISTING
CURB INLET	
STORM LINE	
GRATE INLET	
FL	FLOWLINE
TI	TOP OF INLET
TC	TOP OF CURB

SYMBOL KEY

(A) DOWNSPOUT CONNECITON LATERAL STORM LINES (REF ROOF DRAINAGE PLAN)

DRAINAGE NOTE TO CONTRACTOR

1. CONTRACTOR TO PLACE ALL CURB INLETS ON-GRADE AND CONTINUE THE RUNNING SLOPE ACROSS THE INLET UNLESS THE INLET IS IN A SAG CONDITION.
2. SITE RUNOFF DRAINS TO REGIONAL BATCH DETENTION POND PERMITTED AND CONSTRUCTED BY OTHERS. REFER TO SADDLEBACK AT SANTA RITA RANCH PHASE 2 SECTION 1 BY CBD, DATED SEPTEMBER 2024.

CIVIL DRAINAGE NOTES

1. ALL CIVIL STORM DRAIN LINES 15" AND SMALLER CONNECTING TO ROOF DRAIN OR DOWNSPOUT SHOWN BY ARCH/MEP SHALL BE SCH-40 PVC OR BETTER .
2. CIVIL DRAINAGE CONTRACTOR SHALL INSTALL CONNECTING DOWNSPOUT DRAIN LINES PER CIVIL AND ARCHITECTURAL DETAILS TO THE FACE OF THE BUILDING AND TERMINATING ABOVE GROUND SURFACE UNLESS COORDINATED OTHERWISE.
3. WHERE CIVIL LINE SIZE AND ROOF DRAIN / DOWNSPOUT SIZE DO NOT MATCH, CONTRACTOR TO SUPPLY AND INSTALL REDUCER AS REQUIRED FOR THE CONNECTION.
4. CONTRACTOR TO SUPPLY AND INSTALL A PREMANUFACTURED FITTING AT ALL PVC CONNECTIONS TO HDPE TRUNK LINE.

Know what's below.
Call before you dig.

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LIBERTY HILL INDEPENDENT SCHOOL DISTRICT

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C
G A B

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
JACK H. GARNER, JR.
98447
LICENSED PROFESSIONAL ENGINEER
12.05.2025
TCEQ CZP
TBPE Registration #: 13709

CLIENT
LIBERTY HILL ISD

DATE	PROJECT NUMBER
12/05/2025	250254

DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

DRAINAGE PLAN

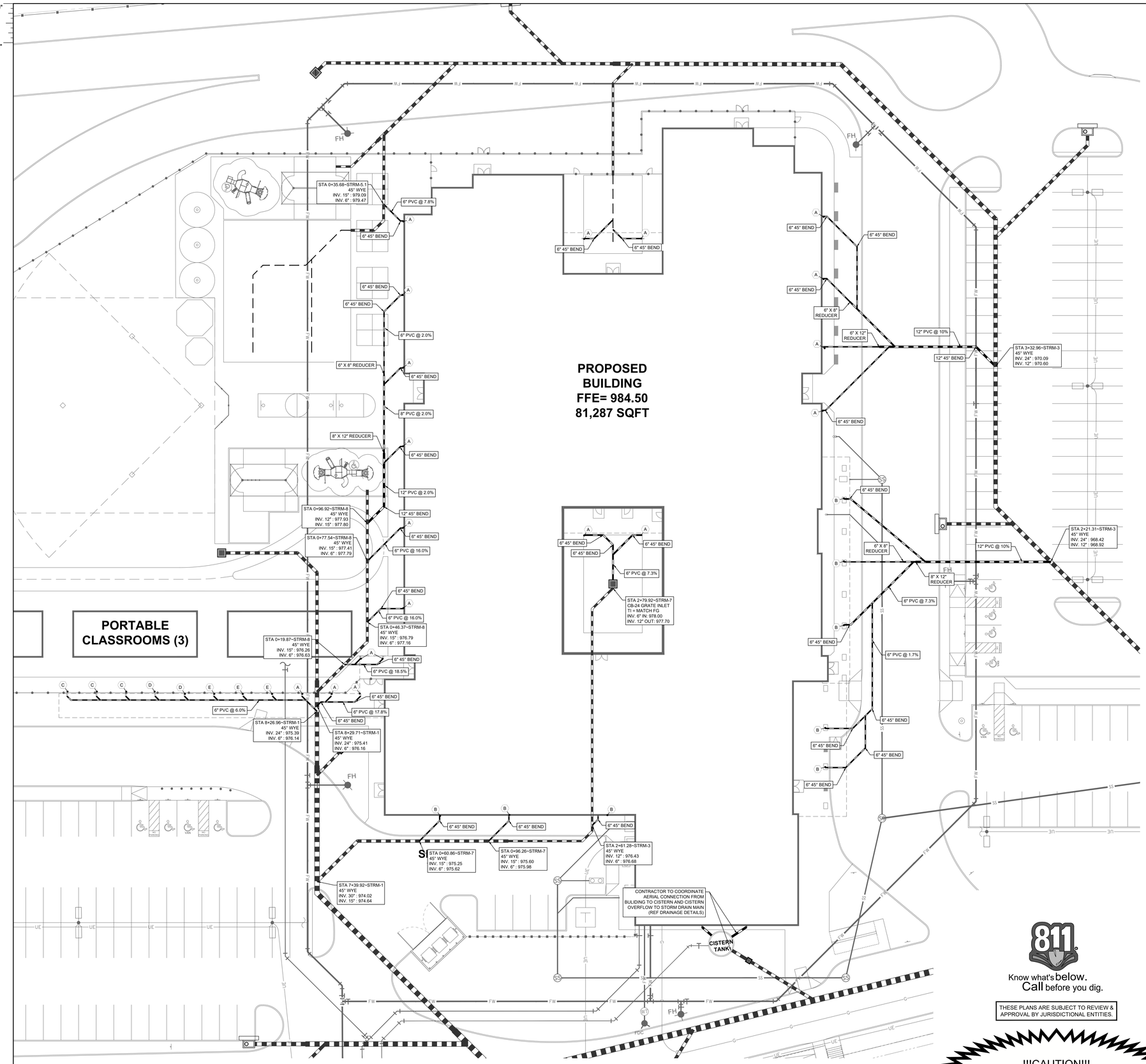
C-603

Plot Stamp:
Date: 12/5/2025 Time: 12:47 User: kekim Style Table: Langan.stb Layout: 16 C-603 DRAINAGE PLAN

Document Code: 531013323-0102-CG102-0101

ROOF DRAINAGE PLAN
C-604
FOR BLUEBEAM LABELING/OCR:

0"
1"



20 0 5 10 20
SCALE IN FEET

LEGEND

EX.	EXISTING
CURB INLET	
STORM LINE	
GRATE INLET	
FL	FLOWLINE
TI	TOP OF INLET
TC	TOP OF CURB

SYMBOL KEY

- (A) CONNECTION TO DOWNSPOUT 6" FLOWLINE = 980.50 (REF TO ARCH FOR DETAILS)
- (B) CONNECTION TO DOWNSPOUT 6" FLOWLINE = 979.50 (REF TO ARCH FOR DETAILS)
- (C) CONNECTION TO DOWNSPOUT 4" FLOWLINE = 984.00 (REF TO ARCH FOR DETAILS)
- (D) CONNECTION TO DOWNSPOUT 4" FLOWLINE = 983.00 (REF TO ARCH FOR DETAILS)
- (E) CONNECTION TO DOWNSPOUT 4" FLOWLINE = 982.00 (REF TO ARCH FOR DETAILS)

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811
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Liberty Hill Texas 78642

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LIBERTY HILL INDEPENDENT SCHOOL DISTRICT

KEY PLAN

F	E	D
	C	
G	A	B

NORTH: PLAN TRUE

STATE OF TEXAS
JACK H. GARNER, JR.
98447
LICENSED PROFESSIONAL ENGINEER
12.05.2025
TCEQ CZP
TBPE Registration #: 13709

CLIENT	
LIBERTY HILL ISD	
DATE	PROJECT NUMBER
12/05/2025	250254

DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

ROOF DRAINAGE PLAN

C-604

Plot Stamp:
Date: 12/5/2025 Time: 12:47 User: kekim Style Table: Langan.stb Layout: 17 C-604 ROOF DRAINAGE PLAN

Document Code: 531013323-0102-CG102-0103

DRAINAGE CALCULATIONS
C-608
FOR BLUEBEAM LABELING/DOOR:

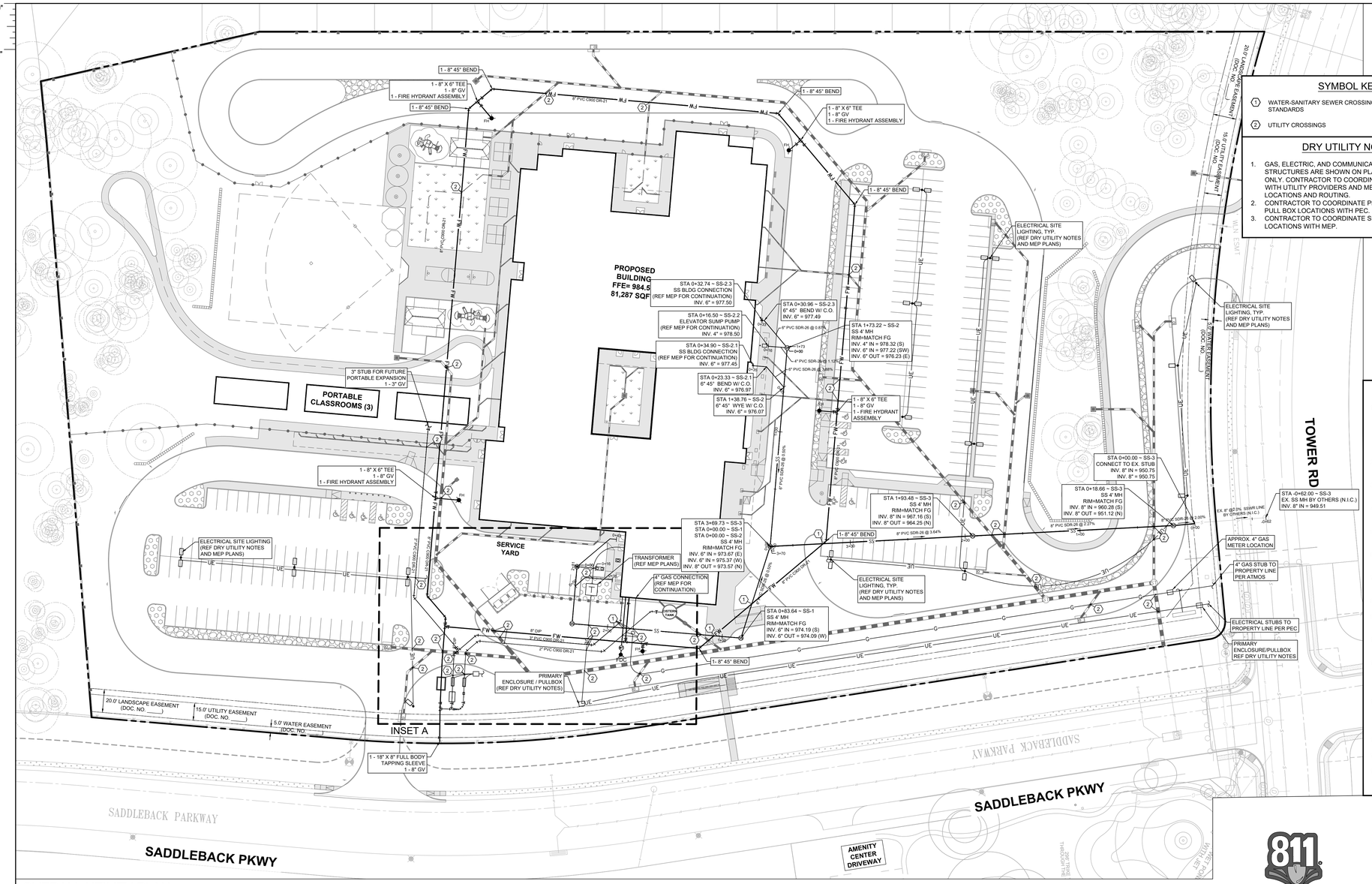
0"
1"

100-YEAR RATIONAL METHOD STORM SEWER CALCULATIONS

Line ID	Upstream Station	Downstream Station	Pipe Length	Pipe Slope	Drainage Area Designation	Incremental Drainage Area	Cumulative Drainage Area	Runoff Coefficient	Incremental	Cumulative	Time at Inlet	Time in Pipe	Cumulative Time	Rainfall Intensity	Peak Flow	Pipe Material	Pipe Capacity	Pipe Diameter	Friction Slope	Hydraulic Gradient		Upstream Junction Type	Loss Coefficient	Velocity Head Loss	Upstream Invert Elev.	Downstream Invert Elev.
																				Upstream	Downstream					
-	-	-	(ft)	(ft/ft)	-	(ac)	(ac)	"C"	"CA"	"CA"	(min)	(min)	(min)	(in/hr)	(cfs)	-	(cfs)	(in)	(ft/ft)	-	-	-	"K|"	(ft)	(ft)	(ft)
STRM-1	9+48.60	9+12.05	36.6	0.0100	DA-19	1.32	1.32	0.60	0.78	0.78	10.00	0.08	10.08	12.14	9.52	HDPE	12.4	18	0.0059	978.96	978.74	Begin Line	1.25	1.15	977.00	976.64
	9+12.05	8+97.91	14.1	0.0100	None	0.00	1.32	0.00	0.00	0.78	10.08	0.03	10.11	12.10	9.48	HDPE	12.4	18	0.0058	978.42	978.34	45 Bend	0.35	0.32	976.64	976.50
	8+97.91	8+42.74	55.2	0.0100	None	0.00	1.32	0.00	0.00	0.78	10.11	0.12	10.23	12.09	9.48	HDPE	12.4	18	0.0058	978.02	977.70	45 Bend	0.35	0.32	976.50	975.94
	8+42.74	8+36.82	5.9	0.0100	None	0.00	1.32	0.00	0.00	0.78	10.23	0.01	10.24	12.03	9.44	HDPE	26.7	24	0.0012	977.60	977.59	Collar - 18 to 21	0.10	0.10	975.44	975.38
	8+36.82	8+29.71	7.1	0.0100	STRM 8	0.52	1.83	0.97	0.50	1.29	10.24	0.01	10.26	12.02	15.46	HDPE	26.7	24	0.0033	977.07	977.05	45 Wye	0.75	0.52	975.38	975.31
	8+29.71	8+26.96	2.8	0.0100	R-21	0.01	1.85	0.97	0.01	1.30	10.26	0.01	10.26	12.02	15.59	HDPE	26.7	24	0.0034	976.73	976.72	45 Wye	0.75	0.32	975.31	975.29
	8+26.96	7+99.20	27.8	0.0100	R-22	0.04	1.88	0.97	0.04	1.33	10.26	0.05	10.31	12.01	16.03	HDPE	26.7	24	0.0036	976.41	975.63	45 Wye	0.75	0.31	975.29	975.01
	7+99.20	7+94.20	5.0	0.0100	None	0.00	1.88	0.00	0.00	1.33	10.31	0.01	10.32	11.99	15.99	HDPE	48.5	30	0.0011	975.51	975.46	Collar - 18 to 21	0.10	0.12	974.51	974.46
	7+94.20	7+39.92	54.3	0.0100	STRM 1.4	0.04	1.92	0.91	0.04	1.37	10.32	0.10	10.43	11.99	16.41	HDPE	48.5	30	0.0011	975.48	974.94	45 Bend	0.35	0.41	974.46	973.92
	7+39.92	7+34.00	5.9	0.0100	STRM 7	0.33	2.25	0.97	0.32	1.69	10.43	0.01	10.44	11.94	20.13	HDPE	48.5	30	0.0017	975.04	974.98	45 Wye	0.75	0.50	973.92	973.86
	7+34.00	6+34.94	99.1	0.0100	None	0.00	2.25	0.00	0.00	1.69	10.44	0.18	10.61	11.93	20.12	HDPE	48.5	30	0.0017	974.98	973.99	45 Bend	0.35	0.48	973.86	972.87
	6+34.94	6+24.94	10.0	0.0100	None	0.00	2.25	0.00	0.00	1.69	10.61	0.02	10.63	11.85	19.99	HDPE	78.8	36	0.0006	973.42	973.32	45 Bend	0.35	0.45	972.37	972.27
	6+24.94	6+01.35	23.6	0.0100	STRM 6	2.01	4.26	0.86	1.72	3.41	10.63	0.04	10.67	11.85	40.38	HDPE	78.8	36	0.0026	973.80	973.56	Collar - 24 to 36	0.35	0.67	972.27	972.03
	6+01.35	5+00.00	101.4	0.0200	None	0.00	4.26	0.00	0.00	3.41	10.67	0.12	10.79	11.83	40.32	HDPE	111.5	36	0.0026	973.29	971.26	MH	1.00	1.25	972.03	970.00
	5+00.00	4+36.48	63.5	0.0200	STRM 1.3	0.35	4.61	0.80	0.28	3.69	10.79	0.07	10.86	11.78	43.43	HDPE	111.5	36	0.0030	971.32	970.05	45 Bend	0.35	1.14	970.00	968.73
	4+36.48	1+50.84	285.6	0.0200	STRM 1.2	0.26	4.87	0.72	0.19	3.88	10.86	0.32	11.18	11.75	45.53	HDPE	111.5	36	0.0033	970.08	964.37	45 Bend	0.35	1.18	968.73	963.02
	1+50.84	1+02.91	47.9	0.0500	STRM 3	4.74	9.60	0.87	4.10	7.98	11.18	0.03	11.21	11.61	92.60	HDPE	176.3	36	0.0138	962.61	960.22	MH	1.00	6.27	961.05	958.66
	1+02.91	0+55.85	47.1	0.0500	STRM 1.1	0.60	10.20	0.80	0.48	8.46	11.21	0.03	11.24	11.59	98.03	HDPE	176.3	36	0.0155	960.28	957.92	45 Wye	0.75	2.60	958.66	956.30
	0+55.85	0+00.00	55.9	0.0400	STRM 2	1.11	11.31	0.75	0.83	9.29	11.24	0.04	11.28	11.58	107.55	HDPE	157.7	36	0.0186	958.13	955.90	MH	1.00	0.10	956.30	954.07
STRM-1.1	0+28.77	0+00.00	28.8	0.1000	DA-14	0.60	0.60	0.80	0.48	0.48	10.00	0.03	10.03	12.14	5.8	HDPE	39.3	18	0.0022	963.68	960.80	Begin Line	1.25	4.89	963.29	960.41
STRM-1.2	0+49.02	0+38.23	10.8	0.0500	R-19	0.26	0.26	0.97	0.25	0.25	10.00	0.02	10.02	12.14	3.1	HDPE	27.8	18	0.0006	972.28	971.74	Begin Line	1.25	1.93	971.93	971.39
	0+38.23	0+00.00	38.2	0.0500	None	0.00	0.26	0.00	0.00	0.25	10.00	0.06	10.06	12.14	3.1	HDPE	27.8	18	0.0006	971.74	969.83	MH	1.00	0.10	971.39	969.48
STRM-1.3	0+26.69	0+21.69	5.0	0.0500	DA-15	0.35	0.35	0.72	0.25	0.25	10.00	0.01	10.01	12.14	3.1	HDPE	27.8	18	0.0006	972.73	972.72	Inlet	0.50	1.56	972.08	971.83
	0+21.69	0+00.00	21.7	0.0500	None	0.00	0.35	0.00	0.00	0.25	10.01	0.04	10.04	12.13	3.1	HDPE	27.8	18	0.0006	972.18	971.10	45 Bend	0.35	0.54	971.83	970.75
STRM-1.4	0+16.38	0+00.00	16.4	0.0500	DA-18	0.04	0.04	0.67	0.03	0.03	10.00	0.05	10.05	12.14	0.3	HDPE	17.1	15	0.0000	976.13	0.00	Inlet	0.50	0.39	976.01	975.18
STRM-2	2+36.47	2+31.13	5.3	0.0100	DA-12	0.59	0.59	0.81	0.47	0.47	10.00	0.01	10.01	12.14	5.7	HDPE	12.4	18	0.0021	962.45	962.44	Begin Line	1.25	0.91	960.54	960.49
	2+31.13	2+17.10	14.0	0.0100	None	0.00	0.59	0.00	0.00	0.47	10.01	0.03	10.05	12.13	5.7	HDPE	12.4	18	0.0021	962.19	962.16	45 Bend	0.35	0.26	960.49	960.36
	2+17.10	2+10.96	6.1	0.0100	None	0.00	0.59	0.00	0.00	0.47	10.05	0.01	10.06	12.11	5.7	HDPE	12.4	18	0.0021	961.90	961.89	45 Bend	0.35	0.25	960.36	960.31
	2+10.96	1+40.95	70.0	0.0100	STRM 2.2	0.59	1.17	0.81	0.47	0.95	10.06	0.15	10.21	12.11	11.5	HDPE	12.4	18	0.0085	961.45	960.46	45 Wye	0.75	0.44	960.31	959.62
	1+40.95	1+30.79	10.2	0.0100	None	0.00	1.17	0.00	0.00	0.95	10.21	0.02	10.23	12.04	11.4	HDPE	26.7	24	0.0018	960.36	960.34	Collar - 21 to 24	0.10	0.10	959.12	959.02
	1+30.79	0+00.00	130.8	0.0100	STRM 2.1	0.28	1.45	0.51	0.14	1.09	10.23	0.26	10.49	12.03	13.1	HDPE	26.7	24	0.0024	960.02	0.00	45 Wye	0.75	0.32	959.02	957.71
STRM-2.1	0+58.88	0+27.27	31.6	0.0500	DA-10	0.33	0.33	0.94	0.31	0.31	10.00	0.05	10.05	12.14	3.7	HDPE	17.1	15	0.0024	961.43	960.51	Inlet	0.50	1.89	961.03	959.45
	0+27.27	0+00.00	27.3	0.0500	None	0.00	0.33	0.00	0.00	0.31	10.05	0.04	10.09	12.11	3.7	HDPE	17.1	15	0.0024	959.85	0.00	45 Bend	0.35	0.66	959.45	958.09
STRM-2.2	0+17.98	0+00.00	18.0	0.0500	DA-11	0.28	0.28	0.51	0.14	0.14	10.00	0.03	10.03	12.14	1.7	HDPE	27.8	18	0.0002	960.16	0.00	Inlet	0.50	1.17	959.91	959.01
STRM-3	7+88.43	7+83.55	4.9	0.0150	DA-03	1.08	1.08	0.70	0.75	0.75	10.00	0.01	10.01	12.14	9.1	HDPE	15.2	18	0.0054	978.99	978.96	Begin Line	1.25	1.55	977.43	977.35
	7+83.55	7+16.83	66.7	0.0150	None	0.00	1.08	0.00	0.00	0.75	10.01	0.12	10.13	12.13	9.1	HDPE	15.2	18	0.0054	978.53	978.17	45 Bend	0.35	0.43	977.35	976.35
	7+16.83	6+62.48	54.4	0.0150	STRM 5	0.53	1.60	0.85	0.45	1.20	10.13	0.09	10.23	12.07	14.5	HDPE	15.2	18	0.0136	977.61	976.87	45 Wye	0.75	0.56	976.35	975.54
	6+62.48	6+36.55	25.9	0.0150	STRM 3.5	0.27	1.87	0.70	0.19	1.39	10.23	0.04	10.27	12.03	16.7	HDPE	32.7	24	0.0039	976.31	976.21	45 Wye	0.75	0.56	975.04	974.65
	6+36.55	6+26.55	10.0	0.0150	None	0.00	1.87	0.00	0.00	1.39	10.27	0.02	10.28	12.01	16.7	HDPE	32.7	24	0.0039	976.04	976.00	Collar - 18 to 21	0.10	0.17	974.65	974.50
	6+26.55	5+20.07	106.5	0.0150	STRM 3.4	0.06	1.93	0.97	0.06	1.45	10.28	0.17	10.45	12.00	17.4	HDPE	32.7	24	0.0042	975.54	975.00	45 Wye	0.75	0.47	974.50	972.90
	5+20.07	4+08.31	111.8	0.0150	None	0.00	1.93	0.00	0.00	1.45	10.45	0.18	10.63	11.93	17.3	HDPE	32.7	24	0.0042	974.41	973.94	45 Bend	0.35	0.59	972.90	971.22
	4+08.31	3+98.93	9.4	0.0150	None	0.00	1.93	0.00	0.00	1.45	10.63	0.02	10.65	11.85	17.1	HDPE	32.7	24	0.0041	972.30	972.26	45 Bend	0.35	0.59	971.22	971.08
	3+98.93	3+32.96	66.0	0.0150	STRM 3.3	0.62	2.56	0.82	0.51	1.96	10.65	0.10	10.74	11.84	23.2	HDPE	32.7	24	0.0075	972.84	972.34	45 Wye	0.75	0.66	971.08	970.09
	3+32.96	2+61.28	71.7	0.0150	R-10:R-13	0.34	2.90	0.97	0.33	2.29	10.74	0.10	10.85	11.80	27.0	HDPE	32.7	24	0.0102	972.23	971.49	45 Wye	0.75	0.61	970.09	969.02
	2+61.28	2+48.76	12.5	0.0150	None	0.00	2.90	0.00	0.00	2.29	10.85	0.02	10.87	11.75	26.9	HDPE	32.7	24	0.0101	970.55	970.42	45 Bend	0.35	0.71	969.02	968.83
	2+48.76	2+21.31	27.5	0.0150	STRM 3.2	0.17	3.07	0.94	0.16	2.45	10.87	0.04	10.91	11.74	28.8	HDPE	32.7	24	0.0116	970.61	970.29	45 Wye	0.75	0.60	968.83	968.42
	2+21.31	0+67.63	153.7	0.0150	R-14:R-18	0.30	3.37	0.97	0.29	2.74	10.91	0.22	11.12	11.72	32.2	HDPE	32.7	24	0.0145	972.27	970.04	45 Wye	0.75	0.57	968.42	966.11
	0+67.63	0+57.63	10.0	0.0150	None	0.00	3.37	0.00	0.00	2.74	11.12	0.01	11.14	11.63	31.9	HDPE	59.4	30	0.0043	966.98	966.94	Collar - 27 to 30	0.10	0.23	965.61	965.46
	0+57.63	0+26.98	30.7	0.0150	STRM 4	1.18	4.55	0.94	1.11	3.85	11.14	0.04	11.17	11.63	44.8	HDPE	59.4	30	0.0085	967.35	967.09	45 Wye	0.75	1.03	965.46	965.00
	0+26.98	0+00.00	27.0	0.0150	STRM 3.1	0.48	5.03	0.96	0.46	4.31	11.17	0.03	11.21	11.61	50.1	HDPE	59.4	30	0.0107	967.07	966.78	45 Wye	0.75	0.75	965.00	964.60
STRM-3.1	0+37.17	0+00.00	37.2	0.1000	DA-09	0.28	0.28	0.97	0.28	0.28	10.00	0.05	10.05	12.14	3.4	HDPE	39.3	18	0.0007	974.43	974.41	Inlet	0.50	2.76	969.21	965.50
STRM-3.2	0+33.86	0+00.00	33.9	0.1000	DA-08	0.17	0.17	0.96	0.17	0.17	10.00	0.05	10.05	12.14	2.0	HDPE	39.3	18	0.0003	972.85	972.84	Inlet	0.50	1.88	972.46	969.08
STRM-3.3	0+71.49	0+66.49	5.0	0.0300	DA-05	0.62	0.62	0.87	0.54	0.54	10.00	0.01	10.01	12.14	6.6	HDPE	21.5	18	0.0028	974.51	974.49	Inlet	0.50	1.66	973.48	973.32
	0+66.49	0+00.00	66.5	0.0300	None	0.00	0.62	0.00	0.00	0.54	10.01	0.11	10.12	12.13	6.6	HDPE	21.5	18	0.0028	973.91	0.00	45 Bend	0.35	0.58	973.32	971.33
STRM-3.4	0+61.16	0+14.12	47.0	0.0400	CY-02	0.06	0.06	0.97	0.06	0.06	0.00	0.09	0.09	22.05	1.2	PVC	10.3	12	0.0006	977.68	976.18	Begin Line	1.25	1.42	977.44	975.55
	0+14.12	0+00.00	14.1	0.0400	None	0.00	0.06	0.00	0.00	0.06	0.09	0.03	0.12	21.86	1.2	PVC	10.3	12	0.0006	975.79	0.00	45 Bend	0.35	0.39	975.55	974.99
STRM-3.5	0+42.41	0+37.41	5.0	0.0500	DA-04	0.27	0.27	0.82	0.22	0.22	0.00	0.01	0.01	22.05	4.9	HDPE	27.8	18	0.0016	978.58	978.58	Inlet	0.50	2.09	977.66	977.41
	0+37.41	0+00.00	37.4	0.0500	None	0.00	0.27	0.00	0.00	0.22	0.01	0.05	0.06	22.03	4.9	HDPE	27.8	18	0.0016	977.85	0.00	45 Bend	0.35	0.73	977.41	975.53
STRM-4	2+94.49	2+50.65	43.8	0.0200	DA-06	0.37	0.37	0.94	0.35	0.35	0.00	0.08	0.08	22.05	7.7	HDPE	17.6	18	0.0038	973.05	972.05	Inlet	0.50	1.37	972.35	971.47
	2+50.65	1+26.63	124.0	0.0200	None	0.00	0.37	0.00	0.00	0.35	0.08	0.23	0.30	21.88	7.6	HDPE	37.8	24	0.0008	971.59	971.10	45 Bend	0.35	0.46	970.97	968.49
	1+26.63	1+26.63	0.0	0.0200	None	0.00	0.37	0.00	0.00	0.35	0.30	0.00	0.30	21.42	7.4	HDPE	37.8	24	0.0008	970.98	970.98	Collar - 21 to 24	0.10	0.13	968.49	968.49
	1+26.63	1+16.63	10.0	0.0200	STRM 4.2	0.33	0.70	0.94	0.31	0.66	0.30	0.02	0.32	21.42	14.0	HDPE	37.8	24	0.0028	970.33	970.31	45 Bend	0.35	0.64	968.49	968.29
	1+16.63	0+00.00	116.6	0.0200	STRM 4.1	0.48	1.18	0.94	0.45	1.11	0.32	0.16	0.47	21.39	23.7	HDPE	37.8	24	0.0079	969.45	0.00	45 Bend	0.35	0.85	968.29	965.96
STRM-4.1	0+43.39	0+25.23	18.2	0.0500	DA-07	0.48	0.48	0.94	0.45	0.45	0.00	0.02	0.02	22.05	10.0	HDPE	27.8	18	0.0064	971.63	971.52	Inlet	0.50	3.11	970.71	969.80
	0+25.23	0+00.00	25.2	0.0500	None	0.00	0.48	0.00	0.00	0.45	0.02	0.03	0.05	22.00	9.9	HDPE	27.8	18	0.0064	970.43	0.00	45 Bend	0.35	1.08	969.80	968.54
STRM-4.2	0+10.79	0+00.00	10.8	0.0500	DA-10	0.33	0.33	0.94	0.31	0.31	0.00	0.01	0.01	22.05	6.8	PVC	11.5	12	0.0174	970.09	0.00	Inlet	0.50	3.49	969.53	968.99
STRM-5	0+83.06	0+75.07	8.0	0.0300	DA-02	0.05	0.05	0.97	0.05	0.05	0.00	0.02	0.02	22.05	1.1	PVC	8.9	12	0.0004	980.48	980.48	Begin Line	1.25	1.07	979.35	979.10
	0+75.07	0+56.65	18.4	0.0300	None	0.00	0.05	0.00	0.00	0.05	0.02	0.04	0.06	22.01	1.1	PVC	8.9	12	0.0004	980.18	980.17	45 Bend	0.35	0.30	979.10	978.55
	0+56.65	0+51.65	5.0	0.0300	None	0.00	0.05	0.00	0.00	0.05	0.06	0.01	0.07	21.92	1.1	HDPE	21.5	18	0.0001	980.07	980.07	Collar - 18 to 21	0.10	0.10	978.05	977.90
	0+51.65	0+00.00	51.7	0.0300	STRM 5.1	0.40	0.45	0.82	0.33	0.38	0.07	0.08	0.15	21.89	8.3	HDPE	21.5	18	0.0045	978.56	0.00	45 Wye	0.75	1.51	977.90	976.35
STRM-5.1	0+62.92	0+51.20	11.7	0.0300	DA-01	0.40	0.40	0.82	0.33	0.33	0.00	0.02	0.02	22.05	7.3	HDPE	13.2	15	0.0091	982.03	981.92	45 Wye	0.75	1.81	979.91	979.56
	0+51.20	0+44.13	7.1	0.0300	None	0.00	0.40	0.00	0.00	0.33	0.02	0.01	0.03	22.01	7.3	HDPE	13.2	15	0.0091	981.26	981.19	45 Bend	0.35	0.66	979.56	979.34
	0+44.13	0+35.68	8.5	0.0300	None	0.00	0.40	0.00	0.00	0.33	0.03	0.01	0.04	21.99	7.3	HDPE	13.2	15	0.0091	980.53	980.46	45 Bend	0.35	0.66	979.34	979.09
	0+35.68	0+00.00	35.7	0.0300	R-1	0.07	0.48	0.97	0.07	0.40	0.04	0.05	0.09	21.96	8.8	HDPE	13.2	15	0.0133	979.84	0.00	45 Wye	0.75	0.62	979.09	978.02
STRM-6	1+08.98	0+82.97	26.0	0.0100	DA-17	1.12	1.12	0.91	1.01	1.01	0.00	0.05	0.05	22.05	22.4	HDPE	26.7	24	0.0070	976.12	975.93	Inlet	0.50	1.41	973.48	973.22
	0+82.97	0+72.97	10.0	0.0100	None	0.00	1.12	0.00	0.00	1.01	0.05	0.02	0.06	21.95	22.3	HDPE	48.5	30	0.0021	975.79	975.77	Collar - 18 to 21	0.10	0.14	972.72	972.62
	0+72.97	0+00.00	73.0	0.0100	STRM 6.1	0.89	2.01	0.80	0.71	1.72	0.06	0.11	0.18	21.92	37.8	HDPE	48.5	30	0.0061	975.02	0.00	45 Wye	0.75	0.75	973.35	972.62
STRM-6.1	0+64.62	0+28.87	35.8	0.0300	DA-16	0.89	0.89	0.80	0.71	0.71	10.00	0.05	10.05	12.14	8.6	PVC	26.3	18	0.0032	976.39	976.23	Inlet	0.50	2.63	975.79	974.72
	0+28.87	0+00.00	28.9	0.0300	None	0.00	0.89	0.00	0.00	0.71	10.05	0.04	10.08	12.12	8.6	PVC	26.3	18	0.0032	975.32	974.45	45 Bend	0.35	0.92	974.72	973.85
STRM-7	2+79.92	2+64.87	15.1	0.0100	CY-01	0.09	0.09	0.97	0.08	0.08	0.00	0.04	0.04	22.05	1.8	PVC	5.1	12	0.0013	978.49	978.47	Begin Line	1.25	0.67	977.70	977.54
	2+64.87	1+54.22	110.7	0.0100	None	0.00	0.09	0.00	0.00	0.08	0.04	0.31	0.36	21.96	1.8	PVC	5.1	12	0.0013	978.28	978.14	45 Bend	0.35	0.19	977.54	976.43
	1+54.22	1+51.22	3.0	0.0100	R-9	0.07	0.16	0.97	0.07	0.15	0.36	0.01	0.36	21.31	3.3	PVC	5.1	12	0.0041	977.82	977.81	45 Wye	0.75	0.32	976.43	976.40
	1+51.22	1+44.15	7.1	0.0100	None	0.00	0.16	0.00	0.00	0.15	0.36	0.02	0.38	21.30	3.3	PVC	5.1	12	0.0041	977.55	977.53	45 Bend	0.35	0.25	976.40	976.33
	1+44.15	1+06.26	37.9	0.0100	None	0.00	0.16	0.00	0.00	0.15	0.38	0.09	0.47	21.27	3.3	PVC	5.1	12	0.0041	977.27	977.12	45 Bend	0.35	0.25	976.33	975.95
	1+06.26	0+96.26	10.0	0.0100	None	0.00	0.16	0.00	0.00	0.15	0.47	0.03	0.50	21.09	3.3	HDPE	7.6	15	0.0018	977.02	977.00	Collar - 18 to 21	0.10	0.10	975.70	975.60
	0+96.26	0+60.86	35.4	0.0100	R-8	0.08	0.24	0.97	0.08	0.24	0.50	0.09	0.59	21.03	5.0	HDPE	7.6	15	0.0042	976.73	976.58	45 Wye	0.75	0.27	975.60	975.25
	0+60.86	0+29.28	31.6	0.0100	R-7	0.08	0.33	0.97	0.08	0.32	0.59	0.08	0.67	20.86	6.6	HDPE	7.6	15	0.0075	976.33	976.09	45 Wye	0.75	0.25	975.25	974.93
	0+29.28	0+00.00	29.3	0.0100	None	0.00	0.33	0.00	0.00	0.32	0.67	0.07	0.74	20.72	6.6	HDPE	7.6	15	0.0074	975.83	0.00	45 Bend	0.35	0.26	974.93	974.64
STRM-8	1+13.99	0+96.92	17.1	0.0200	DA-20	0.06	0.06	0.97	0.06	0.06	0.00	0.05	0.05	22.05	1.3	HDPE	10.8	15	0.0003	981.28	981.27	Begin Line	1.25	0.65	978.14	977.80
	0+96.92	0+96.92	0.0	0.0200	R-2:R-4	0.28	0.34	0.97	0.27	0.33	0.05	0.00	0.05	21.95	7.3	HDPE	10.8	15	0.0001	980.81	980.81	45 Bend	0.35	0.47	977.80	977.80
	0+96.92	0+77.54	19.4	0.0200	R-5	0.08	0.43	0.97	0.08	0.41	0.05	0.03	0.08	21.95	9.0	HDPE	10.8	15	0.0140	980.34	980.07	45 Wye	0.75	0.46	977.80	977.41
	0+77.54	0+46.37	31.2	0.0200	R-6	0.08	0.51	0.97	0.08	0.49	0.08	0.05	0.13	21.87	10.8	HDPE	10.8	15	0.0201	979.53	978.91	45 Bend	0.35	0.54	977.41	976.79
	0+46.37	0+36.37	10.0	0.0200	None	0.00	0.51	0.00	0.00	0.49	0.13	0.02	0.15	21.77	10.8	HDPE	10.8	15	0.0199	978.36	978.17	45 Bend	0.35	0.54	976.79	976.59
	0+36.37	0+19.87	16.5	0.0200	None	0.00	0.51	0.00	0.00	0.49	0.15	0.03	0.18	21.73	10.7	HDPE	10.8	15	0.0198	978.01	977.68	Collar - 18 to 21	0.10	0.15	976.59	976.26
	0+19.87	0+00.00	19.9	0.0200	R-20	0.01	0.52	0.97	0.01	0.50	0.18	0.03	0.21	21.67	10.9	H

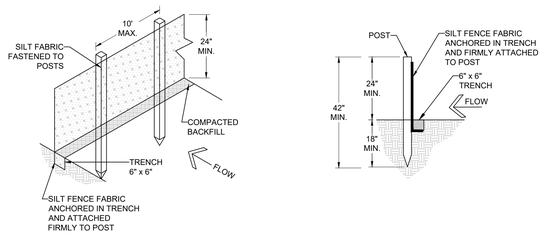
UTILITY PLAN
C-700
FOR BLUEBEAM LABELING/OCR:

0"
1"


1 - 8" 45° BEND
1 - 8" X 6" TEE
1 - 8" GV
1 - FIRE HYDRANT ASSEMBLY
8" PVC C900 DR-21
M.J
FH
PROPOSED BUILDING FFE= 984.5 81,287 SQF
STA 0+32.74 ~ SS-2.3
SS BLDG CONNECTION (REF MEP FOR CONTINUATION)
INV. 6" = 977.50
STA 0+30.96 ~ SS-2.3
6" 45° BEND W/ C.O.
INV. 6" = 977.49
STA 0+16.50 ~ SS-2.2
ELEVATOR SUMP PUMP (REF MEP FOR CONTINUATION)
INV. 4" = 978.50
STA 0+34.90 ~ SS-2.1
SS BLDG CONNECTION (REF MEP FOR CONTINUATION)
INV. 6" = 977.45
STA 0+23.33 ~ SS-2.1
6" 45° BEND W/ C.O.
INV. 6" = 976.97
STA 1+36.78 ~ SS-2
6" 45° WYE W/ C.O.
INV. 6" = 976.07
STA 1+73.22 ~ SS-2
SS 4' MH
RIM=MATCH FG
INV. 4" IN = 978.32 (S)
INV. 6" IN = 977.22 (SW)
INV. 6" OUT = 976.23 (E)
6" PVC SDR-26 @ 0.67%
6" PVC SDR-26 @ 1.12%
6" PVC SDR-26 @ 1.38%
3" STUB FOR FUTURE PORTABLE EXPANSION
1 - 3" GV
PORTABLE CLASSROOMS (3)
SERVICE YARD
STA 3+69.73 ~ SS-3
STA 0+00.00 ~ SS-1
STA 0+00.00 ~ SS-2
SS 4' MH
RIM=MATCH FG
INV. 6" IN = 973.67 (E)
INV. 6" IN = 975.37 (W)
INV. 8" OUT = 973.57 (N)
TRANSFORMER (REF MEP PLANS)
4" GAS CONNECTION (REF MEP FOR CONTINUATION)
STA 0+83.64 ~ SS-1
SS 4' MH
RIM=MATCH FG
INV. 6" IN = 974.19 (S)
INV. 6" OUT = 974.09 (W)
STA 1+93.48 ~ SS-3
SS 4' MH
RIM=MATCH FG
INV. 8" IN = 967.16 (S)
INV. 8" OUT = 964.25 (N)
8" PVC SDR-26 @ 3.64%
STA 0+00.00 ~ SS-3
CONNECT TO EX. STUB
INV. 8" IN = 950.75
INV. 8" = 950.75
STA 0+18.66 ~ SS-3
SS 4' MH
RIM=MATCH FG
INV. 8" IN = 960.28 (S)
INV. 8" OUT = 951.12 (N)
8" PVC SDR-26 @ 2.27%
STA -0+62.00 ~ SS-3
EX. SS MH BY OTHERS (N.I.C.)
INV. 8" IN = 949.51
EX. 8" @ 2.0% SSWR LINE BY OTHERS (N.I.C.)
APPROX. 4" GAS METER LOCATION
4" GAS STUB TO PROPERTY LINE PER ATMOS
ELECTRICAL STUBS TO PROPERTY LINE PER PEC
PRIMARY ENCLOSURE/PULLBOX REF DRY UTILITY NOTES
ELECTRICAL SITE LIGHTING, TYP. (REF DRY UTILITY NOTES AND MEP PLANS)
TOWER RD
1 - 8" 45° BEND
1 - 8" X 6" TEE
1 - 8" GV
1 - FIRE HYDRANT ASSEMBLY
1 - 8" X 6" TEE
1 - 8" GV
1 - FIRE HYDRANT ASSEMBLY
1 - 8" X 6" TEE
1 - 8" GV
1 - FIRE HYDRANT ASSEMBLY
1 - 8" 45° BEND
1 - 8" 45° BEND
1 - 8" 45° BEND

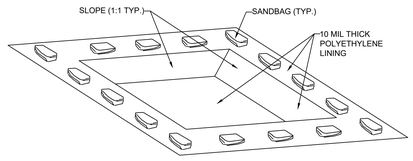
0"
1"

EROSION CONTROL DETAILS
C-800
FOR BLUEBEAM LABELING/OCR:

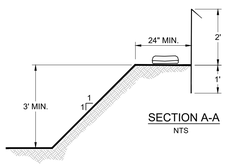


SILT FENCE GENERAL NOTES:
1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (e.g. PAVEMENT), WEIGHT FABRIC FLAP WITH ROCK ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS ATTACHED TO THE STEEL FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
5. INSPECTION SHALL BE MADE IN ACCORDANCE WITH PERMIT REQUIREMENTS. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM WATER FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

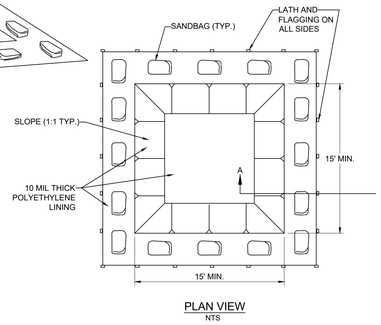
SILT FENCE
N.T.S.



ISOMETRIC VIEW
NTS



SECTION A-A
NTS

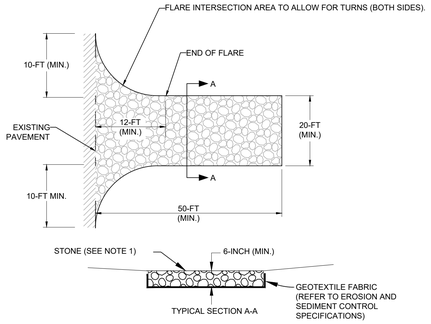


PLAN VIEW
NTS

NOTES:
1. ACTUAL LAYOUT, SIZE AND LOCATION TO BE DETERMINED BY CONTRACTOR.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. ONCE CONCRETE WASTES ARE ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED AND DISPOSED OF PROPERLY. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.

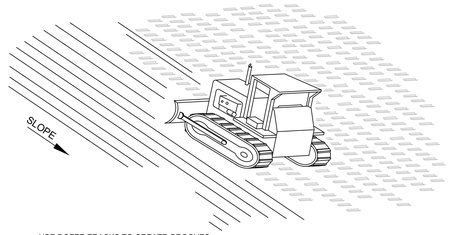
TEMPORARY CONCRETE WASHOUT AREA
N.T.S.

CRITICAL ROOT ZONE AREA
N.T.S.



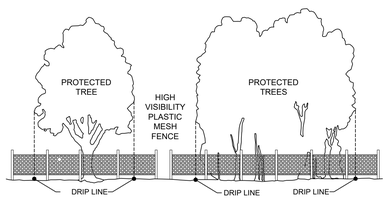
NOTES:
1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALEN THICKNESS OF STONE - NOT LESS THAN SIX INCHES.
2. LENGTH OF STABILIZED CONSTRUCTION ACCESS - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY)
3. WIDTH - TWENTY FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR FOOT IF SINGLE ENTRANCE TO SITE.
4. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. (REFER TO EROSION AND SEDIMENT CONTROL SPECIFICATIONS)
5. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE PUBLIC RIGHT-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
7. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ACCESS
N.T.S.



USE DOZER TRACKS TO CREATE GROOVES PERPENDICULAR TO THE SLOPE. GROOVES WILL CATCH SEED, FERTILIZER, MULCH, RAINFALL AND DECREASE RUNOFF.

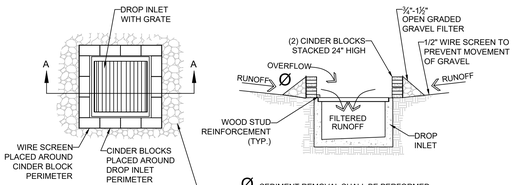
TRACKING DETAIL
N.T.S.



PROTECTIVE FENCING: ORANGE VINYL CONSTRUCTION FENCING, CHAIN LINK FENCING, SNOW FENCING, OR OTHER SIMILAR FENCING AT LEAST FOUR FEET (4') HIGH AND SUPPORTED AT A MAXIMUM OF TEN-FOOT (10') INTERVALS BY APPROVED METHODS SUFFICIENT ENOUGH TO KEEP THE FENCE UPRIGHT AND IN PLACE. THE FENCING SHALL BE OF A HIGHLY VISIBLE MATERIAL.

PRIOR TO CONSTRUCTION: THE CONTRACTOR OR SUBCONTRACTOR SHALL CONSTRUCT AND MAINTAIN, FOR EACH PROTECTED TREE OR GROUP OF TREES ON A CONSTRUCTION SITE, A PROTECTIVE FENCING WHICH ENCIRCLES THE OUTER LIMITS OF THE CRITICAL ROOT ZONE OF THE TREES TO PROTECT IT FROM CONSTRUCTION ACTIVITY. ALL PROTECTIVE FENCING SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF ANY SITE WORK AND REMAIN IN PLACE UNTIL ALL EXTERIOR WORK HAS BEEN COMPLETED.

TREE PROTECTION FENCING
N.T.S.

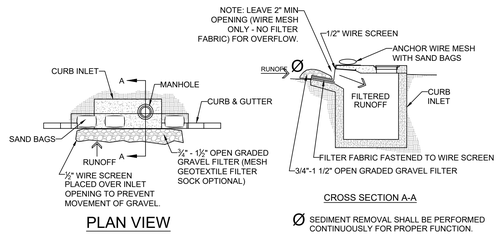


PLAN VIEW

CROSS SECTION A-A

Ø SEDIMENT REMOVAL SHALL BE PERFORMED CONTINUOUSLY FOR PROPER FUNCTION.

GRATE INLET PROTECTION
N.T.S.

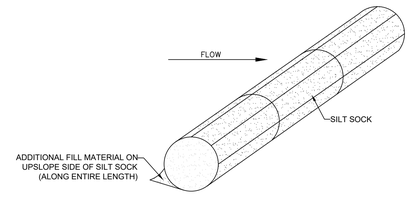


PLAN VIEW

CROSS SECTION A-A

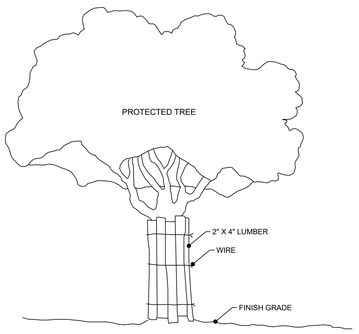
Ø SEDIMENT REMOVAL SHALL BE PERFORMED CONTINUOUSLY FOR PROPER FUNCTION.

CURB INLET PROTECTION
N.T.S.



NOTES:
1. FILL AND INSTALL SILT SOCK WITH COMPOST MATERIAL AS PER MANUFACTURER'S SPECIFICATIONS. INSTALL ADDITIONAL FILL MATERIAL ON THE UPSLOPE SIDE OF THE BARRIER TO SEAL JOINT BETWEEN SURFACE AND SILT SOCK.
2. SILT SOCK SECTION SHALL BE PLACED IN A ROW, OR STAGGERED, WITH ENDS TIGHTLY ABUTTING ADJACENT SILT SOCK SECTIONS TO PROVIDE A CONTINUOUS BARRIER AGAINST STORMWATER.
3. MAINTENANCE IS REQUIRED WHEN SEDIMENT ACCUMULATION EQUALS 1/2 OF THE SOCK HEIGHT. REMOVE ACCUMULATED SILT BY HAND OR INSTALL A SECOND ROW OF SOCK POSITIONED ON TOP OF OR UP SLOPE OF THE ORIGINAL SOCK.
4. SMALL HOLES OR NARROW RIPS SHORTER THAN 12 INCHES MAY BE STITCHED CLOSED USING PLASTIC ZIP TIES. TEARS LONGER THAN 12 INCHES REQUIRE THE SOCK BE REPLACED. 5. WHEN A PINCH OR LOCALIZED DIAMETER REDUCTION OF MORE THAN 1/2 OF THE ORIGINAL DIAMETER INSTALL NEW SECTION OF SOCK UPSLOPE OF THE DAMAGED SECTION.
6. UPON REMOVAL, SWEEP WORK AREA CLEAN OF ALL SEDIMENT AND FILL MATERIAL; DISPOSE OF LEGALLY OFF-SITE.
7. SILT SOCK SHALL BE AS MANUFACTURED BY FILTREXX INTERNATIONAL (FILTREXX SEDIMENT CONTROL), OR APPROVED EQUAL.
8. SILT SOCK USED FOR GENERAL EROSION CONTROL SHALL BE 12-INCHES DIAMETER; SILT SOCK USED FOR INLET PROTECTION SHALL BE 8-INCHES DIAMETER OR GREATER.

SILT SOCK
N.T.S.



IN SITUATIONS WHERE A PROTECTED TREE REMAINS IN THE IMMEDIATE AREA OF INTENDED CONSTRUCTION AND THE TREE MAY BE IN DANGER OF BEING DAMAGED BY CONSTRUCTION EQUIPMENT OR OTHER ACTIVITY, THE CONTRACTOR OR SUBCONTRACTOR SHALL PROTECT THE TREE WITH 2" X 4" LUMBER ENCIRCLED WITH WIRE OR OTHER MEANS THAT DO NOT DAMAGE THE TREE. THE INTENT IS TO PROTECT THE TRUNK OF THE TREE AGAINST INCIDENTAL CONTACT BY LARGE CONSTRUCTION EQUIPMENT.

BARK PROTECTION
N.T.S.

PBK
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TX FIRM: BR-1608
AUSTIN, TX
512-340-0876

ELEMENTARY SCHOOL #9
1703 Tower Road
Liberty Hill Texas 78642
75% CD PROGRESS SET

LIBERTY HILL INDEPENDENT SCHOOL DISTRICT

F E D
G C
A B

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
JACK R. GARNER, JR.
98447
LICENSED PROFESSIONAL ENGINEER
12.05.2025
TCEQ CZP
TBPE Registration #: 13709

CLIENT
LIBERTY HILL ISD

DATE	PROJECT NUMBER
12/05/2025	250254

DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

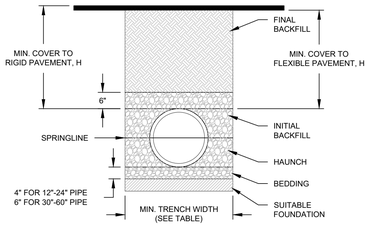
EROSION CONTROL DETAILS

C-800

Plot Stamp:
Date: 12/5/2025 Time: 12:48 User: kekim Style Table: Langan.stb Layout: 20 C-800 EROSION CONTROL DETAILS

Document Code: 531013323-0102-CE501-0101

0"
1"



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4" (100mm)	21" (533mm)
6" (150mm)	23" (584mm)
8" (200mm)	26" (660mm)
10" (250mm)	28" (711mm)
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
60" (1500mm)	96" (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. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I CRUSHED LIMESTONE. 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 CRUSHED LIMESTONE IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE 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.

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

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

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D
4	REV. DRAWING NAME OR NUMBER	TJR	01/28/16	

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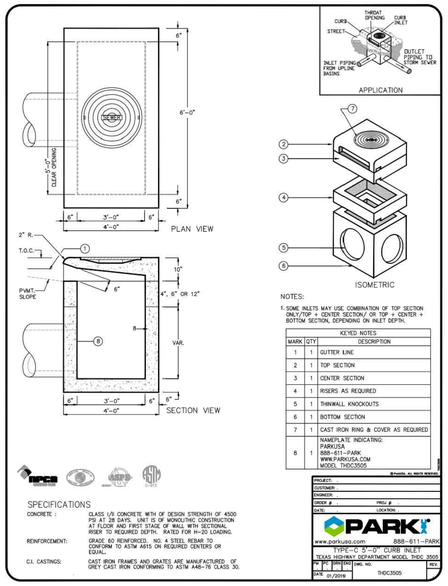
ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DEPICT THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEER'S 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.

STANDARD TRENCH INSTALLATION DETAIL

DRAWING NUMBER: STD-101

ADS ADVANCED DRAINAGE SYSTEMS, INC. 4640 TRUEMAN BLVD HILLIARD, OHIO 43026

DRAWN BY: CKS
DATE: 10/18/06
SPEC #:
SCALE: NTS
SHEET: 1 OF 1



NOTES:

1. SOME INLETS MAY USE COMBINATION OF TOP SECTION ONLY/TOP + CENTER SECTION/ OR TOP + CENTER + BOTTOM SECTION, DEPENDING ON INLET DEPTH.

KEYED NOTES

MARK	QTY	DESCRIPTION
1	1	GUTTER LINE
2	1	TOP SECTION
3	1	CENTER SECTION
4	1	RISERS AS REQUIRED
5	1	THINWALL KNOCKOUTS
6	1	BOTTOM SECTION
7	1	CAST IRON RING & COVER AS REQUIRED
8	1	NAMEPLATE INDICATING: PARKUSA 888-611-PARK WWW.PARKUSA.COM MODEL THDC3505

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SPECIFICATIONS

CONCRETE : CLASS I/II CONCRETE WITH OF DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR AND FIRST STAGE OF WALL WITH SECTIONAL RISER TO REQUIRED DEPTH. RATED FOR H-20 LOADING.

REINFORCEMENT: GRADE 60 REINFORCED. NO. 4 STEEL REBAR TO CONFORM TO ASTM A615 ON REQUIRED CENTERS OR EQUIVALENT.

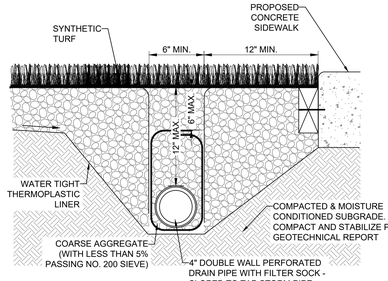
C.I. CASTINGS: CAST IRON FRAMES AND GRATES ARE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48-76 CLASS 30.

PROJECT:
CUSTOMER:
ENGINEER:
ORDER #: PROJ #:
DATE: LOCATION:

PARK I
www.parkusa.com 888-611-PARK

TYPE C 5'-0" CURB INLET
TEXAS HIGHWAY DEPARTMENT MODEL THDC 3505

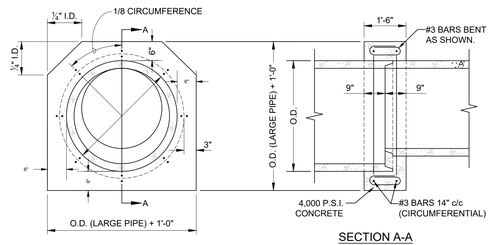
IN	FC	GRATE	CURB	DWG. NO.	REV.
DATE: 01/2019				THDC3505	



NOTE:
REFER TO APPROPRIATE DRAINAGE AND SITE DETAIL ASSOCIATED WITH APPLICATION

4" DOUBLE WALL PERFORATED PIPE DETAIL

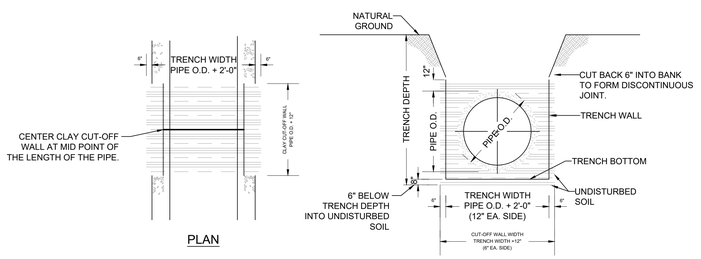
N.T.S.



SECTION A-A

CONCRETE COLLAR DETAIL (PIPE)

N.T.S.



PLAN

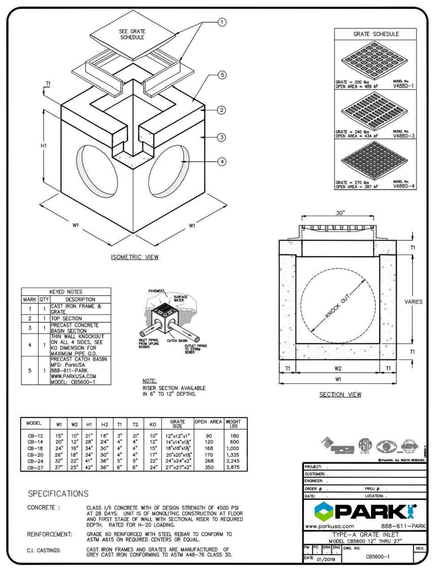
TYP. SECTION

CLAY CUT-OFF WALL NOTES:

1. CLAY CUT-OFF WALLS SHALL BE CONSTRUCTED AT APPROXIMATELY 250 FOOT INTERVALS ALONG ALL STORM DRAIN CONDUITS HAVING CRUSHED STONE EMBEDMENT.
2. THE CLAY CUT-OFF WALL SHALL BE PLACED AT THE MID POINT OF THE LENGTH OF THE PIPE BEING PLACED, BUT NOT AT A LOCATION WHERE A LATERAL CONNECTS TO THE MAIN. THE MINIMUM CLEARANCE IS 10 FEET.
3. MATERIAL FOR CLAY CUT-OFF WALL TO BE CLEAN MATERIAL WITH NO LUMPS LARGER THAN 3". CLAY TO HAVE P.I. OF 30 TO 40. MATERIAL TO BE PLACED IN 6" LIFTS, MOISTENED TO OPTIMUM MOISTURE CONTENT AND COMPACTED WITH HAND HELD MECHANICAL TAMPERS, WITHOUT DAMAGING THE PIPE.

STORM DRAIN CLAY CUT-OFF WALL

N.T.S.



KEYED NOTES		
MARK	QTY	DESCRIPTION
1	1	CAST IRON FRAME & GRATE
2	1	TOP SECTION
3	1	PRECAST CONCRETE BASIN SECTION
4	1	THIN WALL KNOCKOUT ON ALL 4 SIDES. SEE KO DIMENSION FOR MAXIMUM PIPE O.D.
5	1	PRECAST CATCH BASIN MFG: ParkUSA 888-611-PARK WWW.PARKUSA.COM MODEL: CB5600-1

NOTE: RISER SECTION AVAILABLE IN 6" TO 12" DEPTHS.

MODEL	W1	W2	H1	H2	T1	T2	KO	GRATE SIZE	OPEN AREA	WEIGHT LBS
CB-12	15"	15"	21"	18"	3"	3"	10"	12"x12"x1"	90	180
CB-14	20"	12"	28"	24"	4"	4"	12"	14"x14"x1⅛"	120	600
CB-18	24"	18"	34"	30"	4"	4"	15"	18"x18"x1⅛"	168	1,000
CB-20	28"	18"	34"	30"	4"	4"	17"	20"x20"x1⅛"	170	1,335
CB-24	33"	23"	41"	36"	5"	5"	23"	24"x24"x2"	288	2,245
CB-27	37"	23"	42"	36"	6"	6"	24"	27"x27"x2"	350	2,875

SPECIFICATIONS

CONCRETE : CLASS I/II CONCRETE WITH OF DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR AND FIRST STAGE OF WALL WITH SECTIONAL RISER TO REQUIRED DEPTH. RATED FOR H-20 LOADING.

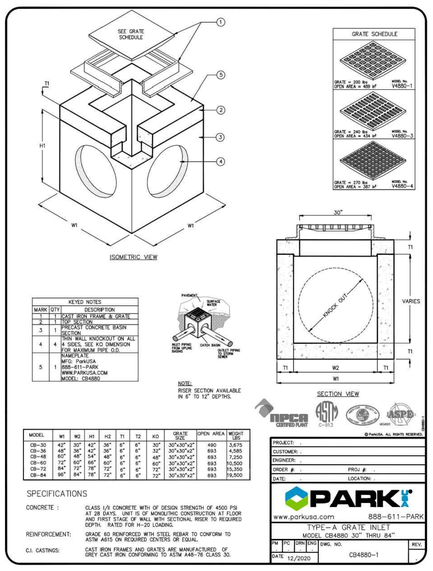
REINFORCEMENT: GRADE 60 REINFORCED. NO. 4 STEEL REBAR TO CONFORM TO ASTM A615 ON REQUIRED CENTERS OR EQUIVALENT.

C.I. CASTINGS: CAST IRON FRAMES AND GRATES ARE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48-76 CLASS 30.

PARK I
www.parkusa.com 888-611-PARK

TYPE-A GRATE INLET
MODEL CB5600 12" THRU 27"

IN	FC	GRATE	CURB	DWG. NO.	REV.
DATE: 01/2019				CB5600-1	



KEYED NOTES		
MARK	QTY	DESCRIPTION
1	1	CAST IRON FRAME & GRATE
2	1	TOP SECTION
3	1	PRECAST CONCRETE BASIN SECTION
4	4	THIN WALL KNOCKOUT ON ALL 4 SIDES. SEE KO DIMENSION FOR MAXIMUM PIPE O.D.
5	1	PRECAST CATCH BASIN MFG: ParkUSA 888-611-PARK WWW.PARKUSA.COM MODEL: CB4880

NOTE: RISER SECTION AVAILABLE IN 6" TO 12" DEPTHS.

MODEL	W1	W2	H1	H2	T1	T2	KO	GRATE SIZE	OPEN AREA	WEIGHT LBS
CB-30	42"	30"	42"	36"	6"	6"	30"	30"x30"x2"	490	3,675
CB-36	48"	36"	42"	36"	6"	6"	33"	30"x30"x2"	693	4,585
CB-48	60"	48"	54"	48"	6"	6"	48"	30"x30"x2"	693	7,250
CB-60	72"	60"	66"	60"	6"	6"	60"	30"x30"x2"	693	10,500
CB-72	84"	72"	78"	72"	6"	6"	72"	30"x30"x2"	693	10,350
CB-84	96"	84"	78"	72"	6"	6"	72"	30"x30"x2"	693	19,500

SPECIFICATIONS

CONCRETE : CLASS I/II CONCRETE WITH OF DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR AND FIRST STAGE OF WALL WITH SECTIONAL RISER TO REQUIRED DEPTH. RATED FOR H-20 LOADING.

REINFORCEMENT: GRADE 60 REINFORCED WITH STEEL REBAR TO CONFORM TO ASTM A615 ON REQUIRED CENTERS OR EQUIVALENT.

C.I. CASTINGS: CAST IRON FRAMES AND GRATES ARE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48-76 CLASS 30.

PARK I
www.parkusa.com 888-611-PARK

TYPE-A GRATE INLET
MODEL CB4880 30" THRU 84"

IN	FC	GRATE	CURB	DWG. NO.	REV.
DATE: 12/2020				CB4880-1	

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PROJECT:
CUSTOMER:
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F	E	D
G	C	
	A	B

NORTH: PLAN TRUE

STATE OF TEXAS
JACK H. GARNER, JR.
98447
LICENSED PROFESSIONAL ENGINEER
12.05.2025
TCEQ CZP
TBPE Registration #: 13709

CLIENT
LIBERTY HILL ISD

DATE	PROJECT NUMBER
12/05/2025	250254

DRAWING HISTORY

No.	Description	Date

CHECKED BY: AR
DRAWN BY: KK

DRAINAGE DETAILS

C-804