CONTRIBUTING ZONE PLAN MODIFICATION
FOR:

COMAL INDEPENDENT SCHOOL DISTRICT: SMITHSON VALLEY HIGH SCHOOL 2023 ROTC & WRESTLING FACILITY

PREPARED FOR:

APRIL 2025
REVISED: MAY 2025

STATE OF TEXAS
SEAN S. SMITH
113308
REGISTERED PROFESSIONAL ENGINEER
5/19/25

PREPARED BY:

• Engineers
• Surveyors
• Planners

Moy Tarin Ramirez Engineers, LLC

12770 Cimarron Path, Ste. 100 San Antonio, TX 78249
TBPELS: Engineering F-5297/Surveying F-10131500
Phone 210-698-5051 Fax 210-698-5085
MTR JOB #24250.01

COMAL INDEPENDENT SCHOOL DISTRICT
SMITHSON VALLEY HIGH SCHOOL – 2023 ROTC & WRESTLING FACILITY
CONTRIBUTING ZONE PLAN MODIFICATION

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Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

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

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

Technical Review

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

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

Mid-Review Modifications

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

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

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

- You can withdraw your application, and your fees will be refunded or credited for a resubmittal.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

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

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

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

1. Regulated Entity Name: CISD Smithson Valley High School					**2. Regulated Entity No.: 103932638**			
3. Customer Name: Comal ISD					**4. Customer No.: CN600249825**			
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):**		95.4 acres	
9. Application Fee:	$8,000	**10. Permanent BMP(s):**			Extended Detention Ponds, VFS, Contech Jellyfish Unit			
11. SCS (Linear Ft.):	N/A	**12. AST/UST (No. Tanks):**			N/A			
13. County:	Comal	**14. Watershed:**			Dripping Springs Creek			

Application Distribution

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

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

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

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

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	_X_	___	___	___
Region (1 req.)	___	_X_	___	___	___
County(ies)	___	_X_	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	_X_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.
Sean Smith, P.E. Print Name of Customer/Authorized Agent
Signature of Customer/Authorized Agent — Date: 4/16/25

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):	

Modification of a Previously Approved Contributing Zone Plan

Texas Commission on Environmental Quality

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

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

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

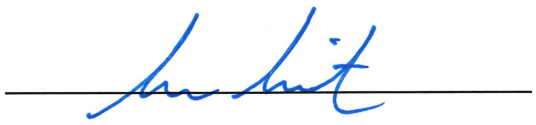
Signature

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

Print Name of Customer/Agent: Sean Smith, P.E.

Date: 4/16/25

Signature of Customer/Agent:



Project Information

1. Current Regulated Entity Name: CISD Smithson Valley High School
   Original Regulated Entity Name: CISD Smithson Valley High School
   Assigned Regulated Entity Number(s) (RN): 103932638
   Edwards Aquifer Protection Program ID Number(s): _____
   ☒ The applicant has not changed and the Customer Number (CN) is: 600249825
   ☐ The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

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

3. A modification of a previously approved plan is requested for (check all that apply):

☐ Any physical or operational modification of any best management practices or structure(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;
☐ Any change in the nature or character of the regulated activity from that which was originally approved;
☐ A change that would significantly impact the ability to prevent pollution of the Edwards Aquifer and hydrologically connected surface water; or
☒ Any development of land previously identified in a contributing zone plan as undeveloped.

4. ☒ Summary of Proposed Modifications (select plan type being modified). If the approved plan has been modified more than once, copy the appropriate table below, as necessary, and complete the information for each additional modification.

CZP Modification Summary	***Approved Project***	***Proposed Modification***
Acres	See Attached Summary	95.4
Type of Development	_____	High School
Number of Residential Lots	_____	0
Impervious Cover (acres)	_____	45.60
Impervious Cover (%)	_____	47.78
Permanent BMPs	_____	Extended Detention Ponds, VFS, Jellyfish
Other	_____	_____

AST Modification Summary	***Approved Project***	***Proposed Modification***
Number of ASTs	_____	_____
Other	_____	_____

UST Modification Summary	***Approved Project***	***Proposed Modification***
Number of USTs	_____	_____
Other	_____	_____

5. ☒ **Attachment B: Narrative of Proposed Modification**. A detailed narrative description of the nature of the proposed modification is attached. It discusses what was approved,

including previous modifications, and how this proposed modification will change the approved plan.

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

7. ☒ Acreage has not been added to or removed from the approved plan.
   ☐ Acreage has been added to or removed from the approved plan and is discussed in *Attachment B: Narrative of Proposed Modification*.

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

SUMMARY OF PREVIOUS & PROPOSED MODIFICATIONS								
CZP Modification Summary	***Pre-June 1, 1999***	***Approved Project***	***Approved Modification 1***	***Approved Modification 2***	***Approved Modification 3***	***Approved Modification 4***	***Approved Modification 5***	***Proposed Modification 6***
Site Acreage	45	45	45	91.6	95.4	95.4	95.4	95.4
Type of Development	High School	High School	High School	High School	High School	High School	High School	High School
Number of Residential Lots	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Impervious Cover Added (acres)	N/A	6.87	1.08	15.45	1.57	0.37	0.22	0.65
Total Impervious Cover (acres)	19.40	26.27	27.35	42.80	44.37	44.73	44.95	45.60
Impervious Cover (%)	43.11%	58.37%	60.77%	46.72%	46.51%	46.89%	47.12%	47.78%
Permanent BMPs	N/A	None	None	3 Extended Detention Ponds	3 Extended Detention Ponds	3 Extended Detention Ponds	3 Extended Detention Ponds, VFS	3 Extended Detention Ponds, VFS, Jellyfish
Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Approval Letter Date	N/A	July 12, 2001	July 1, 2002	April 24, 2009	October 28, 2016	April 9, 2019	February 21, 2025	TBD

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 21, 2025

Mr. Jeffrey Smith
Comal Independent School District
1404 IH 35 North
New Braunfels, Texas 78130-2817

Re: Modification of an approved Contributing Zone Plan (CZPMOD)
CISD Smithson Valley High School; Located at 14001 Highway 46 west; Spring Branch, Comal County, Texas
Edwards Aquifer Protection Program ID: 13002022, Regulated Entity No. RN103932638

Dear Mr. Smith:

The Texas Commission on Environmental Quality (TCEQ) has completed its review on the application for the above-referenced project submitted to the Edwards Aquifer Protection Program (EAPP) by Moy Tarin Ramirez Engineers, LLC on behalf of the applicant, Comal Independent School District on November 7, 2024. Final review of the application was completed after additional material was received on January 27, 2025, and February 18, 2025.

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 Smithson Valley High School campus was established on a 45-acre site with approximately 19.40 acres of impervious cover that was constructed prior to the effective rule date of 30 TAC Chapter 213, Subchapter B.

Consequently, five (5) other modifications have been approved by letters dated July 12, 2001, July 1, 2002, April 24, 2009, October 28, 2016, and April 9, 2019. Latest modification had a project area of 95.4 acres and overall impervious cover of 44.73 acres with pre-existing

impervious cover totaling 19.40 acres. The approved permanent BMPs were three extended detention basins.

PROJECT DESCRIPTION

The proposed school project will have an area of approximately 95.4 acres. The modification will include of upgrades to the existing baseball facility and the addition of a golf practice facility. The baseball upgrades consist of the demolition and replacement of existing impervious cover, as well as the addition of new concrete flatwork and buildings. The golf practice facility addition consists of the demolition and replacement of existing impervious cover, as well as the addition of new concrete flatwork and new synthetic turf. The site has 19.40 acres of pre-development impervious cover. The impervious cover onsite will increase by 0.20 acres. Of the 0.20 acres, approximately 0.15 acres is comprised of synthetic turf with an underdrain system and liner. The overall impervious cover will be 44.95 acres (47.11-percent). Project wastewater will be disposed of by conveyance to the existing Smithson Valley High School Wastewater Treatment Plant owned by the Comal Independent School District.

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, three (3) existing extended detention basins (13000851) and an engineered vegetative filter strip, designed using the TCEQ technical guidance, *RG-348, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices,* will be constructed and implemented to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 22,799 pounds of TSS generated from the 44.95 acres of impervious cover. The approved permanent BMPs and measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The permanent BMPS shall be operational prior to occupancy or use of the proposed project. Inspection, maintenance, repair, and retrofit of the permanent BMPs shall be in accordance with the approved application.

SPECIAL CONDITIONS

I. This modification is subject to all the special and standard conditions listed in the approval letter dated July 12, 2001, July 1, 2002, April 24, 2009, October 28, 2016, and April 9, 2019.

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.

<u>During Construction:</u>

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.

<u>After Completion of Construction:</u>

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 Neri B. Valdez of the Edwards Aquifer Protection Program at 210-403-4087 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/nbv

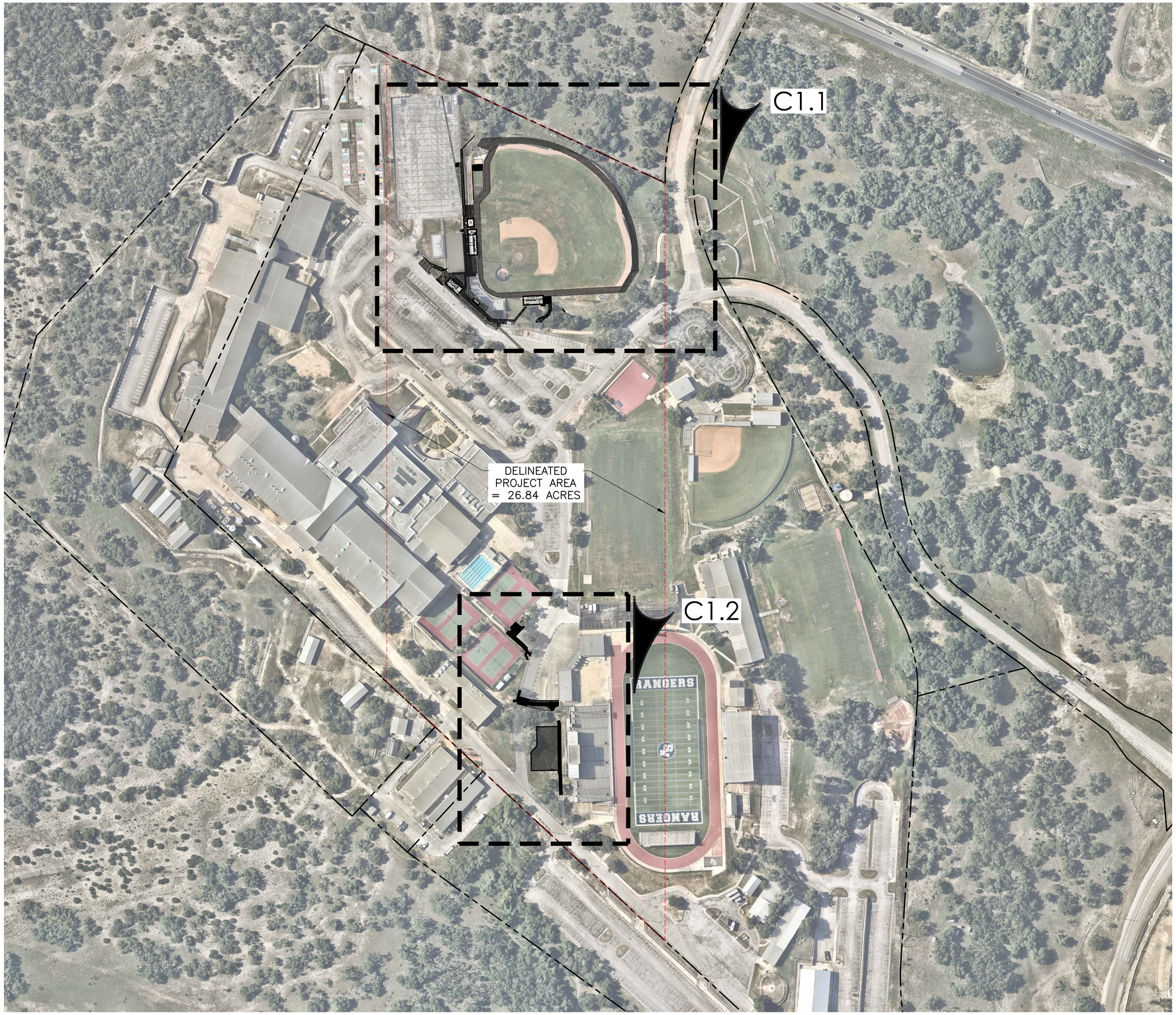
cc: Mr. Sean Smith, P.E., Moy Tarin Ramirez, LLC

ATTACHMENT B

NARRATIVE OF PROPOSED MODIFICATION

The scope of this project includes the construction of a new ROTC & Wrestling Facility with associated 100'x100' concrete marching pad, a new concrete pavement parking lot, new concrete sidewalks/flatwork, new concrete and modular block retaining walls, new underground water and sanitary sewer improvements, a new underground storm drainage system, a new Contech Peak Diversion Jellyfish Unit, and other improvements associated with construction of this nature. The total increase in impervious cover to the site resulting from these improvements will be 28,270 square-feet (0.65 acres). All new impervious cover will be treated with either vegetative filter strips or the aforementioned Jellyfish Unit. Reference the Contributing Zone Plan (Sheet C1.1) included with this submittal for additional information. The treatment of proposed impervious cover is discussed in more detail in Attachment K: BMPs for On-Site Storm Water.

The overall acreage of the Smithson Valley High School property is 95.4 acres and is located at 14001 TX-46, Spring Branch, Texas 78070. The site is located within the Edwards Aquifer Contributing Zone. The property contains 19.4 acres of impervious cover constructed prior to the effective date of 30 TAC Chapter 213, Subchapter B.



SCALE: 1"=100'
0 100 200

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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San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
Phone(210) 490-3096
Fax (210) 545-4329

GENERAL NOTES:

1. PROVIDE BAGGED GRAVEL INLET FILTERS AT ALL EXPOSED DRAINAGE STRUCTURES.
2. SOIL DISTURBANCES WILL OCCUR OVER PARTS OF SITE AS INDICATED ON PLAN.
3. LOCATIONS OF MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS ARE LABELED.
4. THESE ARE THE TEMPORARY AND PERMANENT BEST MANAGEMENT PRACTICES.
5. SOIL STABILIZATION PRACTICES SHALL OCCUR OVER THE ENTIRE SITE WITH THE USE OF PAVEMENT, BUILDINGS, SIDEWALKS, GRASS SOD, GRASS SEEDING AND MULCH.
6. THERE ARE NO LOCATIONS WHERE STORMWATER DISCHARGES TO SURFACE WATER.

ATTACHMENT C: CURRENT SITE PLAN OF THE APPROVED PROJECT

REVISIONS

NO.	DATE	DESCRIPTION	BY	PROJ. #	DSN. BY:	DWN. BY:	CHKD. BY:	DATE

MTR
• Engineers
• Surveyors
• Planners
Moy Tarin Ramirez Engineers, LLC
TBPELS: ENGINEERING F-5297/SURVEYING F-10131500
12770 CIMARRON PATH, SUITE 100
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STATE OF TEXAS
SEAN S. SMITH
113308
REGISTERED PROFESSIONAL ENGINEER
8/8/24

CONTRIBUTING ZONE PLAN / STORM WATER POLLUTION PREVENTION PLAN

COMAL ISD - SMITHSON VALLEY HIGH SCHOOL

SHEET
C1.0

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SCALE: 1"=30'
0 30 60

LEGEND

- PROPERTY LINE
- EXISTING CONTOUR (1246)
- DISTURBED AREA
- SILT FENCE
- BAGGED GRAVEL INLET FILTER
- NEW CONCRETE SIDEWALK/FLATWORK
- SYNTHETIC TURF
- NEW ASPHALT PAVEMENT
- SOLID SOD

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:
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COMAL ISD - SMITHSON VALLEY HIGH SCHOOL

SHEET
C1.1

K:\Comal ISD\Smithson Valley HS 2022\4 CZP Mods\Drawings\00000_CNC_C1.1_Site Plan.dwg 2024/08/08 3:53pm ertorsh

SCALE: 1"=30'

0 30 60

LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- DISTURBED AREA
- SILT FENCE
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NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

· Engineers · Surveyors · Planners

Moy Tarin Ramirez Engineers, LLC

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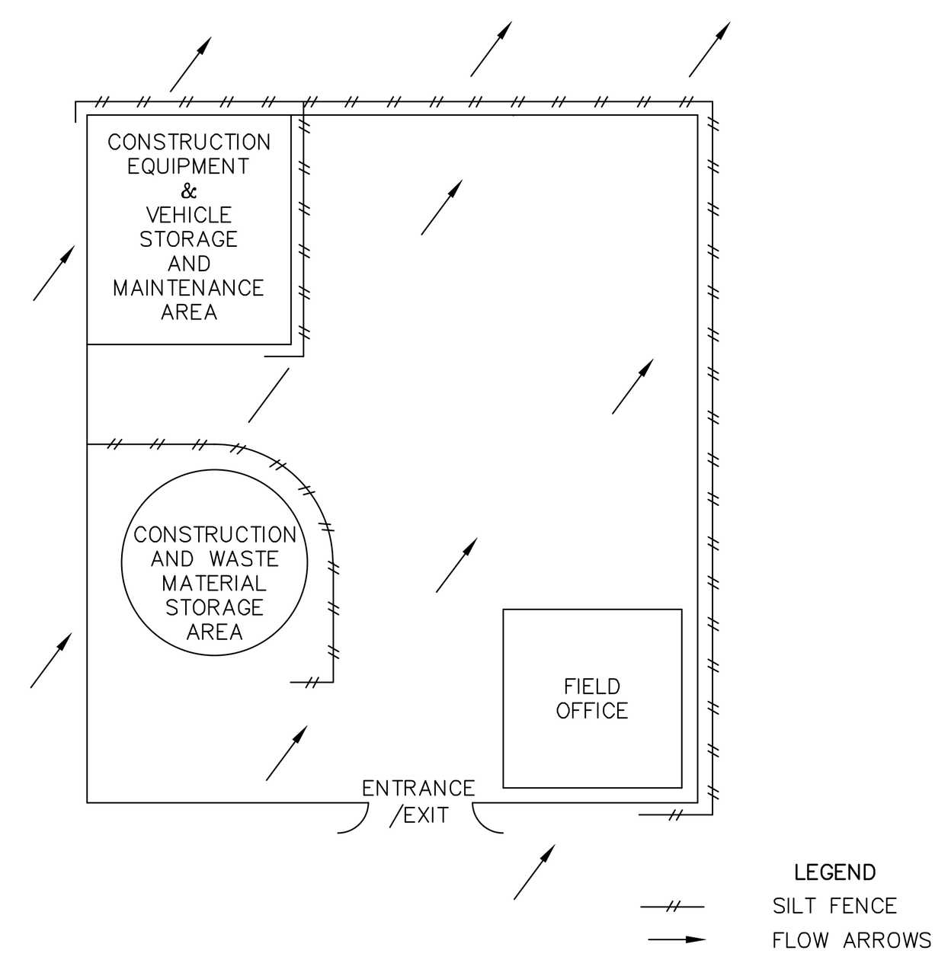
CONTRIBUTING ZONE PLAN / STORM WATER POLLUTION PREVENTION PLAN

ATTACHMENT C: CURRENT SITE PLAN OF THE APPROVED PROJECT

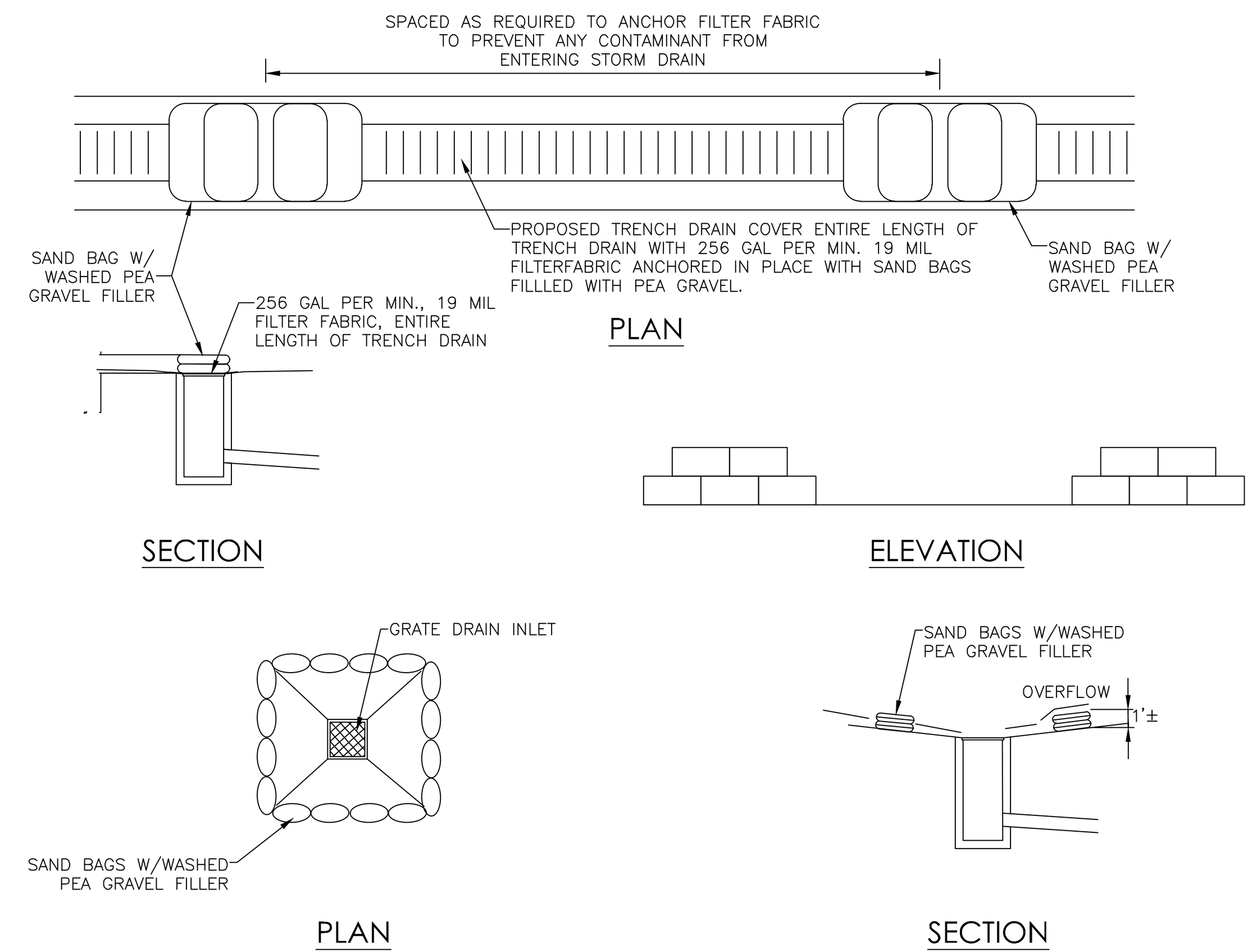
SHEET

C1.2



1 CONSTRUCTION STAGING AREA

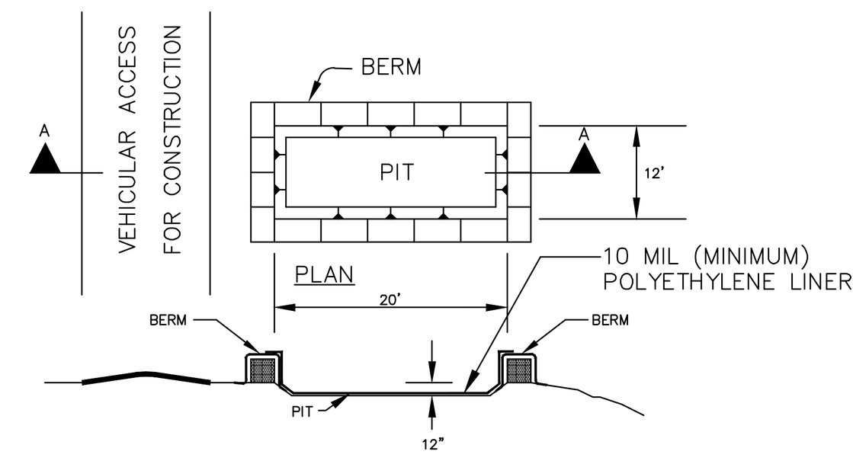
SCALE: NONE



1. THE GRAVEL BAG MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE, POLYAMIDE OR COTTON BULAP WOVEN FABRIC, MINIMUM UNIT WEIGHT 4 OZ/YD 2, MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70 PERCENT.
2. THE BAG LENGTH SHOULD BE 24 INCHES, WIDTH SHOULD BE 18 INCHES AND THICKNESS SHOULD BE 6 INCHES.
3. THE GRAVEL BAGS SHOULD BE FILLED WITH 3/4" GRAVEL.
4. WHEN A GRAVEL BAG IS FILED WITH GRAVEL, THE OPEN END OF THE GRAVEL BAG SHOULD BE STAPLED OR TIED WITH NYLON OR POLY CORD.
5. THE GRAVEL BAGS SHOULD BE PLACED AS SHOWN ON THE DETAIL. THE GRAVEL BAGS SHALL BE STACKED TO FORM A CONTINUOUS BARRIER AROUND THE INLETS. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.
6. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
7. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND CURB.
8. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
9. STRUCTURE SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

2 BAGGED GRAVEL INLET FILTER

SCALE: NONE

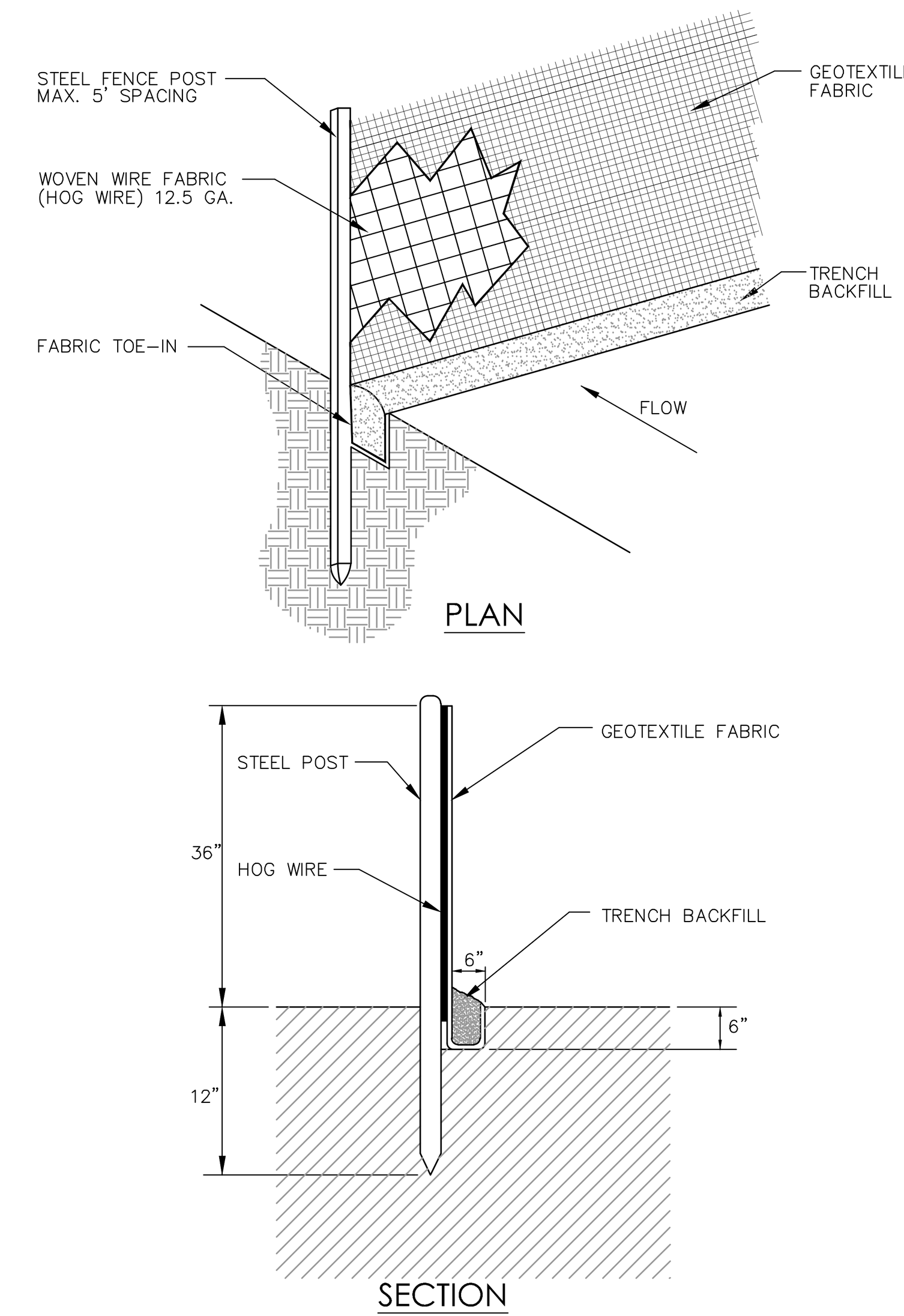


GENERAL NOTES:

- DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
- WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
- WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.

3 CONCRETE TRUCK WASHOUT PIT

SCALE: NONE

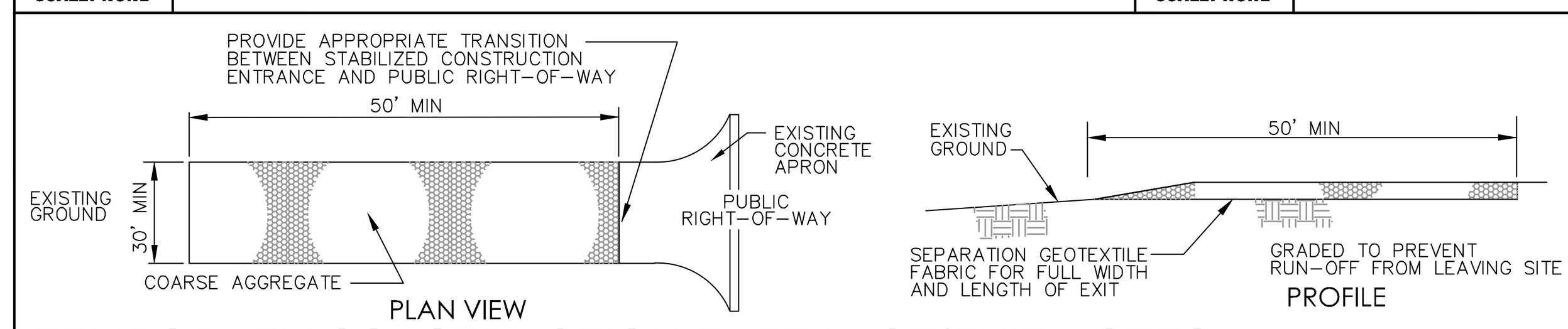


SILT FENCE NOTES

1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN 2 , ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
2. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR Y-BAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM NOMINAL WEIGHT 1.25 LB/FT 2 , AND BRINDELL HARDNESS EXCEEDING 140.
3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12.5 GAUGE MINIMUM.
4. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1 FOOT DEEP AND SPACED NOT MORE THAN 5 FEET ON CENTER.
5. LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ACRE/100 FEET OF FENCE.
6. THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
7. 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.
8. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
9. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
10. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES, OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE OLD FENCE.
11. REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
12. 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.

4 SILT FENCE DETAIL

SCALE: NONE

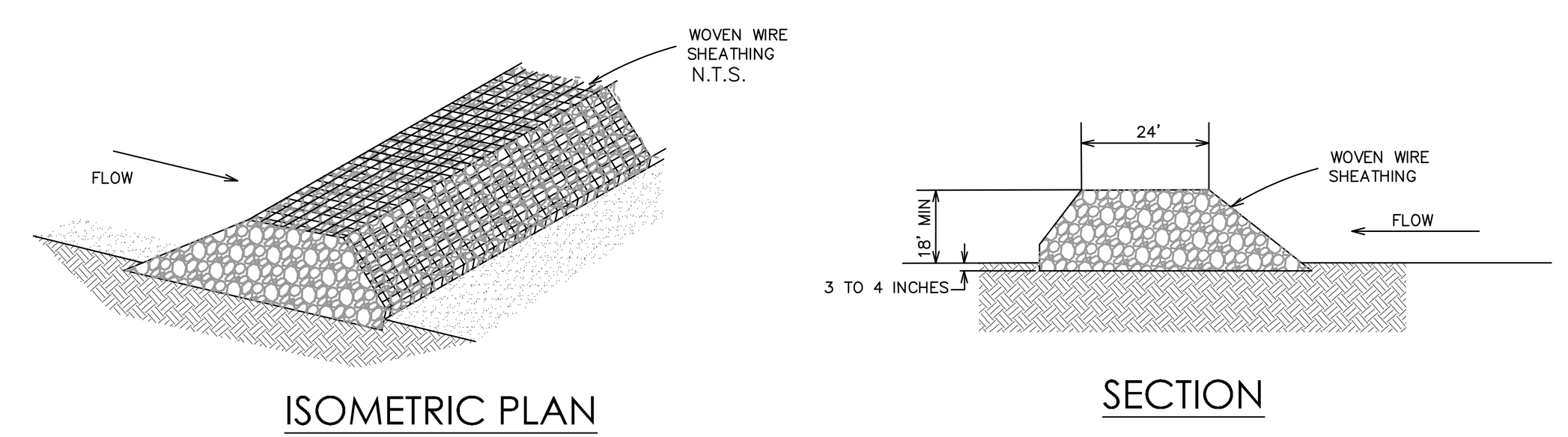


TEMPORARY CONSTRUCTION ENTRANCE/EXIT NOTES

1. THE AGGREGATE SHOULD CONSIST OF 4 TO 8 INCH WASHED STONE OVER A STABLE FOUNDATION.
2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8 INCHES.
3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD 2 , A MULLEN BURST RATING OF 140 LB/IN 2 , AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
4. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
5. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
6. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
7. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
8. PLACE STONE TO DIMENSIONS AND GRADE SHOWN. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
9. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
10. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
11. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
12. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
13. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE.

5 STABILIZED CONSTRUCTION ENTRANCE / EXIT

SCALE: NONE

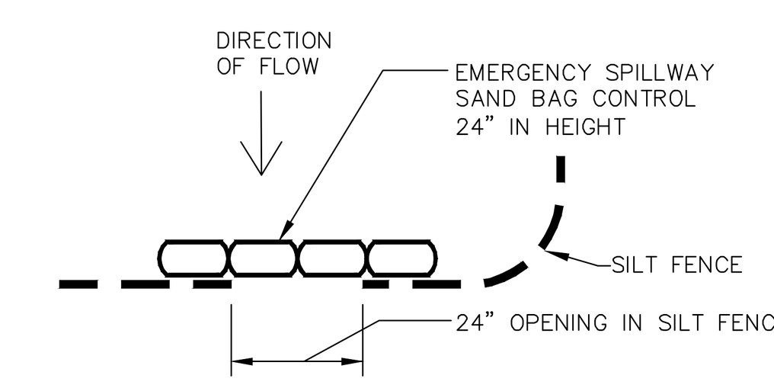


ROCK BERM NOTES

1. THE BERM STRUCTURE SHOULD BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED AND SHOULD BE SECURED WITH SHOAT RINGS.
2. CLEAN, OPEN GRADED 3 TO 5-INCH DIAMETER ROCK SHOULD BE USED, EXCEPT IN AREAS WHERE HIGH VELOCITIES OR LARGE VOLUMES OF FLOW ARE EXPECTED, WHERE 5-TO 8-INCH DIAMETER ROCKS MAY BE USED.
3. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE.
4. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.
5. PLACE THE ROCK ALONG THE SHEATHING TO A HEIGHT NOT LESS THAN 18".
6. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.
7. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.
8. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
9. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
10. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT OF IN AN APPROVED MANNER AND REPAIR ANY LOOSE WIRE SHEATHING.
11. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
12. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

6 ROCK BERM

SCALE: NONE



7 PLAN - SAND BAG CONTROL DETAIL

SCALE: NONE

NO.	DATE	DESCRIPTION	BY

REVISIONS

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING F-10131500
12770 CIMARRON PATH, SUITE 100
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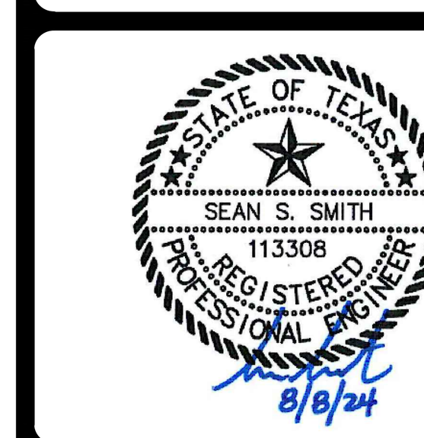


COMAL ISD - SMITHSON VALLEY HIGH SCHOOL

CONTRIBUTING ZONE PLAN / STORM WATER POLLUTION PREVENTION PLAN

SHEET C2.0

ATTACHMENT C: CURRENT SITE PLAN OF THE APPROVED PROJECT

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: Sean Smith, P.E.

Date: 4/16/25

Signature of Customer/Agent:

Regulated Entity Name: CISD Smithson Valley High School

Project Information

1. County: Comal
2. Stream Basin: Dripping Springs
3. Groundwater Conservation District (if applicable): N/A
4. Customer (Applicant):

   Contact Person: Jeffrey Smith
   Entity: Comal Independent School District
   Mailing Address: 1404 IH 35 North
   City, State: New Braunfels, Texas Zip: 78130-2817
   Telephone: (830) 221-2064 Fax: _____
   Email Address: jeffrey.smith@comalisd.org

5. Agent/Representative (If any):

   Contact Person: Sean Smith, P.E.
   Entity: Moy Tarin Ramirez, LLC
   Mailing Address: 12770 Cimarron Path Suite 100
   City, State: San Antonio, Texas Zip: 78249
   Telephone: (210) 698-5051 Fax: (210) 698-5085
   Email Address: ssmith@mtrengineers.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 _____.
   ☒ 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.

   14001 TX-46, Spring Branch, Texas 78070

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: Existing High School site

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): 95.4 Acres

Total disturbed area: ±6.44 Acres

14. Estimated projected population: 2,750

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	473,634	÷ 43,560 =	10.87
Parking	994,470	÷ 43,560 =	22.83
Other paved surfaces	518,296	÷ 43,560 =	11.90
Total Impervious Cover	1,958,130	÷ 43,560 =	45.60

Total Impervious Cover 45.6 **÷ Total Acreage** 95.4 **X 100 =** 47.78**% 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 Smithson Valley HS 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" = 20'.

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 Map 48091C0240F, dated Sept. 2, 2009.

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.

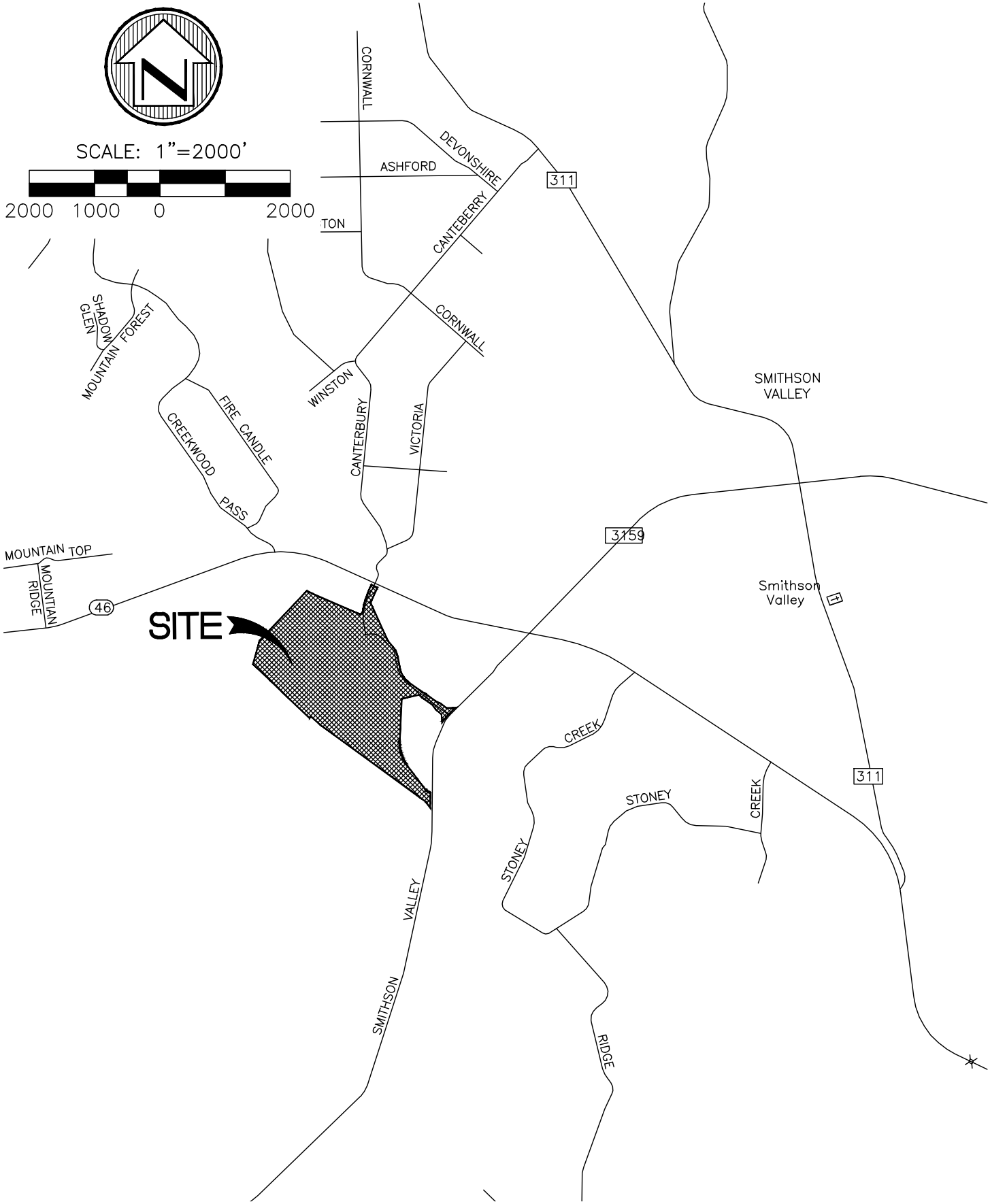
Administrative Information

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.



• Engineers
• Surveyors
• Planners

Moy Tarin Ramirez Engineers, LLC

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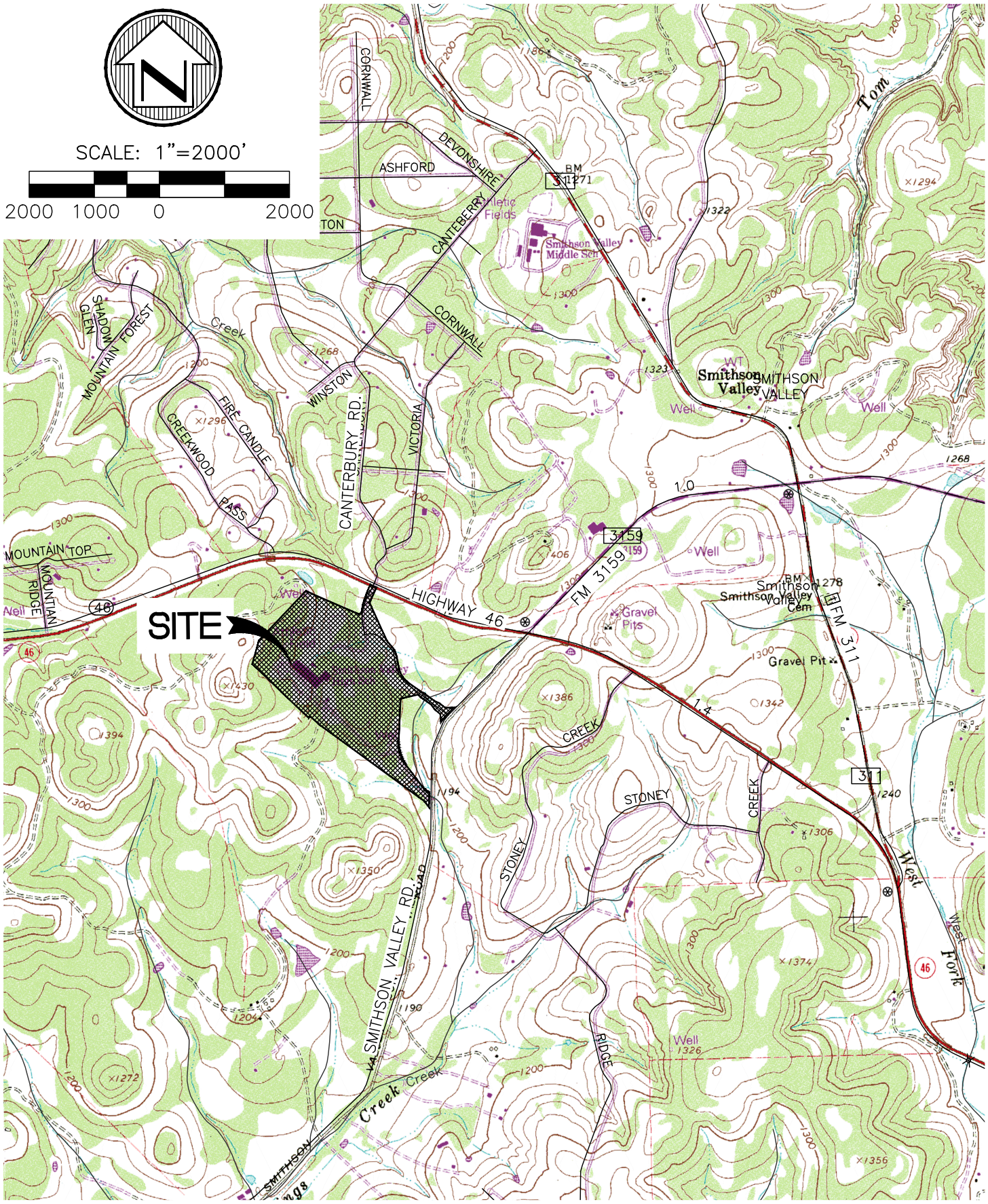
ATTACHMENT A

SMITHSON VALLEY HIGH SCHOOL

LOCATION MAP

PROJ. #: 24250.01 **DATE: APRIL 2025**

R:\COMAL ISD\SMITHSON VALLEY H S\2025 CZP MOD\DRAWINGS\ATTACHMENT A - LOCATION MAP.DWG



(SMITHSON VALLEY QUADRANGLE MAP)

MTR
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ATTACHMENT B

SMITHSON VALLEY HIGH SCHOOL

USGS MAP

PROJ. #: 24250.01 DATE: APRIL 2025

R:\COMAL ISD\SMITHSON VALLEY H S\2025 CZP MOD\DRAWINGS\ATTACHMENT B - USGS MAP.DWG

ATTACHMENT C

PROJECT NARRATIVE

The scope of this project includes the construction of a new ROTC & Wrestling Facility with associated 100'x100' concrete marching pad, a new concrete pavement parking lot, new concrete sidewalks/flatwork, new concrete and modular block retaining walls, new underground water and sanitary sewer improvements, a new underground storm drainage system, a new Contech Peak Diversion Jellyfish Unit, and other improvements associated with construction of this nature. The total increase in impervious cover to the site resulting from these improvements will be 28,270 square-feet (0.65 acres). All new impervious cover will be treated with either vegetative filter strips or the aforementioned Jellyfish Unit. Reference the Contributing Zone Plan (Sheet C1.1) included with this submittal for additional information. The original CZP was approved on July 12, 2001. The original CZP included 19.4 acres of impervious cover constructed prior to the effective date of 30 TAC Chapter 213, Subchapter B. The most recent CZP Modification was approved on February 21st, 2025.

The overall acreage of the property is 95.4 acres and is located at 14001 TX-46, Spring Branch, Texas 78070. The site is located in the Edwards Aquifer Contributing Zone. Current development consists of an existing high school campus with educational buildings, concrete sidewalks/flatwork, parking lots, and sports fields.

The impervious cover onsite will increase by approximately 0.65 acres, bringing the total site impervious cover to 45.60 acres, or 47.78 percent. Total Suspended Solids (TSS) generated by 0.25 acres of the new impervious cover, comprised primarily of the proposed 100'x100' concrete marching pad, will be treated with new engineered vegetative filter strips (VFS). The proposed 6'x4' Peak Diversion Jellyfish Unit will treat 0.45 acres of new impervious cover as well as approximately 0.26 acres of previously untreated impervious cover. A more in-depth breakdown of the on-site TSS removal is provided in Attachment K: BMPs for On-Site Storm Water.

The majority of the site, including the high school's educational buildings, will remain undisturbed with this project.

ATTACHMENT D

FACTORS AFFECTING SURFACE WATER QUALITY

Factors impacting surface water quality include fertilizers, pesticides from landscaping, sediment from soil disturbances, leaf litter from tree removal, small amounts of oil grease from vehicular traffic, and suspended solids from the proposed impervious cover areas. These factors may cause suspended solids to enter into the storm water runoff and subsequently affect the surface water. However, temporary BMPs have been designed in accordance with the Technical Guidance Manual to treat the required amount of storm water runoff as to not adversely affect the quality of water discharging into any surface or groundwater.

ATTACHMENT E

VOLUME AND CHARACTER OF STORM WATER

Volume of Storm Water

The three (3) existing on-site extended detention ponds were designed to decrease the post development peak runoff rate to be less than or equal to the existing peak runoff rates. In this case, the "existing" condition includes impervious cover in-place prior to the Edwards CZP requirements becoming effective. The existing ponds, as designed, were approved with the CZP Modification in 2009.

There will be approximately 0.65 acres of impervious cover added to the site as part of these improvements. With an existing impervious cover area of approximately 44.95 acres, the total impervious cover will be approximately 45.60 acres after construction completion. This is a 1.45% increase in impervious cover & therefore should have **no significant impact** to the post-construction flow relative to the pre-construction flow.

Character of Storm Water

Storm water runoff generated from the site during construction will be typical of a high school educational facility with buildings, parking lots, & small addition/renovation construction projects. The runoff should consist of small amounts of suspended solids created by sediments from disturbed soils, construction dust, sawdust and hydrocarbons from construction equipment. Temporary BMP's have been selected from the TCEQ Publication, "Complying with the Edwards Aquifer Rules: Technical Guidance for Best Management Practices," to treat the required volume and character of storm water runoff to remove the increased total suspended solids (TSS) due to the proposed construction activities. Permanent stabilization of areas where soil is disturbed by construction activities will be accomplished by installing new vegetation, mulch and impervious cover in those areas as described in the Storm Water Pollution Prevention Plan.

Storm water runoff generated after construction is complete will also be typical of a high school educational facility. The runoff will contain sediments from rooftops, driveways, parking lots, sidewalks, landscape areas, and other miscellaneous impervious areas from the site. The runoff may contain small amounts of oil, grease, suspended solids, fertilizers and pesticides. The post construction runoff will be treated with a new Peak Diversion Jellyfish Unit and new engineered vegetative filter strips. The Jellyfish Unit was designed in accordance with the Technical Guidance Manual to remove a minimum of 80% of the total increase in TSS caused by the proposed onsite impervious cover. The engineered vegetative filter strips will be designed in accordance with the Technical Guidance Manual to remove a minimum of 80% of the total increase in TSS caused by the impervious cover draining to them.

ATTACHMENT J

BMP'S FOR UPGRADIENT STORM WATER

The portion of the site the proposed project is located on accepts upstream storm water from the western property line. Storm water generated off-site drains onto the property as sheet flow and is captured by an existing concrete interceptor u-channel and conveyed southeast to an existing y-inlet. Storm water is then conveyed in an underground 36" RCP storm drainage system to an existing outfall that bypasses the extended detention pond systems located near the south corner of the property. The aforementioned off-site runoff does not traverse impervious cover prior to entering the interceptor channel.

All other storm water originating upgradient of the site will continue to naturally enter the site and is accounted for in TSS previously submitted treatment calculations.

During construction, temporary BMP's consisting of silt fences, bagged gravel inlet filters, and stabilized construction entrance/exit will be utilized to alleviate sediment from leaving the site.

ATTACHMENT K

BMP'S FOR ON-SITE STORM WATER

During construction, Temporary Best Management Practices (TBMP's) consisting of silt fences, bagged gravel inlet filters, stabilized construction entrances/exits, and rock berms will be utilized to mitigate accumulated sediment from discharging the site. After construction completion, Permanent Best Management Practice (PBMP's) consisting of three (3) Extended Detention Basins, Engineered Vegetative Filter Strips (VFS), and a Peak Diversion Jellyfish Unit will be utilized to treat storm water originating on all on-stie impervious surfaces. The TSS removal required for each on-site drainage area as well as the actual TSS removal achieved with each respective PBMP is summarized below.

DRAINAGE AREA 1 (30.37 ACRES) PBMP'S

Extended Detention Basin #1 (Pond #1) in Drainage Area 1

According to the most recent CZP modification, approved on February 21st, 2025, the required water quality volume for Pond #1 is 23,989 cubic feet with an associated required TSS removal of 7,630 pounds. Pond #1, as currently constructed, provides a water quality volume of 98,140 cubic feet with an associated actual TSS removal of 12,610 pounds. Pond #1 provides 74,164 cubic feet of additional volume and 4,980 pounds of additional TSS removal beyond what is required, available for use with future projects. For the purposes of this report, it is assumed that the drainage area contributing to Pond #1, as well as the amount of existing impervious cover within Drainage Area 1, remains unchanged.

6'x4' Peak Diversion Jellyfish System in Drainage Area 1

Contech Engineered Solutions will provide a 6'x4' Peak Diversion Jellyfish Unit to treat 0.45 acres of new impervious cover as well as approximately 0.26 acres of previously untreated impervious cover. The drainage area contributing to the Jellyfish unit, located within Drainage Area 1, is comprised of 0.78 acres with a post-project impervious cover of 0.71 acres. The impervious surfaces in this watershed will produce 637 pounds of TSS that is required to be treated. Utilizing 54-inch cartridges, the proposed Jellyfish Unit can remove 698 pounds of TSS based on a Peak Treatment Flow Rate of 0.74 cfs. This results in an additional 61 pounds of additional TSS removal (within the Jellyfish's contributing drainage area) beyond what is required, available for use with future projects.

Vegetative Filter Strips in Drainage Area 1

VFS will be provided with this project to treat a total of 0.25 acres of impervious cover within Drainage Area 1. The TSS removal associated with this treatment measure is 224 pounds.

DRAINAGE AREA 2 (27.14 ACRES) PBMP'S

Extended Detention Basin #2 (Pond #2) in Drainage Area 2

According to the most recent CZP modification, approved on February 21st, 2025, the required water quality volume for Pond #2 is 55,715 cubic feet with an associated required TSS removal of 13,628 pounds. Pond #2, as currently constructed, provides a water quality volume of 143,622 cubic feet with an associated actual TSS removal of 19,860 pounds. Pond #2 provides 87,907 cubic feet of additional volume and 6,241 pounds of additional TSS removal beyond what is required, available for use with future projects. These numbers take into consideration the overtreatment Pond #2 provides for the 325 pounds of TSS that Pond #3 is unable to treat (see below) as well as 494 pounds of existing uncaptured TSS. There is no construction occurring within the Pond #2 drainage basin.

Vegetative Filter Strips in Drainage Area 2

VFS has been provided to treat a total of 0.08 acres of impervious cover within Drainage Area 2. The TSS removal associated with this treatment measure is 72 pounds.

DRAINAGE AREA 3 (2.69 ACRES) PBMP'S

Extended Detention Basin #3 (Pond #3) in Drainage Area 3

According to the most recent CZP modification, approved on February 21st, 2025, the required water quality volume for Pond #3 is 8,544 cubic feet with an associated required TSS removal of 1,795 pounds. Pond #3, as currently constructed, provides a water quality volume of 8,987 cubic feet with an associated actual TSS removal of 1,470 pounds. Pond #3 has reached its treatment capacity and is unable to treat any TSS generated from future impervious cover. The 325 pounds of excess TSS that Pond #3 is unable to treat is being overtreated for with Pond #2 (see above). There is no construction occurring within the Pond #3 drainage basin.

SUMMARY

The total impervious cover on-site will be increased by 0.65 acres for a total of 45.60 acres. This results in a total on-site TSS removal requirement of 23,661 pounds after accounting for 19.4 acres of pre-1999 impervious cover. Of this requirement, 7,630 pounds will be removed in Pond #1, 13,628 pounds will be removed in Pond #2, 1,470 pounds will be removed in Pond #3, 637 pounds will be removed by the proposed Jellyfish Unit, and 296 pounds will be removed by VFS, totaling 23,661 pounds. The total remaining treatment capacity available in the PBMP's after construction has been completed will be 11,298 pounds. The remaining capacity in each respective treatment measure is summarized in Table 1, below.

Table 1: On-Site PBMP Treatment Summary											
Drainage Area	**Acreage (AC)**	**Existing Impervious Cover (AC)**	**Proposed Impervious Cover (AC)**	**Total Impervious Cover (AC)**	**Treatment Measure / Permanent Best Management Practice (PBMP)**	**Required TSS Removal (lbs)**	**Provided TSS Removal (lbs)**	**Additional Available TSS Removal (lbs)**	**Required Water Quality Voume (cu.ft.)**	**Provided Water Quality Voume (cu.ft.)**	**Additional Available Water Quality Volume (cu.ft.)**
1	30.37	15.97	0.00	15.97	Extended Detention Basin #1	7,630	12,610	4,980	23,989	98,140	74,151
		0.29	0.42	0.71	6'x4' Peak Diversion Jellyfish Unit	637	698	61	-	-	-
		0.00	0.25	0.25	Engineered Vegetative Filter Strips	224	243	19	-	-	-
2	27.14	26.19	0.00	26.19	Extended Detention Basin #2	13,628	19,860	6,232	55,715	143,622	87,907
		0.08	0.00	0.08	Engineered Vegetative Filter Strips	72	78	6	-	-	-
3	2.69	2.00	0.00	2.00	Extended Detention Basin #3	1,795	1,470	-325	8,544	8,987	443
4	35.20	0.55	0.00	0.55	Uncaptured	494	0	-494	-	-	-
					Total TSS Removal Provided	**23,661**					
					Additional Available TSS Removal	**11,298**					

Peak Diversion Jellyfish Unit
(Proposed Calculations)

Contech Engineered Solutions Calculations for Texas Commission on Environmental Quality
TSS Removal Calculations

Project Name: COMAL ISD: SVHS ROTC
Date Prepared: 3/25/2025

1. The Required Load Reduction for the total project:

Calculations from RG-348
Pages 3-27 to 3-30

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

$L_{M\ TOTAL\ PROJECT}$ = 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 =	Comal	
Total project area included in plan * =	0.78	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	0.71	acres
Total post-development impervious cover fraction * =	0.91	
P =	33	inches
$L_{M\ TOTAL\ PROJECT}$ =	637	lbs.
Number of drainage basins / outfalls areas leaving the plan area =	1	

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

Drainage Basin/Outfall Area No. =	1	
Total drainage basin/outfall area =	0.78	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	0.71	acres
Post-development impervious fraction within drainage basin/outfall area =	0.91	
$L_{M\ THIS\ BASIN}$ =	637	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	JF	abbreviation
Removal efficiency =	86	percent

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

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

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 =	0.78	acres
A_I =	0.71	acres
A_P =	0.07	acres
L_R =	698	lbs.

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

Desired $L_{M\ THIS\ BASIN}$ =	637	lbs.
F =	0.91	

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

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

Calculations from RG-348
Pages Section 3.2.22

Rainfall Intensity =	1.15	inches per hour
Effective Area =	0.64	acres
Cartridge Length =	54	inches
Peak Treatment Flow Required =	0.74	cubic feet per second

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

Flow Through Jellyfish Size	Vault	
Jellyfish Size for Flow-Based Configuration =	JFPD0406-4-1	
Jellyfish Treatment Flow Rate =	0.80	cfs

VFS in Drainage Area 1
(Proposed Calculations)

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: SVHS
Date Prepared: 4/15/2025

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 =	Comal	
Total project area included in plan * =	95.40	acres
Predevelopment impervious area within the limits of the plan * =	19.40	acres
Total post-development impervious area within the limits of the plan* =	45.60	acres
Total post-development impervious cover fraction * =	0.48	
P =	33	inches
$L_{M\ TOTAL\ PROJECT}$ =	23517	lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = 4

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

Drainage Basin/Outfall Area No. = 4

Total drainage basin/outfall area =	0.25	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	0.25	acres
Post-development impervious fraction within drainage basin/outfall area =	1.00	
$L_{M\ THIS\ BASIN}$ =	224	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Vegetated Filter Strips
Removal efficiency = 85 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: $L_R = (\text{BMP efficiency}) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

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 =	0.25	acres
A_I =	0.25	acres
A_P =	0.00	acres
L_R =	243	lbs

VFS in Drainage Area 1
(Proposed Calculations)

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

Desired $L_{M\ THIS\ BASIN}$ = **224** lbs.

F = **0.92**

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 = **2.00** inches
Post Development Runoff Coefficient = **0.82**
On-site Water Quality Volume = **1482** 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 = **296**
Total Capture Volume (required water quality volume(s) x 1.20) = **1778** 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.

7. Retention/Irrigation System Designed as Required in RG-348 Pages 3-42 to 3-46

Required Water Quality Volume for retention basin = **NA** cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate = **0.1** in/hr **Enter determined permeability rate or assumed value of**
Irrigation area = **NA** square feet
NA acres

8. Extended Detention Basin System Designed as Required in RG-348 Pages 3-46 to 3-51

Required Water Quality Volume for extended detention basin = **NA** cubic feet

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

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = **NA** cubic feet

Minimum filter basin area = **NA** square feet

Maximum sedimentation basin area = **NA** square feet **For minimum water depth of 2 feet**
Minimum sedimentation basin area = **NA** square feet **For maximum water depth of 8 feet**

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = **NA** cubic feet

Minimum filter basin area = **NA** square feet

Maximum sedimentation basin area = **NA** square feet **For minimum water depth of 2 feet**
Minimum sedimentation basin area = **NA** square feet **For maximum water depth of 8 feet**

10. Bioretention System Designed as Required in RG-348 Pages 3-63 to 3-65

Required Water Quality Volume for Bioretention Basin = **NA** cubic feet

11. Wet Basins Designed as Required in RG-348 Pages 3-66 to 3-71

Required capacity of Permanent Pool = **NA** cubic feet **Permanent Pool Capacity is 1.20 times the WQV**
Required capacity at WQV Elevation = **NA** cubic feet **Total Capacity should be the Permanent Pool Capacity plus a second WQV.**

ATTACHMENT L

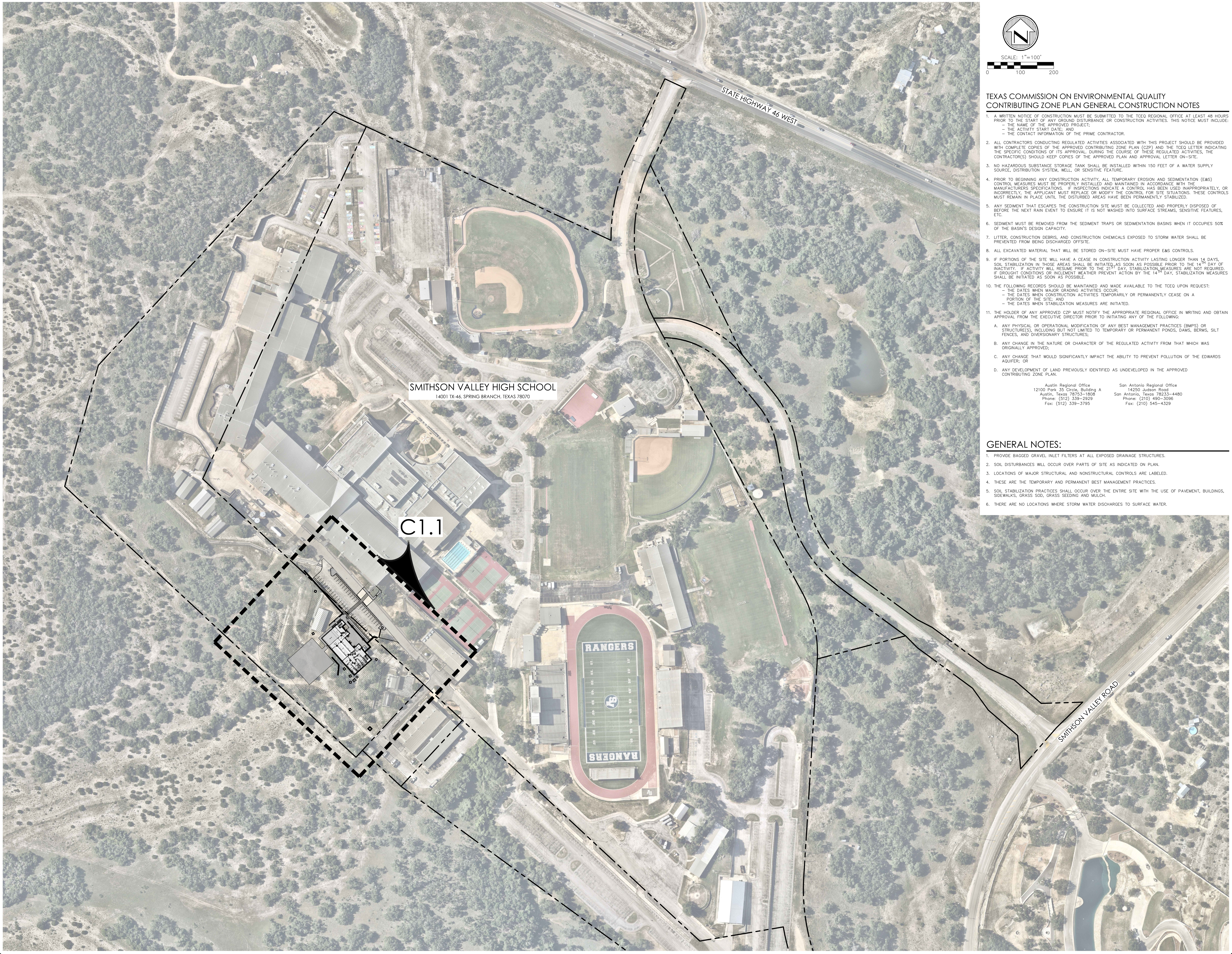
BMP's FOR SURFACE STREAMS

Surface streams do not exist on the site that would require protective measures. Permanent and temporary BMP's, as shown on the CZP Site Plan, shall be used to minimize pollutants draining to offsite surface streams, both during and after construction.

ATTACHMENT P

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

Both permanent and temporary BMP's, as shown on the CZP Site Plan, shall be used to minimize contamination to offsite surface streams, both during and after construction. During construction, temporary BMP's will consist of silt fence, bagged gravel inlet filters, and a gabion mattress. After construction, the permanent BMPs associated with this project will consist of a Peak Diversion Jellyfish System and engineered VFS.



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 STORM WATER 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.
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    - 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;
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    D. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE APPROVED CONTRIBUTING ZONE PLAN.

Austin Regional Office
12100 Park 35 Circle, Building A
Austin, Texas 78753-1808
Phone: (512) 339-2929
Fax: (512) 339-3795

San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
Phone: (210) 490-3096
Fax: (210) 545-4329

GENERAL NOTES:

1. PROVIDE BAGGED GRAVEL INLET FILTERS AT ALL EXPOSED DRAINAGE STRUCTURES.
2. SOIL DISTURBANCES WILL OCCUR OVER PARTS OF SITE AS INDICATED ON PLAN.
3. LOCATIONS OF MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS ARE LABELED.
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6. THERE ARE NO LOCATIONS WHERE STORM WATER DISCHARGES TO SURFACE WATER.

REVISIONS		
NO.	DATE	DESCRIPTION	BY

PROJ. # | DGN. BY: | DWN. BY: | CHKD. BY: | DATE:

MTR
Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING F-10131500
12770 CIMARRON PATH, SUITE 100
SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051
FAX: (210) 698-5085

STATE OF TEXAS
SEAN S. SMITH
113308
REGISTERED PROFESSIONAL ENGINEER
5/19/25

COMAL ISD - SMITHSON VALLEY HIGH SCHOOL

OVERALL CONTRIBUTING ZONE PLAN / STORM WATER POLLUTION PREVENTION PLAN

SHEET
C1.0

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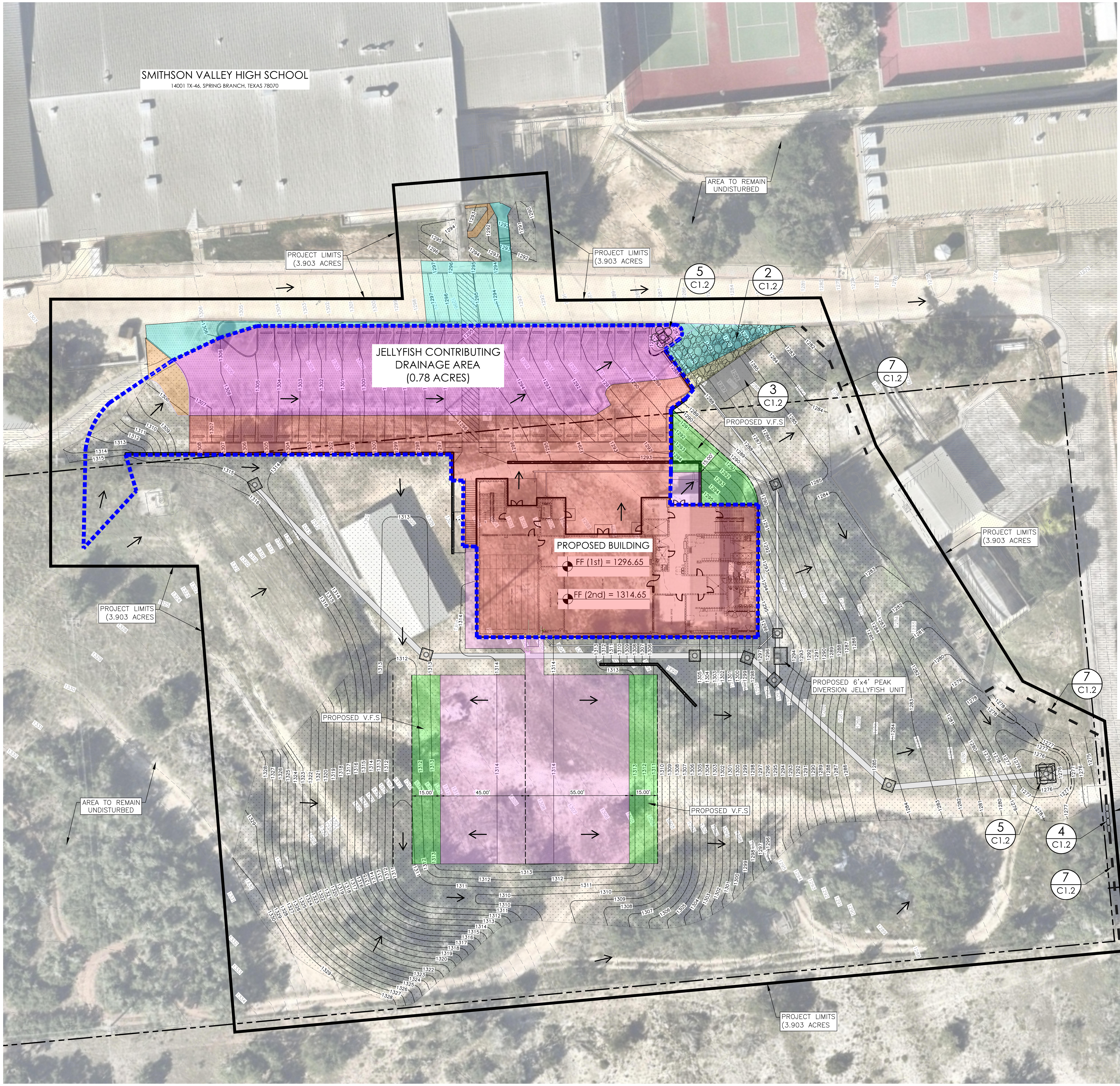

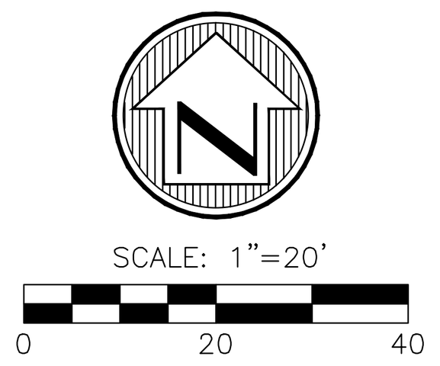

LEGEND

- PROPERTY LINE
- JELLYFISH DRAINAGE AREA
- EXISTING CONTOUR (-802-)
- PROPOSED CONTOUR (802)
- SILT FENCE
- INLET FILTER
- PROPOSED FLOW ARROW
- NEW CONCRETE FLATWORK
- NEW CONCRETE PAVEMENT
- PERMANENT SOIL STABILIZATION (REFERENCE LANDSCAPE PLANS)
- NEW IMPERVIOUS COVER (TREATED WITH JELLYFISH)
- PREVIOUSLY UNTREATED IMPERVIOUS COVER (TREATED WITH JELLYFISH)
- EXISTING IMPERVIOUS COVER REPLACED WITH NEW IMPERVIOUS COVER
- NEW IMPERVIOUS COVER (TREATED WITH V.F.S.)
- NEW VEGETATIVE FILER STRIP (V.F.S.) (5:1 MAX SLOPE)
- NEW PERVIOUS AREA
- NEW IMPERVIOUS COVER (UNTREATED)

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    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.

Austin Regional Office	San Antonio Regional Office
12100 Park 35 Circle, Building A	14250 Judson Road
Austin, Texas 78753-1808	San Antonio, Texas 78233-4480
Phone: (512) 339-2929	Phone: (210) 490-3096
Fax: (512) 339-3795	Fax: (210) 545-4329

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6. THERE ARE NO LOCATIONS WHERE STORM WATER DISCHARGES TO SURFACE WATER.

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. #	DGN. BY:	DWN. BY:	CHKD. BY:	DATE:

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REGISTERED PROFESSIONAL ENGINEER
5/19/25

COMAL ISD - SMITHSON VALLEY HIGH SCHOOL

CONTRIBUTING ZONE PLAN / STORM WATER POLLUTION PREVENTION PLAN

SHEET
C1.1

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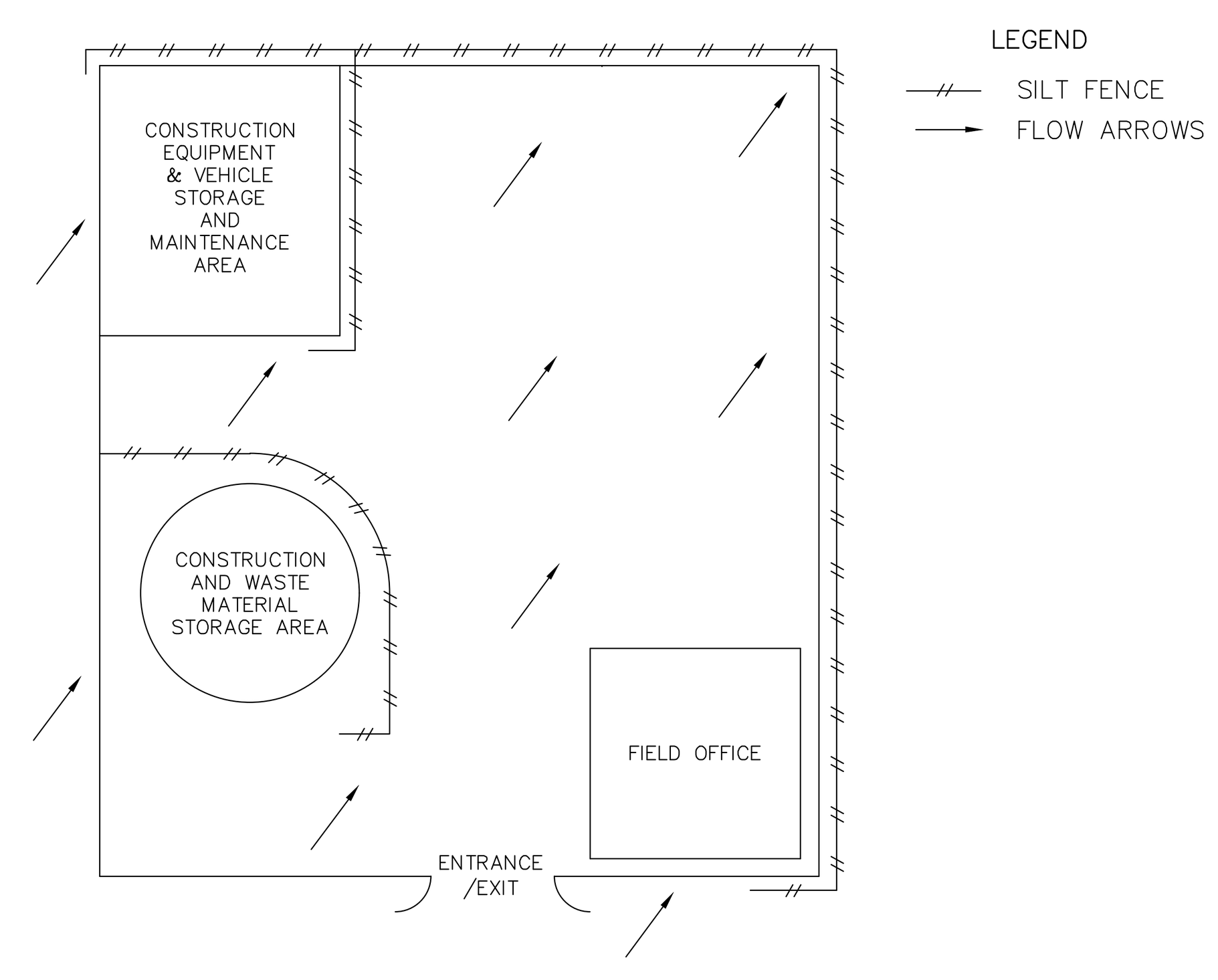
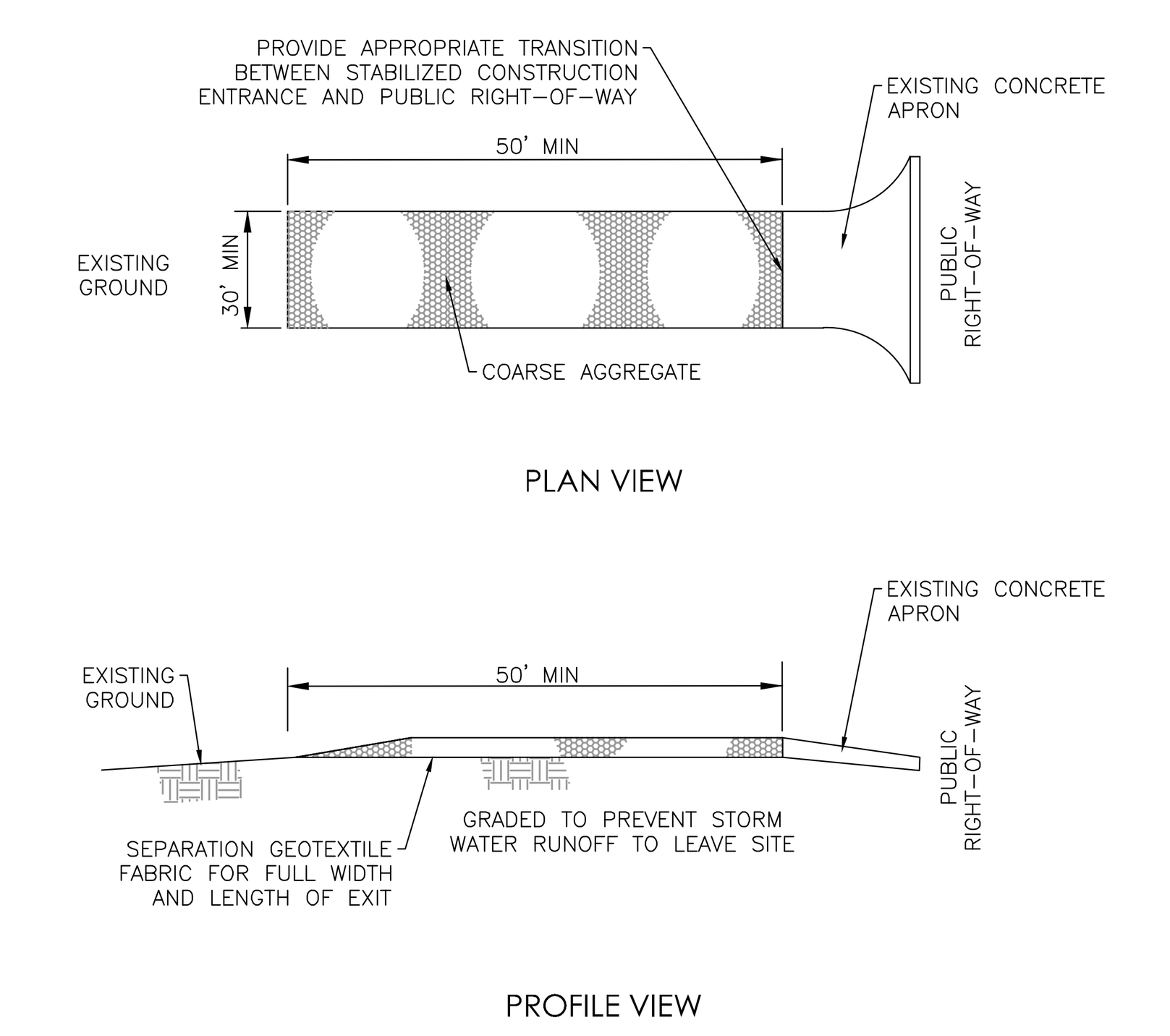


1 CONSTRUCTION STAGING AREA

SCALE: NONE

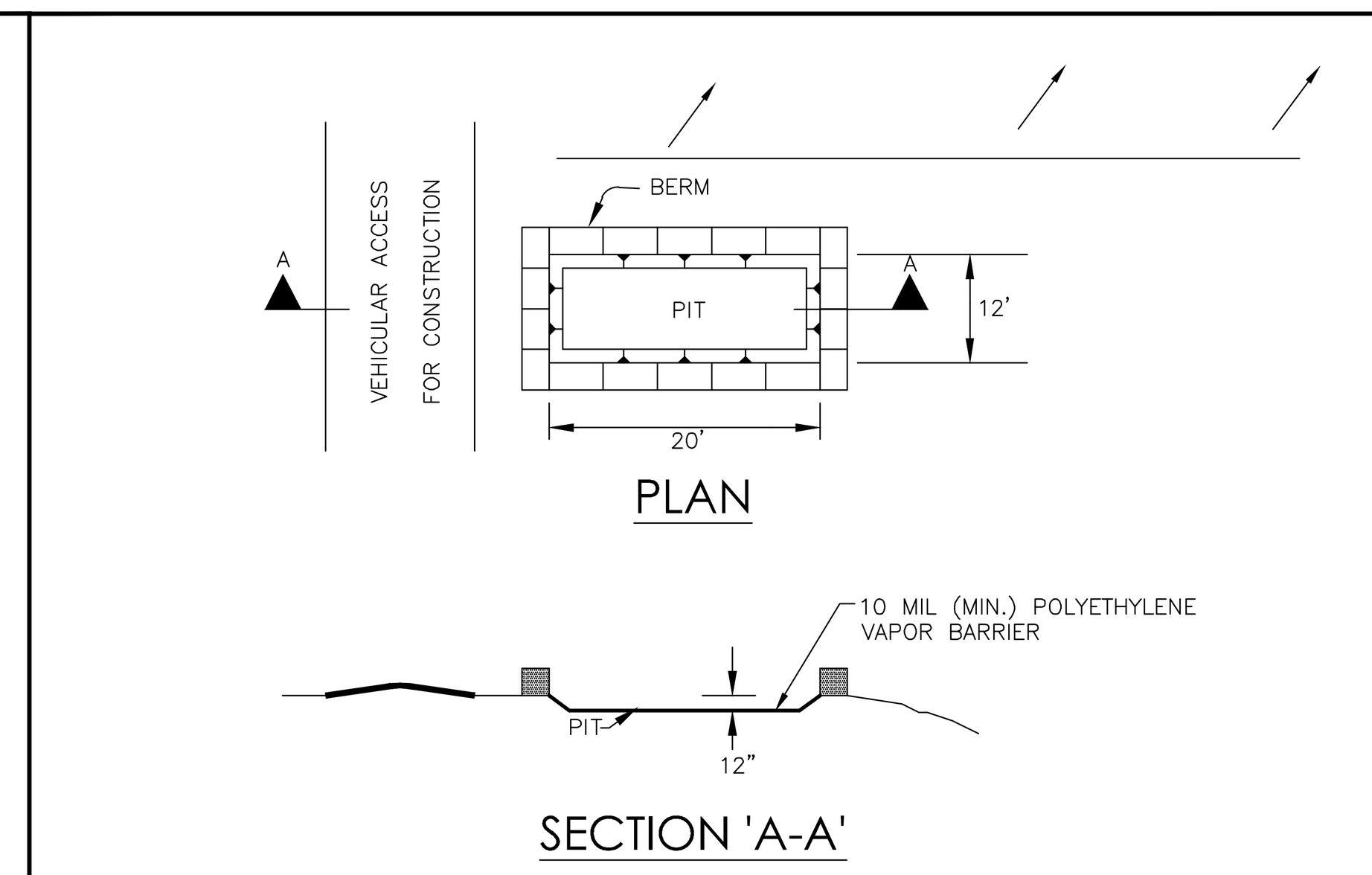


TEMPORARY CONSTRUCTION ENTRANCE/EXIT NOTES:

1. THE AGGREGATE SHOULD CONSIST OF 4 TO 8 INCH WASHED STONE OVER A STABLE FOUNDATION.
2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8 INCHES.
3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD 2 , A MULLEN BURST RATING OF 140 LB/IN 2 , AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
4. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
5. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
6. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
7. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
8. PLACE STONE TO DIMENSIONS AND GRADE SHOWN. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
9. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
10. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
11. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
12. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
13. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE.

2 STABILIZED CONSTRUCTION ENTRANCE / EXIT

SCALE: NONE

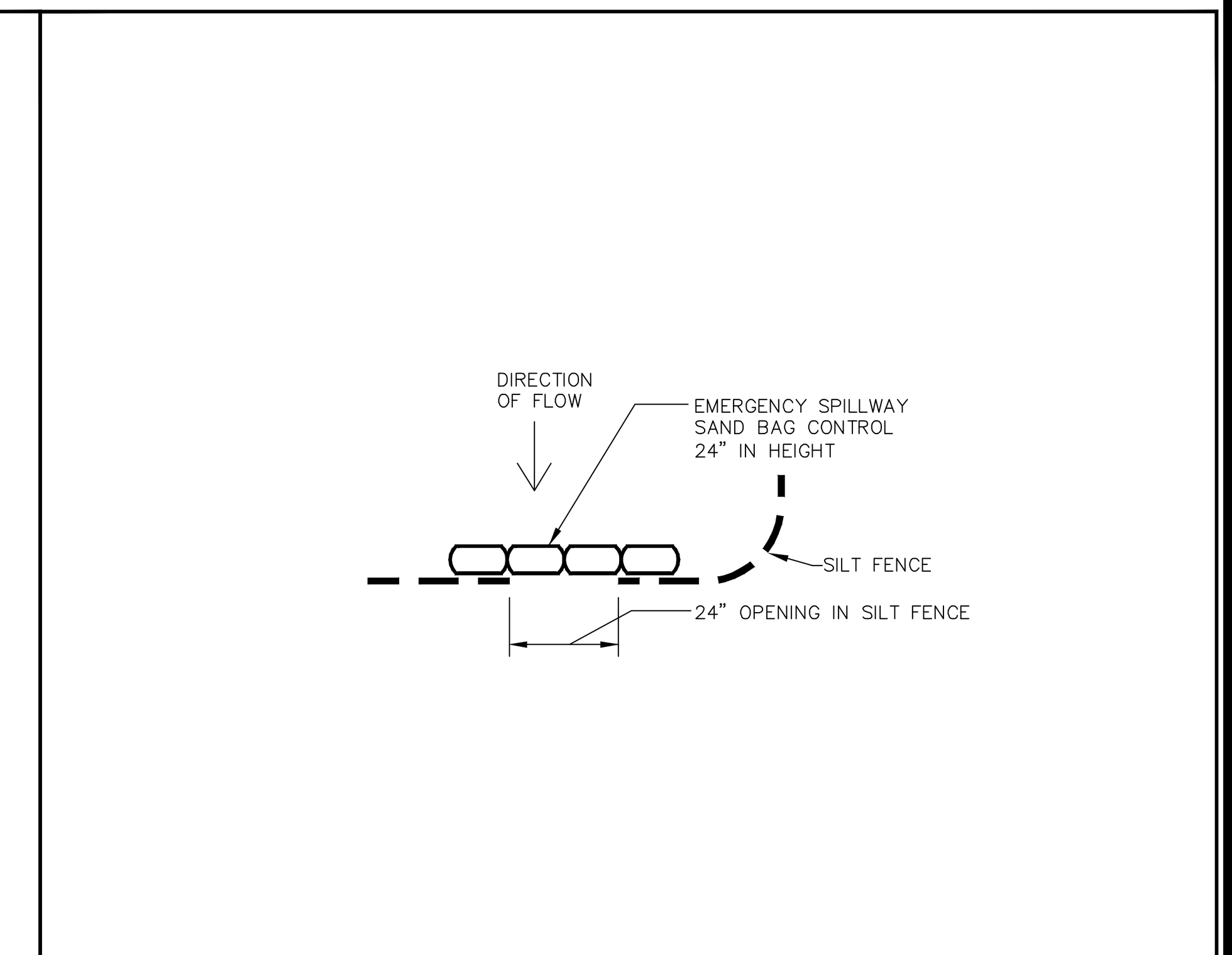


GENERAL NOTES:

1. DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
2. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
3. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.

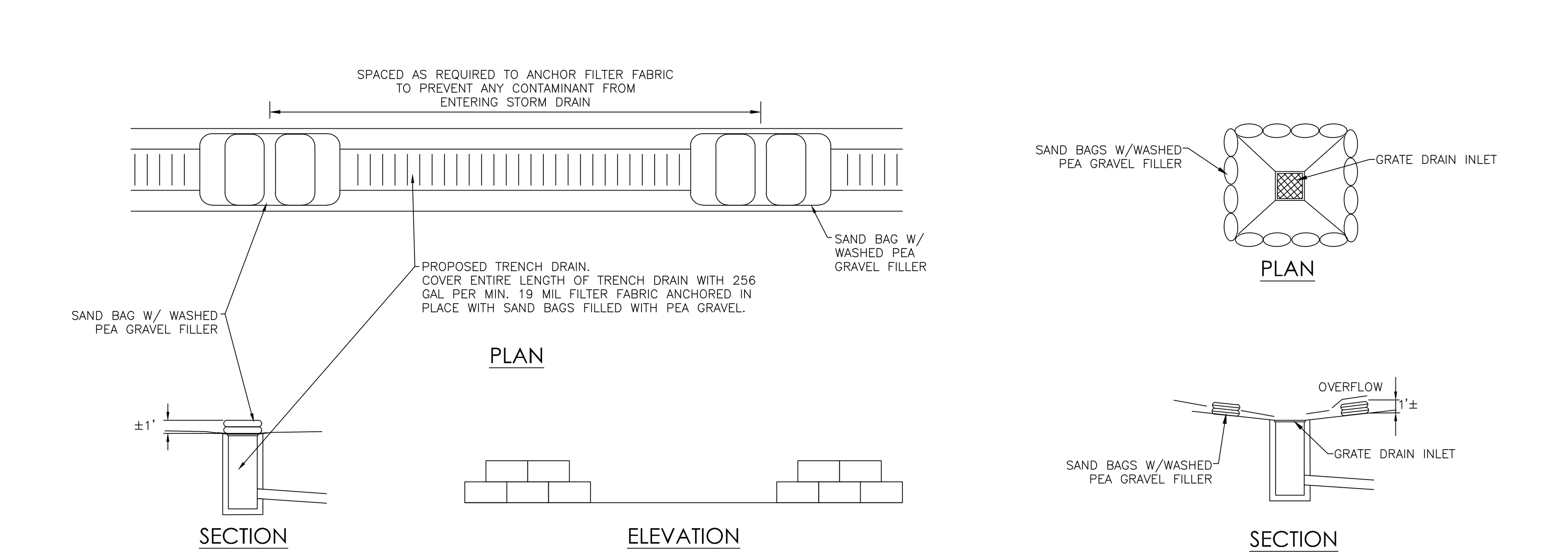
3 CONCRETE TRUCK WASHOUT PIT

SCALE: NONE



4 PLAN - SAND BAG CONTROL DETAIL

SCALE: NONE

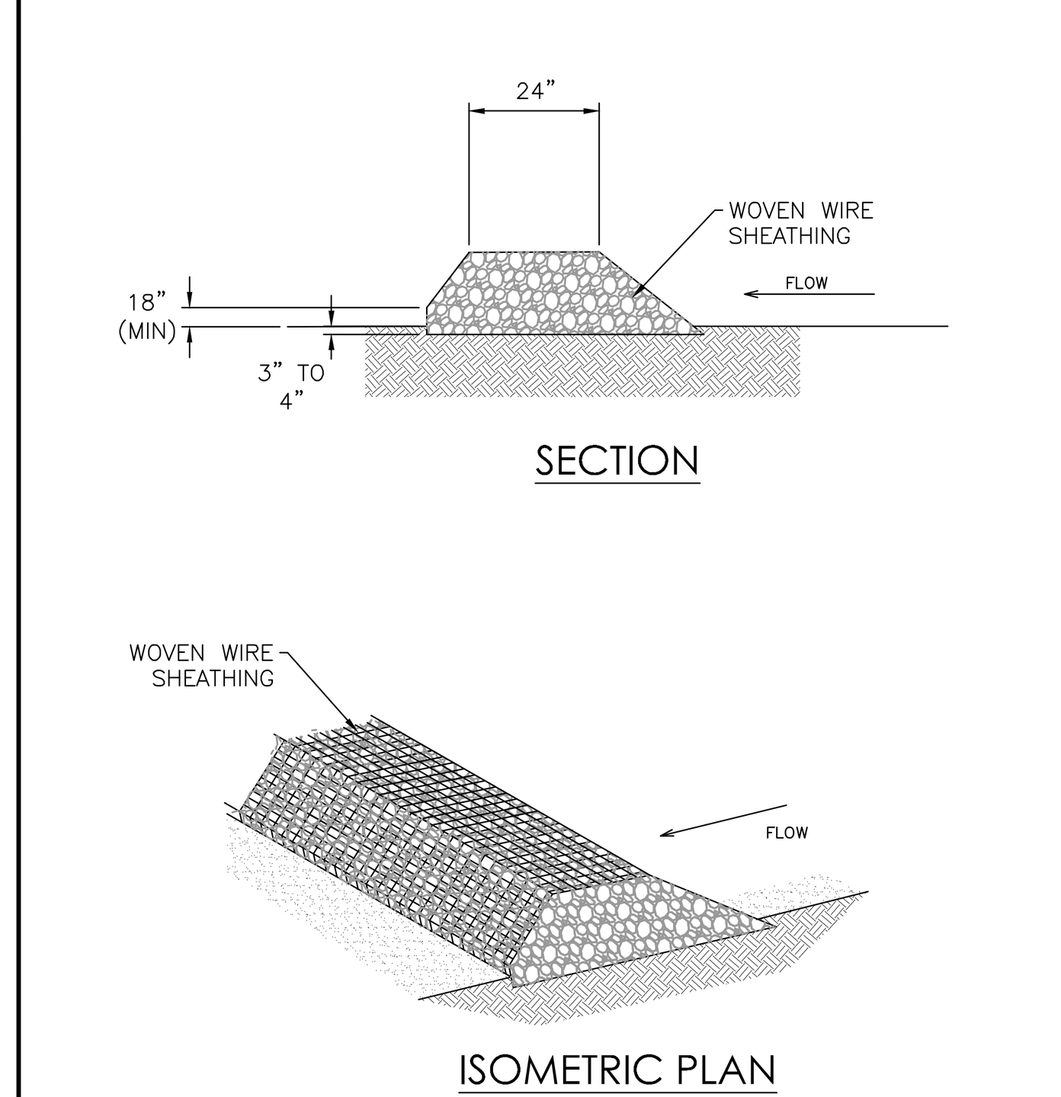


GENERAL NOTES:

1. THE GRAVEL BAG MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE, POLYAMIDE OR COTTON BURLAP WOVEN FABRIC, MINIMUM UNIT WEIGHT 4 OZ/YD 2, MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70 PERCENT.
2. THE BAG LENGTH SHOULD BE 24 INCHES, WIDTH SHOULD BE 18 INCHES AND THICKNESS SHOULD BE 6 INCHES.
3. THE GRAVEL BAGS SHOULD BE FILLED WITH 3/4" GRAVEL.
4. WHEN A GRAVEL BAG IS FILED WITH GRAVEL, THE OPEN END OF THE GRAVEL BAG SHOULD BE STAPLED OR TIED WITH NYLON OR POLY CORD.
5. THE GRAVEL BAGS SHOULD BE PLACED AS SHOWN ON THE DETAIL. THE GRAVEL BAGS SHALL BE STACKED TO FORM A CONTINUOUS BARRIER AROUND THE INLETS. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.
6. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
7. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND CURB.
8. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
9. STRUCTURE SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

5 BAGGED GRAVEL INLET FILTER DETAILS

SCALE: NONE

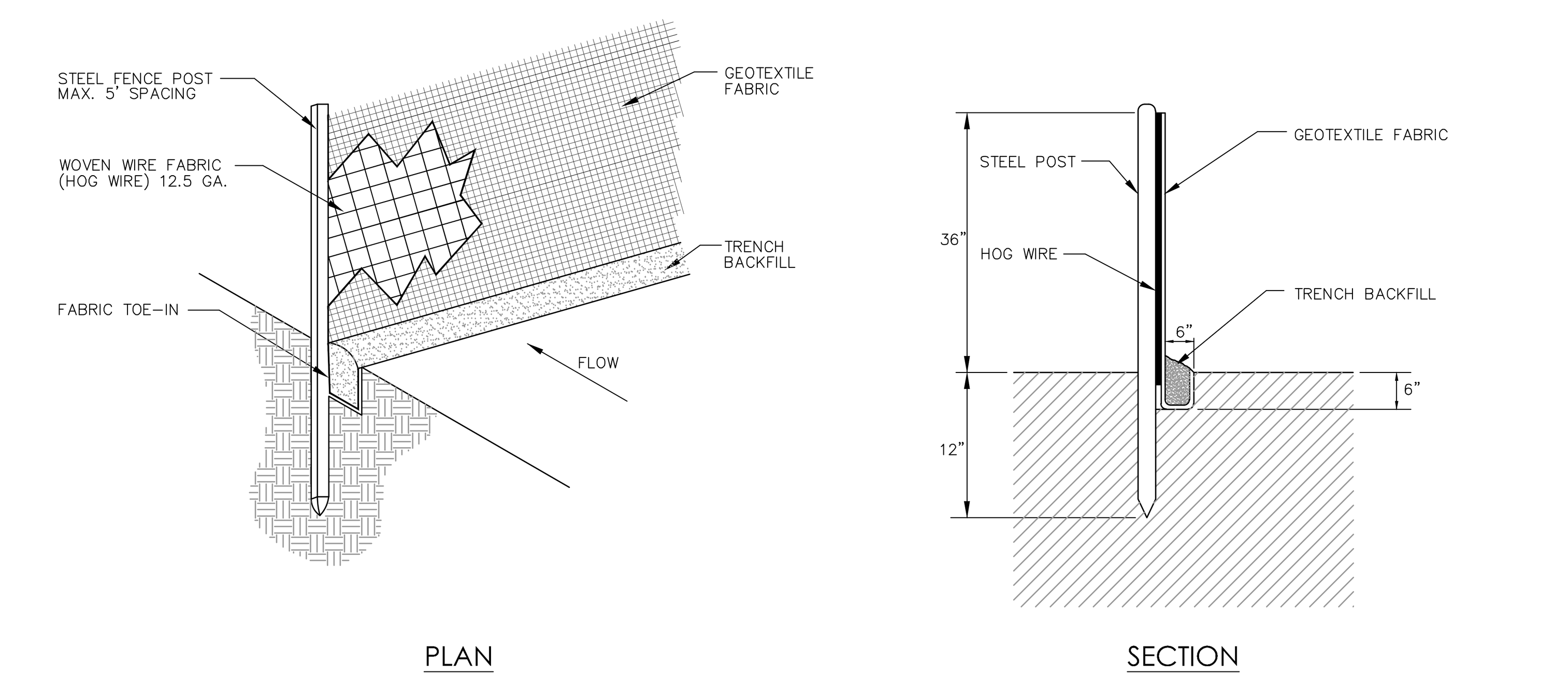


ROCK BERM NOTES:

1. THE BERM STRUCTURE SHOULD BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED AND SHOULD BE SECURED WITH SHOAT RINGS.
2. CLEAN, OPEN GRADED 3 TO 5-INCH DIAMETER ROCK SHOULD BE USED, EXCEPT IN AREAS WHERE HIGH VELOCITIES OR LARGE VOLUMES OF FLOW ARE EXPECTED, WHERE 5-TO 8-INCH DIAMETER ROCKS MAY BE USED.
3. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE.
4. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.
5. PLACE THE ROCK ALONG THE SHEATHING TO A HEIGHT NOT LESS THAN 18".
6. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.
7. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.
8. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
9. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
10. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT OF IN AN APPROVED MANNER AND REPAIR ANY LOOSE WIRE SHEATHING.
11. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
12. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

6 ROCK BERM DETAIL

SCALE: NONE

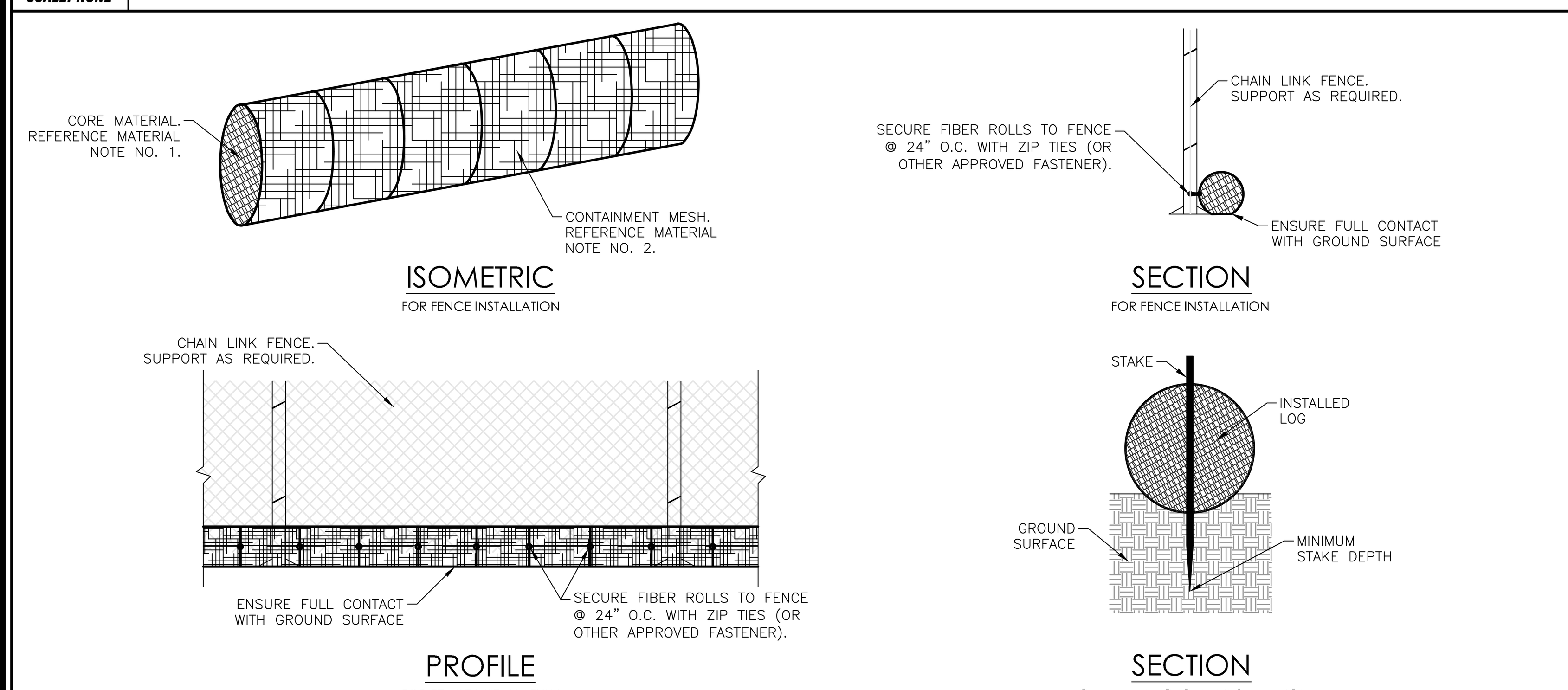


GENERAL NOTES:

1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN 2 , ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
2. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR Y-BAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM NOMINAL WEIGHT 1.25 LB/FT 2 , AND BRINDELL HARDNESS EXCEEDING 140.
3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12.5 GAUGE MINIMUM.
4. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1 FOOT DEEP AND SPACED NOT MORE THAN 5 FEET ON CENTER.
5. LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ACRE/100 FEET OF FENCE.
6. THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
7. 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.
8. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
9. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
10. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES, OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE OLD FENCE.
11. REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
12. 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.

7 SILT FENCE DETAILS

SCALE: NONE



GENERAL NOTES:

MATERIAL:

1. CORE MATERIAL: CORE MATERIAL SHOULD BE BIODEGRADABLE OR RECYCLABLE. MATERIAL MAY BE COMPOST, MULCH, ASPEN WOOD FIBERS, CHIPPED SITE VEGETATION, AGRICULTURAL RICE OR WHEAT STRAW, COCONUT FIBER, 100% RECYCLABLE FIBERS, OR SIMILAR MATERIALS.
2. CONTAINMENT MESH: CONTAINMENT MESH SHOULD BE 100% BIODEGRADABLE, PHOTODEGRADABLE OR RECYCLABLE SUCH AS BURLAP, TWINE, UV PHOTODEGRADABLE PLASTIC, POLYESTER, OR SIMILAR MATERIAL. WHEN THE FIBER ROLL WILL REMAIN IN PLACE AS PART OF A VEGETATIVE SYSTEM USE BIODEGRADABLE OR PHOTODEGRADABLE MESH. FOR TEMPORARY INSTALLATION RECYCLABLE MESH IS RECOMMENDED.

IMPLEMENTATION:

1. LOCATE FIBER ROLLS ON LEVEL CONTOURS SPACED AS FOLLOWS:
   - SLOPE INCLINATION OF 4:1 (H:V) OR FLATTER: FIBER ROLLS SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 20 FT.
   - SLOPE INCLINATION BETWEEN 4:1 AND 2:1 (H:V): FIBER ROLLS SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 15 FT. (A CLOSER SPACING IS MORE EFFECTIVE).
   - SLOPE INCLINATION 2:1 (H:V) OR GREATER: FIBER ROLLS SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 10 FT. (A CLOSER SPACING IS MORE EFFECTIVE).
2. TURN THE ENDS OF THE FIBER ROLL UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND THE ROLL.
3. STAKE FIBER ROLLS INTO A 2 TO 4 IN. DEEP TRENCH WITH A WIDTH EQUAL TO THE DIAMETER OF THE FIBER ROLL.
4. DRIVE STAKES AT THE END OF EACH FIBER ROLL AND SPACED 4 FT MAXIMUM ON CENTER.
5. USE WOOD STAKES WITH A NOMINAL CLASSIFICATION OF 0.75 BY 0.75 IN. AND MINIMUM LENGTH OF 24 IN.
6. IF MORE THAN ONE FIBER ROLL IS PLACED IN A ROW, THE ROLLS SHOULD BE OVERLAPPED, NOT ABUTTED.

INSPECTION AND MAINTENANCE GUIDELINES:

1. INSPECT PRIOR TO FORECAST RAIN, DAILY DURING EXTENDED RAIN EVENTS, AFTER RAIN EVENTS, AND WEEKLY.
2. REPAIR OF REPLACE SPLIT, TORN, UNRAVELING, OR SLUMPING FIBER ROLLS.
3. IF THE FIBER ROLL IS USED AS A SEDIMENT CAPTURE DEVICE, OR AS AN EROSION CONTROL DEVICE TO MAINTAIN SHEET FLOWS, SEDIMENT THAT ACCUMULATES BEHIND THE ROLL MUST BE PERIODICALLY REMOVED IN ORDER TO MAINTAIN ITS EFFECTIVENESS. SEDIMENT SHOULD BE REMOVED WHEN THE ACCUMULATION REACHES ONE-HALF THE DESIGNATED SEDIMENT STORAGE DEPTH, USUALLY ONE-HALF THE DISTANCE BETWEEN THE TOP OF THE FIBER ROLL AND THE ADJACENT GROUND SURFACE. SEDIMENT REMOVED DURING MAINTENANCE MAY BE INCORPORATED INTO EARTHWORK ON THE SITE OR DISPOSED OF AT AN APPROPRIATE LOCATION.

8 FIBER ROLL DETAILS

SCALE: NONE

NO.	DATE	REVISIONS DESCRIPTION	BY

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5/19/25

COMAL ISD - SMITHSON VALLEY HIGH SCHOOL

CONTRIBUTING ZONE PLAN / STORM WATER POLLUTION PREVENTION PLAN DETAILS

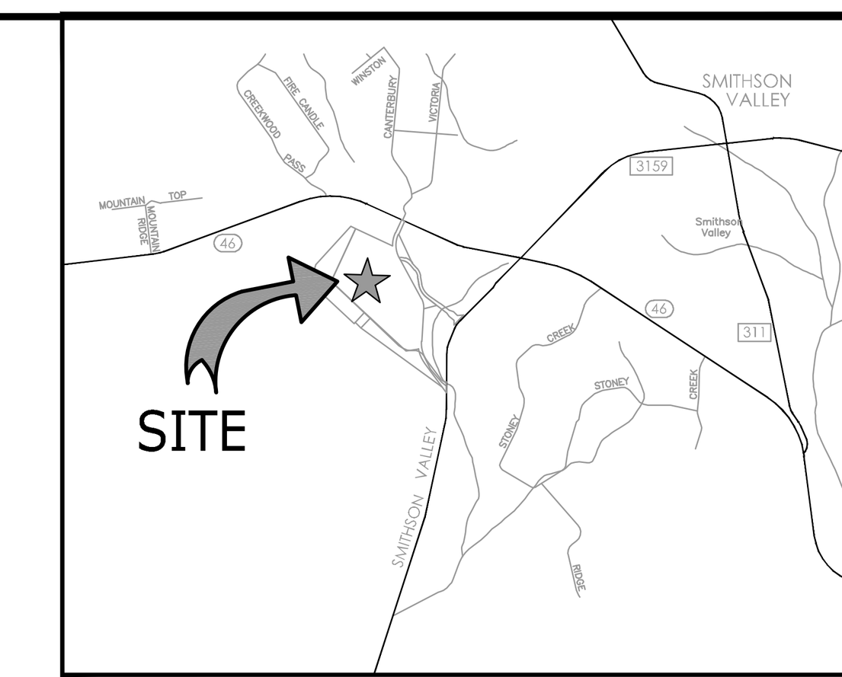
SHEET
C2.0

GENERAL NOTES:

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO BEGINNING WORK.
2. ALL WASTE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND IT SHALL BE HIS SOLE RESPONSIBILITY TO DISPOSE OF THIS MATERIAL OFF THE LIMITS OF THE SITE TO A STATE LICENSED LANDFILL. CONTRACTOR WILL BE REQUIRED TO PROVIDE DOCUMENTATION WHERE DISPOSED MATERIAL IS TAKEN TO. THE OWNER WILL NOT BE HELD LIABLE FOR ANY ON-SITE WASTE MATERIAL. CONTRACTOR SHALL NOT ALLOW THE ACCUMULATION OF DEMOLISHED WASTE MATERIAL ON-SITE.
3. CONTRACTOR IS REQUIRED TO SET AND VERIFY ALL PROJECT ELEVATIONS PRIOR TO THE START OF CONSTRUCTION. "MATCH EXISTING" SHALL BE UNDERSTOOD TO SIGNIFY THE SAME MATERIALS AS WELL AS VERTICAL AND HORIZONTAL ALIGNMENT.
4. GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSION & GRADE CONDITIONS (BOTH NEW AND EXISTING). HE SHALL REPORT ANY DISCREPANCIES TO THE PROJECT ENGINEER BEFORE PROCEEDING WITH ANY PHASE OF THE WORK AS HE WILL BE RESPONSIBLE FOR ALL WORK AS INTENDED BY THE DRAWINGS AND SPECIFICATIONS.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY.
6. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS, AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AT A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS IN AND AROUND TRENCH EXCAVATION.
7. PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL COMPLY WITH THE SEDIMENTATION AND EROSION CONTROL PLANS AND SHALL SUBMIT NOTIFICATIONS AND PAY ALL PERMITS.
8. BARRICADES AND WARNING SIGNS SHALL CONFORM TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND GENERALLY BE LOCATED TO AFFORD MAXIMUM PROTECTION TO THE PUBLIC AS WELL AS CONSTRUCTION PERSONNEL AND EQUIPMENT AND TO ASSURE AN EXPEDITIOUS TRAFFIC FLOW AT ALL TIMES DURING CONSTRUCTION.
9. THE RESPONSIBILITY OF THE ARCHITECT/ENGINEER OR OWNER, TO CONDUCT CONSTRUCTION REVIEW OR OBSERVATION OF THE CONTRACTORS PERFORMANCE IS NOT INTENDED TO REVIEW THE ADEQUACY OF THE CONTRACTORS SAFETY MEASURES IN OR NEAR THE CONSTRUCTION SITE.
10. ANY EXISTING IMPROVEMENTS AND/OR UTILITIES REMOVED, DAMAGED OR UNDERCUT BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AND APPROVED BY THE PROJECT ARCHITECT AT THE CONTRACTOR'S EXPENSE.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION, ANY DAMAGES DONE TO EXISTING FENCES, CURBS, CONCRETE DRIVEWAYS, SIDEWALK STRUCTURES AND PAVEMENT, UTILITY BOXES/VALVES, ETC. THAT ARE NOT INDICATED TO BE REMOVED. AN INVENTORY OF EXISTING CONDITIONS SHALL BE CONDUCTED WITH THE CONTRACTOR AND OWNER PRIOR TO DEMOLITION.
12. CONTRACTOR SHALL MAINTAIN CONTINUAL ALL UTILITY SERVICES (GAS, TELE, CATV, ELEC., WATER, SEWER, STORM SEWER, ETC.) TO EXISTING FACILITIES AND BUILDINGS. WHERE CONSTRUCTION IS IN THE PROXIMITY OF A UTILITY, THE CONTRACTOR WILL TAKE PRECAUTION TO PROTECT AND/OR SUPPORT THE UTILITY.
13. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE PROJECT ENGINEER BEFORE PROCEEDING WITH ANY PHASE OF THE WORK. THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND AND/OR ABOVE GROUND UTILITIES INDICATED ON THE PLANS ARE NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY IN RESPECT TO THE ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING CONSTRUCTION. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY PURVEYORS DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED.
14. NOTIFY OWNER 72 HOURS IN ADVANCE OF ANY UTILITY SHUTDOWN.
15. ADJUST ALL EXISTING VALVES & UTILITIES TO REMAIN TO FINISH GRADE. REFERENCE DEMOLITION, GRADING, & UTILITY PLANS.
16. CONTRACTOR SHALL COORDINATE ALL DEMOLITION/CONSTRUCTION ACTIVITIES WITH OTHER DISCIPLINES AS REQUIRED.
17. CONTRACTOR SHALL COORDINATE UTILITY DEMOLITION WITH UTILITY PLANS.
18. CONTRACTOR IS RESPONSIBLE FOR CLEARING THE ALIGNMENT FOR ALL NEW FENCING. CLEARING TO INCLUDE ALL VEGETATION, TREE LIMBS, AND SHRUBS WITHIN 5' OF NEW FENCE ALIGNMENT ON EACH SIDE. COORDINATE WITH LANDSCAPE/TREE PRESERVATION PLANS AS NEEDED, IF APPLICABLE.
19. CONTRACTOR SHALL IMMEDIATELY REMOVE ALL WATER FROM EXCAVATIONS FOLLOWING RAIN EVENTS. NO STANDING WATER WILL BE ALLOWED IN EXCAVATIONS.
20. CONTRACTOR TO REFERENCE LANDSCAPE PLANS FOR THE REMOVAL OF EXISTING TREES AND THE PROTECTION/PRESERVATION OF EXISTING TREES TO REMAIN, IF APPLICABLE.
21. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL SILT FROM THE DRAINAGE SYSTEM AND FLUSH ALL STORM DRAINS AND CHANNELS PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.
22. CONTRACTOR IS TO TELEVISE ALL HDPE PIPE INSTALLATION PRIOR TO FINAL ACCEPTANCE.
23. AFTER CONSTRUCTION IS COMPLETED, THE CONTRACTOR SHALL STABILIZE ALL DISTURBED SOIL AREAS IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN AND RE-SOD DISTURBED SOIL AREAS WITH BERMUDA SODDING OR HYDROMULCH TO MATCH CONDITIONS PRIOR TO CONSTRUCTION, OR AS OTHERWISE SPECIFIED BY THE LANDSCAPE ARCHITECT.

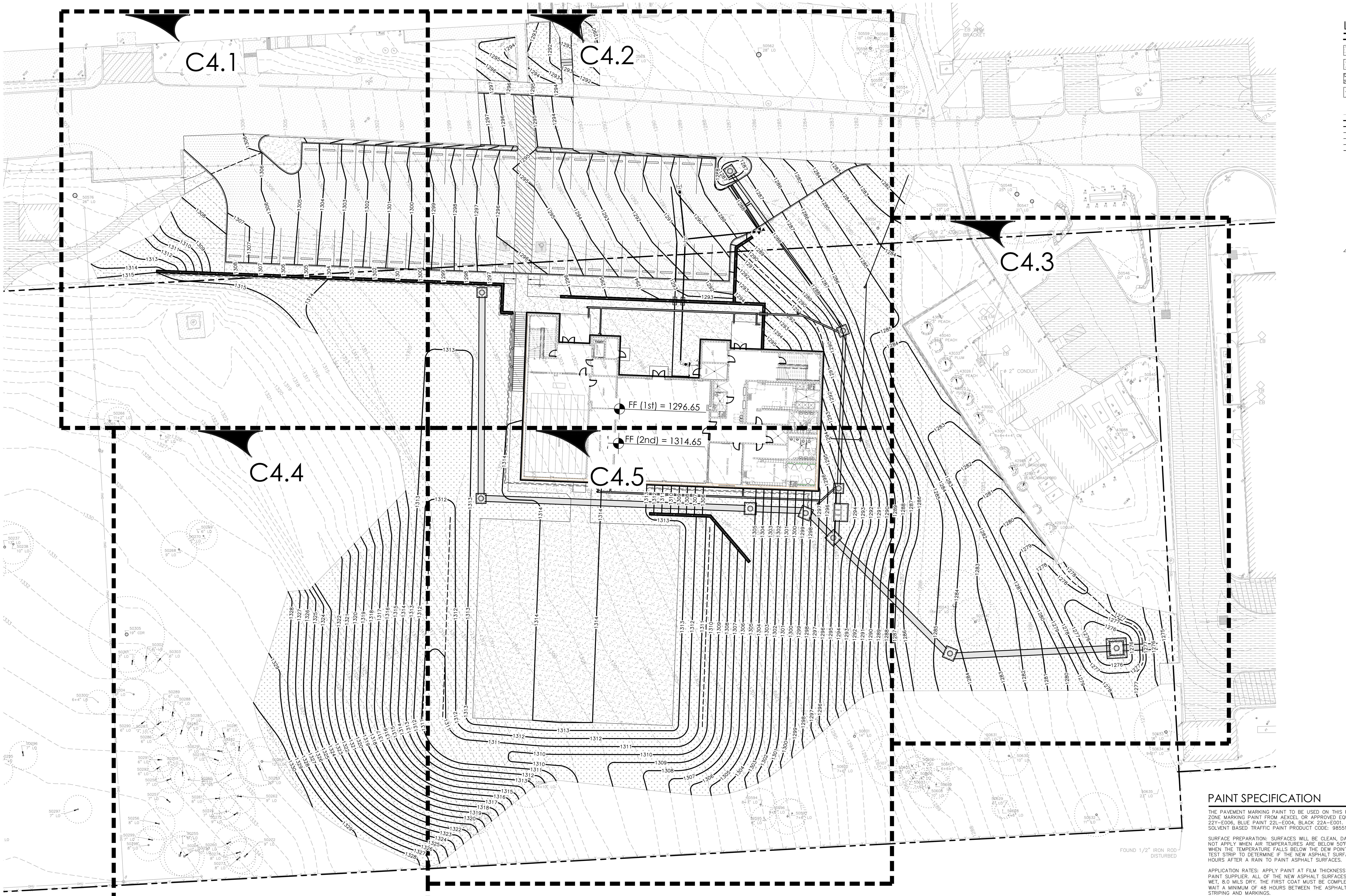
STORM DRAINAGE NOTES:

1. CLEAR COVER FOR REINFORCEMENT STEEL IS 2" UNLESS OTHERWISE NOTED.
2. MATERIAL SPECIFICATIONS:
   A. CONCRETE/CONCRETE RIPRAP: CLASS A 3000 PSI (28-DAY STRENGTH) UNLESS OTHERWISE NOTED ON PLANS.
   B. REINFORCING STEEL: CONFORM TO A.S.T.M. A-615, GRADE 60 (2" CLEAR COVER UNLESS OTHERWISE NOTED ON PLANS)
   C. PIPE RAILING: CONFORM TO A.S.T.M. A-53, GRADE B, OR A-501
3. STORM SEWER PIPE MATERIAL SPECIFICATIONS: PIPE MATERIAL SHALL BE AS NOTED ON DRAINAGE PLANS. WHEN SPECIFIED:
   A. REINFORCED CONCRETE PIPE (RCP) CLASS III, UNLESS OTHERWISE SPECIFIED ON PLAN.
   B. PRECAST BOX CULVERT OLDCASTLE PRECAST TYPE I OR EQUAL APPROVED BY ENGINEER.
   C. POLYVINYL CHLORIDE (PVC) PIPE SHALL BE SDR 26 (115 PSI)
   D. ALUMINIZED STEEL (AS)
      a. CORRUGATIONS: 3/4"X3/4"X7-1/2" HELICAL CORRUGATIONS PER ASSHTO M-36, TYPE IR (ASTM A-760)
      b. MATERIAL: ALUMINIZED TYPE 2 STEEL PER AASHTO M-274 (ASTM A-819)
      c. JOINT: HUGGER BANDS WITH TECHNO ANGLES. CONTRACTOR TO PROVIDE 5-C BANDS WITH BAR BOLT AND STRAP CONNECTION.
      d. THICKNESS: 0.064" (16 GAUGE).
   E. HDPE STORM PIPE TO BE ADS DUAL WALL PIPE N-12 OR APPROVED EQUAL.
4. ALL STORM SEWER INLET GRATES SHALL BE GALVANIZED.
5. CONCRETE COLLARS SHALL BE PROVIDED ON ALL STORM DRAIN TO JUNCTION BOX/GRATE INLET CONNECTIONS. REFERENCE DETAILS.
6. GROUT INVERTS OF ALL JUNCTION BOXES AND GRATE INLETS TO DRAIN.
7. JUNCTION BOXES SHALL HAVE MANHOLES FOR ACCESS WITH BOLTED MANHOLE LIDS.
8. ALL DRAINAGE STRUCTURES, LIDS AND GRATES SHALL BE RATED FOR H20 LOADING.
9. ALL PIPE TRENCHES SHALL CONTAIN FILTER FABRIC BETWEEN THE INITIAL AND SECONDARY BACKFILL. REFERENCE DETAILS AND SPECIFICATIONS FOR CONSTRUCTION REQUIREMENTS.
10. PROVIDE CONCRETE APRONS AROUND ALL INLETS NOT IN PAVEMENT AREAS AS PER CIVIL DETAILS.
11. ALL CONCRETE STORM DRAIN STRUCTURES TO HAVE A 32" CLEAR OPENING FOR ACCESS. CONTRACTOR TO PROVIDE CORRESPONDING LID AND FRAME TO PROVIDE 32" CLEAR OPENING.
12. ALL CURB INLETS TO BE INSTALLED WITH STEEL ARMOR AT THE CURB OPENING.
13. PROVIDE ECCENTRIC REDUCERS ON SDR 26 PVC/HDPE STORM PIPE WHERE PIPE DIAMETERS INCREASE IN SIZE.



LOCATION MAP
NOT TO SCALE

SCALE: 1"=20'
20 10 0 20



LEGEND

(symbol)	PROPERTY LINE
(symbol)	NEW CONCRETE FLATWORK
(symbol)	NEW CONCRETE PAVEMENT
(symbol)	NEW WASHED RIVER ROCK
(symbol)	NEW SOD
+802.00	EXISTING SPOT ELEVATION
(802.00)+	PROPOSED SPOT ELEVATION
802	EXISTING CONTOUR
802	PROPOSED CONTOUR
(symbol)	GRADE BREAK
(symbol)	CHAIN LINK FENCE
(symbol)	ORNAMENTAL FENCE
(symbol)	WOODEN FENCE
(symbol)	FLOW LINE
RCP	REINFORCED CONCRETE
PVC	PIPE POLYVINYL CHLORIDE INVERT
INV	ELEVATION OF PIPE
TW	TOP OF WALL ELEVATION
BW	BOTTOM OF WALL ELEVATION
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TOG	TOP OF GRATE ELEVATION
TC	TOP OF CURB
G	GUTTER
SW	TOP OF SIDEWALK
NG	NATURAL GROUND
ESM'T	EASEMENT
ROW	RIGHT OF WAY
HP	HIGH POINT
E.G.T.CATV	ELECTRIC, GAS, TELEPHONE & CABLE T.V
(symbol)	SIDEWALK RAMP
(symbol)	DRAINAGE FLOW ARROW
(symbol)	PROPOSED TRAFFIC SIGN

PAINT SPECIFICATION

THE PAVEMENT MARKING PAINT TO BE USED ON THIS PROJECT WILL BE GORILLA HI-PERFORMANCE ACRYLIC ZONE MARKING PAINT FROM AEXCEL OR APPROVED EQUAL. WHITE PAINT 22W-E008, LEAD-FREE YELLOW 22Y-E006, BLUE PAINT 22L-E004, BLACK 22A-E001. RED PAINT TO BE ENNIS-FLINT EF SERIES LOW VOC SOLVENT BASED TRAFFIC PAINT PRODUCT CODE: 9855154 OR APPROVED EQUAL.

SURFACE PREPARATION: SURFACES WILL BE CLEAN, DAY AND FREE FROM LOOSE OR PEELING SURFACES. DO NOT APPLY WHEN AIR TEMPERATURES ARE BELOW 50°F. OR WHEN THE RELATIVE HUMIDITY EXCEEDS 85%, OR WHEN THE TEMPERATURE FALLS BELOW THE DEW POINT. IT IS RECOMMENDED TO PLACE AN INCONSPICUOUS TEST STRIP TO DETERMINE IF THE NEW ASPHALT SURFACES HAVE CURED SUFFICIENTLY TO PAINT. WAIT 24 HOURS AFTER A RAIN TO PAINT ASPHALT SURFACES.

APPLICATION RATES: APPLY PAINT AT FILM THICKNESS AND SPREADING RATE AS RECOMMENDED BY THE PAINT SUPPLIER. ALL OF THE NEW ASPHALT SURFACES WILL BE PAINTED WITH TWO (2) COATS OF 15.0 MILS WET, 8.0 MILS DRY. THE FIRST COAT MUST BE COMPLETELY DRY BEFORE THE SECOND COAT IS APPLIED. WAIT A MINIMUM OF 48 HOURS BETWEEN THE ASPHALT PLACEMENT/SEAL COAT AND THE PERMANENT TRAFFIC STRIPING AND MARKINGS.

IF 48 HOURS CANNOT BE ACHIEVED CONTRACTOR TO PROVIDE TWO (2) ADDITIONAL COATS OF 15.0 MILS WET, 8.0 MILS DRY 10 DAYS AFTER INITIAL PLACEMENT AT NO ADDITIONAL COST TO THE OWNER. THE ADDITIONAL COATS ARE TO BE COORDINATED WITH THE OWNER AND WILL NOT DISRUPT OPERATIONS.

STATE OF TEXAS
SEAN S. SMITH
113308
REGISTERED PROFESSIONAL ENGINEER
5/2/25

Revision / Date

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SMITHSON VALLEY HIGH SCHOOL NEW WRESTLING AND ROTC BUILDING
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OVERALL SITE GRADING PLAN

Job No. 01957-02-04	Sheet No. 100% S&S C4.0
Drawn By: JCM	
Date: 04/14/25	

ISSUE FOR PERMIT/CONSTRUCTION

GRADING KEYNOTES

1. NEW LIGHT-DUTY RIGID CONCRETE PAVEMENT. REFERENCE DETAIL NO. 6, SHEET C8.0.
2. NEW HEAVY-DUTY RIGID CONCRETE PAVEMENT. REFERENCE DETAIL NO. 6, SHEET C8.0.
3. NEW CONCRETE PAVEMENT TO MATCH EXISTING. PROVIDE EXPANSION JOINT AT JUNCTURE PER DETAIL NO. 6, SHEET C8.0.
4. NEW 6" MONOLITHIC CONCRETE CURB. REFERENCE DETAIL NO. 6, SHEET C8.0.
5. NEW FLUSH MONOLITHIC CONCRETE CURB TO ALLOW FOR ACCESS/DRAINAGE. REFERENCE DETAIL NO. 6, SHEET C8.0.
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8. EXISTING CONCRETE CURB TO REMAIN IN PLACE.
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10. NEW CONCRETE SIDEWALK/FLATWORK TO MATCH EXISTING. PROVIDE EXPANSION JOINT AT JUNCTURE PER DETAIL NO. 5C, SHEET C8.0.
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13. NEW CONCRETE COMBINATION SIDEWALK/RETAINING WALL. REFERENCE PLAN FOR TOP AND BOTTOM ELEVATIONS. REFERENCE DETAIL NO. 9, SHEET C8.1.
14. NEW MODULAR BLOCK RETAINING WALL. REFERENCE PLAN FOR TOP AND BOTTOM ELEVATIONS. REFERENCE DETAIL SHEET C8.3.
15. NEW STRUCTURAL RETAINING WALL. REFERENCE STRUCTURAL PLANS.
16. PROPOSED WHEEL STOP. REFERENCE DETAIL NO. 5, SHEET C8.4.
17. NEW PAVEMENT MARKINGS. REFERENCE DIMENSIONAL CONTROL PLANS.
18. NEW 6' CHAIN LINK FENCE. REFERENCE DETAIL NO. 1, SHEET C8.4.
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35. EXISTING TREE TO REMAIN.
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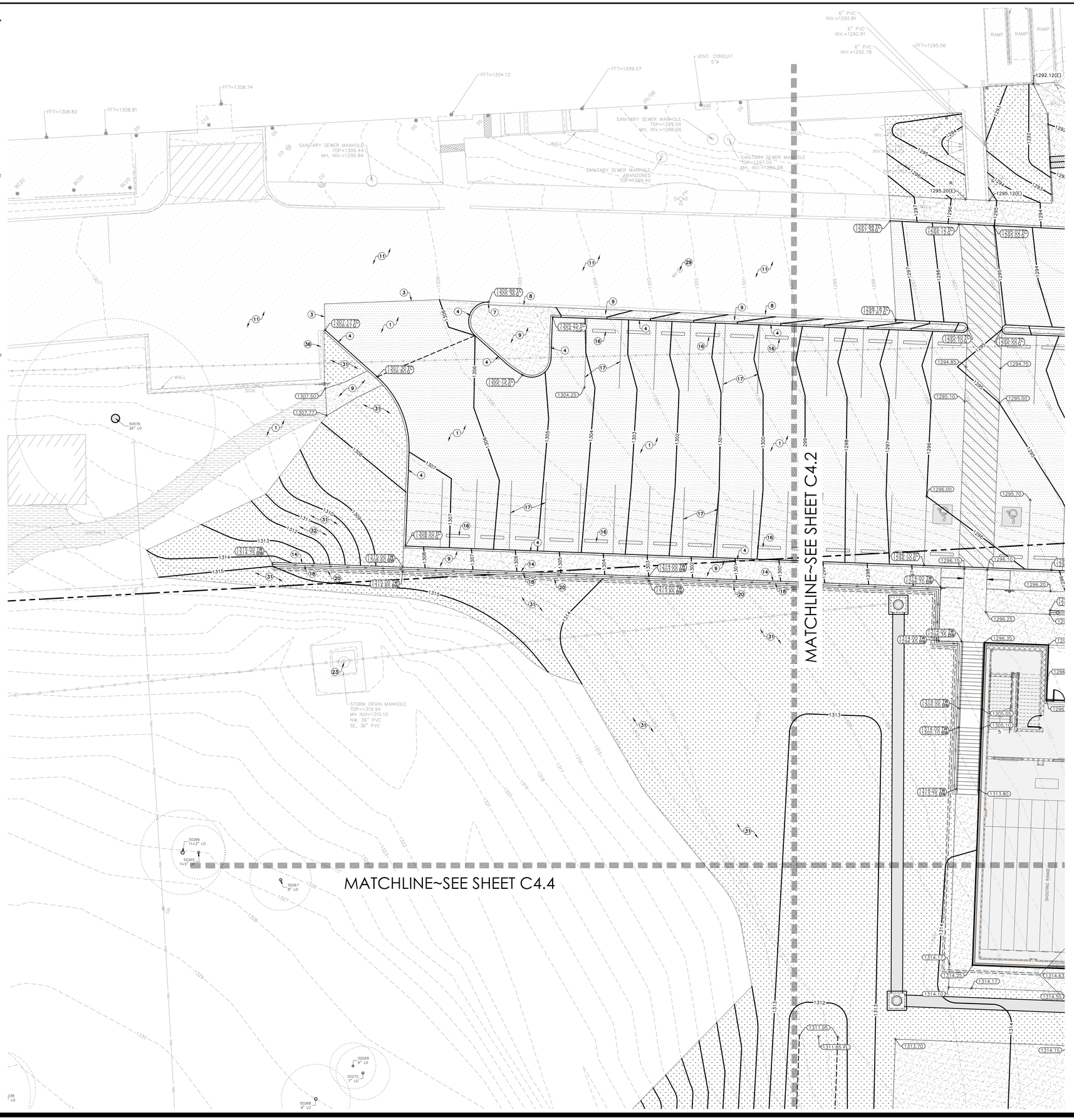

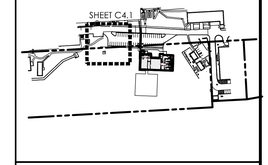

KEY MAP
NOT TO SCALE

SCALE: 1"=10'
10 5 0 10

LEGEND

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STATE OF TEXAS
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REGISTERED PROFESSIONAL ENGINEER
FINAL DOCUMENTS
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Revision / Date

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SITE GRADING PLAN

Job No. 01967-02-04	Sheet No. 100% S&S C4.1
Drawn By: JCM	
Date: 04/14/25	

ISSUE FOR PERMIT/CONSTRUCTION

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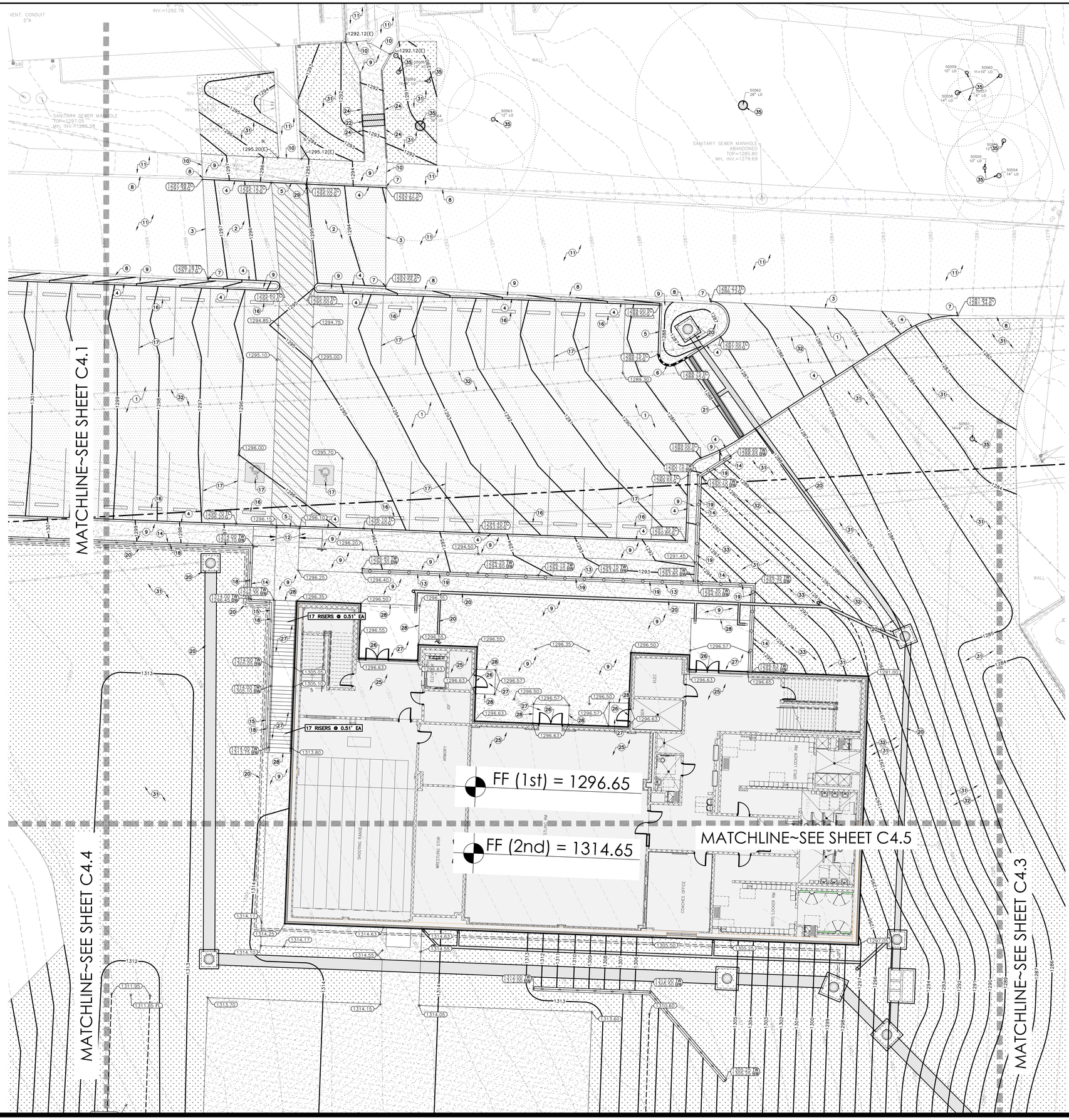

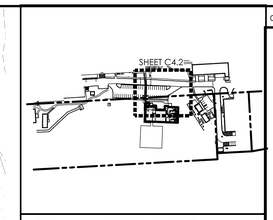

KEY MAP
NOT TO SCALE

SCALE: 1"=10'
10 5 0 10

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STATE OF TEXAS
SEAN S. SMITH
113308
REGISTERED
PROFESSIONAL ENGINEER
5/14/25

Revision / Date

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SITE GRADING PLAN

Job No. 01957-02-04	Sheet No. 100% SAS C4.2
Drawn By: JCM	
Date: 04/14/25	

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GRADING KEYNOTES

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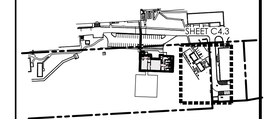

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SITE GRADING PLAN

Job No. 01967-02-04	Sheet No. 100% S&S
Drawn By: JCM	C4.3
Date: 04/14/25	

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7. NEW CONCRETE CURB TO MATCH EXISTING. CONTRACTOR TO PROVIDE EXPANSION JOINT W/ 2 EA. #4 18" DOWELS DRILLED INTO EXISTING CONCRETE AT JUNCTURE.
8. EXISTING CONCRETE CURB TO REMAIN IN PLACE.
9. NEW CONCRETE SIDEWALK/FLATWORK. REFERENCE DETAIL NO. 5, SHEET C8.0.
10. NEW CONCRETE SIDEWALK/FLATWORK TO MATCH EXISTING. PROVIDE EXPANSION JOINT AT JUNCTURE PER DETAIL NO. 5C, SHEET C8.0.
11. EXISTING CONCRETE SIDEWALK/FLATWORK/RIGID PAVEMENT/STRUCTURAL CONCRETE TO REMAIN IN PLACE.
12. NEW 6' SIDEWALK RAMP. REFERENCE DETAIL NO.8, SHEET C8.0.
13. NEW CONCRETE COMBINATION SIDEWALK/RETAINING WALL. REFERENCE PLAN FOR TOP AND BOTTOM ELEVATIONS. REFERENCE DETAIL NO. 9, SHEET C8.1.
14. NEW MODULAR BLOCK RETAINING WALL. REFERENCE PLAN FOR TOP AND BOTTOM ELEVATIONS. REFERENCE DETAIL SHEET C8.3.
15. NEW STRUCTURAL RETAINING WALL. REFERENCE STRUCTURAL PLANS.
16. PROPOSED WHEEL STOP. REFERENCE DETAIL NO. 5, SHEET C8.4.
17. NEW PAVEMENT MARKINGS. REFERENCE DIMENSIONAL CONTROL PLANS.
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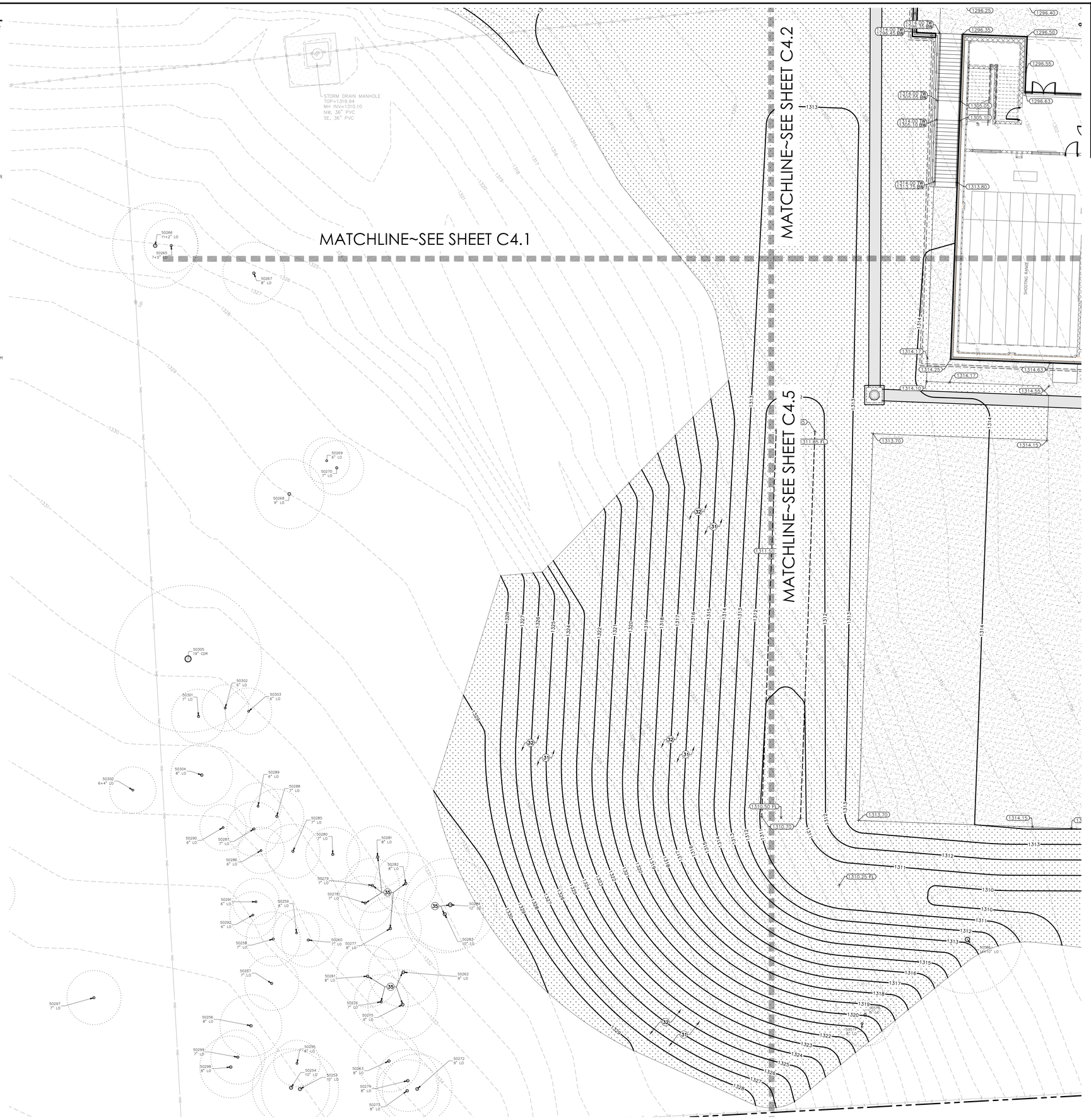
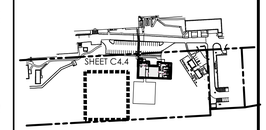
22. NEW SIDEWALK DRAIN BOX. REFERENCE DETAIL NO. 10, SHEET C8.1.
23. EXISTING DRAINAGE STRUCTURE TO REMAIN. REFERENCE DRAINAGE PLANS.
24. CONTRACTOR TO PROVIDE THICKENED EDGE ADJACENT TO TRENCH DRAIN. REFERENCE DETAIL NO. 5E, SHEET C8.0.
25. NEW BUILDING. REFERENCE ARCHITECTURAL PLANS.
26. PROVIDE 1/4" DROP FROM FINISH FLOOR ELEVATIONS SHOWN ON PLAN AND SLOPE AWAY FROM BUILDING AT 2% (MAX).
27. NEW STRUCTURAL CONCRETE. COORDINATE WITH STRUCTURAL PLANS.
28. NEW CONCRETE PAVEMENT/FLATWORK TO MATCH STRUCTURAL CONCRETE. REFERENCE DETAIL NO. 5F, SHEET C8.0.
29. EXISTING UTILITY TO REMAIN. CONTRACTOR TO ADJUST LOCATION AND TO FINISH GRADE AS NECESSARY.
30. EXISTING POWER POLES/OVERHEAD ELECTRIC TO REMAIN.
31. CONTRACTOR TO PROVIDE NEW BERMUDA SOLID SOD. REFERENCE LANDSCAPE NOTES.
32. CONTRACTOR TO SLOPE AT 4:1 MAX.
33. CONTRACTOR TO SLOPE AT 5:1 MAX.
34. CONTRACTOR TO GRADE AREA TO DRAIN AND MATCH EXISTING.
35. EXISTING TREE TO REMAIN.
36. EXISTING WALL TO REMAIN.





KEY MAP
NOT TO SCALE

SCALE: 1"=10'
10 5 0 10

LEGEND

	PROPERTY LINE
	NEW CONCRETE FLATWORK
	NEW CONCRETE PAVEMENT
	NEW WASHED RIVER ROCK
	NEW SOD
+ 802.00	EXISTING SPOT ELEVATION
802.00 +	PROPOSED SPOT ELEVATION
802	EXISTING CONTOUR
802	PROPOSED CONTOUR
	GRADE BREAK
	CHAIN LINK FENCE
	ORNAMENTAL FENCE
	WOODEN FENCE
	FLOW LINE
RCP	REINFORCED CONCRETE
PVC	PIPE POLYVINYL CHLORIDE INVERT
INV	ELEVATION OF PIPE
TW	TOP OF WALL ELEVATION
BW	BOTTOM OF WALL ELEVATION
TOP	TOP OF MANHOLE ELEVATION
TOG	TOP OF GRATE ELEVATION
TC	TOP OF CURB
G	GUTTER
SW	TOP OF SIDEWALK
NG	NATURAL GROUND
ESM'T	EASEMENT
ROW	RIGHT OF WAY
HP	HIGH POINT
E.G.T.CATV	ELECTRIC, GAS, TELEPHONE & CABLE T.V
	SIDEWALK RAMP
	DRAINAGE FLOW ARROW
	PROPOSED TRAFFIC SIGN

Revision / Date

STATE OF TEXAS
SEAN S. SMITH
113308
REGISTERED
PROFESSIONAL ENGINEER
5/14/25

Project:
SMITHSON VALLEY HIGH SCHOOL NEW WRESTLING AND ROTC BUILDING
FOR
COMAL ISD
SPRING BRANCH, TX

· Engineers
· Surveyors
· Planners
Moy Tarin Ramirez Engineers, LLC
TBPELS: ENGINEERING F-5297/SURVEYING F-10131500
12770 CIMARRON PATH, SUITE 100
SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051
FAX: (210) 698-5085

Huckabee
www.huckabee-inc.com
800.687.1229

SITE GRADING PLAN

Job No. 01957-02-04	Sheet No. 100% S&S C4.4
Drawn By: JCM	
Date: 04/14/25	

ISSUE FOR PERMIT/CONSTRUCTION

R:\Comal ISD\Smithson Valley (4-1-2023) #CTC & Wrestling\Drawings\24250_C4-4_GRAD.dwg 2025/05/02 10:08am jmoncrieffeo

GRADING KEYNOTES

1. NEW LIGHT-DUTY RIGID CONCRETE PAVEMENT. REFERENCE DETAIL NO. 6, SHEET C8.0.
2. NEW HEAVY-DUTY RIGID CONCRETE PAVEMENT. REFERENCE DETAIL NO. 6, SHEET C8.0.
3. NEW CONCRETE PAVEMENT TO MATCH EXISTING. PROVIDE EXPANSION JOINT AT JUNCTURE PER DETAIL NO. 6, SHEET C8.0.
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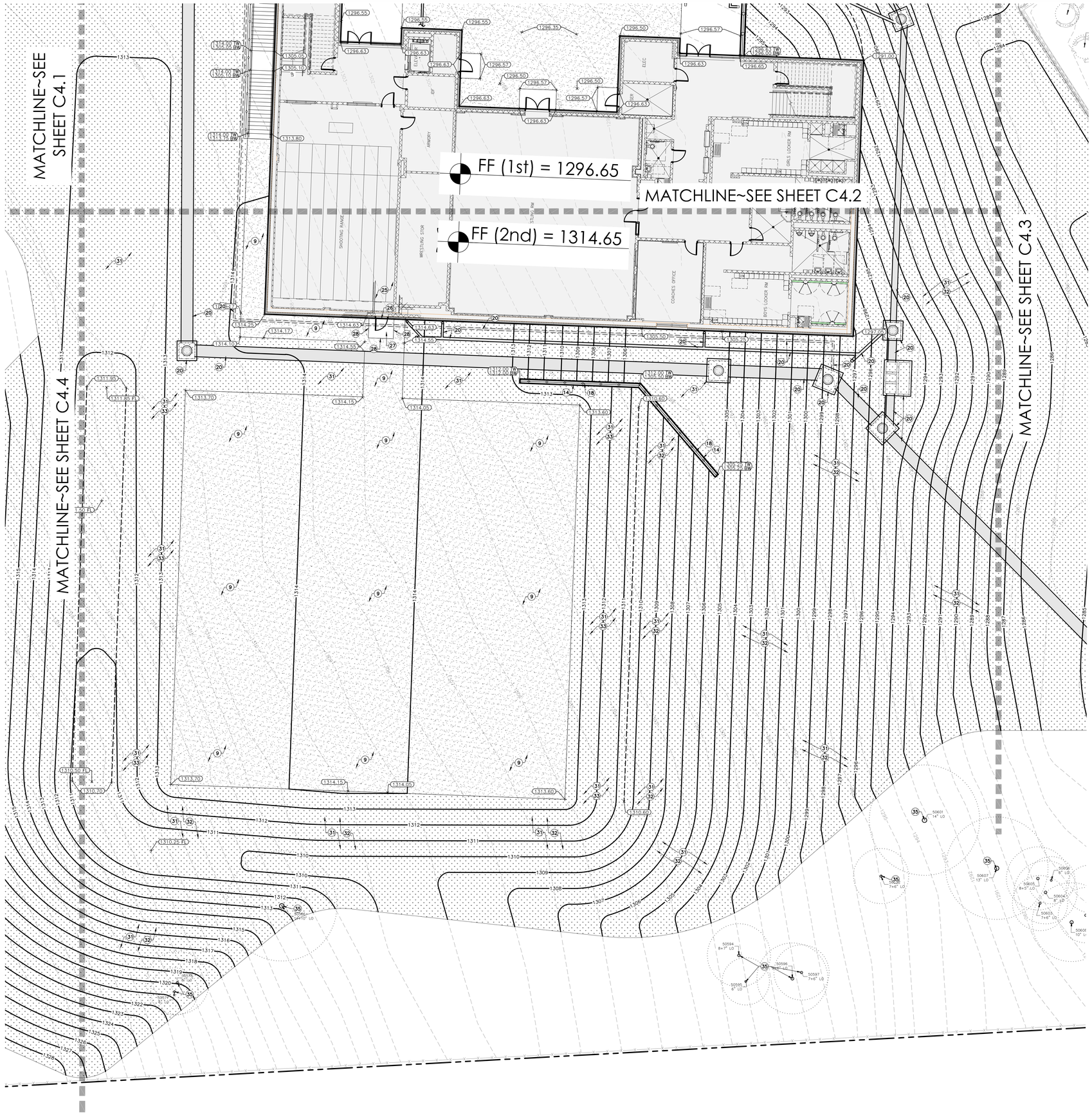

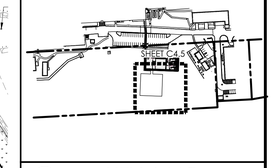

KEY MAP
NOT TO SCALE

SCALE: 1"=10'
10 5 0 10

LEGEND

	PROPERTY LINE
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	NEW CONCRETE PAVEMENT
	NEW WASHED RIVER ROCK
	NEW SOD
+802.00	EXISTING SPOT ELEVATION
802.00+	PROPOSED SPOT ELEVATION
802	EXISTING CONTOUR
802	PROPED CON CONTOUR
	GRADE BREAK
	CHAIN LINK FENCE
	ORNAMENTAL FENCE
	WOODEN FENCE
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RCP	REINFORCED CONCRETE
PVC	PIPE POLYVINYL CHLORIDE INVERT
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STATE OF TEXAS
SEAN S. SMITH
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5/2/25

Revision / Date

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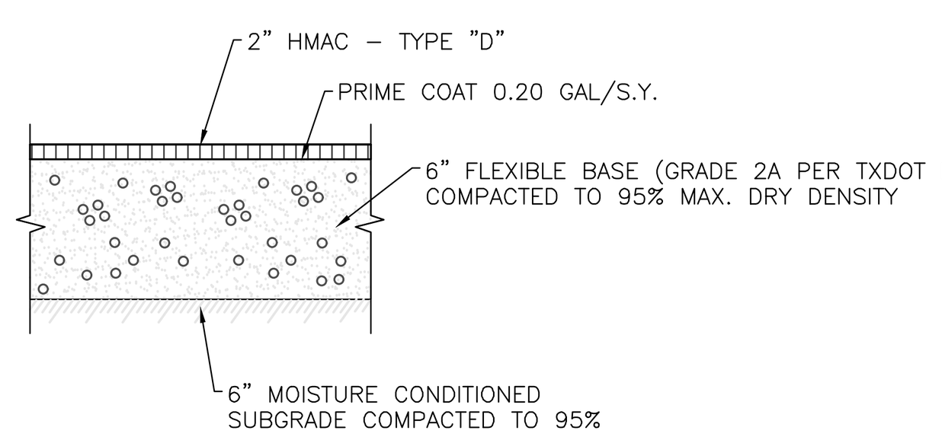
SITE GRADING PLAN

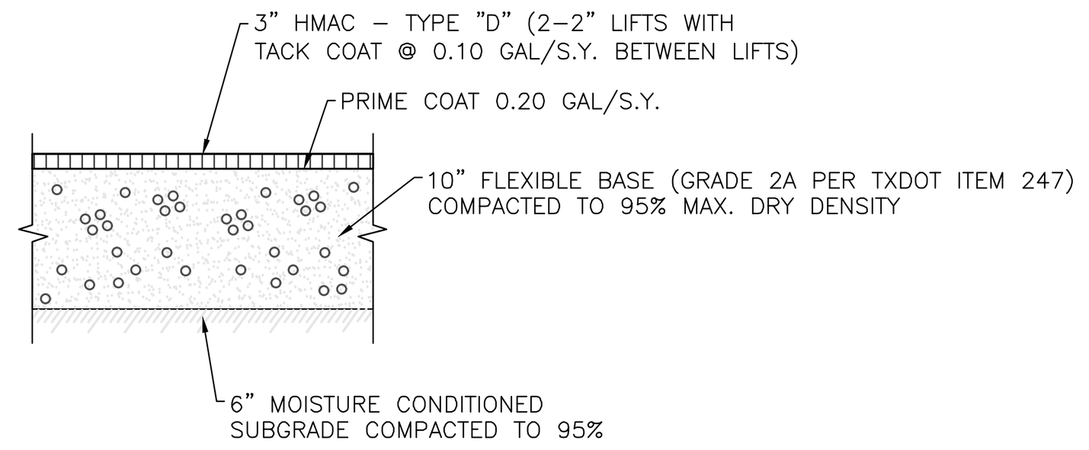
Job No. 01957-02-04	Sheet No. 100% S&S C4.5
Drawn By: JCM	
Date: 04/14/25	

ISSUE FOR PERMIT/CONSTRUCTION

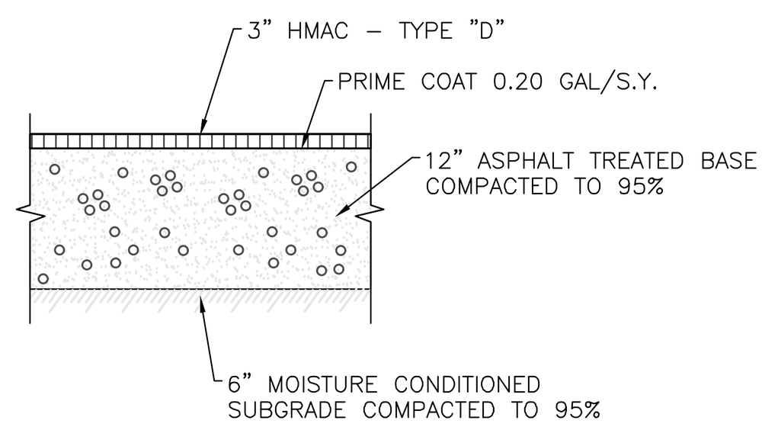
P:\Comal ISD\Smithson Valley HS \2023 ROTC & Wrestling\Drawings\2450_C4.5_GRAD.dwg 2025/05/07 10:46am jmonsonio



A. LIGHT DUTY ASPHALT PAVEMENT SECTION



B. HEAVY DUTY ASPHALT PAVEMENT SECTION



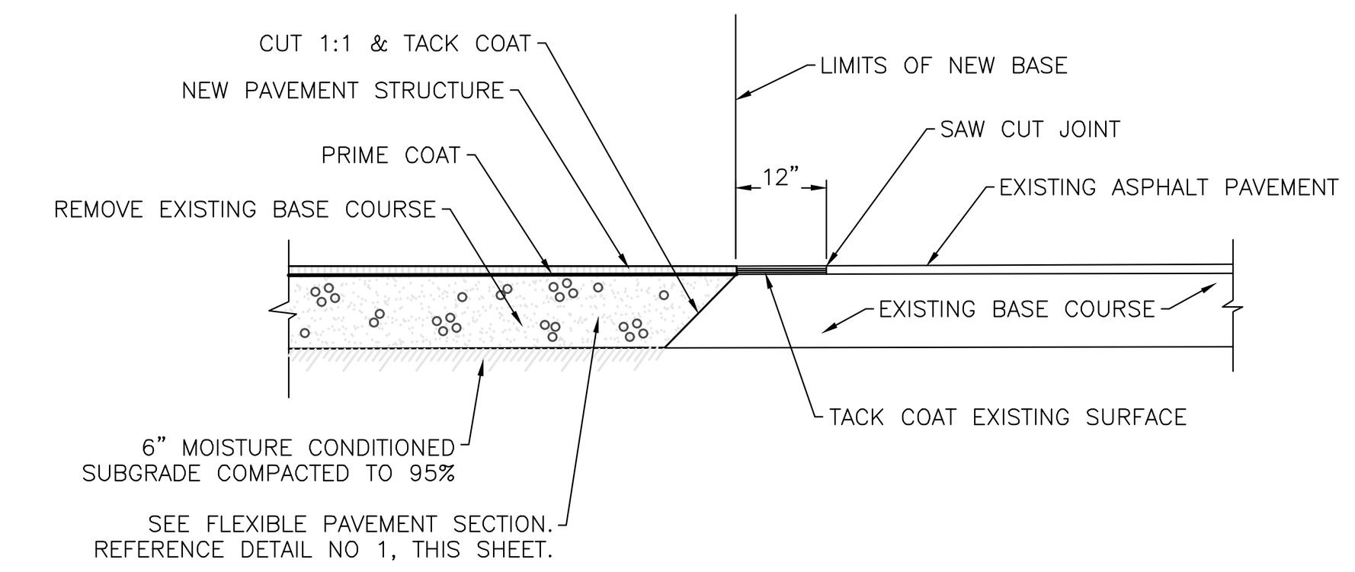
C. ASPHALT PATCH SECTION IN PUBLIC ROW

NOTES:

1. ALL SUBGRADE IN PAVEMENT AREAS SHALL PASS A PROOF ROLL OBSERVED BY THE GEOTECHNICAL ENGINEER PRIOR TO FLEXIBLE BASE PLACEMENT.
2. PAVEMENT RECOMMENDATIONS ARE BASED ON THE GEOTECHNICAL EVALUATION REPORT PROVIDED BY ENCON INTERNATIONAL INC., DATED MARCH 14TH, 2025.

1 FLEXIBLE PAVEMENT DETAIL

SCALE: NONE

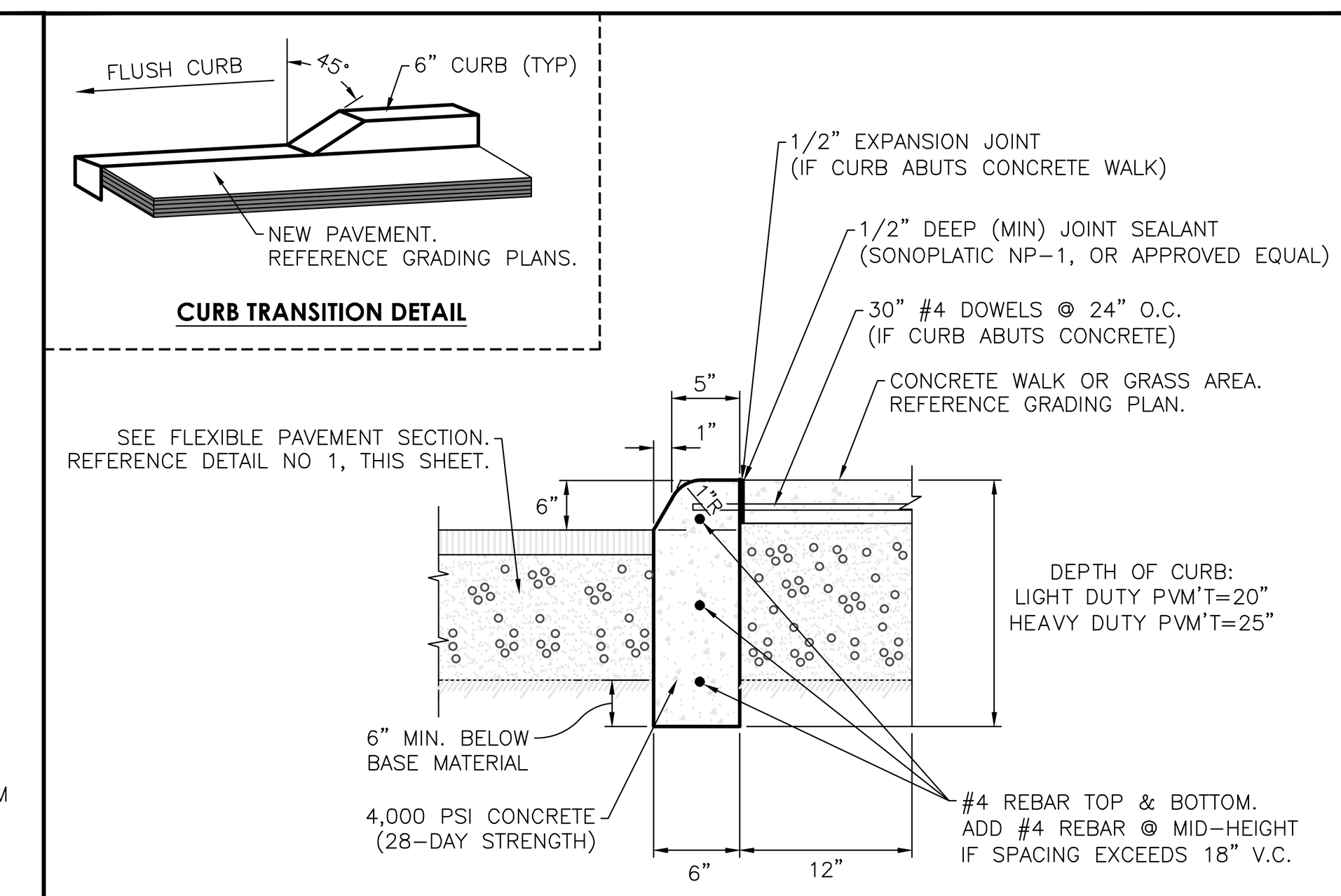


NOTES:

1. APPLY PRIMER IN ACCORDANCE WITH TEXAS DEPARTMENT OF TRANSPORTATION STANDARDS.
   A. APPLY PRIMER EVENLY AND SMOOTHLY ON BASE OR SUB-BASE OVER SUB-GRADE SURFACE AT UNIFORM RATE NOT TO EXCEED 0.20 GALLONS/SQUARE YARD OF SURFACE OR AS APPROVED BY CIVIL ENGINEER.
   B. USE CLEAN SAND TO BLOT EXCESS PRIMER.
2. APPLY TACK COAT IN ACCORDANCE WITH TEXAS DEPARTMENT OF TRANSPORTATION STANDARDS.
   A. APPLY AT A RATE OF 0.11 GALLONS/SQUARE YARD OR SURFACE OR AS APPROVED BY CIVIL ENGINEER.
   B. APPLY TACK COAT TO CONTACT SURFACES OF EXISTING ASPHALT SURFACES WHERE THE NEW ENTRANCE DRIVES TRANSITION TO THE EXISTING STREET.
3. PLACE ASPHALT WITHIN TWENTY-FOUR (24) HOURS OF APPLYING PRIMER OR TACK COAT.

2 ASPHALT PAVEMENT JUNCTURE DETAIL

SCALE: NONE

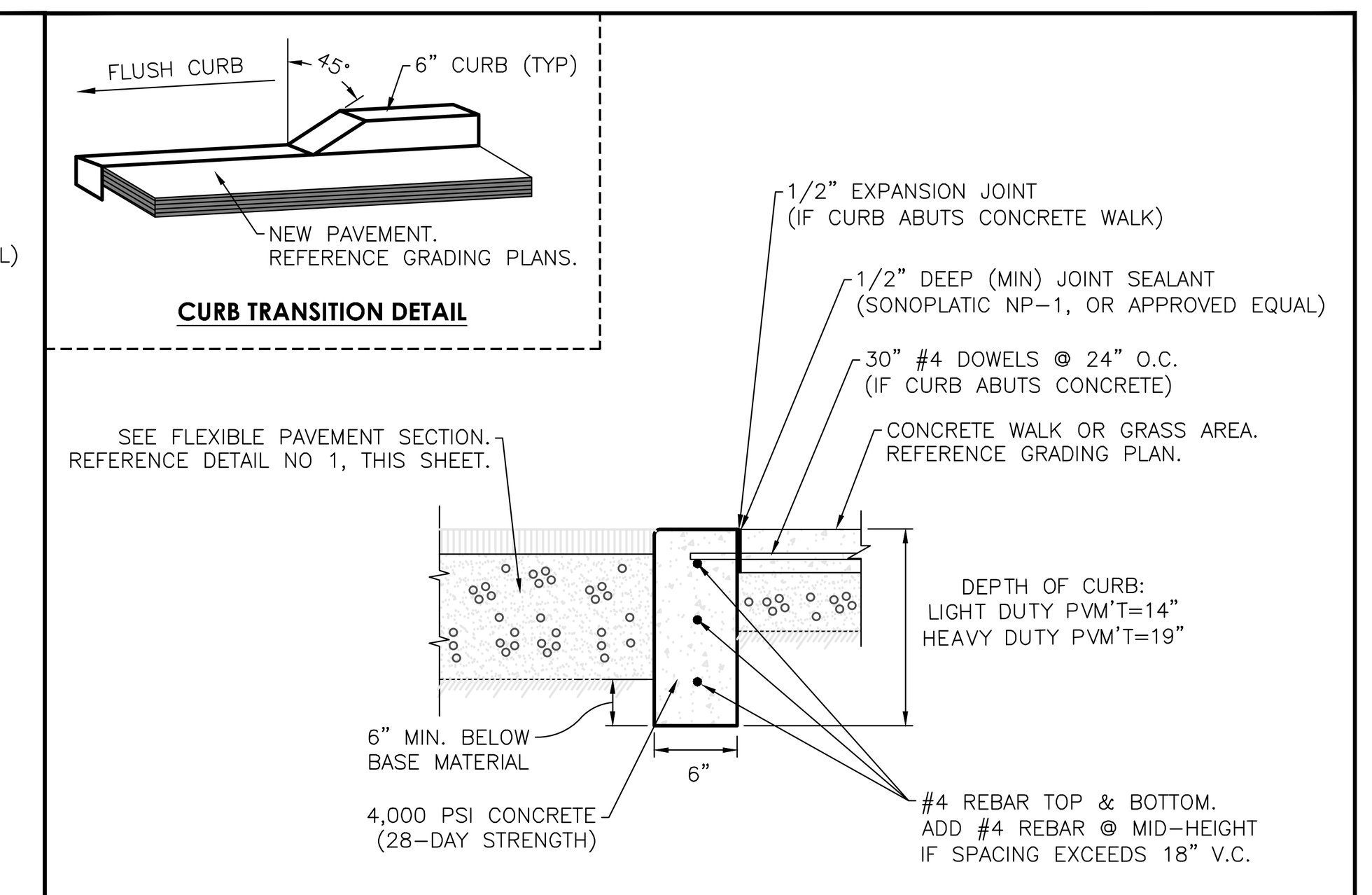


NOTES:

1. PROVIDE CONTROL JOINTS @ 15' O.C. & EXPANSION JOINTS @ 60' O.C.
2. SEAL ALL JOINTS WITH JOINT SEALANT (MASTERSEAL NP-1, OR APPROVED EQUAL).
3. CONCRETE CURB 4,000 PSI. SLUMP = 3.0" ± 1.0".
4. WATER TO CEMENT RATIO (LBS/LBS) CANNOT EXCEED 0.50.

3 CONCRETE CURB DETAIL

SCALE: NONE

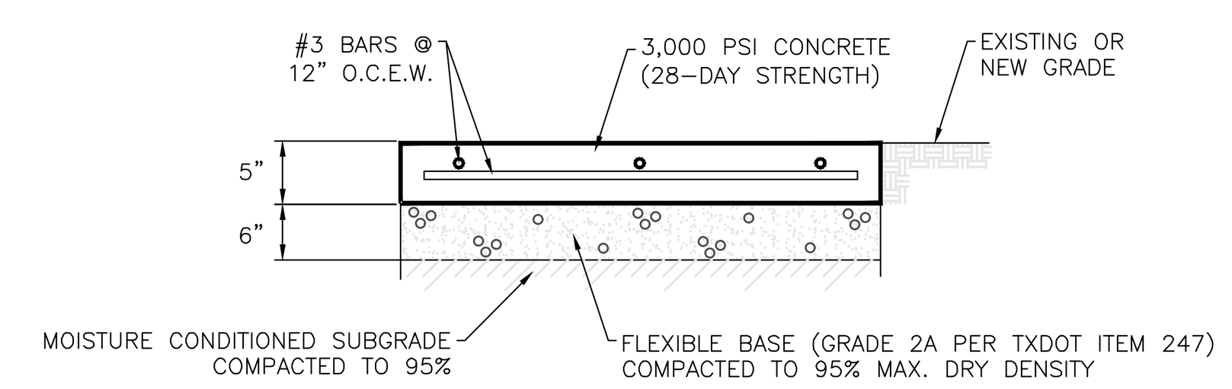


NOTES:

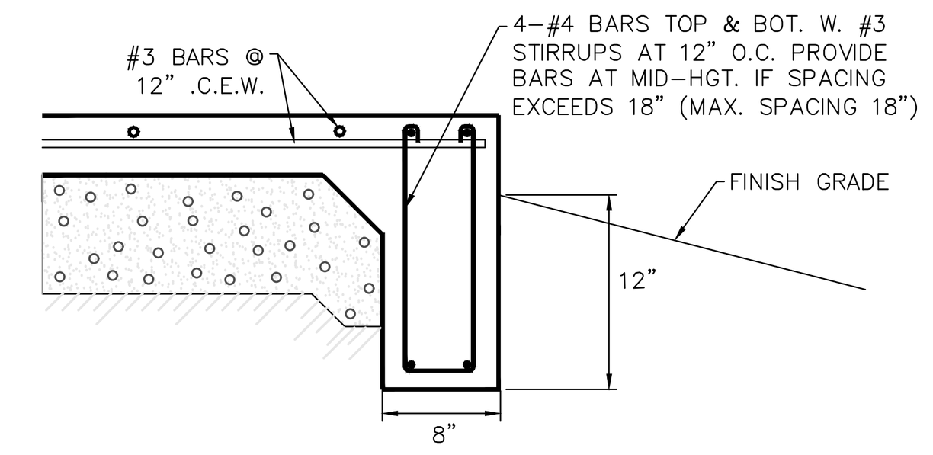
1. PROVIDE CONTROL JOINTS @ 15' O.C. & EXPANSION JOINTS @ 60' O.C.
2. SEAL ALL JOINTS WITH JOINT SEALANT (MASTERSEAL NP-1, OR APPROVED EQUAL).
3. CONCRETE CURB 4,000 PSI. SLUMP = 3.0" ± 1.0".
4. WATER TO CEMENT RATIO (LBS/LBS) CANNOT EXCEED 0.50.

4 HEADER (FLUSH) CURB DETAIL

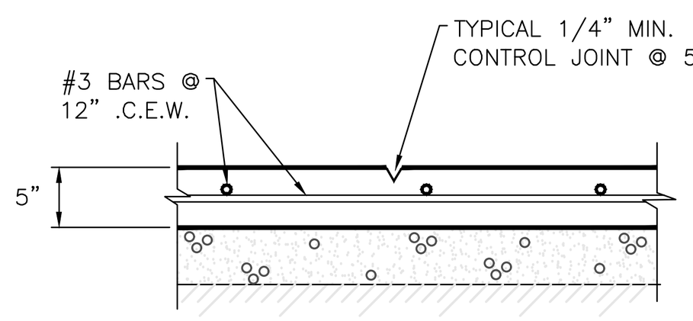
SCALE: NONE



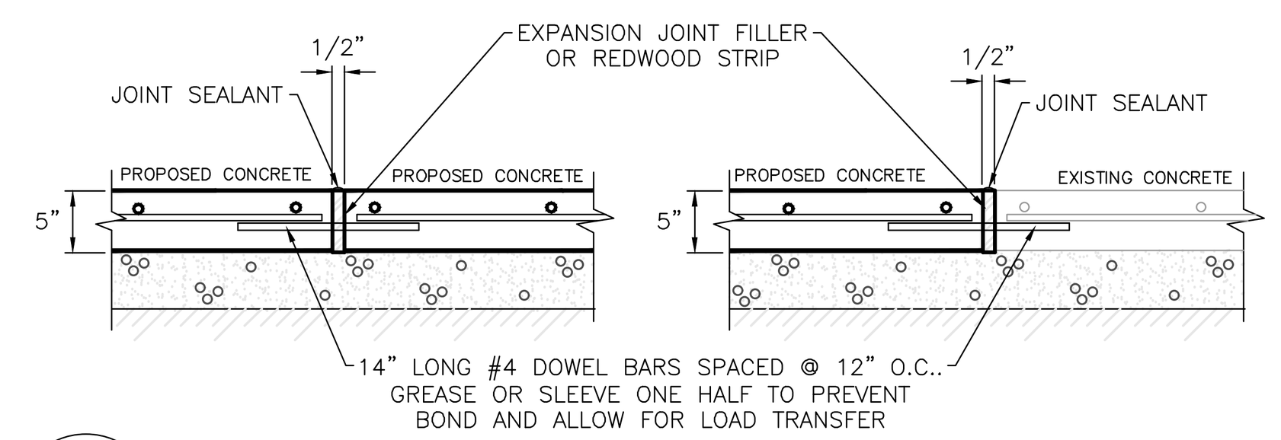
(A) **TYPICAL CONCRETE SIDEWALK/FLATWORK SECTION**
SCALE: NONE



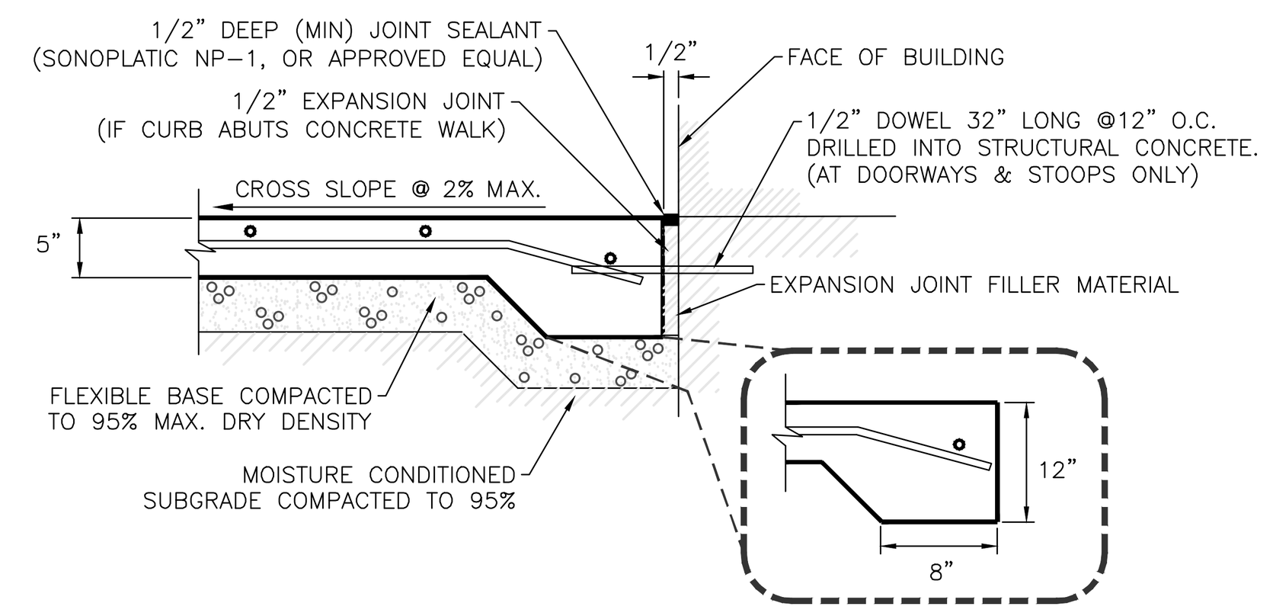
(E) **THICKENED EDGE**
SCALE: NONE



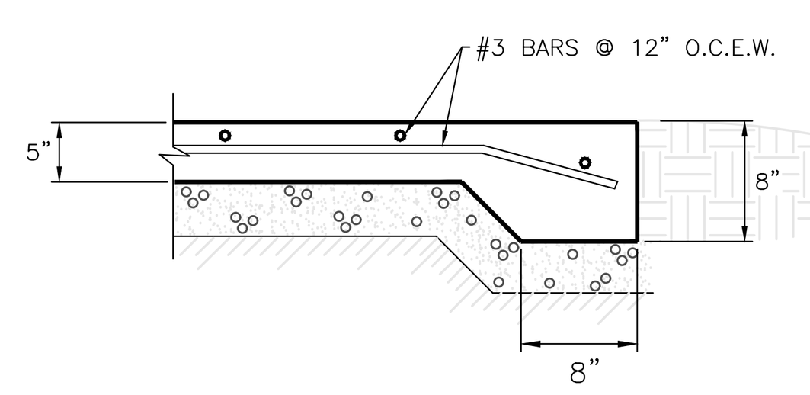
(B) **TYPICAL CONTROL JOINT**
SCALE: NONE



(C) **TYPICAL EXPANSION JOINT**
SCALE: NONE



(F) **TYPICAL EXPANSION JOINT @ CONCRETE WALK/BLDG OR CONCRETE PAVEMENT INTERFACE**
SCALE: NONE



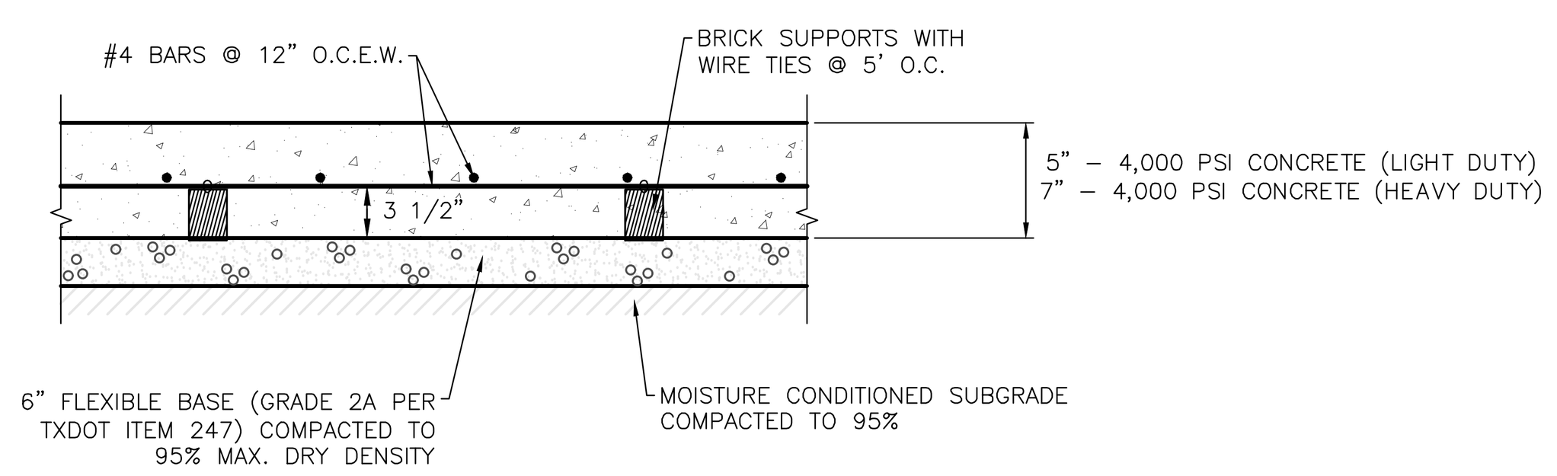
(D) **EDGE ADJACENT TO NATURAL GRADE**
SCALE: NONE

GENERAL NOTES FOR CONCRETE SIDEWALKS:

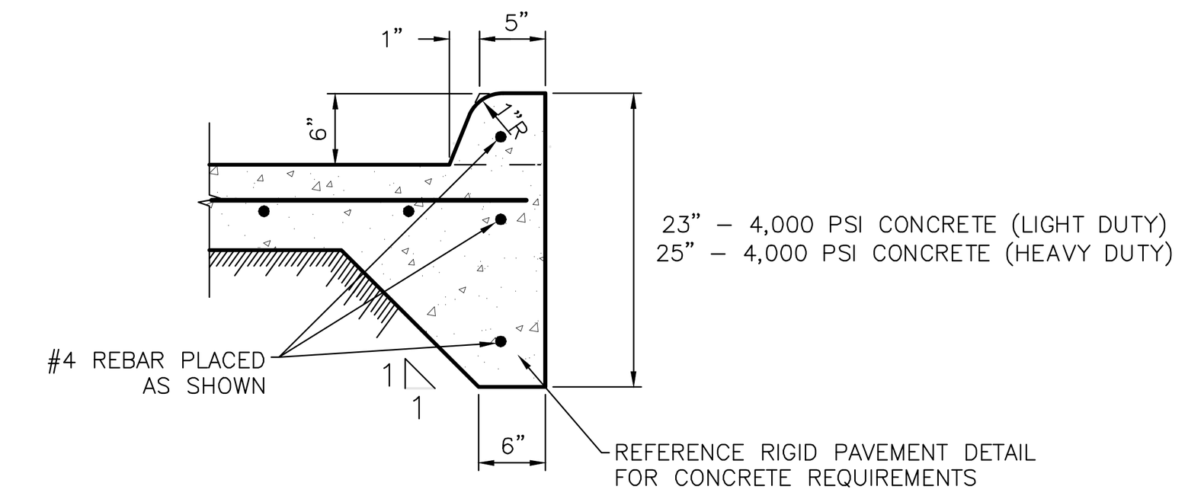
1. ALL SIDEWALKS SHALL BE A MINIMUM 3000 PSI CONCRETE WITH NO. 3 BARS AT 12" INCHES ON CENTER.
2. SLOPE SIDEWALKS AWAY FROM BUILDING AS INDICATED ON DRAWINGS OR AT 2% MAX.
3. PROVIDE SIDEWALK WITH A HORIZONTAL (CROSS) BRUSH FINISH ON ALL SURFACES.
4. GROOVE CONTRACTION JOINTS SHALL BE SPACED 5 FT. ON CENTERS, WITH 1/2" ELASTOMERIC EXPANSION JOINTS AT EVERY 30 FT. IN LARGER AREAS PROVIDE CONTRACTION JOINTS AT 10' O.C.E.W. WITH 1/2" EXPANSION JOINTS AT 30' O.C.E.W.
5. PROVIDE A 1/2" ELASTOMERIC EXPANSION JOINT ALONG NEW BUILDING BETWEEN ALL NEW SIDEWALK. SEAL WITH NP1 JOINT SEALANT.
6. ALL BASE MATERIAL UNDER SIDEWALKS TO BE MOISTURE CONDITIONED AND COMPACTED.
7. MAINTAIN 2" OF CLEAR COVER BETWEEN REINFORCING STEEL AND EDGE OF CONCRETE, BASE MATERIAL AND/OR SUBGRADE. CONTRACTOR TO PROVIDE BRICK SUPPORTS WITH WIRE TIES FOR REINFORCING STEEL. NO REBAR SHALL EXTEND INTO BASE/SUBGRADE.
8. ALL DOWEL BARS SHALL BE SMOOTH AND ALL REINFORCING BARS SHALL BE DEFORMED "REBAR" BOTH DOWELS AND REBAR SHALL BE AT A MINIMUM GRADE 60.
9. CONTRACTOR SHALL SUBMIT JOINTING PLAN TO ENGINEER FOR REVIEW PRIOR TO PLACEMENT OF CONCRETE.
10. CONCRETE FLATWORK 3,000 PSI. SLUMP = 4.0" ± 1.0".
11. WATER TO CEMENT RATIO (LBS/LBS) CANNOT EXCEED 0.50.
12. CONTRACTOR TO PROVIDE A THICKER EDGE ADJACENT TO ALL NATURAL GRADE AND LANDSCAPE AREAS. REFERENCE SECTION D.
13. CONTRACTOR TO PROVIDE A THICKER EDGE ADJACENT TO ALL EXISTING AND PROPOSED BUILDING FACES. REFERENCE SECTION F.

5 SIDEWALK/FLATWORK DETAILS

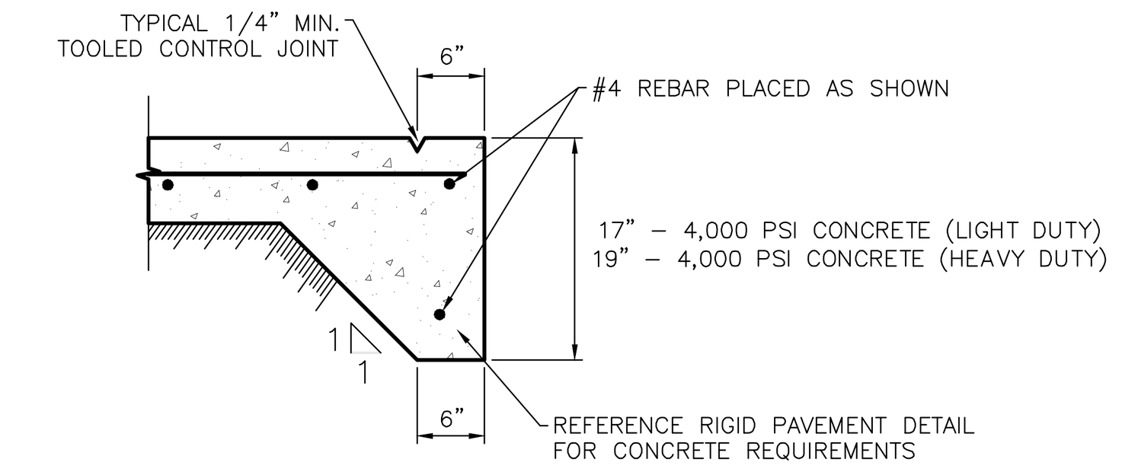
SCALE: NONE



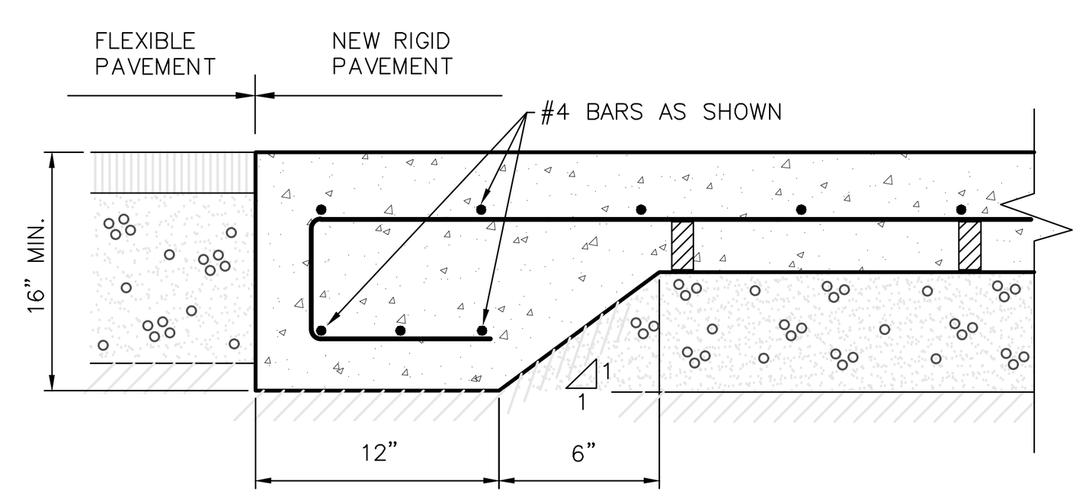
(A) **RIGID PAVEMENT DETAIL**
SCALE: NONE



(B) **MONOLITHIC 6" CONCRETE CURB DETAIL**
SCALE: NONE



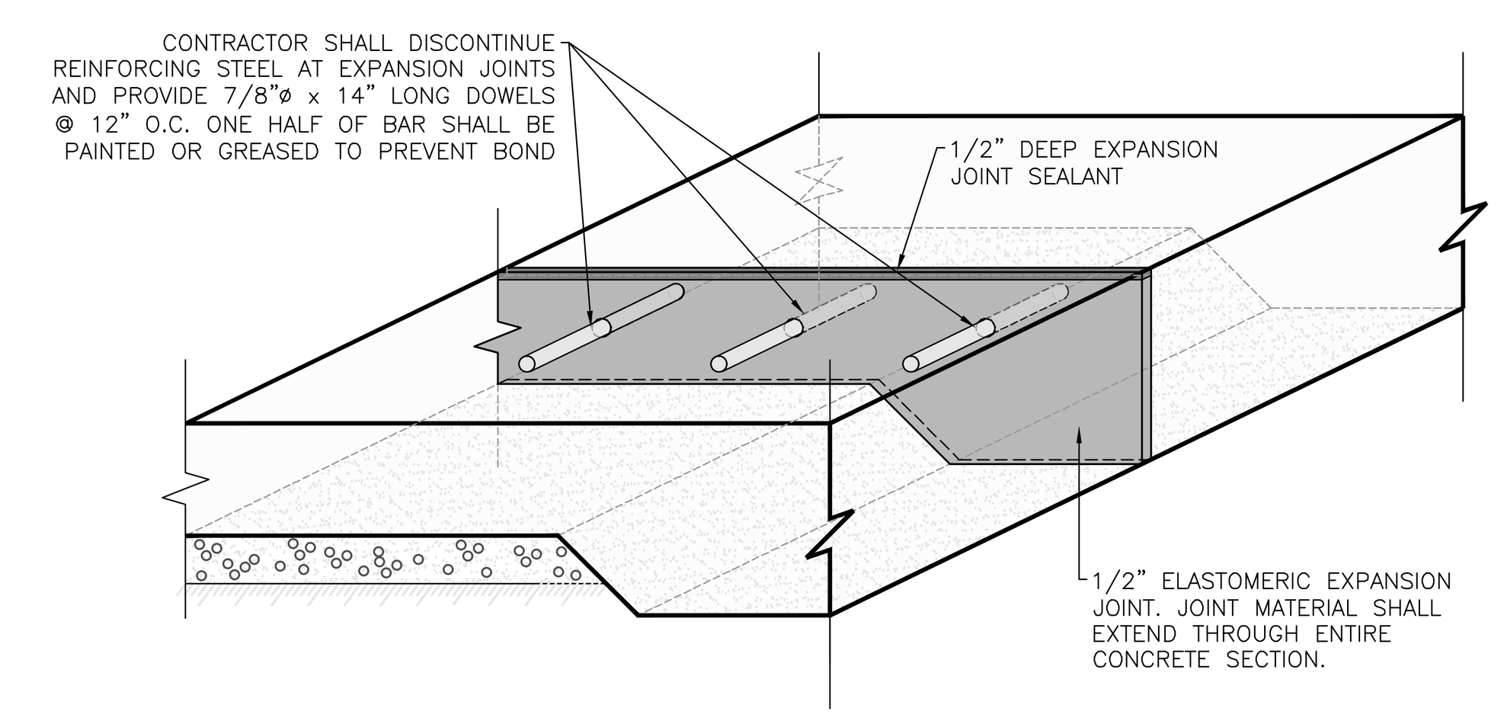
(C) **MONOLITHIC FLUSH CURB AT EDGE OF CONCRETE PAVEMENT**
SCALE: NONE



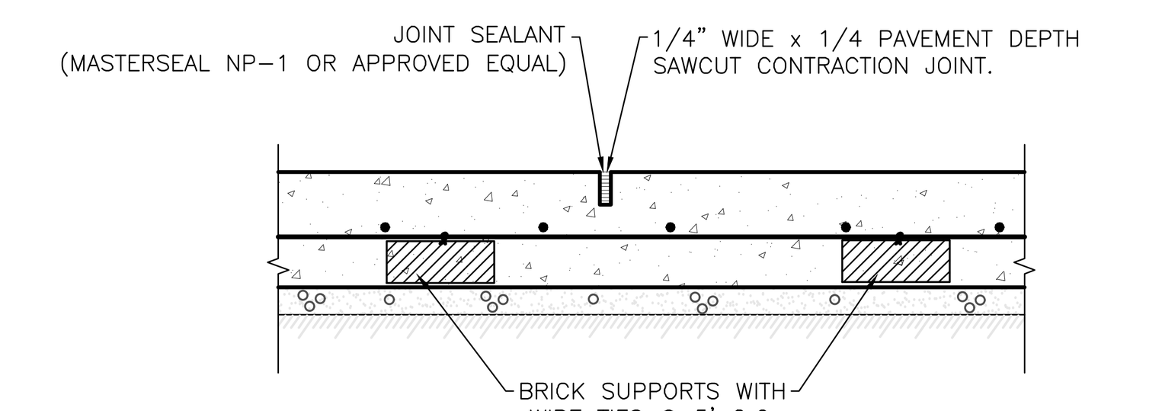
(D) **EDGE SECTION/JUNCTURE DETAIL**
SCALE: NONE

GENERAL NOTES FOR CONCRETE PAVEMENT:

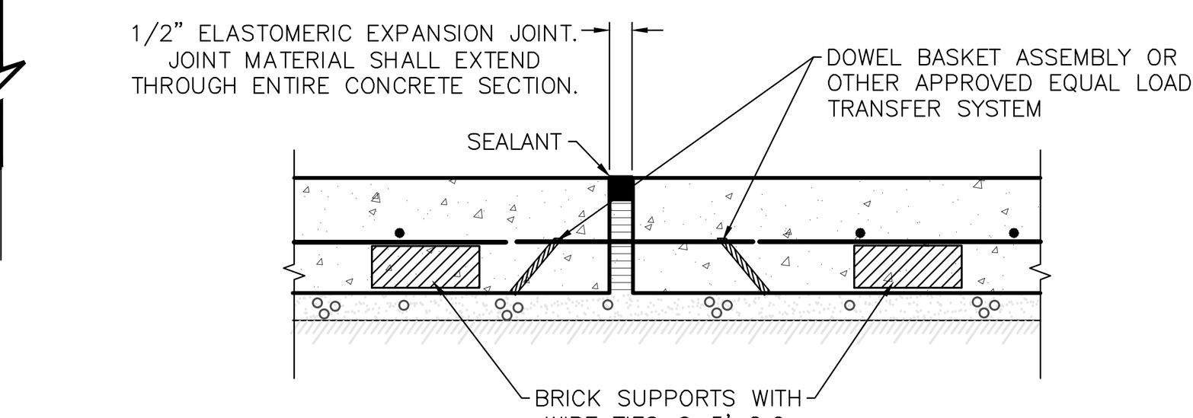
1. PROVIDE CONTROL JOINTS @ 15' O.C.E.W. & EXPANSION JOINTS @ 60' O.C.E.W.
2. SEAL ALL JOINTS WITH JOINT SEALANT (MASTERSEAL NP-1, OR APPROVED EQUAL).
3. CONTRACTOR SHALL SUBMIT JOINTING PLAN TO ENGINEER FOR REVIEW PRIOR TO PLACEMENT OF CONCRETE PAVEMENT.
4. DOWELS SHALL BE PLACED PARALLEL TO EACH OTHER AND PERPENDICULAR TO JOINT FACE.
5. MAINTAIN 2" OF CLEAR COVER BETWEEN REINFORCING STEEL AND EDGE OF CONCRETE, BASE MATERIAL AND/OR SUBGRADE. CONTRACTOR TO PROVIDE BRICK SUPPORTS WITH WIRE TIES FOR REINFORCING STEEL. NO REBAR SHALL EXTEND INTO BASE/SUBGRADE.
6. NO VEHICULAR, CONSTRUCTION, OR PEDESTRIAN TRAFFIC SHALL BE ALLOWED ON CONCRETE PAVEMENT BEFORE SEALANT HAS CURED PER MANUFACTURER SPECIFICATIONS OR 24 HOURS FOLLOWING APPLICATION OF SEALANT, WHICHEVER IS LONGER.
7. CONCRETE PAVEMENT 4,000 PSI. SLUMP = 4.0" ± 1.0".
8. WATER TO CEMENT RATIO (LBS/LBS) CANNOT EXCEED 0.50.
9. PAVEMENT RECOMMENDATIONS ARE BASED ON THE GEOTECHNICAL EVALUATION REPORT PROVIDED BY ENCON INTERNATIONAL INC., DATED MARCH 14TH, 2025.



ISOLATION/EXPANSION JOINT ISOMETRIC VIEW

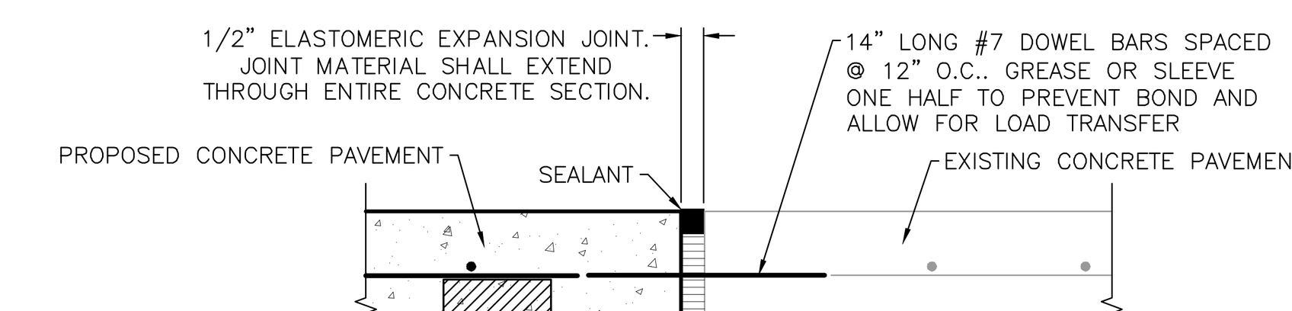


CONTROL JOINT PROFILE VIEW



ISOLATION/EXPANSION JOINT PROFILE VIEW

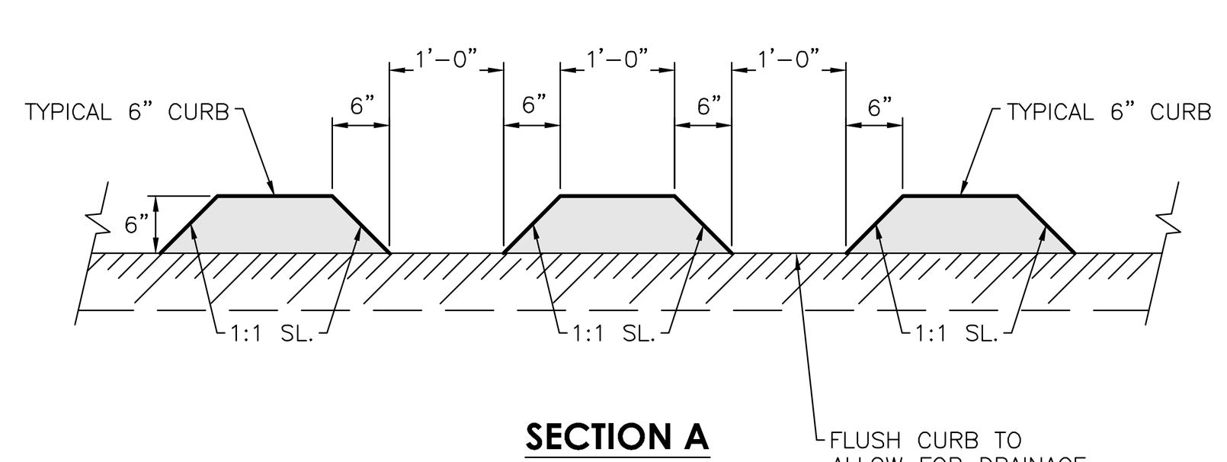
(E) **CONCRETE PAVEMENT EXPANSION JOINT DETAIL**
SCALE: NONE



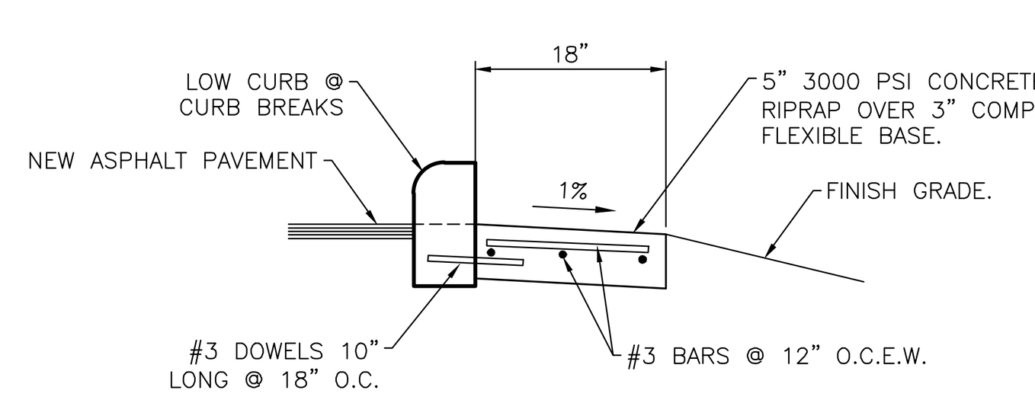
CONCRETE PAVEMENT TO MATCH EXISTING CONCRETE PAVEMENT PROFILE VIEW

6 CONCRETE RIGID PAVEMENT DETAILS

SCALE: NONE



SECTION A



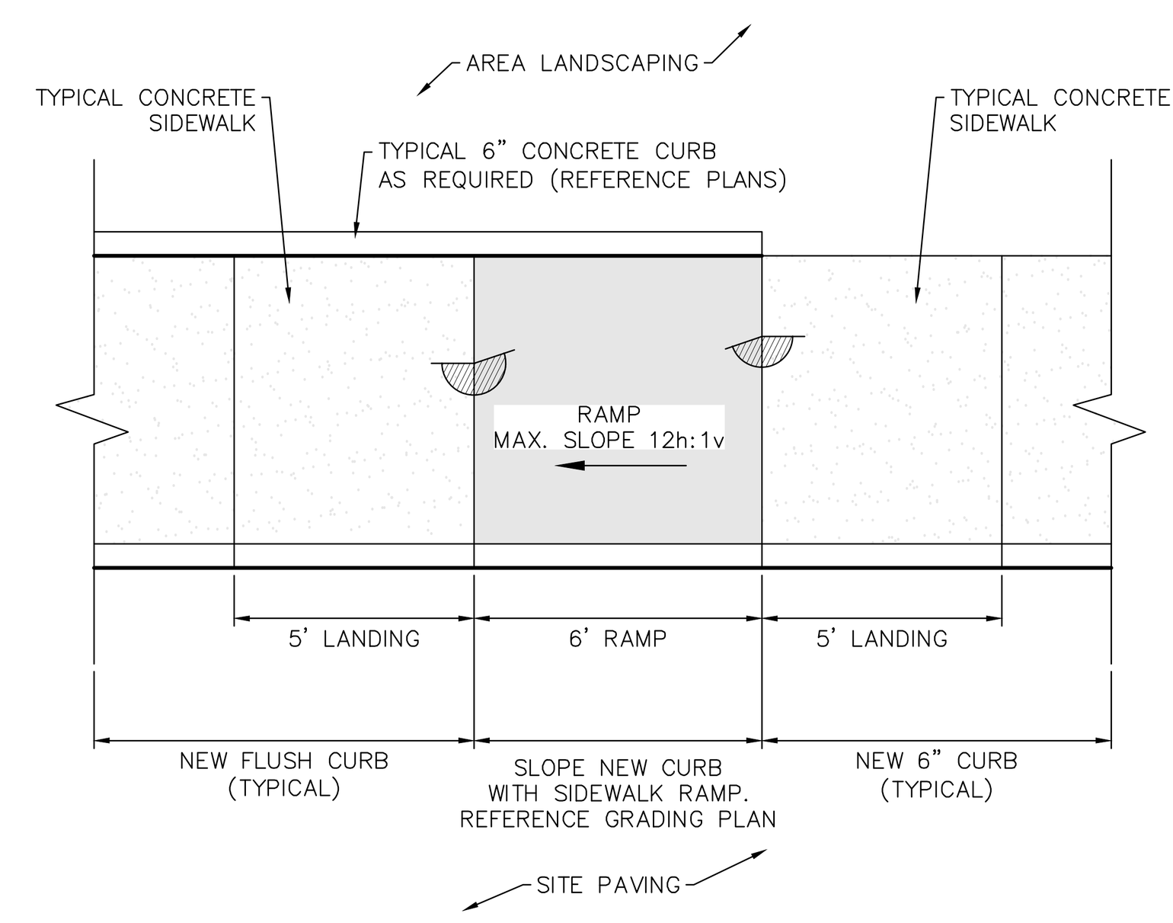
SECTION B

NOTES:

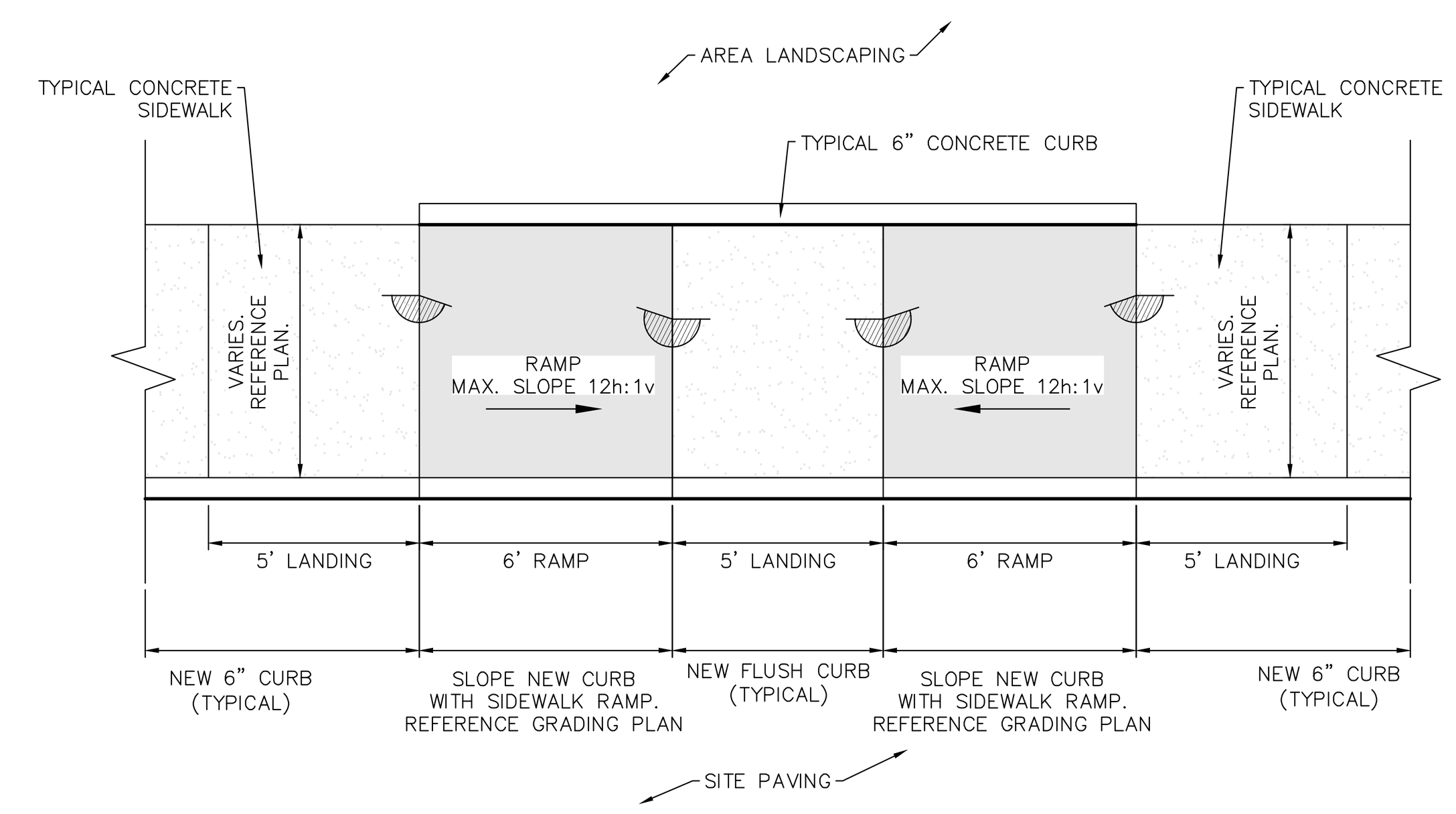
1. CONCRETE CURB 4,000 PSI. SLUMP = 3.0" ± 1.0".
2. WATER TO CEMENT RATIO (LBS/LBS) CANNOT EXCEED 0.50.

7 SLOTTED CURB DETAIL

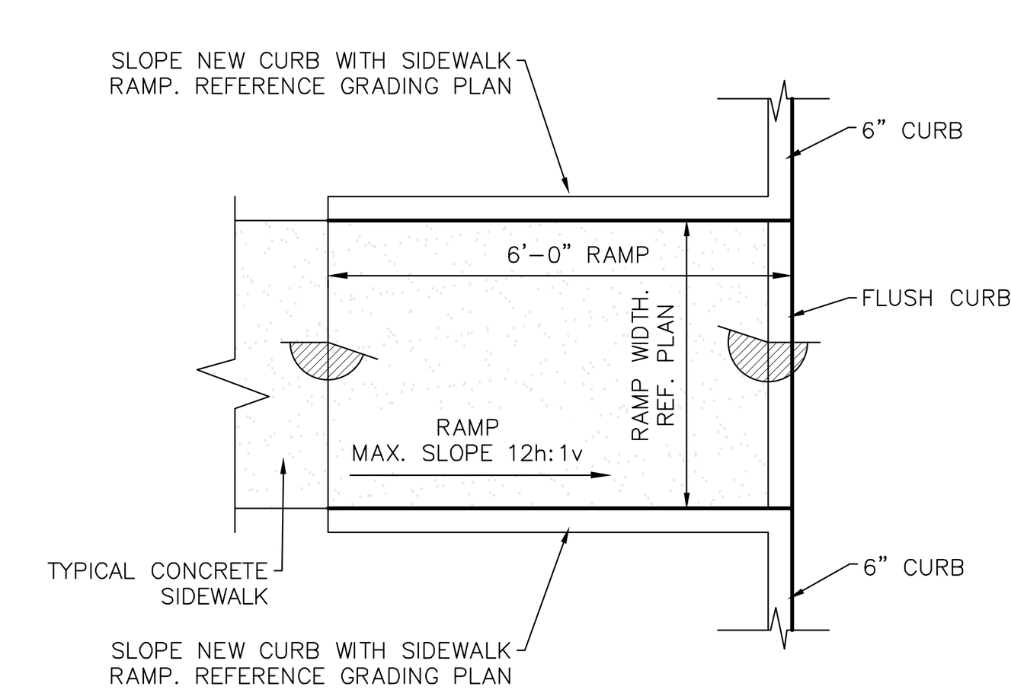
SCALE: NONE



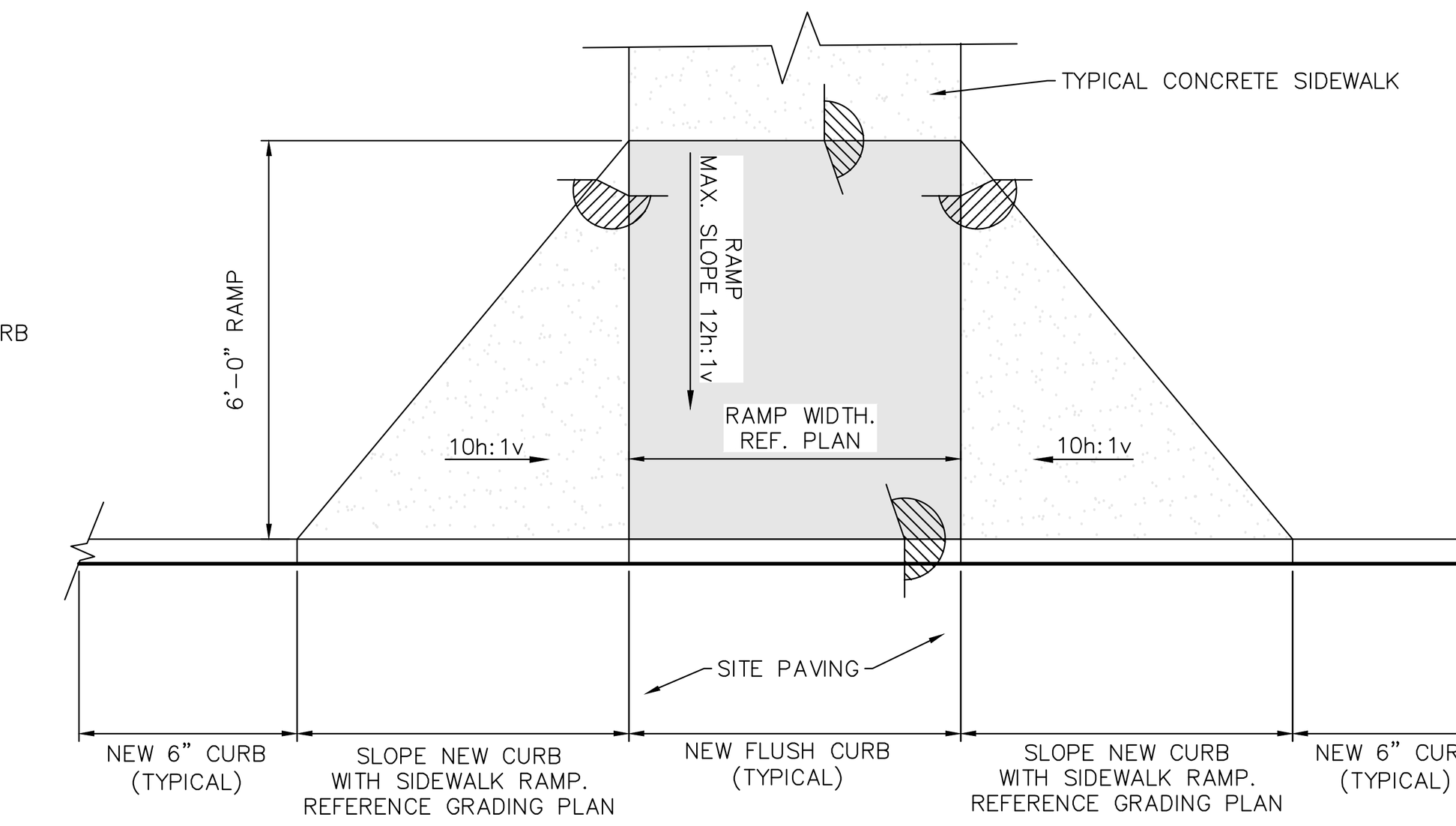
SINGLE PARALLEL CURB RAMP



DUAL PARALLEL CURB RAMP



SINGLE PERPENDICULAR CURB RAMP (NOT FLARED)



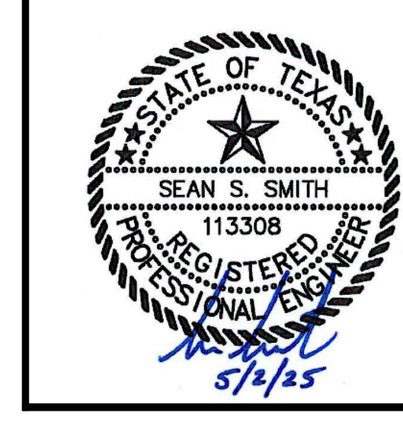
SINGLE PERPENDICULAR CURB RAMP (FLARED)

NOTES:

1. RAMP SURFACE SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES. STAIN CONCRETE WITH KEMIKO STONE TONE CONCRETE ACID STAIN, OR APPROVED EQUAL, AND APPLY PER MANUFACTURER RECOMMENDATIONS. COLOR TO BE SPECIFIED BY OWNER. TDLR RAMP SURFACES TEXTURES NOT REQUIRED. PROVIDE LIGHT BROOM FINISH ON CONCRETE.

8 CURB RAMP DETAIL - NOT WITHIN PUBLIC R.O.W.

SCALE: NONE



Revision / Date

Project: SMITHSON VALLEY HIGH SCHOOL NEW WRESTLING AND ROTC BUILDING FOR COMAL ISD SPRING BRANCH, TX

Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING F-10131500
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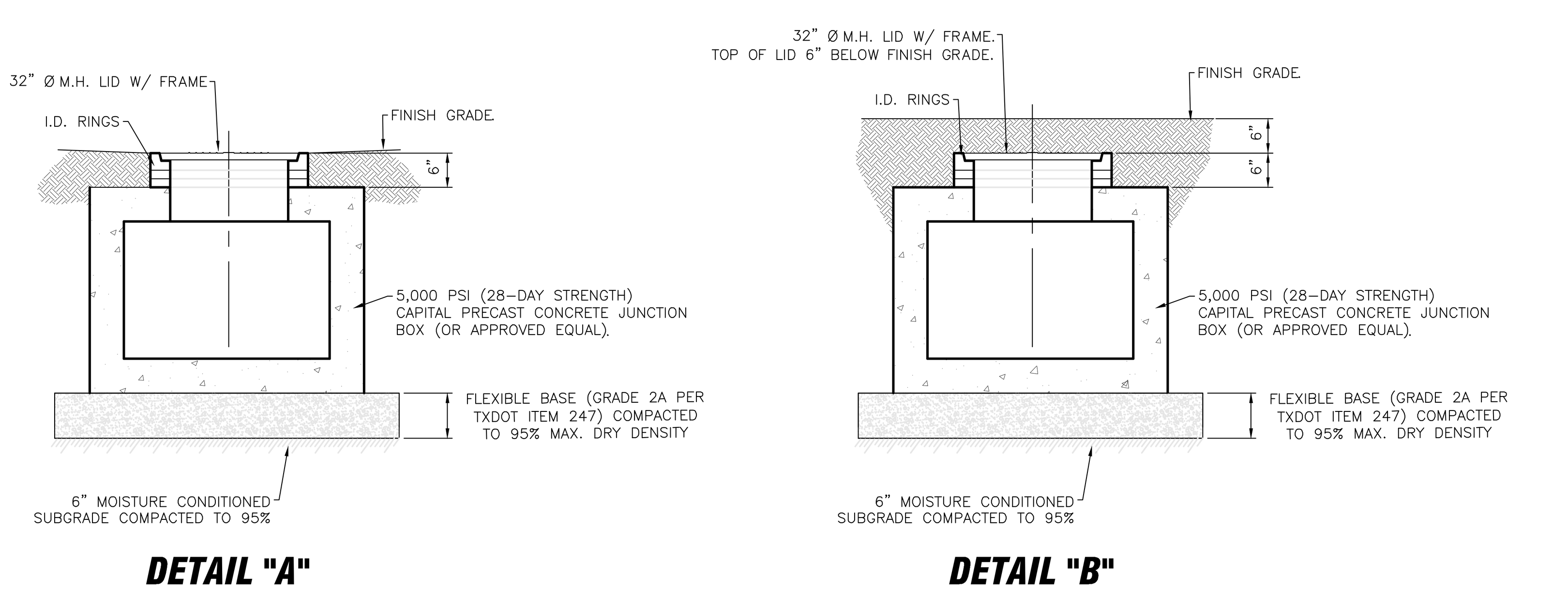
CIVIL DETAILS

Job No. 01957-02-04	Sheet No. 100% S&S C8.0
Drawn By: JCM	
Date: 04/14/25	

ISSUE FOR PERMIT/CONSTRUCTION

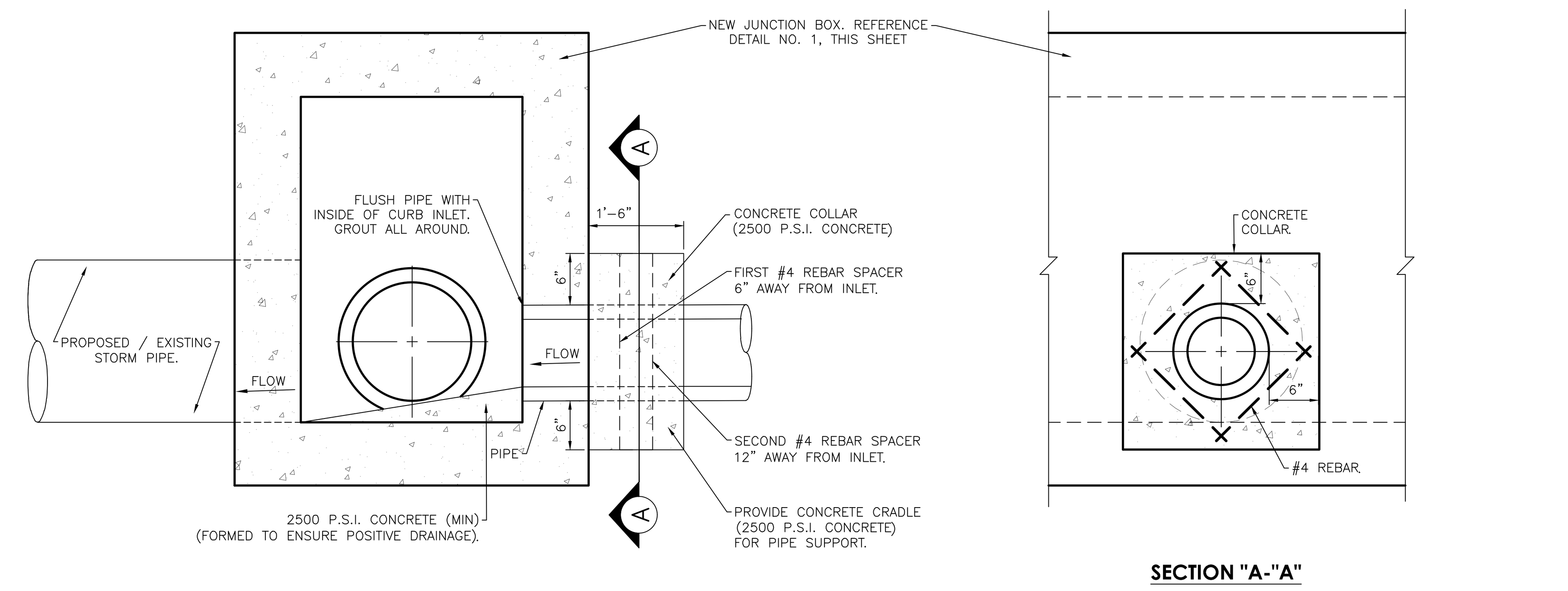


NOTES:

1. PROVIDE PIPE OPENINGS AS REQUIRED FOR PROPOSED STORM DRAINAGE CONSTRUCTION AND CONCRETE COLLAR AT PIPE CONNECTION PER DETAIL NO. 2 THIS SHEET.

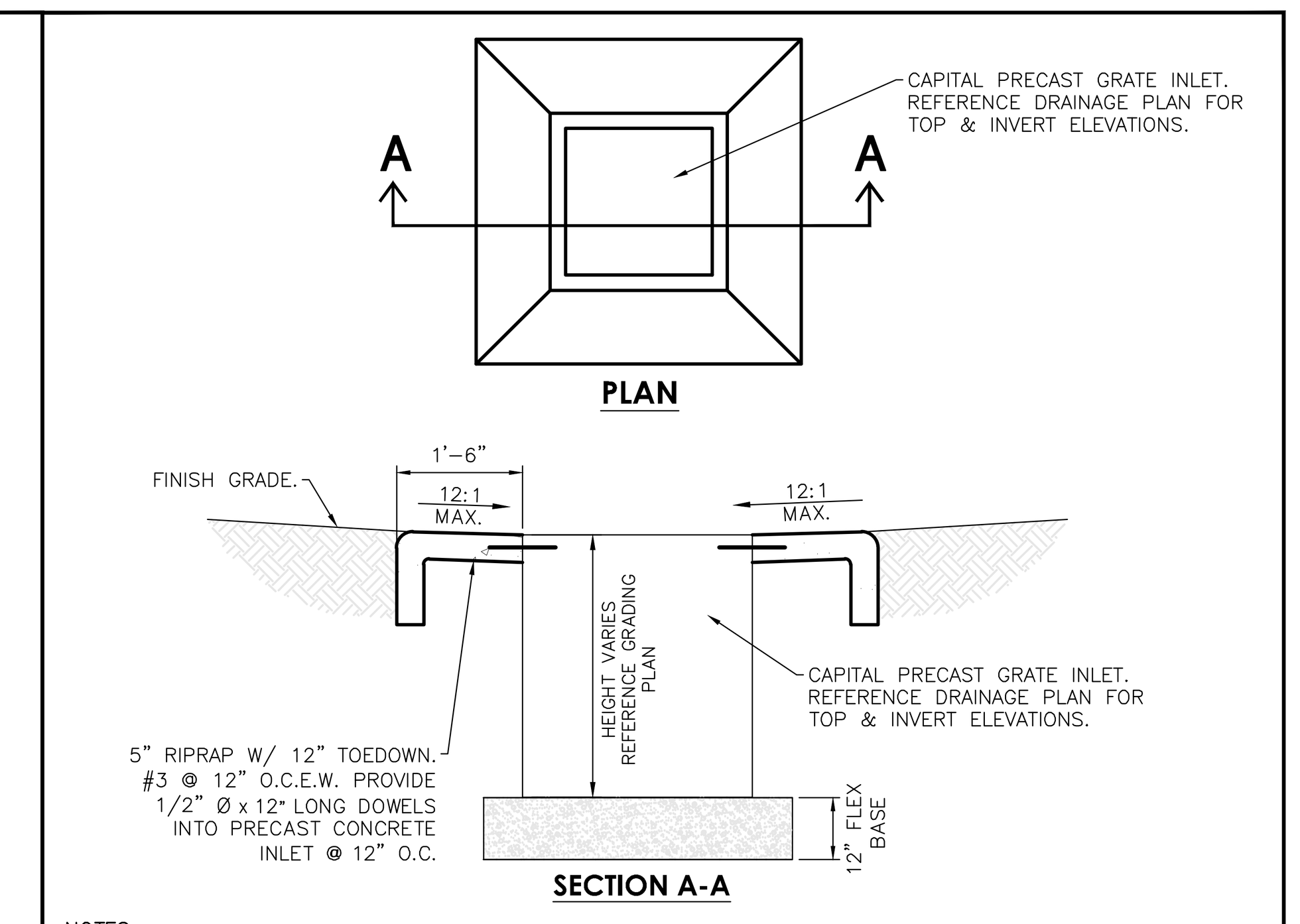
1 JUNCTION BOX SECTION DETAIL

SCALE: NONE



2 JUNCTION BOX/GRATE INLET CONCRETE COLLAR DETAIL

SCALE: NONE



NOTES:

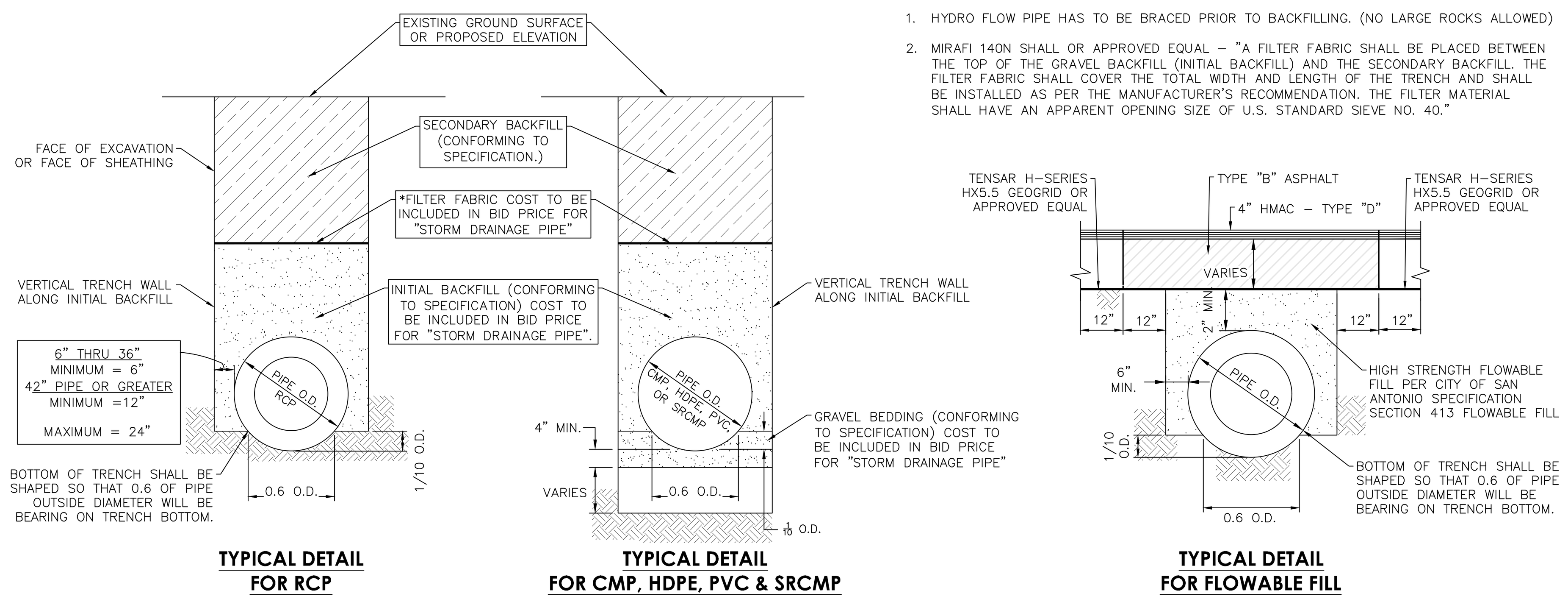
1. PROVIDE PIPE OPENINGS AS REQUIRED FOR PROPOSED STORM DRAINAGE CONSTRUCTION AND CONCRETE COLLAR AT PIPE CONNECTION PER DETAIL NO. 2 THIS SHEET.

3 CONCRETE INLET APRON DETAIL

SCALE: NONE

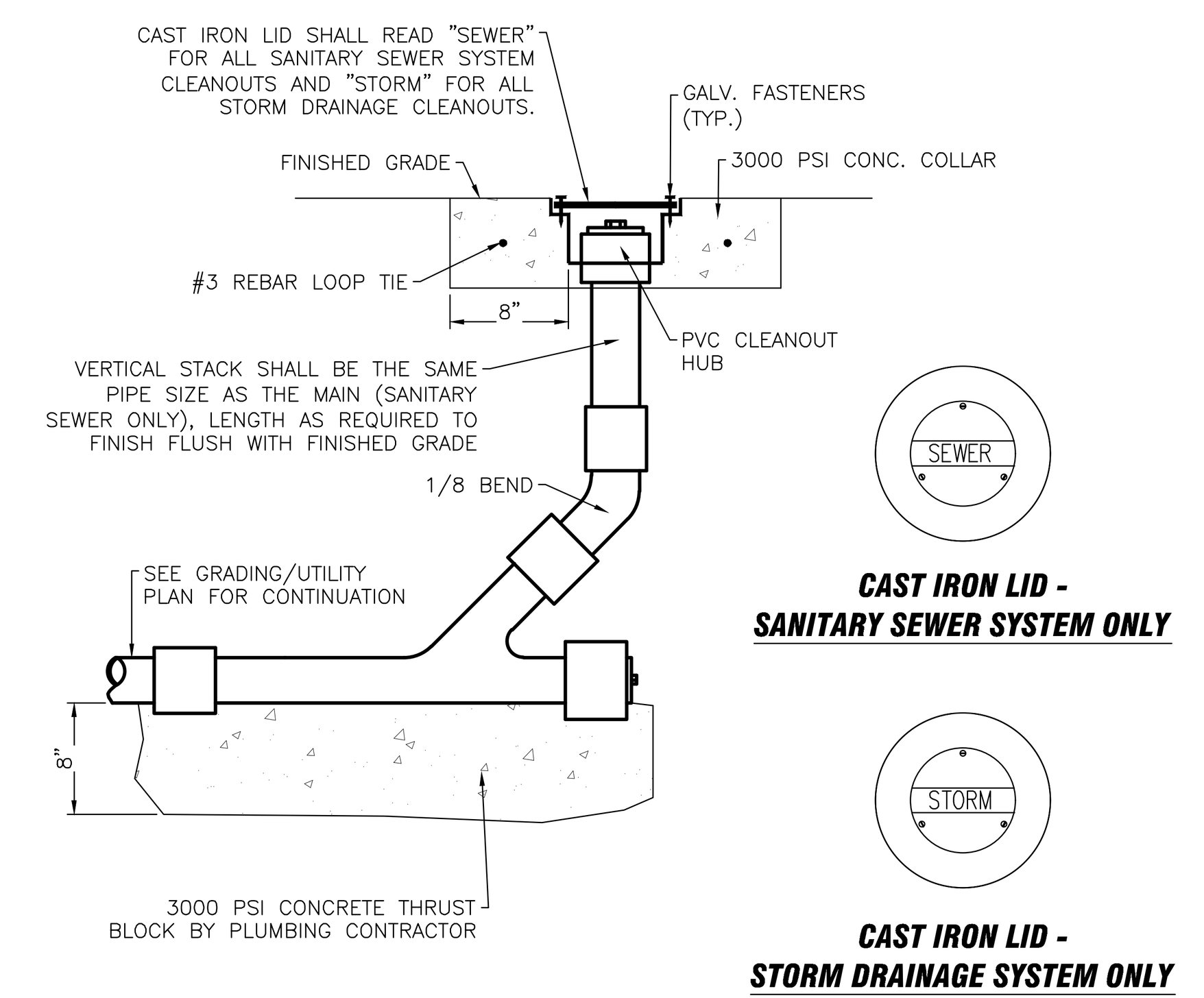
NOTES:

1. HYDRO FLOW PIPE HAS TO BE BRACED PRIOR TO BACKFILLING. (NO LARGE ROCKS ALLOWED)
2. MIRAFI 140N SHALL OR APPROVED EQUAL – "A FILTER FABRIC SHALL BE PLACED BETWEEN THE TOP OF THE GRAVEL BACKFILL (INITIAL BACKFILL) AND THE SECONDARY BACKFILL. THE FILTER FABRIC SHALL COVER THE TOTAL WIDTH AND LENGTH OF THE TRENCH AND SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATION. THE FILTER MATERIAL SHALL HAVE AN APPARENT OPENING SIZE OF U.S. STANDARD SIEVE NO. 40."



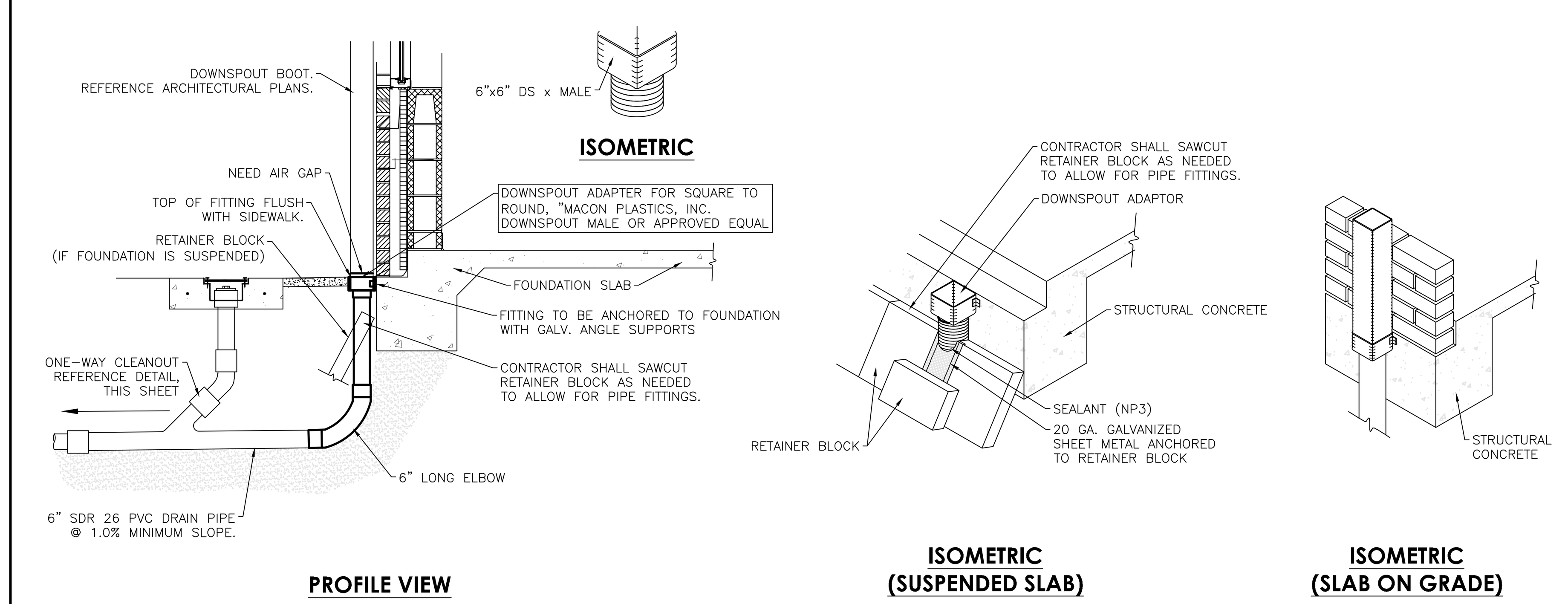
4 PIPE BEDDING & BACKFILL DETAIL FOR STORM DRAIN PIPES

SCALE: NONE



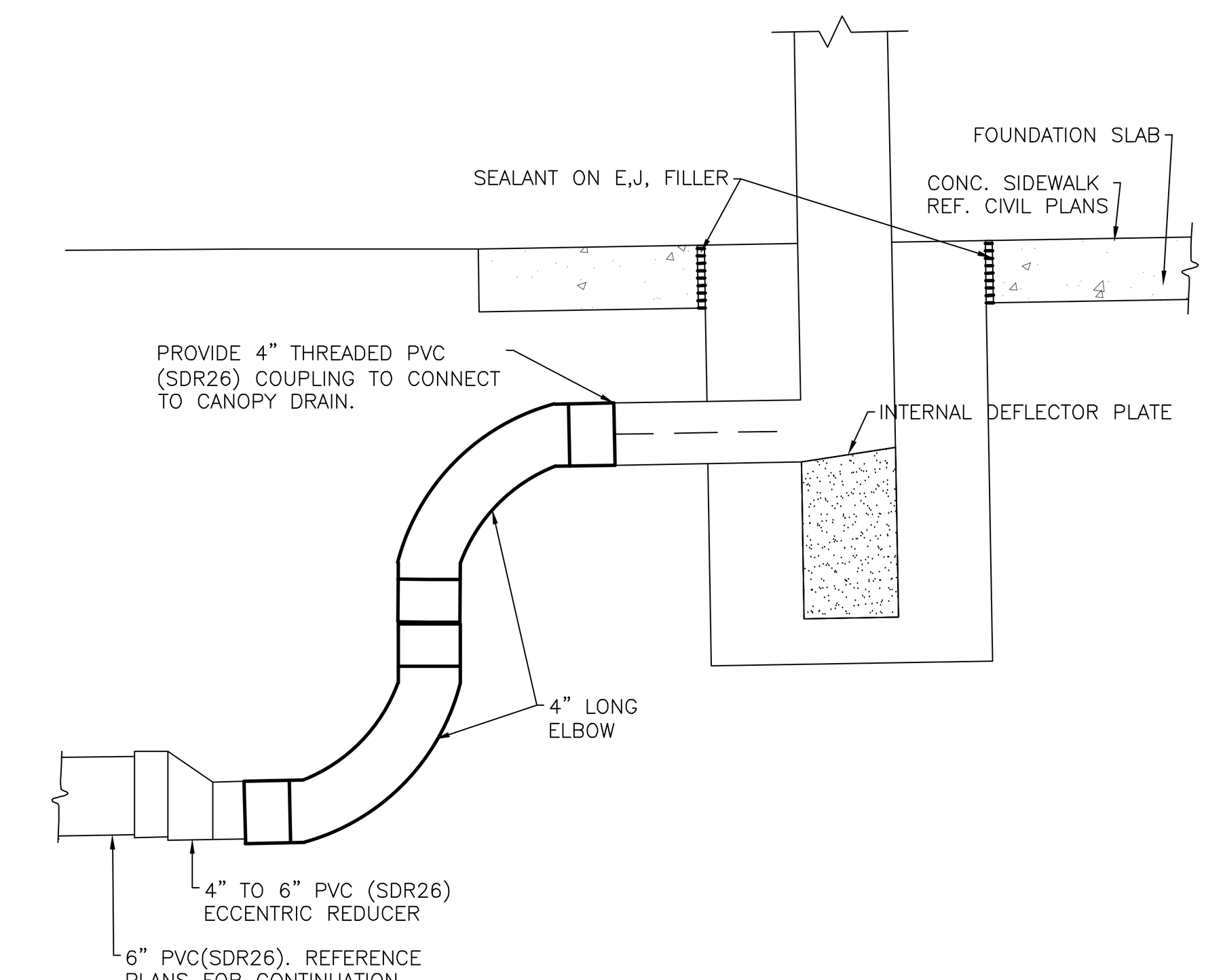
5 STORM PIPE ONE-WAY CLEANOUT DETAIL

SCALE: NONE



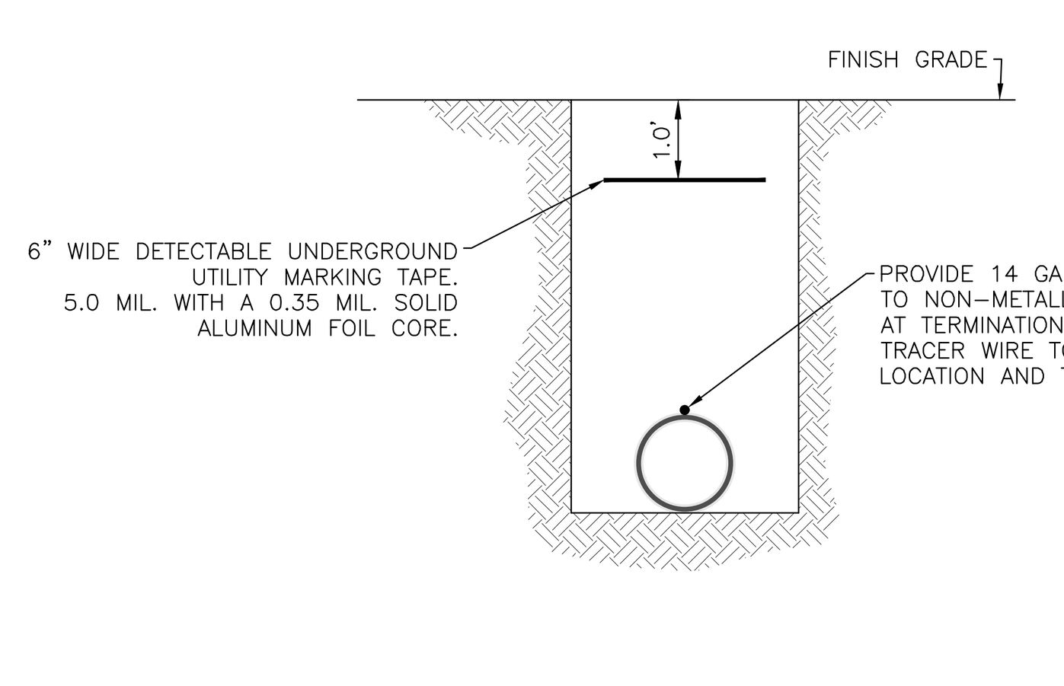
6 DOWNSPOUT/ROOF DRAIN CONNECTION

SCALE: NONE



7 CANOPY DOWNSPOUT CONNECTION

SCALE: NONE

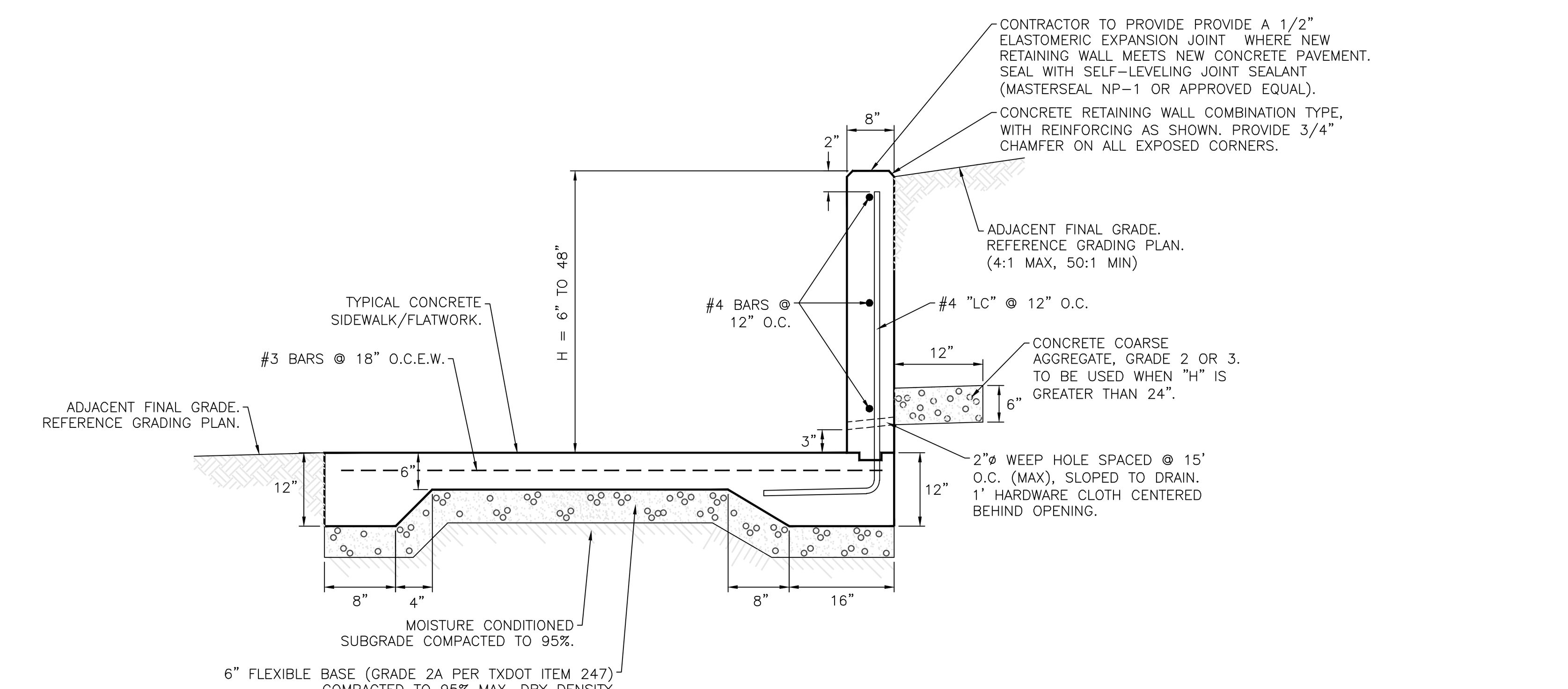


STANDARD COLOR CODE

SAFETY RED	–	ELECTRIC POWER, ELECTRIC SYSTEMS
HIGH VISIBILITY SAFETY YELLOW	–	GAS AND OIL
SAFETY ALERT ORANGE	–	TELEPHONE AND CABLE TELEVISION
SAFETY PRECAUTION BLUE	–	WATER SYSTEMS
SAFETY GREEN	–	SANITARY AND STORM SEWER SYSTEM
SAFETY BROWN	–	FORCE MAINS, RECLAIMED WATER LINES

8 UTILITY MARKER TAPE DETAIL

SCALE: NONE



RETAINING WALL GENERAL NOTES:

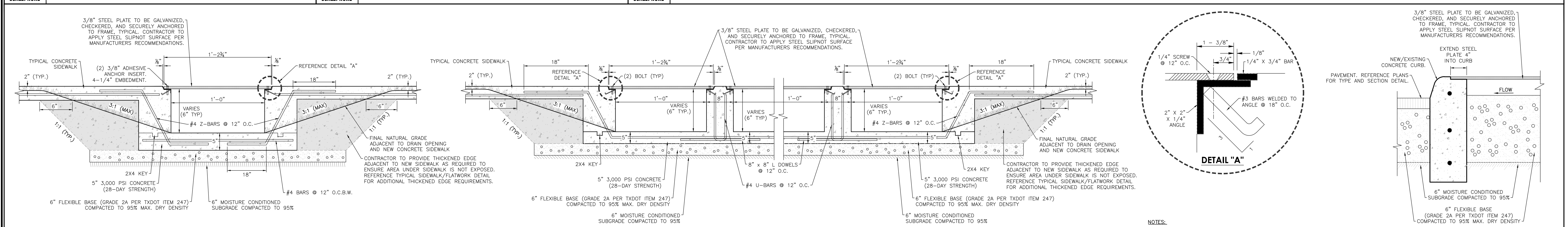
1. SUPPORT AND PROTECT EXISTING AND NEW STRUCTURES THROUGHOUT THE DURATION OF CONSTRUCTION.
2. CONTRACTOR SHALL IMMEDIATELY REMOVE ALL WATER FROM EXCAVATIONS FOLLOWING RAIN EVENTS. NO STANDING WATER WILL BE ALLOWED IN EXCAVATIONS.
3. PROVIDE ¾" CHAMFER AT ALL EXPOSED EDGES.
4. ALL CONCRETE SHALL BE MINIMUM 4000 PSI AT 28 DAY STRENGTH, UNLESS OTHERWISE NOTED. ALL CONCRETE SHALL BE PLACED AND CURED IN COMPLIANCE WITH CURRENT ACI SPECIFICATIONS. WHILE SOME SHRINKAGE CRACKING IS TO BE EXPECTED IN THE CONCRETE, IT HAS BEEN SHOWN TO BE SIGNIFICANTLY REDUCED THROUGH PROPER CURING PROCEDURES AND PROPER CONTROL OF ADMIXTURES.
5. PROVIDE 1" DOWELED EXPANSION JOINTS @ 50' O.C. AND CONTROL JOINTS @ 10' O.C. ALL DOWEL BARS SHALL BE SMOOTH AND ALL REINFORCING BARS SHALL BE DEFORMED "REBAR". BOTH DOWELS AND REINFORCING STEEL SHALL BE A MINIMUM ASTM A 615, GRADE 60. ALL REINFORCEMENT BENDS SHALL CONFORM TO ACI STANDARDS.
6. ALL REINFORCING STEEL SHALL BE PROPERLY CHAIRED AND TIED PRIOR TO PLACEMENT OF CONCRETE.
7. CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE AWAY FROM STRUCTURES AND WALLS AT ALL TIMES.
8. CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING AND STABILIZING EXCAVATIONS IN ACCORDANCE WITH TRENCH EXCAVATION SAFETY PROTECTION REQUIREMENTS.
9. ALL BARS SHALL HAVE A CLEAR COVER OF 3 INCHES FROM THE BOTTOM OF FOOTING AND 2 INCHES UNLESS OTHERWISE NOTED.
10. ALL LAPS AND SPLICES SHALL HAVE A MINIMUM LAP OF 30 BAR DIAMETERS.
11. ALL DIMENSIONS, DROPS AND SPECIAL CONDITIONS SHALL BE VERIFIED WITH THE DIMENSIONAL CONTROL AND ARCHITECTURAL PLANS. ANY DISCREPANCIES OR CHANGES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR REVIEW AND APPROVAL.
12. THIS DESIGN SHALL NOT BE CONSIDERED VALID AND ENGINEER ACCEPTS NO RESPONSIBILITY, UNLESS PRE-PLACEMENT OBSERVATION(S) ARE PERFORMED BY MOY TARIN RAMIREZ ENGINEERS, LLC. NOTIFY OFFICE OF ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE A PRE-PLACEMENT OBSERVATION.
13. REFERENCE GRADING PLAN FOR FINISH ELEVATIONS.

GENERAL NOTES:

1. FOLLOW GENERAL NOTES FOR SIDEWALKS UNLESS OTHERWISE NOTED ON DETAIL.
2. REFERENCE GRADING PLAN FOR PROPOSED SPOT ELEVATIONS.

9 TYPICAL CONCRETE SIDEWALK/RETAINING WALL DETAIL

SCALE: NONE



NOTES:

1. FOLLOW GENERAL NOTES FOR SIDEWALKS UNLESS OTHERWISE NOTED ON DETAIL.
2. REFERENCE GRADING PLAN FOR PROPOSED SPOT ELEVATIONS.
3. ALL CONCRETE TO BE 3,000 PSI (28-DAY STRENGTH).

10 SIDEWALK DRAIN WITH COVER DETAIL

SCALE: NONE

STATE OF TEXAS — SEAN S. SMITH — 113308 — REGISTERED PROFESSIONAL ENGINEER — 5/2/25

Revision / Date

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CIVIL DETAILS

Job No. 01957-02-04	Sheet No. 100% S&S
Drawn By: JCM	C8.1
Date: 04/14/25	

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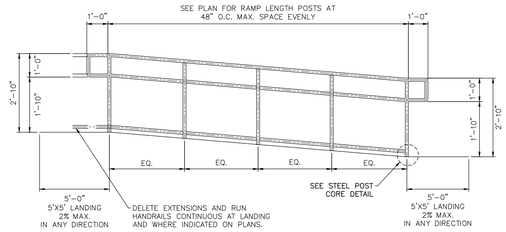
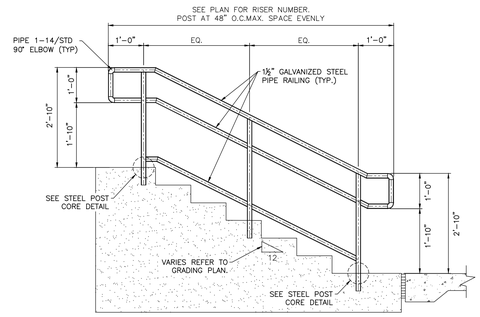
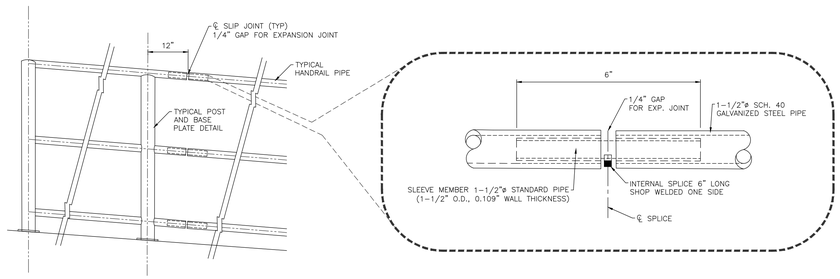


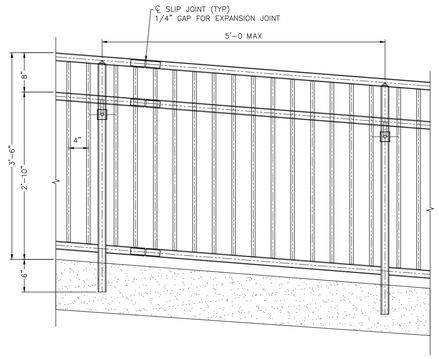
A **TYPICAL HANDRAIL AT RAMP**
SCALE: NONE



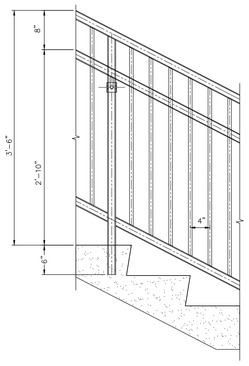
D **TYPICAL HANDRAIL AT STAIRS**
SCALE: NONE



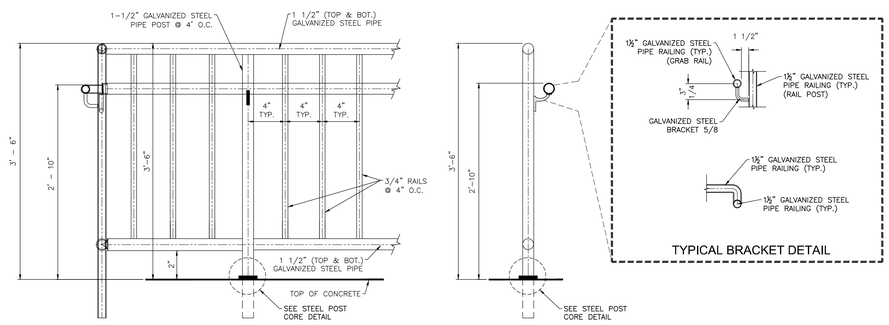
F **TYPICAL SLIP JOINT DETAILS**
SCALE: NONE



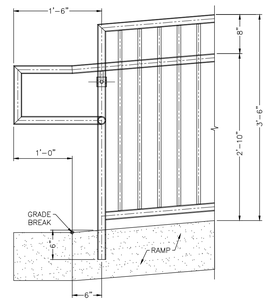
B **TYPICAL GUARDRAIL / HANDRAIL AT RAMP**
SCALE: NONE



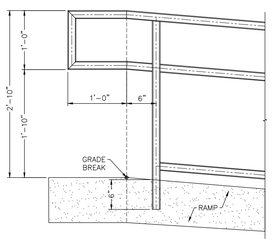
E **TYPICAL GUARDRAIL / HANDRAIL AT STAIRS**
SCALE: NONE

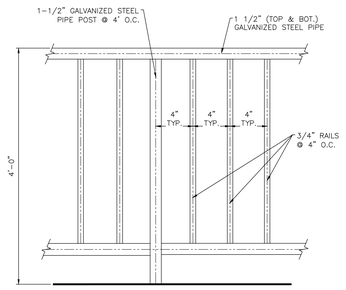


G **TYPICAL GUARDRAIL / HANDRAIL DETAIL**
SCALE: NONE

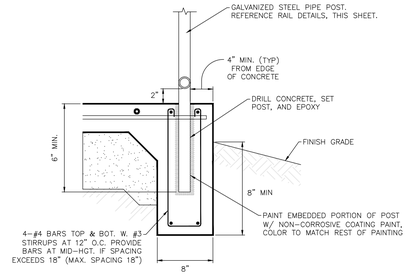


C **TYPICAL GUARDRAIL EXTENSIONS AT RAMP TOP AND BOTTOM**
SCALE: NONE

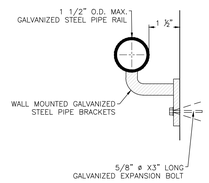




H **TYPICAL GUARDRAIL DETAIL - 2 PIPE**
SCALE: NONE



I **STEEL POST CORE DETAIL**
SCALE: NONE



J **HANDRAIL ADJACENT TO BUILDING**
SCALE: NONE

GENERAL NOTES:

1. HANDRAIL CONSTRUCTION 1-1/2" GALVANIZED STEEL PIPE (TYP).
2. ALL STEEL PIPE TO BE HOTDIP-GALVANIZED AFTER FABRICATION.
3. NO ON-SITE WELDING WILL BE ALLOWED.
4. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO FABRICATION AND GALVANIZATION.
5. PROVIDE HANDRAIL/GUARDRAIL PIPE SLIP JOINTS @ 30' MAX. SPACING AND ACROSS CONCRETE EXPANSION JOINTS TO ALLOW FOR APPROPRIATE MOVEMENT. SLIP JOINTS TO BE PER TXDOT STANDARDS.
6. HEAT UP THE RAILING CORNERS, BEAT THE SHARP EDGES, AND GRIND SMOOTH. ALL EXPOSED STEEL EDGES SHALL BE SMOOTH.
7. FOLLOW GENERAL NOTES FOR SIDEWALKS UNLESS OTHERWISE NOTED ON DETAIL.
8. REFERENCE GRADING PLAN FOR PROPOSED SPOT ELEVATIONS AND DEPTH OF RISERS.
9. IF 2 OR MORE RISERS, PROVIDE ADJACENT HANDRAILS. EXTEND HANDRAILS 1' BEYOND LIMITS OF RISERS AS SHOWN ON PLAN. SEE HANDRAIL EXTENSION DETAIL, THIS SHEET.
10. PAINT ALL RAILING COMPONENTS AS PER OWNER/ARCHITECT'S DIRECTION.

1 ***TYPICAL RAIL AT RAMP AND CONCRETE STEPS WITH SLIP JOINT DETAIL***
SCALE: NONE

Revision / Date

STATE OF TEXAS
SEAN S. SMITH
113308
REGISTERED
PROFESSIONAL ENGINEER
5/2/25

Project:
SMITHSON VALLEY HIGH SCHOOL NEW WRESTLING AND ROTC BUILDING
FOR
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CIVIL DETAILS

Job No. 01957-02-04	Sheet No. 100% S&S
Drawn By: JCM	C8.2
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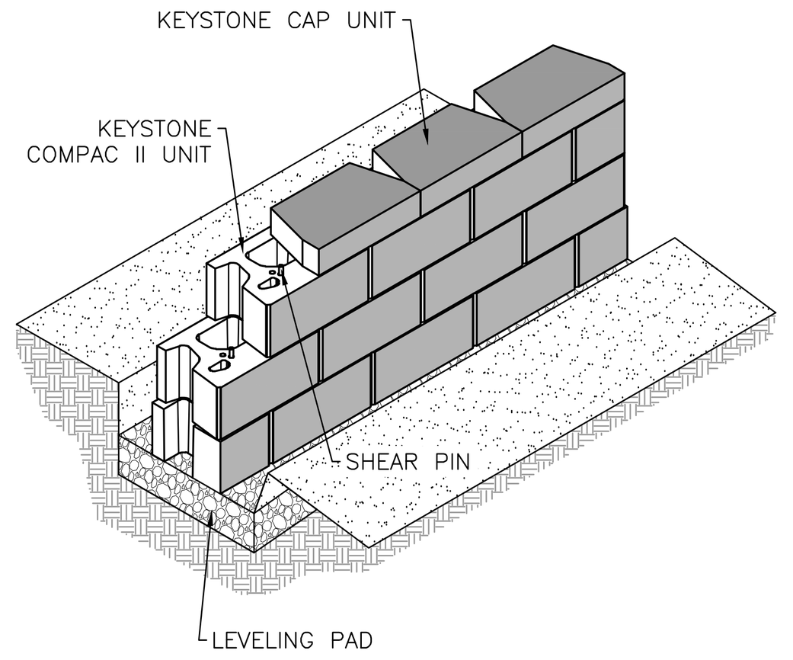
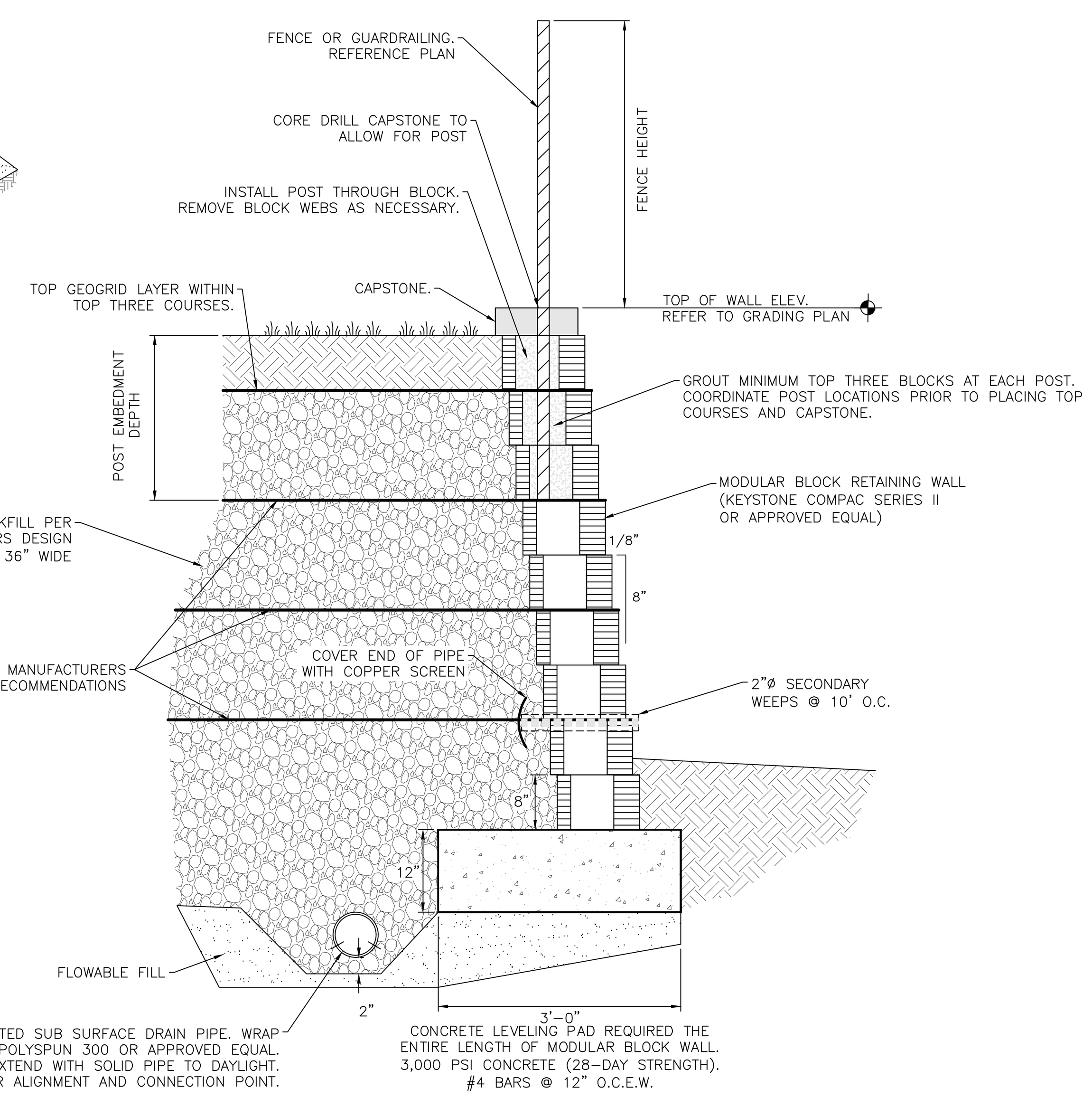
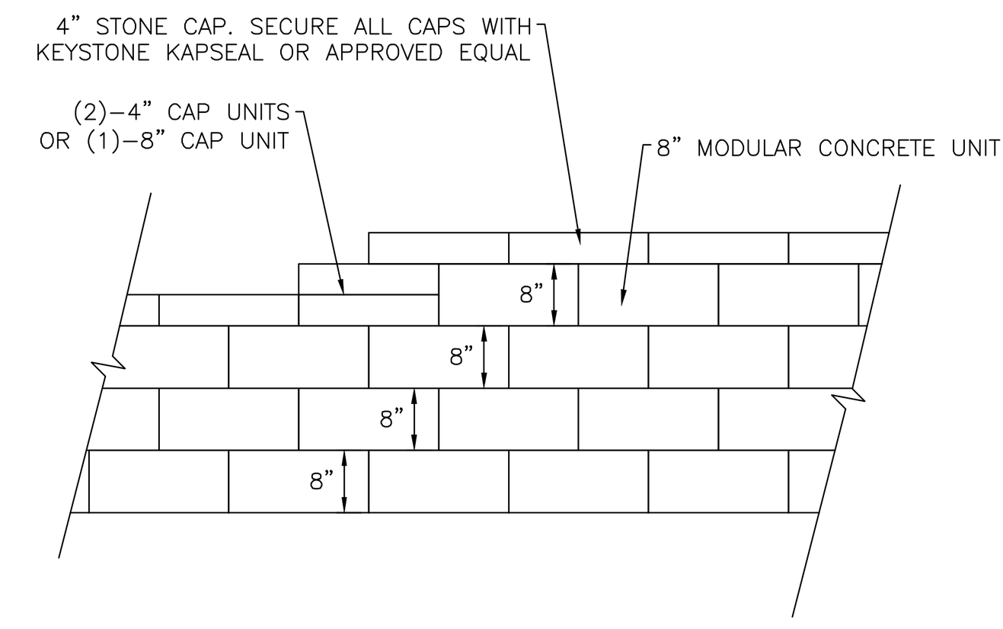


COMPAC II ISOMETRIC VIEW



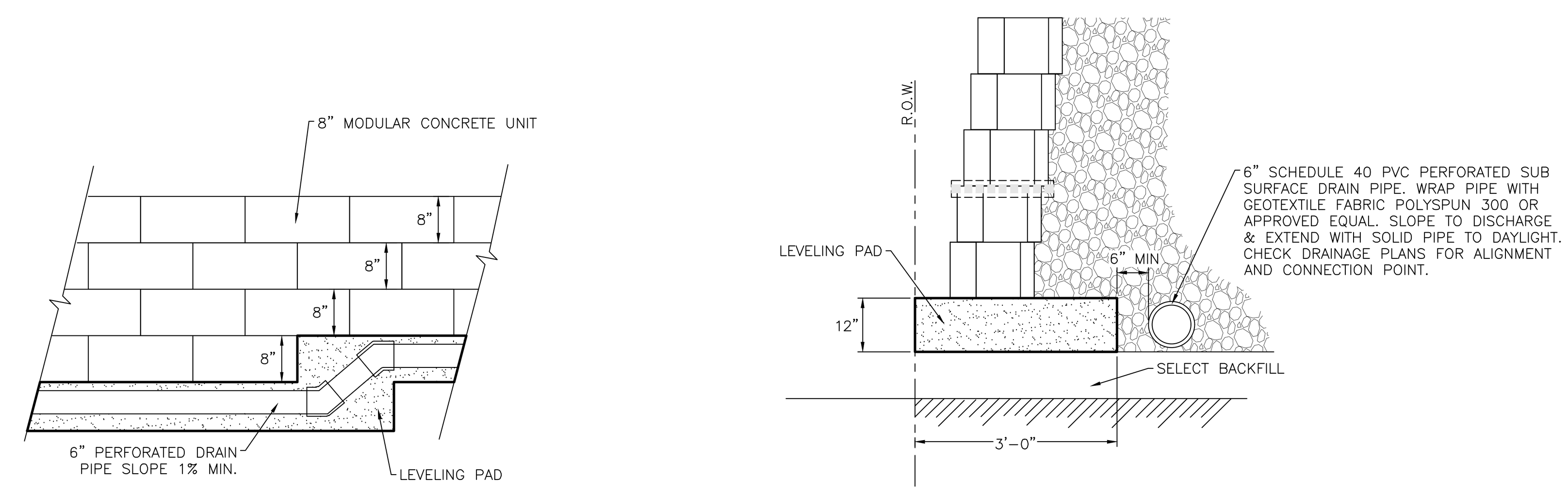
A — **TYPICAL MODULAR BLOCK RETAINING WALL SECTION**

SCALE: NONE



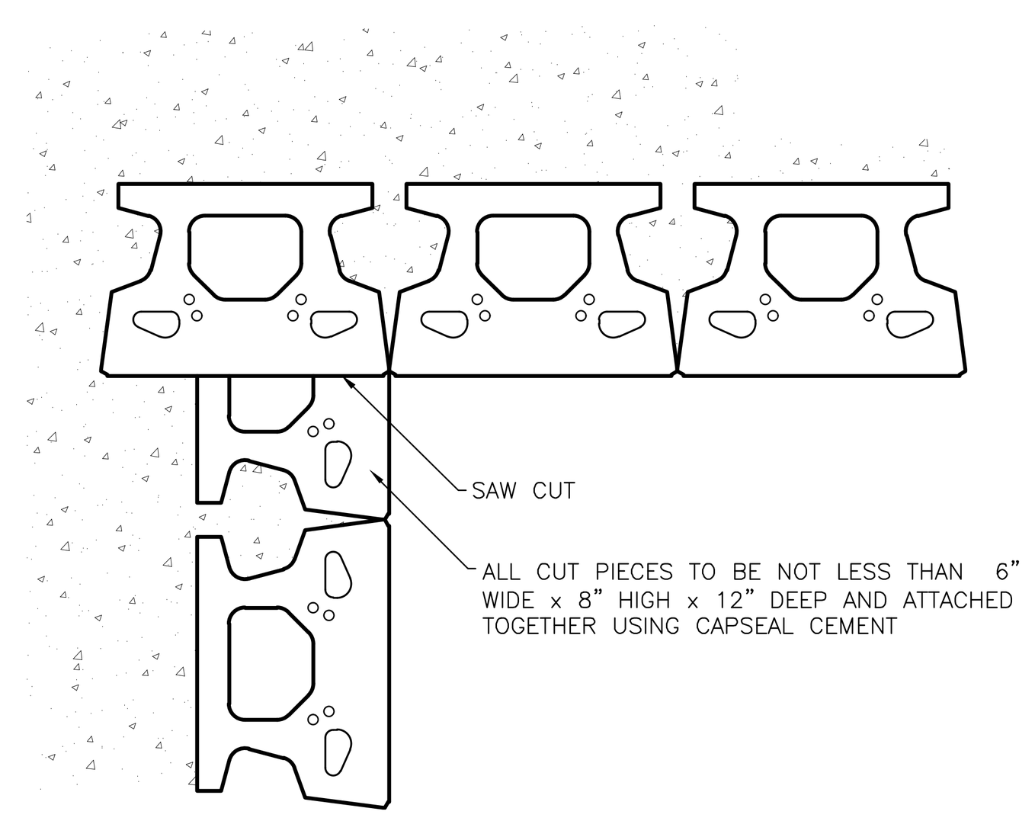
B — **TOP OF WALL STEPS**

SCALE: NONE



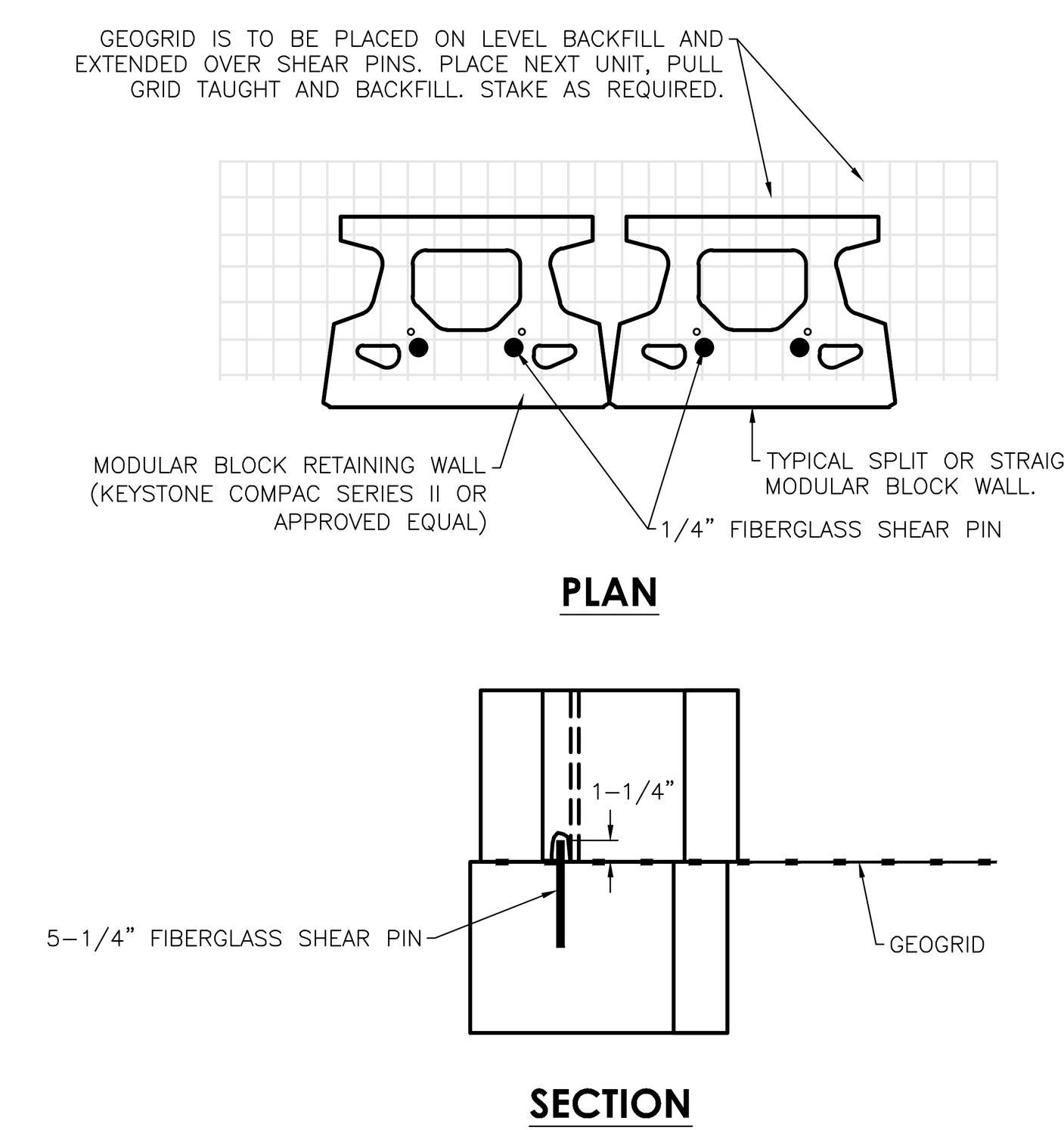
C — **BOTTOM OF WALL STEPS AND LEVELING PAD**

SCALE: NONE



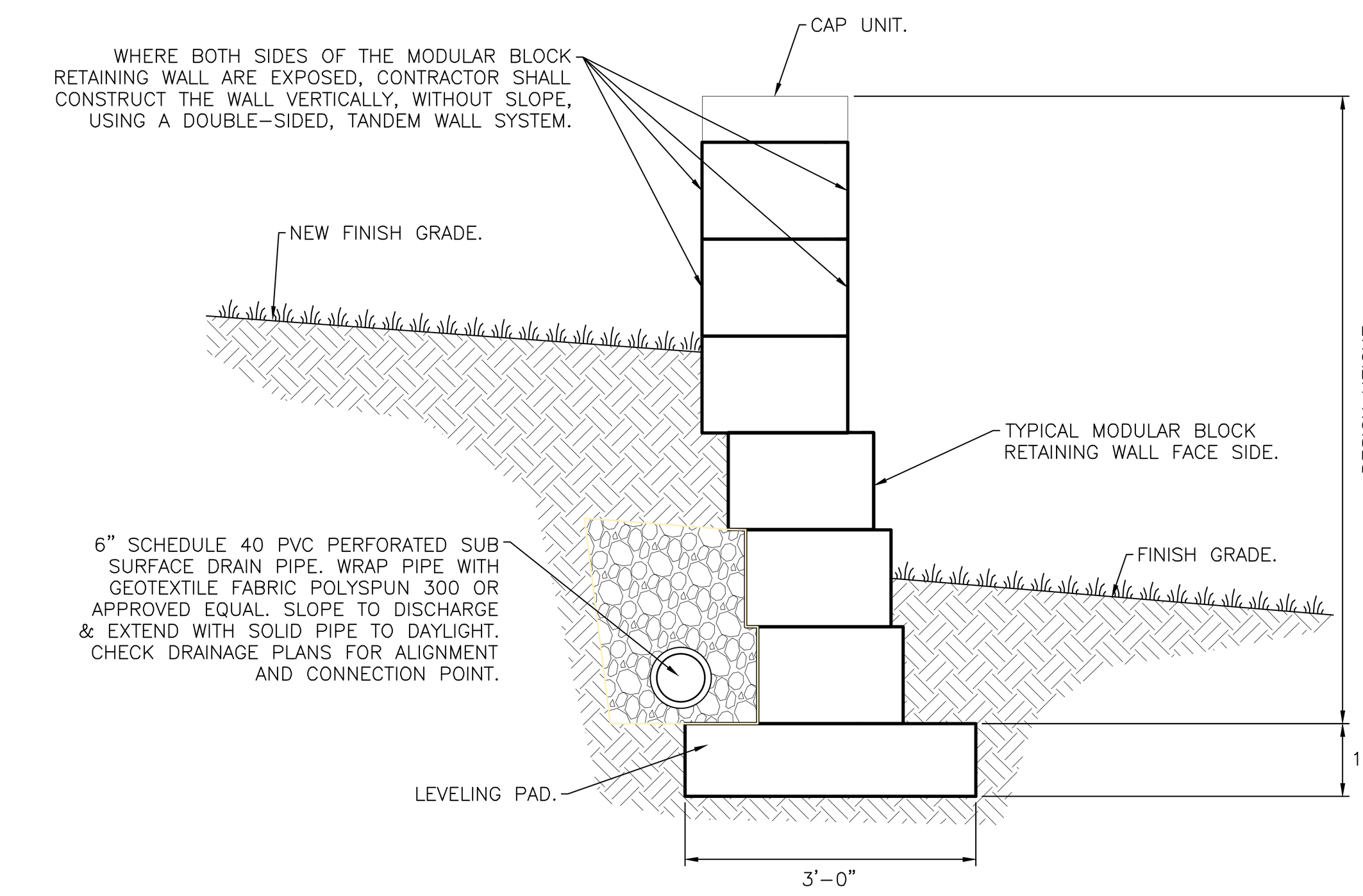
D — **TYPICAL CORNER DETAIL**

SCALE: NONE



E — **MODULAR CONCRETE UNIT GRID/PIN CONNECTION**

SCALE: NONE



F — **TYPICAL GRAVITY/EXPOSED WALL SECTION**

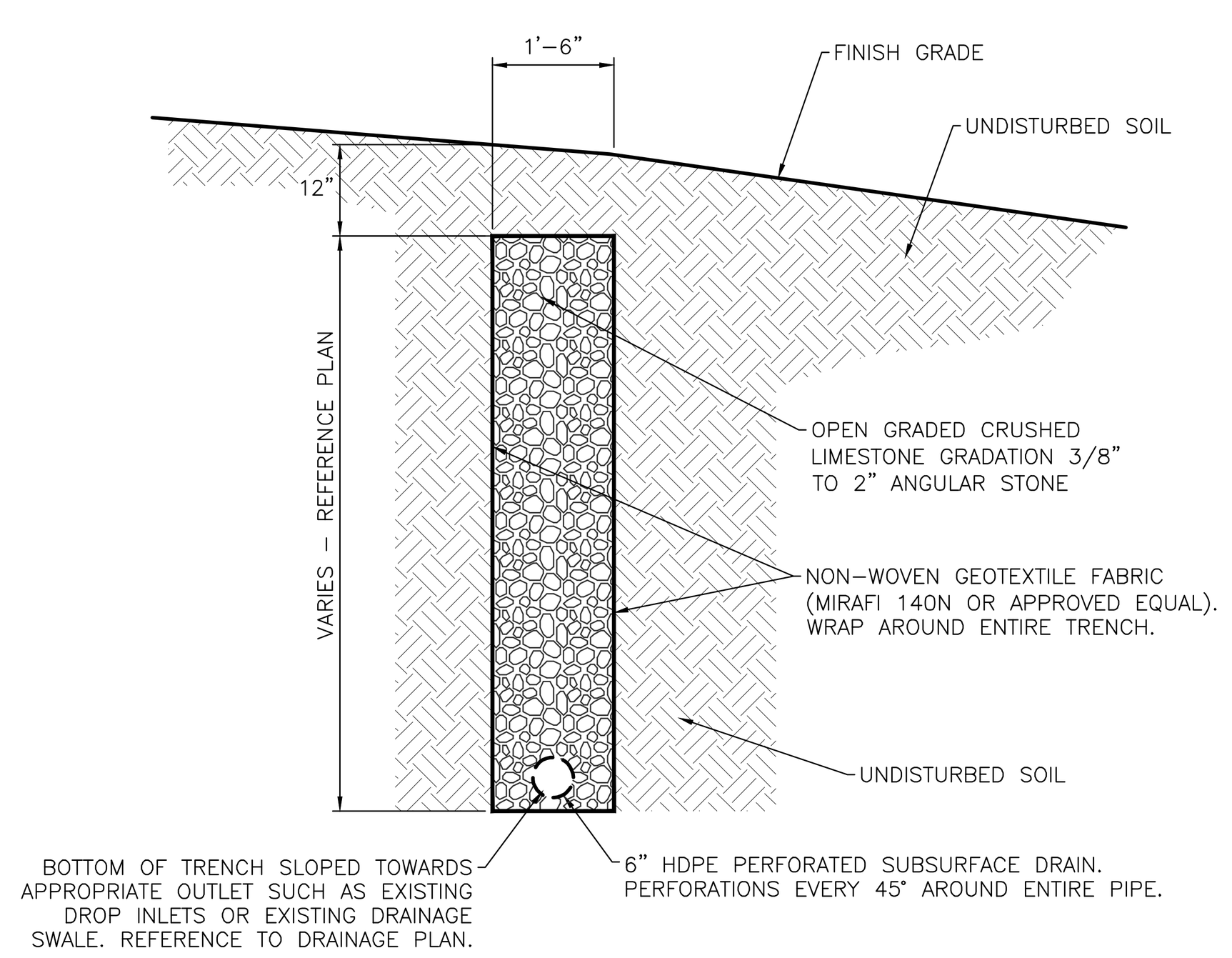
SCALE: NONE

NOTES:

1. MODULAR RETAINING WALL DETAILS SHOWN ON THIS DRAWING ARE FOR REFERENCE PURPOSES ONLY. MODULAR BLOCK MANUFACTURER WILL BE REQUIRED TO SUBMIT SHOP DRAWINGS AND ENGINEERED PLAN. REFERENCE SPECIFICATIONS.
2. CONTRACTOR TO EXACT PLACEMENT OF 4" PERFORATED DRAIN PIPE AT BASE OF WALL AND DISCHARGE LOCATION PER MANUFACTURERS REQUIREMENTS.
3. CONTRACTOR TO ACCOUNT FOR THE CHAIN-LINK FENCE INSTALLATION IN THE MODULAR BLACK WALL DESIGNING MODULAR BLOCK RETAINING WALLS.
4. FENCE POST SPACING NOT TO EXCEED 10'-0" O.C.
5. WHERE THE BACKSIDE OF THE NEW MODULAR BLOCK RETAINING WALL IS EXPOSED ABOVE THE NEW FINISH GRADE, FILL ALL HORIZONTAL OPEN CELLS ON THE BLOCK WALL WITH FLOWABLE FILL CONCRETE GROUT. APPLY CONCRETE COLOR DYE TO THE EXPOSED SURFACE FINISH TO MATCH THE NEW MODULAR BLOCK WALL COLOR. MATCH THE GROUT SURFACE FINISH TO THE BLOCK WALL SURFACE.
6. THE LEVELING PAD IS TO BE CONSTRUCTED OF CRUSHED STONE OR 3,000 PSI± UN-REINFORCED CONCRETE (28-DAY STRENGTH).

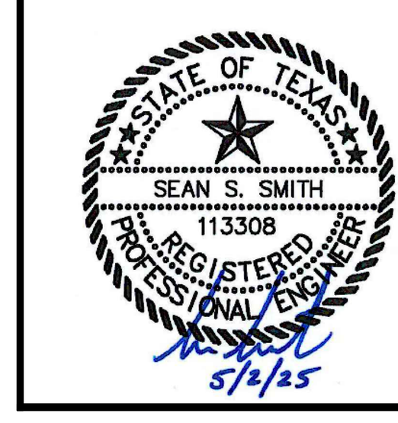
1 — MODULAR BLOCK RETAINING WALL DETAILS

SCALE: NONE



2 — SUBSURFACE FRENCH DRAIN SECTION

SCALE: NONE



Revision / Date

Project: SMITHSON VALLEY HIGH SCHOOL NEW WRESTLING AND ROTC BUILDING
FOR
COMAL ISD
SPRING BRANCH, TX

Moy Tarin Ramirez Engineers, LLC
· Engineers · Surveyors · Planners
TBPELS: ENGINEERING F-5297/SURVEYING F-10131500
12770 CIMARRON PATH, SUITE 100
SAN ANTONIO, TEXAS 78249
TEL: (210) 698-5051
FAX: (210) 698-5085

Huckabee
www.huckabee-inc.com
800.687.1229

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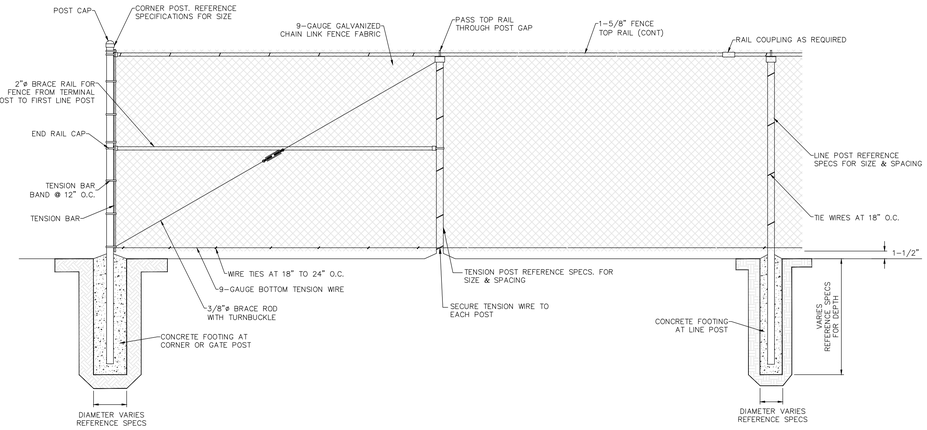
CIVIL DETAILS

Job No.	Sheet No.
01957-02-04	100% S&S
Drawn By: JCM	C8.3
Date: 04/14/25	

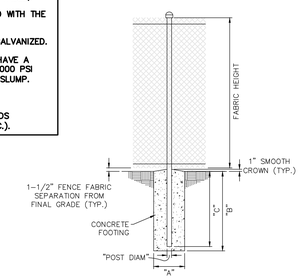
ISSUE FOR PERMIT/CONSTRUCTION



TYPICAL FENCE PROFILE

NOTES:

1. **ALL FENCE MATERIALS & HARDWARE TO BE HOT DIP GALVANIZED UNLESS OTHERWISE NOTED ON FENCING PLAN. (ALUMINUM WIRE TIES ARE ACCEPTABLE)**
2. **ALL FENCE FABRIC SHALL BE INSTALLED WITH THE KNUCKLE SIDE UP AND DOWN.**
3. **ALL CHAIN-LINK FENCE FABRIC IS TO GALVANIZED.**
4. **ALL CONCRETE POST FOOTINGS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI (28-DAY STRENGTH) AND MAXIMUM 3" SLUMP.**
5. **GATES SHALL OPEN 180°.**
6. **GATES SHALL NOT OPEN INTO PLAYFIELDS (BASEBALL FIELDS, TENNIS COURTS, ETC.).**



LINE AND TERMINAL POSTS

FABRIC HEIGHT	POST TYPE	"POST DIAM"	"A" DIAM	"B" DEPTH	"C" POST EMBED
4'-0"	LINE	2"	10"	30"	28"
	TERMINAL	3"	12"	36"	34"
5'-0" TO 6'-0"	LINE	2-3/8"	12"	36"	34"
	TERMINAL	3"	12"	36"	34"
8'-0"	LINE	2-3/8"	12"	36"	34"
	TERMINAL	3"	12"	40"	38"
10'-0" TO 12'-0"	LINE	2-3/8"	12"	40"	38"
	TERMINAL	3"	18"	48"	46"

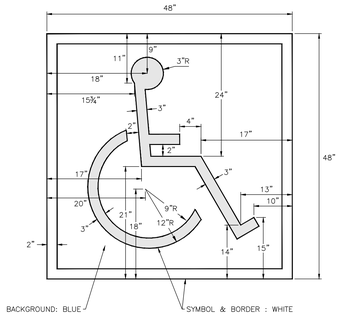
NOTE: TERMINAL POSTS INCLUDE END, CORNER, AND TENSION POSTS

GATE HINGE POST

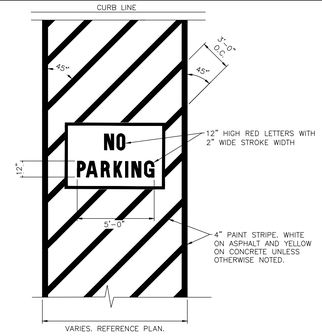
FABRIC HEIGHT	GATE LEAF WIDTH	"POST DIAM"	"A" DIAM	"B" DEPTH	"C" POST EMBED
4'-0"	3' TO 4'	3"	12"	36"	34"
	5' TO 9'	4"	18"	48"	40"
	10' +	6-5/8"	18"	60"	58"
5'-0" TO 6'-0"	3' TO 4'	3"	12"	42"	40"
	5' TO 9'	4"	18"	48"	40"
	10' +	6-5/8"	18"	60"	58"
8'-0" TO 10'-0"	3' TO 4'	3"	12"	42"	40"
	5' TO 9'	4"	18"	48"	40"
	10' +	6-5/8"	18"	60"	58"

FENCE POST FOOTING SCHEDULE

NOTE:
THESE ARE TYPICAL LINE, TERMINAL, & GATE POST DIMENSIONS, TO BE USED UNLESS OTHERWISE SPECIFIED IN SPECIFICATION SECTION 32 3113.



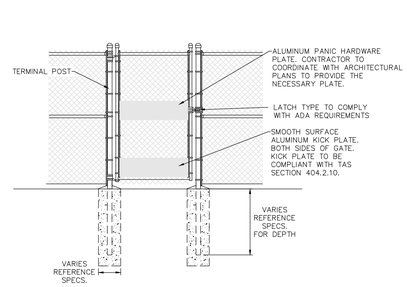
2 **INTERNATIONAL SYMBOL OF ACCESSIBILITY**
SCALE: NONE



NOTES:

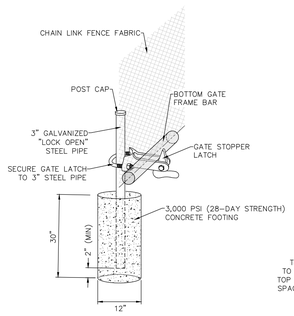
1. CONTRACTOR TO USE CHLORINATED RUBBER BASED PAINTED PAVEMENT MARKINGS. REFERENCE SPECIFICATIONS FOR COLOR & PAINT TYPE.

3 **ACCESSIBLE PAVEMENT ISLAND STRIPING**
SCALE: NONE

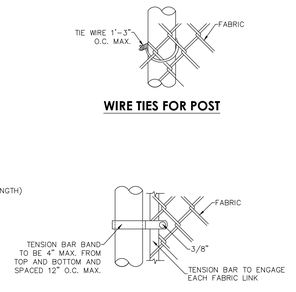


TYPICAL DOUBLE SWING GATE PROFILE

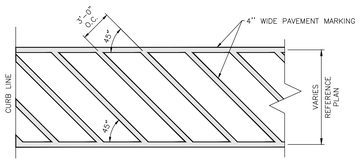
TYPICAL SINGLE SWING (PEDESTRIAN) GATE PROFILE



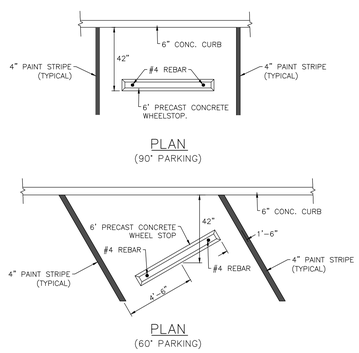
TYPICAL LOCK OPEN POST & GATE LATCH DETAIL

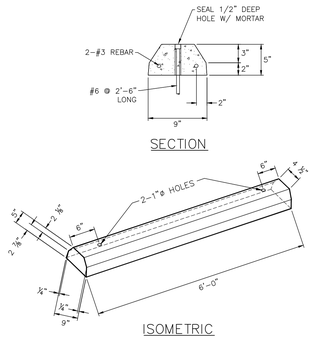


1 **CHAIN LINK FENCE DETAILS**
SCALE: NONE

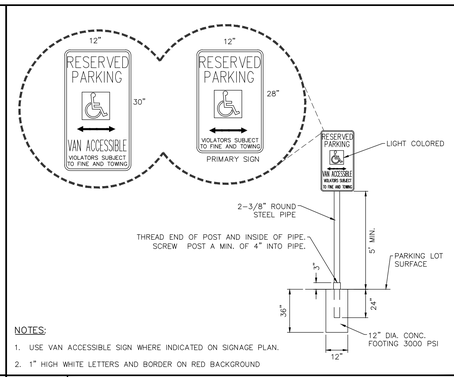


4 **PAVEMENT ISLAND STRIPING**
SCALE: NONE





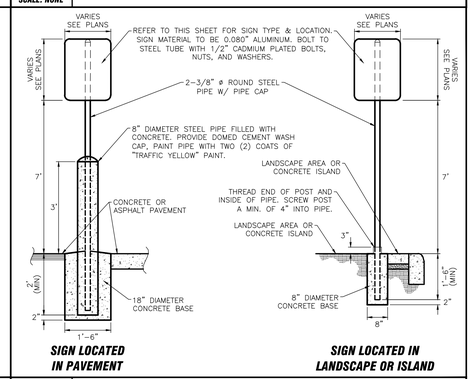
5 **WHEELSTOP DETAILS**
SCALE: NONE



NOTES:

1. USE VAN ACCESSIBLE SIGN WHERE INDICATED ON SIGNAGE PLAN.
2. 1" HIGH WHITE LETTERS AND BORDER ON RED BACKGROUND

6 **ACCESSIBLE PARKING SIGN DETAIL**
SCALE: NONE



7 **TRAFFIC SIGN DETAIL**
SCALE: NONE

STATE OF TEXAS
SEAN S. SMITH
113308
REGISTERED PROFESSIONAL ENGINEER
5/14/25

Date
Revision /

Project: SMITHSON VALLEY HIGH SCHOOL NEW WRESTLING AND ROTC BUILDING FOR COMAL ISD SPRING BRANCH, TX

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CIVIL DETAILS

Job No. 01957-02-04	Sheet No. 100% S&S
Drawn By: JCM	C8.4
Date: 04/14/25	

ISSUE FOR PERMIT/CONSTRUCTION

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ATTACHMENT N

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

SEDIMENTATION BASINS

Monthly:	The vegetative growth in the basin shall be checked. The growth shall not exceed 18 inches in height.
Quarterly:	The level of accumulated silt shall be checked. If depth of silt exceeds 6 inches, it shall be removed and disposed of "properly" and in an "approved" location. The basin shall be checked for accumulation of debris and trash. The debris and trash shall be removed if excessive. All debris and trash shall be removed at least every six months.
Annually:	The basin shall be inspected for structural integrity and repaired if necessary.
After Rainfall:	The basin shall be checked after each rainfall occurrence to ensure that it drains 48 hours after the storm is over. If it does not drain within this time, corrective maintenance will be accomplished.

FILTRATION BASINS

Monthly:	The vegetative growth in the basin shall be checked. The growth shall not exceed 18 inches in height.
Quarterly:	The accumulation of pollutants/oils shall be checked. If the pollutants have significantly reduced the designed capacity of the sand filter, the pollutants shall be removed. The level of accumulated silt shall be checked. If depth of silt/pollutants exceeds 1/2 inch, it shall be removed and disposed of "properly" and in an "approved" location. The basin shall be checked for accumulation of debris and trash. The debris and trash shall be removed if excessive. All debris and trash shall be removed at least every six months.

Annually:	The basin shall be inspected for structural integrity and repaired if necessary. Filter underdrain piping network shall be cleaned to remove sediment buildup.
After Rainfall:	The basin shall be checked after each rainfall occurrence to ensure that it drains within 48 hours. If it does not drain within this time, corrective maintenance will be accomplished.

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

"Proper" disposal of accumulated silt shall be accomplished following Texas Commission on Environmental Quality and City of Spring Branch/Comal County Guidelines and specifications.

Because the site is a political subdivision, the TCEQ and other designated inspectors shall have access to this site by making arrangements with the responsible party at the information provided below.

ENGINEERED VEGETATIVE FILTER STRIPS

Once a vegetated area is well established, little additional maintenance is generally necessary. The key to establishing a viable vegetated feature is the care and maintenance it receives in the first few months after it is planted. Once established, all vegetated BMPs require some basic maintenance to ensure the health of the plants including:

- ***Pest Management.*** An Integrated Pest Management (IPM) Plan should be developed for vegetated areas. This plan should specify how problem insects and weeds will be controlled with minimal or no use of insecticides and herbicides.

- ***Seasonal Mowing and Lawn Care.*** If the filter strip is made up of turf grass, it should be mowed as needed to limit vegetation height to 18 inches, using a mulching mower (or removal of clippings). If native grasses are used, the filter may require less frequent mowing, but a minimum of twice annually. Grass clippings and brush debris should not be deposited on vegetated filter strip areas. Regular mowing should also include weed control practices; however, herbicide use should be kept to a minimum (Urbonas et al., 1992). Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients. Irrigation of the site can help assure dense and healthy vegetative cover.

- ***Inspection.*** Inspect filter strips at least twice annually for erosion or damage to vegetation; however, additional inspection after periods of heavy runoff is most desirable. The strip should be checked for uniformity of grass cover, debris and litter, and areas of sediment accumulation. More frequent inspections of the grass cover during the first few years after establishment will help to determine if any problems are developing, and to plan for long-term restorative maintenance needs. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Construction of a level spreader device may be necessary to reestablish shallow overland flow.

- ***Debris and Litter Removal.*** Trash tends to accumulate in vegetated areas, particularly along highways. Any filter strip structures (i.e., level spreaders) should be kept free of obstructions to reduce floatables being flushed downstream, and for aesthetic reasons. The need for this practice is determined through periodic inspection but should be performed no less than 4 times per year.

- ***Sediment Removal.*** Sediment removal is not normally required in filter strips, since the vegetation normally grows through it and binds it to the soil. However, sediment may accumulate along the upstream boundary of the strip preventing uniform overland flow. Excess sediment should be removed by hand or with flat-bottomed shovels.

- ***Grass Reseeding and Mulching.*** Healthy dense grass should be maintained on the filter strip. If areas are eroded, they should be filled, compacted, and reseeded so that the final grade is level. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during filter strip establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Corrective maintenance, such as weeding or replanting should be done more frequently in the first two to three years after installation to ensure stabilization. Dense vegetation may require irrigation immediately after planting, and during particularly dry periods, particularly as the vegetation is initially established.

CONTECH 6'x4' PEAK DIVERSION JELLYFISH FILTER

See the attached Manufacturer Maintenance Guidelines.

RECORD KEEPING

Maintenance and inspection records should be kept on file by the Owner of the permanent BMPs for a period of at least three (3) years. Repair and retrofit records should be kept on file by the Owner of the permanent BMPs for a period of at least five (5) years.

Jeffrey B. Smith

Print Name Comal ISD Director of Construction & Planning

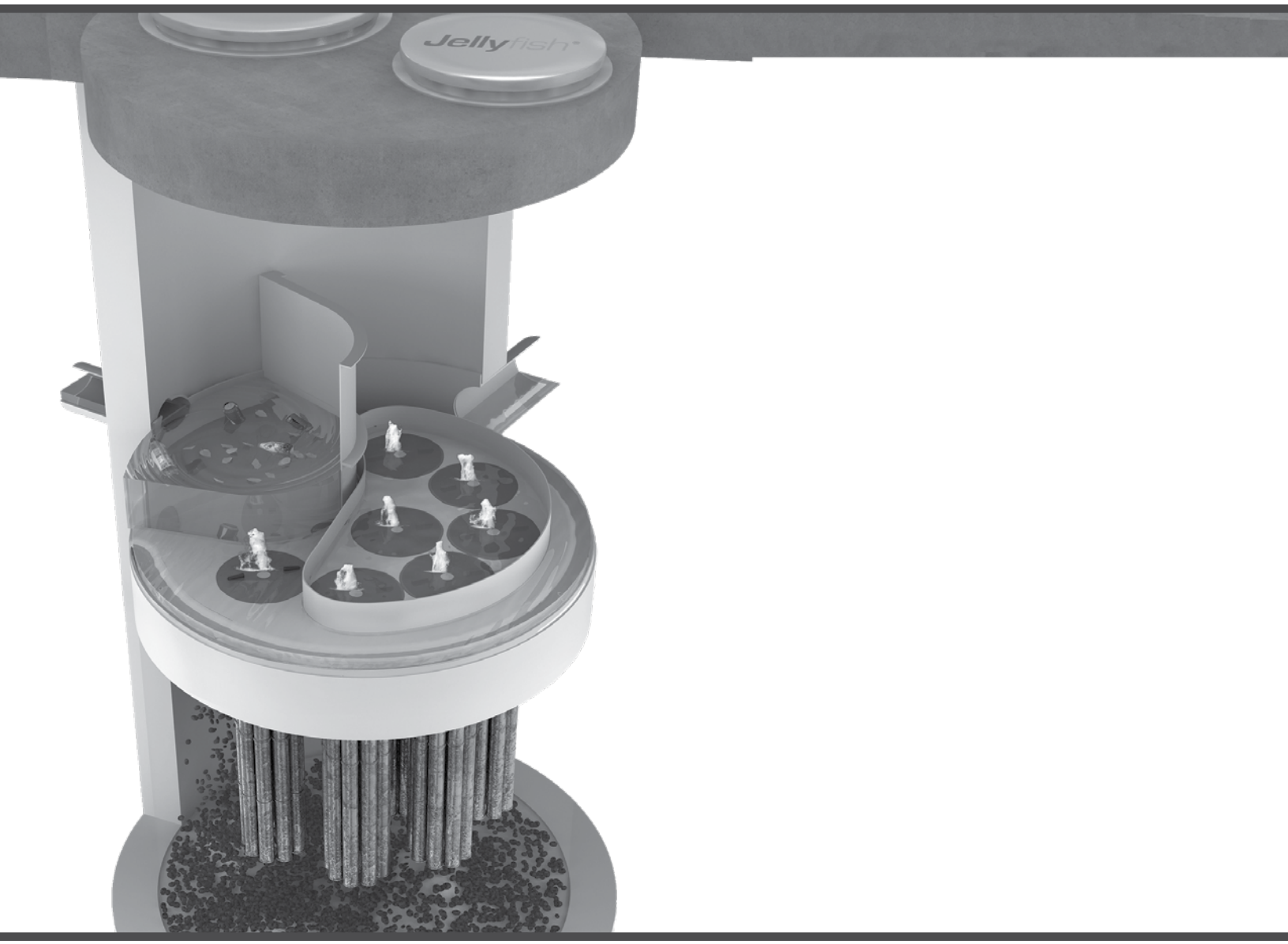
Signature of Applicant/Owner/Agent

4.23.2025

Date

CONTECH®
ENGINEERED SOLUTIONS

Jellyfish® Filter Maintenance Guide



Jellyfish®

JELLYFISH® FILTER
INSPECTION & MAINTENANCE GUIDE

Jellyfish units are often just one of many structures in a more comprehensive stormwater drainage and treatment system.

In order for maintenance of the Jellyfish filter to be successful, it is imperative that all other components be properly maintained. The maintenance and repair of upstream facilities should be carried out prior to Jellyfish maintenance activities.

In addition to considering upstream facilities, it is also important to correct any problems identified in the drainage area. Drainage area concerns may include: erosion problems, heavy oil loading, and discharges of inappropriate materials.

TABLE OF CONTENTS

1.0 Inspection and Maintenance Overview

The primary purpose of the Jellyfish® Filter is to capture and remove pollutants from stormwater runoff. As with any filtration system, these pollutants must be removed to maintain the filter's maximum treatment performance. Regular inspection and maintenance are required to insure proper functioning of the system.

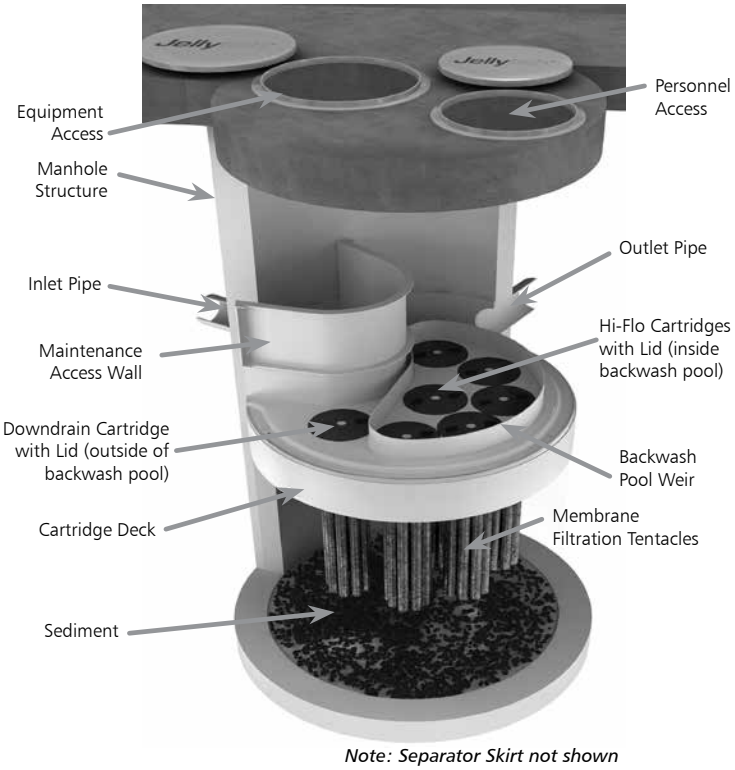
Maintenance frequencies and requirements are site specific and vary depending on pollutant loading. Additional maintenance activities may be required in the event of non-storm event runoff, such as base-flow or seasonal flow, an upstream chemical spill or due to excessive sediment loading from site erosion or extreme runoff events. It is a good practice to inspect the system after major storm events.

Inspection activities are typically conducted from surface observations and include:

- Observe if standing water is present
- Observe if there is any physical damage to the deck or cartridge lids
- Observe the amount of debris in the Maintenance Access Wall (MAW) or inlet bay for vault systems

Maintenance activities include:

- Removal of oil, floatable trash and debris
- Removal of collected sediments
- Rinsing and re-installing the filter cartridges
- Replace filter cartridge tentacles, as needed



Note: Separator Skirt not shown

2.0 Inspection Timing

Inspection of the Jellyfish Filter is key in determining the maintenance requirements for, and to develop a history of, the site's pollutant loading characteristics. In general, inspections should be performed at the times indicated below; *or per the approved project stormwater quality documents (if applicable), whichever is more frequent*.

1. A minimum of quarterly inspections during the first year of operation to assess the sediment and floatable pollutant accumulation, and to ensure proper functioning of the system.
2. Inspection frequency in subsequent years is based on the inspection and maintenance plan developed in the first year of operation. Minimum frequency should be once per year.
3. Inspection is recommended after each major storm event.
4. Inspection is required immediately after an upstream oil, fuel or other chemical spill.

3.0 Inspection Procedure

The following procedure is recommended when performing inspections:

1. Provide traffic control measures as necessary.
2. Inspect the MAW or inlet bay for floatable pollutants such as trash, debris, and oil sheen.
3. Measure oil and sediment depth in several locations, by lowering a sediment probe until contact is made with the floor of the structure. Record sediment depth, and presences of any oil layers.
4. Inspect cartridge lids. Missing or damaged cartridge lids to be replaced.
5. Inspect the MAW (where appropriate), cartridge deck and receptacles, and backwash pool weir, for damaged or broken components.

3.1 Dry weather inspections

- Inspect the cartridge deck for standing water, and/or sediment on the deck.
- No standing water under normal operating conditions.
- Standing water inside the backwash pool, but not outside the backwash pool indicates, that the filter cartridges need to be rinsed.

Inspection Utilizing Sediment Probe

- Standing water outside the backwash pool is not anticipated and may indicate a backwater condition caused by high water elevation in the receiving water body, or possibly a blockage in downstream infrastructure.
- Any appreciable sediment (≥1/16") accumulated on the deck surface should be removed.

3.2 Wet weather inspections

- Observe the rate and movement of water in the unit. Note the depth of water above deck elevation within the MAW or inlet bay.
- Less than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges (i.e. cartridges located outside the backwash pool).
- Greater than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges and each of the hi-flo cartridges (i.e. cartridges located inside the backwash pool), and water should be overflowing the backwash pool weir.
- 18 inches or greater and relatively little flow is exiting the cartridge lids and outlet pipe, this condition indicates that the filter cartridges need to be rinsed.

4.0 Maintenance Requirements

Required maintenance for the Jellyfish Filter is based upon results of the most recent inspection, historical maintenance records, or the site specific water quality management plan; whichever is more frequent. In general, maintenance requires some combination of the following:

1. Sediment removal for depths reaching 12 inches or greater, or within 3 years of the most recent sediment cleaning, whichever occurs sooner.
2. Floatable trash, debris, and oil removal.
3. Deck cleaned and free from sediment.
4. Filter cartridges rinsed and re-installed as required by the most recent inspection results, or within 12 months of the most recent filter rinsing, whichever occurs sooner.
5. Replace tentacles if rinsing does not restore adequate hydraulic capacity, remove accumulated sediment, or if damaged or missing. It is recommended that tentacles should remain in service no longer than 5 years before replacement.
6. Damaged or missing cartridge deck components must be repaired or replaced as indicated by results of the most recent inspection.
7. The unit must be cleaned out and filter cartridges inspected immediately after an upstream oil, fuel, or chemical spill. Filter cartridge tentacles should be replaced if damaged or compromised by the spill.

5.0 Maintenance Procedure

The following procedures are recommended when maintaining the Jellyfish Filter:

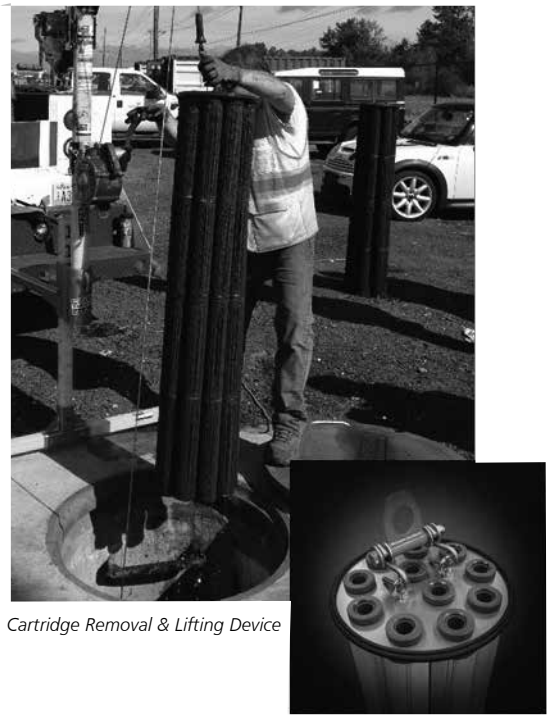
1. Provide traffic control measures as necessary.
2. Open all covers and hatches. Use ventilation equipment as required, according to confined space entry procedures. *Caution: Dropping objects onto the cartridge deck may cause damage*.
3. Perform Inspection Procedure prior to maintenance activity.
4. To access the cartridge deck for filter cartridge service, descend into the structure and step directly onto the deck. Caution: Do not step onto the maintenance access wall (MAW) or backwash pool weir, as damage may result. Note that the cartridge deck may be slippery.
5. Maximum weight of maintenance crew and equipment on the cartridge deck not to exceed 450 lbs.

5.1 Filter Cartridge Removal

1. Remove a cartridge lid.
2. Remove cartridges from the deck using the lifting loops in the cartridge head plate. Rope or a lifting device (available from Contech) should be used. *Caution: Should a snag occur, do not force the cartridge upward as damage to the tentacles may result. Wet cartridges typically weigh between 100 and 125 lbs*.
3. Replace and secure the cartridge lid on the exposed empty receptacle as a safety precaution. Contech does not recommend exposing more than one empty cartridge receptacle at a time.

5.2 Filter Cartridge Rinsing

1. Remove all 11 tentacles from the cartridge head plate. Take care not to lose or damage the O-ring seal as well as the plastic threaded nut and connector.



Cartridge Removal & Lifting Device

2. Position tentacles in a container (or over the MAW), with the threaded connector (open end) facing down, so rinse water is flushed through the membrane and captured in the container.
3. Using the Jellyfish rinse tool (available from Contech) or a low-pressure garden hose sprayer, direct water spray onto the tentacle membrane, sweeping from top to bottom along the length of the tentacle. Rinse until all sediment is removed from the membrane. *Caution: Do not use a high pressure sprayer or focused stream of water on the membrane. Excessive water pressure may damage the membrane*.

4. Collected rinse water is typically removed by vacuum hose.
5. Reassemble cartridges as detailed later in this document. Reuse O-rings and nuts, ensuring proper placement on each tentacle.

5.3 Sediment and Flotables Extraction

1. Perform vacuum cleaning of the Jellyfish Filter only after filter cartridges have been removed from the system. Access the lower chamber for vacuum cleaning only through the maintenance access wall (MAW) opening. Be careful not to damage the flexible plastic separator skirt that is attached to the underside of the deck on manhole systems. Do not lower the vacuum wand through a cartridge receptacle, as damage to the receptacle will result.
2. Vacuum floatable trash, debris, and oil, from the MAW opening or inlet bay. Alternatively, floatable solids may be removed by a net or skimmer.

Vacuuming Sump Through MAW

3. Pressure wash cartridge deck and receptacles to remove all sediment and debris. Sediment should be rinsed into the sump area. Take care not to flush rinse water into the outlet pipe.
4. Remove water from the sump area. Vacuum or pump equipment should only be introduced through the MAW or inlet bay.
5. Remove the sediment from the bottom of the unit through the MAW or inlet bay opening.

Vacuuming Sump Through MAW

6. For larger diameter Jellyfish Filter manholes (≥8-ft) and some vaults complete sediment removal may be facilitated by removing a cartridge lid from an empty receptacle and inserting a jetting wand (not a vacuum wand) through the receptacle. Use the sprayer to rinse loosened sediment toward the vacuum hose in the MAW opening, being careful not to damage the receptacle.

5.4 Filter Cartridge Reinstallation and Replacement

1. Cartridges should be installed after the deck has been cleaned. It is important that the receptacle surfaces be free from grit and debris.
2. Remove cartridge lid from deck and carefully lower the filter cartridge into the receptacle until head plate gasket is seated squarely in receptacle. ***Caution: Do not force the cartridge downward; damage may occur.***
3. Replace the cartridge lid and check to see that both male threads are properly seated before rotating approximately 1/3 of a full rotation until firmly seated. Use of an approved rim gasket lubricant may facilitate installation. See next page for additional details.
4. If rinsing is ineffective in removing sediment from the tentacles, or if tentacles are damaged, provisions must be made to replace the spent or damaged tentacles with new tentacles. Contact Contech to order replacement tentacles.

5.5 Chemical Spills

Caution: If a chemical spill has been captured, do not attempt maintenance. Immediately contact the local hazard response agency and contact Contech.

5.6 Material Disposal

The accumulated sediment found in stormwater treatment and conveyance systems must be handled and disposed of in accordance with regulatory protocols. It is possible for sediments to contain measurable concentrations of heavy metals and organic chemicals (such as pesticides and petroleum products). Areas with the greatest potential for high pollutant loading include industrial areas and heavily traveled roads. Sediments and water must be disposed of in accordance with all applicable waste disposal regulations. When scheduling maintenance, consideration must be made for the disposal of solid and liquid wastes. This typically requires coordination with a local landfill for solid waste disposal. For liquid waste disposal a number of options are available including a municipal vacuum truck decant facility, local waste water treatment plant or on-site treatment and discharge.

Jellyfish Filter Components & Filter Cartridge Assembly and Installation

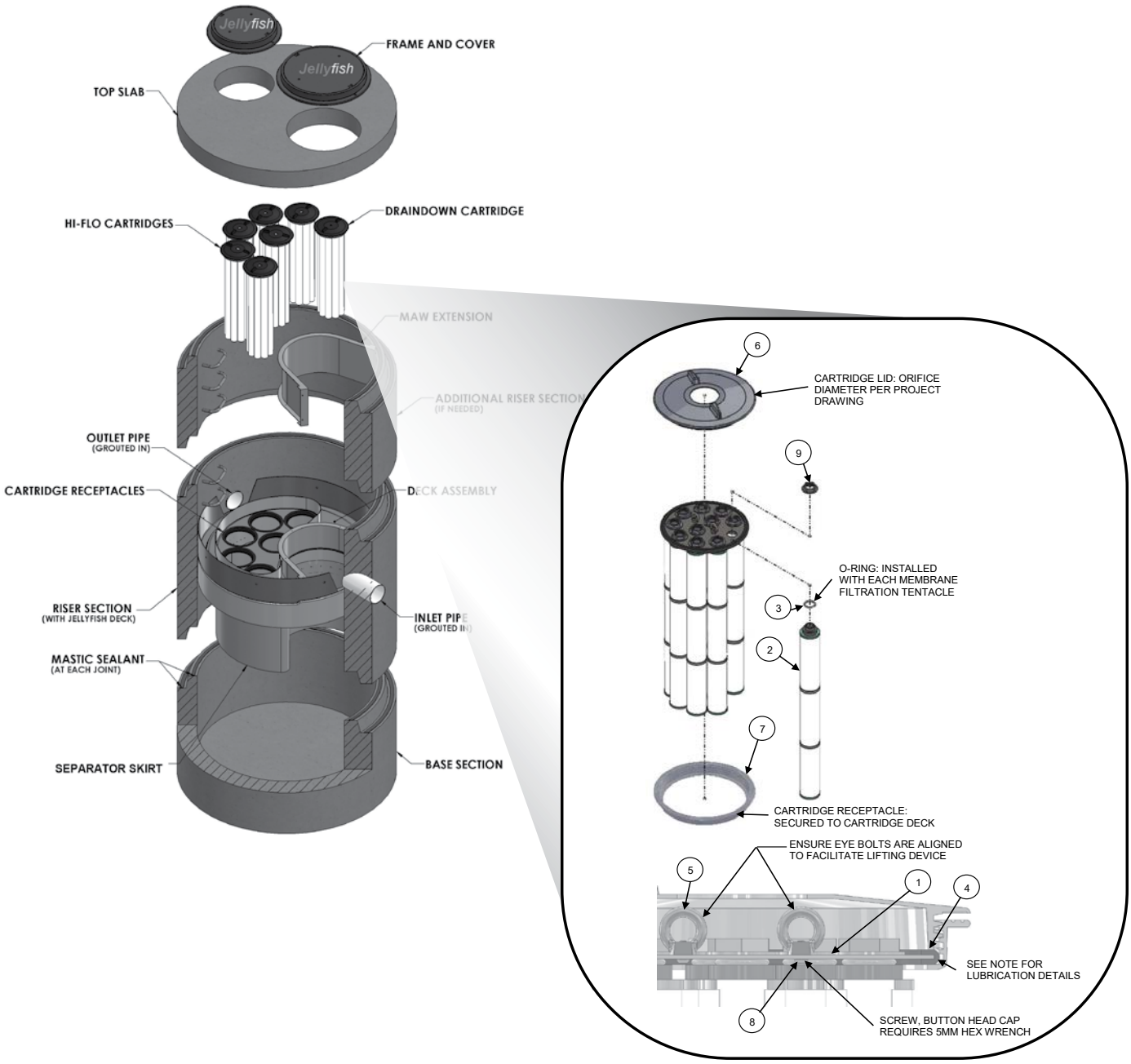


TABLE 1: BOM

ITEM NO.	DESCRIPTION
1	JF HEAD PLATE
2	JF TENTACLE
3	JF O-RING
4	JF HEAD PLATE GASKET
5	JF CARTRIDGE EYELET
6	JF 14IN COVER
7	JF RECEPTACLE
8	BUTTON HEAD CAP SCREW M6X14MM SS
9	JF CARTRIDGE NUT

TABLE 2: APPROVED GASKET LUBRICANTS

PART NO.	MFR	DESCRIPTION
78713	LA-CO	LUBRI-JOINT
40501	HERCULES	DUCK BUTTER
30600	OATEY	PIPE LUBRICANT
PSLUBXL1Q	PROSELECT	PIPE JOINT LUBRICANT

NOTES:

Head Plate Gasket Installation:
Install Head Plate Gasket (Item 4) onto the Head Plate (Item 1) and liberally apply a lubricant from Table 2: Approved Gasket Lubricants onto the gasket where it contacts the Receptacle (Item 7) and Cartridge Lide (ITem 6). Follow Lubricant manufacturer's instructions.

Lid Assembly:
Rotate Cartridge Lid counter-clockwise until both male threads drop down and properly seat. Then rotate Cartridge Lid clock-wise approximately one-third of a full rotation until Cartridge Lid is firmly secured, creating a watertight seal.

Jellyfish Filter Inspection and Maintenance Log

Owner:				Jellyfish Model No:		
Location:				GPS Coordinates:		
Land Use:	Commercial:		Industrial:		Service Station:	
	Roadway/Highway:		Airport:		Residential:	

Date/Time:						
Inspector:						
Maintenance Contractor:						
Visible Oil Present: (Y/N)						
Oil Quantity Removed:						
Floatable Debris Present: (Y/N)						
Floatable Debris Removed: (Y/N)						
Water Depth in Backwash Pool						
Draindown Cartridges externally rinsed and recommissioned: (Y/N)						
New tentacles put on Draindown Cartridges: (Y/N)						
Hi-Flo Cartridges externally rinsed and recommissioned: (Y/N)						
New tentacles put on Hi-Flo Cartridges: (Y/N)						
Sediment Depth Measured: (Y/N)						
Sediment Depth (inches or mm):						
Sediment Removed: (Y/N)						
Cartridge Lids intact: (Y/N)						
Observed Damage:						
Comments:						

Jellyfish®

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Support

- Drawings and specifications are available at www.conteches.com/jellyfish.
- Site-specific design support is available from Contech Engineered Solutions.
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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: Sean Smith, P.E.

Date: 4/16/25

Signature of Customer/Agent:

Regulated Entity Name: CISD Smithson Valley High School

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: Dripping Springs Creek

Temporary Best Management Practices (TBMPs)

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

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

☒ 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.

ATTACHMENT A
SPILL RESPONSE ACTIONS

1. Housekeeping

A. Minimize materials: An effort will be made to store only enough materials required to do the job.

B. Storage: All materials stored on site will be stored in a neat, orderly manner in their appropriate containers in a covered area. If storage in a covered area is not feasible, then the materials will be covered with polyethylene or polypropylene sheeting to protect them from the elements.

C. Labeling: Products will be kept in their original containers with the original manufacturer's label affixed to each container.

D. Mixing: Substances will not be mixed with one another unless this is recommended by the manufacturer.

E. Disposal: Whenever possible, all of the products will be used prior to disposal of the container. The manufacturer's recommendations will be followed for proper use and disposal of materials on site.

F. Inspections: The site superintendent will inspect the site daily to ensure proper use and disposal of materials on site.

G. Spoil Materials: Any excavated earth that will not be used for fill material and all demolished pavements will be hauled off site immediately and will be disposed of properly, in accordance with all applicable state/local regulations.

2. Product Specific Practices

A. Petroleum Products: All on site vehicles will be monitored for leaks and will receive regular preventive maintenance to reduce the chance of leakage. If petroleum products are present at the site, then they will be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used on site will be applied according to the manufacturer's recommendations.

B. Concrete Trucks: Ready/Transit Mix Trucks will not be allowed to wash out or discharge surplus concrete or drum wash water except in the designated location on site as shown on the SWPPP site plan.

C. Paints: All containers will be tightly sealed and stored when not required for use. Excess paint will not be poured into storm sewer system or drainage channels but will be properly disposed of according to manufacturers' instructions or state/local regulations.

D. Fertilizers: Fertilizers will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to storm water. The fertilizer will be stored in a covered area, and any partially used bags will be transferred to a sealable plastic bin to avoid spills.

3. Spill Control and Response Measures

A spill prevention and response team will be designated by the site superintendent. In addition, the following practices will be followed for spill cleanup:

A. Information: Manufacturers' recommended methods for spill cleanup will be clearly posted, and site personnel will be made aware of the procedures and location of the information and cleanup supplies.

B. Equipment: Materials and equipment necessary for spill cleanup will be present on the site at all times. Equipment and materials will include, but not be limited to brooms, shovels, rags, gloves, goggles, absorbent materials (sand, sawdust, etc.) and plastic or metal trash containers specifically designed for this purpose. The materials and equipment necessary for spill cleanup will be dependent upon the nature and quantity of the material stored on site.

C. Response: All spills will be cleaned up immediately upon discovery.

Cleanup

(1) Clean up leaks and spills immediately
(2) Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
(3) Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of it properly. See the waste management BMPs in TCEQ Technical Guidance Manual RG-348 for specific information.

Minor Spills

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

Semi-Significant Spills

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

Spills should be cleaned up immediately:

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

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

(1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
(2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
(3) Notification should first be made by telephone and followed up with a written report.

(4) The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staff have arrived at the job site.
(5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

D. Vehicle and Equipment Maintenance

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

E. Vehicle and Equipment Fueling

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

F. Safety

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

G. Reporting

Spills of toxic or hazardous material (if present on site) will be reported to the appropriate state or local government agency, regardless of the spill's size.

H. Record Keeping

The spill prevention plan will be modified to include measures to prevent this type of spill from recurring as well as improved methods for cleaning up any future spills. A description of each spill, what caused it, and the cleanup measures used will be kept with this plan.

ATTACHMENT B
POTENTIAL SOURCES OF CONTAMINATION

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

Preventive Measure Vehicle maintenance, when possible, will be performed within a construction staging area specified by the General Contractor.

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

Preventive Measure Trash containers will be placed throughout the site to encourage proper trash disposal.

Potential Source Construction debris.

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

Potential Source Stormwater contamination from excess application of fertilizers, herbicides and pesticides.

Preventive Measure Fertilizers, herbicides and pesticides will be applied only when necessary and in accordance with manufacturers' directions.

Potential Source Soil and mud from construction vehicle tires as they leave the site.

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

Potential Source Sediment from soil, sand, gravel and excavated materials stockpiled on site.

Preventive Measure Silt fence shall be installed on the downgradient side of all stockpiled materials. Reinforced rock berms shall be installed at all downstream discharge locations.

ATTACHMENT C
SEQUENCE OF MAJOR ACTIVITIES

Construction Sequencing

A. Installation of temporary BMPs as shown on the CZP Site Plan.

B. Demolition and grading.

C. Seeding and soil stabilization.

ATTACHMENT D
TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

Description of Temporary Best Management Practices:

Vegetation will be used as a temporary stabilization technique for all areas disturbed by construction, not covered in pavement, buildings, or other structures.

Sequence of installation during construction process for each phase of construction:

Vegetation as a temporary control will only be utilized in the event a disturbed area has been left denuded for more than 14 days.

Up gradient storm water flowing across the site:

There is minimum upgradient flow entering the construction area. All upgradient flow will be treated along with the stormwater generated onsite.

Onsite storm water flowing across and off the site:

The storm water originating onsite and flowing off the site will be treated through temporary BMPs. Silt fences will be installed at all locations where non-concentrated storm water exits the site.

Prevention of pollutants from entering surface streams, sensitive features and the aquifer:

The storm water originating onsite and flowing off the site will be treated using temporary BMPs prior to it entering surface streams, sensitive features and the aquifer. Silt fences will be installed at all locations where non-concentrated storm water may leave the site. These silt fences should filter the storm water prior to it leaving the site.

Maintaining flow to naturally occurring sensitive features:

The storm water originating onsite and flowing off the site will continue to flow into the down gradient receiving waters. Any sensitive features downstream will continue to receive flow originating on the site. Prior to the flow leaving the site, it will be treated through temporary BMPs. These temporary BMPs should remove sediment, pollutants and debris if installed and maintained properly.

ATTACHMENT F
STRUCTURAL PRACTICES

Vegetation will be used as a temporary stabilization technique for all areas disturbed by construction, not covered by pavement, buildings, or other structures. Temporary stabilization shall consist of temporary seeding of disturbed areas that are denuded beyond 14 days without construction restart within 21 days. As a temporary control, the vegetation will be used to stabilize barren areas that are inactive for long periods of time.

ATTACHMENT G
DRAINAGE AREA MAP

The improvements proposed with this modification will all be constructed within the existing drainage areas draining to Extended Detention Pond #1. No major changes will be made to the existing drainage patterns.

ATTACHMENT I
INSPECTION AND MAINTENANCE FOR BMPS

Silt Fence

1. Inspect all fencing weekly, and after any rainfall.
2. Remove sediment when buildup reaches 6 inches, or install a second line of fencing parallel to the old fence.
3. Replace any torn fabric or install a second line of fencing parallel to the torn section.
4. Replace or repair any sections crushed or collapsed in the course of construction activity.

Bagged Gravel Inlet Filter

1. Inspections should be made weekly and after each rainfall. Repair or replacement should be made promptly as needed by contractor.
2. Remove sediment when buildup reaches a depth of 3 inches. Removed sediment should be deposited in a suitable area and in such a manner that it will not erode.
3. Check placement of device to prevent gaps between device and curb.
4. Inspect filter fabric and patch or replace if torn or missing.
5. Structures should be removed and the area stabilized only after the remaining drainage area has been properly stabilized.

Temporary Construction Entrance/Exit

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

Concrete Washout Areas

1. Locate washout area at least 50 feet from sensitive features, storm drains, open ditches, or water bodies.
2. Wash out waste into the temporary pit where the concrete can set, be broken up, and then disposed properly.

CISD SMITHSON VALLEY HIGH SCHOOL

Responsible Party Form

Pollution Prevention Measure		Inspected	Corrective Action	
			Description	Date Completed
Silt Fence	Inspections			
	Fencing			
	Sediment Removal			
	Torn Fabric			
	Crushed/Collapsed Fencing			
Bagged Gravel Inlet Filters	Inspections			
	Replaced/Reshaped			
	Silt Removed			
Temporary Construction Entrance/Exit	Inspections			
	Entrance Condition			
	Sediment in Public ROW			
	Sediment Trap Present			
	Sediment Not Entering Storm Drain			

Inspector's Name

Inspector's Signature

Name of Owner/Operator

Date

Note: Inspector is to attach a brief statement of his qualifications to this report.

ATTACHMENT J
SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of the site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

Temporary stabilization shall consist of temporary seeding of disturbed areas that are denuded beyond 14 days without construction restart within 21 days.

As pad sites (buildings, sidewalks and pavement) are completed, permanent landscaping and sod shall be planted and irrigated. Curb and gutter will direct runoff into the permanent water quality basin.

Temporary vegetation stabilization techniques shall be in accordance with the TCEQ Technical Guidance Manual RG-248 (*Complying with the Edwards Aquifer Rules – Technical Guidance on Best Management Practices*), Chapter 1 Temporary Best Management Practices, Section 1.3.8 Temporary Vegetation, as follows:

Temporary Vegetation
Vegetation is used as a temporary or permanent stabilization technique for areas disturbed by construction, but not covered by pavement, buildings, or other structures. As a temporary control, vegetation can be used to stabilize stockpiles and barren areas that are inactive for long periods of time.

Vegetative techniques can and should apply to every construction project with few exceptions. Vegetation effectively reduces erosion in swales, stockpiles, berms, mild to medium slopes, and along roadways.

Other techniques may be required to assist in the establishment of vegetation. These other techniques include erosion control matting, mulches, surface roughening, swales and dikes to direct runoff around newly seeded areas, and proper grading to limit runoff velocities during construction. (NCTCOG, 1993b)

Materials:
The type of temporary vegetation used on a site is a function of the season and the availability of water for irrigation. For areas that are not irrigated, the year can be divided into two temporary planting seasons and one season for planting of permanent warm weather groundcovers. These periods are shown in Figure 1-19 for Bexar, Comal, Kinney, Medina, and Uvalde Counties. Appropriate temporary vegetation for these areas is shown in Table 1-4.

Other vegetation may perform as well as the recommended varieties, especially where irrigation is available. County agricultural extension agents are a good source for suggestions for other types of temporary vegetation. All seed should be high quality, U.S. Dept. of Agriculture certified seed.

Installation:

(1) Interim or final grading must be completed prior to seeding, minimizing all steep slopes. In addition, all necessary erosion structures such as dikes, swales, and diversions, should also be installed.

(2) Seedbed should be well pulverized, loose, and uniform.

(3) Fertilizer should be applied at the rate of 40 pounds of nitrogen and 40 pounds of phosphorus per acre, which is equivalent to about 1.0 pounds of nitrogen and phosphorus per 1000 square feet. Compost can be used instead of fertilizer and applied at the same time as the seed.

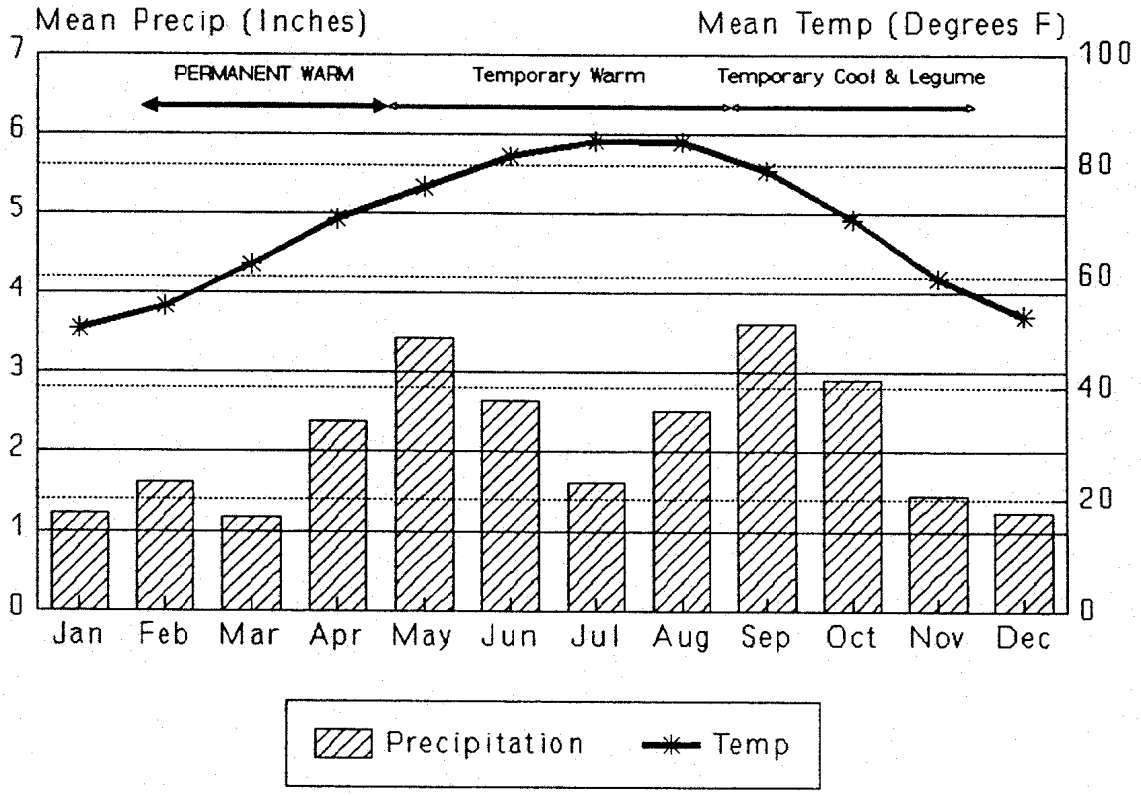

Figure 1-19 Planting Dates for Bexar, Comal, Kinney, Medina, and Uvalde Counties (Northcutt, 1993)

Table 1-4 Temporary Seeding for Bexar, Comal, Kinney, Medina, and Uvalde Counties (Northcutt, 1993)

Dates	**Climate**	**Species (lb/ac)**	
Sept 1 to Nov 30	Temporary Cool Season	Tall Fescue	4.0
		Oats	21.0
		Wheat (Red, Winter)	30.0
		Total	**55.0**
Sept 1 to Nov 30	Cool Season Legume	Hairy Vetch	8.0
May 1 to Aug 31	Temporary Warm Season	Foxtail Millet	30.0

(4) Seeding rates should be as shown in Table 1-4 or as recommended by the county agricultural extension agent.

(5) The seed should be applied uniformly with a cyclone seeder, drill, cultipacker seeder or hydroseeder (slurry includes seed, fertilizer and binder).

(6) Slopes that are steeper than 3:1 should be covered with appropriate soil stabilization matting as described in the following section to prevent loss of soil and seed.

Irrigation:
Temporary irrigation should be provided according to the schedule described below, or to replace moisture loss to evapotranspiration (ET), whichever is greater. Significant rainfall (on-site rainfall of ½" or greater) may allow watering to be postponed until the next scheduled irrigation.

Time Period	**Irrigation Amount and Frequency**
Within 2 hours of installation	Irrigate entire root depth, or to germinate seed
During the next 10 business days	Irrigate entire root depth every Monday, Wednesday, and Friday
During the next 30 business days or until Substantial Completion	Irrigate entire root depth a minimum of once per week, or as necessary to ensure vigorous growth
During the next 4 months or until Final Acceptance of the Project	Irrigate entire root depth once every two weeks, or as necessary to ensure vigorous growth

If cool weather induces plant dormancy, water only as necessary to maintain plant health. Irrigate in a manner that will not erode the topsoil but will sufficiently soak the entire depth of roots.

Inspection and Maintenance Guidelines:

(1) Temporary vegetation should be inspected weekly and after each rain event to locate and repair any erosion.

(2) Erosion from storms or other damage should be repaired as soon as practical by regrading the area and applying new seeds.

(3) If the vegetation cover is less than 80%, the area should be reseeded.

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

I Jeffrey Smith,
Print Name

Director of Construction and Planning,
Title - Owner/President/Other

of Comal Independent School District,
Corporation/Partnership/Entity Name

have authorized Sean Smith, P.E.
Print Name of Agent/Engineer

of Moy Tarin Ramirez Engineers, LLC
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Applicant's Signature

3.31.2025
Date

THE STATE OF TEXAS §

County of COMAL §

BEFORE ME, the undersigned authority, on this day personally appeared JEFFREY B. SMITH 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 31st day of MARCH, 2025.

Amanda Dee Comstock
My Commission Expires
5/29/2028
Notary ID132494576

Amanda Dee Comstock
NOTARY PUBLIC

AMANDA DEE COMSTOCK
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 5/29/2028

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: CISD Smithson Valley High School
Regulated Entity Location: 14001 TX-46, Spring Branch, Texas 78070
Name of Customer: Comal ISD
Contact Person: Jeffrey Smith Phone: (830) 221-2101
Customer Reference Number (if issued):CN 600249825
Regulated Entity Reference Number (if issued):RN 103932638

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	95.4 Acres	$ 8,000
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 4/16/25

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 600249825		RN 103932638

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:*

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:

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:

City		State		ZIP		ZIP + 4	

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

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

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.*)

CISD SMITHSON VALLEY HIGH SCHOOL

23. Street Address of the Regulated Entity: *(No PO Boxes)*	14001 TX-46							
	City	SpringBranch	**State**	TX	**ZIP**	78070	**ZIP + 4**	
24. County	Comal							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:					
26. Nearest City			**State**	**Nearest ZIP Code**	
Spring Branch			TX	78070	
27. Latitude (N) In Decimal:	29.803136		**28. Longitude (W) In Decimal:**	98.358686	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	48	11.29	98	21	31.27

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.)*

High School

34. Mailing Address:	**14001 TX-46**							
	City	**Spring Branch**	**State**	**TX**	**ZIP**	**78070**	**ZIP + 4**	
35. E-Mail Address:	**jeffrey.smith@comalisd.org**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(830) 885-1000		**( ) -**

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:	Sean Smith, P.E.	**41. Title:**	Senior Vice President

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(210) 698-5051		(210) 698-5085	ssmith@mtrengineers.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:	Moy Tarin Ramirez Engineers, LLC	**Job Title:**	Senior Vice President
Name *(In Print):*	Sean Smith, P.E.	**Phone:**	(210) 698- **5051**
Signature:		**Date:**	4/16/25