WATER POLLUTION ABATEMENT PLAN (WPAP) MODIFICATION #7: NISD THOMAS CLARK HIGH SCHOOL

PREPARED FOR:



NORTHSIDE INDEPENDENT SCHOOL DISTRICT

5900 EVERS ROAD SAN ANTONIO, TX 78238

DATE: SEPTEMBER 2025



PREPARED BY:



12770 Cimarron Path, Ste 100 San Antonio, TX 78249 TBPE Firm #5297 Phone 210-698-5051 Fax 210-698-5085

CN: 601104169 RN: 102807898

NISD THOMAS CLARK HIGH SCHOOL WATER POLLUTION ABATEMENT PLAN MODIFICATION #7 TABLE OF CONTENTS

I. EDWARDS AQUIFER APPLICATION

a. FORM TCEQ-20705

II. GENERAL INFORMATION

- a. FORM TCEQ-0587
- b. ATTACHMENT A ROAD MAP
- c. ATTACHMENT B USGS/EDWARDS RECHARGE ZONE MAP
- d. ATTACHMENT C PROJECT DESCRIPTION

III. GEOLOGIC ASSESSMENT

- a. FORM TCEQ-0585
- b. ATTACHMENT A GEOLOGIC ASSESSMENT TABLE
- c. ATTACHMENT B SOIL PROFILE & NARRATIVE OF SOIL UNITS
- d. ATTACHMENT C STRATIGRAPHIC COLUMN
- e. ATTACHMENT D NARRATIVE OF SITE SPECIFIC GEOLOGY

IV. MODIFICATION OF A PREVIOUSLY APPROVED PLAN

- a. FORM TCEQ-0590
- b. ATTACHMENT A ORIGINAL APPROVAL LETTER & APPROVED MODIFICATION LETTERS
- c. ATTACHMENT B NARRATIVE OF PROPOSED MODIFICATION
- d. ATTACHMENT C CURRENT SITE PLAN OF THE APPROVED PROJECT
- e. SUMMARY OF PROPOSED MODIFICATIONS
- f. EXISTING IMPERVIOUS COVER EXHIBIT
- g. PROPOSED IMPERVIOUS COVER EXHIBIT

V. WATER POLLUTION ABATEMENT PLAN APPLICATION

- a. FORM TCEQ-0584
- b. ATTACHMENT A FACTORS AFFECTING SURFACE WATER QUALITY
- c. ATTACHMENT B VOLUME & CHARACTER OF STORMWATER
- d. NISD THOMAS CLARK HIGH SCHOOL WPAP SITE PLAN & WPAP DETAILS

VI. TEMPORARY STORMWATER SECTION

- a. FORM TCEQ-0602
- b. ATTACHMENT A SPILL RESPONSE ACTIONS
- c. ATTACHMENT B POTENTIAL SOURCES OF CONTAMINATION
- d. ATTACHMENT C SEQUENCE OF MAJOR ACTIVITIES
- e. ATTACHMENT D TEMPORARY BEST MANAGEMENT PRACTICES & MEASURES
- f. ATTACHMENT F STRUCTURAL PRACTICES
- g. ATTACHMENT G DRAINAGE AREA MAP
- h. ATTACHMENT I INSPECTION & MAINTENANCE FOR BMPs
- ATTACHMENT J SCHEDULE OF INTERIM & PERMANENT SOIL STABILIZATION PRACTICES

VII. PERMANENT STORMWATER SECTION

- a. FORM TCEQ-0600
- b. ATTACHMENT B BMPs FOR UPGRADIENT STORMWATER
- c. ATTACHMENT C BMPs FOR ON-SITE STORMWATER
- d. ATTACHMENT D BMPs FOR SURFACE STREAMS
- e. ATTACHMENT F CONSTRUCTION PLANS/TSS CALCULATIONS
- f. ATTACHMENT G INSPECTION, MAINTENANCE, REPAIR, AND RETROFIT PLAN
- g. ATTACHMENT I MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

VIII. AGENT AUTHORIZATION FORM (TCEQ-0599)

- IX. APPLICATION FEE FORM (TCEQ-0574)
- X. TCEQ CORE DATA FORM (TCEQ-10400)

I. EDWARDS AQUIFER APPLICATION

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

Technical Review

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

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: NISD THOMAS CLARK HIGH SCHOOL				2. Regulated Entity No.: 102807898				
3. Customer Name: Northside Independent School District			4. Customer No.: 601104169					
5. Project Type: (Please circle/check one)	New	Modi	Modification		Exter	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-ı	Non-residential			8. Sit	te (acres):	63.95
9. Application Fee:	\$8,000	10. P	10. Permanent B			s):	JellyFish F	ilter, VFS
11. SCS (Linear Ft.):	N/A	12. AST/UST (No			o. Tar	ıks):	N/A	
13. County:	Bexar	14. Watershed:					Upper San Ar	ntonio River

Application Distribution

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

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

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

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

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

I certify that to the best of my knowledge, that the 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
Print Name of Customer/Authorized Agent
Signature of Customer/Authorized Agent Date
Signature of Customer/Authorized Agent Date

FOR TCEQ INTERNAL USE ONI	LY			
Date(s)Reviewed: Date Administratively Complete:				
Received From:	eived From: Correct Number of Copies:		Number of Copies:	
Received By:	eceived By: Distribution Date:		ion Date:	
EAPP File Number:	Complex:		:	
Admin. Review(s) (No.):	4	No. AR Rounds:		
Delinquent Fees (Y/N):		Review Time Spent:		
Lat./Long. Verified:		SOS Customer Verification:		
Agent Authorization Complete/Notarized (Y/N):		Fee	Payable to TCEQ (Y/N):	
Core Data Form Complete (Y/N):		Check:	Signed (Y/N):	
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):	

II	. GENERAL INFORMATION

General Information Form

Texas Commission on Environmental Quality

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

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

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

Signature

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

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

Date: 9/3/25

Signature of Customer/Agent:

Project Information

1. Regulated Entity Name: NISD THOMAS CLARK HIGH SCHOOL

2. County: Bexar

3. Stream Basin: San Antonio River Basin

4. Groundwater Conservation District (If applicable): Edwards Aquifer Authority

5. Edwards Aquifer Zone:

Recharge Zone

Transition Zone

6. Plan Type:

AST

UST

Exception Request

 \bowtie wpap

imes Modification

/.	Customer (Applicant):	
	Contact Person: <u>Jacob Villarreal</u> , P.E. Entity: <u>Northside Independent School District</u> Mailing Address: <u>5900 Evers Rd.</u> , <u>Bldg. C</u> City, State: <u>San Antonio</u> , <u>TX</u> Telephone: (210)397-1200 Email Address: <u>jacob.villarreal@nisd.net</u>	Zip: <u>78238</u> FAX:
8.	Agent/Representative (If any):	
	Contact Person: <u>Sean Smith, P.E.</u> Entity: <u>Moy Tarin Ramirez Engineers, LLC</u> Mailing Address: <u>12770 Cimarron Path, Suite 100</u> City, State: <u>San Antonio, TX</u> Telephone: <u>210-698-5051</u> Email Address: <u>ssmith@mtrengineers.com</u>	Zip: <u>78249</u> FAX:
9.	Project Location:	
	 ☐ The project site is located inside the city limits ☐ The project site is located outside the city limit jurisdiction) of ☐ The project site is not located within any city's 	s but inside the ETJ (extra-territorial
10.	The location of the project site is described bel detail and clarity so that the TCEQ's Regional st boundaries for a field investigation.	
	5150 De Zavala Road, San Antonio, Texas 7824	<u>9</u>
11.	Attachment A – Road Map. A road map showing project site is attached. The project location and the map.	_
12.	Attachment B - USGS / Edwards Recharge Zon USGS Quadrangle Map (Scale: 1" = 2000') of th The map(s) clearly show:	
	 ☑ Project site boundaries. ☑ USGS Quadrangle Name(s). ☑ Boundaries of the Recharge Zone (and Trance) ☑ Drainage path from the project site to the known and the project site to the known are project site. 	
13.	The TCEQ must be able to inspect the project solution Sufficient survey staking is provided on the protect the boundaries and alignment of the regulated features noted in the Geologic Assessment.	ject to allow TCEQ regional staff to locate
	Survey staking will be completed by this date: J	lune 1, 2025

14. Attachment C – Project Description. Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:	
 ✓ Area of the site ✓ Offsite areas ✓ Impervious cover ✓ Permanent BMP(s) ✓ Proposed site use ✓ Site history ✓ Previous development ✓ Area(s) to be demolished 	
15. 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/Uncleared)	
Other:	
Prohibited Activities	
16. X I am aware that the following activities are prohibited on the Recharge Zone and are no proposed for this project:	t
(1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);	
(2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;	
(3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;	
(4) The use of sewage holding tanks as parts of organized collection systems; and	
(5) New municipal solid waste landfill facilities required to meet and comply with Type standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).	
(6) New municipal and industrial wastewater discharges into or adjacent to water in th state that would create additional pollutant loading.	e
17. X I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project:	
(1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);	

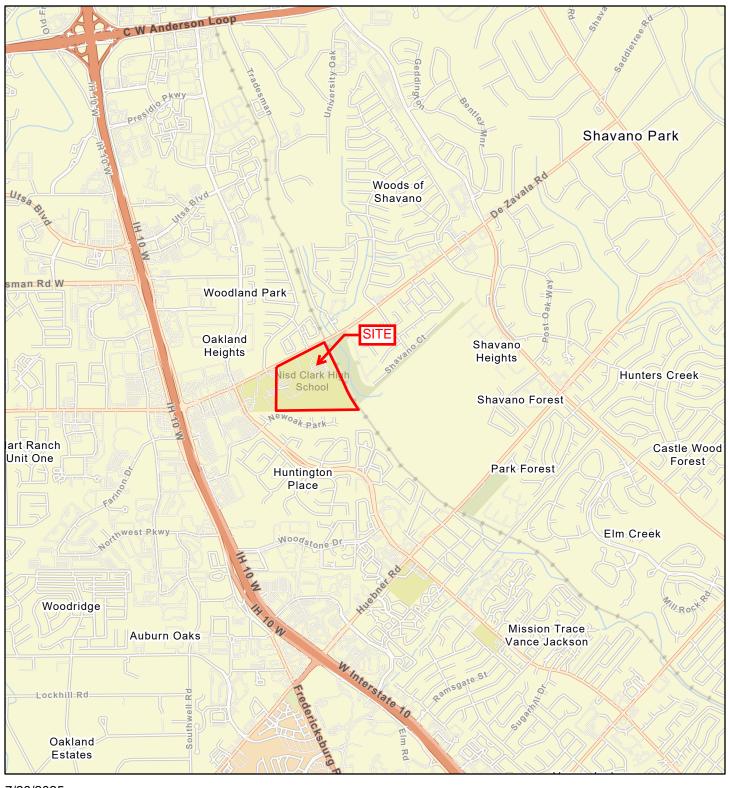
(2) Land disposal of Class I wastes, as defined in 30 TAC $\S335.1$; and

(3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

18.	ne fee for the plan(s) is based on:	
	For a Water Pollution Abatement Plan or Modification, the total acreage of the sit where regulated activities will occur. For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines. For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the number of tanks or piping systems. A request for an exception to any substantive portion of the regulations related to protection of water quality. A request for an extension to a previously approved plan.	total
19.	Application fees are due and payable at the time the application is filed. If the confee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have be sent to the Commission's:	<u> </u>
	 ☐ TCEQ cashier ☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties) ☑ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties) 	d
20.	Submit one (1) original and one (1) copy of the application, plus additional copies needed for each affected incorporated city, groundwater conservation district, ar 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 re office.	id al
21.	No person shall commence any regulated activity until the Edwards Aquifer Prote Plan(s) for the activity has been filed with and approved by the Executive Director	

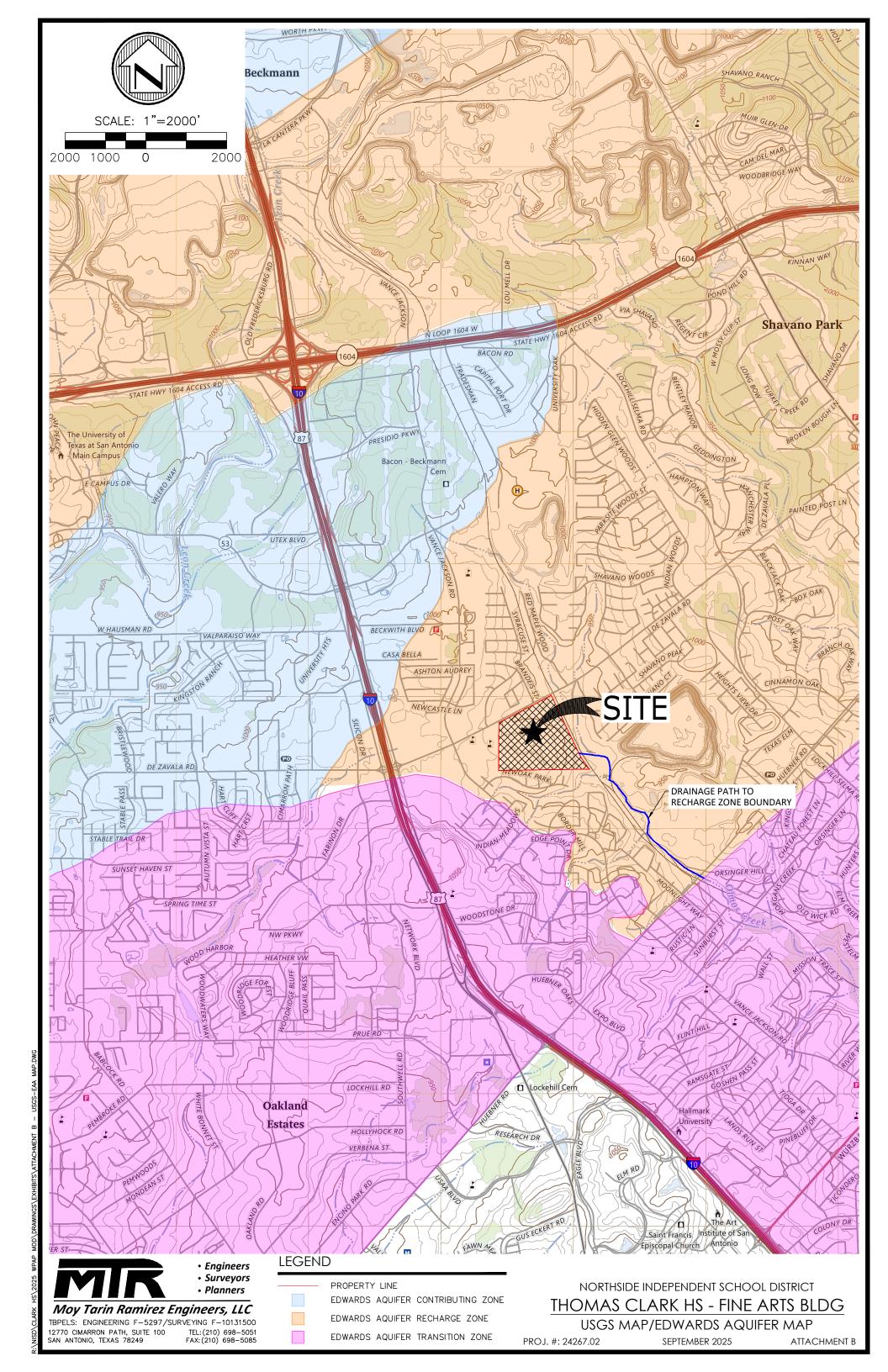
ATTACHMENT A: ROAD MAP



7/28/2025

1:36,112

0 0.28 0.55 1.1 mi
0 0.42 0.85 1.7 km



ATTACHMENT C

PROJECT DESCRIPTION

The site is located at 5150 De Zavala Rd., San Antonio, TX 78249. The entire 63.957-acre site is located in the Edwards Aquifer Recharge Zone. The current development consists of a high school with buildings, concrete sidewalks, asphalt parking, sports fields and a partial sedimentation/filtration basin adjacent to the existing practice field.

A Water Pollution Abatement Plan (WPAP) was first approved by the Texas Water Commission for the NISD Thomas Clark High School on April 22, 1976 for the high school campus. The WPAP was then modified and approved on December 5, 2001 (Modification #1) with the addition of a grassy swale to treat an addition in impervious cover. On May 5, 2009 (Modification #2), the WPAP was modified and approved for the addition of a science building, fire lane and miscellaneous additions including a grassy swale. In lieu of treating the impervious cover that was added, the permanent BMP was constructed for existing impervious cover that was previously untreated. The WPAP was modified and approved again on May 19, 2011 (Modification #3) for the demolition and reconstruction of existing parking, curbs, sidewalks and driveways. Another modification to the WPAP was approved on October 18, 2012 (Modification #4) for the demolition and reconstruction of the existing track, sidewalks, base materials and curb. A grassy swale was constructed to treat improvements associated with the project. On July 1, 2016 (Modification #5), another modification was approved for the addition of three temporary storage containers, portable buildings and associated sidewalks proposed to be treated by vegetative filter strips. The modification also included approximately 68,000 square feet of compacted base material for temporary construction staging areas which were to be removed at the completion of the project. The most recent WPAP modification was approved on February 27, 2020 (Modification #6), and included the replacement of the existing natural turf football field with new synthetic turf, existing track resurfacing, a short emergency access drive to the track, and minor asphalt and concrete work to tie the project into the existing improvements. The modification provided a partial sedimentation/filtration basin to treat all of the impervious cover within the limits of the track. The existing site is reported to have 23.33 acres of impervious cover after the project completion associated with WPAP Modification #6.

This modification (Modification #7) includes the construction of a new parking lot, new fine arts building, renovation of the main building's front entrance and associated concrete flatwork and asphalt pavement improvements to existing driveways and parking lots. Refer to the *Overall WPAP Site Plan* for project area/soil disturbance locations. All construction associated with the improvements will occur within the 63.95-acre property. The overall acreage of the site is 63.95 acres (64 acres). There is not a decrease in acreage being proposed. The acreage is the same as the last four modifications. Previous modifications were prepared without a resolved boundary,

resulting in a discrepancy in the reported overall site acreage.

The calculated existing impervious cover onsite is 23.24 acres. The impervious cover onsite will increase by 2.70 acres totaling 25.93 acres of impervious cover for the entire site. A proposed jellyfish filter will be used to treat the impervious cover increase associated with the new parking lot. Proposed VFS will be utilized to treated pre-1999 impervious cover to offset the increase in impervious cover associated with all other new improvements. All impervious cover associated with the new fine arts building and renovation of the main building's front entrance is being routed underground to discharge at a grassy swale.

III. GEOLOGIC ASSESSMENT	



Geologic Site Assessment (WPAP)

for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone

> <u>Clark High School</u> <u>5150 De Zavala Road</u> <u>San Antonio, Texas</u>

Frost GeoSciences Control # FGS-E16158

April 27, 2016

Prepared exclusively for

MTR Engineering, LLC 12770 Cimarron, Suite 100 San Antonio, Texas 78249

Frost Geosciences

Geotechnical = Construction Materials Forensics = Environmental

13402 Western Oak • San Antonio, Texas 78023 Phone: (210) 372-1315 Fax: (210) 372-1318



13402 Western Oak San Antonio, Texas 78023 **Phone** (210) 372-1315 Fax (210) 372-1318 www.frostgeosciences.com SDVOSB VBE DIBE SBE TBPE Firm Registration # F-9227 TBPG Firm Registration # 50040

April 27, 2016

MTR Engineering, LLC 12770 Cimarron, Suite 100 San Antonio, Texas 78249

Mr. Sean Smith, P.E. Attn:

Re: Geologic Site Assessment (WPAP)

> for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone

The Clark High School 5150 De Zavala Road San Antonio, Texas

Frost GeoSciences, Inc. Control # FGS-E16158

Dear Sir:

Attached is a copy of the Geologic Assessment Report completed for the above referenced project site as it relates to 30 TAC §213.5(b)(3), effective June 1, 1999. Our investigation was conducted and this report was prepared in general accordance with the "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04). The results of our investigation, along with any recommendations for Best Management Practices (BMP's), are provided in the following report.

If you have any questions regarding this report, or if Frost GeoSciences, Inc. may be of additional assistance to you on this project, please feel free to call our office. It has been a pleasure to work with you and we wish to thank you for the opportunity to be of service to you on this project. We look forward to being of continued service.

> Steve M. Frost Geology cense No. 315

Sincerely.

Frost GeoSciences, Inc.

Steve Frost, C.P.G., P.G President, Senior Geologist

Distribution: (5) MTR Engineering, LLC



Table of Contents

GEO	LUGIC ASSES	SMENT FORM
STRA	ATIGRAPHIC (COLUMN4
GEO	LOGIC ASSES	SMENT TABLE5
LOC	ATION	6
METI	HODOLOGY	6
RESE	EARCH & OBS	SERVATIONS
7.	5 Minute Qua	drangle Map Review7
R	echarge/Trans	sition Zone
10	00-Year Flood _l	plain8
S	oils	8
N	arrative Descr	ription of the Site Geology9
BEST	Γ MANAGEME	NT PRACTICES10
DISC	LAIMER	10
REFE	ERENCES	11
APPE	ENDIX	
A:	Site Locatio	on Plates
	Plate 1:	Site Plan
	Plate 2:	Street Map
	Plate 3:	USGS Topographic Map
	Plate 4:	Official Edwards Aquifer Recharge Zone Map
	Plate 5:	FEMA Flood Map
	Plate 6:	USDA Soil Survey Aerial Photograph, 1"=500'
	Plate 7:	Geologic Map of the New Braunfels, Texas 30x60 Minute Quadrangle
	Plate 8:	2016 Aerial Photograph, 1"=500'
	Plate 9:	2016 Aerial Photograph with PRF's, 1"=200'
B:	Site Photog	raphs
C:	Site Geolog	ic Map



Geologic Assessment

Texas Commission on Environmental Quality

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

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

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

Signature

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



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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Cb	D	0 to 1

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

Applicant's Site Plan Scale: 1" = 100 ' Site Geologic Map Scale: 1" = 100 '

Site Soils Map Scale (if more than 1 soil type): 1" = 500 '

Method of collecting positional data:

✓ Global Positioning System (GPS) technology.

Geotechnical - Construction Materials - Forensics - Environmental

✓ Other method(s). Please describe method of data collection: 2016 Aerial Photograph

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

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

Frost	GeoSci	lences
-------	---------------	--------

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



Stratigraphic Column

[Hydrogeologic subdivisions modified from Maclay and Small (1976); groups, formations, and members modified from Rose (1972); lithology modified from Dunham (1962); and porosity type modified from Choquette and Pray (1970). CU, confining unit; AQ, aquifer]

	drogeol subdivisi				Group, ormation, r member	Hydro- logic function	Thickness (feet)	Lithology	Field identification	Cavern development	Porosity/ permeability type
sno	confi	Upper confining units		gle F	ord Group	CU	30 – 50	Brown, flaggy shale and argillaceous limestone	Thin flagstones; petroliferous	None	Primary porosity lost/ low permeability
Upper Cretaceous	un			da L	imestone	CU	40 – 50	Buff, light gray, dense mudstone	Porcelaneous limestone with calcite-filled veins	Minor surface karst	Low porosity/low permeability
Opp			Del Rio Clay		CU	40 – 50	Blue-green to yellow-brown clay	Fossiliferous; Ilymatogyra arietina	None	None/primary upper confining unit	
	1			-	town ation	Karst AQ; not karst CU	2-20	Reddish-brown, gray to light tan marly limestone	Marker fossil; Waconella wacoensis	None	Low porosity/low permeability
	II			Ē.	Cyclic and marine members, undivided	AQ	80 90	Mudstone to packstone: miliolid grainstone; chert	Thin graded cycles; massive beds to relatively thin beds; crossbeds	Many subsurface; might be associated with earlier karst development	Laterally extensive; both fabric and not fabric/water-yielding
	Ш			Person Formation	Leached and collapsed members, undivided	AQ	70 – 90	Crystalline limestone; mudstone to grainstone; chert; collapsed breccia	Bioturbated iron- stained beds separated by massive limestone beds; stromatolitic limestone	Extensive lateral development; large rooms	Majority not fabric/one of the most permeable
sno	IV	Edwards aquifer	Edwards Group		Regional dense member	CU	20 – 24	Dense, argillaceous mudstone	Wispy iron-oxide stains	Very few; only vertical fracture enlargement	Not fabric/low permeability; vertical barrier
Lower Cretz	V	Edwar			Grainstone member	AQ	50 – 60	Miliolid grainstone; mudstone to wackestone; chert	White crossbedded grainstone	Few	Not fabric/ recrystallization reduces permeability
	VI			nation	Kirschberg evaporite member	AQ	50 – 60	Highly altered crystalline limestone; chalky mudstone; chert	Boxwork voids, with neospar and travertine frame	Probably extensive cave development	Majority fabric/one of the most permeable
	VII	711		Kainer Formation	Dolomitic member	AQ	110 – 130	Mudstone to grainstone; crystalline limestone; chert	Massively bedded light gray, <i>Toucasia</i> abundant	Caves related to structure or bedding planes	Mostly not fabric; some bedding plane- fabric/water-yielding
	VIII			K	Basal nodular member	Karst AQ; not karst CU	50 – 60	Shaly, nodular limestone; mudstone and <i>miliolid</i> grainstone	Massive, nodular and mottled, Exogyra texana	Large lateral caves at surface; a few caves near Cibolo Creek	Fabric; stratigraphically controlled/large conduit flow at surface; no permeability in subsurface
	Low confir un	ning	GI	er m en R mes		CU; evaporite beds AQ	350 – 500	Yellowish tan, thinly bedded limestone and marl	Stair-step topography; alternating limestone and marl	Some surface cave development	Some water production at evaporite beds/relatively impermeable

GEOLOGIC ASSESSMENT TABLE	TABI	Щ	PR	OJE	PROJECT NAME:	M	úi		Clark 1	Clark High School	hool,		FG	FGS-E16158	00			
				FE	TUR	E CH,	ARAC	TER	FEATURE CHARACTERISTICS				EVA	EVALUATION	- N	PHYSICAL SETTING	AL S	ETTING
*%	2A	2B	3		4		5	5A	9	7	8A	8B	o	10		7		12
LONGITUDE	FEATURE F	POINTS	POINTS FORMATION	DIMEN	DIMENSIONS (FEET)		TREND (DEGREES)	DOM	DENSITY (NO/FT²)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
				×	>	Z		10						< 40	> 40	<1.6 >1.6	9.	
N29° 33' 55.24' W98° 34' 51.18"	MB	30	Кер	3	3	۷					0	5	35	35		Yes		Hillside
N29° 33' 56.61" W98° 34' 52.19"	MB	30	Кер	3	3	7	1	-		-	0	2	35	35		Yes		Hillside
N29° 33' 57.49' W98° 34' 53.61"	MB	30	Кер	3	3	۷					0	IJ	35	35		Yes		Hillside
N29° 33' 58.08" W98° 34' 54.92"	MB	30	Кер	3	3	2		,			0	ເດ	35	35		Yes		Hillside
W98° 34' 54.4"	MB	30	Кер	3	3	۷			,		0	Ŋ	35	35		Yes		Hillside
N29° 34' 0.74" W98° 34' 52.94"	MB	30	Кер	3	3	5			1	-	0	Ŋ	35	35		Yes		Hillside

1983 North American Datum (NAD83) * DATUM

	z	ပ	0	ட	> i	т ;	×			Cliff, H
2B POINTS	30	20	20	20	2	30	30	20	2	30
	Cave	Solution Cavity	Solution-enlarged fracture(s)	Fault	Other natural bedrock features	Manmade feature in bedrock	Swallow Hole	Sinkhole	Non-karst closed depression	Zone, clustered or aligned features
2A TYPE TYPE	O	SC	SF	ш	0	MB	SW	SH	CD	Z

Fines, compacted clay-rich sediment, soil profile, gray or red colors Vegetation. Give details in narrative description Loose or soft mud or soil, organics, leaves, sticks, dark colors Hillside, Drainage, Floodplain, Streambed Coarse - cobbles, breakdown, sand, gravel Flowstone, cements, cave deposits 12 TOPOGRAPHY None, exposed bedrock Other materials

8A INFILLING

ntal Quality's Instructions to Geologists. The information presented here complies My signature certifies that I am qualified as a geologist as defined by 30 TAC with that document and is a true representation of the conditions observe I have read, I understood and I have followed the Texas Commiss

Frost GeoSciences Signature

TSITVE License No. 315, 198588899

(Rev. 10-1-04)

April 27, 2016 Clark High School Page 5

of

Sheet

April 27, 2016

Date

Steve M. Frost

Geology

PR



LOCATION

The project site consists of 63.95 acres of partially developed land at the existing Clark High School located at 5150 De Zavala Road in San Antonio, Texas. An overall view of the area is shown on copies of the site plan, a street map, the USGS Topographic Map, the Official Edwards Aquifer Recharge Zone Map, the Flood Insurance Rate Map (FIRM), a USDA Soil Survey Map, a geologic map, a 2016 aerial photograph at a scale of 1"=500', and a 2016 aerial photograph at a scale of 1"=200', Plates 1 through 9 in Appendix A.

METHODOLOGY

The Geologic Assessment was performed by Mr. Steve Frost, C.P.G., P.G., President and Senior Geologist with Frost GeoSciences, Inc. Mr. Frost is a Licensed Professional Geoscientist in the State of Texas (License # 315) and is a Certified Professional Geologist with the American Institute of Professional Geologist (Certification # 10176).

Frost GeoSciences, Inc. researched the geology of the area in the immediate vicinity of the project site. The research included, but was not limited to a review of the Geologic Atlas of Texas, San Antonio Sheet, FIRM maps, Edwards Aquifer Recharge Zone Maps, USGS 7.5 Minute Quadrangle Maps, the Geologic Map of the Bulverde, Texas 30 X 60 Minute Quadrangle, the USGS Water-Resources Investigations Report 95-4030 and the USDA Soil Survey of Bexar County, Texas.

After reviewing the available information, a field investigation was performed to identify any geologic or man-made potential recharge features. A transect spacing of approximately 50 feet or less, depending on vegetation thickness, was used to inspect the project site. A 2016 aerial photograph, in conjunction with a hand held Garmin 72H Global Positioning System with an Estimated Potential Error ranging from 7 to 10 feet, was used to navigate around the property and identify the locations of



potential recharge features, as recommended in the "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04). The locations of any potential recharge features noted in the field were identified with blue and white flagging. The flagging is numbered with the same potential recharge feature I.D. # that is used on the Site Geologic Map in Appendix C of this report. The Site Geologic Map indicating the limits of the project site is included in Appendix C. A copy of a 2016 aerial photograph at an approximate scale of 1"=200', indicating the locations of the potential recharge features, is included on Plate 9 in Appendix A. The Geologic Assessment Form (TCEQ-0585, Revised 10-01-10), Stratigraphic Column and the Geologic Assessment Table have been filled with the appropriate information for this project site and are included on pages 1-5 of this report.

RESEARCH & OBSERVATIONS

7.5 Minute Quadrangle Map Review

According to the USGS 7.5 Minute Quadrangle Map, Castle Hills, Texas Sheet (1992), the elevation of the project site ranges from 930 feet near the southeastern property corner to 970 feet along the western property line. These elevations are calculated above mean sea level (AMSL). The surface runoff from the project site flows to the south and east into Olmos Creek. De Zavala Road is located immediately north of the project site. Rail road tracks are located immediately east of the project site. A copy of the above referenced USGS 7.5 Minute Quadrangle Map, indicating the location of the project site, is included in this report on Plate 3 in Appendix A.

Recharge / Transition Zone

According to Official Edwards Aquifer Recharge Zone Map, Castle Hills, Texas Sheet (2014), the project site is located on the Recharge Zone of the Edwards Aquifer. A copy of Official Edwards Aquifer Recharge Zone Map, indicating the location of the project site, is included on Plate 4 in Appendix A.



100-Year Floodplain

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps for Bexar County, Texas, Community Panel Number 48029C0230G (Revised 9/29/10) was reviewed to determine if the project site is located in areas prone to flooding. A review of the above-mentioned panel indicates that no portion of the project site is located within the 100 year floodplain. The project site is located within Zone X. According to the panel legend, Zone X represents areas determined to be outside the 0.2% annual chance floodplain. The 100 year floodplain is located immediately southeast of the project. A copy of the Bexar County, Texas, FIRM map, indicating the location of the project site, is included in this report on Plate 5 in Appendix A.

Soils

According to the United States Department of Agriculture, Soil Conservation Service, Soil Survey of Bexar County, Texas (1966), the project site is located on the Crawford & Bexar Stony (Cb). A copy of the 1962 aerial photograph (approximate scale: 1"=500') from the USDA Soil Survey of Bexar County, Texas indicating the location of the project site and the soil types is included on Plate 6 in Appendix A.

The Crawford and Bexar Stony Soils (Cb) are very dark grayish brown to reddish brown clay. They are stony clay in texture and are shallow to moderately deep over hard limestone. These soils are extensive in the northern part of the county. The surface layer is noncalcareous, about 8 inches thick, and very dark grayish brown or very dark brown. It has fine, subangular blocky and granular structure. When moist, this layer is very firm but breaks easily to a mass of fine clods. When dry, is very hard and contains many large cracks. Angular fragments of chert and limestone are common. These fragments may range in size from a quarter of an inch to 24 inches in diameter. The subsurface layer is dense, angular blocky clay. This layer is neutral or slightly acidic, but it may be limy in the lower parts. It is about 26 inches thick and either overlies a thin layer of yellowish red to pale brown, limy clay or, if the limy layer is lacking, rests



on hard, fractured limestone. Crawford soils are naturally well drained. Internal drainage and permeability vary according to moisture content. Water moves rapidly when the soil is dry and cracked, but very slowly when the soil is wet. This soil has a USDA Texture Classification of Cherty Clay Loam to Loam. The Unified Classification is CG or CL. The AASHO Classification is A-2, A-4 or A-6. This soil has an average permeability from 1.0 to 1.5 inches/hour.

Narrative Description of the Site Geology

The project site consists of 63.95 acres of partially developed land at the existing Clark High School located at 5150 De Zavala Road in San Antonio, Texas. Small areas of natural rock outcrops were noted during the on-site inspection. The site appears to support a thin soil cover. Large areas are covered by asphalt parking lots, driveways, athletic fields, and buildings. The variations in the vegetative cover across the project site are visible in the 2016 aerial photographs on Plates 8 and 9 in Appendix A and in the site visit photographs included in Appendix B. Six PRFs were identified during our research or on site inspection of the property.

S-1 through S-6 consist of manmade features in bedrock. These features are sanitary sewer manhole covers associated with the existing sewer lines on the site. These features are not considered sensitive by FGS. These features score a 35 on the feature assessment table on page 5.

According to the USGS 7.5 Minute Quadrangle Map, Castle Hills, Texas Sheet (1992), the elevation of the project site ranges from 930 feet near the southeastern corner of the site to 970 feet along the western property line. These elevations are calculated above mean sea level (AMSL). According to topographic data obtained from MTR Engineering, LLC, Inc. the elevations on the project site range from 931 feet along the eastern property line near the southeastern property corner to 1969 feet along the western property line. A copy of the site plan, indicating the boundary of the project site and the elevations, is included on Plate 1 in Appendix A and on the Site Geologic Map in Appendix C of this report.

April 27, 2016 Clark High School page 9



According to the Bureau of Economic Geology, Geologic Map of the New Braunfels, Texas 30 X 60 Minute Quadrangle (2000), the project site is covered by the Cretaceous Edwards Person Limestone (Kep). Based on a visual inspection of the outcrops on site, FGS is of the opinion that the site is located on the Cyclic and Marine Member of the Edwards Person Limestone (Kep).

The Cyclic and Marine Member of the Cretaceous Edwards Person Limestone consists of mudstone to packstone and miliolid grainstone with chert. The member is characterized by massive beds of limestone to relatively thin beds of limestone with some crossbedding. The Cyclic and Marine Member forms a few caves some that are laterally extensive. Overall thickness ranges from 80 to 90 feet thick.

A copy of the Bureau of Economic Geology, Geologic Map of the New Braunfels, Texas 30 X 60 Minute Quadrangle (2000), indicating the location of the project site, is included on Plate 7 in Appendix A.

BEST MANAGEMENT PRACTICE (BMP)

Based on a visual inspection of the ground surface the overall potential for fluid flow from the project site into the Edwards Aquifer appears to be low. The potential always exists to encounter subsurface features that lack a surface expression. Frost GeoSciences, Inc. recommends that we be included in the pre-construction meeting to inform construction personnel of the potential to encounter subsurface karst features during excavating activities. Construction personnel should also be informed of the proper protocol to follow in the event that a solution cavity and/or cave is encountered during the excavation and development of the property.

DISCLAIMER

This report has been prepared in general accordance with the "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04) by a Licensed Texas Professional Geoscientist. All areas of



the project site were carefully inspected for features that could contribute to the recharge of the Edwards Aquifer, however, this survey cannot preclude the presence of subsurface karst features that lack surface expression. This report is not intended to be a definitive investigation of all possible geologic or karst features at this site. All conclusions, opinions and recommendations for Best Management Practices (BMP's) in this report are based on information obtained while researching the project and on the site conditions at the time of our field investigation.

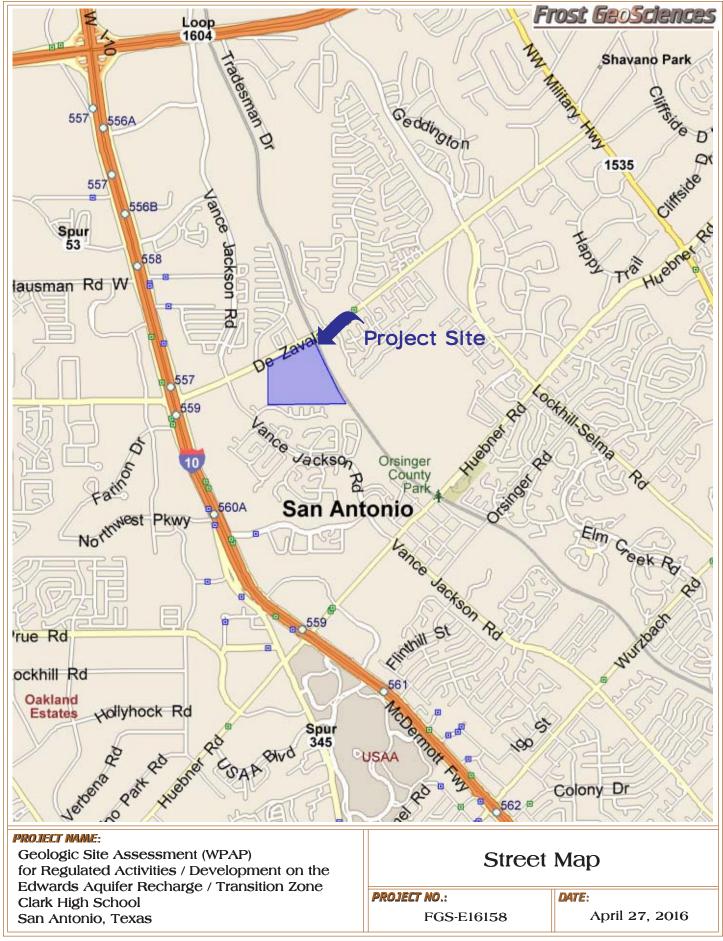
This report has been prepared for and may be relied upon by MTR Engineering, LLC. This report is based on available known records, a visual inspection of the project site and the work generally accepted for a Geologic Assessment TAC §213.5(b)(3), effective June 1, 1999.

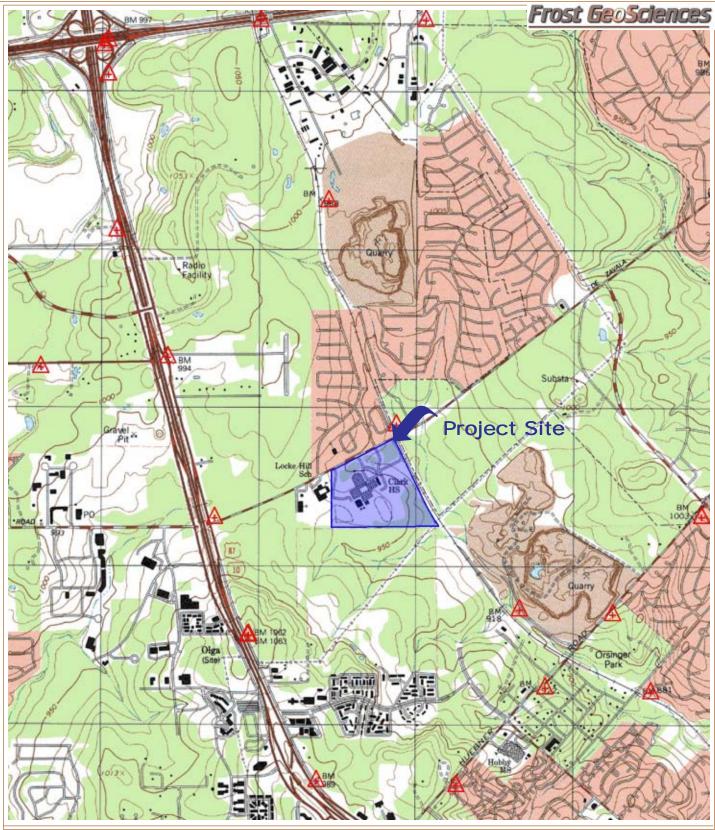
REFERENCES

- 1) USGS 7.5 Minute Quadrangle Map, Castle Hills, Texas Sheet (1992),
- 2) Official Edwards Aquifer Recharge Zone Map, Castle Hills, Texas Sheet (2014).
- Stein, W.G. and Ozuna, G.B., 1995, Geologic Framework and Hydrogeologic
 Characteristics of the Edwards Aquifer Recharge Zone, Bexar County, Texas.
 U.S. Geological Survey Water Resources Investigations 94-4117.
- 4) Collins, Edward, W., 2000, Geologic Map of the San Antonio, Texas 30 X 60 Minute Quadrangle.
- 5) Federal Emergency Management Agency (FEMA), Bexar County, Texas and Incorporated Areas, Flood Insurance Rate Map (FIRM), Panel 48029C0230G (9/29/10) FEMA, Washington D.C.
- 7) USDA Soil Conservation Service, Soil Survey of Bexar, Texas (1966).
- 8) TCEQ-0585-Instructions (Rev. 10-1-04). "Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zone".

Appendix A

Site Location Plates





PROJECT NAME:

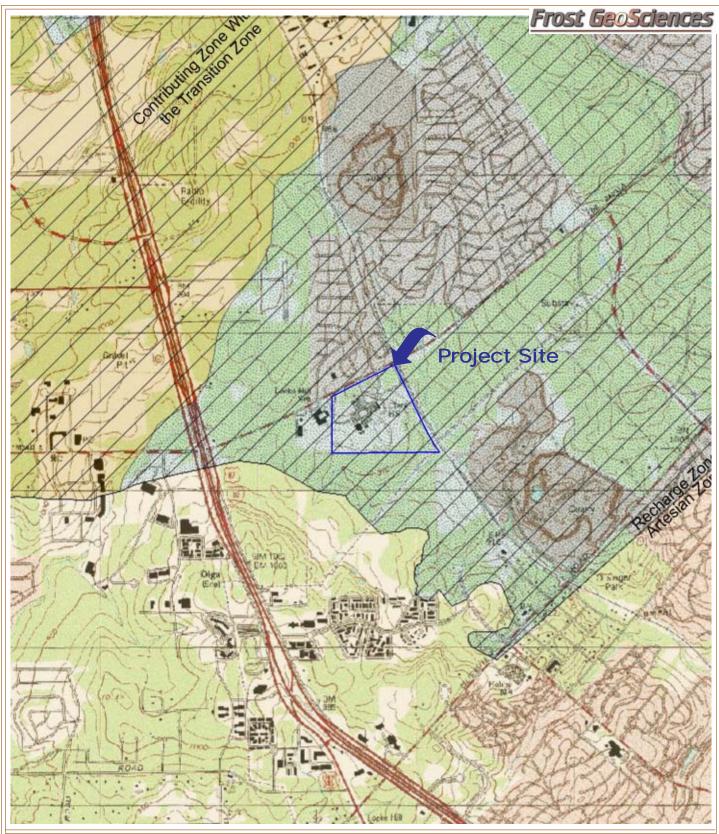
Geologic Site Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone Clark High School San Antonio, Texas U.S.G.S. 7.5 Minute Quadrangle Map Castle Hills, Texas Sheet (1992)

PROJECT NO.:

FGS-E16158

DATE:

April 27, 2016



PROJECT NAME:

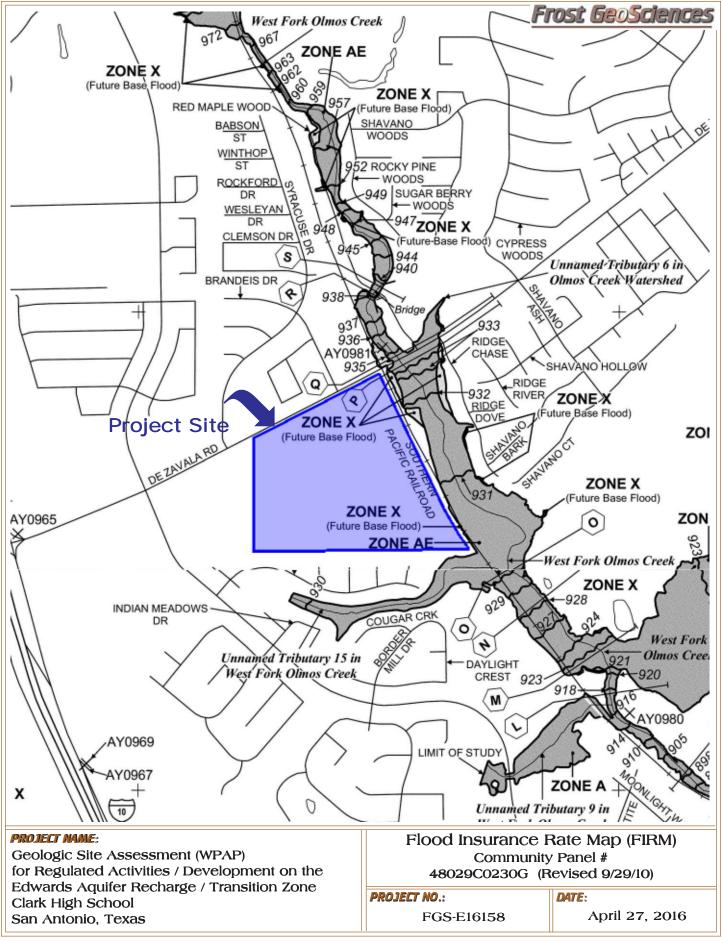
Geologic Site Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone Clark High School San Antonio, Texas Official Edwards Aquifer Recharge Zone Map Castle Hills, Texas Sheet (2014)

PROJECT NO.:

FGS-E16158

DATE:

April 27, 2016





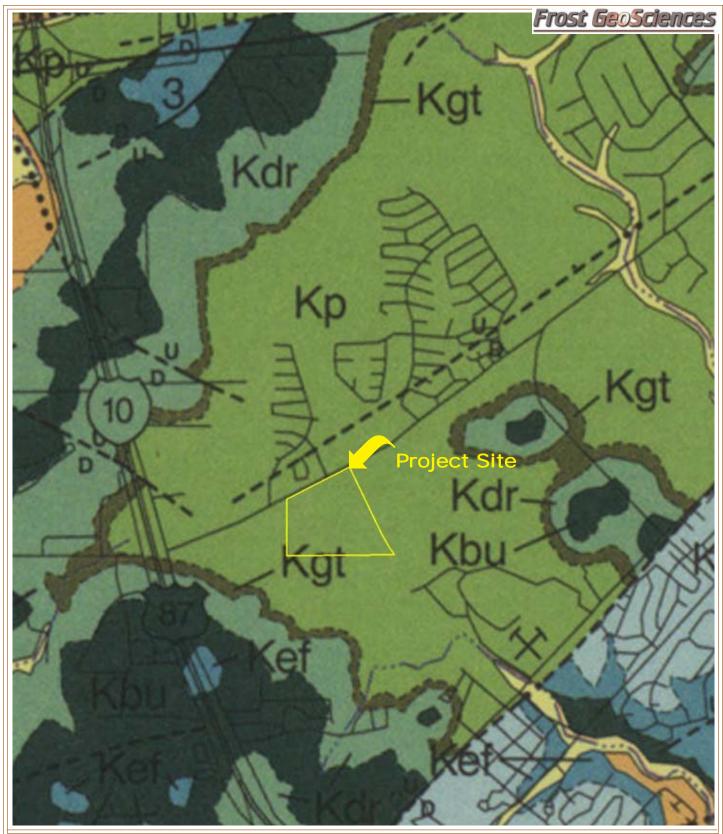
PROJECT NAME:

Geologic Site Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone Clark High School San Antonio, Texas 1962 Aerial Photograph Soil Survey of Bexar County, Texas United States Department of Agriculture

PROJECT NO.:

FGS-E16158

DATE:



PROJECT NAME:

Geologic Site Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone Clark High School San Antonio, Texas Bureau of Economic Geology Geologic Map of the San Antonio, Texas 30 X 60 Minute Quadrangle (2000)

PROJECT NO.:

FGS-E16158

DATE:



PROJECT NAME:

Geologic Site Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone Clark High School San Antonio, Texas 2016 Aerial Photograph Google

PROJECT NO.:

FGS-E16158

DATE:



PROJECT NAME: Geologic Site Assessment (WPAP)
for Regulated Activities / Development on the
Edwards Aquifer Recharge / Transition Zone
Clark High School

San Antonio, Texas

2016 Aerial Photograph Google

PROJECT NO.:

FGS-E16157

DATE:

Appendix B

Site Inspection Photographs



View of a Sanitary Sewer Manhole Cover, Potential Recharge Feature # S-1.



View of a Sanitary Sewer Manhole Cover, Potential Recharge Feature # S-2.



View of a Sanitary Sewer Manhole Cover, Potential Recharge Feature # S-3.



View of a Sanitary Sewer Manhole Cover, Potential Recharge Feature # S-4.



View of a Sanitary Sewer Manhole Cover, Potential Recharge Feature # S-6.



View of a Sanitary Sewer Manhole Cover, Potential Recharge Feature # S-6.



View of the main building for Clark High School



View of an unnamed tributary in the northern portion of the site.

Seotechnical - Construction Materials - Forensics - Environmental



View to the east of the northwest portion of the project site along and south of De Zavala Road.



View to the west of the northwest portion of the project site along and south of De Zavala Road.



project site along and south of De Zavala Road.



View to the east of the north central portion of the View to the west of the north central portion of the project site along and south of De Zavala Road.



View to the east of the north central portion of the project site along and south of De Zavala Road.



View to the west of the north central portion of the project site along and south of De Zavala Road.



View to the south, of the project site from the northeastern property corner.



View to the west, of the project site from the northeastern property corner.



View of a parking lot in the eastern portion of the project site.



View of a parking lot in the eastern portion of the project site.



Typical view of vegetative cover in the southeastern portion of the project site.



Typical view of vegetative cover in the southeastern portion of the project site.



Typical view of vegetative cover in the south central portion of the project site.



Typical view of vegetative cover in the south central portion of the project site.



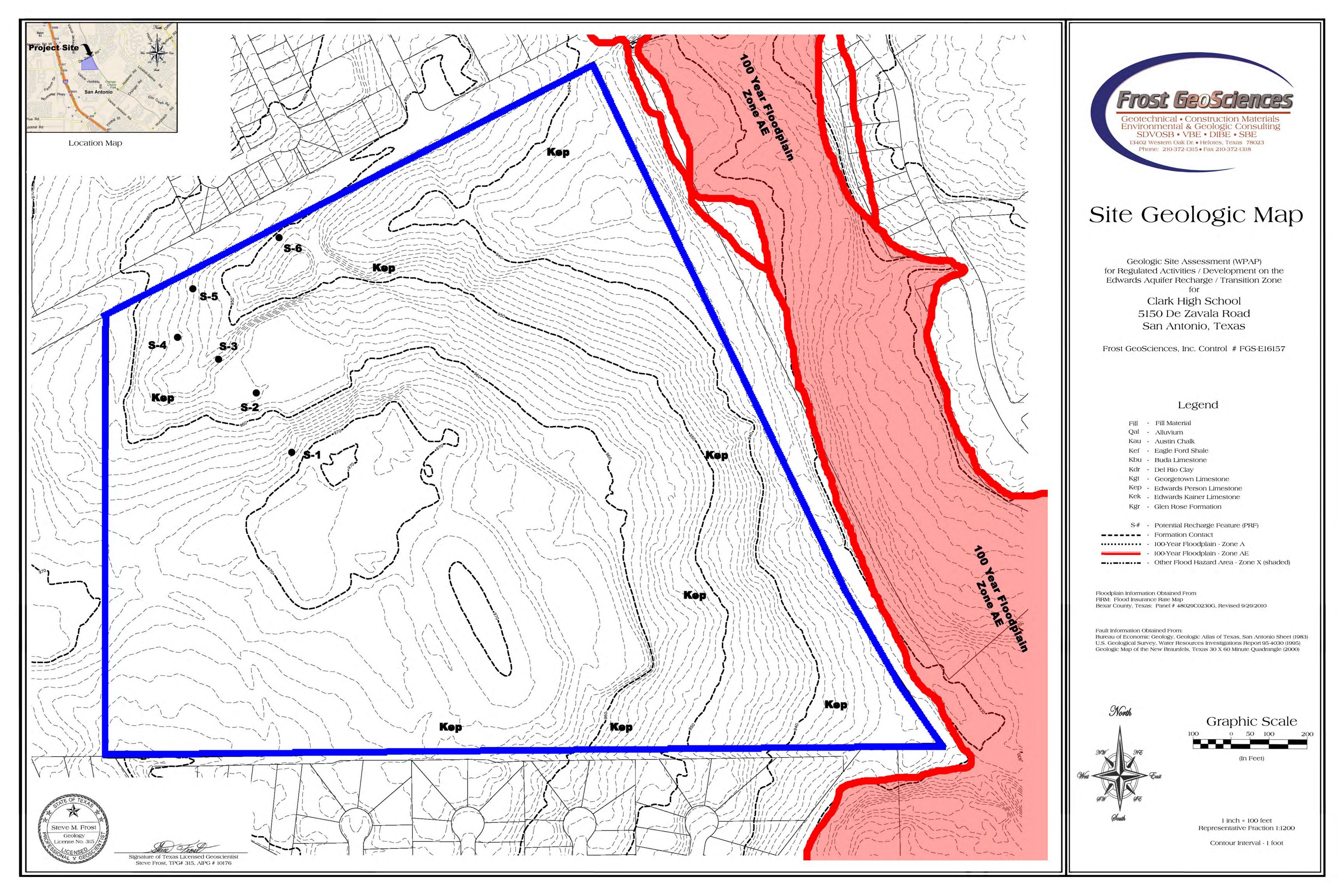
View of tennis courts in the central portion of the project site.



View of the football field in the southern portion of the project site.

Appendix C

Site Geologic Map



IV. MODIFICATION OF A PREVIOUSLY APPROVED PLAN

Modification of a Previously Approved Plan

Texas Commission on Environmental Quality

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

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

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

Signature

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

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

Date: 9/3/25

Signature of Customer/Agent:

Project Information

1.	Current Regulated Entity Name: NISD THOMAS C CLARK HIGH SCHOOL
	Original Regulated Entity Name: NISD THOMAS C CLARK HIGH SCHOOL
	Regulated Entity Number(s) (RN): 102864626
	Edwards Aquifer Protection Program ID Number(s): 13000145
	The applicant has not changed and the Customer Number (CN) is: 601104169
	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.

Physical or operation including but not limed diversionary structions. Change in the natu	re or character of the regulated	ollution abatement structure(s) wage treatment plants, and activity from that which was
plan to prevent pol Development of lar pollution abatemer Physical modification Physical modification	l or a change which would signification of the Edwards Aquifer; and previously identified as undevent plan; on of the approved organized section of the approved underground on of the approved aboveground	reloped in the original water wage collection system; storage tank system;
plan has been modified	Modifications (select plan type be d more than once, copy the appr te the information for each addi	opriate table below, as
WPAP Modification	Approved Project	Proposed Modification
Summary		
Acres	See attached summary	See attached summary
Type of Development		
Number of Residential		
Lots		
Impervious Cover (acres)		
Impervious Cover (%		
Permanent BMPs		
Other		
SCS Modification	Approved Project	Proposed Modification
Summary		
Linear Feet		
Pipe Diameter		
Other		

AST Modification	Approved Project	Proposed Modification			
Summary					
Number of ASTs					
Volume of ASTs					
Other					
UST Modification	Approved Project	Proposed Modification			
Summary					
Number of USTs					
Volume of USTs					
Other					
the nature of the propos	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 any previous modifications, and how this proposed modification will change the approved plan.				
the existing site developmodification is attached modification is required The approved constrant subsequent mode document that the alimeter that the sillustrates that the sill	oment (i.e., current site layoud). A site plan detailing the challelsewhere. ruction has not commenced. dification approval letters are approval has not expired. The was constructed as approvation has commenced and ite was not constructed as a procuction has commenced and ite was not constructed as a procuction has commenced and rates that, thus far, the site was ruction has commenced and ruction has commenced and ruction has commenced and ruction has commenced and	has been completed. Attachment C pproved. has not been completed. vas constructed as approved.			
provided for the new ac	 ☐ The acreage of the approved plan has increased. A Geologic Assessment has been provided for the new acreage. ☐ Acreage has not been added to or removed from the approved plan. 				
needed for each affecte county in which the pro	ed incorporated city, groundy ject will be located. The TCE	cation, plus additional copies as water conservation district, and Q will distribute the additional bmitted to the appropriate regional			

FAX NO. 2106558189

NO.627

CLAYTON I BUILDING

· # 25%

-77e2453

TANTS SE CULTUR MERCEN

BEN H. TWO.

HUR's

PH.: •

P. 02

PØ3

TEX. . WATER QUALITY BC .RD

J. DOUGLASS TOOLE

PRANK H. LEWIS VICE CHAIRMAN

M.F. FROST

. FRATIS L. DUFF, MD



RECEIVEN

APR 27'76

QUALITY BOARD

1700 NORTH CONGRESS AVE. P.O. BOX 17246 CAPITOL STATION 18711 AUSTIN, TEXAS

April 22, 1976

MI

Con

H - PJP

Re: Review and Approval of Subdivision Plans, DeZavala Road Northside High School Subdivision, San Antonio, Bexar County, Texas 130.15.30.001/12.034

Mr. Eugene H. Dawson, P. E. Pape - Dawson, Consulting Engineers 8705 Broadway, Suite 1 San Antonio, Texas 78217

Dear Mr. Dawson:

Pursuant to your request, the Texas Water Quality Board has conducted a review of the subdivision plans for DeZavala Road Northside High School, San Antonio, Bexar County, Texas.

Pursuant to Article VIII of Texas Water Quality Board Order No. 75-0128-20, the construction standards and pollution abatement activities proposed by the developer, which are adopted by reference as set forth in your letter dated March 22, 1976, are found to be generally acceptable, and the following necessary provisions give the Board assurance of an adequate monitoring and protection program:

- Septic tank systems within the subdivision will be prohibited.
 The subdivision will be served by an organized collection system constructed by the developer and operated and maintained by the City of San Antonio.
- 2. The ultimate disposal of solid waste within the subdivision will be prohibited; nowever, should any plan be proposed, it shall be in conformance with the applicable provisions of Texas Water Quality Board Order No. 75-0128-20.

Mr. Eugene H. Dawson, P. E. Page 2 April 22, 1976

- 3. Lawn fertilizers shall be restricted within the subdivir in by the developer providing deed restrictions to "pellet types" only.
- 4. Article VIII, Section 4(b) of Board Order No. 75-0128-20 states that the Board may require frequent street cleaning operations by vacuum-type street sweepers. Currently, the Board is analyzing the effectiveness, the problems of implementation, and the standards which may be required. Upon completion of this analysis, the Board may include such a requirement in this Order.
- 5. A minimum of six (6) inches of soil thickness for all improved turf or lawn areas shall be provided in order to instrument renovation of contaminated waters.
- As an underground hydrocarbon storage facility is proposed, the facility used for the underground storage of hydrocarbon products, chemicals, or other industrial liquids and/or liquid wastes other than sanitary sewage shall be of double wall construction. The design, with particular reference to methods for detecting leaks in the wall of the storage facility, shall be included in the facility's design and construction which must be received by the Board prior to construction.
- 7. The acquisition of right-of-way easements for the purpose of transporting liquid petroleum products shall be prohibited unless such prohibition is proscribed by law.
- Any requirement for monitoring wells is hereby deferred pending resolution of a program which will provide an accurate uniform groundwater monitoring program, independent of the size or configuration of the subdivision. Also, in lieu of such a requirement, a determination may be formulated whereby all subdivisions might share the cost of the construction and monitoring of the well, even though that particular subdivision might not have a monitoring well located upon it.

It should be clearly understood that, in addition to the preceding, all applicable provisions of Texas Water Quality Board Order No. 75-0128-20 are required to be complied with by the developer of the DeZavala Road Northside High School Subdivision.

P. 04

PØ5

Mr. Eugene H. Dawson, P. E. Page 3 April 22, 1976

Furthermore, all requirements incumbent on the subdivision are the responsibility of the Northside Independent School District, 5900 Evers Road, San Antonio, Texas 78238, until such responsibilities are legally transferred to any other entity,

Very truly yours,

Hugh/c. Yantis, Jr. Executive Director/

AY1 Texas Water Quality Board Members CCS: Edwards Underground Water District Texas Water Quality Board District 8 Environmental Protection Agency, Region VI Mrs. Lila Cockrell, Mayor, City of San Antonio

Mr. Richard Teniente, Mayor Pro Tem, City of San Antonio

Mr. Phil Pyndus, Council Member, City of San Antonio

Mr. Bob Billa, Council Member, City of San Antonio

Mr. Henry Cisneros, Council Member, City of San Antonio

Reverend Claud W. Black, Council Member, City of San Antonio

Mr. Glen Hartman, Council Member, City of San Antonio

Mr. Al Rohde, Council Member, City of San Antonio

Dr. D. Ford Nielsen, Council Member, City of San Antonio Mr. Sam Granata, Jr., City Manager, City of San Antonio

Mr. Melvin C: Sueltenfuss, Director of Public Works, City of San Antonio

Mr. Frank G. Vega, Edwards Aquifer Protection Officer, City of Ban Antonio

The County of Bexar - Mr. Dan Finlayson

Mr. Edmund D. Cody, Superintendent of Schools

Northside Independent school District

Mr. Carl F. Raba, Jr., President, Board of School Trustees Northside Independent School District

Mr. Terry McGuire, Northside Independent School District Mr. Paul Silber, Paul Silber & Associates, Engineers Inc. Robert J. Huston, *Chairman*R. B. "Ralph" Marquez, *Commissioner*Kathleen Hartnett White, *Commissioner*Jeffrey A. Saitas, *Executive Director*



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

December 5, 2001

Mr. Jim Martin Northside I.S.D. 5615 Grissom Road San Antonio, TX 78238

Re:

Edwards Aquifer, Bexar County

NAME OF PROJECT: Thomas Clark High School; Located at 5150 De Zavala Road; San Antonio,

Texas

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

Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program File No. -300.01

Dear Mr. Martin:

The Texas Natural Resource Conservation Commission (TNRCC) has completed its review of the request for modification of the approved WPAP for the referenced project submitted to the San Antonio Regional Office by Michael Slay, P.E. of Slay Engineering Company, Inc. on behalf of Northside I.S.D. on October 25, 2001. Final review of the WPAP submittal was completed after additional material was received on December 4, 2001. As presented to the TNRCC, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed, and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer protection plan. A motion for reconsideration must be filed no later than 20 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

PROJECT DESCRIPTION

This facility was previously approved by letter dated April 22, 1976. As presented, the proposed modification to the WPAP will consist of:

• The construction of four additions to three existing buildings and associated walkways.

Mr. Jim Martin December 5, 2001 Page 2

- As presented the existing impervious cover is 17.67 acres (27.6%) of the 64.043 acre site. The proposed impervious cover for the development is approximately 0.48 acres (21,183 square feet) of the 64.043 acre site.
- Because some existing impervious cover will be removed, the net increase impervious cover for this project will be 0.163 acres.
- There will be no increase in wastewater produced.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent pollution of stormwater runoff originating on-site or up-gradient of the site and potentially flowing across and off the site after construction, surface flow from 0.163 acres of existing impervious cover will be directed to a grassy swale with a bottom width of six feet and treatment length of 100 feet. Side slopes will be 3 to 1.

GEOLOGY

According to the geologic assessment included with the submittal, there are two manmade features located on the project site. Both features were assessed as possibly sensitive. The San Antonio Regional Office did not conduct a site investigation.

SPECIAL CONDITIONS

- I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter of April 22, 1976.
- II. All permanent pollution abatement measures shall be operational prior to occupying any building additions.
- III. The vegetated swale is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices."

STANDARD CONDITIONS

1. Pursuant to §26.136 of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

Prior to Commencement of Construction:

2. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries, covered by the Edwards Aquifer protection plan, shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TNRCC-0625) that you may use to deed record the approved WPAP is enclosed.

- 3. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 4. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 5. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and file number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension of an approved plan.
- 6. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TNRCC may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.
- 7. Abandoned injection wells must be closed under the requirements of 30 TAC Chapter 331 (relating to Underground Injection Control).
- 8. All borings with depths greater than or equal to 20 feet must be plugged with a non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

- 9. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 10. If any sensitive feature is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature

Mr. Jim Martin December 5, 2001 Page 4

and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

- 11. No wells exists on the site. All identified abandoned water wells, including injection, dewatering, and monitoring wells must be plugged pursuant to requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Licensing and Regulation of Water Well Drillers and Water Well Pump Installers) and all other locally applicable rules, as appropriate. If any abandoned wells (including water, injection (injection well referenced in Item 7), dewatering, and monitoring well) are encountered during construction, they must be plugged pursuant to requirements of the Texas Department of Licensing and Regulation (16 TAC Chapter 76) and all other locally applicable rules, as appropriate.
- 12. 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%. 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).
- 13. 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.
- 14. 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.
- 15. To the maximum extent practicable, BMPs and measures must maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction. The 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. A request to temporarily seal the feature must include a justification that no reasonable and practicable alternative exists. The request will be evaluated by the executive director on a case-by-case basis.

After Completion of Construction:

- 16. Owners of permanent BMPs and measures must insure that the 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 San Antonio Regional Office within 30 days of site completion.
- 17. 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 (such as without limitation, an owner's association, a new property owner

Mr. Jim Martin December 5, 2001 Page 5

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. A copy of the transfer of responsibility must be filed with the executive director through the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TNRCC-10263) is enclosed.

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

If you have any questions or require additional information, please contact John Mauser of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210/403-4024.

Sincerely,

Jeffrey A. Shitas, P.E.

Executive Director

Texas Natural Resource Conservation Commission

JAS/JKM/eg

Enclosure:

Deed Recordation Affidavit, Form TNRCC-0625

Change in Responsibility for Maintenance or Permanent BMPs-Form TNRCC-10263

cc:

Michael Slay, P.E., Slay Engineering Company, Inc.

Mr. Scott Halty, San Antonio Water System

Ms. Renee Green, Bexar County Public Works

Mr. Greg Ellis, Edwards Aquifer Authority

TNRCC Field Operations

Robert J. Huston, *Chairman*R. B. "Ralph" Marquez, *Commissioner*Kathleen Hartnett White, *Commissioner*Margaret Hoffman, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution
October 22, 2003

Mr. Jim Martin Northside Independent School District 5615 Grissom Road San Antonio, TX 78238

Re:

Edwards Aquifer, Bexar County

NAME OF PROJECT: Thomas Clark High School; Located at 5150 De Zavala Road; San Antonio,

Texas

TYPE OF PLAN: Request for Exception; 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer, Edwards Aquifer Protection Program File No. -300.02, Regulated Entity No. RN 102 864 626, Customer No. CN 601 104 169

Dear Mr. Martin:

The Texas Commission on Environmental quality (TCEQ) has completed its review of the request for exception for the referenced project that Michael Slay, P.E. of Slay Engineering Co., Inc. submitted to the San Antonio Regional Office on behalf of Northside Independent School District (I.S.D.) on September 25, 2003. Final review of the WPAP submittal was completed after additional material was received on October 14, 15, & 16, 2003. The request for exception proposed in the submittal is in general compliance with 30 TAC § 213.9; therefore, approval of the plan is hereby granted subject to applicable state rules and the conditions in this approval letter. This approval expires two (2) years from the date of this approval unless, prior to the expiration date, construction has commenced on the project or an extension of time has been requested.

Under 30 TAC §213.9(a),

Exceptions to any substantive provision of this chapter related to the protection of water quality may be granted by the executive director if the requestor can demonstrate equivalent water quality protection for the Edwards Aquifer. Requests for exceptions will be reviewed by the executive director on a case-by-case basis. Prior approval under this section must be obtained for the exception to be authorized.

BACKGROUND

The WPAP for the subject site was approved by letter dated April 22, 1976, and subsequently modified by letter dated December 5, 2001.

PROJECT DESCRIPTION

The proposed project is for the construction of a four foot wide concrete swale approximately 647 feet long and the re-grading of an adjacent soccer field so to direct flow to the proposed swale. The exception requested was for not submitting an application to modify the existing WPAP for construction of the swale and re-grading of the soccer field. As understood, there will be approximately 1.5 acres of soil disturbance, and the field will be ready for use by late November, 2003.

REPLY To: REGION 13 • 14250 JUDSON RD. • SAN ANTONIO, TEXAS 78233-4480 • 210/490-3096 • FAX 210/545-4329

Mr. Jim Martin October 22, 2003 Page 2

PERMANENT POLLUTION ABATEMENT MEASURES

No permanent pollution abatement measures are proposed for this project. Stormwater from the adjacent soccer fields will be directed to the proposed concrete swale and released at a velocity consistent with the requirements of the City of San Antonio.

EXCEPTION JUSTIFICATION

The justifications presented are that surface runoff from existing projects will be improved; there will be limited site disturbance; appropriate temporary erosion and sedimentation controls will be provided; the concrete swale will not generate contaminated runoff; and runoff will be released from the swale at non-erosive velocities.

SPECIAL CONDITION

- 1. By definition 26(B)(iv) of 30 TAC 213.3, "regulated activity" does not include routine maintenance of existing structures that does not involve additional site disturbance . . . (where) there is little or no potential for contaminating groundwater, or there is little or no change to the topographic, geologic (characteristics of the site), or existing sensitive features.
 - With the proposed temporary erosion and sedimentation controls, the TCEQ will consider the regrading of the existing soccer field as maintenance to an existing structure where there is little or no potential for contaminating groundwater, or there is little or no change to the topographic, geologic or recharge characteristics of the site. Therefore the request for exception is approved.
- 2. Intentional discharges of sediment laden stormwater are not allowed. If dewatering excavated areas becomes necessary, a plan for removing at least 80% of the sediment load from the discharge must be designed by a Texas Licensed Professional Engineer and submitted to the San Antonio Regional Office prior to initiating any discharges. The plan must propose how the discharge will be filtered through appropriately selected temporary best management practices. These include vegetative filter strips, sediment traps, rock berms, silt fence rings, etc.

STANDARD CONDITIONS FOR EXCEPTION

1. Pursuant to §26.136 of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

Prior to Commencement of Construction:

- 2. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries, covered by the Edwards Aquifer protection plan, shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TNRCC-0625) that you may use to deed record the approved WPAP is enclosed.
- 3. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.

Mr. Jim Martin
October 22, 2003
Page 3

- 4. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 5. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and file number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension of an approved plan.

During Construction:

- 6. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 7. If any sensitive feature is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
- 8. 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%. 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).
- 9. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

11. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

Mr. Jim Martin October 22, 2003 Page 4

- 12. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50% of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 13. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

If you have any questions or require additional information, please contact John Mauser of the San Antonio Regional Office at 210/403-4024.

Sincerely,

Margaret Hoffman Executive Director

Texas Commission on Environmental Quality

MH/JKM/eg

Enclosure:

Deed Recordation Affidavit, Form TNRCC-0625

Change in Responsibility for Maintenance or Permanent BMPs-Form TNRCC-10263

cc:

Mr. Michael Slay, P.E., Slay Engineering Company, Inc.

Mr. Scott Halty, San Antonio Water System Ms. Renee Green, Bexar County Public Works Mr. Greg Ellis, Edwards Aquifer Authority

TCEQ Central Records, MC 212

Buddy Garcia, *Chairman*Larry R. Soward, *Commissioner*Bryan W. Shaw, Ph.D., *Commissioner*Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 5, 2009

Mr. Vernon Dunagin, AIA Northside I.S.D. 5900 Evers Road, Building C San Antonio, Texas 78238

Re:

Edwards Aquifer, Bexar County

NAME OF PROJECT: Thomas Clark High School, 5150 De Zavala Road, San Antonio, Texas TYPE OF PLAN: Request for the Modification of an Approved Water Pollution Abatement Plan

(WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer Edwards Aquifer Protection Program ID No.: -300.05, Investigation No. 741808

Regulated Entity No.: RN102864626

Dear Mr. Dunagin:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Modification for the above-referenced project submitted to the San Antonio Regional Office by Slay Engineering Company, Inc. on behalf of Northside I.S.D. on March 30, 2009. Additional information was received April 30, May 6, and May 15, 2009. Final review of the WPAP modification was completed after additional material was received on June 3, 2009. As presented to the TCEQ, the Temporary Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

BACKGROUND

This facility was previously approved by letter dated April 22, 1976. A modification, approved by letter dated December 5, 2001, added 0.163 acres to an existing 17.67 acres of impervious cover for a total of 17.83 acres of impervious cover. A grassy swale was constructed near De Zavala road as a permanent BMP for the calculated increase in stormwater runoff. On April 18, 2006 a TCEQ clarification was made regarding the replacement of a storage building (an increase of 189 square feet of impervious cover). A modification of the approved WPAP was not required for the replacement. A minor modification regarding the placement of two portable buildings with about 362 square feet of associated sidewalk was approved by letter dated May 25, 2006. No impervious cover was considered added by the temporary

REPLY To: REGION 13 • 14250 JUDSON RD. • SAN ANTONIO, TEXAS 78233-4480 • 210-490-3096 • FAX 210-545-4329

Mr. Vernon Dunagin May 5, 2009 Page 2

buildings. The two buildings were recently determined to have been removed. Subsequent to the 2001 modification, 0.40 acres of impervious cover (including a drive, a square parking area, a storage container on a slab, and a storage building) was reportedly constructed at the site without TCEQ approval.

PROJECT DESCRIPTION

The proposed modification will occur within the 64 acre Thomas Clark High School campus. Existing impervious cover was reported as 17.83 acres or 27.86 percent of the site. Modifications will include construction of a new science building to the north and west of Building A, and a new fire lane which will be located about 30 feet southwest of the new science building. An addition to the south corner of Building D (a weight room and space for athletic equipment storage) and a concrete pad for a new chiller unit will both be constructed on existing impervious cover. The calculated area of impervious cover after the proposed modifications will be 18.81 acres or 29.39 percent of the site. Project wastewater will continue to be disposed by conveyance to the Medio Creek Water Recycling Center owned by the San Antonio Water System.

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, a grassy swale, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. Stormwater runoff from existing impervious cover will be treated in lieu of stormwater generated from 0.58 acres of impervious cover to be added by the science building and fire lane. Stormwater runoff generated from 0.40 acres of impervious cover found constructed without TCEQ approval will also be treated. The required total suspended solids (TSS) treatment for this project is 800 pounds of TSS generated from 0.98 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The treatment measure will consist of treating stormwater runoff from 1.14 acres of (previously untreated) impervious cover by a grassy swale. The impervious cover to be treated is in a 2.09 acre area that drains to the grassy swale. The grassy swale will be 10 feet wide and 110 feet long (107 feet required) with a 1 % slope and sides with 3 to 1 slopes.

GEOLOGY

According to the geologic assessment done in January 2009 and included with the application, the area of the site where construction is planned is located on the outcrop of the Person Formation of the Edwards Group. "Vuggy rock" of the Person Formation (the leached collapsed member) was previously noted between Building A and De Zavala Road. No outcrops were noted in the area by recent field observations. Rock outcrops were believed to have been covered by fill soil (landscaping) and pavement. A published fault was previously mapped 45 feet north of the proposed addition to Building A. Evidence of the fault was not found by the recent assessment. The geologic assessment identified five potential recharge features (all manmade utility trenches) in the proposed area of construction. No sensitive features were noted for the project area. On May 22, 2009 TCEQ investigators conducted an assessment of part of the Clark High School Campus and documented a non-compliance relating to the construction of impervious cover. No problems were noted with the geologic assessment included with the application.

SPECIAL CONDITIONS

- I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated April 22, 1976 and the WPAP modification approval letter dated December 5, 2001.
- II. Regulated activities identified during the site assessment investigation constitute construction without the prior approval of the water pollution abatement plan as required by Commission rules (30 TAC Chapter 213). Therefore, the applicant is hereby advised that the after-the-fact approval of the development, as provided by this letter, shall not absolve the applicant of any prior violations of Commission rules related to this project, and shall not necessarily preclude the Commission from pursuing appropriate enforcement actions and administrative penalties associated with such violations, as provided in 30 TAC §213.10 of Commission rules.

STANDARD CONDITIONS

- 1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.
- 2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, UIC) can be required depending on the specifics of the plan.
- 3. In addition to the rules of the Commission, the applicant may also be required to comply with state and local ordinances and regulations providing for the protection of water quality.

Prior to Commencement of Construction:

- 4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.
- 5. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 6. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of

Mr. Vernon Dunagin May 5, 2009 Page 4

appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.

- 7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
- 8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.
- 9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

- 10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
- 12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

- 13. Three water wells exist on the site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 14. 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.
- 15. Intentional discharges of sediment laden storm water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 16. 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.
- 17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

- 18. 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 San Antonio Regional Office within 30 days of site completion.
- 19. 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 (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. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
- 20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses

Mr. Vernon Dunagin May 5, 2009 Page 6

the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

- 21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 22. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

If you have any questions or require additional information, please contact Alan G. Jones of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4074.

Sincerely,

Mark R. Vickery, P.G.

Executive Director

Texas Commission on Environmental Quality

MRV/AGJ/eg

Enclosures:

Deed Recordation Affidavit, Form TCEQ-0625

Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc:

Mr. Michael M. Slay, P.E., Slay Engineering Company, Inc.

Mr. Scott Halty, San Antonio Water System

Ms. Velma Danielson, Edwards Aquifer Authority

Ms. Renee Green, P.E., Bexar County Public Works

TCEO Central Records, Building F, MC 212

SCANNED

Deed Recordation Affidavit Edwards Aquifer Protection Plan

THE STATE	OF TEXAS	§	LT1-81-20110121247-1				
County of	Bexar	§	L11-01-201/01-1-1				
BEF <u>Sup</u> e	ORE ME, the ur erintendent for F	ndersigned authority, on this day po acilities and Operations who, bein	ersonally appeared <u>Leroy San Miguel, Interim Assistant</u> g duly sworn by me, deposes and says:				
(1)	That my nan property des	ne is <u>Leroy San Miguel</u> and that cribed below.	Northside Independent School District owns the real				
(2)		al property is subject to an EDWAR Texas Administrative Code (TAC)	DS AQUIFER PROTECTION PLAN which was required Chapter 213.				
(3)	That the EDV	VARDS AQUIFER PROTECTION ON ON ENVIRONMENTAL QUALI	PLAN for said real property was approved by the TEXAS TY (TCEQ) on May 19, 2011.				
	A copy of the herein by ref	letter of approval from the TCEQ is erence.	attached to this affidavit as Exhibit A and is incorporated				
(4)		property is located in <u>Bexar</u> Cour e attached Exhibit B.	nty, Texas, and the legal description of the property is as				
LANDOWNER-AFFANT							
SWORN AND SUBSCRIBED TO before me, on this 6 day of Yuly , 2011.							
Dina M. Silison							
NOTARTEC	DDLIC						
THE STATE	OF Toyon	2					
•	OF Texas	3					
County of	Bexar §						
BEFORE ME, the undersigned authority, on this day personally appeared <u>Leroy San Miguel</u> 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 6 day of 4/16/19, 20/1.							
NOTARY PUBLIC							
NINA M. GIBSON Typed or Printed Name of Notary NINA M. GIBSON NOTARY PUBLIC STATE OF TEXAS							
MY COMMISSION EXPIRES: 4-28-2012							



EXHIBIT "A"

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 19, 2011

Mr. Vernon L. Dunagin, AIA Northside Independent School District 5900 Evers Road San Antonio, Texas 78238

Re: Edwards Aquifer, Bexar County

Name of Project: NISD Thomas Clark High School, located at 5150 De Zavala Road, San Antonio, Texas

Type of Plan: Modification of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program San Antonio File No. -300.07, Investigation No. 912576 Regulated Entity No. RN102864626

Dear Mr. Dunagin:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP modification application for the above-referenced project submitted to the San Antonio Regional Office by Moy Tarin Ramirez Engineers, LLC on behalf of the Northside Independent School District on March 22, 2011. As presented to the TCEQ, the temporary best management practices (BMPs) and construction plans were prepared by a Texas licensed professional engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas licensed professional engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer protection plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

Background

The original plan for the facility was approved by letter dated April 22, 1976. A modification, approved by letter dated December 5, 2001, added 0.163 acres to an existing 17.67 acres of impervious cover for a total of 17.83 acres of impervious cover. A grassy swale was constructed near De Zavala Road as a permanent BMP for the calculated increase in stormwater runoff. On

REPLY TO: REGION 13 • 14250 JUDSON RD. • SAN ANTONIO, TEXAS 78233-4480 • 210-490-3096 • FAX 210-545-4329

printed on recycled paper using soy-based ink

Mr. Vernon L. Dunagin, AIA May 19, 2011 Page 2

April 18, 2006, a TCEQ clarification was made regarding the replacement of a storage building (an increase of 189 square feet of impervious cover). A modification of the approved WPAP was not required for the replacement. A minor modification regarding the replacement of two portable buildings and the addition of about 362 square feet of associated sidewalk was approved by TCEQ letter dated May 25, 2006. No impervious cover was considered added by the temporary buildings. The two buildings were later removed. Subsequent to the 2001 modification, 0.40 acre of impervious cover (including a drive, a square parking area, a storage container on a slab, and a storage building) was constructed without an approved modification. The modifications, along with the construction of a new science building and fire lane as well as additions on existing impervious cover were approved by TCEQ letter dated May 5, 2009. After the modifications, the site was to have 18.81 acres (29.39 percent) impervious cover:

Project Description

The proposed replacement of the east parking lot will take place within the 64 acre high school site. The project will include the demolition of existing driveways, parking areas, sidewalk, and curb. Asphalt and base material will be removed, the area graded, and replacement driveways, asphalt parking lot, sidewalks, and curb will be constructed within an 8.17 acre project area. The impervious cover at the site will be reduced by 0.02 acre to 18.79 acres (29.36 percent). Site wastewater will continue to be disposed of by conveyance to the existing Dos Rios Water Recycling Center owned by the San Antonio Water System.

Permanent Pollution Abatement Measures

30 TAC Chapter 213.5(b)(4)(D)(ii) requires permanent best management practices and measures be implemented for any increases of total suspended solids caused by regulated activities. As the impervious cover that is to be demolished and replaced was constructed prior to the requirement for permanent pollution abatement measures, such measures are not required.

Geology

According to the geologic assessment done in January 2009, the east parking lot is located on the outcrop of the Person Formation of the Edwards Group. No additional impervious cover is proposed. No new geologic assessment is required. The San Antonio Regional Office site assessment conducted on May 17, 2011, found conditions to be generally as described.

Standard Conditions

- 1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.
- 2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ programs (i.e., Stormwater, Water Rights, UIC) can be required-depending on the specifics of the plan.

Mr. Vernon L. Dunagin, AIA May 19, 2011 Page 3

3. In addition to the rules of the Commission, the applicant may also be required to comply with state and local ordinances and regulations providing for the protection of water quality.

Prior to Commencement of Construction:

- 4. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.
- 5. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 6. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
- 8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.
- 9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

Mr. Vernon L. Dunagin, AIA May 19, 2011 Page 4

applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.

- 11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
- 12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas licensed professional engineer.
- 13. No water wells exist on the site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 14. 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.
- 15. Intentional discharges of sediment laden storm water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 16. 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.
- 17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

18. 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 San-Antonio-Regional-Office within 30-days-of-site-completion.

- 19. 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 (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. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
- 20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
- 21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 22. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aguifer is protected from potential contamination.

If you have any questions or require additional information, please contact Alan G. Jones of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4074.

Sincerely,

Mark R. Vickery, P.G., Executive Director

Texas Commission on Environmental Quality

MRV/AGJ/eg

cc:

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625

Mr. Duane A. Moy, P.E., Moy Tarin Ramirez Engineers, LLC

Mr. Scott Halty, San Antonio Water System

Mr. Karl J. Dreher, Edwards Aquifer Authority

Ms. Renee Green, P.E., Bexar County Public Works

TCEO Central Records, Building F, MC 212

EXHIBIT "B"

Field Notes for a 63.957 Acre Tract of Land

Being a 63.957 acre tract being all of Lot 28, New City Block 14857, Thomas Clerk High School Subdivision recorded in Volume 9613, Pages 138-139, Plat Records, Bexar County, Texas, said 63.597 acre tract being more particularly described by metes and bounds as follows:

Beginning at a point in the southeast right-of-way line of De Zavala Road for the northwest corner of the herein described tract, the northwest corner of the above referenced Lot 28;

Thence, with the southeast right-of-way line of De Zavala Road, the northwest line of Lot 28, North 62 degrees 51 minutes 00 seconds East, a distance of 1464.07 feet to a point for the northeast corner of the herein described tract, the northeast corner of Lot 28;

Thence, departing the southeast right-of-way line of De Zavala Road, with a northeast line of Lot 28, South 25 degrees 16 minutes 33 seconds East, a distance of 1360.37 feet to a point at the beginning of a curve to the left whose central angle is, 10 degrees 17 minutes 56 seconds, whose radius is 3869,71 feet and whose chord bears, South 30 degrees 25 minutes 30 seconds East, a distance of 694.64 feet:

Thence, continuing with a northeast line of Lot 28, along the arc of said curve to the left, a distance of 695.58 feet to a point for the southeast corner of the herein described tract, the southeast corner of Lot 28;

Thence, with the south line of Lot 28, South 89 degrees 19 minutes 34 seconds West, a distance of 1752.76 feet to a point for angle and, South 89 degrees 34 minutes 50 seconds West, a distance of 493.05 feet to a point for the southwest corner of the herein described tract, the southwest corner of Lot 28;

Thence, with the west line of Lot 28, North 00 degrees 29 minutes 53 seconds East, a distance of 1185.30 feet to the Place of Beginning and containing 63.957 acres of land.

Any provision herein which restricts the sale, or use of the described real preperty because of race is invalid and unenforceable under Federal law STATE OF TEXAS, COUNTY OF BEXAR I hereby certify that this instrument was FILED in File Number Sequence on this date and at the time stamped hereon by me and was duly REGORDED in the Official Public Record of Real Property of Bexar County, Texas en:

JUL 12 2011

COUNTY CLERK BEXAR COUNTY, TEXAS

Doc# 20110121247 Fees: \$40.00 07/12/2011 3:23PM # Pages 7 Filed & Recorded in the Official Public Records of BEXAR COUNTY GERARD RICKHOFF COUNTY CLERK Bryan W. Shaw, Ph.D., Chairman Carlos Rubinstein, Commissioner Toby Baker, Commissioner Zak Covar, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution
October 18, 2012

Mr. Leroy San Miguel Northside Independent School District 5900 Evers Road San Antonio, Texas 78238

Re: Edwards Aquifer, Bexar County

NAME OF PROJECT: Clark High School Track Improvements, located east of the intersection of De Zavala Road and Vance Jackson Road, San Antonio, Texas

TYPE OF PLAN: Request for Approval of a Modification of an Approved Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program ID No: -300.08; Investigation No. 1030140; Regulated Entity No. RN102864626

Dear Mr. San Miguel:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Modification for the above-referenced project submitted to the San Antonio Regional Office by CUDE Engineers, L.L.C. on behalf of Northside ISD on August 29, 2012. Final review of the WPAP was completed after additional material was received on September 27, 2012. As presented to the TCEQ, the Temporary Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

BACKGROUND

The original plan for the facility was approved by letter dated April 22, 1976. A modification, approved by letter dated December 5, 2001, added 0.163 acres to an existing 17.67 acres of impervious cover for a total of 17.83 acres of impervious cover. A grassy swale was constructed near De Zavala Road as a permanent BMP for the calculated increase in storm water runoff. On April 18, 2006, a TCEQ clarification was made regarding the replacement of a storage building (an increase of 189 square feet of impervious cover). A modification of the WPAP was not required for the replacement. A minor modification regarding the replacement of two portable buildings and the addition of about 362 square

Mr. Leroy San Miguel Page 2 October 18, 2012

feet of associated sidewalk was approved by TCEQ letter dated May 25, 2006. No impervious cover was considered added by the temporary buildings. The two buildings were later removed. Subsequent to the 2001 modification, 0.40 acres of impervious cover (including a drive, square parking area, a storage container on a slab, and a storage building) were constructed without an approved modification. The modifications, along with the construction of a new science building and fire lane as well as additions on existing impervious cover were approved by TCEQ letter dated May 5, 2009. After the modifications, the site was to have 18.81 acres (29.39 percent) impervious cover. A modification to the WPAP was approved by the TCEQ on May 19, 2011 for the demolition of existing driveways, parking areas, sidewalk, and curb. The area was to be graded, and replacement driveways, asphalt parking lot, sidewalks, and curb would be constructed within an 8.17 acre project area. The impervious cover at the site was reduced by 0.02 acres to 18.79 acres (29.36 percent).

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 4.80 acres. It will include demolition of the existing track surface, sidewalk, base material, and curb. After demolition, site grading and the replacement of a new track surface, sidewalks, base material and curb within the project limits will be performed. There will be 0.56 acres of additional impervious cover added with this modification which will result in a total impervious cover of 19.35 acres (30.26 percent) for the site. No wastewater is generated by this project.

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, a grassy swale, designed using the TCEQ technical guidance document, <u>Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005)</u>, will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 457 pounds of TSS generated from the 0.56 additional acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The individual treatment measures will consist of a grassy swale with a cross-section conforming to Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005). The minimum length of the grassy swale is 97.48 feet. The width of the grassy swale will be 10 feet and slope is to be 1%. The grassy swale will have a 80% uniformly dense vegetative cover.

GEOLOGY

According to the geologic assessment included with the application, the site is underlain by limestone of the Person Formation typically regarded as the upper member of the Edwards Limestone. A majority of the sites terrain has been mechanically altered for leveling purposes and is now covered by landscape soils. The San Antonio Regional Office site assessment conducted on October 12, 2012 indicated agreement with the classification of three manmade features as non-sensitive.

SPECIAL CONDITIONS

- I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letters dated April 22, 1976, December 5, 2001, May 5, 2009, and May 19, 2011.
- II. All permanent pollution abatement measures shall be operational prior to occupancy of the facility.

STANDARD CONDITIONS

- 1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.
- 2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, UIC) can be required depending on the specifics of the plan.
- 3. In addition to the rules of the Commission, the applicant may also be required to comply with state and local ordinances and regulations providing for the protection of water quality.

Prior to Commencement of Construction:

- 4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.
- 5. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 6. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
- 8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.
- 9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain

Mr. Leroy San Miguel Page 4 October 18, 2012

responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.

- 11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
- 12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
- 13. No wells exist on site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 14. 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.
- 15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 16. 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.
- 17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

- 18. 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 San Antonio Regional Office within 30 days of site completion.
- 19. 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 (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. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of

Mr. Leroy San Miguel Page 5 October 18, 2012

responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

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

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Mr. Michael Isley of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4057.

Sincerely,

Lynn Bumguardner, Water Section Manager

San Antonio Region Office

Texas Commission on Environmental Quality

LMB/MI/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625

Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Mr. Kevin Hunt, P.E., CUDE Engineers, L.L.C.

Mr. Scott Halty, San Antonio Water System

Mr. Roland Ruiz, Edwards Aguifer Authority

Ms. Renee Green, P.E., Bexar County Public Works

TCEQ Central Records, Building F, MC 212

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 1, 2016

Mr. Richard De La Cruz Northside Independent School District 5900 Evers Rd. Bldg. E San Antonio, Texas 78238

Re: Edwards Aquifer, Bexar County

NAME OF PROJECT: NISD Thomas Clark High School; Located at 5150 De Zavala Rd.; San Antonio, Texas

PLAN TYPE: Request for the Approval of a Water Pollution Abatement Plan (WPAP) Modification; 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Regulated Entity No. RN102864626; Additional ID No. 13000145

Dear Mr. De La Cruz:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Modification application for the above-referenced project submitted to the San Antonio Regional Office by Moy Tarin Ramirez Engineers, LLC on behalf of Northside Independent School District on May 5, 2016. Final review of the WPAP was completed after additional material was received on June 14, 2016. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

BACKGROUND

The original plan, dated April 22, 1976, was approved for the construction activity and permanent treatment at De Zavala Road Northside High School Subdivision.

A modification, dated December 5, 2001, was approved for the addition of 0.163 acres of impervious cover for a total of 17.83 acres (27.8 percent) of impervious cover within a 64.043

acre site. A grassy swale, six (6) feet wide and 100 feet long, was constructed as the permanent BMP.

A site plan update, dated April 18, 2006, was approved for the replacement of a storage building which resulted in an increase of 189 square feet of impervious cover. A modification of the WPAP was not required for the replacement.

Following the 2001 modification, 0.40 acres of impervious cover were constructed without TCEQ approval, permanent treatment was provided in a subsequent modification. A modification, dated May 5, 2009, was approved for the construction of a new science building, new fire lane, addition to building D, and a concrete pad to give a total of 18.81 acres (29.39 percent) of impervious cover within a 64 acre site. A grassy swale, ten (10) feet wide and 110 feet long, was the approved permanent BMP.

A modification, dated May 19, 2011, was approved for the replacement of the east parking lot which included driveways, parking areas, sidewalk and curb. The impervious cover was reduced by 0.02 acres to 18.79 acres (29.36 percent) of impervious cover within a 64 acre site. No permanent BMPs were proposed or approved.

A modification, dated October 18, 2012, was approved for the demolition and replacement of the existing track, sidewalk, base material and curb. The modification resulted in an additional 0.56 acres of impervious cover for a total of 19.35 acres (30.26 percent) of impervious cover within the 64 acre site. A grassy swale, 10 feet wide and 97.48 feet long, was the approved permanent BMP.

PROJECT DESCRIPTION

The proposed modification is a commercial development within 64 acres which includes the addition of seven (7) portable buildings, associated sidewalks, three (3) temporary storage containers, and compacted base staging areas. The impervious cover will be increased by 1.91 acres for a total of 21.26 acres (33.2 percent) of impervious cover. There are no modifications proposed to the existing permanent BMPs. Project wastewater will be disposed of by conveyance to the existing Dos Rios Water Recycling Center owned by San Antonio Water System.

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, eight (8) engineered vegetative filter strips (VFS) and a natural VFS, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be utilized to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 1,559 pounds of TSS generated from the 1.91 acres of increased impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The eight 15-foot wide VFS(s) shall have a uniform slope of less than 20-percent and vegetated cover of at least 80-percent which will extend along the entire length of the contributing area and will be free of gullies or rills that can concentrate overland flow. The contributing area shall be relatively flat to evenly distribute runoff, and the impervious cover in the direction of flow shall not exceed 72-feet.

The one natural VFS will treat the TSS generated from the three (3) temporary storage units. The proposed natural VFS is approximately 130 feet of undisturbed natural vegetative area.

The slopes shall not exceed 10 percent and shall have no flow concentrating areas on the strip. The contributing area shall be relatively flat to evenly distribute runoff.

GEOLOGY

According to the geologic assessment included with the application, the project site is located on the Cyclic and Marine Member of the Cretaceous Edwards Person Limestone Formation. Six (6) manmade features were identified within the proposed projects limits by the project geologist. The manmade features were not rated sensitive. The San Antonio Regional Office site assessment conducted on May 9, 2016 revealed the site generally as described in the application.

SPECIAL CONDITIONS

- I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated April 22, 1976, December 5, 2001, May 5, 2009, May 19, 2011 and October 18, 2012.
- II. All permanent pollution abatement measures shall be inspected and be fully operational prior to first occupancy of the newly constructed facilities.
- III. During technical review it was decided to place the three (3) temporary storage units on existing impervious cover behind Building E. The approval will allow the containers to be moved near the tennis courts as originally proposed, in the future, since it is accounted for in treatment.
- IV. During the onsite investigation it was noted construction began without approval. The applicant is hereby advised that the after-the-fact approval of the WPAP Modification application, as provided by this letter, shall not absolve the applicant of any violations of TCEQ rules related to this project.

STANDARD CONDITIONS

- 1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.
- 2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, UIC) can be required depending on the specifics of the plan.
- 3. In addition to the rules of the Commission, the applicant may also be required to comply with state and local ordinances and regulations providing for the protection of water quality.

Prior to Commencement of Construction:

4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed

Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.

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

During Construction:

- 10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
- 12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

- 13. No wells exist on site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 14. 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.
- 15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 16. 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.
- 17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

- 18. 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 San Antonio Regional Office within 30 days of site completion.
- 19. 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 (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. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
- 20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
- 21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

22. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Ms. Lillian Butler of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4026.

Sincerely,

Lynn Bumguardner, Water Section Manager

San Antonio Region

Texas Commission on Environmental Quality

LB/LB/eg

cc:

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625

Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

Mr. Rolando Ramirez, P.E., Moy Tarin Ramirez Engineers, LLC

Mr. Scott Halty, San Antonio Water System Ms. Renee Green, Bexar County Public Works Mr. Roland Ruiz, Edwards Aquifer Authority TCEQ Central Records, Building F, MC 212 Jon Niermann, *Chairman*Emily Lindley, *Commissioner*Bobby Janecka, *Commissioner*Toby Baker, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 27, 2020

Mr. Henry Acosta Northside Independent School District 5900 Evers Road, Bldg. E San Antonio, Texas 78238

Re: Edwards Aquifer, Bexar County

NAME OF PROJECT: NISD Thomas C Clark High School; Located approximately 1,700 feet southeast of the Vance Jackson Road and De Zavala Road intersection; San Antonio, Texas

TYPE OF PLAN: Request for Modification of an Approved Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Regulated Entity No. RN102807898; Additional ID. No. 13001059

Dear Mr. Acosta:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Modification Application for the above-referenced project submitted to the San Antonio Regional Office by Moy Tarin Ramirez Engineers, LLC on behalf of Northside Independent School District on January 10, 2020. Final review of the WPAP Modification was completed after additional material was received on February 12, 2020 and February 20, 2020. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

BACKGROUND

The original plan was approved by letter dated April 22, 1976 for construction of the De Zavala Road Northside High School later renamed as NISD Thomas Clark High School. Subsequent WPAP modifications for campus expansion on the 64.04-acre site were approved by letters dated December 5, 2001, May 5, 2009, May 19, 2011, October 18, 2012 and July 1, 2016.

Mr. Henry Acosta Page 2 February 27, 2020

Permanent BMPs initially included quarterly sweeping followed by grassy swales and vegetative filter strips.

PROJECT DESCRIPTION

This modification proposes the replacement of the existing natural turf football field with new synthetic turf and the resurfacing of the existing track surface within a 7.85-acre project area of the 64.04-acre site. Impervious cover totals 3.75 acres (47.77 percent) with 1.12 acres being pre-Rule. Impervious cover requiring treatment totals 2.63 acres. Total site impervious cover increases to 23.33 acres (36.43 percent). No wastewater will be generated by this project.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or up-gradient of the site and potentially flowing across and off the site after construction, a partial sedimentation filtration basin, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 2,144 pounds of TSS generated from the 2.63 acres of impervious cover. The approved measure meets the required 80 percent removal of the increased load in TSS caused by the project.

GEOLOGY

According to the geologic assessment included with the application, the site lies within the Person Formation. No geologic or manmade features in bedrock were noted by the project geologist within the project limits. The site assessment conducted on February 14, 2020 revealed that the site was generally as described in the application.

SPECIAL CONDITIONS

- I. This modification is subject to all Special and Standard Conditions listed in the original plan approval letter dated April 22, 1976 and subsequent WPAP modifications dated December 5, 2001, May 5, 2009, May 19, 2011, October 18, 2012 and July 1, 2016.
- II. The water quality basin shall be operational prior to sport activities on the football field and track area of the campus.
- III. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

STANDARD CONDITIONS

- 1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.
- 2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, UIC) can be required depending on the specifics of the plan.

Mr. Henry Acosta Page 3 February 27, 2020

3. In addition to the rules of the Commission, the applicant may also be required to comply with state and local ordinances and regulations providing for the protection of water quality.

Prior to Commencement of Construction:

- 4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.
- 5. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 6. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
- 8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.
- 9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

- 10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and

Mr. Henry Acosta Page 4 February 27, 2020

- approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
- 12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
- 13. No wells exist on the site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 14. 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.
- 15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 16. 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.
- 17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

- 18. 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 San Antonio Regional Office within 30 days of site completion.
- 19. 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 (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. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
- 20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that

Mr. Henry Acosta Page 5 February 27, 2020

specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

- 21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 22. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Dianne Pavlicek-Mesa, P.G., of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4074.

Sincerely,

Robert Sadlier, Section Manager

Edwards Aquifer Protection Program

Texas Commission on Environmental Quality

RCS/dpm

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625

Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Mr. Nicholas Van Delist, P.E., Moy Tarin Ramirez Engineers, LLC

Ms. Renee Green, P.E., Bexar County Public Works

Mr. Roland Ruiz, Edwards Aquifer Authority

Mr. Scott Halty, San Antonio Water System

Mr. George Wissmann, Trinity Glen Rose Groundwater Conservation District

EXHIBIT B

BEING 63.957 ACRES OF LAND, LOT 28 N.C.B. 14857, AS RECORDED IN VOL. 9554, PG. 16-17 OF THE DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS.

ATTACHMENT B

NARRATIVE OF PROPOSED MODIFICATION

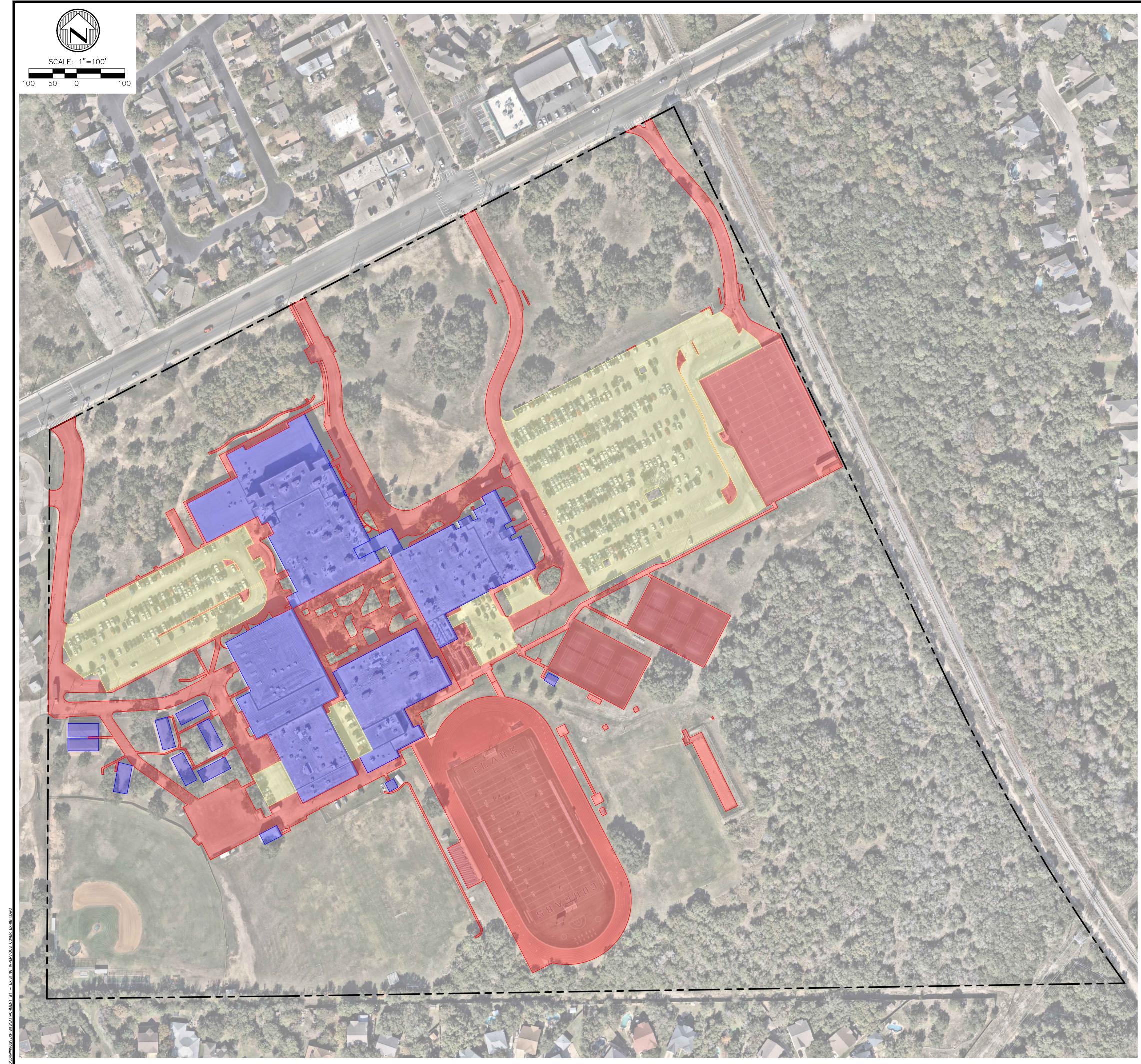
This project includes the construction of a new parking lot, new fine arts building, renovation of the main building's front entrance and associated concrete flatwork and asphalt pavement improvements to existing driveways and parking lots at Thomas Clark High School for Northside Independent School District. The project areas are illustrated on the Overall WPAP Site Plan (sheets C1.0-C1.2). All of the work associated with this modification is located within the 63.957-acre property, leaving roughly half of the site undisturbed with this project.

The current development consists of a high school with buildings, concrete sidewalks, asphalt parking, sports fields and a partial sedimentation/filtration basin adjacent to the existing practice field. A majority of the site was constructed prior to the establishment of TCEQs current regulations on water quality enacted in 1999. The current BMPs treating the site include grassy swales, vegetative filter strips (VFS), and a partial sedimentation/filtration basin, most of which are to remain. Of the existing VFS, 18,869.11 ft² is to be removed in this project.

The impervious cover onsite will increase by 2.70 acres, bringing the total site impervious cover to 25.93 acres, or 40.55%. TSS generated from the impervious cover increase requires a removal of 2,202 pounds. The increase in TSS resulting from the added impervious cover associated with the new parking lot will be removed by a proposed jellyfish filter located at the southeast corner of the new parking lot. Proposed VFS will be utilized to treat pre-1999 impervious cover to offset the increase in impervious cover associated with all other new improvements. All impervious cover associated with the new fine arts building and renovation of the main building's front entrance is being routed underground to discharge at a grassy swale. The JellyFish filter is designed to remove 1,795 pounds of TSS and the new VFS will remove 857 pounds. The total removal provided for this modification is 2,652 pounds meaning an excess removal of 450 pounds is being provided. There are no offsite areas draining to the Project Area.

SUMMARY OF PROPOSED MODIFICATIONS @ NISD CLARK HIGH SCHOOL

WPAP Modification	Approved Project	Approved	Approved	Approved	Approved	Approved	Approved	Proposed
Summary	Approved Project	Modification #1	Modification #2	Modification #3	Modification #4	Modification #5	Modification #6	Modification #7
Acres	64	64	64	64	64	64	64.043	63.95
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 (acres)	17.67	17.83	18.81	18.79	19.35	21.26	23.33	25.93
Impervious Cover (%)	27.60%	27.86%	29.39%	29.36%	30.26%	33.2%	36.43%	40.55%
Darman and DMADa	Ourantaniu Curannina	Canana Carala	Caranii Ciiiala	N1/A	Caranii Ciiiala	Manatativa Filton Ctuina	Partial Sedimentation/	Jellyfish Filters, Vegetative Filter
Permanent BMPs	Quarterly Sweeping	Grassy Swale	Grassy Swale	N/A	Grassy Swale	Vegetative Filter Strips	Filtration Basin	Strips
Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Approval Date	April 22, 1976	December 5, 2001	May 5, 2009	May 19, 2011	October 18, 2012	July 1, 2016	February 27, 2020	TBD



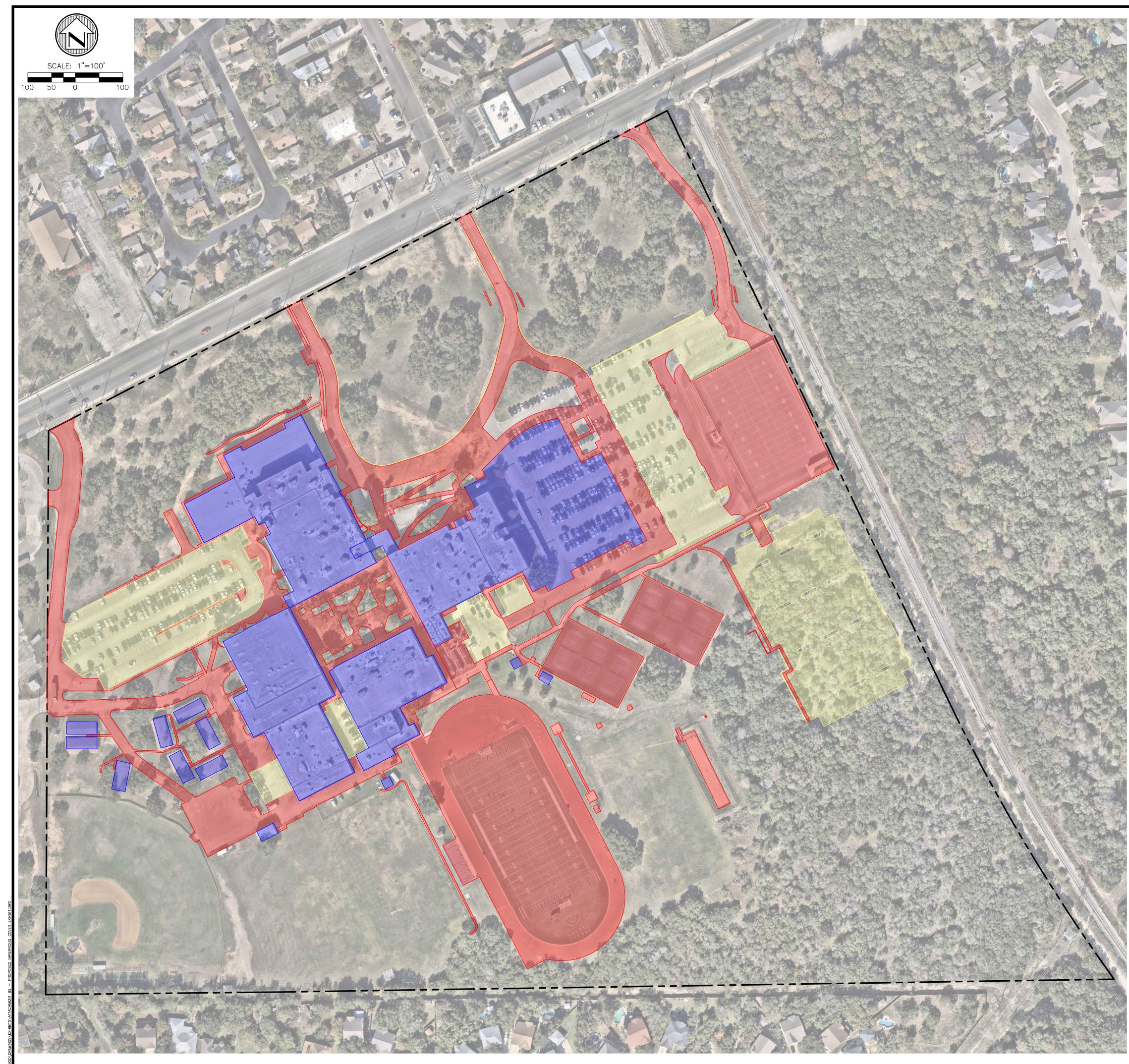
IMPERVIOUS COVER OF EXISTING SITE	SQ. FT.	SQ. FT./ACRE	ACRES
STRUCTURES/ROOFTOPS	230,241	÷ 43,560=	5.29
PARKING	277,499	÷ 43,560=	6.37
OTHER PAVED SURFACES	504,433	÷ 43,560=	11.58
TOTAL IMPERVIOUS COVER	1,012,173	÷ 43,560=	23.24
TOTAL SITE AREA	2,785,629	÷ 43,560=	63.95
TOTAL IMPERVIOUS COVER ÷	TOTAL ACREA	AGE x 100=	36.34%

LEGERIND	
	PROPERTY LINE
	EXISTING STRUCTURES/ROOFTOPS
	EXISTING PARKING
	OTHER EXISTING PAVED SURFACES

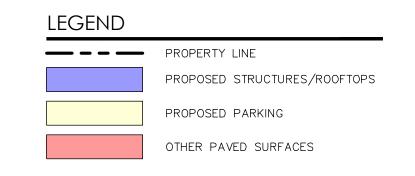
• Engineers
• Surveyors
• Planners

Moy Tarin Ramirez Engineers, LLC

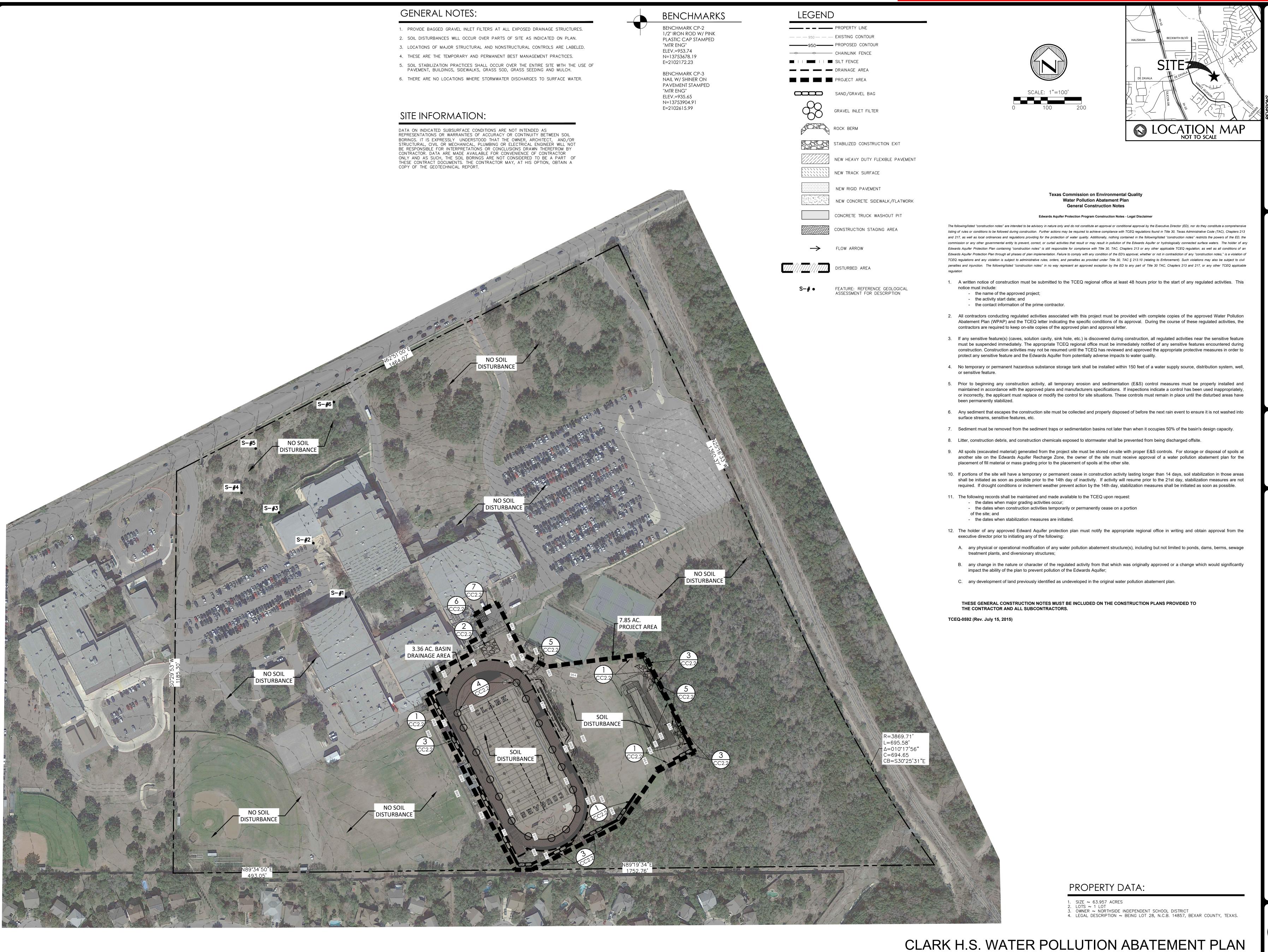
TBPELS: ENGINEERING F-5297/SURVEYING F-10131500
12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051
SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

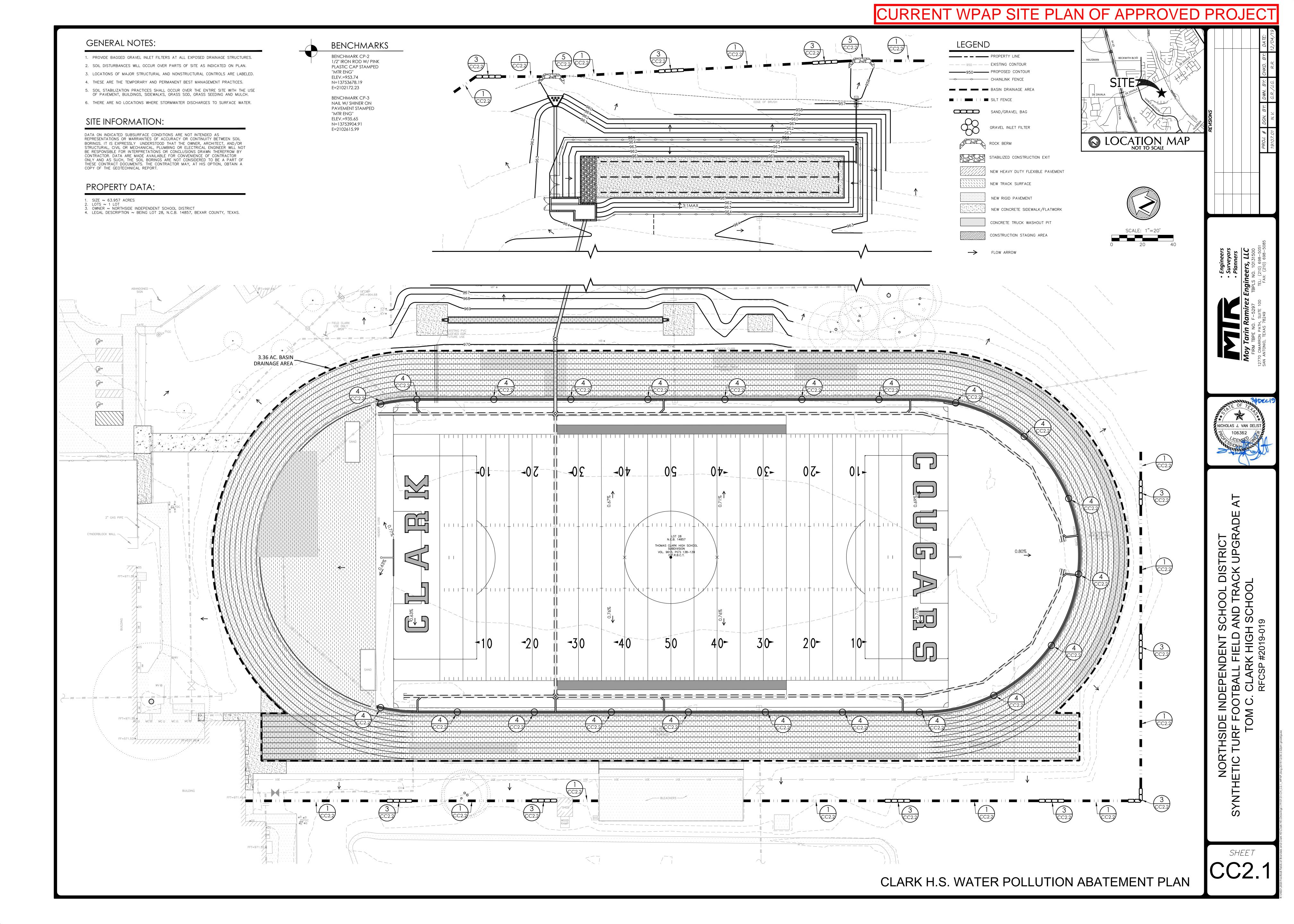


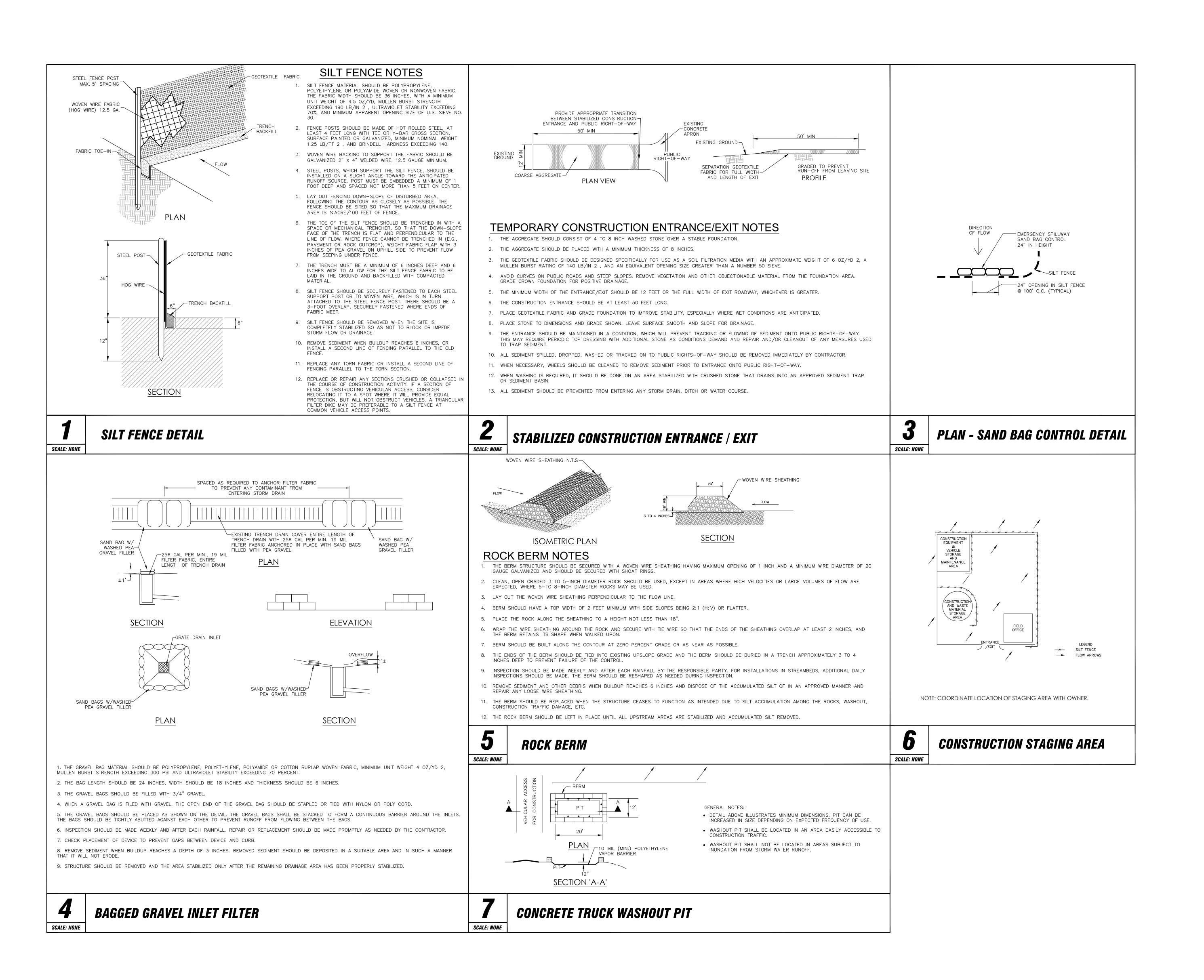
IMPERVIOUS COVER OF PROPOSED PROJECT	SQ. FT.	SQ. FT./ACRE	ACRES
STRUCTURES/ROOFTOPS	302,361	÷ 43,560=	6.94
PARKING	261,290	÷ 43,560=	6.00
OTHER PAVED SURFACES	566,035	÷ 43,560=	12.99
TOTAL IMPERVIOUS COVER	1,129,686	÷ 43,560=	25.93
TOTAL SITE AREA	2,785,629	÷ 43,560=	63.95
TOTAL IMPERVIOUS COVER ÷	TOTAL ACREA	AGE x 100=	40.55%







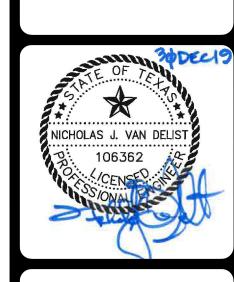




 PROJ. #
 DGN. BY:
 DWN. BY:
 CHKD. BY:
 DAM

 19107.01
 N.V.
 G.R./J.G.
 R.R.
 12/0





NORTHSIDE INDEPENDENT SCHOOL DISTRICT
NTHETIC TURF FOOTBALL FIELD AND TRACK UPGRADE A
TOM C. CLARK HIGH SCHOOL

CC2.2

V. WATER POLLUTION ABATEMENT PLAN APPLICATION

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b), Effective June 1, 1999

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

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

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This Water Pollution Abatement Plan Application Form is hereby submitted for TCEQ review and Executive Director approval. The form was prepared by:

Print Name of Customer/Agent: Sean Smith, P.E. Date: 9/3/25 Signature of Customer/Agent: Regulated Entity Name: NISD THOMAS C CLARK HIGH SCHOOL

Regulated Entity Information

1.	The type of project is:
	Residential: Number of Lots:
	Residential: Number of Living Unit Equivalents:
	Commercial
	Industrial
	Other: <u>School</u>

- 2. Total site acreage (size of property):63.95
- 3. Estimated projected population: 2,746
- 4. The amount and type of impervious cover expected after construction are shown below:

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	302,361	÷ 43,560 =	6.94
Parking	261,290	÷ 43,560 =	6.00
Other paved surfaces	566,035	÷ 43,560 =	12.99
Total Impervious Cover	1,129,686	÷ 43,560 =	25.93

Total Impervious Cover $\underline{25.93}$ ÷ Total Acreage $\underline{63.95}$ X 100 = $\underline{40.55}$ % Impervious Cover

5.	Attachment A - Factors Affecting Surface Water Quality. A detailed description of all
	factors that could affect surface water and groundwater quality that addresses ultimate
	land use is attached.

6. Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

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

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

TCEQ Executive Director. Modi	ting roadways that do not require approval from the fications to existing roadways such as widening g more than one-half (1/2) the width of one (1) existing m the TCEQ.
Stormwater to be gener	rated by the Proposed Project
volume (quantity) and characte occur from the proposed proje quality and quantity are based	naracter of Stormwater. A detailed description of the er (quality) of the stormwater runoff which is expected to ct is attached. The estimates of stormwater runoff on the area and type of impervious cover. Include the r both pre-construction and post-construction conditions
Wastewater to be gener	rated by the Proposed Project
14. The character and volume of waste	ewater is shown below:
100% Domestic% Industrial% Commingled TOTAL gallons/day 27460	27460Gallons/dayGallons/dayGallons/day
15. Wastewater will be disposed of by	:
On-Site Sewage Facility (OSSF/S	Septic Tank):
will be used to treat and dis licensing authority's (authority the land is suitable for the the requirements for on-sit relating to On-site Sewage Each lot in this project/devesize. The system will be de	Letter from Authorized Agent. An on-site sewage facility spose of the wastewater from this site. The appropriate rized agent) written approval is attached. It states that use of private sewage facilities and will meet or exceed the sewage facilities as specified under 30 TAC Chapter 285 Facilities. Elopment is at least one (1) acre (43,560 square feet) in signed by a licensed professional engineer or registered a licensed installer in compliance with 30 TAC Chapter
Sewage Collection System (Sew	ver Lines):
to an existing SCS.	n the wastewater generating facilities will be connected in the wastewater generating facilities will be connected
The SCS was previously subThe SCS was submitted withThe SCS will be submitted a be installed prior to Execut	n this application. It a later date. The owner is aware that the SCS may not

The sewage collection system will convey the wastewater to the <u>Dos Rios Treatment</u> <u>Plant</u> (name) Treatment Plant. The treatment facility is:
Existing. Proposed.
16. All private service laterals will be inspected as required in 30 TAC §213.5.
Site Plan Requirements
Items 17 – 28 must be included on the Site Plan.
17. \square The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = <u>100</u> '.
18. 100-year floodplain boundaries:
 Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled. No part of the project site is located within the 100-year floodplain. The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA Map #48029C0230G, Effective 9/29/2010
19. The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, open space, etc. are shown on the plan.
The layout of the development is shown with existing contours at appropriate, but not greater than ten-foot intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, open space, etc. are shown on the site plan.
20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):
There are (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)
 The wells are not in use and have been properly abandoned. The wells are not in use and will be properly abandoned. The wells are in use and comply with 16 TAC §76.
$oxed{\boxtimes}$ There are no wells or test holes of any kind known to exist on the project site.
21. Geologic or manmade features which are on the site:
 □ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled. ○ No sensitive geologic or manmade features were identified in the Geologic Assessment. □ Attachment D - Exception to the Required Geologic Assessment. A request and
justification for an exception to a portion of the Geologic Assessment is attached.

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

ATTACHMENT A

FACTORS AFFECTING SURFACE WATER QUALITY

This project includes the construction of a new parking lot, new fine arts building, renovation of the main building's front entrance and associated concrete flatwork and asphalt pavement improvements to existing driveways and parking lots at Thomas Clark High School for Northside Independent School District. The project areas are illustrated on the Overall WPAP Site Plan (sheets C1.0-C1.2). All of the work associated with this modification is located within the 63.957-acre property, leaving roughly half of the site undisturbed with this project.

Factors impacting surface water quality include: fertilizers, pesticides from landscaping, sediment from soil disturbances, and small amounts of oil grease from vehicular traffic. These factors may cause suspended solids to enter the storm water runoff and subsequently affect the surface water. However, temporary and permanent BMP's consisting of silt fence, bagged gravel inlet filters, stabilized construction entrance/exit, and Partial Sedimentation/Filtration Basin have been designed using the Technical Guidance Manual to treat the required amount of storm water runoff as to not adversely affect water quality entering any surface water or groundwater.

ATTACHMENT B

VOLUME & CHARACTER OF STORMWATER

There will be an increase in the volume of storm water generated from this site, however there is no anticipated change in the character of storm water generated from this site associated with this modification application. The proposed construction activities should have minor impact to the post-construction flow relative to the preconstruction flow. There is a net increase of 2.70 acres of impervious cover associated with this application. The pre-construction runoff coefficient for the overall site is 0.65, the post-construction runoff coefficient is 0.67. Provided below is a table of anticipated pre- and post-construction flow rates for the overall site.

	Q5 (cfs)	Q25 (cfs)	Q100 (cfs)
Existing	189.21	261.73	324.66
Proposed	195.32	270.18	335.14
Δ =	6.11	8.45	10.48

Storm water runoff generated from the site during construction will be typical of a high school with an on-going building addition/renovation and parking improvement project. 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 BMPs 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 and/or mulch in those areas as described in the Permanent Stormwater Section.

Storm water runoff generated after construction is complete will be typical of a high school site. The runoff will contain sediments from rooftops, flatwork, asphalt & concrete paving, 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 from the project area will be treated through proposed VFS and a new JellyFish Filter. Existing impervious cover elsewhere on the site will continue to be treated by previously approved on-site permanent BMPs.

- 1. WRITTEN CONSTRUCTION NOTIFICATION MUST BE GIVEN TO THE APPROPRIATE TCEQ REGIONAL OFFICE NO LATER THAN 48 HOURS PRIOR TO COMMENCEMENT OF THE REGULATED ACTIVITY. INFORMATION MUST INCLUDE THE DATE ON WHICH THE REGULATED ACTIVITY WILL COMMENCE, THE NAME OF THE APPROVED PLAN FOR THE REGULATED ACTIVITY, AND THE NAME OF THE PRIME CONTRACTOR AND THE NAME AND TELEPHONE NUMBER OF THE CONTACT PERSON.
- 2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
- 3. IF ANY SENSITIVE FEATURE IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
- 4. NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM IS INSTALLED WITHIN 150 FEET OF A DOMESTIC, INDUSTRIAL, IRRIGATION, OR PUBLIC WATER SUPPLY WELL, OR OTHER SENSITIVE FEATURE.
- 5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. CONTROLS SPECIFIED IN THE TEMPORARY STORM WATER SECTION OF THE APPROVED EDWARDS AQUIFER PROTECTION PLAN ARE REQUIRED DURING CONSTRUCTION. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THE CONTROLS MUST REMAIN IN PLACE UNTIL DISTURBED AREAS ARE REVEGETATED AND THE AREAS HAVE BECOME PERMANENTLY STABILIZED.
- 6. 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).
- 7. SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS NOT LATER THAN WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%. A PERMANENT STAKE MUST BE PROVIDED THAT CAN INDICATE WHEN THE SEDIMENT OCCUPIES 50% OF THE BASIN VOLUME.
- 8. 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).
- 9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.
- 10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. BUT IN NO CASE TEMPORARILY OR PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARY OR PERMANENTLY CEASE 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 SITE. IN AREAS EXPERIENCING DROUGHTS WHERE THE INITIATION OF MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SEASONAL ARID CONDITIONS,
- 11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TOFO UPON REQUEST: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
- 12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:

STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.

- A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;
- B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
- C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

AUSTIN REGIONAL OFFICE 2800 S. IH 35, SUITE 100 AUSTIN, TEXAS 78704-5712 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

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

GENERAL NOTES:

- 1. PROVIDE BAGGED GRAVEL INLET FILTERS AT ALL EXPOSED DRAINAGE

2. SOIL DISTURBANCES WILL OCCUR OVER PARTS OF SITE AS INDICATED

- 3. LOCATIONS OF MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS ARE LABELED.
- 5. SOIL STABILIZATION PRACTICES SHALL OCCUR OVER THE ENTIRE SITE

4. THESE ARE THE TEMPORARY AND PERMANENT BEST MANAGEMENT

- WITH THE USE OF PAVEMENT, BUILDINGS, SIDEWALKS, GRASS SOD, GRASS SEEDING AND MULCH.
- 6. THERE ARE NO LOCATIONS WHERE STORM WATER DISCHARGES TO
- SURFACE WATER. 7. CONTRACTOR SHALL MODIFY PLAN AS NECESSARY TO PROVIDE FOR
- PROPER STORM WATER POLLUTION PREVENTION THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES. ALL MODIFICATIONS ARE TO BE NOTED ON CONTRACTOR'S COPY OF THE WPAP SITE PLAN DRAWING AND REPORT ON THE PROJECT SITE.
- 8. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROPER POLLUTION CONTROLS OF THE PROJECT SITE THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.

SITE INFORMATION:

DATA ON INDICATED SUBSURFACE CONDITIONS ARE NOT INTENDED AS REPRESENTATIONS OR WARRANTIES OF ACCURACY OR CONTINUITY BETWEEN SOIL BORINGS. IT IS EXPRESSLY UNDERSTOOD THAT THE OWNER, ARCHITECT, AND/OR STRUCTURAL, CIVIL OR MECHANICAL, PLUMBING

OR ELECTRICAL ENGINEER WILL NOT BE RESPONSIBLE FOR INTERPRETATIONS OR CONCLUSIONS DRAWN THEREFROM BY CONTRACTOR. DATA ARE MADE AVAILABLE FOR CONVENIENCE OF CONTRACTOR ONLY AND AS SUCH, THE SOIL BORINGS ARE NOT CONSIDERED TO BE A PART OF THESE CONTRACT DOCUMENTS. THE CONTRACTOR MAY, AT HIS OPTION, OBTAIN A COPY OF THE GEOTECHNICAL

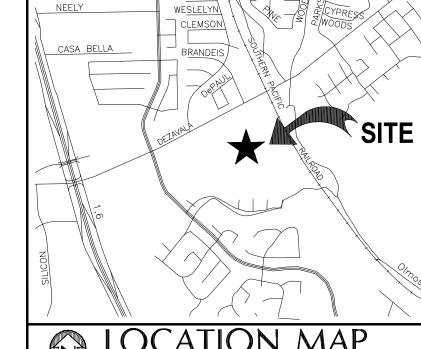
LEGAL:

1. SIZE: 63.957 ACRES 2. LOTS: 1 LOT

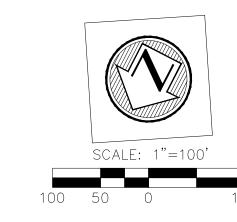
3. OWNER: NORTHSIDE INDEPENDENT SCHOOL DISTRICT 5900 EVERS ROAD SAN ANTONIO, TEXAS 78238

c. SAN ANTONIO, TEXAS (BEXAR COUNTY)

4. LEGAL DESCRIPTION: b. NCB 14857

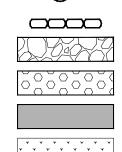




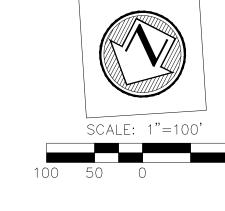






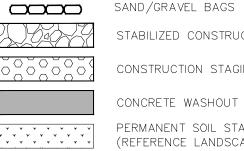


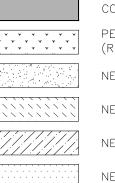
STABILIZED CONSTRUCTION EXIT CONSTRUCTION STAGING AREA CONCRETE WASHOUT PIT PERMANENT SOIL STABILIZATION (REFERENCE LANDSCAPE PLANS) NEW CONCRETE FLATWORK NEW LIGHT—DUTY ASPHALT NEW HEAVY-DUTY ASPHALT

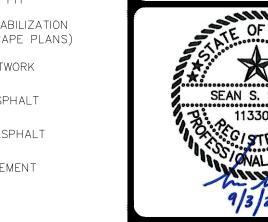




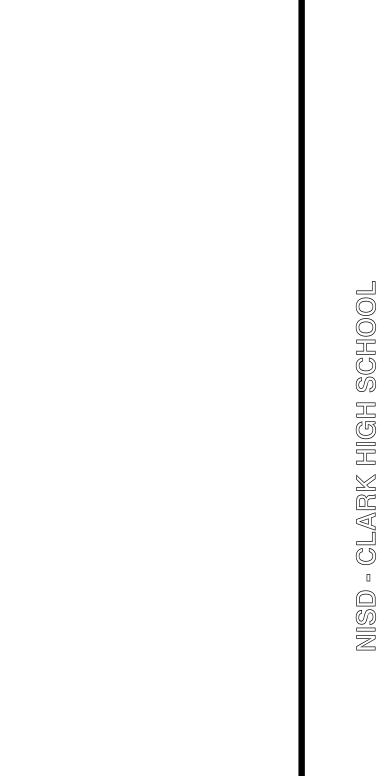
302- — — 302———	PROPOSED CO
	CHAIN LINK FE
	SILT FENCE
	ROCK BERM
	INLET FILTER











. Z

EM

0

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 STORM WATER DISCHARGES TO SURFACE WATER.

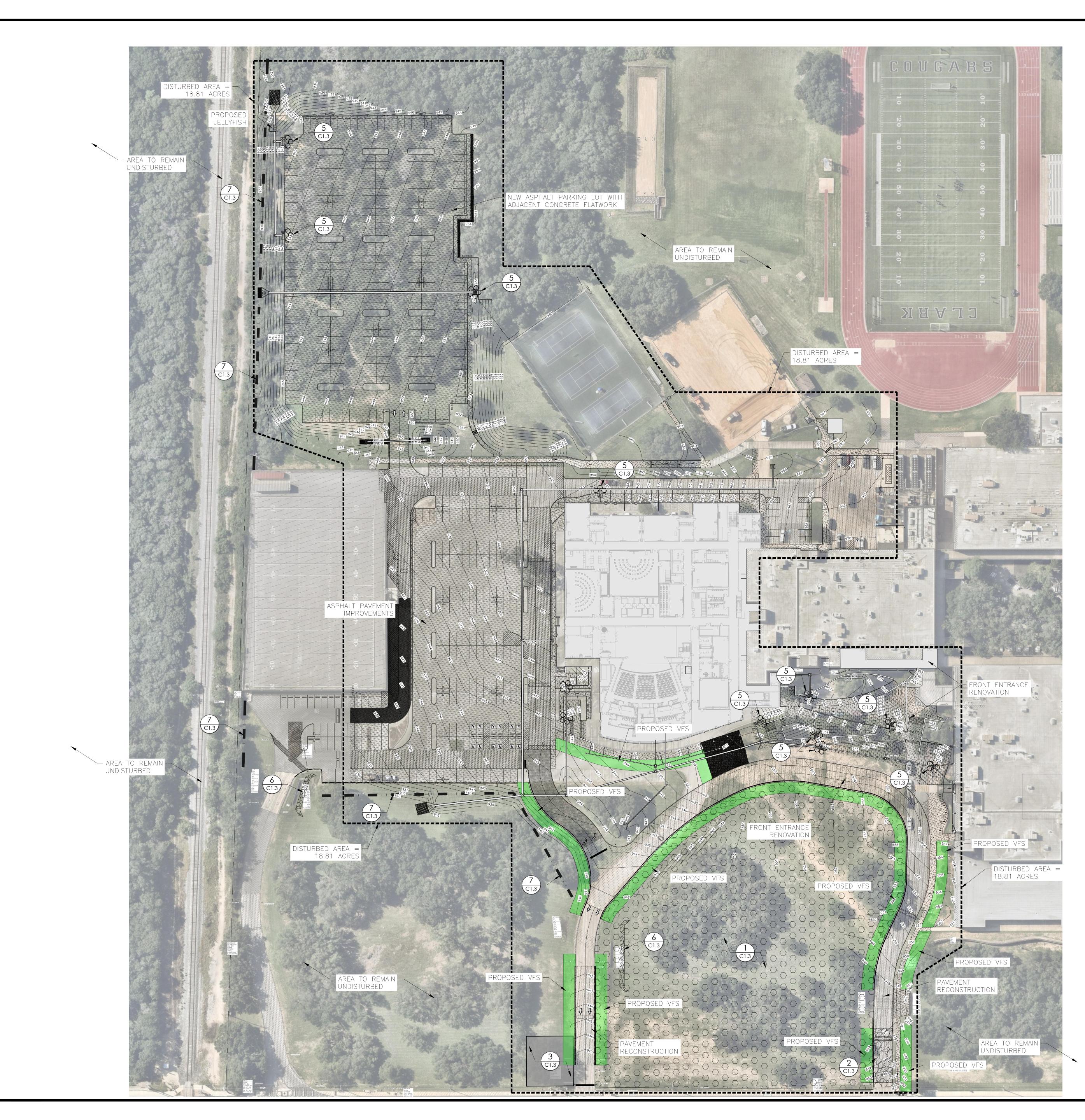
7. CONTRACTOR SHALL MODIFY PLAN AS NECESSARY TO PROVIDE FOR PROPER STORM WATER POLLUTION PREVENTION THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.

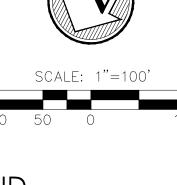
8. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROPER POLLUTION CONTROLS OF THE PROJECT SITE THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.

DATA ON INDICATED SUBSURFACE CONDITIONS ARE NOT INTENDED AS REPRESENTATIONS OR WARRANTIES OF ACCURACY OR CONTINUITY BETWEEN SOIL BORINGS. IT IS EXPRESSLY UNDERSTOOD THAT THE OWNER, ARCHITECT, EXPRESSLY UNDERSTOOD THAT THE OWNER, ARCHITECT, AND/OR STRUCTURAL, CIVIL OR MECHANICAL, PLUMBING OR ELECTRICAL ENGINEER WILL NOT BE RESPONSIBLE FOR INTERPRETATIONS OR CONCLUSIONS DRAWN THEREFROM BY CONTRACTOR. DATA ARE MADE AVAILABLE FOR CONVENIENCE OF CONTRACTOR ONLY AND AS SUCH, THE SOIL BORINGS ARE NOT CONSIDERED TO BE A PART OF THESE CONTRACT DOCUMENTS. THE CONTRACTOR MAY, AT HIS OPTION, OBTAIN A COPY OF THE GEOTECHNICAL REPORT.

LEGAL:

- 1. SIZE: 63.957 ACRES
- 2. LOTS: 1 LOT
- 5900 EVERS ROAD SAN ANTONIO, TEXAS 78238





LEGEND

-----802----- PROPOSED CONTOUR ──── CHAIN LINK FENCE ---- AREA TO BE DISTURBED

---- PROPERTY LINE

INLET FILTER

SAND/GRAVEL BAGS

STABILIZED CONSTRUCTION EXIT CONSTRUCTION STAGING AREA CONCRETE WASHOUT PIT

PERMANENT SOIL STABILIZATION (REFERENCE LANDSCAPE PLANS) NEW CONCRETE FLATWORK

> NEW HEAVY-DUTY ASPHALT NEW CONCRETE PAVEMENT

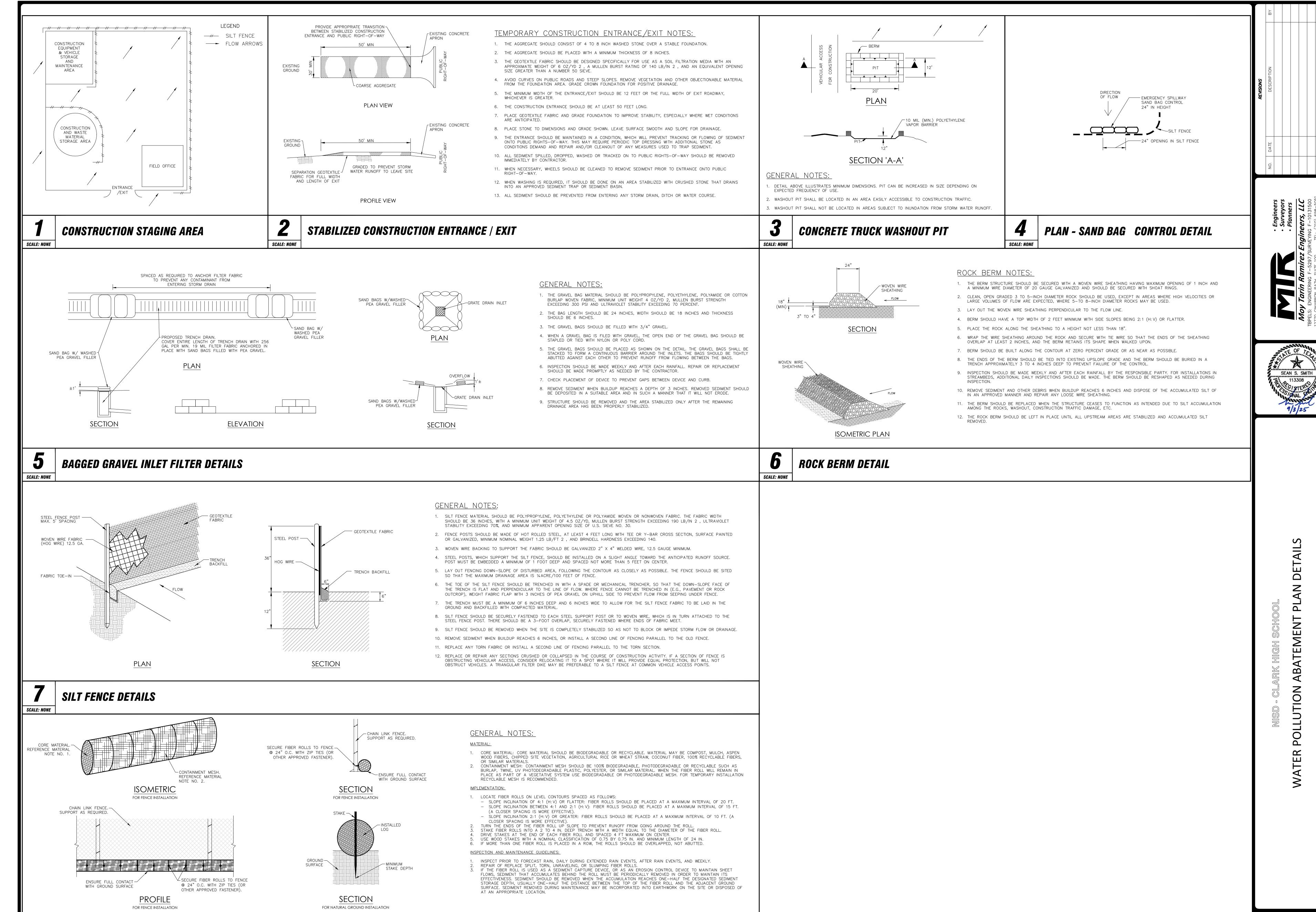
NEW LIGHT-DUTY ASPHALT

- PROVIDE BAGGED GRAVEL INLET FILTERS AT ALL EXPOSED DRAINAGE STRUCTURES.

- ALL MODIFICATIONS ARE TO BE NOTED ON CONTRACTOR'S COPY OF THE WPAP SITE PLAN DRAWING AND REPORT ON THE PROJECT SITE.

SITE INFORMATION:

- 3. OWNER: NORTHSIDE INDEPENDENT SCHOOL DISTRICT
- 4. LEGAL DESCRIPTION:a. LOT 28b. NCB 14857c. SAN ANTONIO, TEXAS (BEXAR COUNTY)



FIBER ROLL DETAILS

SCALE: NONE

SHEET C1.2

VI. TEMPORARY STORMWATER SECTION

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 Aguifer. 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: 9/3/25

Regulated Entity Name: NISD THOMAS CLARK HIGH SCHOOL

Project Information

Signature of Customer/Agent:

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

	 Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year. Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
	Evels and hazardous substances will not be stored on the site.
2.	Attachment A - Spill Response Actions. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.
3.	Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
4.	Attachment B - Potential Sources of Contamination. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.
Se	equence of Construction
5.	Attachment C - Sequence of Major Activities. A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.
	 For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given. For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.
6.	Name the receiving water(s) at or near the site which will be disturbed or which will

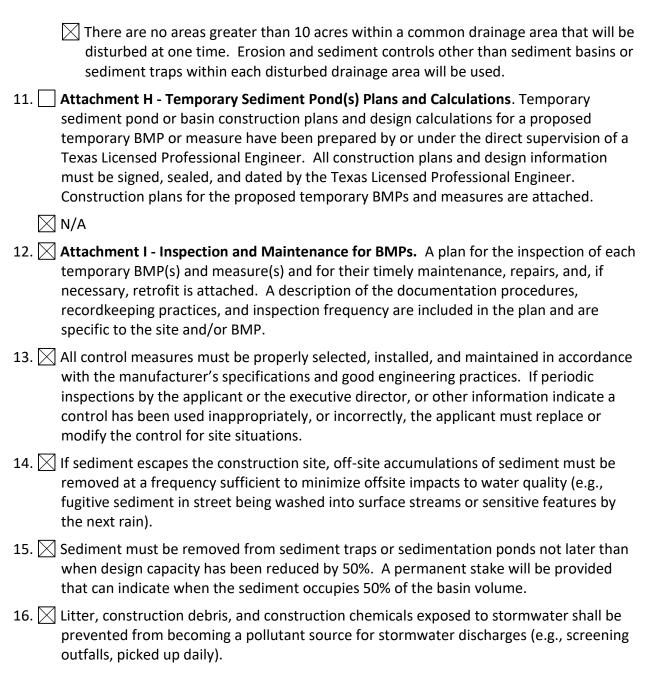
Temporary Best Management Practices (TBMPs)

receive discharges from disturbed areas of the project: Olmos Creek

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

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

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



Soil Stabilization Practices

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

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

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

Administrative Information

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

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 a product will be used prior to disposal of the container. 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 pavement 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 will be 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 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:
- (5) Contain the spread of the spill.
- (6) Recover spilled materials.

(7) Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

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

Spills should be cleaned up immediately:

- (1) Contain spread of the spill.
- (2) Notify the project foreman immediately.
- (3) If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
- (4) If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
- (5) If the spill occurs during rain, cover 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 staffs have arrived at the job site.
- (5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.
- D. Vehicle and Equipment Maintenance
 - (1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the run-on of stormwater and the runoff of spills.

- (2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately.
- (3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
- (4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- (5) Place drip pans or absorbent materials under paving equipment when not in use.
- (6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- (7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
- (8) Oil filters disposed of in 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 WPAP Site Plan. Silt fence will be placed along the down gradient boundary. (0.1 acres disturbed)
- B. Demolition and grading. (18.81 acres disturbed)
- C. Seeding and soil stabilization. (3.75 acres disturbed)

ATTACHMENT D TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

Description of Temporary Best Management Practices:

- 1. Silt Fence A barrier consisting of geotextile fabric supported by metal posts to prevent soil and sediment loss from a site. Silt fences shall be installed on the downgradient side of the proposed areas to be disturbed that have a drainage area of 2 or less acres.
- 2. Bagged Gravel Inlet Filter Sandbags filled with pea gravel used to construct a sediment barrier around curb and drain inlets. The sandbags should be willed with washed pea gravel and stacked to form a continuous barrier about 1 foot high around the inlets. The bags should be tightly abutted against each other to prevent runoff from flowing between the bags.
- 3. Temporary Construction Entrance/Exit A temporary gravel construction entrance used to provide a stable entrance/exit condition from the construction site and keep mud and sediment off public roads. The stabilized entrance is a stabilized pad of crushed stone located at any point traffic will be entering or leaving the construction site from a public right-of-way, street, alley, sidewalk or parking area.
- 4. Concrete Washout Area An area used to prevent or reduce the discharge of pollutants to stormwater from concrete waste by performing on-site washout in a designated area and training employees and subcontractors. Washout area should be located at least 50 feet from sensitive features, storm drains, open ditches, or water bodies. Below grade concrete washout facilities are typical.
- 5. Temporary Seeding Temporary seeding of disturbed areas shall be performed if disturbed areas are expected to have no construction activity for a period of at least 21 days.

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

Temporary BMPs will be installed prior to disturbance on-site. 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:

Upgradient flow enters the property from approximately 0.37 acres. 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. Rock berms will be installed where 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. Rock berms will be used instead of silt fences for concentrated flow areas.

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.

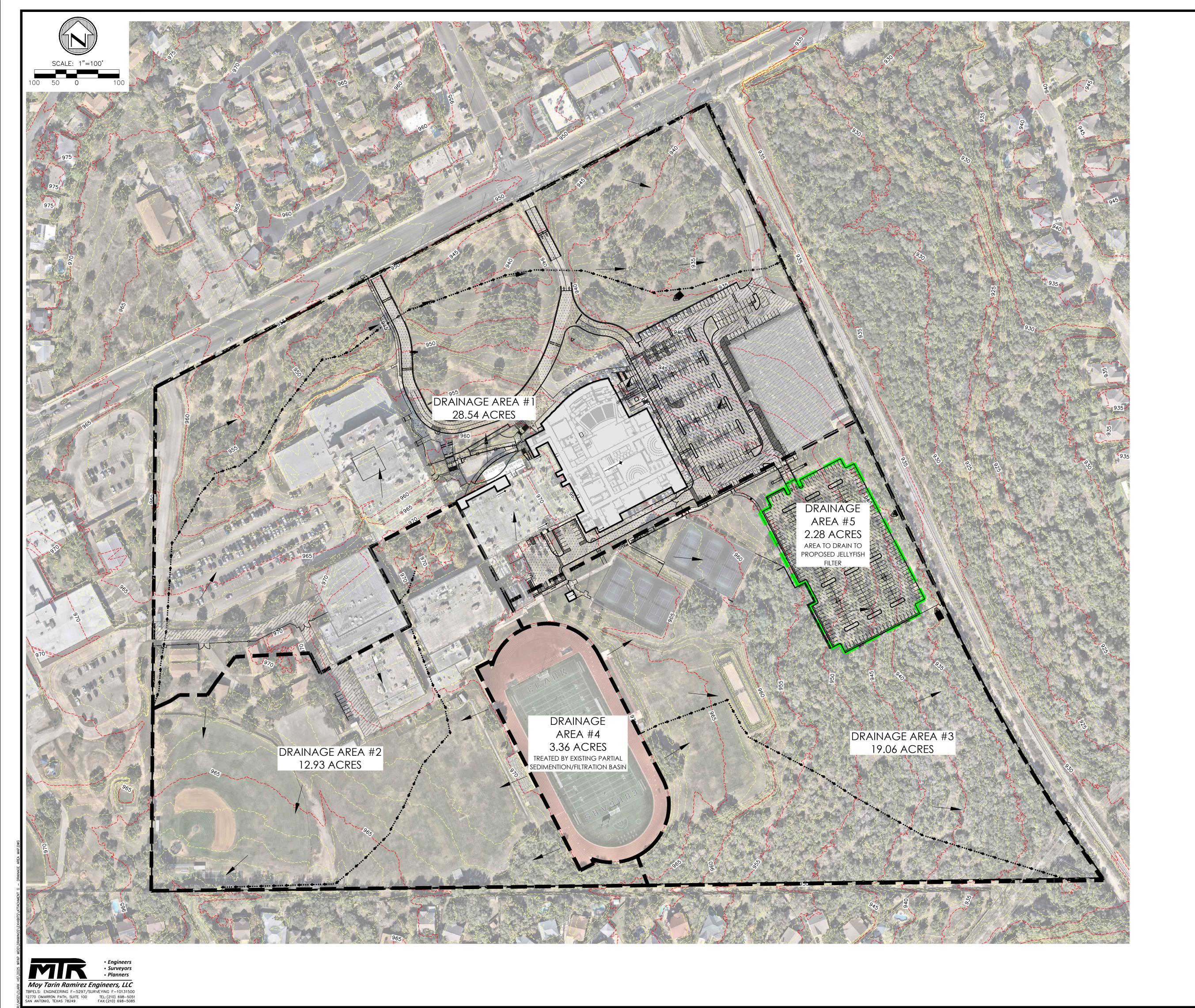
ATTACHMENT F STRUCTURAL PRACTICES

Runoff discharge of pollutants from exposed areas of the site will be limited through the utilization of temporary BMPs. Prior to leaving the site, flows containing pollutant discharges will be treated by a combination of silt fence, bagged gravel inlet filters, concrete washout areas, and temporary construction entrance/exit which will limit pollutants leaving the site.

The temporary BMPs shall be installed prior to the initiation of site preparation and earth moving activities. All temporary BMPs shall be installed and maintained in accordance with TCEQ RG-348 July 2005.

Locations of the temporary BMPs are shown on the WPAP Site Plan.

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.



LEGEND

PROPERTY LINE **- ···→···→** FLOW TRAVEL PATH EXISTING DRAINAGE AREAS TNRIS 5' CONTOURS TNRIS 1' CONTOURS FLOW ARROW

> NORTHSIDE INDEPENDENT SCHOOL DISTRICT FINE ARTS BUILDING AT CLARK HS DRAINAGE AREA MAP AUGUST 2025 ATTACHMENT G

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.
- 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. 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.
- 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 wastes into the temporary pit where the concrete can set, be broken up, and then disposed properly.

Rock Berm

- 1. Inspect rock berms weekly, and after any rainfall.
- 2. Remove accumulated sediment when buildup reaches one-half the height of the berm.
- 3. Replace displaced or missing rock to maintain the berm's height and cross-section.
- 4. Repair or reconstruct sections damaged or flattened by construction activity or vehicle traffic.
- 5. Ensure the berm continues to divert and filter runoff effectively; reshape if water is bypassing or overtopping.

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.

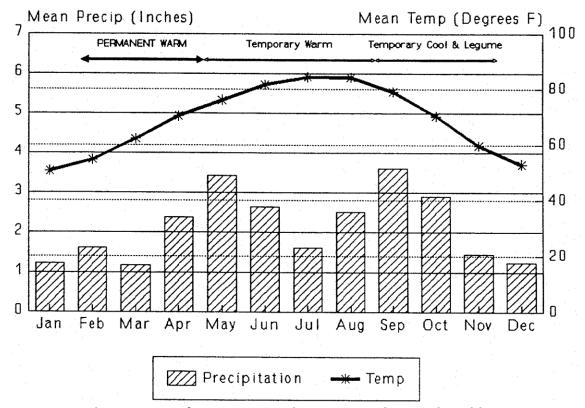


Figure 1-19 Planting Dates for Bexar, Comal, Kinney, Medina, and Uvalde Counties (Northcutt, 1993)

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,	30.0
		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 $\frac{1}{2}$ " 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	Irrigate entire root depth every Monday,
days	Wednesday, and Friday
During the next 30 business	Irrigate entire root depth a minimum of once
days or until Substantial	per week, or as necessary to ensure vigorous
Completion	growth
During the next 4 months or	Irrigate entire root depth once every two
January and Heat I months of	weeks,
until Final Acceptance of the	or as necessary to ensure vigorous growth
Project	

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

VII. PERMANENT STORMWATER SECTION

Permanent Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(C), (D)(Ii), (E), and (5), Effective June 1, 1999

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

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

Signature

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

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

Date: 9/3/25

Signature of Customer/Agent

Regulated Entity Name: NISD THOMAS CLARK HIGH SCHOOL

Permanent Best Management Practices (BMPs)

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

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

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

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

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

ATTACHMENT B

BMP'S FOR UPGRADIENT STORM WATER

Upgradient storm water enters the site along the northwest boundary and does not traverse impervious cover prior to entering the site. All storm water originating upgradient of the site will continue to naturally enter the site. The proposed construction will not impact the existing upgradient flows.

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

ATTACHMENT C

BMP'S FOR ON-SITE STORM WATER

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

The proposed improvements at Clark HS will result in a 2.70-acre increase in impervious cover, for a site total of 25.93 acres. This 2.70-acre increase corresponds to an increased TSS removal requirement of 2,202 pounds. Treatment for the increase in impervious cover from this project will be provided by vegetative filter strips (VFS) and a new JellyFish Filter. The locations of the new VFS and JellyFish Filter are shown on sheet C1.1 of the WPAP Site Plan.

The proposed JellyFish Filter will provide treatment for proposed additional parking lot. The JellyFish filter is designed to remove 1,795 pounds of TSS. The remaining 407 pounds of TSS removal that is required will be provided by utilizing new VFS to treat pre-1999 impervious cover on-site. New VFS will treat a total impervious area of 1.05 acres, which corresponds to a TSS removal quantity of 857 pounds. Ultimately, the provided TSS removal for this modification is 2,652 pounds, compared to a removal requirement of 2,202. This results in an excess removal of 450 pounds of TSS, which can be utilized to offset future improvements to the site, provided that the future improvements do not alter the VFS or VFS treatment areas.

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

Project Name: CLARK HS - PARKING LOT ADDITION

Date Prepared: 8/26/2025

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: $L_M = 27.2(A_N \times P)$

 $L_{\text{M TOTAL PROJECT}} = \text{ Required TSS removal resulting from the proposed development} = 80\% \text{ of increased load}$

 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

Total project area included in plan * = 63.95 acres
Predevelopment impervious area within the limits of the plan* = 25.93 acres
Total post-development impervious cover fraction * = 0.41

P = 30 inches

 $L_{M TOTAL PROJECT} =$ 2202 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 =	2.28	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	2.20	acres
Post-development impervious fraction within drainage basin/outfall area =	0.96	
$L_{M THIS BASIN} =$	1795	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: $LR = (BMP \ efficiency) \ x \ P \ x \ (A_I \ x \ 34.6 + A_P \ x \ 0.54)$

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

 $A_{\text{I}} = \text{Impervious area proposed in the BMP catchment area}$

 A_P = Pervious area remaining in the BMP catchment area

 $L_{R} = \, TSS \, Load \, removed \, from \, this \, catchment \, area \, by \, the \, proposed \, BMP$

$A_C =$	2.28	acres
$A_I =$	2.20	acres
$A_P =$	0.08	acres
I.a. =	106=	lhe

54

inches

${\bf 5.\ Calculate\ Fraction\ of\ Annual\ Runoff\ to\ Treat\ the\ drainage\ basin\ /\ outfall\ area}$

Desired $L_{M THIS BASIN} =$	1795	lbs.
F -	0.01	

$\underline{\textbf{6. Calculate Treated Flow required by the BMP Type for this drainage basin / outfall area.}\\$

Offsite area draining to BMP =	0.00	acres
Offsite impervious cover draining to BMP =	0.00	acres
Rainfall Intensity =	1.15	inches per hour
Effective Area -	1.08	agrac

Cartridge Length =

Peak Treatment Flow Required = 2.30 cubic feet per second

7. Jellyfish

Designed as Required in RG-348 Section 3.2.22

Calculations from RG-348 Pages Section 3.2.22

Flow Through Jellyfish Size	Vault
Jellyfish Size for Flow-Based Configu Jellyfish Treatment Flov	

SEAN S. SMITH

113308

6/STER

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Clark HS Date Prepared: 9/3/2025

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:

where:

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

lbs

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

Bexar Total project area included in plan 63.95 Predevelopment impervious area within the limits of the plan * = 23.24 acres Total post-development impervious area within the limits of the plan* = acres 0.41 Total post-development impervious cover fraction inches 30

> 2202 L_{M TOTAL PROJECT} =

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

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

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

Drainage Basin/Outfall Area No. =

Total drainage basin/outfall area = 1.05 acres Predevelopment impervious area within drainage basin/outfall area = 0.00 acres Post-development impervious area within drainage basin/outfall area = 1.05 acres Post-development impervious fraction within drainage basin/outfall area = 1.00 857 L_{M THIS BASIN} = 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: $L_R = (BMP \text{ efficiency}) \times P \times (A_1 \times 34.6 + A_2 \times 0.54)$

where: $A_{\mathbb{C}}$ = 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 = 1.05 acres $A_{I} =$ 1.05 acres A_P = 0.00 acres lbs

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

lbs. Desired L_{M THIS BASIN} = 857

L_R =

0.93

926

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 = 2.20 inches

Post Development Runoff Coefficient = 0.82

On-site Water Quality Volume = 6845 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 = cubic feet

> Storage for Sediment = 1369

8214 Total Capture Volume (required water quality volume(s) x 1.20) = 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.

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

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

Irrigation Area Calculations:

Soil infiltration/permeability rate = in/hr Enter determined permeability rate or assumed value of 0.1

Irrigation area = NΑ square feet NΑ 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 = square feet

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

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = NA cubic feet

> Minimum filter basin area = NΑ square feet

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

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

> 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 = NΑ cubic feet Permanent Pool Capacity is 1.20 times the WQV Required capacity at WQV Elevation = NΔ cubic feet **Total Capacity should be the Permanent Pool Capacity**

plus a second WQV.

Designed as Required in RG-348 Pages 3-71 to 3-73 12. Constructed Wetlands

> Required Water Quality Volume for Constructed Wetlands = NA cubic feet

13. AquaLogic[™] Cartridge System Designed as Required in RG-348 Pages 3-74 to 3-78

** 2005 Technical Guidance Manual (RG-348) does not exempt the required 20% increase with maintenance contract with AquaLogic™.

Required Sedimentation chamber capacity = cubic feet Filter canisters (FCs) to treat WQV = NΔ cartridges Filter basin area (RIA_F) = NA square feet

14. Stormwater Management StormFilter® by CONTECH

Required Water Quality Volume for Contech StormFilter System = NA cubic feet

THE SIZING REQUIREMENTS FOR THE FOLLOWING BMPs / LOAD REMOVALS ARE BASED UPON FLOW RATES - NOT CALCULATED WATER QUALITY VOLUMES

15. Grassy Swales Designed as Required in RG-348 Pages 3-51 to 3-54

Design parameters for the swale:

```
Drainage Area to be Treated by the Swale = A =
                                                                  0.00 acres
                 Impervious Cover in Drainage Area =
                                                                  0.00 acres
                                Rainfall intensity = i =
                                                                    1.1 in/hr
                                        Swale Slope =
                                                                     0 ft/ft
                                       Side Slope (z) =
                                                                     0
                            Design Water Depth = y =
                                                                  0.00 ft
                    Weighted Runoff Coefficient = C =
                                                            #DIV/0!
         A<sub>CS</sub> = cross-sectional area of flow in Swale =
                                                            #DIV/0!
                                                                        sf
                             P<sub>W</sub> = Wetted Perimeter =
                                                            #DIV/0!
                                                                        feet
R_H = hydraulic radius of flow cross-section = A_{CS}/P_W =
                                                            #DIV/0!
                                                                       feet
                                                                    0.2
                n = Manning's roughness coefficient =
```

15A. Using the Method Described in the RG-348

Manning's Equation:
$$Q = 1.49 A_{CS} R_H^{2/3} S^{0.5}$$

$$b = \frac{0.134 \times Q}{y^{1.67}} - zy = \#DIV/0!$$
 feet

Q = CiA = #DIV/0! cfs

To calculate the flow velocity in the swale:

V (Velocity of Flow in the swale) = Q/A_{CS} = #DIV/0! ft/sec

To calculate the resulting swale length:

L = Minimum Swale Length = V (ft/sec) * 300 (sec) = #DIV/0! feet

If any of the resulting values do not meet the design requirement set forth in RG-348, the design parameters must be modified and the solver rerun.

15B. Alternative Method using Excel Solver

Design Q = CiA = #DIV/0! cfs

Manning's Equation Q = 0.00 cfs Error 1 = #DIV/0!

Swale Width= 6.00 ft

Instructions are provided to the right (green comments).

Flow Velocity #DIV/0! ft/s

Minimum Length = #DIV/0! ft

Instructions are provided to the right (blue comments).

Design Width = $\frac{0}{0}$ ft Design Discharge = $\frac{0}{0}$ 0.00 cfs Error 2 = $\frac{4}{0}$ HDIV/0!

0.33 ft

Flow Velocity = #DIV/0! cfs Minimum Length = #DIV/0! ft

If any of the resulting values do not meet the design requirement set forth in RG-348, the design parameters may be modified and the solver rerun. If any of the resulting values still do not meet the design requirement set forth in RG-348, widening the swale bottom value may not be possible.

16. Vegetated Filter Strips Designed as Required in RG-348 Pages 3-55 to 3-57

There are no calculations required for determining the load or size of vegetative filter strips.

The 80% removal is provided when the contributing drainage area does not exceed 72 feet (direction of flow) and the sheet flow leaving the impervious cover is directed across 15 feet of engineered filter strips with maximum slope of 20% or across 50 feet of natural vegetation with a maximum slope of 10%. There can be a break in grade as long as no slope exceeds 20%.

Design Depth =

If vegetative filter strips are proposed for an interim permanent BMP, they may be sized as described on Page 3-56 of RG-348.

17. Wet Vaults Designed as Required in RG-348 Pages 3-30 to 3-32 & 3-79

Required Load Removal Based upon Equation 3.3 = NA lbs

First calculate the load removal at 1.1 in/hour

RG-348 Page 3-30 Equation 3.4: Q = CiA

C = runoff coefficient for the drainage area = 0.90 C = Runoff Coefficient = 0.546 (IC)² + 0.328 (IC) + 0.03

i = design rainfall intensity = 1.1 in/hour
A = drainage area in acres = 0 acres

Q = flow rate in cubic feet per second = 0.00 cubic feet/sec

RG-348 Page 3-31 Equation 3.5: V_{OR} = Q/A

To solve for Excel can The requir

First, high Then click The value The value Click on so

The resulti

If there is a Click on "I Then proc

If you wou Excel can The requir

First set th Highlight (

Click on "I The value The value Click on so

> The result if the resul First set th Highlight (Click on "I The value The value Click on so

The resulti

```
Q = Runoff rate calculated above =
                                                                                     0.00 cubic feet/sec
                                    A = Water surface area in the wet vault =
                                                                                        0 square feet
                                                     V<sub>OR</sub> = Overflow Rate =
                                                                              #DIV/0!
                                                                                         feet/sec
                Percent TSS Removal from Figure 3-1 (RG-348 Page 3-31) =
                                                                                        0 percent
                                              Load removed by Wet Vault =
                                                                              #VALUE!
If a bypass occurs at a rainfall intensity of less than 1.1 in/hours
Calculate the efficiency reduction for the actual rainfall intensity rate
                 Actual Rainfall Intensity at which Wet Vault bypass Occurs =
                                                                                        0 in/hour
              Fraction of rainfall treated from Figure 3-2 RG-348 Page 3-32 =
                                                                                        0 percent
                           Efficiency Reduction for Actual Rainfall Intensity =
                                                                                     0.00 percent
                                Resultant TSS Load removed by Wet Vault =
                                                                             #VALUE! Ibs
18. Permeable Concrete
                                                                           Designed as Required in RG-348
                                                                                                                           Pages 3-79 to 3-83
PERMEABLE CONCRETE MAY ONLY BE USED ON THE CONTRIBUTING ZONE
                                                                           Designed as Required in RG-348
                                                                                                                           Pages 3-32
19. BMPs Installed in a Series
               Michael E. Barrett, Ph.D.. P.E. recommended that the coefficient for E2 be changed from 0.5 to 0.65 on May 3, 2006
                    E_{TOT} = [1 - ((1 - E_1) \times (1 - 0.65E_2) \times (1 - 0.25E_3))] \times 100 =
                                                                                                      NET EFFICIENCY OF THE BMPs IN THE SERIES
                                                                                     0.00 percent
                        EFFICIENCY OF FIRST BMP IN THE SERIES = E1 =
                                                                                     0.00 percent
                EFFICIENCY OF THE SECOND BMP IN THE SERIES = E2 =
                                                                                     0.00 percent
                   EFFICIENCY OF THE THIRD BMP IN THE SERIES = E3 =
                                                                                     0.00 percent
               THEREFORE, THE NET LOAD REMOVAL WOULD BE:
               (A<sub>I</sub> AND A<sub>P</sub> VALUES ARE FROM SECTION 3 ABOVE)
                                    L_R = E_{TOT} X P X (A_1 X 34.6 X A_P X0.54) =
                                                                                     0.00 lbs
20. Stormceptor
                             Required TSS Removal in BMP Drainage Area=
                                                                                          lbs
                                                                                 NA
                                          Impervious Cover Overtreatment=
                                                                               0.0000
                                                                                          ac
                                        TSS Removal for Uncaptured Area =
                                                                                0.00
                                                                                          lbs
               BMP Sizing
                                                           Effective Area =
                                                                                 NA
                                                                                          EΑ
                                                 Calculated Model Size(s) =
                                                                                #N/A
                  Actual Model Size (if multiple values provided in Calculated
                                                                                 0
                      Model Size or if you are choosing a larger model size) =
                                                                                          Model Size
                                                                                          ft^2
                                                            Surface Area =
                                                                                #N/A
                                                           Overflow Rate =
                                                                              #VALUE!
                                                                                          V_{or}
                                                  Rounded Overflow Rate =
                                                                              #VALUE!
                                                                                          Vor
                                                        BMP Efficiency % =
                                                                              #VALUE!
                                                                                          %
                                                                L<sub>R</sub> Value =
                                                                              #VALUE!
                                                                                          lbs
                                                        TSS Load Credit =
                                                                             #VALUE!
                                                                                         lbs
               Is Sufficient Treatment Available? (TSS Credit ≥ TSS Uncapt.)
                                                                              #VALUE!
                               TSS Treatment by BMP (LM + TSS Uncapt.) =
                                                                              #VALUE!
21. Vortech
                             Required TSS Removal in BMP Drainage Area=
                                                                                 NA
                                                                                          lbs
                                          Impervious Cover Overtreatment=
                                                                               0.0000
                                                                                          ac
                                        TSS Removal for Uncaptured Area =
                                                                                0.00
                                                                                          lbs
               BMP Sizing
                                                           Effective Area =
                                                                                          EΑ
                                                                                 NA
                                                 Calculated Model Size(s) =
                                                                                #N/A
                          Actual Model Size (if choosing larger model size) =
                                                                               Vx1000
                                                                                          Pick Model Size
                                                                                          ft^2
                                                                                7 10
                                                            Surface Area =
                                                           Overflow Rate =
                                                                              #VALUE!
                                                                                          V_{or}
                                                                              #VALUE!
                                                                                          Vor
                                                  Rounded Overflow Rate =
                                                        BMP Efficiency % =
                                                                              #VALUE!
                                                                                          %
                                                                              #VALUE!
                                                                L<sub>R</sub> Value =
                                                                                          lbs
                                                        TSS Load Credit =
                                                                              #VALUE!
                                                                                         lbs
               Is Sufficient Treatment Available? (TSS Credit ≥ TSS Uncapt.)
                                                                              #VALUE!
                               TSS Treatment by BMP (LM + TSS Uncapt.) =
                                                                             #VALUE!
```

ATTACHMENT D

BMP's FOR SURFACE STREAMS

There are no surface streams on the project site. Permanent and temporary BMPs, as shown on the Site Plan, will be used to minimize sediments leaving the site and flowing into off-site surface streams during and after construction.

ATTACHMENT G

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

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 a 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: A 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.

JELLYFISH FILTERS

Jellyfish cartridges are passively backwashed automatically after each storm event, which removes accumulated sediment from the membranes and significantly extends the service life of the cartridges and the maintenance interval. If required, the cartridges can be easily manually backwashed without removing the cartridges. Additionally, the lightweight cartridges can be removed by hand and externally rinsed, and rinsed cartridges then re-installed. These simple maintenance options allow for cartridge regeneration, thereby minimizing cartridge replacement costs and life-cycle treatment costs while ensuring long-term treatment performance. Regular inspection and maintenance are proven, cost-effective ways to maximize water resource protection for all stormwater pollution control practices, and are required to ensure proper functioning of the Jellyfish Filter. Inspection of the Jellyfish Filter is performed from the surface, while proper maintenance required a combination of procedures conducted from the surface and worker entry in the structure.

Inspection: Post-construction inspection is required prior to putting the Jellyfish Filter into service. Routine inspections are recommended quarterly during the first year of operation to accurately assess the sediment and floatable pollutant accumulation, and to ensure that the automatic backwash feature is functioning properly.

Cleaning: The unit must be cleaned annually. This cleaning includes removal and appropriate disposal of all water, sediment, oil and grease, and debris that has accumulated within the unit. The Jellyfish Filter is inspected and maintained by professional vacuum cleaning service providers with experience in the maintenance of underground tanks, sewers and catch basins. Since some of the maintenance procedures require manned entry into the Jellyfish structure, only professional

maintenance service providers trained in confined space entry procedures should enter the vessel. Service provider companies typically have personnel who are trained and certified in confined space entry procedures according to local, state, and federal standards.

Filter Cartridge Testing: Filter cartridges should be tested for adequate flow rate, every 12 months and cleaned and re-commissioned, or replaced if necessary. A manual backflush must be performed on a single draindown cartridge using a Jellyfish Cartridge Backflush pipe (described in the Jellyfish Filter Owner's manual). If the time required to drain 14 gallons of backflush water from the Backflush Pipe (from top of pipe to the top of the open flapper valve) exceeds 15 seconds, it is recommended to perform a manual backflush on each of the cartridges. After the manual backflush, the draindown test should be repeated on a single cartridge to determine if the cartridge can drain 14 gallons of water in 15 seconds. If the cartridge still does not achieve the design flow rate, it must be replaced. The unit should be cleaned out immediately after an oil, fuel or chemical spill.

Filter Cartridge Cleaning: This cartridge cleaning procedure is performed by removing the cartridge from the cartridge deck and externally rinsing the filtration tentacles using a low-pressure water sprayer, as described in the Jellyfish Filter Owner's Manual. If this procedure is performed within the structure, the cartridge or individual filtration tentacles should be rinsed while safely suspended over the maintenance access wall opening in the cartridge deck, such that rinsate flows into the lower chamber of the Jellyfish Filter. If the rinsing procedure is performed outside the structure, the cartridge or individual filtration tentacles should be rinsed in a suitable basin such as a plastic barrel or tub, and rinsate subsequently poured into the maintenance access wall opening in the cartridge deck. Sediment is subsequently removed from the lower chamber by standard vacuum service.

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.

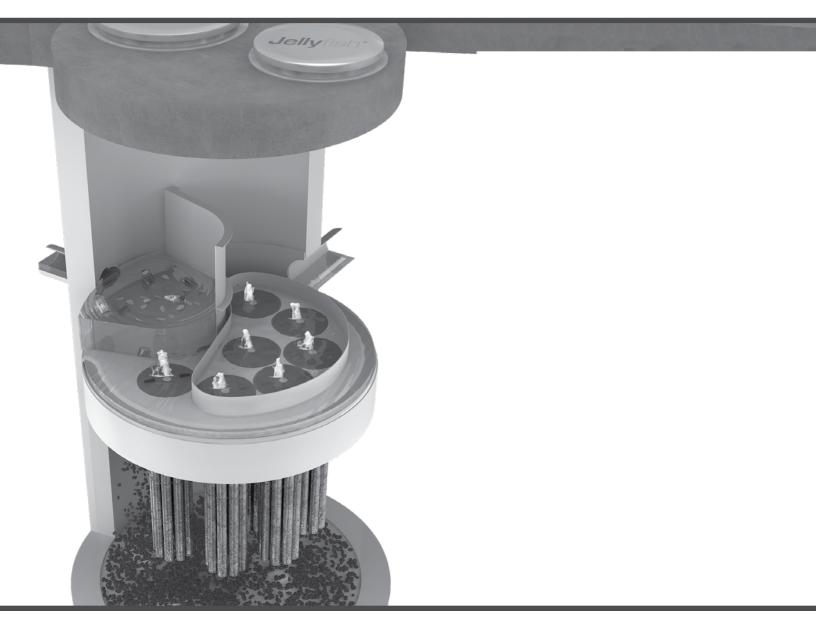
JACOB VILLAMENEM

Signature of Applicant/Owner/Agent

Date



Jellyfish® Filter Maintenance Guide





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

Inspection and Maintenance Overview	3
Inspection Procedure	3
Maintenance Procedure	4
Cartridge Assembly & Cleaning	5
Inspection Process	7

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

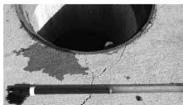
The following procedure is recommended when performing inspections:

- 1. Provide traffic control measures as necessary.
- 2. Inspect the MAW or inlet bay for floatable pollutants such as trash, debris, and oil sheen.
- 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:

- 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.
- 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.
- 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.
- 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.



- 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.
- 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.
- 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

- 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.
- 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

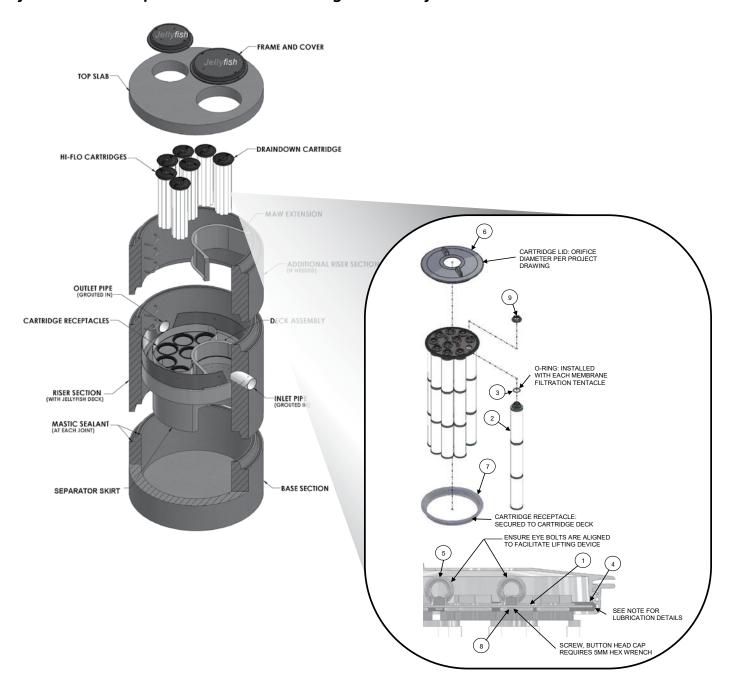


TABLE 1: BOM

ITEM NO.	DESCRIPTION	
1	JF HEAD PLATE	
2	JF TENTACLE	
3	JF O-RING	
	JF HEAD PLATE	
4	GASKET	
5	JF CARTRIDGE EYELET	
6	JF 14IN COVER	
7	JF RECEPTACLE	
	BUTTON HEAD CAP	
8	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:	
Ro	oadway/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:						





CINTECH*

800.338.1122 www.ContechES.com

Support

- Drawings and specifications are available at www.conteches.com/jellyfish.
- Site-specific design support is available from Contech Engineered Solutions.
- Find a Certified Maintenance Provider at www.conteches.com/ccmp

© 2021 Contech Engineered Solutions LLC, a QUIKRETE Company

Contech Engineered Solutions LLC provides site solutions for the civil engineering industry. Contech's portfolio includes bridges, drainage, sanitary sewer, stormwater, wastewater treatment and earth stabilization products. For information on other Contech segment offerings, visit ContechES.com or call 800.338.1122

NOTHING IN THIS CATALOG SHOULD BE CONSTRUED AS A WARRANTY. APPLICATIONS SUGGESTED HEREIN ARE DESCRIBED ONLY TO HELP READERS MAKE THEIR OWN EVALUATIONS AND DECISIONS, AND ARE NEITHER GUARANTEES NOR WARRANTIES OF SUITABILITY FOR ANY APPLICATION. CONTECH MAKES NO WARRANTY WHATSOEVER, EXPRESS OR IMPLIED, RELATED TO THE APPLICATIONS, MATERIALS, COATINGS, OR PRODUCTS DISCUSSED HEREIN. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND ALL IMPLIED WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE ARE DISCLAIMED BY CONTECH-SE CONTECH-SE CONDITIONS OF SALE (AVAILABLE AT WWW.CONTECHES.COM/COS) FOR MORE INFORMATION.

ATTACHMENT I

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

No surface streams exist within the project site. The storm water flows discharging from the site will continue to flow as they currently do. Stormwater from the site will enter off-site surface streams in the same manner that it did prior to the improvements to the site

Temporary BMPs, as shown on the Site Plan, will be used to minimize sediments leaving the site and flowing into surface streams during construction. There will be no adverse effects to downstream surfaces or streams as a result of completion of the proposed project.

VIII. AGENT AUTHORIZATION FORM

Agent Authorization Form

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

1	Jacob Villarreal, P.E.	
	Print Name	
	Assistant Superintendent for Facilities and Operations	
	Title - Owner/President/Other	
of	Northside Independent School District	
	Corporation/Partnership/Entity Name	
have authorized	Moy Tarin Ramirez Engineers, LLC	
	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:

1 Dad Ono	08/08/200
Applicant's Signature	Date

THE STATE OF Texas §

County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared <u>Jacob Villarreal</u> known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 9th day of August, 2025.

NOTARY PUBLIC

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 12-08-2024

YVONNE M CARTER
Notary Public, State of Texas
Comm. Expires 12-08-2026
Notary ID 12593657-6



Application Fee Form

Application i e	e i oi iii			
Texas Commission on Environmental Quality Name of Proposed Regulated Entity: NISD THOMAS CLARK HIGH SCHOOL				
Regulated Entity Location: 5150		nio, 1X 78249		
Name of Customer: Northside IS		no. /210\ 207 1200		
Contact Person: <u>Jacob Villarreal</u> , Customer Reference Number (if		ne: <u>(210) 397-1200</u>		
Regulated Entity Reference Num	•	54626		
Austin Regional Office (3373)		5-1020		
Hays	Travis	Пм	/illiamson	
San Antonio Regional Office (33				
Bexar	☐ Medina	U•	valde	
Comal	Kinney			
Application fees must be paid by	check, certified check,	or money order, payal	ole to the Texas	
Commission on Environmental C				
form must be submitted with yo	our fee payment. This p	payment is being subm	itted to:	
Austin Regional Office		San Antonio Regional C	Office	
Mailed to: TCEQ - Cashier		Overnight Delivery to:	TCEQ - Cashier	
Revenues Section	1	12100 Park 35 Circle		
Mail Code 214		Building A, 3rd Floor		
P.O. Box 13088 Austin, TX 78753				
Austin, TX 78711-3088 (512)239-0357				
Site Location (Check All That Ap	ply):			
Recharge Zone	Contributing Zone	Trans	ition Zone	
Type of Pla	an	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 Resid	Acres	\$		
Water Pollution Abatement Plan, Contributing Zone				
Plan: Non-residential		63.95 Acres	\$ 8000	
Sewage Collection System		L.F.	\$	

Signature: ______ Date: 9/3/25

Underground or Aboveground Storage Tank Facility

Acres \$

Tanks \$ Each \$

Each \$

Each \$

Lift Stations without sewer lines

Piping System(s)(only)

Extension of Time

Exception

Application Fee Schedule

Texas Commission on Environmental Quality

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	Fee
Exception Request	\$500

Extension of Time Requests

Project	Fee
Extension of Time Request	\$150

X. CORE DATA FORM
A. CORE DATA FORM



TCEQ Core Data Form

For detailed instructions on completing 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 Refer	ence Number (if issued)		Follow this link to search		3. Regulated Entity Reference Number (if issued)							
CN 601104169	CN 601104169				for CN or RN numbers in Central Registry** RN 1			102807898				
SECTION II: Customer Information												
4. General Custom	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 Filin	7. TX SOS/CPA Filing Number 8. TX State					9. Federal Tax ID (9 digits)		D	10. DUNS Number (if applicable)			
11. Type of Custon	11. Type of Customer: Corporation						ndividual P		Partnership: General Limited			
Government: City	County Federal	Local State	Other		☐ Sole Pr	Sole Proprietorship			Other:			
12. Number of Em	12. Number of Employees ☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher							ned and Ope	erated?			
	101-250 251- (Proposed or Actual) – <i>as i</i>			sted on	this form.	☐ Yes	•	No the follo	owing			
Owner Operator Overator Other:												
15 Mailing												
15. Mailing Address:						T			T	T		
City	'		State	1	ZIP				ZIP + 4			
16. Country Mailin	g Information (if outside	USA)		17.	E-Mail Ad	ldress (i	if applicable	e)				
18. Telephone Nur	mber	1	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, a new permit application is also required.)												
☐ New Regulated Er	ntity Update to Regu	lated Entity Nar	me Update to	o Regul	ated Entity	Informa	ation					
The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core 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.)												
NISD Thomas Clark High School												

TCEQ-10400 (11/22) Page 1 of 2

23. Street Address of	5150 De Zavala Road										
the Regulated Entity:											
(No PO Boxes)	City	San Antonio	St	ate	TX	ZIP	78249		ZIP + 4		
24. County	Bexar		•								
		If no Str	eet Addre	ss is provid	ded, fields	25-28 are re	quired.				
25. Description to Physical Location:	I Approximately 1 700 FT southeast of Vance Jackson Rd, and De Zavala Rd										
26. Nearest City State Nearest ZIP Code											
San Antonio TX 78249									19		
Latitude/Longitude are r used to supply coordinat		•				Data Stando	ards. (Ge	ocoding of th	ne Physical	Address may be	
27. Latitude (N) In Decim	al: 29.566944°					28. Longitude (W) In Dec			98.58027	8°	
Degrees	Minutes		Seconds		Degi	Degrees		Minutes 34		Seconds	
29	20	34	C C - d -	01	21 Duine	98			n down NAM	49 CS Codo	
29. Primary SIC Code (4 digits)		digits)	Secondary SIC Code gits)			31. Primary NAICS Code (5 or 6 digits)			32. Secondary NAICS Code (5 or 6 digits)		
8211					611110						
33. What is the Primary E	Business of	this entity? ('Do not repe	at the SIC o	r NAICS desc	cription.)					
High School											
	5900 Evers Rd., Bldg. E										
34. Mailing											
Address:	City	San Antonio		State	тх	ZIP	78238		ZIP + 4	1606	
35. E-Mail Address:	jad	ob.villarreal@ni	sd.net								
36. Telephone Number			37. Ext	ension or	Code	38. F	ax Numl	oer (if applicab	ole)		
(210) 397-1215						() -				
39. TCEQ Programs and ID N form. See the Core Data Form ir				n the permi	ts/registrati	on numbers t	nat will be	affected by th	e updates s	ubmitted on this	
☐ Dam Safety	Di	Districts		☐ Edwards Aquifer		☐ Emissions Inventor		ry Air	☐ Industria	al Hazardous Waste	
Municipal Solid Waste		New Source Review Air		OSSF		Petroleu	ım Storagı	e Tank	□ PWS		
☐ Sludge	Sludge		rm Water Title V Air			Tires			Used Oil		
☐ Voluntary Cleanup	astewater	tewater			cure Water Rights			Other:			
SECTION IV: P	repai	er Info	rmati	<u>on</u>							
						41. Title: Senior Vice President					
42. Telephone Number 43. Ext./Code 44. Fax Number				ber	45. E-N	1ail Address					
(210) 698-5051					ssmith@mtrengineers.com						
SECTION V: A	uthor	ized Sic	ınatıı	re							
46. By my signature below, I certo submit this form on behalf of	rtify, to the l	est of my knowl	edge, that t	he informat	ion provided	d in this form he updates to	is true and the ID nu	d complete, and mbers identifie	d that I have	e signature authority).	

 Name (In Print):
 Sean Smith, P.E.
 Phone:
 (210) 698-5051

 Signature:
 Date:
 9/3/25

Job Title:

Senior Vice President

Moy Tarin Ramirez Engineers, LLC

Company: