Cowboy Aggregates, LLC

# Water Pollution Abatement Plan Modification WPAP Mod

# Uvalde Quarry Highway 90, Uvalde, Texas Uvalde County

Submitted to: TCEQ Region 13, San Antonio

Prepared By:



Boerne, Texas 830-249-8284

Date: December 2023 Project No. 11173-03 -NMS-

10685 Signature: Curt G. Campbell, PE - License No. 106851 TX PE Firm No. 4524 Date: 12/15/2023

## Modification of a Previously Approved 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)

#### Modification of a Previously Approved Plan (TCEQ-0590)

Attachment A - Original Approval Letter and Approved Modification Letters Attachment B - Narrative of Proposed Modification Attachment C - Current Site Plan of the Approved Project

#### - Application Form (include any applicable to the proposed modification):

Aboveground Storage Tank Facility Plan (TCEQ-0575) Organized Sewage Collection System Application (TCEQ-0582) Underground Storage Tank Facility Plan (TCEQ-0583) Water Pollution Abatement Plan Application (TCEQ-0584) Lift Station / Force Main System Application (TCEQ-0624)

#### 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), if necessary

Attachment A - 20% or Less Impervious Cover Declaration (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 requested) Attachment I -Measures for Minimizing Surface Stream Contamination

- Agent Authorization Form (TCEQ-0599), 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 <u>30 TAC 213</u>.

#### **Administrative Review**

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

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

- 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: Uvalde Site							2. Regulated Entity No.: 111281358					
3. Customer Name: Cowboy Aggregates				regates, LLC			4. Customer No.: 605798115					
5. Project Type: (Please circle/check one)	New		Modif	icatior	n	Exter	nsion	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)	Resident	tial (	Non-r	esiden	tial		8. Sit	e (acres):	2,952			
9. Application Fee:	\$10,000		10. Po	ermai	nent I	BMP(s	s):	Earthen Berms, VFS				
11. SCS (Linear Ft.):	N/A		12. A	ST/US	ST (No	o. Tar	nks):	N/A				
13. County:	Uvalde		14. W	aters	hed:			Lower West Nueces River				

# **Application Distribution**

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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.

Ausun 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							

Austin Region

San Antonio Region								
County:	Bexar	Comal	Kinney	Medina	Uvalde			
Original (1 req.)					_X_			
Region (1 req.)	_				_X_			
County(ies)					_X_			
Groundwater Conservation District(s)	Edwards Aquifer Authority Trinity-Glen Rose	Edwards Aquifer Authority	Kinney	EAA Medina	_x_EAA _x_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.

 Curt G. Campbell, PE | TX License No. 106851

 Print Name of Customer/Authorized Agent

 .
 12/15/2023

 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:	eived 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	Payable to TCEQ (Y/N):				
Core Data Form Complete (Y/N):		Check:	Signed (Y/N):				
Core Data Form Incomplete Nos.:		Less than 90 days old (Y/N):					

# **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.

## Section 1.01 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: Curt G. Campbell, PE

Texas License No. 106851 | Firm No. 4524

Date: 12/15/2023



## Section 1.02 Project Information

- 1. Regulated Entity Name: Uvalde Site
- 2. County: Uvalde
- 3. Stream Basin: Lower Nueces
- 4. Groundwater Conservation District (If applicable): EAA, Uvalde County UWCD
- 5. Edwards Aquifer Zone:

Recharge Zone

6. Plan Type:

X WPAP	AST
SCS	
imes Modification	Exception Request

1 of 4

7. Customer (Applicant):

	Contact Person: <u>Nathaniel Kelly Foote</u> Entity: <u>Cowboy Aggregates, LLC</u> Mailing Address: <u>2839 Wooded Acres Drive</u>							
	City, State: <u>Waco, Texas</u>	Zip: <u>76710</u>						
	Telephone: <u>970-389-2660</u>	FAX:						
	Email Address: <u>foote@cowboyaggregates.com</u>							
8.	Agent/Representative (If any):							
	Contact Person: <u>Curt G. Campbell</u> Entity: <u>Westward Environmental, Inc.</u> Mailing Address: <u>4 Shooting Club Rd.</u>							
	City, State: <u>Boerne, Texas</u>	Zip: <u>78006</u>						
	Telephone: <u>830-249-8284</u>	FAX: <u>830-249-0221</u>						
	Email Address: <u>ccampbell@westwardenv.com</u>							
9.	Project Location:							
	<ul> <li>The project site is located inside the city limits of</li> <li>The project site is located outside the city limits jurisdiction) of</li> <li>The project site is not located within any city's</li> </ul>	of s but inside the ETJ (extra-territorial imits or ETJ.						
10.	0. 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.							
11.	<ul> <li>From the intersection of US 90 and RR 1022, travel 1.6 miles east along US 90 to entry road on the north side of the road, then approx. 3.0 miles north to plant site.</li> <li>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.</li> </ul>							
12.	Attachment B - USGS / Edwards Recharge Zon USGS Quadrangle Map (Scale: 1" = 2000') of the The map(s) clearly show:	e Map. A copy of the official 7 ½ minute e Edwards Recharge Zone is attached.						
	Project site boundaries.							

 $\boxtimes$  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: Completed on 12/7/2023.

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:

## Section 1.03 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.

## Section 1.04 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 ePay

] 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.





LEGEND







## LEGEND

	PROJECT BOUNDARY
<b>→</b> ··· <b>→</b> ··· <b>—</b>	DITCH-SWALE
	PUBLISHED RECHARGE ZONE
	PUBLISHED RECHARGE BOUNDARY
	ACTUAL RECHARGE BOUNDARY



### **Cowboy Aggregates, LLC**

#### **General Information Form Attachment A**

#### Road Map

Please see attached the Road Map (Sheet C1)

#### **General Information Form Attachment B**

#### **USGS / Edwards Recharge Zone Map**

Please see attached USGS / Edwards Recharge Zone Map (Sheet C2).

#### General Information Form Attachment C

#### **Project Description**

A WPAP for Cowboy Aggregates, LLC was approved on April 4, 2022, to construct a limestone quarry on a project area of 1,548 acres located off Hwy 90 in Uvalde County, Texas. There will be approximately 13 acres of impervious cover added to the site. Initial quarry activity will be 2 pits – a North Pit and South Pit - one on each side of the West Nueces River. Construction of the above project area has not begun as of the submittal of this modification.

A modification is proposed that includes updating impervious cover, adding additional stormwater measures, and an expansion of an additional 1,404.70-acres which takes the overall project site to 2,952.44 acres. In the previous WPAP, approximately 1,400 acres was approved to be quarried on the Recharge Zone. With this modification, the total acreage of quarried activity is proposed to be 2,505.50 acres. Several existing ranch roads and buildings from the previous agricultural use of the property are currently being used by Cowboy Aggregates, LLC. A plant, including self-contained settlement ponds, shop and supporting operations are to be located off the Recharge Zone.

The site is currently utilized for agricultural activities (predominately livestock grazing) and wildlife management. Cowboy Aggregates, LLC. will continue to use several existing ranch roads for access throughout the property. These activities are not considered to be regulated activities as defined by 30 TAC 213.3 (28)(B)(ii). The agricultural activities will continue throughout the duration of mining activities and are expected to continue beyond the life of the mine. All rights, exemptions, and privileges associated with these activities are reserved.

As the quarry expands to the Final Earthen Berm as shown on the Interim Conditions Map, areas that do not drain back to the pit will be cleared in increments of less than 10 acres at a time. The timing and extent of mine expansion will be based on market demand. The primary crusher and associated equipment may be located within the initial pit footprint and may relocate within the quarry pit, as needed, as the pit expands. Stockpiles will also be stored in the pit. All stormwater runoff from these areas will be fully contained within the pit, and therefore structures or stockpiles inside the pit are not included in calculations of regulated impervious cover. Permanent BMPs at the site will include the Final Earthen Berm, 50-foot vegetated buffers and a 25-foot buffer on each side of the bank of the river.

#### **Cowboy Aggregates, LLC**

Phase 1 will consist of establishing a haul road for the processing plant outside the recharge zone to the primary crusher located at the east pit. Runoff from the disturbances of the primary haul road will be treated by temporary BMPs and then temporary vegetative filter strips until such time as the area is mined. Once the interim pit haul road has been established and excavation of the pits is initiated, conformance with 213.4(h)(3) will be complete. After Phase 1, 100% of the construction activity will be completed and the Quarry will enter operation phase. The North Pit initial area will be established north of the Provisional Calculated Floodplain, where areas that do not drain back to the pit will be cleared in increments of less than 10 acres at a time, and overburden will be used to establish temporary earthen berms which will expand with the size of the pit throughout the life of the project. As the size of the initial North Pit expands, the various material processing operations and associated equipment may be relocated within this pit to meet operational needs. Mining in the east pit will commence at the same time as mining in the north pit, clearing less than 10 acres at a time, with earthen berms surrounding quarry pit and expanding to the Final Earthen Berm as shown on the attached Final Conditions map. The size and configuration of the initial pit areas may vary based on field conditions and material quality.

According to FEMA Map Panel 48463CO450E, effective November 4, 2010 a portion of the site is designated as Zone A, meaning that a detailed flood study has not been performed. Westward Environmental, Inc. (Westward) has conducted a hydrologic and hydraulic study to determine a more accurate model of the floodplain in this area of the Nueces River and West Nueces River and is processing a Conditional Letter of Map Revision (CLOMR) with Uvalde County and FEMA. The calculated floodplain, as determined by the Westward study, is shown on the attached Interim and Final Conditions maps. Except for the proposed crossing, a 25-foot natural vegetative buffer from the Ordinary High Water Mark will be maintained between all quarry operations, and the Ordinary High-Water Mark (see Interim Conditions Map). Because the West Nueces River is ephemeral and only has flow for very large rainfall events, an on-grade crossing is proposed. This crossing is intended for general access only since the material from the north side of the river will be transported via conveyor. Haul truck traffic will not utilize the crossing on a day-to-day basis. Traffic on the crossing is anticipated to be only a few passenger vehicles per day. Required authorizations will be obtained from the Uvalde County floodplain administrator and the US Army Corps of Engineers (USACE) prior to any work taking place in the currently mapped floodplain or creek bed. After obtaining said authorizations, Cowboy Aggregates, LLC will establish a graded on-grade crossing (please see attached Interim and Final Conditions map).

A raised crossing as suggested by RG-500 is not feasible in this area due to local topography and flooding characteristics of the river. Installing a raised crossing would pose a greater risk of flooding and TSS contamination during large storm events.

Trash generated on-site will be disposed of in a dumpster and handled by a licensed waste service. A water truck will be used as necessary to control dust. A septic system will be placed off of the Recharge Zone, located near the office within the plant footprint. This system will be installed, serviced, and eventually removed, by a licensed septic contractor. Portable toilets will also be used on-site and will be serviced by a licensed waste collector.

Routine maintenance will take place at the shop building off the Recharge Zone. Fueling of large slow-moving equipment will take place on compacted base pads within the quarry pit.

It is not expected that any significant amount of groundwater will be encountered in the quarry excavation. A 25-foot separation distance between the pit floor and the groundwater level will be

maintained. The groundwater is currently in-process of being evaluated with six (6) exploratory boreholes. It is anticipated that the observed fluctuations in stratigraphy across the site will result in multiple sections of quarry pit having different pit floor elevations to maintain the required 25-foot separation from the Edwards water table. After analysis of on-site data, a Site Plan Update will be submitted to TCEQ to clarify pit floor elevations across the site (if necessary).

Permanent stormwater controls are those that are to remain in place after construction has been completed. At the time construction is completed at the subject site, the vegetated Final Earthen Berm and the 50-foot vegetated buffer that surround most of the site will be located along the project boundary.

The geologic assessment included in this submittal covers the additional 1404.70-acre project area. Ten (10) features were identified as sensitive (S-118, S-125, S-126, S-137, S-169, S-170, S-171, S-172, S-173 and S-174 - see Existing Conditions Map). Of these, four features (S-118, S-125, S-126 and S-137) will have a vegetative buffer put in place prior to being temporarily sealed and eventually removed through mining. Features S-169, S-170, S-171, S-172, S-173 and S-174 are exploratory borings. These borings will be protected by a vegetative buffer or some of these boreholes may be completed as observation wells. Ultimately, prior to mining, all boreholes will be properly plugged and eventually will be removed through mining. Features S-136 and S-147 are water wells (see Interim Conditions Map), and though not rated as sensitive in their current condition, these wells will be properly plugged per 16 TAC 76 prior to being removed through mining.

COWBOY AGGREGATES, LLC

# GEOLOGIC ASSESSMENT (GA)

## UVALDE SITE US HIGHWAY 90 W UVALDE, TX 78801 UVALDE COUNTY

Submitted to: TCEQ Region 13, San Antonio



# **Article I. Geologic Assessment**

**Texas Commission on Environmental Quality** 

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

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

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

## Section 1.01 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:

Telephone: <u>830-249-8284</u>

Fax: 830-249-0221

John J. Sackrider, P.G. #12654

Date: 12/15/2023

Representing: <u>Westward Environmental, Inc., TBPG Registered Geoscience Firm 50012</u> (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:

Regulated Entity Name: Uvalde Site

# 

- Section 1.02 Project Information
- 1. Date(s) Geologic Assessment was performed: Nov. 6-10, 13-17, & 27-Dec. 1 & 4-5, 2023
- 2. Type of Project:

ig >	WPAP
	SCS

AST
UST

3. Location of Project:



Transition Zone

Contributing Zone within the Transition Zone

- 4. X 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.

Soil Name	Group*	Thickness(in.)
Ata	В	> 80
Во	А	> 80
CcA	В	> 80
Со	В	> 80
De	А	> 80
EOB	D	< 20
ERE	D	< 20
FoA	В	> 80
ОМВ	D	< 20
RIVER	А	> 80
ТоВ	D	> 80
UvB	С	> 80

## Article II. Table 1 - Soil Units, Infiltration Characteristics and Thickness

\* 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 columft
- 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'' = 400'Site Geologic Map Scale: 1'' = 400'Site Soils Map Scale (if more than 1 soil type): 1'' = 400'

- 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 2(#) 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.

## Section 2.01 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 (Form TCEQ-0585)

GEOLOGIC ASSESSMENT TABLE PROJECT NAME: Uvalde Site																				
	LOCATION						FEA	TURE CHAR	ACTERIST	ICS					EVA	LUATI	ON	P	HYSI	CAL SETTING
1A	1B *	1C*	2A	2B	3		4		5	5A	6	7	8A	8B	9	1	0	11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	GEO UNIT	DIM	ENSIONS (FE	ET)	TREND (DEGREES)	ром	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	ITIVITY	CATCHMENT AREA (ACRES)		TOPOGRAPHY
						х	Y	z		10					10	<40	>40	<1.6	<u>&gt;1.6</u>	
S-100	29.306777	-99.964593	Z-SC	30	Ksa	50	20	3.66	80				Ν	5	35	Х			Х	Hillside
S-101	29.305240	-99.968541	CD	5	Ksa	50	20	0.5	N/A				Ν	5	10	Х			Х	Hillside
S-102	29.305018	-99.969514	CD	5	Ksa	63	20	1	N/A				Ν	5	10	Х			Х	Hillside
S-103	29.287491	-99.963344	CD	5	Qal	200	50	2	N/A				V	5	10	Х			Х	Floodplain
S-104	29.287324	-99.964467	CD	5	Qal	8	6	0.66	N/A				V	5	10	Х			Х	Floodplain
S-105	29.287801	-99.965551	CD	5	Qal	120	20	1	N/A				V	5	10	Х			Х	Floodplain
S-106	29.287854	-99.965330	CD	5	Qal	8	3	0.66	N/A				V	5	10	Х			Х	Floodplain
S-107	29.287541	-99.965859	CD	5	Qal	644	75	3	N/A				С	5	10	Х			Х	Floodplain
S-108	29.281499	-99.983493	CD	5	Qal	18	10	3	N/A				V	5	10	Х		Х		Floodplain
S-109	29.281780	-99.982809	CD	5	Qal	15	3	0.66	N/A				V	5	10	Х		Х		Floodplain
S-110	29.284131	-99.983760	F	20	Kbu	45	20	2	65	10			Ν	5	35	Х			Х	Floodplain
S-111	29.284345	-99.983191	F	20	Kbu	15	6	3	20				Ν	5	25	Х			Х	Floodplain
S-112	29.279144	-99.981180	CD	5	Kef	15	12	1	N/A				F	5	10	Х		Х		Floodplain
S-113	29.279611	-99.982435	CD	5	Qal	225	130	6	N/A				V	5	10	Х			Х	Floodplain
S-114	29.292681	-99.964570	CD	5	Qal	120	120	3	N/A				V	5	10	Х			Х	Floodplain
S-115	29.294195	-99.966344	CD	5	Qal	60	10	6	N/A				Ν	5	10	Х		Х		Hillside
S-116	29.291104	-99.965369	CD	5	Qal	120	20	1	N/A				V	5	10	Х		Х		Floodplain
S-117	29.302646	-99.964959	SC	20	Ksa	0.21	0.10	0.16	0				0	5	25	Х		Х		Hilltop
S-118	29.303520	-99.974490	Z-SC	30	Ksa	9	5	1.5	0				V	15	45		X		Х	Hillside
S-119	29.303848	-99.975569	F	20	Kbu	4,5	520	Unknown	20				0	5	25	Х			Х	Hillside
S-120	29.302641	-99.975779	CD	5	Kbu	20	12	0.5	N/A				0	5	10	Х			Х	Drainage
S-121	29.301245	-99.979951	CD	5	Kbu	100	30	2	N/A				V	5	10	Х			Х	Floodplain

2A TYPE	TYPE	2B POINTS
С	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
0	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 bedrock	
	С	Coarse - cobbles, breakdown, sand, gravel	
	0	Loose or soft mud or soil, organics, leaves, sticks, 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	
	х	Other materials	
			and the second s
		12 TOPOGRAPHY	TEOFTET
	Cliff,	Hilltop, Hillside, Drainage, Floodplain, Streambed	
lowed	the le	exas Commission on Environmental Quality's Instructions to Geologists. The	JOHN J. SACKRIDER
h that	docum	nent and is a true representation of the conditions observed in the field.	3
as a g	geologi	ist as defined by 30 TAC Chapter 213.	GEOLOGY 12654

I have read, I understood, and I have follo information presented here complies with

My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

12/15/2023 Date

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

GEOLOG	IC ASSES	SMENT TA	BLE				PRO	JECT NAM	IE:	Uv	alde Si	te								
	LOCATION			FEA	<b>FURE CHAR</b>	ACTERIST	CS					EVAL	N	PHYSICAL SETTING						
1A	1B *	1C*	2A	2B	3		4			5A	6	7	8A	8B	9		10	1	1	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION/ MEMBER	DIM	DIMENSIONS (FEET) TR		TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	ITIVITY	CATCH AREA (J	IMENT ACRES)	TOPOGRAPHY
						х	Y	z		10						<40	>40	<1.6	<u>&gt;1.6</u>	
S-122	29.299779	-99.981108	CD	5	Kbu	220	100	5	N/A				Х	5	10	Х			Х	Hillside
S-123	29.300165	-99.982566	CD	5	Kbu	85	15	2	N/A				V	5	10	Х			Х	Floodplain
S-124	29.298268	-99.980840	CD	5	Ksa	12	5	1	N/A				С	5	10	Х			Х	Drainage
S-125	29.297577	-99.979029	MB	30	Ksa	0.	38	23.5	N/A				Ν	35	65		Х	Х		Hillside
S-126	29.300243	35.000000	SH	20	Ksa	60	60	6	50	10			V	20	50		Х	Х		Hillside
S-127	29.292631	-99.976054	SC	20	Ksa	0.66	0.33	0.83	20				0	5	25	Х		Х		Hillside
S-128	29.292584	-99.976700	SC	20	Ksa	1	0.33	1	140				0	5	25	Х		Х		Hillside
S-129	29.292903	-99.973478	SC	20	Ksa	0.33	0.50	1	None				0	5	25	Х		Х		Hillside
S-130	29.296850	-99.969701	SC	20	Ksa	0.50	0.33	1.83	100				0	5	25	Х		Х		Hillside
S-131	29.286890	-99.983710	CD	5	Qal	90	10	3	N/A				O,C,V	5	10	Х			Х	Floodplain
S-132	29.286275	-99.982912	CD	5	Qal	40	21	2	N/A				V	5	10	Х			Х	Floodplain
S-133	29.285406	-99.981967	CD	5	Qal	100	30	2	N/A				V	5	10	Х			Х	Floodplain
S-134	29.286845	-99.982803	CD	5	Qal	45	35	4	N/A				V	5	10	Х		Х		Floodplain
S-135	29.286947	-99.982475	CD	5	Qal	13	20	0.83	N/A				V,O	5	10	Х		Х		Floodplain
S-136	29.282475	-99.978521	MB-W	30	Kef	0.	66	Unknown	None				Х	5	35	Х		Х		Hillside
S-137	29.282358	-99.978511	MB	30	Kef	2	2	4+	None				Ν	20	50		Х	Х		Floodplain
S-138	29.281740	-99.979202	CD	5	Qal	180	175	2	N/A				V	5	10	Х		Х		Floodplain
S-139	29.285322	-99.986695	CD	5	Qal	2,800	840	1	N/A				V	5	10	Х			Х	Floodplain
S-140	29.286968	-99.980411	CD	5	Qal	15	10	0.66	N/A				V	5	10	Х		Х		Floodplain
S-141	29.285520	-99.979455	CD	5	Qal	25	16	1	N/A				V	5	10	Х		Х		Floodplain
S-142	29.285239	-99.979185	CD	5	Qal	50	10	2	N/A				С	5	10	Х		Х		Floodplain
S-143	29.286629	-99.977633	SC	20	Qal	4.5	3.5	3	90		1		O,C	5	25	Х		Х		Floodplain

2A TYPE	TYPE	2B POINTS
С	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
0	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	
1	None, exposed bedrock	
;	Coarse - cobbles, breakdown, sand, gravel	
)	Loose or soft mud or soil, organics, leaves, sticks, dark colors	
	Fines, compacted clay-rich sediment, soil profile, gray or red colors	
/	Vegetation. Give details in narrative description	
S	Flowstone, cements, cave deposits	
(	Other materials	
	12 TOPOGRAPHY	
Cliff,	Hilltop, Hillside, Drainage, Floodplain, Streambed	TE OF TEN

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<u>2 of 4</u>

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

GEOLOGIC ASSESSMENT TABLE PROJECT NAME: Uvalde Site																				
	LOCATION			FEA	TURE CHAR	ACTERIST	ICS					EVAL	N	PHYSICAL SETTING						
1A	1B *	1C*	2A	2B	3		4			5A	6	7	8A	8B	9		10	11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION/ MEMBER	DIN	DIMENSIONS (FEET) TRE		TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	ITIVITY	CATCH AREA (A	IMENT ACRES)	TOPOGRAPHY
						х	Y	z		10						<40	>40	<1.6	<u>&gt;1.6</u>	
S-144	29.287882	-99.980816	SC	20	Ksa	0.25	0.16	2.5	140				0	5	25	Х		Х	Х	Floodplain
S-145	29.294722	-99.966843	SC	20	Qal	1.5	1	2	60	10			0	5	35	Х		Х		Hillside
S-146	29.291004	-99.965618	CD	5	Qal	20	12	2	N/A				V	5	10	Х		Х		Floodplain
S-147	29.293460	-99.967109	MB-W	30	Qal	0.	58	Unknown	None				Х	5	35	Х		Х		Hillside
S-148	29.282468	-99.970094	Z-CD	30	Qal	40	20	4	N/A				V,O	5	35	Х		Х		Hillside
S-149	29.283067	-99.970009	CD	5	Qal	15	4	2	N/A				V,O	5	10	Х		Х		Hillside
S-150	29.283896	-99.969958	CD	5	Qal	12	6	1	N/A				O,C	5	10	Х		Х		Floodplain
S-151	29.285286	-99.969641	CD	5	Qal	20	30	1	N/A				С	5	10	Х		Х		Floodplain
S-152	29.282862	-99.967128	CD	5	Qal	18	3	2	N/A				O,C	5	10	Х		Х		Floodplain
S-153	29.283027	-99.965631	CD	5	Qal	50	20	2	N/A				C,O,V	5	10	Х		Х		Floodplain
S-154	29.282374	-99.973073	CD	5	Qal	15	6	1	N/A				V	5	10	Х			Х	Floodplain
S-155	29.283915	-99.974561	CD	5	Qal	27	27	0.5	N/A				V	5	10	Х		Х		Floodplain
S-156	29.284559	-99.973969	CD	5	Qal	50	75	7.5	N/A				V	5	10	Х		Х		Hillside
S-157	29.283045	-99.971262	CD	5	Qal	15	6	1	N/A				V	5	10	Х			Х	Floodplain
S-158	29.283434	-99.971721	CD	5	Qal	50	30	2	N/A				V	5	10	Х			Х	Floodplain
S-159	29.284775	-99.973236	CD	5	Qal	35	20	4	N/A	1			V	5	10	Х		Х		Floodplain
S-160	29.283891	-99.971017	CD	5	Qal	15	12	3	N/A				V,O	5	10	Х		Х		Floodplain
S-161	29.284185	-99.970692	CD	5	Qal	20	8	1	N/A				0	5	10	Х		Х		Floodplain
S-162	29.282085	-99.970664	CD	5	Qal	190	150	3	N/A				V	5	10	Х			Х	Floodplain
S-163	29.280623	-99.976001	CD	5	Kef	120	50	1	N/A				V	5	10	Х			Х	Hillside
S-164	29.279237	-99.969015	CD	5	Kef	13	10	3.5	N/A				0	5	10	Х		Х		Hillside
S-165	29.279492	-99.968039	CD	5	Kbu	100	20	4	N/A				O,V	5	10	Х		Х		Hillside

2A TYPE	TYPE	2B POINTS
С	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
0	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	
Ν	None, exposed bedrock	
С	Coarse - cobbles, breakdown, sand, gravel	
0	Loose or soft mud or soil, organics, leaves, sticks, 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	
х	Other materials	
	12 TOPOGRAPHY	TE OF TE
Cliff,	, Hilltop, Hillside, Drainage, Floodplain, Streambed	A TANK
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12/15/2023 Date



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

GEOLOG	IC ASSESS	SMENT TAE	BLE			PROJECT NAME: Uvalde Site														
	LOCATION					FEATU	IRE CHARA	CTERISTIC	S					EVAL	UATIC	N		PHY	SICAL 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/ MEMBER	DIM	DIMENSIONS (FEET)		TREND (DEGREES)	ром	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	ITIVITY	CATCH AREA (	HMENT ACRES)	TOPOGRAPHY
						х	Y	Z		10						<40	>40	<1.6	<u>&gt;1.6</u>	
S-166	29.284770	-99.974335	CD	5	Qal	250	80	4	N/A				V	5	10	Х			Х	Floodplain
S-167	29.283674	-99.978435	CD	5	Qal	175	40	1	N/A				V	5	10	Х		Х		Floodplain
S-168	29.283768	-99.978038	CD	5	Qal	50	8	2	N/A				V	5	10	Х		Х		Hillside
S-169	29.294617	-99.976702	MB	30	Ksa	0.	38	243.5	None				Х	35	65		Х	Х		Hillside
S-170	29.297816	-99.973851	MB	30	Ksa	0.	38	417	None				Х	35	65		Х	Х		Hillside
S-171	29.302024	-99.967235	MB	30	Ksa	0.	38	447	None				Х	35	65		Х	Х		Hillside
S-172	29.300219	-99.969861	MB	30	Ksa	0.	38	245.5	None				Х	35	65		Х	Х		Hillside
S-173	29.297834	-99.979706	MB	30	Ksa	0.	38	251	None				Х	35	65		Х	Х		Hillside
S-174	29.291725	-99.981152	MB	30	Ksa	0.	38	446	None				Х	35	65		Х	Х		Hillside
S-175	29.290936	-99.975039	F	20	Ksa/Qal	8,6	630	Unknown	50	10			Х	5	35	Х			Х	Hillside
S-176	29.285735	-99.964337	F	20	Kbu/Ksa/Qal	11,	850	Unknown	126				Х	5	25	Х			Х	Hillside
S-177	29.283599	-99.962938	F	20	Qal/Kbu	1,0	35	Unknown	50	10			Х	5	35	Х			Х	Hillside
S-178	29.304519	-99.966138	SC	20	Ksa	0.33	0.25	3+	28				Ν	5	25	Х		Х		Hillside
S-179	29.303245	-99.966614	SF	20	Ksa	4	0.33	0.5+	139				N,C	5	25	Х		Х		Hillside
S-180	29.301781	-99.980879	F	20	Ksa/Kbu	2,3	60	Unknown	60	10			Х	5	35	Х			Х	Hillside

2A TYPE	TYPE	2B POINTS
С	Cave	30
SC	Solution cavity	20
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FS	Flowstone, cements, cave deposits	
х	Other materials	
	12 TOPOGRAPHY	
Cliff,	Hilltop, Hillside, Drainage, Floodplain, Streambed	TEOFET

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-----JOHN J. SACKRIDER GEOLOGY 12654 Date 12/15/2023 CENS MAL & GEOS <u>4 of 4</u>

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

## Attachment B

## **Stratigraphic Column**

Sys- tem	Hydro- geologic unit	Hydro- geologic formation, logic ness <sup>1</sup> unit or subunit function (feet)		Field identification	Cavern development	Porosity/ permeability type							
		Es F	condido Formation	CU	285	Fine-grained sandstone, with interbedded shale, clay, and pyroclastic material	Brown, fine-grained sandstone, locally fossiliferous	None	Low porosity/low perme- ability				
		An	nacacho imestone	CU	Greater than 470	Massive mudstone to packstone, with interbedded bentonitic clay	White to gray pack- stone, with thick sequences of bento- nitic clays	None	Low porosity/low perme- ability				
retaceous	afining unit	Au	ıstin Group	CU	300	Massive, chalky to marly, fossiliferous mudstone	White, chalky lime- stone, with locally abundant Gryphaea aucella	None	Low to moderate poros- ity and permeability				
Upper C	Jpper col	Ea	gle Ford Group	CU	130-150	Brown, flaggy, sandy shale and argillaceous limestone	Thin flagstones; petroliferous	None	Primary porosity lost/low permeability				
	-	Bu	imestone	CU	70-90	Buff to light-gray, dense	Porcelaneous lime-	Minor surface karst	Low porosity/low perme-				
		De	Del Rio Clay CU		50-110	Blue-green to yellow- brown clay	Fossiliferous; Ilymatogyra arietina	None	Negligible, primary upper confining unit				
		West prong beds		CU	0-20	Reddish-brown, gray to light-tan, argillaceous limestone	Waconella wacoensis	None	Low porosity/low perme- ability				
		Upper unit		AQ	75	Mudstone that grades upward into grainstone	Light-gray mud- stone, with abun- dant fossil fragments	Minor karst, associated with solutioning along fractures	Both fabric and non- fabric selective, low to high porosity/low to high permeability				
		Salmon Peak F	Salmon Peak	Salmon Peak	Salmon Peak	Salmon Peak	Lower unit	AQ	310	Thick, massive lime mudstone, grainstone, and chert	Massive, gray mud- stone	Minor karst, associated with solutioning along fractures	Mostly non-fabric selective; low poros- ity/low permeability
	fer	nation	Upper unit	AQ	100–160	Brownish, thin-bedded, pelleted, mudstone, wackestone, packstone, and grainstone	Brown, thin-bedded mudstone with col- lapse breccia	Negligible	Mostly fabric selective; high porosity and per- meability where evapor- ite dissolution has occurred				
r Cretaceous	Edwards aqui	AcKnight Forn	Middle unit	CU	40	Dark, laminated, fissile mudstone	Petroliferous odor, dark, laminated mudstone; vegeta- tive band on aerial photo	None	Mostly non-fabric selective; low poros- ity/low permeability				
Lowe		I	Lower unit	CU; AQ in evaporites	60–80	Thinly bedded <i>miliolid</i> , gryphaeid fragmented mudstone to grainstone	Thin-bedded mudstone to grain- stone	Negligible	Mostly fabric selective; low to high porosity/low permeability				
		Formation	Undivided	CU	120–260	Gray, thick-bedded, burrowed, shell-fragment wackestone, packstone, and grainstone	Gray wackestone, miliolids, gastro- pods, and Texigry- phaea	Minor, associated with fracture solutioning	Mostly non-fabric selective; low poros- ity/low permeability				
		West Nueces ]	Basal nodular unit	CU; AQ where solution- ally enhanced	20-60	Nodular, burrowed mudstone to wackestone miliolids, gastropods, and Exogyra texana	Nodular gray mud- stone, black rotund bodies	Minor, primarily near contact with Glen Rose Limestone	Mostly non-fabric selective; low porosity/ low permeability				
	Lower confining unit	ower confining unit Upper mem- ber of Glen Rose Lime-		CU; evaporite beds AQ	350-500	Yellowish-tan, thinly bedded limestone and marl	Tan argillaceous limestone	Minor, associated with fracture solutioning	Mostly non-fabric selective porosity, with generally low perme- ability				

## **Generalized Stratigraphic Column – Uvalde County, Texas**

<sup>1</sup> Where present.

Indicates surface unit mapped onsite.

Note: CU = confining unit; AQ = Aquifer

Adapted from Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer, Uvalde County, Texas, USGS Water-Resources Investigations Report 03-4010 (USGS, 2003)

## Attachment C

## Site Geology (Geologic Narrative)

#### **Geologic Narrative**

#### 1.0 PURPOSE

Westward Environmental, Inc. (WESTWARD) was retained by Cowboy Aggregates, LLC (Client) to prepare a Geologic Assessment (GA) on a ~1,548-acre tract (Site) referred to as the Uvalde Site. This GA was prepared as a required attachment to a Water Pollution Abatement Plan (WPAP) modification for the Site as required by the Texas Commission on Environmental Quality (TCEQ).

#### 2.0 REGULATORY GUIDANCE

#### Title 30, Chapter 213 of the Texas Administrative Code

This report was prepared in accordance with *Instructions for Geologists for Geologic Assessments* on the Edwards Aquifer Recharge/Transition Zones (TCEQ-0585 (Rev. 10-01-04)) to be reviewed pursuant to Title 30, Chapter 213 of the Texas Administrative Code.

#### **3.0 PROJECT LOCATION**

The Site is located approximately 12 miles west of Uvalde along US Highway 90 W, in Uvalde County, Texas and is transected by the W Nueces River. The Site is located over the Edwards Aquifer Recharge Zone (EARZ).

#### 4.0 METHODOLOGY

As part of the GA, WESTWARD performed a desktop review of selected published information. WESTWARD also conducted a field investigation in accordance with *TCEQ-0585 (Rev. 10-01-04)*.

#### 4.1 Desktop Review

WESTWARD conducted a review of aerial imagery, the University of Texas Bureau of Economic Geology (BEG) Geologic Atlas of Texas (GAT) San Antonio Sheet, applicable U.S. Geological Survey (USGS) Topographic quadrangle(s) and geospatial dataset(s), the Texas Natural Resources Information System (TNRIS), the Texas Water Development Board's Water Data Interactive Groundwater Data Viewer (TWDB Viewer), the Railroad Commission of Texas (RRC), and the U.S. Department of Agriculture (USDA) National Resource Conservation Service (NRCS) Web Soil Survey prior to the field investigation.

#### 4.2 Field Investigation

A field investigation was performed at the Site by WESTWARD staff under the direction of John J. Sackrider, P.G. (TBPG Lic. No. 12654) from November 6-10, 13-17, & 27 and December 1 & 4-5, 2023. Field transects of the Site were walked in accordance with TCEQ-0585 (rev. 10-01-04).

#### 5.0 DESKTOP REVIEW

The desktop review was utilized for preliminary planning of the field investigation. The accuracy of the desktop review was limited by the accessibility, scale, and age of the data available.

#### 5.1 Published Surface Geology

A review of published geologic maps from the Geologic Atlas of Texas revealed six (6) units mapped at the Site which include the Cretaceous-aged Salmon Peak Limestone (Ksa), Buda Limestone (Kbu), and Eagle Ford Formation (Kef) and the more recent Quaternary-aged Leona Formation (Qle), Alluvium (Qal), and Terrace deposits (Qt).

Based on the field reconnaissance during the previous GA and several exploratory drilling campaigns in and around the Site, it has been observed that the surface geology on the Site differs from the published geologic literature. The surface geology as has been observed and mapped by WESTWARD is reflected in the Site Geologic Map included in Appendix D.

#### 5.2 Published Structure

The Site is located within the Balcones Fault Zone (BFZ). While the published USGS maps do not show faults, or any other structure mapped within the Site boundaries, previous subsurface exploration by WESTWARD has established that there are four (4) faults and one (1) inferred fault that trend southwest to northeast and one (1) inferred fault that trends northwest to southeast at the Site. The faults are shown on the Site Geologic Map (Attachment D).

The faults that follow the dominant trend of the BFZ were used to set the dominant fault trend range of the Site. The average bearing of these faults was calculated to be  $53^{\circ}$ . For the purposes of this GA, the dominant fault trend range of the Site is approximated to be between  $38^{\circ}$  and  $68^{\circ}$ .

#### 5.3 Karst Features

The desktop review did not reveal karst features at the Site.

#### 5.4 Non-karst & Manmade Features

The desktop review revealed two (2) water wells and six (6) exploratory boreholes at the Site.

#### 5.5 Soils

Twelve (12) soil units were identified on the Site through the NRCS Web Soil Survey. They are detailed below as well as included on the Geologic Assessment Form TCEQ-0585 (Rev. 02-11-15). A Site Soils Map is included in Attachment D.

P	ublished	l Soil Unit	Descriptions
Soil Name	Group	Thickness (Inches)	Description
Atco loam (AtA), 0 to 1 percent slopes	В	> 80	More than 80 inches to restrictive feature, well drained, moderately high to high (0.57 to 1.98 in/hr) Ksat capacity
Boerne loam (Bo), rarely flooded	А	> 80	More than 80 inches to restrictive feature, well drained, high (1.98 to 5.95 in/hr) Ksat capacity
Castroville clay loam (CcA), 0 to 1 percent slopes	В	> 80	More than 80 inches to restrictive feature, well drained, moderately high to high (0.57 to 1.98 in/hr) Ksat capacity
Conalb loam (Co), occasionally flooded	В	> 80	More than 80 inches to restrictive feature, well drained, moderately high to high (0.57 to 1.98 in/hr) Ksat capacity
Dev extremely gravelly clay loam (De), 0 to 3 percent slopes, frequently flooded	А	> 80	More than 80 inches to restrictive feature, well drained, high (1.98 to 5.95 in/hr) Ksat capacity
Ector soils (EOB), warm, 1 to 8 percent slopes	D	< 20	6 to 20 inches to lithic bedrock, well drained, moderately low to high (0.06 to 1.98 in/hr) Ksat capacity
Ector-Rock outcrop complex (ERE), warm, 5 to 20 percent slopes	D	< 20	6 to 20 inches to lithic bedrock, well drained, moderately low to high (0.06 to 1.98 in/hr) Ksat capacity
Oakalla silty clay loam (FoA), 0 to 2 percent slopes, occasionally flooded	В	> 80	More than 80 inches to restrictive feature, well drained, moderately high to high (0.20 to 1.98 in/hr) Ksat capacity
Olmos and Langtry soils (OMB), undifferentiated, 1 to 8 percent slopes	D	< 20	4 to 20 inches to petrocalcic, well drained, very low to moderately low (0.00 to 0.06 in/hr) Ksat capacity
Riverwash and Dev soils (RIVER), 0 to 3 percent slopes, frequently flooded	А	> 80	More than 80 inches to restrictive feature, well drained, high to very high (5.95 to 19.98 in/hr) Ksat capacity
Tobosa clay, (ToB), 1 to 3 percent slopes	D	> 80	More than 80 inches to restrictive feature, well drained, very low to moderately low (0.00 to 0.06 in/hr) Ksat capacity
Uvalde clay loam (UvB), 0 to 3 percent slopes	А	> 80	More than 80 inhes to restrictive feature, well drained, moderately high to high (0.57 to 1.98 in/hr) Ksat capacity

#### 6.0 FIELD INVESTIGATION

The field investigation was performed on November 6-10, 13-17, & 27 and December 1 & 4-5, 2023 by WESTWARD staff under the direction of John J. Sackrider, P.G. to verify the presence or absence of recharge features identified in the desktop review and to identify recharge features not found during the desktop review. Field reconnaissance was performed in accordance with the *TCEQ-0585-Instructions (Rev. 10-1-04)*.

#### 6.1 Surface Geology

Buda (Kbu) and Salmon Peak (Ksa) Limestone were observed primarily on the northern part of the Site although some Kbu outcrops were also observed in the West Nueces Riverbed. Alluvium (Qal) was observed primarily on the southern part of the Site. Broken pieces of Del Rio Clay (Kdr), which is not included in the published geologic literature as being mapped on the surface of the Site, were found close to and on the West Nueces River.

#### 6.2 Structure

The presence of three (3) faults, S-110, S-111, and S-119, were observed and recorded in the field. Four (4) additional faults that had previously been discovered through exploratory drilling, S-175 through S-177 and S-180, were added to this report.

#### 6.3 Karst Features

One (1) sinkhole, one (1) solution-enlarged fracture, nine (9) solution cavities, and two (2) zones of solution cavities were identified and recorded during the field investigation. Two of these karst features (S-118 and S-126) are rated sensitive.

#### 6.4 Non-karst & Manmade Features

Fifty (50) non-karst closed depressions, one (1) zone of non-karst closed depressions, and ten (10) manmade features in bedrock were identified and recorded during the field investigation. Of the manmade features, S-136 and S-147 are water wells, neither of which are rated sensitive.

Manmade features S-125, S-137 and exploratory boreholes S-169 through S-174 are all rated sensitive for a total of eight (8) sensitive manmade features in bedrock.

#### 6.5 Feature Descriptions

#### S-100 (Z-SC)

#### **Not Sensitive**

Feature S-100 is a zone of solution cavities located on the northeast corner of the Site. The feature measures approximately 50 ft. x 20 ft. x 3.66 ft. and has an approximate trend of 80°. The largest of these measures 0.25 ft. x 0.66 ft. x 3.6 ft. with 2 or 3 potential solution cavities in the surrounding area. The solution cavities were infilled with cobbles and boulders at the time of field investigation. The catchment area of the feature is greater than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-101 (CD)

Feature S-101 is a non-karst closed depression that is located near the northern property and measures approximately 50 ft. x 20 ft. x 0.5 ft. The feature's floor consists of bedrock with broken cobbles surrounded by vegetation. The catchment area of the feature is greater than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-102 (CD)

Feature S-102 is a is a non-karst closed depression that is located near the northern property boundary and measures approximately 63 ft. x 20 ft. x 1 ft. The feature's floor consists of bedrock with broken cobbles surrounded by vegetation. The catchment area of the feature is greater than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-103 (CD)

Feature S-103 is a non-karst closed depression located within the floodplain on the southeastern part of the Site. It measures approximately 200 ft. x 50 ft. x 2 ft. and has a vegetated soil floor. The catchment area of the feature is greater than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-104 (CD)

Feature S-104 is a non-karst closed depression located within the floodplain on the southeastern part of the Site. It measures approximately 8 ft. x 6 ft. x 0.66 ft. and has a vegetated soil floor. The catchment area of the feature is greater than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-105 (CD)

Feature S-105 is a non-karst closed depression located within the floodplain on the southeastern part of the Site. It measures approximately 120 ft. x 20 ft. x 1 ft. and has a vegetated soil floor. The catchment area of the feature is greater than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

## S-106 (CD)

Feature S-106 is a non-karst closed depression located within the floodplain on the southeastern part of the Site. It measures approximately 8 ft. x 3 ft. x 0.66 ft. and has a vegetated soil floor. The catchment area of the feature is greater than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-107 (CD)

Feature S-107 is a non-karst closed depression located within the floodplain on the southeastern part of the Site. It measures approximately 644 ft. x 75 ft. x 3 ft. and has a vegetated soil floor. The catchment area of the feature is greater than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

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#### S-108 (CD)

Feature S-108 is a non-karst closed depression located within the floodplain on the southwestern part of the Site. It measures approximately 18 ft. x 10 ft. x 3 ft. and is floored with vegetation. The catchment area for this feature is less than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-109 (CD)

Feature S-109 is a non-karst closed depression located within the floodplain on the southwestern part of the Site. It measures approximately 15 ft. x 3 ft. x 0.66 ft. and has a vegetated soil floor topped with many cobbles. The catchment area of the feature is less than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-110 (F)

Feature S-110 is a fault, observed in depression with smooth sides in a Kbu outcrop located in the West Nueces riverbed along the western Site boundary. Previous subsurface exploration by WESTWARD has established that a fault exists at this location. The outcrop measures approximately 45 ft. x 20 ft. x 2 ft. with an approximate trend of  $65^{\circ}$  which is consistent with the dominant fault trend. The catchment area of the feature is greater than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-111 (F)

Feature S-111 is a fault that was observed as a Kbu outcrop with slickensides located less than 200 ft. from feature S-110 in the West Nueces riverbed. The outcrop measures approximately 15 ft. x 6 ft. x 3 ft. with an approximate trend of  $20^{\circ}$ . The catchment area of the feature is greater than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-112 (CD)

Feature S-112 is a non-karst closed depression located near the southwestern boundary of the Site. The feature appears to be a hog wallow and measures approximately 15 ft. x 12 ft. x 1 ft. It is floored with fine-grained soil that exhibited mud cracks at the time of field investigation. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-113 (CD)

Feature S-113 is a large non-karst closed depression located on the southwest corner of the Site. The feature measures approximately 225 ft. x 130 ft. x 6 ft. The feature is floored with vegetated soil. The catchment area of the feature is greater than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

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#### S-114 (CD)

Feature S-114 is a large, circular non-karst closed depression located near the eastern boundary of the Site. The feature appears to have been an old trench and measures approximately 120 ft. x 120 ft. x 3 ft. The feature is floored with vegetated loose dark soil. The catchment area of the feature is greater than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-115 (CD)

Feature S-115 is a non-karst closed depression near the eastern boundary of the Site. The feature measures approximately 60 ft. x 10 ft. x 6 ft. The feature is floored with bedrock and was littered with trash at the time of field investigation. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-116 (CD)

Feature S-116 is a non-karst closed depression located near the eastern boundary of the Site. It is located within the floodplain and appears to be a low spot on the road. The feature measures approximately 120 ft. x 20 ft. x 1 ft. The floor is covered with vegetation. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-117 (SC)

Feature S-117 is a small solution cavity located on a hilltop near the northeastern boundary of the Site. The feature measures approximately 0.21 ft. x 0.10 ft. x 0.16 ft. and has an approximate trend of  $180^{\circ}$ . It was infilled with dark soil at the time of field investigation. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-118 (Z-SC)

Feature S-118 is a zone of three solution cavities located near the northern boundary of the Site. The feature measures approximately 9 ft. x 5 ft. x 1.5 ft. with an approximate trend of  $0^{\circ}$ . The largest of the solution cavities measured approximately 1.5 ft. in diameter at the surface and funneled down to approximately 0.25 ft. at the base. They were all infilled with soil at the time of field investigation. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is low to intermediate. This feature is rated sensitive.

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#### S-119 (F)

Feature S-119 is a fault that was observed on the northcentral boundary of the Site. Previous subsurface exploration by WESTWARD has established that a fault exists at this location. Evidence of the fault was indicated by the presence of bedrock with a steep elevation change and changes in vegetation. Further evidence was observed along the drainage where it is mapped as it appears to be fault-controlled. The extent of the fault within the Site boundary is approximately 4,520 ft. in length, with varying trends. At the location where this feature was observed and recorded, the trend was approximately 20° and the area was floored with bedrock, broken cobbles, and sparse vegetation. The catchment area of the feature is greater than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-120 (CD)

Feature S-120 is a is a non-karst closed depression located near the northcentral boundary of the Site. The feature appears to be a hog wallow and measures approximately 20 ft. x 12 ft. x 0.5 ft. It was infilled with dark soil at the time of the field investigation. The catchment area of the feature is greater than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-121 (CD)

Feature S-121 is a non-karst closed depression located within the floodplain near the northwestern boundary of the Site. It measures approximately 100 ft. x 30 ft. x 2 ft. and has a vegetated soil floor. The catchment area of the feature is greater than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-122 (CD)

Feature S-122 is a non-karst closed depression located near the northwestern boundary of the Site. It measures approximately 220 ft. x 100 ft. with an estimated depth of 5 ft. as the feature was holding water at the time of field investigation. The catchment area of the feature is greater than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-123 (CD)

Feature S-123 is a non-karst closed located within the floodplain near the northwestern boundary of the Site. The feature measures approximately 85 ft. x 15 ft. x 2 ft. and has a vegetated soil floor. The catchment area of the feature is greater than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-124 (CD)

Feature S-124 is a is a non-karst closed depression located in a fault-controlled drainage on the northwestern part of the Site. The feature measures approximately 12 ft. x 5 ft. x 1 ft. and was floored with broken rock. The catchment area for this feature is greater than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

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#### **Not Sensitive**
#### S-125 (MB)

Feature S-125 appears to be an old borehole that is classified as a manmade feature in bedrock and located on the northwestern part of the Site. The diameter of the borehole measures approximately 0.38 ft. and the depth is approximately 23.5 ft. It was observed to be open at the time of the field investigation with a gravel-cemented cap laying nearby. The cap did not fit snugly over the borehole and it could not be confirmed whether the borehole is plugged. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is high. This feature is rated sensitive.

#### S-126 (SH)

Feature S-126 is suspected to be a sinkhole that is located along a bluff on the northcentral part of the Site. The feature measures approximately 60 ft. x 60 ft. x 6 ft. with an approximate trend of 50° which is within the dominant fault trend range. The bluff alongside which it stands measures approximately 8 ft. tall with large boulders at its base. There was no evidence of standing water at the time of field investigation, and it is suspected that there may be a solution cavity underneath the boulders. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is intermediate. This feature is rated sensitive.

#### S-127 (SC)

Feature S-127 is a solution cavity located on the central part of the Site. The feature measures approximately 0.66 ft. x 0.33 ft. x 0.83 ft. with a trend of approximately 20°. The feature floor was comprised of dark soils and scattered organic debris. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-128 (SC)

Feature S-128 is a solution cavity located on the central part of the Site. The feature measures approximately 1 ft. x 0.33 ft. x 1 ft. with an approximate trend of 140°. It was plugged with loose dark soil and organics at the time of field investigation. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-129 (SC)

Feature S-129 is a solution cavity located on the central part of the Site. The feature measures approximately 0.33 ft. x 0.50 ft. x 1 ft. and was plugged with dark soil at the time of field investigation. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-130 (SC)

Feature S-130 is a solution cavity located on the eastern part of the Site. The feature measures approximately 0.50 ft. x 0.33 ft. x 1.83 ft. with an approximate trend of 100° and was plugged with dark soil and organics at the time of field investigation. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

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#### S-131 (CD)

Feature S-131 is a is a non-karst closed depression located along a fault bluff on the western part of the Site. The feature measures approximately 90 ft. x 10 ft. x 3 ft. and has a floor consisting of dark soil, rocks, and vegetation. The catchment area of the feature is greater than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-132 (CD)

Feature S-132 is a is a non-karst closed depression located on the western part of the Site. The feature measures approximately 40 ft. x 21 ft. x 2 ft. and has a floor consisting of vegetation. The catchment area of the feature is greater than 1.6 acres. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-133 (CD)

Feature S-133 is a is a non-karst closed depression located on the western part of the Site. The feature measures approximately 100 ft. x 30 ft. x 2 and has a floor consisting of vegetated soil. The catchment area of the feature is greater than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-134 (CD)

Feature S-134 is a non-karst closed depression located on the western part of the Site. The feature measures approximately 45 ft. x 35 ft. x 4 and has a floor consisting of vegetation. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-135 (CD)

Feature S-135 is a non-karst closed depression located on the western part of the Site. The feature measures approximately 13 ft. x 20 ft. x 0.83 ft. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-136 (MB-W)

Feature S-136 is a water well classified as a manmade feature in bedrock. It is located on the southwestern part of the Site. The well has a steel casing that measures approximately 0.66 ft. in diameter and extends approximately 0.16 ft. above a concrete pad. The concrete pad extends approximately 0.33 ft. above the ground surface. The well was not found on any database for public wells during the desktop review and the depth remains unknown. The well appeared to be in use and compliant at the time of field investigation. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### Project No. 11173-030 December 2023

#### Not Sensitive

# **Not Sensitive**

## **Not Sensitive**

**Not Sensitive** 

#### **Not Sensitive**

#### S-137 (MB)

Feature S-137 was observed to be a hole with a pipe sticking up from the ground and recorded as a manmade feature in bedrock. The feature measures approximately 2 ft. x 2 ft. with a depth of at least 4 ft. although the total depth could not be determined. The hole was infilled with concrete blocks and metal paneling. The catchment area for this feature is less than 1.6 acres and the interpreted probability of rapid infiltration is intermediate. This feature is rated sensitive.

#### S-138 (CD)

Feature S-138 is a non-karst closed depression located within the floodplain on the southwestern part of the Site. The feature measures approximately 180 ft. x 175 ft. x 2 ft. and has a floor consisting of vegetated soil. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-139 (CD)

Feature S-139 is a non-karst closed depression located within the floodplain on the southwestern part of the Site. The feature measures approximately 2,800 ft. x 840 ft. x 1 ft. and has a floor consisting of vegetation. The catchment area of the feature is greater than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-140 (CD)

Feature S-140 is a non-karst closed depression located within the floodplain on the southwestern part of the Site. The feature measures approximately 15 ft. x 10 ft. x 0.66 ft. and has a floor consisting of vegetation. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-141 (CD)

Feature S-141 is a non-karst closed depression located within the floodplain on the southwestern part of the Site. The feature measures approximately 25 ft. x 16 ft. x 1 ft. and has a floor consisting of vegetation. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-142 (CD)

Feature S-142 is a non-karst closed depression located within the floodplain on the southwestern part of the Site. The feature measures approximately 50 ft. x 10 ft. x 2 ft. and has a floor consisting of coarse gravel and cobbles. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

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#### S-143 (SC)

Feature S-143 is a solution cavity located within the floodplain on the southcentral part of the Site. The feature measures approximately 4.5 ft. x 3.5 ft. x 3 ft. and has a floor consisting of gravel and soil. The catchment area of the feature is less than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-144 (SC)

Feature S-144 is a solution cavity located at the bottom of a fault-controlled drainage within the floodplain on the western part of the Site. The feature measures approximately 0.25 ft. x 0.16 ft. x 2.5 ft. with an approximate trend of 140°. At the time of field investigation, there was soil at the base of this feature, and it appeared to be plugged with soil. The catchment area of the feature is greater than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-145 (SC)

Feature S-145 is a solution cavity on the eastern part of the Site. The feature measures approximately 1.5 ft. x 1 ft. x 2 ft. with an approximate trend of 60°. There was evidence of burrowing and the feature appeared to be plugged with soil at the time of field investigation. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-146 (CD)

Feature S-146 is a non-karst closed depression located within the floodplain on the eastern part of the Site. The feature measures approximately 20 ft. x 12 ft. x 2 ft. and has a floor consisting of vegetated soil. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-147 (MB-W)

Feature S-147 is a water well classified as a manmade feature in bedrock. It is located by the house near the eastern Site boundary. The well has a steel casing that measures approximately 0.58 ft. in diameter and extends approximately 1 ft. above a concrete pad. The concrete pad measures approximately 2 ft. x 2 ft. and extends approximately 0.5 ft. above the ground surface. The well was not found on any database for public wells during the desktop review and the depth remains unknown. The well was capped with a steel plate and appeared to be in use and compliant at the time of field investigation. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-148 (Z-CD)

Feature S-148 is a zone of two closed depressions located on the southern part of the Site. The feature measures approximately 40 ft. x 20 ft. x 4 ft. and has a vegetated soil floor. The larger of the closed depressions measures approximately 20 ft. x 12 ft. x 4 ft. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

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#### Not Sensitive

#### Not Sensitive

# Not Sensitive

**Not Sensitive** 

#### **Not Sensitive**

#### S-149 (CD)

Feature S-149 is a non-karst closed depression located on the southern part of the Site. The feature appears to be an old trench and measures approximately 15 ft. x 4 ft. x 2 ft. It has a vegetated soil floor with scattered coarse gravel. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-150 (CD)

Feature S-150 is a non-karst closed depression located within the floodplain on the southern part of the Site. It is a backfilled exploratory trench. The feature measures approximately 12 ft. x 6 ft. x 1 ft. and is floored with soil and gravel. The catchment area of the feature is less than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-151 (CD)

Feature S-151 is a non-karst closed depression located within the floodplain just south of the West Nueces River. It measures approximately 20 ft. x 30 ft. x 1 ft. and is floored with gravel. The feature is an example of a depression in undulating flood-controlled topography. The catchment area of the feature is less than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-152 (CD)

Feature S-152 is a non-karst closed depression located within the floodplain on the southeastern part of the Site. It appears to be an old trench and measures approximately 18 ft. x 3 ft. x 2 ft. The floor consists of soil and gravel. The catchment area of the feature is less than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-153 (CD)

Feature S-153 is a non-karst closed depression located within the floodplain on the southeastern part of the Site. It is a backfilled exploratory trench. The feature measures approximately 50 ft. x 20 ft. x 2 ft., is floored with soil, gravel, and vegetation. The catchment area of the feature is less than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-154 (CD)

Feature S-154 is a non-karst closed depression located within the floodplain on the southcentral part of the Site. The feature measures approximately 15 ft. x 6 ft. x 1 ft. and is floored with vegetation and small scattered cobbles. The catchment area of the feature is greater than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### Project No. 11173-030 December 2023

#### Not Sensitive

**Not Sensitive** 

Not Sensitive

#### Not Sensitive

#### **Not Sensitive**

#### S-155 (CD)

Feature S-155 is a non-karst closed depression located within the floodplain on the southcentral part of the Site. It appears to be an old borrow pit and measures approximately 27 ft. x 27 ft. x 0.5 ft. The feature is floored with vegetation. The catchment area of the feature is less than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-156 (CD)

Feature S-156 is a non-karst closed depression located on the southcentral part of the Site. It appears to be an old borrow pit and measures approximately 50 ft. x 75 ft. x 7.5 ft. The feature is floored with vegetation. The catchment area of the feature is less than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-157 (CD)

Feature S-157 is a non-karst closed depression located within the floodplain on the southcentral part of the Site. The feature measures approximately 15 ft. x 6 ft. x 1 ft. and is floored with vegetation. The catchment area of the feature is greater than 1.6 acres and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-158 (CD)

Feature S-158 is a non-karst closed depression located within the floodplain on the southcentral part of the Site. The feature measures approximately 50 ft. x 30 ft. x 2 ft. and is floored with vegetation. The catchment area of the feature is greater than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-159 (CD)

Feature S-159 is a non-karst closed depression located within the floodplain on the southcentral part of the Site. It appears to be an old borrow pit that measures approximately 35 ft. x 20 ft. x 4 ft. and is floored with vegetation. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

## S-160 (CD)

Feature S-160 is a non-karst closed depression located within the floodplain on the southcentral part of the Site. It appears to be an old borrow pit that measures approximately 15 ft. x 12 ft. x 3 ft. and is floored with vegetation. The catchment area of the feature is less than 1.6 acres, and the probability of rapid infiltration is low. The feature is rated not sensitive.

## S-161 (CD)

Feature S-161 is a non-karst closed depression located within the floodplain on the southcentral part of the Site. It appears to be the result of an uprooted tree. The feature measures approximately 20 ft. x 8 ft. x 1 ft. and is floored with soil. The catchment area of the feature is less than 1.6 acres, and the probability of rapid infiltration is low. The feature is rated not sensitive.

## **Not Sensitive**

Not Sensitive

# Not Sensitive

#### **Not Sensitive**

#### Not Sensitive

# Not Sensitive

#### S-162 (CD)

Feature S-162 is a large non-karst closed depression located within the floodplain on the southcentral part of the Site. The feature measures approximately 190 ft. x 150 ft. x 3 ft and is floored with vegetated soil. The catchment area of the feature is greater than 1.6 acres, and the probability of rapid infiltration is low. The feature is rated not sensitive.

#### S-163 (CD)

Feature S-163 is a large non-karst closed depression located on the southcentral part of the Site. The feature measures approximately 120 ft. x 50 ft. x 1 ft and is floored with vegetation. The catchment area of the feature is greater than 1.6 acres, and the probability of rapid infiltration is low. The feature is rated not sensitive.

#### S-164 (CD)

Feature S-164 is a non-karst closed depression located along the southcentral Site boundary. The feature appears to be a trench that measures approximately 13 ft. x 10 ft. x 3.5 ft and is floored with soil. The catchment area of the feature is less than 1.6 acres, and the probability of rapid infiltration is low. The feature is rated not sensitive.

#### S-165 (CD)

Feature S-165 is a large non-karst closed depression located along the southcentral Site boundary. It appears to be an excavated pit that was holding trash at the time of field investigation. The feature measures approximately 100 ft. x 20 ft. x 4 ft and is floored with vegetated soil. The catchment area of the feature is less than 1.6 acres, and the probability of rapid infiltration is low. The feature is rated not sensitive.

#### S-166 (CD)

Feature S-166 is a large non-karst closed depression located within the floodplain on the southwestern part of the Site. The feature measures approximately 250 ft. x 80 ft. x 4 ft. and is floored with vegetation. The catchment area of the feature is greater than 1.6 acres, and the probability of rapid infiltration is low. The feature is rated not sensitive.

#### S-167 (CD)

Feature S-167 is a large non-karst closed depression located within the floodplain on the southwestern part of the Site. The feature measures approximately 175 ft. x 40 ft. x 1 ft and is floored with vegetation. The catchment area of the feature is less than 1.6 acres, and the probability of rapid infiltration is low. The feature is rated not sensitive.

#### S-168 (CD)

Feature S-168 is a large non-karst closed depression located on the southwestern part of the Site. The feature measures approximately 50 ft. x 8 ft. x 2 ft and is floored with vegetation. The catchment area of the feature is less than 1.6 acres, and the probability of rapid infiltration is low. The feature is rated not sensitive.

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#### Not Sensitive

# Not Sensitive

# **Not Sensitive**

**Not Sensitive** 

## **Not Sensitive**

**Not Sensitive** 

#### S-169 (MB)

Feature S-169 is an exploratory borehole that is classified as a manmade feature in bedrock. The feature is located on the northcentral part of the Site. The borehole measures approximately 0.38 ft. in diameter with a depth of approximately 243.5 ft. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is high. This feature is rated sensitive.

#### S-170 (MB)

Feature S-170 is an exploratory borehole that is classified as a manmade feature in bedrock. The feature is located on the northcentral part of the Site. The borehole measures approximately 0.38 ft. in diameter with a depth of approximately 417 ft. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is high. This feature is rated sensitive.

#### S-171 (MB)

Feature S-171 exploratory borehole that is classified as a manmade feature in bedrock. The feature is located on the northeastern part of the Site. The borehole measures approximately 0.38 ft. in diameter with a depth of approximately 447 ft. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is high. This feature is rated sensitive.

#### S-172 (MB)

Feature S-172 is an exploratory borehole that is classified as a manmade feature in bedrock. The feature is located on the northeastern part of the Site. The borehole measures approximately 0.38 ft. in diameter with a depth of approximately 245.5 ft. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is high. This feature is rated sensitive.

#### S-173 (MB)

Feature S-173 is an exploratory borehole that is classified as a manmade feature in bedrock. The feature is located on the northwestern part of the Site. The borehole measures approximately 0.38 ft. in diameter with a depth of approximately 251 ft. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is high. This feature is rated sensitive.

#### S-174 (MB)

Feature S-174 is an exploratory borehole that is classified as a manmade feature in bedrock. The feature is located on the northwestern part of the Site. The borehole measures approximately 0.38 ft. in diameter with a depth of approximately 446 ft. The catchment area of the feature is less than 1.6 acres. The interpreted probability of rapid infiltration is high. This feature is rated sensitive.

#### Project No. 11173-030 December 2023

#### Sensitive

Sensitive

Sensitive

#### Sensitive

Sensitive

#### Sensitive

#### S-175 (F)

Feature S-175 is a fault discovered on the Site during a previous exploratory drilling campaign. It is mapped across the center of the Site with an average approximate trend of 50° which is within the dominant fault trend range. The extent of the fault within the Site boundaries measures approximately 8,630 ft. The catchment area of the feature is greater than 1.6 acres. Vegetation and an established soil profile were observed in the mapped fault areas. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-176 (F)

Feature S-176 is an inferred fault discovered on the Site during a previous exploratory drilling campaign. It is mapped from the northwest corner to the southeast corner of the Site boundary with an approximate trend of 128°. The extent of the fault within the Site boundaries measures approximately 11,850 ft. The catchment area of the feature is greater than 1.6 acres. Vegetation and an established soil profile were observed in the mapped fault areas. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-177 (F)

Feature S-177 is a fault discovered on the Site during a previous exploratory drilling campaign. It is mapped at the southeastern corner of the Site with an average approximate trend of 50° which is within the dominant fault trend range. The extent of the fault within the Site boundaries measures approximately 1,035 ft. The catchment area of the feature is greater than 1.6 acres. Vegetation and an established soil profile were observed in the mapped fault areas. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-178 (SC)

Feature S-178 is a solution cavity located on the northeastern part of the Site. The feature measures approximately 0.33 ft. x 0.25 ft. and is estimated to be at least 3 feet in depth. Due to its small size, small catchment area of less than 1.6 acres, and absence of direct or indirect evidence of flow, the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-179 (SF)

Feature S-179 is a solution-enlarged fracture located on the northeastern part of the Site. The feature's opening measures approximately 4 ft. x 0.33 ft. x at least 0.5 ft. The catchment area of the feature is less than 1.6 acres, and the interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### S-180 (F)

Feature S-180 is an inferred fault discovered on the Site during a previous exploratory drilling campaign. It is mapped on the northwest corner of the Site boundary with an average approximate trend of 60° which is within the dominant fault trend range. The extent of the fault within the Site boundaries measures approximately 2,360 ft. The catchment area of the feature is greater than 1.6 acres. Vegetation and an established soil

#### Not Sensitive

#### Not Sensitive

# Not Sensitive

Not Sensitive

## **Not Sensitive**

profile were observed in the mapped fault areas. The interpreted probability of rapid infiltration is low. This feature is rated not sensitive.

#### **SELECT PHOTOGRAPHS**



S-100: Solution cavity



S-102: Closed depression



S-110: Fault



S-115: Non-karst closed depression



S-117: Solution cavity



S-119: Evidence of a fault



S-119: Evidence of a fault



S-120: Non-karst closed depression



S-121: Non-karst closed depression



S--122: Non-karst closed depression



S-125: Manmade feature in bedrock



S-125: Manmade feature in bedrock, capped



S-126: Sinkhole, northeast view



S-126: Sinkhole, east/southeast view



S-129: Solution cavity



S-133: Non-karst closed depression



S-135: Non-karst closed depression



S-136: Manmade feature in bedrock, water well



S-137: Manmade feature in bedrock



S-141: Non-karst closed depression



S-142: Non-Karst Closed Depression



S-164: Non-Karst Closed Depression



S-178: Solution cavity



S-179: Solution-enlarged fracture

# Attachment D

Site Geologic Map Site Soils Map







SCALE: 1 INCH = 400 FEET

Note: 2021 Site Geologic Assessment Map scaled to 1 inch = 400 feet to match current map scales. No other alterations made.



SCALE: 1 INCH = 400 FEET

Note: 2021 Site Geologic Assessment Map scaled to 1 inch = 400 feet to match current map scales. No other alterations made.

# Modification of a Previously Approved Plan

#### **Texas Commission on Environmental Quality**

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

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

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

# Signature

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

Print Name of Customer/Agent: Curt Campbell, P.E.

Date: \_12/15/2023

TX License No. 106851 | TX Firm No. 4524

Signature of Customer/Agent:

# Project Information

 Current Regulated Entity Name: <u>Uvalde Site</u> Original Regulated Entity Name: <u>Uvalde Site</u> Regulated Entity Number(s) (RN): <u>111281358</u>

Edwards Aquifer Protection Program ID Number(s): 13001462

The applicant has not changed and the Customer Number (CN) is: 605798115

- The applicant or Regulated Entity has changed. A new Core Data Form has been provided.
- 2. Attachment A: Original Approval Letter and Approved Modification Letters. A copy of the original approval letter and copies of any modification approval letters are attached.

- 3. A modification of a previously approved plan is requested for (check all that apply):
  - Physical or operational modification of any water pollution abatement structure(s) including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
  - Change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
  - Development of land previously identified as undeveloped in the original water pollution abatement plan;
    - Physical modification of the approved organized sewage collection system;
    - Physical modification of the approved underground storage tank system;
      - Physical modification of the approved aboveground storage tank system.
- 4. Summary of Proposed Modifications (select plan type being modified). If the approved plan has been modified more than once, copy the appropriate table below, as necessary, and complete the information for each additional modification.

WPAP Modification	Approved Project	First Modification
Summary		
Acres	<u>1,548</u>	<u>2,952</u>
Type of Development	Quarry, roads, plant	Quarry, roads, plant
Number of Residential	<u>N/A</u>	<u>N/A</u>
Lots		
Impervious Cover (acres)	<u>3.68</u>	<u>10.79</u>
Impervious Cover (%)	<u>0.24%</u>	<u>0.37%</u>
Permanent BMPs	Earthen Berms, NVFS	Earthen Berms, NVFS
Other		

AST Modification	Approved Project	Proposed Modification
Summary		
Number of ASTs		
Volume of ASTs		
Other		

UST Modification	Approved Project	Proposed Modification
Summary		
Number of USTs		
Volume of USTs		
Other		

5. Attachment B: Narrative of Proposed Modification. A detailed narrative description of the nature of the proposed modification is attached. It discusses what was approved, including any previous modifications, and how this proposed modification will change the approved plan.

6. Attachment C: Current Site Plan of the Approved Project. A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere.

The approved construction has not commenced. The original approval letter and any subsequent modification approval letters are included as Attachment A to document that the approval has not expired.

The approved construction has commenced and has been completed. Attachment C illustrates that the site was constructed as approved.

The approved construction has commenced and has been completed. Attachment C illustrates that the site was **not** constructed as approved.

The approved construction has commenced and has **not** been completed.

Attachment C illustrates that, thus far, the site was constructed as approved.

The approved construction has commenced and has **not** been completed.

Attachment C illustrates that, thus far, the site was **not** constructed as approved.

7. The acreage of the approved plan has increased. A Geologic Assessment has been provided for the new acreage.

Acreage has not been added to or removed from the approved plan.

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

## **Cowboy Aggregates, LLC**

## Modification to Previous Plan Attachment A

## **Original Approval Letter and Approved Modification Letters**

Please see attached Approval Letter dated April 4, 2022 (EAPP ID 13001462).

Jon Niermann, *Chairman* Emily Lindley, *Commissioner* Bobby Janecka, *Commissioner* Toby Baker, *Executive Director* 



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 4, 2022

Mr. Nathaniel Kelly Foote Cowboy Aggregates, LLC 2839 Wooded Acres Drive Waco, Texas 76710

Re: Edwards Aquifer, Uvalde County

NAME OF PROJECT: Uvalde Site; Located approximately 3.12 miles northeast from US 90 and RR 1022 intersection; Uvalde County, Texas

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

Regulated Entity No. RN111281358; Additional ID. 13001462

Dear Mr. Foote:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the above-referenced project submitted to the San Antonio Regional Office by Westward Environmental, Inc. on behalf of Cowboy Aggregates, LLC on January 6, 2022. Final review of the WPAP was completed after additional material was received on February 22, 2022, March 8, 2022, March 9, 2022, March 21, 2022, and April 1, 2022. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected, and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed, and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aguifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

#### PROJECT DESCRIPTION

The proposed limestone quarry project will have an area of approximately 1,548 acres. The proposed quarry pit will disturb approximately 1,400 acres. The proposed activities for the quarry include quarrying to an elevation no deeper than 907.5 feet above mean sea level. The proposed impervious cover is 18.85 acres (12.17 percent) consisting of perimeter maintenance roads, haul roads and a West Nueces River on-grade stream crossing.

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Blasting agents will be used in the mining process. All processing operations will take place off site south of the Recharge Zone. Quarrying operations will proceed across the site clearing less than 10-acres at a time.

Project wastewater (domestic) will be collected in portable toilets and disposed of by a TCEQ registered waste disposal service. Trash generated on-site will be disposed of in a dumpster and handled by a licensed waste service.

#### PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or up-gradient of the site and potentially flowing across and off the site after construction, natural vegetative filter strips, designed using the TCEQ technical guidance document, <u>Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005)</u>, will be utilized to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 12,819 pounds of TSS generated from 18.85 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

In addition, as the quarry expands outward in 10-acre increments, temporary earthen berms will retain stormwater runoff. After construction is completed, on-site stormwater will be retained within the quarry pit. The permanent BMPs at the site will include the final vegetated earthen berm and final 50-foot vegetative buffers located along the property boundary, plus 25-foot floodplain buffers.

#### **GEOLOGY**

According to the geologic assessment included with the application, the site is located on Quaternary alluvium, the Leona Formation, the Eagle Ford Formation, the Buda Limestone, the Del Rio Clay and the Salmon Peak Formation which is the Edwards Group equivalent in the Maverick Basin. A total of 36 non-karst closed depressions, seven (7)) non-sensitive manmade features in bedrock, one (1) sensitive manmade feature in bedrock, 25 non-sensitive geologic features and two (2) sensitive geologic features were noted by the project geologist.

Sensitive karst feature S-36 (solution enlarged fracture), S-40 (solution cavity) have natural buffers based on the drainage area to the feature and are shown on the site plan; however, both will be temporarily sealed and mined out during quarrying operations. Feature S-9, a water well rated sensitive, will be repaired and reclassified as non-sensitive. The site assessment conducted on January 26, 2022, revealed that the site was generally as described in the application.

#### SPECIAL CONDITIONS

- I. The BMPs and measures proposed in the application and/or described in this approval letter must be operational prior to any soil disturbing activities within a BMP's drainage area.
- II. Intentional discharges of sediment laden water from regulated activities are not allowed. If dewatering becomes necessary, appropriate measures must be taken.
- III. In addition to the requirements for discovered features, the on-site Quarry Manager will receive annual training from a licensed Professional Geoscientist on feature identification and protection. Each occurrence of this training must be documented, and documentation must be presented when requested by TCEQ representatives.

- IV. The on-site Quarry Manager experienced in feature identification will conduct visual surveys of the pit to ensure adequate identification and reporting of encountered sensitive features. Visual surveys will be conducted monthly. Results of each visual survey conducted by the on-site Quarry Manager must be documented and the documentation must be presented when requested by TCEQ representatives.
- V. The approval of this WPAP is not an approval of the proposed revision of the 100-year floodplain for the Nueces River and West Nueces River which has been submitted as a Conditional Letter of Map Revision to Uvalde County and FEMA by Westward Environmental, Inc.
- VI. Pursuant to 30 TAC §213.4(h)(3) and as stated in the Edwards Aquifer protection plan, this protection plan approval or extension will expire, and no extension will be granted if more than 50% of the total construction has not been completed within 10 years from the initial approval of the plan. A new Edwards Aquifer protection plan must be submitted to the TCEQ with the appropriate fees for review and approval by the executive director prior to commencing or continuing any construction or regulated activities beyond 10 years. The Applicant must submit a status report for the project containing information regarding the percentage of the total project construction completed within 180 days prior to the expiration date of this plan approval. If at that time, the total project construction cannot be demonstrated to be at least 50% complete, the Applicant must submit a new Edwards Aquifer protection plan to the TCEQ for review and approval before continuing any construction or regulated activities beyond 10 years from the date of initial approval of the plan.

#### STANDARD CONDITIONS

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

#### Prior to Commencement of Construction:

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

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

#### **During Construction:**

- 10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
- 12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
- 13. Four (4) wells exist on the site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.

- 14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
- 15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

#### After Completion of Construction:

- 18. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.
- 19. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
- 20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
- 21. An Edwards Aquifer protection plan approval or extension will expire, and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 22. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.
Mr. Nathaniel Kelly Foote April 4, 2022 Page 6

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

Sincerely,

Lillian Butler

Lillian Butler, Section Manager Edwards Aquifer Protection Program Texas Commission on Environmental Quality

LIB/dpm

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625 Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Mr. Curt G. Campbell, P.E., Westward Environmental, Inc.

#### **Modification to Previous Plan Attachment B**

#### Narrative of Proposed Modification

This modification to the previous WPAP approval is to add the east 1,404.70 acres to the plan within the Recharge Zone and expand the final quarry pit boundary to the east. This will bring the total site area to approx. 2,952.44-acres. The previously approved minimum quarry floor bottom elevation of 907.50 ft amsl, will not change.

#### On the Recharge Zone:

The existing quarry pit will continue to expand as described in the approved WPAP. Temporary BMPs consisting of earthen berms and vegetated buffers will continue to be utilized to control and treat stormwater runoff in the initial stages of construction. Temporary natural existing vegetation will be maintained in a 25-foot buffer along the revised calculated FEMA 100-year floodplain of the West Nueces River located north of the Recharge Zone boundary. This buffer will be maintained until mining begins in the area and all applicable permits will be obtained before mining through the FEMA 100-year floodplain.

As previously approved, when the pit is of sufficient size, the crushing operation may be moved into the quarry pit, and additional stockpiles may also be stored in the pit. The crushing equipment may be moved to any location within the pit depending on the current mining area. The Proposed Conditions Map (Sheet C4) depicts the area of the site that will be quarried. Permanent BMPs at the site will include the Final Earthen Berm and 50-foot vegetated buffers.

The area being added will be used to further expand quarry operations in the future. The quarry pit may be backfilled with clean fill materials and non-sellable overburden. As quarry operations expand, areas of more than 10-acres of common drainage may be disturbed at a time, however these areas will be contained within temporary earthen berms, which will expand with the operation up to the Final Earthen Berm (as shown on the Proposed Conditions Map), and all run-off from these areas will remain contained on-site, ultimately draining to the pit. An initial phase of mining may involve grubbing a shallow area inside the temporary earthen berms for use as a material storage/staging yard. Within these areas, temporary material stockpiles & temporary compacted base access roads, constituting up to approximately 50-acres of impervious cover, may be established and/or relocated as needed. Runoff from this temporary impervious cover will be treated by surrounding natural vegetation and contained on-site by the surrounding temporary earthen berm (as described above and shown on the Proposed Conditions Map). These areas of disturbance and temporary impervious cover will all ultimately be mined out as the quarry pit expands to its final limits, as shown on the Proposed Conditions Map.

The geologic assessment included in this submittal covers the additional 1404.70-acre project area. Ten (10) features were identified as sensitive (S-118, S-125, S-126, S-137, S-169, S-170, S-171, S-172, S-173 and S-174 - see Existing Conditions Map). Of these, four features (S-118, S-125, S-126 and S-137) will have a vegetative buffer put in place prior to being temporarily sealed and eventually removed through mining. Features S-169, S-170, S-171, S-172, S-173 and S-174 are exploratory borings. These borings will also be protected by a vegetative buffer or some of these boreholes may be completed as observation wells. Ultimately prior to mining, all boreholes will be properly plugged and eventually will be removed through mining. Features S-136 and S-147

are water wells (see Interim Conditions Map), and though not rated as sensitive in their current condition, these wells will be properly plugged per 16 TAC 76 prior to being removed through mining.

#### Modification to Previous Plan Attachment C

#### **Current Site Plan of the Approved Project**

Please attached Sheet C6 & C7 (Interim and Final Conditions Maps) for the previously approved project.



# 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.

## Section 1.01 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: Curt G. Campbell, PE

Texas License No. 106851 | Firm No. 4524



Regulated Entity Name: Uvalde Site

## Section 1.02 Regulated Entity Information

- 1. The type of project is:
  - Residential: Number of Lots:\_\_\_\_\_

Residential: Number of Living Unit Equivalents:\_\_\_\_\_

Commercial

Industrial

Other:\_\_\_\_

- 2. Total site acreage (size of property): 2,952.44
- 3. Estimated projected population: <u>5</u>
- 4. The amount and type of impervious cover expected after construction are shown below:

TCEQ-0584 (Rev. 02-11-15)

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops		÷ 43,560 =	
Parking		÷ 43,560 =	
Other paved surfaces	<u>470,175.45</u>	÷ 43,560 =	<u>10.79</u>
Total Impervious Cover	<u>470,175.45</u>	÷ 43,560 =	<u>10.79</u>

Article II. Table 1 - Impervious Cover Table

Total Impervious Cover <u>10.79</u> ÷ Total Acreage <u>2,952.44</u> X 100 = <u>0.37</u>% 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.  $\square$  Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

## Section 2.01 For Road Projects Only

- (a) Complete questions 7 12 if this application is exclusively for a road project.
- 7. Type of project:
  - TXDOT road project.
  - County road or roads built to county specifications.
  - City thoroughfare or roads to be dedicated to a municipality.

Street or road providing access to private driveways.

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

Concrete
Asphaltic concrete pavement
Other:

9. Length of Right of Way (R.O.W.): \_\_\_\_\_ feet.

Width of R.O.W.: \_\_\_\_\_ feet.

- L x W =\_\_\_\_  $Ft^2 \div 43,560 Ft^2/Acre = ____ acres.$
- 10. Length of pavement area: \_\_\_\_\_ feet.

Width of pavement area: \_\_\_\_\_ feet. L x W = \_\_\_\_ Ft<sup>2</sup> ÷ 43,560 Ft<sup>2</sup>/Acre = \_\_\_\_ acres. Pavement area \_\_\_\_\_ acres ÷ R.O.W. area \_\_\_\_ acres x 100 = \_\_\_\_% impervious cover.

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

A rest stop will not be included in this project.

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.

# Section 2.02 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.

## Section 2.03 Wastewater to be generated by the Proposed Project

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

<u>100 %</u> Domestic	<u>    10    </u> Gallons/day
% Industrial	Gallons/day
% Commingled	Gallons/day

TOTAL gallons/day <u>10</u>

15. Wastewater will be disposed of by: Portable Toilets

On-Site Sewage Facility (OSSF/Septic Tank): Letter will be provided prior to installation

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.

## Section 2.04 Site Plan Requirements

#### (a) 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" = 400'.

18. 100-year floodplain boundaries:

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

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

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA Panel 48463CO450E eff. 11/4/2010

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

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

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

 $\left|\times\right|$  There are 2 (#) 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.

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

N/A

- 27. X 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. Egal boundaries of the site are shown.

## Section 2.05 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 Attachment A

#### **Factors Affecting Water Quality**

The major factor that could potentially affect water quality is sediment in stormwater runoff from disturbed areas of the site. More remote factors include fuels and lubricants from vehicles and equipment and trash/debris items.

Earthen berms and vegetated buffers located downgradient of the disturbed area(s) are proposed to capture sediment and control the flow of stormwater. Upgradient berms prevent run-on to most disturbed areas of the site. Any spills or leaks will be cleaned up in a timely manner and will be disposed of properly. A trash receptacle will be placed on-site for use by employees and visitors.

#### Water Pollution Abatement Plan Attachment B

#### Volume and Character of Stormwater

The area of the proposed final quarry pit, as shown on the Final Conditions Map, is approximately 2,109 acres. The stormwater from this disturbed area will carry an increased level of total suspended solids (TSS); however, stormwater from this area will be retained in the pit.

Due to the use of Temporary BMPs during construction, the character of stormwater runoff which is expected to occur from the proposed project will be essentially the same as prior to the site. As quarrying activities continue, the volume of stormwater runoff from the site will be reduced because the quarry pit will ultimately retain the anticipated on-site and upgradient stormwater runoff. The runoff coefficient for the impervious areas is 0.9 and the runoff coefficient for predevelopment is 0.03 per TCEQ guidance.





S3

REV. BY DESCRIPTION DATE · · · · · **INTERIM CONDITIONS - OVERVIEW** 12/1 WAR WPAP MOD Environmental. Engineering. Natural Resources. P.O. Box 2205 Boerne, Texas 78006 (830) 249–8284 Fax: (830) 249–0221 TBPE REG. NO.: F–4524 TBPG REG. NO.: 50112 4 COWBOY AGGREGATES ę

UVALDE, TX

12/15/2023			
CURT GARRETT CAMPBELL			
106851			
SONAL ENGLAS	-		
Curt C Campbell PE			
License No. 106851			









15/2023		
CURT GARRETT CAMPBELL		
106851		
Solonal ENGINE		
urt G Campbell PE		
License No. 106851		



## **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.

## Section 1.01 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: Curt G. Campbell, PE

Texas License No. 106851 | Firm No. 4524



Regulated Entity Name: Uvalde Site

## Section 1.02 Project Information

## Section 1.03 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.

## Section 1.04 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: <u>Unnamed Tributary of the West</u> <u>Fork of the Nueces River</u>

# Section 1.05 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:

$\boxtimes$ /	A description of how BMPs and measures will prevent pollution of surface water,
Ę	groundwater or stormwater that originates upgradient from the site and flows
ä	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).

## Section 1.06 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.

## Section 1.07 Administrative Information

- 20.  $\square$  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.

#### **Cowboy Aggregates, LLC**

#### **Temporary Stormwater Section Attachment A**

#### **Spill Response Actions**

#### Education

(1) Be aware that different materials pollute in varying manners. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when spill must be reported to the TCEQ.

(2) Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.

(3) Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).

(4) Establish a continuing education program to ensure training new employees and refresher training for existing employees.

(5) Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

#### **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 in a timely manner.

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

(3) Place a stockpile of spill clean-up 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 run-on 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 materials which are no longer suitable for the intended purpose, in conformance with the provisions in applicable BMPs.

#### **Cowboy Aggregates, LLC**

(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 inspected regularly, repaired or replaced as needed to maintain proper function.

#### <u>Cleanup</u>

(1) Clean up leaks and spills in a timely manner.

(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 should also be treated as hazardous and may be required to 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 (covering) 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 in a timely manner:

(1) Contain spread of the spill.

(2) Notify the project foreman in a timely manner.

(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 allow the spill to spread.

(4) If the spill occurs in soil areas, contain the spill by constructing an earthen dike. Dig up and properly dispose of the 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 operator/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 in a timely manner. Plant personnel should take containment action but 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.

In the event of a reportable spill, the following Emergency Response Agencies can be contacted for assistance. Always inform your supervisor of a reportable spill in a timely manner. Follow company policy when responding to an emergency.

(512) 463-7727
(800) 424-8802
(866) 372-7745
(281) 337-5074
(800) 832-8224
(210) 490-3096

#### Vehicle and Equipment Maintenance

(1) If maintenance must occur on-site, 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 on-site vehicles and equipment for leaks and repair in a timely manner.

(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) When fueling 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.

(4) Equipment fueling will take place on a flex base pad. The flex base pad will be 1 ft. thick with a 1 ft. berm on all sides. The base pad will relocate as quarry expands.

#### **DETAILED TELEPHONE SPILL REPORT FORM**

Date of Incident:
Location of Incident:
Description of material spilled:
Quantity of material spilled:
Cause of spill:
Authorities notified:
Remediation/clean-up action:
Corrective measures taken for prevention of reoccurrence:
Signature:
Notes:

#### **Portable Toilet BMPs:**

Portable toilets will be used at Cowboy Aggregates, LLC and will be handled in accordance with the following guidelines:

- A licensed waste collector should service all the toilets. The following tasks will be performed by the portable toilet supplier:
  - Empty portable toilets before transporting them.
  - Securely fasten the toilets to the transport truck.
  - Use hand trucks, dollies, and power tailgates whenever possible.
  - Suppliers should carry bleach for disinfection in the event of a spill or leak.
  - Inspect the toilets frequently for leaks and have the units serviced and sanitized at time intervals that will maintain sanitary conditions of each toilet.
- Locate portable toilets at least 20 feet from the nearest storm-drain inlet or sensitive-feature buffer area.
- A berm will be constructed around all portable toilet facilities.
- Prepare a level ground surface with clear access to the toilets.
- Secure all portable toilets to prevent tipping by accident, weather, or vandalism.

Sewage pump-out tanks may be associated with modular or trailer-style buildings (i.e. – plant office, scale house, etc.). These tanks operate with the same nature and character as the portable toilets: they temporarily hold sewage from modular building restrooms and will be serviced by the same contractor, in the same way, as portable toilets. These tanks may be partially or fully buried but are still considered temporary/portable as they are intended to be repositioned on site over time to meet operational needs, and therefore do not constitute an OSSF or holding tank as defined by 30 TAC 285, nor any other type of organized sewage collection system.

#### **Temporary Stormwater Section Attachment B**

#### **Potential Sources of Contamination**

Potential sources of contamination in the project area are the soil, fuels and lubricants from vehicles and equipment, and trash/debris items.

#### **Temporary Stormwater Section Attachment C**

#### **Sequence of Major Activities**

Clearing will begin in the proposed Pit quarry area, as shown on the attached Interim Conditions Map. The cleared topsoil will be used to construct earthen berms surrounding the cleared area. Berms will be constructed and will range in height from 2-4'. After clearing is completed in the initial 10-acre quarry area, excavation of the quarry pit will begin in this area. Portions of the site will be cleared in stages as quarrying progresses. The earthen berms surrounding the quarry will expand as the quarry expands to the Final Earthen Berm. The primary processing plant may be inside the pit but all other activities/facilities including but not limited to scale, scale house, office, shop will be located outside of the pit and off of the Recharge Zone. The quarry pit will then expand to the Final Earthen Berm.

#### **Cowboy Aggregates, LLC**

#### **Temporary Stormwater Section Attachment D**

#### **Temporary Best Management Practices (TBMPs) and Measures**

7a) TBMPs and measures will prevent pollution of surface water, groundwater and stormwater that originates upgradient from the site and flows across the site.

As the initial quarry area is cleared and topsoil is removed, earthen berms will be constructed. Upgradient berms will direct stormwater runoff around most disturbed areas of the site.

As the size of the quarry expands, the earthen berms will expand (throughout the life of the project), up to the buffer zones to provide additional controls as mining nears the sensitive features. Natural existing vegetation will be maintained in a 25-foot buffer along the West Nueces River Floodplain. In addition, a natural vegetated buffer with a minimum width of 50 feet will be maintained between the perimeter berms and/or quarry limits and the project boundary as shown on the Interim and Final Conditions Map. This natural vegetated buffer will serve as a final buffer for stormwater runoff leaving the active portion of the site.

**7b)** TBMPs and measures will prevent pollution of surface water, groundwater and stormwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

As the size of the quarry expands, the earthen berms will expand throughout the life of the project to the Final Earthen Berm. These berms will contain storm water that originates on-site. Natural existing vegetation will be maintained in a 25 foot buffer along the Nueces River and West Nueces River Floodplain. The buffer along the unnamed tributary will be maintained until mining begins in the area. In addition, a natural vegetated buffer with a minimum width of 50 feet will be maintained between the edge of disturbance for the quarry activities and the property line. This natural vegetated buffer will serve as a final buffer for stormwater runoff leaving the active portion of the site.

7c) TBMPs and measures will prevent pollution of surface streams, sensitive features and the aquifer.

Earthen berms and vegetated areas will be constructed/maintained as shown on the attached Interim Conditions Map to prevent pollutants from entering surface streams, sensitive features and the aquifer.

Natural existing vegetation will be maintained in a 25-foot buffer along the Nueces River and West Nueces River Floodplain. In addition, a natural vegetated buffer with a minimum width of 50 feet will be maintained between the edge of disturbance for the quarry activities and the property line (except where noted on the Final Conditions Map). This natural vegetated buffer will serve as a final buffer for stormwater runoff leaving the active portion of the site. Buffers will surround sensitive features to protect from potential runoff.

7d) To the maximum extent practicable TBMPs and measures will maintain flow to naturally occurring sensitive features identified in the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

The geologic assessment included in this submittal covers the additional 1404.70-acre project area. Ten (10) features were identified as sensitive (S-118, S-125, S-126, S-137, S-169, S-170, S-171, S-172, S-173 and S-174 - see Existing Conditions Map). Of these, four features (S-118, S-125, S-126 and S-137) will have a vegetative buffer put in place prior to being temporarily sealed and eventually removed through mining. Features S-169, S-170, S-171, S-172, S-173 and S-174 are exploratory borings. These borings will also be protected by a vegetative buffer or some of these boreholes may be completed as observation wells. Ultimately prior to mining, all boreholes will be properly plugged and eventually will be removed through mining. Features S-136 and S-147 are water wells (see Interim Conditions Map), and though not rated as sensitive in their current condition, these wells will be properly plugged per 16 TAC 76 prior to being removed through mining.

As clearing progresses to within approximately 500 feet of a sensitive feature, rock berms and/or silt fences will be established around the feature. These BMPs will slow the flow of water, allowing for sedimentation. Flow will be maintained to the features, until such time as quarrying progresses near the feature, at which time they will be sealed with flowable fill/concrete until it is removed through mining. Earthen berms, vegetative buffer, and the quarry, which store flows, will be used as pollution prevention measures to mitigate runoff from larger disturbed areas. These larger disturbed areas have a greater potential to contain sediment, therefore these BMPs will be used to provide a higher level of protection to the aquifer.

Cowboy Aggregates, LLC will provide initial feature recognition training to Cowboy Aggregates staff within 90 days of the start of operation. Initial feature recognition training will also be provided to applicable new employees (site supervisors and quarry operators) within 90 days of hire. Refresher training will be provided to quarry operators as needed. All training will be conducted by the Site Supervisor or his designee using a training program prepared by a Westward Professional Geoscientist.

The site supervisor or his designee will maintain records of when features are identified by mining staff. These records will include the date the feature was identified, the general location of the feature, a general description of the feature, and what action was taken regarding the potential feature. These records will be maintained for five years and will be made available to the TCEQ upon request.

Any possibly sensitive geologic feature discovered by mining staff will be handled in the following manner: Sediment that can be easily removed from the area adjacent to the feature without disturbing the feature will be removed. Then a rock berm will be placed around the feature to control and filter any potential flows into the feature. After placement of the rock berm, the active work area of the quarry will be moved to another portion of the pit where the feature cannot be impacted by the continuing quarry operations. A Professional Geoscientist will be called to the site to observe and rate the feature. If the feature is determined to be sensitive in accordance with TAC 213 rules, the TCEQ will be notified and an appropriate method for addressing the feature will be formulated and submitted for TCEQ approval. Work will not resume in the area of the feature until the TCEQ approved method for addressing the feature has been carried out.

#### **Cowboy Aggregates, LLC**

#### **Temporary Stormwater Section Attachment E**

#### **Request to Temporarily Seal a Feature**

The following sensitive features are proposed to be temporarily sealed and removed through mining:

Features S-118, S-125, S-126, S-137 S-169, S-170, S-171, S-172, S-173 and S-174.

Features S-169, S-170, S-171, S-172, S-173 and S-174 are boreholes that will be sealed with cutting/bentonite per 16 TAC 76. They may be left open as monitoring wells, and they will be completed per 16 TAC 76 and ultimately sealed and mined through.

In order to protect the aquifer from possible contamination from sediment in stormwater as quarrying nears the features, Cowboy Aggregates, LLC. will temporarily seal the naturally occurring sensitive features listed above using flowable fill/concrete. The features that are located within the proposed quarrying footprint will eventually be removed through mining.

The alternative to sealing the feature would be to not seal it, which would pose a greater threat to the aquifer, due to the potential for sediment to enter in runoff from adjacent disturbed areas. It is not reasonable or practical to avoid mining near or upgradient of the sensitive feature due to its spacing on-site. Mining around the sensitive features would create a safety hazard within the quarry because the features would be left atop pinnacles that would be very tall and slender. These pinnacles would be prone to collapse and would create unsafe working conditions within much of the quarry area.

#### **Temporary Stormwater Section Attachment F**

#### **Structural Practices**

Temporary best management practices proposed for the limestone quarry include earthen and rock berms and natural vegetated buffers. The vegetated buffers and rock berms are used to limit runoff discharge of sediment. The earthen berms are used to store flows and limit runoff discharge of pollutants from exposed areas of the site as well as to divert flows away from exposed (disturbed) soils.

#### **Temporary Stormwater Section Attachment I**

#### **Inspection and Maintenance for BMPs**

The earthen berms and vegetated buffers should be inspected weekly. Written documentation of these inspections should be kept during the course of construction at the project site (see following example Inspection Form.) Any erosion of berms should be backfilled and compacted as soon as possible. If a berm is no longer able to properly filter the sediment from the stormwater due to contamination from silt, it should be replaced. Trash should be removed and any eroded areas of buffers should be reseeded.

The rock berms should be inspected weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made. Sediment and other debris should be removed when buildup reaches 6 inches and the accumulated silt should be disposed of in an approved manner that will not cause any additional siltation. Any loose wire sheathing should be repaired. The berm should be reshaped as needed during inspection. The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc. The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

Cowboy Aggregates, LLC will be authorized to discharge stormwater under the TPDES General Permit No. TXR050000 for industrial activities. Requirements of the general permit include maintaining a SWP3 which includes inspections of stormwater best management practices and sampling of stormwater that is discharged from the site.

It is not anticipated that dewatering of the pit will be required. However, if necessary, mine dewatering will be accomplished according to the TCEQ stormwater regulations noted in the TPDES General Permit No. TXR050000 under Sector J for Mineral Mining and Processing Facilities.

#### Cowboy Aggregates, LLC Best Management Practices Inspection Form

		Weekly Monthly			Monthly		
		Rock	Rock Berms Vegetated Buffers		Vegetated Buffers		
		> 6" Silt	Rock Berm		Vegetative	Erosion of	
Date	Inspector Signature	Retained	Clogged	Trash	Cover/Erosion	Earthen Berm	Additional Comments

If the answer to any of the above questions is "yes", perform maintenance/repair/replacement as described below or in accordance with TCEQ Technical Guidance on BMPs.

#### Rock Berm

- \* >6" of silt retained remove silt, place in protected area
- \* Loose wire sheathing repair
- \* Ceases to function as intended replace rock berm

#### Earthen Berm

- \* Erosion of earthen berm fill eroded areas and compact
- \* Inspect after each rainfall event > 0.5"

#### Natural Vegetated Buffers

- \* Remove trash if present
- \* Reseed eroded areas to reestablish vegetation
- \* Inspect after each rainfall event > 0.5"

#### Construction Entrance

- \* Replace stones if needed
- \* Clean out sediment build-up if necessary
- \* Inspect after each rainfall event > 0.5"

#### **Cowboy Aggregates, LLC**

#### **Temporary Stormwater Section Attachment J**

#### **Schedule of Soil Stabilization Practices**

#### Areas Outside the Pit:

Cleared areas and interim earthen berms may be disturbed for more than 14 days without stabilization because it is not practical to be continually stabilizing small areas prior to their excavation and stabilizing the earthen berms that are frequently relocated. The purpose of soil stabilization is to control erosion and prevent pollutants from entering surface waters, streams, and the aquifer through sensitive recharge features. Areas outside of the pit that are disturbed for quarrying are generally drilled and blasted within 90 days. It is not feasible or appropriate to try to stabilize these areas with vegetation because 1) the topsoil has been removed and vegetation will not readily grow; 2) these areas will soon be excavated and; 3) other structural BMPs will be used to protect stormwater runoff quality from these areas in a manner consistent with customary and acceptable mining practices.

Because the soils and overburden in these cleared areas have been removed and placed in an earthen berm adjacent to the cleared areas, erosion of these areas is mitigated. The earthen berms upgradient of the cleared areas divert upgradient stormwater away from cleared areas and earthen berms downgradient of cleared areas retain stormwater runoff from the cleared area. The proposed BMPs provide adequate protection for the area outside of the pit.

Material stockpiles will be located in the quarry pit.

The Final Earthen Berm outside the pit will be stabilized with native grasses. The undisturbed vegetated buffers shown on the Interim Conditions Map will remain undisturbed so no additional stabilization practices will be needed.

#### Areas Inside the Pit:

Areas inside the pit do not need to be stabilized; the requirement for soil stabilization exists in order to control erosion and prevent pollutants from entering surface waters, streams and the aquifer through sensitive recharge features. The disturbed soils in the quarry pit will be retained in the pit thereby eliminating the need for soil stabilization in the pit to prevent pollutants from entering surface waters or streams. The BMP discussed in the WPAP Temporary Stormwater Section Attachment D (7.d.) will mitigate infiltration of stormwater into the quarry floor. In addition it is not practical to stabilize areas of the pit with vegetation because often times areas of the pit will not be active for some period of time, then be reactivated. Therefore, since the disturbed areas will be located in the pit no soil stabilization is expected to be necessary at the completion of the project.

## **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: <u>Curt G. Campbell, PE</u>

Texas License No. 106851 | Firm No. 4524



Regulated Entity Name: Uvalde Site

## 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.



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

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

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

🗌 N/A

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

🗌 N/A

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

The site will be used for low density single-family residential development and has 20% or less impervious cover.

The site will be used for low density single-family residential development but has more than 20% impervious cover.

The site will not be used for low density single-family residential development.

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

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

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

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

6. Attachment B - BMPs for Upgradient Stormwater.
|     | <ul> <li>A description of the BMPs and measures that will be used to prevent pollution surface water, groundwater, or stormwater that originates upgradient from the and flows across the site is attached.</li> <li>No surface water, groundwater or stormwater originates upgradient from the and flows across the site, and an explanation is attached.</li> <li>Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site a flows across the site, and an explanation is attached.</li> </ul> | n of<br>he site<br>site<br>e<br>nd  |
|-----|--|-------------------------------------|
| 7.  | Attachment C - BMPs for On-site Stormwater.  |                                     |
|     | <ul> <li>A description of the BMPs and measures that will be used to prevent pollution surface water or groundwater that originates on-site or flows off the site, incl pollution caused by contaminated stormwater runoff from the site is attached</li> <li>Permanent BMPs or measures are not required to prevent pollution of surface or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.</li> </ul>   | า of<br>uding<br>ป.<br>e water<br>า |
| 8.  | Attachment D - BMPs for Surface Streams. A description of the BMPs and measu that prevent pollutants from entering surface streams, sensitive features, or the a is attached. Each feature identified in the Geologic Assessment as sensitive has b addressed.   | res<br>aquifer<br>een               |
|     | N/A  |                                     |
| 9.  | The applicant understands that to the extent practicable, BMPs and measures mu<br>maintain flow to naturally occurring sensitive features identified in either the geo<br>assessment, executive director review, or during excavation, blasting, or construct  | ist<br>logic<br>tion.               |
|     | <ul> <li>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.</li> <li>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.</li> </ul>   | itive<br>n<br>ring                  |
| 10. | Attachment F - Construction Plans. All construction plans and design calculations<br>the proposed permanent BMP(s) and measures have been prepared by or under t<br>direct supervision of a Texas Licensed Professional Engineer, and are signed, seale<br>dated. The plans are attached and, if applicable include:   | s for<br>the<br>ed, and             |
|     | <ul> <li>Design calculations (TSS removal calculations)</li> <li>TCEQ construction notes</li> <li>All geologic features</li> <li>All proposed structural BMP(s) plans and specifications</li> </ul>  |                                     |
|     | 」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 an
measures is attached. The plan includes all of the following:
Prepared and certified by the engineer designing the permanent BMPs and measures
$\boxtimes$ 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.  $\square$  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

#### **Cowboy Aggregates, LLC**

#### Permanent Stormwater Section Attachment B

#### **BMPs for Upgradient Stormwater**

As indicated on the Interim and Final Conditions Maps, allowance will be made for some upgradient run-on to enter the pit to prevent upstream flooding.

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:

The temporary earthen berms that are constructed as clearing occurs will expand as the size of the quarry expands. The earthen berms will expand throughout the life of the project to the Final Earthen Berm shown on the Final Conditions Map. The Final Earthen Berm will be vegetated with native grasses to stabilize soils. All stormwater which originates upgradient from the site and flow across the site will ultimately be retained within these earthen berms and the quarry pit.

Permanent stormwater controls are those that are to remain in place after construction has been completed. The vegetated Final Earth Berm and the 50 foot vegetated buffer that surround most of the site will be located along the property boundary.

#### **Permanent Stormwater Section 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:

Pollution of surface water, groundwater or stormwater that originates on-site or flows off-site during the life of the quarry will be mitigated by the use of temporary earthen berms vegetated areas, and the pit which will be constructed as shown on the Interim and Final Conditions Map.

Permanent stormwater controls are those that are to remain in place after construction has been completed. At the time construction is completed at the subject site, the vegetated Final Earth Berm and the 50 foot vegetated buffer that surround most of the site will be located along the property boundary.

#### **Cowboy Aggregates, LLC**

#### Permanent Stormwater Section 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:

During the life of the quarry, temporary earthen berms will be constructed as shown on the Interim and Final Conditions Maps to prevent pollutants from entering surface streams and the aquifer (there will be no sensitive features found in the proposed mining area in the final conditions). The earthen berms that surround future disturbed areas will expand to establish a 100-foot vegetative buffer on each side of the bank of the river and a 50-foot vegetative buffer at the project boundary.

Permanent stormwater controls are those that are to remain in place after construction has been completed. At the time construction is completed at the subject site, the vegetated Final Earthen Berm and the 50-foot vegetated buffer that surround most of the site will be located along the property boundary.

An existing on-grade crossing is currently utilized between the north and south areas of the provisional calculated floodplain. RG-500 recommends that a raised crossing be installed where the upstream drainage area is greater than 40 acres. The primary intent of the raised crossing is to prevent the vehicular traffic from driving through flowing water which would wash oily residue and any dust buildup from the vehicle into the waterway and potentially to the aquifer. As an alternative to the raised crossing at this location, the crossing will be on grade, but will remain closed during runoff events that cause flowing water to top the crossing. Since this crossing is a private crossing traffic is limited to quarry vehicles only and can be managed by site personnel during runoff events during times of quarry operation. Additionally, RG-500 recommends that the crossing is on-grade it is impracticable to drain runoff out of the channel. A sweeper truck will be utilized as needed to remove any buildup of sediment that could potentially become TSS in a runoff event. There will be downstream rock berms to filter water that flows across the crossing.

On the central portion of the site, buffers will be established on either side of the floodplain until such a time as appropriate permitting can be obtained to mine through the mapped blueline. This area has been evaluated by Westward and though a USGS Blueline is present, there is no bed or bank which would establish a regulated Water of the State. A 100-foot vegetative buffer will be maintained on both sides of the bank of the river.

Any possibly sensitive geologic feature discovered by mining staff will be evaluated by a Professional Geoscientist and if determined to be sensitive, will be reported to TCEQ. An appropriate method for addressing the feature will be formulated by a Professional Geoscientist or a Professional Engineer and upon approval by TCEQ, the method to protect the feature will be implemented. Work will not resume in the area of the feature until the TCEQ approved method for addressing the feature has been carried out.

#### Permanent Stormwater Section Attachment F

#### **Construction Plans**

See Interim and Final Conditions Maps for locations of structural practices. BMP construction notes are provide don the Existing Conditions Map.

#### Permanent Stormwater Section Attachment G

#### Inspection, Maintenance, Repair and Retrofit Plan

Final earthen berms should be inspected quarterly until stabilized with vegetation. Written documentation of these inspections should be kept during the course of construction at the project site. Any erosion of berms should be backfilled and compacted as soon as possible.

Vegetated buffers should be inspected at least twice annually, until the Final Earthen Berm has been vegetated, for erosion or damage to vegetation. Written documentation of these inspections should be kept during the course of construction at the project site. Bare spots and areas of erosion identified during inspections must be replanted. Trash and debris items should be removed.

The crossing will be paved to reduce runoff. Gates shall be installed which will allow the crossing to be closed during runoff events (during operation business hours). Drivers will be trained to avoid using the crossing when water is flowing. Drivers/Site Manager will close the gate when runoff is present over the crossing (during operation business hours). The gate shall only be opened when runoff is no longer present over the crossing. This will be confirmed by visual inspection.

#### Vegetative Buffers

- *Pest Management*. An Integrated Pest Management (IPM) Plan should be developed for vegetated areas. This plan should specify how problem insects and weeds will be controlled with minimal or no use of insecticides and herbicides.
- Seasonal Mowing and Lawn Care. If the filter strip is made up of turf grass, it should be mowed as needed to limit vegetation height to 18 inches, using a mulching mower (or removal of clippings). If native grasses are used, the filter may require less frequent mowing, but a minimum of twice annually. Grass clippings and brush debris should not be deposited on vegetated filter strip areas. Regular mowing should also include weed control practices, however herbicide use should be kept to a minimum (Urbonas et al., 1992). Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients. Irrigation of the site can help assure a dense and healthy vegetative cover.
- Inspection. Inspect filter strips at least twice annually for erosion or damage to

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

- *Debris and Litter Removal.* Trash tends to accumulate in vegetated areas, particularly along highways. Any filter strip structures (i.e. level spreaders) should be kept free of obstructions to reduce floatables being flushed downstream, and for aesthetic reasons. The need for this practice is determined through periodic inspection, but should be performed no less than 4 times per year.
- *Sediment Removal.* Sediment removal is not normally required in filter strips, since the vegetation normally grows through it and binds it to the soil. However, sediment may accumulate along the upstream boundary of the strip preventing uniform overland flow. Excess sediment should be removed by hand or with flat-bottomed shovels.
- *Grass Reseeding and Mulching*. A healthy dense grass should be maintained on the filter strip. If areas are eroded, they should be filled, compacted, and reseeded so that the final grade is level. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during filter strip establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Corrective maintenance, such as weeding or replanting should be done more frequently in the first two to three years after installation to ensure stabilization. Dense vegetation may require irrigation immediately after planting, and during particularly dry periods, particularly as the vegetation is initially established.

#### Crossing

- *Inspection*. Inspection should be made weekly. Check the embankment and surrounding areas for erosion damage, and inspect for piping, rills and settlement. Repair should be made promptly as needed. Trash and other debris should be removed after each rainfall. Sediment should be removed via sweeper truck and needed.
- *Record Keeping*. Records shall be kept of sweeping activities. Records shall be kept of driver training. It is anticipated that this training will be integrated into the existing stormwater training at the facility and that records will be kept with the SWPP. All records shall be maintaned on-site for a period of 6 months. Records of crossing inspection shall be kept with SWPPP.

#### Inspection, Maintenance, Repair and Retrofit Plan

Nathaniel Kelly Foote , have read and understand the Inspection, I, Maintenance, Repair and Retrofit (IMRR) Plan contained in this Water Pollution Abatement Plan (WPAP).

I understand the specific Permanent Best Management Practices (PBMPs) and associated inspection and maintenance schedule which are outlined in this IMRR Plan. Cowboy Aggregates LLC will implement these inspections and perform maintenance as required to meet the intent of the IMRR Plan.

#### Name and signature of responsible party for maintenance of permanent BMPs

Print Name:	Nathaniel Kelly Foote	_			
	Cowboy Aggregates LLC				,
Signature	About		Date: 17	- 30	21

#### Name and signature of Engineer

Print Name:	Curt G. Campbell, P.E.	
	Westward Environmental,	Inc.
Signature _		TI GARRETT CAMPBELL 106851

Date: 12/15/2023

#### **Cowboy Aggregates, LLC**

#### Permanent Stormwater Section Attachment I

#### **Measures for Minimizing Surface Stream Contamination**

To avoid surface stream contamination, natural existing vegetation will be maintained in a 100foot vegetative buffer on each side of the bank of the West Nueces River (except where the entrance road passes through, as shown on the attached Interim and Final Conditions Maps). Permanent 25-foot vegetated buffers will be left in place on each side of the West Nueces River to filter sediment in stormwater runoff. The stream crossing will be paved with concrete and rock berms established downgradient of the crossing. In addition, between the edge of disturbance for the quarry activities and the project boundary a natural vegetated buffer with a minimum width of 50 feet will be maintained. This natural vegetated buffer will serve as a final buffer for stormwater runoff leaving the active portion of the site.

Agent Authorization Form For Required Signature Edwards Aquifer Protection Program Relating to 30 TAC Chapter 213 Effective June 1, 1999
INathaniel Kelly Foote
Print Name
Member
Title - Owner/President/Other
of <u>Cowboy Aggregates, LLC</u> , Corporation/Partnership/Entity Name
have authorized <u>Curt Campbell, PE, Gary D. Nicholls, PE, Douglas S. Millsaps, PE, Andrea</u> <u>Kidd, PE and Vance Houy, PE</u> Print Name of Agent/Engineer
of Westward Environmental, Inc 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

021

THE STATE OF \_\_\_\_\_ § County of Summ Ş

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

GIVEN under my hand and seal of office on this <u>30</u> day of <u>December</u>, 2021.

ARY PUBLIC VENKA Typed or Printed Name of Notary

MY COMMISSION EXPIRES:

YOVENKA JACQUEZ NOTARY PUBLIC - STATE OF COLORADO NOTARY ID 20174001676 MY COMMISSION EXPIRES SEP 20, 2025

20,2025



#### Sinclair Land Surveying, Inc.

3411 Magic Drive San Antonio, Texas 78229 210-341-4518 TBPELS Firm No. 10089000

November 17, 2023

6,834 acres consisting of all of the R. Weymiller Survey No. 280, Abstract 1303 and the J.G. Brocke Survey No. 128, Abstract 50 and portions of the C. Weymiller Survey No. 282, Abstract 1289, the Comanche Irrig. Co. Survey No. 283, Abstract 615, the R.R. Co. Survey No. 279, Abstract 608 and the R. Weymiller Survey No. 278, Abstract 1302, the R.R. Co. Survey No. 277, Abstract 604, the R.R. Co. Survey No. 281, Abstract 610, the S. Morris Survey No. 576, Abstract 355, the L. Kuhn Survey No. 23, Abstract 305, the C. Weymiller Survey No. 386, Abstract 1291, the G. Ayres Survey No. 577, Abstract 5, the H.E. & W.T. Survey No. 385, Abstract 687, the J.R. Baylor Survey No. 720, Abstract 1713. the J. Hu Survey No. 136, Abstract 245, the D. Jewell Survey No. 133, Abstract 296, the J.W. Oates Survey No. 132, Abstract 363, the B. Weed JR. Survey No. 129, Abstract 530, the J. Shaw Survey No. 125, Abstract 465 and the J. Kelso Survey No. 124, Abstract 303

THE STATE OF TEXAS COUNTY OF UVALDE

#### METES AND BOUNDS DESCRIPTION OF A SURVEY OF

6,834 acres consisting of all of the R. Weymiller Survey No. 280, Abstract 1303 and the J.G. Brocke Survey No. 128, Abstract 50 and portions of the C. Weymiller Survey No. 282, Abstract 1289, the Comanche Irrig. Co. Survey No. 283, Abstract 615, the R.R. Co. Survey No. 279, Abstract 608, the R. Weymiller Survey No. 278, Abstract 1302, the R.R. Co. Survey No. 277, Abstract 604, the R.R. Co. Survey No. 281, Abstract 610, the S. Morris Survey No. 576, Abstract 355, the L. Kuhn Survey No. 23, Abstract 305, the C. Weymiller Survey No. 386, Abstract 1291, the G. Ayres Survey No. 577, Abstract 5, the H.E. & W.T. Survey No. 385, Abstract 687, the J.R. Baylor Survey No. 720, Abstract 1713, the J. Hu Survey No. 136, Abstract 245, the D. Jewell Survey No. 133, Abstract 296, the J.W. Oates Survey No. 132, Abstract 363, the B. Weed

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JR. Survey No. 129, Abstract 530, the J. Shaw Survey No. 125, Abstract 465 and the J. Kelso Survey No. 124, Abstract 303, Uvalde County, Texas, said 6,834 acres consisting of all of a 1,723.78-acre tract of land described in deed of record in Instrument Number 2021008948 of the Official Public Records of Uvalde County, Texas, a 1,873.813-acre tract of land described in deed of record in Document Number 2021008947 of the Official Public Records of Uvalde County, Texas, a 331.265-acre tract of land described as Tract Two in deed of record in Instrument Number 20210011292 of the Official Public Records of Uvalde County, Texas, a 331.265-acre tract of land described as Tract One in deed of record in Instrument Number 20210011292 of the Official Public Records of Uvalde County, Texas, a 19.053-acre tract of land described as Tract Three in deed of record in Instrument Number 20210011292 of the Official Public Records of Uvalde County, Texas, a 591.9-acre tract of land described in deed of record in Instrument Number 2023019246 of the Official Public Records of Uvalde County, Texas, a 53.09-acre tract of land described in deed of record in Instrument Number 2023019246 of the Official Public Records of Uvalde County, Texas, a remaining portion of a 1,055.533-acre tract of land described in deed of record in Instrument Number 2021008950 of the Official Public Records of Uvalde County, Texas, a 758.383-acre tract of land described in deed of record in Instrument Number 2021010704 of the Official Public Records of Uvalde County, Texas, a 483.592-acre tract of land described in deed of record in Instrument Number, 2021011564 of the Official Public Records of Uvalde County, Texas and a 149.859-acre tract of land described in deed of record in Instrument Number 2021008949 of the Official Public Records of Uvalde County, Texas and being more particularly described by metes and bounds, as surveyed, as follows:

Beginning at an 1-<sup>1</sup>/<sub>2</sub>" pipe found set in the ground in the arc of a curve having a radius of 2,216.56 feet, the south corner of a 1,723.78-acre tract of land described in deed of record in Instrument Number 2021008948 of the Official Public Records of Uvalde County, Texas and the west corner of a 615.905-acre tract of land described in deed of record in Instrument Number 2020004347 of the Official Public Records of Uvalde County, Texas at Northing 13635700.9 and Easting 1653350.7, for the south corner of this tract;

Thence curve to the right in a northwesterly direction along the arc of said curve having a radius of 2,216.65 feet with the northeast right-of-way line of the Union Pacific Railroad and a southwest boundary line of said 1,723.78-acre tract, through a central angle of  $35^{\circ}18'29''$ , a chord bearing and distance of N 44°57'57'' W – 1,344.47 feet, a distance of 1,365.99 feet to an  $\frac{1}{2}''$  iron bar with an orange cap marked "SLS RPLS 5142" set in the ground in the arc of a curve having a radius of 5,107.71 feet, a corner of said 1,723.78-acre tract, for a corner of this tract;

Thence curve to the right in a northwesterly direction along the arc of said curve having a radius of 5,108.71 feet with the northeast right-of-way line of the Union Pacific Railroad and a southwest boundary line of said 1,723.78-acre tract, through a central angle of  $4^{\circ}43'42''$ , a chord bearing and distance of N 24°31'06'' W – 421.47 feet, a distance of 421.59 feet to an  $\frac{1}{2}''$  iron bar with an orange cap marked "SLS RPLS 5142'' set in the ground, a corner of said 1,723.78-acre tract, for a corner of this tract;

Thence N 22°41'01" W with the northeast right-of-way line of the Union Pacific Railroad and a southwest boundary line of said 1,723.78-acre tract a distance of 2,601.84 feet to an ½" iron bar with an orange cap marked "SLS RPLS 5142" found set in the ground in the arc of a curve having a radius of 2,926.58 feet, a corner of said 1,723.78-acre tract, for a corner of this tract;

Thence curve left in a northwesterly direction along the arc of said curve having a radius of 2,926.58 feet with the northeast right-of-way line of the Union Pacific Railroad and a southwest boundary line of said 1,723.78-acre tract, through a central angle of  $34^{\circ}40'19''$ , a chord bearing and distance of N  $39^{\circ}59'15'' W - 1,744.09$  feet, a distance of 1.770.99 feet to an  $\frac{1}{2}''$  iron bar with an orange cap marked "SLS RPLS 5142" set in the ground at the point of curve of a compound curve having a radius of 4,074.01 feet, a corner of said 1,723.78-acre tract, for a corner of this tract;

Thence curve left in a northwesterly direction along the arc of said curve having a radius of 4,074.01 feet with the northeast right-of-way line of the Union Pacific Railroad and a southwest boundary line of said 1,723.78-acre tract, through a central angle of 9°46'27", a chord bearing and distance of N 62°13'14" W – 694.16 feet, a distance of 695.00 feet to a 5" cedar post found set in the ground, a corner of said 1,723.78-acre tract, for a corner of this tract;

Thence N 67°14'21" W with the northeast right-of-way line of the Union Pacific Railroad and a southwest boundary line of said 1,723.78-acre tract a distance of 330.75 feet to an ½" iron bar found set in the ground, a southwest corner of said 1,723.78-acre tract and the southeast corner of an 8,231.8579-acre tract of land described in deed of record in Instrument Number 2003003808 of the Official Public Records of Uvalde County, Texas, for the southwest corner of this tract;

Thence N 0°04'36" W with the west boundary line of said 1,723.78-acre tract and the east boundary line of said 8,231.8579-acre tract a distance of 4,471.73 feet to a 1-½" pipe found set in the ground, the northwest corner of said 1,723.78-acre tract, a corner of said 8,231.8579-acre tract and the southwest corner of a 1,873.813-acre tract of land described in deed of record in Instrument Number 2021008947 of the Official Public Records of Uvalde County, Texas, for a west corner of this tract;

Thence N 0°04'12" E with a west boundary line of said 1,873.813-acre tract and an east boundary line of said 8,231.8579-acre tract a distance of 3,919.36 feet to a 5/8" iron bar found set in the ground, a corner of said 1,873.813-acre tract and a corner of said 8,231.8579-acre tract, for a corner of this tract;

Thence N 0°58'28" E with a west boundary line of said 1,873.813-acre tract and an east boundary line of said 8,231.8579-acre tract a distance of 137.60 feet to a 5/8" iron bar found set in the ground, a corner of said 1,873.813-acre tract and a corner of said 8,231.8579-acre tract, for a corner of this tract;

Thence N 42°31'36" W with a southwest boundary line of said 1,873.813-acre tract and a

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northeast boundary line of said 8,231.8579-acre tract a distance of 541.77 feet to a 5/8" iron bar found set in the ground, a corner of said 1,873.813-acre tract and a corner of said 8,231.8579-acre tract, for a corner of this tract;

Thence N 19°39'48" W with a southwest boundary line of said 1,873.813-acre tract and a northeast boundary line of said 8,231.8579-acre tract a distance of 538.93 feet to a 5/8" iron bar found set in the ground, a corner of said 1,873.813-acre tract and a corner of said 8,231.8579-acre tract, for a corner of this tract;

Thence N 28°33'41" W with a southwest boundary line of said 1,873.813-acre tract and a northeast boundary line of said 8,231.8579-acre tract a distance of 250.20 feet to a 5/8" iron bar found set in the ground, a corner of said 1,873.813-acre tract and a corner of said 8,231.8579-acre tract, for a corner of this tract;

Thence N 35°18'43" W with a southwest boundary line of said 1,873.813-acre tract and a northeast boundary line of said 8,231.8579-acre tract a distance of 547.65 feet to a 5/8" iron bar found set in the ground, the west of said 1,873.813-acre tract and a corner of said 8,231.8579-acre tract, for the west corner of this tract;

Thence N 59°47'44" E with a northwest boundary line of said 1,873.813-acre tract and a southeast boundary line of said 8,231.8579-acre tract a distance of 148.57 feet to a 5/8" iron bar found set in the ground, a corner of said 1,873.813-acre tract and a corner of said 8,231.8579-acre tract, for a corner of this tract;

Thence N 52°29'22" E with a northwest boundary line of said 1,873.813-acre tract and a southeast boundary line of said 8,231.8579-acre tract a distance of 473.97 feet to a 5/8" iron bar found set in the ground, a corner of said 1,873.813-acre tract and a corner of said 8,231.8579-acre tract, for a corner of this tract;

Thence N 52°38'48" E with a northwest boundary line of said 1,873.813-acre tract and a southeast boundary line of said 8,231.8579-acre tract a distance of 757.26 feet to a 5/8" iron bar found set in the ground, a reentrant corner of said 1,873.813-acre tract and a corner of said 8,231.8579-acre tract, for a reentrant corner of this tract;

Thence N 0°00'10" E with a west boundary line of said 1,873.813-acre tract and an east boundary line of said 8,231.8579-acre tract a distance of 2,792.29 feet to a 5/8" iron bar found set in the ground, a corner of said 1,873.813-acre tract and a corner of said 8,231.8579-acre tract, for a corner of this tract;

Thence N 0°24'40" W with a west boundary line of said 1,873.813-acre tract and an east boundary line of said 8,231.8579-acre tract a distance of 217.13 feet to a 5/8" iron bar found set in the ground, a corner of said 1,873.813-acre tract and a corner of said 8,231.8579-acre tract, for a corner of this tract;

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Thence N 0°12'29" E with a west boundary line of said 1,873.813-acre tract and an east boundary line of said 8,231.8579-acre tract a distance of 4,071.48 feet to a 5/8" iron bar found set in the ground, a corner of said 1,873.813-acre tract and a corner of said 8,231.8579-acre tract, for a corner of this tract;

Thence N 0°14'26" E with a west boundary line of said 1,873.813-acre tract and an east boundary line of said 8,231.8579-acre tract a distance of 2,963.78 feet to an ½" iron bar with a red cap marked "KOCH & KOCH 2082" found set in the ground in the south boundary line of a 2,297.771-acre tract of land described in Instrument Number 2005002446 of the Official Public Records of Uvalde County, Texas, the northwest corner of said 1,873.813-acre tract and the northeast corner of said 8,231.8579-acre tract, for the northwest corner of this tract;

Thence S 75°22'53" E with a north boundary line of said 1,873.813-acre tract and the south boundary line of said 2,297.771-acre tract a distance of 543.12 feet to a 3/8" steel pipe found set in the ground at a 3-way fence corner, a corner of said 1,873.813-acre tract, the southwest corner of said 2,297.771-acre tract and the southwest corner of a 1,121.7-acre tract of land described in deed of record in Volume 263 at Page 555 of the Official Public Records of Uvalde County, Texas, for a corner of this tract;

Thence S 74°57'52" E with a northeast boundary line of said 1,873.813-acre tract and a southwest boundary line of said 1,121.7-acre tract a distance of 299.04 feet to an ½" iron bar found set in the ground, a corner of said 1,873.813-acre tract, the south corner of said 1,121.7-acre tract and the west corner of an 868.486-acre tract of land described as Tract One in deed of record in Volume 336 at Pages 429-440 of the Official Public Records of Uvalde County, Texas, for a corner of this tract;

Thence S 75°03'58" E with a north boundary line of said 1,873.813-acre tract and a south boundary line of said 868.486-acre tract a distance of 2,908.70 feet to an ½" iron bar with a red cap marked "KOCH & KOCH 2082" found set in the ground, the northeast corner of said 1,873.813-acre tract and a reentrant corner of said 868.486-acre tract, for a northeast corner of this tract;

Thence S 19°49'49" E with the northeast boundary line of said 1,873.813-acre tract and a southwest boundary line of said 868.486-acre tract a distance of 710.11 feet to an ½" iron bar found set in the ground, a corner of said 1,873.813-acre tract, the south corner of said 868.486-acre tract and the west corner of a 331.265-acre tract of land described as Tract Two in deed of record in Instrument Number 2021011292 of the Official Public Records of Uvalde County, Texas, for a reentrant corner of this tract;

Thence N 71°22'56" E with the northwest boundary line of said 331.265-acre tract described as Tract Two and a southeast boundary line of said 868.486-acre tract a distance of 2,257.36 feet to a 2 3/8" metal fence post found set in the ground, a corner of said 331.265-acre tract described as Tract Two and a corner of said 868.486-acre tract, for a corner of this tract;

Thence N 70°44'34" E with a northwest boundary line of said 331.265-acre tract described as Tract Two and a southeast boundary line of said 868.486-acre tract a distance of 2,643.10 feet to an ½" iron bar with a red cap marked "KOCH & KOCH SURVEYING INC.", a corner of said 331.265-acre tract described as Tract Two and a corner of said 868.486-acre tract, for a corner of this tract;

Thence N 70°28'50" E with a northwest boundary line of said 331.265-acre tract described as Tract Two and a southeast boundary line of said 868.486-acre tract at 812.09 feet a point, the north corner of said 331.265-acre tract described as Tract Two and the west corner of a 331.265-acre tract described as Tract One in deed of record in Instrument Number 2021011292 of the Official Public Records of Uvalde County, Texas and continuing on the same course and by the same count with a northwest boundary line of said 331.265-acre tract described as Tract One an overall distance of 1,956.22 feet to an ½" iron bar with a red cap marked "KOCH & KOCH SURVEYING INC." found set in the ground, a corner of said 331.265-acre tract described as Tract One and a corner of said 868.486-acre tract, for a corner of this tract;

Thence N 70°32'53" E with a northwest boundary line of said 331.265-acre tract described as Tract One and a southeast boundary line of said 868.486-acre tract a distance of 1,678.89 feet to an  $\frac{1}{2}$ " iron bar with a red cap marked "KOCH & KOCH SURVEYING INC." found set in the ground, a corner of said 331.265-acre tract described as Tract One and a corner of said 868.486-acre tract, for a corner of this tract;

Thence N 70°46'56" E with a northwest boundary line of said 331.265-acre tract described as Tract One and a southeast boundary line of said 868.486-acre tract a distance of 1,688.86 feet to, a 4" metal fence post found set in the ground, a corner of said 331.265-acre tract described as Tract One and a corner of said 868.486-acre tract, for a corner of this tract;

Thence N 70°20'02" E with a northwest boundary line of said 331.265-acre tract described as Tract One and a southeast boundary line of said 868.486-acre tract a distance of 540.78 feet to an 8" cedar fence post found set in the ground, a corner of said 331.265-acre tract described as Tract One, the southeast corner of said 868.486-acre tract and the west corner of a 84.969-acre tract of land described as Tract Three in deed of record in Volume 336 at Pages 429-440 of the Official Public Records of Uvalde County, Texas for a corner of this tract;

Thence N 70°30'40" E with a northwest boundary line of said 331.265-acre tract described as Tract One and the southeast boundary line of said 84.969-acre tract a distance of 766.59 feet to a point in the west bank of the Nueces River, the north corner of said 331.265-acre tract described as Tract One, for the northeast corner of this tract;

Thence with the west bank of the Nueces River and the east boundary lines of said 331.265-acre tract described as Tract One the following calls:

S 28°59'25" W a distance of 245.20 feet;

S 24°59'02" W a distance of 161.40 feet;

S 10°30'22" W a distance of 142.47 feet;

S 3°25'59" W a distance of 150.42 feet;

S 9°56'38" W a distance of 537.56 feet;

S 6°59'54" E a distance of 196.63 feet;

S 16°43'48" E a distance of 355.87 feet;

S 25°53'32" E a distance of 316.41 feet;

S 29°36'13" E a distance of 212.95 feet;

S 40°38'28" E a distance of 249.76 feet;

And S 23°39'29" E at 260.44 feet a point, the east corner of said 331.265-acre tract described as Tract One, the north corner of a 19.053-acre tract described as Tract Three in deed of record in Instrument Number 2021011292 of the Official Public Records of Uvalde County, Texas and continuing on the same course and by the same count with the west bank of the Nueces River and the west boundary line of said Tract Three an overall distance of 547.81 feet to a point, a corner of said Tract Three, for a corner of this tract;

Thence with the west bank of the Nueces River and the east boundary line of said 19.053-acre tract the following calls:

S 4°24'15" W a distance of 235.56 feet;

S 89°35'53" E a distance of 640.12 feet;

And S 63°53'03" E a distance of 216.34 feet to a point, the southeast corner of said 19.053-acre tract, for a corner of this tract;

Thence N 84°17'56" W crossing Tract One described as all of the David Jewell Survey No. 133, Abstract 296, Uvalde County, Texas and being 390 acres more or less described in deed of record in Volume 247 at Page 660 of the Deed Records of Uvalde County, Texas and with a south boundary line of said 19.053-acre tract a distance of 418.00 feet to an ½" iron bar with a red cap marked "KOCH & KOCH 2082" found set in the ground, a corner of said 19.053-acre tract, for a corner of this tract;

Thence S 88°16'07" W with a south boundary line of said 19.053-acre tract a distance of 405.36

feet to an <sup>1</sup>/<sub>2</sub>" iron bar with a red cap marked "KOCH & KOCH 2082" found set in the ground, a corner of said 19.053-acre tract, for a corner of this tract;

Thence S 89°23'30" W with a south boundary line of said 19.053-acre tract a distance of 505.27 feet to an ½" iron bar with a red cap marked "KOCH & KOCH 2082" found set in the ground, a corner of said 19.053-acre tract, for a corner of this tract;

Thence N 49°13'47" W with the west boundary line of said 19.053-acre tract a distance of 161.19 feet to an ½" iron bar with a red cap marked "KOCH & KOCH 2082" found set in the ground, a corner of said 19.053-acre tract, for a corner of this tract;

Thence N 44°47'48" W with the west boundary line of said 19.053-acre tract a distance of 303.20 feet to a <sup>3</sup>/<sub>4</sub>" iron bar found set in the ground in the south boundary line of said 331.265-acre tract described as Tract One and the north boundary line of said Tract One described in deed of record in Volume 247 at Page 660 of the Official Public Records of Uvalde County, Texas, the west corner of said 19.053-acre tract, for a reentrant corner of this tract;

Thence S 70°38'59" W with the southeast boundary line of said 331.265-acre tract described as Tract One and the northwest boundary line of said Tract One described in deed of record in Volume 247 at Page 660 of the Official Public Records of Uvalde County, Texas a distance of 1,093.88 feet to a 5/8" iron bar found set in the ground, a corner of said 331.265-acre tract described as Tract One and a corner of said Tract One described in deed of record in Volume 247 at Page 660 of the Official Public Records of Uvalde County, Texas, for a corner of this tract;

Thence S 70°45'13" W with the south boundary line of said 331.265-acre tract described as Tract One and the northeast boundary line said Tract One described in deed of record in Volume 247 at Page 660 of the Official Public Records of Uvalde County, Texas a distance of 850.62 feet to an ½" iron bar with an orange cap marked "SLS RPLS 5142" found set in the ground, a corner of said 331.265-acre tract described as Tract One, and the east corner of a 591.9-acre tract of land described in deed of record in Instrument Number 2023019246 of the Official Public Records of Uvalde County, Texas, for a reentrant corner of this tract;

Thence S 21°57'35" W crossing said Tract One described in deed of record in Volume 247 at Page 660 of the Official Public Records of Uvalde County, Texas and with the southeast boundary line of said 591.9-acre tract a distance of 3,803.76 feet to an ½" iron bar with an orange cap marked "SLS RPLS 5142" found set in the ground in the north boundary line of a 1,055.533-acre tract of land described in deed of record in Instrument Number 2021008950 of the Official Public Records of Uvalde County, Texas, a corner of said 591.9-acre tract and the west corner of a 509.2-acre tract of land described in deed of record in Instrument Number 2023019248 of the Official Public Records of Uvalde County, Texas, for a reentrant corner of this tract;

Thence S 19°50'41" E crossing said 1,055.533-acre tract with the southwest boundary line of said 509.2-acre tract, a distance of 3,276.71 feet to an  $\frac{1}{2}$ " iron bar with an orange cap marked

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"SLS RPLS 5142" found set in the ground, the southwest corner of said 509.2-acre tract, for a reentrant corner of this tract;

Thence S 84°28'31" E with a southwest boundary line of said 509.2-acre tract a distance of 2,396.26 feet to an ½" iron bar with an orange cap marked "SLS RPLS 5142" found set in the ground, a corner of said 509.2-acre tract, for a corner of this tract;

Thence N 84°23'06" E with a south boundary line of said 509.2-acre tract a distance of 1,657.94 feet to a point in the west bank of the Nueces River and a southeast boundary line of said 1,055.533-acre tract, a southeast corner of said 509.2-acre, for a corner of this tract;

Thence S 19°33'12" W with the west bank of the Nueces River and a southeast boundary line of said 1,055.533-acre tract a distance of 226.04 feet to a point, a corner of said 1,055.533-acre tract, for a west corner of this tract;

Thence S 9°40'43" W with the west bank of the Nueces River and an east boundary line of said 1,055.533-acre tract at 225.42 feet a point, the southeast corner of said 1,055.533-acre tract and the northeast corner of a 483.592-acre tract of land described in deed of record in Instrument Number 2021011564 of the Official Public Records of Uvalde County, Texas and continuing on the same course and by the same count with the west bank of the Nueces River and a southeast boundary line of said 483.592-acre tract an overall distance of 334.17 feet to a point, a corner of said 483.592-acre tract, for a corner of this tract;

Thence with the west bank of the Nueces River and the east boundary lines of said 483.592-acre tract the following calls:

S 49°45'04" E a distance of 172.73feet; S 15°15'36" E a distance of 1,153.80 feet; S 7°17'40" E a distance of 234.23 feet; S 0°41'48" E a distance of 190.48 feet; S 3°11'09" W a distance of 584.01 feet; S 5°30'21" W a distance of 235.05 feet; S 12°49'59" W a distance of 281.96 feet;

And S 7°34'18" W a distance of 256.12 feet to a point, a southeast corner of said 483.592-acre tract and the northeast corner of a 265.21-acre tract of land described in Instrument Number 2022016600 of the Official Public Records of Uvalde County, Texas, for the southeast corner of this tract;

Page 9 of 12

Thence S 70°32'24" W with a southeast boundary line of said 483.592-acre tract and a northwest boundary line of said 265.21-acre tract a distance of 164.01 feet to an <sup>3</sup>/<sub>4</sub>" iron bar found set in the ground, a corner of said 483.592-acre tract and a corner of said 265.21-acre tract, for a corner of this tract;

Thence S 70°32'30" W with a southeast boundary line of said 483.592-acre tract and the northwest boundary line of said 265.21-acre tract a distance of 1,539.99 feet to a 2-7/8" metal fence post h-brace, a corner of said 483.592-acre tract and a corner of said 265.21-acre tract, for a corner of this tract;

Thence S 70°30'16" W with a southeast boundary line of said 483.592-acre tract and a northwest boundary line of said 265.21-acre tract a distance of 1,246.93 feet to an ½" iron bar with a red cap marked "KOCH & KOCH SURVEYING INC." found set in the ground, a reentrant corner of said 483.592-acre tract and the west corner of said 265.21-acre tract, for a reentrant corner of this tract;

Thence S 18°59'35" E with a northeast boundary line of said 483.592-acre tract and the southwest boundary line of said 265.21-acre tract a distance of 2,647.60 feet to an ¾" iron bar found set in the ground, the east corner of said 483.592-acre tract, a corner of said 265.21-acre tract and the north corner of a 92.50-acre tract of land described in deed of record in Instrument Number 2017002978 of the Official Public Records of Uvalde County, Texas, for an east corner of this tract;

Thence S 70°28'16" W with a southeast boundary line of said 483.592-acre tract and the northwest boundary line of said 92.50-acre tract a distance of 2,085.89 feet to an ½" iron bar with a damaged orange cap found set in the ground, a reentrant corner of said 483.592-acre tract and the northwest corner of said 92.50-acre tract, for a reentrant corner of this tract;

Thence S 10°19'20" W with an east boundary line of said 483.592-acre tract and the west boundary line of said 92.50-acre tract a distance of 1,129.61 feet to an <sup>3</sup>/<sub>4</sub>" iron bar found set in the ground in the northeast boundary line of a 100.47-acre tract of land described in Volume 440 at Page 558 of the Official Public Records of Uvalde County, Texas, the south corner of said 483.592-acre tract, the west corner of said 92.50-acre tract, for a south corner of this tract;

Thence N 81°29'21" W with the south boundary line of said 483.592-acre tract and a northeast boundary line of said 100.47-acre tract at 708.28 feet an ½" iron bar with a damaged orange cap found set in the ground, a northwest corner of said 100.47-acre tract and the northeast corner of a 100.20-acre tract of land described in deed of record in Volume 439 at Page 347 of the Official Public Records of Uvalde County, Texas and continuing on the same course and by the same count with the south boundary line of said 483.592-acre tract and the north boundary line of said 100.20-acre tract an overall distance of 2,594.48 feet to an ½" iron bar with a red cap marked "KOCH & KOCH 2082" found set in the ground in the east boundary line of a 149.859-acre tract of land described in deed of record in Number 2021008949, the southwest corner of

said 483.592-acre tract and the northeast corner of said 100.20-acre tract, for a reentrant corner of this tract;

Thence S 19°10'35" E with the northeast boundary line of said 149.859-acre tract and the southwest boundary line of said 100.20-acre tract at 358.08 feet a point, the east corner of said 149.859-acre tract and a north corner of said 1,723.78-acre tract and continuing on the same course and by the same count with the northeast boundary line of said 1,723.78-acre tract and the southwest boundary line of said 100.20-acre tract at 3,050.40 feet a 3" cedar post found set in the ground, the south corner of said 100.20-acre tract and the west corner of a 125.14-acre tract of land described in deed of record in Instrument Number 2016001980 of the Official Public Records of Uvalde County, Texas and continuing on the same course and by the same count with the northeast boundary line of said 1,723.78-acre tract and the west boundary line of said 125.14-acre tract of a 125.14-acre tract and continuing on the same course and by the same count with the northeast boundary line of said 1,723.78-acre tract and the southwest boundary line of said 1,723.78-acre tract and the southwest boundary line of said 1,723.78-acre tract and the southwest boundary line of said 1,723.78-acre tract and the southwest boundary line of said 1,723.78-acre tract and the southwest boundary line of said 1,723.78-acre tract and the southwest boundary line of said 1,723.78-acre tract and the southwest boundary line of said 1,723.78-acre tract and the west corner of a 150.00-acre tract of land described in deed of record in Volume 412 at Page 458 of the Official Public Records of Uvalde County, Texas, for a corner of this tract;

Thence S 19°15'51" E with a northeast boundary line of said 1,723.78-acre tract and the southwest boundary line of said 150.00-acre tract a distance of 1,617.53 feet to a 5/8" steel pin set in a 3-way cedar fence post, the east corner of said 1,723.78-acre tract, the south corner of said 150.00-acre tract, the west corner of a 163.05-acre tract of land described in deed of record in Instrument Number 2018002255 of the Official Public Records of Uvalde County, Texas and the north corner of a 119.32-acre tract of land described in deed of record in Instrument Number 9901566 of the Official Public Records of Uvalde County, Texas, for an east corner of this tract;

Thence S 70°51'42" W with a southeast boundary line of said 1,723.78-acre tract and the northwest boundary line of said 119.32-acre tract a distance of 1,889.74 feet to an  $\frac{1}{2}$ " iron bar found set in the ground, a south corner of said 1,723.78-acre tract, the west corner of said 119.32-acre tract and a corner of said 615.905-acre tract, for a corner of this tract;

Thence N 70°51'52" W with a southwest boundary line of said 1,723.78-acre tract and the northeast boundary line of said 615.905-acre tract a distance of 3,938.01 feet to a  $1-\frac{1}{2}$ " pipe found set in the ground, a reentrant corner of said 1,723.78-acre tract and the north corner of said 615.905-acre tract, for a reentrant corner of this tract;

Thence S 22°53'15" W with a southeast boundary line of said 1,723.78-acre tract and a northwest boundary line of said 615.905-acre tract a distance of 5,585.63 feet to the point of beginning.

The bearings for this survey are based on the Texas State Plane Coordinate System established for the Texas South Central Zone (4204) from the North American Datum of 1983 (NA2011) epoch 2010.0.

SINCLAIR & ASSOCIATES, INC Lemuel T. Sinclair, Registered Professional Land Surveyor No. 5142

lts/wj

# **Application Fee Form**

<b>Texas Commission on Environment</b> Name of Proposed Regulated Entity: Regulated Entity Location: <u>Hwy</u>	al Quality : <u>Uvalde Site</u> : 90, Uvalde, Uvald	_ e County, Texas		
Name of Customer: <u>Cowboy Aggrega</u> Contact Person: <u>Nathaniel Kelly Foot</u> Customer Reference Number (if issu Regulated Entity Reference Number	a <u>tes LLC</u> <u>te</u> Ph ed):CN <u>605798115</u> (if issued): RN <u>11</u>	one: <u>970-389-2660</u> <u>5</u> 1281358		
	_	_	-	
Hays	Travis		Will	liamson
San Antonio Regional Office (3362)				
Bexar	Medina	$\geq$	Uva	lde
Comal	Kinney			
Application fees must be paid by che Commission on Environmental Qua form must be submitted with your	eck, certified check lity. Your cancelec fee payment. This	k, or money order, pa d check will serve as s payment is being su	iyable your i bmitt	e to the <b>Texas</b> receipt. <b>This</b> ted to:
Austin Regional Office		San Antonio Region	al Off	fice
Mailed to: TCEO - Cashier		0vernight Deliverv	to TC	FO - Cashier
Bevenues Section		12100 Park 35 Circl	۵. IC	ed cusiner
Mail Code 214		Building A 3rd Floo	r	
P O Boy 13088		Austin TX 78753	1	
Austin TX 78711-3088		(512)239-0357		
Site Location (Check All That Apply)	•	(312)233 0337		
Recharge Zone	• Contributing Zor	ne 🗌 Tr	ansiti	on Zone
Type of Plan		Size		Fee Due
Water Pollution Abatement Plan, C	ontributing Zone			
Plan: One Single Family Residential	Dwelling	Acro	es \$	
Water Pollution Abatement Plan, C	ontributing Zone			
Plan: Multiple Single Family Reside	ntial and Parks	Acr	es \$	
Water Pollution Abatement Plan, C	ontributing Zone			
Plan: Non-residential		2,952 Acr	es \$	10,000
Sewage Collection System		L.	F. \$	
Lift Stations without sewer lines		Acr	es \$	
Underground or Aboveground Stor	age Tank Facility	Tan	ks \$	•
Piping System(s)(only)		Ead	ch \$	
Exception		Ead	ch \$	
Extension of Time		Ead	ch \$	
Signature:	Da	te: 11-27-23	_	

## **Application Fee Schedule**

**Texas Commission on Environmental Quality** 

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

#### Water Pollution Abatement Plans and Modifications Contributing Zone Plans and Modifications

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

Organized Sewage (	Collection Systems a	and Modifications	
			_

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

# Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

# Exception Requests Project Fee Exception Request \$500

#### **Extension of Time Requests**

Project	Fee
Extension of Time Request	\$150



## **TCEQ** Core Data Form

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

#### **SECTION I: General Information**

1. Reason for Submission (If other is checked please describe in space provided.)         New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)         Renewal (Core Data Form should be submitted with the renewal form)         2. Customer Reference Number (if issued)         Follow this link to search for CN or RN numbers in Central Registry**         RN 111281358	)		
<ul> <li>New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)</li> <li>Renewal (Core Data Form should be submitted with the renewal form)</li> <li>Customer Reference Number (<i>if issued</i>)</li> <li>Follow this link to search for CN or RN numbers in Central Registry**</li> <li>RN 111281358</li> </ul>	)		
□ Renewal (Core Data Form should be submitted with the renewal form)       ☑ Other Modification         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)         RN 111281358	)		
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)         RN 111281358	)		
CN         605798115         for CN or RN numbers in Central Registry**         RN         111281358			
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 Ow         Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)	nership		
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) <u>If new Customer, enter previous Customer below:</u>			
Cowboy Aggregates, LLC			
7. TX SOS/CPA Filing Number       8. TX State Tax ID (11 digits)       9. Federal Tax ID (9 digits)       10. DUNS Number	er (if applicable)		
803685841 32075073307 N/A			
11. Type of Customer:         Corporation         Individual         Partnership:GeneralLimited			
Government:  City County Federal State Other			
12. Number of Employees 13. Independently Owned and Operated?	13. Independently Owned and Operated?		
□ 0-20 □ 21-100 □ 101-250 □ 251-500 □ 501 and higher □ Ves □ No			
<b>14. Customer Role</b> (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following			
Owner       Operator       Owner & Operator         Occupational Licensee       Responsible Party       Voluntary Cleanup Applicant       Other:			
2839 Wooded Acres Dr			
15. Mailing			
Address:			
CityWacoStateTXZIP76710ZIP + 4			
16. Country Mailing Information (if outside USA)       17. E-Mail Address (if applicable)			
foote@cowboyaggregates.com			
18. Telephone Number19. Extension or Code20. Fax Number (if applicable)			
970-389-2660			

#### **SECTION III: Regulated Entity Information**

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

 □ New Regulated Entity
 □ Update to Regulated Entity Name
 ☑ Update to Regulated Entity Information

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

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

Uvalde Site

23. Street Address of the Regulated Entity:													
<u>(No PO Boxes)</u>	City				State			ZIP			ZIP + 4		
24. County	Uval	de											
		Er	nter Physical	Locat	tion Descript	ion if	no stre	et addres	s is prov	vided.			
25. Description to Physical Location:	From road	n the on 1	e intersecti north side	on o of U	f US 90 an S 90, then	id Ri appi	R 102 rox 3.	2, trave 0 miles	l 1.6 m north t	iles east o plant s	t along US site.	5 90 to entry	
26. Nearest City									State		Nea	arest ZIP Code	
Uvalde							TX			78	801		
<b>27. Latitude (N) In Decimal:</b> 29.27250			2	28. Longitude			(W) In Decimal:		99.993149				
Degrees	Minutes			Seco	nds		Degrees			Minutes		Seconds	
29		1	.6		21.01		99			59		35.34	
29. Primary SIC Code (4 digits) 30. Secondary S			Secondary Sl	C Cod	Code (4 digits) 31. Primary NAICS Code (5 or 6 digits)					<b>32. Se</b> (5 or 6 d	32. Secondary NAICS Code (5 or 6 digits)		
1422				212312									
33. What is the Primary	Busine	ss of	this entity?	(Do n	ot repeat the SIC	or NA	ICS desci	ription.)					
Construction Mater	rials												
2839 Wooded Acres Dr													
34. Mailing													
Address:	Cit	y	Waco		State	T	X	ZIP	7671	0	ZIP + 4		
35. E-Mail Address	:	foo	te@cowbo	oyag	gregates.co	om							
36. Telephone Number					37. Extension or Code				38. Fax Number (if applicable)				
970-389-2660													

Dam Safety	Districts	Edwards Aquifer	Emissions Inventory Air	Industrial Hazardous Waste
		13001462		
Municipal Solid Waste	New Source Review Air	OSSF OSSF	Petroleum Storage Tank	PWS
Sludge	Storm Water	Title V Air	Tires	Used Oil
Voluntary Cleanup Waste Water		Wastewater Agriculture	Water Rights	Other:

#### **SECTION IV: Preparer Information**

40. Name: Natalie M. Sales				41. Title: Staff Engineer			
42. Telephor	ne Number	43. Ext./Code	44. Fax Number	45. E-Mail Address			
(830) 249-8284		(830) 249-0221	nsales@y	westwardenv.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:	Cowboy Aggregates, LLC	Member	r		
Name (In Print):	Nathaniel Kelly Foote	Phone:	970-389-2660		
Signature:	Mastr			Date:	11-27-23