

October 1, 2024

Ms. Monica Reyes Texas Commission on Environmental Quality (TCEQ) Region 13 14250 Judson Road San Antonio, Texas 78233-4480

Re: Cibolo Canyons Resort Hotel – Ice Facility
Recharge Zone Exception Application

Dear Ms. Reyes:

Please find included herein the Cibolo Canyons Resort Hotel – Ice Facility Recharge Zone Exception Application. This Recharge Zone Exception Application has been prepared in accordance with the Texas Administrative Code (30 TAC 213) and current policies for development over the Edwards Aquifer Recharge Zone.

This Recharge Zone Exception Application applies to an approximate 77.75-acre site as identified by the legal limits. Please review the plan information for the items it is intended to address. If acceptable, please provide a written approval of the plan in order that construction may begin at the earliest opportunity.

Appropriate review fees (\$500) and fee application are included. If you have questions or require additional information, please do not hesitate to contact me at your earliest convenience.

Sincerely,

Pape-Dawson Engineers

Ricardo Gomez, P.E. Managing Vice President

Attachments

62\03\28\Word\Reports\WPAP Exception\2024 - Exception Cover Letter.docx

CIBOLO CANYONS RESORT HOTEL – ICE FACILITY

Contributing Zone Plan Exception Request

August 2024 (Rev. October 2024)



CIBOLO CANYONS RESORT HOTEL – ICE FACILITY

Contributing Zone Plan Exception Request



10/1/2024

August 2024 (Rev. October 2024)



EDWARDS AQUIFER APPLICATION COVER PAGE (TCEQ-20705)

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

- 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: Cibolo Canyons Resort Hotel - Ice Facility				ort	2. Re	egulate	ed Entity No.:	104791868	
3. Customer Name: RHP Property SA, L			SA, LLC 4. Custome		er No.:	606169746			
5. Project Type: (Please circle/check one)	New		Modif	Modification		Extension		Exception	
6. Plan Type: (Please circle/check one)	(WPAP)	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Resider	ntial	Non-r	Non-residential			8. Sit	e (acres):	77.75
9. Application Fee:	\$500	.00	10. Permanent E		BMP(s):	Existing 2 Water Basin 3)	Quality Basins (Basin 2 &	
11. SCS (Linear Ft.):	N/A	4	12. AST/UST (No		12. AST/UST (No. Tanks):		N/A		
13. County:	Bex	ar	14. Watershed:						Salado Creek

Application Distribution

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

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

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

Austin Region				
County:	Hays	Travis	Williamson	
Original (1 req.)				
Region (1 req.)		_	_	
County(ies)				
Groundwater Conservation District(s)	Edwards Aquifer AuthorityBarton Springs/ Edwards AquiferHays Trinity Plum 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> </u>				
Region (1 req.)	<u> </u>		_		
County(ies)	<u> </u>				
Groundwater Conservation District(s)	<u>✓</u> Edwards Aquifer Authority <u>✓</u> Trinity-Glen Rose	Edwards Aquifer Authority	Kinney	EAA Medina	EAA Uvalde
City(ies) Jurisdiction	Castle HillsFair Oaks RanchHelotesHill Country VillageHollywood ParkSan Antonio (SAWS)Shavano Park	Bulverde Fair Oaks Ranch Garden Ridge New Braunfels Schertz	NA	San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.
Ricardo Gomez, P.E.
Print Name of Customer/Authorized Agent 10/01/2024
Signature of Customer/Authorized Agent Date

FOR TCEQ INTERNAL USE ONLY		
Date(s)Reviewed: Date Administratively Complete:		
Received From:	Correct Number of Copies:	
Received By:	Distribution Date:	
EAPP File Number:	Complex:	
Admin. Review(s) (No.):	No. AR Rounds:	
Delinquent Fees (Y/N):	Review Time Spent:	
Lat./Long. Verified:	SOS Customer Verification:	
Agent Authorization Complete/Notarized (Y/N):	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 (TCEQ-0587)

General Information Form

Print Name of Customer/Agent: Ricardo Gomez, P.E.

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

Date: 10/01/2024

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:

Sig	nature of Customer/Agent:
	ful I'd
Pi	roject Information
1.	Regulated Entity Name: Cibolo Canyons Resort Hotel - ICE Facility
2.	County: Bexar
3.	Stream Basin: Salado Creek
4.	Groundwater Conservation District (If applicable): Edwards Aquifer Authority and Trinity Glen Rose
5.	Edwards Aquifer Zone:
	Recharge Zone Transition Zone
6.	Plan Type:
	□ WPAP □ AST □ SCS □ UST □ Modification ⋈ Exception Request

7.	Customer (Applicant):	
	Contact Person: Scott Lynn Entity: RHP Property SA, LLC Mailing Address: One Gaylord Drive City, State: Nashville, TN Telephone: (615)316-6758 Email Address: slynn@rymanhp.com	Zip: <u>37214</u> FAX:
8.	Agent/Representative (If any):	
	Contact Person: Ricardo Gomez, P.E. Entity: Pape-Dawson Engineers, Inc. Mailing Address: 2000 NW Loop 410 City, State: San Antonio, Texas Telephone: (210) 375-9000 Email Address: rgomez@pape-dawson.com	Zip: <u>78213</u> FAX: <u>(210) 375-9010</u>
9.	Project Location:	
	 ☐ The project site is located inside the city ☐ The project site is located outside the city ☐ jurisdiction) of San Antonio. ☐ The project site is not located within any 	ty limits but inside the ETJ (extra-territorial
10.		ped below. The description provides sufficient ional staff can easily locate the project and site
	left. Proceed approximately 1.9 mile Bulverde Road approximately 3.3 mi 1.4 miles to TPC Parkway. Travel nor	niles north on Judson Rd. to Loop 1604 and turn s west to Bulverde Road. Then proceed north or les to Evans Road. Travel east on Evans Road for th on TPC Parkway for approximately 1.6 miles The site is located in front of the hotel
11.		showing directions to and the location of the tion and site boundaries are clearly shown on
12.		ge Zone Map . A copy of the official 7 ½ minute ') of the Edwards Recharge Zone is attached.
	 ✓ Project site boundaries. ✓ USGS Quadrangle Name(s). ✓ Boundaries of the Recharge Zone (as Drainage path from the project sites) 	nd Transition Zone, if applicable). 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.
\boxtimes	Survey staking will be completed by this date: Completed.
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. Exi	sting 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:
Prof	nibited 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: X 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

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.

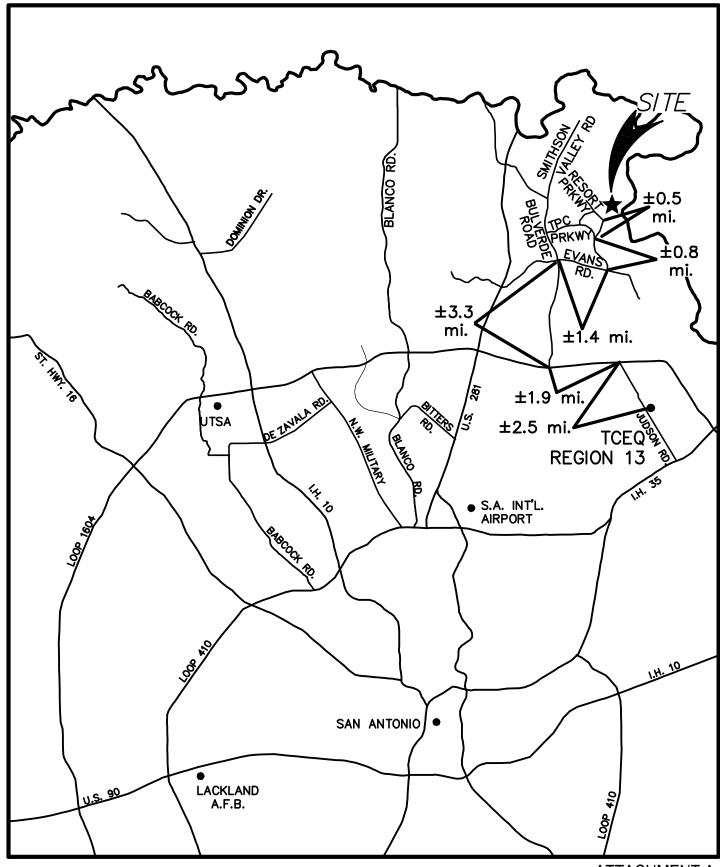
office.

ATTACHMENT A

CIBOLO CANYONS RESORT HOTEL - ICE FACILITY

Recharge Zone Plan Exception Request





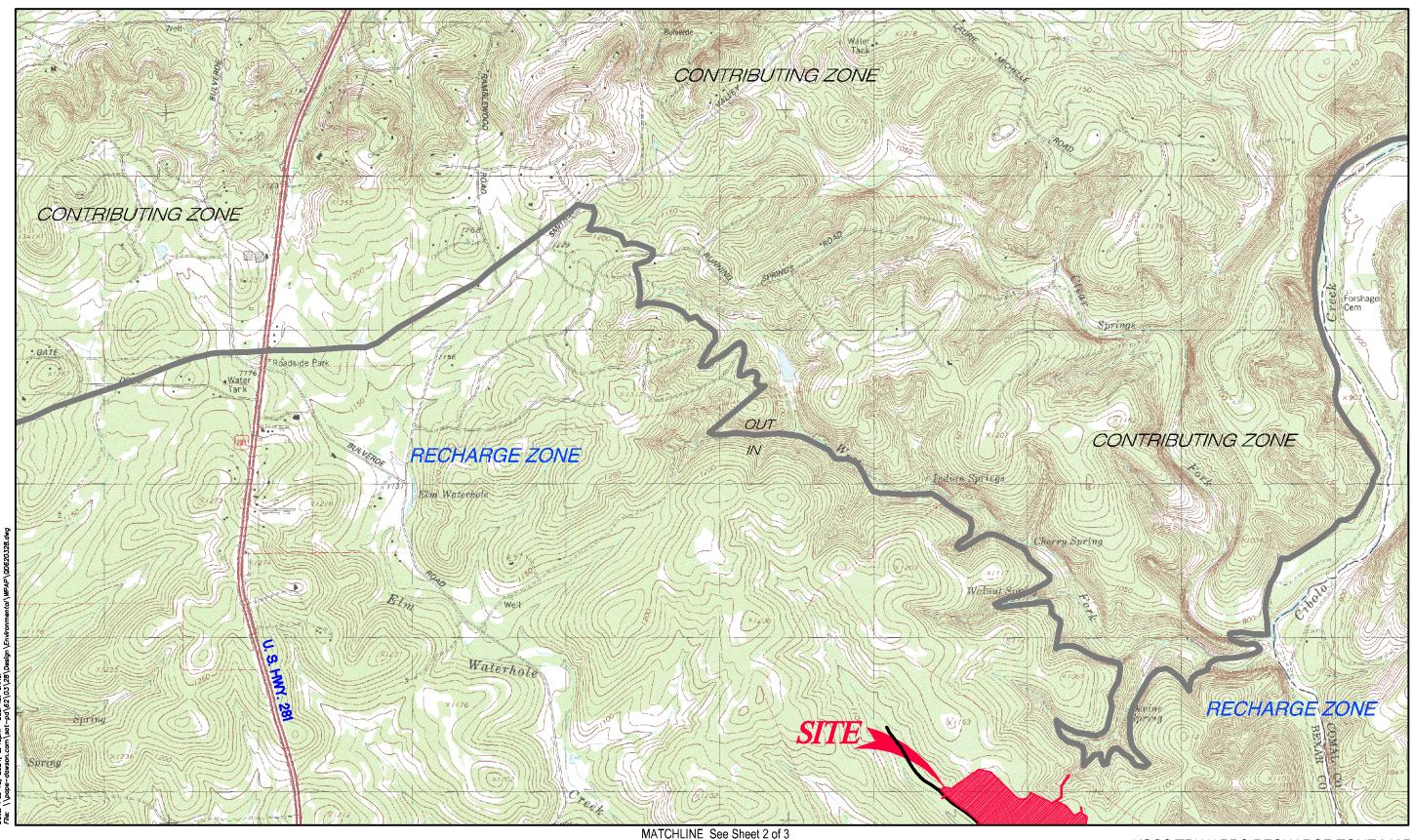
ATTACHMENT A Road Map

ATTACHMENT B

CIBOLO CANYONS RESORT HOTEL - ICE FACILITY

Recharge Zone Plan Exception Request



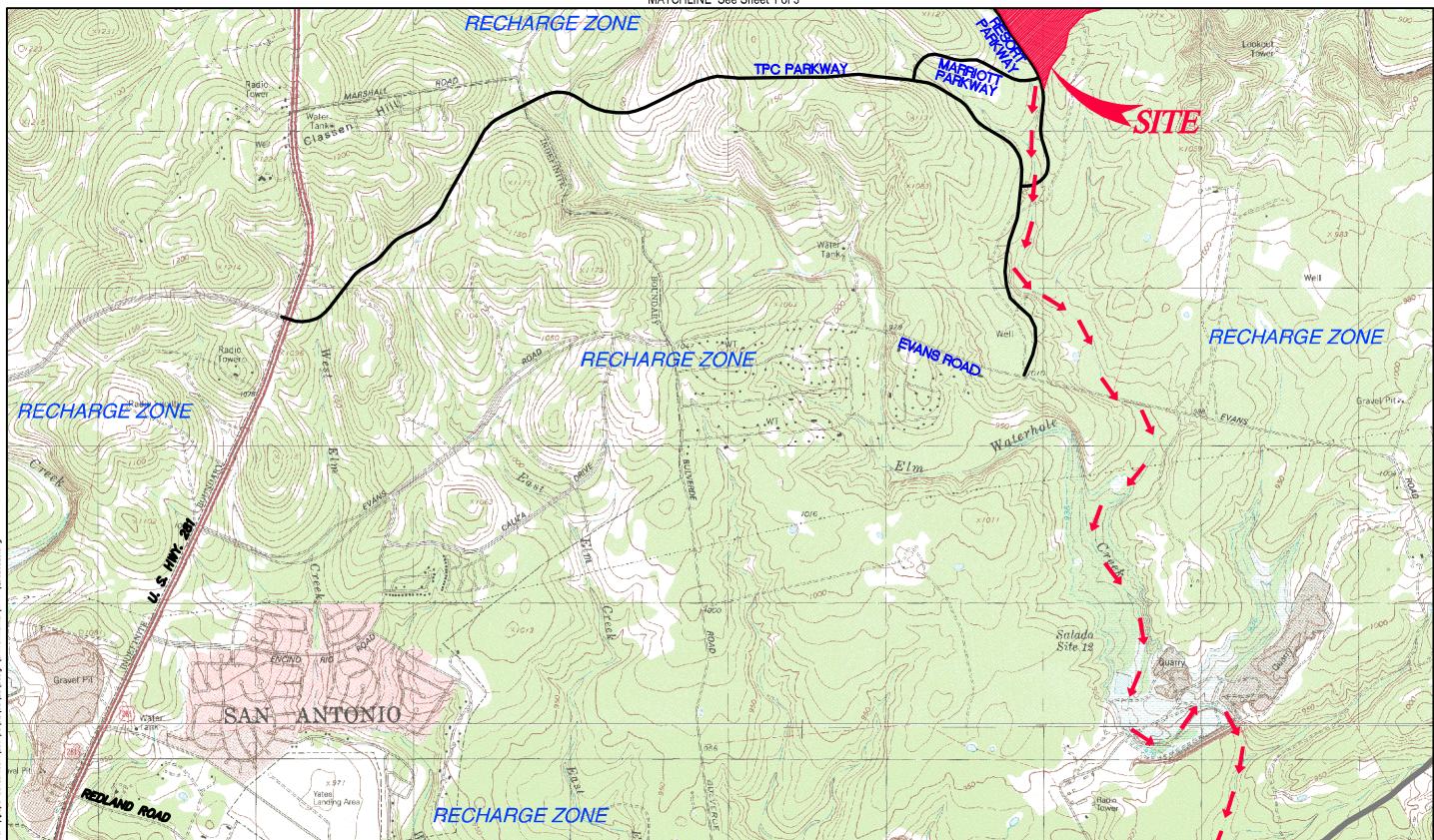


USGS/EDWARDS RECHARGE ZONE MAP Sheet 1 of 3 ATTACHMENT B

CIBOLO CANYONS RESORT HOTEL - ICE FACILITY



Recharge Zone Plan Exception Request MATCHLINE See Sheet 1 of 3



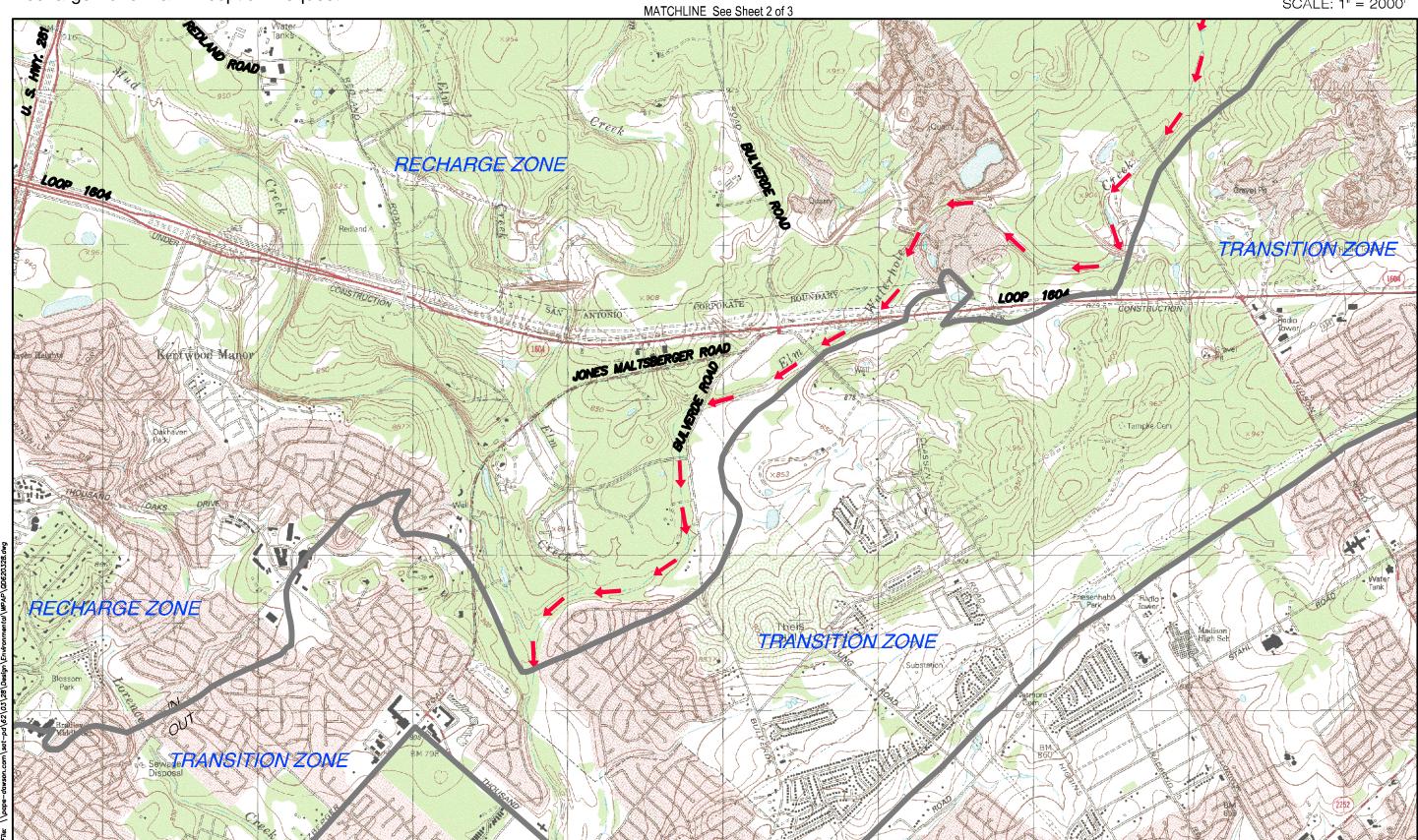
MATCHLINE See Sheet 3 of 3

Pape-Dawson Engineers, Inc.

USGS/EDWARDS RECHARGE ZONE MAP Sheet 2 of 3 ATTACHMENT B

CIBOLO CANYONS RESORT HOTEL - ICE FACILITY Recharge Zone Plan Exception Request





USGS/EDWARDS RECHARGE ZONE MAP Sheet 3 of 3 ATTACHMENT B

ATTACHMENT C

CIBOLO CANYONS RESORT HOTEL – ICE FACILITY Recharge Zone Plan Exception Request

Attachment C - Project Description

Cibolo Canyon Resort Hotel is a commercial development located approximately 2.2 miles east of the intersection of TPC Parkway and Bulverde Road. This exception to the Water Pollution Abatement Plan (WPAP) proposes approximately 0.05 acres of additional proposed impervious cover related to the addition of a concrete sidewalk in the vicinity of the existing ice facility in front of the conference center. The proposed sidewalk will be used by pedestrians as a safe path of travel to navigate to and from the Ice facility in front of the conference center. The site is within the extra-territorial jurisdiction (ETJ) of San Antonio in Bexar County, Texas and lies entirely over the Edwards Aquifer Recharge Zone.

There have been several modifications to the original Cibolo Canyons Resort Hotel WPAP (EAPP ID 13-05103103) the most recent approval, Cibolo Canyons Resort Hotel Ice Facility WPAP (EAPP ID 13001904) approved construction of a concrete slab in front of the existing conference center, additional hardscape and service drive, and consolidation of existing impervious cover. The newly approved increase in impervious cover was 0.58 acres (0.01 percent) for an overall impervious cover of 39.92 acres (51.3 percent). This modification also approved a Jellyfish Filter to treat some of the additional impervious cover and an increase of the impervious cover treatment for basins #2 and #3. Refer to the TCEQ approval letter included in the exhibits section of this application.

With this exception request, the concrete sidewalk will add an approximate 0.02 acres of impervious cover to water quality basin #2 and an approximate 0.03 acres of impervious cover to water quality basin #3. The total impervious cover will increase by approximately 0.05 acres from a total of 39.92 acres to approximately 39.97 acres. No modifications are proposed to the existing permanent best management practices, and all remain properly sized for their watershed and required treatment. Updated pollutant load removal calculations for Water Quality Basin 2 and Water Quality Basin 3 and an overall Treatment Summary Table are provided in the Pollutant Load & Removal Calculations section of this report.

The improvements proposed with this WPAP Exception will not have an associated permanent population nor will they generate additional wastewater. Potable water service for the area is provided by the San Antonio Water System (SAWS) and wastewater from the hotel is disposed of by conveyance to the existing Steven M. Clouse Water Recycling Center. No naturally-occurring sensitive features were identified in the Geologic Assessment within the project limits.



GEOLOGIC ASSESSMENT FORM (TCEQ-0585)

Geologic Assessment

Texas Commission on Environmental Quality

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

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

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

Signature

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

Pri	nt Name of Geologist: <u>Amanda L. Miller</u>	Telephone: <u>210-375-9000</u>
Da	te: <u>4-9-</u> 2015	Fax: <u>210-375-9090</u>
Tex reg Sig	gistration number) nature of Geologist:	Amanda L. Miller Geology 11413
	oject illiormation	X Comments
1.	Date(s) Geologic Assessment was perform January 26, 2007 and September 10,	med: <u>August 15, 2000 through January 26, 2001,</u> <u>2014</u>
2.	Type of Project:	
3.	WPAP SCS Location of Project:	☐ AST ☐ UST
	Recharge Zone Transition Zone	

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Crawford & Bexar stony soils (Cb)	D	2-3
Tarrant association, gently undulating (TaC)	С	1-2
Tarrant association hilly (TaD)	С	1-2

Soil Name	Group*	Thickness(feet)

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

Applicant's Site Plan Scale: $1'' = \underline{100}'$ Site Geologic Map Scale: $1'' = \underline{100}'$

Site Soils Map Scale (if more than 1 soil type): 1'' = 1000'

9. Method of collecting positional data:

	\square	Global Positioning System (GPS) technology. Other method(s). Please describe method of data collection:
10	\boxtimes	The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11	\boxtimes	Surface geologic units are shown and labeled on the Site Geologic Map.
12		Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
		Geologic or manmade features were not discovered on the project site during the field investigation.
13		The Recharge Zone boundary is shown and labeled, if appropriate.
14.		known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If plicable, the information must agree with Item No. 20 of the WPAP Application Section.
		There are (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.) The wells are not in use and have been properly abandoned. The wells are not in use and will be properly abandoned. The wells are in use and comply with 16 TAC Chapter 76. There are no wells or test holes of any kind known to exist on the project site.
A	dm	inistrative Information
15.	\boxtimes	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.

GEOLOC	SIC ASSESS	GEOLOGIC ASSESSMENT TABLE	E E			,	Д	PROJECT NAME: CIBOLO CANYONS RESORT HOTEL	ME: C	IBOLO CANY	ONS RES	JRT HC)TEL		5		
TOC	LOCATION					FEATUR	R CHAR	FEATURE CHARACTERISTICS	တ္လ					EVA	EVALUATION	PHYS	PHYSICAL SETTING
14 4	18*	10*	ZA	28	8		4		5 5A	9		7 8A	88	6	10	11	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIC	DIMENSIONS (FEET)	TREND (DEGREES)	МОО	DENSITY (NO/FT)	APERTURE (FEET)	INFILLING	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY	CATCHMENT AREA (ACRES)	TOPOGRAPHY
						> ×	z		10						<40 >40	<1.6 ×1.6	
S-173	98°24′27"	29°39'37"	ц	20	Kek		792	N60°E	9			ш	2	35	35	×	Streambed
S-174	S-174 98°24'28"	29°39'41"	ч.	20	Kek		1449	Ne0°E	10			ட	2	35	35	×	Streambed
S-176		29°39'49"	Ц	20	Kep/Kek		62	M°55N	0			ட	2	25	25	×	Streambed
S-177	98°24'04"	29°39'50"	ч	20	Kep/Kek		1294		0			ш	သ	25	25	×	Streambed
S-178	98°24'05"	29°39'56"	ц	20	Kek		1675	N40°E	0			ட	2	25	25	×	Streambed
S-179	98°24'38"	29°39′51"	Ц	20	Kek		1491	3°55N	10			ш	2	35	35	×	Streambed
									0,								
-																	
** DATUM: NAD 83	: NAD 83																

Note: Only those geologic and man-made features within that area of the assessment are included. Therefore, the features may not be numbered sequentially.

8A INFILLING	None, exposed bedrock	Coarse - cobbles, breakdown, sand, gravel	Loose or soft mud or soil, organics, leaves, sticks, dark colors	Fines, compacted clay-rich sediment, soil profile, gray or red colors	Vegetation. Give details in narrative description	S Flowstone, cements, cave deposits	Other materials		12 TOPOGRAPHY	Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed	
	z	O	0	ш	>	FS	×			ਹ	
2B POINTS	30	20	20	20	9	30	30	20	2	30	
TYPE	Cave	Solution cavity	Solution-enlarged fracture(s)	Fault	Other natural bedrock features	Manmade feature in bedrock	Swallow hole	Sinkhole	Non-karst closed depression	Zone, clustered or aligned features	The same of the sa
2A TYPE	O	SC	SF	ш	0	MB	SW	SH	СО	Z	

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.

Amanda L. Miller

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

CIBOLO CANYONS RESORT HOTEL

Stratigraphic Column

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

	Hydrogeolog subdivision		Group, formation, or member			Hydrologic function	Thickness (feet)	Lithology	Field Identification	Cavern development	Porosity/ permeability type
	II			(Kep)	Cyclic and marine members, undivided	AQ	80-90	Mudstone to packstone; miliolid grainstone; chert	Thin graded cycles; massive beds to relatively thin beds; crossbeds	Many subsurface; might be associated with earlier karst development	Laterally extensive; both fabric and not fabric/water-yielding
	III			on Formation		AQ .	70-90	Crystalline limestone; mudstone to grainstone; chert; collapsed breccia	Bioturbated iron- stained beds separated by massive limestone beds; stromatolitic limestone	Extensive lateral development; large rooms	Majority not fabric/one of the most permeable
	IV	<i>.</i> .	(Person	Regional dense member	CU	20-24	Dense, argillaceous mudstone	Wispy iron-oxide stains	Very few; only vertical fracture enlargement	Not fabric/low permeability; vertical barrier
ceous	V	Edwards Aquifer	Edwards Group		Grainstone member	AQ	50-60	Miliolid grainstone; mudstone to wackestone; chert	White crossbedded grainstone	Few	Not fabric/ recrystallization reduces permeability
Lower Cretaceous	VI	Edwar	Edwa	n (Kek)	Kirschberg evaporite member	AQ	50-60	Highly altered crystalline limestone; chalky mudstone; chert	Boxwork voids, with neospar and travertine frame	Probably extensive cave development	Majority fabric/one of the most permeable
Lc	VII			Kainer Formation	Dolomite member	AQ	110 -130	Mudstone to grainstone; crystalline limestone; chert	Massively bedded light gray, <i>Toucasia</i> abundant	Caves related to structure or bedding planes	Mostly not fabric; some bedding plane- fabric/water-yielding
	VIII			K	Basal nodular member	Karst AQ; not karst CU	50-60	Shaly, nodular limestone mudstone and miliolid grainstone	Massive, nodular and mottled, Exogyra texana	Large lateral caves at surface; a few caves near Cibolo Creek	Fabric; stratigraphically controlled/large conduit flow at surface; no permeability in subsurface
	Lower confinunit	ning			of the Glen e (Kgru)	CU; evaporite beds AQ	350-500	Yellowish tan, thinly bedded limestone and marl	Stair-step topography; alternating limestone and marl	Some surface cave development	Some water production at evaporite beds / relatively impermeable

(Modified from Stein and Ozuna, 1995)

CIBOLO CANYONS RESORT HOTEL

Site Geology

The overall potential for fluid movement to the Edwards Aquifer for the site is moderate. As a result of several faults that cross the subject site, two separate formations are present. The basal nodular, dolomitic, and grainstone members of the Kainer Formation (Kek) are present at the surface for the majority of the site. A small portion of the leached and collapsed members of the Person Formation (Kep) is present at the surface near the eastern border.

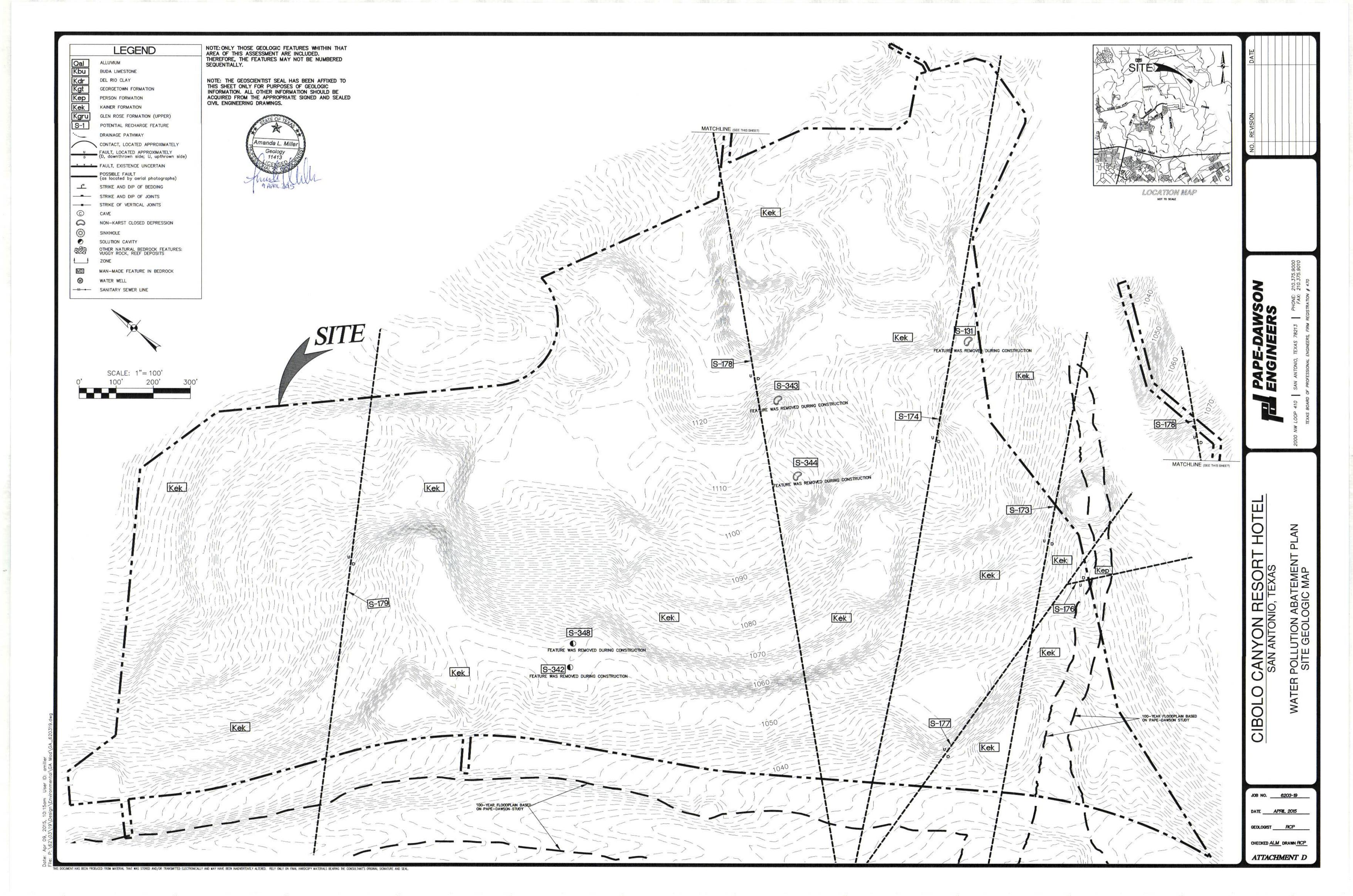
Six (6) faults were identified onsite with a predominant trend of approximately N60°E.

In general, the basal nodular member has cave development as vertical shafts as well as large lateral caves, the dolomitic member predominantly has cave development as vertical shafts only and the grainstone member has little cave development. Extensive lateral development is common in the leached and collapsed members of the Person Formation. No caves or sinkholes were discovered on site.

Features S-173, S-174, S-176 through S-179

The above features are faults identified by aerial photographs and limited field evidence. Fine infilling and lack of on-site field evidence of enhanced permeability results in a low probability for rapid infiltration.

Five other geologic features were previously identified on site in a geologic assessment report titled <u>Cibolo Canyons Resort Hotel</u>, dated <u>October 27, 2005</u>, by Pape-Dawson Engineers. The features were identified as S-131, S-342, S-343, S-344, and S-348. These features are no longer present due to construction of the Cibolo Canyons Resort Hotel, which was approved by a WPAP (EAPP No. 2428.00).



CIBOLO CANYON RESORT HOTEL Geologic Assessment



ATTACHMENT E



RECHARGE AND TRANSITION ZONE EXCEPTION REQUEST FORM (TCEQ0628)

Recharge and Transition Zone Exception Request Form

Texas Commission on Environmental Quality

30 TAC §213.9 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 **Recharge and Transition Zone Exception Request Form** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent: Ricardo Gomez, P.E.

Date: <u>10/01/2024</u>

Signature of Customer/Agent:

Regulated Entity Name: Cibolo Canyon Resort Hotel - Ice Facility

Exception Request

- 1. Attachment A Nature of Exception. A narrative description of the nature of each exception requested is attached. All provisions of 30 TAC §213 Subchapter A for which an exception is being requested have been identified in the description.
- 2. Attachment B Documentation of Equivalent Water Quality Protection.

 Documentation demonstrating equivalent water quality protection for the Edwards Aquifer is attached.

Administrative Information

- 3. 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.
- 4. The applicant understands that no exception will be granted for a prohibited activity in Chapter 213.
- 5. The applicant understands that prior approval under this section must be obtained from the executive director for the exception to be authorized.

ATTACHMENT A

CIBOLO CANYONS RESORT HOTEL – ICE FACILITY Recharge Zone Plan Exception Request

<u>Attachment A – Nature of Exception</u>

With this exception request, the concrete sidewalk will add an approximate 0.02 acres of impervious cover to water quality basin #2 and an approximate 0.03 acres of impervious cover to water quality basin #3. The total impervious cover will increase by approximately 0.05 acres from a total of 39.92 acres to 39.97 acres. No modifications are proposed to existing permanent best management practices and all remain properly sized for their watershed and required treatment. Updated pollutant load removal calculations for Water Quality Basin 2 and Water Quality Basin 3 and an overall Treatment Summary Table are provided in the Pollutant Load & Removal Calculations section of this report.



ATTACHMENT B

CIBOLO CANYONS RESORT HOTEL – ICE FACILITY Recharge Zone Plan Exception Request

Attachment B - Documentation of Equivalent Water Quality Protection

This Cibolo Canyons Resort Hotel – Ice Facility Recharge Zone Exception Request is being submitted for the construction of a concrete sidewalk within the previously approved Cibolo Canyons Resort Hotel – Ice Facility WPAP MOD. The site was previously green-space located between the adjacent road and slab of the ice facility directly in front of the conference center. With 0.02 acres and 0.03 acres of impervious cover proposed to be added to water quality basins #2 and #3 respectively, an approximate increase of 0.05 acres of total impervious cover is proposed for this site with this exception. This increases the overall sites impervious cover to 39.97 acres of the 77.75-acre site or approximately 51.41% of the overall site. No modifications are proposed to the existing Permanent Best Management Practices (PBMP) and they are sufficiently sized for the additional impervious cover. Please refer to the updated pollutant load calculations for water quality basin #2 and #3 and the water quality treatment summary table for more information.



TEMPORARY STORMWATER SECTION (TCEQ-0602)

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: Ricardo Gomez, P.E.

Date: 10/01/2024

Signature of Customer/Agent:

Regulated Entity Name: Cibolo Canyons Resort Hotel - Ice Facility

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:	Construction
Staging Area				

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.
S	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: Salado 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.
	Attachment H - Temporary Sediment Pond(s) Plans and Calculations. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.
	N/A
	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.
,	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.
	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).
	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.
	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 S	Stabilization Practices
-	es: establishment of temporary vegetation, establishment of permanent vegetation, ng, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, or

preservation of mature vegetation.

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

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

Administrative Information

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

ATTACHMENT A

Cibolo Canyons Resort Hotel – Ice Facility Recharge Zone Plan Exception Request

Attachment A – Spill Response Actions

In the event of an accidental leak or spill:

- Spill must be contained and cleaned up immediately.
- Spills will not be merely buried or washed with water.
- Contractor shall take action to contain spill. Contractor may use sand or other absorbent material stockpiled on site to absorb spill. Absorbent material should be spread over the spill area to absorb the spilled product.
- In the event of an uncontained discharge the contractor shall utilize onsite equipment to construct berms downgradient of the spill with sand or other absorbent material to contain and absorb the spilled product.
- Spill containment/absorbent materials along with impacted media must be collected and stored in such a way so as not to continue to affect additional media (soil/water). Once the spill has been contained, collected material should be placed on poly or plastic sheeting until removed from the site. The impacted media and cleanup materials should be covered with plastic sheeting and the edges weighed down with paving bricks or other similarly dense objects as the material is being accumulated. This will prevent the impacted media and cleanup materials from becoming airborne in windy conditions or impacting runoff during a rain event. The stockpiled materials should not be located within an area of concentrated runoff such as along a curb line or within a swale.
- Contaminated soils and cleanup materials will be sampled for waste characterization. When the
 analysis results are known the contaminated soils and cleanup materials will be removed from the
 site and disposed in a permitted landfill in accordance with applicable regulations.
- The contractor will be required to notify the owner, who will in turn contact TCEQ to notify them in the event of a significant hazardous/reportable quantity spill. Additional notifications as required by the type and amount of spill will be conducted by owner or owner's representative.

In the event of an accidental significant or hazardous spill:

The contractor will be required to report significant or hazardous spills in reportable quantities to:

- Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site. https://www.tceq.texas.gov/response/spills/spill_rq.html
- For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.



Cibolo Canyons Resort Hotel – Ice Facility Recharge Zone Plan Exception Request

- Notification should first be made by telephone and followed up with a written report.
- The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
- Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.
- Contaminated soils will be sampled for waste characterization. When the analysis results are known the contaminated soils will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.

Additional guidance can be obtained from TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) Section 1.4.16. Contractor shall review this section.



ATTACHMENT B

<u>Attachment B – Potential Sources of Contamination</u>

Other potential sources of contamination during construction include:

Potential Source	Preventative Measure
Asphalt products used on this project.	After placement of asphalt, emulsion or coatings, the contractor will be responsible for immediate cleanup should an unexpected rain occur. For the duration of the asphalt product curing time, the contractor will maintain standby personnel and equipment to contain any asphalt wash-off should an unexpected rain occur. The contractor will be instructed not to place asphalt products on the ground within 48 hours of a forecasted rain.
Oil, grease, fuel, and hydraulic fluid contamination	 Vehicle maintenance when possible, will be
from construction equipment and vehicle dripping.	 performed within the construction staging area. Construction vehicles and equipment shall be checked regularly for leaks and repaired immediately.
Accidental leaks or spills of oil, petroleum products, and substances listed under 40 CFR parts 110, 117, and 302 used or stored temporarily on site.	 Contractor to incorporate into regular safety meetings, a discussion of spill prevention and appropriate disposal procedures. Contractor's superintendent or representative overseer shall enforce proper spill prevention and control measures. Hazardous materials and wastes shall be stored in covered containers and protected from vandalism. A stockpile of spill cleanup materials shall be stored on site where it will be readily accessible.
Miscellaneous trash and litter from construction	Trash containers will be placed throughout the
workers and material wrappings. Construction debris.	 site to encourage proper trash disposal. Construction debris will be monitored daily by contractor. Debris will be collected weekly and placed in disposal bins. Situations requiring immediate attention will be addressed on a case-by-case basis.
Spills/Overflow of waste from portable toilets	 Portable toilets will be placed away from high-traffic vehicular areas and storm drain inlets. Portable toilets will be placed on a level ground surface. Portable toilets will be inspected regularly for leaks and will be serviced and sanitized at time intervals that will maintain sanitary conditions.

ATTACHMENT C

<u>Attachment C – Sequence of Major Activities</u>

The sequence of major activities which disturb soil during construction on this site will be divided into two stages. The first is site preparation that will include installation of temp BMPs, clearing, and grubbing of vegetation where applicable. This will disturb approximately 0.994 acres. The second is construction that will include construction of pavement area, landscaping, and site cleanup. This will disturb approximately 0.994 acres.



ATTACHMENT D

Attachment D – Temporary Best Management Practices and Measures

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.

No upgradient water will flow onto the site. All TBMPs are adequate for the drainage areas they serve.

b. 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.

Site preparation, which is the initiation of all activity on the project, will disturb the largest amount of soil. Therefore, before any of this work can begin, the clearing and grading contractor will be responsible for the installation of all on-site control measures. The methodology for pollution prevention of on-site stormwater will include: (1) erection of silt fences along the downgradient boundary of construction activities for temporary erosion and sedimentation controls, (2) installation of gravel bags and drain inlet protection at inlets and downgradient areas of construction activities for sediment control, (3) installation of stabilized construction entrance/exit(s) to reduce the dispersion of sediment from the site, and (4) installation of construction staging area(s).

Prior to the initiation of construction, all previously installed control measures will be repaired or reestablished for their designed or intended purpose. This work, which is the remainder of all activity on the project, may also disturb additional soil. The construction contractor will be responsible for the installation of all remaining on-site control measures that includes installation of the concrete truck washout pit(s), as construction phasing warrants.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features.

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

There are no sensitive features observed within the project limits. Any receiving surface streams within the project limits or outside of the project limits will be protected by the proposed TBMPs within this plan. Temporary BMPs utilized are adequate for the drainage areas served.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features.



d. 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.

BMP measures utilized in this plan are intended to allow stormwater to continue downstream after passing through the BMPs. This will allow stormwater runoff to continue downgradient to streams or features that may exist downstream of the site.



ATTACHMENT F

Attachment F – Structural Practices

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

- Erection of silt fences along the downgradient boundary of construction activities, as located on Exhibit 1 and illustrated in Exhibit 2.
- Installation of gravel bags and drain inlet protection at inlets and downgradient areas of construction activities, as located on Exhibit 1 and illustrated in Exhibit 2.
- Installation of stabilized construction entrance/exit(s) and construction staging area(s), as located on Exhibit 1 and illustrated on Exhibit 2.

The following structural measures will be installed at the initiation of construction activities or as appropriate based on the construction sequencing:

• Installation of concrete truck washout pit(s), as required and located on Exhibit 1 and illustrated on Exhibit 2.



ATTACHMENT G

<u>Attachment G – Drainage Area Map</u>

There are no areas where greater than ten (10) acres will be disturbed within a common drainage area. All TBMPs utilized are adequate for the drainage areas served.



ATTACHMENT I

INSPECTIONS

Designated and qualified person(s) shall inspect Pollution Control Measures weekly and within 24 hours after a storm event. An inspection report that summarizes the scope of the inspection, names and qualifications of personnel conducting the inspection, date of the inspection, major observations, and actions taken as a result of the inspection shall be recorded and maintained as part of Storm Water TPDES data for a period of three years after the Notice of Termination (NOT) has been filed. A copy of the Inspection Report Form is provided in this Storm Water Pollution Prevention Plan.

As a minimum, the inspector shall observe: (1) significant disturbed areas for evidence of erosion, (2) storage areas for evidence of leakage from the exposed stored materials, (3) structural controls (rock berm outlets, silt fences, drainage swales, etc.) for evidence of failure or excess siltation (over 6 inches deep), (4) vehicle exit point for evidence of off-site sediment tracking, (5) vehicle storage areas for signs of leaking equipment or spills, (6) concrete truck rinse-out pit for signs of potential failure, (7) embankment, spillways, and outlet of sediment basin (where applicable) for erosion damage, and (8) sediment basins (where applicable) for evidence that basin has accumulated 50% of its volume in silt. Deficiencies noted during the inspection will be corrected and documented within seven calendar days following the inspection or before the next anticipated storm event if practicable.

Contractor shall review Sections 1.3 and 1.4 of TCEQ's Technical Guidance Manual for additional BMP inspection and maintenance requirements.

Pollution	in	Corrective Action Required	
Prevention	ted ianc		_
Measure	nspected Compliance	Description	Date Completed
	Ë 8	(use additional sheet if necessary)	Completed
Best Management Practices			
Natural vegetation buffer strips			
Temporary vegetation			
Permanent vegetation			
Sediment control basin			
Silt fences			
Rock berms			
Gravel filter bags			
Drain inlet protection			
Other structural controls			
Vehicle exits (off-site tracking)			
Material storage areas (leakage)			
Equipment areas (leaks, spills)			
Concrete washout pit (leaks, failure)			
General site cleanliness			
Trash receptacles			
Evidence of Erosion			
Site preparation			
Roadway or parking lot construction			
Utility construction			
Drainage construction			
Building construction			
Major Observations			
Sediment discharges from site			
BMPs requiring maintenance			
BMPs requiring modification			
Additional BMPs required			
"I certify under penalty of law that this document and a system designed to assure that qualified personnel proper or persons who manage the system, or those persons dire of my knowledge and belief, true, accurate, and complet the possibility of fine and imprisonment for knowing violation."	II attach erly gath ectly res e. I am ations."	ments were prepared under my direction or supervision in er and evaluate the information submitted. Based on my inconsible for gathering the information, the information submaware there are significant penalties for submitting false info	quiry of the person itted is, to the best
"I further certify I am an authorized signatory in accordar	nce with	the provisions of 30 TAC §305.128."	
Inspector's Name	spector	's Signature Date	

PROJECT MILESTONE DATES

Date when major site grading activities begin: **Construction Activity** Date Installation of BMPs Dates when construction activities temporarily or permanently cease on all or a portion of the project: **Construction Activity** Date Dates when stabilization measures are initiated: **Stabilization Activity** <u>Date</u>

Removal of BMPs

ATTACHMENT J

Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices

Interim on-site stabilization measures, which are continuous, will include minimizing soil disturbances by exposing the smallest practical area of land required for the shortest period of time and maximizing use of natural vegetation. As soon as practical, all disturbed soil will be stabilized as per project specifications in accordance with pages 1-35 to 1-60 of TCEQ's Technical Guidance Manual (TGM) RG-348 (2005). Mulching, netting, erosion blankets and seeding are acceptable.

Stabilization measures will be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and except as provided below, will be initiated no more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within twenty-one (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 seasonably arid conditions, stabilization measures must be initiated as soon as practicable.

PERMANENT STORMWATER SECTION (TCEQ-0600)

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: <u>Ricardo Gomez, P.E.</u>

Date: <u>10/01/2024</u>

Signature of Customer/Agent

Regulated Entity Name: Cibolo Canyons Resort Hotel - Ice Facility

Permanent Best Management Practices (BMPs)

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

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

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

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

11. Attachment G - Inspection, Maintenance, Repair and Retrofit Plan. A inspection, maintenance, repairs, and, if necessary, retrofit of the perimeasures is attached. The plan includes all of the following:	•
 ✓ Prepared and certified by the engineer designing the permanent B measures ✓ Signed by the owner or responsible party ✓ Procedures for documenting inspections, maintenance, repairs, an retrofit ✓ A discussion of record keeping procedures 	
∑ N/A	
12. Attachment H - Pilot-Scale Field Testing Plan. Pilot studies for BMPs to recognized by the Executive Director require prior approval from the Pilot-scale field testing is attached.	
⊠ N/A	
13. Attachment I -Measures for Minimizing Surface Stream Contamination of the measures that will be used to avoid or minimize surface stream and changes in the way in which water enters a stream as a result of the and development is attached. The measures address increased stream creation of stronger flows and in-stream velocities, and other in-stream by the regulated activity, which increase erosion that results in water degradation.	contamination he construction m flashing, the m effects caused
□ N/A	
Responsibility for Maintenance of Permanent BN	1P(s)
Responsibility for maintenance of best management practices and measures construction is complete.	s after
14. The applicant is responsible for maintaining the permanent BMPs after until such time as the maintenance obligation is either assumed in writer entity having ownership or control of the property (such as without line owner's association, a new property owner or lessee, a district, or mutownership of the property is transferred to the entity. Such entity sharesponsible for maintenance until another entity assumes such obligations ownership is transferred.	ting by another mitation, an nicipality) or the all then be
⊠ N/A	
15. A copy of the transfer of responsibility must be filed with the executive appropriate regional office within 30 days of the transfer if the site is multiple single-family residential development, a multi-family residential or a non-residential development such as commercial, industrial, institution and other sites where regulated activities occur.	for use as a tial development,
⊠ N/A	

ATTACHMENT B

Attachment B - BMPs for Upgradient Stormwater

Upgradient water will cross the proposed improvements as stormwater originating from upgradient will be captured by an existing storm drain system.

The Permanent Best Management Practices (PBMPs) for stormwater treatment are (2) existing sedimentation/filtration basins (Basin #2 and #3) which are designed in accordance with the Texas Commission on Environmental Quality (TCEQ) Technical Guidance Manual (TGM) RG-348 (2005) to remove the 80% of the increase in Total Suspended Solids (TSS) from the site.



ATTACHMENT C

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

The Permanent Best Management Practices (PBMPs) for stormwater treatment are (2) existing sedimentation/filtration basins which are designed in accordance with the Texas Commission on Environmental Quality (TCEQ) Technical Guidance Manual (TGM) RG-348 (2005) to remove the 80% of the increase in Total Suspended Solids (TSS) from the site.



ATTACHMENT D

CIBOLO CANYONS RESORT HOTEL – ICE FACILITY Recharge Zone Plan Exception Request

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

The Permanent Best Management Practices (PBMPs) for stormwater treatment are (2) existing sedimentation/filtration basins which are designed in accordance with the Texas Commission on Environmental Quality (TCEQ) Technical Guidance Manual (TGM) RG-348 (2005) to remove the 80% of the increase in Total Suspended Solids (TSS) from the site.



ATTACHMENT F

CIBOLO CANYONS RESORT HOTEL – ICE FACILITY Recharge Zone Plan Exception Request

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

Please refer to the Exhibits Section of this application for the Site Plans.



ATTACHMENT G

CIBOLO CANYONS RESORT HOTEL - ICE FACILITY

Recharge Zone Plan Exception Request

PERMANENT POLLUTION ABATEMENT MEASURES MAINTENANCE SCHEDULE AND MAINTENANCE PROCEDURES

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

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

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

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

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

In 2	2-15-2024
Scott Lynn, Agent	Date
RHP Property SA, LLC	

CIBOLO CANYONS RESORT HOTEL - ICE FACILITY

Recharge Zone Plan Exception Request

INSPECTION AND MAINTENANCE SCHEDULE FOR PERMANENT POLLUTION ABATEMENT MEASURES

Recommended Frequency	Task to be Performed		
	1	2	3
Annually*	1/	1/	1

^{*}Inspections to occur quarterly during the first year of operation. $\sqrt{\text{Indicates maintenance procedure that applies to this specific site.}}$

See description of maintenance task to be performed on the following pages. Frequency of maintenance tasks may vary depending on amount of rainfall and other weather-related conditions but may not be altered without TCEQ approval. Inspection frequency in subsequent years is based on the maintenance plan developed in the first year but must occur annually at a minimum.

A written record will be kept of inspection results and maintenance performed.

Task No. & Description		Included in this project	
1.	Cleaning	Yes	Ne
2.	Manual Backflush / Flow Rate Test	Yes	Ne
3.	External Rinsing	Yes	No

CIBOLO CANYONS RESORT HOTEL - ICE FACILITY Recharge Zone Plan Exception Request

MAINTENANCE PROCEDURES FOR PERMANENT POLLUTION ABATEMENT MEASURES (Jellyfish)

Note: Additional guidance can be obtained from the TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) Addendum, Section 3.2.22, as well as the Jellyfish® Filter Owner's Manual provided by Imbrium® Systems.

- 1. Cleaning. Removal and appropriate disposal of all water, sediment, oil and grease, and debris that has accumulated within the unit will be performed. The Jellyfish® Filter will be inspected and maintained by professional vacuum cleaning service providers with experience in the maintenance of underground tanks, sewers and catch basins. Since some of the maintenance procedures require manned entry into the Jellyfish structure, only professional maintenance service providers trained in confined space entry procedures should enter the vessel. A written record will be kept of inspection results and maintenance performed.
- 2. Manual Backflush / Flow Rate Test. A manual backflush must be performed on a single draindown cartridge using a Jellyfish Cartridge Backflush Pipe (described in the Jellyfish® Filter Owner's Manual). If the time required to drain 14 gallons of backflush water from the Backflush Pipe (from top of pipe to the top of the open flapper valve) exceeds 15 seconds, it is recommended to perform a manual backflush on each of the cartridges. After the manual backflush, the draindown test should be repeated on a single cartridge to determine if the cartridge can drain 14 gallons of water in 15 seconds. If the cartridge still does not achieve the design flow rate, it must be replaced. Filter cartridges should be tested for adequate flow rate, every 12 months and cleaned and recommissioned, or replaced if necessary. Written record will be kept of inspection results and maintenance performed.
- 3. External Rinsing. If external rinsing is performed within the structure, the cartridge or individual filtration tentacles should be rinsed while safely suspended over the maintenance access wall opening in the cartridge deck, such that rinsate flows into the lower chamber of the Jellyfish® Filter. If the rinsing procedure is performed outside the structure, the cartridge or individual filtration tentacles should be rinsed in a suitable basin such as a plastic barrel or tub, and rinsate subsequently poured into the maintenance access wall opening in the cartridge deck. Sediment is subsequently removed from the lower chamber by standard vacuum service. Written record will be kept of inspection results and maintenance performed.
- 4. Hazardous Material Spill. Maintenance requirements and frequency are dependent on the pollutant load characteristics of each site and may be required in the event of a chemical spill or due to excessive sediment loading. In the case of a spill, the worker should abort inspection activities until the proper guidance is obtained. Notify the local hazard control agency and appropriate regulatory agencies immediately. Maintenance should be performed by a licensed liquid waste hauler. Cartridge replacement may also be required in the event of an accidental significant or hazardous spill. Industrial and hazardous waste materials will be disposed of in accordance with TCEQ rules in 30 Texas Administration Code (TAC) Sections (§§)335.501-.521 (subchapter R). If class I or II non-hazardous or hazardous wastes are generated, a third-party disposal contractor will manage the wastes. Written record will be kept of inspection results and maintenance performed.



ATTACHMENT I

CIBOLO CANYONS RESORT HOTEL – ICE FACILITY Recharge Zone Plan Exception Request

<u>Attachment I – Measures for Minimizing Surface Stream Contamination</u>

Any points where discharge from the site is concentrated and erosive velocities exist will include appropriately sized energy dissipators to reduce velocities to non-erosive levels.



AGENT AUTHORIZATION FORM (TCEQ-0599)

Agent Authorization Form

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

1	Scott Lynn	
	Print Name	
	Agent	
	Title - Owner/President/Other	
of	RHP Property SA, LLC	
	Corporation/Partnership/Entity Name	
have authorized	Pape-Dawson Engineers	
	Print Name of Agent/Engineer	
_		
of	Pape-Dawson Engineers	
	Print Name of Firm	

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

I also understand that:

- 1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to \$10,000 per day per violation.
- 2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.
- 3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.
- 4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.
- 5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Applicant's Signature Date	
THE STATE OF Tennessee §	
County of <u>Davidson</u> §	
BEFORE ME, the undersigned authority, on this day personally appeared to me to be the person whose name is subscribed to the foregoing instrument, and acknowled me that (s)he executed same for the purpose and consideration therein expressed.	_known edged to
GIVEN under my hand and seal of office on this 20th day of November 2023	
NOTARY PUBLIC Caroline C. Jones	STATE OF ENNESSEE
Typed or Printed Name of Notary	PUBLIC PUBLIC
MY COMMISSION EXPIRES: May 7, 2024 Mis	SION EXPIRES

APPLICATION FEE FORM (TCEQ-0574)

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Cibolo Canyons Resort Hotel - Ice Facility Regulated Entity Location: 23808 Resort Parkway, San Antonio, Texas 78261 Name of Customer: RHP Property SA, LLC Contact Person: Scott Lynn Phone: 615.316.6180 Customer Reference Number (if issued):CN 616169746 Regulated Entity Reference Number (if issued):RN 104791868 **Austin Regional Office (3373)** Havs Travis Williamson San Antonio Regional Office (3362) Uvalde Medina Comal Kinney Application fees must be paid by check, certified check, or money order, payable to the Texas Commission on Environmental Quality. Your canceled check will serve as your receipt. This form must be submitted with your fee payment. This payment is being submitted to: **Austin Regional Office** San Antonio Regional Office Mailed to: TCEQ - Cashier Overnight Delivery to: TCEQ - Cashier 12100 Park 35 Circle **Revenues Section** Mail Code 214 Building A, 3rd Floor P.O. Box 13088 Austin, TX 78753 (512)239-0357 Austin, TX 78711-3088

Site Location (Check All Tha	it Apply):	
Recharge Zone	Contributing Zone	Transition Zone

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

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,	< 1	\$3,000
institutional, multi-family residential, schools, and	1 < 5	\$4,000
other sites where regulated activities will occur)	5 < 10	\$5,000
	10 < 40	\$6,500
	40 < 100	\$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

CORE DATA FORM (TCEQ-10400)



TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)											
New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)											
Renewa	l (Core Da	ta Form should b	e submitted with	the renewa	al form)		Other			
2. Customer	2. Customer Reference Number (if issued) Follow this link to search 3. Regulated Entity Reference Number (if issued)										
CN 6061	CN 606169746 for CN or RN numbers in Central Registry** RN 104791868										
SECTION II: Customer Information											
4. General C	ustomer l	nformation	5. Effective Da	ate for Cus	stomer	· Inforn	natio	n Update	es (mm/dd/yyyy)		
☐ New Cust	-	ne (Verifiable wit	_ .	date to Cus				troller of	☐ Change in Public Accounts)	Regulated E	Entity Ownership
									<u>.</u>	rrent and	active with the
Texas Sec	retary of	State (SOS)	or Texas Con	nptroller	of Pu	ublic A	\ccc	ounts (CPA).		
6. Customer	Legal Nai	ne (If an individua	, print last name fir	rst: eg: Doe,	John)		<u>li</u>	f new Cus	stomer, enter previ	ous Custome	er below:
RHP PRO	PERTY	SA, LLC					F	BREIT J	WM SAN ANT	ONIO	
7. TX SOS/C	_	Number	8. TX State Ta		ts)				I Tax ID (9 digits)	10. DUN	Number (if applicable)
08051037	69		320902716	88			9	93-137	8558		
11. Type of C	Customer:	☐ Corporati	on		Individ	ual		Par	tnership: 🗌 Gener	al 🛛 Limited	
Government:	City C	County Federal	State Other		Sole P	roprieto	rship		Other:		
12. Number 0 0-20	of Employ 21-100	ees 101-250	<u></u>	501 ar	nd high	er	1	3. Indep	endently Owned	and Opera	ted?
14. Custome	r Role (Pr	oposed or Actual) -	as it relates to the	Regulated	Entity li	isted on	this fo	orm. Pleas	se check one of the	following	
Owner		Operat	or	⊠ 0	wner &	Opera	tor				
Occupatio	nal Licens	ee Respo	nsible Party	☐ Vo	oluntar	y Clear	up A	pplicant	Other:		
45 88 111	ONE (GAYLORD I	DRIVE								
15. Mailing Address:											
	City	NASHVILI	_	State	TN		ZIP	3721	14	ZIP + 4	
16. Country	Mailing In	formation (if outsi	de USA)			17. E	Mail	Address	(if applicable)		
						SLY	NN	@RYI	MANHP.COM	M	
18. Telephor	e Numbe	ſ	19	9. Extensi	on or (Code			20. Fax Numbe	r (if applicat	ole)
(615)31	6-6180								(615)316	-6758	
SECTION	III: R	egulated En	tity Inform	nation							
					ty" is se	elected	belov	v this for	m should be acco	mpanied by	a permit application)
	ulated Enti	-	to Regulated En		-				Entity Information		. , ,
The Regula	ated Ent	ity Name sub	mitted may b	e update	ed in	order	to n	neet TC	EQ Agency D	ata Stano	lards (removal
		ndings such									
22. Regulate	d Entity N	ame (Enter name	of the site where th	ne regulated	action	is taking	place	e.)			
CIBOLO CANYONS RESORT HOTEL - ICE FACILITY											

TCEQ-10400 (02/21) Page 1 of 2

23. Street Address of									
the Regulated Entity:	23808 R	esort Pkwy			_				
(No PO Boxes)	City	San Antonio	State	Тх	ZIP	78261	ZIP + 4		
24. County							<u> </u>		
Enter Physical Location Description if no street address is provided.									
25. Description to Physical Location:									
26. Nearest City						State	Nea	rest ZIP Code	
27. Latitude (N) In Decin	nal:	29.666459		28. Lo	ongitude (V	V) In Decimal:	-98.40187	9	
Degrees	Minutes	S	Seconds	Degree	S	Minutes		Seconds	
29. Primary SIC Code (4	digits) 30.	Secondary SIC	Code (4 digits)	31. Primar (5 or 6 digits)		32. S (5 or 6	econdary NA digits)	ICS Code	
0783				561730					
33. What is the Primary	Business of	f this entity? (Do not repeat the SIC	or NAICS descr	ription.)	l .			
0.4 14 '''	ONE GAYLORD DRIVE								
34. Mailing Address:									
Auuress:	City	NASHVILLE	State	TN	ZIP	37214	ZIP + 4		
35. E-Mail Address:	' ' ' '	1		1		1			
36. Telepho	one Number	•	37. Extension	n or Code		38. Fax Nu	mber (if appl	icable)	
(615)3	316-6180					() -		
9. TCEQ Programs and ID				rmits/registrati	on numbers	that will be affected	by the updates	submitted on this	
☐ Dam Safety	☐ Districts	S		ifer	☐ Emissio	ons Inventory Air	☐ Industrial Hazardous Waste		
			ĺ						
☐ Municipal Solid Waste	☐ New So	ource Review Air	OSSF		☐ Petrole	um Storage Tank	☐ PWS		
						um Storage Tank			
☐ Municipal Solid Waste ☐ Sludge	☐ New So		☐ OSSF		Petrole	um Storage Tank	PWS Used Oil		
Sludge	☐ Storm \	Water	☐ Title V Air		☐ Tires		Used Oil		
		Water		Agriculture					
☐ Sludge ☐ Voluntary Cleanup	Storm \	Nater Water	☐ Title V Air	Agriculture	☐ Tires		Used Oil		
☐ Sludge ☐ Voluntary Cleanup SECTION IV: Pre 40. JEAN AUTI	Storm \ \text{Waste} \text{Waste}	Nater Water formation	☐ Title V Air ☐ Wastewater A		☐ Tires	Rights	Used Oil		
Sludge Voluntary Cleanup SECTION IV: Pre 40. Name:	Storm \ Waste \ Parer In REY, P.E	Water Water formation ., CESSWI	☐ Title V Air ☐ Wastewater A	41. Title:	☐ Tires ☐ Water F	Rights JECT MANA	Used Oil		
☐ Sludge ☐ Voluntary Cleanup SECTION IV: Pre 40. Name: JEAN AUTI 42. Telephone Number	Storm \ Waste \ Parer In REY, P.E 43. Ext./Cod	Water Water formation ., CESSWI	☐ Title V Air ☐ Wastewater A	41. Title:	☐ Tires ☐ Water F	Rights JECT MANA	Used Oil Other:		
Sludge Voluntary Cleanup SECTION IV: Pre 40. Name: JEAN AUTI 42. Telephone Number (210) 375-9000	Storm \ Waste \ Parer In REY, P.E 43. Ext./Cod	Water Mater Mater Mormation E., CESSWI More 44. Fax	☐ Title V Air ☐ Wastewater A	41. Title:	☐ Tires ☐ Water F	Rights JECT MANA	Used Oil Other:		
Sludge Voluntary Cleanup SECTION IV: Pre 40. Name: JEAN AUTI 42. Telephone Number	Storm \ Storm \ Waste \ Parer In REY, P.E 43. Ext./Cod 2604 horized	Water Water Iformation E., CESSWI 44. Fax (Signature	Title V Air Wastewater A Number	41. Title: 45. E-Ma JAUTI	☐ Tires ☐ Water F ☐ PROS	Rights JECT MANA APE-DAWS	Used Oil Used Oil Other:		

Company: Pape-Dawson Consulting Engineers Job Title: VICE PRESIDENT

Company:	Pape-Dawson Consulting Engineers	Job Title:	VICE PR	ESIDENT	
Name (In Print):	Ricardo Gomez, P.E.			Phone:	(210) 375- 9000
Signature:	ful ID			Date:	10/01/2024

TCEQ-10400 (02/21) Page 2 of 2

EXHIBITS

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WATER POLLUTION ABATEMENT PLAN GENERAL CONSTRUCTION NOTES

1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE: - THE NAME OF THE APPROVED PROJECT;

- THE ACTIVITY START DATE; AND - THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.

2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.

3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) 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. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.

4. NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.

ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.

SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.

8. LITTER. CONSTRUCTION DEBRIS. AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.

9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.

10. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.

11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST: - THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; - THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR

PERMANENTLY CEASE ON A PORTION

OF THE SITE; AND - THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.

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:

A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES; B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE

REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER:

SWP3 MODIFICATIONS

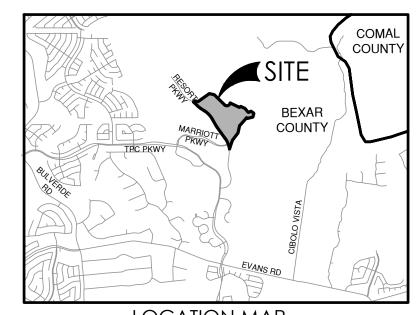
DESCRIPTION

C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT

SAN ANTONIO REGIONAL OFFICE 14250 JUDSON ROAD SAN ANTONIO, TEXAS 78233-4480 PHONE (210) 490-3096 FAX (210) 545-4329

SIGNATURE





LOCATION MAP



PROJECT LIMITS EXISTING CONTOUR PROPOSED CONTOUR FLOW ARROW (EXISTING) FLOW ARROW (PROPOSED) -//-//-//-

• •

TREE PROTECTION - TP - TP - TP - TP GRAVEL FILTER BAGS SEDIMENT CONTROL ROLLS

GRATE INLET PROTECTION

LIMITS OF DISTURBED AREA STABILIZED CONSTRUCTION ENTRANCE/EXIT

CONSTRUCTION EQUIPMENT, VEHICLE & MATERIALS STORAGE AREA (FIELD LOCATE) CONCRETE TRUCK WASH-OUT PIT

TREES TO REMAIN

TREES TO BE REMOVED

GENERAL NOTES

1. DO NOT DISTURB VEGETATED AREAS (TREES, GRASS, WEEDS, BRUSH, ETC.) ANY MORE THAN NECESSARY FOR CONSTRUCTION.

2. CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASH-OUT PIT AND CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD TO BE DETERMINED IN THE FIELD.

MODIFIED IN THE FIELD TO ACCOMPLISH THE DESIRED EFFECT. ALL MODIFICATIONS ARE TO BE NOTED ON THIS EXHIBIT AND SIGNED AND DATED BY THE RESPONSIBLE PARTY.

4. RESTRICT ENTRY/EXIT TO THE PROJECT SITE TO DESIGNATED LOCATIONS BY USE OF ADEQUATE FENCING, IF NECESSARY.

5. ALL STORM WATER POLLUTION PREVENTION CONTROLS ARE TO E MAINTAINED AND IN WORKING CONDITIONS AT ALL TIMES.

6. FOR A COMPLETE LISTING OF TEMPORARY STORM WATER POLLUTION PREVENTION CONTROLS REFER TO THE TPDES STORM WATER POLLUTION

7. STORM WATER POLLUTION PREVENTION STRUCTURES SHOULD B CONSTRUCTED WITHIN THE SITE BOUNDARIES. SOME OF THESE FEATURES MAY BE SHOWN OUTSIDE THE SITE BOUNDARIES ON THIS PLAN FOR VISUAL

8. AS SOON AS PRACTICAL, ALL DISTURBED SOIL THAT WILL NOT BE COVERED BY IMPERVIOUS COVER SUCH AS PARKWAY AREAS, EASEMENT AREAS, EMBANKMENT SLOPES, ETC. WILL BE STABILIZED PER APPLICABLE PROJECT SPECIFICATIONS.

9. BEST MANAGEMENT PRACTICES MAY BE INSTALLED IN STAGES COINCIDE WITH THE DISTURBANCE OF UPGRADIENT AREAS.

10. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN STAGES ONCE TI WATERSHED FOR THAT PORTION CONTROLLED BY THE BEST MANAGEMENT PRACTICES HAS BEEN STABILIZED IN ACCORDANCE WITH TPDES REQUIREMENTS.

11. UPON COMPLETION OF THE PROJECT, INCLUDING SITE STABILIZATION, AND BEFORE FINAL PAYMENT IS ISSUED, CONTRACTOR SHALL REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES, PAYING SPECIAL ATTENTION TO ROCK BERMS IN DRAINAGE FEATURES.

12. WHERE VEGETATED FILTER STRIPS ARE INDICATED, CONTRACTOR SHALL VERIFY THAT SUFFICIENT VEGETATION EXISTS, OTHERWISE CONTRACTOR SHALL PLACE SILT FENCING IN LIEU OF VEGETATED FILTER STRIP.

13. SHADED AREA DENOTES LIMITS OF DISTURBED AREAS. OTHER AREAS WITHIN THE PROJECT LIMITS, WITH THE EXCEPTION OF CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD, ARE NOT PART OF THIS TPDES STORM WATER POLLUTION PREVENTION PLAN (SWP3) AND WILL NOT BE DISTURBED BY CIVIL CONSTRUCTION ACTIVITIES. HOUSE CONSTRUCTION ACTIVITIES WILL REQUIRE A SEPARATE STORM WATER POLLUTION PREVENTION PLAN.

14. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL COORDINATE PLACEMENT OF TEMPORARY BEST MANAGEMENT PRACTICES WITHIN TXDOT RIGHT-OF-WAY WITH TXDOT.

15. CPS ENERGY WILL FUNCTION AS A SECONDARY OPERATOR ON THI PROJECT AND WILL BE INSTALLING ELECTRIC UTILITIES FOR ON-SITE CONSTRUCTION AND OFF-SITE FEED TO THE PROJECT.

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR TH PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

EXHIBIT

6203-28 MARCH 2024 ESIGNER HECKED JD DRAWN EP

ORMW,

JASON T. DIAMONI

C0.20

HIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL. AERIAL IMAGERY PROVIDED BY GOOGLE® UNLESS OTHERWISE NOTED. Imagery © 2016,CAPCOG,Digital Globe,Texas Orthormagery Program, USDA Farm Service Agency.

SCHEMATIC OF TEMPORARY CONSTRUCTION ENTRANCE/EXIT

MATERIALS

THE AGGREGATE SHOULD CONSIST OF 4-INCH TO 8-INCH WASHED STONE OVER A STABLE FOUNDATION AS SPECIFIED IN THE PLAN. 2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF

8-INCHES. 3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD2, A MULLEN BURST RATING OF 140 LB/IN2, AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE

4. IF A WASHING FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM OF 4-INCH DIAMETER WASHED STONE OR COMMERCIAL ROCK SHOULD BE INCLUDED IN THE PLANS. DIVERT WASTEWATER TO A SEDIMENT TRAP OF

INSTALLATION

RUNOFF AWAY FROM THE PUBLIC ROAD.

. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.

THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.

4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE 6-INCHES TO 8-INCHES HIGH WITH 3:1 (H:V) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT

5. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.

SURFACE SMOOTH AND SLOPE FOR DRAINAGE. 7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.

6. PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS. LEAVE

8. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL

NOT-TO-SCALE

ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE

2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS

IN CRITICAL AREAS, SECURE SOD

WITH NETTING. USE STAPLES.

HEALTHY: MOWED AT A 2"-3" CUTTING HEIGHT - THATCH- GRASS CLIPPINGS AND DEAD LEAVES, UP TO 1/2" THICK. SHOULD BE 1/2"-3/4" THICK, WITH DENSE ROOT MAT FOR STRENGTH.

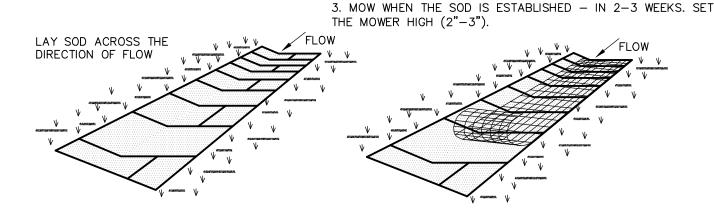
SOON AS THE SOD IS LAID.

SOIL.

LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE APPEARANCE OF GOOD SOD

ENDS AND TRIMMING PIECES.

 ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED



MATERIALS

1. SOD SHOULD BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4" INCH (± 1/4" INCH) AT THE TIME OF CUTTING. THIS THICKNESS SHOULD EXCLUDE SHOOT GROWTH AND THATCH. . PIECES OF SOD SHOULD BE CUT TO THE SUPPLIER'S STANDARD WIDTH AND

STANDARD SIZE SECTIONS OF SOD SHOULD BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED FROM A FIRM GRASP ON ONE END OF THE SECTION.

4. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS.

SITE PREPARATION . PRIOR TO SOIL PREPARATION, AREAS TO BE SODDED SHOULD BE BROUGHT

TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLAN. THE SURFACE SHOULD BE CLEARED OF ALL TRASH, DEBRIS AND OF ALL

FERTILIZE ACCORDING TO SOIL TESTS. FERTILIZER NEEDS CAN BE DETERMINED BY A SOIL TESTING LABORATORY OR REGIONAL RECOMMENDATIONS CAN BE MADE BY COUNTY AGRICULTURAL EXTENSION AGENTS. FERTILIZER SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 3 INCHES WITH A DISC, SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. ON SLOPING LAND, THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE CONTOUR.

INSTALLATION IN CHANNELS

SOD STRIPS IN WATERWAYS SHOULD BE LAID PERPENDICULAR TO THE DIRECTION OF FLOW. CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS TIGHTLY (SEE FIGURE ABOVE).

AFTER ROLLING OR TAMPING, SOD SHOULD BE PEGGED OR STAPLED TO RESIST WASHOUT DURING THE ESTABLISHMENT PERIOD. MESH OR OTHER NETTING MAY BE PEGGED OVER THE SOD FOR EXTRA PROTECTION IN CRITICAL

SECTION "A-A" OF A CONSTRUCTION ENTRANCE/EXIT

STABILIZE FOUNDATION

COMMON TROUBLE POINTS 1. INADEQUATE RUNOFF CONTROL-SEDIMENT WASHES ONTO PUBLIC ROAD.

STONE TOO SMALL OR GEOTEXTILE FABRIC ABSENT, RESULTS IN MUDDY CONDITION AS STONE IS PRESSED INTO SOIL. PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC—EXTEND PAD BEYOND THE MINIMUM 50-FOOT LENGTH AS NECESSARY. 4. PAD NOT FLARED SUFFICIENTLY AT ROAD SURFACE, RESULTS IN MUD BEING TRACKED ON TO ROAD AND POSSIBLE DAMAGE TO ROAD.

5. UNSTABLE FOUNDATION - USE GEOTEXTILE FABRIC UNDER PAD AND/OR

INSPECTION AND MAINTENANCE GUIDELINES

IMPROVE FOUNDATION DRAINAGE.

SHOOTS OR GRASS BLADES.

GRASS SHOULD BE GREEN AND

<u>ROOT ZONE</u>— SOIL AND ROOTS.

. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT

2. ALL SEDIMENT SPILLED. DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR. 3. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

4. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED

WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

5. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

STEEL FENCE POST MAX. 6' SPACING, SILT FENCE $\overline{}$ MIN. EMBEDMENT = 1' (MIN. HEIGHT 24" (SEE INSTALLATION NOTE 1) ABOVE EXISTING GROUND) WIRE MESH BACKING COMPACTED EARTH 4X4~W1.4xW1.4 MIN. OR ROCK BACKFILL - ALLOWABLE TYPICAL CHAIN LINE FENCE FABRIC IS ACCEPTABLE TRENCH-

INCORRECT

SOD INSTALLATION

USE PEGS OR STAPLES TO FASTEN SOD FIRMLY - AT THE ENDS OF STRIPS AND IN THE CENTER, OR EVERY 3-4 FEET IF THE STRIPS ARE LONG. WHEN READY TO MOW, DRIVE PEGS OR STAPLES FLUSH

GENERAL INSTALLATION (VA. DEPT. OF CONSERVATION, 1992)

SOD SHOULD NOT BE CUT OR LAID IN EXCESSIVELY WET OR DRY WEATHER. SOD ALSO SHOULD NOT BE LAID ON SOIL SURFACES THAT ARE FROZEN.

WITH THE GROUND.

2. DURING PERIODS OF HIGH TEMPERATURE, THE SOIL SHOULD BE LIGHTLY LENGTH, WITH A MAXIMUM ALLOWABLE DEVIATION IN ANY DIMENSION OF 5%. IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD, TO COOL THE SOIL AND REDUCE ROOT BURNING AND DIEBACK.

THE FIRST ROW OF SOD SHOULD BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND BUTTING TIGHTLY AGAINST EACH OTHER. LATERAL JOINTS SHOULD BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. CARE SHOULD BE EXERCISED TO ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS (SEE FIGURE ABOVE).

4. ON SLOPES 3:1 OR GREATER, OR WHEREVER EROSION MAY BE A PROBLEM, SOD SHOULD BE LAID WITH STAGGERED JOINTS AND SECURED BY STAPLING OR OTHER APPROVED METHODS. SOD SHOULD BE INSTALLED WITH THE LENGTH PERPENDICULAR TO THE SLOPE (ON CONTOUR).

5. AS SODDING OF CLEARLY DEFINED AREAS IS COMPLETED, SOD SHOULD BE ROOTS, BRUSH, WIRE, GRADE STAKES AND OTHER OBJECTS THAT WOULD ROLLED OR TAMPED TO PROVIDE FIRM CONTACT BETWEEN ROOTS AND SOIL. . AFTER ROLLING, SOD SHOULD BE IRRIGATED TO A DEPTH SUFFICIENT THAT THE UNDERSIDE OF THE SOD PAD AND THE SOIL 4 INCHES BELOW THE SOD IS

> UNTIL SUCH TIME A GOOD ROOT SYSTEM BECOMES DEVELOPED, IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHOULD BE PERFORMED AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF AT LEAST 4

8. THE FIRST MOWING SHOULD NOT BE ATTEMPTED UNTIL THE SOD IS FIRMLY ROOTED, USUALLY 2-3 WEEKS. NOT MORE THAN ONE THIRD OF THE GRASS LEAF SHOULD BE REMOVED AT ANY ONE CUTTING.

INSPECTION AND MAINTENANCE GUIDELINES SOD SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAIN EVENT TO LOCATE AND REPAIR ANY DAMAGE.

. DAMAGE FROM STORMS OR NORMAL CONSTRUCTION ACTIVITIES SUCH AS TIRE RUTS OR DISTURBANCE OF SWALE STABILIZATION SHOULD BE REPAIRED AS SOON AS PRACTICAL.

SOD INSTALLATION DETAIL

SILT FENCE A SILT FENCE IS A BARRIER CONSISTING OF GEOTEXTILE FABRIC SUPPORTED BY METAL POSTS TO PREVENT SOIL AND SEDIMENT LOSS FROM A SITE. WHEN PROPERLY USED, SILT FENCES CAN BE HIGHLY EFFECTIVE AT CONTROLLING SEDIMENT FROM DISTURBED AREAS. THEY CAUSE RUNOFF TO SEEPING UNDER FENCE. POND, ALLOWING HEAVIER SOLIDS TO SETTLE OUT. IF NOT PROPERLY

FENCE).

ISOMETRIC PLAN VIEW

THE PURPOSE OF A SILT FENCE IS TO INTERCEPT AND DETAIN WATER-BORN SEDIMENT FROM UNPROTECTED AREAS OF A LIMITED EXTENT. SILT FENCE IS USED DURING THE PERIOD OF CONSTRUCTION NEAR THE PERIMETER OF A DISTURBED AREA TO INTERCEPT SEDIMENT WHILE ALLOWING WATER TO PERCOLATE THROUGH. THIS FENCE SHOULD REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. SILT FENCE SHOULD NOT BE USED WHERE THERE IS A CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY. IF CONCENTRATED FLOW OCCURS AFTER INSTALLATION, CORRECTIVE ACTION MUST BE TAKEN SUCH AS PLACING A ROCK BERM IN THE AREAS OF CONCENTRATED FLOW.

INSTALLED, SILT FENCES ARE NOT LIKELY TO BE EFFECTIVE.

SILT FENCING WITHIN THE SITE MAY BE TEMPORARILY MOVED DURING THE DAY TO ALLOW CONSTRUCTION ACTIVITY PROVIDED IT IS REPLACED AND PROPERLY ANCHORED TO THE GROUND AT THE END OF THE DAY. SILT FENCES ON THE PERIMETER OF THE SITE OR AROUND DRAINAGE WAYS SHOULD NOT BE MOVED AT ANY TIME.

. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE, OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN2, ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NUMBER 30.

. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR Y-BAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM WEIGHT 1.25 LB/FT, AND BRINDELL HARDNESS

3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12 GAUGE MINIMUM.

INSTALLATION

. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POSTS MUST BE EMBEDDED A MINIMUM OF 1-FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER. WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.

2. LAY OUT FENCING DOWN—SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS 1/4 ACRE/100 FEET OF FENCE.

3. THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM

TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL. 5. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE

4. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE

POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET. 6. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

COMMON TROUBLE POINTS

FENCE NOT INSTALLED ALONG THE CONTOUR CAUSING WATER TO CONCENTRATE AND FLOW OVER THE FENCE. 2. FABRIC NOT SEATED SECURELY TO GROUND (RUNOFF PASSING UNDER

3. FENCE NOT INSTALLED PERPENDICULAR TO FLOW LINE (RUNOFF ESCAPING

4. FENCE TREATING TOO LARGE AN AREA, OR EXCESSIVE CHANNEL FLOW (RUNOFF OVERTOPS OR COLLAPSES FENCE).

INSPECTION AND MAINTENANCE GUIDELINES 1. INSPECT ALL FENCING WEEKLY, AND AFTER RAINFALL

2. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.

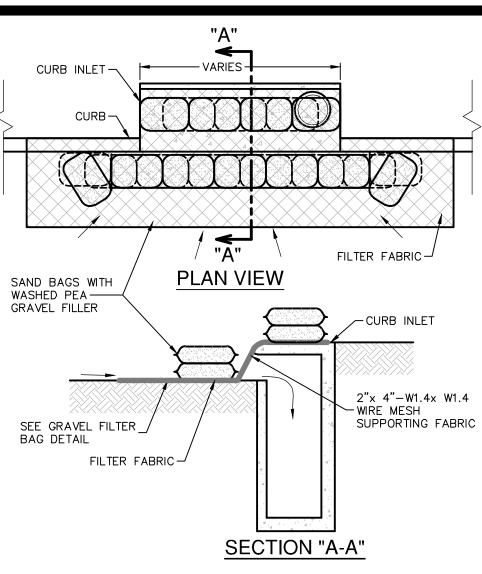
3. REPLACE TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.

4. REPLACE OR REPAIR SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.

WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.

SILT FENCE DETAIL

NOT-TO-SCALE



GENERAL NOTES

. CONTRACTOR TO INSTALL 2"x4"-W1.4xW1.4 WIRE MESH SUPPORTING FILTER FABRIC OVER THE INLET OPENING. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR WIRE TIES AT THIS LOCATION. SAND BAGS FILLED WITH WASHED PEA GRAVEL SHOULD BE PLACED ON TOP OF WIRE MESH ON TOP OF THE INLET AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SANDBAGS FILLED WITH WASHED PEA GRAVEL SHOULD ALSO BE PLACED ALONG THE GUTTER AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SAND BAGS TO BE STACKED TO FORM A CONTINUOUS BARRIER AROUND INLETS.

2. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.

INSPECTION AND MAINTENANCE GUIDELINES 1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE

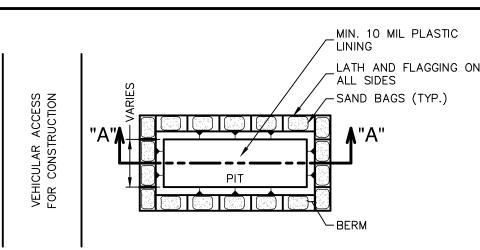
2. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.

3. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND

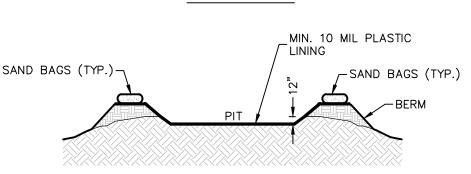
4. INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN OR MISSING. 5. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

BAGGED GRAVEL CURB INLET PROTECTION DETAIL

NOT-TO-SCALE



PLAN VIEW



GENERAL NOTES

WASTE GENERATED BY WASHOUT OPERATIONS.

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

SECTION "A-A"

4. LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES OR WATER BODIES. 5. TEMPORARY CONCRETE WASHOUT FACILITY SHOULD BE CONSTRUCTED WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE

MATERIALS

PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL IN POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

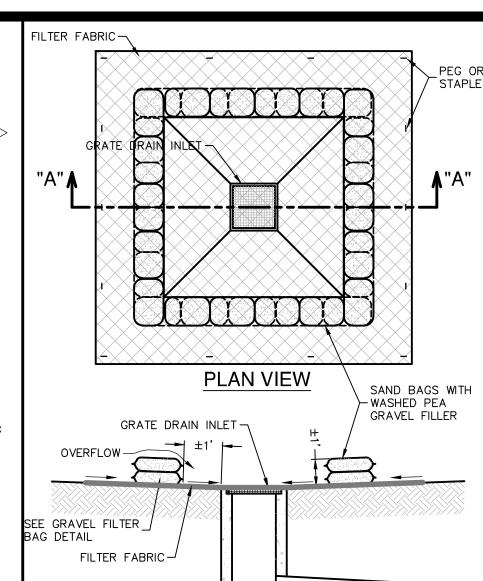
MAINTENANCE

WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF. 2. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED

. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.

CONCRETE TRUCK WASHOUT PIT DETAIL

NOT-TO-SCALE



SECTION "A-A"

GENERAL NOTES . THE SANDBAGS SHOULD BE FILLED WITH WASHED PEA GRAVEL AND STACKED TO FORM A CONTINUOUS BARRIER ABOUT 1 FOOT HIGH AROUND

THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.

INSPECTION AND MAINTENANCE GUIDELINES . INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALI REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY

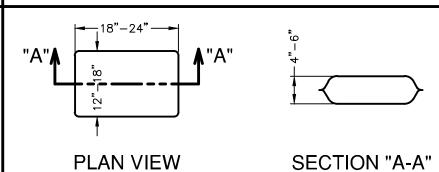
. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MATTER THAT IT WILL NOT ERODE.

3. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN OF

5. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

BAGGED GRAVEL GRATE INLET PROTECTION DETAIL

NOT-TO-SCALE

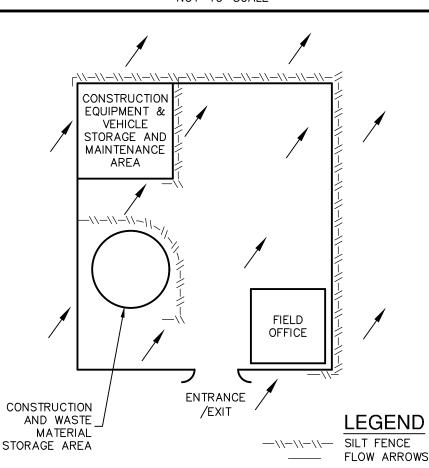


THE FILTER BAG MATERIAL SHALL BE MADE OF POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN FABRIC, MIN. UNIT WEIGHT OF 4 OUNCES/SY, HAVE A MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70%.

THE FILTER BAG SHALL BE FILLED WITH CLEAN, MEDIUM WASHED PEA GRAVEL TO COARSE GRAVEL (0.31 TO 0.75 INCH DIAMETER). SAND SHALL NOT BE USED TO FILL THE FILTER BAGS.

GRAVEL FILTER BAG DETAIL

NOT-TO-SCALE



CONSTRUCTION STAGING AREA NOT-TO-SCALE

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM

THIS SHEET HAS BEEN PREPARED FOI PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

EXHIBIT

ESIGNER

IECKED JD DRAWN EF

NOT-TO-SCALE

DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL. AERIAL IMAGERY PROVIDED BY GOOGL® UNLESS OTHERWISE NOTED. Imagery © 2016, CAPCOG, Digital Globe, Texas Orthoimagery Program, USDA Farm Service Agency.

INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.

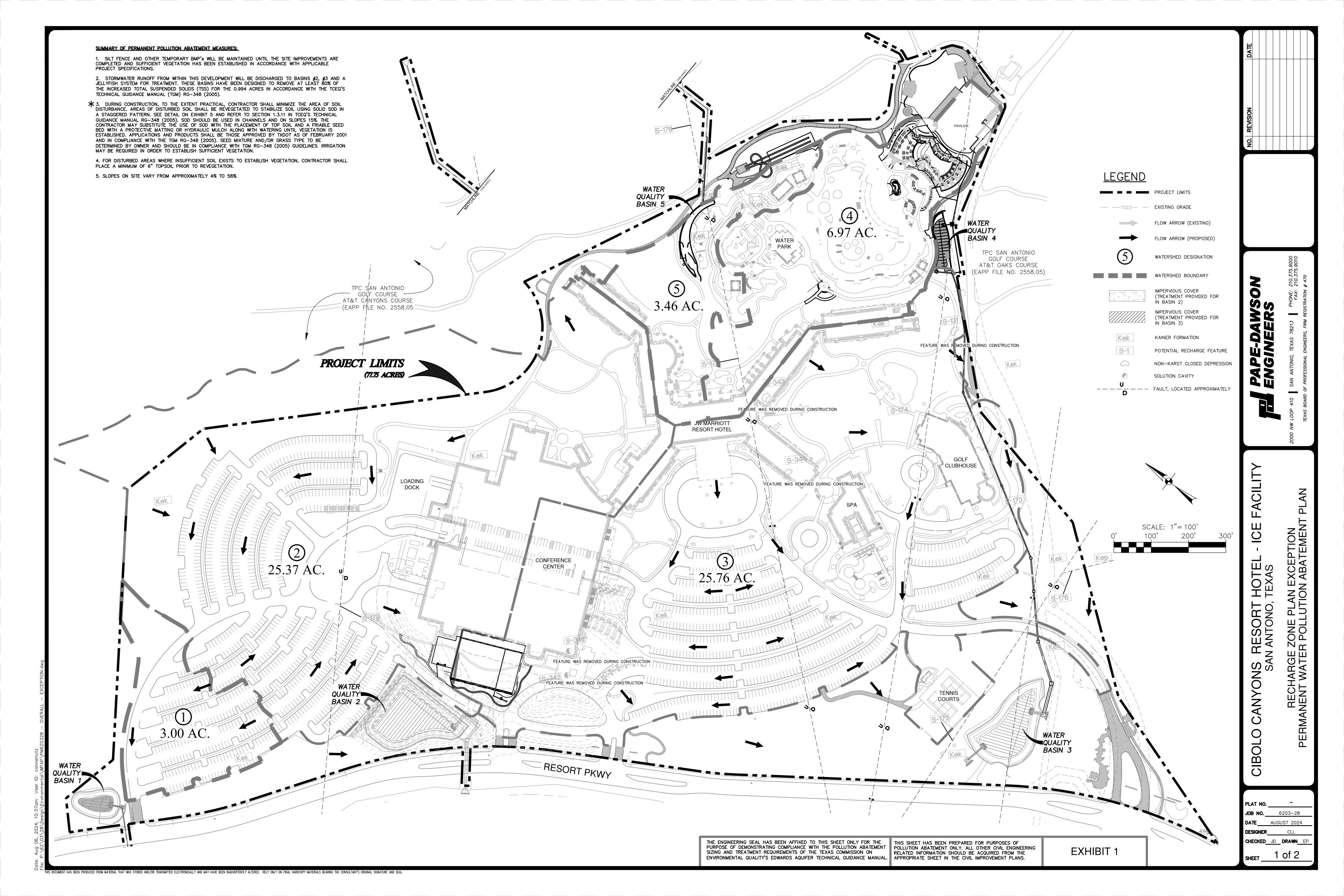
TORN OR UNEVEN PADS SHOULD NOT BE ACCEPTABLE.

C0.30

6203-28

JASON T. DIAMONI

3-1-24



SUMMARY OF PERMANENT POLLUTION ABATEMENT MEASURES: 1. SILT FENCE AND OTHER TEMPORARY BMP's WILL BE MAINTAINED UNTIL THE SITE IMPROVEMENTS ARE COMPLETED AND SUFFICIENT VEGETATION HAS BEEN ESTABLISHED IN ACCORDANCE WITH APPLICABLE PROJECT SPECIFICATIONS. 2. STORMWATER RUNOFF FROM WITHIN THIS DEVELOPMENT WILL BE DISCHARGED TO BASINS #2, #3 AND A JELLYFISH SYSTEM FOR TREATMENT. THESE BASINS HAVE BEEN DESIGNED TO REMOVE AT LEAST 80% OF THE INCREASED TOTAL SUSPENDED SOLIDS (TSS) FOR THE 0.994 ACRES IN ACCORDANCE WITH THE TCEQ'S TECHNICAL GUIDANCE MANUAL (TGM) RG-348 (2005). ★ 3. DURING CONSTRUCTION, TO THE EXTENT PRACTICAL, CONTRACTOR SHALL MINIMIZE THE AREA OF SOIL DISTURBANCE. AREAS OF DISTURBED SOIL SHALL BE REVEGETATED TO STABILIZE SOIL USING SOLID SOD IN A STAGGERED PATTERN. SEE DETAIL ON EXHIBIT 5 AND REFER TO SECTION 1.3.11 IN TCEQ'S TECHNICAL GUIDANCE MANUAL RG-348 (2005). SOD SHOULD BE USED IN CHANNELS AND ON SLOPES 15%. THE CONTRACTOR MAY SUBSTITUTE THE USE OF SOD WITH THE PLACEMENT OF TOP SOIL AND A FRIABLE SEED BED WITH A PROTECTIVE MATTING OR HYDRAULIC MULCH ALONG WITH WATERING UNTIL VEGETATION IS ESTABLISHED. APPLICATIONS AND PRODUCTS SHALL BE THOSE APPROVED BY TXDOT AS OF FEBRUARY 2001 AND IN COMPLIANCE WITH THE TGM RG-348 (2005). SEED MIXTURE AND/OR GRASS TYPE TO BE DETERMINED BY OWNER AND SHOULD BE IN COMPLIANCE WITH TGM RG-348 (2005) GUIDELINES. IRRIGATION MAY BE REQUIRED IN ORDER TO ESTABLISH SUFFICIENT VEGETATION. 4. FOR DISTURBED AREAS WHERE INSUFFICIENT SOIL EXISTS TO ESTABLISH VEGETATION, CONTRACTOR SHALL PLACE A MINIMUM OF 6" TOPSOIL PRIOR TO REVEGETATION. 5. SLOPES ON SITE VARY FROM APPROXIMATELY 4% TO 58%. **LEGEND** PROJECT LIMITS — — 1023— — EXISTING GRADE FLOW ARROW (EXISTING) FLOW ARROW (PROPOSED) WATERSHED DESIGNATION WATERSHED BOUNDARY IMPERVIOUS COVER (TREATMENT PROVIDED FOR IN BASIN 2) IMPERVIOUS COVER (TREATMENT PROVIDED FOR IN BASIN 3) KAINER FORMATION POTENTIAL RECHARGE FEATURE 25.37AC. 25.76 AC. NON-KARST CLOSED DEPRESSION

WATER

BASIN 2

SOLUTION CAVITY

— — — FAULT, LOCATED APPROXIMATELY

CANYONS RESORT HOTEL SAN ANTONO, TEXAS CIBOL

RECHARGE ZONE PLAN EXCEPTION PERMANENT WATER POLLUTION ABATEMENT

JOB NO. 6203-28 DATE JANUARY 2024 CHECKED JD DRAWN EF

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE POLLUTION ABATEMENT SIZING AND TREATMENT REQUIREMENTS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL.

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF POLLUTION ABATEMENT ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

FEATURE WAS REMOVED DURING CONSTRUCTION

FEATURE WAS REMOVED DURING CONSTRUCTION

EXHIBIT 2

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: CIBOLO CANYONS RESORT HOTEL - ICE FACILITY

Date Prepared: 2/15/2024

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell. Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.

Characters shown in red are data entry fields.

Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project:

where:

Calculations from RG-348

Pages 3-27 to 3-30

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

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

 A_N = Net increase in impervious area for the project

P = Average annual precipitation, inches

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

Bexar Total project area included in plan *= 77.75 acres Predevelopment impervious area within the limits of the plan * = 0.00 acres Total post-development impervious area within the limits of the plan* = 39.966 acres Total post-development impervious cover fraction * 0.51 30 inches

> 32612 lbs. L_{M TOTAL PROJECT} =

Number of drainage basins / outfalls areas leaving the plan area = 5

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

Drainage Basin/Outfall Area No. = Basin 2

Total drainage basin/outfall area = 25.37 acres Predevelopment impervious area within drainage basin/outfall area = 0.00 acres Post-development impervious area within drainage basin/outfall area = 13.661 acres Post-development impervious fraction within drainage basin/outfall area = 0.54 L_{M THIS BASIN} = 11147

lbs.



10/1/2024

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

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter

Removal efficiency = **89** percent

Aqualogic Cartridge Filter

Bioretention

Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation

Sand Filter Stormceptor

Vegetated Filter Strips

Vortechs Wet Basin Wet Vault

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

RG-348 Page 3-33 Equation 3.7: $L_R = (BMP \text{ efficiency}) \times P \times (A_1 \times 34.6 + A_2 \times 0.54)$

where: $A_C = \text{Total On-Site drainage area in the BMP catchment area}$

 A_{l} = Impervious area proposed in the BMP catchment area

 A_P = Pervious area remaining in the BMP catchment area

 L_R = TSS Load removed from this catchment area by the proposed BMP

 $A_C = 21.21$ acres

 $A_1 = 13.661$ acres current = 13.58 acres

 $A_P =$ **7.55** acres $L_R =$ **12729** lbs



10/1/2024

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

Desired $L_{M THIS BASIN} = 11768$ lbs.

F = **0.92**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.

Calculations from RG-348

Pages 3-34 to 3-36

Rainfall Depth = 2.00 inches
Post Development Runoff Coefficient = 0.45

On-site Water Quality Volume = 69994 cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP = 4.16 acres
Off-site Impervious cover draining to BMP = 0.00 acres

Impervious fraction of off-site area = **0.00**

Off-site Runoff Coefficient = **0.02**

Off-site Water Quality Volume = 604 cubic feet

Storage for Sediment = 14120

Total Capture Volume (required water quality volume(s) x 1.20) = 84718 cubic feet
The following sections are used to calculate the required water quality volume(s) for the selected BMP.

The values for BMP Types not selected in cell C45 will show NA.

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

Required Water Quality Volume for retention basin = NA cubic feet

Irrigation Area Calculations:

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

Irrigation area = NA square feet NA acres

8. Extended Detention Basin System

Designed as Required in RG-348 Pages 3-46 to 3-51

RICARDO R. GOME

10/1/2024

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

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

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = **84718** cubic feet

Minimum filter basin area = 3889 square feet

Maximum sedimentation basin area = 34997 square feet For minimum water depth of 2 feet

Minimum sedimentation basin area = 8749 square feet For maximum water depth of 8 feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = **84718** cubic feet

Minimum filter basin area = 6999 square feet

Maximum sedimentation basin area = 27998 square feet For minimum water depth of 2 feet
Minimum sedimentation basin area = 1750 square feet For maximum water depth of 8 feet

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: CIBOLO CANYONS RESORT HOTEL - ICE FACILIT

Date Prepared: 5/16/2024

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.

Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.

Characters shown in red are data entry fields.

Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project:

Calculations from RG-348

Pages 3-27 to 3-30

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

where:

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

 A_N = Net increase in impervious area for the project

P = Average annual precipitation, inches

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

County = Bexar
Total project area included in plan * = 77.75 acres
Predevelopment impervious area within the limits of the plan * = 0.00 acres

Total post-development impervious area within the limits of the plan* = 39.947 acres

Total post-development impervious cover fraction * = 0.51

P = 30 inches

 $L_{M TOTAL PROJECT} = 32597$ lbs.

Number of drainage basins / outfalls areas leaving the plan area = 5

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

Drainage Basin/Outfall Area No. = 3 (Basin 3)

Total drainage basin/outfall area = 25.76 acres Predevelopment impervious area within drainage basin/outfall area = 0.00 acres Post-development impervious area within drainage basin/outfall area = 0.62 acres Post-development impervious fraction within drainage basin/outfall area = 0.62 L_{M THIS BASIN} = 0.62 lbs.

RICARDO R. GOMEZ

127575

127575

CENSE

ONAL ENGINEER

10/1/2024

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

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter

Removal efficiency = 89 percent

Aqualogic Cartridge Filter

Bioretention

Contech StormFilter Constructed Wetland Extended Detention Grassy Swale Retention / Irrigation

Sand Filter Stormceptor

Vegetated Filter Strips

Vortechs Wet Basin Wet Vault

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

RG-348 Page 3-33 Equation 3.7: $L_R = (BMP \text{ efficiency}) \times P \times (A_1 \times 34.6 + A_2 \times 0.54)$

where: $A_C = Total On-Site drainage area in the BMP catchment area$

 A_I = Impervious area proposed in the BMP catchment area A_P = Pervious area remaining in the BMP catchment area

L_R = TSS Load removed from this catchment area by the proposed BMP

 $A_{C} =$ **25.60** acres $A_{I} =$ **15.981** acres $A_{P} =$ **9.62** acres $L_{R} =$ **14902** lbs



10/1/2024

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

Desired $L_{M THIS BASIN} = 13775$ lbs.

F = **0.92**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.

Calculations from RG-348

Pages 3-34 to 3-36

Rainfall Depth = 2.00 inches

Post Development Runoff Coefficient = **0.44**

On-site Water Quality Volume = 81509 cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP = 0.16 acres

Off-site Impervious cover draining to BMP = 0.00 acres

Impervious fraction of off-site area = **0.00**

Off-site Runoff Coefficient = **0.02**

Off-site Water Quality Volume = 23 cubic feet

Storage for Sediment = 16306

Total Capture Volume (required water quality volume(s) x 1.20) = 97839 cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.

The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG-348

Pages 3-42 to 3-46

Required Water Quality Volume for retention basin = NA cubic feet

Irrigation Area Calculations:

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

Irrigation area = NA square feet NA acres

8. Extended Detention Basin System

Designed as Required in RG-348 Pages 3-46 to 3-51

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

9. Filter area for Sand Filters

Designed as Required in RG-348

Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = 97839 cubic feet

Minimum filter basin area = 4528 square feet

Maximum sedimentation basin area = 40755 square feet For minimum water depth of 2 feet

Minimum sedimentation basin area = 10189 square feet For maximum water depth of 8 feet

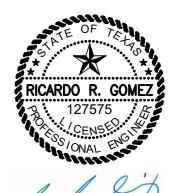
9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = 97839 cubic feet

Minimum filter basin area = 8151 square feet

Maximum sedimentation basin area = 32604 square feet For minimum water depth of 2 feet

Minimum sedimentation basin area = 2038 square feet For maximum water depth of 8 feet



10/1/2024

EXCEPTION REQUEST - CIBOLO CANYON RESORT HOTEL - ICE FACILITY Treatment Summary Table

					Table I						
Watershed (BMP)	Total Watershed Area (Acres)	Off-Site Upgradient Watershed Area (Acres)	On-Site Watershed Area (Acres)	Impervious Cover (Acres)	TSS Removal Required by Watershed (lb/yr)	Total TSS Removal Required by BMP* (lb/yr)	Runoff Depth (Inches)	Capture Volume Required (ft ³)	Capture Volume Provided (ft ³)	Sand Filter Area Required ² (sf)	Sand Filter Area Provided (sf)
1 (Basin 1)	3.00	0.00	3.00	1.93	1,575	1,753	3.00	17,796	18,632	1,780	2,626
2 (Basin 2)	25.37	4.16	21.21	13.661	11,147³	11,768	2.00	84,718	87,434	8,472	16,810
3 (Basin 3)	25.76	0.16	25.60	15.981	13,040³	13,753	2.00	97,839	100,252	9,784	14,469
4 (Basin 4)	6.97	0.00	6.97	3.41	2,783	2,801	1.44	15,374	15,500	1,537	3,732
5 (Wet Basin 5)	3.46	0.00	3.46	1.39	1,134³	1,201	1.44	6,678	6,893 ⁴		
Uncaptured Area A	13.96	0.00	13.96	0.66 ¹	82³	*	-				
Uncaptured Area B	0.14	0.00	0.14	0.03	24³	*	-				
Uncaptured Area C	0.39	0.00	0.39	0.10	82³	*	-				
Uncaptured Area D	0.63	0.00	0.63	0.63	514³	*	1				
Uncaptured Area E	0.005	0.00	0.005	0.005	43	*					
Pool Areas				1.65	**	**					
Jellyfish (in watershed 2)	0.55	0.00	0.55	0.52	424	424					
Resort Infrastructure					903³	***					
Total:	79.69	4.32	75.37	39.97	31,289	31,700	-				

^{*}Equivalent treatment for uncaptured areas is provided in on-site water quality basins. See Note 3 below.

Basin 2 600 lbs
Basin 3 303 lbs

Total 903 lbs (12 lbs were removed based on 2022 Guardshack Exception Request)

Notes

- 1. As noted in the J.W. Marriott Hotel & Resort Infrastructure WPAP (EAPP ID No. 13-0840102) approval letter dated June 20, 2008, 0.56 acres of impervious cover from uncaptured areas within the Cibolo Canyons Resort Hotel project are being treated in the J.W. Marriott Hotel & Resort Infrastructure project's permanent BMPs. Only equivalent treatment for 0.10 acres of impervous cover from Uncaptured Area 'A' will be provided in this WPAP's permanent BMPs.
- 2. "Sand Filter Area Required" includes the 20% increase in sand area required for single chamber basins.
- 3. The TSS loads for the overtreatment areas are included in the "TSS Removal Required" for Basins 2, 3 and 5 as follows:

Overtreatment Designation

	Basin 1	Basin 2	Basin 3	Basin 4	Basin 5	Total
Uncaptured Area A			82			82
Uncaptured Area B			24			24
Uncaptured Area C			82			82
Uncaptured Area D	178	21	244	27	44	514
Uncaptured Area E					4	4
Resort Infrastructure		600	303			903
Total:	178	621	735	27	48	1609

^{4.} As stated in §3.4.9 of the Technical Guidance on BMPs (RG-348, July 2005), the wet basin permanent pool volume should equal the water quality volume (i.e., the total volume of Wet Basin 5 should be a minimum of 9,530 cubic feet). Wet Basin 5 has a total (permanent pool volume + water quality volume) storage capacity of 19,981 cubic feet, which meets the prescribed facility sizing requirement.

Items revised with this WPAP Modificatio
--

^{**}Swimming pool areas are not included in the TSS removal calculations because they do not generate TSS treated by the permanent BMPs.

^{***}The 903 pounds of TSS from the J.W. Marriott Hotel & Resort Infrastructure WPAP (EAPP ID No. 13-0840102) to be accounted for in the Cibolo Canyons Resort Hotel WPAP shall be allocated as follows:

PREVIOUSLY APPROVED WPAP MOD - CIBOLO CANYON RESORT HOTEL - ICE FACILITY

Treatment Summary Table

					Table I						
Watershed (BMP)	Total Watershed Area (Acres)	Off-Site Upgradient Watershed Area (Acres)	On-Site Watershed Area (Acres)	Impervious Cover (Acres)	TSS Removal Required by Watershed (lb/yr)	Total TSS Removal Required by BMP* (lb/yr)	-	Capture Volume Required (ft³)	Capture Volume Provided (ft³)	Sand Filter Area Required ² (sf)	Sand Filter Area Provided (sf)
1 (Basin 1)	3.00	0.00	3.00	1.93	1,575	1,753	3.00	17,796	18,632	1,780	2,626
2 (Basin 2)	25.37	4.16	21.21	13.642	11,132³	11,753	2.00	84,580	87,434	8,458	16,810
3 (Basin 3)	25.76	0.16	25.60	15.954	13,018³	13,753	2.00	97,655	100,252	9,766	14,469
4 (Basin 4)	6.97	0.00	6.97	3.41	2,783	2,801	1.44	15,374	15,500	1,537	3,732
5 (Wet Basin 5)	3.46	0.00	3.46	1.39	1,134³	1,201	1.44	6,678	6,893 ⁴		
Uncaptured Area A	13.96	0.00	13.96	0.66¹	82³	*	1				-
Uncaptured Area B	0.14	0.00	0.14	0.03	24³	*	1				-
Uncaptured Area C	0.39	0.00	0.39	0.10	82³	*					
Uncaptured Area D	0.63	0.00	0.63	0.63	514³	*					
Uncaptured Area E	0.005	0.00	0.005	0.005	4 ³	*	-				
Pool Areas		-	-	1.65	**	**	-				-
Jellyfish (in watershed 2)	0.55	0.00	0.55	0.52	424	424					
Resort Infrastructure					903³	***					
Total:	79.69	4.32	75.37	39.92	31,251	31,685					

^{*}Equivalent treatment for uncaptured areas is provided in on-site water quality basins. See Note 3 below.

Basin 2 600 lbs Basin 3 303 lbs

Total 903 lbs (12 lbs were removed based on 2022 Guardshack Exception Request)

<u>Notes</u>

- 1. As noted in the J.W. Marriott Hotel & Resort Infrastructure WPAP (EAPP ID No. 1789.00) approval letter dated June 20, 2008, 0.56 acres of impervious cover from uncaptured areas within the Cibolo Canyons Resort Hotel project are being treated in the J.W. Marriott Hotel & Resort Infrastructure project's permanent BMPs. Only equivalent treatement for 0.10 acres of impervous cover from Uncaptured Area 'A' will be provided in this WPAP's permanent BMPs.
- 2. "Sand Filter Area Required" includes the 20% increase in sand area required for single chamber basins.
- 3. The TSS loads for the overtreatment areas are included in the "TSS Removal Required" for Basins 2, 3 and 5 as follows:

v	ertre	atm	ent	Desi	ana	ation

	Basin 1	Basin 2	Basin 3	Basin 4	Basin 5	Total
Uncaptured Area A	-		82			82
Uncaptured Area B	-		24			24
Uncaptured Area C	-		82			82
Uncaptured Area D	178	21	244	27	44	514
Uncaptured Area E					4	4
Resort Infrastructure	-	600	303			903
Total:	178	621	735	27	48	1609

^{4.} As stated in §3.4.9 of the Technical Guidance on BMPs (RG-348, July 2005), the wet basin permanent pool volume should equal the water quality volume (i.e., the total volume of Wet Basin 5 should be a minimum of 9,530 cubic feet). Wet Basin 5 has a total (permanent pool volume + water quality volume) storage capacity of 19,981 cubic feet, which meets the prescribed facility sizing requirement.

It	tems revised	with this	WPAP	Modification
----	--------------	-----------	-------------	--------------

^{**}Swimming pool areas are not included in the TSS removal calculations because they do not generate TSS treated by the permanent BMPs.

^{***}The 903 pounds of TSS from the J.W. Marriott Hotel & Resort Infrastructure WPAP (EAPP ID No. 1789.00) to be accounted for in the Cibolo Canyons Resort Hotel WPAP shall be allocated as follows:

Jon Niermann, *Chairman*Bobby Janecka, *Commissioner*Catarina R. Gonzales, *Commissioner*Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 31, 2024

Mr. Scott Lynn RHP PROPERTY SA, LLC 1Gaylord Drive Nashville, TN 37214

Re: Modification of an approved Water Pollution Abatement Plan (WPAP)

Cibolo Canyons Resort Hotel Ice Facility; Located at 23808 Resort Parkway; San Antonio,

Bexar County, Texas

Edwards Aquifer Protection Program ID: 13001904, Regulated Entity No. RN104791868

Dear Mr. Lynn:

The Texas Commission on Environmental Quality (TCEQ) has completed its review on the application for the above-referenced project submitted to the Edwards Aquifer Protection Program (EAPP) by Pape-Dawson Engineers on behalf of the applicant, RHP PROPERTY SA, LLC on March 20, 2024. Final review of the application was completed after additional material was received on May 16, 2024, and May 24, 2024.

As presented to the TCEQ, the application was prepared in general compliance with the requirements of 30 Texas Administrative Codes (TAC) Chapter §213. The permanent best management practices (BMPs) and measures represented in the application were prepared by a Texas licensed professional engineer (PE). All construction plans and design information were sealed, signed, and dated by a Texas licensed PE. Therefore, the application for the construction of the proposed project and methods to protect the Edwards Aquifer are **approved**, subject to applicable state rules and the conditions in this letter.

This approval expires two years from the date of this letter, unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been officially requested. This approval or extension will expire, and no extension will be granted if more than 50 percent of the project has not been completed within ten years from the date of this letter.

The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer protection plan. A motion for reconsideration must be filed in accordance with 30 TAC §50.139.

BACKGROUND

The JW Marriott Hotel is located within the Cibolo Canyon Resort Hotel commercial development approved by letter dated March 14, 2006-corrected May 11, 2006 (13-05103103) Subsequent modification have been approved by different letters dated May 27, 2009 (13-05103103I), September 3, 2013 (13-1306280I). July 28, 2015, revised August 11, 2015 (13-1504100I), and September 9, 2022 (13001588).

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 77.75- acres. The modification will include construction of a concrete slab in front of the existing conference center, as well as additional hardscape and service drive as well as consolidation of existing impervious cover. The new proposed impervious cover will be 0.58 acres (0.01 percent) for an overall impervious cover of 39.92 acres (51.3 percent). Project wastewater will be disposed of by conveyance to the existing Steven Clouse Water Recycling Center.

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 new JellyFish filtration system, four existing sedimentation filtration basins (13-05103103), and one existing wet basin (13-05103103), designed using the TCEQ technical guidance, *RG-348*, *Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices*, will be constructed and implemented to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 32,575 pounds of TSS generated from the 39.92 acres of impervious cover. The approved permanent BMPs and measures meet the required 80 percent removal of the increased load in TSS caused by the project.

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

GEOLOGY

According to the Geologic Assessment (GA) included with the application, the surficial units of the site are the basal nodular member, dolomitic member and grainstone member of the Kainer Formation, and the regional dense member, and leached and collapsed member of the Person Formation. No sensitive geologic features were identified in the GA. The site assessment conducted on May 9, 2024, by TCEQ staff determined the site to be generally as described by the GA.

SPECIAL CONDITIONS

I. This modification is subject to all the special and standard conditions listed in the approval letter(s) dated March 14, 2006-corrected May 11, 2006, May 27, 2009, September 3, 2013, July 28, 2015, revised August 11, 2015, and September 9, 2022.

STANDARD CONDITIONS

- 1. The plan holder (applicant) must comply with all provisions of 30 TAC Chapter §213 and all technical specifications in the approved plan. The plan holder should also acquire and comply with additional and separate approvals, permits, registrations or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, Dam Safety, Underground Injection Control) as required based on the specifics of the plan.
- 2. In addition to the rules of the Commission, the plan holder must also comply with state and local ordinances and regulations providing for the protection of water quality as applicable.

Prior to Commencement of Construction:

3. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the plan holder must submit to the EAPP proof of recordation of notice in the county deed

Mr. Scott Lynn Page 3 May 31, 2024

records, with the volume and page number(s) of the county record. A description of the property boundaries shall be included in the deed recordation in the county deed records. TCEQ form, Deed Recordation Affidavit (TCEQ-0625), may be used.

- 4. The plan holder of any approved Edwards Aquifer protection plan must notify the EAPP and obtain approval from the executive director prior to initiating any modification to the activities described in the referenced application following the date of the approval.
- 5. The plan holder must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the EAPP no later than 48 hours prior to commencement of the regulated activity. Notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person.
- 6. Temporary erosion and sedimentation (E&S) controls as described in the referenced application, must be installed prior to construction, and maintained during construction. Temporary E&S controls may be removed when vegetation is established, and the construction area is stabilized. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.
- 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 or gravel. 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.

During Construction:

- 8. This approval does not authorize the installation of temporary or permanent aboveground storage tanks on this project that will have a total storage capacity of five hundred gallons or more of static hydrocarbons or hazardous substances without prior approval of an Aboveground Storage Tank facility application.
- 9. If any sensitive feature is encountered during construction, replacement, or rehabilitation on this project, all regulated activities must be **immediately** suspended near it and notification must be made to TCEQ EAPP staff. Temporary BMPs must be installed and maintained to protect the feature from pollution and contamination. 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.
- 10. All water wells, including injection, dewatering, and monitoring wells shall be identified in the geologic assessment and must be in compliance with the requirements of the Texas Department of Licensing and Regulation 16 TAC Chapter §76 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.

Mr. Scott Lynn Page 4 May 31, 2024

- 12. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge must be filtered through appropriately selected BMPs.
- 13. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 14. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

- 15. Owners of permanent BMPs and temporary measures must ensure that the BMPs and measures are constructed and function as designed. A Texas licensed PE must certify in writing that the **permanent** BMPs or measures were constructed as designed. The certification letter must be submitted to the EAPP within 30 days of site completion.
- 16. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property or the ownership of the property is transferred to the entity. A copy of the transfer of responsibility must be filed with the executive director through the EAPP within 30 days of the transfer. TCEQ form, Change in Responsibility for Maintenance on Permanent BMPs and Measures (TCEQ-10263), may be used.

The holder of the approved Edwards Aquifer protection plan is responsible for compliance with Chapter §213 and any condition of the approved plan through all phases of plan implementation. Failure to comply with any condition within this approval letter is a violation of Chapter §213 and is subject to administrative rule or orders and penalties as provided under §213.10 of this title (relating to Enforcement). Such violations may also be subject to civil penalties and injunction. Upon legal transfer of this property, the new owner is required to comply with all terms of the approved Edwards Aquifer protection plan.

This action is taken as delegated by the executive director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Neri B. Valdez of the Edwards Aquifer Protection Program at 210-403-4087 or the regional office at 512-339-2929.

Sincerely,

Lori Wilson, Director

Austin Region

Texas Commission on Environmental Quality

LW/nbv

CC: