SMITHSON VALLEY ROAD

WATER POLLUTION ABATEMENT PLAN

PREPARED FOR:

Bexar County – Public Works Department
1948 Probandt St.
San Antonio, Texas 78214

PREPARED BY:

100 NE LOOP 410, SUITE 701
SAN ANTONIO, TEXAS 78216
HALFF ASSOCIATES, INC.
TBPELS ENGINEERING FIRM No. 312

MARCH 2025

Water Pollution Abatement Plan Checklist

Edwards Aquifer Application Cover Page (TCEQ-20705)

General Information Form (TCEQ-0587)

- Attachment A - Road Map
- Attachment B - USGS / Edwards Recharge Zone Map
- Attachment C - Project Description

Geologic Assessment Form (TCEQ-0585)

- Attachment A - Geologic Assessment Table (TCEQ-0585-Table)
- Attachment B - Stratigraphic Column
- Attachment C - Site Geology
- Attachment D - Site Geologic Map(s)

Water Pollution Abatement Plan Application Form (TCEQ-0584)

- Attachment A - Factors Affecting Surface Water Quality
- Attachment B - Volume and Character of Stormwater
- Attachment C - Suitability Letter from Authorized Agent (if OSSF is proposed)
- Attachment D - Exception to the Required Geologic Assessment (if requested)
- Site Plan

Temporary Stormwater Section (TCEQ-0602)

- Attachment A - Spill Response Actions
- Attachment B - Potential Sources of Contamination
- Attachment C - Sequence of Major Activities
- Attachment D - Temporary Best Management Practices and Measures
- Attachment E - Request to Temporarily Seal a Feature (if requested)
- Attachment F - Structural Practices
- Attachment G - Drainage Area Map
- Attachment H - Temporary Sediment Pond(s) Plans and Calculations
- Attachment I - Inspection and Maintenance for BMPs
- Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices

Permanent Stormwater Section (TCEQ-0600)

- Attachment A - 20% or Less Impervious Cover Waiver (if requested for multi-family, school, or small business site)
- Attachment B - BMPs for Upgradient Stormwater
- Attachment C - BMPs for On-site Stormwater
- Attachment D - BMPs for Surface Streams
- Attachment E - Request to Seal Features (if sealing a feature)
- Attachment F - Construction Plans
- Attachment G - Inspection, Maintenance, Repair and Retrofit Plan
- Attachment H - Pilot-Scale Field Testing Plan (if proposed)

Attachment I -Measures for Minimizing Surface Stream Contamination

Agent Authorization Form (TCEQ-0599), if application submitted by agent

Owner Authorization Form (TCEQ-21019), if application submitted by agent

Application Fee Form (TCEQ-0574)

Check Payable to the "Texas Commission on Environmental Quality"

Core Data Form (TCEQ-10400)

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

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

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

Technical Review

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

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

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

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

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Smithson Valley Road						**2. Regulated Entity No.: N/A**			
3. Customer Name: Bexar and/or Comal County						**4. Customer No.: N/A**			
5. Project Type: **(Please circle/check one)**	(New)		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	(WPAP)	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		(Non-residential)			**8. Site (acres):**		4.19 Acre	
9. Application Fee:	$5,000		**10. Permanent BMP(s):**			**N/A**			
11. SCS (Linear Ft.):	**N/A**		**12. AST/UST (No. Tanks):**			**N/A**			
13. County:	Bexar & Comal		**14. Watershed:**			Cibolo Creek			

Application Distribution

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

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

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

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

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

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.	
Edward F. Herlot, PE	
Print Name of Customer/Authorized Agent	
Edward F. Herlot, P.E.	11/08/2024
Signature of Customer/Authorized Agent	Date

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

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: Edward F. Herolt, PE

Date: 11/08/2024

Signature of Customer/Agent:

Edward F. Herolt, P.E.

Project Information

1. Regulated Entity Name: Smithson Valley Road
2. County: Bexar and/or Comal County
3. Stream Basin: Cibolo Creek
4. Groundwater Conservation District (If applicable): Edwards Aquifer Authority
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

   ☒ WPAP
   ☐ SCS
   ☐ Modification
   ☐ AST
   ☐ UST
   ☐ Exception Request

7. Customer (Applicant):

   Contact Person: Reggie Fountain, PE
   Entity: Bexar County - Public Works
   Mailing Address: 1948 Probandt Street
   City, State: San Antonio, TX Zip: 78214
   Telephone: 210-335-7071 FAX: 210-335-6230
   Email Address: reggie.fountain@bexar.org

8. Agent/Representative (If any):

   Contact Person: Edward F. Herolt
   Entity: Halff
   Mailing Address: 100 NE Loop 410, Suite 701
   City, State: San Antonio, TX Zip: 78216
   Telephone: (210)-798-1895 FAX: _____
   Email Address: eherolt@halff.com

9. Project Location:

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

10. ☒ The location of the project site is described below. The description provides sufficient detail and clarity so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

    Intersection of Smithson Valley Road and FM 1863.

11. ☒ **Attachment A – Road Map**. A road map showing directions to and the location of the project site is attached. The project location and site boundaries are clearly shown on the map.

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

    ☒ Project site boundaries.
    ☒ USGS Quadrangle Name(s).
    ☒ Boundaries of the Recharge Zone (and Transition Zone, if applicable).
    ☒ Drainage path from the project site to the boundary of the Recharge Zone.

13. ☒ **The TCEQ must be able to inspect the project site or the application will be returned**. Sufficient survey staking is provided on the project to allow TCEQ regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment.

    ☒ Survey staking will be completed by this date: xxxx 2024

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. ☒ I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:

(1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);

(2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;

(3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;

(4) The use of sewage holding tanks as parts of organized collection systems; and

(5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

(6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

17. ☒ I am aware that the following activities are prohibited on the Transition Zone and are 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 §335.1; and

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

Administrative Information

18. The fee for the plan(s) is based on:

- ☒ For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
- ☐ For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
- ☐ For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems.
- ☐ A request for an exception to any substantive portion of the regulations related to the protection of water quality.
- ☐ A request for an extension to a previously approved plan.

19. ☒ Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

- ☐ TCEQ cashier
- ☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
- ☒ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

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

21. ☒ No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

FORM TCEQ-0587 ATTACHMENTS

ATTACHMENT A – ROAD MAP

Attached following this page.

ATTACHMENT B – USGS/EDWARDS AQUIFER RECHARGE ZONE MAP

Attached following this page.

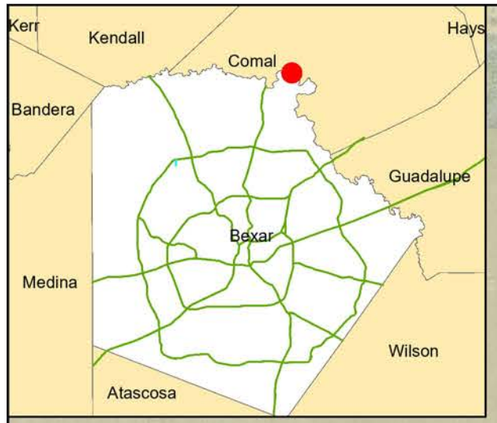
ATTACHMENT C – PROJECT DESCRIPTION

Project Description
The proposed project is a 5.15 acre site to be developed as a Bexar / Comal County Road. The project will include a 400 LF concrete bridge crossing Cibolo Creek with asphalt approaches on both sides of the bridge totaling 435 LF of two-lane road. The proposed road will link between the existing FM 1863 and Smithson Valley Road. When the proposed road is opened to traffic, the existing portion of Smithson Valley Road from FM 1863 to the tie-in of the proposed road (which includes a low water crossing) will be removed. This site is located within the northern portion of Bear County and the southern portion of Comal County.

This development includes:

- ±12,000 SF of concrete bridge with rails
- ±13,050 SF of asphalt approaches to the bridge
- Removal of the existing portion of asphalt road and low water crossing being replaced by the development

The pre-development impervious surface area within the project limits is 1.32 acres and the post-development impervious surface area is 1.27 acres. The existing road does not have a WPAP or any permanent BMPs associated with this section of the road. Permanent Structural BMPs are not required for this project due to the post-development impervious surface area being less than the pre-development area. The proposed road alignment will be raising the road from the channel bed and decreasing the potential for pollutants to enter the channel bed. This will decrease the potential by directing the runoff from the bridge onto vegetative filter strips in accordance with TCEQ RG-348. The post-development impervious areas will flow over vegetative filter strips before entering the creek bed.



FM 1863

1863

Cibolo Creek

Smithson Valley Rd

Red Barn Rd

Legend

Project Site Boundary

Printing Date: 7/22/2024 1:50 PM
File: A:\35000s\35005\015\Data In\Client\2023-09-06 (GIS W-SS-Easements)\MyProject\Road Map.aprx

halff

100 NE Intestate 410 Loop Suite 701
San Antonio, TX 78216

N
W E
S

ATTACHMENT A: ROAD MAP

0 150 300
SCALE IN FEET

Page 1 of 1
Smithson Valley Road
&
FM 1863

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BULVERDE QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

Edwards Aquifer Contributing Zone

Edwards Aquifer Recharge Zone

Edwards Aquifer Contributing Zone

Edwards Aquifer Contributing Zone

Edwards Aquifer Recharge Zone

SAN ANTONIO

Mapped, edited, and published by the Geological Survey

Revised in cooperation with the Texas Water Development Board

Control by USGS and NOS/NOAA

Topography by the Army Map Service by photogrammetric methods from aerial photographs taken 1952. Field checked 1953. Revised by USGS from aerial photographs taken 1986. Field checked 1987 Map edited 1988

Projection and 10,000-foot grid ticks: Texas coordinate system, south central zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 14
1927 North American Datum
To place on the predicted North American Datum 1983 move the projection lines 20 meters south and 29 meters east as shown by dashed corner ticks

Fine red dashed lines indicate selected fence lines

Red tint indicates areas in which only landmark buildings are shown

UTM GRID AND 1988 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET DIAGRAM IS APPROXIMATE

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

2998-423

ROAD CLASSIFICATION

Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route

BULVERDE, TEX.
29098-F4-TF-024
1988
DMA 6343 III NW—SERIES V882

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1988

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program

Regulatory Zones

30 TAC Chapter 213- Edwards Aquifer
Effective March 1974

This map was produced by the Groundwater Planning and Assessment Team of the Texas Commission on Environmental Quality to detail the boundaries of the regulatory zones of the Edwards Aquifer Protection Program, as described in Texas Administrative Code Title 30, Part 1, §213.3. No other claims are made to the accuracy or completeness of the data or to its suitability for a particular use. For more information about the Edwards Aquifer Protection Program, please contact the TCEQ Regional Offices in San Antonio or Austin. Printed June 2006.

Geologic Assessment

Texas Commission on Environmental Quality

For Regulated Activities on The Edwards Aquifer Recharge/transition Zones and Relating to 30 TAC §213.S(b)(3), Effective June l, 1999

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

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

Signature

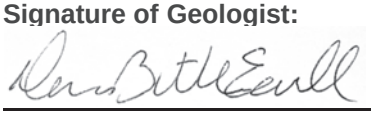
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Print Name of Geologist: Dawne Butler Earll, P.G. **Telephone**: (210) 694-4545

Date: January 20, 2024 **Fax:** (210) 694-4577

Representing: Medina Consulting Co., Inc. TBPG No.50118

Signature of Geologist:



Regulated Entity Name: Smithson Valley Rd Low Water Crossing

Project Information

1. Date(s) Geologic Assessment was performed: 12/21/2023 & 1/16/2024
2. Type of Project:

☒ WPAP ☐ AST

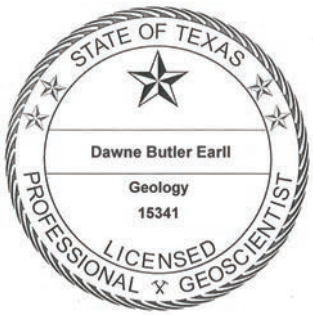
☐ SCS ☐ UST

3. Location of Project:

☒ Recharge Zone

☐ Transition Zone

☐ Contributing Zone within the Transition Zone



4/18/2024

4. ☒ **Attachment A - Geologic Assessment Table**. Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Orif soils, moist, 0-3% slopes, frequently flooded	A	6.67+
Lewisville silty clay, 1-3% slopes	C	5.75+
Sunev silty clay loam, 0-1% slopes	B	5+

** Soil Group Definitions (Abbreviated)*

A. Soils having a high infiltration rate when thoroughly wetted.
B. Soils having a moderate infiltration rate when thoroughly wetted.
C. Soils having a slow infiltration rate when thoroughly wetted.
D. Soils having a very slow infiltration rate when thoroughly wetted.

6. ☒ **Attachment B – Stratigraphic Column**. A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.

7. ☒ **Attachment C – Site Geology**. A narrative description of the site-specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.

8. ☒ **Attachment D – Site Geologic Map(s)**. The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1”: 400'

Applicant's Site Plan Scale: 1" = 100'
Site Geologic Map Scale: 1" = 100’
Site Soils Map Scale (if more than 1 soil type): 1" = 100

9. Method of collecting positional data:

☒ Global Positioning System (GPS) technology.
☐ Other method(s). Please describe method of data collection: _____

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

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

12. ☒ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.

    ☐ Geologic or manmade features were not discovered on the project site during the field investigation.

13. ☒ 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.

Attachment A
Geologic Assessment Table

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Smithson Valley Rd Low Water Crossing

LOCATION			FEATURE CHARACTERISTICS											EVALUATION			PHYSICAL SETTING		
1A	1B"	1C"	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		0, 10						<40	≥40	<1.6	≥1.6	
SF	29.74860°	-98.407779	SF	20	Kgrlf	1.5	15	0.5-0.8	65	0	NA	NA	C,F,V	10	30	X			X	Streambed

• DATUM: WGS 84

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

8A INFILLING	
N	None, exposed rock
C	Coarse – cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials

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

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

Dawne Butler, P.G. Date January 20, 2024

4/18/2024

Sheet 1 of 1

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

Attachment B
Stratigraphic Column

Smithson Valley Rd Low Water Crossing

Time Period (Epoch)	Hydrologic Subdivision	Group	Formation/ Member	Hydrologic Function	Thickness (ft)	Lithology	Cavern Development	Porosity/ Permeability type
Erosional Surface								
Quaternary	N/A	Terrace deposits		N/A	5-20*	Sand, silt, clay, and gravel in various proportions, with gravel more predominant in older, higher terrace deposits. Locally indurated with calcium carbonate (caliche) in terraces along streams	N/A	N/A
Early Cretaceous	Lower Confining Unit	Trinity	Glen Rose Limestone/ upper member/ lower fossiliferous unit	CU	80-150	Caprinid biostrome near top (locally), alternating wackestone, packstone to miliolid grainstone, argillaceous limestone, mudstone, silty mudstone at base	None	Moldic, burrowed, fracture

Notes: CU = Confining Unit
* Qt thickness range is in/near the site; from an 8/22/2006 geotechnical report by Arias & Associates

Sources: Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers Within Northern Bexar and Comal Counties, Texas: US Geological Survey, 2016; and
Geotechnical Engineering Study, Proposed Bridge, Smithson Valley Road Over Cibolo Creek, San Antonio, Texas, 2006.

4/18/2024

Attachment C
Site Geology

Geology Narrative

The site lies in the recharge zone of the Edwards Aquifer. The attached figures show the location of the site, floodplain, topography, and geologic units.

Site Soils

Soil Units: The project site lies on Orif soils, moist, 0-5% slopes, frequently flooded (Or); Lewisville silty clay, 1-3% slopes (LvB); and Sunev Silty clay loam, 0-1% slopes (SuA). The following paragraphs describe the soil units and are partially quoted from the *Soil Survey of Bexar County, Texas* (USDA, issued June 1966), *Soil Survey of Comal and Hays Counties, Texas* (USDA, issued June 1984), and the Web Soil Service map unit descriptions.

Or: “These are deep, nearly level soils on flood plains of large creeks and rivers.” “Typically, the surface layer is grayish brown, moderately alkaline gravelly loamy sand about 20 inches thick. The underlying layer to a depth of 60 inches is very gravelly loamy sand stratified with very gravelly sand, very gravelly sandy loam, and loam.” Or soils are well-drained, and the runoff class is Negligible. The depth to the water table is more than 80 inches. The capacity of the most limiting layer to transmit water (K_{sat}) is high to very high (5.95 to 19.98 in/hr.

LvB: “The Lewisville series consists of moderately deep, dark-colored, nearly level alluvial soils. These soils occur mainly on terraces bordering the San Antonio and Medina Rivers and their main tributaries. The surface layer is very dark grayish-brown to brown silty clay and is about 24 inches thick. It has fine subangular blocky or blocky structure, is firm and crumbly when moist, and is easily worked. This layer contains a few fine concretions of lime carbonate. The subsurface layer is brown silty clay and is about 20 inches thick. It has fine, subangular blocky or blocky structure and is very firm but crumbly when moist. This layer is limy. The underlying material is reddish-yellow silty clay. It has weak, blocky structure, is very firm when moist, and contains large amounts of lime. Beneath this layer, there may be deep beds of water-rounded limestone gravel.” The LvB soil is well-drained with a High runoff class. The depth to the water table is more than 80 inches. The K_{sat} is moderately low to moderately high (0.06 to 0.20 in/hr).

SuA: “This is a deep, nearly level soil on low stream terrace on uplands.” “Typically, the surface layer is a brown silty clay loam and about 15 inches thick.” The subsoils are also silty clay loam. “The soil is moderately alkaline and calcareous throughout. The subsoil is about 60 percent calcium carbonate.” The SuA soil is well-drained with a Negligible runoff class. The depth to the water table is more than 80 inches. The K_{sat} is moderately high to high (0.57 to 1.98 in/hr).

Site Geology

Literature Review: In Figure 6 (Stoeser, et al., 2005; based on a 1992 Barnes map), the site is mapped as being covered by Quaternary terrace deposits (Qt). Later mapping by Blome, et al. (2005), which included only the northwestern half of the site, shows the Glen Rose Limestone, Upper member (Kgru) (Figure 7). In Figure 8, Clark, et al. (2016) mapped the site as having the Lower Fossiliferous unit of the Upper Glen Rose Limestone (Kgrlf) at the surface. We are using a hybrid of the Stoeser and Clark maps for our site-specific map Attachment D because it matches observations. The following descriptions were taken from the USGS Mineral Resources Data website, the Blome, et al. (2005) map, and the Clark, et al. (2016) description in that map's accompanying pamphlet.

Qt: "Sand, silt, clay, and gravel in various proportions, with gravel more predominant in older, higher terrace deposits. Locally indurated with calcium carbonate (caliche) in terraces along streams." "In upland regions (Rolling Plains, Edwards Plateau, etc.) unit includes fluvial terrace deposits, undivided. Light-brown, reddish-brown, gray, or yellowish-brown, gravelly quartz and lithic sand and silt to sandy gravel (Moore and Wermund, 1993)."

Kgru: "Alternating beds of yellowish-tan, medium-bedded limestone and argillaceous limestone with minor evaporite layers." Surface cavern development associated with faults and fractures and some water production at evaporite beds have been noted but are considered a rare occurrence. Field identification is commonly associated with (1) stair-step topography that forms through differential erosion of the alternating limestone and marl beds, and (2) the presence of fossilized ripple marks and sparse casts of *Tylostoma* sp., *Turitella* sp., *Protocardia texana*, and the foraminiferan *Orbitolina minuta* that are classified hydrologically as having mostly nonfabric-selective porosity and generally low permeability (Small and Clark, 2000; Clark, 2003)."

Kgrlf: "The lower part of the fossiliferous HSU contains fabric-selective moldic and burrow porosity and not-fabric-selective fracture porosity (Clark, 2003). The lower part of the fossiliferous HSU is generally considered a confining unit (Clark, 2003; Clark and others, 2009). The lower part of the fossiliferous HSU contains an extensive network of bioturbated beds consisting of *Thalassinoides* that facilitate the lateral movement of groundwater (Golab and others, 2015; Clark and others, 2016)." "Caprinid biostrome near top (locally), alternating wackestone, packstone to miliolid grainstone, argillaceous limestone, mudstone, silty mudstone at base; *Orbitolina minuta* (Douglas, 1960), *Porocystis golobularis, Protocardia texana, Tapes decepta, Hemiaster* sp., *Neithea* sp., and *turritella* sp., gastropods." Field identification as listed on the map: "Limestone and argillaceous limestone, *Orbitolina minuta* (Douglas, 1960)."

Observations: Other than the creek bed, most of the project area and vicinity was covered with thick soil and vegetation (Photographs 1, 2, 3, 7, and 8). A road cut in the soil near and parallel to the proposed site shows terrace deposits. In the creek bed is some exposed Kgrlf surrounded by caliche-cemented terrace deposits (Photographs 4 to 6). A small surface fracture with fine and coarse gravels and vegetation was observed (SF in the Geologic Assessment Table; GAT; Photograph 6). It appears that this feature began as a gouge from transported cobbles and gravel and was subsequently enlarged by a combination of infilling by fines and opportunistic grasses and weeds that took hold.

Vegetation along with cobbles and gravels were removed by hand from a part of the feature and about two liters of water was poured into it. The water pooled and did not drain into the rock, and it eventually soaked into nearby vegetation and fines within the feature.

Other gouges in both the terrace deposits and bedrock in the vicinity were very shallow. Many had fine soil, and some had opportunistic vegetation. Also observed in the creek bed were transported boulders, some of which were heavily weathered and may be from the upper fossiliferous unit. Along the sides of the creek bed were fallen slabs of cemented terrace deposits that were the result of undercutting by the intermittent streamflow.

Along the boundary of the site are two utility poles, neither of which are believed to intersect bedrock. Therefore they are not included in the GAT. An Existing Utility Layout, prepared by Halff, indicates the presence of a gas line in the vicinity and at the southeastern end of the project area. This line is also not believed to intersect bedrock.

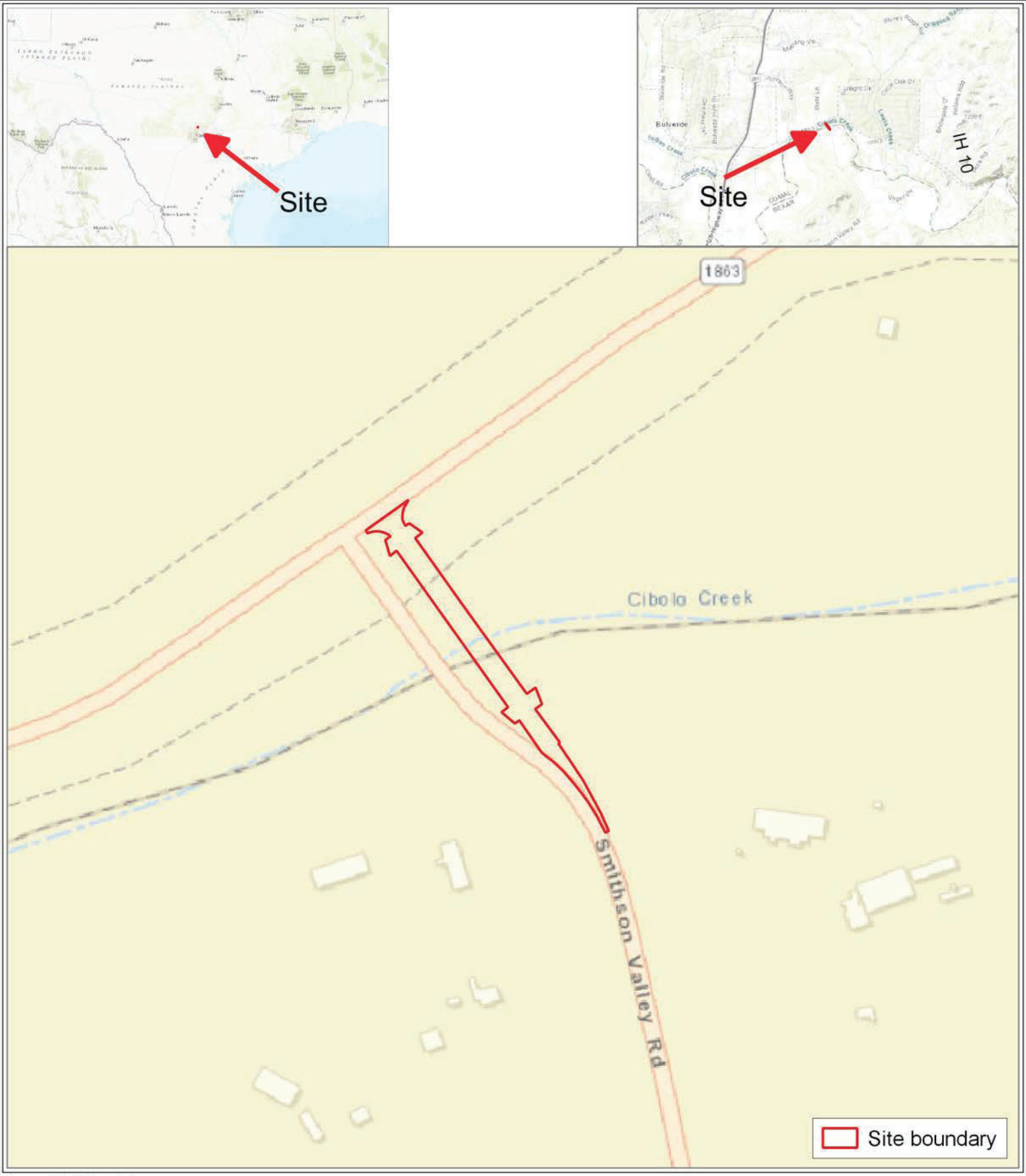
No faults were shown on the project area in any of the geologic maps (Figures 6, 7, 8, and attachment D). An inferred fault is shown to be near the northwest end of the site, but it was not observed at the site (i.e., no cracks, disruptions, or layer discontinuities visible on the ground surface). No significant pavement cracking outside the project area was observed.

No sensitive geologic or manmade features were identified in the project area. The bedrock feature is listed in the Geologic Assessment Table and is described below.

SF (Photograph 6) - Exposed bedrock: A small surface fracture with fine and coarse gravels and vegetation was observed. It appears that this feature began as a gouge from transported cobbles and gravel and was subsequently enlarged by a combination of infilling by fines and opportunistic grasses and weeds that took hold. No rapid infiltration was observed.

If features are discovered during construction, work should stop and the Texas Commission on Environmental Quality (TCEQ) notified so that the feature can be evaluated.

Figures



Source: ESRI Standard

Medina Consulting Company, Inc.

Figure 1: Project Area Location
Smithson Valley Rd Low Water Crossing
Geologic Assessment
Bexar & Comal Counties, TX

N

Author: Dawne Butler EarII 1/13/24

225 0 225 ft

1:3000

Source: Bing Maps Satellite Imagery

Medina Consulting Company, Inc.

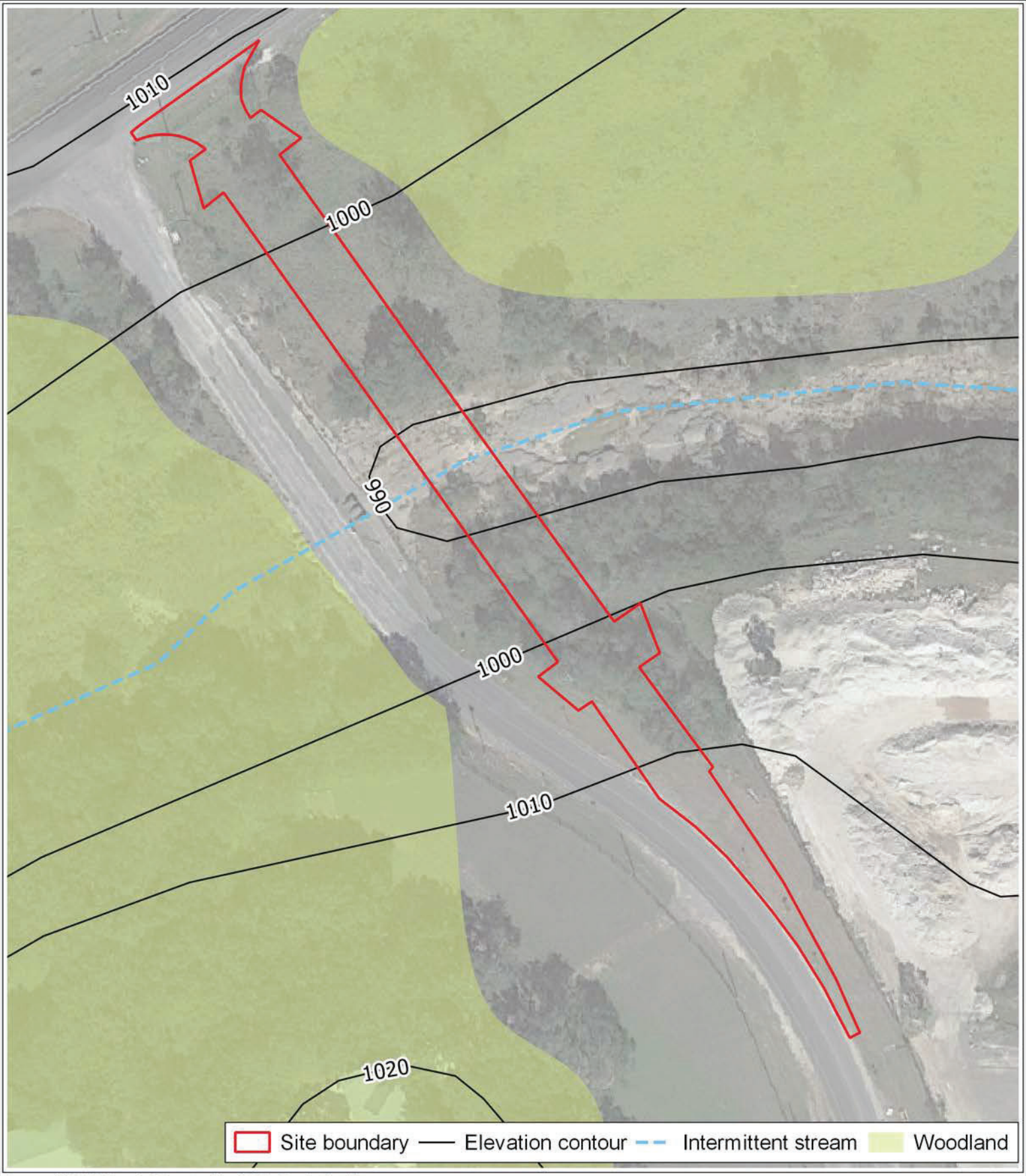
Figure 2: Site and Vicinity
Smithson Valley Rd Low Water Crossing
Geologic Assessment
Bexar & Comal Counties, TX

N

Author: Dawne Butler EarlI 1/13/24

100 0 100 ft

1:1500



Sources: USGS Bulverde, TX vector files (2022), Google Satellite

Medina Consulting Company, Inc.

Figure 3: Site Topography
Smithson Valley Rd Low Water Crossing
Geologic Assessment
Bexar & Comal Counties, TX

N

Author: Dawne Butler EarII 1/13/24

75 0 75 ft

1:1000

Sources: FEMA NFHL Data 48029C (eff. 9/29/2010), 48091C (eff. 2/18/2023), Google Satellite

Medina Consulting Company, Inc.

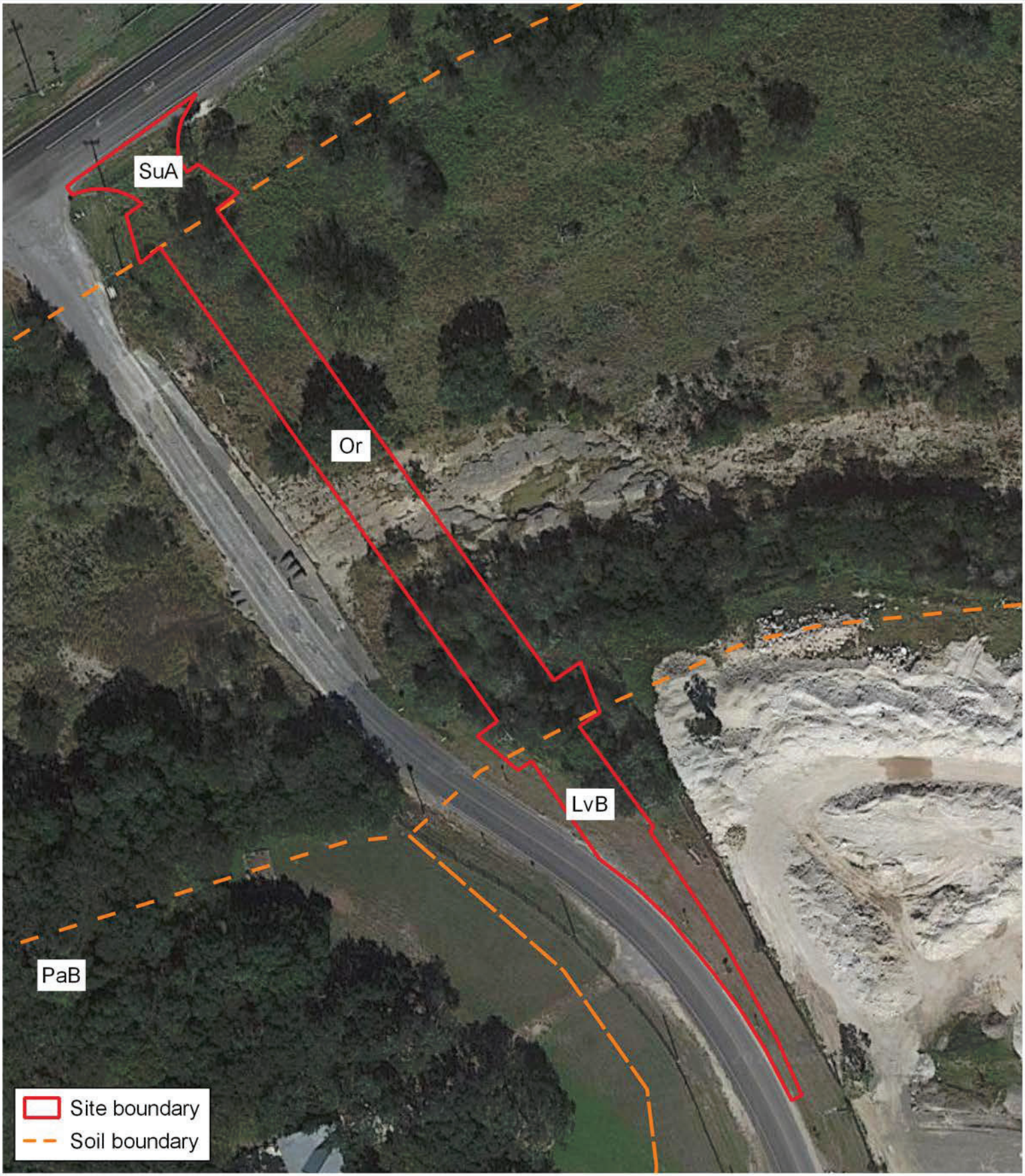
Figure 4: FEMA Flood Zone Map
Smithson Valley Rd Low Water Crossing
Geologic Assessment
Bexar & Comal Counties, TX

N

Author: Dawne Butler Earll 1/13/24

110 0 110 ft

1:1500



Sources: USDA Web Soil Survey data, Google Satellite

Medina Consulting Company, Inc.

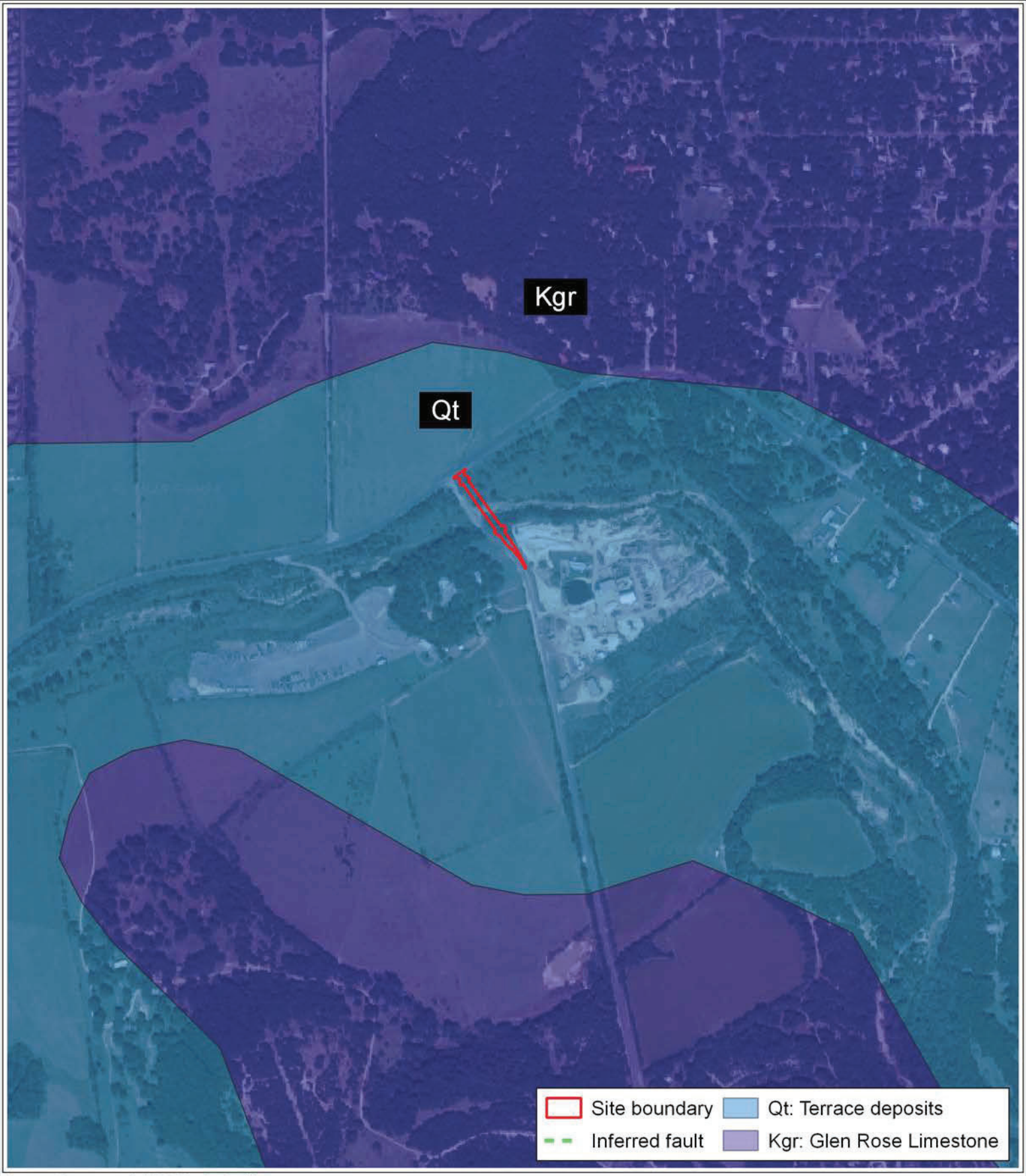
Figure 5: Soil Types
Smithson Valley Rd Low Water Crossing
Geologic Assessment
Bexar & Comal Counties, TX

N

Author: Dawne Butler EarlI 1/13/24

75 0 75 ft

1:1000



Sources: Stoeser, et al., 2005; Google Satellite

Medina Consulting Company, Inc.

Figure 6: 1992 Site Geology
Smithson Valley Rd Low Water Crossing
Geologic Assessment
Bexar & Comal Counties, Texas

N

Author: Dawne Butler EarII 1/18/24

700 0 700 ft

1:10000

Sources: Blome, et al., USGS S.I.M. 2873 (2005); Google Satellite

Medina Consulting Company, Inc.

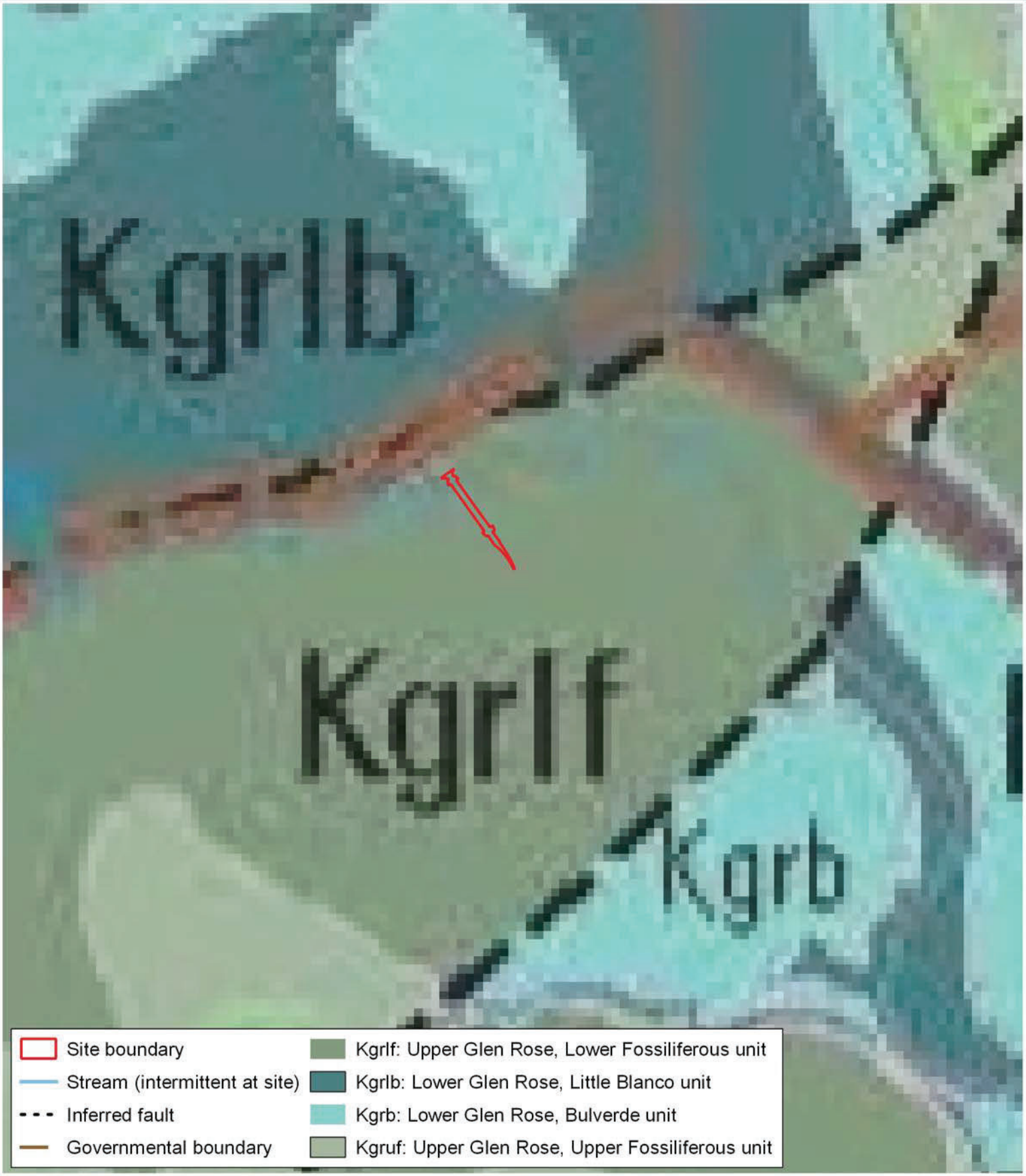
Figure 7: 2005 Site Geology
Smithson Vally Rd Low Water Crossing
Geologic Assessment
Bexar & Comal Counties, Texas

N

Author: Dawne Butler EarII 1/18/24

700 0 700 ft

1:10000



Source: Clark, et al., USGS SIM 3366 (2016)

Medina Consulting Company, Inc.

Figure 8: 2016 Site Geology
Smithson Valley Rd Low Water Crossing
Geologic Assessment
Bexar & Comal Counties, Texas

N

Author: Dawne Butler EarII 1/18/24

750 0 750 ft

1:10000

Photographs

Photograph 1 - View southwestward from current Smithson Valley Rd of the Cibolo Creek creek bed upstream of the project area

Photograph 2 - View southeastward from FM 1863 of current Smithson Valley Rd and the area between the project area and the road

Photograph 3 - View southeastward of most of the project area (from FM 1863 and the northwestern end of the project area)

Photograph 4 - View eastward from Smithson Valley Rd of terrace deposits on the northwestern bank; the foreground is between the current road and the project area.

Photograph 5 - View westward of the terrace deposits on the northwestern bank in the project area

Photograph 6 - View northeastward of the feature listed in the GAT (picture taken in December; when the hand-excavation and water test were performed in January, the grass was no longer green)

Photograph 7 - View southwestward of the southeastern bank terrace deposits and soil

Photograph 8 - View southeastward of the terrace deposits and vegetated soil above the southeastern bank (toward the area of the planned southeastern bridge abutment area)

REFERENCES

Batte, C., United States Department of Agriculture, Soil Conservation Service (USDA SCS), Soil Survey of Comal and Hays Counties, Texas, issued June 1984.

Blome, C., Faith, J., Pedraza, D., Ozuna, G., Cole, J., Clark A., Small, T., Morris, R., Geologic Map of the Edwards Aquifer Recharge Zone, South-Central Texas, USGS Scientific Investigations Map 2873, scale 1:200,000, 2005.

Clark, A., Golab, J., and Morris, R., Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers Within Northern Bexar and Comal Counties, Texas, USGS Scientific Investigations Map 3366, scale 1:24,000, 2016.

Google (Earth Pro and Maps), Images of site, accessed December 2023-January 2024.

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Stein, W. G., and Ozuna, G. B., Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone, Bexar County, Texas: US Geological Survey, Water Resource Investigations Report (95-4030).

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Texas Commission on Environmental Quality (TCEQ), *Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge Zone*, TCEQ-0585-Instructions, 2004, https://www.tceq.texas.gov/assets/public/compliance/field_ops/eapp/F-0585_geologic_assessment_instructions.pdf, accessed January 2024.

Taylor, F., Hailey, R., and Richmond, D., USDA SCS, Soil Survey of Bexar County, Texas, 1962 (reissued 1991).

Attachment D
Site Geologic Map

STATE OF TEXAS
Dawne Butler Earll
Geology
15341
LICENSED
PROFESSIONAL GEOSCIENTIST

4/18/2024

Source: Clark, et al., USGS SIM 3366 (2016)

Medina Consulting Company, Inc.

Attachment D
Smithson Valley Rd Low Water Crossing
Geologic Assessment
Bexar & Comal Counties, Texas

N

Author: Dawne Butler Earll 1/19/24

100 0 100 ft

1:1200

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: Edward F. Herolt, PE

Date: 11/08/24

Signature of Customer/Agent:

Edward F. Herolt, P.E.

Regulated Entity Name: Smithson Valley Road

Regulated Entity Information

1. The type of project is:

   ☐ Residential: Number of Lots:_____
   ☐ Residential: Number of Living Unit Equivalents:_____
   ☐ Commercial
   ☐ Industrial
   ☒ Other:Bexar/Comal County Road

2. Total site acreage (size of property): 5.15 Acres

3. Estimated projected population:0

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	0	÷ 43,560 =	0
Parking	0	÷ 43,560 =	0
Other paved surfaces	55,321	÷ 43,560 =	1.27
Total Impervious Cover	55,321	÷ 43,560 =	1.27

Total Impervious Cover 1.27 **÷ Total Acreage** 5.15 **X 100 =** 24.66**% 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.): 915 feet.

Width of R.O.W.: 160.9 feet.
L x W = 147,224 Ft^2 ÷ 43,560 Ft^2/Acre = 0.38 acres.

10. Length of pavement area: 835 feet.

Width of pavement area: 66.2 feet.
L x W = 55321 Ft^2 ÷ 43,560 Ft^2/Acre = 1.27 acres.
Pavement area 1.27 acres ÷ R.O.W. area 5.15 acres x 100 = 24.66% impervious cover.

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

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

14. The character and volume of wastewater is shown below:

0% Domestic	_____Gallons/day
0% Industrial	_____Gallons/day
0% Commingled	_____Gallons/day
TOTAL gallons/day 0	

15. Wastewater will be disposed of by:

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

- ☐ **Attachment C - Suitability Letter from Authorized Agent**. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.
- ☐ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

☐ Sewage Collection System (Sewer Lines):

- ☐ Private service laterals from the wastewater generating facilities will be connected to an existing SCS.
- ☐ Private service laterals from the wastewater generating facilities will be connected to a proposed SCS.

- ☐ The SCS was previously submitted on_____.
- ☐ The SCS was submitted with this application.
- ☐ The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to Executive Director approval.

☐ The sewage collection system will convey the wastewater to the _____ (name) Treatment Plant. The treatment facility is:

☐ Existing.
☐ Proposed.

16. ☐ All private service laterals will be inspected as required in 30 TAC §213.5.

Site Plan Requirements

Items 17 – 28 must be included on the Site Plan.

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

Site Plan Scale: 1" = 100'.

18. 100-year floodplain boundaries:

☒ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
☐ No part of the project site is located within the 100-year floodplain.
The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): _____

19. ☒ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, open space, etc. are shown on the plan.

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

20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):

☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

☐ The wells are not in use and have been properly abandoned.
☐ The wells are not in use and will be properly abandoned.
☐ The wells are in use and comply with 16 TAC §76.

☒ 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).

☐ N/A

27. ☒ Locations where stormwater discharges to surface water or sensitive features are to occur.

☐ There will be no discharges to surface water or sensitive features.

28. ☒ Legal boundaries of the site are shown.

Administrative Information

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

30. ☒ Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

Water Pollution Abatement Plan Application

REGULATED ENTITY NAME: Smithson Valley Road
DATE: 11/08/24

ATTACHMENT B – Volume and Character of Stormwater

Volume of Stormwater:

Q=CIA

Information obtained from TCEQ RG-348

$C_{pervious}$= 0.03
$C_{impervious}$ = 0.90
I = 1.1 inches/hour

Project Area

Total Project Area: 5.15 Acres

Pre-development:
Impervious Area: 1.32 Acres (Existing road to be removed)
Pervious Area: 3.83 Acres

Post-development:
Impervious Area: 1.27 Acres (New Road)
Pervious Area: 3.88 Acres

Composite Runoff Coefficient

Pre-Development:
C= 0.256

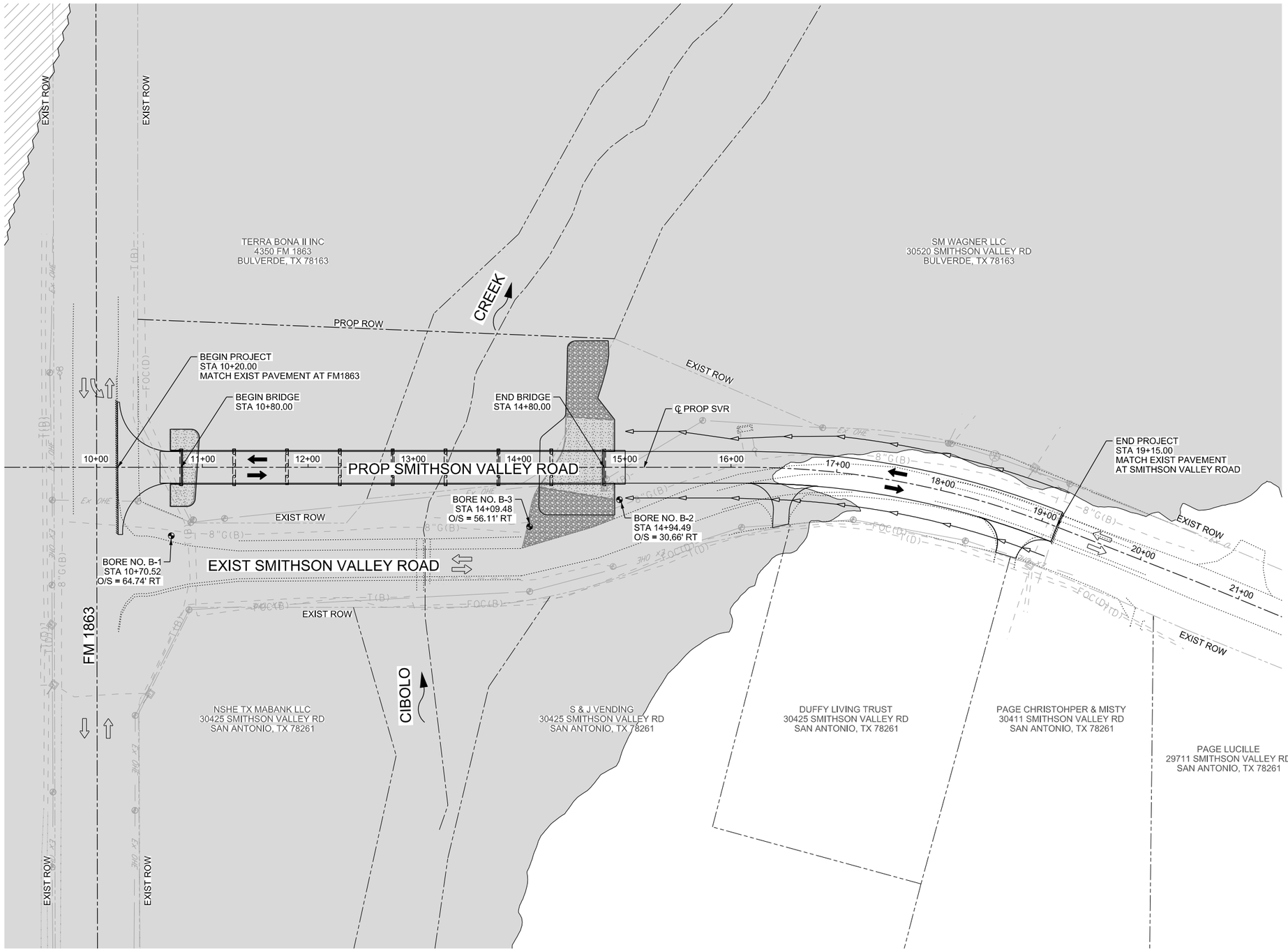
Post-Development:
C=0.247

$\mathbf{Q_{pre\text{-}development}}$ = (0.256)(1.1 in/hr)(5.15 Ac) = **1.45 cfs**

$\mathbf{Q_{post\text{-}development}}$ = (0.247)(1.1 in/hr)(5.15 Ac) = **1.40 cfs**

Quality of Stormwater:

The quality of the stormwater will be typical of an asphalt paved road project. The stormwater could be affected by hydrocarbons from the asphalt paving and hydrocarbons from vehicles traveling the roadway.



LEGEND

- EXISTING RIGHT OF WAY
- ROADWAY CENTERLINE
- PROPOSED EOP
- PROPOSED GABION
- PROPOSED BENT CAP & DRILL SHAFTS
- PROPOSED STEEL RAIL
- PROPOSED CULVERT
- PROPOSED TRAFFIC FLOW
- EXISTING TRAFFIC FLOW
- EXISTING GAS LINE
- EXISTING FIBER OPTIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING TELEPHONE LINE
- BORE NO. LOCATION
- FLOODPLAIN
- FLOODWAY

N

50 25 0 50 100

SCALE: 1"=100'

Edward F. Herolt, P.E.

STATE OF TEXAS
EDWARD F. HEROLT
100461
LICENSED
PROFESSIONAL ENGINEER

1/17/2025

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY EDWARD F. HEROLT, PE# 100461 ON 1-17-2025. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT. THE RECORD COPY OF THIS DRAWING IS ON FILE AT THE OFFICES OF HALFF 100 NE. INTERSTATE 410 LOOP, SUITE 701, SAN ANTONIO, TEXAS 78216. TBPELS FIRM #F-312.

BEXAR COUNTY
PUBLIC WORKS DEPARTMENT

NO	DATE	REVISION DESCRIPTION	DWG	CHK

halff
TBPELS FIRM REGISTRATION #312
100 NE LOOP 410, SUITE 701
SAN ANTONIO, TX 78216-4741
(210) 798-1895

SMITHSON VALLEY ROAD

PROJECT LAYOUT

SCALE 1" = 100' SHEET 1 OF 1

PROJECT AVO:		SHEET NO.
54202.001		4
DESIGNED BY: JRB	ROADWAY/HIGHWAY:	
CHECKED BY: SGL	SMITHSON VALLEY ROAD	
DRAWN BY: JRB	STATE	COUNTY
CHECKED BY: SGL	TEXAS	BEXAR

Temporary Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

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

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

Signature

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

Print Name of Customer/Agent: Edward F. Herolt, PE

Date: 11/08/24

Signature of Customer/Agent:

Edward F. Herolt, P.E.

Regulated Entity Name: Smithson Valley Road

Project Information

Potential Sources of Contamination

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

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

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

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

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

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

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

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

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

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

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

Sequence of Construction

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

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

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

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

Temporary Best Management Practices (TBMPs)

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

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

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

☒ A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

☒ A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

☒ A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

8. ☒ The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

☐ **Attachment E - Request to Temporarily Seal a Feature**. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

☒ There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. ☒ **Attachment F - Structural Practices**. A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.

10. ☒ **Attachment G - Drainage Area Map**. A drainage area map supporting the following requirements is attached:

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

☒ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

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

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

☒ N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

FORM TCEQ-0602 ATTACHMENTS

ATTACHMENT A — SPILL RESPONSE ACTIONS

General Measures

(1) To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.

(2) Store hazardous materials and wastes in covered containers and protect from vandalism.

(3) Place a stockpile of spill cleanup materials where it will be readily accessible.

(4) Train employees in spill prevention and cleanup.

(5) Designate responsible individuals to oversee and enforce control measures.

(6) Spills should be covered and protected from stormwater runoff during rainfall to the extent that it doesn't compromise cleanup activities.

(7) Do not bury or wash spills with water.

(8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.

(9) Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.

(10) Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.

(11) Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.

(12) Keep waste storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

(1) Clean up leaks and spills immediately.

(2) Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.

(3) Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

(1) Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.

(2) Use absorbent materials on small spills rather than hosing down or burying the spill.

(3) Absorbent materials should be promptly removed and disposed of properly.

(4) Follow the practice below for a minor spill:

(5) Contain the spread of the spill.

(6) Recover spilled materials.

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

Semi-Significant Spills

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

Spills should be cleaned up immediately:

(1) Contain spread of the spill.

(2) Notify the project foreman immediately.

(3) If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.

(4) If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.

(5) If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

(1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.

(2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.

(3) Notification should first be made by telephone and followed up with a written report.

(4) The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.

(5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc. More information on spill rules and appropriate responses is available on the TCEQ website at:
http://www.tnrcc.state.tx.us/enforcement/emergency_response.html

ATTACHMENT B — POTENTIAL SOURCES OF CONTAMINATION

Other potential sources of contamination during construction include:

Potential Source – Oil, Grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings.

Preventive Measure:

Vehicle and Equipment Maintenance

(1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the run on of

stormwater and the runoff of spills.

(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately.

(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.

(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.

(5) Place drip pans or absorbent materials under paving equipment when not in use.

(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.

(7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.

(9) Store cracked batteries in a non- leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

(1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the 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.

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. Trash containers should be emptied on a regular

routine schedule to keep trash from overflowing the container.

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.

ATTACHMENT C — SEQUENCE OF MAJOR ACTIVITIES

Project Total Area: 5.15 Acres
Project Total Disturbed Area: 1.99 Acres

The anticipated major construction activities will include and be sequenced as follows:

1. Installation of temporary erosion and sediment controls (0.0 acres disturbed)
2. Construct bridge abutments (0.14 acres disturbed)
3. Pour bridge columns and piers (0.02 acres disturbed)
4. Construct bridge approaches (0.08 acres disturbed)
5. Construct bridge decking (0.0 acres disturbed)
6. Prepare detour road (0.14 acres disturbed)
7. Prepare road right-of-way (0.44 acres disturbed)
8. Construct road (0.44 acres disturbed)
9. Remove detour road (0.14 acres disturbed)
10. Remove old portion of Smithson Valley Road (Drainage structure, riprap, asphalt paving, and base material) (0.59 acres disturbed)
11. Installation of vegetation for final stabilization
12. Final Cleanup
13. Removal of temporary erosion and sediment control measures when revegetation is complete, and the site has achieved final stabilization.

ATTACHMENT D – TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

The TBMPs and measures used during and after construction are listed below:

Material Management

Material stockpiles, borrow areas, access roads, and other land-disturbing activities can often be located away from critical areas such as steep slopes, highly erodible soils, and areas that drain directly into geologically sensitive features. The exposure of litter, construction debris, and chemicals to stormwater should be minimized to prevent them from becoming a pollutant source. Daily litter removal and screening outfalls and storm drain inlets may help retain these materials onsite.

Stockpile topsoil and reapply to revegetate site. Because of the high organic content of topsoil, it cannot be used as fill material or under pavement. Topsoil is typically removed when a site is cleared. Since topsoil is essential to establish new vegetation, it should be stockpiled and then reapplied to the site for revegetation, if appropriate. Although topsoil salvaged from the existing site can often be used, it must meet certain standards and topsoil may need to be imported onto the site if the existing topsoil is not adequate for establishing new vegetation.

Cover or stabilize topsoil stockpiles. Unprotected stockpiles are very prone to erosion and therefore stockpiles must be protected. Small stockpiles can be covered with a tarp to prevent erosion. Large stockpiles should be stabilized with erosion blankets, seeding, and/or mulching. In addition, spoils should not be stored within the 100- year floodplain where they can be disturbed during high flow conditions.

Vegetation Protection

By clearing only those areas immediately essential for completing site construction, buffer zones are preserved and soil remains undisturbed until construction begins. Physical markers, such as tape, signs, or barriers, indicating the limits of land disturbance, can ensure that equipment operators know the proposed limits of clearing. The area of the watershed that is exposed to construction is important in determining the net amount of erosion. Reducing the extent of the disturbed area will ultimately reduce sediment loads to surface waters. Existing or newly planted vegetation that has been planted to stabilize disturbed areas should be protected by routing construction traffic around the areas and protecting natural vegetation with fencing, tree armoring, retaining walls, or tree wells. Avoid disturbing vegetation on steep slopes or other critical areas.

Where possible, construction traffic should travel over areas that must be disturbed

for other construction activity. This practice will reduce the area that is cleared and susceptible to erosion.

Tree armoring protects tree trunks from being damaged by construction equipment. Fencing can also protect tree trunks, but should be placed at the tree's drip line so that construction equipment is kept away from the tree. The tree drip line is the minimum area around a tree in which the tree's root system should not be disturbed by cut, fill, or soil compaction caused by heavy equipment. When cutting or filling must be done near a tree, a retaining wall or tree well should be used to minimize the cutting of the tree's roots or the quantity of fill placed over the roots.

Protect Area from Upgradient runoff

Protect areas to be disturbed from stormwater runoff. Use dikes, diversions, and waterways to interrupt runoff and divert it away from cut-and- fill slopes or other disturbed areas. To reduce on-site erosion, install these measures before clearing and grading.

Earth dikes, perimeter dikes or swales, or diversions can be used to intercept and convey runoff above disturbed areas. An earth dike is a temporary berm or ridge of compacted soil that channels water around or away from disturbed areas. A perimeter dike/swale or diversion is a swale with a supporting ridge on the lower side that is constructed from the soil excavated from the adjoining swale. These practices should be used to intercept flow from denuded areas or newly seeded areas to keep the disturbed areas from being eroded from the uphill runoff. The structures should be stabilized within 14 days of installation or as soon as practicable with vegetation, slope coverings or other appropriate erosion prevention measures. A pipe slope drain, also known as a pipe drop structure, is a temporary pipe placed from the top of a slope to the bottom of the slope to convey concentrated runoff down the slope without causing erosion.

Reduce Runoff Velocities

Keep runoff velocities low. Clearing existing vegetation reduces the surface roughness and infiltration rate and thereby increases runoff velocities and volumes. Use measures that break the slopes to reduce the problems associated with concentrated flow volumes and runoff velocities. Practical ways to reduce velocities include conveying stormwater runoff away from steep slopes to stabilized outlets, preserving natural vegetation where possible, and mulching and vegetating exposed areas immediately after construction.

Benches, terraces, or ditches break up a slope by providing areas of low slope in the reverse direction. This keeps water from proceeding down the slope at increasing volume and velocity. Instead, the flow is directed to a suitable outlet, such as a sediment basin or trap. The frequency of benches, terraces, or ditches

will depend on the erodibility of the soils, steepness and length of the slope, and rock outcrops. This practice should be used if there is a potential for erosion along the slope. Use retaining walls. Often retaining walls can be used to decrease the steepness of a slope. If the steepness of a slope is reduced, the runoff velocity is decreased and therefore, the erosion potential is decreased. Retaining walls also may actually encourage water to infiltrate rather than runoff, thereby helping maintain the natural hydrologic characteristics of a site.

Provide linings for urban runoff conveyance channels. Construction often increases the velocity and volume of runoff, which causes erosion in newly constructed or existing urban runoff conveyance channels. If the runoff during or after construction will cause erosion in a channel, the channel should be lined or flow control BMPs installed. The first choice of lining should be grass or sod since this reduces runoff velocities and provides water quality benefits through filtration and infiltration. If the velocity in the channel would erode the grass or sod, then riprap, concrete, or gabions can be used.

Use check dams. Check dams are small, temporary dams constructed across a swale or channel. They can be constructed using gravel or straw bales. They are used to reduce the velocity of concentrated flow and, therefore, to reduce the erosion in a swale or channel. Check dams should be used when a swale or channel will be used for a short time and therefore it is not feasible or practical to line the channel or implement flow control BMPs.

Site Stabilization

Removing the vegetative cover and altering the soil structure by clearing, grading, and compacting the surface increases an area's susceptibility to erosion. Apply stabilizing measures as soon as possible after the land is disturbed (Figure 1-5). Plan and implement temporary or permanent vegetation, mulches, or other protective practices to correspond with construction activities. Protect channels from erosive forces by using protective linings and the appropriate channel design. Consider possible future repairs and maintenance of these practices in the design.

Seeding establishes a vegetative cover on disturbed areas. Seeding is very effective in controlling soil erosion once a vegetative cover of about 80% has been established. However, often seeding and fertilizing do not produce as thick a vegetative cover as do seed and mulch or netting. Newly established vegetation does not have as extensive a root system as existing vegetation and therefore is more prone to erosion, especially on steep slopes. Care should be taken when fertilizing to avoid untimely or excessive application. Since the practice of seeding and fertilizing does not provide any protection during the time of vegetative establishment, it should be used only on favorable soils in very flat areas and not in sensitive areas.

The management of land by using ground cover reduces erosion by reducing the

flow rate of runoff and the raindrop impact. Bare soils should be seeded or otherwise stabilized within 14 calendar days after final grading or where construction activity has temporarily ceased for more than 21 days. In very flat, non-sensitive areas with favorable soils, stabilization may involve simply seeding and fertilizing. Mulch and/or sod may be necessary on steeper slopes, for erodible soils, and near sensitive areas. Sediment that has escaped the site due to the failure of sediment and erosion controls should be removed as soon as possible to minimize offsite impacts. Permission should be obtained from adjacent landowners prior to offsite sediment removal.

Mulching/mats can be used to protect the disturbed area while vegetation becomes established. Mulching involves applying plant residues or other suitable materials on disturbed soil surfaces. Mulches/mats used include tacked straw, wood chips, and jute netting and are often covered by blankets or netting. Mulching alone should be used only for temporary protection of the soil surface or when permanent seeding is not feasible. The useful life of mulch varies with the material used and the amount of precipitation, but is approximately 2 to 6 months.

During times of year when vegetation cannot be established, soil mulching should be applied to moderate slopes and soils that are not highly erodible. On steep slopes or highly erodible soils, multiple mulching treatments should be used. Interlocking ceramic materials, filter fabric, and netting are available for this purpose. Before stabilizing an area, it is important to have installed all sediment controls and diverted runoff away from the area to be planted. Runoff may be diverted away from denuded areas or newly planted areas using dikes, swales, or pipe slope drains to intercept runoff and convey it to a permanent channel or storm drain. Reserved topsoil may be used to revegetate a site if the stockpile has been covered and stabilized.

Consideration should be given to maintenance when designing mulching and matting schemes. Plastic nets are often used to cover the mulch or mats; however, they can foul lawn mower blades if the area requires mowing.

Sod can be used to permanently stabilize an area. Sodding provides immediate stabilization of an area and should be used in critical areas or where establishment of permanent vegetation by seeding and mulching would be difficult. Sodding is also a preferred option when there is high erosion potential during the period of vegetative establishment from seeding.

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.

Blankets and Matting

Blankets and matting material can be used as an aid to control erosion on critical sites during establishment period of protective vegetation. The most common uses are: in channels where designed flow exceeds 3.5 feet per second; on interceptor swales and diversion dikes when design flow exceeds 6 feet per second; on short, steep slopes where erosion hazard is high and planting is likely to be slow to establish adequate protective cover; and on stream banks where moving water is likely to wash out new vegetative plantings.

Blankets and matting can also be used to create erosion stops on steep, highly erodible watercourses. Erosion stops should be placed approximately 3 feet down channel from point of entry of a concentrated flow such as from culverts, tributary channels or diversions or at points where a change in gradient or course of channel occurs. Spacing of erosion stops on long slopes will vary, depending on the erodibility of the soil and velocity and volume of flow. Erosion stops are placed beneath blankets and matting.

Hydraulic Mulch

Hydraulic mulch consists of applying a mixture of shredded wood fiber or a hydraulic matrix, and a stabilizing emulsion or tackifier with hydro-mulching equipment, which temporarily protects exposed soil from erosion by raindrop impact or wind. Hydraulic mulch is suitable for soil disturbed areas requiring temporary protection until permanent stabilization is established, and disturbed areas that will be re-disturbed following an extended period of inactivity. It is not appropriate for slopes of 3:1 or steeper or for use in channels.

Wood fiber hydraulic mulches are generally short lived and need 24 hours to dry before rainfall occurs to be effective. May require a second application in order to remain effective for an entire rainy season.

Sod

Sod is appropriate for disturbed areas which require immediate vegetative covers, or where sodding is preferred to other means of grass establishment. Locations particularly suited to stabilization with sod are waterways carrying intermittent flow,

areas around drop inlets or in grassed swales, and residential or commercial lawns where quick use or aesthetics are factors.

Temporary Construction Entrance/Exit

The purpose of a temporary gravel construction entrance is to provide a stable entrance/exit condition from the construction site and keep mud and sediment off public roads. A stabilized construction 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-ofway, street, alley, sidewalk or parking area. The purpose of a stabilized construction entrance is to reduce or eliminate the tracking or flowing of sediment onto public rights-of-way. This practice should be used at all points of construction ingress and egress.

Silt Fence

A silt fence is a barrier consisting of geotextile fabric supported by metal posts to prevent soil and sediment loss from a site. When properly used, silt fences can be highly effective at controlling sediment from disturbed areas. They cause runoff to pond, allowing heavier solids to settle out. If not properly installed, silt fences are not likely to be effective.

The purpose of a silt fence is to intercept and detain water-borne sediment from unprotected areas of a limited extent. Silt fence is used during the period of construction near the perimeter of a disturbed area to intercept sediment while allowing water to percolate through. This fence should remain in place until the disturbed area is permanently stabilized. Silt fence should not be used where there is a concentration of water in a channel or drainage way. If concentrated flow occurs after installation, corrective action must be taken such as placing a rock berm in the areas of concentrated flow.

Silt fencing within the site may be temporarily moved during the day to allow construction activity provided it is replaced and properly anchored to the ground at the end of the day. Silt fences on the perimeter of the site or around drainage ways should not be moved at any time.

Rock Berms

The purpose of a rock berm is to serve as a check dam in areas of concentrated flow, to intercept sediment-laden runoff, detain the sediment and release the water in sheet flow. The rock berm should be used when the contributing drainage area is less than 5 acres. Rock berms are used in areas where the volume of runoff is too great for a silt fence to contain. They are less effective for sediment removal than silt fences, particularly for fine particles, but are able to withstand higher flows than a silt fence. As such, rock berms are often used in areas of channel flows (ditches, gullies, etc.). Rock berms are most effective at reducing bed load in

channels and should not be substituted for other erosion and sediment control measures farther up the watershed.

High Service Rock Berms

A high service rock berm should be designated in areas of important environmental significance such as in steep canyons or above permanent springs, pools, recharge features, or other environmentally sensitive areas that may require a higher level of protection. This type of sediment barrier combines the characteristics of a silt fence and a rock berm to provide a substantial level of sediment reduction and a sturdy enough barrier to withstand higher flows. The drainage area to this device should not exceed 5 acres and the slope should be less than 30%.

Check Dams

Check dams are small barriers consisting of rock or earthen berms placed across a drainage swale or ditch. They reduce the velocity of small concentrated flows, provide a limited barrier for sediment and help disperse concentrated flows, reducing potential erosion.

They are used primarily in long drainage swales or ditches in which permanent vegetation may not be established and erosive velocities are present. They are typically used in conjunction with other techniques such as inlet protection, riprap or other sediment reduction techniques. Check dams provide limited treatment. They are more useful in reducing flow to acceptable levels for other techniques (NCTCOG, 1993b).

Although check dams are effective in reducing flow velocity and thereby the potential for channel erosion, it is usually better to establish a protective vegetative lining before flow is confined or to install a structural channel lining. However, under circumstances where this is not feasible, check dams are useful.

Concrete Washout Areas

The purpose of concrete washout areas is to prevent or reduce the discharge of pollutants to stormwater from concrete waste by conducting washout offsite, performing onsite washout in a designated area, and training employees and subcontractors. The following steps will help reduce stormwater pollution from concrete wastes:

- Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.
- Avoid mixing excess amounts of fresh concrete.
- Perform washout of concrete trucks in designated areas only.

- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.

- Do not allow excess concrete to be dumped onsite, except in designated areas.

For onsite washout:

- Locate washout area at least 50 feet from sensitive features, storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.

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

Below grade concrete washout facilities are typical. These consist of a lined excavation sufficiently large to hold expected volume of washout material. Above grade facilities are used if excavation is not practical. Temporary concrete washout facility (type above grade) should be constructed as shown on the details at the end of this section, with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. Plastic lining material should be a minimum of 10 mil in polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.

When temporary concrete washout facilities are no longer required for the work, the hardened concrete should be removed and disposed of. Materials used to construct temporary concrete washout facilities should be removed from the site of the work and disposed of. Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled and repaired.

Vehicle and Equipment Maintenance

(1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the run on of stormwater and the runoff of spills.

(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately.

(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.

(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.

(5) Place drip pans or absorbent materials under paving equipment when not in use.

(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.

(7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.

(9) Store cracked batteries in a non- leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

(1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the 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.

TEMPORARY STORMWATER SECTION

The anticipated major construction activities sequence and appropriate control measure as follows:

1. Installation of temporary erosion and sediment controls (Temporary Construction Entrance/Exit, Silt Fence, Check Dams)

2. Construct bridge abutments (Included pervious steps and Concrete Washout Areas)

3. Pour bridge columns and piers (Included pervious steps)

4. Construct bridge approaches (Included pervious steps)

5. Construct bridge decking (Included pervious steps)

6. Prepare detour road (Included pervious steps)

7. Prepare road right-of-way (Included pervious steps)

8. Construct road (Included pervious steps)

9. Remove detour road (Permanent vegetation)

10. Remove old portion of Smithson Valley Road (Drainage structure, riprap, asphalt paving, and base material) (Permanent vegetation)

11. Installation of vegetation for final stabilization

12. Final Cleanup

13. Removal of temporary erosion and sediment control measures when revegetation is complete and the site has achieved final stabilization in accordance with the TPDES General Permit No. TXR150000 for Storm Water Discharges from Construction Activities.

No naturally-occurring sensitive features were identified on-site during the geologic assessment.

ATTACHMENT E – REQUEST TO TEMPORARILY SEAL A FEATURE

Not applicable.

ATTACHMENT F – STRUCTURAL PRACTICES

The following structural measures will be installed prior to the initiation of site preparation activities:

- Erection of silt fences along the boundary of construction activities, as required as located on the plan and illustrated in the details.
- Installation of stabilized construction entrance/exit, as required as located on the plan and illustrated in the details.
- Installation of stabilized construction staging area, as determined in the field by the contractor.
- Installation of Check Dams

ATTACHMENT G – DRAINAGE AREA MAP

Attached – Drainage Area Map.

ATTACHMENT H – TEMPORARY SEDIMENT POND(S) PLAN AND CALCULATIONS

Sediment ponds are not planned for this project.

ATTACHMENT I – INSPECTION AND MAINTENANCE FOR BMPS

MAINTENANCE

Structural controls shall be inspected as stipulated in this plan. Structural units shall be maintained to perform the function as intended until all soil disturbing activities have been completed and a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established in all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of rip-rap, gabions, or geotextiles) have been employed.

When a structure deteriorates to a condition so that its performance is less than intended, the structure shall be repaired or replaced to full function as specified before the next anticipated storm event or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, the maintenance must be scheduled and accomplished as soon as practicable.

Erosion and sediment controls that have been intentionally disabled, run-over, removed, or otherwise rendered ineffective, must be replaced or corrected immediately upon discovery.

Particular attention shall be paid to the sedimentation areas behind the rock berms and silt fences. When the sediment has accumulated to six inches or more behind a rock berm or silt fence, (from construction debris, tree trimming, trash, municipal type garbage, etc.) it shall be removed and the rock berms and silt fences shall be restored to their original specifications. Contaminated sediment removed from containment areas (vehicle maintenance, concrete wash-out pits, etc.) shall be disposed of off-site in accordance with the appropriate regulations.

INSPECTIONS

Designated and qualified person(s) shall inspect the pollution control measures every fourteen (14) days and within twenty-four (24) hours after a storm event with more than 0.5 inches of rainfall has occurred at the project site. As an alternative, inspections may be scheduled at least once every seven (7) calendar days. The inspection must occur on a specifically defined day, regardless of whether or not there has been a rainfall event since the previous inspection. In the event of flooding or other uncontrollable situation, which prohibits access to the inspection sites, the inspections must be conducted as soon as access is practicable. Where sites have been permanently or temporarily stabilized, inspections must be conducted at least once every month.

An inspection report that summarizes the scope of the inspection, names and qualifications of personnel conducting the inspection, date of the inspection, major observations, and actions taken as a result of the inspection shall be recorded and maintained as part of the Storm Water TPDES data for a period of three (3) years after the date of the inspection. Major observations should include the following:

- The locations of discharges of sediment or other pollutants from the site;
- The locations of the BMPs that need to be maintained;
- The locations of BMPs that failed to operate as designed or proved inadequate;
- The locations where additional BMPs are needed.

A copy of the Inspection Report Form is provided in the “Inspection Record” section of this SWP3.

As a minimum, the inspector shall observe the following:

- Significant disturbed areas for evidence of erosion;
- Storage areas for evidence of leakage from the exposed stored materials;
- Structural controls (rock berm outlets, silt fences, drainage swales, etc.) for evidence of failure or excess silt accumulation (more than six (6) inches deep);
- Vehicle exit point for evidence of off-site sediment tracking;
- Vehicle storage areas for signs of leaking equipment or spills;
- Concrete truck rinse-out pit for signs of potential failure;
- General site cleanliness

Any deficiencies noted during the inspection process shall be corrected and documented within seven (7) calendar days following the inspection or before the next anticipated storm event if practicable.

When an inspection does not identify any incident of non-compliance, the report must contain a certification signed in accordance with 30 TAC §305.128 stating the site is in compliance with the SWP3 and the TPDES general permit conditions.

TEMPORARY STORMWATER SECTION

PROJECT MILESTONE DATES

Date when major site grading activities begin:

Construction Activity	Date

Dates when construction activities temporarily or permanently cease on all or a portion of the project:

Construction Activity	Date

Date when stabilization measures are initiated:

Stabilization Activity	Date

ON-SITE MATERIALS LIST

List of construction and waste materials to be stored on-site. This list is to be kept current and updated. (Examples: topsoil, gravel, sand, base, excess material to be hauled off, demolition or construction waste, bulk chemicals, fuel, lubricants, etc.)

TEMPORARY STORMWATER SECTION

Pollution Prevention Measure	Inspected in Compliance	Corrective Action Required	
		Description (use additional sheet if necessary)	Date Completed
Best Management Practices			
Natural Vegetation Buffer Strip			
Temporary Vegetation			
Permanent Vegetation			
Sediment Control Basin			
Silt Fences			
Rock Berms			
Check Dams			
Gravel Filter Bags			
Drain Inlet Protection			
Other Structural Controls			
Vehicle Exits (Off-Site Tracking)			
Material Storage Areas (Leakage)			
Equipment Areas (Leaks, Spills)			
Concrete Washout Pit (Leaks, Failure)			
General Site Cleanliness			
Trash Receptacles			
Evidence of Erosion			
Site Preparation			
Roadway or Parking Lot Construction			
Utility Construction			
Drainage Construction			
Building Construction			
Major Observations			
Sediment Discharges from Site			
BMPs Requiring Maintenance			
BMPs Requiring Modification			
Additional BMPs Required			

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

"I further certify I am an authorized signatory in accordance with the provisions of 30 TAC §305.128."

_____	_____	_____
Inspector's Name	Inspector's Signature	Date
_____	_____	_____
Name of Owner/Operator (Firm)	Authorized Signature	Date

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

ATTACHMENT J – SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

Disturbed areas on which construction activities have ceased, temporarily or permanently, shall be stabilized within fourteen (14) calendar days unless they are scheduled to and do resume within 21 calendar days. The schedule for major soil disturbing activities includes the following:

1. Install controls down-slope of work area and initiate inspection and maintenance activities.

2. Begin construction with interim stabilization practices. Adjust erosion and sedimentation controls during construction to meet requirements and changing conditions and as directed/approved by the Engineer.

3. Major soil disturbing activities may include, but are not limited to: preparation of trail alignment – including excavating 8" down for preparation of proposed trail section.

Interim on-site stabilization measures, which are continuous (on-going), will include the following:

- Soil disturbances shall be minimized by exposing only the smallest practical area of land required for the clearing and grading activity and for the construction activity, for the shortest practical period of time.

- Maximum practical use will be made of natural vegetation including grass, weeds, trees, shrubs, etc. by leaving these materials in place until construction necessitates clearing the minimal practical area for continuance of construction.

- Trenching and associated backfilling for utilities and for storm drainage piping shall be coordinated to minimize, the extent practical, the time the area is disturbed.

Permanent on-site stabilization measures, which will be scheduled as detailed below, will include the following:

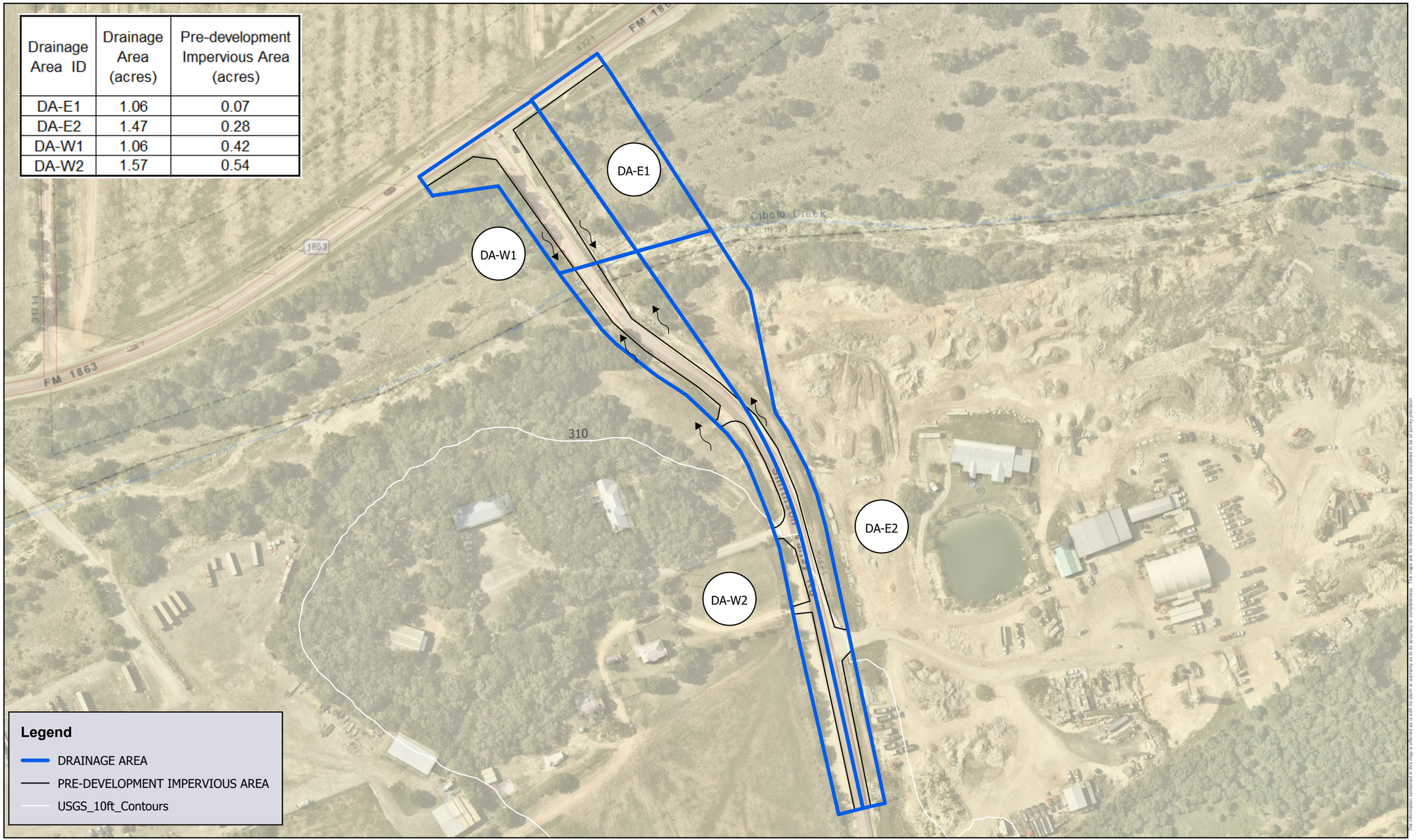
- First, as soon as acceptable subgrade compaction occurs, exposed native soil in driveway areas will be covered with flexible base material, compacted and stabilized to the maximum practical extent during construction, but prior to placement of finished pavement surface.

- Second, as soon as practical, all disturbed soil that will be stabilized as per applicable project specifications.

Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporary 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 resume in 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.

Drainage Area ID	Drainage Area (acres)	Pre-development Impervious Area (acres)
DA-E1	1.06	0.07
DA-E2	1.47	0.28
DA-W1	1.06	0.42
DA-W2	1.57	0.54



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100 NE Intestate 410 Loop Suite 701
San Antonio, TX 78216

N
W E
S

EXIST DRAINAGE AREA MAP

0 75 150
SCALE IN FEET

Smithson Valley Road
&
FM 1863

Drainage Area ID	Drainage Area (acres)	Post-Development Impervious Area (acres)
DA-E1	1.06	0.19
DA-E2	1.47	0.42
DA-W1	1.06	0.24
DA-W2	1.57	0.41

DA-E1

DA-W1

DA-E2

DA-W2

FM 1863

FM 1863

Cibolo Creek

310

Legend

- DRAINAGE AREA
- POST-DEVELOPMENT IMPERVIOUS AREA
- USGS_10ft_Contours

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100 NE Intestate 410 Loop Suite 701
San Antonio, TX 78216

N W E S

PROP DRAINAGE AREA MAP

0 75 150
SCALE IN FEET

Smithson Valley Road
&
FM 1863

DATE:
FILE:

I. STORMWATER POLLUTION PREVENTION-CLEAN WATER ACT SECTION 402

TPDES TXR 150000: Stormwater Discharge Permit or Construction General Permit required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 506.

List MS4 Operator(s) that may receive discharges from this project. They may need to be notified prior to construction activities.

1.

2.

☐ No Action Required ☒ Required Action

Action No.

1. Prevent stormwater pollution by controlling erosion and sedimentation in accordance with TPDES Permit TXR 150000

2. Comply with the SW3P and revise when necessary to control pollution or required by the Engineer.

3. Post Construction Site Notice (CSN) with SW3P information on or near the site, accessible to the public and TCEQ, EPA or other inspectors.

4. When Contractor project specific locations (PSL's) increase disturbed soil area to 5 acres or more, submit NOI to TCEQ and the Engineer.

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas.

The Contractor must adhere to all of the terms and conditions associated with the following permit(s):

☐ No Permit Required

☒ Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)

☐ Nationwide Permit 14 - PCN Required (1/10 to <1/2 acre, 1/3 in tidal waters)

☐ Individual 404 Permit Required

☐ Other Nationwide Permit Required: NWP# _____

Required Actions: List waters of the US permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

1.

2.

3.

4.

The elevation of the ordinary high water marks of any areas requiring work to be performed in the waters of the US requiring the use of a nationwide permit can be found on the Bridge Layouts.

Best Management Practices:

Erosion	Sedimentation	Post-Construction TSS
☒ Temporary Vegetation	☒ Silt Fence	☐ Vegetative Filter Strips
☐ Blankets/Matting	☒ Rock Berm	☐ Retention/Irrigation Systems
☐ Mulch	☐ Triangular Filter Dike	☐ Extended Detention Basin
☐ Sodding	☐ Sand Bag Berm	☐ Constructed Wetlands
☐ Interceptor Swale	☐ Straw Bale Dike	☐ Wet Basin
☐ Diversion Dike	☐ Brush Berms	☐ Erosion Control Compost
☐ Erosion Control Compost	☐ Erosion Control Compost	☐ Mulch Filter Berm and Socks
☐ Mulch Filter Berm and Socks	☐ Mulch Filter Berm and Socks	☐ Compost Filter Berm and Socks
☐ Compost Filter Berm and Socks	☐ Compost Filter Berm and Socks	☐ Vegetation Lined Ditches
	☐ Stone Outlet Sediment Traps	☐ Sand Filter Systems
	☐ Sediment Basins	☐ Grassy Swales

III. CULTURAL RESOURCES

Refer to TxDOT Standard Specifications in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the immediate area and contact the Engineer immediately.

☒ No Action Required ☐ Required Action

Action No.

1.

2.

3.

4.

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical.
Contractor must adhere to Construction Specification Requirements Specs 162, 164, 192, 193, 506, 730, 751, 752 in order to comply with requirements for invasive species, beneficial landscaping, and tree/brush removal commitments.

☒ No Action Required ☐ Required Action

Action No.

1.

2.

3.

4.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.

☒ No Action Required ☐ Required Action

Action No.

1.

2.

3.

4.

If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediate area, and contact the Engineer immediately.

LIST OF ABBREVIATIONS

BMP:	Best Management Practice	SPCC:	Spill Prevention Control and Countermeasure
CGP:	Construction General Permit	SW3P:	Storm Water Pollution Prevention Plan
DSHS:	Texas Department of State Health Services	PCN:	Pre-Construction Notification
FHWA:	Federal Highway Administration	PSL:	Project Specific Location
MOA:	Memorandum of Agreement	TCEQ:	Texas Commission on Environmental Quality
MOU:	Memorandum of Understanding	TPDES:	Texas Pollutant Discharge Elimination System
MS4:	Municipal Separate Stormwater Sewer System	TPWD:	Texas Parks and Wildlife Department
MBTA:	Migratory Bird Treaty Act	TxDOT:	Texas Department of Transportation
NOT:	Notice of Termination	T&E:	Threatened and Endangered Species
NWP:	Nationwide Permit	USACE:	U.S. Army Corps of Engineers
NOI:	Notice of Intent	USFWS:	U.S. Fish and Wildlife Service

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):

Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropriate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act.

Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the District Spill Coordinator immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

Contact the Engineer if any of the following are detected:

- Dead or distressed vegetation (not identified as normal)
- Trash piles, drums, canister, barrels, etc.
- Undesirable smells or odors
- Evidence of leaching or seepage of substances

Does the project involve any bridge class structure rehabilitation or replacements (bridge class structures not including box culverts)?

☐ Yes ☒ No

If "No", then no further action is required.
If "Yes", then TxDOT is responsible for completing asbestos assessment/inspection.

Are the results of the asbestos inspection positive (is asbestos present)?

☐ Yes ☐ No

If "Yes", then TxDOT must retain a DSHS licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary. The notification form to DSHS must be postmarked at least 15 working days prior to scheduled demolition.

If "No", then TxDOT is still required to notify DSHS 15 working days prior to any scheduled demolition.

In either case, the Contractor is responsible for providing the date(s) for abatement activities and/or demolition with careful coordination between the Engineer and asbestos consultant in order to minimize construction delays and subsequent claims.

Any other evidence indicating possible hazardous materials or contamination discovered on site. Hazardous Materials or Contamination Issues Specific to this Project:

☒ No Action Required ☐ Required Action

Action No.

1.

2.

3.

VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

☐ No Action Required ☒ Required Action

Action No.

1. Edward Aquifer rules apply

2.

3.

Texas Department of Transportation

Design Division Standard

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS

EPIC

FILE: epic.dgn	DN: TxDOT	CK: RG	DW: VP	CK: AR
©TxDOT: February 2015	CONT	SECT	JOB	HIGHWAY
REVISIONS				
12-12-2011 (DS)				
05-07-14 ADDED NOTE SECTION IV.	DIST	COUNTY		SHEET NO.
01-23-2015 SECTION I CHANGED ITEM 1122 TO ITEM 506, ADDED GRASSY SWALES.				99

STORMWATER POLLUTION PREVENTION PLAN (SWP3):

This SWP3 has been developed in accordance with the TPDES Construction General Permit TXR150000 (CGP). The Texas Department of Transportation (TxDOT) ensures that project specifications include adequate best management practices (BMPs) for this project.

For all projects with soil disturbing activity and for projects that have Environmental, Permits, Issues, and Commitments (EPICs) dependent on stormwater controls and water quality measures TxDOT will maintain a SWP3 with all pertinent records, correspondence, environmental documents, etc. at the project field office, Area Office, or electronically.

This SWP3 is consistent with requirements specified in applicable stormwater plans and the projects environmental permits, issues, and commitments (EPICs). A copy of the CGP is included in Attachment 2.12 of the SWP3 binder.

1.0 SITE/PROJECT DESCRIPTION

1.1 PROJECT CONTROL SECTION JOB (CSJ):

N/A

1.2 PROJECT LIMITS:

From: STA 10+20.00

To: STA 19+15.00

1.3 PROJECT COORDINATES:

BEGIN: (Lat) 29.749161, (Long) -98.408592

END: (Lat) 29.747128, (Long) -98.406875

1.4 TOTAL PROJECT AREA (Acres): 4.19 Acres

1.5 TOTAL AREA TO BE DISTURBED (Acres): 1.97 Acres

1.6 NATURE OF CONSTRUCTION ACTIVITY:

The proposed project is a 4.19 acre site to be developed as a Bexar / Comal County Road. The project will include a 400 LF concrete bridge crossing Cibolo Creek with asphalt approaches two-lane road.The proposed road will link between the existing FM 1863 and Smithson Valley Road.

1.7 MAJOR SOIL TYPES:

Soil Type	Description
Orif soils	0-3% slopes, High infiltration rate when throroughly wetted.
Lewisville Silty Clay	1-3% slopes, Slow infiltration rate when throroughly wetted.
Sunev Silty Clay Loam	0-3% slopes, Moderate infiltration rate when throroughly wetted.

1.8 PROJECT SPECIFIC LOCATIONS (PSLs):

PSLs must be depicted on the Environmental Layout Sheets in Attachment 1.2 of this SWP3. PSLs may be identified during preconstruction meetings or during the construction process. Please choose from the options below:

- ☐ PSLs determined during preconstruction meeting
- ☐ PSLs determined during construction
- ☐ No PSLs planned for construction

Type	Sheet #s

All off-ROW PSLs required by the Contractor are the Contractor's responsibility. The Contractor shall secure all permits required by local, state, federal laws for off-ROW PSLs. The contractor shall provide diagrams, areas of disturbance, acreage, and BMPs for all off-ROW PSLs within one mile of the project.

1.9 CONSTRUCTION ACTIVITIES:

(Use the following list as a starting point when developing the Construction Activity Schedule and Ceasing Record in Attachment 2.5.)

- ☒ Mobilization
- ☒ Install sediment and erosion controls
- ☒ Blade existing topsoil into windrows, prep ROW, clear and grub
- ☒ Remove existing pavement
- ☒ Grading operations, excavation, and embankment
- ☒ Excavate and prepare subgrade for proposed pavement widening
- ☒ Remove existing culverts, safety end treatments (SETs)
- ☒ Remove existing metal beam guard fence (MBGF), bridge rail
- ☒ Install proposed pavement per plans
- ☒ Install culverts, culvert extensions, SETs
- ☒ Install mow strip, MBGF, bridge rail
- ☒ Place flex base
- ☒ Rework slopes, grade ditches
- ☐ Blade windrowed material back across slopes
- ☒ Revegetation of unpaved areas
- ☒ Achieve site stabilization and remove sediment and erosion control measures
- ☒ Other: INSTALL PROPOSED BRIDGE PER PLANS.
- ☐ Other: _____
- ☐ Other: _____

1.10 POTENTIAL POLLUTANTS AND SOURCES:

- ☒ Sediment laden stormwater from stormwater conveyance over disturbed area
- ☒ Fuels, oils, and lubricants from construction vehicles, equipment, and storage
- ☒ Solvents, paints, adhesives, etc. from various construction activities
- ☒ Transported soils from offsite vehicle tracking
- ☒ Construction debris and waste from various construction activities
- ☒ Contaminated water from excavation or dewatering pump-out water
- ☐ Sanitary waste from onsite restroom facilities
- ☒ Trash from various construction activities/receptacles
- ☒ Long-term stockpiles of material and waste
- ☒ Discharges from concrete washout activities, runoff from concrete cutting activities, and other concrete related activities.
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

1.11 RECEIVING WATERS:

Receiving waters must be depicted on the Environmental Layout Sheets in Attachment 1.2 of this SWP3. Include Segment # for receiving waters.

Tributaries	Classified Waterbody
Cibolo Creek	0-3% slopes, High infiltration rate when throroughly wetted.

* Add (*) for impaired waterbodies with pollutant in ().

1.12 ROLES AND RESPONSIBILITIES: BEXAR COUNTY

- ☒ Development of plans and specifications
- ☒ Submit Notice of Intent (NOI) to TCEQ (≥5 acres)
- ☒ Post Construction Site Notice
- ☒ Submit NOI/CSN to local MS4
- ☒ Perform SWP3 inspections
- ☒ Maintain SWP3 records and update to reflect daily operations
- ☒ Complete and submit Notice of Termination to TCEQ
- ☒ Maintain SWP3 records for 3 years
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

1.13 ROLES AND RESPONSIBILITIES: CONTRACTOR

- ☒ Day To Day Operational Control
- ☒ Submit Notice of Intent (NOI) to TCEQ (≥5 acres)
- ☒ Post Construction Site Notice
- ☒ Submit NOI/CSN to local MS4
- ☒ Maintain schedule of major construction activities
- ☒ Install, maintain and modify BMPs
- ☒ Complete and submit Notice of Termination to TCEQ
- ☒ Maintain SWP3 records for 3 years
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

1.14 LOCAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) OPERATOR COORDINATION:

MS4 Entity

STORMWATER POLLUTION PREVENTION PLAN (SWP3)

July 2023 Sheet 1 of 2

Texas Department of Transportation

FED. RD. DIV. NO.	PROJECT NO.		SHEET NO.
			100
STATE	STATE DIST.	COUNTY	
TEXAS			
CONT.	SECT.	JOB	HIGHWAY NO.

STORMWATER POLLUTION PREVENTION PLAN (SWP3):

2.0 BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS, INSPECTION, AND MAINTENANCE

The Contractor shall be the responsible party for implementing the BMPs described herein and for complying with the SWP3 for control of erosion and sedimentation during day-to-day operations. The Contractor shall implement changes to this SWP3 approved by TxDOT within the times specified in this SWP3 or the CGP.

2.1 EROSION CONTROL AND SOIL STABILIZATION BMPs:

T / P

- [X] [X] Protection of Existing Vegetation
- [X] [ ] Vegetated Buffer Zones
- [ ] [ ] Soil Retention Blankets
- [ ] [ ] Geotextiles
- [ ] [ ] Mulching/ Hydromulching
- [ ] [ ] Soil Surface Treatments
- [ ] [X] Temporary Seeding
- [ ] [X] Permanent Planting, Sodding or Seeding
- [ ] [ ] Biodegradable Erosion Control Logs
- [X] [ ] Rock Filter Dams/ Rock Check Dams
- [ ] [ ] Vertical Tracking
- [ ] [ ] Interceptor Swale
- [X] [X] Riprap
- [ ] [ ] Diversion Dike
- [X] [ ] Temporary Pipe Slope Drain
- [ ] [ ] Embankment for Erosion Control
- [ ] [ ] Paved Flumes
- [ ] [ ] Other: _____
- [ ] [ ] Other: _____
- [ ] [ ] Other: _____
- [ ] [ ] Other: _____

2.2 SEDIMENT CONTROL BMPs:

T / P

- [ ] [ ] Biodegradable Erosion Control Logs
- [ ] [ ] Dewatering Controls
- [ ] [ ] Inlet Protection
- [X] [ ] Rock Filter Dams/ Rock Check Dams
- [ ] [ ] Sandbag Berms
- [X] [ ] Sediment Control Fence
- [ ] [ ] Stabilized Construction Exit
- [ ] [ ] Floating Turbidity Barrier
- [ ] [ ] Vegetated Buffer Zones
- [ ] [X] Vegetated Filter Strips
- [ ] [ ] Other: _____
- [ ] [ ] Other: _____
- [ ] [ ] Other: _____
- [ ] [ ] Other: _____

Refer to the Environmental Layout Sheets/ SWP3 Layout Sheets located in Attachment 1.2 of this SWP3

Sediment control BMPs requiring design capacity calculations (See SWP3 Attachment 1.3.):

T / P

- [ ] [ ] Sediment Trap
  - [ ] Calculated volume runoff from 2-year, 24-hour storm for each acre of disturbed area
  - [ ] 3,600 cubic feet of storage per acre drained
- [ ] [ ] Sedimentation Basin
  - [X] Not required (<10 acres disturbed)
  - [ ] Required (>10 acres) and implemented.
    - [ ] Calculated volume runoff from 2-year, 24-hour storm for each acre of disturbed area
    - [ ] 3,600 cubic feet of storage per acre drained
  - [ ] Required (>10 acres), but not feasible due to:
    - [ ] Available area/Site geometry
    - [ ] Site slope/Drainage patterns
    - [ ] Site soils/Geotechnical factors
    - [ ] Public safety
    - [ ] Other: _____

2.3 PERMANENT CONTROLS:

(Coordinate post-construction BMPs with appropriate TxDOT maintenance sections.)

BMPs To Be Left In Place Post Construction:

Type	Stationing	
	From	To

Refer to the Environmental Layout Sheets/ SWP3 Layout Sheets located in Attachment 1.2 of this SWP3

2.4 OFFSITE VEHICLE TRACKING CONTROLS:

- [X] Excess dirt/mud on road removed daily
- [ ] Haul roads dampened for dust control
- [ ] Loaded haul trucks to be covered with tarpaulin
- [ ] Stabilized construction exit
- [ ] Daily street sweeping
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

2.5 POLLUTION PREVENTION MEASURES:

- [ ] Chemical Management
- [ ] Concrete and Materials Waste Management
- [ ] Debris and Trash Management
- [ ] Dust Control
- [ ] Sanitary Facilities
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

2.6 VEGETATED BUFFER ZONES:

Natural vegetated buffers shall be maintained as feasible to protect adjacent surface waters. If vegetated natural buffer zones are not feasible due to site geometry, the appropriate additional sediment control measures have been incorporated into this SWP3.

Type	Stationing	
	From	To

Refer to the Environmental Layout Sheets/ SWP3 Layout Sheets located in Attachment 1.2 of this SWP3

2.7 ALLOWABLE NON-STORMWATER DISCHARGES:

- [X] Fire hydrant flushings
- [X] Irrigation drainage
- [X] Pavement washwater (where spills or leaks have not occurred, and detergents are not used)
- [X] Potable water sources
- [X] Springs
- [X] Uncontaminated groundwater
- [X] Water used to wash vehicles or control dust
- [X] Other allowable non-stormwater discharges as allowed by TPDES GP TXR150000.

2.8 DEWATERING:

Dewatering discharges of accumulated stormwater, groundwater, and surface water including discharges from dewatering of trenches, excavations, foundations, vaults, and other points of accumulation are prohibited unless managed by appropriate controls to prevent and minimize the offsite discharge of sediment and other pollutants.

2.9 INSPECTIONS:

All disturbed areas and erosion and sediment control devices shall be inspected at least once every seven (7) days. Inspections shall be performed by TxDOT as indicated on the Field Inspection and Maintenance Report Form 2118 and retained in Attachment 2.5 of this SWP3.

When dewatering activities are present, a daily inspection will be conducted once per day during those activities and documented in accordance with CGP and TxDOT requirements.

2.10 MAINTENANCE:

Control measures shall be properly installed according to specifications. If it is determined that a BMP or control measure is not operating effectively, maintenance must be accomplished as soon as possible and before the next anticipated rain event, but in no case later than 7 calendar days after being able to access the site. Maintenance shall be performed by the Contractor as indicated on the Field Inspection and Maintenance Report Form 2118 and retained in Attachment 2.5 of this SWP3.

STORMWATER POLLUTION PREVENTION PLAN (SWP3)

July 2023 Sheet 2 of 2

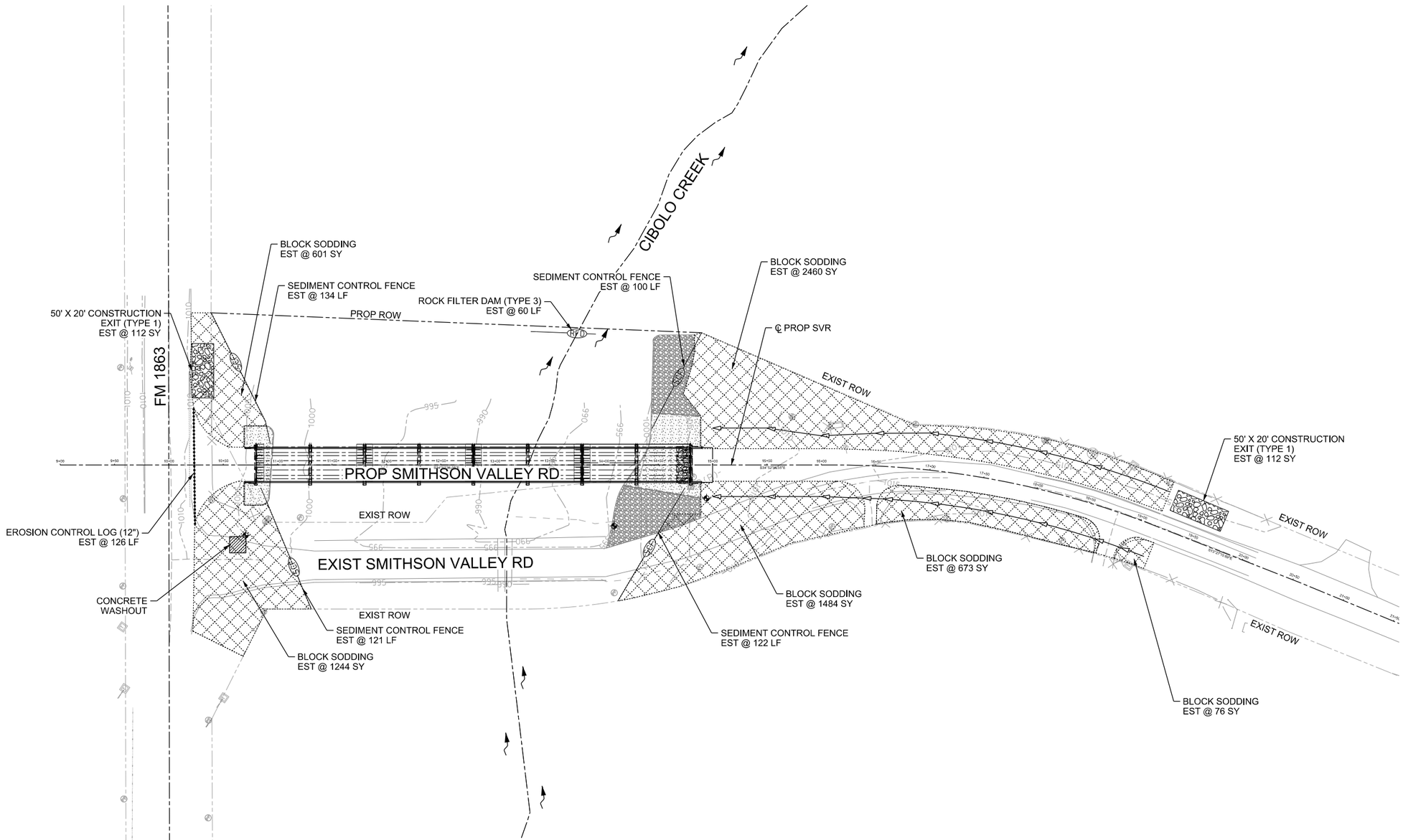
Texas Department of Transportation

FED. RD. DIV. NO.	PROJECT NO.	SHEET NO.
		101

STATE	STATE DIST.	COUNTY	
TEXAS			
CONT.	SECT.	JOB	HIGHWAY NO.

LEGEND

- ROCK FILTER DAM TY 3 (RFD)
- BLOCK SODDING
- SILT FENCE (SCF)
- EROSION CONTROL LOG
- FLOW ARROWS
- CONSTRUCTION ENTRANCE/ EXIT



50 25 0 50 100

SCALE: 1"=100'

STATE OF TEXAS
EDWARD F. HEROLT
100461
LICENSED
PROFESSIONAL ENGINEER

1/17/2025

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY EDWARD F. HEROLT, P.E. # 100461 ON 1-17-2025. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT. THE RECORD COPY OF THIS DRAWING IS ON FILE AT THE OFFICES OF HALFF 100 NE. INTERSTATE 410 LOOP, SUITE 701, SAN ANTONIO, TEXAS 78216. TBPELS FIRM #F-312.

BEXAR COUNTY
PUBLIC WORKS DEPARTMENT

NO	DATE	REVISION DESCRIPTION	DWG	CHK

halff
TBPELS FIRM REGISTRATION #312
100 NE LOOP 410, SUITE 701
SAN ANTONIO, TX 78216-4741
(210) 798-1895

SMITHSON VALLEY ROAD

SWPPP LAYOUT

SCALE 1" = 100' SHEET 1 OF 1

PROJECT AVO:		SHEET NO.
54202.001		109
DESIGNED BY: JRB	ROADWAY/HIGHWAY:	
CHECKED BY: SGL	SMITHSON VALLEY ROAD	
DRAWN BY: JRB	STATE	COUNTY
CHECKED BY: SGL	TEXAS	BEXAR

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: Edward F. Herolt, PE

Date: 11/08/2024

Signature of Customer/Agent

Edward F. Herolt, P.E.

Regulated Entity Name: Smithson Valley Road

Permanent Best Management Practices (BMPs)

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

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

   ☒ N/A

2. ☐ These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.

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

☐ A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is: _____

☒ N/A

3. ☐ Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.

   ☒ N/A

4. Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

   ☐ The site will be used for low density single-family residential development and has 20% or less impervious cover.
   ☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.
   ☒ The site will not be used for low density single-family residential development.

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

   ☐ **Attachment A - 20% or Less Impervious Cover Waiver**. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.
   ☐ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
   ☒ The site will not be used for multi-family residential developments, schools, or small business sites.

6. ☒ **Attachment B - BMPs for Upgradient Stormwater**.

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

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

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

7. ☒ **Attachment C - BMPs for On-site Stormwater**.

☐ A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.

☒ Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.

8. ☒ **Attachment D - BMPs for Surface Streams**. A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.

☐ N/A

9. ☒ The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.

☐ The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.

☐ **Attachment E - Request to Seal Features**. A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.

10. ☒ **Attachment F - Construction Plans**. All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:

☒ Design calculations (TSS removal calculations)

☐ TCEQ construction notes

☐ All geologic features

☐ All proposed structural BMP(s) plans and specifications

☐ N/A

11. ☐ **Attachment G - Inspection, Maintenance, Repair and Retrofit Plan**. A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:

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

    ☐ N/A

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

FORM TCEQ-0600 ATTACHMENTS

ATTACHMENT A — 20% OR LESS IMPERVIOUS COVER WAIVER

Not Applicable.

ATTACHMENT B — BMPS FOR UPGRADIENT STORMWATER

The upgradient flows originating from Cibolo Creek will flow through the project site during storm events less than the 25-year event. These upgradient flows from Cibolo Creek will not pass over impervious surfaces. The proposed bridge decking will span the creek at an elevation greater than the lower storm event's water surface elevation. Due to the topography of the area constructing the bridge and road improvements above the 100-year storm event would be uneconomical. During the 100-year flood event the area will be inundated with stormwater.

The proposed road is aligned to travel perpendicular to the topography and is designed with a 2% crown along the centerline. Upgradient flows from the west and east side of the project site will flow away from the proposed road.

ATTACHMENT C — BMPS FOR ON-SITE STORMWATER

No permanent BMPs or measures are required to prevent pollution of surface water or groundwater that originates on-site or flows off the site.

The existing portion of Smithson Valley Road (Pre-Development) that is going to be removed and realigned to the proposed alignment (Post-Development) will have less impervious cover after construction. The pre-development road will have the asphalt pavement, base material, drainage structure, and concrete riprap removed and permanently vegetated. This existing portion of road does not have any associated WPAPs. Currently the flows from Cibolo Creek flow through the existing drainage structure (3-48" RCP) and concrete riprap until the pipes reach capacity and then the stormwater flows over the road.

The Post-Development road will realign the road and construct a bridge over the creek to allow lower storm events to flow naturally. The proposed road is crowned at the centerline and directs the stormwater off the road and into the naturally vegetated parkway. This stormwater will flow through natural grass areas before entering the creek bed. The proposed bridge abutments will be constructed of rock gabion baskets and will be pervious. The stormwater collected on the bridge decking will flow towards the shoulder of the bridge and travel to the FM 1863 side of the bridge and be released to flow across vegetative areas before entering the creek bed.

Using the TSS removal calculations set forth in the TCEQ RG-348, revised July

2005, “Complying with the Edwards Aquifer Rules Technical Guidance on Best Management Practices” the post development condition will generate less total suspended solids (TSS) than the pre-development condition. The pre-development impervious area is 1.32 acres and the post-development impervious area is 1.27 acres.

Permanent BMPs are not required for this proposed project because the post development condition is improving the pre-development condition. The project area is being improved by realigning and raising the road from the creek bed and reducing the impervious area. Also, by raising the road from the creek bed and directing all flows from the bridge decking to vegetated filter strips and proposed BMPS in accordance with TCEQ RG-348. This will ensure that all flows over impervious areas will be treated by flowing through vegetative areas before entering the creek bed.

ATTACHMENT D –BMPS FOR SURFACE STREAMS

Cibolo Creek at this location is generally a dry creek bed for most periods of the year and doesn’t have surface water.This proposed project will ensure that all flows from impervious surfaces will flow over vegetated filter strips before entering the creek bed. Flows from impervious surfaces will travel through grassed areas by directing the runoff from the road into the vegetative parkway before entering the creek bed.

ATTACHMENT E – REQUEST TO SEAL FEATURES

Not Applicable.

ATTACHMENT F – CONSTRUCTION PLANS

Design Calculations:

The Required Load Reduction from the total project:

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

LM = 27.2(AN x P) Page 3-29 Equation 3.3:

Lm = Required TSS removal

A_N = Net increase in impervious area for site

P = Average annual precipitation, inches

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

County = **Bexar**

Total project area included in plan = **5.15** acres

Predevelopment impervious area within the limits of the plan = **1.32** acres

Total post-development impervious area within the limits of the plan = **1.27** acres

Total post-development impervious cover fraction = **0.25**

P = **30** inches

Total L_M required for this plan = **-41** lbs.

Summary Table – Load Removal

Drainage Area ID	Drainage Area (acres)	Pre-development Impervious Area (acres)	Post-Development Impervious Area (acres)	Post-Development Impervious Cover Fraction	Required TSS Removal (lbs)
DA-E1	1.06	0.07	0.19	0.18	98
DA-E2	1.47	0.28	0.42	0.29	114
DA-W1	1.06	0.42	0.24	0.23	-145
DA-W2	1.57	0.54	0.41	0.26	-103
SUM	5.16	1.30	1.26	0.24	-41

The Post-Development condition provides less impervious area then the Pre-Development condition meaning permanent BMPs and measures are not required. The project meets the requirements of the Edwards Aquifer rules 30 TAC 213.

ATTACHMENT G – INSPECTION, MAINTENANCE, REPAIR & RETROFIT PLAN

This document has been prepared to provide a description and schedule for the performance of maintenance on permanent pollution abatement measures. Maintenance measures to be performed will be dependent on what permanent pollution abatement measures are incorporated into the project.

It should also be noted that the timing and procedures presented herein are general guidelines, adjustment to the timing and procedures may have to be made depending on project specific characteristics as well as weather related conditions.

Where a project is occupied by the owner, the owner may provide for maintenance with his own skilled forces or contract for recommended maintenance of Permanent Best Management Practices. Where a project is occupied or leased by a tenant, the owner shall require tenants to contract for such maintenance services either through a lease agreement, property owner's association covenants, or other binging document.

I understand that I am responsible for maintenance of the Permanent Pollution Abatement Measures included in this project until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property or ownership is transferred.

I, the owner, have read and understand the requirements of the attached Maintenance Plan and Schedule.

Bexar County Infrastructure Services Department

_____ _____

Signature of Responsible Party Date

Name (Print):_____

Title:_____

Address:_____

Phone No.:_____

Permanent Vegetation

Grass Reseeding and Mulching – A healthy dense grass should be maintained on the permanent vegetation areas. 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 vegetation 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.

Quarterly:

Debris and Litter Removal – The vegetative areas should be kept free of obstructions to reduce floatables being flushed downstream.

Semi-Annually:

Seasonal Mowing and Lawn Care – If the vegetative areas are 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 in vegetated areas. Regular mowing should also include weed control practices, however herbicide use should be kept to a minimum.

Inspections – *Inspect* vegetative areas 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. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications.

As Necessary:

Sediment Removal – *Excess* sediment should be removed by hand or with flat-bottomed shovels.

Notes:

1. **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.**
2. **A written record of the inspection findings and corrective actions performed should be made.**

ATTACHMENT H – INSPECTION REPORT

Not Applicable.

ATTACHMENT I – PILOT-SCALE TESTING PLAN

The Post-Development condition of this project will minimize stream flashing, stronger flows, and erosion. This condition will also decrease the rate and volume of stormwater runoff and decrease the rate of channel erosion downstream of the project. The minimization and decrease of contamination is due to the reduction in the impervious surface and due to raising the road from the creek bed.

ATTACHMENT J – MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

Not Applicable.

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

I Reggie Fountain, PE,
Print Name

Operations Engineer,
Title - Owner/President/Other

of Bexar County,
Corporation/Partnership/Entity Name

have authorized Edward F. Herolt, PE
Print Name of Agent/Engineer

of Halff
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Applicant's Signature

7/15/2024
Date

DACIA U. GARZA
Notary Public, State of Texas
Comm. Expires 10-05-2026
Notary ID 2996949

THE STATE OF Texas §

County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared Reggie Fountain 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 15th day of July, 2024

NOTARY PUBLIC

Dacia U. Garza
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 10-05-2026

Owner Authorization Form

Texas Commission on Environmental Quality
for Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

Land Owner Authorization

I, Sherman Krause of Comal County
Land Owner Signatory Name — Land Owner Name (Legal Entity or Individual)

am the owner of the property located at

1.414 acres of land situated in the Agapito Gaytan Survey, Abstract No. 174 in Comal County, Texas

Legal description of the property referenced in the application

and am duly authorized in accordance with §213.4(c)(2) and §213.4(d)(1) or §213.23(c)(2) and §213.23(d) relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize Bexar County
Applicant Name (Legal Entity or Individual)

to conduct bridge construction and channel grading
Description of the proposed regulated activities

at referenced property limits.
Precise location of the authorized regulated activities

Land Owner Acknowledgement

I understand that Comal County
Land Owner Name (Legal Entity or Individual)

Is ultimately responsible for compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation is subject to administrative rule or orders and penalties as provided under §213.10 (relating to Enforcement). Such violation may also be subject to civil penalties and injunction.

Land Owner Signature

Land Owner Signature

FEB. 27, 2025
Date

THE STATE OF § TEXAS

County of § COMAL

BEFORE ME, the undersigned authority, on this day personally appeared Sherman Krause 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 27th day of February

Lacy Booker
NOTARY PUBLIC

LACY B. BOOKER
Notary Public, State of Texas
Comm. Expires 06-03-2027
Notary ID 132036009

Lacy Booker
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 6/3/2027

Attached: (Mark all that apply)

- ☐ Lease Agreement
- ☐ Signed Contract
- ☐ Deed Recorded Easement
- ■ Other legally binding document

Applicant Acknowledgement

I, Reggie Fountain, PE of Bexar County
Applicant Signatory Name — Applicant Name (Legal Entity or Individual)

acknowledge that Comal County
Land Owner Name (Legal Entity or Individual)

has provided Bexar County
Applicant Name (Legal Entity or Individual)

with the right to possess and control the property referenced in the Edwards Aquifer protection plan.

I understand that Bexar County
Applicant Name (Legal Entity or Individual)

is contractually responsible for compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation. I further understand that failure to comply with any condition of the executive director's approval is a violation is subject to administrative rule or orders and penalties as provided under §213.10 (relating to Enforcement). Such violation may also be subject to civil penalties and injunction.

Applicant Signature

[signature], P.E. — 2/13/25
Applicant Signature — Date

THE STATE OF § Texas

County of § Bexar

BEFORE ME, the undersigned authority, on this day personally appeared Reggie Fountain, PE 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 13th day of February 2025

Dacia U Garza
NOTARY PUBLIC

DACIA U. GARZA
Notary Public, State of Texas
Comm. Expires 10-05-2026
Notary ID 2996949

Dacia U. Garza
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 10-05-2026

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Smithson Valley Road
Regulated Entity Location: Intersection of Smithson Valley Road and FM 1863
Name of Customer: Bexar County Infrastructures Service Deparment
Contact Person: _____ Phone: (210) 335-6700
Customer Reference Number (if issued):CN 604469213
Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☒ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

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

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

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

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	5.15 Acres	$ 5,000
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: Edward J. Elwood, P.E. Date: 11/08/2024

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

TCEQ Use Only

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 Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN 604240044		**RN**

SECTION II: Customer Information

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

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

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

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

Bexar County Public Works

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

11. Type of Customer:

☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☒ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees

☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?

☐ **Yes** ☐ **No**

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

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:

1948 PROBANT ST

City	San Antonio	**State**	TX	**ZIP**	78214	**ZIP + 4**	

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

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

(210) 335-6700		( ) -

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 Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

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.)*

Smithson Valley Road

23. Street Address of the Regulated Entity: ***(No PO Boxes)***							
	City		**State**		**ZIP**		**ZIP + 4**
24. County							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	Intersection of Smithson Valley Road and FM 1863				
26. Nearest City			**State**		**Nearest ZIP Code**
Bulverde			TX		78261

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	29.748333		**28. Longitude (W) In Decimal:**	98.4075	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	44	54	98	24	27

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
1611	9511	237310	237990

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

Bexar County Public Works

34. Mailing Address:							
	City		**State**		**ZIP**		**ZIP + 4**
35. E-Mail Address:							

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

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

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

SECTION IV: Preparer Information

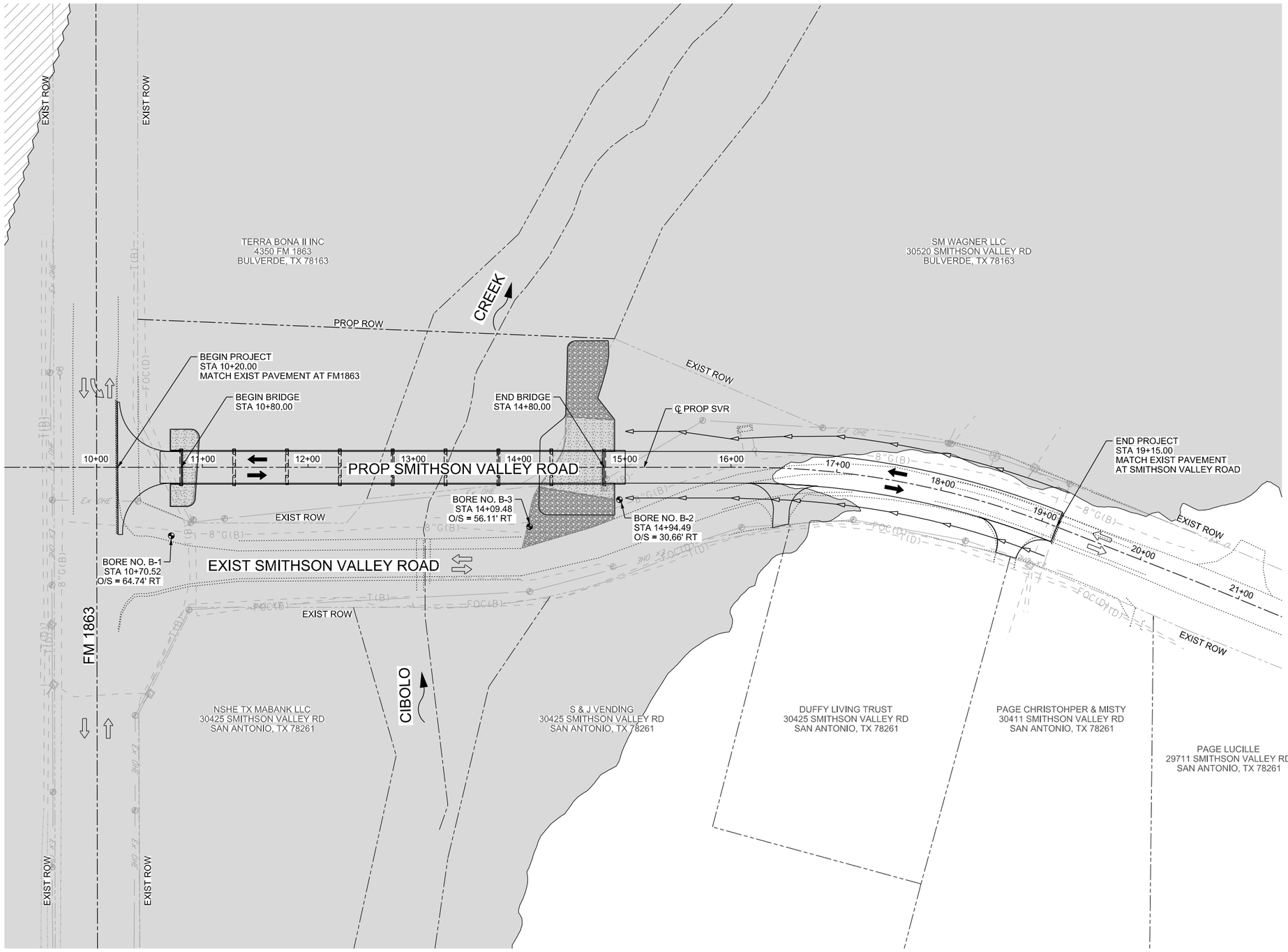
40. Name:	Joel Balbi	**41. Title:**	Graduate Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(210 **)** 704-1349		**( ) -**	Jbalbi@halff.com

SECTION V: Authorized Signature

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

Company:	Halff	**Job Title:**	Operations Manager	
Name *(In Print):*	Edward F. Herolt, PE		**Phone:**	**(** 210 **)** 569- **2408**
Signature:	Edward F. Herolt, P.E.		**Date:**	11/08/2024



LEGEND

- EXISTING RIGHT OF WAY
- ROADWAY CENTERLINE
- PROPOSED EOP
- PROPOSED GABION
- PROPOSED BENT CAP & DRILL SHAFTS
- PROPOSED STEEL RAIL
- PROPOSED CULVERT
- PROPOSED TRAFFIC FLOW
- EXISTING TRAFFIC FLOW
- EXISTING GAS LINE
- EXISTING FIBER OPTIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING TELEPHONE LINE
- BORE NO. LOCATION
- FLOODPLAIN
- FLOODWAY

N

50 25 0 50 100

SCALE: 1"=100'

STATE OF TEXAS
EDWARD F. HEROLT
100461
LICENSED
PROFESSIONAL ENGINEER

1/17/2025

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY EDWARD F. HEROLT, P.E.# 100461 ON 1-17-2025. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT. THE RECORD COPY OF THIS DRAWING IS ON FILE AT THE OFFICES OF HALFF 100 NE. INTERSTATE 410 LOOP, SUITE 701, SAN ANTONIO, TEXAS 78216. TBPELS FIRM #F-312.

BEXAR COUNTY
PUBLIC WORKS DEPARTMENT

NO	DATE	REVISION DESCRIPTION	DWG	CHK

halff
TBPELS FIRM REGISTRATION #312
100 NE LOOP 410, SUITE 701
SAN ANTONIO, TX 78216-4741
(210) 798-1895

SMITHSON VALLEY ROAD

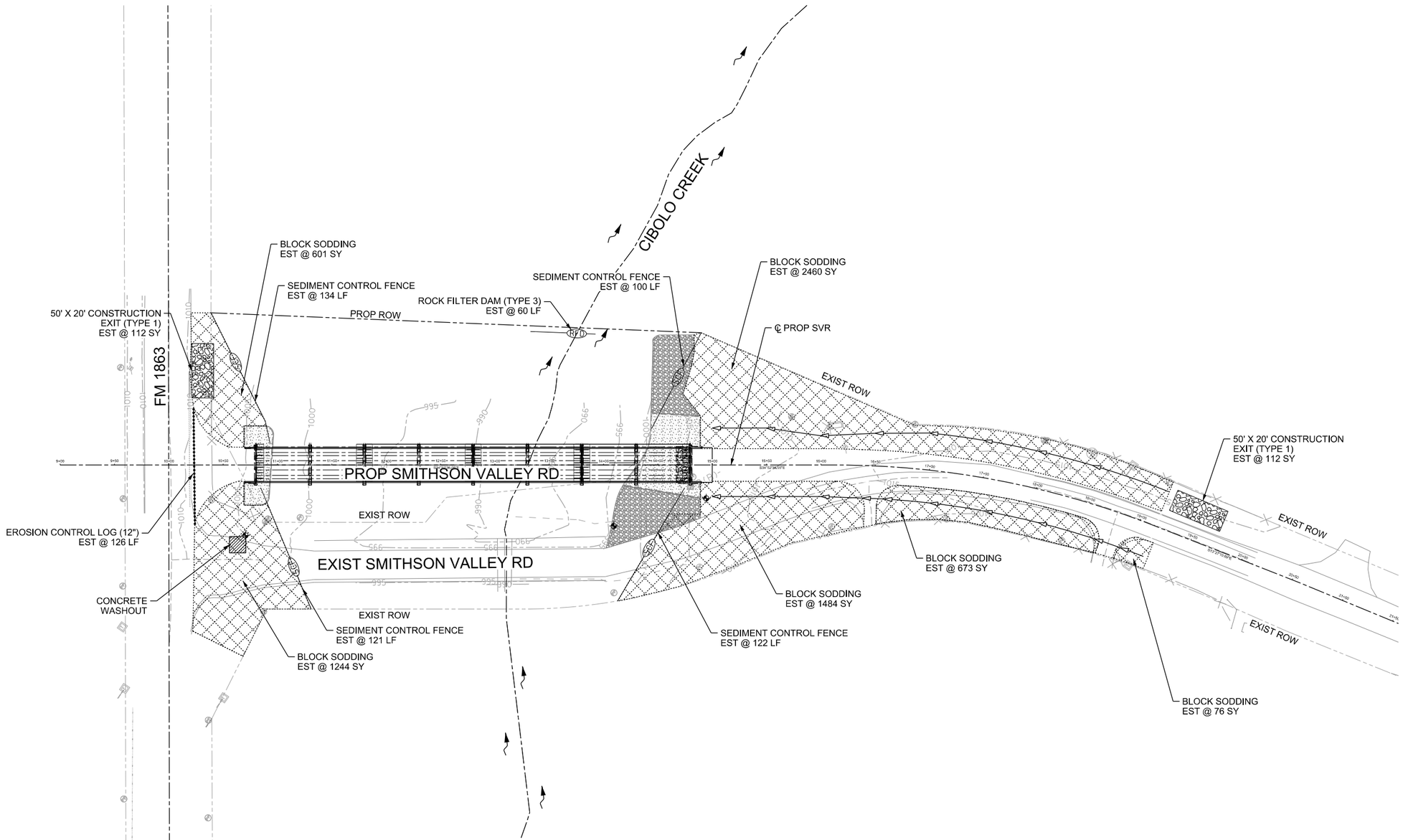
PROJECT LAYOUT

SCALE 1" = 100' SHEET 1 OF 1

PROJECT AVO:		SHEET NO.
54202.001		4
DESIGNED BY: JRB	ROADWAY/HIGHWAY:	
CHECKED BY: SGL	SMITHSON VALLEY ROAD	
DRAWN BY: JRB	STATE	COUNTY
CHECKED BY: SGL	TEXAS	BEXAR

LEGEND

- ROCK FILTER DAM TY 3 (RFD)
- BLOCK SODDING
- SILT FENCE (SCF)
- EROSION CONTROL LOG
- FLOW ARROWS
- CONSTRUCTION ENTRANCE/ EXIT



50 25 0 50 100

SCALE: 1"=100'

STATE OF TEXAS
EDWARD F. HEROLT
100461
LICENSED
PROFESSIONAL ENGINEER

1/17/2025

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BEXAR COUNTY
PUBLIC WORKS DEPARTMENT

NO	DATE	REVISION DESCRIPTION	DWG	CHK

halff
TBPELS FIRM REGISTRATION #312
100 NE LOOP 410, SUITE 701
SAN ANTONIO, TX 78216-4741
(210) 798-1895

SMITHSON VALLEY ROAD

SWPPP LAYOUT

SCALE 1" = 100' SHEET 1 OF 1

PROJECT AVO:		SHEET NO.
54202.001		109
DESIGNED BY: JRB	ROADWAY/HIGHWAY:	
CHECKED BY: SGL	SMITHSON VALLEY ROAD	
DRAWN BY: JRB	STATE	COUNTY
CHECKED BY: SGL	TEXAS	BEXAR