EDWARDS AQUIFER APPLICATION ABOVEGROUND STORAGE TANK PLAN

Capitol Aggregates Solms Operation Comal County, Texas

Submitted to



1026 Solms Quarry Road New Braunfels, Texas 78132

Submitted by



engineers | scientists | innovators

Engineering Firm Registration No. 1182 8217 Shoal Creek Blvd, Suite 200 Austin, Texas 78757

Original Plan Approved November 2017 Modified Plan Submitted May 2023

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

Technical Review

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

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Capitol Aggregates Solms Operation				2. Regulated Entity No.: RN105203939					
3. Customer Name: Capitol Aggregates Inc.			4. Customer No.: CN 604033142						
5. Project Type: (Please circle/check one)	New		Modif	ication		Extension		Exception	
6. Plan Type: (Please circle/check one)	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Resider	ntial	Non-residential		8. Site (acres):		e (acres):	1,015	
9. Application Fee:	\$6,500		10. Permanent B			BMP(s	SMP(s): Secondary Containment		tainment

11. SCS (Linear Ft.):	o	12. AST/UST (No. Tanks):	1 regulated tank previously approved; 10 additional regulated tanks included in plan modification (11 regulated tanks total)
13. County:	Comal	14. Watershed:	Dry Comal Creek

Application Distribution

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

http://www.tceq.texas.gov/assets/public/compliance/field_ops/eapp/EAPP%2oGWCD%2omap.pdf

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

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

San Antonio Region					
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)		_ <u>X</u> _	_		_
Region (1 req.)	_	_ <u>X</u> _		_	
County(ies)	_	_ <u>X</u> _			
Groundwater Conservation District(s)	Edwards Aquifer Authority Trinity-Glen Rose	X Edwards Aquifer Authority X Comal Trinity	Kinney	EAA Medina	EAA Uvalde

City(ies) Jurisdiction	Castle HillsFair Oaks RanchHelotesHill Country VillageHollywood ParkSan Antonio (SAWS)Shavano Park	BulverdeFair Oaks RanchGarden Ridge _X_New Braunfels _X_Schertz	NA	San Antonio ETJ (SAWS)	NA
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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.			
J. Brandon Klenzendorf, P.E.			
	F		
Print Name of Customer/Authorized Agent			
J. Brandon Klady	5.33.3033		
Signature of Customer/Authorized Agent	Date		

Date(s)Reviewed:	Date Administratively Complete:	
Received From:	Correct Number of Copies:	
Received By:	Distribution Date:	
EAPP File Number:	Complex	α:
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.

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: <u>J. Brandon Klenzendorf, P.E</u> Date: <u> </u>	STATE OF TELL
Sig	Signature of Customer/Agent:	*
(J. Brandon Kleyarder	J. BRANDON KLENZERDORF 13007 CENSE ONAL EN
PI	Project Information	1866000
1.	 Regulated Entity Name: <u>Capitol Aggregates Solms Opera</u> 	<u>tion</u>
2.	2. County: <u>Comal</u>	9 1
3.	3. Stream Basin: <u>Dry Comal Creek</u>	
4.	 Groundwater Conservation District (If applicable): <u>Edward GCD</u> 	rds Aquifer Authority; Comal Trinity
5.	5. Edwards Aquifer Zone:	
	Recharge Zone Transition Zone	
6.	5. Plan Type:	
		Modification AST

	UST	Exception Request
7.	Customer (Applicant):	
	Contact Person: Andrew Frye Entity: Capitol Aggregates, Inc. Mailing Address: 11551 Nacogdoches Road City, State: San Antonio, Texas Telephone: 210-871-7214 Email Address: Andrew.Frye@CapitolAggrega	Zip: <u>78217</u> FAX: <u>N/A</u> ates.com
8.	Agent/Representative (If any):	
	Contact Person: <u>Brandon Klenzendorf</u> Entity: <u>Geosyntec Consultants</u> Mailing Address: <u>8217 Shoal Creek Boulevard</u> City, State: <u>Austin, Texas</u> Telephone: <u>512-354-3281</u> Email Address: <u>bklenzendorf@geosyntec.con</u>	Zip: <u>78757</u> FAX: <u>N/A</u>
9.	Project Location:	
10.	and the City of Schertz ETJ (generally sout ☐ The project site is not located within any ☐ The location of the project site is describe	r limits but inside the ETJ (extra-territorial (generally north of the Union-Pacific railroad) th of the Union-Pacific railroad). city's limits or ETJ.
	The project site is located at 1026 Solms (Attachment A). The project site entra approximately 1,200 feet to the west 482. The southern boundary of the site boundary of the site is an existing ran	ance is on the north side of FM 482 of the intersection of Marigold Way and FM te is located adjacent to FM 482. The nothern ch road approximately 850 feet to the south of dary of the site is an existing pipeline easement
11.		showing directions to and the location of the on and site boundaries are clearly shown on
12.		e Zone Map. A copy of the official 7 ½ minute of the Edwards Recharge Zone is attached.
	Project site boundaries.USGS Quadrangle Name(s).	

\boxtimes Boundaries of the Recharge Zone (and Transition Zone, if applicable). \boxtimes 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.
\square Survey staking will be completed by this date: <u>N/A</u>
14. Attachment C – Project Description. Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:
 Area of the site ○ Offsite areas ○ Impervious cover ○ Permanent BMP(s) ○ Proposed site use ○ Site history ○ Previous development ○ Area(s) to be demolished
15. Existing project site conditions are noted below:
 □ Existing commercial site □ Existing industrial site □ Existing residential site ○ Existing paved and/or unpaved roads ○ Undeveloped (Cleared) ○ Undeveloped (Undisturbed/Uncleared) □ Other:
Prohibited Activities

- 16. I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:
 - (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
 - (2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
 - (3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;
 - (4) The use of sewage holding tanks as parts of organized collection systems; and
 - (5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

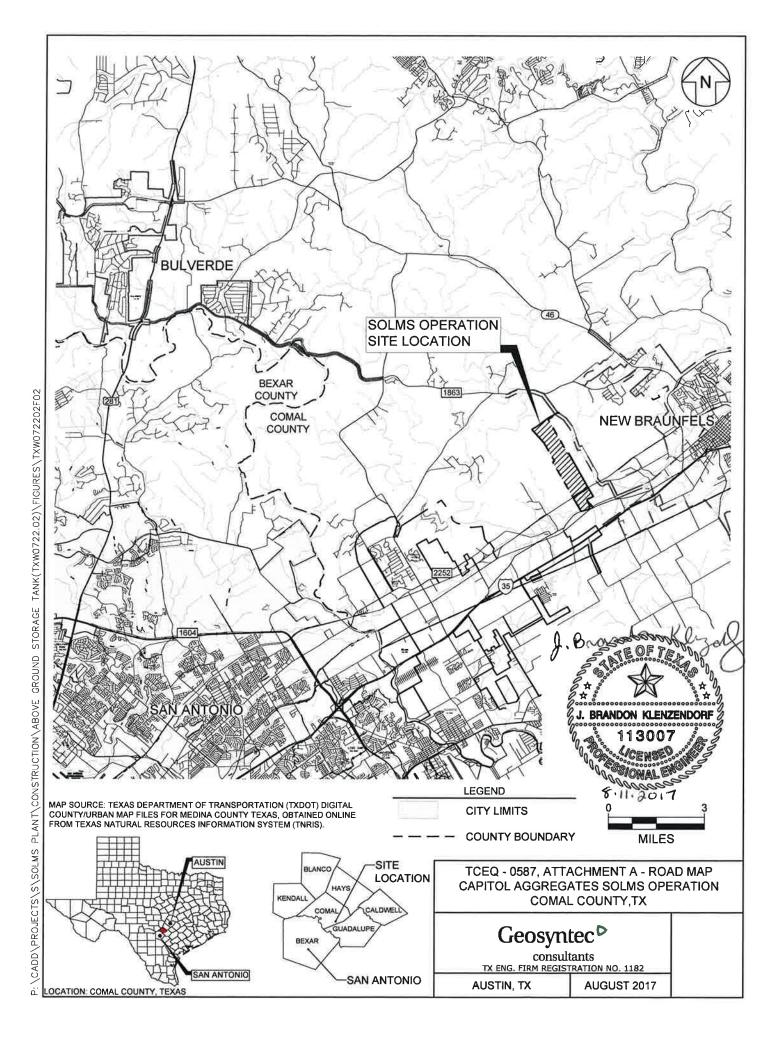
- (6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading. 17. I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project: (1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control); (2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and (3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title. Administrative Information 18. The fee for the plan(s) is based on: For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur. For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines. For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems. A request for an exception to any substantive portion of the regulations related to the protection of water quality. A request for an extension to a previously approved plan. 19. Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's: TCEQ cashier Austin Regional Office (for projects in Hays, Travis, and Williamson Counties) San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and **Uvalde Counties**)
- 20. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
- 21. No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

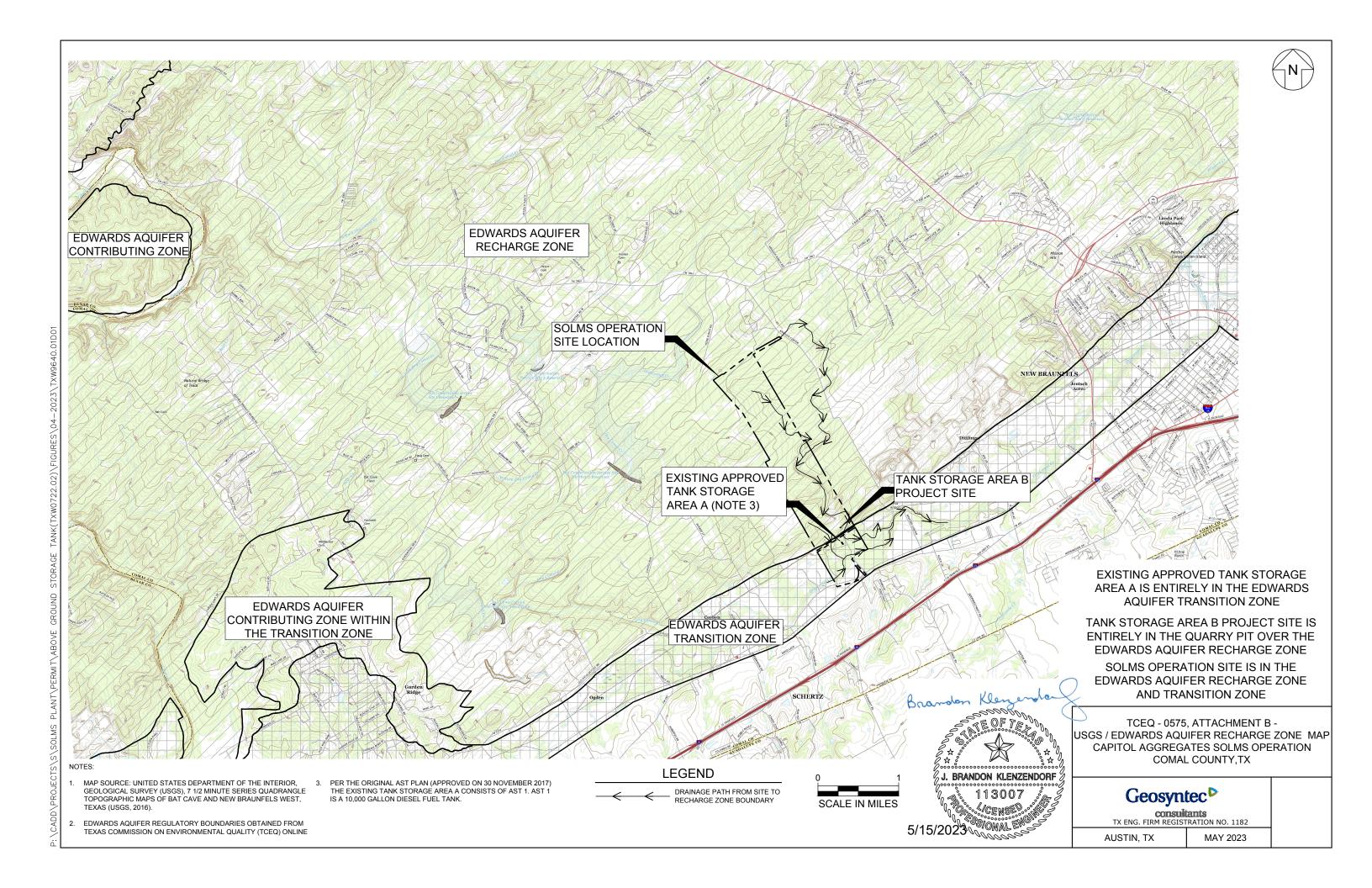
Attachment A - Road Map

See attached Road Map with directions to the Solms Operation Site which includes the Tank Storage Area Project Site and boundaries clearly shown.

Attachment B - USGS/Edwards Recharge Zone Map

See attached USGS/Edwards Recharge Zone Map with the official 7 ½ minute USGS Quadrangle Map (scale: 1" = 2000') of the Edwards Recharge Zone. The map clearly shows the Solms Operation Site and the Tank Storage Area Project Site boundaries, USGS Quadrangle names, boundaries of the Recharge Zone and Transition Zone, and drainage path from the project site to the boundary of the Recharge Zone.





Attachment C – Project Description

Capitol Aggregates, Inc. (Capitol Aggregates) is submitting this modification to their existing approved Aboveground Storage Tank (AST) Plan for the Capitol Aggregates Solms Operation at 1026 Solms Quarry Road, New Braunfels, Texas. The overall Solms Operation Site includes areas in both the Edwards Aquifer Recharge Zone and Transition Zone and has an approved Water Pollution Abatement Plan (WPAP) submitted by Westward Environmental, Inc. on behalf of Holcim (US) Inc. on 6 April 2007. The WPAP was approved on 12 July 2007 (Edwards Aquifer Protection Program ID No. 2643.00). A WPAP modification was approved on 6 May 2015. The Capitol Aggregates Solms Operation Site's original AST Plan (Additional ID No. 13000495) was approved on 30 November 2017. A subsequent WPAP modification was approved on 26 November 2018. The Capitol Aggregates Solms Operation Site consists of 1,015 acres with 853 acres on the Recharge Zone. Permanent pollution abatement measures consist of engineered vegetated filter strips, natural vegetated buffer areas, rock berm, and the quarry pit during the site preparation and excavation/processing phase. The existing approved Tank Storage Area is located next to the scale house along the entrance road and is identified as Tank Storage Area A throughout this plan modification to distinguish it from the new tank storage area, which is designated as Tank Storage Area B and described below. Tank Storage Area A consists of operation of an approved AST with a volume of 10,000 gallons (identified as AST 1 throughout the plan); AST 1 is a doublewalled diesel tank placed upon a concrete base structure with piping, hose, and dispenser located within secondary containment. Tank Storage Area A is located entirely over the Edwards Aquifer Transition Zone.

Capitol Aggregates is submitting this modification to their existing AST Plan to account for a new Fuel Island at the Tank Storage Area B Project Site. The new Tank Storage Area B Project Site is located entirely over the Edwards Aquifer Recharge Zone and is within the existing quarry pit and consists of operation of ten permanent, regulated ASTs (identified as AST 2 through AST 11) within an impervious concrete dike secondary containment structure (with a roof system), designed to have an available storage volume sufficient to contain one and one-half times the cumulative storage capacity of the regulated tanks plus the volume displaced by unregulated tanks that will be stored within the secondary containment. The containment structure at Tank Storage Area B also includes operation of two permanent unregulated ASTs (identified as AST 12 and AST 13) with unregulated materials (i.e., Diesel Exhaust Fluid Additive and Antifreeze, respectively, which are not classified as hazardous substances under Federal Hazardous Waste Regulations 40 CFR 261) plus eighteen regulated 55-gallon portable drums containing petroleum hydrocarbon material. The cumulative storage volume of the portable drums was accounted for in the required containment volume calculation for one and one-half times the cumulative storage capacity and the displacement volume from unregulated AST 12 and AST 13 were accounted for in the available storage volume provided by the containment structure. The proposed AST Plan modification includes the addition of Tank Storage Area B which consists of a cumulative storage volume of 14,202 gallons. Due to scheduling and worker availability challenges, supply chain concerns, and material availability, Capitol Aggregates may initiate construction activities associated with the concrete pad and structure, roofing system, and electrical systems prior to approval from TCEQ on the AST modification application. Capitol Aggregates will not initiate tank installation or transfer of tank contents until approval is received; this AST Plan modification submittal is to obtain approval for the addition of Tank Storage Area B.

Area of the Site

The total area of the Capitol Aggregates Solms Operation Site consists of 1,015 acres. This AST Plan only applies to the regulated activities associated with the on-site storage tanks. The limits of the new Tank Storage Area B Project Site consist of an area of less than 0.05 acres.

Off-Site Areas

Off-site areas surrounding the Tank Storage Area B Project Site consist of the existing quarry entrance and quarry pit to the west and undeveloped areas to the east. Off-site areas will not be required for operations associated with this project.

Impervious Cover

The approved WPAP lists the impervious cover over the Recharge Zone as 2.4% (20.1 acres of impervious cover for the Recharge Zone area of 853 acres). Impervious cover associated with the Tank Storage Area B Project Site is included as part of the existing fueling/shop area located within the quarry pit over the Recharge Zone. Additional impervious cover, including the approved Tank Storage Area A, is located over the Transition Zone totaling 73.1 acres (45.1%).

Permanent BMPs

The Tank Storage Area B Project Site is located within secondary containment within the existing quarry pit. Therefore, additional permanent BMPs are not proposed for this project.

Proposed Site Use

The proposed project associated with this AST Plan application consist of operation of ASTs within the secondary containment structure for use as a fuel island. The Solms Operation Site and proposed site use will not be modified as a result of this project.

Site History and Previous Development

The Solms Operation Site was approved for construction as a quarry following approval of the original WPAP on 12 July 2007. Multiple Requests for the Extension of Time to Commence

Regulated Activities Authorized by a WPAP were submitted including requests approved on the following dates: 10 August 2009, 12 January 2010, 23 August 2010, 7 March 2011, 24 August 2011, 30 January 2012, 30 July 2012, 15 February 2013, 25 July 2013, 7 February 2014, and 30 July 2014. A WPAP modification was submitted and subsequently approved on 6 May 2015. An AST Plan was submitted and subsequently approved on 30 November 2017. An additional WPAP modification was submitted and subsequently approved on 26 November 2018.

A Geologic Assessment was conducted in 2007 as part of the approved WPAP and updated in 2015 as part of the approved WPAP modification. The site was primarily undeveloped until 2009 when Comal County started construction of the Dry Comal Creek Flood Retarding Structure. The retarding structure was completed in 2013 and is located in an easement within the limits of the approved WPAP. The remainder of the site remained undeveloped until late 2014 when construction commenced in preparation of quarry activities including construction of the scale house. Quarry operations began in 2015.

Activities authorized in the previously approved WPAP such as clearing of the initial (temporary) plant area, initial quarry area and roads, as well as construction of BMPs (i.e., temporary earthen berms, silt fences, mulching, and construction entrance/exits) are either completed or ongoing at this time. A number of ranch roads (totaling 14.0 acres of impervious cover) are existing and will continue to be used for access within the site for quarry and ongoing ranching operations. Capitol Aggregates intends to continue quarry operations and BMPs on-site as described in the currently approved WPAP. Material stockpiles will be stored both on the Recharge Zone and on the Transition Zone.

Areas to be Demolished

No areas are proposed to be demolished for this project.

Geologic Assessment Form (TCEQ-0585) Supplemental Information

Based on discussions with TCEQ staff, form TCEQ-0585, Geologic Assessment, is not required to be modified for this AST Plan modification request because the original Geologic Assessment approved with the original WPAP provides the necessary information. The original submittal for the Geologic Assessment form TCEQ-0585 (signed by Thomas O. Mathews II, P.G., for Westward Environmental, Inc. on 3 April 2007) is provided below for reference. In addition, the Geologic Assessment was modified with the WPAP modification approved on 6 May 2015. The updated Geologic Assessment Table was signed by Thomas O. Mathews II, P.G., on 4 February 2015 and is provided for reference. Modifications to the Geologic Assessment form beyond the original Geologic Assessment and updated Geologic Assessment are not proposed as part of the AST Plan application.

No sensitive geologic features were identified near the Tank Storage Area B Project Site associated with this AST Plan modification application. Therefore, a reevaluation of the Geologic Assessment is not required.

<u>Attachment A – Geologic Assessment Table</u>

The Geologic Assessment Table from the original approved WPAP and the approved 2015 WPAP modification will not be modified as a result of this AST Plan modification application. The original Geologic Assessment Table and updated Geologic Assessment Table from the 2015 WPAP modification are provided for reference.

<u>Attachment B – Stratigraphic Column</u>

The original Geologic Assessment approved with the WPAP provides information on the stratigraphic column. Modified information is not required for this AST Plan modification application.

<u>Attachment C – Site Geology</u>

The original Geologic Assessment approved with the WPAP provides information on the site geology. Modified information is not required for this AST Plan modification application.

Attachment D - Site Geologic Map(s)

The original Geologic Assessment approved with the WPAP provides the Site Geologic Maps. Modified information is not required for this AST Plan modification application.

Geologic Assessment

For Regulated Activities

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

REGULATED ENTITY NAME: Holcim +/- 1015 Acre Site
TYPE OF PROJECT: X WPAP AST SCS UST
LOCATION OF PROJECT: X Recharge Zone Transition Zone Contributing Zone within the Transition Zone
PROJECT INFORMATION

- 1. X Geologic or manmade features are described and evaluated using the attached GEOLOGIC ASSESSMENT TABLE.
- 2. 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 Units, Infiltration Characteristics & Thickness				
Soil Name	Group*	Thicknes s (feet)		
Comfort –Rock (CrD)	D	<1'		
Eckrant-Rock (ErG)	D	1'		
Medlin-Eckrant (MED)	С	7.6'		
Purves Clay (PuC)	С	1.5'		
Rumple-Comfort (RUD)	С	4'		

- * Soil Group Definitions (Abbreviated)
- A. Soils having a <u>high infiltration</u> rate when thoroughly wetted.
- B. Soils having a $\underline{\text{moderate infiltration}}$ rate when thoroughly wetted.
- C. Solls having a slow infiltration rate when thoroughly wetted.
- D. Solls having a $\underline{\text{very slow infiltration}}$ rate when thoroughly wetted.
- 3. X A STRATIGRAPHIC COLUMN is attached at the end of this form that shows formations, members, and thicknesses. The outcropping unit should be at the top of the stratigraphic column.
- 4. X A NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY is attached at the end of this form. The description must include a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure, and karst characteristics of the site.
- 5. X Appropriate SITE GEOLOGIC MAP(S) are attached:

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 '

Method of collecting positional data:
 Global Positioning System (GPS) technology.

- Other method(s).
- 7. X The project site is shown and labeled on the Site Geologic Map.
- 8. X Surface geologic units are shown and labeled on the Site Geologic Map.
- 9. X 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.
- 10. X The Recharge Zone boundary is shown and labeled, if appropriate.
- 11. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.):
 - X There are 6 wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
 - The wells are not in use and have been properly abandoned.
 - The wells are not in use and will be properly abandoned.
 - The wells are in use and comply with 16 TAC Chapter 76.
 - There are no wells or test holes of any kind known to exist on the project site.

ADMINISTRATIVE INFORMATION

12. X One (1) original and three (3) copies of the completed assessment has been provided.

Date(s) Geologic Assessment was performed: October 31, November 1, 2, 7, 9, 13, 15, 20, 21, 27, 28, and 29, 2006

Date(s)

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.

Thomas O. Mathews II, P.G. #5321

830-249-8284

Print Name of Geologist

Telephone

Fax

<u>830- 249-022</u>

Signature of Geologist

Date

Representing: Westward Environmental, Inc.

(Name of Company)

If you have questions on how to fill out this form or about the Edwards Aquifer protection program, please contact us at 210/490-3096 for projects located in the San Antonio Region or 512/339-2929 for projects located in the Austin Region.

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512/239-3282.

THOMASO. MATHEV

GEOL	OGIC ASS	SESSMENT	TABL	E			PR	OJE	CT NAME:											
	LOCATIO	NC	Γ				FEA	TUR	E CHARACT	ERI	STICS				EV	ALUAT	ION	P	HYSI	CAL SETTING
1A	18.	10*	2A	28	3		4		5	5 5A 6		7	ðΑ	88	9	1	10	11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POWTS	FORMATION	DME	HEIONS I	FEET)	TREND (DEGREES)	moa	DEHSITY (NOFT)	APERTURE (FEET)	RIFILL	RELATIVE DIFILTRATION RATE	TOTAL	SENS	ITIVITY	CATCHU	ENT AREA RED)	ТОРООВАРНУ
						×	Y	2		10						<40	>40	<1.8	>16	
S-1	29 39.85	98 12.59	O-VR	5	Кер	20	3		N14W				0	11	36	Х			X	STREAMBED
S-2	29 39.84	98 12.59	CD	5	Кер	30	7	3	N17E				0	7	12	X			Х	STREAMBED
S-3	29 39.85	98 12.57	CD	5	Кер	7	10	0.7	N24W				0	9	14	Х			Х	STREAMBED
S-4	29 39.88	98 12.58	MB-W	30	Кер				WELL				Χ	5	35	Х		Х		HILLTOP
S-5	29 39.92	98 12.44	F	20	Кер	2900			N60E	10			N/C	7	37	Х			Х	HILLSIDE
S-6	29 40	98 12.36	CD	5	Кер	80	200	10	N10E				С	10	15	X			Х	STREAMBED
S-7	29 39.99	98 12.35	MB-W	30	Кер				WELL				Х	5	35	X		Х		FLOODPLAIN
S-8	29 39.97	98 12.44	SC	20	Кер	1	1	1.5	N30W				F/O	15	35	Х		X		HILLTOP
S-9	29 39.96	98 12.48	SH	20	Kep	4	6	1.5	N56E	10			O/C	9	39	Х		Х		HILLTOP
S-10	29 39.97	98 12.46	SH	20	Кер	3	6	0.5	N40W				F/O	5	25	X		Х		HILLTOP
S-11	29 39.96	98 12.45	SH	20	Кер	4	6	1	N40E	10			F	5	35	Х		Х		HILLTOP
S-12	29 39.98	98 12.48	CD	5	Кер	11	40	1.5	N40E	10			F	5	20	Χ		Х		HILLTOP
S-13	29 40.01	98 12.51	Z-CD	30	Kep	200	300	1,5	N70E				F	9	39	Х		Х		HILLTOP
S-14	29 39.96	98 12.74	CD	5	Кер	8	4	1	N12W				С	15	20	Х			Х	STREAMBED
S-15	29 39.96	98 12.81	SC	20	Kep	2	1		N6E				0	10	30			Х		HILLSIDE
S-16	29 39.98	98 12.78	CD	5	Кер	200	150	3.5	N-S				N	7	12	Х			X	HILLSIDE
S-17	29 40.01	98 12.8	SF	20	Кер	4	0.3	2	N80E	- 1			0	17	37	X		Х		HILLSIDE

· DATI	UM: NAD 83	
2A TY	PE 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 soll, 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
X	Other materials

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

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

Date 4-3-07

Sheet 1 of 7

			TABL				PK	OJE	CT NAME:											
	LOCATION	ON					FE/	ATU!	RE CHARAC	TER	ISTICS	S			EV	ALUAT	ION	P	HYSI	CAL SETTING
1A	18 *	1C"	ZA	79	3		4		5	5.4	0	7	BA	88	9	10		11		12
FEATURE ID	LATITUCE	LOHIGITUDE	FEATURE TYPE	Poults	FORMATION	DATE	CHCLEN	FEET)	TREND (DEGREES)	Ę	(יוס(ד'ו)	APERTURE (FEET)	INFOL	RELATIVE INFILTRATION RATE	TOTAL	SEN	YTTVITE		EHY AREA RESI	TOPOGRAPHY
						х	Y	z		10						<40	240	<1.0	>10	
S-18 2	29 40.06	98 12.34	CD	5	Кер	15	18	4	N10E				С	10	15	X			X	STREAMBED
S-19 2	29 40.04	98 12.53	SC	20	Кер	8	1	2	N23W				O/F	10	30	Х	T	X		HILLSIDE
S-20 2	29 40.03	98 12.85	SC	20	Kep	15		1	N16E				0	11	31	X		Х		HILLTOP
S-21 2	29 40.05	98 12.8	SH	20	Kep	12	22	4	N50E	10	2001	20 N	N	40	70	1000E	X	X	Tost	HILLSIDE
S-22 2	29 41.1	98 13.43	CD	5	Кер	35	15	2.5	N60W				F	7	12	X		Х		HILLTOP
S-23 2	29:39.98	98 12.63	SC	20	Kep	0.3	0.2	1.3	N50E	10	RIST	Book	N	20	50	SVID	X	1535	isot	HILLTOP
S-24 2	29 40.56	98 12.78	SC	20	Kep	1	0.8	2					С	10	30	X		X		HILLSIDE
S-25 2	29 40.1	98 12.44	SH	20	Кер	4	2	4	N40E	10			N/C	15	45	X		Х		HILLSIDE
S-26 2	29 40.11	98 12.49	SF	20	Кер	1.3	1.3	3.5	N10W		1	1.3	O/F	15	35	Х		Х		FLOODPLAIN
S-27 2	29 40.56	98 12.8	CD	5	Kep	7	7	0.5		1			F	5	10	X		Х		HILLTOP
S-28 2	29 40.14	98 12.57	CD	5	Kep	40	20	2.5	N60W				Ç	10	15	X			X	STREAMBED
S-29 2	29 40.11	98 12.58	C	30	Kep	3	5	8	N10E	165	MEDI		0	25	55	Elid	X	THE REAL PROPERTY.	X	FLOODPLAIN
S-30 2	29 40.11	98 12.63	SC	20	Kep	1	4	5	N53E	10			O/F	7	37	Х			Х	FLOODPLAIN
S-31 2	29 40.11	98 12.69	SC	20	Kep	1	1.7	5	N86E				0	10	30	X		Х		HILLSIDE
S-32 2	29 40.09	98 12.68	SF	20	Кер	5	0.3	2	N35E	10			O/F	8	38	Х		Х		HILLTOP
S-33 2	29 40.12	98 12.62	SC	20	Kep	1	0.3	1.5	N61W				0	10	30	Х			Х	FLOODPLAIN
S-34 2	29 40.11	98 12.56	MB-W	30	Kep	0.4	0.4	50	WELL				Х	5	35	X			X	STREAMBED

* DATL	IM: N	IAD	83
--------	-------	-----	----

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 bedreck	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
- C Coarse cobbles, breakdown, sand, gravel
- D 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

Other materials

12 TOPOGRAPHY

THOMASO, MATHEWS

Cliff, Hillop, Hillside, Drainage, Floodplain, Streambed

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

Date 4-3-07

Sheet 2 of 7

1A	LOCATIO	N IC*					PROJECT NAME:													
		10*				FEATURE CHARACTERISTICS										ALUAT	ION	Р	HYSI	CAL SETTING
FEATURE ID	LATITUDE		2A	ZB	3		4		5	5 5A (7	BA	88	פ	g 10		11		12
	2.,,,,,	LOHGITUDE	FEATURE TYPE	POUIT5	FORMATION	DINE	(510113 (FEET)	TREND (DEGREES)	DOE	(HOAFT)	APERTURE (FEET)	MERL	RELATIVE PIFTLY TRATION RATE	TOTAL	96113	пмт		EUT AREA REB)	ТОРООЛАРНУ
						х	Y	Z		10						<40	740	<1.5	≥1.5	
S-35 29	40.15	98 12.63	SC	20	Kep	3	1	4.5	E-W				N	5	25	Х			Х	FLOODPLAIN
S-36 29	40.14	98 12.88	C	30	Kep	15	8	7	N4E		6.00		N	40	70		X	X		HILLTOP
S-37 29	9 40.14	98 12.88	SC	20	Kep	3	1.3	1.3	N76W				0	15	35	X		Χ		HILLTOP
S-38 29	9 40.15	98 12.66	SC	20	Кер	0.5	0.5	0.8	E-W				0	15	35	Х		Х		HILLTOP
S-39 29	9 40.15	98 12.66	SC	20	Kep	0.8	0.8	1	E-W				0	15	35	X		Х		HILLTOP
S-40 29	9 40.15	98 12.42	SF	20	Kep	8	12	0.1	N12E		3	0.1	O/F	10	30	Х			X	STREAMBED
S-41 29	9 40.15	98 12.42	SF	20	Kep	0.5	2	1	N30E				F	5	25	Х		Х		FLOODPLAIN
S-42 29	9 40.17	98 12.63	SC	20	Kep	1	1	2	N40W		_		0	15	35	Х			X	FLOODPLAIN
S-43 29	40.19	98 12.68	SC	20	Kep	0.5	0.5	0.8					O/F	5	25	Х		Х		HILLTOP
S-44 29	9 40.2	98 12.51	MB-W	30	Kep	0.3	0.3	150					X	5	35	Х		Χ		HILLTOP
S-45 29	9 40.27	98 12.70	SC	20	Kep	1	1	1					O/F	10	30	Х		Х		HILLTOP
S-46 29	9 40.69	98 12.75	CD	5	Kep	3.5	6	1	N40VV		_		O/F	25	30	X		Х		HILLTOP
S-47 29	9 40.24	98 12.93	O-VR	5	Кер	150	15		N41W		10	0.1 - 0	N	10	15	X		Х		HILLSIDE
S-48 29	40.23	98 13.00	SC	20	Kep	0.5	0.5	1.5	N40W				0	8	28	X		Х		HILLTOP
S-49 29	40.25	98 12.92	Z-SC	30	Kep	20	4		N80E		0.3	1	0	8	38	X		Х		HILLSIDE
S-50 29	9 40.25	98 12.86	Z-SC	30	Кер	10	2	2	N11W,N85W	1			0	9	39		Х	X		HILLSIDE
S-51 29	40.3	98 12.61	SC	20	Kep	2	1.3	3	N34E				F	10	30	X			Х	STREAMBED

DAT	LIM.	NAD	83

2A TYP	E 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

	BA INFILLING

- N None, exposed bedrock
- Coarse cobbles, breakdown, sand, gravel
- 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
- Other materiels

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

9ale 4-3-C

Sheet 3 of 7

GEOL	OGIC ASS	ESSMENT	TABL	E			PR	OJE	CT NAME	:										
	LOCATION	ON					FEA	TUE	RE CHARAC	TER	ISTICS	3			EV	ALUA	TION	P	HYSI	CAL SETTING
1.0	1E *	10"	ZA	20	3		4		5	5 5A		7 8A 8B		8B	9	10		11		12
FEATURE ID	LATITUGE	Conductor	FEATURE TYPE	POINTS	FORMATIC H	Deut	nsions (reen	TREND (DEGREES)	DOM	DENSITY (HOAT)	APERTURE (FEET)	mfal	RELATIVE INSTLYRATION RATE	TOTAL	HJE	STINITY		ESIT AREA RESI	TOPOGRAPHY
				and the second		х	Y	Z		10						<40	≥40	<1.8	21.0	
S-52	29 40.31	98 12.72	F	20	Kep	1100			N65E	10	de min		O/F	15	45		X	100	X	STREAMBED
S-53	29 40.29	98 12.78	Z-CD	30	Kep	750	100	_ 3	N65E	10	1	23	O/F	15	55		X		X	STREAMBED
S-54	29 40.31	98 12.91	CD	5	Kep	30	17	1	N73E				O/C	8	13	X		X		HILLSIDE
S-55	29 40.33	98 12.83	SC	20	Kep	2	2.5	1	N70E				O/N	9	39	X		Х		HILLSIDE
S-56	29 40.38	98 12.53	SF	20	Kep	0.3	0.5	_ 2					O/F	10	30	X		X		HILLTOP
S-57	29 40.56	98 13,03	MB-B	30	Kep	0.8	0.8	. 3			Service .		N	35	66	7/-34	X	X		HILLTOP
S-58	29 40.39	98 12.69	SC	20	Kep	8.0	1	1.5	N40E	10		E.C.	F/O	9	39	X	1	Х		HILLTOP
S-59	29 40.39	98 12.79	SF	20	Кер	1	0.5	1.5	N28W				0	8	28	X		Х		HILLTOP
S-60	29 40.38	98 12.86	SH	20	Kep	9	4	3	N56E	10	ASSOCIATE OF THE PERSON	E PE	C/N	35	65		X	X	01-00	HILLTOP
S-61	29 40.39	98 12.88	SH	20	Кер	4	1	1.5	N19W		1	7	0	15	35	X	-	X		HILLTOP
S-62	29 40.38	98 12.99	SC	20	Kep	0.3	0.7	0.8	N73E	20,000			0	8	28	X		Х		HILLSIDE
S-63	29 40.45	98 12.67	CD	5	Kep	10	5	2	N83W				C/N	10	15	Х			Х	STREAMBED
S-64	29 40.46	98 12.67	Z-SC	30	Kep.	100	300		N40W	27	VIII-0	1000	O/C	. 20	50	- J. B	X	120	X	STREAMBED
S-65	29 40.68	98 12.83	SH	20	Kep	9	12	0.5	N82E				O/F	15	35	X		Х		HILLTOP
S-66	29 40.46	98 12.65	F	20	Кер	60	8	0.7	N50E	10			Х	5	25	Х		Х		FLOODPLAIN
S-67	29 40.47	98 13.13	CD	5	Kep	20	8	0.7	N67W				O/C	10	15	X		Х		HILLTOP
S-68	29 40.47	98 13.14	SF	20	Kep	6	1	2.3	N-S				O/F	10	30	Χ		Х		HILLTOP
* DATUM	: NAD 83																			
2A TYPE		TYPE		2B F	POINTS							8A INFILI	LING	•						
_	0				20	1	161			-1										

2A TYP	PE 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

	BA INFILLING
N	None, exposed bedrock
c	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
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Sheet 4 of 7

GEOL	OGIC AS	SESSMENT	TABL	E			PR	OJE	CT NAME	:										
	LOCATI	ON					FE.	ATU	RE CHARAC	TEF	ISTIC	S			EVA	LUA	TION	Р	HYSI	CAL SETTING
1A	10 -	10-	ZA	25	3		4		6	8A	đ	7	BA	68	9	10		11		12
FEATURE ID	LATITUDE	сенситиос	FEATURE.	РОИЛВ	FORMATI	COME	Nacional	(FEET)	TITLEND (DEGREES)	50	DEHSTY (NO.FT)	APERITURE (FEET)	DIFRL	RELATIVE PURETRATION RATE	TOTAL	BEA	(SITIVITY		(HI AREA REB)	TOPOGRAPIN
			1	U 13	11	х	Y	Z		10						≺40	>40	<1.6	>1.0	
S-69	29 40.12	98 12.46	SC	20	Kep	0.8	4	4	N-S	(23)	12.2.3	maker	0	25	45		X	The same	X	FLOODPLAIN
S-70	29 40.23	98 12.43	SC	20	Kep	1.5	0.8	2.5	N58E	10			O/F	15	45	EB9	X	9-1	X	STREAMBED
S-71	29 40.25	98 12.42	SF	20	Kep	1	0.3	0.5	N80E		2	0.25	O/F	25	45	DIE	X	100	X	STREAMBED
S-72	29 40.11	98 12.55	Z-C	30	Kep	5	1	4	N30E			-	O/F	25	55		X		X	CLIFF
S-73	29 40.8	98 12.8	Z-CD	30	Kep	300	50	9	N50E	10	-		N/C	30	60		X	1500	X	STREAMBED
S-74	29 41.26	98 12.88	F	20	Kep	2400	an	No.	N40E	10	I		C/F	15-20	45		X		X .	STREAMBED
S-75	29 40.79	98 12.92	Z-O	30	Kep	30	80		N-S				CIO	8	38	X			X	STREAMBED
S-76	29 40.76	98 12.93	SC	20	Kep	0.7	0.7	1.5	N30W				N/F	15	35	X		Х		HILLTOP
S-77	29 40.98	98 12.93	CD	5	Kep	150	40	3	N40W				F	10	15	X		L	X	STREAMBED
S-78	29 41.14	98 13.15	Z-SC	30	Kep	W-22-1	7	0.7	N45E	10		1	O/N	10	50	STATE OF	X	TESTED 1	X	STREAMBED
S-79	29 41.13	98 13.19	SF	20	Кер	4	0.4	1.5	N80W			241144	O/F	10	30	X		X		HILLTOP
S-80	29 40.98	98 13.24	CD	5	Kep	- 8	6	0.5	N57W				0	8	13	X		X		HILLTOP
S-81	29 40.99	98 13.22	SC	20	Kep	0.5	0.7	2	N77E				0	13	33	X		X		HILLTOP
S-82	29 41.03	98 13.11	0-FR	5	Kep	40	18		N45E	10			O/F	9	24	X			X	STREAMBED
S-83	29 40.82	98 13.21	MB-W	30	Kep	0.5	0,5	>50	B. B. W.	100	Towns !		N	40	70		X	X	1	HILLTOP
S-84	29 41.33	98 13.52	SC	20	Kep	3	4	3	N60W			a	0	11	31	X	-	X		HILLTOP
S-85	29 41.29	98 13.46	SF	20	Kep	2	0.3	1.5	N46E	10			0	8	38	X		Х		HILLTOP

* DATUM: NAD 83

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-kerst closed depression	5
Z	Zone, clustered or aligned features	30

A8	INFIL	LING
----	-------	------

- None, exposed bedrock
- Coarse cobbles, braakdown, sand, gravel
- O 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
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Sheet 5 of 7

GEOL	OGIC AS	SESSMENT	TABL	E			PR	OJE	CT NAME												
	LOCATION								RE CHARAC	TER	ISTIC	S			EVALUATION			F	PHYSICAL SETTING		
1A	18 *	IC.	2A	28	3		4		5	5A	6	6 7	EA	58	9	10		11		12	
FEATURE ®	LATITUDE	rancumae	FEATURE TYPE	PONTS	FORMATION	DHAE	1510115	FEET)	тлено (респеса)	POLI	DEMBITY (NOFT)	APERTURE (FEET)	WFILL	RELATIVE INFILTRATION RATE	TOTAL	BEN	SITIVITY		EHT AREA RES)	TOPOGRAPHY	
		VE BOTOLISCO LONGINGUADO IV IN				х	Υ	z		10						<40	>40	<1.5	>1.6		
S-86	29 41.5	98 13.68	SF	20	Кер	2	0.2	1	N55W				0	8	28	X	1	Χ		HILLTOP	
S-87	29 41.51	98 13.7	SF	20	Kep	4	1	2	Ween				0	8	28	X		Х		HILLTOP	
S-88	29 41.49	98 13.82	O-FR	5	Kep	40	25	1	N45E	10			O/C	15	30	Х			Х	STREAMBED	
S-89	29 41.53	98 13.73	CD	5	Kep	6	4	0.7	N-S				0	8	13	X			X	STREAMBED	
S-90	29 41.69	98 13.45	MB-W	30	Кер	1.00		1,475.9	WELL				X	5	35	X		Х		HILLTOP	
S-91	29 41.64	98 13.38	SF	20	Kep	3.5	2	2	E-W				O/F	18	38	X		Х		HILLTOP	
S-92	29 41.56	98 13.5	SC	20	Кер	1.5	0.5	2.5	N70W				0	13	33	X		Х		HILLTOP	
S-93	29 41.56	98 13.52	SC	20	Kep	3	1	1	N-S				O/F	7	27	Х		Х		HILLTOP	
S-94	29 41.63	98 13.38	SF	20	Kep	3.5	0.4	1.8	N20W				0	7	27	X		X	10.000	HILLTOP	
S-95	29 41.63	98 13.41	SF	20	Kep	0.4	3	1,7	N70E		752.57 N	March Pt.	0	11	31	Х		Х		HILLTOP	
S-96	29 41.66	98 13.86	SC	20	Kep	1.3	1	2.5	N10E				0	13	33	Х		Х		HILLTOP	
S-97	29 41.65	98 13.88	SH	20	Kep	4.5	3	2.5	N50E	10			С	9	39	X		Х		HILLTOP	
S-98	29 41.58	98 13.92	SC	20	Kep	1	1	3.5	N-S		FLAUFY 10 1526		0	13	33	Х		Х		HILLTOP	
S-99	29 41.77	98 13.48	CD	5	Kep	5	3	0.9	N-S				0	5	10	X		Х		HILLTOP	
S-100	29 41.77	98 13.5	SH	20	Kep	50	15	3	N60E	10		TOR	O/F	20	50		X	X	(SIT)	HILLTOP	
S-101	29 41.82	98 13.57	CD	5	Kep	40	10	0.9	N50E	10			С	5	20	X		Х		HILLTOP	
S-102	29 40.18	98 12.61	Z-SC	30	Kep	300	70	8	N-S		1	5171-1	G/N	35	65		X		X	STREAMBED	

* DATUM:NAD83

2A TYF	PE 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

		12/3 10 12 11 11 11 11
		8A INFILLING
202	100	

- N None, exposed bedrock
- C Coarse cobbles, breakdown, sand, gravel
- Loose or soft mud or soll, organics, leaves, sticks, dark colors
- F Fines, compacted clay-rich sediment, soil profile, gray or red colors
- Vegetation. Give details in narrative description
- FS Flowstone, cements, cave deposits
- Other materials

12 TOPOGRAPHY

Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here compiles with that document and is a frue representation of the conditions observed in the field.

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

Date

Sheet 6 of 7

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

GEOL	OGIC ASS	ESSMENT	TABL		PROJECT NAME:															
	LOCATION	FEATURE CHARACTERISTICS										EVALUATION PHYSICAL S				CAL SETTING				
1A	18.	10"	ZA	28	3		.4		5	5A	0	7	8A	68	9	1	10	11		12
FEATURE ID	LATITUDE	roncurae	FEATURE TYPE	PORTS	FORMATION	DIVE	SHIME (FEET)	TREND (DEGREES)	Ē	DEHOMY	APERTURE (FEET)	INFRL	RELATIVE DIFFLITRATION RATE	TOTAL	8E)(\$)	TINTY	CATCHU	ENT AREA RES)	TOPOGRAPHY
						X	Y	Z		10						40	>40	<1.6	≥1.G	
S-103	29 40.68	98 12.75	SH	20	Kep	7	7	0.5					O/F	15	35	X		X		HILLTOP
S-104	29 39.97	98 12.77	CD	5	Кер	55	20	3	NW-SE				0	15	20	Х			Х	STREAMBED
S-105	29 39.94	98 12.72	CD	5	Kep	18	10	1	E-W				С	15	20	X			X	STREAMBED
S-106	29 40.13	98 12.42	CD	5	Кер	15	10	0.9	N50W				С	15	20	X			Χ	STREAMBED
S-107	29 40.14	98 12.37	CD	5	Kep	50	18	3	N30W		100.05		С	15	20	X			Χ	STREAMBED
S-108	29 41.94	98 13.4	CD	5	Kep	250	13	1	N50E	10			F	5	20	X		X		HILLTOP
S-109	29 40.40	98 12.66	CD	5	Kep	35	9	1					F	9	14	X		Х		HILLTOP
	•																			

* DATUM:NAD83

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
- C Coarse cobbles, breakdown, sand, gravel
 - Loose or soft mud or soft, organics, leaves, sticks, dark colors
- F Fines, compacted clay-rich sediment, soft proffle, gray or red colors
- Vegetation. Give details in narrative description
- FS Flowstone, cements, cave deposits
- X Other materials

12 TOPOGRAPHY

Cliff, Hilliop, Hillside, Drainage, Floodplain, Streambed

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

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

Date 4-3-1

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

Sheet 7 of 7

ATTACHMENT B Soil Profile and Narrative of Soil Units

Twelve soils are present on the subject property. However, only five are present over the area assessed as part of this project. The five soil types in the assessment area are: Eckrant – Rock Outcrop (ErG), Rumple-Comfort Association (RUD), Purves Clay (PuC), Comfort Rock Outcrop (CrD) and the Medlin-Eckrant Association (MED).

1) Eckrant-Rock (ErG) – 8 to 30 percent slopes

This soil is very dark gray, extremely stony and about 10" thick. It is about 35%cobbles and stones in the upper part and 75% stones in the lower part

The underlying material is indurated, fractured limestone.

Eckrant slopes are convex. The mapped areas consist of long, narrow slopes on high hills and ridges and along escarpments. This soil is well drained and surface runoff is rapid. Permeability is moderately slow and the available water capacity is very low. Water erosion is a severe hazard.

2) Purves Clay (PuC) – 1 to 5 percent slopes

This is a shallow gently sloping soil on uplands. Typically, the unit dark gray and is typically 45" thick. The lower layer is approximately 10% coarse limestone

The underlaying material is a indurated and fractured limestone.

This soil is well drained and surface runoff is medium. Permeability is moderately slow with a shallow root zone. The water capacity is very low and water erosion is a moderate hazard.

3) Comfort-Rock (CrD) - complex and undulating

The surface layer is a dark brown and extremely stony clay and about 6" thick. Cobbles and stones as much as 4' across cover about 45% of the surface. The sub-

The underlying material is undurated, fractured limestone. The soil is mildly alkaline and noncalcareous throughout.

The soils are well drained and surface runoff is low to medium. Permeability is slow and the available water capacity is very low. The root zone is shallow and water erosion is a slight hazard.

4) Medlin-Eckrant Association (MED) – 1 to 8 percent slopes

The Medlin soil is on slightly concave slopes and the Eckrant soil is on convex slopes. A typical area is 50% Medlin soil and 30% Eckrant soil.

The Medlin soils can be up to 80" thick and are good for rangeland use. The Eckrant soils are typically 17" deep and are not suited for crops but are for rangeland.

The Medlin soil is well drained and surface runoff is rapid. Permeability is very slow and water enters rapidly when the soil is cracked and dry but slowly when wet. The rooting zone is deep but the clay impedes root development thus creating a severe water erosion hazard. The Eckrant soil is well drained and surface runoff is rapid. Permeability is moderately slow and the available water capacity is very low. Water erosion is a severe hazard.

5) Rumple –Comfort Association (RUD) – undulating 1 to 8 percent slopes

Rumple soil makes up anout 60% and the Comfort soil comprises about 20% of the unit. Slopes are plane or convex.

The Rumple interval is very stony and about 28" thick cherty loam with limestone. The underlying unit is indurated limestone fragments. The Comfort soil is an extremely stony clay and is underlain by indurated, fractured limestone.

This Comfort soil is dark brown and dark reddish brown that is mildly alkaline. Both soils are well drained and surface runoff is medium. However, runoff from large areas is much slower than from local areas because some of the water enters caves, sinkholes, rock crevices and streambeds. Permeability is moderately slow in the Rumple and slow in the Comfort. The available water capacity is very low for both. The rooting zone is shallow in the Comfort and moderately deep in the Rumple. Water erosion is moderate for both.

The Anhalt Clay (AnB), Branyon Clay (ByA), Bolar Clay Loam (BrB), Branyon Clay (ByB), Heiden Clay (HeB), Heiden Gravelly Clay (HGD), Houston Black Gravelly Clay (HvB), Krum Clay (KrB), and Orif Soils frequently flooded (Or) and Sunev Clay Loam (SuB) have also been mapped at the project site. However these soils are present over the Transition Zone and were not assessed during this project.

Attachment C Stratigraphic Column

System	Series	Group	Formation	Member	Thickness (feet)	Lithology	Field ID
		ā		Buda	40-50	Buff, light gray dense mudstone	Porcelaneous limestone with calcite-filled veins
		Washita		Del Rio	40-50	Blue green to yellow brown clay	Marker fossil: <i>Ilmatogyra</i> arietna
	,		(Georgetown	2-20	Reddish brown, gray to light tan marly limestone	Marker fossil: Waconella wacoensis
				Cyclic & Marine Members undivided	80-90	Mudstone to packstone; miliolid grainstone; chert	Thin graded cycles; massive beds to relatively thin beds; cross-bedding
	.an		Person	Leached & Collapsed Members undivided	70-90	Crystalline limestone; mudstone to grainstone; chert; collapsed breccia	Bioturbated iron-stained beds separated by massive limestone beds; stromatolitic limestone
	Comanchean	િજ		Regional Dense Member	20-24	Dense; argillaceous mudstone	Wispy iron oxide stains
	Comi	Fredricksburg (Edwards)		Grainstone Member	50-60	Miliolid grainstone; mudstone to wackestone; chert	White cross-bedded grainstone
		Fredricksbu		Kirschberg Evaporite Member	50-60	Highly altered crystalline limestone; chalky mudstone; chert	Boxwork voids, with neospar and travertine frame
			Kainer	Dolomitic Member	110-130	Mudstone to grainstone; crystalline limestone; chert	Massively bedded light gray, <i>Toucasia</i> abundant
				Basal Nodular Member	50-60	Shaly, nodular limestone; mudstone and miliolid grainstone	Massive, nodular and mottled, Exogyra texana

ATTACHMENT D

Geologic Narrative

Overview:

The site consists of approximately 1015 acres located seven miles southwest of New Braunfels, Texas. The geologic assessment was performed over the entire site. One hundred and nine (109) features were identified and mapped during this investigation. Nineteen (19) of the 109 mapped features were classified as sensitive in accordance with the "Instructions for Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones" (TNRCC-0585-Instructions (Rev. 10-1-04)). The sensitive features are; two (2) caves, two (2) solution cavities, three (3) sink holes, one (1) solution enlarged fracture, two (2) faults, two (2) man-made features in bedrock and seven (7) zones of various types.

Field Work:

Field work was performed at the site on October 31, November 1, 2, 7, 9, 13, 15, 20, 21, 27, 28 and 29, 2006 by Westward field personnel consisting of two registered Professional Geologists and two field technicians. Field transects were walked across the site using a 50-foot spacing. In areas of dense vegetative cover, historic site clearing, grubbing and earth moving activities, geologic or manmade features may have been altered or obscured at the time of site visit. Several areas of recent clearing across the southern portion of the site had created very large piles of cut vegetation that were scattered throughout the clearing route. These piles obscured the surface at the time of this assessment.

Geologic and manmade features were field logged, and GPS coordinates were collected for each feature. GPS data are included on the Geologic Assessment Table.

Stratigraphy:

The Person Formation (Kep) of the Edwards Group, which is Lower Cretaceous in age, is the predominantly exposed geologic unit at the surface across the site. However, the Buda Limestone (Kbu), Del Rio Clay (Kdr) and Georgetown Formation (Kgt) are also mapped at the surface in the northern portion of the site. Attachment E shows the stratigraphic relationships and characteristics of the outcropping rocks and other subsurface units.

Structure:

The subject property is located in the Balcones Fault Zone, approximately seven to eight miles southwest of the Comal Springs. Several faults, and evidence of faulting, were observed on site during this assessment. The Geologic Atlas of Texas, San Antonio Sheet, also shows numerous faults and fault blocks across the site. The average fault

trend in this section of the Balcones Fault Zone is approximately N50E. Features trending from N35E to N65E were assigned the extra 10 points for being aligned in the dominant fault trend direction.

Karstic characteristics:

Sixty six (66) possible karst features were identified onsite during this assessment. A summary of features identified is as follows: two (2) caves, one (1) cave zone, thirty (30) solution cavities, four (4) solution cavity zones, eleven (11) sinkholes, sixteen (16) solution enlarged fractures, two (2) other features that could potentially be karst. A total of one hundred and seven (107) geologic and manmade features were logged in Attachment B, the Geologic Assessment Table.

Geologic and Manmade features are described below.

Caves

S-29, S-36: Sensitive

Three caves were identified during this assessment. S-29 occurs in the floodplain above the streambed. There was evidence of downward movement of water through this feature which ranked it as sensitive. Because the entrance to this cave is approximately four feet above the creek bed, it was assessed to have an intermediate infiltration rate. S-36 occurs on a hill top on the southwestern portion of the property. The cave extends downward vertically from the surface for approximately eight feet before turning in a more horizontal direction. Relative infiltration rate is high.

Cave Zone

S-72: Sensitive

S-72 appears to be a zone of caves with the floors sloping outward that are located in the cliff wall above the streambed on the eastern portion of the site. The openings are plugged with organic and fine-grained material. The relative infiltration rate is intermediate.

Closed Depressions

S-2, S-3, S-12, S-16, S-18, S-22, S-27, S-46, S-54, S-67, S-77, S-80, S-99, S-108 and S-109: Not Sensitive

These features are non-karst closed depressions are infilled with either organic or fine grained materials. S-2 and S-3 are large depressions caused by the presence of an elevated road and railroad tracks. S-16 is a large excavation/quarry area that has some fine grained sediment at the lowest part of the depression and appears to hold water. S-108 is large stock pond located in the extreme northeastern corner that was holding water at the time of mapping. Due to lack of evidence to suggest karst involvement, observed ability to hold water and amount of sediment observed, these features have a low to very low probability of rapid infiltration.

S-6, S-14, S-18, S-28, S-63, S-89, S-104, S-105, S-106 and S-107: Not Sensitive

These features are believed to be non-karst in origin that occur in streambeds presumably caused by change in stream load distribution due to obstructions such as downed trees and roads. These features are filled with coarse gravel and cobbles with bedrock visible in many places. Tilted bedrock was not observed in the feature to possibly indicate any connection to structural or karst activity. Probability of rapid infiltration is low.

Other Features

Vuggy Rock Outcrops

S-1 and S-47: Not Sensitive

S-1 is a vuggy rock outcrop located in a streambed near the southern property line. The vugs were infilled with fine soil particles and are up to 1.5" in diameter. The amount of exposed bedrock here is minimal. Based on this, the probability of rapid infiltration was deemed to be low. S-47 is classified as a vuggy rock outcrop. The aperture is less than 1" on average and the vugs are filled with fine-grained sediment.

Fractured Rock Outcrops:

S-75, S-82 and S-88: Not Sensitive

S-75 is a zone of other features that occur in the streambed in the vicinity of fault S-74. Fractures are observed to be the dominant feature in this zone and are not in the dominant trend direction. Probability of rapid infiltration is low. S-82 is an area with fractures that are in the dominant trend direction. The location of this area is in a streambed near the fault S-74. It is anticipated that the fractures are the result of movement along the fault and occur in level bedrock. Probability of rapid infiltration is low. S-88 is a fractured rock outcrop that does follow the dominant trend and has organic and coarse materials as infilling. The probability of rapid infiltration is low.

Solution Cavities

S-8, S-15, S-19, S-20, S-24, S-26, S-30, S-31, S-33, S-35, S-37, S-38, S-39, S-42, S-43, S-45, S-48, S-51, S-55, S-58, S-62, S-76, S-81, S-84, S-92, S-93, S-96 and S-98:

Not Sensitive

Solution cavities were the most frequent feature observed during this assessment with 30 being identified as site features. The features listed above were not classified as sensitive due to the presence of organic and fine-grained sediment in the cavity in addition to surrounding soil cover. Some features also have evidence of animal burrowing activity. Based on the amount of fine-grained sediment located in and around the cavities, in addition to some evidence of animal burrowing activity, the probability of rapid infiltration is low.

S-26 and S-35 occur at the bottom of a rock cliff above the streambed but do not appear to extend downward vertically and contains organic as well as fine-grained sediment. S-51 and S-62 appear to have been caused by stream scour. Both are horizontal in nature with no observable vertical component, and are located above the existing the streambed. Based on the absence of a vertical component and the location above the streambed, the probability of rapid infiltration is low.

S-23, S-69 and S-70: Sensitive

These solution cavities were rated as sensitive features. S-23 is a small cavity located on a hill top but does not have any observable infilling. Although this area does not receive much runoff due to its topographic position, any water received would have a moderate to high infiltration rate unless there is a blockage further down in the cavity that could not be seen. S-69 and S-70 occur in a rock wall above the streambed and are infilled with organics and fine-grained sediment. Based on their location, lack of horizontal development, these features have a moderate probability of rapid infiltration.

Sinkholes

S-9, S-10, S-11, S-25, S-61, S-65, S-97 and S-103: Not Sensitive

These features are sinkholes that were identified during this assessment. S-9, S-10 and S-11 occur within close proximity to each other and do line up in the dominant trend direction. S-10 is located approximately 100' southwest of S-9 and S-11. The features are filled with fine-grained sediment and organic material. S-97 has fine-grained sediment and vegetation growing from the center of the feature. The probability of rapid infiltration is low.

S-21, S-60, and S-100: Sensitive

S-21 is a large sinkhole that follows the dominant fault trend. The opening is obscured with large boulders that have algae/moss present on the top portion of the rocks. This could possibly indicate movement of warm moist air across this feature. Algae/moss was not observed anywhere else in the immediate vicinity. After removal of several rocks, the view was still obscured with larger rocks. This feature may be a collapsed cave. The probability of rapid infiltration is high. S-60 occurs on a hill top and the view down into the feature was obscured with large rocks. The probability of rapid infiltration is intermediate. S-100 is a large sinkhole area that has a dominant trend. The deepest portion was observed to approximately 3' with obscured views in some portions. Algae was observed growing on the surface rocks inside the feature. The probability of rapid infiltration is low to intermediate.

Solutioned Enlarged Fractures

S-17, S-32, S-40, S-41, S-56, S-59, S-68, S-72, S-79, S-85, S-86, S-87, S-91, S-94, and S-95: Not Sensitive

These features were observed in various areas across the site. Infilling is fine-grained sediment and trees were observed growing in many of the fractures.

S-71: Sensitive

S-71 occurs in a stream bed with little observed infilling. Additionally, the bedrock where the feature was identified appears to dipping at an angle. Probability of rapid infiltration is intermediate.

Faults

S-5: Not Sensitive

S-5 is the main fault that goes across the southern portion of the site. The fault scarp is comprised of weathered materials and bedrock. Probability of rapid infiltration is low.

S-52, S-74: Sensitive

S-52 appears to be part of a horst-graben sequence and does follow the dominant trend. Bedrock outcrops dip away from each other on either side of the CD zone that is feature S-53. Probability of rapid infiltration along these faults appears to be low. S-74 is very pronounced fault that follows the dominant trend. The bedrock is fractured at the contact and appears to be the cause of the streambed that runs parallel to the fault. There is up to 60' of topographic relief from the northern side of the fault down to the streambed. Probability of rapid infiltration is low to intermediate.

There are two faults located in the far northern portion of the site that has been mapped by the Bureau of Economic Geology (BEG) on the Geologic Atlas of Texas, San Antonio Sheet. However, these faults were not readily identifiable in the field and are dotted as discussed in the F-0585 Geologic Assessment Instructions. These faults were not assigned a site feature number.

Man Made Features

S-4, S-7, S-34, S-44 and S-90: Not Sensitive

These features are water wells. S-4, S-7 and S-90 are domestic water wells that are enclosed and are finished on concrete pads. S-34 and S-44 are monitoring wells that have a three foot steel box riser and appear to be sealed with grout/concrete at the surface. The probability of rapid infiltration is low.

S-57 and S-83: Sensitive

S-57 appears to be a boring that was not plugged. It is approximately 9" in diameter and the depth is unknown. The view was obscured by a possible sediment bridge. The probability of rapid infiltration is high. S-83 is a water well that is uncapped and open at the surface. Water is present in the well but it is not known what the static level of the groundwater is. The probability of rapid infiltration is high.

Zone - Closed Depression

S-13: Not Sensitive

S-13 covers a large area of approximately 200' x 300' on a hilltop. However, vertical soil sapping to a depth of approximately 8" was observed in the center of one depression. This may indicate karst activity in the subsurface. But due to the amount of fine-grained sediment observed and vegetation present, the probability of rapid infiltration was rated low.

S-53 and S-73: Sensitive

S-53 is the graben area between two faults that has numerous close depressions that are aligned parallel to the faults and is also in the dominant trend. The features are filled with fine-grained sediment with some depressions up to 4 ft deep possibly indicating soil sapping in the subsurface. Evidence of ponding water was observed. The probability of rapid infiltration is low. S-73 is a series of closed depressions in a streambed presumably caused by change in stream load distribution due to obstructions such as downed trees.

However, the features are also associated with a fault in the vicinity and are oriented in the dominant trend direction. Although fine grained sediment was not observed in the features, the relative infiltration rate is still assessed as low. The fact that the feature has dominant orientation and is classified as a zone, the sensitivity rating is elevated.

Zone - Solution Cavities

S-49: Not Sensitive

S-49 is a 20' long area of solution cavities along the hilltop. The cavities do not appear to be oriented downward but more horizontally and upward. The probability of rapid infiltration is low.

S-50, S-64, S-78 and S-102: Sensitive

S-50 was rated slightly sensitive but the cavities are infilled with fine-grained sediment and organic material. The probability of rapid infiltration is low. S-64 is a zone approximately 100 ft by 300 ft with organic and coarse materials for infilling. This feature is also located in a streambed. The probability of rapid infiltration is low to intermediate. S-78 occurs in a streambed also and follows the dominant trend. The infilling is organic materials where visible. The probability of rapid infiltration is low.

S-102 is a large area located in a streambed. In addition to numerous solution cavities, there are other features such as closed depressions and solutioned enlarged fractures also in this zone. Bedrock is dipping in various locations and there is very minimal stream debris. The depth of some of the depressions is up to 8 ft. The probability of rapid infiltration is high.





UPDATED GA TABLES

GEOL	OGIC AS	SESSMENT	TABL	E			PR	OJE	CT NAME:										- 6			
	LOCATI	ON					FEA	TUR	E CHARACT	ERI	STICS				EVA	ALUAT	ION	PHYSICAL SETTING				
1A	1B *	1C*	2A	2B	3		4		5	5A	8	7	8A	8B	9		10		11	12		
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIME	NSIONS	FEET)	TREND (DEGREES)	DOM	DENSITY (NO/FT)		INFILL	RELATIVE INFILTRATION RATE	TOTAL	BENSITIVITY		CATCHMENT AREA (AI)RES)		TOPOGRAPHY		
						X	Y	Z		10						<40	≥40	<1,6	<u>>1.6</u>			
S-1	29 39.85	98 12.59	O-VR	5	Kep	20	3		N14W				0	11	36	X			X	STREAMBED		
S-2	29 39.84	98 12.59	CD	5	Kep	30	7	3	N17E				0	7	12	Х			X	STREAMBED		
S-3	29 39.85	98 12.57	CD	5	Кер	7	10	0.7	N24W				Ō	9	14	X			Х	STREAMBED		
S-4	29 39.88	98 12.58	MB-W	30	Кер				WELL				X	5	35	X		Х		HILLTOP		
S-5	29 39.92	98 12.44	F	20	Kep	2900			N60E	10			N/C	7	37	X			X	HILLSIDE		
S-6	29 40	98 12.36	CD	5	Кер	80	200	10	N10E				С	10	15	X		П	X	STREAMBED		
S-7	29 39.99	98 12.35	MB-W	30	Kep				WELL				X	5	35	X		Х		FLOODPLAIN		
S-8	29 39.97	98 12.44	SC	20	Kep	1	1	1.5	N30W				F/O	15	35	X		Х		HILLTOP		
S-9	29 39.96	98 12.46	SH	20	Кер	4	6	1.5	N56E	10			O/C	9	39	X		Х		HILLTOP		
S-10	29 39.97	98 12.46	SH	20	Kep	3	6	0.5	N40W				F/O	5	25	X		Х	(HILLTOP		
S-11	29 39.96	98 12.45	SH	20	Kep	4	6	1	N40E	10			F	5	35	X		X		HILLTOP		
S-12	29 39.98	98 12.48	CD	5	Kep	11	40	1.5	N40E	10			F	5	20	X		Х		HILLTOP		
S-13	29 40.01	98 12.51	Z-CD	30	Kep	200	300	1.5	N70E				F	9	39	X		Х		HILLTOP		
5-14	29 39.96	98 12.74	CD	5	Kep	8	4	1	N12W				С	15	20	_			X	STREAMBED		
S-15	29 39.96	98 12.81	SC	20	Кер	2	1	1.5	N6E				0	10	30			X		HILLSIDE		
S-16	29 39.98	98 12.78	CD	5	Kep	200	150	3.5	N-S				N	7	12				X	HILLSIDE		
S-17	29 40.01	98 12.8	SF	20	Кер	4	0.3	2	N80E				0	17	37	X		X		HILLSIDE		

* DAT	JM: NAD 83	
2A TYI	PE TYPE	2B POINT
С	Cave	3
sc	Solution cavity	2
SF	Solution-enlarged fracture(s)	2
F	Fault	2
0	Other natural bedrock features	
MB	Manmade feature in bedrock	3
sw	Swallow hole	3
SH	Sinkhole	2
CD	Non-karst closed depression	
2	Zone, clustered or aligned features	

	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
x	Other materials

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My signature certifies that I am qualified as a geologist as defined by 30 C. Chapter 3.

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

THOMAS O. MATHEWS Date

Sheet 1 of 8

		SESSMENT			_	_			CT NAME	_	ICTIO		_					_		
_	LOCATI		-			FEATURE CHARACTERISTICS										LUAT	_	P	HYSI	CAL SETTING
1A	1B *	104	2A	28	3		4		5	5A	6	7	INFILL	8B	9		10	11		12
FEATURE ID	LATITUDE	rondunds	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)		FEET)	TREND (DEGRÉES)	ž.	DENSITY (NG/FT)	APERTURE (FEET)		RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						Х	Y	Z		10						<40	>40	<1,8	<u>≥1.6</u>	
S-18	29 40.06	98 12.34	CD	5	Кер	15	18	4	N10E				C	10	15	X			Х	STREAMBED
S-19	29 40.04	98 12.53	SC	20	Kep	8	1	2	N23W				O/F	10	30	X		X		HILLSIDE
S-20	29 40.03	98 12.85	SC	20	Kep	15	0.5	1	N16E				0	11	31	X		X		HILLTOP
S-21	29 40.05	98 12.8	SH	20	Kep	12	22	4	N50E	10			N	40	70		X	X		HILLSIDE
S-22	29 41.1	98 13.43	CD	5	Kep	35	15	2.5	N60W				F	7	12	Х		Х		HILLTOP
S-23	29 39.98	98 12.63	SC	20	Kep	0.3	0.2	1.3	N50E	10			N	20	50		X			HILLTOP
S-24	29 40.56	98 12.78	SC	20	Kep	1	8.0	2					С	10	30	Х		Х		HILLSIDE
S-25	29 40.1	98 12.44	SH	20	Kep	4	2	4	N40E	10			N/C	15				Х		HILLSIDE
S-26	29 40.11	98 12.49	SF	20	Kep	1.3	1.3	3.5	N10W		1	1.3	O/F	15				X		FLOODPLAIN
S-27	29 40.56	98 12.8	CD	5	Kep	7	7	0.5					F	5	10			X		HILLTOP
S-28	29 40.14	98 12.57	CD	5	Kep	40	20	2.5	N60W	\top			С	10					X	STREAMBED
S-29	29 40.11	98 12.58	C	30	Kep	3	5	8	N10E				0	25	55		X		X	FLOODPLAIN
S-30	29 40.11	98 12.63	SC	20	Кер	1	4	5	N53E	10			O/F	7	37	X			X	FLOODPLAIN
S-31	29 40.11	98 12.69	SC	20	Кер	1	1.7	5	N86E	Т			0	10	30	X		X		HILLSIDE
S-32	29 40.09	98 12.68	SF		Kep	5	0.3	2	N35E	10			O/F	8				X	$\overline{}$	HILLTOP
S-33	29 40.12	98 12.62	SC	20	Кер	1	0.3	1.5	N61W	T			0	10				Ť	X	FLOODPLAIN
\$ 34	29-40-11	98 12.56	MB-W		Kep	0.4	0.4	_	WELL	1			X	5	_				×	STREAMBED

Plugged

2A TYI	PE TYPE	2B POINTS
C	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 hote	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

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The

THOMAS D. MATHEWS

12 TOPOGRAPHY

Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

information presented here complies with that document end is a true representation of the conditions observed in the field.

My signature certifies that I am qualified as a geologist as defined to the Chapter of the

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

Sheet 2 of 8

	LOCATI	SESSMENT	T			_	FE/	TUI	RE CHARACT	ER	ISTICS	8	_		EV	ALUAT	TON	T P	HYSI	CAL SETTING
1A	18 *	1C'	2A	28	3	4			5 5		6	7	BA	88	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIME	ISIONS (FEET)	TREND (DEGREES)	% 00,	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SEN	9TIVITY		ENT AREA RES)	TOPOGRAPHY
						×	Υ	Z		10						<4D	>40	<1.6	≥1.6	
3-35	29 40.15	98 12.63	SC	20	Kep	3	1	4.5	E-W				N	5	25	Х			X	FLOODPLAIN
S-36	29 40.14	98 12.88	C	30	Kep	15	8	7	N4E				N	40	70		X	X		HILLTOP
S-37	29 40.14	98 12.88	SC	20	Kep	3			N76W				0	15	35	X		Х		HILLTOP
S-38	29 40.15	98 12.66	sc	20	Kep	0.5	0.5	0.8	E-W				0	15	35	Х		Х		HILLTOP
3-39	29 40.15	98 12.66	SC	20	Kep	0.8	0.8	1	E-W				0	15	35	Х		Х		HILLTOP
5-40	29 40.15	98 12.42	SF	20	Kep	8	12	0.1	N12E		3	0.1	O/F	10	30	X			X	STREAMBED
3-41	29 40.15	98 12.42	SF	20	Kep	0.5	2	1	N30E				F	5	25	X		Х		FLOODPLAIN
5-42	29 40.17	98 12.63	SC	20	Kep	1	1	2	N40W				0	15	35	Х			X	FLOODPLAIN
5-43	29 40.19	98 12.68	SC	20	Kep	0.5	0.5	0.8					O/F	5	25	Х		X		HILLTOP
S-44	29 40.2	98-12.51	MB W	30	Kep	0.3	0.3	150					X	5	35	×		X		HILLTOP
3-45	29 40.27	98 12.70	SC	20	Kep	1	1	1					O/F	10	30	X		X		HILLTOP
5-46	29 40.69	98 12.75	CD	5	Kep	3.5	6	1	N40W				O/F	25	30	X		X		HILLTOP
5-47	29 40.24	98 12.93	O-VR	5	Kep	150	15		N41W		10	0.1 - 0	N	10	15	Х		X		HILLSIDE
3-48	29 40.23	98 13.00	sc	20	Kep	0.5	0.5	1.5	N40W				0	8	28	X		X		HILLTOP
3-49	29 40.25	98 12.92	Z-SC	30	Кер	20	4		N80E		0.3	1	0	8	38	Х		Х		HILLSIDE
S-50	29 40.25	98 12.86	Z-SC	30	Kep	10	2	2	N11W,N85W	1			0	9	39		X	Х		HILLSIDE
5-51	29 40.3	98 12.61	SC	20	Kep	2	1.3	3	N34E				F	10	30	X			X	STREAMBED

DATE	JMI: NAD 83	
2A TYI	PE 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
ÇD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

	8A INFILLING
N	None, exposed bedrack
c	Coarse - cobbles, breakdown, sand, gravel
0	Loose or soft mud or soll, 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
x	Other materials

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

THOMAS D. MATHEWS GEOLOGY

Sheet 3 of B

SEOL	OGIC AS	SESSMENT	TABL	E			PRO	JJE	CT NAME:												
	LOCATI	ON				- 7	FEA	TUF	RE CHARACT	ER	STICS	3			EVA	LUAT	ION	P	CAL SETTING		
1A	18 *	10"	2A	2B	3		4		5		В	7	8A	88	9		10	1	1	12	
EATURE ID	LATTUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATI ON	OMENSIONS (FEET)		FEET)	TREND (DEGREES)		DENSITY (NOFT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY	
						×	Υ	Z		10						<40	>40	<1.6	≥1.6		
5-52	29 40.31	98 12.72	F	20	Kep	1100			N65E	10			O/F	15	45		X		Х	STREAMBED	
5-53	29 40.29	98 12.78	Z-CD	30	Kep	750	100	3	N65E	10			O/F	15	55		X		X	STREAMBED	
3-54	29 40.31	98 12.91	CD	5	Kep	30	17	1	N73E				O/C	8	13	X		X		HILLSIDE	
S-55	29 40.33	98 12.83	SC	20	Kep	2	2.5	1	N70E				O/N	9	39	X		X		HILLSIDE	
3-56	29 40.38	98 12.53	SF	20	Kep	0.3	0.5	2					O/F	10	30	X		Х		HILLTOP	
S-57	29 40.56	98 13.03	MB-B	30	Kep	8.0	0.8	3			-		N	35	65		X	X		HILLTOP	
S-58	29 40.39	98 12.69	SC	20	Kep	0.8	1	1.5	N40E	10			F/O	9	39	X		Х		HILLTOP	
S-59	29 40.39	98 12.79	SF		Kep	1	0.5	1.5	N28W				0	8	28	Χ		Х		HILLTOP	
S-60	29 40.38	98 12.86	SH	20	Kep	9	4	3	N56E	10			C/N	35	65		X	X		HILLTOP	
S-61	29 40.39	98 12.88	SH	20	Kep	4	1	1.5	N19W		1	1	0	15	35	X		X		HILLTOP	
3-62	29 40.38	98 12.99	SC	20	Kep	0.3	0.7	0.8	N73E				0	8	28	X		X		HILLSIDE	
S-63	29 40.45	98 12.67	CD	5	Kep	10	5	2	WE8N				C/N	10	15	X			X	STREAMBED	
S-64	29 40.46	98 12.67	Z-SC	30	Kep	100	300		N40W				O/C	20	50		X		X	STREAMBED	
S-65	29 40.68	98 12.83	SH	20	Kep	9	12	0.5	N82E				O/F	15	35	X		Х		HILLTOP	
S-66	29 40.46	98 12.65	F	20	Кер	60	8	0.7	N50E	10			X	5	25	Χ		X		FLOODPLAIN	
6-67	29 40.47	98 13.13	CD	5	Kep	20	8	0.7	N67W				O/C	10	15	X		X		HILLTOP	
3-68	29 40.47	98 13.14	SF	20	Kep	6	1	2.3	N-S				O/F	10	30	X		IX		HILLTOP	

2A TY	PE TYPE	2B POINTS
C	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 cotors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
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THOMAS O. MATHEWS

Sheet 4 of 8

LOCATION							EE.	ATLU	RE CHARAC	rro	CTIC				EV.	ALUAT	TON	T D	⊣		
						_		AIUI	L CHARAC	_	as no	7	8A				10N			CAL SETTING	4
1A	18 *	10-	2A	28	3		4	_	5	5A	Б	_	8A	8B	8		10	No.	11	12	
FEATURE ID	LATITUDE	LONGITUDE	PEATURE TYPE	POINTS	FORMATI	DIMEN	ISIONS ((FEET)	TREND (DEGREE\$)	203	(NO/FT)	APERTURE (FEST)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	ΙΠΥΠΥ	CATCHMENT AREA (ACRES) TOPO		TOPOGRAPHY	
						X	Y	Z		10						<40	≥40	<1.6	≥1.6		
	29 40.12	98 12.46	SC	-	Kep	0.8			N-S	-	_		Q	25	45		X	X		FLOODPLAIN	
	29 40.23	98 12.43	SC		Kep				N58E	10			O/F	15	45		X	-	X	STREAMBED	4
	29 40.25	98 12.42	SF		Kep		_	-	N80E		2	0.25		25	45		Х		X	STREAMBED	4
5-72	29 40.11	98 12.55	Z-C		Kep	5	_	_	N30E				O/F	25	55		Х		X	CLIFF	4
	29 40.8	98 12.8	Z-CD		Kep	300	50	9	N50E	10			N/C	30	60		X		X	STREAMBED	4
	29 41.26	98 12.88	F		Kep	2400			N40E	10			C/F	15-20	45		X		X	STREAMBED	
	29 40.79	98 12.92	Z-O		Kep		80		N-S				C/O	8						STREAMBED	
	29 40.76	98 12.93	SC		Kep				N30W				N/F	15				X		HILLTOP	
S-77	29 40.98	98 12.93	CD		Kep	150	40		N40W				F	10					X	STREAMBED	
S-78	29 41.14	98 13.15	Z-SC		Kep	1	7		N45E	10			O/N	10	50	_	X		X	STREAMBED	
S-79	29 41.13	98 13.19	SF		Kep	4		_	N80W				O/F	10				X		HILLTOP	
S-80	29 40.98	98 13.24	CD		Kep	8	_	_	N57W			1	0	8				X		HILLTOP	
S-81	29 40.99	98 13.22	SC	20	Kep	0.5	0.7	2	N77E				0	13	33	X		Х		HILLTOP	
S-82	29 41.03	98 13.11	O-FR	5	Kep	40	18		N45E	10			O/F	9	24	X			X	STREAMBED	
8-83	29 40.82	98 13.21	MB-W	30	Kep	0.5	0.5	>50					N	40	70		X	X		HILLTOP	Plu
S-84	29 41.33	98 13.52	SC	20	Kep	3	4	3	N60W				0	11	31	X		X		HILLTOP	
S-85	29 41.29	98 13.46	SF	20	Kep	2	0.3	1.5	N46E	10			0	8	38	X		X		HILLTOP	
DATUM	: NAD 83																				I
ATYPE		TYPE		2B P	OINTS	ĺ						BA INFIL	LING								
3	Cave				30		N	None	, exposed bedro	ck											
SC	Solution cavity				20		C Coarse - cobbles, breakdown, sand, gravel														
SF	Solution-enlarg	red fracture(s)			20	O Loose or soft mud or soll, organics, leaves, sticks, dark colors										1					
	Fault				20		F Fines, compacted clay-rich sediment, soil profile, gray or red colors										1				
		edrock features			5		V		tation, Give deta				-	•							
ИB	Manmade featu				30		FS	-	stone, cements, o			,									
	Swallow hole				30		X		materials		- 25 - 5100										
200	Sinkhole				20	125	-	- 410													_
	Non-karst close	ed dearessine			5	12 TOPOGRAPHY															

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The weg

Alfiled as a geologist as

THOMASO.M.

GEOLOGY

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CENSED

CHARLES GEOSCHAFT

GE information presented here complies with that document and is a true represented of the conditions observed in the field.

My signature certifies that I am qualified as a geologist as defined by \$1.781 Cifeting 19.

Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

30

Zone, clustered or aligned features

Sheet 5 of 8

GEOL	OGIC AS	SESSMENT	TABL	E			PR	OJE	CT NAME:												
	LOCATI	ON					FE	ATUI	RE CHARAC	TER	ISTIC	3			EV	ALUAT	ION	P	HYSI	CAL SETTING	
1A	10 *	10*	2A	28	3	4			5	5A	6	7	8A	8B	9	10		11		12	
EATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	<u>Ş</u>	DENSITY (NOVFT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SEN	YTIVITIE		MENT	TOPOGRAPHY	
						x	Y	Z		10						<40	≥40	<1.6	≥1.6		
	29 41.5	98 13.68	SF	20	Kep	2	0.2	1	N55W				0	8	28	X		Х		HILLTOP	
S-87	29 41.51	98 13.7	SF	20	Кер	4	1	2	N39W				0	8	28	X		X		HILLTOP	
88-2	29 41.49	98 13.82	O-FR	5	Kep	40	25	1	N45E	10			O/C	15	30	Х			X	STREAMBED	
S-89	29 41.53	98 13.73	CD	5	Кер	6	4	0.7	N-S				0	8	13	Х			X	STREAMBED	
S-90	29 41.69	98 13.45	MB-W	30	Кер				WELL				X	5	35	X		X		HILLTOP	
S-91	29 41.64	98 13.38	SF	20	Kep	3.5	2	2	E-W				O/F	18	38	X		X		HILLTOP	
S-92	29 41.56	98 13.5	SC	20	Kep	1.5	0.5	2.5	N70W				0	13	33			X	_	HILLTOP	
5-93	29 41.56	98 13.52	SC	20	Kep	3	1	1	N-S				O/F	7	27			X		HILLTOP	
S-94	29 41.63	98 13.38	SF	20	Kep	3.5	0.4	1.8	N20W				0	7	27	X		X		HILLTOP	
S-95	29 41 63	98 13.41	SF	20	Kep	0.4	3	1.7	N70E				0	11	31	X		X		HILLTOP	
S-96	29 41.66	98 13.86	SC	20	Kep	1.3	1	2.5	N10E				0	13	33	Х		X		HILLTOP	
S-97	29 41.65	98 13.88	SH	20	Кер	4.5	3	2.5	N50E	10			С	9	39	X		X		HILLTOP	
S-98	29 41.58	98 13.92	SC	20	Kep	1	1	3.5	N-S				0	13	33	Х	1	X		HILLTOP	
3-99	29 41.77	98 13.48	CD	5	Кер	5	3	0.9	N-S				0	5		_		X		HILLTOP	
5-100	29 41.77	98 13.5	SH	20	Kep	50	15	3	N60E	10			O/F	20	50		X	X		HILLTOP	
5-101	29 41.82	98 13.57	CD	5	Kep	40	10	0.9	N50E	10			C	5	20	Х		X		HILLTOP	
S-102	29 40.18	98 12.61	Z-SC	30	Kep	300	70	8	N-S				C/N	35	65		X		X	STREAMBED	

* DATUM:NA	D83
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2A TY	PE TYPE	2B POINTS
¢	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
X	Other materials

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

My signature complies that I am qualified as a geologist as defined by 300 to Charter 215.

THOMASO, MATHERES GEOLOGY

Sheet 6 of 8

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

GEOLOGIC ASSESSMENT TABLE							PR	OJE	CT NAME:											
	LOCAT	ION	T				FE	ATUI	RE CHARAC	TER	ISTIC	3			EVA	ALUAT	ION	PHYSICAL SETTIN		
1A	1A 1B" 1C" 2A 2B 3					4			5	SA	8	7	A8	8B	9	10		11		12
EATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POWTS	FORMATION	ISMID	MENSIONS (FEET)		TRENO (DEGREES)	5	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	YTIVITI	CATCHIN (AC	ENT AREA RES)	TOPOGRAPHY
						х	Υ	Z		10						<40	>40	<1,6	≥1.6	
S-103	29 40.68	98 12.75	SH	20	Кер	7	7	0.5					O/F	15	35	X		Х		HILLTOP
S-104	29 39 97	98 12.77	CD	5	Кер	55	20	3	NW-SE				0	15	20	X			X	STREAMBED
S-105	29 39.94	98 12.72	CD	5	Kep	18	10	_ 1	E-W				С	15	20	X			X	STREAMBED
S-106	29 40.13	98 12.42	CD	5	Кер	15	10	0.9	N50W				C	15	20	X			X	STREAMBED
S-107	29 40.14	98 12.37	CD	5	Kep	50	18	3	N30W				С	15	20	X			X	STREAMBED
S-108	29 41.94	98 13.4	CD	5	Kep	250	13	1	N50E	10			F	5	20	X		Х		HILLTOP
S-109	29 40.40	98 12.66	CD		Кер	35	9	1					F	9	14	X		Х		HILLTOP
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2A TY	PE 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 20
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

	BA INFILLING
N	None, exposed bedrack
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
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FS	Flowstone, cements, cave deposits
X	Other materials

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the field.

My signature certifies that I am qualified as a geologist as defined by \$10.7 \text{chapter 213}.

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

THOMASO. MATHERES

Sheet 7 of 8

GEOL	SESSMENT			PR	OJE	CT NAME:	5													
	LOCAT	ION					FE	ATUI	RE CHARAC	ΓER	ISTIC	3			EV	TION	PHYSICAL SETTING			
1A	1A 1B 1C 2A 2B 3						4		5	5A	6	7	BA	88	9	10		11		12
EATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIME	DIMENSIONS (FEET)		TREND (DEGREES)	DOL	DENBITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SEN	SITIVITY	CATCHME (ACI		TOPOGRAPHY
						х	Y	Z		10						<40	≥40	<1,6	>1.8	(12)
S-110	29°39.77	98°12.53	MB-W	30	Kep				WELL				Х	5	35	X		X		HILLTOP
S-111	29°39.99	98°12.33	MB-W	30	Kep				WELL				Χ	5	35	X		X		HILLSIDE
S-112	29°40.03	98°12.32	MB-W	30	Kep				WELL				Х	5	35	Χ		Х		FLOODPLAIN
S-113	29°40.07	98°12.90	MB-W	30	Kep			-	WELL				Х	5	35	Х		Х		HILLSIDE
_			1			_		-										1		
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· DAT	JM:NAD83	
2A TYI	PE TYPE	2B POINTS
С	Cave	30
sc	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
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My signature certifies that I am qualified as a geologist as defined as 2000 Chapter 2000.

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

THOMAS O. MATHEW Ste GEGLOGY

Sheet B of B

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: J. Brandon Klenzendorf, P.E.

Date: <u>5 2</u>2 2023

Signature of Customer/Agent:

Project Information



1. Current Regulated Entity Name: <u>Capitol Aggregates Solms Operation</u>

Original Regulated Entity Name: New Braunfels Quarry

Regulated Entity Number(s) (RN): RN105203939

Edwards Aquifer Protection Program ID Number(s): 2643.00

igspace The applicant has not changed and the Customer Number (CN) is: $\underline{\sf CN604033142}$

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;
	$oxed{\boxtimes}$ 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;
	$\overline{igstyle{igstyle}{igstyle}}$ 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	Proposed Modification
Summary		
Acres	<u>1,015</u>	<u>N/A</u>
Type of Development	Industrial (Quarry)	<u>N/A</u>
Number of Residential	<u>N/A</u>	<u>N/A</u>
Lots		
Impervious Cover (acres)	93.2	<u>N/A</u>
Impervious Cover (%	9.2%	<u>N/A</u>
Permanent BMPs	Quarry pit, engineered VFS	<u>N/A</u>
Other	<u>N/A</u>	N/A
SCS Modification	Approved Project	Proposed Modification
Summary		
Linear Feet	<u>N/A</u>	N/A
Pipe Diameter	<u>N/A</u>	<u>N/A</u>
Other	N/A	N/A

AST Modification	Approved Project	Proposed Modification	
Summary			
Number of ASTs	<u>1</u>	<u>11</u>	
Volume of ASTs	<u>10,000 gallons</u>	23,212 gallons	
Other	<u>N/A</u>	18 drums (55-gal each)	
UST Modification	Approved Project	Proposed Modification	
Summary			
Number of USTs	<u>N/A</u>	<u>N/A</u>	
Volume of USTs	<u>N/A</u>	<u>N/A</u>	
Other	<u>N/A</u>	<u>N/A</u>	
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.			
 Attachment C: Current Site Plan of the Approved Project. A current site plan showin 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 illustrates that the site was constructed as approved. The approved construction has commenced and has been completed. Attachment 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. 			
provided for the new acre	red plan has increased. A Geologic age. ed to or removed from the approv		
needed for each affected county in which the project	d one (1) copy of the application, princorporated city, groundwater conct will be located. The TCEQ will dins. The copies must be submitted	nservation district, and stribute the additional	

Attachment A – Original Approval Letter and Approved Modification Letters

A copy of the original AST Plan approval letter dated 30 November 2017 is attached. The original WPAP approval letter (dated 12 July 2007) and WPAP modification approval letters (dated 6 May 2017 and 26 November 2018) are provided as part of the Administrative Information provided as part of TCEQ-0575, Aboveground Storage Tank Facility Plan Application.

Attachment B - Narrative of Proposed Modification

Capitol Aggregates, Inc. proposed to modify approved activities and features within the project limits of the Capitol Aggregates Solms Operation at 1026 Solms Quarry Road, New Braunfels, Texas. The overall Solms Operation Site includes areas in both the Edwards Aquifer Recharge Zone and Transition Zone. The original approved AST Plan application was submitted to TCEQ in August 2017. The AST Plan was approved on 30 November 2017. The approved AST Plan project consisted of one (1) double-walled aboveground storage tank (AST) with a cumulative storage volume of 10,000 gallons (identified as AST 1 throughout the plan); AST 1 is a double-walled diesel tank placed upon a concrete base structure which is located entirely in the Edwards Aquifer Transition Zone. Diesel fuel is contained within the double-walled tank with piping, hoses, and dispenser located within secondary containment. The existing approved Tank Storage Area is located next to the scale house along the entrance road; approved construction of this Tank Storage Area has commenced and has been completed as approved. The existing approved Tank Storage Area is identified as "Tank Storage Area A" in this AST Plan modification to distinguish it from the new tank storage area which is designated as "Tank Storage Area B." This application includes a proposed modification to the previously approved plan.

Capitol Aggregates is submitting this modification to their existing AST Plan to account for the new Fuel Island at the Tank Storage Area B Project Site. The new Tank Storage Area B Project Site is located entirely over the Edwards Aquifer Recharge Zone and is within the existing quarry pit and consists of operation of ten permanent, regulated ASTs (identified as AST 2 through AST 11 within an impervious concrete dike secondary containment structure (with a roof system), designed to have an available storage volume sufficient to contain one and one-half times the cumulative storage capacity of the regulated tanks plus the volume displaced by unregulated tanks that will be stored within the secondary containment. The containment structure at Tank Storage Area B also includes operation of two permanent unregulated ASTs (identified as AST 12 and AST 13) with unregulated materials (i.e., Diesel Exhaust Fluid Additive and Antifreeze which are not classified as hazardous substances under Federal Hazardous Waste Regulations 40 CFR 261) plus eighteen regulated 55-gallon portable drums

containing petroleum hydrocarbon material. The cumulative storage volume of the drums was accounted for in the required containment volume calculation for one and one-half times the cumulative storage capacity and the displacement volume from unregulated AST 12 and AST 13 were accounted for in the available storage volume provided by the containment structure. The proposed AST Plan modification includes the addition of Tank Storage Area B which consists of a cumulative storage volume of 14,202 gallons. Due to scheduling and worker availability challenges, supply chain concerns, and material availability, Capitol Aggregates may initiate construction activities associated with the concrete pad and structure, roofing system, and electrical systems prior to approval from TCEQ on the AST modification application. Capitol Aggregates will not initiate tank installation or transfer of tank contents until approval is received; this AST Plan modification submittal is to obtain approval for the addition of Tank Storage Area B. Attachment B included with Form TCEQ-0575 in this AST Plan modification application provides a detailed summary of the size and contents of each of the new tanks plus a description of the new containment system.

In addition to the regulated and unregulated tanks and drums stored in Tank Storage Area B, there are additional unrelated tanks and drums located at the Site. These include a mobile refueler and ten 55-gallon drums containing used oil, hydraulic oil, or drive train fluid. According to discussions with TCEQ staff, 55-gallon drums are not regulated unless they are placed within a containment structure that has regulated tanks in which case their volume must be included as part of the cumulative storage capacity when calculating the containment volume of one and one-half times the cumulative storage capacity. Because these ten drums are not located in Tanks Storage Area B with the regulated tanks, they are unregulated by TCEQ but are stored within their own containment structures (250-gallon steel stock tanks when in use or placed inside Conex Storage units at the facility). The mobile refueler is stored in the equipment and vehicle storage area when not in use.

No modifications to the approved WPAP are proposed. The site does not have a SCS or UST plan.

Attachment C – Current Site Plan of the Approved Project

The previously approved "Site Plan" prepared by Geosyntec Consultants, Inc. and submitted with the approved AST Plan is attached. Construction of the previously approved Tank Storage Area A has commenced and has been completed as approved.

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



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 30, 2017

Mr. Paul Detterline Capitol Aggregates, Inc. 11551 Nacogdoches Road San Antonio, Texas 78217

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Capitol Aggregates Solms Operations; Located at 1026 Solms Quarry Road; New Braunfels, Texas

TYPE OF PLAN: Request for Approval of an Aboveground Storage Tank (AST) Facility; 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Regulated Entity No. RN105203939; Additional ID No. 13000495

Dear Mr. Detterline,

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the AST application for the above-referenced project submitted to the San Antonio Regional Office by Geosyntec Consultants on behalf of Capitol Aggregates on August 24, 2017. Final review of the AST was completed after additional material was received on November 6, 2017. As presented to the TCEQ, the AST Facility Plan proposed in the application was prepared to be in general compliance with the requirements of 30 TAC §213.5(e). Therefore, based on the applicant'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 approval letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer protection plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

BACKGROUND

The Capitol Aggregates Solms Operation is a 1,015-acre limestone quarry located on the Recharge and Transition Zones of the Edwards Aquifer. The site received approval of a Water Pollution Abatement Plan (WPAP) on July 12, 2007 and a WPAP Modification on May 6, 2015. There have been no aboveground storage tank facility plans approved at the site.

PROJECT DESCRIPTION

The AST project area is located on the Edwards Aquifer Transition Zone. The proposed AST Facility Plan will consist of a 10,000-gallon double-walled steel diesel fuel storage tank. All

Mr. Paul Detterline November 30, 2017 Page 2

piping and hoses are located within secondary containment areas. Any spillage will be contained within the containment structure for collection and recovery.

EQUIVALENT PROTECTION

The UL 142 double walled tank consists of a primary tank within a secondary tank. The 10,000-gallon tank dimensions are approximately eight (8) feet diameter and twenty-six feet nine inches in length. The interstitial area between the two tanks will contain any product leaks from the primary tank. The primary diesel tank is equipped an overflow control system that includes a level gauge, an overfill alarm and a rupture alarm system.

A spill and overfill control for the tank and piping structures will be provided by reducing probability, training employees and using BMPs to mitigate releases described in Attachment D (enclosed).

The planned spill response that will take place at the facility is provided in Attachment "E" (enclosed) of the AST Facility Plan Application (Response Actions to Spills). In the event of a release the substance will be disposed of in accordance with TCEQ requirements.

GEOLOGY

According to the geologic assessment included with the application, the project area is located on the Leon Formation within the Transition Zone. No features were identified within the proposed project area for the AST. The San Antonio Regional Office site assessment conducted on October 30, 2017 revealed the site was generally as described in the application.

SPECIAL CONDITION

The existing 10,000-gallon AST was not previously approved. The applicant is hereby advised that the after-the-fact approval of the AST Modification application, as provided by this letter, shall not absolve the applicant of any violations of TCEQ rules related to this project.

STANDARD CONDITIONS

- 1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.
- 2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, UIC, PST) 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 AST Facility Plan 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 AST Facility Plan and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 6. Prior to commencing construction, the applicant shall submit any modifications to this approved AST Facility Plan required by some other regulating authority or desired by the applicant.
- 7. Modification to the activities described in the referenced AST Facility Plan, including Attachment "E" of the AST Facility Plan application (Response Actions to Spills), following the date of approval may require the submittal of an Edwards Aquifer Protection Plan application to modify this approval. The payment of appropriate fees and all information necessary must be provided for its review and approval prior to initiating construction of the modifications.
- 8. 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.
- 9. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved AST Facility Plan, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.
- 10. All borings with depths greater than or equal to 20 feet must be plugged with a non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

- 11. 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.
- 12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature

- and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
- 13. No wells exist on site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
- 15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

- 18. Attachment "E" of the AST Facility Plan application (Response Actions to Spills) shall be located on-site (copy enclosed).
- 19. In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly. The applicant must comply with 30 TAC Chapter 334, Subchapter D, pertaining to Release Reporting and Corrective Action.
- 20. During the life of the AST facility, the owner shall comply with all applicable provisions of 30 TAC §213.5(e). Additionally, the owner, shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity, upon which that person or entity shall assume all responsibility for provisions and specific conditions of this approval.
- 21. An "as-built" site plan for the facility shall be drawn to scale and in sufficient detail to depict the specific locations and dimensions of all major components of the storage system. A copy of such "as-built" site plan and construction drawings, as well as operating instructions for all major system components shall be maintained in a secure location at the site of the proposed facility. This information shall be available for examination by TCEQ personnel upon request.

Mr. Paul Detterline November 30, 2017 Page 5

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 Lillian Butler of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210)403-4026.

Sincerely,

Lynn Bumguardner, Water Section Manager

San Antonio Region

Texas Commission on Environmental Quality

LB/LB/eg

cc:

Enclosures: Deed Recordation Affidavit, Form TCEQ-0625

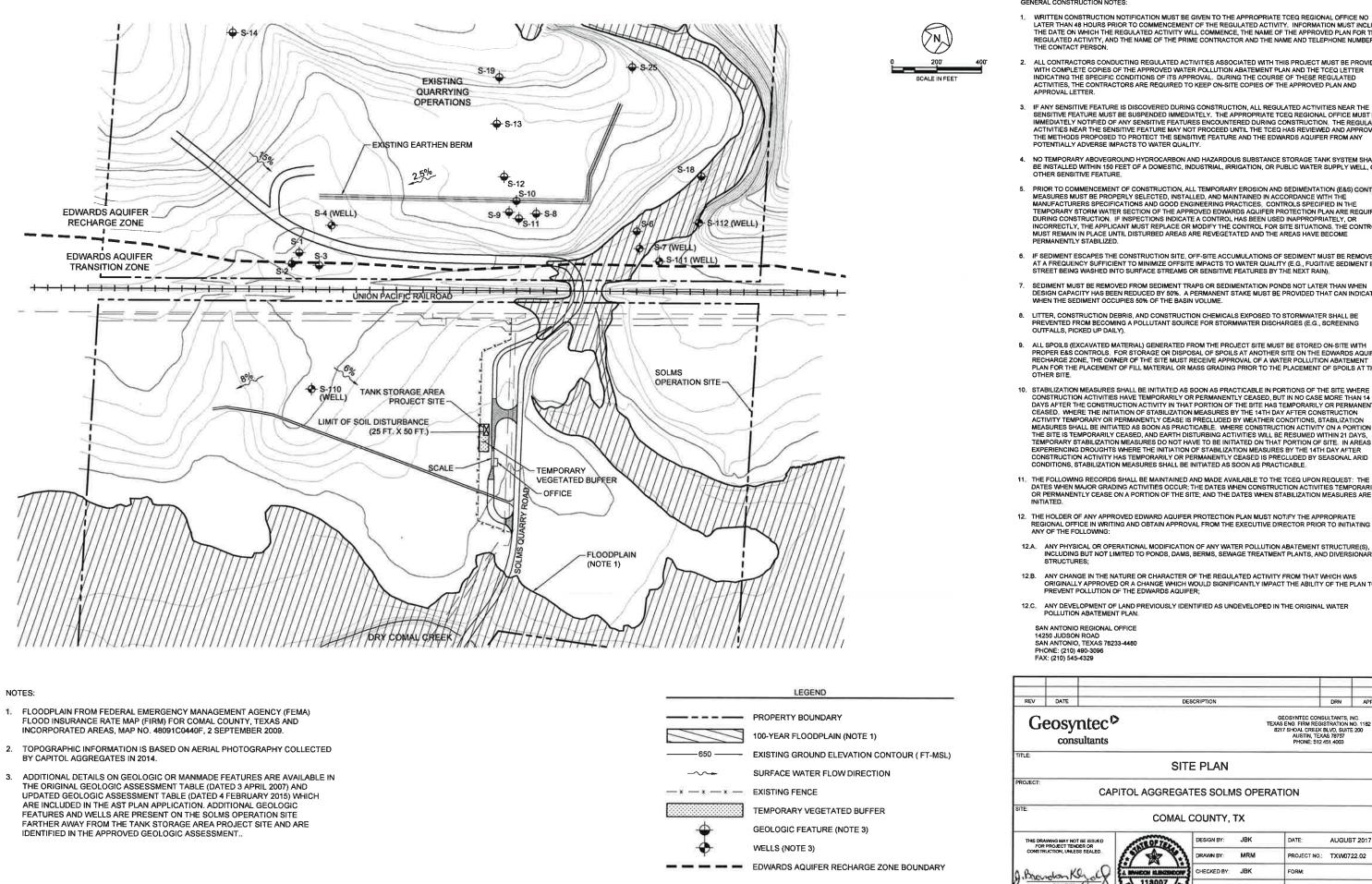
Attachment "E" of AST Facility Plan application (Response Actions to Spills)

Mr. Brandon Klenzendorf, P.E., Geosyntec Consultants

The Honorable Michael Carpenter, City of Schertz

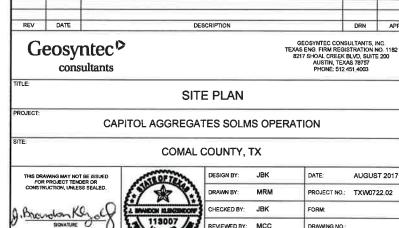
Mr. Mark Enders, City of New Braunfels Mr. Roland Ruiz, Edwards Aquifer Authority Mr. Thomas H. Hornseth, P.E., Comal County

Mr. H. L. Saur, Comal Trinity Groundwater Conservation District



GENERAL CONSTRUCTION NOTES:

- 1... WRITTEN CONSTRUCTION NOTIFICATION MUST BE GIVEN TO THE APPROPRIATE TOEQ REGIONAL OFFICE NO LATER THAN 48 HOURS PRIOR TO COMMENCEMENT OF THE REGULATED ACTIVITY. INFORMATION MUST INCI UDE THE DATE ON WHICH THE REGULATED ACTIVITY WILL COMMENCE, THE NAME OF THE APPROVED PLAN FOR THE REGULATED ACTIVITY, AND THE NAME OF THE PRIME CONTRACTOR AND THE NAME AND TELEPHONE NUMBER OF
- ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN AND THE TOEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND
- IF ANY SENSITIVE FEATURE IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE TODQ HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
- 4. NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM SHALL BE INSTALLED WITHIN 150 FEET OF A DOMESTIC, INDUSTRIAL, IRRIGATION, OR PUBLIC WATER SUPPLY WELL, OR
- 5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTRO MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. CONTROLS SPECIFIED IN THE TEMPORARY STORM WATER SECTION OF THE APPROVED EDWARDS AQUIFER PROTECTION PLAN ARE REQUIRED DURING CONSTRUCTION. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THE CONTROLS MUST REMAIN IN PLACE UNTIL DISTURBED AREAS ARE REVEGETATED AND THE AREAS HAVE BECOME
- 6. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED. AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS TO WATER QUALITY (E. PUGITIVE 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%. A PERMANENT STAKE MUST BE PROVIDED THAT CAN INDICATE WHEN THE SEDIMENT OCCUPIES 50% OF THE BASIN VOLUME.
- 8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES (E.G., SCREENING
- ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS, FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE
- 10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION CEASED, WHERE THE INITIATION OF STRILLIZATION MEASURES BY THE LATER CONSTRUCTION
 ACTIVITY TEMPORARY OR PERMANENTLY CEASE IS PRECLUDED BY WEATHER CONDITIONS, STABILIZATION
 MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE, WHERE CONSTRUCTION ACTIVITY ON A PORTION OF
 THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE. IN AREAS EXPERIENCING DROUGHTS WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SEASONAL ARID CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
- 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
- 12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
- 12.A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY
- 12.B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
- 12.C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.



PROVED BY: JBK

5.11.2017

Aboveground Storage Tank Facility Plan Application

Texas Commission on Environmental Quality

For Permanent Storage on The Edwards Aquifer Recharge and Transition Zones And Relating to 30 TAC §213.5(e), 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 **Aboveground Storage Tank Facility Plan Application** is hereby submitted for TCEQ review and Executive Director approval. The application was prepared by:

Print Name of Customer/Agent: J. Brandon Klenzendorf, P.E.

Date: 5.22.2023

Signature of Customer/Agent:

Regulated Entity Name: Capitol Aggregates Solms Operation



Aboveground Storage Tank (AST) Facility Information

1. Tanks and substance stored:

Table 1 - Tank and Substance Storage

AST Number	Size (Gallons)	Substance to be Stored	Tank Material
	10,000 (previously approved double-		
1	walled tank)	Diesel fuel	Steel
2	10,000	Diesel fuel	Steel
3	600	Grease Lubricant	Steel

AST Number	Size (Gallons)	Substance to be Stored	Tank Material
4	250	Hydraulic Oil	Steel
	AST 5 - 250		
	AST 6 - 250	AST 5 - Gear Oil	
	AST 7 - 250	AST 6 - Motor Oil	
	AST 8 - 500	AST 7 - Tranmission	
	AST 9 - 500	Oil	
	AST 10 - 500	AST 8 - Used Oil	
	AST 11 - 112	AST 9 - Gasoline	
	AST 12 (unregulated contents; no associated plan fee) -	AST 10 - Future tank; undecided Petroleum Product	
	450	AST 11 - Diesel Tank	
	AST 13 (unregulated contents; no associated plan fee) -	AST 12 - Diesel Exhaust Fluid Additive	
	250	AST 13- Antifreeze	
5	(18) 55 gallon drums (no associated plan fee) - 990 gallons total	Drums 1 through 18 - Used Oil, Hydrualic Fluid, Drive Train Fluid	Steel

Total x 1.5 = Tank Storage Area A (AST 1) consists of double-walled tank and containment for piping, hose, and dispenser only totaling 35 gallons;

<u>Tank Storage Area B (regulated tanks AST 2 through AST 11 and 18 55-gal drums plus</u> <u>displacement volume of unregulated tanks AST 12 and AST 13) = 22,003</u> **Gallons**

- 2. The AST will be placed within a containment structure that is sized to capture one and one-half (1 1/2) times the storage capacity of the system. For facilities with more than one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems.
 - Attachment A Alternative Methods of Secondary Containment. Alternative methods for providing secondary containment are proposed. Specifications that show equivalent protection for the Edwards Aquifer are attached.
- 3. Inside dimensions and capacity of containment structure(s):

Table 2 - Secondary Containment

Length (L) (Ft.)	Width (W) (Ft.)	Height (H) (Ft.)	L x W x H = (Ft3)	Gallons
7	5	0.33	11.7	87
38.5	35.2	3.0	4,068	30,430

Total: 30,517 Gallons

4.	\boxtimes	All piping, hoses, and dispensers will be located inside the containment structure.
		Some of the piping to dispensers or equipment will extend outside the containment structure.
		The piping will be aboveground The piping will be underground
5.		The containment area must be constructed of and in a material impervious to the substance(s) being stored. The proposed containment structure will be constructed of concrete dike and concrete slab sufficiently impervious to petroleum products plus a roof system.
6.		Attachment B - Scaled Drawing(s) of Containment Structure . A scaled drawing of the containment structure that shows the following is attached:
		 ✓ Interior dimensions (length, width, depth and wall and floor thickness). ✓ Internal drainage to a point convenient for the collection of any spillage. ✓ Tanks clearly labeled. ✓ Piping clearly labeled. ✓ Dispenser clearly labeled.
Si	te	Plan Requirements
Ite	ms :	7 - 18 must be included on the Site Plan.
7.	\boxtimes	The Site Plan must have a minimum scale of 1" = 400'.
		Site Plan Scale: 1" = <u>200</u> '.
8.	100	O-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.
	\square	
		The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): Floodplain data obtained from Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Comal County, Texas and incorporated areas, man number 48091 CO440E, 2 September 2009

9.	The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Show lots, recreation centers, buildings, roads, etc.
	The layout of the development is shown with existing contours. Finished topographic contours will not differ from the existing topographic configuration and are not shown.
10.	All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):
	There are <u>8</u> (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply): The wells are not in use and have been properly abandoned. The wells are not in use and will be properly abandoned. The wells are in use and comply with 16 TAC § 76.
	There are no wells or test holes of any kind known to exist on the project site.
11.	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 C - Exception to the Geologic Assessment. A request and justification for an exception to a portion of the Geologic Assessment is attached.
12.	$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
13.	Areas of soil disturbance and areas which will not be disturbed.
14.	igstyle Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
15.	\times Locations where soil stabilization practices are expected to occur.
16.	✓ Surface waters (including wetlands).✓ N/A
17.	igstyle Locations where stormwater discharges to surface water or sensitive features.
	There will be no discharges to surface water or sensitive features.
18.	☐ Legal boundaries of the site are shown.
Be	est Management Practices
19.	Any spills must be directed to a point convenient for collection and recovery. Spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill

	 In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly. In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.
20. 🔀	All stormwater accumulating inside the containment structure will be disposed of through an authorized waste disposal contractor.
	Containment area will be covered by a roof. Containment area will not be covered by a roof.
	A description of the alternate method of stormwater disposal is submitted for the executive director's review and approval and is attached.
21. 🔀	Attachment D - Spill and Overfill Control . A site-specific description of the methods to be used at the facility for spill and overfill control is attached.
22. 🔀	Attachment E - Response Actions to Spills . A site-specific description of the planned response actions to spills that will take place at the facility is attached.
Adn	ninistrative Information
	Water Pollution Abatement Plan (WPAP) is required for construction of any associated mmercial, industrial or residential project located on the Recharge Zone.
	The WPAP application for this project was approved by letter dated 12 July 2007 for the original WPAP application; 6 May 2015 for the first WPAP modification; and 26 November 2018 for the second WPAP modification. A copy of the approval letter is attached at the end of this application. The WPAP application for this project was submitted to the TCEQ on, but has not been approved. A WPAP application is required for an associated project, but it has not been submitted. There will be no building or structure associated with this project. In the event a building or structure is needed in the future, the required WPAP will be submitted to the TCEQ. The proposed AST is located on the Transition Zone and a WPAP is not required. Information requested in 30 TAC 213.5 subsection (b) (4)(B) and (C) and (5) is provided with this application. (Forms TCEQ-0600 Permanent Stormwater Section and TCEQ-0602 Temporary Stormwater Section or Stormwater Pollution Prevention Plan/SW3P).
24. 🔀	This facility is subject to the requirements for the reporting and cleanup of surface spills and overfills pursuant to 30 TAC 334 Subchapter D relating to Release Reporting and Corrective Action.

- 25. 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.
- 26. Any modification of this AST Facility Plan application will require executive director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

Attachment A – Alternative Methods of Secondary Containment

The previously approved storage tank associated with the original approved AST Plan application (AST 1 in Tank Storage Area A) is a double-walled tank which is acceptable in place of tank containment as allowed by TCEQ guidance *Best Management Practices for Quarry Operations*, RG-500 (2012). A description of the tank from the manufacturer was provided as supplemental information along with the original AST Plan submittal and is also provided below in this AST Plan modification application for reference. This supplemental information associated with AST 1 was approved with the original AST Plan on 30 November 2017. Drip pans are used during fueling operations as secondary containment for any accidental spills as described in Attachment D – Spill and Overfill Control.

The primary diesel tank (AST 1 in Tank Storage Area A) is equipped with an overflow control system that includes a level gauge to indicate the diesel level in the tank and an overfill alarm to prevent the tank from being overfilled. It is also equipped with a rupture alarm system. Leaks from the primary tank AST 1 will be collected in the interstitial area between the double-walled containment and can be pumped from the tank using normal pump operations. If a leak is detected, the double-walled tank will be taken out of service and properly repaired or replaced.

The piping, hose, and dispenser are located inside a 4-inch (minimum) tall containment structure with minimum dimensions of 7 ft by 5 ft, resulting in a minimum containment capacity of 87 gallons. The piping, hose, and dispenser have a capacity of approximately 35 gallons.

The new storage tanks associated with this AST Plan modification application (AST 2 through AST 13) are constructed within a secondary containment structure, described in Attachment B.

Steel Tank Institute 570 Oakwood Road Lake Zurich, IL 60047 847/438-8265 Fax 847/438-8766 Web site: http://www.steeltank.com



Fireguard®

- 1. Fireguard® is a Protected Tank defined as, "A method of tank construction that includes an aboveground atmospheric tank with secondary containment and an insulation system that is intended to limit the heat transferred to the primary tank when the construction is exposed to a 2-hour hydrocarbon pool fire and is provided with protection from physical damage."
- 2. UL 2085 Listed Protected tank. A Certificate of Compliance from UL is attached. UL 2085 requires the primary tank to be constructed per the requirements of UL 142 and Fireguard® complies with this requirement. UL 2085 has the following performance test requirements:
 - a. FULL-SCALE FIRE TEST: A test which simulates a hydrocarbon pool fire. The representative tank is placed in a 2000° F rapid rise furnace that meets the requirements of UL 1709, "Standard for Rapid Rise Fire Tests of Protection Materials for Structural Steel." The temperatures recorded on the primary tank at any time during the 2-hour fire exposure must not exceed an average maximum temperature rise of 260°F and a maximum temperature of any single thermocouple of 400°F. The emergency venting of the tank must not be impaired during the test. Immediately following the fire test, the tank is subjected to the Hose Stream Test and the primary tank must not leak.
 - b. BALLISTICS PROTECTION: A method of tank construction in which the tank system has a tested ability to prevent penetration of a bullet into the primary tank. The ballistics test shall require that the tank be shot at five times with a 150 grain (9.72 g) M-2 ball ammunition, having a muzzle velocity of 2700 feet per second (823 meters per second), fired from a .30 caliber rifle at a distance of 100 feet (30.5 m).
 - c. HOSE STREAM RESISTANT: A method of tank construction in which the tank system has a tested ability to prevent leakage of the primary tank or damage to the insulation material when the completed tank assembly is impacted with a stream of water for 2 ½ minutes, as per the UFC test criteria, with the purpose of simulating a fire hose. This test shall be conducted immediately after the furnace test.
 - d. IMPACT PROTECTION: A method of tank construction in which the tank

- system has a tested ability to prevent leakage of the primary tank if impacted by a vehicle. Testing shall consist of hitting the completed tank assembly with a 12,000 pound (5455 kg) weight moving at 10 m.p.h.(16 kph), 18 inches (457 mm) off the ground in a one square foot area.
- e. INTERSTITIAL COMMUNICATION TEST: A test that ensures the communication inside the interstitial space of liquid, vacuum, or pressure at the monitoring point.
- 3. ULC-S655-98 Listed Protected Tank. ULC is Underwriters' Laboratories of Canada. Their requirements mirror the UL 2085 requirements.
- 4. UFC (Uniform Fire Code) Protected tank. UFC testing requirements are identical to UL 2085 described above.
- 5. SwRI 93-01 Standard for Protected Tanks is identical to UL 2085 with 2 exceptions. SwRI 93-01 requires the tank used in the impact protection test to be anchored, while UL 2085 requires it to be unanchored. In addition, SwRI 93-01 allows the fire test to be extended from 2 hours to 4 hours. Please note that a requirement for a 4 hour test is for a Fireguard® Tank with 6 inches of insulation.
- 6. Fireguard® meets the California Air Resources Board (CARB) testing requirements for air emissions.
- 7. The Fireguard® secondary containment is testable on-site using standard, economical testing procedures. Steel outer wall provides low-cost maintenance and protects the insulation material from weathering. (Exposed concrete outer walls are susceptible to cracking, spalling and weathering.)
- 8. Fireguard® includes a 30 year warranty.

Certificate of Compliance

Certificate Number 0070130-MH17883 Report Reference MH17883,19940124

Issue Date 2007 January 30



Issued to:

Steel Tank Institute, Div of STI/SPFA

570 Oakwood Rd. Lake Zurich, IL 36502

This is to certify that representative samples of

Protected Aboveground Tanks for Flammable

and Combustible Liquids

Have been investigated by Underwriters Laboratories Inc.® in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety:

UL 2085 Protected Aboveground Tanks for Flammable and Combustible

Liquids

Additional Information:

Listee's name, trade name, or trademark, a distinctive model designation or the equivalent, capacity of the primary containment tank, the month and year of manufacture, this tank requires emergency relief venting, the annular space requires emergency relief venting.

Only those products bearing the UL Listing Mark should be considered as being covered by UL's Listing and Follow-Up Service.

The UL Listing Mark generally includes the following elements: the symbol UL in a circle: with the word "LISTED": a control number (may be alphanumeric) assigned by UL; and

the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product

Issued by John Libert John Silsdorf/Lead Engineering Associate Underwriters Laboratories Inc.

Reviewed by Milan Dotlich/Operations Manager

Underwriters Luboratories Inc.

Attachment B – Scaled Drawing(s) of Containment Structure and Site Plan

The original Scaled Drawings of the previously approved Tank Storage Area A that houses the approved AST 1 are provided below for reference. AST 1 is a double-walled 10,000 gallon diesel fuel tank. This drawing was approved with the original AST Plan submittal on 30 November 2017. These original approved Scaled Drawings depict the secondary containment structure and collection point for spillage for the piping, hose, and dispenser only; secondary containment was not required for the approved AST 1 because it is a double-walled tank.

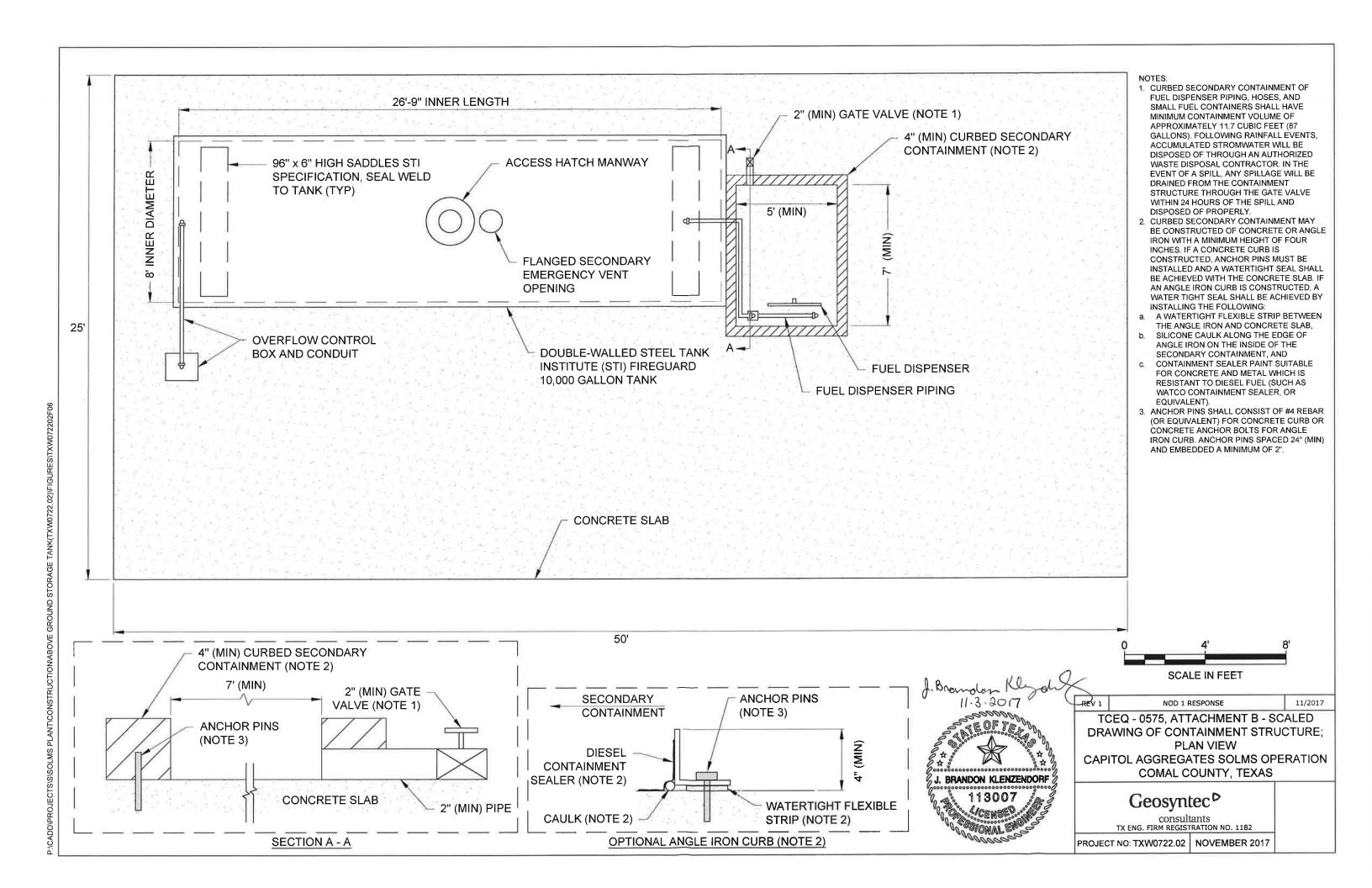
Additionally, Scaled Drawings of the new containment structure at the Tank Storage Area B Project Site associated with the new storage tanks (AST 2 through AST 13) are provided below as part of this AST Plan modification application. The Scaled Drawings include the tank locations, tank capacities, associated piping, and fuel dispensers clearly labeled. The new tanks that will be housed in the new containment system at Tank Storage Area B Project Site, plus planned future tanks, are described below:

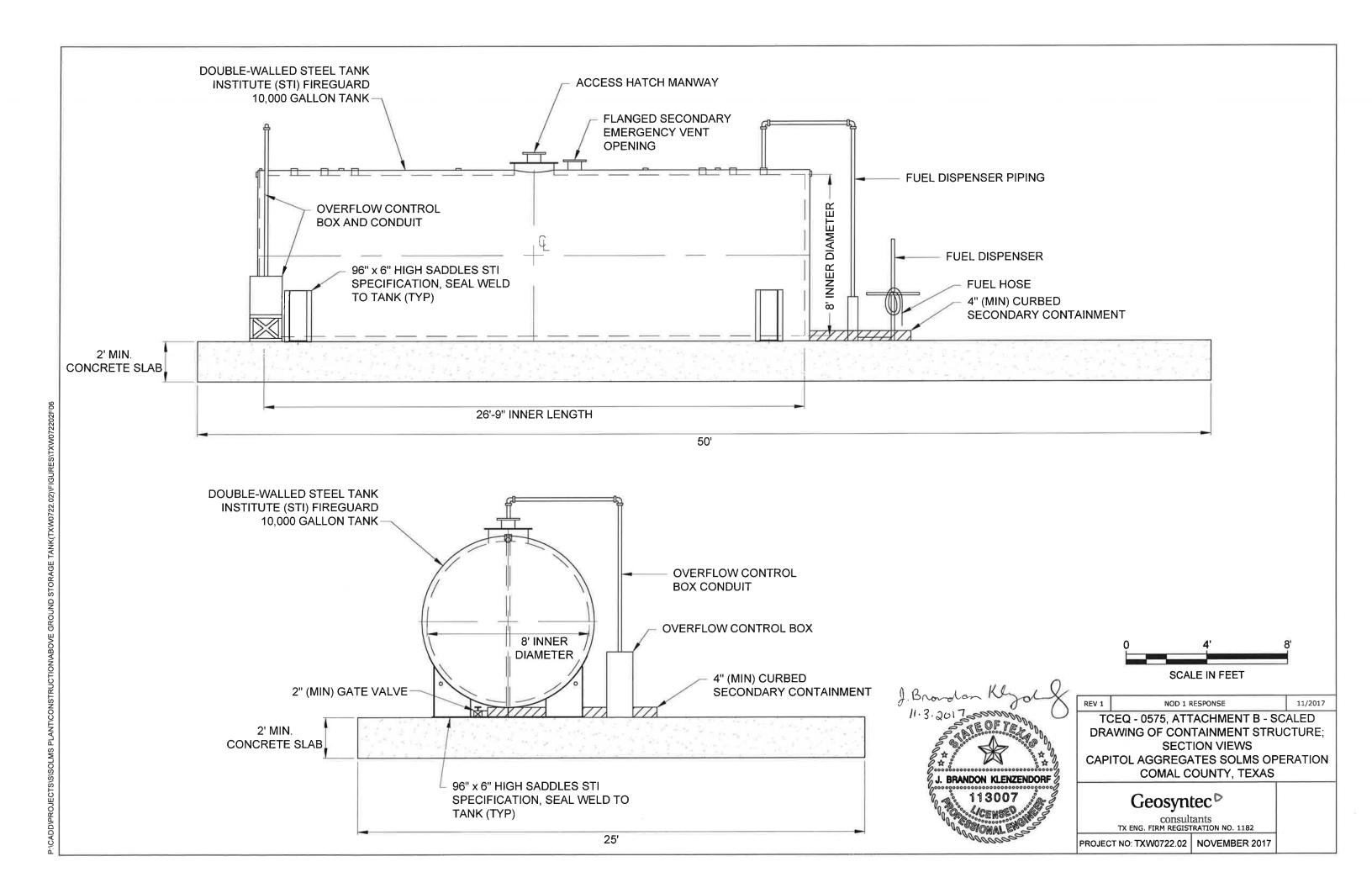
- AST 2 is a 10,000-gallon diesel fuel steel permanent tank;
- AST 3 is a 600-gallon grease lubricant steel permanent tank;
- AST 4 is a 250-gallon hydraulic oil steel permanent tank;
- AST 5 is a 250-gallon gear oil steel permeant tank;
- AST 6 is a 250-gallon motor oil steel permanent tank;
- AST 7 is a 250-gallon transmission oil steel permanent tank;
- AST 8 is a 500-gallon used oil steel permanent tank;
- AST 9 is a 500-gallon gasoline steel permanent tank;
- AST 10 is planned a 500-gallon future steel permanent tank with unknown contents at this time but will contain petroleum product;
- AST 11 is a 112-gallon diesel steel permanent tank;
- AST 12 is a 450-gallon diesel exhaust fluid steel permanent tank; the contents of this tank are not regulated under the AST Plan requirements and therefore are not included in the associated plan fee; the displacement volume for this tank is accounted for in the available containment structure volume;
- AST 13 is a 250-gallon antifreeze steel permanent tank; the contents of this tank are not regulated under the AST Plan requirements and therefore are not included in the associated plan fee; the displacement volume for this tank is accounted for in the available containment structure volume; and,
- Eighteen (18) 55-gallon portable steel drums containing various petroleum products; the drums are not subject to associated plan fees but because the drums contain regulated contents, the volume is accounted for in required containment volume calculation at one and one-half times the total storage volume.

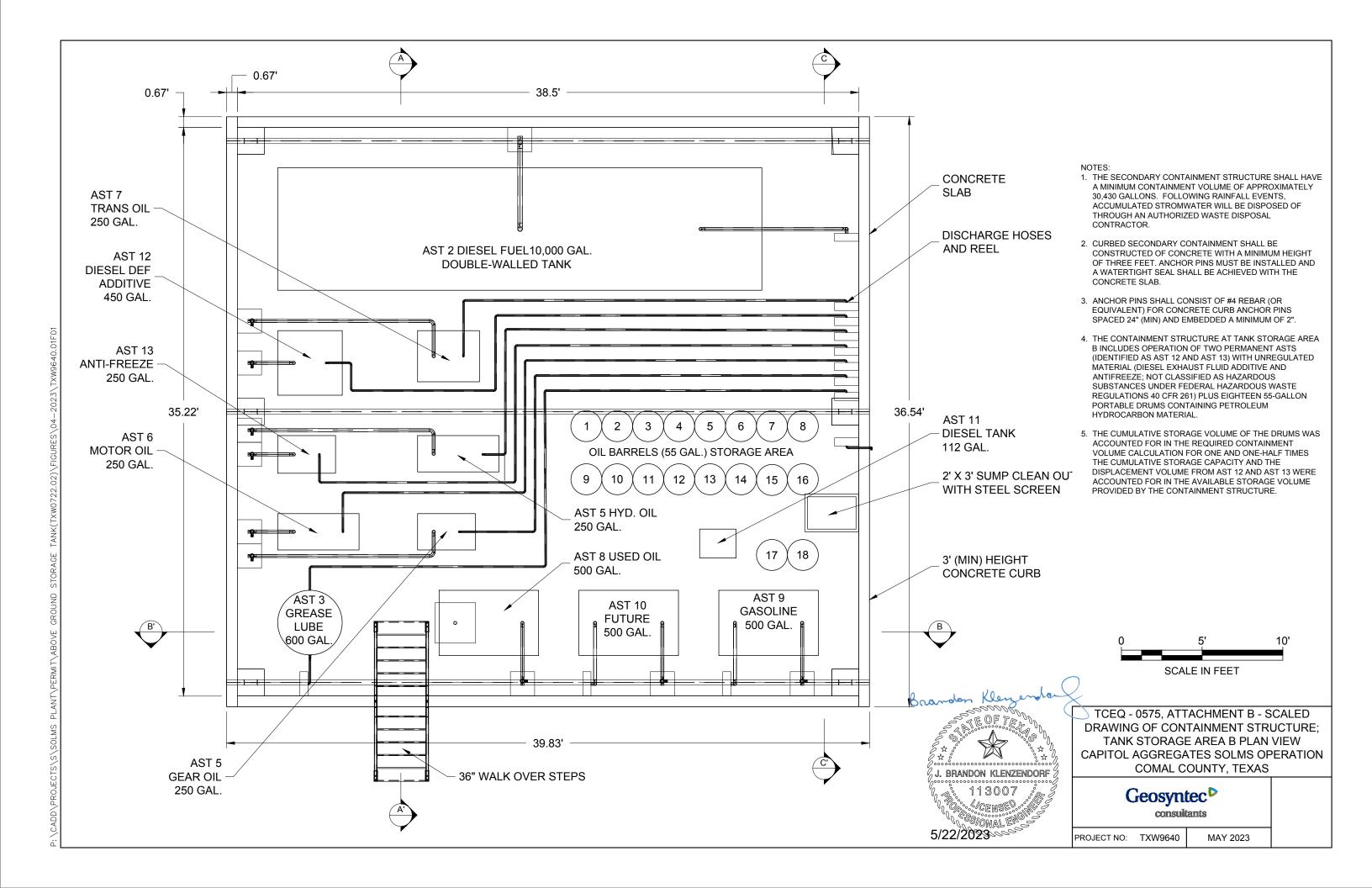
Tank Storage Area B is located within the existing quarry pit and consists of operation of the new ASTs within an impervious concrete dike secondary containment structure, designed to have an available storage volume sufficient to contain one and one-half times the cumulative storage capacity of the regulated tanks and drums plus the displacement volume of unregulated tanks stored within the containment. This AST Plan modification includes regulated tanks and drums containing an additional cumulative storage volume of 14,202 gallons. This total storage volume of the regulated tanks and drums times one and one-half plus the displacement volume of the unregulated tanks AST 12 and AST 13 that are stored in the Tank Storage Area B containment structure equals 22,003 gallons (14,202-gal times 1.5 plus 450-gal plus 250-gal = 22,003 gal).

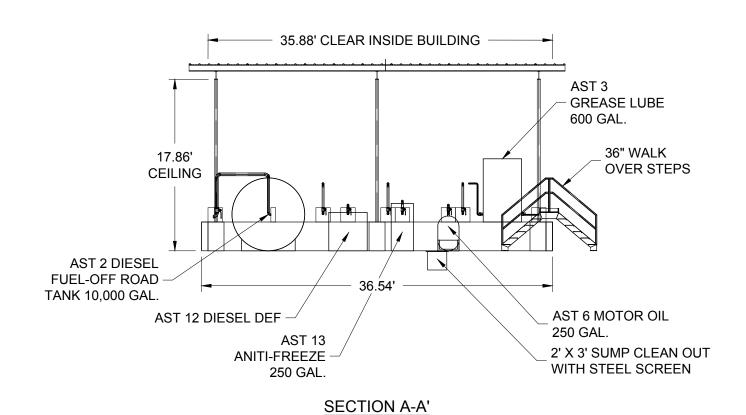
The secondary containment structure at Tank Storage Area B Project Site includes a concrete slab sufficiently impervious to petroleum products (inner dimensions approximately 38.5 feet by 35.2 ft), concrete dike (approximately 3 feet in height), and a roof system. The secondary containment structure provides a total containment volume of 30,430 gallons which exceeds the required containment volume of 22,003 gallons.

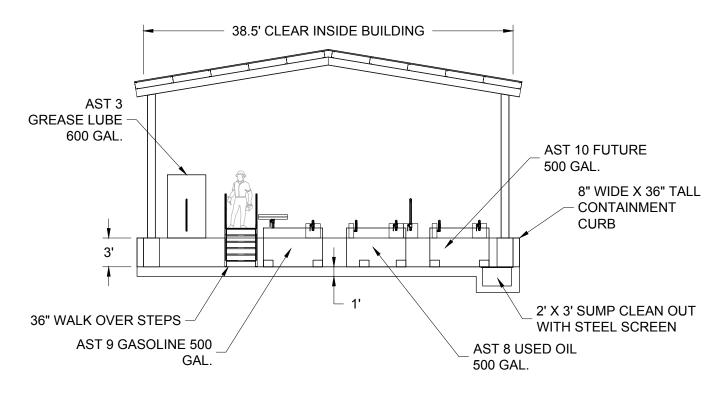
In addition to the Scaled Drawings of Tank Storage Area B, the Site Plan shows the Tank Storage Areas and surrounding areas, including the 100-year floodplain boundary. The Tank Storage Area B Project Site is not located within the 100-year floodplain. Wells and geologic or manmade features identified in the approved Geologic Assessment are shown and labeled on the Site Plan. A total of eight wells are present on the Solms Operation Site, and the nearest well (S-7) is greater than approximately 350 feet to the east of the Tank Storage Area B Project Site. The nearest geologic or manmade feature (S-8) is not characterized as a sensitive geologic feature and is located approximately 200 feet to the south of the Tank Storage Area B Project Site.



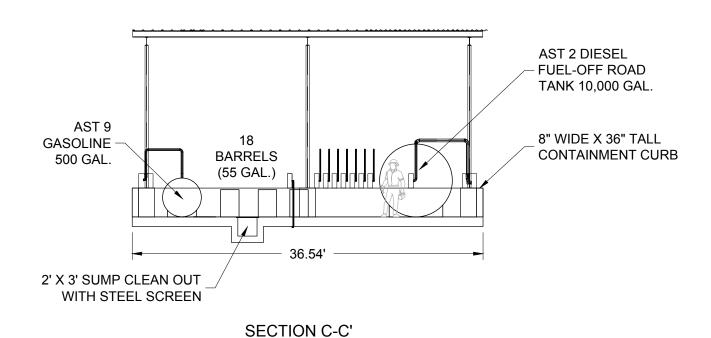


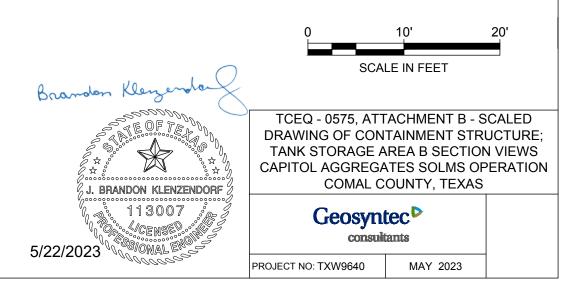


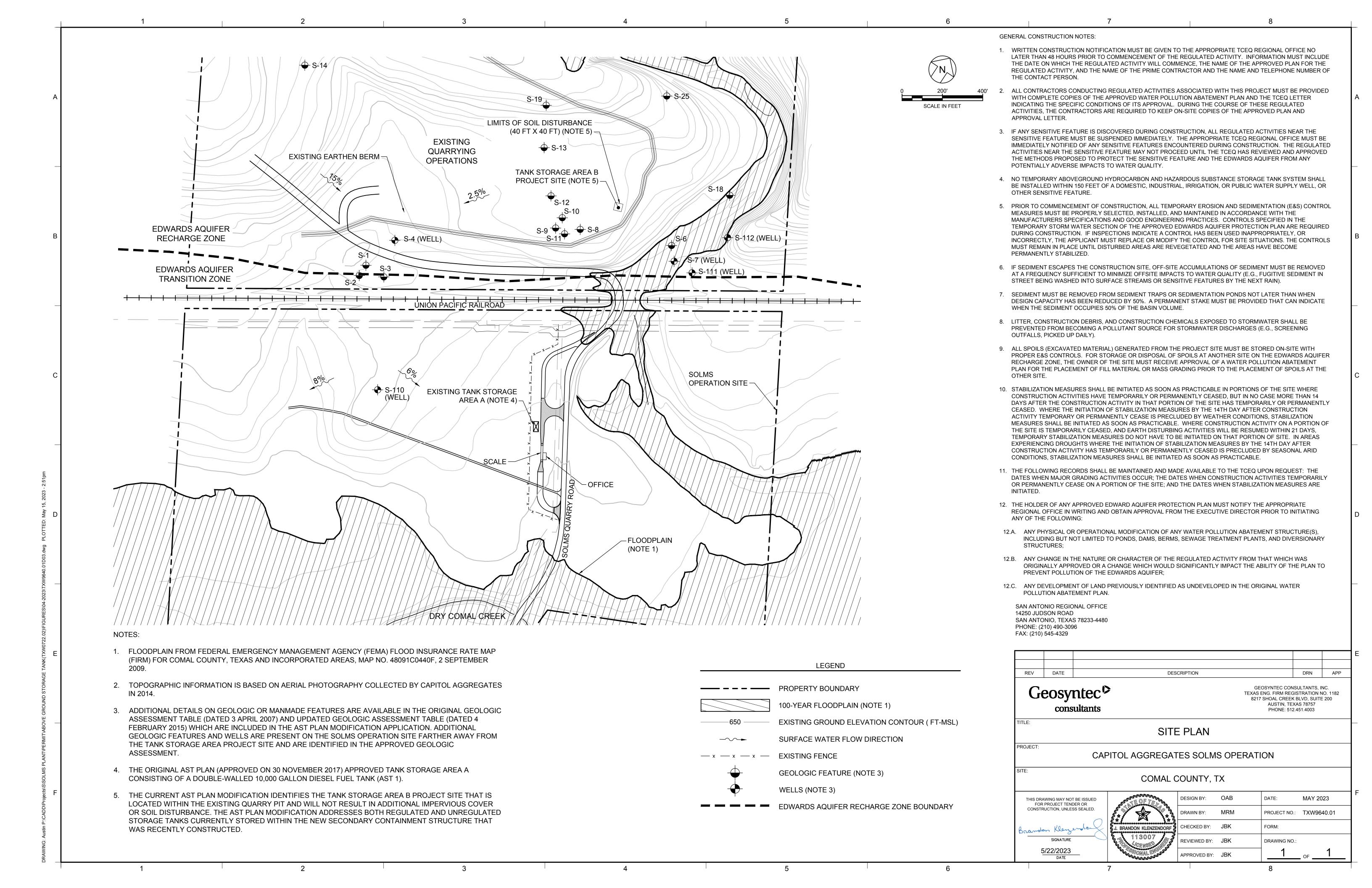




SECTION B-B'







Attachment C - Exception to the Geologic Assessment

Not applicable. All geologic or manmade features identified in the Geologic Assessment (included within this AST Plan modification application) are shown and labeled in the vicinity of the Tank Storage Area B Project Site. Additional geologic or manmade features were identified on-site but are not shown on the Site Plan due to their distance from the Tank Storage Area B Project Site. None of the identified features located near the Tank Storage Area B Project Site were classified as sensitive. Therefore, an Exception to the Geologic Assessment is not required. Additional geologic or manmade features at the Solms Operation Site are identified in the approved Geologic Assessment.

Attachment D – Spill and Overfill Control

The objective of this section is to describe measures to prevent or reduce the discharge of pollutants to drainage systems or water courses from leaks, spills, and overfills by reducing their probability, training employees, and using BMPs to mitigate releases.

Employee Education

Measures must be implemented to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks, spills, and overfills. Employee training programs must include the following, at a minimum:

- awareness that different materials pollute in different amounts and the definition of a "significant spill" for each material used;
- awareness of the appropriate response for "significant" and "insignificant" spills and when a spill must be reported to the TCEQ;
- potential dangers to humans and the environment from spills and leaks;
- hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into routine safety meetings);
- establish a continuing education program to indoctrinate new employees; and
- have representatives oversee and enforce proper spill prevention and control measures.

General Measures

The following general measures for spill response actions shall be implemented at the Site:

- To the extent that the work can be accomplished safely, contain and immediately clean up spills of oil, petroleum products, substances listed under 40 CFR parts 110, 117 and 302, and sanitary and septic wastes.
- Store hazardous materials and wastes in covered containers and protect from vandalism.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Train employees in spill prevention and cleanup.
- Designate responsible individuals to oversee and enforce control measures.
- Cover spills and protect them from stormwater run-on during rainfall to the extent that it does not compromise cleanup activities.
- Do not bury or wash spills with water.
- Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- 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.
- Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- Place Safety Data Sheets (SDSs), 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.
- Keep waste storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Refilling Operations

This procedure provides guidelines to be used in the safe and environmentally responsible refueling and maintenance of vehicles and equipment with petroleum products stored on-site, refilling of the storage tank(s), or any other reasonably sized transfer of fuel at the Site. This procedure encompasses those activities involving the transfer of reasonable quantities of fuel at the Site in a manner such that risks to health, safety, and the environment are minimized as much as is practicable.

• Operating personnel must be present at all times when large quantity diesel/fuel transfer is taking place.

- Observe tank capacity and contents and ensure that the volumes being added to the bulk tank are not excessive and that the correct material is being added.
- Make certain that a Safety Data Sheet (SDS) is available.
- Ensure that all pipes and hoses are properly connected and can be observed during any transfer of fuel. Both ends of hoses should be visible and should not be used in unlighted areas at night.
- Capitol Aggregates must approve all locations where refueling or transfer is taking place.
- Portable containment and spill control devices (such as buckets, drip pans, etc.) should be available, should a leak occur, and ready for use.
- Vehicle parking brake should be set prior to any refueling activity.
- Should leaks or spills occur, any transfer must immediately be stopped and the cause of the leak or spill investigated and resolved.
- All pipes and hoses must be voided of contents prior to disassembly and removal from coupling devices.
- Vehicle engines should be shut off during refueling or transfer.

Attachment E – Response Actions to Spills

The objective of this section is to describe the planned response actions to spills that could take place at the facility.

Cleanup

A spill containment kit and cleanup materials shall be stored where they are readily accessible. The Site Spill Coordinator shall be designated to oversee and enforce control measures and maintain and restock the spill containment kit, as needed. Clean up leaks and spills immediately. Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent materials for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste. Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly.

Minor Spills

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. Use absorbent materials on small spills rather than washing the area with water or burying the spill. Absorbent materials should be promptly removed and disposed of properly. Follow the practices below for a minor spill:

- Contain the spread of the spill.
- Recover spill materials.
- Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills that are below reportable quantities, are not hazardous, and 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 in order to contain the spill. Semi-significant spills should be cleaned up immediately using the following practices:

- Contain the spread of the spill.
- Notify the spill cleanup coordinate or project foreman immediately.
- If the spill occurs on paved or impermeable surfaces, clean up using dry methods (absorbent materials, cat litter and/or rags provided in the spill containment kit). Contain the spill by encircling it with absorbent materials to prevent the spread of the material.
- If the spill occurs in dirt areas, the spill can be contained by constructing an earthen berm; spilled material can be excavated and properly dispose of.
- If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant or Hazardous Spills

For significant or hazardous spills, reportable quantities include the following limits:

- For spills of hazardous substances, the federal requirements in 40 CFR 302.4 apply.
- For petroleum products or used oil, the reportable quantity for a spill onto land is 25 gallons, and the reportable quantity directly into water is enough to create a sheen on the water.

In the event of a significant or hazardous spill in excess of reportable quantities, Site personnel shall:

• Notify the TCEQ San Antonio Regional Office by telephone as soon as possible and within 24 hours at (210) 490-3096 between 8 AM and 5 PM. After hours, contact the State of Texas Spill-Reporting Hotline and the State Emergency Response Commission (SERC) at 1-800-832-8224. All emergency phone numbers must be posted at the Site.

- For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 119, and 302, notify the National Response Center at 1-800-424-8802. Notifying the National Response Center does not constitute notice to TCEQ.
- Notification should first be made by telephone and followed up with a written report. Spills reported to the National Response Center can be reported via an online reporting tool.
- The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up a spill until the appropriate and qualified staff have arrived at the job site.
- Other agencies which may need to be notified include, but are not limited to, 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 immediately. Follow company policy when responding to an emergency.

TCEQ Region 13 office (Includes Comal County)	(210) 490-3096
State Emergency Response Center (Spill Reporting)	(800) 832-8224
TCEQ Main Office	(512) 239-3700
National Response Center	(800) 424-8802
New Braunfels Fire Department	(830) 221-4200 911
	<i>7</i> 11
New Braunfels Police Department	(830) 221-4100 911
	911
Comal County Sherriff's Office	(318) 322-2641
USEPA, Region VI	(214) 665-2200
	(800) 887-6063
Comal County Emergency Management Coordinator	(830) 608-8656
Resolute Health Hospital	(844) 815-1858

Vehicle or Equipment Fueling and Maintenance

Fuel or hazardous substances will be stored on-site in the ASTs described in this application. Temporary ASTs with a capacity of 250 gallons or more will not be required during project activities. In the event that fuel trucks are used for on-site vehicle fueling, best management practices will be implemented during fueling and maintenance at the site include the following:

- Inspect on-site vehicles and equipment daily for leaks and conduct repairs immediately.
- 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 on-site.
- Always use secondary containment, such as a drip pan or drop cloth, to catch spills or leaks when removing or changing fluids. Drip pans are to be used where leaks or spills of fuel can occur and where making and breaking hose connections.
- Promptly transfer used fluids to the proper waste or recycling drums; do not leave full drip pans or other open containers lying around.
- Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- Fueling hoses should have check valves to prevent hose drainage after filling.
- Spills and vehicle leaks are to be cleaned up with absorbent materials for dry cleanup methods. The use of water for such cleanups is to be minimized.
- "Topping off" of fuel tanks is discouraged.
- Personnel are not to leave fueling equipment unattended during fueling operations.
- Oil filters disposed of in trash cans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
- 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 it is verified as not leaking.
- Equipment such as valves, pumps, flanges, and connections shall be checked regularly for leaks and be repaired as needed.

In the event of a leak from the ASTs and associated piping, hoses, and dispensers described in this application into the secondary containment structure, spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly. All stormwater accumulating inside the containment structure will be disposed of through an authorized waste disposal contractor.

Administrative Information

The original WPAP approval letter (dated 12 July 2007) and WPAP modification approval letters (dated 6 May 2017 and 26 November 2018) are attached.

JUL 12 2007 13.43

Kathleen Hartnett White, Chairman Larry R. Soward, Commissioner H. S. Buddy Garcia, Commissioner Glenn Shankle, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 12, 2007

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JUL 12 2007

Mr. Jim Addams Holeim (US) Inc. 122 W. Carpenter Freeway, Suite 485 Irving, Texas 75039

COUNTY ENGINEER

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: New

NAME OF PROJECT: New Braunfels Quarry; Located on the north side of FM 482, approximately 3 miles southwest of the intersection with IH 35; New Braunfels ETJ, Texas TYPE OF PLAN: Request for Approval of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer Edwards Aquifer Protection Program ID No. 2643.00; Investigation No. 557130; Regulated Entity No. RN105203939

Dear Mr. Addams:

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 Holcim (US) Inc. on April 6, 2007. Final review of the WPAP was completed after additional material was received on June 14, 2007 and June 25, 2007. As presented to the TCEQ, the Temporary Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

PROJECT DESCRIPTION

The proposed commercial project is a limestone quarry that will have an area of approximately 1,015 acres with 853 acres on the Recharge Zone. Quarrying activities will only occur on the Recharge Zone and be divided into 4 pits separated by 25 foot setbacks from the 100 year floodplain. Fifty foot setbacks will be provided for property boundaries. The total impervious cover for the site is approximately 80 acres. Twelve acres of existing ranch roads, consisting of compacted base material, are located on the recharge zone and the roads will not be widened or improved. Approximately 68 acres of impervious cover is proposed within the transition zone and will include the plant site, a portable building, scale house, truck scale, secondary processing plant, rail siding and cement storage facility. The quarry pit area will have a portable rock crushing plant and a conveyor system to transport product. Quarrying will occur to an elevation no deeper than 25 feet above the maximum potentiometric surface of the Edwards Aquifer stated to be 685 feet in the southern portion and 705 feet in the northern portion of the site. Project wastewater (domestic) will be collected in portable toilets and disposed of by a TCEQ registered waste disposal service.

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

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of storm water runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, various controls describe below will be utilized.

Site Preparation and Excavation/Processing

A two foot high (minimum) earthen berm will direct upgradient water around the plant site.

• A four to six foot high earthen berm will be located on the downgradient side of the plant area and will store storm water runoff from this area.

 Silt fence, earthen berms and rock berms will be constructed to prevent pollutants from entering surface streams and sensitive features.

• A 25 foot natural undisturbed vegetated buffer area will be maintained between the quarry disturbance and the 100 year floodplain.

Pit/Site Closure

Storm water runoff that contacts sediment in the quarry will be retained in the quarry pit.

A request was made for an exception to the requirement of permanent BMP for this project after pit and/or site closure. Based upon the plan review, the justification review, the nature of the regulated activity, the BMPs provided during the excavation and processing phase, TCEQ regulations and consistency with previous quarry approvals pursuant to 30 TAC 213, the TCEQ grants the exception request for not providing BMPs after the quarrying operations have been completed.

GEOLOGY

According to the geologic assessment included with the application, 109 geologic and manmade features exist at the project site. Nineteen features (6 zones, 3 swallow holes, 2 faults, 1 solution enlarged fracture, 2 caves, 3 solution cavities, 1 well and 1 manmade boring) were rated as sensitive (>40). Any sensitive geologic feature in the quarry pit will be undisturbed until mining operations progress near the feature. The feature will be temporarily sealed until the feature can be mined out in the quarrying process. The San Antonio Regional Office conducted a site assessment on June 25, 2007 and found the site to be in general agreement with the geologic assessment.

SPECIAL CONDITIONS

General

- I. The holder of the approved Edwards Aquifer WPAP must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the application.
- II. In addition to the rules of the Commission, the applicant may also be required to comply with federal, state and local ordinance and regulations providing for the protection of water quality.
- III. This approval does not authorize manufacturing of explosives on the site.
- IV. This approval does not authorize the construction of an above ground storage tank facility. A separate AST facility plan shall be submitted and approved by the TCEQ. This AST plan shall provide an illustration that depicts the layout of the plant area including the AST facility, portable building, scale house, truck scale, secondary processing plant, rail siding and cement storage facility and any other structures on the transition zone.
- V. As stated in the WPAP application, a Texas Licensed Professional Geologist will conduct a quarterly survey of the pit area looking for geologic features. Records of the survey shall be maintained at the site and available for review by TCEQ staff for the life of the project.
- VI. As stated in the Westward Environmental, Inc. response dated June 13, 2007, the ranch roads located throughout the project site will not be widened or improved.

VII. It is the responsibility of the applicant to comply with Chapter 11 of the Texas Water Code. This letter does not provide authorization or approval for any regulations of the Watermaster Program of the TCEQ.

VIII. This letter does not provide authorization or approval for any regulations of the U.S. Fish and Wildlife Service.

Best Management Practices

- IX. Intentional discharges of sediment laden storm water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices to meet the requirements of the TPDES General Perinit No. TXR050000 Sector J. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- X. Perimeter berms shall be inspected and maintained annually, or more often if necessary, to ensure functionality. Inspection and maintenance records shall be kept on site and available for review by TCEQ staff for the life of the project. The perimeter berms shall be maintained after closure of the site unless a modification to the approved WPAP is submitted and approved by the TCEQ.
- XI. The BMPs for the plant site and stockpile area shall be operational prior to any crushing, processing, washing, stockpiling, etc.
- XII. Inspection and maintenance records of temporary BMPs shall be kept on site for a period of three years.
- A copy of pages 1-35 through 1-60 of the TCEQ TGM RG-348 (2005) shall be provided and kept on-site as a guide for soil stabilization. Temporary and/or permanent soil stabilization consistent with RG-348 (2005) shall be provided on all earthen berm structures
- XIV. All other temporary BMPs provided at the site shall conform to RG-348 (2005).
- XV. Any sediment deemed as waste or hazardous waste that is removed from any temporary BMP structure (silt fence, berms) or from the quarry pit area shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

Other

- Pursuant to 30 TAC §213.4(j)(2&3), the holder of an approved Edwards Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer; and any development of land previously identified as undeveloped in the original water pollution abatement plan.
- XVII. Within 60 days of the date of this letter provide written confirmation that the three wells to be abandoned have been properly abandoned.
- XVIII. Within 60 days of the date of this letter address the pipeline along the eastern boundary of the site. Disclose the contents and the owner of the pipeline and describe how the pipeline will be protected during the earthen berm construction.
- For clarification, feature recognition training will be provided for plant and quarry operators and personal. If a geologic feature is discovered by personal or operators, a Texas Licensed Professional Geologist shall further evaluate the feature and submit the required notifications and forms to the TCEQ.

Mr. Jim Addams July 12, 2007

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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.

Prior to Commencement of Construction:

- 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.
- 3. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 4. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 5. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and 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.
- 6. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The 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.
- 7. 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:

- 8. 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.
- 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

JUL 12 2007

Mr. Jim Addams July 12, 2007 Page 5

COUNTY ENGINEER

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.

- 10. Six wells exist on site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 11. 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.
- 12. 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.
- 13. 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:

- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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.

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Mr. Jim Addams July 12, 2007 Page 6

COUNTY ENGINEER

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

If you have any questions or require additional information, please contact Charlyne Fritz of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4065.

Sincerely,

Glenn Shankle

Executive Director

Texas Commission on Environmental Quality

GS/CEF/eg

Enclosure:

Deed Recordation Affidavit, Form TCEQ-0625

cc:

Mr. Gary Nicholls, P.E., Westward Environmental, Inc.

Mr. Bruce Boyer, City of New Braumfels

Mr. Robert Potts, Edwards Aquifer Authority

Mr. Tom Hornseth, Comal County

TCEQ Central Records, Building F, MC 212

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



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution
May 6, 2015

Mr. Paul Detterline Capitol Aggregates, Inc. P.O. Box 33240 San Antonio, TX 78265

Re: Edwards Aquifer, Comal County

Name of Project: Capitol Aggregates, Inc. Solms Operations; Located along the north side of FM482, 0.75 miles west of the intersection of FM482 and Krueger Canyon; New Braunfels, Texas

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

Regulated Entity No. RN10203939; Investigation No. 1227681; Additional ID No. 13-15021001

Dear Mr. Detterline:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the Modification of a WPAP application for the above-referenced project submitted to the San Antonio Regional Office by Westward Environmental, Inc. behalf of Capitol Aggregates, Inc. on February 10, 2015. Final review of the WPAP was completed after additional material was received on April 1, 2015. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

BACKGROUND

A Water Pollution Abatement Plan (WPAP) was approved by the TCEQ on July 12, 2007. The site consisted of 853 acres total over the Recharge Zone and 162 acres total over the Transition Zone. The total impervious cover for the site was to be 80 acres. Quarrying was to occur to an elevation no deeper than 25 feet above the maximum potentiometric surface of the Edwards Aquifer. The potentiometric surface is approximately 660 feet amsl in the southern portion and 680 feet amsl in

the northern portion. Project wastewater (domestic) will be collected in portable toilets and disposed of by a TCEQ registered waste disposal service.

PROJECT DESCRIPTION

The commercial project has an area of approximately 1,015 acres. Surface drainage from the Transition Zone flows away from the Recharge Zone. The overall site will have impervious cover of approximately 169 acres (16.7 percent of 1,015 acres). The WPAP Modification application proposes numerous modifications including the following; increase the total area to be mined from 613 acres to 700 acres, move the secondary crushing plant onto the Recharge Zone, construct a pre-check scale in the quarry pit, construct a shop/office building near the proposed plant entrance, and construct a hot mix asphalt plant and concrete batch plant. The quarry operation will install lined temporary settling ponds in the Recharge Zone and unlined ponds in the Transition Zone portion of the site. The unlined pond bottoms in the Transition Zone will be more than 100 feet above Edwards Limestone, for water and fines generated by the aggregate production washing process. The quarry pit will be excavated to an elevation of 685 feet amsl in the southern portion and 705 feet amsl in the northern portion of the site. Project wastewater will be captured through the use of portable toilets.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, one wet basin, numerous engineered vegetated filter strips, and numerous natural vegetated filter strips, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 79,796 pounds (79,796 pounds designed) of TSS generated from the 96 acres of impervious cover in the Recharge Zone. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

A wet basin will be constructed to treat 65 acres of impervious cover. The required permanent pool volume, including 20% for sediment accumulation, is 1,108,570 cubic feet (1,108,570 cubic feet provided). The required detention volume is an additional 652,100 cubic feet. The TSS removal provided by the wet basin is 58,344 pounds annually. The wet basin was oversized to compensate for 10 acres of uncaptured impervious cover.

Numerous fifty foot natural vegetated buffer strips will remove 19,298 pounds of TSS from 21.5 acres of impervious cover. The fifty foot natural VFSs shall have a uniform slope of less than 10 percent and shall extend along the entire length of the contributing area.

Numerous engineered vegetated filter strips will remove 2,154 pounds of TSS from 2.4 acres of impervious cover. The vegetated filter strips shall have a uniform slope of less than 20 percent and vegetated cover of at least 80 percent which will extend along the entire length of the contributing area and will be free of gullies or rills that can concentrate overland flow. The contributing area shall be relatively flat to evenly distribute runoff, and the impervious cover in the direction of flow shall not exceed 72 feet.

GEOLOGY

According to the geologic assessment included with the application, the majority of the site is the exposed Person Formation and in the northern portion of the site, Buda Limestone, Del Rio Clay,

and Georgetown Formation were identified. The combined geologic and manmade features numbered 113; 19 of which were sensitive per the 2007 Geologic Assessment. The nineteen sensitive features consist of 6 zones (2 closed depression zones, 1 cave zone, 3 solution cavity zones), 3 swallow holes, 2 faults, 1 solution enlarged fracture, 2 caves, 3 solution cavities,1 well, and 1 manmade boring. The July 12, 2007 TCEQ approval letter indicated that sensitive features (S-21 sinkhole, S-23 solution cavity, S-36 cave, S-70 solution cavity, S-71 solution enlarged fractures, S-78 zone of solution cavities, and S-100 sinkhole) in the proposed quarry pit can be temporarily sealed and then mined out as the mining operation proceeds near the features. This application requests to temporarily seal and to mine through features; S-57 manmade boring; S-60 sinkhole; and S-83 water well. The features to be sealed are in addition to the features previously approved for temporary sealing and ultimate mine through. This request is approved. The San Antonio Regional Office did not conduct a site assessment.

SPECIAL CONDITIONS

The request to cease performance of quarterly geologic assessments by a Registered
Professional Geoscientist is approved based on your submission of a suitable annual training
program, employee observations, and recordkeeping program. Retain records of employee
training and of visual observations made by site employees for a period of five years from the
date of training and of observations. Records shall be presented to TCEQ upon request.

2. As proposed, either flowable fill or concrete will be utilized to temporarily seal sensitive features within the quarry pit.

3. The approved permanent pollution abatement measures shall be operational prior to the installation of new impervious cover within their respective drainage area.

4. All sediment and/or media removed from the permanent pollution abatement measures during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

5. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated July 12, 2007.

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. Eleven water wells/boreholes are located on-site, however, two have been previously plugged and abandoned. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
- 15. Intentional discharges of sediment laden storm water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

- 18. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.
- 19. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio

Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

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

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

Sincerely,

Lynn Bumguardner, Water Section Manager

San Antonio Region

Texas Commission on Environmental Quality

LMB/MI/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625

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

cc: Ms. Mary Ellen Schulle, P.E., Westward Environmental, Inc.

Mr. Thomas Hornseth, P.E., Comal County Engineer Mr. Charlie Thomas, P.E., City of New Braunfels

Mr. Roland Ruiz, General Manager, Edwards Aquifer Authority

TCEQ Central Records, Building F, MC 212

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



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 26, 2018

Mr. Paul Detterline Capitol Aggregates, Inc. 11551 Nacogdoches Road San Antonio. Texas 78217

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Capitol Aggregates Solms Operation; 1026 Solms Quarry Road; ETJ of New Braunfels and ETJ of Schertz, Texas

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

Regulated Entity No. RN105203939; Additional ID No. 13000782

Dear Mr. Detterline:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Modification for the above-referenced project submitted to the San Antonio Regional Office by Geosyntec Consultants on behalf of Capitol Aggregates, Inc. on September 26, 2018. Final review of the WPAP Modification was completed after additional material was received on November 6, 2018. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

BACKGROUND

The New Braunfels Quarry WPAP was approved by letter dated July 12, 2007. The site consisted of 853 acres over the Recharge Zone and 162 acres over the Transition Zone (1,015 acres total). The total impervious cover for the site was to be 80 acres. Quarrying was to occur to an elevation no deeper than 25 feet above the maximum potentiometric surface of the Edwards Aquifer. The potentiometric surface is approximately 660 feet amsl (above mean sea level) in the southern portion and 680 feet amsl in the northern portion of the site. Permanent BMPs included earthen berms, natural undisturbed vegetative buffers and the retainment of stormwater runoff within the quarry pit.

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The Capitol Aggregates Solms Operation WPAP Modification was approved by letter dated May 6, 2015 for an area of approximately 1,015 acres with 853 acres over the Recharge Zone and 162 acres over the Transition Zone. Surface drainage from the Transition Zone flows away from the Recharge Zone on the site. Approximately 169 acres (16.7 percent of 1,015 acres) of impervious cover was proposed with 96 acres on the Recharge Zone. The WPAP Modification proposed numerous modifications including the following: increase the total area to be mined from 613 acres to 700 acres, move the secondary crushing plant onto the Recharge Zone, construct pre-check scale in the quarry pit, construct a shop/office building near the proposed plant entrance, and construct a hot mix asphalt plant and concrete batch plant. The quarry pit was proposed to be excavated to an elevation of 685 feet amsl in the southern portion and 705 feet amsl in the northern portion of the site. Permanent BMPs included a wet basin, numerous 50-foot natural vegetative buffer strips and numerous engineered vegetative filter strips.

PROJECT DESCRIPTION

This modification reduces the amount of impervious cover on the entire 1,015-acre site to 93.2 acres (9.18 percent). A total of 20.1 acres of impervious cover is proposed on the Recharge Zone with 14.0 acres consisting of pre-existing ranch roads. In summary, the following modifications are proposed: removal of the hot mix asphalt plant area consisting of 55 acres of impervious cover, removal of the northern stockpile and equipment storage area, removal of the concrete batch plant area (included in 55 acres of impervious cover), removal of the wet basin, removal of the haul road along the western site perimeter and Stream Crossing 2 (20.9 acres of impervious cover), and the addition of engineered vegetative filter strips for treatment of Stream Crossing 1 and 3. According to a letter dated March 22, 2018, signed by Mr. Robert Boyd, P.E., with Comal County, the site is suitable for the use of on-site sewage facilities which will be located on the Transition Zone.

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, numerous engineered vegetative filter strips (VFS), designed using the TCEQ technical guidance document, <u>Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005)</u>, will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for the site is 4,488 pounds of TSS generated from 5.0 acres of impervious cover. The approved measure meets the required 80 percent removal of the increased load in TSS caused by the project.

The proposed 15-foot wide VFS are associated with two stream crossings, plus the entrance road and will treat a total of 5.0 acres of impervious cover with 4,488 pounds of TSS removal. The VFS shall have a uniform slope of less than 20 percent and vegetated cover of at least 80 percent which will extend along the entire length of the contributing area and will be free of gullies or rills that can concentrate overland flow. The contributing area shall be relatively flat to evenly distribute runoff, and the impervious cover in the direction of flow shall not exceed 72 feet.

In addition, stormwater runoff that contacts sediment within the quarry will be retained within the quarry pit. A total of 1.1 acres of impervious cover exists within the quarry pit. Earthen berms will be implemented along the quarry periphery.

GEOLOGY

According to the geologic assessment included with the application, a portion of the site is located on the Buda Limestone, Del Rio Clay, and Georgetown Formation. The majority of the site is located on the Person Formation. The combined geologic and manmade features totaled 113 of which 19 were sensitive per the 2007 Geologic Assessment. The July 12, 2007 TCEQ approval letter indicated that sensitive features S-21 (sinkhole), S-23 (solution cavity), S-36 (cave), S-70 (solution cavity), S-71 (solution enlarged fractures), S-78 (zone of solution enlarged fractures) and S-100 (sinkhole) in the

proposed quarry pit can be temporarily sealed and then mined out as the mining operation proceeds near features. The May 6, 2015 TCEQ approval letter indicated that feature S-57 (manmade boring), S-60 (sinkhole) and S-83 (water well) can be temporarily sealed and then mined out in addition to the previously approved features. The San Antonio Regional Office site assessment conducted on October 26, 2018 revealed that the site was generally as described in the application.

SPECIAL CONDITION

This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated July 12, 2007 and subsequent modification dated May 6, 2015.

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. Ten 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.

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,

Lynn Bumguardner, Water Section Manager

San Antonio Region

Texas Commission on Environmental Quality

LB/DPM/eg

cc:

Enclosures: Deed Recordation Affidavit, Form TCEQ-0625

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

Mr. Brandon Klenzendorf, Ph.D., P.E., Geosyntec Consultants

Mr. Robert Boyd, P.E., Comal County Mr. Mark Enders, City of New Braunfels

Mr. Brian James, City of Schertz

Mr. H. L. Saur, Comal Trinity Groundwater Conservation District

Mr. Roland Ruiz, Edwards Aguifer Authority

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: J. Brandon Klenzendorf, P.E.

Date: 5.22.2023

Signature of Customer/Agent:

Regulated Entity Name: Capitol Aggregates Solms Operation

Project Information

Potential Sources of Contamination

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

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

The following fuels and/or hazardous substances will be stored on the site: <u>Diesel fuel, grease lubricant, hydraulic oil, gear oil, motor oil, transmission oil, gasoline, and used oil.</u>

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.
Se	equence of Construction
5.	Attachment C - Sequence of Major Activities. A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.
	 For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given. For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.
6.	Name the receiving water(s) at or near the site which will be disturbed or which will

Temporary Best Management Practices (TBMPs)

receive discharges from disturbed areas of the project: Dry Comal Creek

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

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

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

	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.
\boxtimes	N/A
12. 🔀	Attachment I - Inspection and Maintenance for BMPs. A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.
13. 🔀	All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.
14. 🔀	If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
15. 🔀	Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.
16. 🔀	Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

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

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

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

Administrative Information

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

Temporary Stormwater Section Form (TCEQ-0602) Supplemental Information

The information presented in the attachments to form TCEQ-0602 apply specifically to the tank storage area associated with this AST Plan modification application (Tank Storage Area B). Temporary stormwater control measures identified in the original approved WPAP, which are located outside of the tank storage area, are still applicable and will not be modified.

Attachment A – Spill Response Actions

The objective of this section is to describe measures to prevent or reduce the discharge of pollutants to drainage systems or water courses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

Employee Education

Measures must be implemented to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees. Employee training programs must include the following, at a minimum:

- awareness that different materials pollute in different amounts and the definition of a "significant spill" for each material used;
- awareness of the appropriate response for "significant" and "insignificant" spills and when a spill must be reported to the TCEQ;
- potential dangers to humans and the environment from spills and leaks;
- hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into routine safety meetings);
- establish a continuing education program to indoctrinate new employees; and
- have representatives oversee and enforce proper spill prevention and control measures.

General Measures

The following general measures for spill response actions shall be implemented at the Site:

- To the extent that the work can be accomplished safely, contain and immediately clean up spills of oil, petroleum products, substances listed under 40 CFR parts 110, 117 and 302, and sanitary and septic wastes.
- Store hazardous materials and wastes in covered containers and protect from vandalism.

- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Train employees in spill prevention and cleanup.
- Designate responsible individuals to oversee and enforce control measures.
- Cover spills and protect them from stormwater run-on during rainfall to the extent that it does not compromise cleanup activities.
- Do not bury or wash spills with water.
- Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- 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.
- Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- Place Safety Data Sheets (SDSs), 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.
- Keep waste storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

A spill containment kit and cleanup materials shall be stored where they are readily accessible. The Site's Spill Coordinator shall be designated to oversee and enforce control measures and maintain and restock the spill containment kit, as needed. Clean up leaks and spills immediately. Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent materials for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste. Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly.

Minor Spills

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. Use absorbent materials on small spills rather than washing the area with water or burying the spill. Absorbent materials should be promptly removed and disposed of properly. Follow the practices below for a minor spill:

- Contain the spread of the spill.
- Recover spill materials.
- Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills that are below reportable quantities, are not hazardous, and 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 in order to contain the spill. Semi-significant spills should be cleaned up immediately using the following practices:

- Contain the spread of the spill.
- Notify the Spill Coordinator or project foreman immediately.
- If the spill occurs on paved or impermeable surfaces, clean up using dry methods (absorbent materials, cat litter and/or rags provided in the spill containment kit). Contain the spill by encircling it with absorbent materials to prevent the spread of the material.
- If the spill occurs in dirt areas, the spill can be contained by constructing an earthen berm; spilled material can be excavated and properly dispose of.
- If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant or Hazardous Spills

For significant or hazardous spills, reportable quantities include the following limits:

- For spills of hazardous substances, the federal requirements in 40 CFR 302.4 apply.
- For petroleum products or used oil, the reportable quantity for a spill onto land is 25 gallons, and the reportable quantity directly into water is enough to create a sheen on the water.

In the event of a significant or hazardous spill in excess of reportable quantities, Site personnel shall:

• Notify the TCEQ San Antonio Regional Office by telephone as soon as possible, and within 24 hours, at (210) 490-3096 between 8 AM and 5 PM. After hours, contact the State of Texas Spill-Reporting Hotline and the State Emergency Response Commission (SERC) at 1-800-832-8224. All emergency phone numbers must be posted at the Site.

- For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 119, and 302, notify the National Response Center at 1-800-424-8802. Notifying the National Response Center does not constitute notice to TCEQ.
- Notification should first be made by telephone and followed up with a written report. Spills reported to the National Response Center can be reported via an online reporting tool.
- The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up a spill until the appropriate and qualified staff have arrived at the job site.
- Other agencies which may need to be notified include, but are not limited to, 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 immediately. Follow company policy when responding to an emergency.

TCEQ Region 13 office (Includes Comal County) State Emergency Response Center (Spill Reporting)	(210) 490-3096 (800) 832-8224
TCEQ Main Office	(512) 239-3700
National Response Center	(800) 424-8802
New Braunfels Fire Department	(830) 221-4200 911
New Braunfels Police Department	(830) 221-4100 911
Comal County Sherriff's Office	(318) 322-2641
USEPA, Region VI	(214) 665-2200 (800) 887-6063
Comal County Emergency Management Coordinator	(830) 608-8656
Resolute Health Hospital	(844) 815-1858

Vehicle or Equipment Fueling and Maintenance

Fuel or hazardous substances will be stored on-site in the ASTs described in this application during project activities. Temporary ASTs with a capacity of 250 gallons or more will not be required during project activities. In the event that fuel trucks are used for on-site vehicle fueling, BMPs will be implemented during fueling and maintenance at the Site include the following:

- Inspect on-site vehicles and equipment daily for leaks and conduct repairs immediately.
- 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 on-site.
- Always use secondary containment, such as a drip pan or drop cloth, to catch spills or leaks when removing or changing fluids. Drip pans are to be used where leaks or spills of fuel can occur and where making and breaking hose connections.
- Promptly transfer used fluids to the proper waste or recycling drums; do not leave full drip pans or other open containers unattended for longer than necessary.
- Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- Fueling hoses should have check valves to prevent hose drainage after filling.
- Spills and vehicle leaks are to be cleaned up with absorbent materials for dry cleanup methods. The use of water for such cleanups is to be minimized.
- "Topping off" of fuel tanks is discouraged.
- Personnel are not to leave fueling equipment unattended during fueling operations.
- Oil filters disposed of in trash cans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
- 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 it is verified as not leaking.
- Equipment such as valves, pumps, flanges, and connections shall be checked regularly for leaks and be repaired as needed.

Portable Toilet Maintenance

Portable toilets will be used at the Site and will be handled and maintained as follows during construction. Portable toilets must be empty before transporting them. Toilets shall be securely fastened to transport trucks; hand trucks, dollies, or power tailgates shall be used whenever possible. Portable toilets shall be located at least 20 feet from the nearest storm drain inlet or sensitive feature buffer area (note that no sensitive features were identified near the tank storage

area in the Geologic Assessment). Toilets shall be located on a level ground surface, with clear access, and secured with a stake driven into the ground to prevent tipping by accident, weather, or vandalism.

During construction of Tank Storage Area B, portable toilets shall be inspected frequently for leaks (daily during the work week, or on a weekly basis and after rainfall events) and serviced/sanitized at time intervals that will maintain sanitary conditions (typically weekly or on an as-needed basis). A licensed waste collector shall service all toilets. Suppliers should carry bleach for disinfection, in the event of a spill or leak, and properly store (or cover)/handle chemical materials. Employees shall be trained on these BMPs, prohibitions of stormwater discharge, and wastewater-discharge requirements.

Attachment B – Potential Sources of Contamination

Potential sources of contamination at the project site include soil, concrete material, fueling operations, material loading areas, trash and debris, spills or leaks, and other waste materials generated on-site. The regulated activities associated with this AST Plan Modification will be located immediately adjacent to the Tank Storage Area B.

Attachment C – Sequence of Major Activities

Due to scheduling and worker availability challenges, supply chain concerns, and material availability, Capitol Aggregates may initiate construction activities associated with the concrete pad and structure, roofing system, and electrical systems prior to approval from TCEQ on the AST modification application. Capitol Aggregates will not initiate tank installation or transfer of tank contents until approval is received. The project will consist of constructing Tank Storage Area B, including installation of a concrete pad (approximately 38.5 ft by 35.2 ft), concrete dike (approximately 3 feet in height), roof system, and AST 2 through AST 13 within the existing quarry pit on-site. The main BMP during construction will consist of the quarry pit in accordance with the approved WPAP, and no additional soil disturbance was added as part of this project. The major activities that will occur during the construction activities are described below. Activities for construction of Tank Storage Area B are presented in the order or sequence in which they should be completed.

1) Clear vegetation in Tank Storage Area B in preparation of installing concrete pad for the secondary containment structure; approximately 0.05 acres of existing quarry pit disturbed area will be utilized.

- 2) Install concrete pad, concrete dike, and roof system.
- 3) Install AST 2 through AST 13.

Attachment D – Temporary Best Management Practices and Measures

Overview

The project consists of constructing Tank Storage Area B, which includes installation of a concrete pad (approximately 38.5 ft by 35.2 ft), concrete dike (approximately 3 feet in height), roof system, and AST 2 through AST 13 within the existing quarry pit area on-site. The main BMP during construction consists of the quarry pit in accordance with the approved WPAP, and no additional soil disturbance will be added. Stormwater runoff from upgradient, disturbed quarry areas will be routed around the tank storage area. Only a minimal area, approximately 0.05 acres, will be utilized to install the concrete pad and ASTs associated with Tank Storage Area B. Although Tank Storage Area B is located within the existing quarry pit, immediate stabilization of the concrete pad will occur. Since the Tank Storage Area B is located within the existing quarry pit, which is already designated as a disturbed area, only limited, temporary BMPs during construction will be required, as described below.

Erosion Control BMPs

The purpose of soil stabilization is to provide a ground cover that limits the rainfall impact energy, provides a limited amount of water storage through rainfall interception, and limits sheet flow runoff velocity by increasing surface roughness. In the natural condition, soil is stabilized by native vegetation. Details of the soil stabilization BMPs that will be implemented are listed below.

• Concrete – Tank Storage Area B includes a concrete pad, which is an effective form of permanent stabilization.

Dust Control

The purpose of dust control is to prevent blowing and movement of dust from exposed soil surfaces, reduce on-site and off-site damage, reduce health hazards, and improve traffic safety. Fugitive dust is emitted during construction (i.e., excavation, vehicle traffic, human activity) and as a result of wind erosion over the exposed earth surfaces. Proper management practices for dust control reduce or prevent wind erosion by protecting and roughening the soil surface and reducing the surface wind velocity.

Dust control was not expected to be an issue for Tank Storage Area B due to the small impacted area and limited duration of disturbed conditions. However, specific BMPs for dust control are listed below:

• Sprinkling – Sprinkling ground surfaces with water until it is moist is an effective dust control method. When water is used for dust control, the water should be applied such that runoff does not occur.

Sediment Control BMPs

The purpose of a surface water diversion structure is to limit the length of slope over which surface water runoff can travel as sheet flow or shallow concentrated flow. The diversion concentrates and laterally conveys surface water in a non-erosive manner. Since Tank Storage Area B is located in the existing permitted quarry pit, the main BMP for sediment control is the quarry pit itself. No additional disturbed area was added as part of this project.

Non-Structural BMPs

Non-structural BMPs should be identified and integrated into any stormwater management program. As with any long-term program, effective implementation of these BMPs may require establishing specific criteria and standard procedures for various types of facilities or operations, and personnel training. In many cases, these procedures are simply "common sense" applied to routine activities. The primary objective of these measures is to prevent or reduce the amount of contaminants released to surface waters; however, the pollutant reduction that can be attributed to these measures has not been quantified. This discussion of non-structural BMPs emphasizes practices to achieve source control and pollution containment and prevention. These BMPs can also improve the operation and maintenance of structural stormwater management systems.

Non-structural BMPs such as preserving natural runoff conditions and maintaining natural vegetated areas will be implemented at the Site. Good housekeeping practices such as street sweeping will be utilized in the event that tracking of sediment onto public roadways is observed. Proper solid waste management will be used to control the accumulation of litter. Solid wastes and litter that accumulate on the land are easily transported by runoff. Appropriate placement of waste receptacles should be considered by the contractor. Regularly scheduled maintenance of these receptacles and signage can encourage their use. Spill response and prevention, including employee training, are non-structural BMPs that will be used to reduce potential pollution.

BMPs to Prevent Pollution that Originates Upgradient from the Site

Stormwater runoff that originates upgradient from the tank storage area is expected to be minimal, consisting mostly of runoff from the adjacent quarry pit areas. Since Tank Storage Area B is located entirely within the existing permitted quarry pit, the main BMP for preventing pollution that originates upgradient from the project site is the existing earthen berm around the quarry pit itself.

BMPs to Prevent Pollution that Originates On-Site or Flows Off-Site

Since Tank Storage Area B is located entirely within the existing quarry pit, the main BMP for preventing pollution that originates from the project site is the quarry pit itself.

BMPs to Prevent Pollution from Entering Surface Streams, Sensitive Features, or the Aquifer

Sensitive features are not expected to be a concern near Tank Storage Area B, as none were identified in the Geologic Assessment. The BMPs described above will be used to manage runoff that discharges to off-site surface streams.

BMPs to Maintain Flow to Sensitive Features

Sensitive features are not located within Tank Storage Area B, as identified in the Geologic Assessment. Therefore, BMPs are not required to maintain flow to sensitive features since they are not present. In the event that a sensitive feature is identified during TCEQ inspection or during construction activities, work activities will stop in the vicinity of the feature, TCEQ will be notified, temporary sediment and erosion controls will be implemented and remain in place until the feature closure methods have been completed, and a feature protection plan will be submitted to TCEQ for approval before commencing construction activities in the vicinity of the feature.

Attachment E – Request to Temporarily Seal a Feature

Not applicable. Sensitive geologic or manmade features are not located near the tank storage area; therefore, a Request to Temporarily Seal Features is not required.

<u>Attachment F – Structural Practices</u>

Structural practices can be used to divert flows away from exposed soils, to store flows, or to limit runoff discharge of pollutants from exposed areas of the Site. Since Tank Storage Area B is

located entirely within the existing quarry pit, the main BMP for preventing pollution that originates from the project site is the quarry pit itself. Placement of structural practices in the floodplain was avoided.

Attachment G – Drainage Area Map

Construction activities associated with the Tank Storage Area B installation did not disturb additional areas greater than 10 acres at one time. Therefore, a temporary sediment basin was not required for this project.

<u>Attachment H – Temporary Sediment Pond(s) Plans and Calculations</u>

Not applicable. The disturbed acreage is less than 10 acres; therefore, a temporary sediment pond is not required during construction.

Attachment I – Inspection and Maintenance for BMPs

Structural and non-structural BMPs should be inspected weekly and after each rainfall event of 0.5 inches or greater. Written documentation of these inspections should be kept during the course of construction at the project site which has been completed at the time of the submittal of the AST Plan Modification application. A report summarizing the scope of the inspection, the date of the inspection, and major observations relating to the implementation of BMPs must be documented. Major observations include: the location of discharges of sediment or other pollutants from the Site; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed. Actions taken as a result of inspections must be described on the inspection report. Reports must identify any incidence of non-compliance. The names and qualifications of personnel making the inspections must be included on each report.

All BMPs must be maintained in effective operating condition. If sediment escapes the Site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts to water quality and prior to the next rain event, if feasible. 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 routinely). Erosion from storms or other damage should be repaired as soon as practical by regrading the area and applying

new seed. Any sediment deposited on the roadway shall be swept as necessary and within the same day as discovery.

During construction activities, stormwater will not require authorization to discharge under the TPDES General Permit No. TXR150000 for construction activities since the disturbed area is less than 1.0 acres (approximately 0.05 acres will be disturbed).

If periodic inspections by the contractor or other information indicate a control has been used inappropriately, or incorrectly, the contractor must replace or modify the control for Site situations.

Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices

Due to scheduling and worker availability challenges, supply chain concerns, and material availability, Capitol Aggregates may initiate construction activities associated with the concrete pad and structure, roofing system, and electrical systems prior to approval from TCEQ on the AST modification application. Capitol Aggregates will not initiate tank installation or transfer of tank contents until approval is received. A schedule of the interim and permanent soil stabilization practices for the Site must be maintained by the contractor. 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. Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Interim Stabilization

Temporary stabilization measures must be initiated as soon as practicable in portions of the Site where construction activities have temporarily ceased, but no more than 14 days after the construction activities in that portion of the Site have ceased. In areas where temporary stabilization measures are infeasible, the contractor may alternatively utilize temporary perimeter controls. The contractor must document the reason why stabilization measures are not feasible and must demonstrate that the perimeter controls will retain sediment on-site to the extent practicable.

Permanent Stabilization

Permanent stabilization consists of the concrete pad. Areas shall not remain disturbed for more than 14 days after the permanent completion of construction activities. Natural vegetation shall be preserved to the extent practicable.

Capitol Aggregates AST Plan Modification Capitol Aggregates Solms Operation TCEQ-0602, Temporary Stormwater Section

Final stabilization is considered to have occurred when all soil disturbing activities have been completed and a uniform (i.e., evenly distributed, without large bare areas) perennial vegetative cover, with a density of at least 70 percent of the native background vegetative cover for the area, has been established, or equivalent permanent stabilization measures (such as the use of impervious cover) have been employed.

The owner is responsible for the maintenance of these stabilization measures until the applicant informs the TCEQ in writing that another organization or individual has assumed control or ownership of the property.

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: J. Brandon Klenzendorf, P.E. Date: 5.22.2023 Signature of Customer/Agent J. BRANDON KLENZENDOR h. Brandon 120 Regulated Entity Name: Capitol Aggregates Solms Quarry 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. \bowtie N/A 2. These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.

The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs

and measures for this site.

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

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

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

Permanent Stormwater Section Form (TCEQ-0600) Supplemental Information

The information presented in the attachments to form TCEQ-0600 applies specifically to the aboveground storage tank facility associated with this AST Plan modification application (Tank Storage Area B) at the Capitol Aggregates Solms Operation. Permanent pollution abatement measures identified in the approved WPAP consist of engineered vegetated filter strips, natural vegetated buffer areas, rock berm, and the quarry pit during the site preparation and excavation/processing phase. Capitol Aggregates is submitting a modification to their original AST Plan to address the new tanks at Tank Storage Area B (AST 2 through AST 13). Due to scheduling and worker availability challenges, supply chain concerns, and material availability, Capitol Aggregates may initiate construction activities associated with the concrete pad and structure, roofing system, and electrical systems prior to approval from TCEQ on the AST modification application. Capitol Aggregates will not initiate tank installation or transfer of tank contents until approval is received. The project consists of constructing Tank Storage Area B, which includes installation of a concrete pad (approximately 38.5 ft by 37 ft), concrete dike (approximately 3 feet in height), roof system, and AST 2 through AST 13 within the existing quarry pit area on-site. The main BMP during construction will consist of the quarry pit in accordance with the approved WPAP, and no additional soil disturbance will be added as part of this project.

Attachment A – 20% or Less Impervious Cover Waiver

Not applicable. The site associated with this AST Plan modification application will not be used for multi-family residential developments, schools, or small business sites.

<u>Attachment B – BMPs for Upgradient Stormwater</u>

No surface water, groundwater, or stormwater originates upgradient from the site and flows across the site. The Tank Storage Area B Project Site will be located on a concrete slab with a concrete dike that is elevated so that upgradient stormwater runoff flows around the tank storage area. Stormwater runoff that originates upgradient from the tank storage area is expected to be minimal. Additionally, the containment system at Tank Storage Area B will include a covered roofing system to prevent precipitation from entering the containment structure. Due to the limited upgradient area draining to the tank storage area and coverage from the roof, permanent BMPs are not included for upgradient stormwater.

<u>Attachment C – BMPs for On-Site Stormwater</u>

Additional permanent BMPs are not required to treat runoff from the Tank Storage Area B because the impervious cover associated with the area has been addressed by the approved WPAP and will be treated by the quarry pit itself.

<u>Attachment D – BMPs for Surface Streams</u>

Not applicable. Permanent BMPs are not required to prevent pollutants from entering surface streams, sensitive features, or the aquifer because the Tank Storage Area B Project Site is covered under the approved WPAP. Sensitive features are not located within 800 feet of the tank storage area.

Attachment E – Request to Seal a Features

Not applicable. Sensitive geologic or manmade features are not located near the Tank Storage Area B Project Site; therefore, a Request to Seal Features is not required.

<u>Attachment F – Construction Plans</u>

The Construction Plans for the project are submitted as the Scaled Drawings and Site Plan with the Aboveground Storage Tank (AST) Plan application (form TCEQ-0575). All geologic features and structural BMPs in the vicinity of the Tank Storage Area B Project Site and TCEQ construction notes are shown on the Site Plan. Design calculations (TSS removal calculations) are not required for this AST Plan modification application. The approved WPAP modification allows for the quarry pit itself to address runoff from the Tank Storage Area B Project Site.

Attachment G – Inspection, Maintenance, Repair and Retrofit Plan

Not applicable. No additional permanent BMPs are proposed. Updates to the Inspection, Maintenance, Repair and Retrofit Plan in the approved WPAP are not required.

Attachment H - Pilot-Scale Field Testing Plan

Not applicable. BMPs that are not recognized by the TCEQ Executive Director are not proposed for the project. Therefore, a Pilot-Scale Field Testing Plan is not required.

Attachment I – Measures for Minimizing Surface Stream Contamination

Not applicable. The Tank Storage Area B Project Site is located within the existing quarry pit area. The impervious cover associated with the tank storage area has been addressed by the approved WPAP. Therefore, additional measures as part of this AST Plan modification application for minimizing surface stream contamination are not required. The little additional runoff that will be generated from the tank storage area will be attenuated and buffered by the quarry pit, so stream flashing, stronger flows, and increases in in-stream velocities are not expected to occur as a result of this project.

Agent Authorization Form

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

I William Scotty Gerbes ,
Print Name
Vice President - Aggregates, Title - Owner/President/Other
ofCapitol Aggregates, Inc.
Corporation/Partnership/Entity Name
have authorizedJ. Brandon Klenzendorf
Print Name of Agent/Engineer
ofGeosyntec Consultants, 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:

1	2	1	eeth	Ü	
Appli	ican	i' s \$	ignature		

5-9-23 Date

THE STATE OF TEXAS §

County of Bexar §

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

GIVEN under my hand and seal of office on this 9th day of May , 2023



Kathyn Cordoya

Kathryn Cordova
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 7-26-2023

Application Fe	e Form		
Texas Commission on Environm	nental Quality		
Name of Proposed Regulated Er	ntity: Capitol Aggregates S	Solms Operation	
Regulated Entity Location: 1026	Solms Quarry Road, New	Braunfels, Texas 781	<u>32</u>
Name of Customer: Capitol Agg	regates Inc.		
Contact Person: Andrew Frye		e: <u>210-871-7214</u>	
Customer Reference Number (if	issued):CN 604033142		
Regulated Entity Reference Nun		3939	
Austin Regional Office (3373)			
Hays	Travis	☐ W	illiamson
San Antonio Regional Office (33	362)		
Bexar	Medina	Uv	/alde
Comal	Kinney	54	
Application fees must be paid b	y check, certified check, c	or money order, payab	le to the Texa
Commission on Environmental			
form must be submitted with y			
Austin Regional Office	⊠s	an Antonio Regional O	ffice
Mailed to: TCEQ - Cashier	□ c	vernight Delivery to: 1	「CEQ - Cashie
Revenues Section	1	2100 Park 35 Circle	
Mail Code 214	В	uilding A, 3rd Floor	
P.O. Box 13088	Д	ustin, TX 78753	
Austin, TX 78711-3088	(!	512)239-0357	
Site Location (Check All That Ap	oply):		
🔀 Recharge Zone	Contributing Zone	🔀 Transi	tion Zone
Type of P	lan	Size	Fee Due

∑ ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Type of Plan	1	Size	Fee Due
Water Pollution Abatement Plan, (Contributing Zone		
Plan: One Single Family Residentia	l Dwelling	0 Acres	\$0
Water Pollution Abatement Plan, (Contributing Zone		
Plan: Multiple Single Family Reside	ential and Parks	0 Acres	\$0
Water Pollution Abatement Plan, (Contributing Zone		
Plan: Non-residential		0 Acres	\$0
Sewage Collection System		0 L.F.	\$0
Lift Stations without sewer lines		0 Acres	\$0
Underground or Aboveground Sto	rage Tank Facility	10 regulated Tanks	\$ 6,500
Piping System(s)(only)		0 Each	\$0
Exception		0 Each	\$ 0
Extension of Time		0 Each	\$0

Date: <u>5.22.2023</u>

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	Fee
Exception Request	\$500

Extension of Time Requests

Project	Fee
Extension of Time Request	\$150



TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (If other is checked please desc	cribe in space provided.)		
_			
New Permit, Registration or Authorization (Core Data I	Form should be submitted with	the program application.)	
Renewal (Core Data Form should be submitted with the	Other Modification to exist	ting AST Facility Plan	
2. Customer Reference Number (if issued)	Follow this link to search	3. Regulated Entity Reference Nu	umber (if issued)
	for CN or RN numbers in		
CN 604033142	Central Registry**	RN 105203939	
CN 604033142	<u>ochtral neglotry</u>	KN 105205555	
	_		

SECTION II: Customer Information

4. General Cւ	ıstomer Ir	nformation	5. Effective	Date for Cu	ıstome	er Inf	formation	Updat	es (mm/dd,	/уууу)		
☐ New Custor☐ Change in Le		U(Verifiable with the Te	 pdate to Custo xas Secretary o			nptrol	_	•	egulated En ınts)	tity Own	ership	
		ıbmitted here may ı oller of Public Accou	•	utomatical	ly base	ed on	what is c	urrent	and active	with th	he Texas Sec	retary of State
		ne (If an individual, pri		rst: ag: Dag I	lohn)			16	. Contains		- · · · · · · · · · · · · · · · · · · ·	and halour
o. customer	Legai ivaii	ie (ij un maiviaaai, pri	nt iast name jii	st. eg. Doe, 1	Onn			<u>ıŢ nev</u>	v customer,	enter pri	evious Custom	er below:
Capitol Aggrega	ates, Inc.											
7. TX SOS/CP	A Filing N	umber	8. TX State	,	igits)				deral Tax I	D	10. DUNS (applicable)	Number (if
801525417			17427312255					(9 dig	•		008119422	
								/42/:	31225	1		
11. Type of Customer:					☐ Individual I		Partne	Partnership: General Limited				
Government: [City 🔲 0	County 🗌 Federal 📗	Local State	e 🗌 Other			☐ Sole Proprietorship ☐ Other:					
12. Number o	of Employ	ees						13. lı	ndepender	itly Ow	ned and Ope	erated?
0-20	21-100	☑ 101-250 251-	500 501	and higher				⊠ Y€	es	☐ No		
14. Customer	r Role (Pro	posed or Actual) – as i	it relates to the	Regulated E	ntity list	ted or	n this form.	Please	check one o	f the follo	owing	
Owner Occupation	al Licensee	Operator Responsible Pa		vner & Opera VCP/BSA App					Other:			
15. Mailing	P.O. Box	33240										
Address:												
	City	San Antonio		State	TX		ZIP	78265	5		ZIP + 4	3240
16. Country N	Mailing In	formation (if outside	USA)			17.	17. E-Mail Address (if applicable)					
						and	drew.frye@d	capitola	aggregates.c	om		
18. Telephone Number 19. Extension of						ode	ode 20. Fax Number (if applicable)					

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(210) 871-7214 (210) 599-1709

SECTION III: Regulated Entity Information

21. General Regulated Er	ntity Informa	ation (If 'New Re	gulated Entity"	is selected,	a new perm	it applica	tion is al	so required.)		
☐ New Regulated Entity	Update to	Regulated Entity	y Name 🔲 U	odate to Re	gulated Enti	ity Inform	ation			
The Regulated Entity Nat as Inc, LP, or LLC).	me submitte	ed may be updo	ated, in order i	o meet To	CEQ Core D	ata Star	dards (removal of or	ganizatio	nal endings such
22. Regulated Entity Nan	ne (Enter nam	ne of the site whe	re the regulated	action is to	aking place.)	١				
Capitol Aggregates Solms Op	peration									
23. Street Address of the Regulated Entity:	1026 Solms	Quarry Road								
		1								
(No PO Boxes)	City	New Braunfel	State	TX	Z	IP	78132		ZIP + 4	
24. County	Comal									
		If no Stre	et Address is	provided,	fields 25-2	8 are red	quired.			
25. Description to	Project entr	ance is on the no	orth side of FM 4	82 approxi	mately 1.20	O feet to t	he west	of the intersect	ion of Mari	gold Way and FM
Physical Location:	482.			o_ upp. o						Bora 114, and 111
26. Nearest City							State		Nea	rest ZIP Code
New Braunfels							TX		7813	32
Latitude/Longitude are r used to supply coordinat	-		-			Standa	rds. (Ge	ocoding of the	e Physical	Address may be
27. Latitude (N) In Decim	ıal:	29.663533			28. Long	itude (W	/) In De	cimal:	-98.2067	3
Degrees										
	Minutes		Seconds		Degrees			Minutes		Seconds
29		39	48.72	!	Degrees	-98		12		22.58
29 29. Primary SIC Code		39 Secondary SIC	48.72		Degrees Primary N		de	12	ndary NAI	22.58
	30.		48.72	31.			de	12	-	22.58
29. Primary SIC Code	30.	Secondary SIC	48.72	31. (5 (Primary N		de	12 32. Seco r	-	22.58
29. Primary SIC Code (4 digits)	30. (4 d	Secondary SIC	48.72 Code	31. (5 c	Primary N or 6 digits)	AICS Cod	de	12 32. Seco r	-	22.58
29. Primary SIC Code (4 digits)	30. (4 d	Secondary SIC	48.72 Code	31. (5 c	Primary N or 6 digits)	AICS Cod	de	12 32. Seco r	-	22.58
29. Primary SIC Code (4 digits) 1422 33. What is the Primary I	30. (4 d	Secondary SIC igits) this entity? (E	48.72 Code	31. (5 c	Primary N or 6 digits)	AICS Cod	de	12 32. Seco r	-	22.58
29. Primary SIC Code (4 digits) 1422 33. What is the Primary I	30. (4 d	Secondary SIC igits) this entity? (E	48.72 Code	31. (5 c	Primary N or 6 digits)	AICS Cod	de	12 32. Seco r	-	22.58
29. Primary SIC Code (4 digits) 1422 33. What is the Primary I	30. (4 d	Secondary SIC igits) this entity? (E	48.72 Code	31. (5 c	Primary N or 6 digits) 312 CS description	AICS Cod	78265	12 32. Secor (5 or 6 digi	-	22.58
29. Primary SIC Code (4 digits) 1422 33. What is the Primary I	30. (4 d	Secondary SIC igits) this entity? (C	Code On not repeat the	31. (5 o	Primary N or 6 digits) 312 CS description	on.)		12 32. Secor (5 or 6 digi	its)	22.58 CS Code
29. Primary SIC Code (4 digits) 1422 33. What is the Primary I Quarry 34. Mailing Address:	30. (4 d	Secondary SIC igits) this entity? (D 3240 San Antonio	Code On not repeat the	31. (5 of 212) e SIC or NAI	Primary N or 6 digits) 312 CS description	on.)	78265	12 32. Secor (5 or 6 digi	ZIP + 4	22.58 CS Code

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

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□ Dam Safety		Districts	Edwards Aquifer		Emissions In	ventory Air	☐ Industrial Hazardous Waste
			13000495, 13000782	2			
Municipal Solid	i Waste	New Source Review Air	OSSF	[Petroleum S	torage Tank	□ PWS zz
						,71	
Sludge		Storm Water	☐ Title V Air		Tires		Used Oil
☐ Voluntary Clea	nup	☐ Wastewater	☐ Wastewater Agri	culture [Water Right	s	Other:
							3
ECTION	IV: Pr	reparer Inf	ormation				
					_		
10. Name:				41. Title:			
	ımber	43. Ext./Code	44. Fax Number		il Address		
42. Telephone Nu	umber	43. Ext./Code	44. Fax Number		il Address		
42. Telephone Nu			() -		il Address		
42. Telephone Nu () - SECTION 5. By my signature b	V: Au	uthorized S	() - Signature	45. E-Ma	n this form is ti	rue and complet e ID numbers id	e, and that I have signature authority entified in field 39.
42. Telephone Nu () - SECTION 6. By my signature by submit this form of	V: Au below, I certi n behalf of tl	uthorized S	() - Signature owledge, that the inform	45. E-Ma	n this form is to updates to the	rue and complet e ID numbers id Engineer	e, and that I have signature authority entified in field 39.
5. By my signature l	V: Au below, I certi n behalf of tl	uthorized S ify, to the best of my know the entity specified in Sec	() - Signature owledge, that the inform	45. E-Ma	n this form is to updates to the	e ID numbers id	e, and that I have signature authority entified in field 39.